Return to COTW Memo

VILLAGE OF LINCOLNWOOD
PRESIDENT AND BOARD OF TRUSTEES
COMMITTEE OF THE WHOLE MEETING
VILLAGE HALL COUNCIL CHAMBERS
6:30 P.M. MARCH 6, 2018

AGENDA

I) Call to Order

II) Roll Call

III) Minutes –

1) Committee of the Whole Meeting – February 20, 2018

IV) Closed Session

A Closed Session is requested to Discuss Purchase or Lease of Property (Per Section 2(c)(5)) (6:30 – 7:15 p.m.)

V) Regular Business

1) Discussion Concerning Proposed Invest in Cook County Grant Projects (7:15 – 7:30 p.m.)

VI) Public Comment

VII) Adjournment

DATE POSTED: March 2, 2018

Return to COTW Memo

VILLAGE OF LINCOLNWOOD
PRESIDENT AND BOARD OF TRUSTEES
COMMITTEE OF THE WHOLE MEETING
VILLAGE HALL COUNCIL CHAMBERS
FEBRUARY 20, 2018

Draft

Call to Order

President Bass called the Committee of the Whole meeting of the Lincolnwood Board of Trustees to order at 6:34 P.M., Tuesday, February 20, 2018, in the Council Chambers of the Municipal Complex, 6900 North Lincoln Avenue, Village of Lincolnwood, County of Cook and State of Illinois.

Roll Call

On roll call by Deputy Clerk Meyer the following were:
PRESENT: President Bass, Trustees Ikezoe-Halevi, Hlepas Nickell, Cope, Sugarman, Patel (6:36 pm)
ABSENT: Spino

A quorum was present.

Also present: Timothy Wiberg, Village Manager; Ashley Engelmann, Assistant Village Manager; Steven Elrod, Village Attorney; Charles Meyer, Assistant to the Village Manager; Heather McFarland, Management Analyst, Mike Hansen, Fire Chief, Andrew Letson, Public Works Director, Nadim Badran, Assistant to the Public Works Director, Steve McNellis, Community Development Director, Bruce Rottner, Acting Police Chief, Robert Merkel, Finance Director, and Doug Hammel, Development Manager.

Approval of Minutes

Minutes of the February 6, 2018 Committee of the Whole and February 13, 2018 Budget Workshop meetings were distributed in advance of the meeting and were examined.

Trustee Hlepas Nickell moved to approve the minutes as presented. Trustee Sugarman seconded the motion. The motion passed with a Voice Vote.

Regular Business

1. Employee Recognitions
   - Mayor Bass and Village Manager Wiberg presented an introduction to the employee recognition program and thanked the employees for their years of service.
   - David Gomez, Laborer, was recognized for 10 years of service by the Village Manager and Mayor Bass.
   - Tom Siwik, Captain, was recognized for 20 years of service by Fire Chief Hansen.

2. Discussion Concerning a Request from 90 Miles Cuban Café for Modifications to its Liquor License Hours:

Return to COTW Memo

- Mr. Wiberg provided an overview of the liquor license requirements for the Village. Mr. Wiberg stated that Class "A" Liquor License holders, such as 90 Miles Cuban Café are allowed to stay open Sunday through Thursday nights until 1:00 am and until 2:00 am on Friday and Saturday nights. Mr. Gonzalez, Owner of 90 Miles Cuban Café, is requesting that the Liquor License be extended to 4:00 am on Friday and Saturday nights due to the nature of his business in which they offer entertainment and other events until later hours and a lot of their clientele comes up from the City of Chicago and the longer hours allow for a more significant enticement for people to make the trip to the suburbs. Mr. Wiberg stated that Mr. Gonzalez was notified of this meeting and offered an opportunity to attend the meeting to discuss the business owner's request.
- Trustee Ikezoe-Halevi asked if the mall had an issue with the extended hours. Mr. Wiberg stated that the mall is inaccessible at that time and that Mr. Gonzalez had stated that the mall was not opposed to the extended hours.
- Trustee Cope asked about what are the public safety concerns related to these types of establishments. Acting Chief Rottner stated that Skokie, Morton Grove, and Niles have allowed for liquor licenses that go until 4:00 am and relayed the Police activity for those establishments during the additional time that the establishment is open and serving alcohol.
- Trustee Sugarman asked if there were any other requests for a later closing period. Mr. Wiberg confirmed that there were no other requests for the 4:00 am liquor license at this time.
- Acting Chief Rottner stated that the other 90 Miles to Cuba restaurants in Chicago are B.Y.O.B. and that they do not have a 4:00 am liquor license to operate similar to what is being requested by the business owner.
- Mr. Wiberg said that if the Village Board was interested in entertaining this request, then the Village Board could direct staff to draft language to create a new type of liquor license to allow for 4:00 am liquor licenses.
- Trustee Cope stated that he was not persuaded by the idea of having a liquor license until 4:00 am but would be interested in hearing from the business owner for his reasoning for the request.
- Trustee Patel asked Attorney Elrod if the Village could issue a 4:00 am license and then have the ability to remove the license at a later date. Attorney Elrod said that there were several options available including a look back period for the liquor license or conditions for revocation. Attorney Elrod said that it would be tied to the license itself and not to the category.
- Trustee Hlepas Nickell stated that she had a concern that if the Village were to offer a 4:00 am license then the Village may receive several requests for 4:00 am liquor licenses from other establishments.
- Attorney Elrod stated that the Village does not have to make it a yearly license and can issue the license only for six months if needed.
- Mr. Gonzalez spoke to the Village Board regarding his desire to expand the liquor license. He stated that because a lot of his customers travel from the City of Chicago and do not get to the business until 11:30 pm / 12:00 am they then have to leave to head back home and would otherwise stay in the City as opposed to making the trip. Mr. Gonzalez stated that there is a dinner crowd that comes in around 7:00 pm and then leaves around 9:30 pm and then later he has an older crowd who comes up and is entertained by shows put on by the business.
- Trustee Cope asked if Mr. Gonzalez would be interested in staying open until 2:30 am due to concerns related to overextending the Police Department. Mr. Gonzalez stated that the later times allow for him to extend his shows and to re-coup his money for having a show that can go later. He would be open to it.

- Trustee Hlepas Nickell asked Mr. Gonzalez how much of his sales were mostly food or mostly liquor from 10:00 pm to 2:00 am. Mr. Gonzalez said that the kitchen is open to 2:00 am serving food so that it is hard to determine what portion is alcohol versus food.
- Trustee Sugarman asked about the possibility of allowing for a license for 90 days as a test.
- Trustee Hlepas Nickell asked if Mr. Gonzalez would be open to reimbursing the Village for a portion of the expenses related to public safety. Mr. Gonzalez stated that his staff is always on the floor and make efforts to ensure that patrons are not overserved. Mr. Gonzalez said that he has never had an incident and that he wants to have additional income as the reasoning for his request.
- Trustee Cope asked how liquor sales fit into the business model from 2:00 am to 4:00 am. Mr. Gonzalez stated that it would be about increasing the customer volume to help with expenses.
- Mr. Gonzalez stated that he spoke with the mall about it, and they were positive on the subject of staying open later.
- Mayor Bass polled the Board regarding the possibility of allowing for a 4:00 am license
    - Trustee Patel said that he would be open to a test period of three months or six months
    - Trustee Cope said that he would like to get more information before he proceeds with this process. Trustee Cope said that he may be interested in allowing for a separate license until 3:00 am for a six month period.
    - Trustee Hlepas Nickell stated that her concern was that by staying open later other restaurant could come forward requesting later liquor licenses but would be interested in carving out the license for certain areas that includes factors related to proximity to residential areas and to preserve the quality of life and safety of neighborhoods.
    - Trustee Ikezoe-Halevi stated that she was in support of the idea with the factors of a look back and a shortened period.
    - Trustee Sugarman stated that he was in support.
    - Based on the discussion of the group, the Mayor stated that he felt that there was a consensus to draft language related to a six month period and a look back period related to the liquor license.

Public Comment

- Charles Halevi spoke during the public forum about the equal rights amendment (ERA). Mr. Halevi stated that Illinois and one other state are needed to approve the ERA to have it added to the Constitution and requested that residents become aware and support the ERA for the State of Illinois.

Adjournment

At 7:39 P.M. Trustee Cope moved to adjourn Committee of the Whole, seconded by Trustee Ikezoe-Halevi. The motion passed with a Voice Vote.

Respectfully Submitted,

Charles Meyer
Deputy Village Clerk

Return to COTW Memo

MEMORANDUM

TO: President Bass and Members of the Village Board

FROM: Timothy C. Wiberg, Village Manager

DATE: March 2, 2018

SUBJECT: **March 6 Committee of the Whole Meeting**

As a reminder, the Committee of the Whole (COTW) meeting is scheduled for **6:30 p.m.** on Tuesday evening. Dinner will be available in the Village Hall Board Conference Room beginning at 5:45 p.m. Please find below a summary of the items for discussion:

1) **Closed Session (Land Acquisition 6:30 – 7:15 p.m.)**

A Closed Session is requested to discuss Purchase or Lease of Property (Per Section 2(c)(5))

2) **Discussion Concerning Proposed Invest in Cook County Grant Projects (7:15 – 7:30 p.m.)**

Cook County has announced a new round of grant opportunities for transportation-related projects. Attached is a memorandum from the Public Works Director summarizing staff recommended projects to submit for grant funding consideration. The Board will be asked to provide direction on which project the Village should include in its application.

If you should have any questions concerning these matters, please feel free to contact me.

Return to COTW Memo

MEMORANDUM

TO: Timothy C. Wiberg, Village Manager

FROM: Andrew Letson, Director of Public Works

DATE: March 6, 2018

SUBJECT: Invest in Cook Grant – Potential Projects

Background: In 2017, the Cook County Department of Transportation and Highways (CCDOTH) announced a new grant program entitled "Invest in Cook" with the goal of furthering the County's long range transportation plan. The grant program is being offered on an annual basis and a call for projects is currently ongoing. The grant focuses on transit improvement projects, bicycle and pedestrian facility projects, freight projects, traffic flow improvement projects, bridge improvements, demonstration projects for new technology, and corridor studies. One of the goals of the program is to focus on maintaining and improving existing infrastructure.

There is not a set funding percentage or required local match. Last year, the Village was successful in obtaining a grant to pay 70% of a Phase I engineering study of improvements at the intersection of Touhy and Cicero Avenues. It is anticipated that 70% grant funding would again be sought if the Village were to pursue another grant application with the remaining 30% being the responsibility of the Village. The County has $8.5 million allocated for grant funding. Grant applications are due on March 16, 2018.

Purpose of Discussion: On February 15, 2018 a meeting was held with the Village Engineer, Village Manager, Assistant Village Manager, Public Works Director, Parks and Recreation Director, Community Development Director and Finance Director to discuss possible projects that the Village could submit for the current round of funding. The information below outlines the three projects that staff believes would have the greatest chance of award. Cook County has indicated that each community may only submit an application for one project.

Project #1: North Shore Channel Path Improvements

The North Shore Channel Path runs through Centennial Park between Devon Avenue and Touhy Avenue connecting recreation paths in Chicago and Skokie. The project was built in phases, with the initial phase being constructed in 1992, including the asphalt recreation path and a concrete "horse shoe" sidewalk at the northern end of the park. The most recent

phase was completed in 2013, which included a parking lot and an amphitheater and boat launch near the concrete horse shoe at the northern end of the park.

Recently, staff has identified several deficiencies with the northern end of the park. Sections of the concrete horse shoe sidewalk have become severely deteriorated and concrete panels have separated, creating a dangerous situation for cyclists. Last summer a cyclist fell off their bike when a tire became wedged between two sidewalk panels. In response, the Public Works Department installed an asphalt overlay over the sidewalk gaps and while the path is safe, it is not a permanent or aesthetically pleasing fix. The proposed project would include removal of the concrete and replacement with an asphalt path.

There are a few areas along the concrete horse shoe near McCormick Boulevard where stormwater does not drain well. Additionally, there are several areas along the path and near the amphitheater that have eroded and erosion control needs to be installed to prevent deterioration of the path and amphitheater. Finally, to the north of the amphitheater a "cow path" has been established in the grass where people are traveling to get between the amphitheater and the path on the north. The proposed project would improve drainage, provide minor erosion control, and pave the cow path.

Due to the limited amount of grant funding available and in an effort to increase the likelihood of being awarded funds, staff recommends pursuing grant funding only for the construction phase of the project and local funds be used for the design. If a grant is awarded, the local match would be included in the FY 2019/20 budget.

Project #1 – Project Costs		
Project Phase	**Funding Source**	**Amount**
Engineering (all phases)	Invest in Cook	$0
	Local Match	$66,700
	Total	*$66,700*
Construction	Invest in Cook	$200,000
	Local Match	$89,720
	Total	*$289,720*
Total Project Cost		$356,420

Project #2: Touhy/Kostner/Lincoln Safety and Geometry Improvements

This project includes lane improvements and geometry changes on Lincoln and Touhy Avenues to improve the flow of traffic at the intersection and will include the following changes.

1. Install a second dedicated left turn lane on northbound Lincoln Avenue for traffic to turn west onto Touhy Avenue and dedicate the existing shared turn/straight lane for northbound traffic. This requires adjustment of the median south of Touhy Avenue and will result in the loss of some on-street parking. It will improve traffic flow at the intersection by allowing northbound and southbound traffic to move at the same time.
2. Install a dedicated left turn lane on westbound Touhy Avenue for traffic to turn south onto Lincoln Avenue. This would require the elimination of left turn movements onto northbound Kostner Avenue, but improves the overall flow of traffic

by not requiring traffic wishing to turn onto southbound Lincoln to wait at two intersections.

3. The signals at Lincoln/Touhy and Lincoln/Kostner will be upgraded to include new poles and a modernized controller system.

Upon completion of this project, it would become possible to vacate the portion of Kostner Avenue that is between Lincoln and Touhy Avenues to a neighboring parcel to allow for a larger future redevelopment project. This is made possible by the fact that the Lincoln/Touhy intersection will become a complete intersection allowing all movements.

This project was previously discussed by the Village Board at the November 1, 2016 Committee of the Whole as a candidate for future Congestion Mitigation/Air Quality (CMAQ) grant funding. The CMAQ program requires that Phase I engineering be completed prior to being eligible for funding. The Invest in Cook grant would be used to cover a portion of the Phase I engineering costs, similar to the Touhy/Cicero project. Also similar to the Touhy/Cicero project, the Village would engage with the Illinois Department of Transportation (IDOT) to seek the State's participation on the local match; however, it should be noted that if the State does not participate in the local match, the Village would be required to provide the funding. If a grant is awarded, the local match would be included in the FY 2019/20 budget.

Project #2 – Project Costs		
Project Phase	**Funding Source**	**Amount**
Phase I Engineering	Invest in Cook	$192,500
	Local Match	$82,500
	Total	*$275,000*
Phase II & III Engineering and Construction	CMAQ (Anticipated)	$2,640,000
	Local Match	$660,000
	Total	*$3,300,000*
Total Project Cost		$3,575,000

Project #3: Touhy/Kedzie Geometry Improvements

This project includes geometry changes to the intersection of Touhy and Kedzie Avenues to improve the flow of traffic. Currently, during rush hour periods, eastbound Touhy Avenue is congested on the east side of the Village, primarily due to inefficient flow of traffic through the intersection of Touhy and Kedzie Avenues. This project would include widening eastbound Touhy Avenue, east of the North Shore Channel to allow for the construction of a dedicated right turn lane onto southbound Kedzie Avenue. Additionally, the traffic signal would be modernized.

This intersection is unique due to the various governing bodies that maintain jurisdiction. Touhy Avenue is an IDOT route, Kedzie Avenue is owned by the City of Chicago, the land to the southwest of the intersection is owned by the Metropolitan Water Reclamation District of Greater Chicago (MWRD). East of the intersection is within corporate boundaries of the City of Chicago, whereas the west is split between the Villages of

Lincolnwood and Skokie. This project will require significant coordination between each of these agencies.

Similar to the Touhy/Lincoln/Kostner project, Invest in Cook funds would be sought for Phase I engineering to prepare for a future CMAQ application. The Village would act as the lead agency, coordinating the consultants and the grant process. Funding participation would be sought from IDOT and the City of Chicago; however, if those organizations do not participate in the local match, the Village would be required to provide the funding. If a grant is awarded, the local match would be included in the FY 2019/20 budget.

Project #3 – Project Costs		
Project Phase	**Funding Source**	**Amount**
Phase I Engineering	Invest in Cook	$81,200
	Local Match	$34,800
	Total	*$116,000*
Phase II &III Engineering and Construction	CMAQ (Anticipated)	$755,200
	Local Match	$188,800
	Total	*$944,000*
Total Project Cost		$1,060,000

Proposed Timeline: If the Village Board decides to move forward with one of the projects described above, a grant application will be submitted to CCDOTH.

Staff Direction: Staff is seeking direction regarding which project the Village Board would desire to have applied for grant funding.

Attachments:

- Presentation

Return to COTW Memo

Invest In Cook Grant

Committee of the Whole
March 6, 2018

Return to COTW Memo

Purpose of Discussion

- Seek feedback on submitting for Invest In Cook grant funding

Return to COTW Memo

Background

- Invest In Cook Grant started in 2017
- LincoInwood was successful in our 2017 application, receiving $175,000 for the Touhy/Cicero Intersection Phase 1 Engineering
- Eligible Project Types
  - Transit Improvement
  - Bicycle and Pedestrian Facilities
  - Freight
  - Traffic Flow Improvement
  - Bridge Improvements
  - Demonstration Project for New Technology
  - Corridor Studies

Return to COTW Memo

Potential Projects

1. North Shore Channel Path Improvements
2. Touhy/Kostner/Lincoln Safety and Geometry Improvements
3. Touhy/Kedzie Geometry Improvements

Return to COTW Memo

North Shore Channel Path – Existing Conditions

Concrete gap filled with asphalt

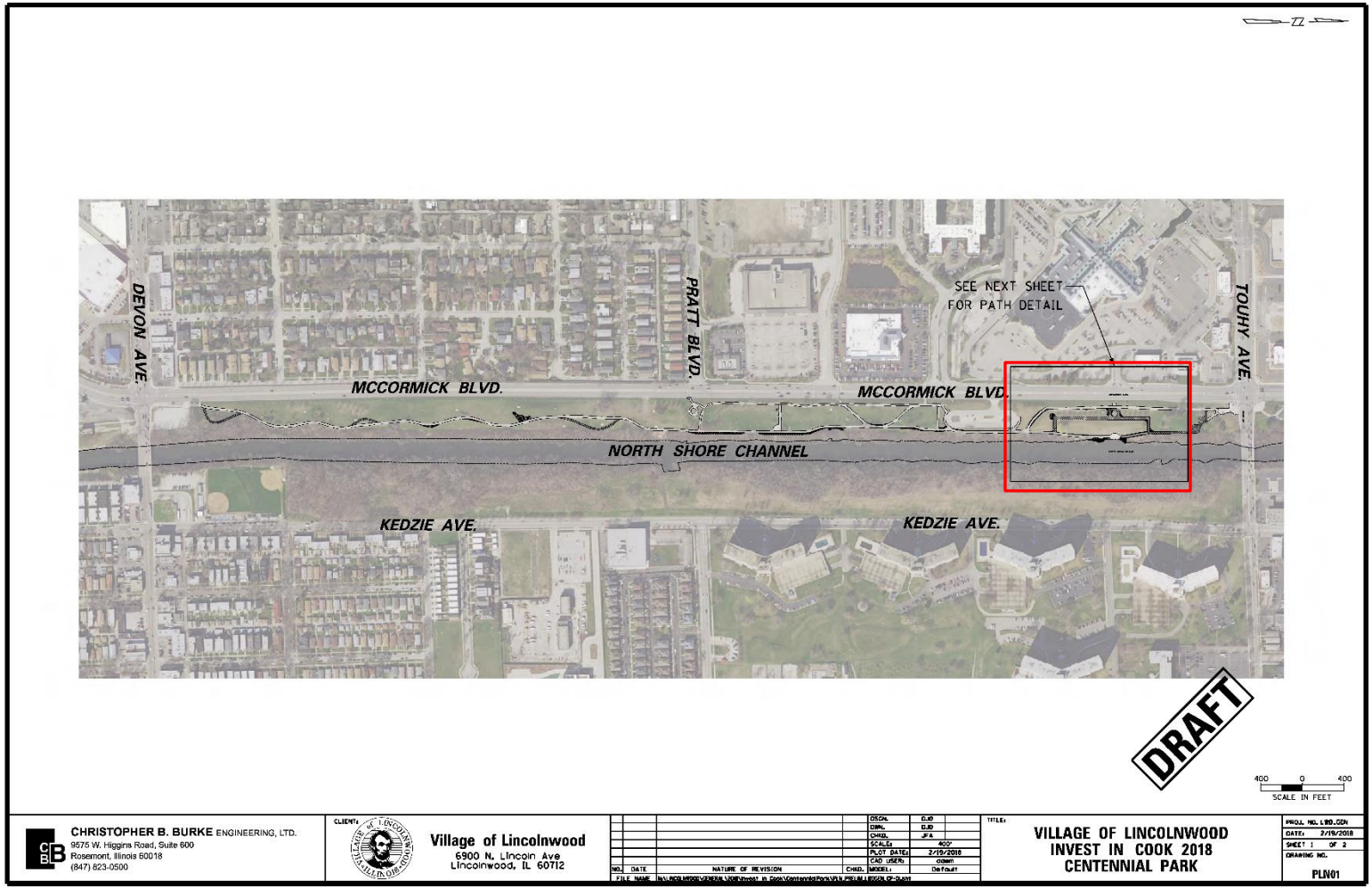
Deteriorated concrete patched with asphalt

Drainage issue near McCormick Blvd

"Cow path" and eroded stream bank

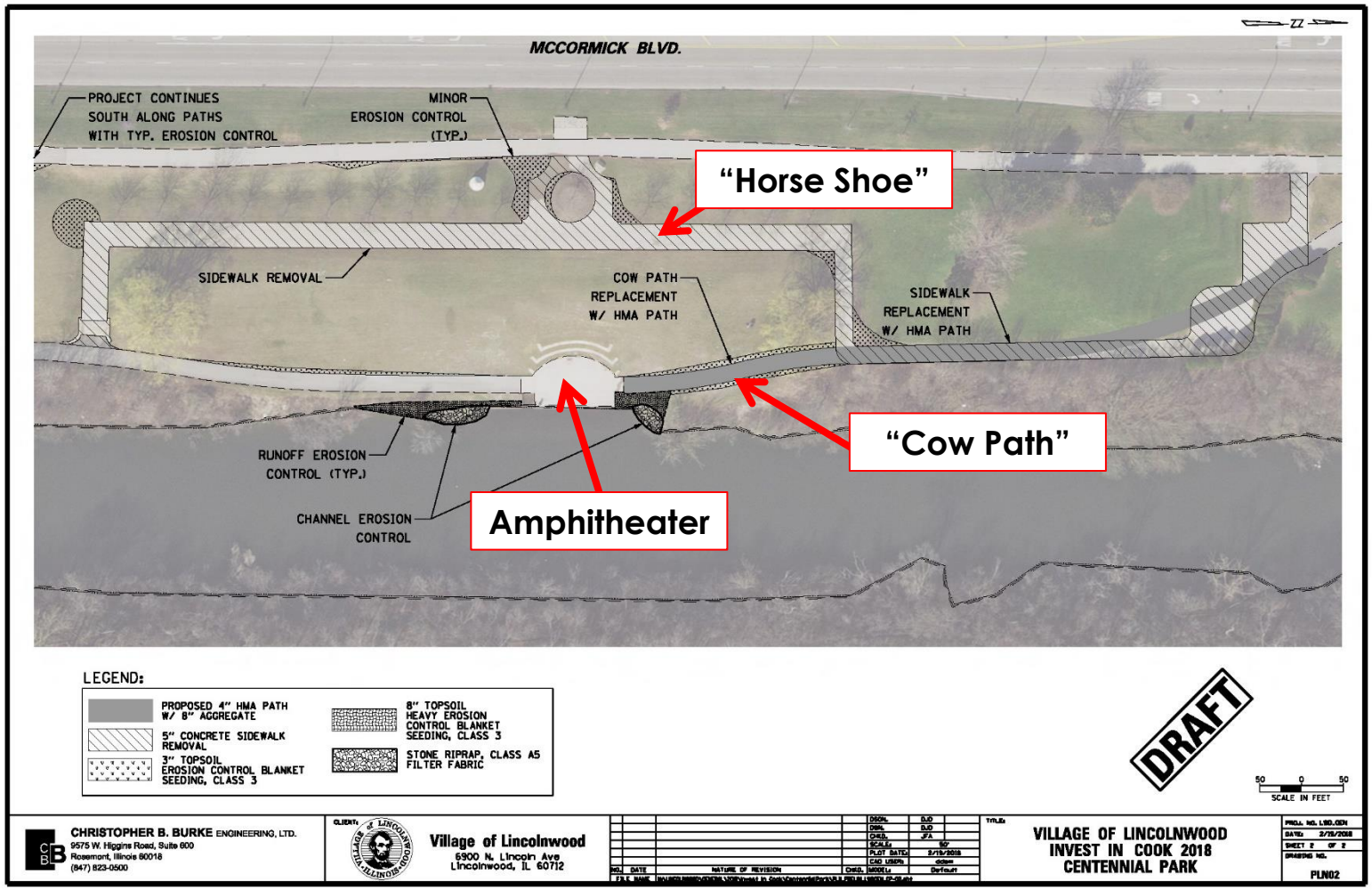
Return to COTW Memo

Project #1 – North Shore Channel Path Improvements



Return to COTW Memo

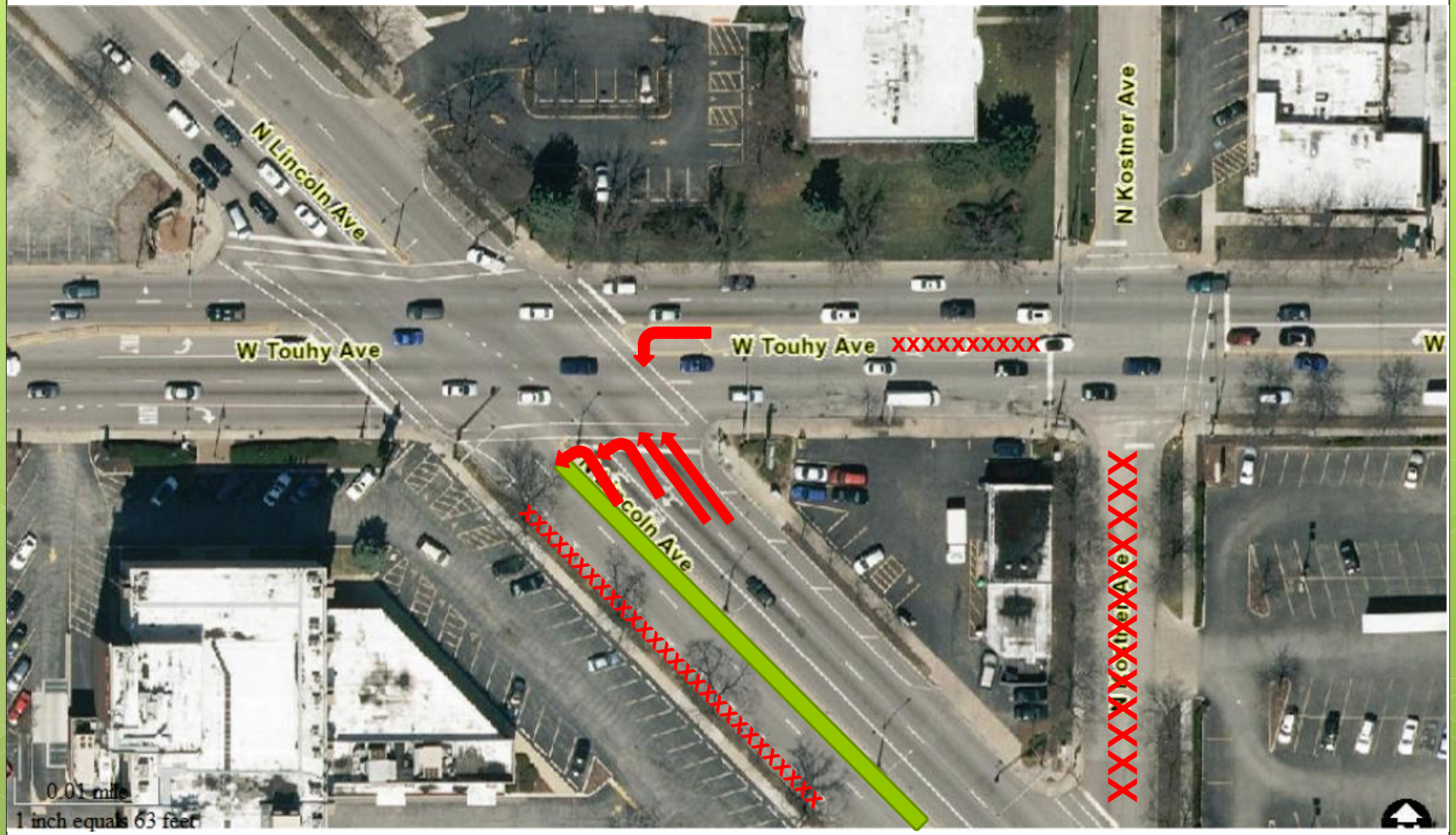
Project #1 – North Shore Channel Path Improvements



Total Project Cost: $376,900

Return to COTW Memo

Project #2 – Touhy/Kostner/Lincoln

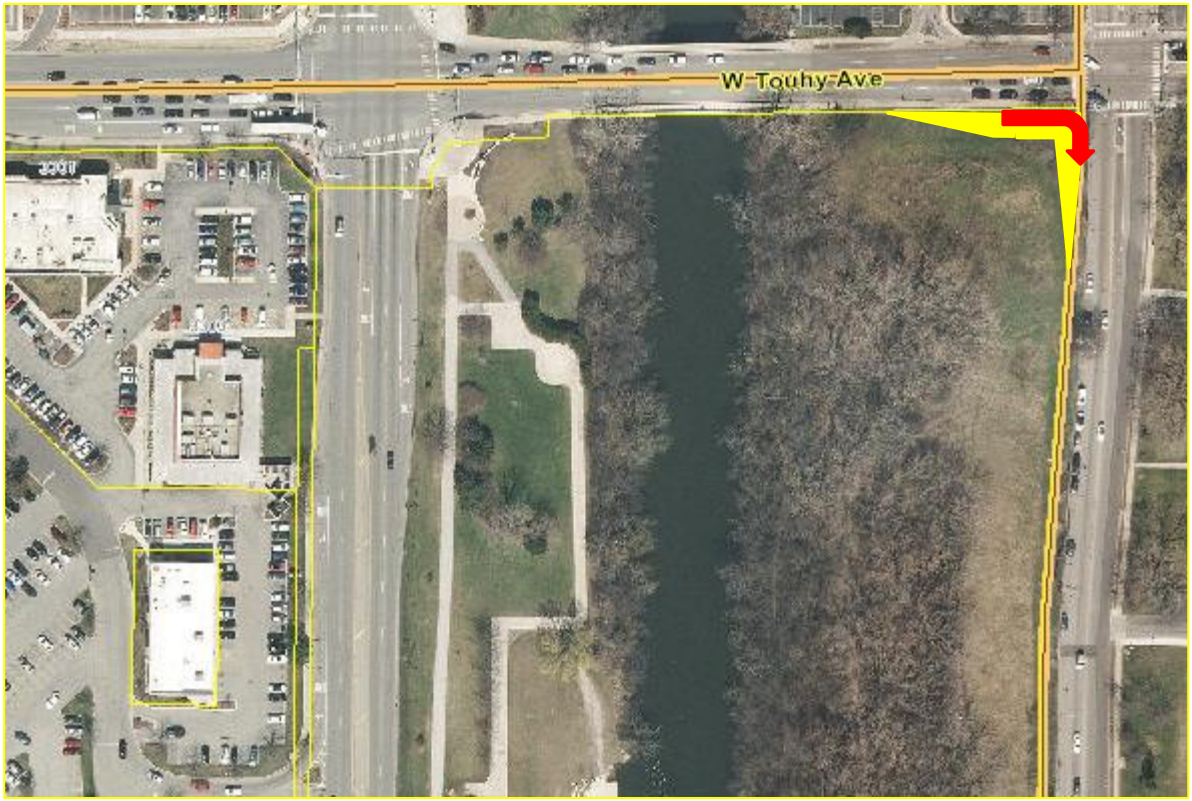


Total Project Cost: $3,575,000

Return to COTW Memo

Return to COTW Memo

Project #3 – Touhy/Kedzie Geometry Improvements



Total Project Cost: $1,060,000

Return to COTW Memo

Project Costs

- Project #1 – North Shore Channel Path ($356,000)
  - Total Project
    - $156,000 (Village – 30% Const. + Design)
    - $200,000 (Invest In Cook Request – 70% Const.)
- Project #2 – Touhy/Kostner/Lincoln ($3,575,000)
  - Phase I Engineering ($275,000)
    - $82,500 (Village – 30% Ph 1 Eng.)
    - $192,500 (Invest In Cook Request – 70% of Ph 1 Eng.)
- Project #3 – Touhy/Kedzie ($1,060,000)
  - Phase I Engineering ($116,000)
    - $34,800 (Village – 30% Ph 1 Eng.))
    - $81,200 (Invest In Cook Request – 70% of Ph 1 Eng.))
    - Excludes ROW Acquisition

Return to COTW Memo

Proposed Timeline

- If a project(s) is selected to move forward, staff will prepare and submit application
  - Applications due 3/16/2018
- July 2018 Announcement of Award

Return to COTW Memo

Village Board Direction

- Staff is seeking direction regarding which, if any, project to submit for funding
  - Project #1 – Centennial Park Path Improvements
  - Project #2 – Touhy/Kostner/Lincoln Safety and Geometry Improvements
  - Project #3 – Touhy/Kedzie Geometry Improvements

Return to VB Agenda

VILLAGE OF LINCOLNWOOD
PRESIDENT AND BOARD OF TRUSTEES
REGULAR MEETING
VILLAGE HALL COUNCIL CHAMBERS
7:30 P.M., MARCH 6, 2018

AGENDA

I. Call to Order

II. Pledge to the Flag

III. Roll Call

IV. Approval of Minutes

1. Village Board Minutes – February 6, 2018
2. Village Board Minutes – February 20, 2018

V. Warrant Approval

VI. Village President's Report

VII. Consent Agenda (If anyone wishes to speak to any matter on the Consent Agenda, a Speaker's Request Form must be completed, presented to the Village Manager, and the matter will be removed from the Consent Agenda and added to Regular Business.)

1. Approval of an Ordinance Amending Chapter 14, Article 15 of the Village Code Related to Contractor License Suspension (Appears on Consent Agenda Because it was Discussed at a Previous Village Board Meeting)

2. Approval of a Recommendation by the Zoning Board of Appeals to Adopt an Ordinance Approving Special Fences, Fence Variations, and an Accessory Structure Variation for Village of Lincolnwood Public Works Facilities at 7001 North Lawndale Avenue and 7015-17 North Central Park Avenue (Appears on Consent Agenda Because it was Approved Unanimously by a Recommending Body)

3. Approval of the Following Items Pertaining to the Public Works Yard Expansion Project: A) A Resolution Approving a Contract with Stuckey Construction Company, Inc. of Waukegan, IL in the amount of $1,523,000; and B) An Ordinance Waiving the Competitive Bidding Process and Approving an Agreement with FGM Architects of Oak Brook, IL in the Amount of $79,000 for Construction Administration Services (Appears on Consent Agenda Because it is the Lowest Qualified Bidder)

VIII. Regular Business

4. Consideration of an Ordinance Authorizing Negotiations and Final Bona Fide Offers to Purchase Title to Certain Real Property Located at 4500 – 4560 W. Touhy Avenue and 7350 N. Lincoln Avenue

5. Consideration of a Recommendation by the Plan Commission to Adopt an Ordinance Approving Zoning Code Text Amendments Related to Increased Permitted Building Coverage for the Construction of Two-Car Garages in the R-3 and R-4 Zoning Districts

IX. Manager's Report

X. Board, Commission, and Committee Reports

XI. Village Clerk's Report

XII. Trustee Report

XIII. Public Forum

XIV. Closed Session

A Closed Session is Requested to Discuss Purchase or Lease of Property Per Section 2(c)(5) and Probable or Imminent Litigation Per Section 2(c)(11)

XV. Adjournment

DATE POSTED: March 2, 2018

All Village Board meetings are broadcast live to residents on Comcast Cable Channel 6, AT&T U-VERSE Channel 99, RCN Channel 49, and online at Lincolnwood.tv at 7:30 p.m. Rebroadcasts of Village Board meetings can be viewed one week following the live broadcast at 1:00 p.m. and 7:30 p.m. on cable television or online at lwdtv.org or on the Lincolnwood Mobile App.

Return to VB Agenda

VILLAGE OF LINCOLNWOOD
PRESIDENT AND BOARD OF TRUSTEES
REGULAR MEETING
VILLAGE HALL COUNCIL CHAMBERS
FEBRUARY 6, 2018

DRAFT

Call to Order

President Bass called the regular meeting of the Lincolnwood Board of Trustees to order at 7:35 p.m., Tuesday, February 6, 2018, in the Council Chambers of the Municipal Complex at 6900 N. Lincoln Avenue, Village of Lincolnwood, County of Cook, and State of Illinois.

Pledge to the Flag

The Corporate Authorities and all persons in attendance recited the Pledge of Allegiance.

Roll Call

On roll call by Village Clerk Beryl Herman the following were:
PRESENT: President Bass, Trustees Sugarman, Spino, Hlepas Nickell, Ikezoe-Halevi, Cope, Patel
ABSENT: None

A quorum was present. Also present: Timothy Wiberg, Village Manager; Ashley Engelmann, Assistant Village Manager; Steven Elrod, Village Attorney; Charles Meyer, Assistant to the Village Manager; Doug Hammel, Community Development Manager; Andrew Letson, Public Works Director; Nadim Badram, Assistant to the Public Works Director; Steve McNellis, Director of Community Development

Approval of Minutes

The minutes from the January 16, 2018 Village Board Meeting were presented.

Trustee Hlepas Nickell moved to approve the minutes as presented, seconded by Trustee Sugarman.

The minutes were approved by a voice vote.

Warrant Approval

President Bass presented the warrants for approval in the amount of $878,966.64. Trustee Sugarman moved to approve, seconded by Trustee Hlepas Nickell

Upon a Roll Call the results were:
AYES: Trustees Patel, Cope, Ikezoe-Halevi, Hlepas Nickell, Spino, Sugarman
NAYS: None The motion passed.

Village President's Report

1. Creation of the Ad-Hoc Infrastructure Committee
2. Appointments of the Following to the Ad-Hoc Infrastructure Committee: Gus Dimas, Jeffery Perl, Syed Mudassir, Rizwan Hussain, Teodor Strat, Kathy O'Brien, and Marilyn Marwedel
3. Swearing in of Police Officer Mark Gaseor (Chief Rottner introduced the family members in attendance, clerk swore him in)

4. Lincolnwood Lions Club: On Sunday, our Interim Police Chief, Bruce Rottner, Public Works Director, Andrew Letson and the Mayor were recognized by the Lincolnwood Lions Club at their luncheon which took place this last Sunday at Usmania Fine Dining 2244 W. Devon. Thank you to the Lions Club for the recognition.

5. Alternate Side Street Parking: As a reminder, whenever the Village receives a snowfall of two inches or greater, the alternate side street parking restrictions go into effect during the hours of 8:30AM to 3:30 PM, Monday through Friday. On even days of the month, vehicles may only park on the even side of the street and on odd days of the month vehicles may only park on the odd side of the street. Parking is prohibited on Pratt during snow emergencies. A notification is posted on the Village Website and cable channel. Snow removal is a two day process. Since the Village received more than two inches of snow on Monday evening, alternate side street parking will remain in effect until tomorrow. Please be sure to park on the odd side of the street.

6. The mayor gave a big shout out to the Human Relations Commission (HRC) for another successful Iron Chief's competition. The 2n Annual Iron Chief's Competition took place this past Saturday, February 3. The event is held to raise awareness and to raise funds for the Niles Township Food Pantry. A big part of the success of the event is Lincolnwood's very own Mario Rizzotti who is also a member of the HRC. Mario was our MC and one of the three judges at the event. The Fire and Police Departments both did a great job on their dish preparation, but the Police Department walked away with the win this year. Congratulations Lincolnwood Police Department! The event would not have been a success without the following vendors: Stefani Prime, Fabbri, Schlegl's Bakery, Vero Gelato, Binny's, Starr Catering, Psisteria, Fresh Farms, Wildwood Tavern, Libanais, Old Town Abby Beer, Caffe L'antico, and Fast Signs in Lincolnwood for providing all of the signage for the event.

Consent Agenda (If anyone wishes to speak to any matter on the Consent Agenda, a Speaker's Request form must be completed, presented to the Village Manager and the matter will be removed from Consent and added to regular business)

1. Approval of a Recommendation by the Plan Commission to Adopt a Resolution Approving a Final Plat of Subdivision and Subdivision Variation for 6530 North Lincoln Avenue, as well as an Ordinance Approving Special Uses Related to Parking Located in the Front Yard and Variations Related to Building Setbacks and Parking Lot Design on Both Parcels Resulting from the Requested Subdivision, and an Ordinance Approving the Rezoning of One of the Resulting Parcels

2. Approval of a Recommendation by the Zoning Board of Appeals to Adopt an Ordinance Approving a Zoning Code Variation Request Regarding Building Foundation Landscaping Requirements at 7110 North Lincoln Avenue

3. Approval of a Resolution Authorizing the Execution of a Contract with Dahme Mechanical Industries, Inc., of Arlington Heights, IL, for the Removal and Replacement of Water Pump #4 at the Pump House in the Amount of $123,217.00

Trustee Hlepas Nickell moved to approve the Consent Agenda as amended. The motion was seconded by Trustee Spino

Upon a Roll Call the results were:
AYES: Trustees Hlepas Nickell, Ikezoe-Halevi, Spino, Cope, Sugarman, Patel
NAYS: None The motion passed.

Regular Business

4. Consideration of a Recommendation by the Plan Commission to Adopt an Ordinance Approving Text Amendments and a Map Amendment to Create the Auto Uses Overlay Zone Within the O, Office Zoning District and Rezone Certain Properties to the Auto Uses Overlay Zone

This item was presented by Mr. Hammel using PowerPoint.

Mr. Hammel discussed intent of the Ordinance.

Case #PC-13-17
Text and Map Amendments
Auto Uses Overlay Zone within Office Zoning District and Rezone Certain Properties to Auto Uses Overlay Zone

Regulatory Context
Intent of requested text amendment:
-Capitalize on potential uses of properties regarding:
- Current lot sizes
- Compatibility with surrounding uses
- Proximity to I-94 and regional arterials

A map of the proposed Auto Use Overlay Zone Map was exhibited

*Original recommendation:
- Modify Table 4.01.1 Permitted and Special Uses in all Zoning Districts to permit Auto/Light Truck Sales and Services as Special Uses in O Office District/
*Updated recommendation:
- Establish overlay zone that would permit Auto/Light Truck Sales and Services in a more specific area without the potential of being located immediately adjacent to residential areas.

Text Amendment
*Amendment to Section 4.01 Establishment of Districts to establish the Auto Uses Overlay Zone (AUOZ)
*Amendment to Table 4.01.1 Permitted and Special Uses in all Zoning Districts to:
- Indicate the Auto/Light Truck Sales and Services as a permitted special use in the O Office District
- Include a new note establishing additional standards related to the permissibility of Auto/Light Truck Sales and Service uses in the O Office District

*Auto Uses Overlay Zone applied to:
- All properties currently in O office District and located between Cicero and Lincoln Avenues.

Plan Commission Discussion
*Village Board referral on September 5, 2017
*Public Hearing held on December 6, 2017
- Commissioner concerns with original text amendment:

- Did not adequately protect the residents West of Cicero and East of Lincoln Avenue
- Hesitant regarding used car sales

-Commission suggested implementing standards associated with the Auto Uses Overlay Zone

*Regular Plan Commission meeting on January 3, 2018, Plan Commission
-Reinforced preference for overlay zone approach
-Commission discussed appropriate minimum lot size:

- 2 acre minimum to keep smaller, short-term auto uses from being developed

Plan Commission Discussion
January 3, 2018

1. Establish Auto Uses Overlay Zone
2. Permit Auto/Light Truck Sales and Service as special uses
3. Require a two-are minimum lot size
4. Prohibit "Auto Service" as the primary use on a property

Plan Commission unanimously recommended approval (6-0 vote) of the proposed text and map amendments

Requested Action
Move to approve

An Ordinance approving text amendments and a map amendment to create the Auto Uses Overlay Zone within the Office Zoning District and rezone certain properties to the Auto Uses Overlay Zone.

Trustee Hlepas Nickell moved to approve the Ordinance, seconded by Trustee Ikezoe-Halevi
Upon Roll Call the Results were:
AYES: Trustees Hlepas Nickell, Ikezoe-Halevi, Cope, Patel, Spino, Sugarman
NAYS: None The motion passed.

5. Consideration of a Recommendation by the Zoning Board of Appeals in Case #ZB-11-17 to Deny a Variation Request Regarding Existing Non-Conforming Fences in the Corner Side Yard and Interior Side Yard of 6454 North Kimball Avenue and in the Interior Side Yard of 6450 North Kimball Avenue

This item was presented by Mr. Hammel using PowerPoint

Regulatory Context

*R3 Residential
*2015 Building Permit for 6454 N. Kimball resulted in damaged fences
*Fences on both properties were replaced without a permit

Existing Fences – Photo exhibited

*Corner side yard of 6454 N. Kimball
*6'-tall solid fence

- 4'- tall "semi-private permitted

Existing Fences

*Interior side yards of 6450 and 6454 N. Kimball
*6'-tall solid fence

- 4'-tall "open" permitted

Required Variations

*Section 3.13(11) c
- Open fences of all types allowed by this regulation not more than four feet in height are allowed in side yards. – 6' tall solid fences are *not* permitted in interior side yards

*Section 3.13(11) h
- On a corner lot open and semiprivate fences not more than four feet in height may be erected in a corner side yard – 6' tall solid fences are *not* permitted in corner side yards

Petitioner Considerations

*General sense of safety and privacy
*Alley along the west property line generates additional traffic
*Local bus stops
*Traffic circle and curbside vehicular standing areas

Precedent Cases

6850 N. Lowell (2017)
*4' tall semi-private fences along side yards and near front façade of the home
*Request modified through ZBA deliberations
- Fences along front façade required to come into compliance as an "open" fence, but location could remain

*ZBA recommended approval of the modified variation request (3 – 1)
*Village Board concurred (6 – 0)

6402 N. Kolmar (2012)
*Replacement of a 5' tall solid fence in the corner side yard
*ZBA imposed a condition for additional landscape screening, but then recommended denial of the variation (3 -2)
*Village Board approved the request (6 – 0) with the condition that it be screened by arborvitae

6546 N. Sauganash (2013)
*6' tall solid fence in the corner side yard
*ZBA unanimously recommended denial of the variation
*No record of Village Board action (request may have been withdrawn)

ZBA Discussion

*Public Hearing held on September 27
- ZBA failed to find a hardship based on the considerations presented by the petitioner
- ZBA stated that landscaping could be used to provide privacy – Petitioner stated that landscaping would not provide desired level of security
- ZBA found that the standards for a Variation had not been met

ZBA unanimously recommended denial (6-0 vote) of the requested Variations

Requested Action

Move to Concur
With the recommendation of the Zoning Board of Appeals to deny the requested Variations for

fence height and openness.

Direct Village Attorney to draft a Resolution supporting this motion.

Mr. Kraft, petitioner addressed the Board. He spoke of his need for the fence. He stated that he had sent a letter to the Board members. He hired a worker to replace the broken fence. He stated that the shorter and more transparent fence offers less privacy and safety and the opportunity for his children to reach the latch and open the gate. He would like to go through the proper process. Mr. Kraft presented 10 pictures of non-compliant fences, some of which had no permits. He may look at screening possibilities.

Trustee Cope stated that it seems that people today are looking for more safety and privacy than they were looking for in the past when this Ordinance was approved. He sees no problem with the fence, but the Ordinance speaks for itself.

Trustee Hlepas Nickell stated that it is too bad that the contractor didn't let Mr. Kraft know about the Ordnance. In the past it was felt by law enforcement that the openness was safer. The onus is on the Board to enforce current laws.

Attorney Elrod stated that the only issue tonight is granting of a variation, not anything regarding a permit.

Mayor Bass called for a motion, if no hardship was found, to deny.

Resident Steven Jacobowski addressed the Board. Mr. Jacobowski stated that he is a member of the Plan Commission. He opined that the definition of Hardship should be reviewed.

Trustee Cope asked how high the knocked down fence was. He feels that this needs to be reviewed.

Trustee Hlepas Nickell stated that the problem here is the lack of enforcement.

Mayor Bass again stated that the Trustees need to look and decide if there is a hardship.

Trustee Hlepas Nickell moved to have the Attorney draft a Resolution for Denial for the next meeting, seconded by Trustee Patel.

Upon Roll Call the Results were:
AYES: Trustees Spino, Hlepas Nickell, Ikezoe-Halevi, Patel
NAYS: Trustees Sugarman, Cope The motion passed.

Manager's Report

None

Board and Commissions Report

None

Village Clerk's Report

Applications for Absentee Ballots have been received. If any resident would like to have the application, please contact the office of the Village Clerk, leave your name address and the number of applications you will need. They will be mailed to you quickly.

Trustees Reports

Trustee Patel attended the North West Municipal Conference Brunch. Manager Fowler offered to come to speak with our Board. Excellent idea.

Public Forum

Resident Leah Brennan, a member of Lincolnwood Indivisible announced that the group will be sponsoring a meeting on February 19 at the Lincolnwood Library. Lou Lang will be speaking.

Resident Steven Jakubowski addressed the Board. He questioned the fact that not all Trustees seem to have knowledge which they need regarding "hardship". He also felt that the vote on the last item needs to be repeated. Trustee Ikezoe-Halevi responded and stated that her knowledge is thorough and that the vote was correct.

Trustee Ikezoe-Halevi clarified her earlier statement. She was on the Zoning Board for several years and understands the process for hardships completely. The gentleman did not have a hardship according to what the zoning code defines. That is what is being voted on.

Trustee Patel asked if the vote can be undone. Mayor Bass said the Board already made a decision.

Trustee Cope stated that if any Trustee wishes to change a vote, they can do so when the Resolution comes before the Board at the next meeting.

Resident Steven Jakubowski said that he accepted Trustee Ikezoe-Halevi's clarification about the Board and some Commissions needing a training session/workshop to better understand rules and policies, he then apologized to her.

Adjournment to Closed Session

At 8:50 p.m. Trustee Ikezoe-Halevi moved to adjourn the meeting to Closed Session for the purpose of discussing Purchase or Lease of Property per Section 2(c)(5) and Pending Litigation per Section 2(c)(11), seconded by Trustee Hlepas Nickell.

Upon Roll Call the Results were:
AYES: Trustees Ikezoe-Halevi, Hlepas Nickell, Patel, Sugarman, Spino, Cope
NAYS: None The motion passed.

Reconvention

At 10:02 PM. President Bass reconvened the Village Board Meeting.

Adjournment to Return to Closed Session

At 10:02 PM Trustee Sugarman moved to adjourn to Closed Session for the purpose of discussion of Personnel, seconded by Trustee Ikezoe-Halevi.

Upon Roll Call the results were:
AYES: Trustees Sugarman, Ikezoe-Halevi, Patel, Spino, Cope, Hlepas Nickell
NAYS: None

Reconvention

At 10:32 PM President Bass reconvened the Village Board Meeting.

Adjournment

At 10:32 PM Trustee Cope moved to adjourn the Village Board Meeting, seconded by Trustee Spino. The motion passed with a Voice Vote

Respectfully Submitted,

Beryl Herman
Village Clerk

Return to VB Agenda

VILLAGE OF LINCOLNWOOD
PRESIDENT AND BOARD OF TRUSTEES
REGULAR MEETING
VILLAGE HALL COUNCIL CHAMBERS
FEBRUARY 20, 2018

DRAFT

Call to Order

President Bass called the regular meeting of the Lincolnwood Board of Trustees to order at 7:45 p.m., Tuesday, February 20, 2018, in the Council Chambers of the Municipal Complex at 6900 N. Lincoln Avenue, Village of Lincolnwood, County of Cook, and State of Illinois.

Pledge to the Flag

The Corporate Authorities and all persons in attendance recited the Pledge of Allegiance.

Roll Call

On roll call by Deputy Village Clerk Charles Meyer the following were:
PRESENT: President Bass, Trustees Ikezoe-Halevi, Hlepas Nickell, Cope, Sugarman, Patel, and Spino (present electronically)
ABSENT: None

A quorum was present.

Also present: Timothy Wiberg, Village Manager; Ashley Engelmann, Assistant Village Manager; Steven Elrod, Village Attorney; Charles Meyer, Assistant to the Village Manager; Heather McFarland, Management Analyst, Andrew Letson, Public Works Director, Nadim Badran, Assistant to the Public Works Director, Steve McNellis, Community Development Director, Bruce Rottner, Acting Police Chief, Robert Merkel, Finance Director, and Doug Hammel, Development Manager.

Approval of Minutes

The minutes from the February 6, 2018 Village Board Meeting were distributed and examined in advance.

Trustee Ikezoe-Halevi moved to postpone approval of the minutes and seconded by Trustee Hlepas Nickell.

The motion was approved by a Roll Call and the results were:
AYES: Trustees Ikezoe-Halevi, Hlepas Nickell, Cope, Sugarman, Patel, and Spino
NAYS: None The motion passed.

Warrant Approval

President Bass presented the warrants for approval in the amount of $723,566.33. Trustee Sugarman moved to approve, seconded by Trustee Ikezoe-Halevi.

Upon a Roll Call the results were:
AYES: Trustees Ikezoe-Halevi, Hlepas Nickell, Cope, Sugarman, Patel, and Spino
NAYS: None The motion passed.

Village President's Report

1. **Spring Break Camp**

Mayor Bass stated that registration for our new Spring Break camp is open. The camp is for grades kindergarten through 5th and features a different field trip each day, plus games, crafts and playground fun. You can register for individual days or take advantage of our full week discounted rate. The camp will run from March 26-30. For more information or to register stop by the Parks and Recreation office.

2. **Mayor Bass thanked Lieutenants Rathmell and Macaluso for having served as Interim Deputy Chief recently for the Police Department and announce that Lieutenant Schenita Stewart will be the Interim Deputy Chief for the next month.**

3. **The Mayor announced the renewed collaboration between the Village and School District 74**

The Mayor stated that the Village has renewed the collaboration with School District 74 and the Village regarding prevention training mitigating situations involving active shooter type scenarios. A special thank you was made to former Lieutenant Larry Martin for generously donating his time for the initial training. All training is in conjunction with Police Chief Bruce Rottner and acting Deputy Chief Schenita Stewart as coordinators with SD74 Superintendent Kim Nasshan and School Board President Scott Anderson.

4. **Excellence in Financial Reporting**

The Mayor announced that the Certificate of Achievement for Excellence in Financial Reporting has been awarded to the Village of Lincolnwood by Government Finance Officers Association of the United States (GFOA) for it comprehensive annual financial report for the year ended April 30, 2017. The certificate of Achievement is the highest form of recognition in the area of governmental accounting and financial reporting and its attainment represents a significant accomplishment by a government and its management.

5. **8th Senate District Candidate Forum**

Mayor Bass relayed that the 8th Senate District Candidate Forum will be taking place this Thursday, February 22 at 7 P.M. at the Bernard Horwich Center JCC located at 3003 W Touhy in Chicago. This event is organized by the League of Women Voters of Chicago.

6. **New Year Celebrations**

Mayor Bass stated that the Assyrian New Year begins April 1 and wanted to wish the Village's Assyrian residents a Happy New Year. Mayor Bass also stated that the Chinese New Year began on February 16 and was the year of the dog.

7. **Extended Lobby Hours**

Mayor Bass announced that effective February 20, 2018, the Village had extended the hours from 7:00 am to 7:00 pm. Since the State of Illinois mandate required consolidation of the Village's dispatch center the Village has been working to extend the police lobby hours in order to better serve the residents of the community. This is being accomplished with no impact to the budget. The department Records Clerks will ensure that the additional hours are staffed by on-

duty personnel to accommodate residents who may require assistance. The main goal is to offer excellent public safety and quality police service to our community.

Consent Agenda

1. Approval of a Resolution Appointing a Representative and an Alternate to the Governing Board of the North Suburban Employee Benefit Cooperative

2. Approval of a Resolution in Case #PC-01-18 to Approve a Final Plat of Subdivision for the Grossinger Subdivision at 7080 North McCormick Boulevard

3. Approval of a Resolution Approving a Memorandum of Understanding Between the City of Evanston and the MABAS Division 3 Agencies for a Joint Application to FEMA's Firefighters Grant Program

Trustee Hlepas Nickell moved to approve the Consent Agenda. The motion was seconded by Trustee Cope.

Upon a Roll Call the results were:
AYES: Trustees Ikezoe-Halevi, Hlepas Nickell, Cope, Sugarman, Patel, and Spino
NAYS: None The motion passed.

Regular Business

4. Consideration of an Ordinance Denying a Variation Request Regarding Existing Non-Conforming Fences in the Corner Side Yard and Interior Side Yard of 6454 North Kimball Avenue and in the Interior Side Yard of 6450 North Kimball Avenue

This item was presented by Douglas Hammel, Development Manager, who provided a summary of the case to date. Mr. Hammel stated that the item had been reviewed previously by the Village Board and on February 6, 2018 the Village Board made a recommendation by a 4-2 vote to direct the Village Attorney to draft an Ordinance to deny a variation request regarding the existing non-conforming fences in the corner side yard and interior side yard of 6454 North Kimball Avenue and in the Interior Side Yard of 6450 North Kimball Avenue.

Trustee Cope stated that the resident was making improvements to his yard and after the fence was damaged by a contractor the resident had the contractor put up a fence similar to other fences in neighboring properties. Trustee Cope said that since the Plan Commission is looking at natural screening that they are open to making adjustments to this aspect of the Village Code. Trustee Cope said that the resident does have a hardship that was caused in part by the Village allowing these types of fences going into place.

Trustee Patel moved to approve the Ordinance, seconded by Trustee Ikezoe-Halevi.

Upon Roll Call the Results were:
AYES: Trustees Ikezoe-Halevi, Hlepas Nickell, Cope, Sugarman, Patel, and Spino
NAYS: None The motion passed.

5. Consideration of the Following Items Pertaining to the Former Purple Hotel Site: A) An Ordinance Authorizing Negotiations and Final Bona Fide Offers to Purchase Title to Certain Real Property Located at 4500 – 4560 W. Touhy Avenue and 7350 N. Lincoln Avenue B) A Resolution Directing Enforcement of the Village Code Against the Property Located at 4500 – 4560 W. Touhy Avenue and 7350 N. Lincoln Avenue

To begin the topic of discussion, Mayor Bass stated if interested speakers would like to speak, the timeframe for speaking would be extended from three minutes to five minutes per speaker. The topics discussed for each speaker would be limited to only the topic to be discussed under the topic of Regular Business.

Mr. Michael Siemen, on behalf of Lake Forest Real Estate Capital, requested the ability to speak for 10 minutes regarding the property and his organization's vision for the property as the contract purchaser for the site in question. He stated that his intent was to speak for five minutes and then pass his speech over to his brother for the remaining five minutes to complete the speech.

After a discussion by the Village Board on the topic of allowing Mr. Siemen to speak for 10 minutes, Trustee Cope made a motion to allow Mr. Siemen to speak for 10 minutes on the subject matter of this topic. The motion was approved via a voice vote.

Attorney Elrod asked for the Board to consider if the subject matter from Mr. Sieman was related to the topic on the agenda and that if it does not pertain to the subject matter than should it occur during the Public Forum portion. The Mayor polled the Board of Trustees and all Trustees stated that they were in support for letting Mr. Siemen speak now regarding the topic on hand.

Mr. Michael Siemen read from a prepared statement as the contract purchaser for the property at the Purple Hotel Site:

- Mr. Siemen stated that he was present tonight on behalf of Lake Forest Real Estate Capital as the contract purchaser for the site located at the property in question.
- Mr. Sieman requested to share the background of him and his development team for this project to illustrate their plan for the Purple Hotel Site and asked that the Board not hold the failures of previous developers of the site against him and his team and ask for patience as they develop the site.
- Mr. Siemen stated that they will be able to develop a project together that everyone will be proud of if given the chance.
- Mr. Siemen stated that they are fully capitalized and capable for the project and ready to go. He said that he has a long familiarity for the property dating back to his grandfather.
- Mr. Siemen noted that in his time he has reviewed in excess of $100 billion in projects with 100 developers. Have been involved in $3 billion in development including the Glenview project on the former naval base that involved a public-private partnership analogous to the Purple Hotel Site.
- Mr. Siemen stated that he felt that the eminent domain process would create an unnecessary delay in the common goal for this property.
- Mr. Siemen said that they performed a market analysis and a design for the property. The team that has been assembled is a best in class team ready to setup for this project. Mr. Siemen said that they have more than enough capital to complete the project.
- Mr. Siemen stated since they have secured the contract for the property they have accomplished the following:
    - Due diligence on the property
    - Interviewing previous participants on the project
    - Extensive conversations with investors and after we demonstrated control of site we have redundant capital opportunities
    - Met with various contractors to discuss how we can remediate the site
- Mr. Siemen stated that he appreciates the Village's desire to proceed forward with the site

and requested that the meeting that was previously scheduled between his organization and the Village be rescheduled so that they may present to the Village the actions undertaken for the site and the future development opportunities. Mr. Siemen stated that after that meeting if the Village wants to proceed with someone else then he would be inclined to discuss a price for the property provided that the Village acknowledges that they have full property rights to the site and that they have a very good idea of the value of the property.

- Mr. Siemen noted that he was confident that they were the property developer to further this project and that they have several incentive options to facilitate development.
- Mr. Siemen stated that if the Village is looking to issue General Obligation bonds to invest in the property then it could be used to help with financing to the site and provide a good return in investment.

Todd Zima, Design Director for ZS Development, said that he came here to make a couple of points:

- Mr. Zima stated that as the Design Director he would be responsible for bringing this project to fruition and that the organization understands the storied history for this site and that ZS Development plans to bring a development to the site.
- He stated that he has 20 years of experience delivering high quality projects in Chicago and internationally in which he has worked with several different entities and understands what it takes to bring plans to fruition.
- He then provided an update on where they are at in the development process:
    - ZS Development has made a full project plan and would like to meet with Village staff to discuss the next steps
    - They have met with construction consultants and have commissioned a full market analysis, and they plan to continually update the market analysis
    - An RFP has been created and they have interviewed three world class master planners and would like to invite the Village to judge these panelists with ZS Development
- The current concept plan is similar to what has been brought forward and we think that there is more to be done here and we want to be able to collaborate with you on the project.

Sandford Stein, Attorney, spoke on behalf of ZS Development not as a representative but as a friend of the family. Mr. Stein stated that ZS Development has the ability to bring a project in on time and under budget. He said that the team has been working on this site for two years. He said that it would be a mistake to judge this team as anything else but the very best. As you proceed with your charge, consider how this group can achieve this goal. He asked that the Board pause and allow this team to continue.

Mr. Elrod explained how the Village Board can proceed and that the two items for consideration on the agenda can be handled separately and in whatever order the Village Board decides.

Trustee Hlepas-Nickell moved to approve a Resolution Directing Enforcement of the Village Code against the Property Located at 4500 – 4560 W. Touhy Avenue and 7350 N. Lincoln Avenue, seconded by Trustee Patel.

Upon Roll Call the Results were:
AYES: Trustees Ikezoe-Halevi, Hlepas Nickell, Cope, Sugarman, Patel, and Spino
NAYS: None The motion passed.

Trustee Patel asked for the Village Manager to explain the process that would be taken to facilitate

the completion of the purchase of the property. Mr. Wiberg stated that he would work with the Village Attorney to determine the next steps and debt-financing and would work with the Board to establish what that price would be. Then, the Village would develop a financing mechanism and would identify a debt instrument. The Village would then speak with a bond consultant and would determine the timing and total amount. The Village would then need to determine the debt service for any expenditure. After that is completed the Village would then proceed with a negotiation for the property based on this information.

Trustee Cope asked for the contract-purchaser to clarify the statement regarding the use of General Obligation (G.O.) Bonds to fund the project. Mr. Elrod clarified that by his understanding the developer had a desire for a public-private partnership in which the Village would invest in the form of G.O. Bonds to own the land and then a developer would be responsible for developing the land. Mr. Sieman confirmed Mr. Elrod's summary and stated that the G.O. Bonds would be a good way to do it and that it would be a good component to improve the property. Mr. Sieman stated that if the Village was interested in utilizing G.O. Bonds for this purpose then they should enter in agreement with his organization to complete the process.

Trustee Cope related that the Village's concern was that the previous developer of the property had three to four years working on the property while it laid dormant and that residents are upset that nothing was done to address the issues for the property. Mr. Sieman stated that it was their goal to develop the property understanding what led to the previous project to fail. Mr. Sieman stated that they have built a financial model for the project that is the largest that he has developed since he left his previous job. He stated that the project is scalable and that the financing can be adjusted based on what the Village wants to do with this site.

Trustee Cope asked for what the timeframe was for the project and to avoid going another couple of years without anything taking place on the site. Mr. Zima stated they were looking to create the right project and pick the right model for the site. Mr. Zima said that the next three months would be to select the right model and plan going forward before creating a plan and selecting the right group. Mr. Zima stated that no matter who is selected there is going to be a period of time to produce drawings and that they are positioned best to proceed quickly. Mr. Zima stated that the team that they have put together is poised to complete this as quickly as possible.

Trustee Patel asked if the Village needed an Ordinance to start looking at options for financing and could come back to the Village Board with that information in approximately two weeks. Village Manager Wiberg and Finance Director Merkel stated that the Village could start the process of meeting with their bond consultant and could get information together for the Board.

Mayor Bass requested that Attorney Elrod provide an overview for the process. Mr. Elrod stated that the Village has the ability to act in a regulatory manner or proprietary manner in respect to the property. The Village has previously exercised its regulatory authority and awaited for an application for the property and has seen that application fail. The Village may continue to operate with a regulatory capacity with regards to the developers that are before you tonight who have stated that they are ready to proceed. The Village can act in a proprietary capacity and take complete control over the property. The ordinance tonight allows for the Village to act in a proprietary motion to acquire the property. Tonight's action would be the first step in the eminent domain process, which would then be followed by a bona fide offer for the property to the owner, but not to the contract purchaser of the property. The Village would need to determine if there was a way to make a good faith deal for the property. If that process is not successful, then public action

to commence steps for acquisition of the property through eminent domain. Eminent domain for economic development would require additional action by the Village, which has been previously taken. Attorney Elrod stated that the direction of the Board would be to authorize the Mayor, Village Manager, and myself to meet with the land owner to present a bona fide offer for the property.

Trustee Patel asked for the Village to give staff more time to look at financing options and present them to the Board at the next meeting.

Trustee Hlepas Nickell asked for Attorney Elrod to provide an overview of the impact of the resolution that was passed regarding the Resolution for enforcement of the Village Code on the property. Mr. Elrod said that the Resolution was the culmination of several issues with the prior property owner and code violations still present on the property. The Village, at the request of the prior owner, allowed for the private owner to not take all of the steps necessary to complete the demolition – specifically removal of foundation and underground components of the property. Mr. Elrod stated that the Village estimates that the total cost to complete this work is $1 million. Mr. Elrod noted that the Village went to Court to require the property owner to complete the work and the Village would have the right to do the work. The Village was succesful in the Court Action and the Village could enter the property to complete the work and lein the property if the Village desires. The Resolution previously approved allows the Village to proceed forward with that action if it so desires.

Trustee Cope stated that he would like to hear more about how this group would like to move forward and bring this project to fruition. Trustee Cope said that he wanted to wait on voting on this motion until after the Village Manager is able to determine how the Village may purchase the property and handle financing.

Trustee Patel made a motion to continue the discussion until the March 6, 2018, Village Board Meeting. The motion was seconded by Trustee Spino.

Upon Roll Call the Results were:
AYES: Trustees Ikezoe-Halevi, Hlepas Nickell, Cope, Sugarman, Patel, and Spino
NAYS: None The motion passed.

6. Consideration of a Recommendation by the Plan Commission Concerning Case #PC-10-17 to Adopt an Ordinance Regarding Zoning Code Text Amendments to Modify the Permissibility and Requirements for Natural Screening on and Adjacent to Single-Family Residential Properties

This item was presented by Steve McNellis, Community Development Director, who started with a background for the item:

- May 2, 2017 Committee of the Whole: Request for Natural Screening on/off-site at 3500 W. Arthur resulted in consensus that Village code requirements should be reviewed
- Referral to PC for review of Natural Screening on-site (specifically in Front Yards and Corner Side Yards) and in Public Right-of-Way
- PC began Public Hearing in July, 2017, concluding in February, 2018, after four meetings on the subject
- Natural Screening is defined as follows:
    - *The use of deciduous trees, deciduous bushes, evergreen trees, evergreen*

bushes, or other live plantings which are planted or grown in a manner that creates a hedge which acts as a barrier or boundary

- A. Natural Screening is currently permitted, by right, on single-family residential property in any required Yard (setback), with different height permissibility
- B. Natural Screening is also currently permitted in public Rights-of-Way, with special approval, as a "Special Fence"

Mr. McNellis provided an overview of natural screening:

- Current Requirements for Public Rights-of-Way:
  - Rear and Side Yards (interior & Corner Side with no front door) = no height restriction
  - Corner Side Yard with front door to residence = 4' max. height
  - Front Yard = 30" maximum height
  - Can be increased only through a Variation process
  - Net effect – Generally, no visual barrier from the street is permitted
- Current Requirements:
  - Natural Screening on public rights-of-way is permitted only as a Special Fence (requires a Public Hearing process)
  - **Special Fence** – *Those which have a greater potential than permitted fences to have an adverse impact upon the surrounding neighborhood. (These fences) may be appropriate in some locations and inappropriate in other locations*
  - Other types of Special Fences include: wrought iron fences, brick or stone walls, through-lot fences and landscaped terrace walls over 30" in height
- Proposed Amendments:
  - Natural Screening in Close Proximity to the Home :
    - Section 3.13(1)(b)(ii) excludes Natural screening "adjacent to" the base of a home from any regulations. Result – No limitations in this area
    - Amend existing Code Section to expand this area to up to ten feet (10') from the base/façade of the home
    - Reason – PC believes this is vague and potentially too limiting for foundation plantings
  - Natural Screening Height in Corner Side Yard (with no front door):
    - Section 3.13(12) provides no limitation on height of Natural Screening in Corner Side Yard, where front door of the home does not face that yard
    - Amend existing Code Section to limit Natural Screening in Corner Side Yards with no facing front door, to a maximum eight feet (8') in height
    - Reason – PC concerned that in these cases, there should be a reasonable limitation on maximum Natural Screening height to reduce likelihood of a "canyon effect" along Village streets
  - Natural Screening Height in Corner Side Yard (with front door):
    - Section 3.13(12)(c) limits all Natural Screening in ***entire*** Corner Side Yard to no taller than four feet (4') in height, on these types of lots
    - Amend existing Code Section to limit Natural Screening to four feet (4') in height only in area between the house, corner side lot line, and front and rear facades of the house. Remainder permitted up to eight feet (8')
    - Reason – Provide additional privacy in the "extended" Rear yard, as four foot (4') height limitation is intended to leave primary facade visible
  - Natural Screening Height in Front Yard:
    - Section 3.13(20)(a) limits Natural Screening in Front Yards to no taller than

thirty inches (30") in all circumstances
        - Amend existing Code Section to permit two exceptions: 1) Lots across a Public Right-of-Way from Commercial, Office or Industrial Zoning (permit 6' tall screening) or 2) Corner lots (permit 8' tall screening)
        - Reason – Provide a buffer from non-residentially-zoned property, and provide additional privacy for a Corner Front Yard, recognizing Rear Yards alone do not offer a similar-sized private area as Rear Yards in interior lots
        - Unique nature of corner lots results in less private space than an interior lot
        - Corner lots are "setback-restricted" (ie. Interior lot 50' wide has two 5' Side Yard setbacks, corner lots have a 5' Side Yard setback and a 10' Corner Side Yard setback)
        - Limiting this to corner lots would not result in a "canyon effect" along streets, as it would be limited to the end of the street
    - Required Setbacks for Special Fences:
        - Section 3.13(8)(a) provides that Natural Screening in a Public Right-of-Way may be permitted as a Special Fence, however there are no required setbacks from infrastructure in the Right-of-Way
        - Amend existing Code Section to maintain certain minimum setbacks, at all times, from a hydrant, utility pole or similar infrastructure, and a sidewalk and street curb
        - Reason – Allow proper access to utilities, ensure sidewalks will not become overgrown, and provide ample room for occupants to enter/exit parked cars
    - Maintain Current Regulations:
        - Remove inconsistency in existing Zoning Code language and reaffirm that Natural Screening is permitted in a Corner Side Yard, where the front door to a home faces that yard
        - Remove inconsistency in existing Zoning Code language and reaffirm that Natural Screening in the Public Right-of-Way should only be permitted through the "Special Fence" process (essentially a Special Use)
        - Unanimous consensus of the PC that the permissibility of natural screening in the public right-of-way should be considered on a case-by-case basis, and no blanket approval should be provided

Mr. McNellis provided an overview of the Plan Commission deliberation:

- **Plan Commission Public Hearing on July 5, November 1 and February 7.**
    - General consensus - existing regulations are overly-restrictive and should be reduced
    - Concern by several Commissioners that a "canyon effect", creating a natural "wall", should be avoided on typical residential blocks
    - Recognition that corner lots and residential across from higher-intensity zoning created unique situations where additional privacy is warranted
    - No Public testimony received at the Hearing
    - Proposed text Amendments addressed separately, with all receiving unanimous support from the PC, with exception of the proposal to increase permissibility of Natural Screening in certain Front Yards
        - *Commissioner Kohn voiced concern about the proposed 8' height for Natural Screening in a Corner Lot Front Yard, apparently concerned the proposal was too tall*
- Plan Commission Recommendation:
    - By 5-0 Vote (4-1 Vote for #4), Plan Commission Recommends the following Text Amendments to regulate Natural Screening on Single-Family Residential Properties

and the adjacent Public Right-of-Way:

1. Permit Natural Screening within 10’ of the base/façade of a house, with no limitation on height
2. Limit Natural Screening in a Corner Side Yard, with no front door facing, to eight feet (8’) in height
3. Limit the height of Natural Screening, in a Corner Side Yard, with a front door facing, to four feet (4’) only in that area bound by the house, the Corner Side lot line, the front façade of the home and the rear façade of the home
4. Increase the maximum permitted height of Front Yard Natural Screening to six feet (6’) when a home is across from specific higher-intensity Zoning Districts, and to eight feet (8’) for all corner lots
5. Require minimum setbacks for Natural Screening, when permitted through the Special Fence process, to five feet (5’) from any hydrant, utility pole, or similar infrastructure, three feet (3’) from a sidewalk, and five feet (5’) from the curb line of a street
6. Eliminate inconsistencies, in favor of existing permissibilities

Trustee Patel voiced a concern regarding the allowance of eight feet for natural screening in the front yard that may cause a negative impact on the rest of the neighborhood.

Trustee Hlepas Nickell asked that a species list is included in the Ordinance to ensure that species are utilized that will maintain the Village’s direction for keeping line-of-sight on the property.

Trustee Cope moved to approve the Ordinance Regarding Zoning Code Text Amendments to Modify the Permissibility and Requirements for Natural Screening on and Adjacent to Single-Family Residential Properties with an Amendment to include a requirement that a list of applicable tree species list be included in the Ordinance. The motion was seconded by Trustee Sugarman.

Upon Roll Call the Results were:
AYES: Trustees Ikezoe-Halevi, Hlepas Nickell, Cope, Sugarman, and Spino
NAYS: Trustee Patel The motion passed.

Manager’s Report

None

Board and Commissions Report

None

Village Clerk’s Report

None

Trustees Reports

Trustee Patel said that we are working through the process of the Finance Committee and asked about the status of the Ad-Hoc Infrastructure Committee. Mayor Bass stated that the Ad-Hoc Infrastructure Committee’s first meeting was being scheduled by Village Manager Wiberg and that the meeting would be open to the Public and the Village Board Liaison is going to be Trustee Cope who is handling similar projects in other communities.

Public Forum

1. Darlene Grossman stated that Mr. Wiberg's contract was terminated recently and asked if Mr. Wiberg had reapplied for the position. Mr. Elrod clarified that the Village Board did not terminate Mr. Wiberg's contract but instead had voted to not allow the automatic renewal of the existing Contract.

2. Scott Anderson, School District 74 President, came forward to complement the Police Department and said that the positive relationship between the School District and Village to resolve a recent safety issue.

3. Edye Kamensky, asked to clarify the financial award that was received by the Village during the President's Report along with who was responsible for the Village receiving the award.

Adjournment

At 9:36 p.m. Trustee Cope moved to adjourn the meeting to Closed Session for the purpose of discussing Employment Matters Per Section 2(c)(5) and Potential Litigation per Section 2(c)(11), seconded by Trustee Spino.

AYES: Trustees Ikezoe-Halevi, Hlepas Nickell, Cope, Sugarman, Patel, and Spino
NAYS: None The motion passed.

Reconvention

At 10:47 p.m. President Bass reconvened the Village Board Meeting.

Adjournment

At 10:47 p.m. Trustee Cope moved to adjourn the meeting, seconded by Trustee Sugarman. The motion passed with a Voice Vote.

Respectfully Submitted,

Charles Meyer
Deputy Village Clerk

Return to VB Agenda

TO: President and the Board of Trustees

FROM: Timothy C. Wiberg, Village Manager

SUBJECT: Warrant Approval

DATE: March 2, 2018

The following are the totals for the List of Bills being presented at the March 6th Village Board meeting.

03/06/2018		169,092.42
03/06/2018		31,276.86
03/06/2018		51,355.54
03/06/2018		30,136.60
03/06/2018		56,517.09
03/06/2018		24,460.08
Total	$	362,838.59

Return to VB Agenda

Accounts Payable

To Be Paid Proof List

User: jmazzeffi
Printed: 02/21/2018 - 12:06PM
Batch: 00100.03.2018

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				**Description**
City of Chicago Dept of Water				
CTYOFCHI				
430883-430883	2/7/2018	84,361.20	0.00	03/06/2018
660-620-519-5790 Water purchases				Water - 12/11/17-1/10/18
430883-430883 Total:		84,361.20		
430884-430884	2/7/2018	73,819.68	0.00	03/06/2018
660-620-519-5790 Water purchases				Water - 12/11/17-1/10/18
430884-430884 Total:		73,819.68		
City of Chicago Dept of W		158,180.88		
Commonwealth Edison				
COMED				
2873043051	2/8/2018	186.27	0.00	03/06/2018
101-440-513-5785 Utilities - public way				6471 N Lincoln
2873043051 Total:		186.27		
300071087	2/6/2018	225.21	0.00	03/06/2018
101-440-513-5785 Utilities - public way				7157 N Keeler
300071087 Total:		225.21		
381169268	2/7/2018	253.74	0.00	03/06/2018
101-440-513-5785 Utilities - public way				7002 N Tripp
381169268 Total:		253.74		

Return to VB Agenda

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
4357072009	2/6/2018	223.27	0.00	03/06/2018
101-440-513-5785 Utilities - public way				6401 McCormick
4357072009 Total:		223.27		
4847019018	2/8/2018	165.91	0.00	03/06/2018
101-440-513-5785 Utilities - public way				6668 N Lincoln Ave
4847019018 Total:		165.91		
Commonwealth Edison To		1,054.40		
Lowe's Business Acc/GECF				
LOWES				
01086	1/19/2018	45.19	0.00	03/06/2018
101-420-511-5730 Program supplies				Lysol, clorox wipes for PW Building
01086 Total:		45.19		
02101	1/22/2018	4.74	0.00	03/06/2018
101-420-511-5405 R&M - buildings				Steel garage door rollers for PW
02101 Total:		4.74		
02238	1/24/2018	275.02	0.00	03/06/2018
101-440-513-5290 Street lights & traffic signal				Battery clamp, tubing, pole for electrical project
02238 Total:		275.02		
02241	1/24/2018	59.84	0.00	03/06/2018
101-440-513-5290 Street lights & traffic signal				Sheeting, fuses for electrical project
02241 Total:		59.84		
02313	1/25/2018	30.75	0.00	03/06/2018
101-440-513-5290 Street lights & traffic signal				Box cover, wirirng for electrical project
02313 Total:		30.75		
02340	1/25/2018	49.63	0.00	03/06/2018
101-440-513-5290 Street lights & traffic signal				Wires for electrical project

Return to VB Agenda

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
02340 Total:		49.63		
02393	1/26/2018	147.35	0.00	03/06/2018
101-440-513-5730 Program supplies				Cement, char for Streets
02393 Total:		147.35		
02665	1/30/2018	20.89	0.00	03/06/2018
101-420-511-5405 R&M - buildings				Wire nuts for PW
02665 Total:		20.89		
02788	2/1/2018	1,632.08	0.00	03/06/2018
660-620-519-5745 Small tools				Wrench, rachets, chisel, pipes, blades, pliers, drill bits
02788 Total:		1,632.08		
02848	2/2/2018	20.85	0.00	03/06/2018
205-430-515-5730 Program supplies				Graffiti removal for Centennial Park
02848 Total:		20.85		
02919	1/18/2018	3.36	0.00	03/06/2018
101-440-513-5480 R&M - vehicles				Scrapers for Auction vehicles
02919 Total:		3.36		
02976	1/19/2018	5.55	0.00	03/06/2018
101-440-513-5480 R&M - vehicles				Scrapers for Auction vehicles
02976 Total:		5.55		
Lowe's Business Acc/GEC		2,295.25		
Nicor Gas				
NICOR				
1436840000	2/6/2018	492.11	0.00	03/06/2018
205-430-515-5780 Utilities - government buildin				Community Center

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				Description
1436840000 Total:		492.11		
21-46-84-00003	2/6/2018	263.30	0.00	03/06/2018
205-560-515-5780 Utilities - government buildin				Pool
21-46-84-00003 Total:		263.30		
21-84-84-00004	2/6/2018	439.48	0.00	03/06/2018
660-620-519-5780 Utilities - government buildin				Pump Station
21-84-84-00004 Total:		439.48		
3017240000	2/7/2018	2,458.38	0.00	03/06/2018
101-420-511-5780 Utilities - government buildin				Public Services
3017240000 Total:		2,458.38		
31-46-84-00002	2/8/2018	201.00	0.00	03/06/2018
205-560-515-5780 Utilities - government buildin				Parks & Rec
31-46-84-00002 Total:		201.00		
5202340000	2/8/2018	921.53	0.00	03/06/2018
101-420-511-5780 Utilities - government buildin				Village Hall
5202340000 Total:		921.53		
6202340000	2/7/2018	1,383.77	0.00	03/06/2018
101-420-511-5780 Utilities - government buildin				Public Safety
6202340000 Total:		1,383.77		
70-61-47-04487	2/7/2018	82.32	0.00	03/06/2018
205-560-515-5780 Utilities - government buildin				7055 Kostner
70-61-47-04487 Total:		82.32		
Nicor Gas Total:		6,241.89		

United States Postal Service

Return to VB Agenda

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				**Description**
USPOSTMA				
469009	2/12/2018	1,320.00	0.00	03/06/2018
101-210-511-5720 Postage				Box/Caller Fee
	469009 Total:	1,320.00		
	United States Postal Servic	1,320.00		
	Report Total:	169,092.42		

Return to VB Agenda

Accounts Payable

To Be Paid Proof List

User: jmazzeffi
Printed: 02/26/2018 - 9:18AM
Batch: 00101.03.2018

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
American Express				
AMEREXP				
021518	2/15/2018	45.00	0.00	03/06/2018
205-500-515-5725 Credit card charges				Membership fee
021518 Total:		45.00		
31083021618	2/16/2018	119.97	0.00	03/06/2018
101-350-512-5480 R&M - vehicles				Paypal - Laptop docking stations for rigs
31083021618	2/16/2018	326.05	0.00	03/06/2018
101-350-512-5480 R&M - vehicles				Paypal - Dash lights, light bar for vehicles
31083021618	2/16/2018	1,345.50	0.00	03/06/2018
101-350-512-5570 Professional associations				NFPA - Annual membership
31083021618 Total:		1,791.52		
31182011518	1/15/2018	39.99	0.00	03/06/2018
101-250-511-5340 Maintenance Agreement Expen				Website domain Golincolnwood.com
31182011518 Total:		39.99		
31182011618	1/16/2018	45.00	0.00	03/06/2018
101-200-511-5510 Advertising				Job posting crossing guard
31182011618	1/16/2018	9.87	0.00	03/06/2018
101-100-511-5840 Meals				Refreshments for Art Reception
31182011618 Total:		54.87		
31182012218	1/22/2018	15.99	0.00	03/06/2018
101-250-511-5340 Maintenance Agreement Expen				Domain name

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				Description
31182012218 Total:		15.99		
31182012418	1/24/2018	-10.88	0.00	03/06/2018
101-250-511-5340 Maintenance Agreement Expen				Logmein/Gotomeeting for Council Chambers
31182012418 Total:		-10.88		
31182012518	1/25/2018	1.99	0.00	03/06/2018
101-250-511-5340 Maintenance Agreement Expen				Website
31182012518 Total:		1.99		
31182013118	1/31/2018	56.00	0.00	03/06/2018
101-100-511-5799 Other materials & supplies				Flowers for employee loss
31182013118	1/31/2018	52.95	0.00	03/06/2018
101-100-511-5799 Other materials & supplies				Flowers for employee loss
31182013118 Total:		108.95		
31182020418	2/4/2018	129.49	0.00	03/06/2018
101-250-511-5340 Maintenance Agreement Expen				Server Storage/Amazon
31182020418 Total:		129.49		
31182020518	2/5/2018	29.99	0.00	03/06/2018
101-250-511-5330 Data processing				Adobe for CD intern
31182020518 Total:		29.99		
31182020618	2/6/2018	251.00	0.00	03/06/2018
101-100-511-5840 Meals				Dinner for Board meeting
31182020618	2/6/2018	32.97	0.00	03/06/2018
101-100-511-5840 Meals				Dinner for Board meeting
31182020618	2/6/2018	28.95	0.00	03/06/2018
101-100-511-5840 Meals				Dinner for Board meeting
31182020618 Total:		312.92		
31190011118	1/11/2018	76.13	0.00	03/06/2018
205-500-515-5510 Advertising				Signs.com Inc. - Park sign inserts
31190011118	1/11/2018	269.00	0.00	03/06/2018

Return to VB Agenda

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
205-500-515-5570 Professional associations				IPRA Membership renewal
31190011118	1/11/2018	269.00	0.00	03/06/2018
205-500-515-5570 Professional associations				IPRA Membership renewal
31190011118	1/11/2018	190.00	0.00	03/06/2018
205-504-515-5730 Program supplies				Windy City Novelties - Daddy Daughter Dance Giveaway
31190011118 Total:		804.13		
31190012418	1/24/2018	80.12	0.00	03/06/2018
205-570-515-5270 Purchased program services				Drury Lane - Senior Social Club Theater Trip
31190012418 Total:		80.12		
31190012518	1/25/2018	650.00	0.00	03/06/2018
205-500-515-5570 Professional associations				National Recreation and Parks Assn/Membership
31190012518 Total:		650.00		
31190012618	1/26/2018	324.00	0.00	03/06/2018
205-504-515-5270 Purchased program services				Photo Booth Time - Daddy Daughter Dance photo booth
31190012618	1/26/2018	175.00	0.00	03/06/2018
205-500-515-5570 Professional associations				IPRA Unplug Illinois Champagne Kit
31190012618 Total:		499.00		
31190013018	1/30/2018	438.38	0.00	03/06/2018
205-530-515-5730 Program supplies				Positive Promotions - Day Camp swimsuit bag
31190013018	1/30/2018	170.43	0.00	03/06/2018
205-560-515-5690 Merchandise for resale				Positive Promotions - Pool merchandise for resale
31190013018	1/30/2018	121.82	0.00	03/06/2018
205-562-515-5730 Program supplies				Positive Promotions - Swim Team swimsuit bags
31190013018 Total:		730.63		
31190013118	1/31/2018	19.99	0.00	03/06/2018
205-504-515-5510 Advertising				Facebook - Daddy Daughter dance push
31190013118 Total:		19.99		
31190020118	2/1/2018	10.00	0.00	03/06/2018
205-530-515-5730 Program supplies				Google - Summer Camp google account
31190020118	2/1/2018	10.00	0.00	03/06/2018

Return to VB Agenda

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				Description
205-560-515-5640 Computer supplies				Google - Pool google account
31190020118 Total:		20.00		
31190020218	2/2/2018	15.00	0.00	03/06/2018
205-500-515-5725 Credit card charges				Plug n Play monthly billing
31190020218	2/2/2018	35.00	0.00	03/06/2018
205-520-515-5270 Purchased program services				Brunswick Zone - Spring break trip deposit
31190020218 Total:		50.00		
31190020518	2/5/2018	1,930.00	0.00	03/06/2018
205-530-515-5599 Other contractual				American Camp Assn - Annual Accredidation
31190020518 Total:		1,930.00		
31208011718	1/17/2018	288.96	0.00	03/06/2018
101-240-517-5850 Purchased transportation				Air fare/New Orleans Conference
31208011718	1/17/2018	735.00	0.00	03/06/2018
101-240-517-5810 Conference & meeting registrat				APA National Planning Conference
31208011718	1/17/2018	735.00	0.00	03/06/2018
101-240-517-5810 Conference & meeting registrat				APA National Planning Conference
31208011718 Total:		1,758.96		
31208011818	1/18/2018	288.96	0.00	03/06/2018
101-240-517-5850 Purchased transportation				Air fare/New Orleans Conference
31208011818 Total:		288.96		
31208012518	1/25/2018	25.00	0.00	03/06/2018
101-240-517-5810 Conference & meeting registrat				Foreign Direct Investment
31208012518 Total:		25.00		
31208020618	2/6/2018	644.00	0.00	03/06/2018
101-240-517-5570 Professional associations				APA Professional Membership
31208020618 Total:		644.00		
31216011118	1/11/2018	134.95	0.00	03/06/2018
101-410-511-5730 Program supplies				Step tool for PW shop

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
31216011118 Total:		134.95		
31216011618	1/16/2018	195.00	0.00	03/06/2018
101-400-511-5590 Training				IPELRA Training/Public Works
31216011618	1/16/2018	195.00	0.00	03/06/2018
101-400-511-5590 Training				IPELRA Training/Public Works
31216011618 Total:		390.00		
31216012518	1/25/2018	2.64	0.00	03/06/2018
101-410-511-5730 Program supplies				GV water for Shop
31216012518 Total:		2.64		
31216020618	2/6/2018	25.00	0.00	03/06/2018
101-400-511-5590 Training				Stormwater Seminar for PW Director
31216020618	2/6/2018	263.25	0.00	03/06/2018
101-400-511-5730 Program supplies				Lunch for Workers during snow storm
31216020618 Total:		288.25		
32008011218	1/12/2018	97.19	0.00	03/06/2018
101-200-511-5840 Meals				Luncheon/Administration
32008011218 Total:		97.19		
32008011618	1/16/2018	147.85	0.00	03/06/2018
660-610-519-5580 Telecommunications				Internet Service/Public Works
32008011618	1/16/2018	104.85	0.00	03/06/2018
660-610-519-5580 Telecommunications				Internet Service/Pump House
32008011618	1/16/2018	274.51	0.00	03/06/2018
101-250-511-5580 Telecommunications				Cable Service Village Hall
32008011618 Total:		527.21		
American Express Total:		11,460.86		

Bank of America, Business Card
BANKOFAM

Return to VB Agenda

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				**Description**
0423020318	2/3/2018	711.20	0.00	03/06/2018
101-300-512-5730 Program supplies				Tables/Linens/Iron Chief event
0423020318	2/3/2018	-47.50	0.00	03/06/2018
101-300-512-5730 Program supplies				Refund parking fee CPS
0423020318 Total:		663.70		
1582010618	1/6/2018	812.10	0.00	03/06/2018
205-560-515-5405 R&M - buildings				The Lifeguard Store - Rescue tubes & whistles
1582010618 Total:		812.10		
1582011018	1/10/2018	269.00	0.00	03/06/2018
205-500-515-5570 Professional associations				IPRA annual membership
1582011018 Total:		269.00		
1582012418	1/24/2018	14.28	0.00	03/06/2018
205-500-515-5700 Office supplies				Walgreens - Photos for Lobby
1582012418 Total:		14.28		
1582012518	1/25/2018	1,500.00	0.00	03/06/2018
205-504-515-5645 Concessions & food				Holiday Inn - Daddy Daughter Dance deposit
1582012518 Total:		1,500.00		
1582012618	1/26/2018	435.12	0.00	03/06/2018
205-560-515-6599 EQUIPMENT- POOL				Positive Promotions - Pool bags for resale/prizes
1582012618 Total:		435.12		
1582013018	1/30/2018	665.00	0.00	03/06/2018
205-504-515-5645 Concessions & food				Holiday Inn - Daddy Daughter final payment
1582013018 Total:		665.00		
1582020118	2/1/2018	40.00	0.00	03/06/2018
205-504-515-5730 Program supplies				Michaels - Daddy Daughter dance supplies
1582020118 Total:		40.00		
8334010218	1/2/2018	80.00	0.00	03/06/2018

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				Description
101-210-511-5820 Local mileage, parking & tolls				Ipass replenishment
8334010218 Total:		80.00		
8334012718	1/27/2018	250.00	0.00	03/06/2018
101-250-511-5340 Maintenance Agreement Expen				Zebra Technologies
8334012718	1/27/2018	169.99	0.00	03/06/2018
101-250-511-5340 Maintenance Agreement Expen				GoDaddy/website host for Village
8334012718 Total:		419.99		
8334012918	1/29/2018	80.00	0.00	03/06/2018
101-210-511-5820 Local mileage, parking & tolls				Ipass replenishment
8334012918 Total:		80.00		
8334013118	1/31/2018	-32.50	0.00	03/06/2018
101-210-511-5820 Local mileage, parking & tolls				Ipass replenishment/payment
8334013118	1/31/2018	2.58	0.00	03/06/2018
101-250-511-5700 Office supplies				Finance fee
8334013118 Total:		-29.92		
Bank of America, Business		4,949.27		
Commonwealth Edison				
COMED				
1011026306	2/20/2018	2,764.13	0.00	03/06/2018
101-440-513-5785 Utilities - public way				Metered Street lights
1011026306 Total:		2,764.13		
2028043041	2/8/2018	4,700.58	0.00	03/06/2018
101-440-513-5785 Utilities - public way				Master Account/Street lighting
2028043041 Total:		4,700.58		
5103171049	2/15/2018	3,603.17	0.00	03/06/2018
101-440-513-5785 Utilities - public way				Master Account/Street lighting
5103171049	2/15/2018	629.09	0.00	03/06/2018
660-620-519-5785 Utilities - public way				Master Account/Street lighting

Return to VB Agenda

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
5103171049 Total:		4,232.26		
57221-35010	2/8/2018	518.78	0.00	03/06/2018
101-440-513-5785 Utilities - public way				Master Account/Street lighting
57221-35010 Total:		518.78		
592075011	1/30/2018	1,813.54	0.00	03/06/2018
101-440-513-5785 Utilities - public way				Master Account/Street lighting
592075011 Total:		1,813.54		
Commonwealth Edison To		14,029.29		
Lowe's Business Acc/GECF				
LOWES				
013018	1/30/2018	-1.85	0.00	03/06/2018
101-350-512-5799 Other materials & supplies				Refund
013018 Total:		-1.85		
07463	1/30/2018	20.36	0.00	03/06/2018
101-350-512-5799 Other materials & supplies				Light covers
07463 Total:		20.36		
Lowe's Business Acc/GEC		18.51		
Village of Lincolnwood				
VOL				
PC021218	2/12/2018	39.00	0.00	03/06/2018
101-350-512-5820 Local mileage, parking & tolls				Petty cash reimbursement
PC021218	2/12/2018	50.00	0.00	03/06/2018
101-200-511-5840 Meals				Petty cash reimbursement
PC021218	2/12/2018	25.00	0.00	03/06/2018
101-240-517-5590 Training				Petty cash reimbursement
PC021218	2/12/2018	13.51	0.00	03/06/2018
101-240-517-5820 Local mileage, parking & tolls				Petty cash reimbursement

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				Description
PC021218	2/12/2018	505.00	0.00	03/06/2018
205-500-515-5840 Meals				Petty cash reimbursement
PC021218	2/12/2018	21.52	0.00	03/06/2018
101-210-511-5850 Purchased transportation				Petty cash reimbursement
PC021218	2/12/2018	37.28	0.00	03/06/2018
101-100-511-5840 Meals				Petty cash reimbursement
PC021218	2/12/2018	31.49	0.00	03/06/2018
101-200-511-5820 Local mileage, parking & tolls				Petty cash reimbursement
PC021218	2/12/2018	6.70	0.00	03/06/2018
101-210-511-5840 Meals				Petty cash reimbursement
PC021218	2/12/2018	12.38	0.00	03/06/2018
101-240-517-5840 Meals				Petty cash reimbursement
PC021218	2/12/2018	36.13	0.00	03/06/2018
101-210-511-5820 Local mileage, parking & tolls				Petty cash reimbursement
PC021218	2/12/2018	25.00	0.00	03/06/2018
101-350-512-5540 Intergovernmental fees & dues				Petty cash reimbursement
PC021218	2/12/2018	15.92	0.00	03/06/2018
205-504-515-5730 Program supplies				Petty cash reimbursement
PC021218 Total:		818.93		
Village of Lincolnwood To		818.93		
Report Total:		31,276.86		

Return to VB Agenda

Accounts Payable

To Be Paid Proof List

User: jmazzeffi
Printed: 02/27/2018 - 9:44AM
Batch: 00102.03.2018

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
Airgas USA LLC				
AIRGAS				
9950769200	1/31/2018	317.02	0.00	03/06/2018
101-350-512-5660 EMS supplies				Oxyen cylinders for ambulances
9950769200 Total:		317.02		
Airgas USA LLC Total:		317.02		
Anderson Lock				
ANDERSON				
966672	2/8/2018	224.30	0.00	03/06/2018
101-420-511-5405 R&M - buildings				1 Key and re-key cylinder
966672 Total:		224.30		
Anderson Lock Total:		224.30		
Bound Tree Medical, LLC				
BOUND				
82769937	2/7/2018	49.64	0.00	03/06/2018
101-350-512-5660 EMS supplies				Battery for suction unit
82769937 Total:		49.64		
Bound Tree Medical, LLC		49.64		

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
Chicago Metropolitan Fire Prevention Co.				
CHGOMETR				
178508	1/31/2018	327.50	0.00	03/06/2018
101-420-511-5405 R&M - buildings				Fire alarm service call - PW
178508 Total:		327.50		
178672	1/26/2018	860.25	0.00	03/06/2018
101-350-512-5411 R&M- Wireless Alarm Equipm				Monthly wireless radio network maintenance billing
178672 Total:		860.25		
Chicago Metropolitan Fire		1,187.75		
Cook County Recorder of Deeds				
COOKCOUN				
3511312018	1/31/2018	60.00	0.00	03/06/2018
101-230-511-5399 Other professional services				Recording fees
3511312018 Total:		60.00		
Cook County Recorder of D		60.00		
De Lange Landen Financial Services				
DELANGE				
58177891	2/15/2018	89.92	0.00	03/06/2018
205-571-515-5730 Program supplies				CC Copier - January 2018
58177891 Total:		89.92		
De Lange Landen Financia		89.92		
Fire Service Inc.				
FIRESERV				
26001	1/25/2018	1,228.93	0.00	03/06/2018
101-350-512-5480 R&M - vehicles				Service repairs generator T15

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
26001 Total:		1,228.93		
Fire Service Inc. Total:		1,228.93		
IFSAP				
IFSAP				
021418	2/14/2018	45.00	0.00	03/06/2018
101-350-512-5570 Professional associations				Annual dues
021418 Total:		45.00		
IFSAP Total:		45.00		
Kane McKenna & Associates				
KANEMKEN				
15261	1/31/2018	75.00	0.00	03/06/2018
217-000-517-5399 Other professional services				Professional fees for Document preparation review
15261 Total:		75.00		
Kane McKenna & Associa		75.00		
KaTom Restaurant Supply				
KATOM				
12022467	1/19/2018	3,300.00	1.00	03/06/2018
101-350-512-6570 Equipment - public safety				New stove for Firehouse kitchen. Casters for stove, Shippin
12022467	1/19/2018	2,282.30	1.00	03/06/2018
101-350-512-5730 Program supplies				New stove for Firehouse kitchen. Casters for stove, Shippin
12022467 Total:		5,582.30		
KaTom Restaurant Supply		5,582.30		
Lawson Products Inc				

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
LAWSNPRO				
9305572546	2/5/2018	15.80	0.00	03/06/2018
101-410-511-5730 Program supplies				Shop supplies for PW garage
9305572546 Total:		15.80		
9305572547	2/5/2018	71.00	0.00	03/06/2018
101-410-511-5730 Program supplies				Shop supplies for PW garage
9305572547 Total:		71.00		
Lawson Products Inc Total		86.80		
Maine-Niles Association of Special Recreation				
MNASR				
16-423	2/12/2018	603.33	0.00	03/06/2018
205-580-515-5270 Purchased program services				Inclusion Services for February A 2018
16-423 Total:		603.33		
Maine-Niles Association o		603.33		
Panzica, Anthony				
PANZICA				
005324-000	2/12/2018	44.02	0.00	03/06/2018
660-000-110-1006 Water Fd Lock Box Bk Financi				Refund/Water Bill overpaid on sold property
005324-000 Total:		44.02		
Panzica, Anthony Total:		44.02		
ProSafety				
PROSAFET				
2/846720	1/31/2018	3,005.50	0.00	03/06/2018
101-440-513-5730 Program supplies				Safety supplies for Forestry

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
2/846720 Total:		3,005.50		
ProSafety Total:		3,005.50		
Raynor Door Co				
RAYNOR				
18-18649	2/6/2018	44.00	0.00	03/06/2018
101-420-511-5405 R&M - buildings				Cables for PW garage door
18-18649 Total:		44.00		
Raynor Door Co Total:		44.00		
Sam's Club				
SAMSCL				
21518	2/15/2018	121.37	0.00	03/06/2018
205-520-515-5645 Concessions & food				Club Kid snacks
21518 Total:		121.37		
22118	2/21/2018	40.66	0.00	03/06/2018
205-504-515-5645 Concessions & food				Coupes & Comedy snacks
22118 Total:		40.66		
Sam's Club Total:		162.03		
Sandoval, Leydy				
SANDOVAL				
02202018	2/20/2018	81.00	0.00	03/06/2018
205-000-210-2430 Parks and Recs Control Deposi				Refund - Zumba
02202018 Total:		81.00		
Sandoval, Leydy Total:		81.00		

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
Stanley Consultants, Inc.				
STANLEY				
4	2/16/2018	33,775.91	0.00	03/06/2018
454-000-561-5340 Engineering				Touhy overpass construction oversight
4 Total:		33,775.91		
Stanley Consultants, Inc. T		33,775.91		
Teleflex				
TELEFLEX				
95476003	2/2/2018	490.64	0.00	03/06/2018
101-350-512-6570 Equipment - public safety				Laryngoscope blades for patient intubation
95476003 Total:		490.64		
95476005	2/2/2018	169.88	0.00	03/06/2018
101-350-512-6570 Equipment - public safety				Laryngoscope blades for patient intubation
95476005 Total:		169.88		
Teleflex Total:		660.52		
Tierney, Bob				
TIERNEYA				
021518	2/15/2018	892.00	0.00	03/06/2018
205-000-210-2430 Parks and Recs Control Deposi				Refund Classes
021518 Total:		892.00		
Tierney, Bob Total:		892.00		
Trizetto Provider Solutions				
TRIZETTO				
7108021800	2/1/2018	161.49	0.00	03/06/2018
101-000-410-4315 Ambulance & EMS fees				Claims transaction fee for ambulance billing

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
7108021800 Total:		161.49		
Trizetto Provider Solutions		161.49		
Williams Architects				
WILLIAM				
/0018310	2/13/2018	1,821.38	0.00	03/06/2018
205-560-515-5405 R&M - buildings				Main pool controller engineer/permit fee
/0018310 Total:		1,821.38		
Williams Architects Total:		1,821.38		
Zarebski, Iwona				
ZAREBSKI				
021418	2/14/2018	63.00	0.00	03/06/2018
205-000-210-2430 Parks and Recs Control Deposi				Refund - Class
021418 Total:		63.00		
Zarebski, Iwona Total:		63.00		
Zoll Medical Corporation GPO				
ZOLLMEDC				
2637417	2/7/2018	1,094.70	0.00	03/06/2018
101-350-512-6570 Equipment - public safety				SPO2 Sensors
2637417 Total:		1,094.70		
Zoll Medical Corporation G		1,094.70		

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				Description

Report Total:	51,355.54

Return to VB Agenda

Accounts Payable

To Be Paid Proof List

User: jmazzeffi
Printed: 02/26/2018 - 9:19AM
Batch: 00103.03.2018

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
Alvira, Diana				
ALVIRA				
022218	2/22/2018	80.00	0.00	03/06/2018
205-000-210-2430 Parks and Recs Control Deposi				Refund - Ski Trip
022218 Total:		80.00		
Alvira, Diana Total:		80.00		
American Traffic Solutions				
ATS				
INV00026092	1/31/2018	4,400.00	0.00	03/06/2018
101-300-512-5599 Other contractual				Monthly Contractual fee/January
INV00026092	1/31/2018	780.00	0.00	03/06/2018
101-300-512-5599 Other contractual				Collection of unpaid violations
INV00026092 Total:		5,180.00		
American Traffic Solutions		5,180.00		
Anderson Lock				
ANDERSON				
0966672	2/8/2018	224.30	0.00	03/06/2018
101-300-512-5405 R&M - buildings				Cylinder changed new keys made for Investigations office
0966672 Total:		224.30		

Return to VB Agenda

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
Anderson Lock Total:		224.30		
Artistic Engraving Co.				
ARTISTIC				
11711	11/30/2017	795.75	0.00	03/06/2018
101-300-512-5730 Program supplies				Badges and shadow boxes for retired Chief and Deputy Chi
11711 Total:		795.75		
Artistic Engraving Co. Tota		795.75		
Canon Solutions America				
CANN				
456871	2/1/2018	58.19	0.00	03/06/2018
101-210-511-5440 R&M - office equipment				Copier Maintenance- February
456871 Total:		58.19		
Canon Solutions America T		58.19		
Carbonneau, Claire				
CARBONNE				
REIM021918CCM	2/19/2018	75.00	0.00	03/06/2018
101-300-512-5840 Meals				Reimburse Meals/Training
REIM021918CCM Total:		75.00		
Carbonneau, Claire Total:		75.00		
Chicago Communications, LLC				
CHGOCOMM				
299069	2/7/2018	49.60	0.00	03/06/2018
101-300-512-5410 R&M - communications equipm				Monthly portable radio maintenance/March

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
299069 Total:		49.60		
Chicago Communications,		49.60		
Colby, Ross				
COLBYR				
022218	2/22/2018	21.00	0.00	03/06/2018
205-000-210-2430 Parks and Recs Control Deposi				Refund - Ski Trip
022218 Total:		21.00		
Colby, Ross Total:		21.00		
CPS Parking of Illinois				
CPSPARK				
CPSMarch18	2/21/2018	252.50	0.00	03/06/2018
101-300-512-5730 Program supplies				Parking Fee/Transponder fee
CPSMarch18 Total:		252.50		
CPS Parking of Illinois Tot		252.50		
Dulhanty, Jennifer				
DULHANT				
022218	2/22/2018	117.00	0.00	03/06/2018
205-000-210-2430 Parks and Recs Control Deposi				Refund - Ski Trip
022218 Total:		117.00		
Dulhanty, Jennifer Total:		117.00		
Frankel, Amy				
FRANKELA				
022218	2/22/2018	55.00	0.00	03/06/2018

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
205-000-210-2430 Parks and Recs Control Deposi				Refund - Ski Trip
022218 Total:		55.00		
Frankel, Amy Total:		55.00		
Got Laundry Chicago?, Inc.				
GOTLAUND				
N309431	1/4/2018	41.00	0.00	03/06/2018
101-300-512-5730 Program supplies				Dry clean cell blankets
N309431 Total:		41.00		
N309555	1/11/2018	41.00	0.00	03/06/2018
101-300-512-5730 Program supplies				Dry clean cell blankets
N309555 Total:		41.00		
N310059	1/18/2018	41.00	0.00	03/06/2018
101-300-512-5730 Program supplies				Dry clean cell blankets
N310059 Total:		41.00		
N310198	1/25/2018	33.00	0.00	03/06/2018
101-300-512-5730 Program supplies				Dry clean cell blankets
N310198 Total:		33.00		
N310529	2/8/2018	65.00	0.00	03/06/2018
101-300-512-5730 Program supplies				Dry clean cell blankets
N310529 Total:		65.00		
Got Laundry Chicago?, Inc		221.00		
Hernandez, Rubi				
HERNARUB				
022218	2/22/2018	80.00	0.00	03/06/2018
205-000-210-2430 Parks and Recs Control Deposi				Refund - Ski Trip

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				Description
022218 Total:		80.00		
Hernandez, Rubi Total:		80.00		
IRMA				
IRMA				
IVC0010405	1/31/2018	721.00	0.00	03/06/2018
101-210-511-5260 Liability insurance				Volunteer coverage
IVC0010405 Total:		721.00		
SALES0016622	1/31/2018	8,919.32	0.00	03/06/2018
101-210-511-5260 Liability insurance				January Deductible
SALES0016622 Total:		8,919.32		
IRMA Total:		9,640.32		
Jacobson, Debra				
JACOBDE				
022218	2/22/2018	117.00	0.00	03/06/2018
205-000-210-2430 Parks and Recs Control Deposi				Refund - Ski Trip
022218 Total:		117.00		
Jacobson, Debra Total:		117.00		
JG Uniforms Inc				
JGUNIFOR				
32422	2/8/2018	182.00	0.00	03/06/2018
101-300-512-5070 Uniform allowance				Uniform allowance
32422 Total:		182.00		
JG Uniforms Inc Total:		182.00		

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				**Description**
L3 Communications Mobile Vision, Inc.				
L3COMM				
0309148-IN	12/26/2017	1,865.00	0.00	03/06/2018
101-300-512-5410 R&M - communications equipm				Video server
0309148-IN Total:		1,865.00		
0309149-IN	12/22/2017	299.00	0.00	03/06/2018
101-300-512-5410 R&M - communications equipm				Camera - Interview room
0309149-IN Total:		299.00		
0309150-IN	12/22/2017	598.00	0.00	03/06/2018
101-300-512-5410 R&M - communications equipm				Squad camera
0309150-IN Total:		598.00		
0309151-IN	12/27/2017	299.00	0.00	03/06/2018
101-300-512-5410 R&M - communications equipm				Squad camera
0309151-IN Total:		299.00		
L3 Communications Mobil		3,061.00		
Labuz, Robert				
LABUZ				
REIM012618RLM	1/26/2018	1,515.00	0.00	03/06/2018
101-300-512-5840 Meals				Reimbursement/Meals/Academy
REIM012618RLM Total:		1,515.00		
Labuz, Robert Total:		1,515.00		
Malnati Organization				
MALNATI				
2580890	2/13/2018	58.48	0.00	03/06/2018
101-300-512-5730 Program supplies				Mini Academy Lunch

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
2580890 Total:		58.48		
Malnati Organization Total		58.48		
Massa, Dominic				
MASSA				
REIM0126DMA	2/22/2018	182.20	0.00	03/06/2018
101-300-512-5820 Local mileage, parking & tolls				Reimbursement/Auto/Academy
REIM0126DMA Total:		182.20		
REIM0126DMM	2/22/2018	1,515.00	0.00	03/06/2018
101-300-512-5840 Meals				Reimbursement/Meals/Academy
REIM0126DMM Total:		1,515.00		
Massa, Dominic Total:		1,697.20		
Northwestern University				
NWUNIVER				
10978	2/20/2018	3,600.00	0.00	03/06/2018
101-300-512-5590 Training				Training/Registration/ Police Staff and Command
10978 Total:		3,600.00		
Northwestern University To		3,600.00		
O'Connor, Timothy				
OCONNOR				
REIM120817TOM	12/8/2017	720.00	0.00	03/06/2018
101-300-512-5840 Meals				Reimbursement/Meals/Training
REIM120817TOM Total:		720.00		
O'Connor, Timothy Total:		720.00		

Return to VB Agenda

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				**Description**
Team Wendy				
TEAMWEND				
CD970002196	2/8/2018	83.06	0.00	03/06/2018
101-300-512-5730 Program supplies				NIPAS uniform items
CD970002196 Total:		83.06		
Team Wendy Total:		83.06		
Tri-Tech Forensics				
TRITECH				
155345	2/8/2018	112.30	0.00	03/06/2018
101-000-210-2440 DUI Fines Fund				Specimen collection kits
155345 Total:		112.30		
Tri-Tech Forensics Total:		112.30		
VCG Uniform				
VCGUNIFO				
20294	2/13/2018	105.90	0.00	03/06/2018
101-300-512-5070 Uniform allowance				Uniform allowance
20294 Total:		105.90		
VCG Uniform Total:		105.90		
Wienski, Jesse				
WIENSKI				
REIM022318JWM	2/23/2018	75.00	0.00	03/06/2018
101-300-512-5840 Meals				Reimburse Meals/Training
REIM022318JWM Total:		75.00		

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				Description
	Wienski, Jesse Total:	75.00		
Zarebski, Iwona				
ZAREBSKI				
022218	2/22/2018	117.00	0.00	03/06/2018
205-000-210-2430 Parks and Recs Control Deposi				Refund - Ski Trip
	022218 Total:	117.00		
	Zarebski, Iwona Total:	117.00		
Zero 9 Holsters				
ZERO9HOL				
959	2/5/2018	1,843.00	0.00	03/06/2018
101-300-512-5730 Program supplies				Radio cases
	959 Total:	1,843.00		
	Zero 9 Holsters Total:	1,843.00		
	Report Total:	30,136.60		

Return to VB Agenda

Accounts Payable

To Be Paid Proof List

User: jmazzeffi
Printed: 02/26/2018 - 9:19AM
Batch: 00104.03.2018

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
AllData				
ALLDATA				
611926	2/10/2018	750.00	0.00	03/06/2018
660-610-519-5330 Data processing				Online vehicle maintenance software
611926	2/10/2018	750.00	0.00	03/06/2018
101-250-511-5330 Data processing				Online vehicle maintenance software
611926 Total:		1,500.00		
AllData Total:		1,500.00		
American First Aid Services				
AFAS INC				
60626	2/6/2018	67.85	0.00	03/06/2018
101-200-511-5599 Other contractual				First Aid box/Village Hall break room
60626 Total:		67.85		
American First Aid Service		67.85		
Arrow Road Construction Co				
ARROWROA				
12797	2/15/2018	1,002.15	0.00	03/06/2018
213-000-561-5490 R&M Road Repairs				UPM Cold patch material for potholes
12797 Total:		1,002.15		

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
Arrow Road Construction C		1,002.15		
Business Only Broadband				
BUSONLY				
85850	3/1/2018	250.00	0.00	03/06/2018
101-250-511-5580 Telecommunications				Back-up connection- Internet Access
85850 Total:		250.00		
85851	3/1/2018	250.00	0.00	03/06/2018
101-250-511-5580 Telecommunications				Wireless Alarm Internet access
85851 Total:		250.00		
Business Only Broadband		500.00		
Detroit Salt Company				
DETROIT				
73615	2/22/2018	19,702.99	0.00	03/06/2018
101-440-513-5766 Street materials - salt & sand				Salt
73615 Total:		19,702.99		
Detroit Salt Company Tota		19,702.99		
Emcor Services Team Mechanical Inc				
EMCOR				
930007491	2/16/2018	941.65	0.00	03/06/2018
101-420-511-5405 R&M - buildings				HVAC Preventive maintenance/February
930007491 Total:		941.65		
Emcor Services Team Mec		941.65		
First Advantage Occ Health Svcs				

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
FIRSTADV				
2518651801	1/31/2018	30.45	0.00	03/06/2018
101-200-511-5599 Other contractual				Drug Test for employee
2518651801 Total:		30.45		
First Advantage Occ Health		30.45		
GOVTEMPSUSA LLC				
GOVTEMP				
2458800	2/8/2018	8,440.25	0.00	03/06/2018
101-300-512-5599 Other contractual				Interim Police Chief contract
2458800 Total:		8,440.25		
GOVTEMPSUSA LLC To		8,440.25		
HMO Healthcare Service Corporation				
HMO				
March 2018	2/14/2018	1,238.99	0.00	03/06/2018
102-000-210-2027 Health insurance premium with				Employee Health Insurance - March 2018
March 2018 Total:		1,238.99		
HMO Healthcare Service C		1,238.99		
Illinois Section AWWA				
ILSECTIO				
200034578	2/22/2018	90.00	0.00	03/06/2018
660-620-519-5590 Training				In plant training tour for Water Dept workers
200034578 Total:		90.00		
200034580	2/22/2018	120.00	0.00	03/06/2018
660-620-519-5590 Training				New Water main inspections seminar

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				Description
200034580 Total:		120.00		
200034584	2/23/2018	410.00	0.00	03/06/2018
660-620-519-5590 Training				Water distribution and sewer collection seminar
200034584 Total:		410.00		
Illinois Section AWWA Tot		620.00		
Impact Networking, LLC				
IMPACT				
1002516	1/4/2018	537.00	0.00	03/06/2018
101-210-511-5440 R&M - office equipment				Copier - Finance & Police
1002516	1/4/2018	204.00	0.00	03/06/2018
660-610-519-5340 Maintenance Agreement Expen				Copier - Public Works
1002516	1/4/2018	204.00	0.00	03/06/2018
205-500-515-5440 R&M - office equipment				Copier - Parks
1002516	1/4/2018	204.00	0.00	03/06/2018
101-000-210-2650 Contractor Permits Payable				Copier - Fire
1002516 Total:		1,149.00		
1032801	2/9/2018	262.78	0.00	03/06/2018
660-610-519-5340 Maintenance Agreement Expen				Copier - Public Works
1032801	2/9/2018	262.78	0.00	03/06/2018
205-500-515-5440 R&M - office equipment				Copier - Parks
1032801	2/9/2018	262.78	0.00	03/06/2018
101-000-210-2650 Contractor Permits Payable				Copier - Fire
1032801	2/9/2018	595.77	0.00	03/06/2018
101-210-511-5440 R&M - office equipment				Copier - Finance & Police
1032801 Total:		1,384.11		
Impact Networking, LLC T		2,533.11		
iSolved				
ISOLVED				

Return to VB Agenda

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
90128001	2/10/2018	52.58	0.00	03/06/2018
101-400-511-5440 R&M - office equipment				Montly maintenance time clock
90128001	2/10/2018	88.43	0.00	03/06/2018
205-530-515-5730 Program supplies				Montly maintenance time clock
90128001	2/10/2018	19.12	0.00	03/06/2018
205-560-515-5405 R&M - buildings				Montly maintenance time clock
90128001 Total:		160.13		
iSolved Total:		160.13		
Lowe's Business Acc/GECF				
LOWES				
02453	2/14/2018	89.81	0.00	03/06/2018
101-440-513-5480 R&M - vehicles				Elbow, nozzle for Sweeper #1
02453 Total:		89.81		
Lowe's Business Acc/GEC		89.81		
Madison National Life				
MADISON				
12877760	2/19/2018	99.31	0.00	03/06/2018
101-200-511-5150 Insurance - group life & AD&D				Life insurance - March
12877760	2/19/2018	102.11	0.00	03/06/2018
101-210-511-5150 Insurance - group life & AD&D				Life insurance - March
12877760	2/19/2018	64.90	0.00	03/06/2018
101-240-517-5150 Insurance - group life & AD&D				Life insurance - March
12877760	2/19/2018	558.98	0.00	03/06/2018
101-300-512-5150 Insurance - group life & AD&D				Life insurance - March
12877760	2/19/2018	9.35	0.00	03/06/2018
101-350-512-5150 Insurance - group life & AD&D				Life insurance - March
12877760	2/19/2018	28.05	0.00	03/06/2018
101-400-511-5150 Insurance - group life & AD&D				Life insurance - March
12877760	2/19/2018	18.70	0.00	03/06/2018
101-410-511-5150 Insurance - group life & AD&D				Life insurance - March
12877760	2/19/2018	84.15	0.00	03/06/2018

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
101-440-513-5150 Insurance - group life & AD&D				Life insurance - March
12877760	2/19/2018	46.75	0.00	03/06/2018
205-430-515-5150 Insurance - group life & AD&D				Life insurance - March
12877760	2/19/2018	37.40	0.00	03/06/2018
205-500-515-5150 Insurance - group life & AD&D				Life insurance - March
12877760	2/19/2018	120.43	0.00	03/06/2018
660-620-519-5150 Insurance - group life & AD&D				Life insurance - March
12877760 Total:		1,170.13		
Madison National Life Tot		1,170.13		
Metropolitan Family Services				
METROFML				
MFS02012018	2/1/2018	4,500.00	0.00	03/06/2018
101-100-511-5399 Other professional services				Counseling services for Village residents
MFS02012018 Total:		4,500.00		
Metropolitan Family Servic		4,500.00		
MGP, Inc.				
MGPINC				
4214	1/31/2018	909.15	0.00	03/06/2018
101-250-511-5599 Other contractual				GISC Staffing - January
4214	1/31/2018	909.15	0.00	03/06/2018
101-000-210-2650 Contractor Permits Payable				GISC Staffing - January
4214	1/31/2018	1,818.28	0.00	03/06/2018
660-620-519-5599 Other contractual				GISC Staffing - January
4214 Total:		3,636.58		
MGP, Inc. Total:		3,636.58		
National Minority Update				
QUARTERL				

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
8032574	2/16/2018	195.00	0.00	03/06/2018
101-200-511-5510 Advertising				Police officer listing
8032574 Total:		195.00		
National Minority Update T		195.00		
North Suburban Employee Benefit NSEBENEF				
March, 2018	2/16/2018	10,188.00	0.00	03/06/2018
102-000-210-2028 Dental insurance premium with				Dental Bill - March 2018
March, 2018 Total:		10,188.00		
North Suburban Employee		10,188.00		
Report Total:		56,517.09		

Return to VB Agenda

Accounts Payable

To Be Paid Proof List

User: jmazzeffi
Printed: 02/26/2018 - 9:20AM
Batch: 00105.03.2018

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
Anderson Pest Solutions				
ANDERP				
4605121	1/1/2018	283.55	0.00	03/06/2018
101-420-511-5405 R&M - buildings				Pest Control Services for Village/Jan
4605121 Total:		283.55		
4675359	3/1/2018	283.55	0.00	03/06/2018
101-420-511-5405 R&M - buildings				Pest Control Services for Village/March
4675359 Total:		283.55		
Anderson Pest Solutions To		567.10		
Best Quality Cleaning, Inc.				
BESTQU				
2389	2/20/2018	2,813.34	0.00	03/06/2018
101-420-511-5240 Janitorial				Cleaning Services/February 2018
2389	2/20/2018	416.66	0.00	03/06/2018
205-571-515-5240 Janitorial				Cleaning Services/February 2018
2389 Total:		3,230.00		
Best Quality Cleaning, Inc.		3,230.00		
Case Lots, Inc.				
CASELOTS				
193	2/14/2018	2,153.75	0.00	03/06/2018

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
101-420-511-5730 Program supplies				Multi-fold towels, pine sol, bleach, dish soap
193 Total:		2,153.75		
Case Lots, Inc. Total:		2,153.75		
Cassidy Tire				
CASSIDYT				
708001126	2/12/2018	48.00	0.00	03/06/2018
205-430-515-5480 R&M - vehicles				Labor
708001126 Total:		48.00		
708001163	2/16/2018	264.50	0.00	03/06/2018
205-430-515-5480 R&M - vehicles				Tire for Tractor #9
708001163 Total:		264.50		
Cassidy Tire Total:		312.50		
Chicago Tribune				
CHGOTRIB				
5457397	2/15/2018	118.98	0.00	03/06/2018
101-240-517-5510 Advertising				Legal notice
5457397 Total:		118.98		
Chicago Tribune Total:		118.98		
Collins and Company				
COLLINS				
68367	2/13/2018	1,120.24	0.00	03/06/2018
101-440-513-5730 Program supplies				Kit repair, hose, gun repair kit, filter, teflon
68367 Total:		1,120.24		

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
Collins and Company Tota		1,120.24		
Golf Mill Ford				
GOLFMILL				
433685P	2/13/2018	437.71	0.00	03/06/2018
101-300-512-5480 R&M - vehicles				Kit, rotor, pad, rotor/Squad #1
433685P Total:		437.71		
433724P	2/15/2018	113.88	0.00	03/06/2018
660-620-519-5480 R&M - vehicles				Mirror for Truck #10
433724P Total:		113.88		
Golf Mill Ford Total:		551.59		
Grainger				
GRAINGER				
9698836088	2/14/2018	262.55	0.00	03/06/2018
101-410-511-5730 Program supplies				Needle scaler for Shop
9698836088 Total:		262.55		
9698836096	2/14/2018	46.40	0.00	03/06/2018
101-410-511-5730 Program supplies				Threaded flange for Shop
9698836096 Total:		46.40		
Grainger Total:		308.95		
Grover Welding Company				
GROVERWE				
377	2/14/2018	561.23	0.00	03/06/2018
101-440-513-5480 R&M - vehicles				Steel for Sweeper #1
377 Total:		561.23		

Return to VB Agenda

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
Grover Welding Company		561.23		
Kane McKenna & Associates				
KANEMKEN				
16154	2/9/2018	190.50	0.00	03/06/2018
101-440-513-5480 R&M - vehicles				Hydraulic hose for plows
16154 Total:		190.50		
Kane McKenna & Associa		190.50		
Lowe's Business Acc/GECF				
LOWES				
02407	2/13/2018	144.00	0.00	03/06/2018
205-430-515-5730 Program supplies				Rope for Baseball banner
02407 Total:		144.00		
02464	2/14/2018	10.56	0.00	03/06/2018
101-420-511-5405 R&M - buildings				Hooks for Village Hall
02464 Total:		10.56		
02591	2/16/2018	218.94	0.00	03/06/2018
660-620-519-5730 Program supplies				Clamps, snap cable, wire for Water Dept
02591 Total:		218.94		
02797	2/20/2018	19.41	0.00	03/06/2018
101-420-511-5405 R&M - buildings				Knife, key for PW
02797 Total:		19.41		
02805	2/20/2018	6.51	0.00	03/06/2018
101-420-511-5405 R&M - buildings				Padlock for PW
02805 Total:		6.51		
02880	2/21/2018	189.91	0.00	03/06/2018

Return to VB Agenda

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
660-620-519-5405 R&M - buildings				Level, wheel set, wood, saw for Pump House
02880 Total:		189.91		
02892	2/21/2018	186.01	0.00	03/06/2018
660-620-519-5405 R&M - buildings				Drywall screws for Pump House
02892 Total:		186.01		
02913	2/21/2018	49.68	0.00	03/06/2018
101-440-513-5730 Program supplies				PVC Coupling for Streets
02913 Total:		49.68		
02919	2/21/2018	98.52	0.00	03/06/2018
660-620-519-5405 R&M - buildings				All Purpose mix, taping knife, sponge, wall patch
02919 Total:		98.52		
Lowe's Business Acc/GEC		923.54		
NAPA				
NAPA				
2812-299578	2/21/2018	56.72	0.00	03/06/2018
660-620-519-5480 R&M - vehicles				Spark plugs for Truck #10
2812-299578 Total:		56.72		
2812-299607	2/21/2018	96.72	0.00	03/06/2018
660-620-519-5480 R&M - vehicles				Spark plugs for Truck #10
2812-299607 Total:		96.72		
NAPA Total:		153.44		
Southwest Oil, Inc.				
SOUTHWE				
14746	2/12/2018	35.00	0.00	03/06/2018
101-410-511-5480 R&M - vehicles				Oil recycle

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				Description
14746 Total:		35.00		
Southwest Oil, Inc. Total:		35.00		
Standard Equipment Company				
STANDARD				
P03879	1/30/2018	76.16	0.00	03/06/2018
660-620-519-5480 R&M - vehicles				Gasket, tube for Truck #6
P03879 Total:		76.16		
P04035	2/7/2018	3,192.49	0.00	03/06/2018
101-440-513-5480 R&M - vehicles				Parts to rebuild Sweeper #1
P04035 Total:		3,192.49		
P04036	2/7/2018	446.05	0.00	03/06/2018
101-440-513-5480 R&M - vehicles				Harness, can/USB for Sweeper #1
P04036 Total:		446.05		
P04043	2/7/2018	1,445.78	0.00	03/06/2018
101-440-513-5480 R&M - vehicles				Filters for Sweeper #1
P04043 Total:		1,445.78		
P04121	2/14/2018	136.64	0.00	03/06/2018
101-440-513-5480 R&M - vehicles				Hose radiator, hose, hose elbow
P04121 Total:		136.64		
Standard Equipment Comp		5,297.12		
State Treasurer, IL Dept of Trans.				
STATETIL				
53984	2/7/2018	5,947.50	0.00	03/06/2018
212-000-513-5290 Street lights & traffic signal				Maintenance for Traffic Control signals at various intersecti

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
53984 Total:		5,947.50		
State Treasurer, IL Dept of		5,947.50		
Swid Sales Corp				
SWIDSALE				
29562	2/14/2018	509.44	0.00	03/06/2018
101-300-512-5480 R&M - vehicles				Batteries for PD Squads - #22,25,215
29562 Total:		509.44		
Swid Sales Corp Total:		509.44		
The Blue Line				
THEBLUEL				
36677	2/23/2018	397.00	0.00	03/06/2018
101-200-511-5510 Advertising				Police officer job posting
36677 Total:		397.00		
The Blue Line Total:		397.00		
Traffic Control & Protection				
TRAFFICC				
91188	12/4/2017	63.55	0.00	03/06/2018
101-440-513-5768 Street materials - signs & bar				Stop sign
91188 Total:		63.55		
91728	2/13/2018	61.85	0.00	03/06/2018
101-440-513-5768 Street materials - signs & bar				No Left Turn signal sign
91728 Total:		61.85		
Traffic Control & Protectio		125.40		

Invoice Number	Invoice Date	Amount	Quantity	Payment Date
Account Number				**Description**
Tyco Integrated Security LLC				
ADTSS				
30053691	2/10/2018	347.56	0.00	03/06/2018
660-610-519-5340 Maintenance Agreement Expen				Alarm system service fee/Pump House
30053691 Total:		347.56		
Tyco Integrated Security L		347.56		
Warehouse Direct				
WAREHOUS				
3793240-0	2/8/2018	58.65	0.00	03/06/2018
101-350-512-5730 Program supplies				Office supplies
3793240-0 Total:		58.65		
3793261-0	2/8/2018	257.03	0.00	03/06/2018
101-210-511-5700 Office supplies				Office supplies
3793261-0 Total:		257.03		
3794071-0	2/20/2018	64.85	0.00	03/06/2018
101-210-511-5700 Office supplies				Office supplies
3794071-0 Total:		64.85		
3802389-0	2/16/2018	136.02	0.00	03/06/2018
101-300-512-5730 Program supplies				Office supplies
3802389-0 Total:		136.02		
Warehouse Direct Total:		516.55		
Wholesale Direct Inc				
WHOLESAL				
100006659	1/26/2018	-33.65	0.00	03/06/2018
205-430-515-5480 R&M - vehicles				Return

Invoice Number / Account Number	Invoice Date	Amount	Quantity	Payment Date / Description
100006659 Total:		-33.65		
231356	1/10/2018	255.24	0.00	03/06/2018
101-440-513-5480 R&M - vehicles				Rubber tarp, winter blades
231356	1/10/2018	202.38	0.00	03/06/2018
660-620-519-5480 R&M - vehicles				Rubber tarp, winter blades
231356 Total:		457.62		
231441	1/16/2018	108.99	0.00	03/06/2018
101-440-513-5480 R&M - vehicles				Winter blades
231441 Total:		108.99		
231560	1/23/2018	161.85	0.00	03/06/2018
660-620-519-5480 R&M - vehicles				Hydraulic Motor
231560	1/23/2018	397.88	0.00	03/06/2018
205-430-515-5480 R&M - vehicles				Hydraulic Motor
231560 Total:		559.73		
Wholesale Direct Inc Total		1,092.69		
Report Total:		24,460.08		

Return to VB Agenda

Request for Board Action

REFERRED TO BOARD: March 6, 2018 **AGENDA ITEM NO: 1**

ORIGINATING DEPARTMENT: Community Development

SUBJECT: Approval of an Ordinance Amending Chapter 14, Article 15 of the Village Code Related to Contractor License Suspension

SUMMARY AND BACKGROUND OF SUBJECT MATTER:
Section 14-15-1 of the Building Regulations requires all contractors conducting work in Lincolnwood to be licensed by the Village. This license is intended to ensure that property owners will be receiving services from fully licensed, insured, and bonded professionals. Over the past several months, however, staff has received complaints from residents regarding the quality of services they have received from certain building contractors. In some instances, residents have asked what actions the Village may be able to take to hold a contractor accountable for substandard work that has been undertaken and/or work that has been completed without required inspections.

Currently, the Village Code lacks specific provisions that would allow staff to hold contractors accountable when they do not follow municipal procedures or meet standards. Therefore, staff recommends an amendment to Section 14-15-1 of the Building Regulations to establish specific provisions for the suspension of a Contractor License. It should be noted that such suspension would apply to the Village License required to do work in Lincolnwood, rather than the professional license issued to a contractor by his or her related trade organization or another governing body.

Committee of the Whole Deliberations
The Village Board discussed the recommended amendment during its November 7, 2017 and January 16, 2018 Committee of the Whole meetings. During those discussions, Trustees reached consensus that a more proactive approach is warranted in order to encourage behavior by contractors that would minimize risk to residents of the Village. Specifically, the following policy questions were discussed:

What actions would trigger the possible revocation of a Village Contractor License?
Staff recommended that violation of Village procedures regarding contractor licensure, building permit procurement, illegally expanding the scope of work of a project, and advancing work without passing required interim or final inspections should warrant license suspension. The Village Board agreed with this recommendation.

What would be an appropriate period for reinstatement?
Staff research indicates that peer communities typically use 90 days as a standard for suspension. The Village Board generally stated that this is appropriate.

Who should have the power to revoke contractor licenses?
Staff recommended that the process for suspending a contractor license be initiated through a citation and finding of liability by the Village's administrative hearing official. From there, staff would have the discretion to recommend suspension, and the Village Board would conduct a Public Hearing and take final action on staff's recommendation. The Village Board agreed that this is an appropriate process.

What is the best way to make information available to the public regarding contractors with revoked licenses?
Staff recommended that the Village utilize its new land and license software to "red flag" suspended contractors so they cannot be added to new permits. The Village Board agreed with this approach.

FINANCIAL IMPACT:
None

DOCUMENTS ATTACHED:
1. Proposed Ordinance
2. January 16, 2018 Committee of the Whole Memo
3. November 7, 2017 Committee of the Whole Minutes
4. January 16, 2018 Committee of the Whole Minutes
5. Pertinent Zoning Code Sections

RECOMMENDED MOTION:
Move to approve an Ordinance amending Chapter 14, Article 15 of the Village Code to include provisions related to the suspension of contractor licenses.

Return to VB Agenda

VILLAGE OF LINCOLNWOOD

ORDINANCE NO. 2018-_____

AN ORDINANCE AMENDING CHAPTER 14 OF THE MUNICIPAL CODE OF LINCOLNWOOD REGARDING CONTRACTOR LICENSES

ADOPTED BY THE
PRESIDENT AND BOARD OF TRUSTEES
OF THE VILLAGE OF LINCOLNWOOD
THIS ____ DAY OF _____, 2018.

Published in pamphlet form
by the authority of the
President and Board of Trustees
of the Village of Lincolnwood,
Cook County, Illinois this
_____ day of _____, 2018

_____
Village Clerk

VILLAGE OF LINCOLNWOOD

ORDINANCE NO. 2018-_____

AN ORDINANCE AMENDING CHAPTER 14 OF THE MUNICIPAL CODE OF LINCOLNWOOD REGARDING CONTRACTOR LICENSES

WHEREAS, pursuant to Article 15 of Chapter 14 of the "Municipal Code of Lincolnwood," as amended ("***Village Code***"), no person may engage in the business of contractor in the Village prior to obtaining a Village license therefore; and

WHEREAS, the Village President and Board of Trustees desire to amend Article 15 of Chapter 14 of the Village Code to establish procedures for the suspension of contractor licenses upon violations by a contractor of the Village Code; and

WHEREAS, the President and Board of Trustees have determined that it will serve and be in the best interest of the Village to amend the Village Code pursuant to this Ordinance;

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LINCOLNWOOD, COOK COUNTY, ILLINOIS, as follows:

SECTION 1. RECITALS. The facts and statements contained in the preamble to this Ordinance are found to be true and correct and are hereby adopted as part of this Ordinance.

SECTION 2. CONTRACTOR LICENSES – VIOLATIONS AND SUSPENSION. Article 15 of Chapter 14 of the Village Code is hereby amended to add a new Section 14-15-8, which new Section hereafter reads as follows:

"14-5-8: VIOLATION; SUSPENSION.

(A) It shall be unlawful for any contractor licensed pursuant to this Article 15 to:

(1) Perform any work outside the scope of operations as defined under the particular classification of contractor for which the contractor is licensed;

(2) Perform, or cause to be performed, any work in violation or deviation of the applicable permit issued by the Village, without prior approval of the Community Development Director or his or her designee;

(3) Aid or abet any person in evading the requirements of this Article, or allow the Contractor's license to be used by any person, or act as an agent, partner, or associate of any

person, with the intent to evade the provisions of this Article 15;

(4) Abandon, without justification, any project or operation for which the Village has issued a permit to the contractor;

(5) Fail to obtain Village approval, through required interim or final inspections as required by a building permit issued for construction, or fail to rectify work previously deemed to be unacceptable by the Village's building official prior to reinspection and satisfactory approval, prior to advancing the project beyond a state that allows for appropriate inspection;

(6) Make any false, fraudulent or misleading material statement in the application for a license filed pursuant to this Article 15;

(7) Make any false, fraudulent or misleading material statement, or be convicted of perpetrating a fraud upon any person, whether or not such fraud was perpetrated in the course of conducting any business in the Village, or commit a felony; or

(8) Conduct any activities directly related to its business in the Village in an unlawful manner or in such a manner as to constitute a breach of the peace or a menace to the health, safety or general welfare of the public.

(B) Upon a finding by a court or the Village's administrative hearing officer that a contractor violated any provision of Section 14-5-8(A) of this Code, the Village may suspend that contractor's license in accordance with the following:

(1) The Community Development Director, or his or her designee, shall cause to be served upon the licensee or his or her agent, either personally or by certified mail, return receipt requested, written notice that the Community Development Department intends to recommend to the Village Board of Trustees, during a public hearing at a meeting not less than 15 days after such notice is served, that the contractor's license be suspended;

(2) During a public hearing of the Village Board, the licensee shall have the right to present evidence on its behalf, and shall have the right to be represented at such hearing by counsel. Within 35 days after the conclusion of the public hearing, the Village Board shall make a determination, by

resolution duly adopted, whether to suspend the license for a period of up to 90 days. The duration of the suspension may depend on the following factors:

i. The nature of the violation;

ii. The nature and extent of the harm caused by the licensee's action or failure to act;

iii. The factual situation and circumstances surrounding the violation;

iv. Whether or not the action or failure to act was willful; and

v. The record of the licensee with respect to violations.

(C) A licensee whose license has been suspended pursuant to this Section 14-15-8 shall not be eligible to reapply for a contractor's license until the expiration of the suspension period, beginning on the date of adoption of the resolution enacting the suspension. At the time of the reapplication, the applicant must submit all required forms and fees as specified in this Article 15."

SECTION 3. SEVERABILITY. If any provision of this Ordinance or part thereof is held invalid by a court of competent jurisdiction, the remaining provisions of this Ordinance are to remain in full force and effect, and are to be interpreted, applied, and enforced so as to achieve, as near as may be, the purpose and intent of this Ordinance to the greatest extent permitted by applicable law.

SECTION 4. EFFECTIVE DATE. This Ordinance will be in full force and effect from and after its passage, approval, and publication in the manner provided by law.

[SIGNATURE PAGE FOLLOWS]

PASSED this _____ day of _____, 2018.

AYES: _____

NAYS: _____

ABSENT: _____

ABSTENTION: _____

APPROVED by me this _____ day of _____, 2018.

_____
Barry I. Bass, President
Village of Lincolnwood, Cook County, Illinois

ATTESTED and FILED in my office the
_____ day of _____, 2018.

_____
Beryl Herman, Village Clerk
Village of Lincolnwood, Cook County, Illinois

Return to VB Agenda

MEMORANDUM

TO: Timothy Wiberg, Village Manager

FROM: Steve McNellis, Community Development Director
Doug Hammel, Community Development Manager

DATE: January 16, 2018

SUBJECT: Proposed Building Code Text Amendment: Contractor License Revocation

This issue was originally opened for discussion at the November 7, 2017 Village Board Committee of the Whole meeting. At that meeting, the Village Board discussed this proposal and requested that staff conduct additional research before returning to a Committee of the Whole meeting for further discussion.

This memorandum presents information related to a proposed Building Code amendment that would allow the Village to revoke the Village License of contractors doing work on behalf of property owners. The intent of this proposed amendment is to enhance the Community Development Department's ability to monitor the performance of building contractors in the Village. The following pages include the relevant content of the original memorandum from November 7, 2017, as well as a summary of subsequent research conducted by staff related to comments or questions received from the Village Board during that discussion.

Contractor License Revocation Provisions

Over the past several months, staff has received complaints from residents regarding the quality of services they have received from certain building contractors. In some instances, residents have asked what actions the Village may be able to take to hold a contractor accountable for substandard work that has been undertaken and/or work that has been completed without required inspections. In many of those cases, the resident is the Petitioner, and they have paid a

contractor up front. As a result, the resident is responsible as the Permittee, and they have no recourse with the contractor without money held back from the contractor. In those instances, without any specific regulations in the Village Code that speak to revocation of a license, staff has had to counsel that such matters must be resolved between the property owner and the contractor. Staff assists residents by providing any documentation available to demonstrate where Village procedures or standards had not been met. (Such documentation is typically in the form of Building Permits and inspection reports related to specific improvements in question.)

Section 14-15-1 of the Building Regulations (see Attachment #1) requires all contractors conducting work in Lincolnwood to be licensed by the Village. This license is intended to ensure that property owners will be receiving services from fully licensed, insured, and bonded professionals. Several residents, however, have requested that the Village consider a more proactive approach to monitoring contactors. Currently, the Village Code lacks specific provisions that would allow staff to hold contractors accountable when they do not follow municipal procedures or meet standards. Therefore, staff recommends an amendment to Section 14-15-1 of the Building Regulations to establish specific provisions for the revocation of a Contractor License. It should be noted that such revocation would apply to the Village License required to do work in Lincolnwood, rather than the professional license issued to a contractor by his or her related trade organization or another governing body.

Relevant policy questions to be explored through the amendment process include the following. Any Village Board comments from the November 7, 2017 discussion or information from staff research conducted since then have been added for context:

- *Does the Village support a more proactive approach to contractor monitoring?*
  Generally, the Village Board supported staff's objective of establishing greater accountability for contractors and enhancing protections for residents engaged in Building Permits. There was no specific opposition to exploring the idea of contractor license revocation further.

- *What actions would trigger the possible revocation of a Village Contractor License?*
  Staff research indicates that in Evanston, Morton Grove, Wilmette, and Niles, the revocation process can be triggered by violations to the community's Building Code, non-compliance of laws and/or ordinances, refusing to allow required inspections, and any matter that jeopardizes public health, safety, or welfare.

  Glenview specifies that if any three violations occur in a calendar year, the contractor license shall be revoked. Specific violations include failure to correct defective work, failure to pay debts to the Village, being in possession of an outstanding violation, and failure to complete a job.
  Staff recommends that any provisions related to contractor license revocation be focused on procedural infractions, such as completing work without passing interim inspections, doing work without a permit, or doing work without being licensed by the Village. Staff

stated that including provisions related to the subjective quality of work by a contractor could be difficult to administer.

- *What would be an appropriate period for reinstatement?*
  Most of the communities researched do not specify a specific time period of reinstatement. Only Evanston provided specifics in this regard, stating that the license shall be revoked for up to 90 days. In Niles' one instance of revocation, the contractor did not seek to be reinstated.

- *What impacts might this have on property owners in the Village?*
  Staff stated that the intended benefit for property owners is additional incentive for contractors to abide by the regulations of the Village. Related to this intended benefit, one Trustee asked how a registry of contractors with revoked licenses may be made available to the public. That question is discussed in the next section of this memorandum.

- *Who should have the power to revoke contractor licenses?*
  In both Wilmette and Evanston, the power to revoke or suspend a contractor license lies with the Village Manager. The process is initiated by providing notice of a Public Hearing on the suspension or revocation to the licensee. In Wilmette, the licensee may appeal the action to the Village President and Board of Trustees.

  In Morton Grove, the revocation process is initiated through staff and the Adjudication Officer makes the final decision as part of an administrative hearing. Staff's action is subject to following up on complaints from residents.

- *What is the best way to make information available to the public regarding contractors with revoked licenses?*
  None of the researched communities provide a public list of contractors whose licenses have been revoked. Morton Grove has the capability to mark contractors with revoked licenses with a "red flag" on their internal staff software, indicating that the contractor is prohibited from applying for a new license or permits.

RECOMMENDATION

Staff recommends the Village Board further consider the specific provisions for Contractor License Revocation, and direct staff to draft regulatory language based on Village Board feedback.

Documents Attached

1. Current Building Regulations related to Contractor License Requirements
2. Committee of the Whole PowerPoint Presentation

Return to VB Agenda

VILLAGE OF LINCOLNWOOD
PRESIDENT AND BOARD OF TRUSTEES
COMMITTEE OF THE WHOLE MEETING
VILLAGE HALL COUNCIL CHAMBERS
NOVEMBER 7, 2017

Call to Order

President Bass called the Committee of the Whole meeting of the Lincolnwood Board of Trustees to order at 6:00 P.M., Tuesday, November 7, 2017, in the Council Chambers of the Municipal Complex, 6900 North Lincoln Avenue, Village of Lincolnwood, County of Cook and State of Illinois.

Roll Call

On roll call by Deputy Village Clerk Ashley Engelmann the following were:
PRESENT: President Bass, Trustees Ikezoe-Halevi, Spino, Patel, Hlepas Nickell, Sugarman (6:17 pm.), Cope (6:23 p.m.)

ABSENT: None

A quorum was present. Also present: Timothy Wiberg, Village Manager, Ashley Engelmann, Assistant Village Manager; Steve Elrod, Village Attorney; Heather McFarland, Management Analyst; Charles Meyer, Assistant to the Village Manager; Ben Harris, Accountant; Robert Merkel, Finance Director; Andrew Letson, Public Works Director; Nadim Badran, Assistant to the Public Works Director; Robert LaMantia, Police Chief; Steve McNellis, Community Development Director; Doug Hammel, Development Manager; Jim Amelio, Village Engineer

Approval of Minutes

Minutes of the October 17, 2017 Committee of the Whole and minutes from the February 23, 2017 Committee of the Whole Budget Workshop meeting were distributed in advance of the meeting and were examined. Trustee Ikezoe-Halevi moved to approve the minutes. Trustee Patel seconded the motion.

The motion passed with a Voice Vote

Return to VB Agenda

Regular Business

1. Discussion Concerning Potential Projects for Illinois Transportation Enhancement Project Grant funding

The item was presented by Nadim Badran, Assistant to the Public Works Director using PowerPoint. Mr. Badran also introduced Jim Amelio, Village Engineer. The purpose of the discussion is to seek Village Board direction regarding grant funding for the 2017 Illinois Transportation Enhancement Program (ITEP) grant. Typically ITEP grants are split 80% grant funding and 20% local match. Mr. Badran reviewed typical project types that are eligible. A review of ITEP grants that were received previously was presented. Current Village grant activity was reviewed. Staff presented two potential projects for the 2017 application.

Project #1-Lincoln Avenue Streetscape Enhancements
In 2009 the Lincoln Avenue Streetscape Plan was adopted. The estimated project cost is $2,645,400 for the grant application. Elements include parkway improvements such as sidewalk, benches, trees, garbage cans and landscaping. Eligible ITEP funding would be $1,963,320 with the Village's portion $682,080. Right-of-way acquisition may be required in some areas due to right-of-way property lines that are inconsistent.

Project #2-McCormick Boulevard Sidewalk
The project would include the installation of a sidewalk from Pratt to Albion Avenues on the west side of McCormick Boulevard. There are existing traffic signals and streetlights that may need to be relocated as part of the project. ITEP eligible funding is $230,400 with the Village's portion $57,600. The project would also include wayfinding signage and possibly existing fence relocation in some areas. Tree removal would most likely be required for a significant portion of the existing trees in order to fit a sidewalk within the space.

Trustee Patel requested that staff look at extending the project area to include the area near Novelty Golf to add sidewalk where the current cow path exists and also to include sidewalk on both the east and west side if possible.

Mr. Badran presented a proposed timeline for the grant application:

November 21- Funding Resolution for Village Board approval
November 28 - Submit ITEP application
FY 18/19 - Phase I of the project begins

At this time discussion ensued regarding the projects that were presented.

Trustee Ikezoe-Halevi noted that she would like to see the McCormick Boulevard sidewalk be implemented due to the lack of sidewalk but she is interested in both projects moving forward.

Trustee Patel supports both projects and asked if more than one application could be submitted for funding.

It was clarified by Mr. Amelio that more than one project can be submitted for funding and that only the project with the highest score would be funded.

Trustee Spino felt that both projects have merit and likes the idea of adding additional sidewalk on McCormick Boulevard.

Trustee Hlepas Nickell noted that she feels the money may be better spent on McCormick Boulevard. She expressed concerns regarding the Lincoln Avenue project and whether or not it would be a significant impact.

Trustee Sugarman noted that he was not present for the entire discussion.

Consensus was reached to submit an application for both projects, including a revision to the McCormick Boulevard project to add a sidewalk on both the east and west side of McCormick Boulevard.

2. Status Report Concerning Police Pension Funding

The item was presented by Mr. Merkel, Finance Director. Several members of the Police Pension Board were also present in the audience.

In November 2016 the Pension Board presented an annual update to the Village Board. The Pension Board presented the current funding status and asked that staff look at putting additional funding into the pension. State law requires that by 2040 the pension is 90% funded. The Village's annual contributions are based on that goal. During the December 2016 presentation the Village Board directed staff to create an Ad Hoc Pension Board to review funding level options.

The purpose of the discussion is to present the results of the Ad Hoc Committee's findings. Mr. Merkel presented an overview of the pension fund. A review of the plan provisions was discussed. Employees age 50 with 20 or more years of service can obtain 75% of their final salary. Mr. Merkel presented the plan funding sources which include employee contributions, annual earnings of the fund investments and Village contributions based on actuarial valuation. The current funding status was presented. The pension fund is currently 44% funded. During the last two years the Village contributed an additional $280,000/year from the additional two cents the Village imposed on the local gas tax.

Trustee Cope asked what the 44% reflects. Mr. Merkel explained that it reflects the amount of assets the Village has on hand to fund the required payments throughout the recipient's lifetime. It is indexed to the mortality tables. The Village is legally obligated to fund 100% of the pension. Other funds have to be used to cover the remainder of what is not in the fund. Mr. Merkel noted that as long as the Village pays the annual actuary requirement the Village will meet the 90% fund requirement by 2040.

Jessica Fain from Lauterbach & Amen, LLP presented the current actuarial projections as well as hypothetical scenarios to get to the 2040 funding requirement. Specifically they looked at what the impact would be if additional funds are put in annually.

Ms. Fain reviewed the first scenario which is the current annual funding amount of an additional $280,000/annually. The actual liability versus the market value of assets was depicted.

Ms. Fain reviewed a second scenario which contemplates an additional $500,000 annually. By adding an additional $500,000 annually or an extra $220,000 beyond the additional $280,000 additional that is being added currently the fund would be fully funded in 2038.

The Ad Hoc Pension Board recommends funding the additional $500,000 annually. Mr. Merkel requested direction regarding the recommendation.

Discussion ensued. Consensus by the Village Board was to fund the additional $500,000 annually. Staff will discuss funding options at the FY 2018/2019 Budget Workshop.

3. Discussion Concerning Proposed Zoning Code Text Amendments

The item was presented by Mr. Hammel, Development Manager and Mr. McNellis, Community Development Director. Mr. Hammel presented a discussion regarding allowing sign frames in Village parks. Currently there are no provisions for signs within the P Open Space Zoning District. Mr. Hammel presented a request to refer a text amendment to the Plan Commission to allow for the signs within Village owned park properties.

Trustee Cope asked what purpose the signs would serve. Mr. Wiberg explained that it is an avenue to advertise to users of the facilities. Ms. McCarty, Parks and Recreation Director noted that we can reach additional audiences through the use of the signs.

Trustee Nickell asked what the cost would be for printing the signs each year. It was noted that there would be a cost of approximately $200 annually to print signs to place within the frames.

Village Board consensus was reached to refer the item to the Plan Commission.

Mr. Hammel presented a staff recommendation to refer the concept of contractor license revocation to the Plan Commission. Mr. Hammel noted that currently contractors must be licensed to do work within the Village. There are situations where complaints have been received by residents but the Village currently does not have recourse to stop a contractor from continuing to do work in the Village if a contractor is failing to perform good work consistently.

Discussion ensued. Concerns were expressed regarding the process for revocation. It was noted that the Village Attorney should review the recommendation. Staff was directed to return to the next Committee of the Whole to continue the discussion.

Return to VB Agenda

4. Discussion Concerning 2018 Village Board Meeting Dates

Mr. Wiberg presented the proposed schedule of Village Board meeting dates for 2018. The Village Board was asked to review the dates. They will be presented in a Resolution at the next Village Board meeting.

Adjournment

At 7:33 PM Trustee Spino moved to adjourn Committee of the Whole, seconded by Trustee Cope. The motion passed with a Voice Vote.

Respectfully Submitted,

Ashley Engelmann

Ashley Engelmann
Deputy Village Clerk

Return to VB Agenda

VILLAGE OF LINCOLNWOOD
PRESIDENT AND BOARD OF TRUSTEES
COMMITTEE OF THE WHOLE MEETING
VILLAGE HALL COUNCIL CHAMBERS
JANUARY 16, 2018

Call to Order

President Bass called the Committee of the Whole meeting of the Lincolnwood Board of Trustees to order at 7:05 P.M., Tuesday, January 16, 2018, in the Council Chambers of the Municipal Complex, 6900 North Lincoln Avenue, Village of Lincolnwood, County of Cook and State of Illinois.

Roll Call

On roll call by Village Clerk Beryl Herman the following were:
PRESENT: President Bass, Trustees Spino, Hlepas Nickell, Ikezoe-Halevi, Patel, Cope (7:05 p.m.)
ABSENT: Trustee Sugarman

A quorum was present. Also present: Timothy Wiberg, Village Manager; Ashley Engelmann, Assistant Village Manager; Steve Elrod, Village Attorney; Charles Meyer, Assistant to the Village Manager; Doug Hammel, Community Development Manager; Steve McNellis, Community Development Director; Andrew Letson, Public Works Director; Nadim Badran, Assistant to the Public Works Director; Bruce Rottner, Interim Police Chief and Heather McFarland, Management Analyst.

Approval of Minutes

Minutes of the December 5, 2017, December 19, 2017 and January 2, 2018 Committee of the Whole meetings were distributed in advance of the meeting and were examined.

Trustee Hlepas Nickel moved to approve the minutes as presented. Trustee Spino seconded the motion.

The motion passed with a Voice Vote.

Regular Business

1. Discussion Concerning a Proposed Building Code Text Amendment

This item was presented by Mr. Hammel via PowerPoint. He began by presenting a brief background. This item was originally discussed in November of 2017.

Mr. Hammel presented the following reasons why staff is proposing consideration of an amendment:

- Contractors doing work without a Building Permit
- Contractors doing work without a Village License
- Contractors completing work without having passed interim inspections
- Contractors completing non-compliant work not shown in the Building Permit approved plans
- Unusually quick deterioration of work shortly after approval of final inspection and closing of the Building Permit

Mr. Hammel presented the following items for the Board to consider:

Does the Village support a more proactive approach (i.e. Contractor License revocation) to contractor monitoring? If so the following items should be discussed:

- What actions would trigger the possible revocation of a Village Contractor License?
- What would be an appropriate period for reinstatement?
- What impacts might this have on property owners in the Village?

Mr. Hammel noted questions that were raised at the November 7, 2017 Village Board meeting:

- Who should have the power to revoke contractor licenses?
- Should the contractor receive a hearing prior to a decision by the Village, and in front of what body?
- Should the Village publically post a list of contractors whose licenses have been revoked?

Staff is requesting feedback regarding the Village Board's desire to undertake more proactive Contractor License monitoring and any considerations related to such an approach, and direct staff to draft regulatory language based on that feedback.

Trustee Patel asked if this is only for contractor licenses.

Mr. Hammel confirmed that this is only for contractor licenses.

Trustee Patel asked if someone could apply under a new name if one was revoked under a different name. Mr. Hammel stated that staff would have to investigate how that would be handled.

Trustee Patel asked what the appropriate time should be for suspension. He also has heard concerns regarding the types of inspections that we require. Are we clearly explaining what inspections are required for each permit type? Mr. Hammel stated that a form is provided with all of the necessary inspections. He also stated that the intent here is not to use this as an overly proactive tool, any decisions will be very well vetted.

Trustee Hlepas Nickell stated that she has had residents who have expressed concerns about contactors. She feels something should be done to provide some protection to residents. She also asked if we know what other Villages have had to expend from a liability standpoint on revocation. Contractors need to be notified of this possibility when they are issued a license.

Trustee Cope noted that due process would occur through the Village's Administrative Hearing process.

Trustee Spino has no issue with the concept.

Trustee Ikezoe-Halevi does not have an issue but asked if there is a risk with posting a list publicly. Mr. Hammel stated that we would want to keep it up to date and that there could be some risk, he does not feel it will be necessary to post it online.

Mr. Wiberg reminded the Board that the Village currently posts restaurant inspection scores online.

Trustee Cope would support revocation but not support posting the information online.

Mayor Bass stated that there is Board consensus.

Mr. Wiberg stated that an Ordinance will come forward for the Board's consideration.

Adjournment

At 7:28 P.M. Trustee Cope moved to adjourn Committee of the Whole, seconded by Trustee Ikezoe-Halevi. The motion passed with a Voice Vote.

Respectfully Submitted,

Beryl Herman

Beryl Herman
Village Clerk

Attachment #1 – Building Regulations related to Contractor License Requirements

Chapter 1- Building Regulations, Article 15: Contractors

14-15-1 License required.
No person shall engage in the business of contractor without first having obtained a license from the Village. This article however shall not apply to plumbers or other contractors who are licensed and regulated pursuant to the preemption powers of the State of Illinois.

14-15-2 License application.
An applicant for a contractor's license shall file an application therefor with the Village Finance Director, on a form provided by the Village, which application shall include, without limitation, the number of individual employees of the applicant which will be operating under such license, the type and scope of contracting activity for which a license is requested, and a statement that the applicant agrees to comply with all provisions of this Code relating to or regulating the activities engaged in by the applicant.

14-15-3 Term of license.
Licenses issued to contractors shall be valid for a period of one year, beginning from the date of issuance.

14-15-4 Duties of licensee.
It shall be the absolute and irrevocable responsibility of all contractors licensed hereunder to secure the appropriate and necessary permits required by this Code before undertaking to construct, alter, maintain, repair, add to, subtract from, improve, move, wreck or demolish, in whole or in part, any building, structure, land parcel, sidewalk, driveway or street pavement. It shall also be the duty of all contractors licensed hereunder to comply with all the provisions of this Code relating to or regulating their activities as contractors, and, in addition thereto, to remove or cause to be removed at least once each week from the site of said contractor's activities, all trash, refuse and waste materials. Contractors shall, at all times, keep the site of activities in an orderly condition, free from standing water, unguarded, dangerous implements, and health and safety hazards. Contractors shall not obstruct traffic, streets, or sidewalks nor allow dirt or waste materials from falling or being carried onto public ways.

14-15-5 Inspection.
The provisions of this Article 15 are declared to be of a regulatory nature, and it shall at all times be the duty of all municipal officials charged with enforcement of this Code, to regularly inspect the site of the contractor's activities and to investigate whether persons engaged as contractors are properly licensed and that their activities are being conducted and operated in accordance with applicable provisions of this Code.
14-15-6 Bond required.

All contractors shall give security to the Village in the form and manner required by Chapter 6, Article 2, of this Code, by which security the contractor shall save and keep harmless the Village from any and all damage that may result to pavements, sidewalks, or other public property resulting from the use of streets in connection with such business, and, further, to save and keep harmless the Village from damages to persons or property arising from suits or claims resulting from obstructions or materials deposited or dropped upon the streets or other public places in the Village by such contractor.

14-15-7 Insurance required.
All contractors or an applicant or property owner acting as a general contractor who have applied for a building or construction permit for a property must submit evidence of current liability insurance to the Community Development Department showing that the contractor, applicant, or the property owner for which the permit is sought has insurance coverage in an amount of not less than the amount set forth in the Annual Fee Resolution for all damage to property adjoining the subject property resulting from the proposed work on the subject property.

Return to VB Agenda

Request for Board Action

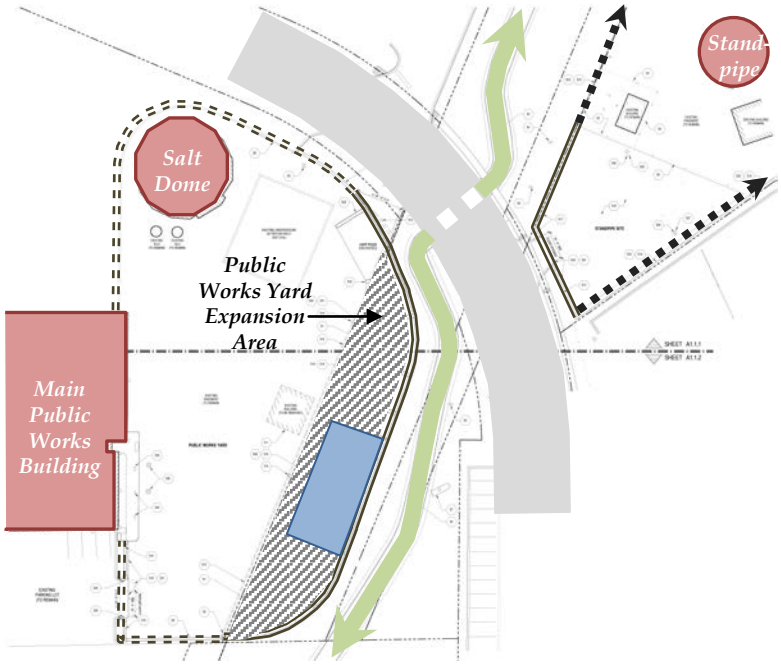
REFERRED TO BOARD: March 6, 2018 **AGENDA ITEM NO: 2**

ORIGINATING DEPARTMENT: Community Development

SUBJECT: Approval of a Recommendation by the Zoning Board of Appeals to Adopt an Ordinance Approving Special Fences, Fence Variations, and an Accessory Structure Variation for Village of Lincolnwood Public Works Facilities at 7001 North Lawndale Avenue and 7015-17 North Central Park Avenue

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

The Village of Lincolnwood, Petitioner and property owner, is seeking approval of a Special Fence and Variations to permit the construction of a masonry wall and access gates around portions of the perimeter of both of the subject properties, a decorative metal fence around portions of 7015-17 North Central Park Avenue, and an enclosed storage area at 7001 North Lawndale Avenue. The improvements are components of a larger capital improvement to expand and secure the Public Works yard and Village standpipe.



A portion of the wall for which Special Fence approval and zoning relief are sought was constructed in 2007 following Village Board approval of the yard expansion. At that time, staff was advised that formal zoning approval was not required. However, as the remainder of the project comes to fruition, staff feels it is prudent to request formal zoning approval to ensure entitlement in the future. Approval of the requested zoning would bring all portions of the project – existing and yet to be constructed – into legal compliance. The components of the Public Works yard expansion that require zoning approval include the following:

- 834-linear feet of masonry wall (380-linear feet installed as part of the original phase of work completed in 2007, 320-linear feet proposed to enclose the expanded yard, and 134-linear feet to secure the Village standpipe at 7015-17 North Central Park Avenue), including one eight-foot-tall metal gate on each property providing Village access;
- 660-linear feet of an eight-foot-tall decorative metal fencing around the standpipe property running along the trail corridor to the west and industrial properties to the north and southeast; and
- An enclosed storage area that would house materials related to Public Works operations and maintenance, installed immediately adjacent to a portion of the masonry wall.

Requested Relief

The proposed improvements require relief from the following zoning regulations:

- Special Fence Approval: Section 3.13(8) of the Zoning Ordinance defines special fences as "*those which have a greater potential than permitted fences to have an adverse impact upon the surrounding neighborhood. Special Fences may be appropriate in some locations and inappropriate in other locations.*" Specifically, brick walls and fences on through lots are designated as Special Fences. (For the purposes of this request, staff has interpreted the Public Works yard at 7001 North Lawndale Avenue to be on a through lot.) Approval of the Special Fence applies to both subject properties since each is proposed to have a brick wall.

- Fence Height: Section 3.13(15)c of the Zoning Ordinance states that fence height in the M-B District "*shall not exceed seven feet unless the Zoning Board of Appeals recommends, and the Board of Trustees grants, a Variation from the applicable regulation.*" The proposed height of the masonry wall and access gates is eight feet, and the proposed height of the decorative metal fence around the standpipe property is eight feet. The height of the wall is necessary to provide security to critical municipal properties, operations, and infrastructure. At the same time, the design of the masonry wall and decorative metal fence is intended to enhance the aesthetics along the public right-of-way. Approval of this Variation request would apply to both subject properties.

- Fence Location: Section 3.13(9)c of the Zoning Ordinance states that "*fencing shall not be allowed in front yards, except as provided in this section.*" The masonry walls and a portion of the decorative metal fence are proposed in the front yard of 7015-17 North Central Park Avenue and in what would be interpreted as the front yard of 7001 North Lawndale Avenue since the Zoning Ordinance generally applies front yard requirements on through lots where the lot abuts a public street.

- Accessory Structure Setback: Section 3.08(4)c of the Zoning Ordinance states that "*a detached accessory building or structure in a rear yard shall be not less than three feet from a lot line.*" It also states that, on through lots, accessory structures shall be set back "*not less than the distance required for a front yard setback from the rear lot line abutting a street.*" The shape of this lot and the fact that the rear portion of it is shared with a public bike trail make it difficult to determine how these regulations should specifically be applied to this situation. However, staff recommends consideration of a general Variation to Section 3.08(4)c in order to allow the construction of the project as illustrated in the attached plans. (The plans would also be attached to the Ordinance granting final approval of the improvement, ensuring there is a legal document in place guiding project compliance as it moves forward.)

Zoning Board of Appeals Discussion
A Public Hearing regarding this matter was conducted by the Zoning Board of Appeals (ZBA) on February 21, 2018. As part of that discussion, the ZBA considered the following characteristics of the proposed Public Works yard expansion:

- *Safety and security of municipal facilities and infrastructure.* The eight-foot height and location of the walls and decorative metal fence are necessary in order to adequately protect municipal facilities, equipment, and infrastructure from vandalism and terrorism.

- *Aesthetic character.* The design of the masonry wall is intended to enhance the aesthetic character along Central Park Avenue and the bike trail corridor.

The ZBA concurred that the requested zoning approvals are appropriate in order to provide adequate security to the properties, given the nature of the facilities and infrastructure they host. The ZBA unanimously approved a motion, by a 7-0 vote, recommending approval of the requested zoning relief.

FINANCIAL IMPACT:
None

DOCUMENTS ATTACHED:
1. Proposed Ordinance
2. February 21, 2018 Zoning Board of Appeals Minutes (Draft)
3. February 21, 2018 Staff Report to the Zoning Board of Appeals
4. Public Hearing Application
5. Proposed Plans and Elevations
6. Pertinent Zoning Code Sections

RECOMMENDED MOTION:
Move to approve an Ordinance approving Special Fences, Fence Variations, and an Accessory Structure Variation for Village of Lincolnwood Public Works facilities at 7001 North Lawndale Avenue and 7015-17 North Central Park Avenue.

Return to VB Agenda

THIS SPACE FOR RECORDERS USE ONLY

VILLAGE OF LINCOLNWOOD

ORDINANCE NO. 2018-_____

AN ORDINANCE GRANTING SPECIAL FENCE APPROVAL AND VARIATIONS FOR THE INSTALLATION OF A MASONRY WALL AND STORAGE STRUCTURE
(7001 North Lawndale Avenue & 7015-17 North Central Park Avenue)

ADOPTED BY THE
PRESIDENT AND BOARD OF TRUSTEES
OF THE VILLAGE OF LINCOLNWOOD
THIS ___ DAY OF MARCH, 2018.

Published in pamphlet form
by the authority of the
President and Board of Trustees
of the Village of Lincolnwood,
Cook County, Illinois this
___ day of March, 2018

_____
Village Clerk

Return to VB Agenda

AN ORDINANCE GRANTING SPECIAL FENCE APPROVAL AND VARIATIONS FOR THE INSTALLATION OF A MASONRY WALL AND STORAGE STRUCTURE
(7001 North Lawndale Avenue & 7015-17 North Central Park Avenue)

WHEREAS, the Village is the record title owner of that certain property located in the M-B Light Manufacturing/Business District (***"M-B District"***), commonly known as 7001 North Lawndale Avenue, and legally described in **Exhibit A** attached to and, by this reference, made a part of this Ordinance (***"Public Works Property"***); and

WHEREAS, in accordance with Section 2.02 of "The Village of Lincolnwood Zoning Ordinance," as amended (***"Zoning Ordinance"***), the Public Works Property is a through lot; and

WHEREAS, the Village is also the record title owner of that certain property located in the M-B District, commonly known as 7015-17 North Central Park Avenue, and legally described in **Exhibit B** attached to and, by this reference, made a part of this Ordinance (***"Standpipe Property"***); and

WHEREAS, the Village is also the record title owner of that certain property commonly known as the former Union Pacific right-of-way, and legally described in **Exhibit C** attached to and, by this reference, made a part of this Ordinance ***("Right-of-Way"),*** which Right-of-Way is adjacent to each of the Public Works Property and the Standpipe Property; and

WHEREAS, the Public Works Property is improved with a building used as the Village Public Works Department offices, and the Village's Public Works yard; and

WHEREAS, the Standpipe Property is improved with a standpipe; and

WHEREAS, the Village desires to expand the Public Works yard into a portion the Right-of-Way; and

WHEREAS, in order to provide security for the Public Works Property, the Standpipe Property, and the Right-of-Way (collectively, the ***"Properties"***), the Village desires to install: (i) a 700-foot-long brick masonry wall along the eastern lot line of the Public Works Property and within a portion of the Right-of-Way (***"Proposed Public Works Wall"***); (ii) a 134-foot-long brick masonry wall along the western and southwestern lot lines of the Standpipe Property (***"Proposed Standpipe Wall"***); (iii) a 22-foot-long metal fence gate along the north lot line of the Public Works Property (***"Proposed Public Works Fence"***); (iv) a 145-foot-long metal fence along the western lot line of the Standpipe Property (***"Proposed Western Standpipe Fence"***); (v) a 200-foot-long metal fence along the northern lot line of the Standpipe Property (***"Proposed Northern Standpipe Fence"***);and (vi) a 275-foot-long metal fence along the eastern lot line of the Standpipe Property (***"Proposed Eastern Standpipe Fence"***) (collectively, the ***"Proposed Fences"***); and

WHEREAS, neither brick walls, nor fences on through lots, may be installed except upon approval by the Village Board of Trustees of a "special fence" authorization pursuant to Section 3.13(8) of the Zoning Ordinance; and

WHEREAS, pursuant to Section 3.13(9)(c) of the Zoning Ordinance, fences may not be installed in front yards; and

WHEREAS, each of the Proposed Fences, other than the Proposed Eastern Standpipe Fence will be located in part within the front yards of the Properties, in violation of Section 3.13(9)(c) of the Zoning Ordinance; and

WHEREAS, pursuant to Section 3.13(15)c of the Zoning Ordinance, fences in the M-B District may not exceed seven feet in height; and

WHEREAS, each of the Proposed Fences will be eight feet in height, in violation of the fence height regulations set forth in Section 3.13(15)c of the Zoning Ordinance; and

WHEREAS, pursuant to Section 3.08(4)c of the Zoning Ordinance, detached accessory structures on through lots may not be located less than 60 feet from the front lot line or from a rear lot line abutting a street; and

WHEREAS, the Village also desires to construct an enclosed concrete storage structure (***"Proposed Storage Structure"***) within the easternmost portion of the Public Works Property and within a portion of the Right-of-Way, abutting the Proposed Public Works Wall, in violation of Section 3.08(4)c of the Zoning Ordinance; and

WHEREAS, in order to install the Proposed Fences on the Properties, the Village has filed an application for: (i) special fence approval for the Proposed Public Works Wall, the Proposed Standpipe Wall, and Proposed Public Works Fence, pursuant to Section 3.13(8) of the Zoning Ordinance; (ii) a variation for each of the Proposed Fences, other than the Proposed Eastern Standpipe Fence, from the front yard regulation set forth in Section 3.13(9)(c) of the Zoning Ordinance; (iii) a variation for each of the Proposed Fences from the fence height regulation set forth in Section 3.13(15)c of the Zoning Ordinance; and (iv) a variation for the Proposed Storage Structure from the accessory structure setback regulation set forth in Section 3.08(4)c of the Zoning Ordinance (collectively, the ***"Requested Relief"***); and

WHEREAS, a public hearing of the Zoning Board of Appeals ("***ZBA***") of the Village of Lincolnwood to consider approval of the Requested Relief was duly advertised in the *Chicago Tribune* on February 5, 2018, and held on February 21, 2018; and

WHEREAS, on February 21, 2018, the ZBA made findings and recommendations in support of the Requested Relief, subject to specified conditions; and

WHEREAS, the Village President and Board of Trustees have determined that the Requested Relief meets the required standards for special fence authorizations and variations, as set forth in Sections 3.13(24) and 3.13(25) and Article V of the Zoning Ordinance; and

WHEREAS, the Village President and Board of Trustees have determined that it will serve and be in the best interests of the Village to grant the Requested Relief, subject to the conditions, restrictions, and provisions of this Ordinance;

NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE PRESIDENT AND BOARD OF TRUSTEES OF LINCOLNWOOD, COOK COUNTY, ILLINOIS, as follows:

SECTION 1. RECITALS. The facts and statements contained in the preamble to this Ordinance are found to be true and correct and are hereby adopted as part of this Ordinance.

SECTION 2. SPECIAL FENCE AUTHORIZATION. In accordance with and pursuant to Section 3.13(8) and Article V of the Zoning Ordinance and the home rule powers of the Village, and subject to, and contingent upon, the conditions, restrictions, and provisions set forth in Section 4 of this Ordinance, the Village President and Board of Trustees hereby grant special fence authorization to permit the installation of the Proposed Public Works Wall, the Proposed Public Works Fence, and the Proposed Standpipe Wall on the Properties.

SECTION 3. APPROVAL OF REQUESTED VARIATIONS. In accordance with and pursuant to Section 3.13(24) and Article V of the Zoning Ordinance and the home rule powers of the Village, and subject to, and contingent upon, the conditions, restrictions, and provisions set forth in Section 4 of this Ordinance, the Village President and Board of Trustees hereby grant the following variations from the Zoning Ordinance for the Proposed Fences and the Properties:

A. Front Yard Fence. Variations from Section 3.13(9)(c) of the Zoning Ordinance to permit the installation of the Proposed Public Works Wall, the Proposed Standpipe Wall, the Proposed Public Works Fence, and the Proposed Eastern Standpipe Fence on the Properties.

B. Fence Height. Variations from Section 3.13(15)c of the Zoning Ordinance to increase the maximum height of each of the Proposed Fences, from seven feet to eight feet.

C. Storage Structure. A variation from Section 3.08(4)c of the Zoning Ordinance to permit the construction of the Proposed Storage Structure within the easternmost portion of the Public Works Property and a portion of the Right-of-Way, abutting the Proposed Public Works Wall.

SECTION 4. CONDITIONS. Notwithstanding any use or development right that may be applicable or available pursuant to the provisions of the Zoning Ordinance, the approvals granted pursuant to Section 2 and 3 of this Ordinance are hereby expressly subject to, and contingent upon, the development, use, and maintenance of the Proposed Fence, the Proposed Storage Structure, and the Properties in compliance with each and all of the following conditions:

A. Compliance with Regulations. Except to the extent specifically provided otherwise in this Ordinance, the construction, development, use, operation, and maintenance of the Proposed Fences, the Proposed Storage Structure, and the Properties must comply at all times with all applicable Village codes and ordinances, as the same have been or may be amended from time to time.

B. Compliance with Plan. Except for minor changes and site work approved by the Village Zoning Officer or the Village Engineer (for matters within their respective permitting authorities) in accordance with all applicable Village standards, the development, use, operation, and maintenance of the Proposed Fences, the Proposed Storage Structure, and the Properties must comply with that certain plan consisting of four sheets and prepared by FGM Architects, with a latest revision date of January 8, 2018, a copy of which is attached to and, by this reference, made a part of this Ordinance as **Exhibit D** (***"Plan"***).

C. Limitation of Requested Relief. The special fence authorization and the variations granted in Sections 2 and 3 of this Ordinance apply and are limited only to the Proposed Fences and the Proposed Storage Structure, as depicted in the Plan. No future alterations or modifications that are not in conformity with the requirements of the Zoning Ordinance may be made to the Proposed Fences, the Proposed Storage Structure, or the Properties without first obtaining Village approval in accordance with the applicable provisions of the Zoning Ordinance.

SECTION 5. RECORDATION; BINDING EFFECT. A copy of this Ordinance will be recorded with the Cook County Recorder of Deeds. This Ordinance and the privileges, obligations, and provisions contained herein inure solely to the benefit of, and are binding upon, the owner of the Properties, and each of its heirs, representatives, successors, and assigns.

SECTION 6. FAILURE TO COMPLY WITH CONDITIONS. Upon the failure or refusal of an owner of the Properties to comply with any or all of the conditions, restrictions, or provisions of this Ordinance, as applicable, the approvals granted in Sections 2 and 3 of this Ordinance will, at the sole discretion of the Village President and Board of Trustees, by ordinance duly adopted, be revoked and become null and void; provided, however, that the Village President and Board of Trustees may not so revoke the approvals granted in Section 2 and 3 of this Ordinance unless they first provide the owners of the Properties with two months advance written notice of the reasons for revocation and an opportunity to be heard at a regular meeting of the Village President and Board of Trustees. In the event of revocation, the development and use of the Property will be governed solely by the regulations of the M-B District and the applicable provisions of the Zoning Ordinance, as the same may, from time to time, be amended. Further, in the event of such revocation, the Village Manager and Village Attorney are hereby authorized and directed to bring such zoning enforcement action as may be appropriate under the circumstances.

SECTION 7. AMENDMENTS. Any amendments to the approvals granted in Sections 2 and 3 of this Ordinance that may be requested by an owner of the Properties, after the effective date of this Ordinance may be granted only pursuant to the procedures, and subject to the standards and limitations, provided in the Zoning Ordinance.

SECTION 8. SEVERABILITY. If any provision of this Ordinance or part thereof is held invalid by a court of competent jurisdiction, the remaining provisions of this Ordinance are to remain in full force and effect, and are to be interpreted, applied, and enforced so as to achieve, as near as may be, the purpose and intent of this Ordinance to the greatest extent permitted by applicable law.

SECTION 9. EFFECTIVE DATE. This Ordinance will become effective only upon the occurrence of each of the following events:

A. Passage by the Village President and Board of Trustees in the manner required by law; and

B. Publication in pamphlet form in the manner required by law.

[SIGNATURE PAGE FOLLOWS]

PASSED this _____ day of March, 2018.

AYES: _____

NAYS:_____

ABSENT:_____

ABSTENTION:_____

APPROVED by me this _____day of _____, 2018.

_____
Barry I. Bass, President
Village of Lincolnwood, Cook County, Illinois

ATTESTED and FILED in my office this
_____ day of _____, 2018

_____
Beryl Herman, Village Clerk
Village of Lincolnwood, Cook County, Illinois

Return to VB Agenda

EXHIBIT A

LEGAL DESCRIPTION OF THE PUBLIC WORKS PROPERTY

Commonly known as: 7001 North Lawndale Avenue, Lincolnwood, Illinois.

PIN: _____

Return to VB Agenda

EXHIBIT B

LEGAL DESCRIPTION OF THE STANDPIPE PROPERTY

Commonly known as: 7015-17 North Central Park Avenue, Lincolnwood, Illinois.

PIN: _____

Return to VB Agenda

EXHIBIT C

LEGAL DESCRIPTION OF THE RIGHT-OF-WAY

PIN: _____

EXHIBIT D

PLAN

Return to VB Agenda

MEETING MINUTES
OF THE
ZONING BOARD OF APPEALS
FEBRUARY 21, 2018

LINCOLNWOOD VILLAGE HALL
COUNCIL CHAMBERS
6900 NORTH LINCOLN AVENUE
LINCOLNWOOD, ILLINOIS 60712

MEMBERS PRESENT:
Chairman Kathy O'Brien
Paul Grant
Bruce Heller (arrived after approval of minutes)
Rizwan Hussain
Christopher Nickell
Martina Keller
Teodor Strat

MEMBERS ABSENT:

STAFF PRESENT:
Doug Hammel, AICP, Community Development Manager
Andrew Letson, Public Works Director
Nadim Badran, Assistant to the Public Works Director

I. Call to Order

Chairman O'Brien noted a quorum of six members and called the meeting to order at 7:00 p.m.

II. Pledge of Allegiance

III. Approval of Minutes

Motion to approve the January 17, 2018 Zoning Board of Appeals minutes was made by Commissioner Grant and seconded by Commissioner Keller.

Aye: Grant, Keller, Hussain, Nickell, Strat, and O'Brien
Nay: None
Motion Approved: 6-0

DRAFT

IV. Case #ZB-02-18: Public Hearing: 7001 North Lawndale Avenue and 7015-17 North Central Park Avenue – Special Fence Approval, Fence Variations, and Accessory Structure Variation

Chairman O'Brien announced Case #ZB-02-18 for consideration of a request by the Village of Lincolnwood, property owner, to approve a Special Fence that would allow an existing masonry wall to remain and the installation of a new masonry wall, Variations related to the height and location of the masonry wall and a decorative metal fence, and a Variation related to the location of an accessory structure on the subject property.

Development Manager Doug Hammel provided a brief overview of the requested approvals and Variations. 7001 North Lawndale Avenue is the location of the Public Works facility and 7015-17 North Central Park Avenue is the location of the Village's water tower.

The existing masonry wall was built in 2007. The proposed masonry wall is part of a Public Works yard expansion project for storage of maintenance materials. A masonry wall and decorative metal fence is proposed to enclose the Village's water tower.

Special Fence and Variation approvals are required for brick walls and fences on through lots, the eight-foot-tall fence height, and fences located in front yards. The Zoning Code allows masonry walls and fences up to a maximum of seven feet, and fences are not allowed on front yards, including frontage along public streets on through lots.

Accessory structures are required to be set back three feet from a property line. Even though there is adequate setback from the lot line, due the fact there is a public trail running along the same parcel the Village attorney recommended the Village seek approval in case these lots were ever subdivided. The request is not for a specific amount of setback from the existing property line, but to approved the plans, as drawn, according to the building plan. Should any issue arise in the future, the Village has zoning entitlement.

Considerations for the proposed improvements include the safety and security of municipal facilities and infrastructure and to enhance the aesthetic character along Central Park Avenue and the bike trail corridor.

Development Manager Hammel presented the Standards for Granting Variations and Standards for Special Fence approval for review and discussion. Development Manager Hammel stated that, while one or two standards may not have been met to demonstrate the hardship, the unique circumstances of this project to provide safety and security to critical operations and infrastructure warrant consideration by the ZBA. No public comment was received prior to this Public Hearing. The Requested Action is Special Fence and Variations approval to allow the construction of masonry walls, a decorative metal fence, and a seventeen-foot enclosed storage structure at 7001 North Lawndale Avenue and 7015-17 North Central Park Avenue.

Chairman O'Brien requested clarification from staff on the proposed actions.

Chairman O'Brien asked if anyone in the audience would like to address the Zoning Board of Appeals. Let the record state that no one came forward.

Commissioner Hussain asked if the property is subdivided in the future, will the structure's footing extend past the fence line. Public Works Director Letson ensured the footings would be on the same parcel and would not have a structure that would cross property lines.

Motion to recommend approval of Special Fence approval and Variations, as presented, was made by Chairman O'Brien and seconded by Commissioner Grant. Case #ZB-02-18 will be heard at the March 6, 2018 meeting of the Village Board.

Aye: O'Brien, Grant, Heller, Hussain, Keller, Nickell, and Strat
Nay: None
Motion Approved: 7-0

V. Staff Report

Development Manager Hammel reminded the Commissioners that the Statement of Economic Interest from Cook County will be emailed to them in March. These forms are to be filled out and returned to the County electronically. The County can fine the Commissioners individually if not returned.

VI. Next Meeting

The next Zoning Board of Appeals meeting is set for Wednesday, March 21, 2018. Development Manager Hammel stated there are no cases to be heard at that time. The ZBA's Biennial Report to the Village Board will be presented for review and approval at the April 18, 2018 ZBA meeting.

VII. Public Comment

Chairman O'Brien asked if anyone in the audience would like to address the Zoning Board of Appeals. Let the record state that no one came forward.

VIII. Adjournment

Motion to adjourn was made by Commissioner Grant and seconded by Commissioner Keller. Meeting adjourned at 7:28 p.m.

Aye: Grant, Keller, Heller, Hussain, Nickell, Strat, and O'Brien
Nay: None
Motion Approved: 7-0

Respectfully submitted,

Kathryn Kasprzyk

Return to VB Agenda

Zoning Board of Appeals Staff Report
Case #ZB-02-18
February 21, 2018

Subject Property:
7001 North Lawndale Avenue,
7015-17 North Central Park Avenue

Zoning District: MB, Manufacturing and Business

Petitioner: Village of Lincolnwood

Requested Action: Special Fence approval and Variations to allow a masonry wall and a decorative metal fence in various locations on the subject properties, and an accessory structure located within the required setback.

Notification: Notice was published in the Chicago Tribune on February 5, 2018, a Public Hearing Sign installed at 7001 North Lincoln Avenue, and Legal Notices were mailed on February 2, 2018 to Properties within 250 Feet.

Summary of Request

The Petitioner is seeking approval of a Special Fence and Variations to permit the construction of a masonry wall around portions of the perimeter of both of the subject properties, a decorative metal fence around portions of 7015-17 North Central park Avenue, and an enclosed storage area at 7001 North Lawndale Avenue. The improvements are components of a larger capital improvement to expand and secure the Public Works yard and Village standpipe. The current yard occupies approximately 39,700 square feet. The expansion would add another 10,500 square feet and support safe and efficient operations in the yard.

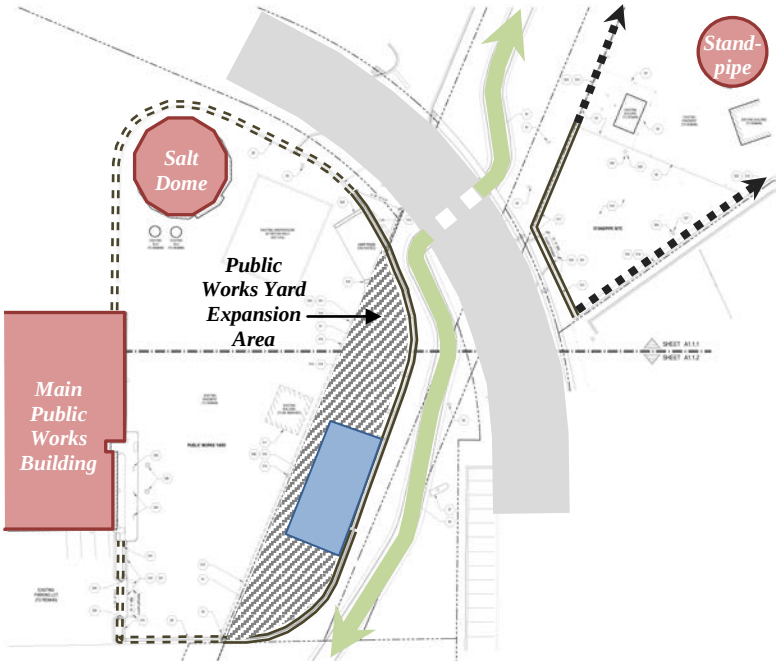
A portion of the wall for which Special Fence approval and zoning relief are sought was constructed in 2007 following Village Board approval of the yard expansion. (Approval was granted in April 2004.) However, no formal zoning approval was granted at that time. Approval of the requested actions would result in retroactive compliance of this portion of the masonry wall. The remainder of the project was delayed due to the implementation of the new

bike trail corridor. With the trail now installed, the Village is preparing to complete the remainder of the yard expansion and is seeking zoning approval for the entirety of the masonry wall, including both the already installed segments and the planned segments.

The masonry walls would be eight feet tall, and would provide security to the Public Works yard and standpipe. The request seeks approval of a total of 834 linear feet of masonry wall (380 linear feet installed as part of the original phase of work completed in 2007, 320 linear feet proposed to enclose the expanded yard, and 134 linear feet to secure the Village standpipe at 7015-17 North Central Park Avenue.) The proposed walls are designed to provide an attractive screening of the Public Woks facilities, and ensure that Village equipment and infrastructure is adequately secure.

The proposed decorative metal fence would provide security to the remainder of the standpipe property. The fence would be eight feet tall, and would run a total of 660 linear feet along the trail corridor to the west and industrial properties to the north and southeast.

The enclosed storage area would house materials related to Public Works operations and maintenance, and would be installed immediately adjacent to a portion of the masonry wall.



Example of the decorative metal fence design proposed for the interior lot lines of 7015-17 North Central Park Avenue

Requested Relief:

The proposed improvements require relief from the following zoning regulations:
Special Fence Approval: Section 3.13(8) of the Zoning Ordinance defines special fences as *"those which have a greater potential than permitted fences to have an adverse impact upon the surrounding neighborhood. Special fences may be appropriate in some locations and inappropriate in other locations."* Specifically, brick walls and fences on through lots are designated as special fences. (For the purposes of this request, staff has interpreted the Public Works yard at 7001 North Lawndale to be on a through lot.) Approval of the Special Fence applies to both subject properties, since each is proposed to have a brick wall.

Fence Height: Section 3.13(15)c of the Zoning Ordinance states that fence height in the MB District *"shall not exceed seven feet unless the Zoning Board of Appeals recommends and the Board of Trustees grants a variation from the applicable regulation."* The proposed height of the masonry wall is eight feet, and the proposed height of the decorative metal fence around the standpipe property is eight feet. As stated in the Petitioner's application, this is necessary to provide adequate security to critical Village properties and infrastructure. Approval of this Variation request would apply to both subject properties.

Fence Location: Section 3.13(9)c of the Zoning Ordinance states that *"fencing shall not be allowed in front yards, except as provided in this section."* (The circumstances of this case do not trigger any exceptions included in the Zoning Ordinance.) The masonry walls and a portion of the decorative metal fence are proposed in the front yard of 7015-17 North Central Park Avenue, and in what would be interpreted as the front yard of 7001 North Lawndale Avenue, since the Zoning Ordinance generally applies front yard requirements on through lots where the lot abuts a public street.

Accessory Structure Setback: Section 3.08(4)c of the Zoning Ordinance states that *"a detached accessory building or structure in a rear yard shall be not less than three feet from a lot line."* It also states that, on through lots, accessory structures shall be setback *"not less than the distance required for a front yard setback from the rear lot line abutting a street."* The shape of this lot and the fact that the rear portion of it is shared with a public bike trail make it difficult to determine how these regulations should specifically be applied to this situation. However, staff recommends consideration of a general Variation to Section 3.08(4)c in order to allow the construction of the project as illustrated in the attached plans. (The plans would also be attached to the Ordinance granting final approval of the improvement, ensuring there is a legal document in place guiding project compliance as it moves forward.)

Considerations:

The Petitioner's application highlights the following considerations related to the proposed improvement:

Safety and security of municipal facilities and infrastructure. The petitioner's application states that the eight-foot height and location of the walls and decorative metal fence are necessary in order to adequately protect municipal facilities, equipment, and infrastructure from vandalism and terrorism.

Aesthetic character. According to the petitioner's application, the design of the masonry wall is intended to enhance the aesthetic character along Central Park Avenue and the bike trail corridor.

Special Fence Standards

Section 3.13(25)b of the Zoning Ordinance identifies five to be used in determining the appropriateness of a Special Fence request. These standards can be found in attachment #3 of this report.

Variation Standards

Section 5.15(7) Major Variations of the Village zoning ordinance identifies eight standards related to this case to be used in determining *"whether in a specific case there are practical difficulties or particular hardships in the way of carrying out the strict letter of this Zoning Ordinance."* These standards can be found in attachment #3 of this report.

Public Comment

No public comment was received by the Community Development Department prior to the distribution of this staff report.

Precedent Cases

Staff did not identify any precedent cases related to this request due to the unique nature of the use and requirements related to safety and security. However, Special Fence approvals have recently been granted for the Lincolnwood Jewish Congregation AGBI (7117 North Crawford Avenue) in order to enhance safety at their place of worship, and at 6489 North Longmeadow Avenue to allow a resident to build a sound wall adjacent to I-94. Both requests were unanimously approved by the Zoning Board of Appeals and Village Board.

Conclusion

The Petitioner is seeking approval of a Special Fence and Variations to permit the construction of a masonry wall around portions of the perimeter of the subject properties, and an enclosed storage area at 7001 North Lawndale Avenue. The masonry walls would be eight feet tall, and would provide security to the Village of Lincolnwood Public Works yard. The proposed walls are designed to provide an attractive screening of the Public Woks facilities, and ensure that Village equipment and infrastructure is adequately secure. The enclosed storage area would house materials related to Public Works operations and maintenance, and would be installed immediately adjacent to a portion of the masonry wall.

Documents Attached

1. Zoning Variation Application
2. Proposed Plans and Elevations
3. Relevant Village Code Sections

Return to VB Agenda

VILLAGE OF LINCOLNWOOD Public Hearing Application
Community Development Department Variations

SUBJECT PROPERTY

Property Address: 7001 N Lawndale Ave, 7015-7017 N Central Park Avenue

Permanent Real Estate Index Number(s): 10-35-107-013-0000, 10-35-107-015-0000, 10-35-107-022-0000, 10-35-200-041-0000

Zoning District: MB Lot Area: 2.66 acres total

List all existing structures on the property. Include fencing, sheds, garages, pools, etc.
Public Works offices, maintenance garage, storage silo, material partition walls

Are there existing development restrictions affecting the property? ☐ Yes ☑ No
(*Examples: previous Variations, conditions, easements, covenants*) If yes, describe: _____

REQUESTED ACTION

- ☐ Variation – Residential
- ■ Variation – Non-Residential
- ☐ Variation – Off-Street Parking
- ☐ Variation – Design Standards
- ☐ Variation – Signs/Special Signs
- ☐ Minor Variation
- ☐ Other

PROJECT DESCRIPTION

Describe the Request and Project: Variation and Special Fence approval to permit construction of a masonry wall around the Public Works facility and related facilities.

PROPERTY OWNER/PETITIONER INFORMATION

Property Owner(s): *(List all Beneficiaries if Trust)*

Name: Village of Lincolnwood

Address: 6900 North Lincoln Avenue

Telephone: (847) 745-4851 Fax: (____) _____ E-mail: aletson@lwd.org

Petitioner: *(if Different from Owner)*

Name: _____ Relationship to Property: _____

Address: _____

Telephone: (____) _____ Fax: (____) _____ E-mail: _____

NOTICE OF REASONABLE ACCOMMODATION PROCESS

An alternate process is provided by the Village for persons with disabilities or handicaps who seek a Reasonable Accommodation from the Zoning Code regulations in order to gain equal access to housing. If you seek a Reasonable Accommodation from the Zoning Code based on disability or handicap, do not complete this application form, but rather a separate application for Reasonable Accommodation. For more information on this process, consult Section 4.06(3) of the Zoning Code, or contact the Community Development Department at 847.673.7402.

Return to VB Agenda

REQUIRED ATTACHMENTS *

Check all Documents that are Attached:

Plat of Survey	☑	Applicable Zoning Worksheet	☐
Site Plan	☑	Photos of the Property	☐
Proof of Ownership	☐	PDF Files of all Drawings	☐
Floor Plans	☑	Elevations	☑

**The above documents are required for all applications. The Zoning Officer may release an applicant from specific required documents or may require additional documents as deemed necessary.*

COST REIMBURSEMENT REQUIREMENT

The Village requires reimbursement of certain out-of-pocket costs incurred by the Village in connection with applications for zoning approvals and relief. These costs include, but are not limited to, mailing costs, attorney and engineer costs, and other out-of-pocket costs incurred by the Village in connection with this application. In accordance with Section 5.02 of the Village of Lincolnwood Zoning Ordinance, both the petitioner and the property owner shall be jointly and severely liable for the payment of such out-of-pocket costs. Out-of pocket costs incurred shall be first applied against any hearing deposit held by the Village, with any additional sums incurred to be billed at the conclusion of the hearing process.

Invoices in connection with this application shall be directed to:

Name: Village of Lincolnwood

Address: 6900 North Lincoln Avenue

City, State, Zip: Lincolnwood, IL 60712

ATTESTMENT AND SIGNATURE

I hereby state that I have read and understand the Village cost reimbursement requirement, as well as the requirements and procedures outlined in Article V of the Village Zoning Ordinance, and I agree to reimburse the Village within 30 days after receipt of an invoice therefor. I also understand that if I desire a Reasonable Accommodation from the Zoning Code based on disability or handicap, that I must complete and submit a different application for consideration and by submitting this application for a Variation, I am attesting that I am not seeking a Reasonable Accommodation. I further attest that all statements and information provided in this application are true and correct to the best of my knowledge and that I have vested in me the authority to execute this application.

PROPERTY OWNER:

Andrew Letson
Signature

Andrew Letson, Director of Public Works
Print Name

2/15/18
Date

PETITIONER: *(if Different than Property Owner)*

Signature

Print Name

Date

Return to VB Agenda

VARIATION STANDARDS

To be approved, each Variation request must meet certain specific standards. These standards are listed below. After each listed standard, explain how your Variation request satisfies the listed standard. Use additional paper if necessary.

1. The requested Variation is consistent with the stated intent and purposes of the Zoning Ordinance and the Comprehensive Plan.

The requested Variation reflects the intent of the Zoning Ordinance through its intent to 1) provide a more attractive visual character from the public right-of-way by screening Public Works facilities and operations, and 2) enhancing security around critical facilities and infrastructure that serve residents of the Village.

2. The particular physical surroundings, shape or topographical conditions of the subject property would bring a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of this Zoning Ordinance is enforced.

The request for the Variation is predicated upon the unique facilities and uses that house Village equipment and support the maintenance of critical infrastructure. These uses require a heightened level of security, especially given the proximity to public rights-of-way and the trail corridor.

3. The conditions upon which the petition for the Variation is based would not be applicable generally to other property within the same Zoning District.

The subject property is unique in that it houses facilities and equipment dedicated to the maintenance of municipal infrastructure. Other properties in the MB district are generally adequately screened and secured by fencing and screening that is permitted within the context of the Zoning Ordinance.

4. The Variation is not solely and exclusively for the purpose of enhancing the value of or increasing the revenue from the property.

The Village does not benefit from enhancing the value of the property, and does not generate revenue through the operation of the property. Instead, the improvements are to provide adequate security from vandalism and/or terrorism to municipal facilities, equipment and infrastructure.

VARIATION STANDARDS (Continued)

5. The alleged difficulty or hardship has not been created by any person presently having an interest in the property.

The request for the Variation is in response to security from public areas and adjacent properties, rather than any conditions specifically created by the property owner.

6. The granting of the Variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located.

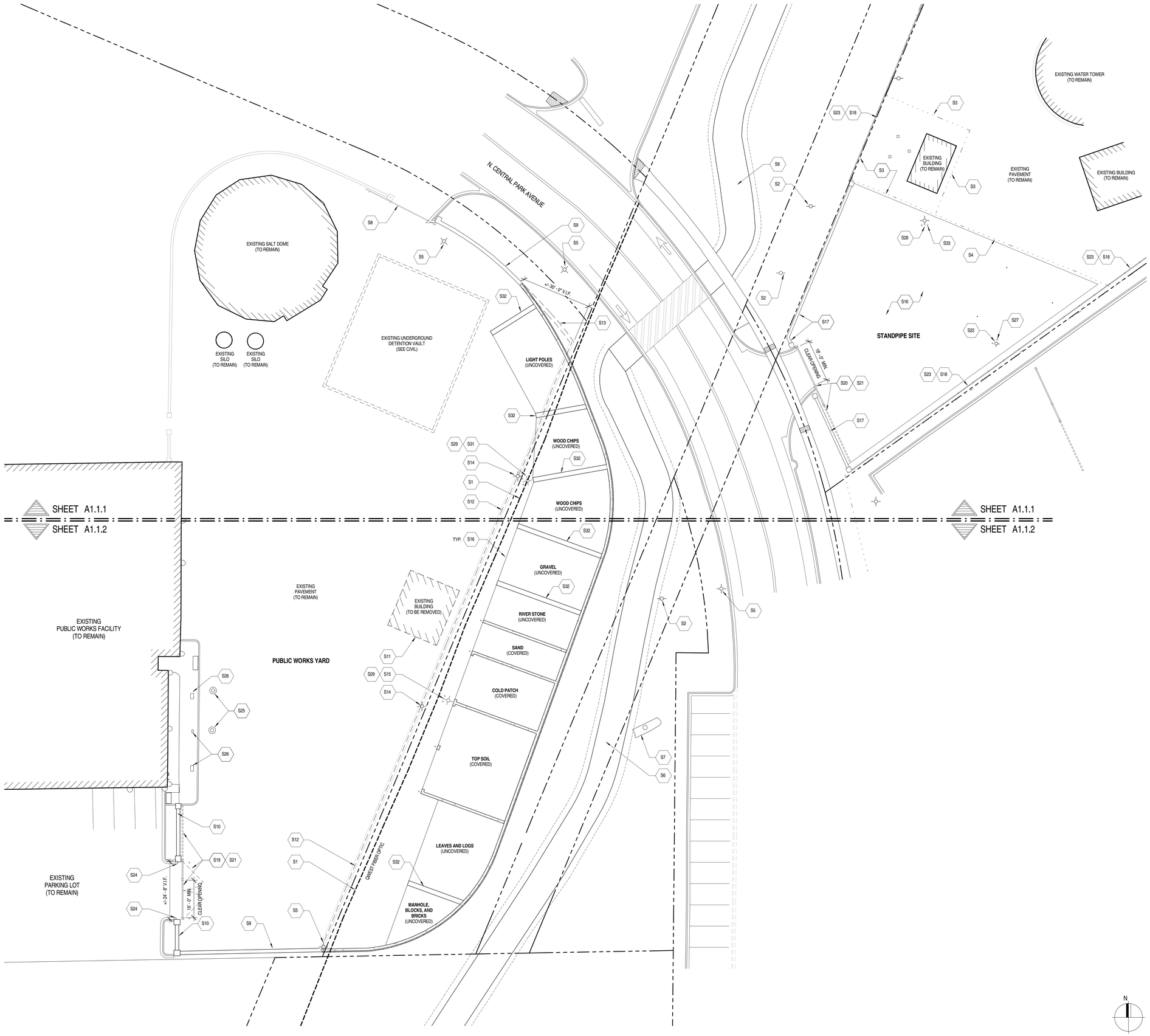
The intent of the Variation request is to enhance the visual character of the property and adjacent rights-of-way, and to enhance the safety and security of municipal facilities. The Petitioner is not aware of any detrimental impacts on surrounding properties.

7. The Variation granted is the minimum change to the Zoning Ordinance standards necessary to alleviate the practical hardship on the subject property.

The requested height and location of the masonry wall are required to provide safety and security to municipal facilities and equipment.

8. The proposed Variation will not impair an adequate supply of light and air to adjacent property, or substantially increase the danger of fire, or otherwise endanger the public safety, or substantially diminish or impair property values within the neighborhood.

The requested Variation would result in a wall that is designed to be more aesthetically appealing than what would otherwise be permitted, and does not in any way impact light or safety of surrounding properties.



KEYNOTES - REFERENCE

KEY NUMBER	DESCRIPTION

KEYNOTES - SHEET

KEY NUMBER	DESCRIPTION
S1	EXISTING UNDERGROUND QWEST FIBER OPTIC LINE TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
S2	EXISTING COMED SITE POLES AND INFRASTRUCTURE TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
S3	EXISTING 4-SIDED PROTECTIVE FENCE AROUND CELL TOWER AND RELATED INFRASTRUCTURE TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
S4	EXISTING FENCE AND GATE SEPARATING STANDPIPE/WATER TOWER SITE FROM LIMITS OF NEW WORK TO REMAIN. CONTRACTOR TO EVALUATE IF TEMPORARY REMOVAL AND REINSTALLATION OF FENCE IS NECESSARY TO ACCOMMODATE CONSTRUCTION ACTIVITIES.
S5	EXISTING LIGHT POLE TO REMAIN.
S6	EXISTING BIKE PATH TO REMAIN.
S7	EXISTING SITE SCULPTURE TO REMAIN.
S8	EXISTING MOTORIZED SLIDING SITE ENTRY GATE TO REMAIN. GATE TO BE REFERENCED AS A MINIMUM MASIS FOR THE COMPONENTS AND STANDARDS THAT SHALL BE PROVIDED FOR NEW CANTILEVER SLIDE GATES.
S9	EXISTING CONCRETE AND MASONRY PERIMETER YARD WALL TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
S10	EXISTING CONCRETE AND MASONRY COMBINATION PERIMETER YARD WALL AND ORNAMENTAL FENCE TO REMAIN.
S11	REMOVE EXISTING STORAGE STRUCTURE IN ITS ENTIRETY TO ACCOMMODATE NEW WORK.
S12	DASHED LINES DENOTE EXISTING PERIMETER YARD CHAIN LINK FENCE TO BE REMOVED TO ACCOMMODATE NEW WORK. CONFIRM WITH OWNER IF FENCE COMPONENTS ARE TO BE SALVAGED PRIOR TO REMOVAL.
S13	DASHED LINES DENOTE PORTION OF EXISTING CONCRETE AND MASONRY PERIMETER YARD WALL TO BE REMOVED IN ITS ENTIRETY WITHIN LIMITS INDICATED TO ACCOMMODATE NEW WORK.
S14	EXISTING LIGHT POLE TO BE REMOVED AND RELOCATED TO ACCOMMODATE NEW WORK. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
S15	RELOCATED EXISTING LIGHT POLE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. NOTE: PLACEMENT OF LIGHT POLE FOUNDATIONS SHALL BE INDEPENDENT FROM AND NOT CONFLICT WITH BIN WALL STRUCTURAL FOUNDATIONS AND FOOTINGS, OR EXISTING UNDERGROUND INFRASTRUCTURE TYP. PROVIDE ADEQUATE CLEARANCES AS REQUIRED.
S16	NEW CONCRETE PAVEMENT, REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
S17	PROVIDE NEW CONCRETE AND MASONRY SCREEN WALL AT ENTRY TO SITE AS SHOWN. REFER TO ENLARGED PLANS AND EXTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION.
S18	EXISTING CHAIN LINK FENCE SURROUNDING PERIMETER OF STANDPIPE/WATER TOWER SITE TO BE REMOVED AND REPLACED WITH NEW PREFINISHED ORNAMENTAL STEEL FENCE. ESTIMATED EXTENT OF NEW LINEAR FENCE TO BE PROVIDED IS 660 LINEAR FEET, VERIFY EXACT EXTENTS IN FIELD. REFER TO EXTERIOR ELEVATIONS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
S19	EXISTING MANUALLY OPERATED SWING GATE TO BE REMOVED AND REPLACED WITH NEW PINFINISHED MOTORIZED SLIDING GATE. EXISTING CONDITIONS AND DIMENSIONAL GATE WIDTH TO BE VERIFIED IN FIELD, TYP. REFER TO ELECTRICAL DRAWINGS FOR CONNECTIONS TO ELECTRICAL INFRASTRUCTURE.
S20	PROVIDE NEW PREFINISHED MOTORIZED ALUMINUM CANTILEVER SLIDING GATE, IN OPENING CONFIGURATION AS SHOWN. REFER TO ELECTRICAL DRAWINGS FOR CONNECTIONS TO ELECTRICAL INFRASTRUCTURE.
S21	SLIDING GATE BASIS OF DESIGN: TRANSPORT II ALUMINUM CANTILEVER GATE, BY AMERISTAR FENCE. NOTE: GATE DESIGN INTENDED TO MATCH AESTHETICS AND STYLE OF ORNAMENTAL FENCE, TYP.
S22	EXISTING SITE HYDRANT TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
S23	PREFINISHED ORNAMENTAL FENCE BASIS OF DESIGN: MONTAGE INDUSTRIAL STEEL FENCE, 2-RAIL MAJESTIC DESIGN, BY AMERISTAR FENCE.
S24	EXISTING CONCRETE BOLLARD TO REMAIN.
S25	EXISTING UNDERGROUND GAS TANKS TO REMAIN.
S26	EXISTING GAS PUMPS AND CONTROLS TO REMAIN.
S27	PROVIDE NEW CONCRETE BOLLARDS, AS SHOWN. REFER TO CIVIL DRAWINGS FOR DETAILS AND ADDITIONAL INFORMATION.
S28	NEW SITE LIGHT POLE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
S29	RELOCATED EXISTING LIGHT POLE TO BE FLANKED BY NEW CONCRETE BOLLARDS, EACH SIDE. REFER TO CIVIL DRAWINGS FOR DETAILS AND ADDITIONAL INFORMATION.
S31	RELOCATED EXISTING LIGHT POLE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. NOTE: PLACEMENT OF LIGHT POLE FOUNDATIONS SHALL BE INDEPENDENT FROM AND NOT CONFLICT WITH EXISTING UNDERGROUND FIBER OPTIC LINE. PROVIDE ADEQUATE CLEARANCES TO EXISTING INFRASTRUCTURE AS REQUIRED.
S32	EXISTING PRECAST CONCRETE BLOCK BIN DIVIDER WALLS TO BE REMOVED AND SALVAGED ON SITE. PRECAST BLOCKS TO BE RECONFIGURED IN NEW LAYOUT AS SHOWN. EXISTING BLOCKS 2'-0" WIDE, 2'-0" HIGH AND VARIED IN LENGTH.
S33	NEW LIGHT POLE TO BE FLANKED BY NEW CONCRETE BOLLARDS, EACH SIDE. REFER TO CIVIL DRAWINGS FOR DETAILS AND ADDITIONAL INFORMATION.

ISSUANCE

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR BID / ISSUED FOR PERMIT

FGM ARCHITECTS
CHICAGO OAKBROOK O'FALLON

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	01/08/18
DRAWN	AO
CHECKED	JE
APPROVED	JD

PROFESSIONAL DESIGN FIRM IL # 184.000350

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

OVERALL ARCHITECTURAL SITE PLAN

SHEET NO.
A1.1.0

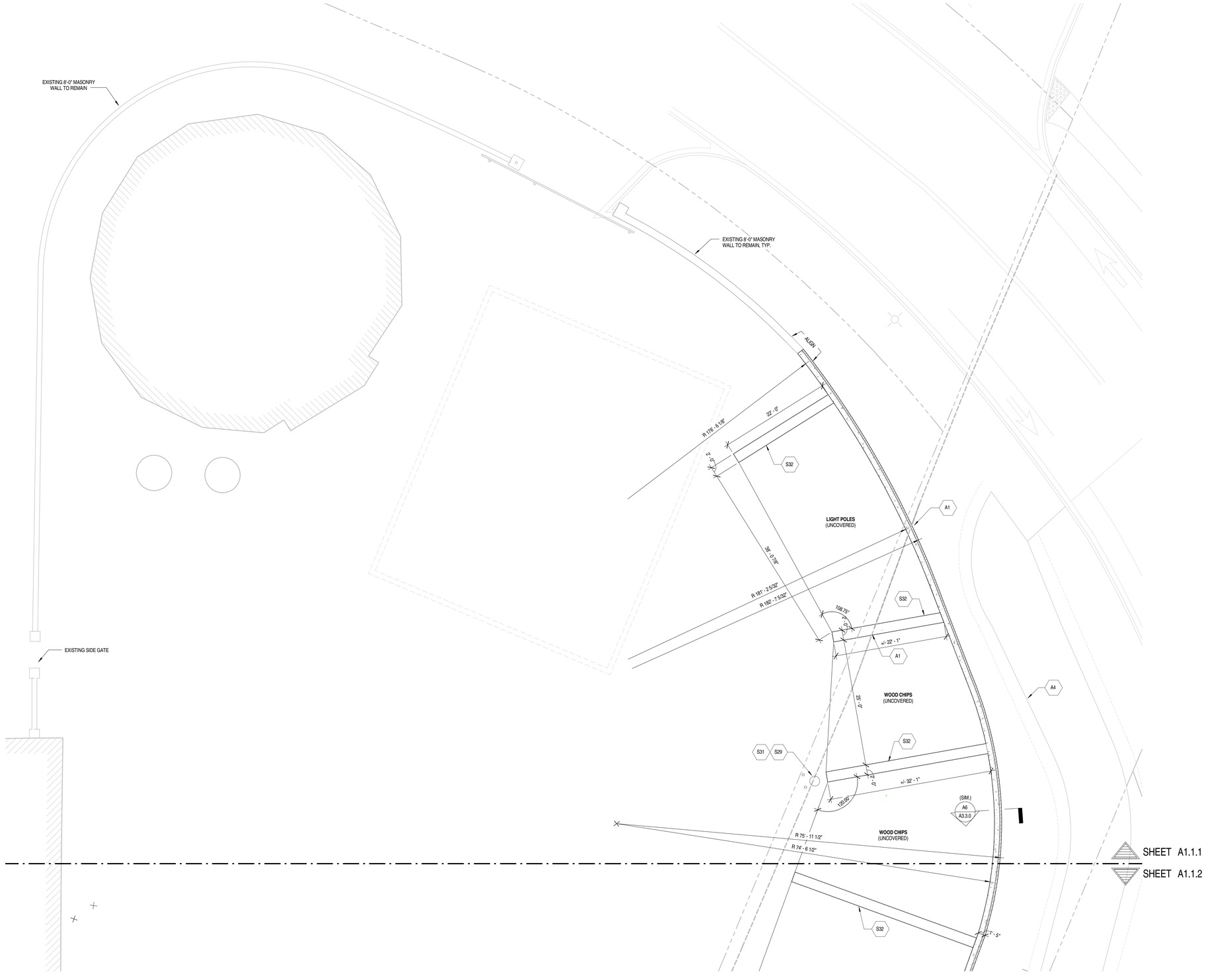
JOB NO. 14-1815.01

© 2017 FGM Architects Inc.

A1 OVERALL ARCHITECTURAL SITE PLAN
1/16" = 1'-0"

A21 NOTATIONS

1/9/2018 12:00:50 AM
C:\Revit Temp\2016\14-1815a_Lincolnwood PW Yard_Central_2016_annabella.orlando.rvt
Copyright 2017 FGM ARCHITECTS, INC.



KEYNOTES - REFERENCE

KEY NUMBER	DESCRIPTION

KEYNOTES - SHEET

KEY NUMBER	DESCRIPTION
A1	PROVIDE SLEEVE THROUGH FOUNDATION WALL AS REQUIRED TO RESOLVE POTENTIAL CONFLICT WITH LOCATION OF EXISTING UNDERGOUND FIBER OPTIC LINE. REFER TO STRUCTURAL AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
A4	EXISTING SITE COMPONENTS AND BOUNDARY INFORMATION SHOWN IN HALFTONE FOR CLARITY. REFER TO OVERALL SITE PLAN SHEET A1.1.0 FOR PERTINENT DETAILS.
S29	RELOCATED EXISTING LIGHT POLE TO BE FLANKED BY NEW CONCRETE BOLLARDS, EACH SIDE. REFER TO CIVIL DRAWINGS FOR DETAILS AND ADDITIONAL INFORMATION.
S31	RELOCATED EXISTING LIGHT POLE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. NOTE: PLACEMENT OF LIGHT POLE FOUNDATIONS SHALL BE INDEPENDENT FROM AND NOT CONFLICT WITH EXISTING UNDERGOUND FIBER OPTIC LINE. PROVIDE ADEQUATE CLEARANCES TO EXISTING INFRASTRUCTURE AS REQUIRED.
S32	EXISTING PRECAST CONCRETE BLOCK BIN DIVIDER WALLS TO BE REMOVED AND SALVAGED ON SITE. PRECAST BLOCKS TO BE RECONFIGURED IN NEW LAYOUT AS SHOWN. EXISTING BLOCKS 2'-0" WIDE, 2'-0" HIGH AND VARIED IN LENGTH.

GENERAL FLOOR PLAN NOTES

1 WALL AND PARTITION DIMENSIONS ARE SHOWN TO FINISHED FACE OF WALL
2 DIMENSIONS FOR AREAS DRAWN AT A LARGER SCALE ARE SHOWN ON ENLARGED SCALE PLANS.
3 UNLESS OTHERWISE NOTED, WALLS AND PARTITIONS WHICH ARE LAID OUT RADIALLY, ARE DIMENSIONED BY RADIAN (DEGREES) FROM THE NEAREST GRID LINES.
4 UNLESS OTHERWISE NOTED, WALLS AND PARTITIONS WHICH ARE SHOWN TO BE ON A GRID LINE OR IMMEDIATELY NEXT TO A GRID LINE SHALL BE LOCATED PARALLEL WITH THE GRID LINE WITH THE FACE OF THE WALL 1" AWAY FROM THE LEG OF THE STEEL JOIST. (SEE DETAIL A--/A2--)
5 UNLESS OTHERWISE NOTED, WALL AND PARTITIONS WHICH ARE LAID OUT CONCENTRICALLY ARE DIMENSIONED FROM THE NEAREST GRID AND SHALL BE LAID OUT ALONG THE ESTABLISHED RADIUS.
6 WALLS AND PARTITIONS WHICH ARE NOT INTENDED TO BE LAID OUT ON A RADIUS, ARE SHOWN TO BE PERPENDICULAR (--) OR AT SOME ANGLE) --) TO THE ADJOINING WALLS OR PERPEDICULAR TO A GRID LINE (--).
7 DIMENSIONS ALONG CURVED LINES ARE ACTUAL CURVED DIMENSIONED ARC LENGTHS.
8 EQUIPMENT SHOWN DOTTED IS NOT IN CONTRACT AND IS SHOWN FOR COORDINATION PURPOSES, UNLESS NOTED OTHERWISE
9 USE OF SPECIFICATION SECTION NUMBERS WITHIN KEY NOTES IS MADE SOLELY FOR CONVENIENCE IN COORDINATION AND WITHOUT LIMITATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE WORK IN ACCORDANCE TO THE CONTRACT DOCUMENTS IN THEIR ENTIRETY
10 USE OF MANUFACTURER'S CONTENT WITHN THE DRAWINGS IS MADE SOLELY FOR CONVENIENCE IN ILLUSTRATING THE REQUIREMENTS OF THE PROJECT. THE CONTRACTOR IS REQUIRED TO PROVIDE PRODUCTS SPECIFIED AND APPROVED THROUGH THE SUBMITTAL PROCESS.

ISSUANCE

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR BID / ISSUED FOR PERMIT

FGM ARCHITECTS
OAKBROOK
CHICAGO
OFALLON

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	01/08/18	PROFESSIONAL DESIGN FIRM IL # 184-003330
DRAWN	AO	
CHECKED	JE	
APPROVED	JD	

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

ENLARGED ARCHITECTURAL SITE PLAN - NORTH

SHEET NO.
A1.1.1

JOB NO. 14-1815.01

© 2017 FGM Architects Inc.

A1 ENLARGED ARCHITECTURAL SITE PLAN - NORTH
1/8" = 1'-0"

A21 NOTATIONS

1/9/2018 12:33:53 AM
C:\Revit Temp\2016\ 14-1815q_Lincolnwood PW Yard_Central_2016_annabella.orlando.rvt

Copyright 2017 FGM ARCHITECTS, INC.

KEYNOTES - REFERENCE	
KEY NUMBER	DESCRIPTION

KEYNOTES - SHEET	
KEY NUMBER	DESCRIPTION
A2	PROVIDE AN ELECTRICAL STUB/ WEATHERPROOF JUNCTION BOX TO INTERIOR WALL AS SHOWN. FOR OWNER'S FUTURE USE. COORDINATE PLACEMENT OF STUB WITH OWNER PRIOR TO INSTALLATION. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
A3	PROVIDE (2) ROWS OF THREADED RODS, EMBEDDED INTO FACE OF CAST-IN-PLACE CONCRETE WALL THROUGHOUT ENTIRE LENGTH OF WALL FOR OWNER USE. REFER TO INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION.
A4	EXISTING SITE COMPONENTS AND BOUNDARY INFORMATION SHOWN IN HALFTONE FOR CLARITY. REFER TO OVERALL SITE PLAN SHEET A1.1.0 FOR PERTINENT DETAILS.
A5	DASHED LINES DENOTE FUTURE LOCATION OF OVERHEAD COILING DOOR, TO BE FURNISHED AND INSTALLED BY OWNER AT A LATER DATE.
S10	EXISTING CONCRETE AND MASONRY COMBINATION PERIMETER YARD WALL AND ORNAMENTAL FENCE TO REMAIN.
S20	PROVIDE NEW PREFINISHED MOTORIZED ALUMINUM CANTILEVER SLIDING GATE, IN OPENING CONFIGURATION AS SHOWN. REFER TO ELECTRICAL DRAWINGS FOR CONNECTIONS TO ELECTRICAL INFRASTRUCTURE.
S27	PROVIDE NEW CONCRETE BOLLARDS, AS SHOWN. REFER TO CIVIL DRAWINGS FOR DETAILS AND ADDITIONAL INFORMATION.
S32	EXISTING PRECAST CONCRETE BLOCK BIN DIVIDER WALLS TO BE REMOVED AND SALVAGED ON SITE. PRECAST BLOCKS TO BE RECONFIGURED IN NEW LAYOUT AS SHOWN. EXISTING BLOCKS 2'-0" WIDE, 2'-0" HIGH AND VARIED IN LENGTH.

GENERAL FLOOR PLAN NOTES

1 WALL AND PARTITION DIMENSIONS ARE SHOWN TO FINISHED FACE OF WALL
2 DIMENSIONS FOR AREAS DRAWN AT A LARGER SCALE ARE SHOWN ON ENLARGED SCALE PLANS.
3 UNLESS OTHERWISE NOTED, WALLS AND PARTITIONS WHICH ARE LAID OUT RADIALLY, ARE DIMENSIONED BY RADIAN (DEGREES) FROM THE NEAREST GRID LINES.
4 UNLESS OTHERWISE NOTED, WALLS AND PARTITIONS WHICH ARE SHOWN TO BE ON A GRID LINE OR IMMEDIATELY NEXT TO A GRID LINE SHALL BE LOCATED PARALLEL WITH THE GRID LINE WITH THE FACE OF THE WALL 1" AWAY FROM THE LEG OF THE STEEL JOIST. (SEE DETAIL A--/A2--)
5 UNLESS OTHERWISE NOTED, WALL AND PARTITIONS WHICH ARE LAID OUT CONCENTRICALLY ARE DIMENSIONED FROM THE NEAREST GRID AND SHALL BE LAID OUT ALONG THE ESTABLISHED RADIUS.
6 WALLS AND PARTITIONS WHICH ARE NOT INTENDED TO BE LAID OUT ON A RADIUS, ARE SHOWN TO BE PERPENDICULAR (--) OR AT SOME ANGLE) --) TO THE ADJOINING WALLS OR PERPEDICULAR TO A GRID LINE (--).
7 DIMENSIONS ALONG CURVED LINES ARE ACTUAL CURVED DIMENSIONED ARC LENGTHS.
8 EQUIPMENT SHOWN DOTTED IS NOT IN CONTRACT AND IS SHOWN FOR COORDINATION PURPOSES, UNLESS NOTED OTHERWISE
9 USE OF SPECIFICATION SECTION NUMBERS WITHIN KEY NOTES IS MADE SOLELY FOR CONVENIENCE IN COORDINATION AND WITHOUT LIMITATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE WORK IN ACCORDANCE TO THE CONTRACT DOCUMENTS IN THEIR ENTIRETY
10 USE OF MANUFACTURER'S CONTENT WITHIN THE DRAWINGS IS MADE SOLELY FOR CONVENIENCE IN ILLUSTRATING THE REQUIREMENTS OF THE PROJECT. THE CONTRACTOR IS REQUIRED TO PROVIDE PRODUCTS SPECIFIED AND APPROVED THROUGH THE SUBMITTAL PROCESS.

ISSUANCE

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR BID / ISSUED FOR PERMIT

FGM ARCHITECTS
OAK BROOK, O'FALLON, CHICAGO

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	01/08/18		PROFESSIONAL DESIGN FIRM IL # 184-000350
DRAWN	AO		
CHECKED	JE		
APPROVED	JD		

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

ENLARGED ARCHITECTURAL SITE PLAN - SOUTH

SHEET NO.
A1.1.2

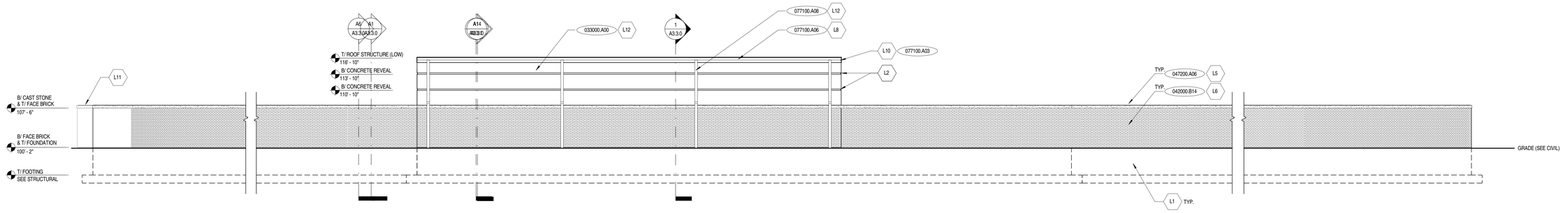
JOB NO. 14-1815.01

© 2017 FGM Architects Inc.

A1 ENLARGED ARCHITECTURAL SITE PLAN - SOUTH
1/8" = 1'-0"

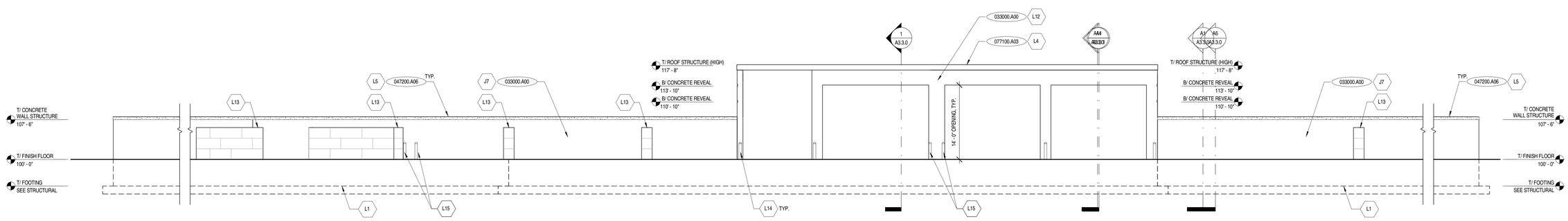
A21 NOTATIONS

1/9/2018 12:33:16 AM
C:\Revit Temp\2016\14-1815a_Lincolnwood PW Yard_Central_2016_annabella.orlando.rvt
Copyright 2017 FGM ARCHITECTS, INC.



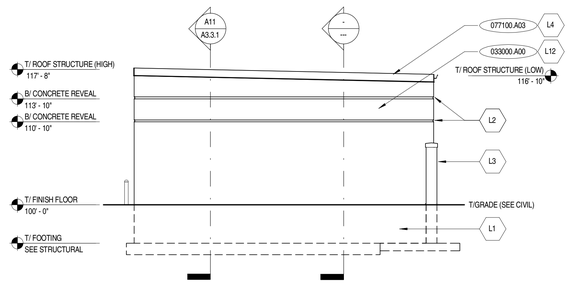
N1 EAST EXTERIOR ELEVATION

1/8" = 1'-0"



J1 WEST EXTERIOR ELEVATION

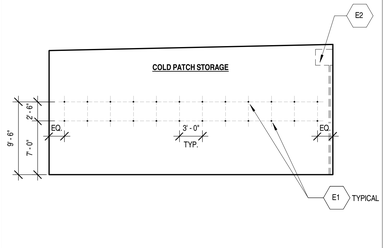
1/8" = 1'-0"



NOTE: NORTH EXTERIOR ELEVATION SIMILAR OPPOSITE

E1 SOUTH EXTERIOR ELEVATION

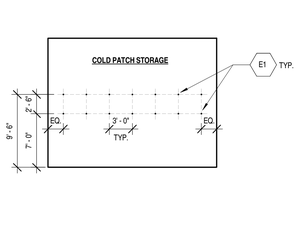
1/8" = 1'-0"



NOTE: NORTH INTERIOR ELEVATION SIMILAR OPPOSITE

F9 SOUTH INTERIOR ELEVATION

1/8" = 1'-0"



F13 EAST INTERIOR ELEVATION

1/8" = 1'-0"

KEYNOTES - REFERENCE

KEY NUMBER	DESCRIPTION
033000.A00	CAST-IN-PLACE CONCRETE
042000.B14	BRICK
047200.A06	CAST STONE COPING
077100.A03	CANTED ROOF EDGE FASCIA AND OR GRAVEL STOP
077100.A06	GUTTER
077100.A08	DOWNSPOUT

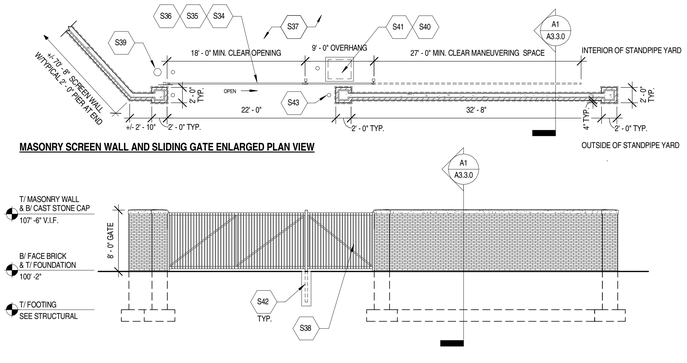
F17 NOTATIONS

KEYNOTES - SHEET

KEY NUMBER	DESCRIPTION
E1	PROVIDE THREADED RODS, EMBEDDED INTO FACE OF CAST-IN-PLACE CONCRETE WALL AS SHOWN. THREADED RODS TO PROTRUDE OUTWARDS FROM FACE OF WALL 2". CONTRACTOR TO REVIEW PROPOSED CONFIGURATION WITH OWNER AND CONFIRM PLACEMENT PRIOR TO INSTALLATION. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
E2	DASHED LINES DENOTE FUTURE LOCATION OF OVERHEAD COILING DOOR, TO BE FURNISHED AND INSTALLED BY OWNER AT A LATER DATE.
J7	SEE STRUCTURAL SERIES
L1	DASHED LINES REPRESENT OUTLINE OF FOUNDATION WALL AND FOOTING BELOW. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
L2	PROVIDE 3" HIGH X 1" DEEP REVEAL WITHIN CAST-IN-PLACE CONCRETE WALL. REFER TO WALL SECTIONS FOR ADDITIONAL INFORMATION.
L3	OUTLINE OF ADJACENT PERIMETER WALL, REFER TO FLOOR PLAN FOR ADDITIONAL INFORMATION.
L4	PREFINISHED ALUMINUM FASCIA WITH GRAVEL STOP COPING EDGE. COLOR TO BE SELECTED BY OWNER FROM MANUFACTURER'S COMPLETE AVAILABLE RANGE.
L5	COLOR AND TEXTURE OF CAST STONE CAP TO MATCH EXISTING ON SITE. CONTRACTOR TO REVIEW EXISTING CONDITIONS AND PROVIDE OWNER WITH SAMPLE OPTIONS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
L6	COLOR, TEXTURE, AND SIZE OF FACE BRICK TO MATCH EXISTING ON SITE. CONTRACTOR TO REVIEW EXISTING CONDITIONS AND PROVIDE OWNER WITH SAMPLE OPTIONS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
L8	PREFINISHED ALUMINUM GUTTER, MINIMUM 4" X 6" SIZE. COLOR TO BE SELECTED BY OWNER FROM MANUFACTURER'S COMPLETE AVAILABLE RANGE AND SHALL MATCH COPING.
L10	ALUMINUM FASCIA ELEMENT BEHIND GUTTER. REFER TO ROOF DETAILS FOR ADDITIONAL INFORMATION. COLOR TO MATCH TYPICAL FASCIA/COPING ELEMENT AROUND BUILDING.
L11	PROFILE OF EXISTING SITE SCREEN WALL BEYOND. PROFILES OF NEW WALL ELEMENTS TO MATCH EXISTING, TYP.
L12	EXTERIOR FACE OF EXPOSED CAST-IN-PLACE CONCRETE WALL WILL RECEIVE PAINTED FINISH, TO BE APPLIED IN THE FIELD BY OWNER AT A FUTURE DATE. SURFACE FINISH OF CAST IN PLACE CONCRETE TO BE PREPARED ACCORDINGLY, SUCH THAT IT IS SUITABLE TO RECEIVE A FINAL PAINTED FINISH.
L13	EXISTING PRECAST CONCRETE BLOCK BIN DIVIDER WALLS, IN NEW CONFIGURATION AS SHOWN.
L14	CONCRETE BOLLARD, REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
L15	CONCRETE BOLLARD, INTENDED TO FLANK EACH SIDE OF SITE LIGHT POLE FIXTURE. REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
S10	EXISTING CONCRETE AND MASONRY COMBINATION PERIMETER YARD WALL AND ORNAMENTAL FENCE TO REMAIN.
S24	EXISTING CONCRETE BOLLARD TO REMAIN.
S34	FURNISH AND INSTALL MOTORIZED ALUMINUM CANTILEVER SLIDING GATE. TO BE LOCATED WITHIN EXISTING SCREEN WALL OPENING. WIDTH OF EXISTING OPENING TO BE VERIFIED IN THE FIELD. IF POSSIBLE, MAXIMIZE CLEAR OPENING WIDTH OF GATE, WHILE ALLOWING SUFFICIENT CLEARANCE FOR ALL GATE AND OPERATOR COMPONENTS AND COUNTERBALANCE ASSEMBLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFO.
S35	AS RECOMMENDED BY GATE MANUFACTURER, CONTRACTOR SHALL ENSURE THAT THE MOTOR IS SIZED TO HANDLE THE GATE SIZE INSTALLED AND THAT THE MOTOR'S ELECTRICAL CHARACTERISTICS WILL FUNCTION WITHIN THE EXISTING ELECTRICAL SYSTEM OF THE PUBLIC WORKS FACILITY.
S36	CONTRACTOR SHALL BE RESPONSIBLE FOR BRINGING ELECTRICAL POWER TO THE GATE OPERATOR NECESSARY FOR ITS PROPER OPERATION AND SHALL MAKE ALL FINAL CONNECTIONS TO THE OPERATOR.
S37	PROVIDE IN-GROUND "FREE EXIT" DETECTOR LOOP WITHIN PAVEMENT, IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. PLACEMENT OF INFRASTRUCTURE TO BE COORDINATED IN THE FIELD WITH OWNER AND MANUFACTURER PRIOR TO INSTALLATION.
S38	PROVIDE PICKETS TO MATCH REMAINDER OF GATE WITHIN SLIDING GATE OVERHANG PANEL.
S39	PROVIDE CHIP KEY PAD, NEAR GATE ENTRY. PLACEMENT TO BE COORDINATED IN THE FIELD WITH OWNER.
S40	EXISTING FLEET VEHICLES EQUIPPED WITH PUSH BUTTON REMOTES FOR ENTRY/EXIT INTO SITE. NEW GATE OPERATORS TO BE PROGRAMMED WITH SAME CODES AS EXISTING CONDITIONS TO ENSURE CONTINUITY IN CONFIGURATION OF SYSTEMS AND CONSISTENCY OF USER FUNCTION.
S41	GATE OPERATOR AND PAD, INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
S42	GATE MOUNTING POSTS, WITHIN CONCRETE SLEEVE. INSTALL PER MANUFACTURER RECOMMENDATIONS.
S43	PROVIDE NEW CONCRETE BOLLARDS ON EACH SIDE OF GATE OPENING WIDTH, AS SHOWN. COORDINATE EXACT LOCATION IN THE FIELD WITH OWNER. REFER TO CIVIL DRAWINGS FOR DETAILS AND ADDITIONAL INFORMATION.

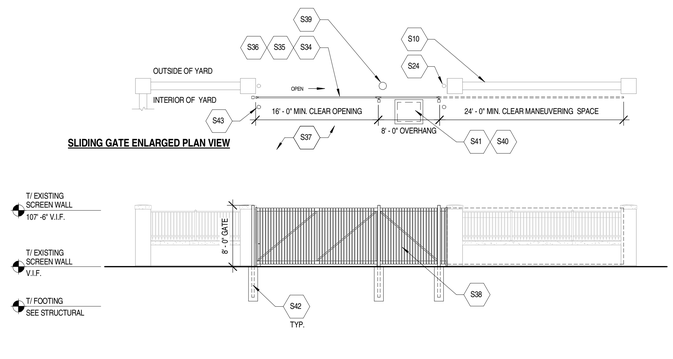
A1 SOUTHWEST EXTERIOR ELEVATION (NORTH STANDPIPE SITE)

1/8" = 1'-0"



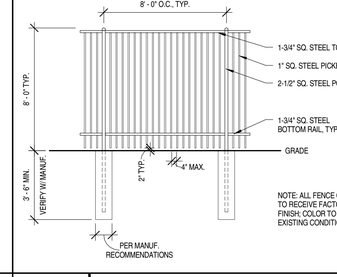
A9 EXISTING YARD CANTILEVER GATE ENLARGED PLAN AND WEST ELEVATION

1/8" = 1'-0"



A17 TYP. ORNAMENTAL FENCE ELEV.

1/4" = 1'-0"



NOTE: ALL FENCE COMPONENTS TO RECEIVE FACTORY APPLIED FINISH. COLOR TO MATCH EXISTING CONDITIONS ON SITE.

A21 NOTATIONS

ISSUANCE

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR BID / ISSUED FOR PERMIT

FGM ARCHITECTS
OAK BROOK, O'FALLON, CHICAGO

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

EXTERIOR BUILDING AND SITE ELEVATIONS, INTERIOR BUILDING ELEVATIONS

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	01/08/18
DRAWN	AO
CHECKED	JE
APPROVED	JD

PROFESSIONAL DESIGN FIRM
IL # 184.000350

SHEET NO.
A3.1.0

JOB NO. 14-1815.01

© 2017 FGM Architects Inc.

1/9/2018 12:19:27 AM
C:\Revit Temp\2016\14-1815q_Lincolnwood PW Yard_Central_2016_annabella.orlando.rvt
Copyright 2017 FGM ARCHITECTS, INC.

Return to VB Agenda

Attachment #3. Relevant Code Sections

(Sections not pertaining to this request have been redacted.)

3.08 Accessory buildings, structures and uses.

(4) Except as otherwise regulated herein, an accessory building hereafter erected, altered, enlarged or moved on a lot shall conform with the following:

c. A detached accessory building or structure in a rear yard shall be not less than three feet from a lot line, except:

i. On corner lots: not less than five feet from a rear lot line which adjoins a lot in a Residence District and not less than required corner front yard abutting a street;

ii. On through lots: not less than the distance required for a front yard setback from the rear lot line abutting a street; and

iii. An accessory building having vehicular access from an alley not less than five feet from the lot line abutting the alley.

3.13 Fences and natural screening

(8) Special fences; preexisting masonry fences: landscape terrace walls; decorative wrought iron fences, through lot fences. Special fences are those which have a greater potential than permitted fences to have an adverse impact upon the surrounding neighborhood. Special fences may be appropriate in some locations and inappropriate in other locations. The following fences may be allowed by special fence authorization in accordance with this Section 3.13 where the Zoning Board of Appeals finds that a special fence is appropriate at the location requested. The Zoning Board of Appeals may recommend, and the Board of Trustees may impose conditions, terms and restrictions in addition to those set forth herein as a condition of granting special fence authorization.

a. The following types of fences shall be special fences:

i. Brick walls, masonry fences, and stone walls.

v. Through lot fences.

(9) Location and orientation of fences and natural screening.

c. Fencing shall not be allowed in front yards, except as provided in this section.

(15) Fences in manufacturing districts.

a. Solid fences not more than seven feet in height are allowed in rear yards, and side yards, but not in corner lot side yards.

c. Fence height in M (Manufacturing) District shall not exceed seven feet unless the Zoning Board of Appeals recommends and the Board of Trustees grants a variation from the applicable regulation.

(25) Special fence procedures.

b. The Zoning Board of Appeals shall not recommend to the Board of Trustees that a special fence permit be granted unless it makes findings of fact based upon evidence presented at the hearing in any given case that:

i. The special fence will serve the public convenience at the location of the subject fence; or that the establishment, maintenance or operation of the special fence will not be detrimental to or endanger the visibility, public safety, comfort or general welfare.

ii. The special fence will be in harmony and scale with the architecture of the building in this development and with other fences in the neighborhood.

iii. The special fence will not be injurious to the use and enjoyment of other property in the immediate vicinity of the subject property for the purpose already permitted; nor substantially diminish and impair the visibility of adjacent property.

iv. The nature, location and size of the special fence will not impede, substantially hinder, or discourage the installation of fences on adjacent property in accordance with the Fence Ordinance.

v. The special fence shall in all other respects conform to the regulations of this Section 3.13 except as modified as provided herein.

5.15 Major variations.

(7) Standards. In determining whether in a specific case there are practical difficulties or particular hardships in the way of carrying out the strict letter of this Zoning Ordinance, there shall be taken into consideration the extent to which the following facts are established:

a. The requested major variation is consistent with the stated intent and purposes of this Zoning Ordinance and the Comprehensive Plan;

b. The particular physical surroundings, shape or topographical conditions of the subject property would bring a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of this Zoning Ordinance is enforced;

c. The conditions upon which the petition for the variation is based would not be applicable generally to other property within the same zoning district;

d. The variation is not solely and exclusively for the purpose of enhancing the value of or increasing the revenue from the property;

e. The alleged difficulty or hardship has not been created by any person presently having an interest in the property;

f. The granting of the variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located;

g. The variation granted is the minimum change to the Zoning Ordinance standards necessary to alleviate the practical hardship on the subject property; and

h. The proposed variation will not impair an adequate supply of light and air to adjacent property, or substantially increase the danger of fire, or otherwise endanger the public safety, or substantially diminish or impair property values within the neighborhood.

Return to VB Agenda

Request For Board Action

REFERRED TO BOARD: March 6, 2018 **AGENDA ITEM NO: 3**

ORIGINATING DEPARTMENT: Public Works

SUBJECT: **Approval of the Following Items Pertaining to the Public Works Yard Expansion Project: A) A Resolution Approving a Contract with Stuckey Construction Company, Inc. of Waukegan, IL in the amount of $1,523,000; and B) An Ordinance Waiving the Competitive Bidding Process and Approving an Agreement with FGM Architects of Oak Brook, IL in the Amount of $79,000 for Construction Administration Services**

SUMMARY AND BACKGROUND OF SUBJECT MATTER:
In 2003, the Village constructed Northeast Parkway, which was a new road to connect to McCormick Boulevard through the Northeast Industrial District ("NEID"). The new road crossed the Union Pacific right-of-way directly behind the Public Works Facility, which is located at 7001 N. Lawndale Avenue. Prior to the construction of Northeast Parkway, the Public Works material storage yard, located directly behind the building, was not very visible to the public. The yard is used to store bulk materials such as dirt, stone, sand, and playground quality woodchips used in daily operations as well as logs, waste wood chips (from tree removals), and spoils from underground repairs prior to its removal by a third party contractor. After Northeast Parkway was completed, there was a desire to improve the aesthetics of the area as it became readily visible to motorists traveling down the new road. Improving the aesthetics of this area remains important as redevelopment in the NEID continues to be a focus for the Economic Development Commission.

In 2004, the Village Board approved a concept plan for the Public Works Yard Improvements and Expansion project with the intention of using revenue from the NEID TIF as the source of funding. The plan called for constructing the improvements over phases to ensure sufficient funds and maximize the useable space. The first phase was completed in 2004 and included the construction of the salt dome. The second phase was built in 2007 and included underground stormwater detention, a new concrete yard, and an eight-foot tall masonry wall surrounding three sides of the yard. The rear of the yard abutted the Union Pacific right-of-way and was constructed with a black chain link fence. At the time, it was intended the third and final phase of the project would include construction of an expanded yard onto the former Union Pacific right-of-way after the Village was able to purchase the property as well as enclosing the site surrounding the standpipe.

In February 2014, the Village began negotiations to purchase the Union Pacific right-of-way for the purpose of constructing a multi-use recreation path. On March 4, 2014, the Village Board authorized the execution of an agreement with FGM Architects ("FGM") for services to design Phase III of the Public Works Yard Improvements and Expansion project. Design of the project was delayed due to the fact that

the Village did not yet own the property. The Village closed on the purchase of the Union Pacific right-of-way in April 2016 and design of the project was subsequently restarted.

The proposed improvements include expansion of the existing yard by 60 feet to the east, continuation and completion of the eight-foot tall masonry wall. Additionally, new covered bins will be constructed for storage of topsoil, stone, and cold patch asphalt to reduce contact with water and prevent freezing in the winter months. The existing swing gate on the southwest side of the property is underutilized because it is manually operated, as part of this project it will be automated to provide a greater level of access for employees. Finally, the area around the standpipe on the east side of Central Park Avenue will be enclosed as well with a masonry wall along the frontage of the property and a decorative fence on the other sides. This area is currently used to store dirt spoils as well as broken out concrete and asphalt before it is hauled off by a contractor. Enclosing the site with an eight-foot masonry wall will bring continuity to the two properties while at the same time improving the aesthetic appeal of the area. The standpipe yard will also have a motorized gate installed. Finally, new lights will be installed throughout the site.

On January 11, 2018, a bid notice was published in the *Lincolnwood Review.* Bid packages were picked up by 16 firms who perform this type of work and on January 25, 2018, seven sealed bids were received and publicly opened. Table 1 provides a summary of the bids received.

Table 1. Summary of Bids

Firm	Bid
Stuckey Construction	$1,523,000
Camosy Construction	$1,530,000
Schaefges Brothers	$1,562,000
Marta Construction	$1,650,300
Copenhaver Construction	$1,680,000
Rausch Infrastructure	$1,744,000
R.C. Wegman Construction	$1,988,000

The lowest bidder, meeting all bid specifications, is Stuckey Construction Company, Inc. ("Stuckey") of Waukegan, Illinois. The Village has not worked with Stuckey in the past; however, FGM Architects has and states that they have performed well on other projects. Additionally, reference checks were performed and all provided positive responses. For these reasons, staff recommends awarding a contract to Stuckey. Construction is anticipated to be completed this summer.

Staff also recommends waiving the competitive bid process and approving a proposal from FGM to provide construction administration services to oversee the construction of the yard expansion project. As previously noted, FGM was the design architect for the project and is intimately knowledgeable with the details of the specifications. Construction administration services would include meetings between the architect, Village, and contractor to ensure all work is being performed per the specifications. Additionally, civil and structural engineers, who assisted with the design, would conduct inspections of the work to ensure compliance with all specifications. The proposed not to exceed amount of $79,000 is 4.8% of the cost of construction and is in line with the anticipated cost for this type of project.

FINANCIAL IMPACT:

Construction of this project will take place over two fiscal years; sufficient funds are available in the FY 2017/18 NEID TIF budget and will be included in the draft FY 2018/19 NEID TIF budget for construction of the project and construction administration services.

DOCUMENTS ATTACHED:

1. Proposed Resolution
2. Proposed Construction Contract
3. Bid Proposal
4. Recommendation of Award
5. Proposed Ordinance
6. Proposed Consultant Services Agreement
7. Construction Administration Proposal
8. Budget Memo dated February 6, 2018

RECOMMENDED MOTION:

Move to approve the following items pertaining to the Public Works yard expansion project: A) a Resolution approving a contract with Stuckey Construction Company, Inc. of Waukegan, IL for construction of the improvements; and B) an Ordinance waiving the competitive bidding process and approving an agreement with FGM Architects of Oak Brook, IL for construction administration services.

Return to VB Agenda

VILLAGE OF LINCOLNWOOD

RESOLUTION NO. R2018-_____

A RESOLUTION APPROVING THE AWARD OF A CONTRACT FOR THE PUBLIC WORKS YARD EXPANSION PROJECT TO STUCKEY CONSTRUCTION COMPANY, INC., OF WAUKEGAN, ILLINOIS

WHEREAS, the Village sought bids for the award of a contract for the expansion of the Village Public Works yard (***"Contract"***); and

WHEREAS, Stuckey Construction Company, Inc., of Waukegan, Illinois (***"Stuckey"***), was the low responsible bidder of the firms that submitted bid packages to the Village; and

WHEREAS, the Village President and Board of Trustees have determined that entering into the Contract with Stuckey will serve and be in the best interest of the Village;

NOW, THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LINCOLNWOOD, COOK COUNTY, ILLINOIS, as follows:

SECTION 1. RECITALS. The facts and statements contained in the preamble to this Resolution are found to be true and correct and are hereby adopted as part of this Resolution.

SECTION 2. APPROVAL OF CONTRACT. The Contract by and between the Village and Stuckey is hereby approved in substantially the form attached to this Resolution as **Exhibit A**.

SECTION 3. EXECUTION OF CONTRACT. The Village Manager and the Village Clerk are hereby authorized and directed to execute and attest, on behalf of the Village, the Contract upon receipt by the Village Clerk of at least one original copy of the Contract executed by Stuckey; provided, however, that if the executed copy of the Contract is not received by the Village Clerk within 60 days after the effective date of this Resolution, then this authority to execute and attest will, at the option of the President and Board of Trustees, be null and void.

SECTION 4. EFFECTIVE DATE. This Resolution will be in full force and effect from and after its passage and approval as provided by law.

[SIGNATURE PAGE FOLLOWS]

Return to VB Agenda

PASSED this ___ day of March, 2018.

AYES: _____

NAYS:_____

ABSENT:____

ABSTENTION:_____

APPROVED by me this _____ day of March, 2018.

_____
Barry I. Bass, President
Village of Lincolnwood, Cook County, Illinois

ATTESTED and FILED in my office this
_____ day of _____, 2018

_____
Beryl Herman, Village Clerk
Village of Lincolnwood, Cook County, Illinois

Return to VB Agenda

EXHIBIT A

CONTRACT

Return to VB Agenda

CONTRACT BETWEEN

VILLAGE OF LINCOLNWOOD

AND

STUCKEY CONSTRUCTION COMPANY, INC.

FOR THE CONSTRUCTION OF

THE PUBLIC WORKS YARD EXPANSION PROJECT

TABLE OF CONTENTS

Page

ARTICLE I 1

1.1 PERFORMANCE OF THE WORK 1

1.2 COMMENCEMENT AND COMPLETION DATES 2

1.3 REQUIRED SUBMITTALS 2

1.4 REVIEW AND INTERPRETATION OF CONTRACT PROVISIONS 3

1.5 CONDITIONS AT THE WORK SITE; RECORD DRAWINGS 3

1.6 TECHNICAL ABILITY TO PERFORM 4

1.7 FINANCIAL ABILITY TO PERFORM 4

1.8 TIME 4

1.9 SAFETY AT THE WORK SITE 4

1.10 CLEANLINESS OF THE WORK SITE AND ENVIRONS 5

1.11 DAMAGE TO THE WORK, THE WORK SITE, AND OTHER PROPERTY 5

1.12 SUBCONTRACTORS AND SUPPLIERS 5

1.13 SIMULTANEOUS WORK BY OTHERS 6

1.14 OCCUPANCY PRIOR TO FINAL PAYMENT 6

1.15 OWNER'S RIGHT TO TERMINATE OR SUSPEND WORK FOR CONVENIENCE 6

ARTICLE II 6

2.1 CHANGES 6

2.2 DELAYS 7

ARTICLE III 7

3.1 INSPECTION; TESTING; CORRECTION OF DEFECTS 7

3.2 WARRANTY OF WORK 7

3.3 OWNER'S RIGHT TO CORRECT 8

ARTICLE IV 8

4.1 BONDS 8

4.2 INSURANCE 8

4.3 INDEMNIFICATION 9

ARTICLE V 9

5.1 CONTRACT PRICE 9

5.2 TAXES AND BENEFITS 9

5.3 PROGRESS PAYMENTS 9

5.4 FINAL ACCEPTANCE AND FINAL PAYMENT 10
5.5 LIENS 10
5.6 DEDUCTIONS 11
ARTICLE VI 12
6.1 DISPUTE RESOLUTION PROCEDURE 12
6.2 CONTRACTOR'S REMEDIES 12
6.3 OWNER'S REMEDIES 12
6.4 OWNER'S SPECIAL REMEDY FOR DELAY 14
6.5 TERMINATIONS AND SUSPENSIONS DEEMED FOR CONVENIENCE 14
ARTICLE VII 14
7.1 BINDING EFFECT 14
7.2 RELATIONSHIP OF THE PARTIES 14
7.3 NO COLLUSION 14
7.4 ASSIGNMENT 15
7.5 CONFIDENTIAL INFORMATION 15
7.6 NO WAIVER 15
7.7 NO THIRD PARTY BENEFICIARIES 15
7.8 NOTICES 15
7.9 GOVERNING LAWS 16
7.10 CHANGES IN LAWS 16
7.11 COMPLIANCE WITH LAWS 16
7.12 COMPLIANCE WITH PATENTS 17
7.13 TIME OF THE ESSENCE 17
7.14 CALENDAR DAYS AND TIME 17
7.15 SEVERABILITY 17
7.16 ENTIRE AGREEMENT 18
7.17 AMENDMENTS AND MODIFICATIONS 18

CONTRACTOR'S CERTIFICATION
ATTACHMENT A - Supplemental Schedule of Contract Terms
ATTACHMENT A1- Schedule of Contract Prices
ATTACHMENT B - Specifications
ATTACHMENT C - List of Drawings
ATTACHMENT D – Special Project Requirements
APPENDIX 1 - Prevailing Wage Ordinance

Return to VB Agenda

In consideration of the mutual promises set forth below, the VILLAGE OF LINCOLNWOOD, 6900 North Lincoln Avenue, Lincolnwood, Illinois, 60712, a municipal corporation ("***Owner***"), and Stuckey Construction Company, Inc., 220 N. Lewis Avenue, Waukegan, Illinois 60087 an Illinois corporation ("***Contractor***"), make this Contract as of the _____ day of _____**, 2018**, and hereby agree as follows:

ARTICLE I
THE WORK

1.1 Performance of the Work

Contractor shall, at its sole cost and expense, provide, perform, and complete all of the following, all of which is herein referred to as the "Work":

1. Labor, Equipment, Materials, and Supplies. Provide, perform, and complete, in the manner described and specified in this Contract, all necessary work, labor, services, transportation, equipment, materials, apparatus, machinery, tools, fuels, gas, electric, water, waste disposal, information, data, and other means and items necessary to accomplish the Project at the Work Site, both as defined in Attachment A, in accordance with the specifications attached hereto as Attachment B, the drawings identified in the list attached hereto as Attachment C**,** and the Special Project Requirements attached hereto as Attachment D.

2. Permits. Except as otherwise provided in Attachment A, procure and furnish all permits, licenses, and other governmental approvals and authorizations necessary in connection therewith.

3. Bonds and Insurance. Procure and furnish all Bonds and all certificates and policies of insurance specified in this.

4. Taxes. Pay all applicable federal, state, and local taxes.

5. Miscellaneous. Do all other things required of Contractor by this Contract, including, without limitation, arranging for utility and other services needed for the work and for testing, including the installation of temporary utility lines, wiring, switches, fixtures, hoses, connections, and meters, and providing sufficient sanitary conveniences and shelters to accommodate all workers and all personnel of Owner engaged in the Work.

6. Quality. Provide, perform and complete all of the foregoing in a proper and workmanlike manner, consistent with the highest standards of professional and construction practices and in full compliance with, and as required by or pursuant to, this Contract, and with the greatest economy, efficiency, and expedition consistent therewith, with only new, undamaged and first quality equipment, materials, and supplies.

1.2 Commencement and Completion Dates

Contractor shall commence the Work not later than the "Commencement Date" set forth on Attachment A and shall diligently and continuously prosecute the Work at such a rate as will allow the Work to be fully provided, performed, and completed in full compliance with this Contract not later than the "Completion Date" set forth in Attachment A. The time of commencement, rate of progress, and time of completion are referred to in this Contract as the "Contract Time."

1.3 Required Submittals

A. Submittals Required. Contractor shall submit to Owner all documents, data, and information specifically required to be submitted by Contractor under this Contract and shall, in addition, submit to Owner all such drawings, specifications, descriptive information, and engineering documents, data, and information as may be required, or as may be requested by Owner, to show the details of the Work, including a complete description of all equipment, materials, and supplies to be provided under this Contract ("***Required Submittals***"). Such details shall include, but shall not be limited to, design data, structural and operating features, principal dimensions, space required or provided, clearances required or provided, type and brand of finish, and all similar matters, for all components of the Work.

B. Number and Format. Contractor shall provide three complete sets for each Required Submittal. All Required Submittals, except drawings, shall be prepared on 8-1/2 inch by 11-inch paper. Two blueline prints and one sepia transparency of each drawing shall be provided. All prints of drawings shall be folded to 8-1/2 inches by 11 inches, or less. All drawings shall be clearly marked in the lower right-hand corner with the names of Owner and Contractor.

C. Time of Submission and Owner's Review. All Required Submittals shall be provided to Owner no later than the time, if any, specified in this Contract for their submission or, if no time for submission is specified, in sufficient time, in Owner's sole opinion, to permit Owner to review the same prior to the commencement of the part of the Work to which they relate and prior to the purchase of any equipment, materials, or supplies that they describe. Owner shall have the right to require such corrections as may be necessary to make such submittals conform to this Contract. All such submittals shall, after final processing and review with no exception noted by Owner, become a part of this Contract. No Work related to any submittal shall be performed by Contractor until Owner has completed review of such submittal with no exception noted. Owner's review and stamping of any Required Submittal shall be for the sole purpose of examining the general management, design, and details of the proposed Work, shall not relieve Contractor of the entire responsibility for the performance of the Work in full compliance with, and as required by or pursuant to this Contract, and shall not be regarded as any assumption of risk or liability by Owner.

D. Responsibility for Delay. Contractor shall be responsible for any delay in the Work due to delay in providing Required Submittals conforming to this Contract.

1.4 Review and Interpretation of Contract Provisions

Contractor represents and warrants that it has carefully reviewed this Contract, including all of its Attachments, and the drawings identified in Attachment C, all of which are by this reference incorporated into and made a part of this Contract. Contractor shall, at no increase in the Contract Price, provide workmanship, equipment, materials, and supplies that fully conform to this Contract. Whenever any equipment, materials or supplies are specified or described in this Contract by using the name or other identifying feature of a proprietary product or the name or other identifying feature of a particular manufacturer or vendor, the specific item mentioned shall be understood as establishing the type, function and quality desired. Other manufacturers' or vendors' products may be accepted, provided that the products proposed are equivalent in substance and function to those named as determined by Owner in its sole and absolute discretion.

Contractor shall promptly notify Owner of any discrepancy, error, omission, ambiguity, or conflict among any of the provisions of this Contract before proceeding with any Work affected thereby. If Contractor fails to give such notice to Owner, then the subsequent decision of Owner as to which provision of this Contract shall govern shall be final, and any corrective work required shall not entitle Contractor to any damages, to any compensation in excess of the Contract Price, or to any delay or extension of the Contract Time.

When the equipment, materials, or supplies furnished by Contractor cannot be installed as specified in this Contract, Contractor shall, without any increase in the Contract Price, make all modifications required to properly install the equipment, materials, or supplies. Any such modification shall be subject to the prior review and consent of Owner.

1.5 Conditions at the Work Site; Record Drawings

Contractor represents and warrants that it has had a sufficient opportunity to conduct a thorough investigation of the Work Site and the surrounding area and has completed such investigation to its satisfaction. Contractor shall have no claim for damages, for compensation in excess of the Contract Price, or for a delay or extension of the Contract Time based upon conditions found at, or in the vicinity of, the Work Site. When information pertaining to subsurface, underground or other concealed conditions, soils analysis, borings, test pits, utility locations or conditions, buried structures, condition of existing structures, and other investigations is or has been provided by Owner, or is or has been otherwise made available to Contractor by Owner, such information is or has been provided or made available solely for the convenience of Contractor and is not part of this Contract. Owner assumes no responsibility whatever in respect to the sufficiency or accuracy of such information, and there is no guaranty or warranty, either expressed or implied, that the conditions indicated are representative of those existing throughout the Work or the Work Site, or that the conditions indicated are representative of those existing at any particular location, or that the conditions indicated may not change, or that unanticipated conditions may not be present.

Contractor shall be solely responsible for locating all existing underground installations by prospecting no later than two workdays prior to any scheduled excavation or trenching, whichever is earlier. Contractor shall check all dimensions, elevations, and quantities indicated in this Contract within the same time period as set forth above for prospecting underground installations. Contractor shall lay out the Work in accordance with this Contract and shall

establish and maintain such locations, lines and levels. Wherever pre-existing work is encountered, Contractor shall verify and be responsible for dimensions and location of such pre-existing work. Contractor shall notify Owner of any discrepancy between the dimensions, elevations and quantities indicated in this Contract and the conditions of the Work Site or any other errors, omissions or discrepancies which Contract may discover during such inspections. Full instructions will be furnished by Owner should such error, omission, or discrepancy be discovered, and Contractor shall carry out such instructions as if originally specified and without any increase in Contract Price.

Before Final Acceptance of the Work, Contractor shall submit to Owner two sets of Drawings of Record, unless a greater number is specified elsewhere in this Contract, indicating al field deviations from Attachment B or the drawings identified in Attachment C.

1.6 Technical Ability to Perform

Contractor represents and warrants that it is sufficiently experienced and competent, and has the necessary capital, facilities, plant, organization, and staff, to provide, perform and complete the Work in full compliance with, and as required by or pursuant to, this Contract.

1.7 Financial Ability to Perform

Contractor represents and warrants that it is financially solvent, and Contractor has the financial resources necessary to provide, perform and complete the Work in full compliance with, and as required by or pursuant to, this Contract.

1.8 Time

Contractor represents and warrants that it is ready, willing, able and prepared to begin the Work on the Commencement Date and that the Contract Time is sufficient time to permit completion of the Work in full compliance with, and as required by or pursuant to, this Contract for the Contract Price, all with due regard to all natural and man-made conditions that may affect the Work or the Work Site and all difficulties, hindrances, and delays that may be incident to the Work.

1.9 Safety at the Work Site

Contractor shall be solely and completely responsible for providing and maintaining safe conditions at the Work Site, including the safety of all persons and property during performance of the Work. This requirement shall apply continuously and shall not be limited to normal working hours. Contractor shall take all safety precautions as shall be necessary to comply with all applicable laws and to prevent injury to persons and damage to property.

Contractor shall conduct all of its operations without interruption or interference with vehicular and pedestrian traffic on public and private rights-of-way, unless it has obtained permits therefore from the proper authorities. If any public or private right-of-way shall be rendered unsafe by Contractor's operations, Contractor shall make such repairs or provide such temporary ways or guards as shall be acceptable to the proper authorities.

1.10 Cleanliness of the Work Site and Environs

Contractor shall keep the Work Site and adjacent areas clean at all times during performance of the Work and shall, upon completion of the Work, leave the Work Site and adjacent areas in a clean and orderly condition.

1.11 Damage to the Work, the Work Site, and Other Property

The Work and everything pertaining thereto shall be provided, performed, completed, and maintained at the sole risk and cost of Contractor from the Commencement Date until Final Payment. Contractor shall be fully responsible for the protection of all public and private property and all persons. Without limiting the foregoing, Contractor shall, at its own cost and expense, provide all permanent and temporary shoring, anchoring and bracing required by the nature of the Work in order to make all parts absolutely stable and rigid, even when such shoring, anchoring and bracing is not explicitly specified, and support and protect all buildings, bridges, roadways, conduits, wires, water pipes, gas pipes, sewers, pavements, curbs, sidewalks, fixtures and landscaping of all kinds and all other public or private property that may be encountered or endangered in providing, performing and completing the Work. Contractor shall have no claim against Owner because of any damage or loss to the Work or to Contractor's equipment, materials, or supplies from any cause whatsoever, including damage or loss due to simultaneous work by others. Contractor shall, promptly and without charge to Owner, repair or replace, to the satisfaction of Owner, any damage done to, and any loss suffered by, the Work and any damage done to, and any loss suffered by, the Work Site or other property as a result of the Work. Notwithstanding any other provision of this Contract, Contractor's obligations under this Section shall exist without regard to, and shall not be construed to be waived by, the availability or unavailability of any insurance, either of Owner or Contractor, to indemnify, hold harmless, or reimburse Contractor for the cost of any repair or replacement work required by this Section.

1.12 Subcontractors and Suppliers

A. Approval and Use of Subcontractors and Suppliers. Contractor shall perform the Work with its own personnel and under the management, supervision, and control of its own organization unless otherwise approved by Owner in writing. All subcontractors, suppliers, and subcontracts used by Contractor shall be acceptable to, and approved in advance by, Owner. Owner's approval of any subcontractor, supplier, and subcontract shall not relieve Contractor of full responsibility and liability for the provision, performance, and completion of the Work in full compliance with, and as required by or pursuant to, this Contract. All Work performed under any subcontract shall be subject to all of the provisions of this Contract in the same manner as if performed by employees of Contractor. Every reference in this Contract to "Contractor" shall be deemed also to refer to all subcontractors and suppliers of Contractor. Every subcontract shall include a provision binding the subcontractor or supplier to all provisions of this Contract.

B. Removal of Subcontractors and Suppliers. If any subcontractor or supplier fails to perform the part of the Work undertaken by it in a manner satisfactory to Owner, Contractor shall immediately upon notice from Owner terminate such subcontractor or supplier. Contractor shall have no claim for damages, for compensation in excess of the Contract Price, or for a delay or extension of the Contract Time as a result of any such termination.

1.13 Simultaneous Work By Others

Owner shall have the right to perform or have performed such other work, as Owner may desire in, about, or near the Work Site during the performance of the Work by Contractor. Contractor shall make every reasonable effort to perform the Work in such manner as to enable both the Work and such other work to be completed without hindrance or interference from each other. Contractor shall afford Owner and other contractors reasonable opportunity for the execution of such other work and shall properly coordinate the Work with such other work.

1.14 Occupancy Prior to Final Payment

Owner shall have the right, at its election, to occupy, use, or place in service any part of the Work prior to Final Payment. Such occupancy, use, or placement in service shall be conducted in such manner as not to damage any of the Work or to unreasonably interfere with the progress of the Work. No such occupancy, use, or placement in service shall be construed as an acceptance of any of the Work or a release or satisfaction of Contractor's duty to insure and protect the Work, not shall it, unless conducted in an unreasonable manner, be considered as an interference with Contractor's provision, performance, or completion of the Work.

1.15 Owner's Right to Terminate or Suspend Work for Convenience

A. Termination or Suspension for Convenience. Owner shall have the right, for its convenience, to terminate or suspend the Work in whole or in part at any time by written notice to Contractor. Every such notice shall state the extent and effective date of such termination or suspension. On such effective date, Contractor shall, as and to the extent directed, stop Work under this Contract, cease all placement of further orders or subcontracts, terminate or suspend Work under existing orders and subcontracts, cancel any outstanding orders or subcontracts that may be cancelled, and take any action necessary to protect any property in its possession in which Owner has or may acquire any interest and to dispose of such property in such manner as may be directed by Owner.

B. Payment for Completed Work. In the event of any termination pursuant to Subsection 1.15A above, Owner shall pay Contractor (1) such direct costs, excluding overhead, as Contractor shall have paid or incurred for all Work done in compliance with, and as required by or pursuant to, this Contract up to the effective date of termination together with ten percent of such costs for overhead and profit; and (2) such other costs pertaining to the Work, exclusive of overhead and profit, as Contractor may have reasonably and necessarily incurred as the result of such termination. Any such payment shall be offset by any prior payment or payments and shall be subject to Owner's rights to withhold and deduct as provided in this Contract.

ARTICLE II
CHANGES AND DELAYS

2.1 Changes

Owner shall have the right, by written order executed by Owner, to make changes in the Contract, the Work, the Work Site, and the Contract Time ("***Change Order***"). If any Change Order causes an increase or decrease in the amount of the Work, an equitable adjustment in the Contract Price or Contract Time may be made. All claims by Contractor for an equitable adjustment in either the Contract Price or the Contract Time shall be made within two business

days following receipt of such Change Order, and shall, if not made prior to such time, be conclusively deemed to have been waived. No decrease in the amount of the Work caused by any Change Order shall entitle Contractor to make any claim for damages, anticipated profits, or other compensation.

2.2 Delays

A. Extensions for Unavoidable Delays. For any delay that may result from causes that could not be avoided or controlled by Contractor, Contractor shall, upon timely written application, be entitled to issuance of a Change Order providing for an extension of the Contract Time for a period of time equal to the delay resulting from such unavoidable cause. No extension of the Contract Time shall be allowed for any other delay in completion of the Work.

B. No Compensation for Delays. No payment, compensation, damages, or adjustment of any kind, other than the extension of the Contract Time provided in Subsection 2.2A above, shall be made to, or claimed by, Contractor because of hindrances or delays from any cause in the commencement, prosecution, or completion of the Work, whether caused by Owner or any other party and whether avoidable or unavoidable.

ARTICLE III
CONTRACTOR'S RESPONSIBILITY FOR DEFECTIVE WORK

3.1 Inspection; Testing; Correction of Defects

A. Inspection. Until Final Payment, all parts of the Work shall be subject to inspection and testing by Owner or its designated representatives. Contractor shall furnish, at its own expense, all reasonable access, assistance, and facilities required by Owner for such inspection and testing.

B. Re-Inspection. Re-inspection and re-testing of any Work may be ordered by Owner at any time, and, if so ordered, any covered or closed Work shall be uncovered or opened by Contractor. If the Work is found to be in full compliance with this Contract, then Owner shall pay the cost of uncovering, opening, re-inspecting, or re-testing, as the case may be. If such Work is not in full compliance with this Contract, then Contractor shall pay such cost.

C. Correction. Until Final Payment, Contractor shall, promptly and without charge, repair, correct, or replace all or any part of the Work that is defective, damaged, flawed, or unsuitable or that in any way fails to conform strictly to the requirements of this Contract.

3.2 Warranty of Work

A. Scope of Warranty. Contractor warrants that the Work and all of its components shall be free from defects and flaws in design, workmanship, and materials; shall strictly conform to the requirements of this Contract; and shall be fit, sufficient and suitable for the purposes expressed in, or reasonably inferred from, this Contract. The warranty herein expressed shall be in addition to any other warranties expressed in this Contract, or expressed or implied by law, which are hereby reserved unto Owner.

B. Repairs; Extension of Warranty. Contractor shall, promptly and without charge, correct any failure to fulfill the above warranty that may be discovered or develop at any time

within one year after Final Payment or such longer period as may be prescribed in Attachment B or Attachment D to this Contract or by law. The above warranty shall be extended automatically to cover all repaired and replacement parts and labor provided or performed under such warranty and Contractor's obligation to correct Work shall be extended for a period of one year from the date of such repair or replacement. The time period established in this Subsection 3.2B relates only to the specific obligation of Contractor to correct Work and shall not be construed to establish a period of limitation with respect to other obligations that Contractor has under this Contract.

C. Subcontractor and Supplier Warranties. Whenever Attachment B or Attachment D requires a subcontractor or supplier to provide a guaranty or warranty, Contractor shall be solely responsible for obtaining said guaranty or warranty in form satisfactory to Owner and assigning said warranty or guaranty to Owner. Acceptance of any assigned warranties or guaranties by Owner shall be a precondition to Final Payment and shall not relieve Contractor of any of its guaranty or warranty obligations under this Contract.

3.3 Owner's Right to Correct

If, within two business days after Owner gives Contractor notice of any defect, damage, flaw, unsuitability, nonconformity, or failure to meet warranty subject to correction by Contractor pursuant to Section 3.1 or Section 3.2 of this Contract, Contractor neglects to make, or undertake with due diligence to make, the necessary corrections, then Owner shall be entitled to make, either with its own forces or with contract forces, the corrections and to recover from Contractor all resulting costs, expenses, losses, or damages, including attorneys' fees and administrative expenses.

ARTICLE IV
FINANCIAL ASSURANCES

4.1 Bonds

Contemporaneous with Contractor's execution of this Contract, Contractor shall provide a Performance Bond and a Labor and Material Payment Bond, on forms provided by, or otherwise acceptable to, Owner, from a surety company licensed to do business in the State of Illinois with a general rating of A minus and a financial size category of Class X or better in Best's Insurance Guide, each in the penal sum of the Contract Price ("***Bonds***"). Contractor shall, at all times while providing, performing, or completing the Work, including, without limitation, at all times while correcting any failure to meet warranty pursuant to Section 3.2 of this Contract, maintain and keep in force, at Contractor's expense, the Bonds required hereunder.

4.2 Insurance

Contemporaneous with Contractor's execution of this Contract, Contractor shall provide certificates and policies of insurance evidencing the minimum insurance coverage and limits set forth in Attachment A. For good cause shown, Owner may extend the time for submission of the required policies of insurance upon such terms, and with such assurances of complete and prompt performance, as Owner may impose in the exercise of its sole discretion. Such policies shall be in a form, and from companies, acceptable to Owner. Such insurance shall provide that no change, modification in, or cancellation of any insurance shall become effective until the

expiration of 30 days after written notice thereof shall have been given by the insurance company to Owner. Contractor shall, at all times while providing, performing, or completing the Work, including, without limitation, at all times while correcting any failure to meet warranty pursuant to Section 3.2 of this Contract, maintain and keep in force, at Contractor's expense, the minimum insurance coverage and limits set forth in Attachment A.

4.3 Indemnification

Contractor shall indemnify, save harmless, and defend Owner against any and all lawsuits, claims, demands, damages, liabilities, losses, and expenses, including attorneys' fees and administrative expenses, that may arise, or be alleged to have arisen, out of or in connection with Contractor's performance of, or failure to perform, the Work or any part thereof, whether or not due or claimed to be due in whole or in part to the active, passive, or concurrent negligence or fault of Contractor, except to the extent caused by the sole negligence of Owner.

ARTICLE V
PAYMENT

5.1 Contract Price

Owner shall pay to Contractor, in accordance with and subject to the terms and conditions set forth in this Article V and Attachment A, and Contractor shall accept in full satisfaction for providing, performing, and completing the Work, the amount or amounts set forth in Attachment A ("***Contract Price***"), subject to any additions, deductions, or withholdings provided for in this Contract.

5.2 Taxes and Benefits

Owner is exempt from and shall not be responsible to pay, or reimburse Contractor for, any state or local sales, use, or excise taxes. The Contract Price includes all other applicable federal, state, and local taxes of every kind and nature applicable to the Work as well as all taxes, contributions, and premiums for unemployment insurance, old age or retirement benefits, pensions, annuities, or other similar benefits. All claim or right to claim additional compensation by reason of the payment of any such tax, contribution, or premium is hereby waived and released by Contractor.

5.3 Progress Payments

A. Payment in Installments. The Contract Price shall be paid in monthly installments in the manner set forth in Attachment A ("***Progress Payments***").

B. Pay Requests. Contractor shall, as a condition precedent to its right to receive each Progress Payment, submit to Owner a pay request in the form provided by Owner ("***Pay Request***"). The first Pay Request shall be submitted not sooner than 60 days following commencement of work. Owner may, by written notice to Contractor, designate a specific day of each month on or before which Pay Requests must be submitted. Each Pay Request shall include (a) Contractor's certification of the value of, and partial or final waivers of lien covering, all Work for which payment is then requested and (b) Contractor's certification that all prior Progress Payments have been properly applied to the payment or reimbursement of the costs with respect to which they were paid.

C. Work Entire. This Contract and the Work are entire and the Work as a whole is of the essence of this Contract. Notwithstanding any other provision of this Contract, each and every part of this Contract and of the Work are interdependent and common to one another and to Owner's obligation to pay all or any part of the Contract Price or any other consideration for the Work. Any and all Progress Payments made pursuant to this Article are provided merely for the convenience of Contractor and for no other purpose.

5.4 Final Acceptance and Final Payment

A. Notice of Completion. When the Work has been completed and is ready in all respects for acceptance by Owner, Contractor shall notify Owner and request a final inspection ("***Notice of Completion***"). Contractor's Notice of Completion shall be given sufficiently in advance of the Completion Date to allow for scheduling of the final inspection and for completion or correction before the Completion Date of any items identified by such inspection as being defective, damaged, flawed, unsuitable, nonconforming, incomplete, or otherwise not in full compliance with, or as required by or pursuant to, this Contract ("***Punch List Work***").

B. Punch List and Final Acceptance. The Work shall be finally accepted when, and only when, the whole and all parts thereof shall have been completed to the satisfaction of Owner in full compliance with, and as required by or pursuant to, this Contract. Upon receipt of Contractor's Notice of Completion, Owner shall make a review of the Work and notify Contractor in writing of all Punch List Work, if any, to be completed or corrected. Following Contractor's completion or correction of all Punch List Work, Owner shall make another review of the Work and prepare and deliver to Contractor either a written notice of additional Punch List Work to be completed or corrected or a written notice of final acceptance of the Work ("***Final Acceptance***").

C. Final Payment. As soon as practicable after Final Acceptance, Contractor shall submit to Owner a properly completed final Pay Request in the form provided by Owner ("***Final Pay Request***"). Owner shall pay to Contractor the balance of the Contract Price, after deducting therefrom all charges against Contractor as provided for in this Contract ("***Final Payment***"). Final Payment shall be made not later than 60 days after Owner approves the Final Pay Request. The acceptance by Contractor of Final Payment shall operate as a full and complete release of Owner of and from any and all lawsuits, claims, demands, damages, liabilities, losses, and expenses of, by, or to Contractor for anything done, furnished for, arising out of, relating to, or in connection with the Work or for or on account of any act or neglect of Owner arising out of, relating to, or in connection with the Work.

5.5 Liens

A. Title. Nothing in this Contract shall be construed as vesting in Contractor any right of property in any equipment, materials, supplies, and other items provided under this Contract after they have been installed in, incorporated into, attached to, or affixed to, the Work or the Work Site. All such equipment, materials, supplies, and other items shall, upon being so installed, incorporated, attached or affixed, become the property of Owner, but such title shall not release Contractor from its duty to insure and protect the Work in accordance with the requirements of this Contract.

B. Waivers of Lien. Contractor shall, from time to time at Owner's request and in any event prior to Final Payment, furnish to Owner such receipts, releases, affidavits, certificates, and other evidence as may be necessary to establish, to the reasonable satisfaction of Owner, that no lien against the Work or the public funds held by Owner exists in favor of any person whatsoever for or by reason of any equipment, material, supplies, or other item furnished, labor performed, or other thing done in connection with the Work or this Contract ("***Lien***") and that no right to file any Lien exists in favor of any person whatsoever.

C. Removal of Liens. If at any time any notice of any Lien is filed, then Contractor shall, promptly and without charge, discharge, remove, or otherwise dispose of such Lien. Until such discharge, removal, or disposition, Owner shall have the right to retain from any money payable hereunder an amount that Owner, in its sole judgment, deems necessary to satisfy such Lien and to pay the costs and expenses, including attorneys' fees and administrative expenses, of any actions brought in connection therewith or by reason thereof.

D. Protection of Owner Only. This Section shall not operate to relieve Contractor's surety or sureties from any of their obligations under the Bonds, nor shall it be deemed to vest any right, interest, or entitlement in any subcontractor or supplier. Owner's retention of funds pursuant to this Section shall be deemed solely for the protection of its own interests pending removal of such Liens by Contractor, and Owner shall have no obligation to apply such funds to such removal but may, nevertheless, do so where Owner's interests would thereby be served.

5.6 Deductions

A. Owner's Right to Withhold. Notwithstanding any other provision of this Contract and without prejudice to any of Owner's other rights or remedies, Owner shall have the right at any time or times, whether before or after approval of any Pay Request, to deduct and withhold from any Progress or Final Payment that may be or become due under this Contract such amount as may reasonably appear necessary to compensate Owner for any actual or prospective loss due to: (1) Work that is defective, damaged, flawed, unsuitable, nonconforming, or incomplete; (2) damage for which Contractor is liable under this Contract; (3) state or local sales, use, or excise taxes from which Owner is exempt; (4) Liens or claims of Lien regardless of merit; (5) claims of subcontractors, suppliers, or other persons regardless of merit; (6) delay in the progress or completion of the Work; (7) inability of Contractor to complete the Work; (8) failure of Contractor to properly complete or document any Pay Request; (9) any other failure of Contractor to perform any of its obligations under this Contract; or (10) the cost to Owner, including attorneys' fees and administrative costs, of correcting any of the aforesaid matters or exercising any one or more of Owner's remedies set forth in Section 6.3 of this Contract.

B. Use of Withheld Funds. Owner shall be entitled to retain any and all amounts withheld pursuant to Subsection 5.6A above until Contractor shall have either performed the obligations in question or furnished security for such performance satisfactory to Owner. Owner shall be entitled to apply any money withheld or any other money due Contractor under this Contract to reimburse itself for any and all costs, expenses, losses, damages, liabilities, suits, judgments, awards, attorneys' fees and administrative expenses incurred, suffered, or sustained by Owner and chargeable to Contractor under this Contract.

ARTICLE VI
DISPUTES AND REMEDIES

6.1 Dispute Resolution Procedure

A. Notice of Disputes and Objections. If Contractor disputes or objects to any requirement, direction, instruction, interpretation, determination, or decision of Owner, Contractor may notify Owner in writing of its dispute or objection and of the amount of any equitable adjustment to the Contract Price or Contract Time to which Contractor claims it will be entitled as a result thereof; provided, however, that Contractor shall, nevertheless, proceed without delay to perform the Work as required, directed, instructed, interpreted, determined, or decided by Owner, without regard to such dispute or objection. Unless Contractor so notifies Owner within two business days after receipt of such requirement, direction, instruction, interpretation, determination, or decision, Contractor shall be conclusively deemed to have waived all such disputes or objections and all claims based thereon.

B. Negotiation of Disputes and Objections. To avoid and settle without litigation any such dispute or objection, Owner and Contractor agree to engage in good faith negotiations. Within three business days after Owner's receipt of Contractor's written notice of dispute or objection, a conference between Owner and Contractor shall be held to resolve the dispute. Within three business days after the end of the conference, Owner shall render its final decision, in writing, to Contractor. If Contractor objects to the final decision of Owner, then it shall, within three business days, give Owner notice thereof and, in such notice, shall state its final demand for settlement of the dispute. Unless Contractor so notifies Owner, Contractor shall be conclusively deemed (1) to have agreed to and accepted Owner's final decision and (2) to have waived all claims based on such final decision.

6.2 Contractor's Remedies

If Owner fails or refuses to satisfy a final demand made by Contractor pursuant to Section 6.1 of this Contract, or to otherwise resolve the dispute which is the subject of such demand to the satisfaction of Contractor, within ten days following receipt of such demand, then Contractor shall be entitled to pursue such remedies, not inconsistent with the provisions of this Contract, as it may have in law or equity.

6.3 Owner's Remedies

If it should appear at any time prior to Final Payment that Contractor has failed or refused to prosecute, or has delayed in the prosecution of, the Work with diligence at a rate that assures completion of the Work in full compliance with the requirements of this Contract on or before the Completion Date, or has attempted to assign this Contract or Contractor's rights under this Contract, either in whole or in part, or has falsely made any representation or warranty in this Contract, or has otherwise failed, refused, or delayed to perform or satisfy any other requirement of this Contract or has failed to pay its debts as they come due ("***Event of Default***"), and has failed to cure any such Event of Default within five business days after Contractor's receipt of written notice of such Event of Default, then Owner shall have the right, at its election and without prejudice to any other remedies provided by law or equity, to pursue any one or more of the following remedies:

1. Owner may require Contractor, within such reasonable time as may be fixed by Owner, to complete or correct all or any part of the Work that is defective, damaged, flawed, unsuitable, nonconforming, or incomplete; to remove from the Work Site any such Work; to accelerate all or any part of the Work; and to take any or all other action necessary to bring Contractor and the Work into strict compliance with this Contract.

2. Owner may perform or have performed all Work necessary for the accomplishment of the results stated in Paragraph 1 above and withhold or recover from Contractor all the cost and expense, including attorneys' fees and administrative costs, incurred by Owner in connection therewith.

3. Owner may accept the defective, damaged, flawed, unsuitable, nonconforming, incomplete, or dilatory Work or part thereof and make an equitable reduction in the Contract Price.

4. Owner may terminate this Contract without liability for further payment of amounts due or to become due under this Contract.

5. Owner may, without terminating this Contract, terminate Contractor's rights under this Contract and, for the purpose of completing or correcting the Work, evict Contractor and take possession of all equipment, materials, supplies, tools, appliances, plans, specifications, schedules, manuals, drawings, and other papers relating to the Work, whether at the Work Site or elsewhere, and either complete or correct the Work with its own forces or contracted forces, all at Contractor's expense.

6. Upon any termination of this Contract or of Contractor's rights under this Contract, and at Owner's option exercised in writing, any or all subcontracts and supplier contracts of Contractor shall be deemed to be assigned to Owner without any further action being required, but Owner shall not thereby assume any obligation for payments due under such subcontracts and supplier contracts for any Work provided or performed prior to such assignment.

7. Owner may withhold from any Progress Payment or Final Payment, whether or not previously approved, or may recover from Contractor, any and all costs, including attorneys' fees and administrative expenses, incurred by Owner as the result of any Event of Default or as a result of

actions taken by Owner in response to any Event of Default.

8. Owner may recover any damages suffered by Owner.

6.4 Owner's Special Remedy for Delay

If the Work is not completed by Contractor, in full compliance with, and as required by or pursuant to, this Contract, within the Contract Time as such time may be extended by Change Order, then Owner may invoke its remedies under Section 6.3 of this Contract or may, in the exercise of its sole and absolute discretion, permit Contractor to complete the Work but charge to Contractor, and deduct from any Progress or Final Payments, whether or not previously approved, administrative expenses and costs for each day completion of the Work is delayed beyond the Completion Date, computed on the basis of the "Per Diem Administrative Charge" set forth in Attachment A, as well as any additional damages caused by such delay.

6.5 Terminations and Suspensions Deemed for Convenience

Any termination or suspension of Contractor's rights under this Contract for an alleged default that is ultimately held unjustified shall automatically be deemed to be a termination or suspension for the convenience of Owner under Section 1.15 of this Contract.

ARTICLE VII
LEGAL RELATIONSHIPS AND REQUIREMENTS

7.1 Binding Effect

This Contract shall be binding upon Owner and Contractor and upon their respective heirs, executors, administrators, personal representatives, and permitted successors and assigns. Every reference in this Contract to a party shall also be deemed to be a reference to the authorized officers, employees, agents, and representatives of such party.

7.2 Relationship of the Parties

Contractor shall act as an independent contractor in providing and performing the Work. Nothing in, nor done pursuant to, this Contract shall be construed (1) to create the relationship of principal and agent, partners, or joint ventures between Owner and Contractor or (2) except as provided in Paragraph 6.3(6) above, to create any relationship between Owner and any subcontractor or supplier of Contractor.

7.3 No Collusion

Contractor hereby represents that the only persons, firms, or corporations interested in this Contract as principals are those disclosed to Owner prior to the execution of this Contract, and that this Contract is made without collusion with any other person, firm, or corporation. If at any time it shall be found that Contractor has, in procuring this Contract, colluded with any other person, firm, or corporation, then Contractor shall be liable to Owner for all loss or damage that Owner may suffer thereby, and this Contract shall, at Owner's option, be null and void.

7.4 Assignment

Contractor shall not (1) assign this Contract in whole or in part, (2) assign any of Contractor's rights or obligations under this Contract, or (3) assign any payment due or to become due under this Contract without the prior express written approval of Owner, which approval may be withheld in the sole and unfettered discretion of Owner; provided, however, that Owner's prior written approval shall not be required for assignments of accounts, as defined in the Illinois Commercial Code, if to do so would violate Section 9-318 of the Illinois Commercial Code, 810 ILCS 5/9-318. Owner may assign this Contract, in whole or in part, or any or all of its rights or obligations under this Contract, without the consent of Contractor.

7.5 Confidential Information

All information supplied by Owner to Contractor for or in connection with this Contract or the Work shall be held confidential by Contractor and shall not, without the prior express written consent of Owner, be used for any purpose other than performance of the Work.

7.6 No Waiver

No examination, inspection, investigation, test, measurement, review, determination, decision, certificate, or approval by Owner, nor any order by Owner for the payment of money, nor any payment for, or use, occupancy, possession, or acceptance of, the whole or any part of the Work by Owner, nor any extension of time granted by Owner, nor any delay by Owner in exercising any right under this Contract, nor any other act or omission of Owner shall constitute or be deemed to be an acceptance of any defective, damaged, flawed, unsuitable, nonconforming or incomplete Work, equipment, materials, or supplies, nor operate to waive or otherwise diminish the effect of any warranty or representation made by Contractor; or of any requirement or provision of this Contract; or of any remedy, power, or right of Owner.

7.7 No Third Party Beneficiaries

No claim as a third party beneficiary under this Contract by any person, firm, or corporation other than Contractor shall be made, or be valid, against the Owner or the Contractor.

7.8 Notices

All notices required or permitted to be given under this Contract shall be in writing and shall be delivered (i) personally, (ii) by a reputable overnight courier or (iii) by certified mail, return receipt requested, and deposited in the U.S. mail, postage prepaid. Unless otherwise expressly provided in this Agreement, notices shall be deemed received upon the earlier of (a) actual receipt; (b) one business day after deposit with an overnight courier as evidenced by a receipt of deposit; or (c) three business days following deposit in the U.S. mail, as evidenced by a return receipt. By notice complying with the requirements of this Section, each party shall have the right to change the address or addressee, or both, for all future notices and communications to the other party but no notice of a change of address or addressee shall be effective until actually received. Notices and communications to the Owner shall be addressed to, and delivered at, the following address:

Village of Lincolnwood
6900 North Lincoln Avenue
Lincolnwood, IL 60712
Attention: Andrew Letson, Director of Public Works

With a copy to: Holland & Knight LLP
131 S. Dearborn Street, 30th Floor
Chicago, Illinois 60603
Attention: Steven M. Elrod, Corporation Counsel

Notices and communications to the Contractor shall be addressed to, and delivered at, the following address:

Stuckey Construction Company, Inc.
2020 N. Lewis Avenue
Waukegan, IL 60087
Attention: Edwin Stuckey

7.9 Governing Laws

This Contract shall be governed by, construed and enforced in accordance with the internal laws, but not the conflicts of laws rules, of the State of Illinois.

7.10 Changes in Laws

Unless otherwise provided in this Contract, any reference to existing law shall be deemed to include any modifications of, or amendments, to existing law that may occur in the future.

7.11 Compliance with Laws

Contractor shall give all notices, pay all fees, and take all other action that may be necessary to ensure that the Work is provided, performed, and completed in accordance with all required governmental permits, licenses or other approvals and authorizations that may be required in connection with providing, performing, and completing the Work, and with all applicable statutes, ordinances, rules, and regulations, including without limitation the Prevailing Wage Act, 820 ILCS 130/0.01 et seq. (in furtherance of which, a copy of Owner's ordinance ascertaining the prevailing rate of wages, in effect as of the date of this Contract, has been attached as an Appendix to this Contract; if the Illinois Department of Labor revises the prevailing rate of hourly wages to be paid, the revised rate shall apply to this Contract); any other prevailing wage laws; the Fair Labor Standards Act; any statutes regarding qualification to do business; any statutes requiring preference to laborers of specified classes; the Illinois Steel Products Procurement Act, 30 ILCS 565/1 et seq.; any statutes prohibiting discrimination because of, or requiring affirmative action based on, race, creed, color, national origin, age, sex, or other prohibited classification, including, without limitation, the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 et seq., the Illinois Human Rights Act, 775 ILCS 5/1-101 et seq., and the Public Works Discrimination Act, 775 ILCS 10/1 et seq.; and any statutes regarding safety or the performance of the Work, including the Illinois Structural Work Act, the Illinois Underground Utility Facilities Damage Prevention Act, and the Occupational Safety and Health Act. Contractor shall also comply with all conditions of any federal, state, or local grant received by Owner or Contractor with respect to this Contract or the Work. Further, Bidder shall

have a written sexual harassment policy in compliance with Section 2-105 of the Illinois Human Rights Act .

Contractor shall be solely liable for any fines or civil penalties that are imposed by any governmental or quasi-governmental agency or body that may arise, or be alleged to have arisen, out of or in connection with Contractor's, or its subcontractors' or suppliers', performance of, or failure to perform, the Work or any part thereof.

Every provision of law required by law to be inserted into this Contract shall be deemed to be inserted herein.

7.12 Compliance with Patents

A. Assumption of Costs, Royalties, and Fees. Contractor shall pay or cause to be paid all costs, royalties, and fees arising from the use on, or the incorporation into, the Work, of patented equipment, materials, supplies, tools, appliances, devices, processes, or inventions.

B. Effect of Contractor Being Enjoined. Should Contractor be enjoined from furnishing or using any equipment, materials, supplies, tools, appliances, devices, processes, or inventions supplied or required to be supplied or used under this Contract, Contractor shall promptly offer substitute equipment, materials, supplies, tools, appliances, devices, processes, or inventions in lieu thereof, of equal efficiency, quality, suitability, and market value, for review by Owner. If Owner should disapprove the offered substitutes and should elect, in lieu of a substitution, to have supplied, and to retain and use, any such equipment, materials, supplies, tools, appliances, devices, processes, or inventions as may by this Contract be required to be supplied, Contractor shall pay such royalties and secure such valid licenses as may be requisite and necessary for Owner to use such equipment, materials, supplies, tools, appliances, devices, processes, or inventions without being disturbed or in any way interfered with by any proceeding in law or equity on account thereof. Should Contractor neglect or refuse to make any approved substitution promptly, or to pay such royalties and secure such licenses as may be necessary, then Owner shall have the right to make such substitution, or Owner may pay such royalties and secure such licenses and charge the cost thereof against any money due Contractor from Owner or recover the amount thereof from Contractor and its surety or sureties notwithstanding that Final Payment may have been made.

7.13 Time of the Essence

Time is of the essence in the performance of all terms and provisions of this Contract Calendar Days and Time.

7.14 Calendar Days and Time

Unless otherwise provided in this Contract, any reference in this Contract to "day" or "days" shall mean calendar days and not business days. If the date for giving of any notice required to be given, or the performance of any obligation, under this Contract falls on a Saturday, Sunday, or federal holiday, then the notice or obligation may be given or performed on the next business day after that Saturday, Sunday, or federal holiday.

7.15 Severability

It is hereby expressed to be the intent of the parties to this Contract that should any provision, covenant, agreement, or portion of this Contract or its application to any Person or property be held invalid by a court of competent jurisdiction, the remaining provisions of this Contract and the validity, enforceability, and application to any Person or property shall not be impaired thereby, but the remaining provisions shall be interpreted, applied, and enforced so as to achieve, as near as may be, the purpose and intent of this Contract to the greatest extent permitted by applicable law.

7.16 Entire Agreement

This Contract constitutes the entire agreement between the parties to this Contract concerning the work and supercedes all prior agreements and negotiations between the parties, whether written or oral relating to the subject matter of this Contract.

7.17 Amendments and Modifications

No amendment or modification to this Contract shall be effective until it is reduced to writing and approved and executed by the corporate authorities of the parties in accordance with all applicable statutory procedures.

IN WITNESS WHEREOF, Owner and Contractor have caused this Contract to be executed in five original counterparts as of the day and year first written above.

ATTEST:	**VILLAGE OF LINCOLNWOOD**
By:_____	_____
Beryl Herman, Village Clerk	Timothy C. Wiberg, Village Manager
ATTEST:	**STUCKEY CONSTRUCTION COMPANY, INC.**
By:_____	By:_____
Title:_____	Title:_____

STATE OF ILLINOIS)
) SS
COUNTY OF _____)

CONTRACTOR'S CERTIFICATION

_____ **EXECUTING OFFICER**, being first duly sworn on oath, deposes and states that all statements herein made are made on behalf of Contractor, that this deponent is authorized to make them, and that the statements contained herein are true and correct.

Contractor deposes, states, and certifies that Contractor is not barred from contracting with a unit of state or local government as a result of (i) a delinquency in the payment of any tax administered by the Illinois Department of Revenue unless Contractor is contesting, in accordance with the procedures established by the appropriate Revenue Act, its liability for the tax or the amount of tax, as set forth in 65 ILCS 5/11-42.1-1; or (ii) a violation of either Section 33E-3 or Section 33E-4 of Article 33E of the Criminal Code of 1961, 720 ILCS 5/33E-1 et seq.

DATED this _____ day of _____, 20__.

ATTEST:

By: _____

Title: _____

Stuckey Construction Company, Inc.

By: _____

Title: _____

Subscribed and Sworn to
before me this ____ day
of _____, 20__.

My Commission Expires: _____

_____
Notary Public

[SEAL]

ATTACHMENT A

SUPPLEMENTAL SCHEDULE OF CONTRACT TERMS

1. **Project**:

Exterior construction work to be inclusive of demolition of selective site elements throughout established project areas, construction of new cast-in-place concrete wall, expanded concrete pavement areas, underground utility work, and new ornamental site fence.

2. **Work Site**:

The Work shall be performed at the following Work Site: 7001 N. Lawndale Avenue (Public Works Facility) and 7015 N. Central Park Avenue (Standpipe). The Standpipe is located directly behind the Public Works Facility.

3. **Permits, Licenses, Approvals, and Authorizations**:

Contractor shall obtain all required governmental permits, licenses, approvals, and authorizations.

4. **Commencement Date**:

April 2, 2018

5. **Completion Date**:

July 20, 2018, plus extensions, if any, authorized by a Change Order issued pursuant to Subsection 2.2A of the Contract

In compliance with Section 6.4 of this Contract, the Village may levy a Per Diem Administrative Charge at a per calendar day rate that is consistent with the most recent version of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction.

6. **Insurance Coverage**:

A. Worker's Compensation and Employer's Liability with limits not less than:

(1) Worker's Compensation: Statutory;

(2) Employer's Liability:

$500,000 injury-per occurrence

$500,000 disease-per employee

ATTACHMENT A

$500,000 disease-policy limit

Such insurance shall evidence that coverage applies in the State of Illinois Article 107.02.

B. Comprehensive Motor Vehicle Liability with a combined single limit of liability for bodily injury and property damage of not less than **$1,000,000** for vehicles owned, non-owned, or rented.

All employees shall be included as insured.

C. Comprehensive General Liability with coverage written on an "occurrence" basis and with limits no less than:

(1) General Aggregate: $2,000,000\
(2) Bodily Injury:

$500,000 per person

$1,000,000 per occurrence

(3) Property Damage:

$1,000,000 per occurrence, and

$2,000,000 aggregate.

(4) Other Coverage:

Coverage's shall include:

- Premises/Operations
- Products/Completed Operations (to be maintained for two years following Final Payment)
- Independent Contractors
- Personal Injury (with Employment Exclusion deleted)
- Broad Form Property Damage Endorsement
- Blanket Contractual Liability (must expressly cover the indemnity provisions of the Contract)

- Bodily Injury and Property Damage

"X", "C", and "U" exclusions shall be deleted.

Railroad exclusions shall be deleted if Work Site is within 50 feet of any railroad track.

All employees shall be included as insured.

D. Umbrella Policy. The required coverage may be in any combination of primary, excess, and umbrella policies. Any excess or umbrella policy must provide excess coverage over underlying insurance on a following-form basis such that when any loss covered by the primary policy exceeds the limits under the primary policy, the excess or umbrella policy becomes effective to cover such loss.

E. Owner as Additional Insured. Owner shall be named as an Additional Insured on the required policies excluding worker's compensation.

7. **Contract Price**:

SCHEDULE OF PRICES (SEE ATTACHMENT A-1)

[TO BE SUPPLIED BY BIDDER]

8. **Progress Payments**:

A. General. Owner shall pay to Contractor 90 percent of the Value of Work, determined in the manner set forth below, installed and complete in place up to the day before the Pay Request, less the aggregate of all previous Progress Payments, until 50 percent of contract Value of Work is completed. The total amount of Progress Payments made prior to Final Acceptance by Owner shall not exceed 95 percent of the Contract Price.

B. Value of Work. The Value of the Work shall be determined as follows (when applicable):

(1) Lump Sum Items. For all Work to be paid on a lump sum basis, Contractor shall, not later than 10 days after execution of the Contract and before submitting its first Pay Request, submit to Owner a schedule showing the value of each component part of such Work in form and with substantiating data acceptable to Owner ("***Breakdown Schedule***"). The sum of the items listed in the Breakdown Schedule shall equal the amount or amounts set forth in the Schedule of Prices for Lump Sum Work. An unbalanced Breakdown Schedule providing for overpayment of Contractor on component parts of the Work to be performed first will not be accepted.

The Breakdown Schedule shall be revised and resubmitted until acceptable to Owner. No payment shall be made for any lump sum item until Contractor has submitted, and Owner has approved, an acceptable Breakdown Schedule.

Owner may require that the approved Breakdown Schedule be revised based on developments occurring during the provision and performance of the Work. If Contractor fails to submit a revised Breakdown Schedule that is acceptable to Owner, Owner shall have the right either to suspend Progress and Final Payments for Lump Sum Work or to make such Payments based on Owner's determination of the value of the Work completed.

(2) Unit Price Items. For all Work to be paid on a unit price basis, the value of such Work shall be determined by Owner on the basis of the actual number of acceptable units of Unit Price Items installed and complete in place, multiplied by the applicable Unit Price set forth in the Schedule of Prices. The actual number of acceptable units installed and complete in place shall be measured on the basis described in Attachment B to the Contract or, in the absence of such description, on the basis determined by Owner. The number of units of Unit Price Items stated in the Schedule of Prices are Owner's estimate only and shall not be used in establishing the Progress or Final Payments due Contractor. The Contract Price shall be adjusted to reflect the actual number of acceptable units of Unit Price Items installed and complete in place upon Final Acceptance.

C. Application of Payments. All Progress and Final Payments made by Owner to Contractor shall be applied to the payment or reimbursement of the costs with respect to which they were paid and shall not be applied to or used for any pre-existing or unrelated debt between Contractor and Owner or between Contractor and any third party.

ATTACHMENT A-1
SCHEDULE OF PRICES

Lump Sum Contract:

For providing, performing and completing all work, the total Contract Price of:
$1,523,000.

Unit Price Items:

ITEM	UOM	UNIT PRICE
EARTH EXCAVATION	CUBIC YARD	$36.00
NON-SPECIAL WASTE DISPOSAL	CUBIC YARD	$95.00

Return to VB Agenda

ATTACHMENT B

SPECIFICATIONS

Return to VB Agenda

PROJECT MANUAL

FOR

VILLAGE OF LINCOLNWOOD
PUBLIC WORKS YARD EXPANSION

AT

7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

OWNER:

VILLAGE OF LINCOLNWOOD

DOCUMENTS DATED: JANUARY 8, 2018

ISSUED FOR BID
ISSUED FOR PERMIT

FGM ARCHITECTS INC.
1211 WEST 22ND STREET, SUITE 700
OAK BROOK, ILLINOIS 60523

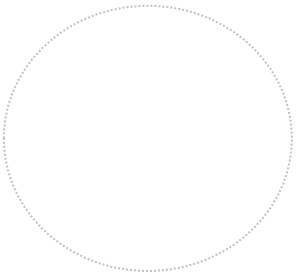
FGM JOB NO. 14-1815.01

©2018 FGM ARCHITECTS INC.
Professional Design Firm #184-000350

Return to VB Agenda

CERTIFICATIONS:

I hereby certify that these plans and specifications were prepared under my supervision and to the best of my knowledge comply with the 2009 International Building Code (IBC), 2015 International Energy Conservation Code (IECC), 2009 International Fire Code (IFC) except Chapter 4, Illinois Accessibility Code, as well as the applicable requirements of 23 Ill. Adm. Code 180.



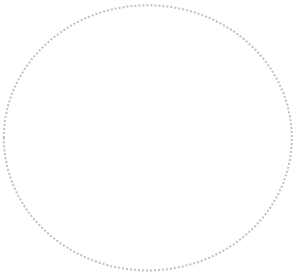
Architect's Seal

_____

(Architect's Signature)

Date Signed: _____ Expiration Date: _____

I hereby certify that these plans and specifications were prepared under my supervision and to the best of my knowledge comply with the 2009 International Building Code (IBC), as well as the applicable requirements of 23 Ill. Adm. Code 180.



Structural Engineer's Seal

_____

(Engineer's Signature)

Date Signed: _____ Expiration Date: _____

© 2018 FGM Architects Inc.

Return to VB Agenda

TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 011000 - SUMMARY
SECTION 012500 - SUBSTITUTION PROCEDURES
SECTION 012600 - CONTRACT MODIFICATION PROCEDURES
SECTION 012900 - PAYMENT PROCEDURES
SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION
SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION
SECTION 013300 - SUBMITTAL PROCEDURES
SECTION 013301 - BIM AND ELECTRONIC DOCUMENTS TRANSFER TERMS AND CONDITIONS
SECTION 014000 - QUALITY REQUIREMENTS
SECTION 014200 - REFERENCES
SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS
SECTION 016000 - PRODUCT REQUIREMENTS
SECTION 016001 - DATA FOR EVALUATION OF MATERIALS, PRODUCTS AND SYSTEMS
SECTION 017300 - EXECUTION
SECTION 017700 - CLOSEOUT PROCEDURES
SECTION 017823 - OPERATION AND MAINTENANCE DATA
SECTION 017839 - PROJECT RECORD DOCUMENTS
SECTION 017900 - DEMONSTRATION AND TRAINING

DIVISION 02 - EXISTING CONDITIONS

SECTION 024119 - SELECTIVE STRUCTURE DEMOLITION

DIVISION 03 - CONCRETE

SECTION 033000 - CAST-IN-PLACE CONCRETE
SECTION 034100 – PRECAST STRUCTURAL CONCRETE

DIVISION 04 - MASONRY

SECTION 042000 - UNIT MASONRY

DIVISION 05 - METALS

NOT APPLICABLE

© 2018 FGM Architects Inc.

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

NOT APPLICABLE

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

SECTION 075323 – ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING
SECTION 076200 – SHEET METAL FLASHING AND TRIM
SECTION 079200 - JOINT SEALANTS

DIVISION 08 - OPENINGS

NOT APPLICABLE

DIVISION 09 - FINISHES

NOT APPLICABLE

DIVISION 10 - SPECIALTIES

NOT APPLICABLE

DIVISION 11 - EQUIPMENT

NOT APPLICABLE

DIVISION 12 - FURNISHINGS

NOT APPLICABLE

DIVISION 13 - SPECIAL CONSTRUCTION

NOT APPLICABLE

DIVISION 14 - CONVEYING EQUIPMENT

NOT APPLICABLE

DIVISION 21 - FIRE SUPPRESSION

NOT APPLICABLE

DIVISION 22 - PLUMBING

NOT APPLICABLE

DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)

NOT APPLICABLE

© 2018 FGM Architects Inc.

DIVISION 26 - ELECTRICAL

INFORMATION NOTED ON ELECTRICAL DRAWINGS

DIVISION 27 - COMMUNICATIONS

NOT APPLICABLE

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

NOT APPLICABLE

DIVISION 31 - EARTHWORK

INFORMATION NOTED ON CIVIL DRAWINGS

DIVISION 32 - EXTERIOR IMPROVEMENTS

SECTION 323119 – DECORATIVE METAL FENCES AND GATES

DIVISION 33 - UTILITIES

INFORMATION NOTED ON CIVIL DRAWINGS

© 2018 FGM Architects Inc.

Return to VB Agenda

SECTION 000115 - LIST OF DRAWING SHEETS

1.1 LIST OF DRAWINGS

A. List of Drawings: Drawings consist of the following Contract Drawings and other drawings of type indicated:

1. LIST OF DRAWINGS

GENERAL

G1.0.0	COVER SHEET
G1.0.1	ARCHITECTURAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES

CIVIL AND ELECTRICAL

C1	TITLE SHEET
C2	EXISTING CONDITIONS / DEMOLITION PLAN
C3	GEOMETRIC AND UTILITY PLAN
C4	GRADING PLAN
C5	GENERAL NOTES
C6	MWRD NOTES
C7	DETAILS
C8	DETAILS
C9	MWRD EXHIBIT
EL1	GENERAL LIGHTING NOTES
EL2	LIGHTING PLAN
EL3	LIGHTING CONTROLS
EL4	LIGHTING DETAILS
EL5	PHOTOMETRIC PLAN

ARCHITECTURAL

A0.0.1	OVERALL ARCHITECTURAL SITE PLAN
A1.1.1	ENLARGED ARCHITECTURAL SITE PLAN - NORTH
A1.1.2	ENLARGED ARCHITECTURAL SITE PLAN – SOUTH
A1.2.1	ROOF PLAN AND ROOF DETAILS
A3.1.0	EXTERIOR BUILDING AND SITE ELEVATIONS, INTERIOR BUILDING ELEVATIONS
A3.3.0	WALL SECTIONS AND EXTERIOR WALL DETAILS
A3.3.1	WALL SECTIONS AND EXTERIOR WALL DETAILS

STRUCTURAL

S0.1.0	STRUCTURAL GENERAL NOTES
S1.1.1	PARTIAL FOUNDATION PLAN - SOUTH
S1.1.2	PARTIAL FOUNDATION PLAN – NORTH
S1.2.1	PARTIAL ROOF PLAN - SOUTH
S2.0.1	DETAILS AND SECTIONS
S2.0.2	DETAILS AND SECTIONS

END OF DOCUMENT 000115

© 2018 FGM Architects Inc.

DOCUMENT 003119 - EXISTING CONDITION INFORMATION

1.1 EXISTING CONDITION INFORMATION

A. This Document with its referenced attachments is part of the Procurement and Contracting Requirements for Project. They provide Owner's information for Bidders' convenience and are intended to supplement rather than serve in lieu of the Bidders' own investigations. They are made available for Bidders' convenience and information, but are not a warranty of existing conditions. This Document and its attachments are not part of the Contract Documents.

B. Related Requirements:

1. Village of Lincolnwood "Instructions to Bidders" for the Bidder's responsibilities for examination of Project site and existing conditions.
2. Document 003132 "Geotechnical Data" for reports and soil-boring data from geotechnical investigations that are made available to bidders.

END OF DOCUMENT 003119

© 2018 FGM Architects Inc.

DOCUMENT 003132 - GEOTECHNICAL DATA

1.1 GEOTECHNICAL DATA

A. This Document with its referenced attachments is part of the Procurement and Contracting Requirements for Project. They provide Owner's information for Bidders' convenience and are intended to supplement rather than serve in lieu of Bidders' own investigations. They are made available for Bidders' convenience and information, but are not a warranty of existing conditions. This Document and its attachments are not part of the Contract Documents.

B. Soil-boring data for Project, obtained by Soil and Material Consultants, Inc., dated February 6, 2017, is available for viewing as appended to this Document.

C. A geotechnical investigation report for Project, prepared by Soil and Material Consultants, Inc., dated February 6, 2017, is available for viewing as appended to this Document.

1. Contractor to be aware of requirement and complete an up to date report of soils/ and or provide additional testing as required by law and dispose of any soils properly off-site.

D. Related Requirements:

1. Village of Lincolnwood "Instructions to Bidders" for the Bidder's responsibilities for examination of Project site and existing conditions.
2. Document 003119 "Existing Condition Information" for information about existing conditions that is made available to bidders.

END OF DOCUMENT 003132

© 2018 FGM Architects Inc.

Return to VB Agenda

SOIL AND MATERIAL CONSULTANTS, INC.
office: 1-847-870-0544
fax: 1-847-870-0661
www.soilandmaterialconsultants.com
us@soilandmaterialconsultants.com

February 6, 2017
File No. 22869
Revised

Mr. Brian S. Mihelich
True North Consultants, Inc.
1240 Iroquois Avenue, Suite 206
Naperville, IL 60563

Re: Geotechnical Investigation
Lincolnwood Public Works Yard
Lincolnwood, Illinois

Dear Mr. Mihelich:

The following is our report of findings for the geotechnical investigation completed at the Lincolnwood Public Works Yard in the Village of Lincolnwood, Illinois.

The investigation was requested to determine current subsurface soil and water conditions at select boring locations. The findings of the field investigation and the results of laboratory testing are intended to assist in the planning, design and construction of proposed site improvements. We understand it is proposed to construct a concrete retaining wall with frost depth foundations.

SCOPE OF THE INVESTIGATION

The field investigation included obtaining 3 borings at the locations requested and as indicated on the enclosed location sketch. The boring locations were established using field taping methods and accuracy. Surface elevations were estimated to the nearest 0.5 ft. using data presented on the topographic survey.

We auger drilled the borings to depths of 10.0 feet below existing surface elevations. Soil samples were obtained using a split barrel sampler advanced utilizing an automatic SPT hammer. Soil profiles were determined in the field and soil samples returned to our laboratory for additional testing including determination of moisture content. Cohesive soils obtained by split barrel sampling were tested further to determine dry unit weight and unconfined compressive strength. The results of all field determinations and laboratory testing are included in summary with this report.

RESULTS OF THE INVESTIGATION

Enclosed are boring logs indicating the soil conditions encountered at each location. Site surface conditions include fill soil conditions. Composition of the fill includes the presence of poorly to moderately compacted silt/clay, sand/gravel, and clay/silt mixtures, with lesser amounts of organic matter and asphalt noted at some locations. The fill was found extending to depths of 4.0 feet to 4.5 feet below the surface. The limits of fill placement were not determined within the scope of this investigation. Larger debris may also be present within the

fill but was not encountered during the investigation. The fill soil conditions were found to overlie the apparent natural topsoil which extended to depths of 5.0 feet to 6.0 feet at the boring locations. The topsoil is classified as black silt/clay mixtures and had moisture contents in excess of 31% determined.

Underlying natural soil conditions include the presence of cohesive soils. These are classified as stiff to very tough clay/silt mixtures with lesser portions of sand and gravel. A non-cohesive, very loose, silt/clay soil layer was also encountered at a depth of 9.0 feet at boring B-102. The non-cohesive soils were in a very damp to saturated condition. Cobbles and boulders may be present within the site soils at any elevation, although none were encountered while drilling.

The following table summarizes depth ranges below existing grade, the magnitude of soil strength within these ranges and other information:

Boring	Surface Elevation (feet)	Depth Range Below Existing Surface (feet)	Soil Strength (lbs./sq.ft.)	Recorded Water Levels, W.D./A.D. (feet)
101	602.0	0.0 to 6.5	*500	dry/dry
		6.5 to 7.0	1,000	
102	601.5	0.0 to 6.0	*500	9.0/9.0
		6.0 to 7.0	500	
103	600.5	0.0 to 5.5	*500	dry/dry
		5.5 to 7.0	3,000	

* Not recommended for support of the retaining wall foundations. Deeper foundation depths or foundations supported on coarse crushed stone fill may be needed to reduce the magnitude of long-term total and differential settlement.

It is expected that foundations can be supported on undisturbed natural soils located at any elevation within the depth ranges indicated in the above table, except as noted. Above these depth ranges the soils are not considered able to support foundations, even at reduced design bearing values, due to long-term settlement considerations.

SUBSURFACE WATER

The boring logs and the above table indicate the depth at which subsurface water was encountered in the bore holes at the time of the drilling operations and during the period of these readings. It is expected that fluctuations from the water levels recorded will occur over a period of time due to variations in rainfall, temperature, subsurface soil conditions, soil permeability and other factors not evident at the time of the water level measurements. Based on the conditions encountered, we estimate the seasonal high groundwater elevation to be at EL. 592.5 feet, where a gray silt layer was encountered at boring B-102.

FOUNDATIONS

Based on the results of this investigation it is our opinion that footing foundations may be considered for support of the retaining wall. These foundations can be supported on undisturbed natural soils located below all unsuitable fill soils, debris, buried topsoil, low strength soils and other unsuitable conditions which may be encountered. Soil strength values and the depths at which they are expected to be encountered at these boring locations are indicated in the above table. A net allowable bearing value of 500 lbs./sq.ft. is available for design. This value can be used to size foundations for support of structure dead and live loads. Increased bearing values may be available at some locations and elevations. The feasibility of using a higher value is best determined after our review of proposed foundation details and elevations.

Foundations for unprotected improvements should extend at least 48.0 inches below exposed surface elevations to provide adequate protection against uplift due to freezing of the supporting soils. We recommend providing adequate reinforcing steel in the retaining wall to minimize the effects of long-term differential settlement.

Weak soil conditions may be discovered locally at design foundation elevations and may require extending the foundation to a deeper elevation. Alternately, removal of the weak soil followed by replacement with properly compacted coarse crushed granular fill (CA01) may be feasible. When removal is approved by the Soil Engineer, the removal of the weak soil should also extend beyond the face of footings to a distance at least equal to the depth of fill that will be present beneath the footings and/or piers. A capping layer of finer crushed granular fill (CA06) can be utilized to establish a working surface.

DEWATERING

Excavations may require dewatering due to subsurface water seepage and/or surface precipitation. This water can likely be removed by standard sump and pump operations. Soils exposed at foundation or undercut elevations should not be permitted to become saturated. Loss of bearing strength and stability may occur, requiring additional soil excavation.

Fill soils, organic soils, non-cohesive soils and others can be unstable when saturated. These soils tend to cave or run when submerged or disturbed. The stability of exposed embankments is minimal to non-existent as confining soil pressures are removed. Proper drainage within excavations is necessary at all times, particularly when excavations extend below anticipated water levels and below saturated soils.

The contractor should be made responsible for designing and constructing stable temporary excavations. Also, the contractor should shore, slope, bench or restrain the sides of the excavations as required to maintain stability of both the excavation sides and bottom. In no case, should the slope, slope heights, or excavation depth exceed those in the local, state, and federal safety regulations.

DESIGN

Where applicable, the following values can be utilized for design of the proposed retaining wall:

Item	On-Site Cohesive Fill Soil			
	Drained		Undrained	
Active Pressure:	65	psf/f	100	psf/f
Passive Pressure:	235	psf/f	215	psf/f

Item	On-Site Non-Cohesive Fill Soil			
	Drained		Undrained	
Active Pressure:	50	psf/f	90	psf/f
Passive Pressure:	255	psf/f	240	psf/f

Item	On-Site Cohesive Natural Soil			
	Drained		Undrained	
Active Pressure:	55	psf/f	90	psf/f
Passive Pressure:	245	psf/f	225	psf/f

Item	Granular Backfill			
	Drained		Undrained	
Active Pressure:	45	psf/f	85	psf/f
Passive Pressure:	260	psf/f	245	psf/f

Backfill materials placed behind walls, as well as soils located behind walls, are presumed to be drained. Passive pressure within 3.5 feet of the surface should be omitted due to seasonal weather conditions.

SUBGRADE SOIL PREPARATION

The procedure in all areas of subgrade supported improvements should include the removal of unsuitable surface conditions including vegetation, topsoil, unsuitable fill soils, significant debris, weak or unstable soils, and other deleterious conditions which may be encountered. Above grade areas should be cut to design subgrade elevations. Exposed subgrade soils should be leveled, compacted and proof-rolled in the presence of the Soil Engineer.

Proof-rolling may reveal areas of unstable soil conditions. Discing and aeration of high moisture content soils can be effective to depths of up to 1.0 foot, depending upon the equipment utilized. Removal of unstable soils may be necessary if high moisture content conditions extend to depths greater than the effective depth of discing.

Soft or unstable soil conditions in pavement areas can often be bridged by use of an effective depth of crushed granular material. The placement of the crushed granular bridging material, possibly in conjunction with the use of an appropriate geotextile fabric, should only proceed after review of the proof-roll conditions by the Soil Engineer. Long-term settlement of pavement surfaces may occur locally as the bridged soils desiccate.

Structural fill can be placed on soils prepared to the satisfaction of the Soil Engineer. The fill should be placed in lifts not to exceed 8.0 inches when uncompacted. Each lift should exceed minimum compaction requirements prior to placement of the next lift. We recommend a minimum of 90% compaction based on the modified Proctor test, ASTM D-1557, be achieved beneath exterior improvements such as pavements and sidewalks. Compaction requirements also apply to backfill placement around foundations and within trench excavations located below subgrade supported improvements.

CONCLUSION

The information within this report is intended to provide initial information concerning subsurface soil and water conditions on the site. Variations in subsurface conditions are expected to be present between boring locations due to naturally changing soil and fill conditions.

Our understanding of the proposed improvements is based on very limited information available to us at the writing of this report. The findings of the investigation and the recommendations presented are not considered applicable to significant changes in the scope of the improvements or applicable to alternate site uses. We recommend that proposed foundation and grading plans be reviewed by our office to determine if additional considerations are necessary to address anticipated subsurface conditions. Soil conditions encountered at footing elevations should be tested to verify the presence of design soil strength prior to concrete placement.

If you have any questions concerning the findings or recommendations presented in this report, please let me know.

Very truly yours,

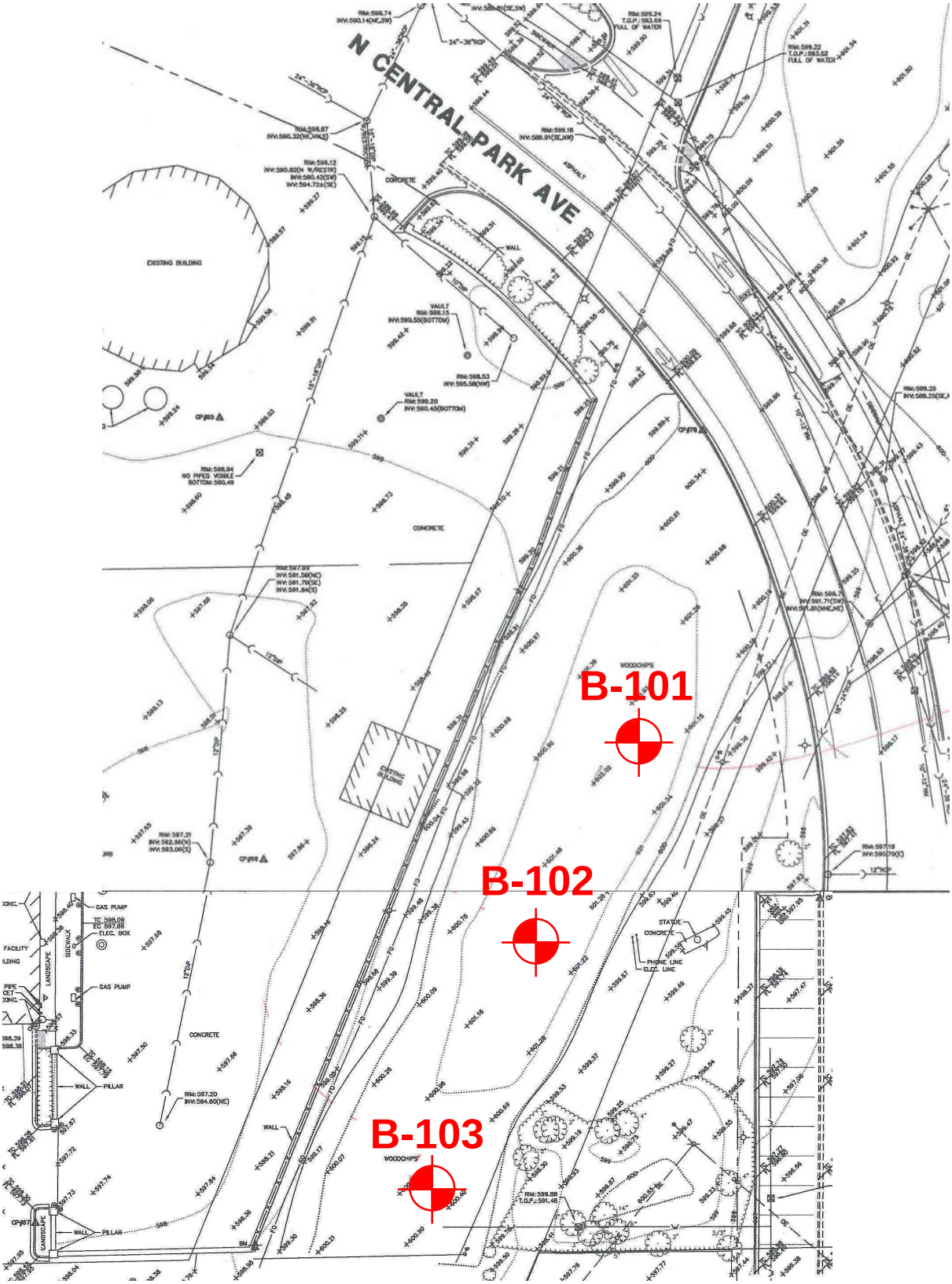
SOIL AND MATERIAL CONSULTANTS, INC.

Thomas P. Johnson, P.E.
President

THOMAS P. JOHNSON
062-058735
REGISTERED
PROFESSIONAL
ENGINEER
OF
ILLINOIS
11/17

TPJ:ek
Enc.

Return to VB Agenda



N

SMC	SOIL AND MATERIAL CONSULTANTS, INC.	LOCATION SKETCH
Client:	TRUE NORTH CONSULTANTS, INC.	
Project:	LINCOLNWOOD PUBLIC WORKS YARD	
Location:	LINCOLNWOOD, ILLINOIS	
File No. 22869	Date: 8-22-16	Scale: NONE

Return to VB Agenda

SOIL AND MATERIAL CONSULTANTS, INC.
Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 101

Logged By: DA **Page:** 1 of 1

Client: True North Consultants, Inc.

File No. 22869 **Date Drilled:** 8/22/16

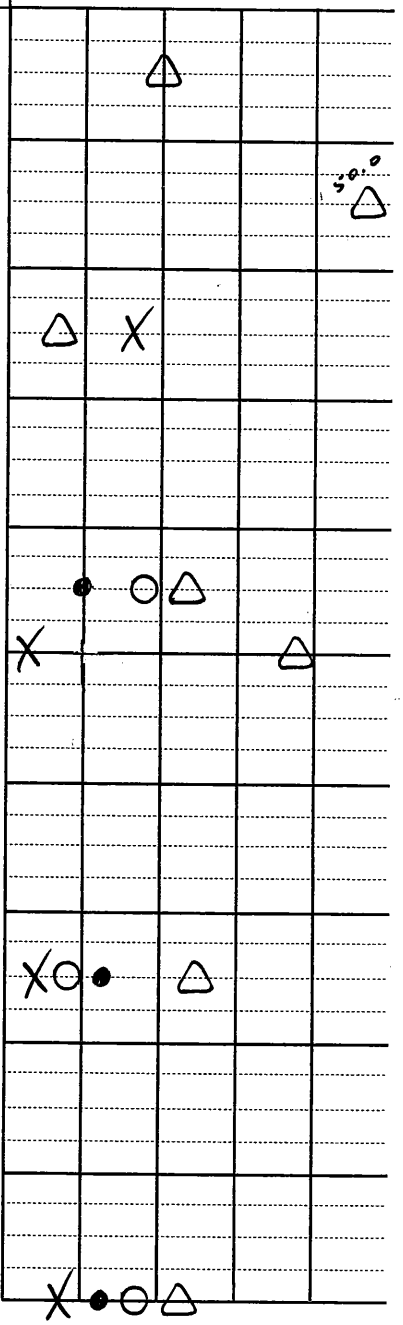
Reference: Lincolnwood Public Works Yard
Lincolnwood, IL

Comments:

Equipment: ☒ CME 45B ☐ CME 55 ☐ Hand Auger ☐ Other

depth, ft.	CLASSIFICATION Elevation 602.0' Existing Surface	standard penetration ×	moisture content △	dry unit weight lbs./cu.ft. ⊗	unconfined compressive strength ○
	Brown-gray-black silt,some clay,trace sand & gravel,damp - Fill		19.6		
1	Black silt,some clay,trace sand,gravel & organic matter,damp,loose - Fill		50.0		
2	Brown-gray fine-medium sand,some gravel, trace coarse sand,damp,medium dense - Fill	16	6.6		
3	Brown-gray clay,some silt,trace sand & gravel,damp-very damp,tough - Fill		22.6	101.0	1.8
4					
5	Black silt,some clay,trace sand,damp, very loose (topsoil)	3	38.9		
6	Brown-gray clay,some silt,trace sand & gravel,damp-very damp,stiff to tough				
7		4	24.5	91.7	0.9
8					
9					
10	End of Boring	6	22.1	104.0	1.6

○ unconfined compressive strength, tons/sq.ft.
● penetrometer reading, tons/sq.ft.
1.0 2.0 3.0 4.0
× standard penetration "N", blows/ft.
△ moisture content, %
10 20 30 40



Water encountered at dry feet during drilling operations (W.D.).
Water recorded at dry feet on completion of drilling operations (A.D.).
Water recorded at feet hours after completion of drilling operations (A.D.).

G-303d

Return to VB Agenda

SOIL AND MATERIAL CONSULTANTS, INC.
Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 102

Logged By: DA Page: 1 of 1

Client: True North Consultants, Inc.

File No. 22869 Date Drilled: 8/22/16

Reference: Lincolnwood Public Works Yard
Lincolnwood, IL

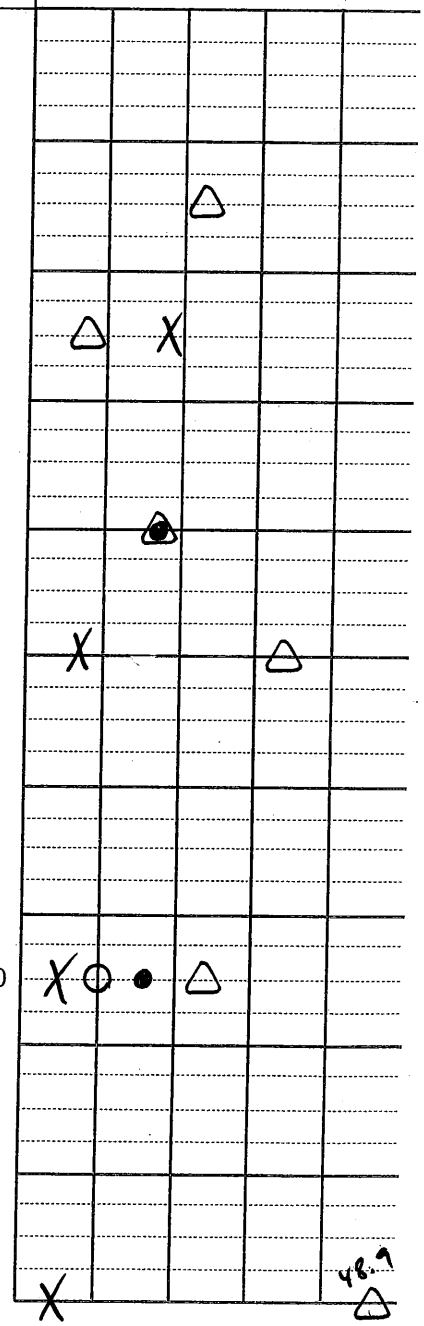
Comments:

Equipment: ☒ CME 45B ☐ CME 55 ☐ Hand Auger ☐ Other

depth, ft.	CLASSIFICATION Elevation 601.5' Existing Surface	standard penetration ×	moisture content △	dry unit weight lbs./cu.ft. ϒ	unconfined compressive strength ○
1	Dark brown-gray-black silt,some clay, trace sand & gravel,damp - Fill				
2	Black sand,some gravel,trace asphalt, damp,medium dense - Fill		22.3		
3		18	8.2		
4	Brown-gray clay,some silt,trace sand, damp,tough - Fill		17.5		
5	Black silt,some clay,trace sand,damp, loose (topsoil)	7	33.0		
6	Gray to brown-gray clay,some silt,trace sand & gravel,damp,tough				
7		5	23.7	92.3	1.0
8					
9	Gray silt,some clay,trace fine sand, very damp-saturated,very loose				
10		4	48.9		

○ unconfined compressive strength, tons/sq.ft.
● penetrometer reading, tons/sq.ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
△ moisture content, %
10 20 30 40



End of Boring

Water encountered at 9.0 feet during drilling operations (W.D.).
Water recorded at 9.0 feet on completion of drilling operations (A.D.).
Water recorded at feet hours after completion of drilling operations (A.D.).

G-303d

Return to VB Agenda

SOIL AND MATERIAL CONSULTANTS, INC.
Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 103

Logged By: DA Page: 1 of 1

Client: True North Consultants, Inc.

File No. 22869 Date Drilled: 8/22/16

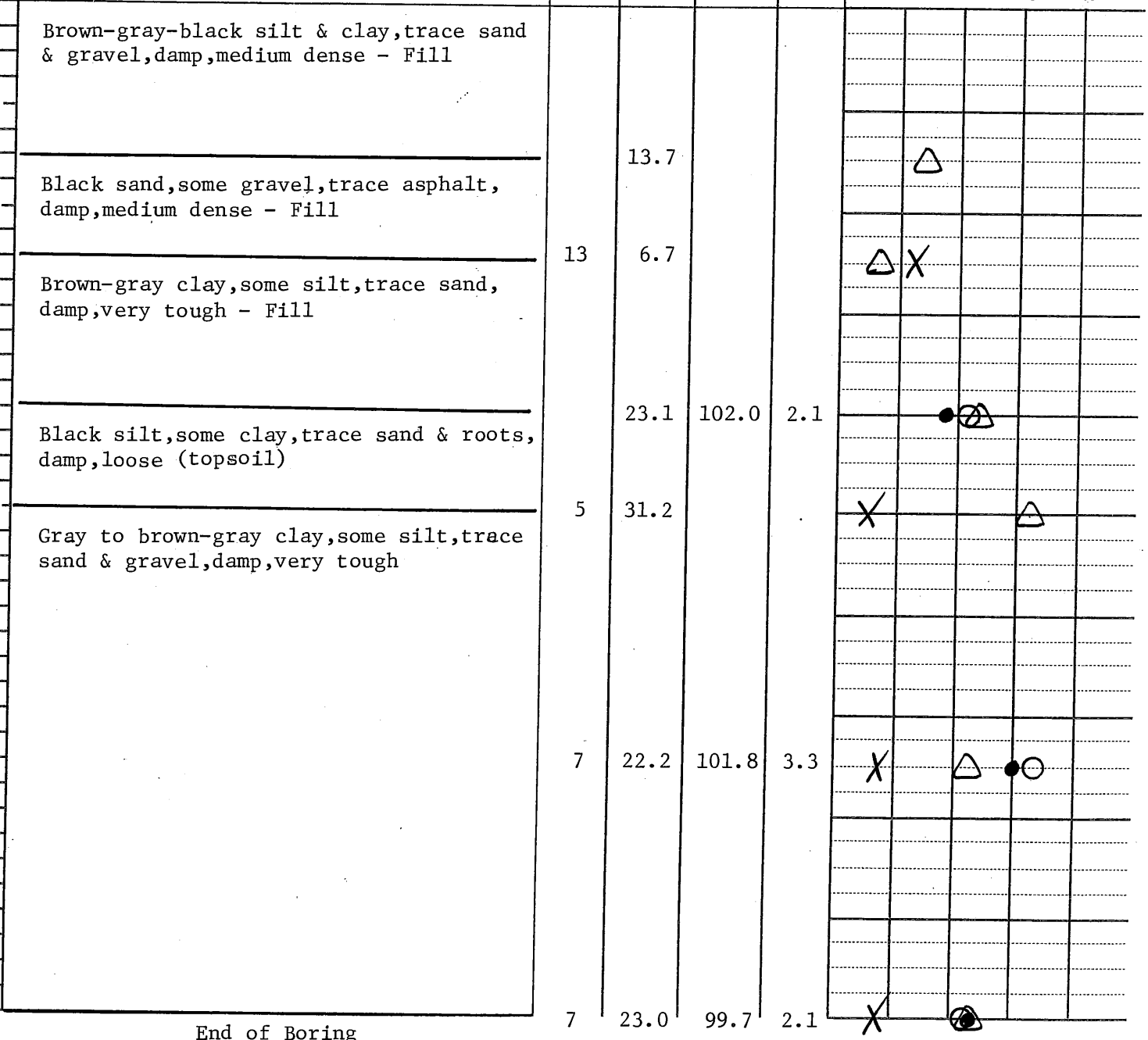
Reference: Lincolnwood Public Wotks Yard
Lincolnwood, IL

Comments:

Equipment: ☒ CME 45B ☐ CME 55 ☐ Hand Auger ☐ Other

depth, ft.	CLASSIFICATION Elevation 600.5' Existing Surface	standard penetration ×	moisture content △	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strength ○
1	Brown-gray-black silt & clay,trace sand & gravel,damp,medium dense - Fill		13.7		
2	Black sand,some gravel,trace asphalt, damp,medium dense - Fill	13	6.7		
3	Brown-gray clay,some silt,trace sand, damp,very tough - Fill		23.1	102.0	2.1
4	Black silt,some clay,trace sand & roots, damp,loose (topsoil)	5	31.2		
5	Gray to brown-gray clay,some silt,trace sand & gravel,damp,very tough	7	22.2	101.8	3.3
6					
7					
8					
9					
10	End of Boring	7	23.0	99.7	2.1

○ unconfined compressive strength, tons/sq.ft.
● penetrometer reading, tons/sq.ft.
1.0 2.0 3.0 4.0
× standard penetration "N", blows/ft.
△ moisture content, %
10 20 30 40



Water encountered at dry feet during drilling operations (W.D.).
Water recorded at dry feet on completion of drilling operations (A.D.).
Water recorded at feet hours after completion of drilling operations (A.D.).

G-303d

Return to VB Agenda

SOIL AND MATERIAL CONSULTANTS, INC.

General Notes

SAMPLE CLASSIFICATION

Soil sample classification is based on the Unified Soil Classification System, the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), ASTM D-2488, the Standard Test Method for Classification of Soils for Engineering Purposes, ASTM D-2487(when applicable), and the modifiers noted below.

CONSISTENCY OF COHESIVE SOILS

Term	Qu -tons/sq. ft.	N (unreliable)
Very Soft	0.00 - 0.25	0 - 2
Soft	0.26 - 0.49	3 - 4
Stiff	0.50 - 0.99	5 - 8
Tough	1.00 - 1.99	9 - 15
Very Tough	2.00 - 3.99	16 - 30
Hard	4.00 - 7.99	30 +
Very Hard	8.00 +	

RELATIVE DENSITY OF GRANULAR SOILS

Term	N - blows/foot
Very Loose	0 - 4
Loose	5 - 9
Medium Dense	10 - 29
Dense	30 - 49
Very Dense	50 +

IDENTIFICATION AND TERMINOLOGY

Term		Size Range
Boulder		over 8 in.
Cobble		3 in. to 8 in.
Gravel	-coarse	1 in. to 3 in.
	-medium	3/8 in. to 1 in.
	-fine	#4 sieve to 3/8 in.
Sand	-coarse	#10 sieve to #4 sieve
	-medium	#40 sieve to #10 sieve
	-fine	#200 sieve to #40 sieve
Silt		0.002 mm to #200 sieve
Clay		smaller than 0.002 mm

Modifying Term	Percent by Weight
Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

Moisture Condition

Dry
Damp
Very Damp
Saturated

DRILLING, SAMPLING & SOIL PROPERTY SYMBOLS

CF - Continuous Flight Auger
HS - Hollow Stem Auger
HA - Hand Auger
RD - Rotary Drilling
AX - Rock Core, 1-3/16 in. diameter
BX - Rock Core, 1-5/8 in. diameter
NX - Rock Core, 2-1/8 in. diameter
S - Sample Number
T - Type of Sample
J - Jar
AS - Auger Sample
SS - Split-spoon (2 in. O.D. with 1-3/8 in. I.D.)
ST - Shelby Tube (2 in. O.D. with 1-7/8 in. I.D.)
R - Recovery Length, in.
B - Blows/ 6 in. interval, Standard Penetration Test (SPT)
N - Blows/ foot to drive 2 in. O.D. split-spoon sampler with 140 lb. hammer falling 30 in., (STP)
Pen. - Pocket Penetrometer reading, tons/ sq. ft.
W - Water Content, % of dry weight
Uw - Dry Unit Weight of soil, lbs./ cu. ft.
Qu - Unconfined Compressive Strength, tons/ sq. ft.
Str - % Strain at Qu.
WL - Water Level
WD - While Drilling
AD - After Drilling
DCI - Dry Cave-in
WCI - Wet Cave-in
LL - Liquid Limit, %
PL - Plastic limit, %
PI - Plasticity Index (LL-PL)
LI - Liquidity Index [(W-PL)/PI]

Return to VB Agenda

SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Access to site.
4. Coordination with occupants.
5. Work restrictions.
6. Specification and drawing conventions.

B. Related Requirements:

1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.3 PROJECT INFORMATION

A. Project Identification: Village of Lincolnwood Public Works Yard Expansion; FGM Project No. 14-1815.01.

1. Project Location: 7001 North Lawndale Avenue, Lincolnwood, Illinois 60712.

B. Owner: Village of Lincolnwood, 6900 Lincoln Avenue, Lincolnwood, IL 60712 .

1. Owner's Representative: Andrew Letson, Public Works Director.

C. Architect: FGM Architects Inc., 1211 West 22nd Street, Suite 700, Oak Brook, IL 60523.

1. Architect's Representative: Annabella Orlando.

1.4 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and consists of the following:

© 2018 FGM Architects Inc.

1. Proposed expansion to existing Public Works Department yard area. Exterior construction work to be inclusive of demolition of selective site elements throughout established project areas, construction of new cast-in-place concrete bin assemblies, expanded concrete pavement areas, underground utility work, and new ornamental site fences and motorized operable gates.

B. Type of Contract:

1. Project will be constructed under a single prime contract.

1.5 ACCESS TO SITE

A. General: Contractor shall have full use of Project site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.

B. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.

C. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

1. Limits: Coordinate work in existing yard area with Owner. Owner will occupy existing building and will need garage access to vehicles and allow for their discharge from facility. Maintain access for Owner parking and access to garages as well.
2. Driveways, Walkways and Entrances: Keep driveways, parking and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.

a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

1.6 COORDINATION WITH OCCUPANTS

A. Partial Owner Occupancy: Owner will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.

1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.

© 2018 FGM Architects Inc.

2. Provide not less than 48 hours' notice to Owner of activities that will affect Owner's operations.

1.7 WORK RESTRICTIONS

A. Work Restrictions, General: Comply with restrictions on construction operations.

1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.

B. On-Site Work Hours: Limit work in the existing building to normal business working hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, unless otherwise indicated.

C. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.

1. Notify Owner not less than two days in advance of proposed disruptive operations.
2. Obtain Owner's written permission before proceeding with disruptive operations.

D. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet of entrances, operable windows, or outdoor-air intakes.

1.8 SPECIFICATION AND DRAWING CONVENTIONS

A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.

B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:

1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard and scheduled on Drawings.
3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

© 2018 FGM Architects Inc.

a. Use of specification section numbers within keynotes is made solely for convenience in coordination and without limitation. The contractor is responsible for providing the work in accordance to the contract documents in their entirety.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

© 2018 FGM Architects Inc.

SECTION 012500 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for substitutions.

B. Related Requirements:

1. Section 016000 "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

1.3 DEFINITIONS

A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

1.4 ACTION SUBMITTALS

A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Substitution Request Form: Use CSI Form 13.1A.
2. Form 016001 "DATA FOR EVALUATION OF MATERIALS, PRODUCTS AND SYSTEMS".
3. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
   a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.

© 2018 FGM Architects Inc.

b. Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
e. Samples, where applicable or requested.
f. Certificates and qualification data, where applicable or requested.
g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
h. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
i. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
j. Cost information, including a proposal of change, if any, in the Contract Sum.
k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
l. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

4. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.

a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.5 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

© 2018 FGM Architects Inc.

1.6 PROCEDURES

A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.

1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
b. Substitution request is fully documented and properly submitted in accordance with the Contract Documents.
c. Requested substitution will not adversely affect Contractor's construction schedule.
d. Requested substitution has received necessary approvals of authorities having jurisdiction.
e. Requested substitution is compatible with other portions of the Work.
f. Requested substitution has been coordinated with other portions of the Work.
g. Requested substitution provides specified warranty.
h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

B. Substitutions for Convenience: Architect will consider requests for substitution if received within 60 days after the Notice of Award. Requests received after that time may be considered or rejected at discretion of Architect.

1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

© 2018 FGM Architects Inc.

a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
b. Requested substitution does not require extensive revisions to the Contract Documents.
c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
d. Substitution request is fully documented and properly submitted in accordance with the Contract Documents.
e. Requested substitution will not adversely affect Contractor's construction schedule.
f. Requested substitution has received necessary approvals of authorities having jurisdiction.
g. Requested substitution is compatible with other portions of the Work.
h. Requested substitution has been coordinated with other portions of the Work.
i. Requested substitution provides specified warranty.
j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

Return to VB Agenda

Advancement of Construction Technology

SUBSTITUTION REQUEST

(After the Bidding Phase)

Project: _____ Substitution Request Number: _____

_____ From: _____

To: _____ Date: _____

_____ A/E Project Number: _____

Re: _____ Contract For: _____

Specification Title: _____ Description: _____

Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____

Manufacturer: _____ Address: _____ Phone: _____

Trade Name: _____ Model No.: _____

Installer: _____ Address: _____ Phone: _____

History: ☐ New product ☐ 2-5 years old ☐ 5-10 yrs old ☐ More than 10 years old

Differences between proposed substitution and specified product: _____

_____

_____

☐ Point-by-point comparative data attached - REQUIRED BY A/E

Reason for not providing specified item: _____

_____

Similar Installation:

Project: _____ Architect: _____

Address: _____ Owner: _____

_____ Date Installed: _____

Proposed substitution affects other parts of Work: ☐ No ☐ Yes; explain _____

_____

Savings to Owner for accepting substitution: _____ ($ _____).

Proposed substitution changes Contract Time: ☐ No ☐ Yes [Add] [Deduct] _____ days.

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

Copyright 1996, Construction Specification Institute,
601 Madison Street, Alexandria, VA 22314-1791

Return to VB Agenda

SUBSTITUTION REQUEST
(Continued)

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

_____

Telephone: _____

Attachments: _____

_____

_____

_____

A/E's REVIEW AND ACTION

☐ Substitution approved - Make submittals in accordance with Specification Section 01330.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: Date:

Additional Comments: ☐ Contractor ☐ Subcontractor ☐ Supplier ☐ Manufacturer ☐ A/E ☐ _____

_____

_____

_____

_____

_____

_____

_____

Copyright 1996, Construction Specification Institute,
601 Madison Street, Alexandria, VA 22314-1791

SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

B. Related Requirements:

1. Section 012500 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after the Contract award.

1.3 MINOR CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.4 PROPOSAL REQUESTS

A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.

1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
2. Within time specified in Proposal Request or 20 days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.

a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
c. Include costs of labor and supervision directly attributable to the change.

© 2018 FGM Architects Inc.

d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
e. Quotation Form: Use CSI Form 13.6D, "Proposal Worksheet Summary," and Form 13.6C, "Proposal Worksheet Detail."

B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.

1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Include costs of labor and supervision directly attributable to the change.
5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
6. Comply with requirements in Section 012500 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
7. Proposal Request Form: Use CSI Form 13.6A, "Change Order Request (Proposal)," with attachments CSI Form 13.6D, "Proposal Worksheet Summary," and Form 13.6C, "Proposal Worksheet Detail."form acceptable to Architect.

1.5 ADMINISTRATIVE CHANGE ORDERS

A. Allowance Adjustment: See Section 012100 "Allowances" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect actual costs of allowances.

B. Unit-Price Adjustment: See Section 012200 "Unit Prices" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope of unit-price work.

1.6 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Work Changes Proposal Request, Contractor will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

1.7 CONSTRUCTION CHANGE DIRECTIVE

A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714 Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.

1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.

B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.

1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

© 2018 FGM Architects Inc.

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.

B. Related Requirements:

1. Section 012600 "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
2. Section 013200 "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.

1.3 DEFINITIONS

A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.

1. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:

   a. Application for Payment forms with continuation sheets.
   b. Submittal schedule.
   c. Items required to be indicated as separate activities in Contractor's construction schedule.

2. Submit the schedule of values to Architect at earliest possible date, but no later than seven days before the date scheduled for submittal of initial Applications for Payment.

© 2018 FGM Architects Inc.

B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.

1. Identification: Include the following Project identification on the schedule of values:

   a. Project name and location.
   b. Name of Architect.
   c. Architect's project number.
   d. Contractor's name and address.
   e. Date of submittal.

2. Arrange schedule of values consistent with format of AIA Document G703
3. Arrange the schedule of values in tabular form with separate columns to indicate the following for each item listed:

   a. Related Specification Section or Division.
   b. Description of the Work.
   c. Name of subcontractor.
   d. Name of manufacturer or fabricator.
   e. Name of supplier.
   f. Change Orders (numbers) that affect value.
   g. Dollar value of the following, as a percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.

      1) Labor.
      2) Materials.
      3) Equipment.

4. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
5. Provide separate line items for the following:

   a. General and Overhead Profit.
   b. Bond and Insurance.
   c. Temporary facilities and other major cost items that are not direct cost of actual work in place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor’s option.

6. Round amounts to nearest whole dollar; total shall equal the Contract Sum.

1.5 APPLICATIONS FOR PAYMENT

A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.

© 2018 FGM Architects Inc.

1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.

B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.

1. Submit draft copy of Application for Payment seven days prior to due date for review by Architect.

C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.

D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.

1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.

E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.

1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.
2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
3. Provide summary documentation for stored materials indicating the following:

    a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
    b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
    c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.

F. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.

1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

© 2018 FGM Architects Inc.

G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.

1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
2. When an application shows completion of an item, submit conditional final or full waivers.
3. Owner reserves the right to designate which entities involved in the Work must submit waivers.

H. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's liens from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.

1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
2. When an application shows completion of an item, submit conditional final or full waivers.
3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.

I. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:

1. List of subcontractors.
2. Schedule of values.
3. Contractor's construction schedule (preliminary if not final).
4. Combined Contractor's construction schedule (preliminary if not final) incorporating Work of multiple contracts, with indication of acceptance of schedule by each Contractor.
5. Products list (preliminary if not final).
6. Schedule of unit prices.
7. Submittal schedule (preliminary if not final).
8. List of Contractor's staff assignments.
9. List of Contractor's principal consultants.
10. Copies of building permits.
11. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
12. Initial progress report.
13. Report of preconstruction conference.
14. Certificates of insurance and insurance policies.
15. Performance and payment bonds.
16. Data needed to acquire Owner's insurance.

© 2018 FGM Architects Inc.

J. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.

1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

K. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

1. Evidence of completion of Project closeout requirements.
2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
3. Updated final statement, accounting for final changes to the Contract Sum.
4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
6. AIA Document G707, "Consent of Surety to Final Payment."
7. Evidence that claims have been settled.
8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

© 2018 FGM Architects Inc.

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:

1. General coordination procedures.
2. Requests for Information (RFIs).
3. Project meetings.

B. Each contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.

C. Related Requirements:

1. Section 017300 "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
2. Section 017700 "Closeout Procedures" for coordinating closeout of the Contract.

1.3 DEFINITIONS

A. RFI: Request from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

1.4 INFORMATIONAL SUBMITTALS

A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:

1. Name, address, and telephone number of entity performing subcontract or supplying products.
2. Number and title of related Specification Section(s) covered by subcontract.
3. Drawing number and detail references, as appropriate, covered by subcontract.

© 2018 FGM Architects Inc.

B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office, and cellular telephone numbers and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.

1. Post copies of list in project meeting room, in temporary field office. Keep list current at all times.

1.5 GENERAL COORDINATION PROCEDURES

A. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each contractor shall coordinate its operations with operations, included in different Sections, that depend on each other for proper installation, connection, and operation.

1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
2. Coordinate installation of different components with other contractors to ensure maximum performance and accessibility for required maintenance, service, and repair.
3. Make adequate provisions to accommodate items scheduled for later installation.

B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.

1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

1. Preparation of Contractor's construction schedule.
2. Preparation of the schedule of values.
3. Installation and removal of temporary facilities and controls.
4. Delivery and processing of submittals.
5. Progress meetings.
6. Preinstallation conferences.
7. Project closeout activities.
8. Startup and adjustment of systems.

D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.

© 2018 FGM Architects Inc.

1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. See other Sections for disposition of salvaged materials that are designated as Owner's property.

1.6 REQUESTS FOR INFORMATION (RFIs)

A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.

1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.

B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:

1. Project name.
2. Project number.
3. Date.
4. Name of Contractor.
5. Name of Architect.
6. RFI number, numbered sequentially.
7. RFI subject.
8. Specification Section number and title and related paragraphs, as appropriate.
9. Drawing number and detail references, as appropriate.
10. Field dimensions and conditions, as appropriate.
11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
12. Contractor's signature.
13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.

    a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.

C. RFI Forms: Software-generated form with substantially the same content as indicated above, acceptable to Architect.

1. Attachments shall be electronic files in Adobe Acrobat PDF format.

D. Architect's's Action: Architect will review each RFI, determine action required, and respond. Allow seven working days for Architect's's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.

1. The following Contractor-generated RFIs will be returned without action:

© 2018 FGM Architects Inc.

a. Requests for approval of submittals.
b. Requests for approval of substitutions.
c. Requests for approval of Contractor's means and methods.
d. Requests for coordination information already indicated in the Contract Documents.
e. Requests for adjustments in the Contract Time or the Contract Sum.
f. Requests for interpretation of Architect's actions on submittals.
g. Incomplete RFIs or inaccurately prepared RFIs.

2. Architect's's action may include a request for additional information, in which case Architect's's time for response will date from time of receipt of additional information.
3. Arcitect's's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."

a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.

E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly Include the following**:**

1. Project name.
2. Name and address of Contractor.
3. Name and address of Architect.
4. RFI number including RFIs that were returned without action or withdrawn.
5. RFI description.
6. Date the RFI was submitted.
7. Date Architect's response was received.

F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.

1.7 PROJECT MEETINGS

A. General: Contractor will schedule and conductmeetings and conferences at Project site unless otherwise indicated.

1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner, and Architect, within three days of the meeting.

B. Preconstruction Conference: Contractor will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Ownerand Architect, but no later than 7 days after execution of the Agreement.

1. Conduct the conference to review responsibilities and personnel assignments.

2. Attendees: Authorized representatives of Owner Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

3. Agenda: Discuss items of significance that could affect progress, including the following:

   a. Tentative construction schedule.
   b. Phasing.
   c. Critical work sequencing and long-lead items.
   d. Designation of key personnel and their duties.
   e. Lines of communications.
   f. Procedures for processing field decisions and Change Orders.
   g. Procedures for RFIs.
   h. Procedures for testing and inspecting.
   i. Procedures for processing Applications for Payment.
   j. Distribution of the Contract Documents.
   k. Submittal procedures.
   l. Preparation of record documents.
   m. Use of the premises.
   n. Work restrictions.
   o. Working hours.
   p. Owner's occupancy requirements.
   q. Responsibility for temporary facilities and controls.
   r. Procedures for moisture and mold control.
   s. Procedures for disruptions and shutdowns.
   t. Construction waste management and recycling.
   u. Parking availability.
   v. Office, work, and storage areas.
   w. Equipment deliveries and priorities.
   x. First aid.
   y. Security.
   z. Progress cleaning.

4. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.

C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.

1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.

© 2018 FGM Architects Inc.

2. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
3. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
4. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

D. Project Closeout Conference: Contractor will schedule and conduct a project closeout conference, at a time convenient to Owner and Architect, but no later than 60 days prior to the scheduled date of Substantial Completion.

1. Conduct the conference to review requirements and responsibilities related to Project closeout.
2. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:

    a. Preparation of record documents.
    b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
    c. Submittal of written warranties.
    d. Requirements for preparing operations and maintenance data.
    e. Requirements for delivery of material samples, attic stock, and spare parts.
    f. Requirements for demonstration and training.
    g. Preparation of Contractor's punch list.
    h. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
    i. Submittal procedures.
    j. Coordination of separate contracts.
    k. Owner's partial occupancy requirements.
    l. Installation of Owner's furniture, fixtures, and equipment.
    m. Responsibility for removing temporary facilities and controls.

4. Minutes: Entity conducting meeting will record and distribute meeting minutes.

E. Progress Meetings: Contractor will conduct progress meetings at biweekly or mutually agreed upon time l intervals.

1. Coordinate dates of meetings with preparation of payment requests.

2. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.

3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

   a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

      1) Review schedule for next period.

   b. Review present and future needs of each entity present, including the following:

      1) Interface requirements.
      2) Sequence of operations.
      3) Status of submittals.
      4) Deliveries.
      5) Off-site fabrication.
      6) Access.
      7) Site utilization.
      8) Temporary facilities and controls.
      9) Progress cleaning.
      10) Quality and work standards.
      11) Status of correction of deficient items.
      12) Field observations.
      13) Status of RFIs.
      14) Status of proposal requests.
      15) Pending changes.
      16) Status of Change Orders.
      17) Pending claims and disputes.
      18) Documentation of information for payment requests.

4. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.

   a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

F. Coordination Meetings: Contractor will conduct Project coordination meetings at regular intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.

© 2018 FGM Architects Inc.

1. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meetings shall be familiar with Project and authorized to conclude matters relating to the Work.
2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

    a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to combined Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
    b. Schedule Updating: Revise combined Contractor's construction schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
    c. Review present and future needs of each contractor present, including the following:

        1) Interface requirements.
        2) Sequence of operations.
        3) Status of submittals.
        4) Deliveries.
        5) Off-site fabrication.
        6) Access.
        7) Site utilization.
        8) Temporary facilities and controls.
        9) Work hours.
        10) Hazards and risks.
        11) Progress cleaning.
        12) Quality and work standards.
        13) Change Orders.

3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

© 2018 FGM Architects Inc.

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:

1. Contractor's construction schedule.
2. Construction schedule updating reports.
3. Daily construction reports.
4. Site condition reports.
5. Special reports.

B. Related Requirements:

1. Section 013300 "Submittal Procedures" for submitting schedules and reports.
2. Section 014000 "Quality Requirements" for submitting a schedule of tests and inspections.

1.3 DEFINITIONS

A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.

1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
2. Predecessor Activity: An activity that precedes another activity in the network.
3. Successor Activity: An activity that follows another activity in the network.

B. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.

C. Event: The starting or ending point of an activity.

D. Float: The measure of leeway in starting and completing an activity.

© 2018 FGM Architects Inc.

1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.

E. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

1.4 INFORMATIONAL SUBMITTALS

A. Format for Submittals: Submit required submittals in the following format:
1. PDF electronic file.

B. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.

1. Submit a working electronic copy of schedule, using software indicated, and labeled to comply with requirements for submittals. Include type of schedule (initial or updated) and date on label.

C. Construction Schedule Updating Reports: Submit with Applications for Payment.

D. Daily Construction Reports: Submit at monthly intervals.

E. Material Location Reports: Submit at monthly intervals.

F. Site Condition Reports: Submit at time of discovery of differing conditions.

1.5 COORDINATION

A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling of separate contractors.

B. Coordinate Contractor's construction schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.

1. Secure time commitments for performing critical elements of the Work from entities involved.
2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

© 2018 FGM Architects Inc.

PART 2 - PRODUCTS

2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of final completion.

1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.

B. Activities: Treat each story or separate area as a separate numbered activity for each main element of the Work. Comply with the following:

1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Architect.
2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
3. Submittal Review Time: Include review and resubmittal times indicated in Section 013300 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
4. Startup and Testing Time: Include no fewer than 15 days for startup and testing.
5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's's administrative procedures necessary for certification of Substantial Completion.
6. Punch List and Final Completion: Include not more than 30 days for completion of punch list items and final completion.

C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.

1. Work Restrictions: Show the effect of the following items on the schedule:

a. Coordination with existing construction.
b. Limitations of continued occupancies.
c. Uninterruptible services.
d. Partial occupancy before Substantial Completion.
e. Use of premises restrictions.
f. Provisions for future construction.
g. Seasonal variations.
h. Environmental control.

2. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:

a. Subcontract awards.
b. Submittals.

© 2018 FGM Architects Inc.

c. Purchases.
d. Mockups.
e. Fabrication.
f. Sample testing.
g. Deliveries.
h. Installation.
i. Tests and inspections.
j. Adjusting.
k. Curing.

D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion.

E. Cost Correlation: Superimpose a cost correlation timeline, indicating planned and actual costs. On the line, show planned and actual dollar volume of the Work performed as of planned and actual dates used for preparation of payment requests.

1. See Section 012900 "Payment Procedures" for cost reporting and payment procedures.

F. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:

1. Unresolved issues.
2. Unanswered Requests for Information.
3. Rejected or unreturned submittals.
4. Notations on returned submittals.

G. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, and equipment required to achieve compliance, and date by which recovery will be accomplished.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's construction schedule within 15 days of date established for the Notice to Proceed. Base schedule on the startup construction schedule and additional information received since the start of Project.

B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.

1. For construction activities that require three months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.

2.3 REPORTS

A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:

1. List of subcontractors at Project site.
2. Approximate count of personnel at Project site.
3. Equipment at Project site.
4. Material deliveries.
5. High and low temperatures and general weather conditions, including presence of rain or snow.
6. Accidents.
7. Meetings and significant decisions.
8. Unusual events (see special reports).
9. Stoppages, delays, shortages, and losses.
10. Meter readings and similar recordings.
11. Emergency procedures.
12. Orders and requests of authorities having jurisdiction.
13. Change Orders received and implemented.
14. Construction Change Directives received and implemented.
15. Services connected and disconnected.
16. Equipment or system tests and startups.
17. Partial completions and occupancies.
18. Substantial Completions authorized.

B. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

2.4 SPECIAL REPORTS

A. General: Submit special reports directly to Owner within one day(s) of an occurrence. Distribute copies of report to parties affected by the occurrence.

B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.

© 2018 FGM Architects Inc.

1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
3. As the Work progresses, indicate final completion percentage for each activity.

B. Distribution: Distribute copies of approved schedule to Architect, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.

1. Post copies in Project meeting rooms and temporary field offices.
2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 013200

© 2018 FGM Architects Inc.

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

B. Related Requirements:

1. Section 012900 "Payment Procedures" for submitting Applications for Payment and the schedule of values.
2. Section 013200 "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule.
3. Section 017823 "Operation and Maintenance Data" for submitting operation and maintenance manuals.
4. Section 017839 "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
5. Section 017900 "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.

1.3 DEFINITIONS

A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action.

B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

C. Newforma: Architect's web-based document management software required to be used in the submittal process.

© 2018 FGM Architects Inc.

1.4 ACTION SUBMITTALS

A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.

1.5 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

A. All submittals shall be made in electronic format unless paper submittals have been previously authorized in writing by the Architect.

B. All submittals shall be made using the Architect's Newforma software system. Specific information and log-in instructions will be discussed at pre-construction meetings.

C. Architect's Digital Data Files: Electronic digital data files of the Contract Drawings may be provided by Architect for Contractor's use in preparing submittals.
   1. Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
   2. Contractor shall execute a data licensing agreement in the form of FGM Disclaimer Form at the end of this section.

D. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

   1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
   2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.

      a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

E. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

   1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
   2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
   3. Resubmittal Review: Allow 15 days for review of each resubmittal.

© 2018 FGM Architects Inc.

4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 21 days for initial review of each submittal.

F. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:

1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
2. Name file with submittal number or other unique identifier, including revision identifier.

    a. Submittal number shall include the six digit specification section followed by the number of the submittal within the specification section. Re-submittals shall include the number of the resubmissions of the submittal.

        1) Example of original submittal: 098413-03, where 098413 is the specification section number, 03 represents the third submittal under Section 098412.
        2) Example of re-submittal: 098413-03r01, where 098413 is the specification section number, 03 represents the third submittal under Section 098413, and r01 represents the number of times the submittal has been re-submitted.

3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
4. Transmittal Form for Electronic Submittals: Use the Architect's Newforma program; Provide Transmittal Form containing the following information:

    a. Project name.
    b. Date.
    c. Name and address of Architect.
    d. Name of Project Coordinator.
    e. Name of Contractor.
    f. Name of firm or entity that prepared submittal.
    g. Names of subcontractor, manufacturer, and supplier.
    h. Category and type of submittal.
    i. Submittal purpose and description.
    j. Specification Section number and title.
    k. Specification paragraph number or drawing designation and generic name for each of multiple items.
    l. Drawing number and detail references, as appropriate.
    m. Location(s) where product is to be installed, as appropriate.
    n. Related physical samples submitted directly.
    o. Indication of full or partial submittal.
    p. Transmittal number numbered consecutively.
    q. Submittal and transmittal distribution record.
    r. Other necessary identification.
    s. Remarks.

© 2018 FGM Architects Inc.

5. Metadata: Include the following information as keywords in the electronic submittal file metadata:

    a. Project name.
    b. Number and title of appropriate Specification Section.
    c. Manufacturer name.
    d. Product name.

G. Options: Identify options requiring selection by Architect.

H. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.

I. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.

1. Note date and content of previous submittal.
2. Note date and content of revision in label or title block and clearly indicate extent of revision.
3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.

J. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

K. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.

1. Post electronic submittals as PDF electronic files directly to Architect's Newforma Info-Exchange specifically established for Project.

    a. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.

© 2018 FGM Architects Inc.

2. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.

    a. Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated.
    b. Provide a notarized statement on original paper copy certificates and certifications where indicated.

B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.

1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
2. Mark each copy of each submittal to show which products and options are applicable.
3. Include the following information, as applicable:

    a. Manufacturer's catalog cuts.
    b. Manufacturer's product specifications.
    c. Standard color charts.
    d. Statement of compliance with specified referenced standards.
    e. Testing by recognized testing agency.
    f. Application of testing agency labels and seals.
    g. Notation of coordination requirements.
    h. Availability and delivery time information.

4. For equipment, include the following in addition to the above, as applicable:

    a. Wiring diagrams showing factory-installed wiring.
    b. Printed performance curves.
    c. Operational range diagrams.
    d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.

5. Submit Product Data before or concurrent with Samples.
6. Submit Product Data in the following format:

    a. PDF electronic file.

C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data unless submittal based on Architect's digital data drawing files is otherwise permitted.

1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:

    a. Identification of products.

b. Schedules.
c. Compliance with specified standards.
d. Notation of coordination requirements.
e. Notation of dimensions established by field measurement.
f. Relationship and attachment to adjoining construction clearly indicated.
g. Seal and signature of professional engineer if specified.

2. Submit Shop Drawings in the following format:

a. PDF electronic file.

D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.

1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
2. Identification: Attach label on unexposed side of Samples that includes the following:

a. Generic description of Sample.
b. Product name and name of manufacturer.
c. Sample source.
d. Number and title of applicable Specification Section.
e. Specification paragraph number and generic name of each item.

3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.

a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.

5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.

a. Number of Samples: Submit one full set of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architectwill return submittal with options selected.

© 2018 FGM Architects Inc.

6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.

   a. Number of Samples: Submit three sets of Samples. Architect and Owner will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a project record sample.

   b. Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.

      1) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.

E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:

1. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
2. Manufacturer and product name, and model number if applicable.
3. Number and name of room or space.
4. Location within room or space.

5. Submit product schedule in the following format:

   a. PDF electronic file.

F. Coordination Drawing Submittals: Comply with requirements specified in Section 013100 "Project Management and Coordination."

G. Contractor's Construction Schedule: Comply with requirements specified in Section 013200 "Construction Progress Documentation."

H. Application for Payment and Schedule of Values: Comply with requirements specified in Section 012900 "Payment Procedures."

I. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Section 014000 "Quality Requirements."

J. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 017700 "Closeout Procedures."

© 2018 FGM Architects Inc.

K. Maintenance Data: Comply with requirements specified in Section 017823 "Operation and Maintenance Data."

L. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.

M. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.

N. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

O. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

P. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

Q. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.

R. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.

S. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

T. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:

1. Name of evaluation organization.
2. Date of evaluation.
3. Time period when report is in effect.
4. Product and manufacturers' names.
5. Description of product.
6. Test procedures and results.
7. Limitations of use.

U. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.

V. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

W. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.

X. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

2.2 DELEGATED-DESIGN SERVICES

A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.

B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file and three paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.

1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect .

B. Project Closeout and Maintenance Material Submittals: See requirements in Section 017700 "Closeout Procedures."

C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.

B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action, as follows**:**

a. Final-But-Restricted Release: When the Architect marks a submittal "**REVIEWED AS NOTED**", the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents. Final payment depends on that compliance. In this option, the Architect may require a re-submittal by checking the "**REVISE AND RESUBMIT**" box or not by leaving the "**REVISE AND RESUBMIT**" box blank.

b. Returned Rejected: When the Architect marks a submittal "Resubmit" or "**REJECTED**" do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the notations; resubmit without delay. Repeat if necessary to obtain different action mark.

c. Acknowledgement only: When the Architect marks a submittal "**INFORMATION ONLY**", the Architect acknowledges receipt. Submittal will be returned for record only.

C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.

D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.

E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

© 2018 FGM Architects Inc.

3.3 USE OF ARCHITECT'S CAD DRAWINGS

A. The Architect may, at his sole discretion, allow use of CAD files of architectural plan backgrounds, prepared by the Architect, for the convenience of the Contractor subject to payment of the following handling fee and agreement to the following disclaimer. Architectural plan backgrounds are defined as floor plans containing room layout, room names, column centerlines, door swings, ceiling grid and light fixtures.

B. Disclaimer: Provide a written request on the user's letterhead including the following disclaimer:

3.4 DISCLAIMER

A. It is understood and agreed that the calculations, drawings, and specifications prepared pursuant to this agreement, whether in hard copy or machine readable form, are instruments of professional architectural service intended for one time use in the construction of this project. They are and shall remain the property of FGM Architects Inc. The contractor may retain copies, including copies stored on magnetic tape or disk for information and reference in connection with the occupancy and use of the project.

B. In the case that any calculations, drawings and specifications in hard copy or machine readable form are provided to the contractor or any of its subcontractors, materialmen or suppliers, or those contracting with any of them in connection with the Project (together "Contractor"), it is understood that such calculations, drawings and specifications have been furnished at the request of the Owner and that the Contractor has read and understood the limitations on the Owner's rights in connection with such calculations, drawings and specifications as instruments of service.

C. Because of the possibility that information and data delivered in machine readable form may be altered, whether inadvertently or otherwise, FGM Architects Inc. reserves the right to retain the original tapes/disks and to remove from copies provided to contractor all identification reflecting the involvement of FGM Architects Inc. in their preparation. FGM Architects Inc. also reserves the right to retain hard copy originals of all project documentation delivered to the contractor in machine readable form, which originals shall be referred to and shall govern in the event of any inconsistency between the two.

D. The contractor understands that the automated conversion of information and data from the system and format used by FGM Architects Inc. to an alternate system or format or version cannot be accomplished without the introduction of inexactitudes, anomalies, and errors. In the event project documentation provided to the contractor in machine readable form is so converted, the contractor agrees to assume all risks associated therewith and, to the fullest extent permitted by law, to defend, and hold harmless and indemnify FGM Architects Inc. from and against all claims, liabilities, losses, damages, and costs, including but not limited to attorney's fees, arising therefrom or in connection therewith.

© 2018 FGM Architects Inc.

E. The contractor recognizes that changes or modifications to FGM Architects Inc. instruments of professional service introduced by anyone other than FGM Architects Inc. may result in adverse consequences which FGM Architects Inc. can neither predict nor control. Therefore, and in consideration of FGM Architects Inc.'s agreement to deliver its instruments of professional service in machine readable form, the contractor agrees, to the fullest extent permitted by law, to defend, and hold harmless and indemnify FGM Architects Inc. from and against all claims, liabilities, losses, damages, and costs, including but not limited to attorney's fees, arising out of or in any way connected with the modification, misinterpretation, misuse, or reuse by others of the machine readable information and data provided by FGM Architects Inc. under this agreement. The foregoing indemnification applies, without limitation, to any use of the project documentation on other projects, for additions to this project, or for completion of this project by others, excepting only such use as may be authorized, in writing, by FGM Architects Inc.

F. The Contractor acknowledges and agrees that it has received such instruments of service with the full understanding that they are the property of FGM Architects Inc., as described in the preceding paragraphs of this "Disclaimer" and that FGM Architects Inc. owes no duty or obligation to the Contractor with respect to the adequacy, suitability, correctness or usability of such instruments of service. Contractor also agrees that it is to look solely to its rights against the Owner, if any, in connection with any instruments of service or calculations, drawings or specifications provided to it by the Owner.

3.5 PROVISIONS RELATING TO THESE SPECIFIC DRAWINGS

A. The computer drawing data contained in this/these files is subject to the following provisions:

1. These data are only valid as to the completeness of the designs as of this date. (See the dates on the disk label and on the magnetic file. If these dates differ due to changes made in the file after it was delivered to you, the date on the disk label will be controlling.) The designs may continue to be developed and updated as project requirements justify.
2. FGM Architects Inc. is delivering these files for the express purpose of REVIEW.
3. These data insertions will only be utilized for coordination of architectural appurtenances and related dimensioning.
4. Any other use of the data on this/these files and/or disks must be further authorized in writing by FGM Architects Inc.

Accepted by: _____(signature)
Title: _____
Company: _____

END OF SECTION 013300

BIM AND ELECTRONIC DOCUMENTS TRANSFER TERMS AND CONDITIONS

FGM Architects Inc. (hereinafter the “Architect”) may, at its sole discretion, provide for use to Contractor from time to time upon Contractor’s request and for Contractor’s convenience, Building Information Models (hereinafter referred to as “BIM”) and/or CAD files, including plans, details, and schedules in electronic format, prepared by the Architect, subject to and upon the following terms and conditions which shall have full force and effect as of the date the electronic documents are provided.

TERMS AND CONDITIONS

The Contractor understands and agrees that the design documents, calculations, drawings, details, schedules, specifications and other information prepared by the Architect in electronic format, whether incorporated in BIM or in CAD format (hereinafter collectively referred to as “Electronic Instruments of Service”), are instruments of professional architectural service intended for use only in connection with the construction of this Project. The Electronic Instruments of Service are and shall remain the property of FGM Architects Inc. The Contractor may use and retain copies of the Electronic Instruments of Service provided by the Architect in connection with Contractor’s pre-construction and construction services for the Project. The Electronic Instruments of Service are provided for the sole purpose of communicating the state of the design to date, and Contractor acknowledges that the Electronic Instruments of Service may not be final, complete or accurate. Contractor further acknowledges and agrees that any use by Contractor of the Electronic Instruments of Service provided by the Architect is at Contractor’s sole risk and responsibility. Contractor acknowledges and agrees that the official Instruments of Service are the drawings and specifications signed and sealed by the Architect and its consultants in paper format.

In the case that the Electronic Instruments of Service are provided to the Contractor or any of its subcontractors, materialmen or suppliers, or those contracting with any of them in connection with the Project (together "Contractor"), it is understood that such Electronic Instruments of Service have been furnished at the request of the Owner or Contractor, and that the Contractor has read and understood the limitations, terms and conditions governing the use of Electronic Instruments of Service as set forth in the Contract Documents and herein.

Because of the possibility that the Electronic Instruments of Service, and other information and data delivered in machine readable form may be subject to alteration, deterioration, incompatibility, translation or readability issues, whether inadvertently or otherwise, Contractor acknowledges and agrees that Architect shall have no responsibility or liability arising out of or in connection with the completeness or accuracy of the Electronic Instruments of Service, information and data, and any use by the Contractor of same is at Contractor’s sole risk and responsibility. FGM Architects Inc. reserves the right to retain hard copy originals of all project documentation delivered to the Contractor in machine readable form, which originals shall be referred to and shall govern in the event of any inconsistency between the two.

The Contractor understands that the use and automated conversion of information and data in the Electronic Instruments of Service provided by FGM Architects Inc. to a derivative work, model. or alternate system or format or version by the Contractor may not be accomplished

without the introduction of inexactitudes, anomalies, and errors. In the event the Electronic Instruments of Service provided to the Contractor are so used or converted, the Contractor agrees to assume all risks associated therewith and releases FGM Architects Inc. from such responsibility and, to the fullest extent permitted by law, Contractor shall defend, and hold harmless and indemnify FGM Architects Inc. from and against all claims, liabilities, losses, damages, and costs, including but not limited to attorney's fees, arising therefrom or in connection therewith.

The Contractor acknowledges that changes or modifications to the Electronic Instruments of Service introduced by anyone other than FGM Architects Inc. may result in adverse consequences which FGM Architects Inc. can neither predict nor control. Therefore, and in consideration of FGM Architects Inc.'s provision of such Electronic Instruments of Service for Contractor's use and convenience. The Contractor agrees, to the fullest extent permitted by law, to defend, and hold harmless and indemnify FGM Architects Inc. from and against all claims, liabilities, losses, damages, and costs, including but not limited to attorney's fees, arising out of or in any way connected with the use, modification, interpretation, misuse, or reuse by the Contractor or others to whom it has provided any Electronic Instrument of Service. The foregoing indemnification applies, without limitation, to the use of or creation of derivative works from the Electronic Instruments of Service on other projects, for additions to this Project, or for completion of this Project by others, excepting only such use as may be authorized, in writing, by FGM Architects Inc.

The Contractor acknowledges and agrees that it has received the Electronic Instruments of Service with the full understanding that they are the property of FGM Architects Inc., as described herein and that FGM Architects Inc. owes no duty or obligation to the Contractor with respect to the adequacy, suitability, correctness or usability of the Electronic Instruments of Service.

ADDITIONAL PROVISIONS RELATING TO TRANSFER OF ELECTRONIC INSTRUMENTS OF SERVICE IN CAD FORMAT

The computer drawing data contained in this/these files is subject to the following provisions:

The data is only valid as to the stage of completion of the designs as of the date it is provided. (See the dates on the disk label and on the magnetic file. If these dates differ due to changes made in the file after it was delivered to you, the date on the disk label will be controlling. The designs may continue to be developed, changed, and updated as project requirements justify.

FGM Architects Inc. is delivering these files for the express purpose of REVIEW.

These data insertions will only be utilized for coordination of architectural

appurtenances and related dimensioning.

Any other use of the data on this/these files and/or disks must be further authorized in writing by FGM Architects Inc.

Accepted by: _____(signature)
Title: _____
Company: _____

© 2018 FGM Architects Inc.

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for quality assurance and quality control.

B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.

1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
3. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
4. Specific test and inspection requirements are not specified in this Section.

1.3 DEFINITIONS

A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.

B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.

© 2018 FGM Architects Inc.

C. Mockups: Full-size physical assemblies that are constructed on-site. Mockups are constructed to verify selections made under Sample submittals; to demonstrate aesthetic effects and, where indicated, qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.

1. Integrated Exterior Mockups: Mockups of the exterior envelope erected separately from the building but on Project site, consisting of multiple products, assemblies, and subassemblies.

D. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.

E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.

F. Source Quality-Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.

G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.

H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.

I. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.

1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).

J. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.4 CONFLICTING REQUIREMENTS

A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for a decision before proceeding.

B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.5 INFORMATIONAL SUBMITTALS

A. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems:

1. Seismic-force-resisting system, designated seismic system, or component listed in the designated seismic system quality-assurance plan prepared by Architect.
2. Main wind-force-resisting system or a wind-resisting component listed in the wind-force-resisting system quality-assurance plan prepared by Architect.

B. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.

C. Schedule of Tests and Inspections: Prepare in tabular form and include the following:

1. Specification Section number and title.
2. Entity responsible for performing tests and inspections.
3. Description of test and inspection.
4. Identification of applicable standards.
5. Identification of test and inspection methods.
6. Number of tests and inspections required.
7. Time schedule or time span for tests and inspections.
8. Requirements for obtaining samples.
9. Unique characteristics of each quality-control service.

1.6 CONTRACTOR'S QUALITY-CONTROL PLAN

A. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.

B. Testing and Inspection: In quality-control plan, include a comprehensive schedule of Work requiring testing or inspection, including the following:

1. Contractor-performed tests and inspections including subcontractor-performed tests and inspections. Include required tests and inspections and Contractor-elected tests and inspections.
2. Special inspections required by authorities having jurisdiction and indicated on the "Statement of Special Inspections."

© 2018 FGM Architects Inc.

3. Owner-performed tests and inspections indicated in the Contract Documents.

C. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.

D. Monitoring and Documentation: Maintain testing and inspection reports including log of approved and rejected results. Include work Architect has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

1.7 REPORTS AND DOCUMENTS

A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:

1. Date of issue.
2. Project title and number.
3. Name, address, and telephone number of testing agency.
4. Dates and locations of samples and tests or inspections.
5. Names of individuals making tests and inspections.
6. Description of the Work and test and inspection method.
7. Identification of product and Specification Section.
8. Complete test or inspection data.
9. Test and inspection results and an interpretation of test results.
10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
12. Name and signature of laboratory inspector.
13. Recommendations on retesting and reinspecting.

B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:

1. Name, address, and telephone number of technical representative making report.
2. Statement on condition of substrates and their acceptability for installation of product.
3. Statement that products at Project site comply with requirements.
4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
6. Statement whether conditions, products, and installation will affect warranty.
7. Other required items indicated in individual Specification Sections.

© 2018 FGM Architects Inc.

C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.8 QUALITY ASSURANCE

A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.

B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.

F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.

1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.

G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329 and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.

1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.

© 2018 FGM Architects Inc.

H. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

I. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

J. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:

1. Contractor responsibilities include the following:

    a. Provide test specimens representative of proposed products and construction.
    b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
    c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
    d. Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.
    e. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
    f. When testing is complete, remove test specimens, assemblies, do not reuse products on Project.

2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.

K. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:

1. Build mockups in location and of size indicated or, if not indicated, as directed by Architect.
2. Notify Architect seven days in advance of dates and times when mockups will be constructed.
3. Employ supervisory personnel who will oversee mockup construction. Employ workers that will be employed during the construction at Project.
4. Demonstrate the proposed range of aesthetic effects and workmanship.
5. Obtain Architect's approval of mockups before starting work, fabrication, or construction.

    a. Allow seven days for initial review and each re-review of each mockup.

6. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
7. Demolish and remove mockups when directed unless otherwise indicated.

L. Integrated Exterior Mockups: Construct integrated exterior mockup according to approved Shop Drawings. Coordinate installation of exterior envelope materials and products for which mockups are required in individual Specification Sections, along with supporting materials.

1.9 QUALITY CONTROL

A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.

1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
2. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.

B. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.

1. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.

2. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.

    a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.

3. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
4. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
5. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
6. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.

C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 013300 "Submittal Procedures."

© 2018 FGM Architects Inc.

D. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.

E. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.

F. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.

1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
6. Do not perform any duties of Contractor.

G. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:

1. Access to the Work.
2. Incidental labor and facilities necessary to facilitate tests and inspections.
3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
4. Facilities for storage and field curing of test samples.
5. Delivery of samples to testing agencies.
6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
7. Security and protection for samples and for testing and inspecting equipment at Project site.

H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.

1. Schedule times for tests, inspections, obtaining samples, and similar activities.

© 2018 FGM Architects Inc.

I. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents. Coordinate and submit concurrently with Contractor's construction schedule. Update as the Work progresses.

1. Distribution: Distribute schedule to Owner, Architect, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

1.10 SPECIAL TESTS AND INSPECTIONS

A. Special Tests and Inspections: Engage a qualified testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, and as follows:

1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviews the completeness and adequacy of those procedures to perform the Work.
2. Notifying Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect with copy to Contractor and to authorities having jurisdiction.
4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
6. Retesting and reinspecting corrected work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:

1. Date test or inspection was conducted.
2. Description of the Work tested or inspected.
3. Date test or inspection results were transmitted to Architect.
4. Identification of testing agency or special inspector conducting test or inspection.

B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.

© 2018 FGM Architects Inc.

3.2 REPAIR AND PROTECTION

A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Section 017300 "Execution."

B. Protect construction exposed by or for quality-control service activities.

C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

© 2018 FGM Architects Inc.

SECTION 014200 - REFERENCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 DEFINITIONS

A. General: Basic Contract definitions are included in the Conditions of the Contract.

B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.

C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."

D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."

E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.

F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.

G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.

H. "Provide": Furnish and install, complete and ready for the intended use.

I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

© 2018 FGM Architects Inc.

1.3 INDUSTRY STANDARDS

A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.

C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.

1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.4 ABBREVIATIONS AND ACRONYMS

A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."

B. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.

1. AABC - Associated Air Balance Council; www.aabc.com.
2. AAMA - American Architectural Manufacturers Association; www.aamanet.org.
3. AAPFCO - Association of American Plant Food Control Officials; www.aapfco.org.
4. AASHTO - American Association of State Highway and Transportation Officials; www.transportation.org.
5. AATCC - American Association of Textile Chemists and Colorists; www.aatcc.org.
6. ABMA - American Bearing Manufacturers Association; www.americanbearings.org.
7. ABMA - American Boiler Manufacturers Association; www.abma.com.
8. ACI - American Concrete Institute; (Formerly: ACI International); www.abma.com.
9. ACPA - American Concrete Pipe Association; www.concrete-pipe.org.
10. AEIC - Association of Edison Illuminating Companies, Inc. (The); www.aeic.org.
11. AF&PA - American Forest & Paper Association; www.afandpa.org.
12. AGA - American Gas Association; www.aga.org.
13. AHAM - Association of Home Appliance Manufacturers; www.aham.org.

© 2018 FGM Architects Inc.

14. AHRI - Air-Conditioning, Heating, and Refrigeration Institute (The); www.ahrinet.org.
15. AI - Asphalt Institute; www.asphaltinstitute.org.
16. AIA - American Institute of Architects (The); www.aia.org.
17. AISC - American Institute of Steel Construction; www.aisc.org.
18. AISI - American Iron and Steel Institute; www.steel.org.
19. AITC - American Institute of Timber Construction; www.aitc-glulam.org.
20. AMCA - Air Movement and Control Association International, Inc.; www.amca.org.
21. ANSI - American National Standards Institute; www.ansi.org.
22. AOSA - Association of Official Seed Analysts, Inc.; www.aosaseed.com.
23. APA - APA - The Engineered Wood Association; www.apawood.org.
24. APA - Architectural Precast Association; www.archprecast.org.
25. API - American Petroleum Institute; www.api.org.
26. ARI - Air-Conditioning & Refrigeration Institute; (See AHRI).
27. ARI - American Refrigeration Institute; (See AHRI).
28. ARMA - Asphalt Roofing Manufacturers Association; www.asphaltroofing.org.
29. ASCE - American Society of Civil Engineers; www.asce.org.
30. ASCE/SEI - American Society of Civil Engineers/Structural Engineering Institute; (See ASCE).
31. ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers; www.ashrae.org.
32. ASME - ASME International; (American Society of Mechanical Engineers); www.asme.org.
33. ASSE - American Society of Safety Engineers (The); www.asse.org.
34. ASSE - American Society of Sanitary Engineering; www.asse-plumbing.org.
35. ASTM - ASTM International; www.astm.org.
36. ATIS - Alliance for Telecommunications Industry Solutions; www.atis.org.
37. AWEA - American Wind Energy Association; www.awea.org.
38. AWI - Architectural Woodwork Institute; www.awinet.org.
39. AWMAC - Architectural Woodwork Manufacturers Association of Canada; www.awmac.com.
40. AWPA - American Wood Protection Association; www.awpa.com.
41. AWS - American Welding Society; www.aws.org.
42. AWWA - American Water Works Association; www.awwa.org.
43. BHMA - Builders Hardware Manufacturers Association; www.buildershardware.com.
44. BIA - Brick Industry Association (The); www.gobrick.com.
45. BICSI - BICSI, Inc.; www.bicsi.org.
46. BIFMA - BIFMA International; (Business and Institutional Furniture Manufacturer's Association); www.bifma.org.
47. BISSC - Baking Industry Sanitation Standards Committee; www.bissc.org.
48. BWF - Badminton World Federation; (Formerly: International Badminton Federation); www.bissc.org.
49. CDA - Copper Development Association; www.copper.org.
50. CEA - Canadian Electricity Association; www.electricity.ca.
51. CEA - Consumer Electronics Association; www.ce.org.
52. CFFA - Chemical Fabrics and Film Association, Inc.; www.chemicalfabricsandfilm.com.
53. CFSEI - Cold-Formed Steel Engineers Institute; www.cfsei.org.

© 2018 FGM Architects Inc.

54. CGA - Compressed Gas Association; www.cganet.com.
55. CIMA - Cellulose Insulation Manufacturers Association; www.cellulose.org.
56. CISCA - Ceilings & Interior Systems Construction Association; www.cisca.org.
57. CISPI - Cast Iron Soil Pipe Institute; www.cispi.org.
58. CLFMI - Chain Link Fence Manufacturers Institute; www.chainlinkinfo.org.
59. CPA - Composite Panel Association; www.pbmdf.com.
60. CRI - Carpet and Rug Institute (The); www.carpet-rug.org.
61. CRRC - Cool Roof Rating Council; www.coolroofs.org.
62. CRSI - Concrete Reinforcing Steel Institute; www.crsi.org.
63. CSA - Canadian Standards Association; www.csa.ca.
64. CSA - CSA International; (Formerly: IAS - International Approval Services); www.csa-international.org.
65. CSI - Construction Specifications Institute (The); www.csinet.org.
66. CSSB - Cedar Shake & Shingle Bureau; www.cedarbureau.org.
67. CTI - Cooling Technology Institute; (Formerly: Cooling Tower Institute); www.cti.org.
68. CWC - Composite Wood Council; (See CPA).
69. DASMA - Door and Access Systems Manufacturers Association; www.dasma.com.
70. DHI - Door and Hardware Institute; www.dhi.org.
71. ECA - Electronic Components Association; (See ECIA).
72. ECAMA - Electronic Components Assemblies & Materials Association; (See ECIA).
73. ECIA - Electronic Components Industry Association; www.eciaonline.org.
74. EIA - Electronic Industries Alliance; (See TIA).
75. EIMA - EIFS Industry Members Association; www.eima.com.
76. EJMA - Expansion Joint Manufacturers Association, Inc.; www.ejma.org.
77. ESD - ESD Association; (Electrostatic Discharge Association); www.esda.org.
78. ESTA - Entertainment Services and Technology Association; (See PLASA).
79. EVO - Efficiency Valuation Organization; www.evo-world.org.
80. FCI - Fluid Controls Institute; www.fluidcontrolsinstitute.org.
81. FIBA - Federation Internationale de Basketball; (The International Basketball Federation); www.fiba.com.
82. FIVB - Federation Internationale de Volleyball; (The International Volleyball Federation); www.fivb.org.
83. FM Approvals - FM Approvals LLC; www.fmglobal.com.
84. FM Global - FM Global; (Formerly: FMG - FM Global); www.fmglobal.com.
85. FRSA - Florida Roofing, Sheet Metal & Air Conditioning Contractors Association, Inc.; www.floridaroof.com.
86. FSA - Fluid Sealing Association; www.fluidsealing.com.
87. FSC - Forest Stewardship Council U.S.; www.fscus.org.
88. GA - Gypsum Association; www.gypsum.org.
89. GANA - Glass Association of North America; www.glasswebsite.com.
90. GS - Green Seal; www.greenseal.org.
91. HI - Hydraulic Institute; www.pumps.org.
92. HI/GAMA - Hydronics Institute/Gas Appliance Manufacturers Association; (See AHRI).
93. HMMA - Hollow Metal Manufacturers Association; (See NAAMM).
94. HPVA - Hardwood Plywood & Veneer Association; www.hpva.org.
95. HPW - H. P. White Laboratory, Inc.; www.hpwhite.com.

© 2018 FGM Architects Inc.

96. IAPSC - International Association of Professional Security Consultants; www.iapsc.org.
97. IAS - International Accreditation Service; www.iasonline.org.
98. IAS - International Approval Services; (See CSA).
99. ICBO - International Conference of Building Officials; (See ICC).
100. ICC - International Code Council; www.iccsafe.org.
101. ICEA - Insulated Cable Engineers Association, Inc.; www.icea.net.
102. ICPA - International Cast Polymer Alliance; www.icpa-hq.org.
103. ICRI - International Concrete Repair Institute, Inc.; www.icri.org.
104. IEC - International Electrotechnical Commission; www.iec.ch.
105. IEEE - Institute of Electrical and Electronics Engineers, Inc. (The); www.ieee.org.
106. IES - Illuminating Engineering Society; (Formerly: Illuminating Engineering Society of North America); www.ies.org.
107. IESNA - Illuminating Engineering Society of North America; (See IES).
108. IEST - Institute of Environmental Sciences and Technology; www.iest.org.
109. IGMA - Insulating Glass Manufacturers Alliance; www.igmaonline.org.
110. IGSHPA - International Ground Source Heat Pump Association; www.igshpa.okstate.edu.
111. ILI - Indiana Limestone Institute of America, Inc.; www.iliai.com.
112. Intertek - Intertek Group; (Formerly: ETL SEMCO; Intertek Testing Service NA); www.intertek.com.
113. ISA - International Society of Automation (The); (Formerly: Instrumentation, Systems, and Automation Society); www.isa.org.
114. ISAS - Instrumentation, Systems, and Automation Society (The); (See ISA).
115. ISFA - International Surface Fabricators Association; (Formerly: International Solid Surface Fabricators Association); www.isfanow.org.
116. ISO - International Organization for Standardization; www.iso.org.
117. ISSFA - International Solid Surface Fabricators Association; (See ISFA).
118. ITU - International Telecommunication Union; www.itu.int/home.
119. KCMA - Kitchen Cabinet Manufacturers Association; www.kcma.org.
120. LMA - Laminating Materials Association; (See CPA).
121. LPI - Lightning Protection Institute; www.lightning.org.
122. MBMA - Metal Building Manufacturers Association; www.mbma.com.
123. MCA - Metal Construction Association; www.metalconstruction.org.
124. MFMA - Maple Flooring Manufacturers Association, Inc.; www.maplefloor.org.
125. MFMA - Metal Framing Manufacturers Association, Inc.; www.metalframingmfg.org.
126. MHIA - Material Handling Industry of America; www.mhia.org.
127. MIA - Marble Institute of America; www.marble-institute.com.
128. MMPA - Moulding & Millwork Producers Association; www.wmmpa.com.
129. MPI - Master Painters Institute; www.paintinfo.com.
130. MSS - Manufacturers Standardization Society of The Valve and Fittings Industry Inc.; www.mss-hq.org.
131. NAAMM - National Association of Architectural Metal Manufacturers; www.naamm.org.
132. NACE - NACE International; (National Association of Corrosion Engineers International); www.nace.org.
133. NADCA - National Air Duct Cleaners Association; www.nadca.com.

© 2018 FGM Architects Inc.

134. NAIMA - North American Insulation Manufacturers Association; www.naima.orgwww.naima.org.
135. NBGQA - National Building Granite Quarries Association, Inc.; www.nbgqa.com.
136. NBI - New Buildings Institute; www.newbuildings.org.
137. NCAA - National Collegiate Athletic Association (The); www.ncaa.org.
138. NCMA - National Concrete Masonry Association; www.ncma.org.
139. NEBB - National Environmental Balancing Bureau; www.nebb.org.
140. NECA - National Electrical Contractors Association; www.necanet.org.
141. NeLMA - Northeastern Lumber Manufacturers Association; www.nelma.org.
142. NEMA - National Electrical Manufacturers Association; www.nema.org.
143. NETA - InterNational Electrical Testing Association; www.netaworld.org.
144. NFHS - National Federation of State High School Associations; www.nfhs.org.
145. NFPA - National Fire Protection Association; www.nfpa.org.
146. NFPA - NFPA International; (See NFPA).
147. NFRC - National Fenestration Rating Council; www.nfrc.org.
148. NHLA - National Hardwood Lumber Association; www.nhla.com.
149. NLGA - National Lumber Grades Authority; www.nlga.org.
150. NOFMA - National Oak Flooring Manufacturers Association; (See NWFA).
151. NOMMA - National Ornamental & Miscellaneous Metals Association; www.nomma.org.
152. NRCA - National Roofing Contractors Association; www.nrca.net.
153. NRMCA - National Ready Mixed Concrete Association; www.nrmca.org.
154. NSF - NSF International; www.nsf.org.
155. NSPE - National Society of Professional Engineers; www.nspe.org.
156. NSSGA - National Stone, Sand & Gravel Association; www.nssga.org.
157. NTMA - National Terrazzo & Mosaic Association, Inc. (The); www.ntma.com.
158. NWFA - National Wood Flooring Association; www.nwfa.org.
159. PCI - Precast/Prestressed Concrete Institute; www.pci.org.
160. PDI - Plumbing & Drainage Institute; www.pdionline.org.
161. PLASA - PLASA; (Formerly: ESTA - Entertainment Services and Technology Association); www.plasa.org.
162. RCSC - Research Council on Structural Connections; www.boltcouncil.org.
163. RFCI - Resilient Floor Covering Institute; www.rfci.com.
164. RIS - Redwood Inspection Service; www.redwoodinspection.com.
165. SAE - SAE International; www.sae.org.
166. SCTE - Society of Cable Telecommunications Engineers; www.scte.org.
167. SDI - Steel Deck Institute; www.sdi.org.
168. SDI - Steel Door Institute; www.steeldoor.org.
169. SEFA - Scientific Equipment and Furniture Association (The); www.sefalabs.com.
170. SEI/ASCE - Structural Engineering Institute/American Society of Civil Engineers; (See ASCE).
171. SIA - Security Industry Association; www.siaonline.org.
172. SJI - Steel Joist Institute; www.steeljoist.org.
173. SMA - Screen Manufacturers Association; www.smainfo.org.
174. SMACNA - Sheet Metal and Air Conditioning Contractors' National Association; www.smacna.org.
175. SMPTE - Society of Motion Picture and Television Engineers; www.smpte.org.
176. SPFA - Spray Polyurethane Foam Alliance; www.sprayfoam.org.

© 2018 FGM Architects Inc.

177. SPIB - Southern Pine Inspection Bureau; www.spib.org.
178. SPRI - Single Ply Roofing Industry; www.spri.org.
179. SRCC - Solar Rating & Certification Corporation; www.solar-rating.org.
180. SSINA - Specialty Steel Industry of North America; www.ssina.com.
181. SSPC - SSPC: The Society for Protective Coatings; www.sspc.org.
182. STI - Steel Tank Institute; www.steeltank.com.
183. SWI - Steel Window Institute; www.steelwindows.com.
184. SWPA - Submersible Wastewater Pump Association; www.swpa.org.
185. TCA - Tilt-Up Concrete Association; www.tilt-up.org.
186. TCNA - Tile Council of North America, Inc.; www.tileusa.com.
187. TEMA - Tubular Exchanger Manufacturers Association, Inc.; www.tema.org.
188. TIA - Telecommunications Industry Association (The); (Formerly: TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance); www.tiaonline.org.
189. TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance; (See TIA).
190. TMS - The Masonry Society; www.masonrysociety.org.
191. TPI - Truss Plate Institute; www.tpinst.org.
192. TPI - Turfgrass Producers International; www.turfgrasssod.org.
193. TRI - Tile Roofing Institute; www.tileroofing.org.
194. UL - Underwriters Laboratories Inc.; www.ul.com.
195. UNI - Uni-Bell PVC Pipe Association; www.uni-bell.org.
196. USAV - USA Volleyball; www.usavolleyball.org.
197. USGBC - U.S. Green Building Council; www.usgbc.org.
198. USITT - United States Institute for Theatre Technology, Inc.; www.usitt.org.
199. WASTEC - Waste Equipment Technology Association; www.wastec.org.
200. WCLIB - West Coast Lumber Inspection Bureau; www.wclib.org.
201. WCMA - Window Covering Manufacturers Association; www.wcmanet.org.
202. WDMA - Window & Door Manufacturers Association; www.wdma.com.
203. WI - Woodwork Institute; www.wicnet.org.
204. WSRCA - Western States Roofing Contractors Association; www.wsrca.com.
205. WWPA - Western Wood Products Association; www.wwpa.org.

C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is believed to be accurate as of the date of the Contract Documents.

1. DIN - Deutsches Institut fur Normung e.V.; www.din.de.
2. IAPMO - International Association of Plumbing and Mechanical Officials; www.iapmo.org.
3. ICC - International Code Council; www.iccsafe.org.
4. ICC-ES - ICC Evaluation Service, LLC; www.icc-es.org.

D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Information is subject to change and is up to date as of the date of the Contract Documents.

1. COE - Army Corps of Engineers; www.usace.army.mil.
2. CPSC - Consumer Product Safety Commission; www.cpsc.gov.

3. DOC - Department of Commerce; National Institute of Standards and Technology; www.nist.gov.
4. DOD - Department of Defense; www.quicksearch.dla.mil.
5. DOE - Department of Energy; www.energy.gov.
6. EPA - Environmental Protection Agency; www.epa.gov.
7. FAA - Federal Aviation Administration; www.faa.gov.
8. FG - Federal Government Publications; www.gpo.gov.
9. GSA - General Services Administration; www.gsa.gov.
10. HUD - Department of Housing and Urban Development; www.hud.gov.
11. LBL - Lawrence Berkeley National Laboratory; Environmental Energy Technologies Division; www.eetd.lbl.gov.
12. OSHA - Occupational Safety & Health Administration; www.osha.gov.
13. SD - Department of State; www.state.gov.
14. TRB - Transportation Research Board; National Cooperative Highway Research Program; The National Academies; www.trb.org.
15. USDA - Department of Agriculture; Agriculture Research Service; U.S. Salinity Laboratory; www.ars.usda.gov.
16. USDA - Department of Agriculture; Rural Utilities Service; www.usda.gov.
17. USDJ - Department of Justice; Office of Justice Programs; National Institute of Justice; www.ojp.usdoj.gov.
18. USP - U.S. Pharmacopeial Convention; www.usp.org.
19. USPS - United States Postal Service; www.usps.com.

E. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.

1. CFR - Code of Federal Regulations; Available from Government Printing Office; www.gpo.gov/fdsys.
2. DOD - Department of Defense; Military Specifications and Standards; Available from DLA Document Services; www.quicksearch.dla.mil.
3. DSCC - Defense Supply Center Columbus; (See FS).
4. FED-STD - Federal Standard; (See FS).
5. FS - Federal Specification; Available from DLA Document Services; www.quicksearch.dla.mil.

    a. Available from Defense Standardization Program; www.dsp.dla.mil.
    b. Available from General Services Administration; www.gsa.gov.
    c. Available from National Institute of Building Sciences/Whole Building Design Guide; www.wbdg.org/ccb.

6. MILSPEC - Military Specification and Standards; (See DOD).
7. USAB - United States Access Board; www.access-board.gov.
8. USATBCB - U.S. Architectural & Transportation Barriers Compliance Board; (See USAB).

F. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.

© 2018 FGM Architects Inc.

1. CBHF; State of California; Department of Consumer Affairs; Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation; www.bearhfti.ca.gov.
2. CCR; California Code of Regulations; Office of Administrative Law; California Title 24 Energy Code; www.calregs.com.
3. CDHS; California Department of Health Services; (See CDPH).
4. CDPH; California Department of Public Health; Indoor Air Quality Program; www.cal-iaq.org.
5. CPUC; California Public Utilities Commission; www.cpuc.ca.gov.
6. SCAQMD; South Coast Air Quality Management District; www.aqmd.gov.
7. TFS; Texas A&M Forest Service; Sustainable Forestry and Economic Development; www.txforestservice.tamu.edu.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 014200

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

B. Related Requirements:

1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.

1.3 USE CHARGES

A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, testing agencies, and authorities having jurisdiction.

B. Water and Sewer Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

C. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.4 INFORMATIONAL SUBMITTALS

A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

B. Erosion- and Sedimentation-Control Plan: Show compliance with requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.

© 2018 FGM Architects Inc.

C. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.

D. Moisture-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage.

1. Describe delivery, handling, and storage provisions for materials subject to water absorption or water damage.
2. Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water-damaged Work.

1.5 QUALITY ASSURANCE

A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

C. Accessible Temporary Egress: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.

1.6 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Portable Chain-Link Fencing: Minimum 2-inch, 0.148-inch- thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts; minimum 2-3/8-inch- OD line posts and 2-7/8-inch- OD corner and pull posts, with 1-5/8-inch- OD top and bottom rails. Provide galvanized-steel bases for supporting posts.

B. Polyethylene Sheet: Reinforced, fire-resistive sheet, 10-mil minimum thickness, with flame-spread rating of 15 or less per ASTM E 84 and passing NFPA 701 Test Method 2.

© 2018 FGM Architects Inc.

2.2 TEMPORARY FACILITIES

A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.

B. Common-Use Field Office: Of sufficient size to accommodate needs of Owner, Architect, and construction personnel office activities and to accommodate Project meetings specified in other Division 01 Sections. Keep office clean and orderly. Furnish and equip offices as follows:

1. Furniture required for Project-site documents including file cabinets, plan tables, plan racks, and bookcases.
2. Conference room of sufficient size to accommodate meetings of 10 individuals. Provide electrical power service and 120-V ac duplex receptacles, with no fewer than one receptacle on each wall. Furnish room with conference table, chairs, and 4-foot- square tack and marker boards.
3. Drinking water and private toilet.
4. Coffee machine and supplies.
5. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72 deg F.
6. Lighting fixtures capable of maintaining average illumination of 20 fc at desk height.

C. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.

1. Store combustible materials apart from building.

2.3 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.

1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
2. Heating Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.

© 2018 FGM Architects Inc.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.

1. Locate facilities to limit site disturbance as specified in Section 011000 "Summary."

B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

A. General: Install temporary service or connect to existing service.

1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.

B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.

1. Connect temporary sewers to municipal system as directed by authorities having jurisdiction.

C. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.

D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.

E. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.

F. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.

© 2018 FGM Architects Inc.

1. Provide dehumidification systems when required to reduce substrate moisture levels to level required to allow installation or application of finishes.

G. Electric Power Service: Connect to Owner's existing electric power service. Maintain equipment in a condition acceptable to Owner.

H. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.

1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

I. Electronic Communication Service: Provide a desktop computer in the primary field office adequate for use by Architect and Owner to access Project electronic documents and maintain electronic communications. Equip computer with not less than the following:

3.3 SUPPORT FACILITIES INSTALLATION

A. General: Comply with the following:

1. Provide construction for temporary offices, shops, and sheds located within construction area or within 30 feet of building lines that is noncombustible according to ASTM E 136. Comply with NFPA 241.
2. Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

B. Traffic Controls: Comply with requirements of authorities having jurisdiction.

1. Protect existing site improvements to remain including curbs, pavement, and utilities.
2. Maintain access for fire-fighting equipment and access to fire hydrants.

C. Parking: Use designated areas of Owner's existing parking areas for construction personnel.

D. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.

1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
2. Remove snow and ice as required to minimize accumulations.

E. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.

© 2018 FGM Architects Inc.

1. Identification Signs: Provide Project identification signs as indicated on Drawings.
2. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.

    a. Provide temporary, directional signs for construction personnel and visitors.

3. Maintain and touchup signs so they are legible at all times.

F. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Section 017300 "Execution."

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.

B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

1. Comply with work restrictions specified in Section 011000 "Summary."

C. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.

D. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

E. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.

1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations.
2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Furnish one set of keys to Owner.

F. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each work day.

© 2018 FGM Architects Inc.

G. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.

1. Prohibit smoking in construction areas.
2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.5 MOISTURE AND MOLD CONTROL

A. Contractor's Moisture-Protection Plan: Avoid trapping water in finished work. Document visible signs of mold that may appear during construction.

B. Exposed Construction Phase: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:

1. Protect porous materials from water damage.
2. Protect stored and installed material from flowing or standing water.
3. Keep porous and organic materials from coming into prolonged contact with concrete.
4. Remove standing water from decks.
5. Keep deck openings covered or dammed.

C. Partially Enclosed Construction Phase: After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:

1. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
2. Keep interior spaces reasonably clean and protected from water damage.
3. Periodically collect and remove waste containing cellulose or other organic matter.
4. Discard or replace water-damaged material.
5. Do not install material that is wet.
6. Discard, replace, or clean stored or installed material that begins to grow mold.
7. Perform work in a sequence that allows any wet materials adequate time to dry before enclosing the material in drywall or other interior finishes.

D. Controlled Construction Phase of Construction: After completing and sealing of the building enclosure but prior to the full operation of permanent HVAC systems, maintain as follows:

1. Control moisture and humidity inside building by maintaining effective dry-in conditions.
2. Use permanent HVAC system to control humidity.
3. Comply with manufacturer's written instructions for temperature, relative humidity, and exposure to water limits.

    a. Hygroscopic materials that may support mold growth, including wood and gypsum-based products, that become wet during the course of construction and remain wet for 48 hours are considered defective.
    b. Measure moisture content of materials that have been exposed to moisture during construction operations or after installation. Record readings beginning at time of exposure and continuing daily for 48 hours. Identify materials containing moisture levels higher than allowed. Report findings in writing to Architect.
    c. Remove materials that can not be completely restored to their manufactured moisture level within 48 hours.

3.6 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Maintenance: Maintain facilities in good operating condition until removal.

1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.

C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
2. Remove temporary roads and paved areas not intended for or acceptable for integration into permanent construction. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.

© 2018 FGM Architects Inc.

3. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 "Closeout Procedures."

END OF SECTION 015000

© 2018 FGM Architects Inc.

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.

B. Related Requirements:

1. Section 012500 "Substitution Procedures" for requests for substitutions.
2. Section 014200 "References" for applicable industry standards for products specified.

1.3 DEFINITIONS

A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
3. Comparable Product: Product that is demonstrated and approved through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

B. Basis-of-Design Product Specification: A specification in which a specific manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the specification.

© 2018 FGM Architects Inc.

1.4 ACTION SUBMITTALS

A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.

    a. Form of Approval: As specified in Section 013300 "Submittal Procedures."
    b. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.

B. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 013300 "Submittal Procedures." Show compliance with requirements.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.

B. Delivery and Handling:

1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.

C. Storage:

1. Store materials in a manner that will not endanger Project structure.
2. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
3. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.

© 2018 FGM Architects Inc.

4. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
5. Protect stored products from damage and liquids from freezing.

1.6 PRODUCT WARRANTIES

A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.

B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.

1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
2. See other Sections for specific content requirements and particular requirements for submitting special warranties.

C. Submittal Time: Comply with requirements in Section 017700 "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.

1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
4. Where products are accompanied by the term "as selected," Architect will make selection.
5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.

B. Product Selection Procedures:

© 2018 FGM Architects Inc.

1. Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
3. Products:

4. Restricted List: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.
   a. Nonrestricted List: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product.

5. Manufacturers:

   a. Restricted List: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.
   b. Nonrestricted List: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed manufacturer's product.

6. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.

C. Visual Matching Specification: Where Specifications require "match Architect's sample", provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.

1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 012500 "Substitution Procedures" for proposal of product.

© 2018 FGM Architects Inc.

D. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

A. Conditions for Consideration: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:

1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
3. Evidence that proposed product provides specified warranty.
4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
5. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

© 2018 FGM Architects Inc.

DATA FOR EVALUATION OF MATERIALS, PRODUCTS AND SYSTEMS

SCHEDULE 1 - GENERAL:

PART 2 - In order for the proposed substitution to be given proper consideration, please complete the following:

PART 3 - Product Name:_____

PART 4 - Manufacturer:_____

PART 5 - Product Description:_____

SCHEDULE 1 - Basic Use:_____

SCHEDULE 2 - Composition and Materials:_____

3.5 Location of place where the material or product has been extracted, harvested or recovered as well as manufactured: _____

SCHEDULE 3 - PRODUCT EXPERIENCE AND MANUFACTURER QUALIFICATIONS:

PART 6 - List projects where this product was used in the same way as proposed for this project. Include names, addresses and telephone number of Contractors, Owners and Architects who can be contacted to report experience with this product. Submit information on project location, year installed and approximate square footage.

PART 7 - Describe in detail successful results:_____

PART 8 - Describe in detail unsuccessful results:_____

PART 9 - Having reviewed the Contract Documents and being aware of the manner in which the product is to be used, furnish us with complete technical data as it pertains to the intended application in addition to yur promotional catalogue.

PART 10 - Describe in detail the product's limitations:_____

PART 11 - State your delivery parameters:_____

PART 12 - To what extent do you warrant the product:_____

PART 13 - What has been your warranty history?_____

PART 14 - What previous experience have you had in this product line?

_____
_____

© 2018 FGM Architects Inc.

PART 15 - What are the qualifications of your field representative?

PART 16 - (For new or small manufacturer)

10a. Do you have the financial resources to execute this project?_____

10b. Do you have the production capacity to execute this project?_____

PART 17 - Submit a tailor specification as it pertains to the proposed application.

PART 18 - (For major items of significance)

Will you provide a field rep to observe or supervise installation?_____

Is your installer/applicator certified by the manufacturer?_____

Will you certify, upon completion that the product has been installed according to the manufacturer's recommendation?:

_____

PART 19 - What union has jurisdiction:_____

PART 20 - Costs:

Material cost:_____

Installed cost:_____

SCHEDULE 1 - PERFORMANCE DATA:

PART 21 - In order to evaluate the material, product, or system, please complete applicable portions of the following form. Add pertinent information, and indicate "not applicable" for items that are not appropriate. If you refer to product literature, please identify specifically, the portions that apply. List the following properties and characteristics for our information in evaluating its potential for use in our projects. Whenever applicable, responses should be quantitative, and in terms of the same recognized testing procedures of comparable or competitive products.

PART 22 - For each applicable property or characteristic below, identify testing procedure and results.

PART 23 - Strength and Stability

SCHEDULE 1 - Loads:_____

© 2018 FGM Architects Inc.

PRODUCT DATA SHEET 1 - Wind:_____

PRODUCT DATA SHEET 2 - Seismic:_____

PRODUCT DATA SHEET 3 - Compressive:_____

PRODUCT DATA SHEET 4 - Tensile:_____

PRODUCT DATA SHEET 5 - Impact:_____

PRODUCT DATA SHEET 6 - Modulus of Rupture:_____

PRODUCT DATA SHEET 7 - Impact:_____

PRODUCT DATA SHEET 8 - Weight:_____

PART 24 - Fire Safety

SCHEDULE 1 - Fire Resistance:_____

SCHEDULE 2 - Flame Spread:_____

SCHEDULE 3 - Smoke Development:_____

SCHEDULE 4 - Toxicity:_____

SCHEDULE 5 - Fuel Contribution:_____

SCHEDULE 6 - Combustibility:_____

SCHEDULE 7 - Testing Lab Label:_____

PART 25 - Habitability

SCHEDULE 1 - Thermal Properties:_____

© 2018 FGM Architects Inc.

PRODUCT DATA SHEET 1 - Thermal Conductivity:_____

PRODUCT DATA SHEET 2 - Thermal Expansion:_____

PRODUCT DATA SHEET 3 - Thermal Shock:_____

SCHEDULE 2 - Acoustic Properties:_____

PRODUCT DATA SHEET 1 - Sound Transmission:_____

PRODUCT DATA SHEET 2 - Sound Absorption:_____

PRODUCT DATA SHEET 3 - Sound Reverberation:_____

SCHEDULE 3 - Water Permeability:_____

PRODUCT DATA SHEET 1 - Water Absorption:_____

PRODUCT DATA SHEET 2 - Permeability:_____
_____

PRODUCT DATA SHEET 3 - Water Vapor Transmission:_____

PRODUCT DATA SHEET 4 - Moisture Expansion and Drying Shrinkage:_____

PART 26 - Durability

SCHEDULE 1 - Resistance to Wear:_____

PRODUCT DATA SHEET 1 - Abrasion Resistance:_____

PRODUCT DATA SHEET 2 - Scratch Resistance:_____

SCHEDULE 2 - Weathering:_____
_____

© 2018 FGM Architects Inc.

PRODUCT DATA SHEET 1 - Freeze-Thaw:_____
_____

PRODUCT DATA SHEET 2 - Ozone:_____
_____

PRODUCT DATA SHEET 3 - Fading:_____
_____

PRODUCT DATA SHEET 4 - Chemical
Fumes:_____

PRODUCT DATA SHEET 5 - Bactericidal:_____
_____

SCHEDULE 3 - Adhesion of
Coatings:_____

PRODUCT DATA SHEET 1 - Delamination:_____
_____

PRODUCT DATA SHEET 2 - Blistering:_____
_____

SCHEDULE 4 - Dimensional
Stability:_____

PRODUCT DATA SHEET 1 - Shrinkage:_____
_____

PRODUCT DATA SHEET 2 - Expansion:_____
_____

PRODUCT DATA SHEET 3 - Volume
Change:_____

PART 27 - Practicability

SCHEDULE 1 - Transport:_____
_____

PRODUCT DATA SHEET 1 - Limitations with Respect to Size, Weight,
Handling:_____

© 2018 FGM Architects Inc.

SCHEDULE 2 - Storage on Site:_____

PRODUCT DATA SHEET 1 - Protection Against Element:_____

SCHEDULE 3 - Handling on Site & During Installation:_____

PRODUCT DATA SHEET 1 - Abrasion:_____

PRODUCT DATA SHEET 2 - Breakage:_____

PRODUCT DATA SHEET 3 - Patching:_____

SCHEDULE 4 - Field Tolerances:_____

PRODUCT DATA SHEET 1 - Corrective Measures:_____

SCHEDULE 5 - Connections:_____

PRODUCT DATA SHEET 1 - Inserts:_____

SCHEDULE 6 - Availability:_____

PART 28 - Compatibility

SCHEDULE 1 - Jointing Materials:_____

PRODUCT DATA SHEET 1 - Adherence of Sealants:_____

© 2018 FGM Architects Inc.

PRODUCT DATA SHEET 2 - Ability to Receive & Retain Coatings:_____

PRODUCT DATA SHEET 3 - Interaction:_____

SCHEDULE 2 - Galvanic Interaction or Corrosion Resistance:_____

PRODUCT DATA SHEET 1 - Steel:_____

PRODUCT DATA SHEET 2 - Aluminum:_____

PRODUCT DATA SHEET 3 - Wood:_____

PRODUCT DATA SHEET 4 - Others:_____

PART 29 - Maintenance

SCHEDULE 1 - Indentation & Puncture:_____

PRODUCT DATA SHEET 1 - Patching:_____

SCHEDULE 2 - Chemical or Graffiti Attack:_____

PRODUCT DATA SHEET 1 - Cleanability:_____

PRODUCT DATA SHEET 2 - Resistance to Attack:_____

SCHEDULE 3 - Protection:_____

SCHEDULE 4 - Delamination:_____

© 2018 FGM Architects Inc.

SCHEDULE 5 - Blistering:_____

PART 30 - Code Acceptance

SCHEDULE 1 - Review of Codes:_____

PRODUCT DATA SHEET 1 - Fire:_____

PRODUCT DATA SHEET 2 - Health & Safety:_____

PRODUCT DATA SHEET 3 - National:_____

PRODUCT DATA SHEET 4 - Local:_____

PRODUCT DATA SHEET 5 - Energy:_____

PART 31 - Economics

SCHEDULE 1 - Installed Costs:_____

SCHEDULE 2 - Maintenance Costs:_____

SCHEDULE 3 - Life Cycle Costs:_____

PART 32 - Installation

SCHEDULE 1 - General:_____

SCHEDULE 2 - Preparatory Work:_____

© 2018 FGM Architects Inc.

SCHEDULE 3 - Placement/Application:_____
_____

SCHEDULE 4 - Precautions:_____
_____

SCHEDULE 5 - Jurisdiction:_____
_____

SCHEDULE 6 - Clean-Up/Cleaners:_____
_____

SCHEDULE 7 - Tools/Equipment:_____
_____

PART 33 - Additional Items of Importance and/or Limitations that might Affect the Performance of the Product.

_____
_____

(Manufacturer & Address) Signature & Position
Title (Date)

END OF SECTION 01601

© 2018 FGM Architects Inc.

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:

1. Construction layout.
2. Field engineering and surveying.
3. Installation of the Work.
4. Cutting and patching.
5. Progress cleaning.
6. Starting and adjusting.
7. Protection of installed construction.

B. Related Requirements:

1. Section 011000 "Summary" for limits on use of Project site.
2. Section 013300 "Submittal Procedures" for submitting surveys.
3. Section 017700 "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.
4. Section 024119 "Selective Demolition" for demolition and removal of selected portions of the building.

1.3 DEFINITIONS

A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.

B. Patching: Fitting and repair work required to restore construction to original conditions after installation of other work.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For land surveyor.

© 2018 FGM Architects Inc.

B. Certificates: Submit certificate signed by land surveyor certifying that location and elevation of improvements comply with requirements.

C. Cutting and Patching Plan: Submit plan describing procedures at least 10 days prior to the time cutting and patching will be performed. Include the following information:

1. Extent: Describe reason for and extent of each occurrence of cutting and patching.
2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building appearance and other significant visual elements.
3. Products: List products to be used for patching and firms or entities that will perform patching work.
4. Dates: Indicate when cutting and patching will be performed.
5. Utilities and Mechanical and Electrical Systems: List services and systems that cutting and patching procedures will disturb or affect. List services and systems that will be relocated and those that will be temporarily out of service. Indicate length of time permanent services and systems will be disrupted.

    a. Include description of provisions for temporary services and systems during interruption of permanent services and systems.

D. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.

E. Certified Surveys: Submit twocopies signed by land surveyor.

F. Final Property Survey: Submit 10 copies showing the Work performed and record survey data.

1.5 QUALITY ASSURANCE

A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.

B. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.

1. Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection

2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.

© 2018 FGM Architects Inc.

3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.

4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

C. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

D. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

PART 2 - PRODUCTS

2.1 MATERIALS

A. General: Comply with requirements specified in other Sections.

B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.

1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, mechanical and electrical systems, and other construction affecting the Work.

1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; underground electrical services, and other utilities.
2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.

© 2018 FGM Architects Inc.

B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.

C. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:

1. Description of the Work.
2. List of detrimental conditions, including substrates.
3. List of unacceptable installation tolerances.
4. Recommended corrections.

D. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Section 013100 "Project Management and Coordination."

© 2018 FGM Architects Inc.

3.3 CONSTRUCTION LAYOUT

A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.

B. General: Engage a land surveyor to lay out the Work using accepted surveying practices.

1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
2. Establish limits on use of Project site.
3. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
4. Inform installers of lines and levels to which they must comply.
5. Check the location, level and plumb, of every major element as the Work progresses.
6. Notify Architect when deviations from required lines and levels exceed allowable tolerances.
7. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.

C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.

D. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.

E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect.

3.4 FIELD ENGINEERING

A. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.

1. Do not change or relocate existing benchmarks or control points without prior written approval of Architect. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to Architect before proceeding.
2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.

© 2018 FGM Architects Inc.

B. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.

1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.

C. Certified Survey: On completion of foundation walls, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and sitework.

D. Final Property Survey: Engage a land surveyor to prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by land surveyor, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey.

1. Show boundary lines, monuments, streets, site improvements and utilities, existing improvements and significant vegetation, adjoining properties, acreage, grade contours, and the distance and bearing from a site corner to a legal point.
2. Recording: At Substantial Completion, have the final property survey recorded by or with authorities having jurisdiction as the official "property survey."

3.5 INSTALLATION

A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

1. Make vertical work plumb and make horizontal work level.
2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
4. Maintain minimum headroom clearance of 96 inches in occupied spaces and 90 inches in unoccupied spaces.

B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.

C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.

D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

© 2018 FGM Architects Inc.

E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.

F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.

G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.

H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.

1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
2. Allow for building movement, including thermal expansion and contraction.
3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.6 CUTTING AND PATCHING

A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.

1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.

C. Temporary Support: Provide temporary support of work to be cut.

D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

© 2018 FGM Architects Inc.

E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Section 011000 "Summary."

F. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.

G. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.

1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
4. Excavating and Backfilling: Comply with requirements in applicable Sections where required by cutting and patching operations.
5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
6. Proceed with patching after construction operations requiring cutting are complete.

H. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.

1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.

    a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
    b. Restore damaged pipe covering to its original condition.

3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.

© 2018 FGM Architects Inc.

a. Where patching occurs in a painted surface, prepare substrate and apply primer and intermediate paint coats appropriate for substrate over the patch, and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.

4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.

I. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.7 PROGRESS CLEANING

A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.

1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.

a. Use containers intended for holding waste materials of type to be stored.

4. Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.

B. Site: Maintain Project site free of waste materials and debris.

C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.

1. Remove liquid spills promptly.
2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.

D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.

© 2018 FGM Architects Inc.

F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Section 015000 "Temporary Facilities and Controls."

H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.8 STARTING AND ADJUSTING

A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.

B. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.

C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

D. Manufacturer's Field Service: Comply with qualification requirements in Section 014000 "Quality Requirements."

3.9 PROTECTION OF INSTALLED CONSTRUCTION

A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.10 CORRECTION OF THE WORK

A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.

1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.

© 2018 FGM Architects Inc.

B. Restore permanent facilities used during construction to their specified condition.

C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 017300

© 2018 FGM Architects Inc.

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:

1. Substantial Completion procedures.
2. Final completion procedures.
3. Warranties.
4. Final cleaning.
5. Repair of the Work.

B. Related Requirements:
1. Section 017300 "Execution" for progress cleaning of Project site.
2. Section 017823 "Operation and Maintenance Data" for operation and maintenance manual requirements.
3. Section 017839 "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
4. Section 017900 "Demonstration and Training" for requirements for instructing Owner's personnel.

1.3 ACTION SUBMITTALS

A. Product Data: For cleaning agents.

B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.

C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.4 CLOSEOUT SUBMITTALS

A. Certificates of Release: From authorities having jurisdiction.

B. Certificate of Insurance: For continuing coverage.

© 2018 FGM Architects Inc.

1.5 MAINTENANCE MATERIAL SUBMITTALS

A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.6 SUBSTANTIAL COMPLETION PROCEDURES

A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.

B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect. Label with manufacturer's name and model number where applicable.

    a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Architect's signature for receipt of submittals.

5. Submit test/adjust/balance records.
6. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.

C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

1. Advise Owner of pending insurance changeover requirements.
2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
3. Complete startup and testing of systems and equipment.
4. Perform preventive maintenance on equipment used prior to Substantial Completion.

© 2018 FGM Architects Inc.

5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings specified in Section 017900 "Demonstration and Training."
6. Advise Owner of changeover in heat and other utilities.
7. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
8. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
9. Complete final cleaning requirements, including touchup painting.
10. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.7 FINAL COMPLETION PROCEDURES

A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:

1. Submit a final Application for Payment according to Section 012900 "Payment Procedures."
2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.

B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

© 2018 FGM Architects Inc.

1.8 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction. Use CSI Form 14.1A.

1. Organize list of spaces in sequential order, starting with exterior areas first.
2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
3. Include the following information at the top of each page:

    a. Project name.
    b. Date.
    c. Name of Architect.
    d. Name of Contractor.
    e. Page number.
4. Submit list of incomplete items in the following format:

    a. MS Excel electronic file and PDF electronic file. Architect will return annotated file.

1.9 SUBMITTAL OF PROJECT WARRANTIES

A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.

B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.

1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
4. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.

C. Provide additional copies of each warranty to include in operation and maintenance manuals.

© 2018 FGM Architects Inc.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:

a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
d. Remove tools, construction equipment, machinery, and surplus material from Project site.
e. Remove snow and ice to provide safe access to building.
f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
h. Sweep concrete floors broom clean in unoccupied spaces.
i. Remove labels that are not permanent.
j. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
k. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.

© 2018 FGM Architects Inc.

l. Leave Project clean and ready for occupancy.

C. Construction Waste Disposal: Comply with waste disposal requirements in Section 015000 "Temporary Facilities and Controls."

3.2 REPAIR OF THE WORK

A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.

B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.

1. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that that already show evidence of repair or restoration.

a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.

2. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
3. Replace burned-out bulbs, bulbs noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

END OF SECTION 017700

© 2018 FGM Architects Inc.

SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:

1. Operation and maintenance documentation directory.
2. Emergency manuals.
3. Operation manuals for systems, subsystems, and equipment.
4. Product maintenance manuals.
5. Systems and equipment maintenance manuals.

B. Related Requirements:

1. Section 013300 "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.

1.3 DEFINITIONS

A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.

B. Subsystem: A portion of a system with characteristics similar to a system.

1.4 CLOSEOUT SUBMITTALS

A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.

1. Architect will comment on whether content of operations and maintenance submittals are acceptable.
2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.

B. Format: Submit operations and maintenance manuals in the following format:

© 2018 FGM Architects Inc.

1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Architect.

    a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.
    b. Enable inserted reviewer comments on draft submittals.

C. Initial Manual Submittal: Submit draft copy of each manual at least 30 days before commencing demonstration and training. Architect will comment on whether general scope and content of manual are acceptable.

D. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Architect will return copy with comments.

1. Correct or revise each manual to comply with Architect's comments. Submit copies of each corrected manual within 15 days of receipt of Architect's comments and prior to commencing demonstration and training.

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information. Include a section in the directory for each of the following:

1. List of documents.
2. List of systems.
3. List of equipment.
4. Table of contents.

B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.

C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.

D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.

E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

© 2018 FGM Architects Inc.

2.2 REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS

A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:

1. Title page.
2. Table of contents.
3. Manual contents.

B. Title Page: Include the following information:

1. Subject matter included in manual.
2. Name and address of Project.
3. Name and address of Owner.
4. Date of submittal.
5. Name and contact information for Contractor.
6. Name and contact information for Construction Manager.
7. Name and contact information for Architect.
8. Name and contact information for Commissioning Authority.
9. Names and contact information for major consultants to the Architect that designed the systems contained in the manuals.
10. Cross-reference to related systems in other operation and maintenance manuals.

C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.

1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.

D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.

E. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.

1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.

© 2018 FGM Architects Inc.

2. File Names and Bookmarks: Enable bookmarking of individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.

2.3 EMERGENCY MANUALS

A. Content: Organize manual into a separate section for each of the following:

1. Type of emergency.
2. Emergency instructions.
3. Emergency procedures.

B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:

1. Fire.
2. Flood.
3. Gas leak.
4. Water leak.
5. Power failure.
6. Water outage.
7. System, subsystem, or equipment failure.
8. Chemical release or spill.

C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.

D. Emergency Procedures: Include the following, as applicable:

1. Instructions on stopping.
2. Shutdown instructions for each type of emergency.
3. Operating instructions for conditions outside normal operating limits.
4. Required sequences for electric or electronic systems.
5. Special operating instructions and procedures.

2.4 OPERATION MANUALS

A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:

1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.

© 2018 FGM Architects Inc.

2. Performance and design criteria if Contractor has delegated design responsibility.
3. Operating standards.
4. Operating procedures.
5. Operating logs.
6. Wiring diagrams.
7. Control diagrams.
8. Piped system diagrams.
9. Precautions against improper use.
10. License requirements including inspection and renewal dates.

B. Descriptions: Include the following:

1. Product name and model number. Use designations for products indicated on Contract Documents.
2. Manufacturer's name.
3. Equipment identification with serial number of each component.
4. Equipment function.
5. Operating characteristics.
6. Limiting conditions.
7. Performance curves.
8. Engineering data and tests.
9. Complete nomenclature and number of replacement parts.

C. Operating Procedures: Include the following, as applicable:

1. Startup procedures.
2. Equipment or system break-in procedures.
3. Routine and normal operating instructions.
4. Regulation and control procedures.
5. Instructions on stopping.
6. Normal shutdown instructions.
7. Seasonal and weekend operating instructions.
8. Required sequences for electric or electronic systems.
9. Special operating instructions and procedures.

D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.

E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

2.5 PRODUCT MAINTENANCE MANUALS

A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.

B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.

C. Product Information: Include the following, as applicable:

1. Product name and model number.
2. Manufacturer's name.
3. Color, pattern, and texture.
4. Material and chemical composition.
5. Reordering information for specially manufactured products.

D. Maintenance Procedures: Include manufacturer's written recommendations and the following:

1. Inspection procedures.
2. Types of cleaning agents to be used and methods of cleaning.
3. List of cleaning agents and methods of cleaning detrimental to product.
4. Schedule for routine cleaning and maintenance.
5. Repair instructions.

E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.

F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

1. Include procedures to follow and required notifications for warranty claims.

2.6 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.

B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.

C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:

1. Standard maintenance instructions and bulletins.

© 2018 FGM Architects Inc.

2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
3. Identification and nomenclature of parts and components.
4. List of items recommended to be stocked as spare parts.

D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:

1. Test and inspection instructions.
2. Troubleshooting guide.
3. Precautions against improper maintenance.
4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
5. Aligning, adjusting, and checking instructions.
6. Demonstration and training video recording, if available.

E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.

1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.

F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.

G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.

H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

1. Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.

B. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.

© 2018 FGM Architects Inc.

C. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.

D. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.

1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.

E. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.

1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.

F. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.

1. Do not use original project record documents as part of operation and maintenance manuals.
2. Comply with requirements of newly prepared record Drawings in Section 017839 "Project Record Documents."

G. Comply with Section 017700 "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 017823

© 2018 FGM Architects Inc.

SECTION 017839 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for project record documents, including the following:

1. Record Drawings.
2. Record Specifications.
3. Record Product Data.
4. Miscellaneous record submittals.

B. Related Requirements:

1. Section 017300 "Execution" for final property survey.
2. Section 017700 "Closeout Procedures" for general closeout procedures.
3. Section 017823 "Operation and Maintenance Data" for operation and maintenance manual requirements.

1.3 CLOSEOUT SUBMITTALS

A. Record Drawings: Comply with the following:

1. Number of Copies: Submit set(s) of marked-up record prints.
2. Number of Copies: Submit copies of record Drawings as follows:

a. Initial Submittal:

1) Submit PDF electronic files of scanned record prints and oneof file prints.
2) Submit record digital data files and one set(s) of plots.
3) Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.

b. Final Submittal:

1) Submit PDF electronic files of scanned record prints and three set(s) of prints.

© 2018 FGM Architects Inc.

2) Print each drawing, whether or not changes and additional information were recorded.

c. Final Submittal:

1) Submit record digital data files and three set(s) of record digital data file plots.
2) Plot each drawing file, whether or not changes and additional information were recorded.

B. Record Specifications: Submit annotated PDF electronic files of Project's Specifications, including addenda and contract modifications.

C. Record Product Data: Submit annotated PDF electronic files and directories of each submittal.

1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.

D. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Submit annotated PDF electronic files and directories of each submittal.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.

1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.

a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
b. Accurately record information in an acceptable drawing technique.
c. Record data as soon as possible after obtaining it.
d. Record and check the markup before enclosing concealed installations.
e. Cross-reference record prints to corresponding archive photographic documentation.

2. Content: Types of items requiring marking include, but are not limited to, the following:

a. Dimensional changes to Drawings.

© 2018 FGM Architects Inc.

b. Revisions to details shown on Drawings.
c. Depths of foundations below first floor.
d. Locations and depths of underground utilities.
e. Revisions to routing of piping and conduits.
f. Revisions to electrical circuitry.
g. Actual equipment locations.
h. Duct size and routing.
i. Locations of concealed internal utilities.
j. Changes made by Change Order or Construction Change Directive.
k. Changes made following Architect's written orders.
l. Details not on the original Contract Drawings.
m. Field records for variable and concealed conditions.
n. Record information on the Work that is shown only schematically.

3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
5. Mark important additional information that was either shown schematically or omitted from original Drawings.
6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

B. Newly Prepared Record Drawings: Prepare new Drawings instead of preparing record Drawings where Architect determines that neither the original Contract Drawings nor Shop Drawings are suitable to show actual installation.

1. New Drawings may be required when a Change Order is issued as a result of accepting an alternate, substitution, or other modification.
2. Consult Architect for proper scale and scope of detailing and notations required to record the actual physical installation and its relation to other construction. Integrate newly prepared record Drawings into record Drawing sets; comply with procedures for formatting, organizing, copying, binding, and submitting.

C. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.

1. Record Prints: Organize record prints and newly prepared record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
2. Format: Annotated PDF electronic file.
3. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
4. Identification: As follows:

a. Project name.
b. Date.

c. Designation "PROJECT RECORD DRAWINGS."
d. Name of Architect.
e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
4. For each principal product, indicate whether record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
5. Note related Change Orders, record Product Data, and record Drawings where applicable.

B. Format: Submit record Specifications as annotated PDF electronic file.

2.3 RECORD PRODUCT DATA

A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
3. Note related Change Orders, record Specifications, and record Drawings where applicable.

B. Format: Submit record Product Data as annotated PDF electronic file.

1. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.

2.4 MISCELLANEOUS RECORD SUBMITTALS

A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

© 2018 FGM Architects Inc.

B. Format: Submit miscellaneous record submittals as PDF electronic file.

1. Include miscellaneous record submittals directory organized by Specification Section number and title, electronically linked to each item of miscellaneous record submittals.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.

B. Maintenance of Record Documents and Samples: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Architect's reference during normal working hours.

END OF SECTION 017839

© 2018 FGM Architects Inc.

SECTION 017900 - DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:

1. Demonstration of operation of systems, subsystems, and equipment.
2. Training in operation and maintenance of systems, subsystems, and equipment.
3. Demonstration and training video recordings.

1.3 INFORMATIONAL SUBMITTALS

A. Instruction Program: Submit outline of instructional program for demonstration and training, including a list of training modules and a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.

1. Indicate proposed training modules using manufacturer-produced demonstration and training video recordings for systems, equipment, and products in lieu of video recording of live instructional module.

B. Attendance Record: For each training module, submit list of participants and length of instruction time.

C. Evaluations: For each participant and for each training module, submit results and documentation of performance-based test.

1.4 CLOSEOUT SUBMITTALS

A. Demonstration and Training Video Recordings: Submit two copies within seven days of end of each training module.

1. Identification: On each copy, provide an applied label with the following information:

a. Name of Project.
b. Name and address of videographer.

c. Name of Architect.
d. Name of Contractor.
e. Date of video recording.

2. Transcript: Prepared and bound in format matching operation and maintenance manuals. Mark appropriate identification on front and spine of each binder. Include a cover sheet with same label information as the corresponding video recording. Include name of Project and date of video recording on each page.
3. Transcript: Prepared in PDF electronic format. Include a cover sheet with same label information as the corresponding video recording and a table of contents with links to corresponding training components. Include name of Project and date of video recording on each page.
4. At completion of training, submit complete training manual(s) for Owner's use in PDF electronic file format on compact disc.

1.5 QUALITY ASSURANCE

A. Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.

B. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Section 014000 "Quality Requirements," experienced in operation and maintenance procedures and training.

1.6 COORDINATION

A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's personnel.

B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.

C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Architect.

PART 2 - PRODUCTS

2.1 INSTRUCTION PROGRAM

A. Program Structure: Develop an instruction program that includes individual training modules for each system and for equipment not part of a system, as required by individual Specification Sections.

© 2018 FGM Architects Inc.

B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following as applicable to the system, equipment, or component:

1. Basis of System Design, Operational Requirements, and Criteria: Include the following:

   a. System, subsystem, and equipment descriptions.
   b. Performance and design criteria if Contractor is delegated design responsibility.
   c. Operating standards.
   d. Regulatory requirements.
   e. Equipment function.
   f. Operating characteristics.
   g. Limiting conditions.
   h. Performance curves.

2. Documentation: Review the following items in detail:

   a. Emergency manuals.
   b. Operations manuals.
   c. Maintenance manuals.
   d. Project record documents.
   e. Identification systems.
   f. Warranties and bonds.
   g. Maintenance service agreements and similar continuing commitments.

3. Emergencies: Include the following, as applicable:

   a. Instructions on meaning of warnings, trouble indications, and error messages.
   b. Instructions on stopping.
   c. Shutdown instructions for each type of emergency.
   d. Operating instructions for conditions outside of normal operating limits.
   e. Sequences for electric or electronic systems.
   f. Special operating instructions and procedures.

4. Operations: Include the following, as applicable:

   a. Startup procedures.
   b. Equipment or system break-in procedures.
   c. Routine and normal operating instructions.
   d. Regulation and control procedures.
   e. Control sequences.
   f. Safety procedures.
   g. Instructions on stopping.
   h. Normal shutdown instructions.
   i. Operating procedures for emergencies.
   j. Operating procedures for system, subsystem, or equipment failure.
   k. Seasonal and weekend operating instructions.

© 2018 FGM Architects Inc.

l. Required sequences for electric or electronic systems.
m. Special operating instructions and procedures.

5. Adjustments: Include the following:

a. Alignments.
b. Checking adjustments.
c. Noise and vibration adjustments.
d. Economy and efficiency adjustments.

6. Troubleshooting: Include the following:

a. Diagnostic instructions.
b. Test and inspection procedures.

7. Maintenance: Include the following:

a. Inspection procedures.
b. Types of cleaning agents to be used and methods of cleaning.
c. List of cleaning agents and methods of cleaning detrimental to product.
d. Procedures for routine cleaning
e. Procedures for preventive maintenance.
f. Procedures for routine maintenance.
g. Instruction on use of special tools.

8. Repairs: Include the following:

a. Diagnosis instructions.
b. Repair instructions.
c. Disassembly; component removal, repair, and replacement; and reassembly instructions.
d. Instructions for identifying parts and components.
e. Review of spare parts needed for operation and maintenance.

PART 3 - EXECUTION

3.1 PREPARATION

A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Section 017823 "Operation and Maintenance Data."

B. Set up instructional equipment at instruction location.

© 2018 FGM Architects Inc.

3.2 INSTRUCTION

A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.

B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.

1. Owner will furnish an instructor to describe Owner's operational philosophy.
2. Owner will furnish Contractor with names and positions of participants.

C. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.

1. Schedule training with Owner with at least seven days' advance notice.

D. Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.

E. Evaluation: At conclusion of each training module, assess and document each participant's mastery of module by use of a demonstration performance-based test.

F. Cleanup: Collect used and leftover educational materials and give to Owner. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

3.3 DEMONSTRATION AND TRAINING VIDEO RECORDINGS

A. General: Engage a qualified commercial videographer to record demonstration and training video recordings. Record each training module separately. Include classroom instructions and demonstrations, board diagrams, and other visual aids, but not student practice.

1. At beginning of each training module, record each chart containing learning objective and lesson outline.

B. Video: Provide minimum 640 x 480 video resolution converted to format file type acceptable to Owner, on electronic media.

1. Electronic Media: Read-only format compact disc acceptable to Owner, with commercial-grade graphic label.
2. File Hierarchy: Organize folder structure and file locations according to project manual table of contents. Provide complete screen-based menu.
3. File Names: Utilize file names based upon name of equipment generally described in video segment, as identified in Project specifications.

© 2018 FGM Architects Inc.

4. Contractor and Installer Contact File: Using appropriate software, create a file for inclusion on the Equipment Demonstration and Training DVD that describes the following for each Contractor involved on the Project, arranged according to Project table of contents:

    a. Name of Contractor/Installer.
    b. Business address.
    c. Business phone number.
    d. Point of contact.
    e. E-mail address.

C. Recording: Mount camera on tripod before starting recording, unless otherwise necessary to adequately cover area of demonstration and training. Display continuous running time.

1. Film training session(s) in segments not to exceed 15 minutes.

    a. Produce segments to present a single significant piece of equipment per segment.
    b. Organize segments with multiple pieces of equipment to follow order of Project Manual table of contents.
    c. Where a training session on a particular piece of equipment exceeds 15 minutes, stop filming and pause training session. Begin training session again upon commencement of new filming segment.

D. Light Levels: Verify light levels are adequate to properly light equipment. Verify equipment markings are clearly visible prior to recording.

1. Furnish additional portable lighting as required.

E. Narration: Describe scenes on video recording by dubbing audio narration off-site after video recording is recorded. Include description of items being viewed.

F. Transcript: Provide a transcript of the narration. Display images and running time captured from videotape opposite the corresponding narration segment.

G. Preproduced Video Recordings: Provide video recordings used as a component of training modules in same format as recordings of live training.

END OF SECTION 017900

© 2018 FGM Architects Inc.

SECTION 024119 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Demolition and removal of selected site elements.
2. Salvage of existing items to be reused or recycled.

1.3 DEFINITIONS

A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.

B. Remove and Salvage: Carefully detach from existing construction, in a manner to prevent damage, and deliver to Owner.

C. Remove and Reinstall: Detach items from existing construction, prepare for reuse, and reinstall where indicated.

D. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.4 MATERIALS OWNERSHIP

A. Unless otherwise indicated, demolition waste becomes property of Contractor.

B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.

1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.5 PREINSTALLATION MEETINGS

A. Predemolition Conference: Conduct conference at Project site.

© 2018 FGM Architects Inc.

1. Inspect and discuss condition of construction to be selectively demolished.
2. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
3. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
4. Review areas where existing construction is to remain and requires protection.

1.6 INFORMATIONAL SUBMITTALS

A. Inventory: Submit a list of items to be removed and salvaged and deliver to Owner prior to start of demolition.

B. Predemolition Photographs or Video: Submit before Work begins.

1.7 FIELD CONDITIONS

A. Owner will occupy portions of site immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.

B. Notify Owner of discrepancies between existing conditions and Drawings before proceeding with selective demolition.

C. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.

1. If suspected hazardous materials are encountered, do not disturb; immediately notify Owner. Hazardous materials will be removed by Owner under a separate contract.

D. Storage or sale of removed items or materials on-site is not permitted.

E. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

PART 2 - PRODUCTS

2.1 PEFORMANCE REQUIREMENTS

A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.

© 2018 FGM Architects Inc.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that utilities have been disconnected and capped before starting selective demolition operations.

B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.

C. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Owner.

D. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs.

1. Inventory and record the condition of items to be removed and salvaged. Provide of conditions that might be misconstrued as damage caused by salvage operations.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.

1. Comply with requirements for existing services/systems interruptions specified in Section 011000 "Summary."

B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.

1. Arrange to shut off indicated utilities with utility companies.
2. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.

3.3 PREPARATION

A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

1. Comply with requirements for access and protection specified in Section 015000 "Temporary Facilities and Controls."

© 2018 FGM Architects Inc.

B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.

1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
4. Cover and protect furniture, furnishings, and equipment that have not been removed.
5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Section 015000 "Temporary Facilities and Controls."

C. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.

1. Strengthen or add new supports when required during progress of selective demolition.

3.4 SELECTIVE DEMOLITION, GENERAL

A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.
5. Maintain adequate ventilation when using cutting torches.
6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
7. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
8. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.

9. Dispose of demolished items and materials promptly.

B. Removed and Salvaged Items:

1. Clean salvaged items.
2. Pack or crate items after cleaning. Identify contents of containers.
3. Store items in a secure area until delivery to Owner.
4. Transport items to Owner's storage area designated by Owner.
5. Protect items from damage during transport and storage.

C. Removed and Reinstalled Items:

1. Clean and repair items to functional condition adequate for intended reuse.
2. Pack or crate items after cleaning and repairing. Identify contents of containers.
3. Protect items from damage during transport and storage.
4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

D. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Owner, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

A. Concrete: Demolish in small sections. Using power-driven saw, cut concrete to a depth of at least 3/4 inch at junctures with construction to remain. Dislodge concrete from reinforcement at perimeter of areas being demolished, cut reinforcement, and then remove remainder of concrete. Neatly trim openings to dimensions indicated.

B. Concrete: Demolish in sections. Cut concrete full depth at junctures with construction to remain and at regular intervals using power-driven saw, then remove concrete between saw cuts.

C. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using power-driven saw, then remove masonry between saw cuts.

D. Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, then break up and remove.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

A. General: Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site.

1. Do not allow demolished materials to accumulate on-site.

© 2018 FGM Architects Inc.

2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Burning: Do not burn demolished materials.

C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

3.7 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

SECTION 033000 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes.

1.3 DEFINITIONS

A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash, slag cement, other pozzolans, and silica fume; materials subject to compliance with requirements.

B. W/C Ratio: The ratio by weight of water to cementitious materials.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

1. Indicate amounts of mixing water to be withheld for later addition at Project site.

C. Construction Joint Layout: Indicate proposed construction joints required to construct the structure.

1. Location of construction joints is subject to approval of the Architect.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Material Certificates: For each of the following, signed by manufacturers:

1. Cementitious materials.
2. Admixtures.

© 2018 FGM Architects Inc.

3. Form materials and form-release agents.
4. Steel reinforcement and accessories.
5. Curing compounds.
6. Bonding agents.
7. Adhesives.
8. Semirigid joint filler.
9. Joint-filler strips.

C. Material Test Reports: For the following, from a qualified testing agency:

1. Aggregates: Include service record data indicating absence of deleterious expansion of concrete due to alkali aggregate reactivity.

D. Floor surface flatness and levelness measurements indicating compliance with specified tolerances.

E. Field quality-control reports.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: A qualified installer who employs on Project personnel qualified as ACI-certified Flatwork Technician and Finisher and a supervisor who is an ACI-certified Concrete Flatwork Technician.

B. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.

1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."

C. Welding Qualifications: Qualify procedures and personnel according to AWS D1.4/D 1.4M.

D. Mockups: Cast concrete formed-surface panels to demonstrate typical joints, surface finish, texture, tolerances, floor treatments, and standard of workmanship.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage.

1.8 FIELD CONDITIONS

A. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.

© 2018 FGM Architects Inc.

1. When average high and low temperature is expected to fall below 40 deg F for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301.
2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.

B. Hot-Weather Placement: Comply with ACI 301 and as follows:

1. Maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

A. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:

1. ACI 301.
2. ACI 117.

2.2 FORM-FACING MATERIALS

A. Smooth-Formed Finished Concrete: Form-facing panels that provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.

1. Plywood, metal, or other approved panel materials.
2. Exterior-grade plywood panels, suitable for concrete forms, complying with DOC PS 1, and as follows:

    a. High-density overlay, Class 1 or better.
    b. Medium-density overlay, Class 1 or better; mill-release agent treated and edge sealed.
    c. Structural 1, B-B or better; mill oiled and edge sealed.
    d. B-B (Concrete Form), Class 1 or better; mill oiled and edge sealed.

3. Overlaid Finnish birch plywood.

B. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch, minimum.

© 2018 FGM Architects Inc.

C. Rustication Strips: Wood, metal, PVC, or rubber strips, kerfed for ease of form removal.

D. Form-Release Agent: Commercially formulated form-release agent that does not bond with, stain, or adversely affect concrete surfaces and does not impair subsequent treatments of concrete surfaces.

1. Formulate form-release agent with rust inhibitor for steel form-facing materials.

E. Form Ties: Factory-fabricated, removable or snap-off glass-fiber-reinforced plastic or metal form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.

1. Furnish units that leave no corrodible metal closer than 1 inch to the plane of exposed concrete surface.
2. Furnish ties that, when removed, leave holes no larger than 1 inch in diameter in concrete surface.
3. Furnish ties with integral water-barrier plates to walls indicated to receive dampproofing or waterproofing.

2.3 STEEL REINFORCEMENT

A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.

B. Steel Bar Mats: ASTM A 184/A 184M, fabricated from ASTM A 615/A 615M, Grade 60, deformed bars, assembled with clips.

C. Plain-Steel Wire: ASTM A 1064/A 1064M, as drawn.

D. Deformed-Steel Wire: ASTM A 1064/A 1064M.

E. Plain-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, plain, fabricated from as-drawn steel wire into flat sheets.

F. Deformed-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, flat sheet.

2.4 REINFORCEMENT ACCESSORIES

A. Joint Dowel Bars: ASTM A 615/A 615M, Grade 60, plain-steel bars, cut true to length with ends square and free of burrs.

B. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded-wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:

1. For concrete surfaces exposed to view, where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected steel wire or CRSI Class 2 stainless-steel bar supports.

© 2018 FGM Architects Inc.

2.5 CONCRETE MATERIALS

A. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.

B. Cementitious Materials:

1. Portland Cement: ASTM C 150/C 150M, Type I.
2. Silica Fume: ASTM C 1240, amorphous silica.

C. Normal-Weight Aggregates: ASTM C 33/C 33M, Class 3S coarse aggregate or better, graded. Provide aggregates from a single source with documented service record data of at least 10 years' satisfactory service in similar applications and service conditions using similar aggregates and cementitious materials.

1. Maximum Coarse-Aggregate Size: 1-1/2 inches nominal.
2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.

D. Air-Entraining Admixture: ASTM C 260/C 260M.

E. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures and that do not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.

1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
2. Retarding Admixture: ASTM C 494/C 494M, Type B.
3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.

F. Water: ASTM C 94/C 94M and potable.

2.6 CURING MATERIALS

A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.

B. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.

C. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.

D. Water: Potable.

© 2018 FGM Architects Inc.

2.7 RELATED MATERIALS

A. Bonding Agent: ASTM C 1059/C 1059M, Type II, nonredispersible, acrylic emulsion or styrene butadiene.

B. Epoxy Bonding Adhesive: ASTM C 881, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class suitable for application temperature and of grade to suit requirements, and as follows:

1. Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.

C. Reglets: Fabricate reglets of not less than 0.022-inch- thick, galvanized-steel sheet. Temporarily fill or cover face opening of reglet to prevent intrusion of concrete or debris.

D. Dovetail Anchor Slots: Hot-dip galvanized-steel sheet, not less than 0.034 inch thick, with bent tab anchors. Temporarily fill or cover face opening of slots to prevent intrusion of concrete or debris.

2.8 CONCRETE MIXTURES, GENERAL

A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.

1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.

B. Limit water-soluble, chloride-ion content in hardened concrete in accordance with ACI 301 in percentage by weight of cement.

C. Admixtures: Use admixtures according to manufacturer's written instructions.

1. Use water-reducing high-range water-reducing or plasticizing admixture in concrete, as required, for placement and workability.
2. Use water-reducing and -retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a w/c ratio below 0.50.

2.9 CONCRETE MIXTURES FOR BUILDING ELEMENTS

A. Footings: Normal-weight concrete.

1. Minimum Compressive Strength: 4000 psi at 28 days.
2. Maximum W/C Ratio: 0.45.
3. Slump Limit: 4 inches, plus or minus 1 inch.

© 2018 FGM Architects Inc.

4. Air Content: 5.5 percent, plus or minus 1.5 percent at point of delivery for 1-1/2-inch nominal maximum aggregate size.

B. Foundation Walls: Normal-weight concrete.

1. Minimum Compressive Strength: 4000 psi at 28 days.
2. Maximum W/C Ratio: 0.45.
3. Slump Limit: 4 inches, plus or minus 1 inch.
4. Air Content: 5.5 percent, plus or minus 1.5 percent at point of delivery for 1-1/2-inch nominal maximum aggregate size.

C. Building Walls: Normal-weight concrete.

1. Minimum Compressive Strength: 4000 psi at 28 days.
2. Maximum W/C Ratio: 0.45.
3. Slump Limit: 4 inches, plus or minus 1 inch.
4. Air Content: 5.5 percent, plus or minus 1.5 percent at point of delivery for 1-1/2-inch nominal maximum aggregate size.

2.10 FABRICATING REINFORCEMENT

A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.11 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M, and furnish batch ticket information.

1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Mix concrete materials in appropriate drum-type batch machine mixer.

1. For mixer capacity of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.
2. For mixer capacity larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd..
3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixture time, quantity, and amount of water added. Record approximate location of final deposit in structure.

© 2018 FGM Architects Inc.

PART 3 - EXECUTION

3.1 FORMWORK INSTALLATION

A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.

B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.

C. Limit concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:

1. Class A, 1/8 inch for smooth-formed finished surfaces.

D. Construct forms tight enough to prevent loss of concrete mortar.

E. Construct forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast-concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.

1. Install keyways, reglets, recesses, and the like, for easy removal.
2. Do not use rust-stained steel form-facing material.

F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.

G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.

H. Chamfer exterior corners and edges of permanently exposed concrete.

I. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.

J. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.

K. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.

L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

© 2018 FGM Architects Inc.

3.2 EMBEDDED ITEM INSTALLATION

A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

1. Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of AISC 303.
2. Install reglets to receive waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, shelf angles, and other conditions.
3. Install dovetail anchor slots in concrete structures as indicated.

3.3 REMOVING AND REUSING FORMS

A. General: Formwork for sides of beams, walls, columns, and similar parts of the Work that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F for 24 hours after placing concrete. Concrete has to be hard enough to not be damaged by form-removal operations, and curing and protection operations need to be maintained.

1. Leave formwork for beam soffits, joists, slabs, and other structural elements that support weight of concrete in place until concrete has achieved at least 70 percent of its 28-day design compressive strength.
2. Remove forms only if shores have been arranged to permit removal of forms without loosening or disturbing shores.

B. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material are not acceptable for exposed surfaces. Apply new form-release agent.

C. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved by Architect.

3.4 STEEL REINFORCEMENT INSTALLATION

A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.

B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that reduce bond to concrete.

C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.

© 2018 FGM Architects Inc.

1. Weld reinforcing bars according to AWS D1.4/D 1.4M, where indicated.

D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.

E. Install welded-wire reinforcement in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least one mesh spacing. Offset laps of adjoining sheet widths to prevent continuous laps in either direction. Lace overlaps with wire.

3.5 JOINTS

A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.

B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.

1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of strip placements of floors and slabs.
2. Form keyed joints as indicated. Embed keys at least 1-1/2 inches into concrete.
3. Locate joints for beams, slabs, joists, and girders in the middle third of spans. Offset joints in girders a minimum distance of twice the beam width from a beam-girder intersection.
4. Locate horizontal joints in walls and columns at underside of floors, slabs, beams, and girders and at the top of footings or floor slabs.
5. Space vertical joints in walls as indicated. Locate joints beside piers integral with walls, near corners, and in concealed locations where possible.
6. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
7. Use epoxy-bonding adhesive at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.

C. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt coat one-half of dowel length to prevent concrete bonding to one side of joint.

3.6 CONCRETE PLACEMENT

A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections are completed.

B. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Architect.

C. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.

© 2018 FGM Architects Inc.

1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.

D. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete is placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.

1. Deposit concrete in horizontal layers of depth not to exceed formwork design pressures and in a manner to avoid inclined construction joints.
2. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.
3. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mixture constituents to segregate.

3.7 FINISHING FORMED SURFACES

A. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities.

1. Apply to concrete surfaces exposed to public view, to receive a rubbed finish, or to be covered with a coating or covering material applied directly to concrete.

B. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

3.8 MISCELLANEOUS CONCRETE ITEM INSTALLATION

A. Filling In: Fill in holes and openings left in concrete structures after work of other trades is in place unless otherwise indicated. Mix, place, and cure concrete, as specified, to blend with in-place construction. Provide other miscellaneous concrete filling indicated or required to complete the Work.

3.9 CONCRETE PROTECTING AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.

© 2018 FGM Architects Inc.

B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

C. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing for remainder of curing period.

D. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces.

E. Cure concrete according to ACI 308.1, by one or a combination of the following methods:

1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:

    a. Water.
    b. Continuous water-fog spray.
    c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.

2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period, using cover material and waterproof tape.
3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

    a. Removal: After curing period has elapsed, remove curing compound without damaging concrete surfaces by method recommended by curing compound manufacturer.

4. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

3.10 JOINT FILLING

A. Prepare, clean, and install joint filler according to manufacturer's written instructions.

© 2018 FGM Architects Inc.

1. Defer joint filling until concrete has aged at least [**one**] [**six**] month(s). Do not fill joints until construction traffic has permanently ceased.

B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joints clean and dry.

C. Install semirigid joint filler full depth in saw-cut joints and at least 2 inches deep in formed joints. Overfill joint and trim joint filler flush with top of joint after hardening.

3.11 CONCRETE SURFACE REPAIRS

A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.

B. Patching Mortar: Mix dry-pack patching mortar, consisting of 1 part portland cement to 2-1/2 parts fine aggregate passing a No. 16 sieve, using only enough water for handling and placing.

C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.

1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension to solid concrete. Limit cut depth to 3/4 inch. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar matches surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Architect.

D. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.

1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.
2. After concrete has cured at least 14 days, correct high areas by grinding.
3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.

© 2018 FGM Architects Inc.

4. Correct other low areas scheduled to receive floor coverings with a repair underlayment. Prepare, mix, and apply repair underlayment and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface. Feather edges to match adjacent floor elevations.
5. Correct other low areas scheduled to remain exposed with a repair topping. Cut out low areas to ensure a minimum repair topping depth of 1/4 inch to match adjacent floor elevations. Prepare, mix, and apply repair topping and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface.
6. Repair defective areas, except random cracks and single holes 1 inch or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least a 3/4-inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mixture as original concrete, except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
7. Repair random cracks and single holes 1 inch or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.

E. Perform structural repairs of concrete, subject to Architect's approval, using epoxy adhesive and patching mortar.

F. Repair materials and installation not specified above may be used, subject to Architect's approval.

3.12 FIELD QUALITY CONTROL

A. Special Inspections: Owner will engage a special inspector and qualified testing and inspecting agency to perform field tests and inspections and prepare test reports.

B. Testing Agency: Engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.

C. Inspections:

1. Steel reinforcement placement.
2. Steel reinforcement welding.
3. Headed bolts and studs.
4. Verification of use of required design mixture.
5. Concrete placement, including conveying and depositing.
6. Curing procedures and maintenance of curing temperature.

D. Concrete Tests: Testing of composite samples of fresh concrete obtained according to ASTM C 172/C 172M shall be performed according to the following requirements:

1. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mixture placed each day.

    a. When frequency of testing provides fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.

2. Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
3. Air Content: ASTM C 231/C 231M, pressure method, for normal-weight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
4. Unit Weight: ASTM C 567/C 567M, fresh unit weight of structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
5. Compression Test Specimens: ASTM C 31/C 31M.

    a. Cast and laboratory cure two sets of two standard cylinder specimens for each composite sample.
    b. Cast and field cure **two** sets of two standard cylinder specimens for each composite sample.

6. Compressive-Strength Tests: ASTM C 39/C 39M; test one set of two laboratory-cured specimens at 7 days and one set of two specimens at 28 days.

    a. Test one set of two field-cured specimens at 7 days and one set of two specimens at 28 days.
    b. A compressive-strength test shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.

7. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, Contractor shall evaluate operations and provide corrective procedures for protecting and curing in-place concrete.
8. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
9. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
10. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.

© 2018 FGM Architects Inc.

11. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42/C 42M or by other methods as directed by Architect.
12. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
13. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.

E. Measure floor and slab flatness and levelness according to ASTM E 1155 within 24 to 48 hours of finishing.

END OF SECTION 033000

© 2018 FGM Architects Inc.

SECTION 034100 - PRECAST STRUCTURAL CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Precast structural concrete.

B. Related Requirements:

1. Section 033000 "Cast-in-Place Concrete" for installing connection anchors in concrete.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Design Mixtures: For each precast concrete mixture. Include compressive strength and water-absorption tests.

C. Shop Drawings:

1. Detail fabrication and installation of architectural precast concrete units.
2. Indicate locations, plans, elevations, dimensions, shapes, and cross sections of each unit.
3. Indicate joints, reveals, drips, chamfers, and extent and location of each surface finish.
4. Indicate details at building corners.
5. Indicate type, size, and length of welded connections by AWS standard symbols. Detail loose and cast-in hardware and connections.
6. Indicate locations, tolerances, and details of anchorage devices to be embedded in or attached to structure or other construction.
7. Indicate locations, extent, and treatment of dry joints if two-stage casting is proposed.
8. Include plans and elevations showing unit location and sequence of erection for special conditions.
9. Indicate location of each architectural precast concrete unit by same identification mark placed on panel.
10. Indicate relationship of architectural precast concrete units to adjacent materials.

© 2018 FGM Architects Inc.

11. If design modifications are proposed to meet performance requirements and field conditions, submit design calculations and Shop Drawings. Do not adversely affect the appearance, durability, or strength of units when modifying details or materials and maintain the general design concept.

D. Delegated-Design Submittal: For architectural precast concrete indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified structural engineer responsible for their preparation.

1. Show governing panel types, connections, types of reinforcement, including special reinforcement, and concrete cover on reinforcement. Indicate location, type, magnitude, and direction of loads imposed on the building structural frame from architectural precast concrete.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer and fabricator.

B. Welding certificates.

C. Material Certificates: For the following items:

1. Cementitious materials.
2. Reinforcing materials and prestressing tendons.
3. Admixtures.
4. Bearing pads.

D. Material Test Reports: For aggregates.

E. Preconstruction test reports.

F. Source quality-control test reports.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: A precast concrete erector qualified and designated by PCI's Certificate of Compliance to erect Category S2 (Complex Structural Systems) for load-bearing members.

B. Installer Qualifications: A precast concrete erector who has retained a "PCI-Certified Field Auditor" to conduct a field audit of a project in same category as this Project and who can produce an Erectors' Post-Audit Declaration.

C. Fabricator Qualifications: A firm that assumes responsibility for engineering architectural precast concrete units to comply with performance requirements. This responsibility includes preparation of Shop Drawings and comprehensive engineering analysis by a qualified professional engineer.

© 2018 FGM Architects Inc.

1. Designated as a PCI-certified plant for Group A, Category A1 - Architectural Cladding and Load Bearing Units at time of bidding or designated as an APA-certified plant for production of architectural precast concrete products.

D. Quality-Control Standard: For manufacturing procedures and testing requirements, quality-control recommendations, and dimensional tolerances for types of units required, comply with PCI MNL 117, "Manual for Quality Control for Plants and Production of Architectural Precast Concrete Products."

E. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D.1.1M, "Structural Welding Code - Steel"; and AWS D1.4/D1.4M, "Structural Welding Code - Reinforcing Steel."

1.6 COORDINATION

A. Furnish loose connection hardware and anchorage items to be embedded in or attached to other construction without delaying the Work. Provide locations, setting diagrams, templates, instructions, and directions, as required, for installation.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver architectural precast concrete units in such quantities and at such times to limit unloading units temporarily on the ground or other rehandling.

B. Support units during shipment on nonstaining shock-absorbing material.

C. Store units with adequate dunnage and bracing and protect units to prevent contact with soil, to prevent staining, and to prevent cracking, distortion, warping or other physical damage.

D. Place stored units so identification marks are clearly visible, and units can be inspected.

E. Handle and transport units in a manner that avoids excessive stresses that cause cracking or damage.

F. Lift and support units only at designated points indicated on Shop Drawings.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Fabricators: Subject to compliance with requirements, available fabricators offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Lombard Architectural Precast Products Co.
2. ATMI Precast

3. Midstates Concrete Incorporated.

2.2 PERFORMANCE REQUIREMENTS

A. Delegated Design: Engage a qualified structural engineer, as defined in Section 014000 "Quality Requirements," to design architectural precast concrete units.

B. Design Standards: Comply with ACI 318 and design recommendations of PCI MNL 120, "PCI Design Handbook - Precast and Prestressed Concrete," applicable to types of architectural precast concrete units indicated.

C. Structural Performance: Provide architectural precast concrete units and connections capable of withstanding the following design loads within limits and under conditions indicated:

1. Loads: As indicated on Structural Drawings.
2. Design precast concrete units and connections to maintain clearances at openings, to allow for fabrication and construction tolerances, to accommodate live-load deflection, shrinkage and creep of primary building structure, and other building movements as follows:

    a. Upward and downward movement of 1 inch.

3. Thermal Movements: Provide for in-plane thermal movements resulting from annual ambient temperature changes of 120 deg F.

2.3 MOLD MATERIALS

A. Molds: Rigid, dimensionally stable, non-absorptive material, warp and buckle free, that provides continuous and true precast concrete surfaces within fabrication tolerances indicated; nonreactive with concrete and suitable for producing required finishes.

1. Mold-Release Agent: Commercially produced form-release agent that does not bond with, stain or adversely affect precast concrete surfaces and does not impair subsequent surface or joint treatments of precast concrete.

2.4 REINFORCING MATERIALS

A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.

B. Low-Alloy-Steel Reinforcing Bars: ASTM A 706/A 706M, deformed.

C. Steel Bar Mats: ASTM A 184/A 184M, fabricated from ASTM A 615/A 615M, Grade 60, deformed bars, assembled with clips.

D. Plain-Steel Welded Wire Reinforcement: ASTM A 185/A 185M, fabricated from as-drawn steel wire into flat sheets.

© 2018 FGM Architects Inc.

E. Deformed-Steel Welded Wire Reinforcement: ASTM A 497/A 497M, flat sheet.

F. Supports: Suspend reinforcement from back of mold or use bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place according to PCI MNL 117.

2.5 PRESTRESSING TENDONS

A. Prestressing Strand: ASTM A 416/A 416M, Grade 270, uncoated, seven-wire, low-relaxation strand.

1. Coat unbonded post-tensioning strand with post-tensioning coating complying with ACI 423.7 and sheath with polypropylene tendon sheathing complying with ACI 423.7. Include anchorage devices and coupler assemblies.

2.6 CONCRETE MATERIALS

A. Portland Cement: ASTM C 150/C 150M, Type I or Type III, gray, unless otherwise indicated.

1. For surfaces exposed to view in finished structure, use gray or white cement, of same type, brand, and mill source.

B. Supplementary Cementitious Materials:

1. Fly Ash: ASTM C 618, Class C or F, with maximum loss on ignition of 3 percent.
2. Metakaolin: ASTM C 618, Class N.
3. Silica Fume: ASTM C 1240, with optional chemical and physical requirement.
4. Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 100 or 120.

C. Normal-Weight Aggregates: Except as modified by PCI MNL 117, ASTM C 33/C 33M, with coarse aggregates complying with Class 5S. Stockpile fine and coarse aggregates for each type of exposed finish from a single source (pit or quarry) for Project.

1. Face-Mixture-Coarse Aggregates: Selected, hard, and durable; free of material that reacts with cement or causes staining; to match selected finish sample.

a. Gradation: Uniformly graded.

2. Face-Mixture-Fine Aggregates: Selected, natural or manufactured sand compatible with coarse aggregate; to match approved finish sample.

D. Water: Potable; free from deleterious material that may affect color stability, setting, or strength of concrete and complying with chemical limits of PCI MNL 117.

E. Air-Entraining Admixture: ASTM C 260, certified by manufacturer to be compatible with other required admixtures.

© 2018 FGM Architects Inc.

F. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures and to not contain calcium chloride, or more than 0.15 percent chloride ions or other salts by weight of admixture.

1. Water-Reducing Admixtures: ASTM C 494/C 494M, Type A.
2. Retarding Admixture: ASTM C 494/C 494M, Type B.
3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
4. Water-Reducing and Accelerating Admixture: ASTM C 494/C 494M, Type E.
5. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
6. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
7. Plasticizing Admixture: ASTM C 1017/C 1017M, Type I.
8. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.
9. Corrosion Inhibiting Admixture: ASTM C 1582/C 1582M.

2.7 STEEL CONNECTION MATERIALS

A. Carbon-Steel Shapes and Plates: ASTM A 36/A 36M.

B. Carbon-Steel-Headed Studs: ASTM A 108, AISI 1018 through AISI 1020, cold finished, AWS D1.1/D1.1M, Type A or Type B, with arc shields and with minimum mechanical properties of PCI MNL 117, Table 3.2.3.

C. Carbon-Steel Plate: ASTM A 283/A 283M, Grade C.

D. Deformed-Steel Wire or Bar Anchors: ASTM A 496/A 496M or ASTM A 706/A 706M.

E. Carbon-Steel Bolts and Studs: ASTM A 307, Grade A or ASTM F 1554, Grade 36; carbon-steel, hex-head bolts and studs; carbon-steel nuts, ASTM A 563; and flat, unhardened steel washers, ASTM F 844.

F. Zinc-Coated Finish: For exterior steel items, steel in exterior walls, and items indicated for galvanizing, apply zinc coating by hot-dip process according to ASTM A 123/A 123M or ASTM A 153/A 153M.

1. For steel shapes, plates, and tubing to be galvanized, limit silicon content of steel to less than 0.03 percent or to between 0.15 and 0.25 percent or limit sum of silicon and 2.5 times phosphorous content to 0.09 percent.
2. Galvanizing Repair Paint: High-zinc-dust-content paint with dry film containing not less than 94 percent zinc dust by weight, and complying with DOD-P-21035B or SSPC-Paint 20.

G. Welding Electrodes: Comply with AWS standards.

2.8 BEARING PADS

A. Provide one of the following bearing pads for architectural precast concrete units as recommended by precast fabricator for application:

1. Elastomeric Pads: AASHTO M 251, plain, vulcanized, 100 percent polychloroprene (neoprene) elastomer, molded to size or cut from a molded sheet, Type A durometer hardness of 50 to 70, ASTM D 2240, minimum tensile strength 2250 psi, ASTM D 412.
2. Random-Oriented-Fiber-Reinforced Elastomeric Pads: Preformed, randomly oriented synthetic fibers set in elastomer. Type A durometer hardness of 70 to 90, ASTM D 2240; capable of supporting a compressive stress of 3000 psi with no cracking, splitting, or delaminating in the internal portions of pad. Test one specimen for every 200 pads used in Project.
3. Cotton-Duck-Fabric-Reinforced Elastomeric Pads: Preformed, horizontally layered cotton-duck fabric bonded to an elastomer; Type A durometer hardness of 80 to 100, ASTM D 2240; complying with AASHTO's "AASHTO LRFD Bridge Design Specifications," Division II, Section 18.10.2; or with MIL-C-882E.
4. Frictionless Pads: PTFE, glass-fiber reinforced, bonded to stainless or mild-steel plate, or random-oriented-fiber-reinforced elastomeric pads; of type required for in-service stress.
5. High-Density Plastic: Multimonomer, nonleaching, plastic strip.

2.9 ACCESSORIES

A. Reglets: PVC extrusions, felt or fiber filled, or with face opening of slots covered.

B. Precast Accessories: Provide clips, hangers, high-density plastic or steel shims, and other accessories required to install architectural precast concrete units.

2.10 GROUT MATERIALS

A. Sand-Cement Grout: Portland cement, ASTM C 150/C 150M, Type I, and clean, natural sand, ASTM C 144 or ASTM C 404. Mix at ratio of 1 part cement to 2-1/2 to 3 parts sand, by volume, with minimum water required for placement and hydration. Water-soluble chloride ion content less than 0.06 percent by weight of cement when tested according to ASTM C 1218/C 1218M.

B. Nonmetallic, Nonshrink Grout: Packaged, nonmetallic, noncorrosive, nonstaining grout containing selected silica sands, portland cement, shrinkage-compensating agents, plasticizing and water-reducing agents, complying with ASTM C 1107/C 1107M, Grade A for drypack and Grades B and C for flowable grout and of consistency suitable for application within a 30-minute working time. Water-soluble chloride ion content less than 0.06 percent by weight of cement when tested according to ASTM C 1218/C 1218M.

C. Epoxy-Resin Grout: Two-component, mineral-filled epoxy resin; ASTM C 881/C 881M, of type, grade, and class to suit requirements.

2.11 CONCRETE MIXTURES

A. Prepare design mixtures for each type of precast concrete required.

1. Use a single design mixture for units with more than one major face or edge exposed.
2. Where only one face of unit is exposed use either a single design mixture or separate mixtures for face and backup.

B. Limit use of fly ash and ground granulated blast-furnace slag to 20 percent of portland cement by weight; limit metakaolin and silica fume to 10 percent of portland cement by weight.

C. Design mixtures may be prepared by a qualified independent testing agency or by qualified precast plant personnel at architectural precast concrete fabricator's option.

D. Limit water-soluble chloride ions to maximum percentage by weight of cement permitted by ACI 318 or PCI MNL 117 when tested according to ASTM C 1218/C 1218M.

E. Normal-Weight Concrete Mixtures: Proportion full-depth mixture by either laboratory trial batch or field test data methods according to ACI 211.1, with materials to be used on Project, to provide normal-weight concrete with the following properties:

1. Compressive Strength (28 Days): 5000 psi minimum.
2. Maximum Water-Cementitious Materials Ratio: 0.45.

F. Water Absorption: 6 percent by weight or 14 percent by volume, tested according to ASTM C 642, except for boiling requirement.

G. Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content complying with PCI MNL 117.

H. When included in design mixtures, add other admixtures to concrete mixtures according to manufacturer's written instructions.

2.12 MOLD FABRICATION

A. Molds: Accurately construct molds, mortar tight, of sufficient strength to withstand pressures due to concrete-placement operations and temperature changes and for prestressing and detensioning operations. Coat contact surfaces of molds with release agent before reinforcement is placed. Avoid contamination of reinforcement and prestressing tendons by release agent.

B. Maintain molds to provide completed architectural precast concrete units of shapes, lines, and dimensions indicated, within fabrication tolerances specified.

1. Form joints are not permitted on faces exposed to view in the finished work.
2. Edge and Corner Treatment: Uniformly chamfered.

© 2018 FGM Architects Inc.

2.13 FABRICATION

A. Cast-in Anchors, Inserts, Plates, Angles, and Other Anchorage Hardware: Fabricate anchorage hardware with sufficient anchorage and embedment to comply with design requirements. Accurately position for attachment of loose hardware, and secure in place during precasting operations. Locate anchorage hardware where it does not affect position of main reinforcement or concrete placement.

1. Weld-headed studs and deformed bar anchors used for anchorage according to AWS D1.1/D1.1M and AWS C5.4, "Recommended Practices for Stud Welding."

B. Furnish loose hardware items including steel plates, clip angles, seat angles, anchors, dowels, cramps, hangers, and other hardware shapes for securing architectural precast concrete units to supporting and adjacent construction.

C. Cast-in reglets, slots, holes, and other accessories in architectural precast concrete units as indicated on the Contract Drawings.

D. Cast-in openings larger than 10 inches in any dimension. Do not drill or cut openings or prestressing strand without Architect's approval.

E. Reinforcement: Comply with recommendations in PCI MNL 117 for fabricating, placing, and supporting reinforcement.

1. Clean reinforcement of loose rust and mill scale, earth, and other materials that reduce or destroy the bond with concrete. When damage to epoxy-coated reinforcing exceeds limits specified in ASTM A 775/A 775M, repair with patching material compatible with coating material and epoxy coat bar ends after cutting.
2. Accurately position, support, and secure reinforcement against displacement during concrete-placement and consolidation operations. Completely conceal support devices to prevent exposure on finished surfaces.
3. Place reinforcing steel and prestressing strands to maintain at least 3/4-inch minimum concrete cover. Increase cover requirements for reinforcing steel to 1-1/2 inches when units are exposed to corrosive environment or severe exposure conditions. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position while placing concrete. Direct wire tie ends away from finished, exposed concrete surfaces.
4. Install welded wire reinforcement in lengths as long as practicable. Lap adjoining pieces at least one full mesh spacing and wire tie laps, where required by design. Offset laps of adjoining widths to prevent continuous laps in either direction.

F. Reinforce architectural precast concrete units to resist handling, transportation, and erection stresses and specified in-place loads.

G. Prestress tendons for architectural precast concrete units by either pretensioning or post-tensioning methods. Comply with PCI MNL 117.

© 2018 FGM Architects Inc.

1. Delay detensioning or post-tensioning of precast, prestressed architectural concrete units until concrete has reached its indicated minimum design release compressive strength as established by test cylinders cured under same conditions as concrete unit.
2. Detension pretensioned tendons either by gradually releasing tensioning jacks or by heat-cutting tendons, using a sequence and pattern to prevent shock or unbalanced loading.
3. If concrete has been heat cured, detension while concrete is still warm and moist to avoid dimensional changes that may cause cracking or undesirable stresses.
4. Protect strand ends and anchorages with bituminous, zinc-rich, or epoxy paint to avoid corrosion and possible rust spots.

H. Comply with requirements in PCI MNL 117 and requirements in this Section for measuring, mixing, transporting, and placing concrete. After concrete batching, no additional water may be added.

I. Place concrete in a continuous operation to prevent cold joints or planes of weakness from forming in precast concrete units.

J. Thoroughly consolidate placed concrete by internal and external vibration without dislocating or damaging reinforcement and built-in items, and minimize pour lines, honeycombing, or entrapped air voids on surfaces. Use equipment and procedures complying with PCI MNL 117.

1. Place self-consolidating concrete without vibration according to PCI TR-6, "Interim Guidelines for the Use of Self-Consolidating Concrete in Precast/Prestressed Concrete Institute Member Plants." Ensure adequate bond between face and backup concrete, if used.

K. Comply with PCI MNL 117 for hot- and cold-weather concrete placement.

L. Identify pickup points of architectural precast concrete units and orientation in structure with permanent markings, complying with markings indicated on Shop Drawings. Imprint or permanently mark casting date on each architectural precast concrete unit on a surface that does not show in finished structure.

M. Cure concrete, according to requirements in PCI MNL 117, by moisture retention without heat or by accelerated heat curing using low-pressure live steam or radiant heat and moisture. Cure units until compressive strength is high enough to ensure that stripping does not have an effect on performance or appearance of final product.

N. Discard and replace architectural precast concrete units that do not comply with requirements, including structural, manufacturing tolerance, and appearance, unless repairs meet requirements in PCI MNL 117 and Architect's approval.

2.14 FABRICATION TOLERANCES

A. Fabricate architectural precast concrete units to shapes, lines, and dimensions indicated so each finished unit complies with the following product tolerances:

1. Overall Height and Width of Units, Measured at the Face Exposed to View: As follows:

    a. 10 feet or under, plus or minus 1/8 inch.
    b. 10 to 20 feet, plus 1/8 inch, minus 3/16 inch.
    c. 20 to 40 feet, plus or minus 1/4 inch.
    d. Each additional 10 feet, plus or minus 1/16 inch.

2. Variation from Square or Designated Skew (Difference in Length of the Two Diagonal Measurements): Plus or minus 1/8 inch/72 inches or 1/2 inch total, whichever is greater.
3. Length and Width of Block-outs and Openings within One Unit: Plus or minus 1/4 inch.
4. Location and Dimension of Block-outs Hidden from View and Used for HVAC and Utility Penetrations: Plus or minus 3/4 inch.
5. Bowing: Plus or minus L/360, maximum 1 inch.
6. Local Smoothness: 1/4 inch/10 feet.
7. Warping: 1/16 inch/12 inches of distance from nearest adjacent corner.
8. Tipping and Flushness of Plates: Plus or minus 1/4 inch.
9. Dimensions of Architectural Features and Rustications: Plus or minus 1/8 inch.

B. Position Tolerances: For cast-in items measured from datum line location, as indicated on Shop Drawings.

1. Weld Plates: Plus or minus 1 inch.
2. Inserts: Plus or minus 1/2 inch.
3. Handling Devices: Plus or minus 3 inches.
4. Reinforcing Steel and Welded Wire Reinforcement: Plus or minus 1/4 inch where position has structural implications or affects concrete cover; otherwise, plus or minus 1/2 inch.
5. Reinforcing Steel Extending out of Member: Plus or minus 1/2 inch of plan dimensions.
6. Tendons: Plus or minus 1/4 inch, vertical; plus or minus 1 inch, horizontal.
7. Location of Rustication Joints: Plus or minus 1/8 inch.
8. Location of Opening within Panel: Plus or minus 1/4 inch.
9. Location of Flashing Reglets: Plus or minus 1/4 inch.
10. Location of Flashing Reglets at Edge of Panel: Plus or minus 1/8 inch.
11. Location of Bearing Surface from End of Member: Plus or minus 1/4 inch.
12. Allowable Rotation of Plate, Channel Inserts, and Electrical Boxes: 2-degree rotation or 1/4 inch maximum over the full dimension of unit.
13. Position of Sleeve: Plus or minus 1/2 inch.
14. Location of Window Washer Track or Buttons: Plus or minus 1/8 inch.

2.15 FINISHES

A. Finish exposed top and back surfaces of architectural precast concrete units to match face-surface finish.

B. Finish exposed top and back surfaces of architectural precast concrete units with smooth, steel-trowel finish.

C. Finish unexposed surfaces of architectural precast concrete units with as cast finish.

2.16 SOURCE QUALITY CONTROL

A. Quality-Control Testing: Test and inspect precast concrete according to PCI MNL 117 requirements. If using self-consolidating concrete, also test and inspect according to PCI TR-6, ASTM C 1610/C 1610M, ASTM C 1611/C 1611M, ASTM C 1621/C 1621M, and ASTM C 1712.

B. Owner will employ an independent testing agency to evaluate architectural precast concrete fabricator's quality-control and testing methods.

1. Allow Owner's testing agency access to material storage areas, concrete production equipment, concrete placement, and curing facilities. Cooperate with Owner's testing agency and provide samples of materials and concrete mixtures as may be requested for additional testing and evaluation.

C. Strength of precast concrete units is considered deficient if units fail to comply with ACI 318 requirements for concrete strength.

D. Testing: If there is evidence that strength of precast concrete units may be deficient or may not comply with ACI 318 requirements, precaster will employ an independent testing agency to obtain, prepare, and test cores drilled from hardened concrete to determine compressive strength according to ASTM C 42/C 42M and ACI 318.

1. A minimum of three representative cores shall be taken from units of suspect strength, from locations directed by Architect.
2. Test cores in an air-dry condition.
3. Strength of concrete for each series of three cores is considered satisfactory if average compressive strength is equal to at least 85 percent of 28-day design compressive strength and no single core is less than 75 percent of 28-day design compressive strength.
4. Report test results in writing on same day that tests are performed, with copies to Architect, Contractor, and precast concrete fabricator. Test reports include the following:

    a. Project identification name and number.
    b. Date when tests were performed.
    c. Name of precast concrete fabricator.
    d. Name of concrete testing agency.
    e. Identification letter, name, and type of precast concrete unit(s) represented by core tests; design compressive strength; type of break; compressive strength at breaks, corrected for length-diameter ratio; and direction of applied load to core in relation to horizontal plane of concrete as placed.

E. Patching: If core test results are satisfactory and precast concrete units comply with requirements, clean and dampen core holes and solidly fill with precast concrete mixture that has no coarse aggregate, and finish to match adjacent precast concrete surfaces.

© 2018 FGM Architects Inc.

F. Defective Units: Discard and replace recast architectural concrete units that do not comply with acceptability requirements in PCI MNL 117, including concrete strength, manufacturing tolerances, and color and texture range. Chipped, spalled, or cracked units may be repaired, subject to Architect's approval. Architect reserves the right to reject precast units that do not match approved samples, sample panels, and mockups. Replace unacceptable units with precast concrete units that comply with requirements.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine supporting structural frame or foundation and conditions for compliance with requirements for installation tolerances, bearing surface tolerances, and other conditions affecting performance of the Work.

B. Do not install precast concrete units until supporting cast-in-place concrete has attained minimum allowable design compressive strength and supporting steel or other structure is structurally ready to receive loads from precast concrete units.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install clips, hangers, bearing pads, and other accessories required for connecting architectural precast concrete units to supporting members and backup materials.

B. Erect architectural precast concrete level, plumb, and square within specified allowable tolerances. Provide temporary supports and bracing as required to maintain position, stability, and alignment of units until permanent connections are completed.

1. Install temporary steel or plastic spacing shims as precast concrete units are being erected. Tack weld steel shims to each other to prevent shims from separating.
2. Maintain horizontal and vertical joint alignment and uniform joint width as erection progresses.
3. Remove projecting lifting devices and grout fill voids within recessed lifting devices flush with surface of adjacent precast surfaces when recess is exposed.
4. Unless otherwise indicated, maintain uniform joint widths of 3/4 inch.

C. Connect architectural precast concrete units in position by bolting, welding, grouting, or as otherwise indicated on Shop Drawings. Remove temporary shims, wedges, and spacers as soon as practical after connecting and grouting are completed.

1. Do not permit connections to disrupt continuity of roof flashing.

D. Welding: Comply with applicable requirements in AWS D1.1/D1.1M and AWS D1.4/D1.4M for welding, welding electrodes, appearance, quality of welds, and methods used in correcting welding work.

1. Protect architectural precast concrete units and bearing pads from damage by field welding or cutting operations, and provide noncombustible shields as required.
2. Welds not specified shall be continuous fillet welds, using no less than the minimum fillet as specified by AWS.
3. Clean weld-affected metal surfaces with chipping hammer followed by brushing, and apply a minimum 4.0-mil- thick coat of galvanized repair paint to galvanized surfaces according to ASTM A 780/A 780M.
4. Clean weld-affected metal surfaces with chipping hammer followed by brushing, and reprime damaged painted surfaces.
5. Visually inspect welds and remove, reweld, or repair incomplete and defective welds.

E. At bolted connections, use lock washers, tack welding, or other approved means to prevent loosening of nuts after final adjustment.

1. Where slotted connections are used, verify bolt position and tightness. For sliding connections, properly secure bolt but allow bolt to move within connection slot.

F. Grouting or Dry-Packing Connections and Joints: Grout connections where required or indicated. Retain flowable grout in place until hard enough to support itself. Alternatively, pack spaces with stiff dry-pack grout material, tamping until voids are completely filled. Place grout and finish smooth, level, and plumb with adjacent concrete surfaces. Promptly remove grout material from exposed surfaces before it affects finishes or hardens. Keep grouted joints damp for not less than 24 hours after initial set.

3.3 ERECTION TOLERANCES

A. Erect architectural precast concrete units level, plumb, square, and in alignment, without exceeding the following noncumulative erection tolerances:

1. Plan Location from Building Grid Datum: Plus or minus 1/2 inch.
2. Plan Location from Centerline of Steel: Plus or minus 1/2 inch.
3. Top Elevation from Nominal Top Elevation: As follows:

    a. Exposed Individual Panel: Plus or minus 1/4 inch.
    b. Non-Exposed Individual Panel: Plus or minus 1/2 inch.
    c. Exposed Panel Relative to Adjacent Panel: 1/4 inch.
    d. Non-Exposed Panel Relative to Adjacent Panel: 1/2 inch.

4. Support Elevation from Nominal Support Elevation: As follows:

    a. Maximum Low: 1/2 inch.
    b. Maximum High: 1/4 inch.

5. Maximum Plumb Variation over the Lesser of Height of Structure or 100 Feet: 1 inch.
6. Plumb in Any 10 Feet of Element Height: 1/4 inch.
7. Maximum Jog in Alignment of Matching Edges: 1/4 inch.

© 2018 FGM Architects Inc.

8. Joint Width (Governs over Joint Taper): Plus or minus 1/4 inch.
9. Maximum Joint Taper: 3/8 inch.
10. Joint Taper in 10 Feet: 1/4 inch.
11. Maximum Jog in Alignment of Matching Faces: 1/4 inch.
12. Differential Bowing or Camber, as Erected, between Adjacent Members of Same Design: 1/4 inch.
13. Opening Height between Spandrels: Plus or minus 1/4 inch.

3.4 FIELD QUALITY CONTROL

A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections and prepare reports:

1. Erection of loadbearing precast concrete members.

B. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections and prepare test reports.

C. Visually inspect field welds and test according to ASTM E 165 or to ASTM E 709 and ASTM E 1444. High-strength bolted connections are subject to inspections.

D. Testing agency will report test results promptly and in writing to Contractor and Architect.

E. Repair or remove and replace work where tests and inspections indicate that it does not comply with specified requirements.

F. Additional testing and inspecting, at Contractor's expense, shall be performed to determine compliance of replaced or additional work with specified requirements.

3.5 REPAIRS

A. Repair architectural precast concrete units if permitted by Architect. Architect reserves the right to reject repaired units that do not comply with requirements.

B. Mix patching materials and repair units so cured patches blend with color, texture, and uniformity of adjacent exposed surfaces and show no apparent line of demarcation between original and repaired work, when viewed in typical daylight illumination from a distance of 20 feet.

C. Prepare and repair damaged galvanized coatings with galvanizing repair paint according to ASTM A 780/A 780M.

D. Wire brush, clean, and paint damaged prime-painted components with same type of shop primer.

E. Remove and replace damaged architectural precast concrete units when repairs do not comply with requirements.

© 2018 FGM Architects Inc.

3.6 CLEANING

A. Clean surfaces of precast concrete units exposed to view.

B. Clean mortar, plaster, fireproofing, weld slag, and other deleterious material from concrete surfaces and adjacent materials immediately.

C. Clean exposed surfaces of precast concrete units after erection and completion of joint treatment to remove weld marks, other markings, dirt, and stains.

1. Perform cleaning procedures, if necessary, according to precast concrete fabricator's recommendations. Protect other work from staining or damage due to cleaning operations.
2. Do not use cleaning materials or processes that could change the appearance of exposed concrete finishes or damage adjacent materials.

END OF SECTION 034500

© 2018 FGM Architects Inc.

SECTION 042000 - UNIT MASONRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Clay face brick.
2. Cast stone trim units.
3. Mortar and grout.
4. Steel reinforcing bars.
5. Masonry-joint reinforcement.
6. Ties and anchors.
7. Embedded flashing.
8. Miscellaneous masonry accessories.

B. Related Requirements:

1. Section 033000 Cast-in-Place Concrete.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples for Initial Selection:

1. Clay face brick, in the form of straps of five or more bricks.
2. Cast Stone trim.
3. Weep holes/cavity vents.

C. Samples for Verification: For each type and color of the following:

1. Clay face brick, in the form of straps of five or more bricks.
2. Cast Stone trim.

© 2018 FGM Architects Inc.

1.5 INFORMATIONAL SUBMITTALS

A. List of Materials Used in Constructing Mockups: List generic product names together with manufacturers, manufacturers' product names, model numbers, lot numbers, batch numbers, source of supply, and other information as required to identify materials used. Include mix proportions for mortar and grout and source of aggregates.

1. Submittal is for information only. Receipt of list does not constitute approval of deviations from the Contract Documents unless such deviations are specifically brought to the attention of Owner and approved in writing.

B. Qualification Data: For testing agency.

C. Material Certificates: For each type and size of the following:

1. Masonry units.

a. Include data on material properties, material test reports substantiating compliance with requirements.
b. For brick, include size-variation data verifying that actual range of sizes falls within specified tolerances.
c. For exposed brick, include test report for efflorescence according to ASTM C 67.
d. For masonry units used in structural masonry, include data and calculations establishing average net-area compressive strength of units.

2. Cementitious materials. Include name of manufacturer, brand name, and type.
3. Mortar admixtures.
4. Preblended, dry mortar mixes. Include description of type and proportions of ingredients.
5. Grout mixes. Include description of type and proportions of ingredients.
6. Reinforcing bars.
7. Joint reinforcement.
8. Anchors, ties, and metal accessories.

D. Mix Designs: For each type of mortar and grout. Include description of type and proportions of ingredients.

1. Include test reports for mortar mixes required to comply with property specification. Test according to ASTM C 109/C 109M for compressive strength, ASTM C 1506 for water retention, and ASTM C 91/C 91M for air content.
2. Include test reports, according to ASTM C 1019, for grout mixes required to comply with compressive strength requirement.

E. Statement of Compressive Strength of Masonry: For each combination of masonry unit type and mortar type, provide statement of average net-area compressive strength of masonry units, mortar type, and resulting net-area compressive strength of masonry determined according to TMS 602/ACI 530.1/ASCE 6.

F. Cold-Weather and Hot-Weather Procedures: Detailed description of methods, materials, and equipment to be used to comply with requirements.

© 2018 FGM Architects Inc.

1.6 QUALITY ASSURANCE

A. Testing Agency Qualifications: Qualified according to ASTM C 1093 for testing indicated.

B. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.

1. Build mockups for typical exterior wall in sizes approximately 60 inches long by 60 inches high by full thickness, including face and backup wythes and accessories.

a. Include a sealant-filled joint at least 16 inches long in mockup.
b. Include through-wall flashing installed for a 24-inch length in corner of exterior wall mockup approximately 16 inches down from top of mockup, with a 12-inch length of flashing left exposed to view (omit masonry above half of flashing).
c. Include veneer anchors, flashing, cavity drainage material, and weep holes in exterior masonry-veneer wall mockup.

2. Where masonry is to match existing, erect mockups adjacent and parallel to existing surface.
3. Clean one-half of exposed faces of mockups with masonry cleaner as indicated.
4. Protect accepted mockups from the elements with weather-resistant membrane.
5. Approval of mockups is for color, texture, and blending of masonry units; relationship of mortar and sealant colors to masonry unit colors; tooling of joints; and aesthetic qualities of workmanship.

a. Approval of mockups is also for other material and construction qualities specifically approved by Architect in writing.
b. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.

6. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.

B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.

C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.

© 2018 FGM Architects Inc.

D. Deliver preblended, dry mortar mix in moisture-resistant containers. Store preblended, dry mortar mix in delivery containers on elevated platforms in a dry location or in covered weatherproof dispensing silos.

E. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

1.8 FIELD CONDITIONS

A. Protection of Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed masonry when construction is not in progress.

1. Extend cover a minimum of 24 inches down both sides of walls, and hold cover securely in place.
2. Where one wythe of multiwythe masonry walls is completed in advance of other wythes, secure cover a minimum of 24 inches down face next to unconstructed wythe, and hold cover in place.

B. Do not apply uniform floor or roof loads for at least 12 hours and concentrated loads for at least three days after building masonry walls or columns.

C. Stain Prevention: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed or painted. Immediately remove grout, mortar, and soil that come in contact with such masonry.

1. Protect base of walls from rain-splashed mud and from mortar splatter by spreading coverings on ground and over wall surface.
2. Protect sills, ledges, and projections from mortar droppings.
3. Turn scaffold boards near the wall on edge at the end of each day to prevent rain from splashing mortar and dirt onto completed masonry.

D. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace unit masonry damaged by frost or by freezing conditions. Comply with cold-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6.

1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F and higher and will remain so until masonry has dried, but not less than seven days after completing cleaning.

E. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6.

© 2018 FGM Architects Inc.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations for Masonry Units: Obtain exposed masonry units of a uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, from single source from single manufacturer for each product required.

B. Source Limitations for Mortar Materials: Obtain mortar ingredients of a uniform quality, including color for exposed masonry, from single manufacturer for each cementitious component and from single source or producer for each aggregate.

2.2 PERFORMANCE REQUIREMENTS

A. Provide structural unit masonry that develops indicated net-area compressive strengths at 28 days.

1. Determine net-area compressive strength of masonry from average net-area compressive strengths of masonry units and mortar types (unit-strength method) according to TMS 602/ACI 530.1/ASCE 6.

2.3 UNIT MASONRY, GENERAL

A. Masonry Standard: Comply with TMS 602/ACI 530.1/ASCE 6, except as modified by requirements in the Contract Documents.

B. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated. Do not use units where such defects are exposed in the completed Work and will be within 20 feet vertically and horizontally of a walking surface.

2.4 BRICK

A. General: Provide shapes indicated and as follows, with exposed surfaces matching finish and color of exposed faces of adjacent units:

1. For ends of sills and caps and for similar applications that would otherwise expose unfinished brick surfaces, provide units without cores or frogs and with exposed surfaces finished.
2. Provide special shapes for applications where stretcher units cannot accommodate special conditions, including those at corners, movement joints, bond beams, sashes, and lintels.
3. Provide special shapes for applications requiring brick of size, form, color, and texture on exposed surfaces that cannot be produced by sawing.
4. Provide special shapes for applications where shapes produced by sawing would result in sawed surfaces being exposed to view.

© 2018 FGM Architects Inc.

B. Clay Face Brick: Facing brick complying with ASTM C 216.

1. Products: Subject to compliance with requirements, provide the following:

a. Provide face brick matching existing conditions on site and to match existing adjacent brickwork..

2. Grade: SW or match existing.
3. Type: FBX or match existing.
4. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 3350 psi.
5. Initial Rate of Absorption: Less than 30 g/30 sq. in. per minute when tested according to ASTM C 67.
6. Efflorescence: Provide brick that has been tested according to ASTM C 67 and is rated "not effloresced."
7. Size : Match existing conditions.
8. Color and Texture: Match existing conditions.

2.5 CAST STONE TRIM UNITS

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Architectural Castone Inc., West Chicago, Illinois
2. Continental Cast Stone, Inc.; Michigan City, Indiana
3. Custom Stone Works Inc.; Cortland, Illinois
4. Harvey Cement Products; Harvey, Illinois
5. Northeast Wisconsin Precast, Greenville, Wisconsin.
6. Royal Stone Inc. Williamstone, Michigan
7. Superior Precast Products, Inc., Kalamazoo, Michigan.

B. Provide cast stone units complying with ASTM C 1364 using either the vibrant dry tamp or wet-cast method.

1. Provide units that are resistant to freezing and thawing as determined by laboratory testing according to ASTM C 666/C 666M, Procedure A, as modified by ASTM C 1364.

C. Portland Cement: ASTM C 150, Type I, containing not more than 0.60 percent total alkali when tested according to ASTM C 114.

D. Fine Aggregates: Manufactured or natural sands complying with ASTM C 33, gradation as needed to produce required textures.

E. Air-Entraining Admixture: ASTM C 260, certified by the manufacturer to be compatible with other admixtures used.

1. Add to mixes for units exposed to the exterior at manufacturer's prescribed rate to result in an air content of 5 to 7 percent.

© 2018 FGM Architects Inc.

F. Fabricate units with sharp arris and accurately reproduced details, with indicated texture on all exposed surfaces unless otherwise indicated.

1. Slope exposed horizontal surfaces 1:12 to drain unless otherwise indicated.
2. Provide drips on projecting elements unless otherwise indicated.

G. Fabrication Tolerances:

1. Variation in Cross Section: Do not vary from indicated dimensions by more than 1/8 inch (3 mm).
2. Variation in Length: Do not vary from indicated dimensions by more than 1/360 of the length of unit or 1/8 inch (3 mm), whichever is greater, but in no case by more than 1/4 inch (6 mm).
3. Warp, Bow, and Twist: Not to exceed 1/360 of the length of unit or 1/8 inch (3 mm), whichever is greater.
4. Location of Grooves, False Joints, Holes, Anchorages, and Similar Features: Do not vary from indicated position by more than 1/8 inch (3 mm) on formed surfaces of units and 3/8 inch (10 mm) on unformed surfaces.

H. Cure and finish units as follows:

1. Cure units in totally enclosed curing room under dense fog and water spray at 95 percent relative humidity for 24 hours.
2. Yard cure units until the sum of the mean daily temperatures for each day equals or exceeds 350 deg F.
3. Acid etch units to remove cement film from surfaces indicated to be finished.

I. Colors and Textures: Match existing conditions on site.

J. Reinforcement: Deformed steel bars complying with ASTM A 615/A 615M, Grade 60 (Grade 420). Use galvanized or epoxy-coated reinforcement when covered with less than 1-1/2 inches (38 mm) of cast stone material.

1. Epoxy Coating: ASTM A 775/A 775M.
2. Galvanized Coating: ASTM A 767/A 767M.

2.6 MORTAR AND GROUT MATERIALS

A. Portland Cement: ASTM C 150/C 150M, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.

1. Alkali content shall not be more than 0.1 percent when tested according to ASTM C 114.

B. Hydrated Lime: ASTM C 207, Type S.

C. Portland Cement-Lime Mix: Packaged blend of portland cement and hydrated lime containing no other ingredients.

© 2018 FGM Architects Inc.

D. Aggregate for Mortar: ASTM C 144.

1. For mortar that is exposed to view, use washed aggregate consisting of natural sand or crushed stone.
2. For joints less than 1/4 inch thick, use aggregate graded with 100 percent passing the No. 16 sieve.
3. White-Mortar Aggregates: Natural white sand or crushed white stone.
4. Colored-Mortar Aggregates: Natural sand or crushed stone of color necessary to produce required mortar color.

E. Aggregate for Grout: ASTM C 404.

F. Cold-Weather Admixture: Nonchloride, noncorrosive, accelerating admixture complying with ASTM C 494/C 494M, Type C, and recommended by manufacturer for use in masonry mortar of composition indicated.

G. Water: Potable.

2.7 REINFORCEMENT

A. Uncoated-Steel Reinforcing Bars: ASTM A 615/A 615M or ASTM A 996/A 996M, Grade 60.

B. Reinforcing Bar Positioners: Wire units designed to fit into mortar bed joints spanning masonry unit cells and to hold reinforcing bars in center of cells. Units are formed from 0.148-inch steel wire, hot-dip galvanized after fabrication. Provide units designed for number of bars indicated.

C. Masonry-Joint Reinforcement, General: ASTM A 951/A 951M.

1. Exterior Walls: Hot-dip galvanized carbon steel.
2. Wire Size for Side Rods: 0.148-inch diameter.
3. Wire Size for Cross Rods: 0.148-inch diameter.
4. Wire Size for Veneer Ties: 0.148-inch diameter.
5. Spacing of Cross Rods, Tabs, and Cross Ties: Not more than 16 inches o.c.
6. Provide in lengths of not less than 10 feet, with prefabricated corner and tee units.

D. Masonry-Joint Reinforcement for Single-Wythe Masonry: Ladder or truss type with single pair of side rods.

2.8 TIES AND ANCHORS

A. General: Ties and anchors shall extend at least 1-1/2 inches into veneer but with at least a 5/8-inch cover on outside face.

B. Materials: Provide ties and anchors specified in this article that are made from materials that comply with the following unless otherwise indicated:

© 2018 FGM Architects Inc.

1. Mill-Galvanized, Carbon-Steel Wire: ASTM A 82/A 82M, with ASTM A 641/A 641M, Class 1 coating.
2. Hot-Dip Galvanized, Carbon-Steel Wire: ASTM A 82/A 82M, with ASTM A 153/A 153M, Class B-2 coating.
3. Stainless-Steel Bars: ASTM A 276 or ASTM A 666, Type 304.

C. Corrugated-Metal Ties: Metal strips not less than 7/8 inch wide with corrugations having a wavelength of 0.3 to 0.5 inch and an amplitude of 0.06 to 0.10 inch made from 0.030-inch- thick steel sheet, galvanized after fabrication .

D. Individual Wire Ties: Rectangular units with closed ends and not less than 4 inches wide.

1. Z-shaped ties with ends bent 90 degrees to provide hooks not less than 2 inches long may be used for masonry constructed from solid units.
2. Where wythes do not align or are of different materials, use adjustable ties with pintle-and-eye connections having a maximum adjustment of 1-1/4 inches.
3. Wire: Fabricate from 3/16-inch- diameter, hot-dip galvanized steel wire.

E. Adjustable Anchors for Connecting to Concrete: Provide anchors that allow vertical or horizontal adjustment but resist tension and compression forces perpendicular to plane of wall.

2.9 EMBEDDED FLASHING MATERIALS

A. Metal Flashing: Provide metal flashing complying with SMACNA's "Architectural Sheet Metal Manual" and as follows:

1. Stainless Steel: ASTM A 240/A 240M or ASTM A 666, Type 304, 0.016 inch thick.
2. Fabricate continuous flashings in sections 96 inches long minimum, but not exceeding 12 feet. Provide splice plates at joints of formed, smooth metal flashing.
3. Fabricate through-wall flashing with drip edge unless otherwise indicated. Fabricate by extending flashing 1/2 inch out from wall, with outer edge bent down 30 degrees.
4. Fabricate metal drip edges from stainless steel. Extend at least 3 inches into wall and 1/2 inch out from wall, with outer edge bent down 30 degrees.

B. Flexible Flashing: Use one of the following unless otherwise indicated:

1. Elastomeric Thermoplastic Flashing: Composite flashing product consisting of a polyester-reinforced ethylene interpolymer alloy.

a. Products: Subject to compliance with requirements, provide one of the following:

1) Du Pont; Thru-Wall Flashing.
2) Hohmann & Barnard, Inc; Flex-Flash.
3) Hyload, Inc.; Hyload Cloaked Flashing System.

4) Mortar Net USA, Ltd; Total Flash.

b. Monolithic Sheet: Elastomeric thermoplastic flashing, 0.040 inch thick.
c. Self-Adhesive Sheet: Elastomeric thermoplastic flashing, 0.025 inch thick, with a 0.015-inch- thick coating of adhesive.
d. Self-Adhesive Sheet with Drip Edge: Elastomeric thermoplastic flashing, 0.025 inch thick, with a 0.015-inch- thick coating of rubberized-asphalt adhesive. Where flashing extends to face of masonry, rubberized-asphalt coating is held back approximately 1-1/2 inches from edge.

1) Color: Black.

e. Accessories: Provide preformed corners, end dams, other special shapes, and seaming materials produced by flashing manufacturer.

C. Application: Unless otherwise indicated, use the following:

1. Where flashing is indicated to receive counterflashing, use metal flashing.
2. Where flashing is indicated to be turned down at or beyond the wall face, use metal flashing.
3. Where flashing is partly exposed and is indicated to terminate at the wall face, use metal flashing with a drip edge with a sealant stop or flexible flashing with a metal drip edge.
4. Where flashing is fully concealed, use flexible flashing.

2.10 MISCELLANEOUS MASONRY ACCESSORIES

A. Compressible Filler: Premolded filler strips complying with ASTM D 1056, Grade 2A1; compressible up to 35 percent; of width and thickness indicated; formulated from neoprene urethane or PVC.

B. Preformed Control-Joint Gaskets: Made from styrene-butadiene-rubber compound, complying with ASTM D 2000, Designation M2AA-805 or PVC, complying with ASTM D 2287, Type PVC-65406 and designed to fit standard sash block and to maintain lateral stability in masonry wall; size and configuration as indicated.

C. Bond-Breaker Strips: Asphalt-saturated felt complying with ASTM D 226/D 226M, Type I (No. 15 asphalt felt).

D. Weep/Cavity Vent Products: Use the following unless otherwise indicated:

1. Cellular Plastic Weep/Vent: One-piece, flexible extrusion made from UV-resistant polypropylene copolymer, full height and width of head joint and depth 1/8 inch less than depth of outer wythe, in color selected from manufacturer's standard.

E. Cavity Drainage Material: Free-draining mesh, made from polymer strands that will not degrade within the wall cavity.

1. Products: Subject to compliance with requirements, provide the following:

© 2018 FGM Architects Inc.

a. Mortar Net USA, Ltd; Mortar Net.
b. Insert manufacturer's name; product name or designation.

2. Configuration: Provide one of the following:

a. Strips, full depth of cavity and 10 inches high, with dovetail-shaped notches 7 inches deep that prevent clogging with mortar droppings.

2.11 MASONRY CLEANERS

A. Proprietary Acidic Cleaner: Manufacturer's standard-strength cleaner designed for removing mortar/grout stains, efflorescence, and other new construction stains from new masonry without discoloring or damaging masonry surfaces. Use product expressly approved for intended use by cleaner manufacturer and manufacturer of masonry units being cleaned.

2.12 MORTAR AND GROUT MIXES

A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures unless otherwise indicated.

1. Do not use calcium chloride in mortar or grout.
2. Use portland cement-lime mortar unless otherwise indicated.
3. For exterior masonry, use portland cement-lime mortar.
4. For reinforced masonry, use portland cement-lime mortar.
5. Add cold-weather admixture (if used) at same rate for all mortar that will be exposed to view, regardless of weather conditions, to ensure that mortar color is consistent.

B. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients in form of a preblended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.

C. Mortar for Unit Masonry: Comply with ASTM C 270, Proportion Specification. Provide the following types of mortar for applications stated unless another type is indicated or needed to provide required compressive strength of masonry.

1. For masonry below grade or in contact with earth, use Type M.
2. For reinforced masonry, use Type S.
3. For exterior, above-grade, load-bearing and nonload-bearing walls and parapet walls; for interior load-bearing walls; for interior nonload-bearing partitions; and for other applications where another type is not indicated, use Type N.

D. Grout for Unit Masonry: Comply with ASTM C 476.

1. Use grout of type indicated or, if not otherwise indicated, of type (fine or coarse) that will comply with TMS 602/ACI 530.1/ASCE 6 for dimensions of grout spaces and pour height.

© 2018 FGM Architects Inc.

2. Proportion grout in accordance with ASTM C 476, Table 1.
3. Provide grout with a slump of 8 to 11 inches as measured according to ASTM C 143/C 143M.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

1. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
2. Verify that foundations are within tolerances specified.
3. Verify that reinforcing dowels are properly placed.
4. Verify that substrates are free of substances that impair mortar bond.

B. Before installation, examine rough-in and built-in construction for piping systems to verify actual locations of piping connections.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

A. Thickness: Build cavity and composite walls and other masonry construction to full thickness shown. Build single-wythe walls to actual widths of masonry units, using units of widths indicated.

B. Build chases and recesses to accommodate items specified in this and other Sections.

C. Leave openings for equipment to be installed before completing masonry. After installing equipment, complete masonry to match construction immediately adjacent to opening.

D. Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.

E. Select and arrange units for exposed unit masonry to produce a uniform blend of colors and textures. Mix units from several pallets or cubes as they are placed.

F. Matching Existing Masonry: Match coursing, bonding, color, and texture of existing masonry.

© 2018 FGM Architects Inc.

G. Wetting of Brick: Wet brick before laying if initial rate of absorption exceeds 30 g/30 sq. in. per minute when tested according to ASTM C 67. Allow units to absorb water so they are damp but not wet at time of laying.

3.3 TOLERANCES

A. Dimensions and Locations of Elements:

1. For dimensions in cross section or elevation, do not vary by more than plus 1/2 inch or minus 1/4 inch.
2. For location of elements in plan, do not vary from that indicated by more than plus or minus 1/2 inch.
3. For location of elements in elevation, do not vary from that indicated by more than plus or minus 1/4 inch in a story height or 1/2 inch total.

B. Lines and Levels:

1. For bed joints and top surfaces of bearing walls, do not vary from level by more than 1/4 inch in 10 feet, or 1/2-inch maximum.
2. For conspicuous horizontal lines, such as lintels, sills, parapets, and reveals, do not vary from level by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2-inch maximum.
3. For vertical lines and surfaces, do not vary from plumb by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2-inch maximum.
4. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2-inch maximum.
5. For lines and surfaces, do not vary from straight by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2-inch maximum.
6. For vertical alignment of exposed head joints, do not vary from plumb by more than 1/4 inch in 10 feet or 1/2-inch maximum.
7. For faces of adjacent exposed masonry units, do not vary from flush alignment by more than 1/16 inch except due to warpage of masonry units within tolerances specified for warpage of units.

C. Joints:

1. For bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch.
2. For exposed bed joints, do not vary from bed-joint thickness of adjacent courses by more than 1/8 inch.
3. For head and collar joints, do not vary from thickness indicated by more than plus 3/8 inch or minus 1/4 inch.
4. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch. Do not vary from adjacent bed-joint and head-joint thicknesses by more than 1/8 inch.
5. For exposed bed joints and head joints of stacked bond, do not vary from a straight line by more than 1/16 inch from one masonry unit to the next.

© 2018 FGM Architects Inc.

3.4 LAYING MASONRY WALLS

A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.

B. Bond Pattern for Exposed Masonry: Unless otherwise indicated, lay exposed masonry in bond pattern to match existing conditions; do not use units with less-than-nominal 4-inch horizontal face dimensions at corners or jambs.

C. Lay concealed masonry with all units in a wythe in running bond or bonded by lapping not less than 2 inches. Bond and interlock each course of each wythe at corners. Do not use units with less-than-nominal 4-inch horizontal face dimensions at corners or jambs.

D. Stopping and Resuming Work: Stop work by stepping back units in each course from those in course below; do not tooth. When resuming work, clean masonry surfaces that are to receive mortar, remove loose masonry units and mortar, and wet brick if required before laying fresh masonry.

E. Built-in Work: As construction progresses, build in items specified in this and other Sections. Fill in solidly with masonry around built-in items.

F. Fill space between steel frames and masonry solidly with mortar unless otherwise indicated.

G. Where built-in items are to be embedded in cores of hollow masonry units, place a layer of metal lath, wire mesh, or plastic mesh in the joint below, and rod mortar or grout into core.

3.5 MORTAR BEDDING AND JOINTING

A. Lay hollow brick as follows:

1. Bed face shells in mortar and make head joints of depth equal to bed joints.
2. Bed webs in mortar in all courses of piers, columns, and pilasters.
3. Bed webs in mortar in grouted masonry, including starting course on footings.
4. Fully bed entire units, including areas under cells, at starting course on footings where cells are not grouted.
5. Fully bed units and fill cells with mortar at anchors and ties as needed to fully embed anchors and ties in mortar.

B. Lay solid masonry units and hollow brick with completely filled bed and head joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not deeply furrow bed joints or slush head joints.

C. Set cast-stone trim units in full bed of mortar with full vertical joints. Fill dowel, anchor, and similar holes.

© 2018 FGM Architects Inc.

1. Clean soiled surfaces with fiber brush and soap powder and rinse thoroughly with clear water.
2. Allow cleaned surfaces to dry before setting.
3. Wet joint surfaces thoroughly before applying mortar.
4. Rake out mortar joints for pointing with sealant.

D. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated.

3.6 MASONRY-JOINT REINFORCEMENT

A. General: Install entire length of longitudinal side rods in mortar with a minimum cover of 5/8 inch on exterior side of walls, 1/2 inch elsewhere. Lap reinforcement a minimum of 6 inches.

1. Space reinforcement not more than 16 inches o.c.
2. Space reinforcement not more than 8 inches o.c. in foundation walls and parapet walls.
3. Provide reinforcement not more than 8 inches above and below wall openings and extending 12 inches beyond openings in addition to continuous reinforcement.

B. Interrupt joint reinforcement at control and expansion joints unless otherwise indicated.

C. Provide continuity at wall intersections by using prefabricated T-shaped units.

D. Provide continuity at corners by using prefabricated L-shaped units.

E. Cut and bend reinforcing units as directed by manufacturer for continuity at corners, returns, offsets, column fireproofing, pipe enclosures, and other special conditions.

3.7 ANCHORING MASONRY TO CONCRETE

A. Anchor masonry to concrete, where masonry abuts or faces concrete, to comply with the following:

1. Provide an open space not less than 1 inch wide between masonry and structural steel or concrete unless otherwise indicated. Keep open space free of mortar and other rigid materials.
2. Anchor masonry with anchors embedded in masonry joints and attached to structure.
3. Space anchors as indicated, but not more than 24 inches o.c. vertically and 36 inches o.c. horizontally.

© 2018 FGM Architects Inc.

3.8 CONTROL AND EXPANSION JOINTS

A. General: Install control- and expansion-joint materials in unit masonry as masonry progresses. Do not allow materials to span control and expansion joints without provision to allow for in-plane wall or partition movement.

B. Form expansion joints in brick as follows:

1. Build flanges of metal expansion strips into masonry. Lap each joint 4 inches in direction of water flow. Seal joints below grade and at junctures with horizontal expansion joints if any.
2. Build flanges of factory-fabricated, expansion-joint units into masonry.
3. Build in compressible joint fillers where indicated.
4. Form open joint full depth of brick wythe and of width indicated, but not less than 3/8 inch for installation of sealant and backer rod specified in Section 079200 "Joint Sealants."

3.9 FLASHING, WEEP HOLES, AND CAVITY VENTS

A. General: Install embedded flashing and weep holes in masonry at shelf angles, lintels, ledges, other obstructions to downward flow of water in wall, and where indicated. Install cavity vents at shelf angles, ledges, and other obstructions to upward flow of air in cavities, and where indicated.

B. Install flashing as follows unless otherwise indicated:

1. Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing. Where flashing is within mortar joint, place through-wall flashing on sloping bed of mortar and cover with mortar. Before covering with mortar, seal penetrations in flashing with adhesive, sealant, or tape as recommended by flashing manufacturer.
2. At multiwythe masonry walls, including cavity walls, extend flashing through outer wythe, turned up a minimum of 8 inches, and through inner wythe to within 1/2 inch of the interior face of wall in exposed masonry. Where interior face of wall is to receive furring or framing, carry flashing completely through inner wythe and turn flashing up approximately 2 inches on interior face.
3. At multiwythe masonry walls, including cavity walls, extend flashing through outer wythe, turned up a minimum of 8 inches, and 1-1/2 inches into the inner wythe.
4. At masonry-veneer walls, extend flashing through veneer, across airspace behind veneer, and up face of sheathing at least 8 inches; with upper edge tucked under air barrier, lapping at least 4 inches.
5. Install metal drip edges beneath flexible flashing at exterior face of wall. Stop flexible flashing 1/2 inch back from outside face of wall, and adhere flexible flashing to top of metal drip edge.
6. Cut flexible flashing off flush with face of wall after masonry wall construction is completed.

C. Install weep holes in exterior wythes and veneers in head joints of first course of masonry immediately above embedded flashing.

© 2018 FGM Architects Inc.

1. Use specified weep/cavity vent products to form weep holes.
2. Space weep holes 24 inches o.c. unless otherwise indicated.

D. Place cavity drainage material in cavities to comply with configuration requirements for cavity drainage material in "Miscellaneous Masonry Accessories" Article.

3.10 FIELD QUALITY CONTROL

A. Testing and Inspecting: Owner will engage special inspectors to perform tests and inspections and prepare reports. Allow inspectors access to scaffolding and work areas as needed to perform tests and inspections. Retesting of materials that fail to comply with specified requirements shall be done at Contractor's expense.

B. Inspections: Special inspections according to Level B in TMS 402/ACI 530/ASCE 5.

1. Begin masonry construction only after inspectors have verified proportions of site-prepared mortar.
2. Place grout only after inspectors have verified compliance of grout spaces and of grades, sizes, and locations of reinforcement.
3. Place grout only after inspectors have verified proportions of site-prepared grout.

C. Testing Prior to Construction: One set of tests.

D. Testing Frequency: One set of tests for each 5000 sq. ft. of wall area or portion thereof.

E. Clay Masonry Unit Test: For each type of unit provided, according to ASTM C 67 for compressive strength.

F. Mortar Aggregate Ratio Test (Proportion Specification): For each mix provided, according to ASTM C 780.

G. Mortar Test (Property Specification): For each mix provided, according to ASTM C 780. Test mortar for mortar air content and compressive strength.

H. Grout Test (Compressive Strength): For each mix provided, according to ASTM C 1019.

3.11 REPAIRING, POINTING, AND CLEANING

A. Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Install new units to match adjoining units; install in fresh mortar, pointed to eliminate evidence of replacement.

B. Pointing: During the tooling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar. Point up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance. Prepare joints for sealant application, where indicated.

© 2018 FGM Architects Inc.

C. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.

D. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:

1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
2. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes. Obtain Owner's approval of sample cleaning before proceeding with cleaning of masonry.
3. Protect adjacent stone and nonmasonry surfaces from contact with cleaner by covering them with liquid strippable masking agent or polyethylene film and waterproof masking tape.
4. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing surfaces thoroughly with clear water.
5. Clean brick by bucket-and-brush hand-cleaning method described in BIA Technical Notes 20.
6. Clean concrete masonry by applicable cleaning methods indicated in NCMA TEK 8-4A.
7. Clean masonry with a proprietary acidic cleaner applied according to manufacturer's written instructions.
8. Clean cast stone trim to comply with stone supplier's written instructions.

3.12 MASONRY WASTE DISPOSAL

A. Salvageable Materials: Unless otherwise indicated, excess masonry materials are Contractor's property. At completion of unit masonry work, remove from Project site.

B. Waste Disposal as Fill Material: Dispose of clean masonry waste, including excess or soil-contaminated sand, waste mortar, and broken masonry units, by crushing and mixing with fill material as fill is placed.

1. Crush masonry waste to less than 4 inches in each dimension.
2. Mix masonry waste with at least two parts of specified fill material for each part of masonry waste. Fill material is specified in Section 312000 "Earth Moving."
3. Do not dispose of masonry waste as fill within 18 inches of finished grade.

C. Masonry Waste Recycling: Return broken CMUs not used as fill to manufacturer for recycling.

D. Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above or recycled, and other masonry waste, and legally dispose of off Owner's property.

END OF SECTION 042000

© 2018 FGM Architects Inc.

SECTION 075323 - ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Adhered ethylene-propylene-diene-monomer (EPDM) roofing system.
2. Roof insulation.

B. Related Requirements:

1. Section 076200 "Sheet Metal Flashing and Trim" for metal roof flashings and counterflashings.
2. Section 079200 "Joint Sealants" for joint sealants, joint fillers, and joint preparation.

1.3 DEFINITIONS

A. Roofing Terminology: Definitions in ASTM D 1079 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" apply to work of this Section.

1.4 PREINSTALLATION MEETINGS

A. Preinstallation Roofing Conference: Conduct conference at Project site.

1. Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, roofing Installer, roofing system manufacturer's representative, deck Installer, and installers whose work interfaces with or affects roofing, including installers of roof accessories and roof-mounted equipment.
2. Review methods and procedures related to roofing installation, including manufacturer's written instructions.
3. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
4. Examine deck substrate conditions and finishes for compliance with requirements, including flatness and fastening.
5. Review structural loading limitations of roof deck during and after roofing.

© 2018 FGM Architects Inc.

6. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that affects roofing system.
7. Review governing regulations and requirements for insurance and certificates if applicable.
8. Review temporary protection requirements for roofing system during and after installation.
9. Review roof observation and repair procedures after roofing installation.

1.5 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: For roofing system. Include plans, elevations, sections, details, and attachments to other work, including:

1. Base flashings and membrane terminations.
2. Roof plan showing orientation of steel roof deck and orientation of roofing and fastening spacings and patterns for mechanically fastened roofing.

C. Samples for Verification: For the following products:

1. Sheet roofing, of color required.
2. Roof insulation.

1.6 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer and manufacturer.

B. Product Test Reports: For components of roofing system, tests performed by manufacturer and witnessed by a qualified testing agency.

C. Research/Evaluation Reports: For components of roofing system, from ICC-ES.

D. Sample Warranties: For manufacturer's special warranties.

1.7 CLOSEOUT SUBMITTALS

A. Maintenance Data: For roofing system to include in maintenance manuals.

1.8 QUALITY ASSURANCE

A. Manufacturer Qualifications: A qualified manufacturer that is for membrane roofing system identical to that used for this Project.

© 2018 FGM Architects Inc.

B. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by membrane roofing system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's special warranty.

C. Source Limitations: Obtain components including roof insulation for membrane roofing system from same manufacturer as membrane roofing or approved by membrane roofing manufacturer.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.

B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.

1. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.

C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.

D. Handle and store roofing materials, and place equipment in a manner to avoid permanent deflection of deck.

1.10 FIELD CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

1.11 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within specified warranty period.

1. Special warranty includes membrane roofing, base flashings, roof insulation, roofing accessories, and other components of membrane roofing system.
2. Warranty Period: 20 years from date of Substantial Completion.
3. Verify available warranties and warranty periods for membrane roofing system with manufacturers listed in Part 2 articles.

© 2018 FGM Architects Inc.

B. Special Project Warranty: Submit roofing Installer's warranty, on warranty form at end of this Section, signed by Installer, covering Work of this Section, including all components of roofing system such as membrane roofing, base flashing, roof insulation, fasteners, cover boards, substrate boards, vapor retarders, roof pavers, and walkway products, for the following warranty period:

1. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations: Obtain components including roof insulation for roofing system from same manufacturer as membrane roofing ormanufacturer approved by membrane roofing manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. General Performance: Installed roofing and base flashings shall withstand specified uplift pressures, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Roofing and base flashings shall remain watertight.

B. Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials under conditions of service and application required, as demonstrated by roofing manufacturer based on testing and field experience.

2.3 EPDM ROOFING

A. EPDM: ASTM D 4637, Type I, nonreinforced, uniform, flexible EPDM sheet.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
2. Basis-of-Design Product: Carlisle SynTec Incorporated or comparable product by one of the following:

    a. GAF Materials Corporation.
    b. Johns Manville.
    c. Versico Incorporated.

3. Thickness: 60 mils, nominal.
4. Exposed Face Color: White on black Insert color.

© 2018 FGM Architects Inc.

2.4 AUXILIARY ROOFING MATERIALS

A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with roofing.

B. Sheet Flashing: 60-mil- thick EPDM, partially cured or cured, according to application.

C. Protection Sheet: Epichlorohydrin or neoprene nonreinforced flexible sheet, 55- to 60-mil- thick, recommended by EPDM manufacturer for resistance to hydrocarbons, non-aromatic solvents, grease, and oil.

D. Bonding Adhesive: Manufacturer's standard,solvent based.

E. Seaming Material: Single-component, butyl splicing adhesive and splice cleaner.

F. Lap Sealant: Manufacturer's standard, single-component sealant, colored to match membrane roofing.

G. Water Cutoff Mastic: Manufacturer's standard butyl mastic sealant.

H. Metal Termination Bars: Manufacturer's standard, predrilled stainless-steel or aluminum bars, approximately 1 by 1/8 inch thick; with anchors.

I. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, molded pipe boot flashings, preformed inside and outside corner sheet flashings, reinforced EPDM securement strips, T-joint covers, in-seam sealants, termination reglets, cover strips, and other accessories.

1. Provide white flashing accessories for white EPDM membrane roofing.

2.5 ROOF INSULATION

A. General: Preformed roof insulation boards manufactured or approved by EPDM roofing manufacturer, selected from manufacturer's standard sizes suitable for application, of thicknesses indicated.

B. Polyisocyanurate Board Insulation: ASTM C 1289, Type II, Class 1, Grade 2, felt or glass-fiber mat facer on both major surfaces.

C. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated.

2.6 INSULATION ACCESSORIES

A. General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatibility with roofing.

B. Insulation Adhesive: Insulation manufacturer's recommended adhesive formulated to

attach roof insulation to substrate or to another insulation layer as follows:

1. Full-spread spray-applied, low-rise, two-component urethane adhesive.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the Work:

1. Verify that roof openings and penetrations are in place, curbs are set and braced, and roof-drain bodies are securely clamped in place.
2. Verify that wood blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation.
3. Verify that minimum concrete drying period recommended by roofing system manufacturer has passed.
4. Verify that concrete substrate is visibly dry and free of moisture. Test for capillary moisture by plastic sheet method according to ASTM D 4263.
5. Verify that concrete-curing compounds that will impair adhesion of roofing components to roof deck have been removed.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.

B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

3.3 ROOFING INSTALLATION, GENERAL

A. Install roofing system according to roofing system manufacturer's written instructions.

B. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at the end of the workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.

© 2018 FGM Architects Inc.

3.4 INSULATION INSTALLATION

A. Coordinate installing roofing system components so insulation is not exposed to precipitation or left exposed at the end of the workday.

B. Comply with roofing system and insulation manufacturer's written instructions for installing roof insulation.

C. Install insulation under area of roofing to achieve required thickness. Where overall insulation thickness is 2.7 inches or greater, install two or more layers with joints of each succeeding layer staggered from joints of previous layer a minimum of 6 inches in each direction.

1. Where installing composite and noncomposite insulation in two or more layers, install noncomposite board insulation for bottom layer and intermediate layers, if applicable, and install composite board insulation for top layer.

D. Trim surface of insulation where necessary at roof drains so completed surface is flush and does not restrict flow of water.

E. Install insulation with long joints of insulation in a continuous straight line with end joints staggered between rows, abutting edges and ends between boards. Fill gaps exceeding 1/4 inch with insulation.

1. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.

F. Adhered Insulation: Install each layer of insulation and adhere to substrate as follows:

1. Set each layer of insulation in a uniform coverage of full-spread insulation adhesive, firmly pressing and maintaining insulation in place.

3.5 ADHERED MEMBRANE ROOFING INSTALLATION

A. Adhere membrane roofing over area to receive roofing according to membrane roofing system manufacturer's written instructions. Unroll membrane roofing and allow to relax before installing.

B. Start installation of roofing in presence of roofing system manufacturer's technical personnel.

C. Accurately align roofing, and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.

D. Bonding Adhesive: Apply to substrate and underside of roofing at rate required by manufacturer, and allow to partially dry before installing roofing. Do not apply to splice area of roofing.

E. In addition to adhering, mechanically fasten roofing securely at terminations, penetrations, and perimeters.

© 2018 FGM Architects Inc.

F. Apply roofing with side laps shingled with slope of roof deck where possible.

G. Adhesive Seam Installation: Clean both faces of splice areas, apply splicing cement, and firmly roll side and end laps of overlapping roofing according to manufacturer's written instructions to ensure a watertight seam installation. Apply lap sealant and seal exposed edges of roofing terminations.

1. Apply a continuous bead of in-seam sealant before closing splice if required by roofing system manufacturer.

H. Repair tears, voids, and lapped seams in roofing that do not comply with requirements.

I. Spread sealant or mastic bed over deck-drain flange at roof drains, and securely seal membrane roofing in place with clamping ring.

J. Adhere protection sheet over membrane roofing at locations indicated.

3.6 BASE FLASHING INSTALLATION

A. Install sheet flashings and preformed flashing accessories, and adhere to substrates according to roofing system manufacturer's written instructions.

B. Apply bonding adhesive to substrate and underside of sheet flashing at required rate, and allow to partially dry. Do not apply to seam area of flashing.

C. Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.

D. Clean splice areas, apply splicing cement, and firmly roll side and end laps of overlapping sheets to ensure a watertight seam installation. Apply lap sealant and seal exposed edges of sheet flashing terminations.

E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.

3.7 INSULATION ASSEMBLIES

A. Provide insulation assembly components from the deck up as indicated on the drawings.

B. Insulation Assembly Type 1:

1. One layer of 2 inch insulation set in adhesive.
2. Form saddles as indicated, with custom fabricated boards at ½• /ft slope.
3. Roofing membrane adhered.

© 2018 FGM Architects Inc.

3.8 PROTECTING AND CLEANING

A. Protect membrane roofing system from damage and wear during remainder of construction period. When remaining construction does not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.

B. Correct deficiencies in or remove membrane roofing system that does not comply with requirements, repair substrates, and repair or reinstall membrane roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.

C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

3.9 ROOFING INSTALLER'S WARRANTY

A. WHEREAS _____ of _____, herein called the "Roofing Installer," has performed roofing and associated work ("work") on the following project:

1. Owner: <**Insert name of Owner**>.
2. Address: <**Insert address**>.
3. Building Name/Type: <**Insert information**>.
4. Address: <**Insert address**>.
5. Area of Work: <**Insert information**>.
6. Acceptance Date: _____.
7. Warranty Period: <**Insert time**>.
8. Expiration Date: _____.

B. AND WHEREAS Roofing Installer has contracted (either directly with Owner or indirectly as a subcontractor) to warrant said work against leaks and faulty or defective materials and workmanship for designated Warranty Period,

C. NOW THEREFORE Roofing Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period he will, at his own cost and expense, make or cause to be made such repairs to or replacements of said work as are necessary to correct faulty and defective work and as are necessary to maintain said work in a watertight condition.

D. This Warranty is made subject to the following terms and conditions:

1. Specifically excluded from this Warranty are damages to work and other parts of the building, and to building contents, caused by:

a. lightning;
b. peak gust wind speed exceeding Insert wind speed;
c. fire;

d. failure of roofing system substrate, including cracking, settlement, excessive deflection, deterioration, and decomposition;
e. faulty construction of parapet walls, copings, chimneys, skylights, vents, equipment supports, and other edge conditions and penetrations of the work;
f. vapor condensation on bottom of roofing; and
g. activity on roofing by others, including construction contractors, maintenance personnel, other persons, and animals, whether authorized or unauthorized by Owner.

2. When work has been damaged by any of foregoing causes, Warranty shall be null and void until such damage has been repaired by Roofing Installer and until cost and expense thereof have been paid by Owner or by another responsible party so designated.
3. Roofing Installer is responsible for damage to work covered by this Warranty but is not liable for consequential damages to building or building contents resulting from leaks or faults or defects of work.
4. During Warranty Period, if Owner allows alteration of work by anyone other than Roofing Installer, including cutting, patching, and maintenance in connection with penetrations, attachment of other work, and positioning of anything on roof, this Warranty shall become null and void on date of said alterations, but only to the extent said alterations affect work covered by this Warranty. If Owner engages Roofing Installer to perform said alterations, Warranty shall not become null and void unless Roofing Installer, before starting said work, shall have notified Owner in writing, showing reasonable cause for claim, that said alterations would likely damage or deteriorate work, thereby reasonably justifying a limitation or termination of this Warranty.
5. During Warranty Period, if original use of roof is changed and it becomes used for, but was not originally specified for, a promenade, work deck, spray-cooled surface, flooded basin, or other use or service more severe than originally specified, this Warranty shall become null and void on date of said change, but only to the extent said change affects work covered by this Warranty.
6. Owner shall promptly notify Roofing Installer of observed, known, or suspected leaks, defects, or deterioration and shall afford reasonable opportunity for Roofing Installer to inspect work and to examine evidence of such leaks, defects, or deterioration.
7. This Warranty is recognized to be the only warranty of Roofing Installer on said work and shall not operate to restrict or cut off Owner from other remedies and resources lawfully available to Owner in cases of roofing failure. Specifically, this Warranty shall not operate to relieve Roofing Installer of responsibility for performance of original work according to requirements of the Contract Documents, regardless of whether Contract was a contract directly with Owner or a subcontract with Owner's General Contractor.

E. IN WITNESS THEREOF, this instrument has been duly executed this _____ day of _____, _____.

1. Authorized Signature: _____.
2. Name: _____.

3. Title: _____.

END OF SECTION 075323

SECTION 076200 - SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Formed roof-drainage sheet metal fabrications.
2. Formed low-slope roof sheet metal fabrications.

1.3 COORDINATION

A. Coordinate sheet metal flashing and trim layout and seams with sizes and locations of penetrations to be flashed, and joints and seams in adjacent materials.

B. Coordinate sheet metal flashing and trim installation with adjoining roofing and wall materials, joints, and seams to provide leakproof, secure, and noncorrosive installation.

1.4 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1. Review construction schedule. Verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
2. Review special roof details, roof drainage, roof-penetration flashing, equipment curbs, and condition of other construction that affect sheet metal flashing and trim.
3. Review requirements for insurance and certificates if applicable.
4. Review sheet metal flashing observation and repair procedures after flashing installation.

1.5 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each manufactured product and accessory.

© 2018 FGM Architects Inc.

B. Shop Drawings: For sheet metal flashing and trim.

1. Include plans, elevations, sections, and attachment details.
2. Detail fabrication and installation layouts, expansion-joint locations, and keyed details. Distinguish between shop- and field-assembled work.
3. Include identification of material, thickness, weight, and finish for each item and location in Project.
4. Include details for forming, including profiles, shapes, seams, and dimensions.
5. Include details for joining, supporting, and securing, including layout and spacing of fasteners, cleats, clips, and other attachments. Include pattern of seams.
6. Include details of termination points and assemblies.
7. Include details of expansion joints and expansion-joint covers, including showing direction of expansion and contraction from fixed points.
8. Include details of roof-penetration flashing.
9. Include details of edge conditions, including eaves, ridges, valleys, rakes, crickets, and counterflashings as applicable.
10. Include details of special conditions.
11. Include details of connections to adjoining work.

C. Samples for Initial Selection: For each type of sheet metal and accessory indicated with factory-applied finishes.

D. Samples for Verification: For each type of exposed finish.

1. Sheet Metal Flashing: 12 inches long by actual width of unit, including finished seam and in required profile. Include fasteners, cleats, clips, closures, and other attachments.
2. Trim, Metal Closures, Expansion Joints, Joint Intersections, and Miscellaneous Fabrications: 12 inches long and in required profile. Include fasteners and other exposed accessories.
3. Unit-Type Accessories and Miscellaneous Materials: Full-size Sample.
4. Anodized Aluminum Samples: Samples to show full range to be expected for each color required.

1.6 INFORMATIONAL SUBMITTALS

A. Qualification Data: For fabricator.

B. Product Test Reports: For each product, for tests performed by a qualified testing agency.

C. Sample Warranty: For special warranty.

1.7 CLOSEOUT SUBMITTALS

A. Maintenance Data: For sheet metal flashing and trim, and its accessories, to include in maintenance manuals.

© 2018 FGM Architects Inc.

1.8 QUALITY ASSURANCE

A. Fabricator Qualifications: Employs skilled workers who custom fabricate sheet metal flashing and trim similar to that required for this Project and whose products have a record of successful in-service performance.

B. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for fabrication and installation.

1. Build mockup of typical roof edge, including fasciafascia trim gutter, approximately 10 feet long, including supporting construction cleats, seams, attachments, underlayment, and accessories.
2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Owner specifically approves such deviations in writing.
3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Do not store sheet metal flashing and trim materials in contact with other materials that might cause staining, denting, or other surface damage. Store sheet metal flashing and trim materials away from uncured concrete and masonry.

B. Protect strippable protective covering on sheet metal flashing and trim from exposure to sunlight and high humidity, except to extent necessary for period of sheet metal flashing and trim installation.

1.10 WARRANTY

A. Special Warranty on Finishes: Manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.

1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:

a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.

2. Finish Warranty Period: 20 years from date of Substantial Completion.

© 2018 FGM Architects Inc.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. General: Sheet metal flashing and trim assemblies shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.

B. Sheet Metal Standard for Flashing and Trim: Comply with SMACNA's "Architectural Sheet Metal Manual" requirements for dimensions and profiles shown unless more stringent requirements are indicated.

C. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes to prevent buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

2.2 SHEET METALS

A. General: Protect mechanical and other finishes on exposed surfaces from damage by applying strippable, temporary protective film before shipping.

B. Aluminum Sheet: ASTM B 209, alloy as standard with manufacturer for finish required, with temper as required to suit forming operations and performance required; with smooth, flat surface.

1. Exposed Coil-Coated Finish:

a. Two-Coat Fluoropolymer: AAMA 2605. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

2. Color: As selected by Owner from manufacturer's full range.
3. Concealed Finish: Pretreat with manufacturer's standard white or light-colored acrylic or polyester backer finish, consisting of prime coat and wash coat with minimum total dry film thickness of 0.5 mil.

2.3 UNDERLAYMENT MATERIALS

A. Felt: ASTM D 226/D 226M, Type II (No. 30), asphalt-saturated organic felt; nonperforated.

2.4 MISCELLANEOUS MATERIALS

A. General: Provide materials and types of fasteners, solder, protective coatings, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and as recommended by manufacturer of primary sheet metal or manufactured item unless otherwise indicated.

B. Fasteners: Wood screws, annular threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads and recommended by manufacturer of primary sheet metal or manufactured item.

1. General: Blind fasteners or self-drilling screws, gasketed, with hex-washer head.

a. Exposed Fasteners: Heads matching color of sheet metal using plastic caps or factory-applied coating. Provide metal-backed EPDM or PVC sealing washers under heads of exposed fasteners bearing on weather side of metal.
b. Blind Fasteners: High-strength aluminum or stainless-steel rivets suitable for metal being fastened.
c. Spikes and Ferrules: Same material as gutter; with spike with ferrule matching internal gutter width.

2. Fasteners for Aluminum Sheet: Aluminum or Series 300 stainless steel.

C. Sealant Tape: Pressure-sensitive, 100 percent solids, polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch wide and 1/8 inch thick.

D. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane polymer sealant; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.

E. Epoxy Seam Sealer: Two-part, noncorrosive, aluminum seam-cementing compound, recommended by aluminum manufacturer for exterior nonmoving joints, including riveted joints.

F. Bituminous Coating: Cold-applied asphalt emulsion according to ASTM D 1187.

2.5 |FABRICATION, GENERAL

A. General: Custom fabricate sheet metal flashing and trim to comply with details shown and recommendations in cited sheet metal standard that apply to design, dimensions, geometry, metal thickness, and other characteristics of item required. Fabricate sheet metal flashing and trim in shop to greatest extent possible.

1. Fabricate sheet metal flashing and trim in thickness or weight needed to comply with performance requirements, but not less than that specified for each application and metal.
2. Obtain field measurements for accurate fit before shop fabrication.
3. Form sheet metal flashing and trim to fit substrates without excessive oil canning, buckling, and tool marks; true to line, levels, and slopes; and with exposed edges folded back to form hems.

© 2018 FGM Architects Inc.

4. Conceal fasteners and expansion provisions where possible. Do not use exposed fasteners on faces exposed to view.

B. Fabrication Tolerances: Fabricate sheet metal flashing and trim that is capable of installation to tolerances specified in MCA's "Guide Specification for Residential Metal Roofing."

C. Expansion Provisions: Where lapped expansion provisions cannot be used, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with butyl sealant concealed within joints.

D. Sealed Joints: Form nonexpansion but moveable joints in metal to accommodate elastomeric sealant.

E. Fabricate cleats and attachment devices of sizes from same material as accessory being anchored or from compatible, noncorrosive metal and as recommended by SMACNA's "Architectural Sheet Metal Manual" for application, but not less than thickness of metal being secured.

F. Seams for Aluminum: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with epoxy seam sealer. Rivet joints where necessary for strength.

G. Do not use graphite pencils to mark metal surfaces.

2.6 ROOF-DRAINAGE SHEET METAL FABRICATIONS

A. Hanging Gutters: Fabricate to cross section required, complete with end pieces, outlet tubes, and other accessories as required. Fabricate in minimum 96-inch- long sections. Furnish flat-stock gutter brackets and flat-stock gutter spacers and straps fabricated from same metal as gutters, of size recommended by cited sheet metal standard but with thickness not less than twice the gutter thickness. Fabricate expansion joints, expansion-joint covers, and gutter accessories from same metal as gutters.

1. Gutter Profile: SMACNA designation Style K .
2. Or field produced box gutter if size is too large for continuous.
3. Expansion Joints: Butt type with cover plate.
4. Gutters with Girth up to 15 Inches: Fabricate from the following materials:

    a. Aluminum: 0.032 inch thick.

B. Downspouts: Fabricate rectangular downspouts to dimensions indicated, complete with mitered elbows. Furnish with metal hangers from same material as downspouts and anchors .

1. Fabricated Hanger Style: Fig 1-35A according to SMACNA's "Architectural Sheet Metal Manual."
2. Fabricate from the following materials:

    a. Aluminum: 0.024 inch thick.

© 2018 FGM Architects Inc.

2.7 LOW-SLOPE ROOF SHEET METAL FABRICATIONS

A. Roof Edge Flashing (Gravel Stop and Fascia): Manufactured two-piece roof edge fascia consisting of snap-on metal fascia cover in section lengths not exceeding 12 feet and a continuous formed or extruded aluminum anchor bar with integral drip edge cleat to engage fascia cover. Provide matching mitered and welded corner units.

1. Basis of Design Product: Subject to compliance with requirements, provide Petersen Aluminum; Pac-Clad Fascia 2000 or comparable product by one of the following:

a. Johns Manville.
b. Metal-Fab Manufacturing, LLC.
c. National Sheet Metal Systems, Inc.

2. Fascia Cover: Fabricated from the following exposed metal:

a. Formed Aluminum: 0.063 inch (0.81 mm) thick.

3. Corners: Factory mitered and mechanically clinched and sealed watertight.
4. Splice Plates: Concealed, of same material, finish, and shape as fascia cover.
5. Size: 12-3/4 inches high fascia dimension, plus custom fascia extender, with flush face, to achieve total fascia height indicated on project drawings.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, substrate, and other conditions affecting performance of the Work.

1. Verify compliance with requirements for installation tolerances of substrates.
2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.
3. Verify that air- or water-resistant barriers have been installed over sheathing or backing substrate to prevent air infiltration or water penetration.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 UNDERLAYMENT INSTALLATION

A. Felt Underlayment: Install felt underlayment, wrinkle free, using adhesive to minimize use of mechanical fasteners under sheet metal flashing and trim. Apply in shingle fashion to shed water, with lapped joints of not less than 2 inches.

© 2018 FGM Architects Inc.

3.3 INSTALLATION, GENERAL

A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.

1. Install sheet metal flashing and trim true to line, levels, and slopes. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant.
2. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
3. Space cleats not more than 12 inches apart. Attach each cleat with at least two fasteners. Bend tabs over fasteners.
4. Install exposed sheet metal flashing and trim with limited oil canning, and free of buckling and tool marks.
5. Torch cutting of sheet metal flashing and trim is not permitted.
6. Do not use graphite pencils to mark metal surfaces.

B. Metal Protection: Where dissimilar metals contact each other, or where metal contacts pressure-treated wood or other corrosive substrates, protect against galvanic action or corrosion by painting contact surfaces with bituminous coating or by other permanent separation as recommended by sheet metal manufacturer or cited sheet metal standard.

1. Coat concealed side of uncoated-aluminum sheet metal flashing and trim with bituminous coating where flashing and trim contact wood, ferrous metal, or cementitious construction.
2. Underlayment: Where installing sheet metal flashing and trim directly on cementitious or wood substrates, install underlayment and cover with slip sheet.

C. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at maximum of 10 feet with no joints within 24 inches of corner or intersection.

1. Form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with sealant concealed within joints.
2. Use lapped expansion joints only where indicated on Drawings.

D. Fasteners: Use fastener sizes that penetrate wood blocking or sheathing not less than 1-1/4 inches for nails and not less than 3/4 inch for wood screws.

E. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.

F. Seal joints as required for watertight construction.

© 2018 FGM Architects Inc.

1. Use sealant-filled joints unless otherwise indicated. Embed hooked flanges of joint members not less than 1 inch into sealant. Form joints to completely conceal sealant. When ambient temperature at time of installation is between 40 and 70 deg F, set joint members for 50 percent movement each way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant-type joints at temperatures below 40 deg F.
2. Prepare joints and apply sealants to comply with requirements in Section 079200 "Joint Sealants."

G. Rivets: Rivet joints in uncoated aluminum where necessary for strength.

3.4 ROOF-DRAINAGE SYSTEM INSTALLATION

A. General: Install sheet metal roof-drainage items to produce complete roof-drainage system according to cited sheet metal standard unless otherwise indicated. Coordinate installation of roof perimeter flashing with installation of roof-drainage system.

B. Hanging Gutters: Join sections with riveted and soldered joints or with lapped joints sealed with sealant. Provide for thermal expansion. Attach gutters at eave or fascia to firmly anchor them in position. Provide end closures and seal watertight with sealant. Slope to downspouts.

1. Fasten gutter spacers to front and back of gutter.
2. Anchor back of gutter that extends onto roof deck with cleats spaced not more than 24 inches apart.
3. Anchor gutter with gutter brackets spaced not more than 36 inches apart .
4. Install gutter with expansion joints at locations indicated, but not exceeding, 50 feet apart. Install expansion-joint caps.
5. Install continuous gutter screens on gutters with noncorrosive fasteners, removable for cleaning gutters.

C. Downspouts: Join sections with 1-1/2-inch telescoping joints.

1. Provide hangers with fasteners designed to hold downspouts securely to walls. Locate hangers at top and bottom and at approximately 60 inches o.c.
2. Provide elbows at base of downspout to direct water away from building.

D. Expansion-Joint Covers: Install expansion-joint covers at locations and of configuration indicated. Lap joints minimum of 4 inches in direction of water flow.

3.5 ROOF FLASHING INSTALLATION

A. General: Install sheet metal flashing and trim to comply with performance requirements, sheet metal manufacturer's written installation instructions, andSMACNA's "Architectural Sheet Metal Manual". Provide concealed fasteners where possible, and set units true to line, levels, and slopes. Install work with laps, joints, and seams that are permanently watertight and weather resistant.

© 2018 FGM Architects Inc.

B. Roof Edge Flashing: Anchor to resist uplift and outward forces according to recommendations in cited sheet metal standard unless otherwise indicated. Interlock bottom edge of roof edge flashing with continuous cleat anchored to substrate at staggered 3-inch centers.

3.6 ERECTION TOLERANCES

A. Installation Tolerances: Shim and align sheet metal flashing and trim within installed tolerance of 1/4 inch in 20 feet on slope and location lines indicated on Drawings and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.

B. Installation Tolerances: Shim and align sheet metal flashing and trim within installed tolerances specified in MCA's "Guide Specification for Residential Metal Roofing."

3.7 CLEANING AND PROTECTION

A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.

B. Clean off excess sealants.

C. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed unless otherwise indicated in manufacturer's written installation instructions. On completion of sheet metal flashing and trim installation, remove unused materials and clean finished surfaces as recommended by sheet metal flashing and trim manufacturer. Maintain sheet metal flashing and trim in clean condition during construction.

D. Replace sheet metal flashing and trim that have been damaged or that have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 076200

© 2018 FGM Architects Inc.

SECTION 079200 - JOINT SEALANTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Silicone joint sealants.
2. Latex joint sealants.

B. Related Sections:

1. Division 04 Section "Unit Masonry" for masonry control and expansion joint fillers and gaskets.

1.3 SUBMITTALS

A. Product Data: For each joint-sealant product indicated.

B. Samples for Verification: For each kind and color of joint sealant required, provide Samples with joint sealants in 1/2-inch-wide joints formed between two 6-inch-long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.

C. Joint-Sealant Schedule: Include the following information:

1. Joint-sealant application, joint location, and designation.
2. Joint-sealant manufacturer and product name.
3. Joint-sealant formulation.
4. Joint-sealant color.

D. Qualification Data: For qualified Installer.

E. Product Certificates: For each kind of joint sealant and accessory, from manufacturer.

F. Sealant, Waterproofing, and Restoration Institute (SWRI) Validation Certificate: For each sealant specified to be validated by SWRI's Sealant Validation Program.

G. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, indicating that sealants comply with requirements.

H. Field-Adhesion Test Reports: For each sealant application tested.

© 2018 FGM Architects Inc.

I. Warranties: Sample of special warranties.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.

B. Source Limitations: Obtain each kind of joint sealant from single source from single manufacturer.

C. Product Testing: Test joint sealants using a qualified testing agency.

1. Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated.
2. Test according to SWRI's Sealant Validation Program for compliance with requirements specified by reference to ASTM C 920 for adhesion and cohesion under cyclic movement, adhesion-in-peel, and indentation hardness.

1.5 PROJECT CONDITIONS

A. Do not proceed with installation of joint sealants under the following conditions:

1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
2. When joint substrates are wet.
3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

1.6 WARRANTY

A. Special Installer's Warranty: Manufacturer's standard form in which Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.

1. Warranty Period: Two years from date of Substantial Completion.

B. Special Manufacturer's Warranty: Manufacturer's standard form in which joint-sealant manufacturer agrees to furnish joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.

1. Warranty Period: Two years from date of Substantial Completion.

C. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:

© 2018 FGM Architects Inc.

1. Movement of the structure caused by structural settlement or errors attributable to design or construction resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
2. Disintegration of joint substrates from natural causes exceeding design specifications.
3. Mechanical damage caused by individuals, tools, or other outside agents.
4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.

B. Colors of Exposed Joint Sealants: As selected by Owner from manufacturer's full range.

2.2 SILICONE JOINT SEALANTS

A. Single-Component, Nonsag, Traffic-Grade, Neutral-Curing Silicone Joint Sealant: ASTM C 920, Type S, Grade NS, Class 100/50, for Use T.

1. Products: Subject to compliance with requirements, provide one of the following:

    a. Dow Corning Corporation; 790.
    b. May National Associates, Inc.; Bondaflex Sil 728 NS.
    c. Pecora Corporation; 301 NS.
    d. Tremco Incorporated; Spectrem 800.

B. Mildew-Resistant, Single-Component, Nonsag, Neutral-Curing Silicone Joint Sealant: ASTM C 920, Type S, Grade NS, Class 25, for Use NT.

1. Products: Subject to compliance with requirements, provide the following:

    a. Pecora Corporation; 898.

2.3 LATEX JOINT SEALANTS

A. Latex Joint Sealant: Acrylic latex or siliconized acrylic latex, ASTM C 834, Type OP, Grade NF.

1. Products: Subject to compliance with requirements, provide one of the following:

    a. BASF Building Systems; Sonolac.
    b. Bostik, Inc.; Chem-Calk 600.
    c. May National Associates, Inc.; Bondaflex 600.
    d. Pecora Corporation; AC-20+.

e. Schnee-Morehead, Inc.; SM 8200.
f. Tremco Incorporated; Tremflex 834.

2.4 JOINT SEALANT BACKING

A. General: Provide sealant backings of material that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

B. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin), Type O (open-cell material), Type B (bicellular material with a surface skin) or any of the preceding types, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

2.5 MISCELLANEOUS MATERIALS

A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.

C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:

1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and

approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.

2. Clean porous joint substrate surfaces by brushing, grinding, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:

    a. Concrete.
    b. Masonry.

3. Remove laitance and form-release agents from concrete.
4. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:

    a. Metal.
    b. Glass.

B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.

B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

C. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.

    1. Do not leave gaps between ends of sealant backings.
    2. Do not stretch, twist, puncture, or tear sealant backings.
    3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.

D. Install sealants using proven techniques that comply with the following and at the same time backings are installed:

    1. Place sealants so they directly contact and fully wet joint substrates.

2. Completely fill recesses in each joint configuration.
3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.

E. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.

1. Remove excess sealant from surfaces adjacent to joints.
2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
3. Provide concave joint profile per Figure 8A in ASTM C 1193, unless otherwise indicated.

F. Acoustical Sealant Installation: At sound-rated assemblies and elsewhere as indicated, seal construction at perimeters, behind control joints, and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C 919 and with manufacturer's written recommendations.

3.4 CLEANING

A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.5 PROTECTION

A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

3.6 JOINT-SEALANT SCHEDULE

A. Joint-Sealant Application: Exterior joints in horizontal traffic surfaces.

1. Joint Locations:

a. Isolation and contraction joints in cast-in-place concrete slabs.

2. Silicone Joint Sealant: Single component, nonsag, traffic grade, neutral curing.
3. Joint-Sealant Color: As selected by Owner from manufacturer's full range of colors.

B. Joint-Sealant Application: Exterior joints in vertical surfaces and horizontal nontraffic surfaces.

1. Joint Locations:

    a. Construction joints in cast-in-place concrete.
    b. Control and expansion joints in unit masonry.
    c. Joints between different materials listed above.

2. Silicone Joint Sealant: Single component, nonsag, neutral curing, Class 100/50.
3. Joint-Sealant Color: As selected by Owner from manufacturer's full range of colors.

C. Joint-Sealant Application: Interior joints in horizontal traffic surfaces.

1. Joint Locations:

    a. Isolation joints in cast-in-place concrete slabs.
    b. Control and expansion joints in tile flooring.
2. Silicone Joint Sealant: Single component, nonsag, traffic grade, neutral curing.
3. Joint-Sealant Color: As selected by Owner from manufacturer's full range of colors.

D. Joint-Sealant Application: Interior joints in vertical surfaces and horizontal nontraffic surfaces.

1. Joint Locations:

    a. Control and expansion joints on exposed interior surfaces of exterior walls.
    b. Perimeter joints of exterior openings where indicated.
    c. Vertical joints on exposed surfaces of interior unit masonry and partitions.
    d. Joints on underside of plant-precast structural concrete planks.

2. Joint Sealant: Latex.
3. Joint-Sealant Color: As selected by Owner from manufacturer's full range of colors.

E. Joint-Sealant Application: Mildew-resistant interior joints in vertical surfaces and horizontal nontraffic surfaces.

1. Joint Sealant Location:

    a. Joints between plumbing fixtures and adjoining walls, floors, and counters.
    b. Tile control and expansion joints where indicated.

2. Joint Sealant: Mildew resistant, single component, nonsag, neutral curing, Silicone.
3. Joint-Sealant Color: As selected by Owner from manufacturer's full range of colors.

END OF SECTION 079200

© 2018 FGM Architects Inc.

SECTION 323119 - DECORATIVE METAL FENCES AND GATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Decorative steel fences.
2. Horizontal-slide gates.
3. Gate operators, including controls.

B. Related Requirements:

1. Section 033000 "Cast-in-Place Concrete" for concrete post concrete fill.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: For fences and gates. Include plans, elevations, sections, details, and attachments to other work.

1. Include diagrams for power, signal, and control wiring.

C. Samples: For each fence material and for each color specified.

1. Provide Samples 12 inches in length for linear materials.

1.5 INFORMATIONAL SUBMITTALS

A. Product Test Reports: For decorative metallic-coated-steel tubular picket fences, including finish, indicating compliance with referenced standard and other specified requirements.

© 2018 FGM Architects Inc.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For gate operators to include in maintenance manuals.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: Fabricator of products.

PART 2 - PRODUCTS

2.1 DECORATIVE STEEL FENCES

A. Decorative Steel Fences: Fences made from steel tubing and shapes, hot-dip galvanized.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Ameristar Montage Industrial Steel Ornamental Fence, Majestic Design; or comparable product by one of the following:

a. A & T Iron Works, Inc.
b. Ametco Manufacturing Corporation.
c. BarnettBates Corporation.
d. Metalco Fence & Railing Systems; Atlantis Products, Inc.

B. Posts: Square steel tubing.

1. Line Posts: minimum 2-1/2 by 2-1/2 inches with 12 ga. wall thickness.
2. End and Corner Posts: minimum 2-1/2 by 2-1/2 inches with 12 ga. wall thickness.

C. Post Caps: Formed from steel sheet and hot-dip galvanized after forming.

D. Rails:

1. Steel Channel Rails: Steel channels minimum 1-3/4 by 1-3/4 inches with minimum 0.105 wall thickness.

E. Pickets: 1 inch square by 0.065-inch steel tubes.

1. Terminate tops of pickets at top rail for flush top appearance.
2. Picket Spacing: 4 inches clear, maximum.

F. Fasteners: Stainless-steel carriage bolts and nuts.

G. Fabrication: Assemble fences into sections by welding pickets to rails.

1. Fabricate sections with clips welded to rails for field fastening to posts.
2. Drill posts and clips for fasteners before finishing to maximum extent possible.

H. Finish exposed welds to comply with NOMMA Guideline 1, Finish #2 - completely sanded joint, some undercutting and pinholes okay.

I. Galvanizing: For items other than hardware that are indicated to be galvanized, hot-dip galvanize to comply with ASTM A 123/A 123M. For hardware items, hot-dip galvanize to comply with ASTM A 153/A 153M.

1. Hot-dip galvanize posts and rails.

J. Finish for Steel Items: High-performance coating.

K. Finish for Metallic-Coated-Steel Items: High-performance coating.

2.2 HORIZONTAL-SLIDE GATES

A. Basis of Design: Ameristar Transport II Cantilever Gate, Majestic Design.

B. Gate Configuration: As indicated.

1. Type: Cantilever slide, with internal roller assemblies.

C. Gate Frame Height: 96 inches.

D. Gate Opening Width: As indicated.

E. Automated vehicular gates shall comply with ASTM F 2200, Class III.

F. Aluminum Frames and Bracing: Fabricate members from square tubing.

1. Frame Members: Extruded-aluminum tubes 5 by 2 inches with 0.125-inch wall thickness.
2. Bracing Members: Extruded-aluminum tubes 2 by 2 inches with 0.125-inch wall thickness.

G. Frame Corner Construction:

1. Welded frame with panels assembled with bolted or riveted corner fittings and 5/16-inch- diameter, adjustable truss rods for panels 5 feet wide or wider.

H. Additional Rails: Provide as indicated, complying with requirements for fence rails.

I. Infill: Comply with requirements for adjacent fence.

J. Picket Size, Configuration, and Spacing: 1 by 1 inch, with 0.125 wall thickness. Comply with requirements for adjacent fence.

K. Hardware: Latches permitting operation from both sides of gate, locking devices hangers roller assemblies and stops fabricated from galvanized steel or galvanized malleable iron.

1. Provide positive latch with provisions for padlocking.

L. Finish exposed welds to comply with NOMMA Guideline 1, Finish #2 - completely sanded joint, some undercutting and pinholes okay.

M. Galvanizing: For items other than hardware that are indicated to be galvanized, hot-dip galvanize to comply with ASTM A 123/A 123M. For hardware items, hot-dip galvanize to comply with ASTM A 153/A 153M.

N. Aluminum Finish: Baked enamel or powder coating.

2.3 GATE OPERATORS

A. Gate Operators:

1. Basis-of-Design Product: Subject to compliance with requirements, provide LiftMaster SL585 Industrial Gear-Driven Slide Gate Operator or comparable product by one of the following:

a. Ameristar Fence Products.
b. AutoGate, Inc.
c. DoorKing, Inc.
d. Elite Fence Products, Inc.
e. Viking Access Systems.

B. Provide factory-assembled automatic operating system designed for gate size, type, weight, and operation frequency. Provide operation control system with characteristics suitable for Project conditions, with remote-control stations, safety devices, and weatherproof enclosures; coordinate electrical requirements with building electrical system.

1. Provide operator designed so motor may be removed without disturbing limit-switch adjustment and without affecting auxiliary emergency operator.
2. Provide operator with UL approval.
3. Provide electronic components with built-in troubleshooting diagnostic feature.
4. Provide unit designed and wired for both right-hand/left-hand opening, permitting universal installation.

C. Comply with NFPA 70.

D. UL Standard: Manufacturer and label gate operators to comply with UL 325.

E. Emergency Access Requirements: Comply with requirements of authorities having jurisdiction for automatic gate operators on gates that must provide emergency access.

F. Motor Characteristics: Sufficient to start, accelerate, and operate connected loads at designated speeds, within installed environment, with indicated operating sequence, and without exceeding nameplate rating or considering service factor. Comply with NEMA MG 1 and the following:

1. Voltage: 208 V.
2. Horsepower: Not less than 1 HP.
3. Enclosure: Totally enclosed.
4. Duty: Continuous duty at ambient temperature of 105 deg F and at altitude of 3300 feet above sea level.
5. Service Factor: 1.15 for open dripproof motors; 1.0 for totally enclosed motors.
6. Phase: One.

G. Gate Operators: Concrete base or Post mounted and as follows:

1. Mechanical Slide Gate Operators:

a. Duty: Heavy duty, commercial/industrial.

H. System Components:

1. Control Station:
2. Inherent Obstruction Sensing
3. External Obstruction Sensing
4. Obstruction Sensing Alarm
5. Master/Slave Operation
6. Gate Movement Warning
7. Long Distance Control Wiring
8. Solenoid-Activated Brake
9. Safety Loop Connections
10. Delay on Reverse
11. On/Off Switch
12. Limit Switches
13. Left Hand/Right Hand Selectable
14. Automatic Shut Down
15. Timer to Close
16. Emergency One Button Control Station
17. Power Train Disconnect

2.4 ACCESS CONTROL EQUIPMENT

A. Click to Enter: Gate Operator shall have a receiver and be operated as a “Click to Enter” system, to match details and conditions of existing system. Contractor to provide a gate operator that has a receiver that will operate the gate via a visor clip on type transmitter device. Intent if for Owner’s existing transmitters to operate new gates. If existing transmitters cannot be used, Contractor shall provide the Owner a total of 25 transmitters that will operate new gates. The operator and operating system shall comply with UL325.

B. Vehicle Chip Key: Gate Operator shall also be programmed to operate using the Owner's current Chip Key system. Owner to provide details of system. (As manufacturered by OPW, Hodgekins, IL and distributed by Metro Tank & Pump, (847) 361-0854). In addition to te gate operator, the Contractor shall furnish and install all Chip Key system components material, equipment and labor) necessary to operate the sliding gate, as specified herein and as indicated on the Drawings. This shall include, but not be limited to a K-800 FIT with pedestal (indicated as "chip key pad" on Drawings). The chip key pad shall be connected to the gate operator (through ¾" conduit) and to the existing fuel site controller in the Public Works office and programmed as required. All programming required shall be performed by a certified OPW Distributor. All exterior conduit runs shall be buried and all interior conduit concealed (where possible) from view.

C. Loop Detector: Furnish and install a loop detector in the concrete pavement programmed with the gate operator to permit "FREE EXIT" through gate. Install loop detector near gate in location designated by the Owner and in accordance with manufacturer guidelines.

D. Manual Override: Gate shall be able to operate manually if Chip Key, Click to Enter or loop detector components do not work.

2.5 GATE SAFETY

A. Gate edges to reverse or stop the gate.

B. Gate safety edges shall consist of an edge on the tail end of the gate and a photo eye across the gate opening.

2.6 ALUMINUM

A. Aluminum, General: Provide alloys and tempers with not less than the strength and durability properties of alloy and temper designated in paragraphs below for each aluminum form required.

B. Extrusions: ASTM B 221, Alloy 6063-T5.

C. Tubing: ASTM B 429/B 429M, Alloy 6063-T6.

D. Plate and Sheet: ASTM B 209, Alloy 6061-T6.

E. Die and Hand Forgings: ASTM B 247, Alloy 6061-T6.

F. Castings: ASTM B 26/B 26M, Alloy A356.0-T6.

2.7 STEEL AND IRON

A. Plates, Shapes, and Bars: ASTM A 36/A 36M.

B. Bars (Pickets): Hot-rolled, carbon steel complying with ASTM A 29/A 29M, Grade 1010.

C. Tubing: ASTM A 500/A 500M, cold-formed steel tubing.

D. Bar Grating: NAAMM MBG 531.

1. Bars: Hot-rolled steel strip, ASTM A 1011/A 1011M, Commercial Steel, Type B.
2. Wire Rods: ASTM A 510.

E. Uncoated Steel Sheet: Hot-rolled steel sheet, ASTM A 1011/A 1011M, Structural Steel, Grade 45 or cold-rolled steel sheet, ASTM A 1008/A 1008M, Structural Steel, Grade 50.

F. Galvanized-Steel Sheet: ASTM A 653/A 653M, structural quality, Grade 50, with G60 coating.

G. Castings: Either gray or malleable iron unless otherwise indicated.

1. Gray Iron: ASTM A 48/A 48M, Class 30.
2. Malleable Iron: ASTM A 47/A 47M.

2.8 MISCELLANEOUS MATERIALS

A. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.

1. For aluminum, provide type and alloy as recommended by producer of metal to be welded and as required for strength and compatibility in fabricated items.

B. Concrete: Normal-weight, air-entrained, ready-mix concrete complying with requirements in Section 033000 "Cast-in-Place Concrete" with a minimum 28-day compressive strength of 3000 psi, 3-inch slump, and 1-inch maximum aggregate size.

C. Nonshrink Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M and specifically recommended by manufacturer for exterior applications.

2.9 ALUMINUM FINISHES

A. Baked-Enamel or Powder-Coat Finish: AAMA 2603 except with a minimum dry film thickness of 2 mils. Comply with coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish.

1. Color and Gloss: As selected by Owner from manufacturer's full range.

© 2018 FGM Architects Inc.

2.10 STEEL FINISHES

A. Surface Preparation: Clean surfaces according to SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."

1. After cleaning, apply a conversion coating compatible with the organic coating to be applied over it.

B. Powder Coating: Immediately after cleaning, apply two-coat finish consisting of epoxy primer and TGIC polyester topcoat, with a minimum total dry film thickness of not less than 8 mils. Comply with coating manufacturer's written instructions.

1. Color and Gloss: As selected by Owner from manufacturer's full range.

C. Primer Application: Apply zinc-rich epoxy primer immediately after cleaning, to provide a minimum dry film thickness of 2 mils per applied coat, to surfaces that are exposed after assembly and installation, and to concealed surfaces.

D. High-Performance Coating: Apply intermediate and polyurethane topcoats to prime-coated surfaces. Comply with coating manufacturer's written instructions and with requirements in SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting. Apply at spreading rates recommended by coating manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, construction layout, and other conditions affecting performance of the Work.

B. Do not begin installation before final grading is completed unless otherwise permitted by Architect.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

1. Construction layout and field engineering are specified in Section 017300 "Execution."

© 2018 FGM Architects Inc.

3.3 DECORATIVE FENCE INSTALLATION

A. Install fences according to manufacturer's written instructions.

B. Install fences by setting posts as indicated and fastening infill panels to posts. Peen threads of bolts after assembly to prevent removal.

C. Post Excavation: Drill or hand-excavate holes for posts in firm, undisturbed soil. Excavate holes to a diameter of not less than 4 times post size and a depth of not less than 24 inches plus 3 inches for each foot or fraction of a foot that fence height exceeds 4 feet.

D. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.

1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
2. Concrete Fill: Place concrete around posts and sleeves and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.

    a. Concealed Concrete: Top below grade as indicated on Drawings to allow covering with surface material. Slope top surface of concrete to drain water away from post.

3. Posts Set into Concrete in Sleeves: Use galvanized-steel pipe sleeves with inside diameter at least 3/4 inch larger than outside diagonal dimension of post, preset and anchored into concrete for installing posts.

    a. Extend posts at least 5 inches into sleeve.
    b. After posts have been inserted into sleeves, fill annular space between post and sleeve with nonshrink grout, mixed and placed to comply with grout manufacturer's written instructions; shape and smooth to shed water. Finish and slope top surface of grout to drain water away from post.

4. Space posts uniformly at 8 feet o.c.

3.4 GATE INSTALLATION

A. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.

3.5 GATE OPERATOR INSTALLATION

A. General: Install gate operators according to manufacturer's written instructions, aligned and true to fence line and grade.

© 2018 FGM Architects Inc.

B. Excavation for Support Posts, Pedestals or Concrete Bases: Hand-excavate holes for bases in firm, undisturbed soil to dimensions and depths and at locations as required by gate operator component manufacturer's written instructions and as indicated.

C. Concrete Bases: Cast-in-place or precast concrete, , dimensioned and reinforced according to gate operator component manufacturer's written instructions and as indicated on Drawings.

D. Vehicle Loop Detector System: Cut grooves in pavement and bury and seal wire loop according to manufacturer's written instructions. Connect to equipment operated by detector.

E. Comply with NFPA 70 and manufacturer's written instructions for grounding of electric-powered motors, controls, and other devices.

3.6 ADJUSTING

A. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.

B. Automatic Gate Operators: Energize circuits to electrical equipment and devices. Adjust operators, controls, safety devices, alarms, and limit switches.

1. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
2. Test and adjust controls, alarms, and safeties. Replace damaged and malfunctioning controls and equipment.

C. Lubricate hardware, gate operators, and other moving parts.

3.7 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's personnel to adjust, operate, and maintain gates.

END OF SECTION 323119

© 2018 FGM Architects Inc.

Return to VB Agenda

ATTACHMENT C

DRAWINGS

PROJECT:

PUBLIC WORKS YARD EXPANSION PROJECT

Village of Lincolnwood
7001 North Lawndale Avenue
Lincolnwood, IL 60712

OWNER:

VILLAGE OF LINCOLNWOOD

6900 Lincoln Avenue
Lincolnwood, IL 60712

ISSUANCE:

ISSUED FOR BID / ISSUED FOR PERMIT
January 8, 2018

FGM ARCHITECTS

ARCHITECTURAL
FGM Architects Inc.
1211 West 22nd Street
Suite 705
Phone: 630.574.8300
Fax: 630.574.9292

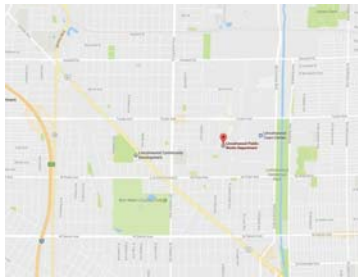
GHA GEWALT HAMILTON ASSOCIATES, INC.

CIVIL
Gewalt Hamilton Associates, Inc.
850 Forest Edge Drive
Vernon Hills, IL 60061
TEL. 847.478.9700
FAX. 847.478.9701

JOHNSONWILBUR ADAMS, INC.
STRUCTURAL ENGINEERING
175 N. Washington St.
Wheaton, Illinois 60187

STRUCTURAL
Johnson Wilbur Adams, Inc.
330 S. Naperville Road, Suite 300
Wheaton, IL 60187
TEL. 630.653.9060
FAX. 630.653.9059

J15 **PROJECT TEAM**



E15 **LOCATION MAP**

VILLAGE OF LINCOLNWOOD APPLICABLE CODES:

1.	2009	INTERNATIONAL BUILDING CODE
2.	2004	ILLINOIS PLUMBING CODE (77 ILL. ADM. CODE 890)
3.	2015	INTERNATIONAL ENERGY CONSERVATION CODE
4.	1997	ILLINOIS ACCESSIBILITY CODE (71 ILL. ADM. CODE 400)
5.	2009	INTERNATIONAL FUEL GAS CODE
6.	2009	INTERNATIONAL MECHANICAL CODE
7.	2009	INTERNATIONAL PROPERTY MAINTENANCE CODE
8.	2009	INTERNATIONAL FIRE CODE
9.	2011	NATIONAL ELECTRICAL CODE

CODE COMPLIANCE NOTES / USE AND OCCUPANCY CLASSIFICATION:

1.	BUILDING USE	MATERIAL STORAGE
2.	USE GROUP	S-2 STORAGE (LOW HAZARD)
3.	CONSTRUCTION TYPE	2B
4.	AUTOMATIC SPRINKLER SYSTEM	NOT APPLICABLE
5.	ENCLOSED BUILDING AREA	3,127 SF

NOTES: THE BUILDING WILL BE A 1 STORY, UNOCCUPIED STRUCTURE.

F20 **APPLICABLE CODES**

INDEX OF DRAWINGS

Sheet Number	Sheet Name
GENERAL	
G1.0.0	COVER SHEET
G1.0.1	ARCHITECTURAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES
CIVIL AND ELECTRICAL	
C1	TITLE SHEET
C2	EXISTING CONDITIONS / DEMOLITION PLAN
C3	GEOMETRIC AND UTILITY PLAN
C4	GRADING PLAN
C5	GENERAL NOTES
C6	MWRD NOTES
C7	DETAILS
C8	DETAILS
C9	MWRD EXHIBIT
EL1	GENERAL LIGHTING NOTES
EL2	LIGHTING PLAN
EL3	LIGHTING CONTROLS
EL4	LIGHTING DETAILS
EL5	PHOTOMETRIC PLAN
ARCHITECTURAL	
A1.1.0	OVERALL ARCHITECTURAL SITE PLAN
A1.1.1	ENLARGED ARCHITECTURAL SITE PLAN - NORTH
A1.1.2	ENLARGED ARCHITECTURAL SITE PLAN - SOUTH
A1.2.1	ROOF PLAN AND ROOF DETAILS
A3.1.0	EXTERIOR BUILDING AND SITE ELEVATIONS, INTERIOR BUILDING ELEVATIONS
A3.3.0	WALL SECTIONS AND EXTERIOR WALL DETAILS
A3.3.1	WALL SECTIONS AND EXTERIOR WALL DETAILS
STRUCTURAL	
S0.1.0	STRUCTURAL GENERAL NOTES
S1.1.1	PARTIAL FOUNDATION PLAN - SOUTH
S1.1.2	PARTIAL FOUNDATION PLAN - NORTH
S1.2.1	PARTIAL ROOF PLAN - SOUTH
S2.0.1	DETAILS AND SECTIONS
S2.0.2	DETAILS AND SECTIONS

A15 **NOT USED**

A20 **INDEX OF DRAWINGS**

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR BID / ISSUED FOR PERMIT

FGM ARCHITECTS — CHICAGO · OAK BROOK · O'FALLON

PROFESSIONAL SEAL
EXPIRATION DATE:

DATE	01/08/18	
DRAWN	AO	
CHECKED	JE	
APPROVED	JD	

PROFESSIONAL DESIGN FIRM
L # 184.000300

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

COVER SHEET

SHEET NO.
G1.0.0

JOB NO. 14-1815.01

© 2017 FGM Architects Inc.

1/8/2018 2:10:03 PM
C:\Revit Temp\2016\14-1815o_Lincolnwood PW Yard_Central_2016_annabella.olanda.rvt
Copyright 2017 FGM ARCHITECTS, INC.

Return to VB Agenda

GRAPHIC AND MATERIAL SYMBOLS

Symbol	Description
[8'-0"]	CEILING TAG
?	COLUMN NUMBER/LETTER
?	COLUMN LINE TAG
	DATUM TARGET
A1 / A6.00	DETAIL TAG DETAIL IDENTIFICATION SHEET WHERE DETAIL IS DRAWN AREA DETAIL REFERENCES
A1 DETAIL 1-1/2"=1'-0"	DETAIL TAG DETAIL IDENTIFICATION DETAIL TITLE DRAWING SCALE
120-2	DOOR TAG DOOR NUMBER
K5 / K13 / A3.1.0 / K9	ELEVATION(S) TAG ELEVATION IDENTIFICATION SHEET WHERE ELEVATION IS DRAWN
G / 2	EQUIPMENT TAG EQUIPMENT TYPE EQUIPMENT GROUP
L1	LOUVER TAG LOUVER NUMBER
SEE SHT. / SEE SHT.	MATCH LINE (SHADED PORTION IS SIDE CONSIDERED)
N	NORTH ARROW
A16	SHEET NOTE TAG SHEET NOTE NUMBER
042000.A00	REFERENCE NOTE TAG REFERENCE NOTE NUMBER
1	REVISION TAG REVISION NUMBER CLOUD AROUND REVISION
KITCHEN / 100	ROOM IDENTIFICATION TAG ROOM NAME ROOM NUMBER
SF1	STOREFRONT TAG
P3	WALL TYPE TAG
W1	WINDOW TAG WINDOW NUMBER
E9 / A2.45	WINDOW DETAIL TAG DETAIL IDENTIFICATION SHEET WHERE DETAIL IS DRAWN
A1 / A3.00	WALL SECTION TAG SECTION IDENTIFICATION SHEET WHERE SECTION IS DRAWN
A1 / A3.00	BUILDING SECTION TAG SECTION IDENTIFICATION SHEET WHERE SECTION IS DRAWN
A1 / A3.00	SECTION IDENTIFICATION SHEET WHERE SECTION IS DRAWN
A1 / A3.00	DETAIL SECTION TAG DETAIL IDENTIFICATION SHEET WHERE DETAIL IS DRAWN
A1 / A3.00	ELEVATION TAG SHEET WHERE ELEVATION IS DRAWN ELEVATION IDENTIFICATION

Materials:

- ALUMINUM
- BRICK
- BRICK (GLAZED)
- CONCRETE
- CONCRETE MASONRY UNIT
- EARTH (ORIGINAL)
- EXISTING CONSTRUCTION TO BE REMOVED
- GRAVEL OR CRUSHED STONE
- GROUT
- GYPSUM BOARD
- INSULATION - BATT
- INSULATION - RIGID
- PLYWOOD
- STEEL
- STONE (CAST)
- WOOD (BLOCKING)
- WOOD (FINISH)
- WOOD (ROUGH)

ABBREVIATIONS G101

&	AND
∠	ANGLE
@	AT
℄	CENTER LINE
Ø	DIAMETER OR ROUND
#	POUND OR NUMBER
ACOUS	ACOUSTICAL
ADJ	ADJACENT
AFF	ABOVE FINISH FLOOR
AGR	AGGREGATE
AL	ALUMINUM
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ASPH	ASPHALT
ACT	ACOUSTICAL TILE CEILING
B/	BOTTOM OF
BD	BOARD
BITUM	BITUMINOUS
BLDG	BUILDING
BLKG	BLOCKING
BLK	BLOCK
BM	BEAM
BR	BRICK
CAB	CABINET
CB	CHALKBOARD
CBN	CATCH BASIN
CEM	CEMENT
CER	CERAMIC
CG	CORNER GUARD
CI	CAST IRON
CJ	CONTROL JOINT
CLG	CEILING
℄	CENTER LINE
CL	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CORR	CORRIDOR
CPT	CARPETING
CT	CERAMIC TILE
CTR	CENTER
CTRL	CONTROL
CST	CONCRETE STEEL TROWELED
CUH	CABINET UNIT HEATER
DBL	DOUBLE
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DO	DOOR OPENING
DR	DOOR
DS	DOWNSPOUT
DWG	DRAWING
E	EAST
EA	EACH
EIFS	EXTERIOR INSULATION & FINISH SYSTEMS
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
ELEV	ELEVATION
ENCL	ENCLOSURE
E.P.	ELECTRICAL PANEL
EP	EPOXY PAINT
EQ	EQUAL
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
EXP	EXPOSED
EXT	EXTERIOR
FA	FIRE ALARM
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
F.F.	FACTORY FINISH
FHC	FIRE HOSE CABINET
FHMS	FLAT HEAD MACHINE SCREW
FHVC	FIRE HOSE VALVE CABINET
FIN	FINISH
FLR	FLOOR
FOC	FACE OF CONCRETE
FLUOR	FLUORESCENT
FOF	FACE OF FINISH
FOS	FACE OF STUD
FRP	FIBERGLASS REINFORCED POLYESTER
FS	FLOOR SINK
FT	FOOT OR FEET
FSR	FLAME SPREAD RATING
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GYPSUM BOARD
GL	GLASS
GND	GROUND
GR	GRADE
GYP	GYPSUM
HB	HOSE BIBB
HC	HANDICAPPED
HDWD	HARDWOOD
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HP	HIGH POINT
HR	HOUR
HT	HEIGHT
ID	INSIDE DIAMETER
IN	INCH
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
JAN	JANITOR
JC	JANITOR CLOSET
JT	JOINT
KD	KNOCK DOWN
KIT	KITCHEN
KO	KNOCKOUT
KW	KILOWATT
KWH	KILOWATT HOUR
LAM	LAMINATE
LAV	LAVATORY
LBR	LUMBER
LG	LONG
LL	LIVE LOAD
LP	LOW POINT
LT	LIGHT
MATL	MATERIAL
MAX	MAXIMUM
MB	MARKER BOARD
MECH	MECHANICAL
MTL	METAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
P.B.	PARTICLE BOARD
P.C.	PRECAST
P.L.	PROPERTY LINE
PL.	PLATE
PLAS	PLASTER
PLWD	PLYWOOD
PLUM	PLUMBING
PR	PAIR
PT	PAINT
QT	QUARRY TILE
QTY	QUANTITY
R	RISER
RAD	RADIUS
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REC	RECESSED
REINF	REINFORCED
REQ'D	REQUIRED
REV	REVERSE
RM	ROOM
RO	ROUGH OPENING
S	SOUTH
SCHED	SCHEDULE
SCWD	SOLID CORE WOOD
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
ST	STAIN
STD	STANDARD
STL	STEEL
SUSP	SUSPENDED
SYM	SYMMETRICAL
T	TREAD
T/	TOP OF
T&G	TONGUE AND GROOVE
TB	TACK BOARD
THK	THICK
THSH	THRESHOLD
T.S.	TUBE STEEL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VAR	VARNISH
VCB	VINYL COVE BASE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
V.I.F.	VERIFY IN FIELD
VOL	VOLUME
VWC	VINYL WALL COVERING
W	WEST
WC	WATER CLOSET
WD	WOOD
WM	WIRE MESH
WP	WATERPROOF
WPT	WORKING POINT
WR	WATER RESISTANT
WT	WEIGHT
W/	WITH
W/O	WITHOUT
YD	YARD
YR	YEAR

GENERAL NOTES

GENERAL ARCHITECTURAL NOTES

A. FIRE RESISTANCE COMPLIANCE

A.01 SEE CODE COMPLIANCE PLANS IN A-SERIES FOR DETAILED CODE COMPLIANCE REQUIREMENTS.

A.02 UNLESS OTHERWISE NOTED, PROVIDE THE FOLLOWING MINIMUM FIRE SEPARATIONS:
- A. STAIR ENCLOSURES - 1-HR W/'C' LABEL DOORS (1-3 STORIES) 2 HR W/ 'B' LABEL DOORS (4 OR MORE STORIES)
- B. ELEVATOR SHAFTS - 2 HR
- C. MECHANICAL SHAFTS - 2 HR
- D. WALLS
  1. EXTERIOR NONBEARING - NON COMBUSTIBLE
  2. INTERIOR PARTITIONS STORAGE - 1 HR.
  3. ELEVATOR MACHINE ROOMS - 1 HR B LABEL DOORS

A.03 INTERIOR FINISH MATERIALS SHALL BE OF FLAME SPREAD/SMOKE DEVELOPED LIMITS AS SHOWN BELOW BASED ON ASTM E-84 TEST METHOD:
- A. STAIRS - 25/450 MAXIMUM
- B. PUBLIC CIRCULATION SPACES - 25/450 MAXIMUM
- C. OCCUPIED SPACES - 200/450 MAXIMUM

A.04 UNLESS OTHERWISE NOTED, AUTOMATIC SPRINKLER PROTECTION SHALL BE INSTALLED THROUGHOUT ALL BUILDING AREAS.

A.05 ALL OPENINGS IN THE FLOOR SLABS, INCLUDING SPACES BETWEEN CONDUITS, PIPING, ETC (EXCEPT WHEN COMPLETELY ENCLOSED WITHIN FIRE RATED CONSTRUCTION, SHALL BE SEALED OFF WITH APPROVED FIRE RATED PENETRATION SEALANT SYSTEMS TO MAINTAIN FIRE RATING CONTINUITY OF THE FLOOR CONSTRUCTION.

A.06 ALL FIRE-RESISTIVE (LABELED) DOORS SHALL HAVE THE APPROPRIATE UL OR OTHER RATING AGENCY LABEL ACCEPTABLE TO GOVERNMENT AUTHORITIES AFFIXED TO BOTH DOOR AND FRAME.

A.07 FIRE RATING INDICATION ON A WALL SHALL MEAN THE ENTIRE LENGTH OF WALL IS TO BE FIRE RATED.

A.08 ALL PIPING DUCTS, ETC THAT PENETRATE FLOOR SLABS SHALL BE INSTALLED IN A MANNER THAT WILL PRESERVE THE FIRE-RESISTIVE AND STRUCTURAL INTEGRITY. PENETRATIONS INTO FIRE-RATED WALLS OF MORE THAN 1 HR. RATING SHALL BE PROVIDED WITH APPROVED FIRE DAMPERS WHETHER OR NOT SHOWN IN THE MECHANICAL DRAWINGS.

A.09 ALL RATINGS ARE TO COMPLY WITH UNDERWRITERS LABORATORIES (UL) TEST RATINGS. IN THE ABSENCE OF TESTED ASSEMBLY, PROVIDE CERTIFICATE OF EQUIVALENCY FROM UL. MEET ALL THE REQUIREMENTS OF FACTORY MUTUAL ENGINEERING FOR BOTH CONSTRUCTION AND FIRE PROTECTION.

A.10 GENERAL CONTRACTOR TO COORDINATE ALL MECHANICAL AND ELECTRICAL FLOOR, ROOF AND WALL SLEEVES AND ALL MECHANICAL SHAFTS AND OPENINGS WITH MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, STRUCTURAL AND ARCHITECTURAL DRAWINGS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. GENERAL CONTRACTOR SHALL PROVIDE SLEEVES AND FLOOR AND ROOF OPENINGS AS REQUIRED TO ALLOW INSTALLATION OF ALL DUCTS AND PIPING AS SHOWN ON THE MECHANICAL AND ELECTRICAL DRAWINGS.

A.11 REFER TO CERTIFIED MECHANICAL AND ELECTRICAL CONTRACTOR'S DRAWINGS AND MANUFACTURER'S TEMPLATE DRAWINGS FOR ALL MECHANICAL AND ELECTRICAL EQUIPMENT SUPPORTS. BOLT SETTING TEMPLATES, ISOLATIONS, SPRING ISOLATION, ETC., REQUIRED, WHETHER OR NOT SHOWN ON DRAWINGS.

B. DIMENSIONING

B.01 PARTITIONS ARE DIMENSIONED TO THE FACE OF THE WALL UNLESS NOTED OTHERWISE.

B.02 VERIFY DIMENSIONS IN THE FIELD BEFORE PROCEEDING WITH THE WORK. NOTIFY ARCHITECT OF DEFICIENCIES

B.03 DOOR OPENINGS ARE GENERALLY DIMENSIONED TO CENTERLINE OF OPENING. DOOR OPENINGS THAT ARE NOT DIMENSIONALLY LOCATED ARE TO BE CENTERED BETWEEN WALLS OR POSITIONED WITH THE HINGED JAMB 2" AWAY FROM AN ADJACENT WALL OR COLUMN AS SHOWN ON THE PLANS AND/OR DETERMINED BY THE DETAILS.

B.04 WHEN UNDIMENSIONED PARTITIONS APPEAR IN CONJUNCTION WITH DOOR OPENINGS, THE DOOR WIDTH AND DOOR FRAME DETAILS DETERMINE THE LOCATION OF ADJACENT WALLS AND FRAMES.

B.05 UNLESS OTHERWISE NOTED, REFER TO 1/4" (1:50) SCALE PLANS FOR DIMENSIONS OF MAJOR STAIRS, TOILETS AND ELEVATOR SHAFTS.

B.06 ALL DIMENSIONS SHALL BE VERIFIED AND COORDINATED WITH ALL OF THE WORK OF ALL TRADES.

C. INSULATION

C.01 WHETHER SPECIFICALLY SHOWN, OR NOT, PROVIDE INSULATION AND VAPOR BARRIER BETWEEN ALL EXTERIOR AND INTERIOR HEATED SPACES TO MAINTAIN MINIMUM DESIGN U- VALUES OF 0.08 FOR WALLS AND 0.05 FOR ROOFS, UNLESS NOTED OTHERWISE.

C.02 ALL JOINTS AND PENETRATIONS IN PLASTIC INSULATION BARRIER SHALL BE FULLY BUTTERED/SEALED WITH ADHESIVE/SEALANT TO PROVIDE A CONTINUOUS AIR/VAPOR TIGHT INSTALLATION.

C.03 ALL JOINTS IN FOIL FACE MINERAL FIBER INSULATION BARRIER SHALL BE FOIL-TAPED TO PROVIDE A CONTINUOUS VAPOR-TIGHT INSTALLATION.

D. WATERPROOFING AND DAMPPROOFING

D.01 UNLESS OTHERWISE NOTED, PROVIDE ELASTOMERIC WATERPROOF DECK COATING AT FAN ROOMS, EMERGENCY GENERATOR ROOMS, PUMP ROOMS AND ALL MECHANICAL ROOMS.

D.02 PROVIDE SPECIFIED SETTING BED AND WATERPROOFING MEMBRANE UNDER ENTIRE TILE FLOOR IN TOILET ROOMS, SHOWER ROOMS, KITCHENS AND OTHER WET AREAS WHEN THESE SPACES ARE OVER OCCUPIED SPACES OTHER THAN TOILET ROOMS.

E. MECHANICAL AND ELECTRICAL AREAS

E.01 ALL WALLS BETWEEN MECHANICAL OR ELECTRICAL SPACES AND OCCUPIED SPACES SHALL BE ACOUSTICALLY ISOLATED FROM THE OCCUPIED SPACES AND SHALL MAINTAIN A MINIMUM STC RATING OF 52. (U.N.O.)

E.02 UNLESS OTHERWISE NOTED, PROVIDE A 6" CONCRETE CURB AROUND ENTIRE PERIMETER OF MECHANICAL ROOMS.

E.03 UNLESS OTHERWISE NOTED, ALL HOUSEKEEPING CONCRETE PADS ARE TO BE 4" (INCHES) HIGH MINIMUM. PROVIDE ONE LAYER OF WWF 6X6/W4.0 X W4.0 WELDED WIRE FABRIC MINIMUM.

E.04 PROVIDE BASES AND HOUSEKEEPING PADS FOR ALL ELECTRICAL AND MECHANICAL REQUIRING BASES AND PADS. COORDINATE ALL EQUIPMENT BASE AND HOUSEKEEPING PADS WITH MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTORS. INSTALL THE PADS BENEATH THE FULL PROJECTED AREA OF EQUIPMENT.

F. EXTERIOR WALL

F.01 THE EXTERIOR WALL AS SHOWN SHALL BE A COMPLETE SYSTEM INCLUDING ALL STIFFENERS, FASTENERS, SEALANTS, JOINTING, MISCELLANEOUS PIECES AND MATERIAL THICKNESS AS REQUIRED TO FORM A WATERTIGHT ENCLOSURE.

F.02 DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE DETAILED.

F.03 ALL DETAILS ARE TO BE COORDINATED WITH THE STRUCTURAL FRAMING AND OTHER BUILDING COMPONENTS INCLUDING ROOFING, EXTERIOR-CLADDING ITEMS, GLAZING, INTERIOR FINISH AND OTHER RELATED BUILDING COMPONENTS.

F.04 THE EXTERIOR METAL BACK UP WALL, INCLUDING METAL STUD FRAMING, SIZE, CONNECTIONS, BRACING AND MISCELLANEOUS SUPPORTS SHALL BE DESIGNED BY THE COLD FORMED METAL MANUFACTURER ACCORDING TO STRUCTURAL LOADING PARAMETER SPECIFIED AND AS REQUIRED BY ALL CODES HAVING JURISDICTION.

F.05 ALL SEALANT JOINTS SHALL BE SIZED SUCH THAT THEY WILL BE WITHIN THE SIZE RANGE RECOMMENDED BY THE SEALANT MANUFACTURER.

F.06 VERIFY OR GUARANTEE ALL CLEAR OPENINGS FOR LOUVERS AND WINDOW INSTALLATION.

F.07 ALL MASONRY ATTACHMENTS, LINTELS, SHELF ANGLES, AND SUPPORTS SHALL BE HOT-DIPPED GALVANIZED STEEL. ALL SHIMS SHALL BE NON-CORROSIVE MATERIALS.

F.08 ALL SILLS, WINDOW HEADS, AND SHELF ANGLES SHALL HAVE FLASHING EXTENDED TO THE OUTSIDE OF THE WALL WHETHER OR NOT SHOWN ON THE DRAWINGS.

F.09 MORTAR SHALL BE OF THE SAME MIX AND SAME MANUFACTURER FOR THE ENTIRE PROJECT.

F.10 MASONRY UNITS SHALL BE PLACED IN A FULL BED OF MORTAR IN BOTH HORIZONTAL AND VERTICAL JOINTS.

F.11 EXTEND SCHEDULED WATERPROOFING AT EXTERIOR FOUNDATION WALLS FROM BOTTOM OF FOOTINGS TO GRADE AND TUCK INTO CAST IN REGLET UNLESS OTHER WISE SHOWN.

G. MISCELLANEOUS NOTES

G.01 ALL BASE BUILDING INTERIOR PARTITIONS SHALL WITHSTAND MINIMUM INWARD AND OUTWARD ACTING PRESSURES OF 5 PSF.

G.02 ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO AVOID MOLECULAR BREAKDOWN.

G.03 ALL ELEVATOR OPENINGS SHALL BE CERTIFIED BY THE ELEVATOR SUBCONTRACTOR PRIOR TO FORMING. REQUIRED MODIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER FOR THE APPROVAL PRIOR TO FORMING.

G.04 PROVIDE ACCESS PANELS AS REQUIRED BY APPLICABLE CODES AND AS REQUIRED FOR ACCESS OR MAINTENANCE OF MECHANICAL AND ELECTRICAL EQUIPMENT INCLUDING JUNCTION BOXES. ALL ACCESS PANELS LOCATIONS SHALL BE REVIEWED WITH THE ARCHITECT PRIOR TO PROCEEDING. ACCESS PANELS IN FINISHED DRYWALL AREAS SHALL BE OF THE TYPE THAT ACCEPTS DRYWALL INFILL.

G.05 WHERE DISCREPANCIES EXIST BETWEEN THE DRAWINGS OF THE VARIOUS TRADES. CONSULT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

G.06 COORDINATE PLACEMENT OF ALL CEILING, ELEMENTS WITH MECHANICAL, ELECTRICAL AND INSTALLER. WHERE DISCREPANCIES EXIST BETWEEN DRAWINGS AND INSTALLATION, REVIEW WITH ARCHITECT PRIOR TO PROCEEDING.

G.07 THE CONTRACTOR SHALL FURNISH AND INSTALL ALL STIFFENERS, BRACINGS, BLOCKING BACKING PLATES AND SUPPORTING BRACKETS REQUIRED FOR THE PROPER INSTALLATION OF ALL CASEWORK, TOILET ROOM ACCESSORIES AND TOILET PARTITIONS, AS WELL AS ALL WALL-MOUNTED OR SUSPENDED MECHANICAL, ELECTRICAL AND/OR MISCELLANEOUS EQUIPMENT WHETHER SHOWN OR NOT, INCLUDING ITEMS SHOWN AS NOT IN CONTRACT (N.I.C.)

G.08 WHETHER OR NOT EXPLICITLY INDICATED, ALL GLAZING SHALL BE SAFETY GLAZED WHEN WITHIN 18" (INCHES) OF THE FLOOR OR WITHIN 3'-0" (900MM) HORIZONTAL DISTANCE FROM ANY DOOR ALONG PEDESTRIAN PATHS. A CERTIFICATE MUST ACCOMPANY ALL GLAZING PRODUCTS STATING THAT THE PRODUCTS CONFORM WITH APPLICABLE CONSUMER PRODUCT SAFETY STANDARDS.

G.09 ALL EXTERIOR HANDRAILS AND EXTERIOR EXPOSED METAL SHALL BE GALVANIZED AND PAINTED UNLESS NOTED OTHERWISE.

G.10 ALL EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES BETWEEN WALLS AND FOUNDATION, BETWEEN WALLS AND ROOF, BETWEEN WALL PANELS. AT PENETRATION OF UTILITIES THROUGH THE ENVELOPE SHALL BE SEALED, CAULKED OR WEATHER-STRIPPED TO PREVENT AIR LEAKAGE/INFILTRATION.

G.11 ALL EXPOSED MECHANICAL AND ELECTRICAL EQUIPMENT, LOUVERS, PIPING, CONDUITS, ETC SHALL BE FINISHED WITH INDUSTRIAL ENAMEL PAINT AND COLOR CODED AND/OR AS DIRECTED.

G.12 ALL RECESSED CABINETS, PANELS, BOXES LOCATED IN FIRE-RATED WALLS SHALL BE INSTALLED AS TO MAINTAIN THE FIRE-RATED CONSTRUCTION. PROVIDE ADDITIONAL FRAMING, DRYWALL OR BLOCK AS REQUIRED TO MAINTAIN RATING.

G.13 ALL ARCHITECTURAL WOODWORK/PANELING SHALL BE TREATED WITH MATERIALS COMPLYING WITH APPLICABLE FLAME SPREAD AND SMOKE DEVELOPMENT RATING REQUIREMENTS. ALL WOOD USED IN BACKING AND BLOCKING SHALL BE FIRE RETARDANT TREATED.

G.14 EMERGENCY LIGHTING SHALL BE PROVIDED SO AS TO GIVE A VALUE OF ONE FOOT CANDLE, MINIMUM AT FLOOR LEVEL IN ALL EXIT CORRIDORS AND STAIR SHAFTS.

G.15 UNLESS NOTED TO BE EXPOSED, ALL MECHANICAL AND ELECTRICAL DISTRIBUTION SYSTEMS TO BE CONCEALED IN CHASES, WALLS, CEILING SPACES ETC., IN EXISTING CONSTRUCTION, MATCH ADJACENT MATERIALS, TEXTURES AND COLORS (WALLS, FLOORS, BASE, CEILING)

G.16 CONTRACTOR'S RESPONSIBILITY FOR DAMAGE DURING CONSTRUCTION: THE CONTRACTOR WILL REPAIR AND/OR REPLACE ALL DAMAGED MATERIALS THAT ARE FOUND TO HAVE BEEN MADE DURING THE COURSE OF THE WORK AND CLEAN-UP PROCEDURE. REPAIR SHALL MEAN THE ITEM(S) ARE RETURNED TO THEIR ORIGINAL STATE, AS A MINIMUM, AS DETERMINED BY THE OWNER.

G.17 ALL REFUSE AND DEBRIS SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF BY THE CONTRACTOR.

G.18 REFER TO DIVISION 0NE SPECIFICATION SECTION "LEED®FOR SCHOOLS CHECK LIST" FOR LEED POINTS APPLICABLE TO THIS PROJECT. REFER TO USGBC LEED® FOR SCHOOLS REFERENCE GUIDE FOR REFERENCE STANDARDS APPLICABLE TO EACH POINT SOUGHT.

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE CODES.
2. THE CONTRACTOR ALONE IS RESPONSIBLE FOR THE SAFETY AND ADEQUACY OF HIS PLANT, APPLIANCES, METHODS AND FOR DAMAGE WHICH MAY RESULT FROM THEIR IMPROPER REMOVAL, CONSTRUCTION, MAINTENANCE OR OPERATION. HE SHALL ERECT AND PROPERLY MAINTAIN AT ALL TIMES AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, PROPER SAFEGUARDS FOR THE PROTECTION OF WORKMEN, OWNER AND OWNERS PROPERTY AND SHALL POST DANGER WARNINGS AGAINST HAZARDS CREATED BY CONSTRUCTION OPERATIONS.
3. INSPECTION BY CONTRACTOR: THE CONTRACTOR ACKNOWLEDGES AND AGREES THAT HE HAS INDIVISIBLE, INDELEGABLE AND INTRANSFERABLE AND CONTRACTUAL OBLIGATION TO THE OWNER TO MAKE HIS OWN INSPECTIONS ON HIS OWN WORK AT THE STAGES OF CONSTRUCTION AND SHALL SUPERVISE AND SUPERINTEND PERFORMANCE OF WORK IN SUCH MANNER AS TO ENABLE HIM TO CONFIRM, CERTIFY AND CORROBORATE AT ALL TIMES THAT ALL WORK HAS BEEN EXECUTED ACCORDING TO THE CONTRACT DOCUMENT.
4. THE CONTRACTOR SHALL SUPPLY ALL LABOR, TRANSPORTATION, APPARATUS, SCAFFOLDING, ANY TOOLS FOR THE COMPLETION OF THE WORK, MAINTAIN AND REMOVE ANY TEMPORARY EQUIPMENT, AND CONSTRUCT THE COMPLETE WORK AND EVERYTHING PROPERLY INCIDENTAL THERETO AS STATED IN THE CONTRACT DOCUMENTS OR REASONABLY IMPLIED THEREFROM. IT IS NOT THE INTENT OF THE CONTRACT DOCUMENTS TO SET FORTH IN DETAIL EVERY ITEM NECESSARY TO PROVIDE FOR THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR MUST BE QUALIFIED FOR THIS WORK AND MUST, WITHOUT DIRECTION, FURNISH AND INSTALL EVERYTHING NECESSARY TO PROVIDE CONSTRUCTION COMPLETE AND ACCEPTABLE ORDER READY FOR USE WITHOUT ADDITIONAL WORK. ALL PARTS MUST BE COORDINATED, COMPLETE, READY TO OPERATE AND DELIVERED TO THE OWNER IN NEW CONDITION.
5. CONTRACTOR'S WARRANTY: THE CONTRACTOR WARRANTS THAT HE IS FAMILIAR WITH THE CODES AND REGULATIONS APPLICABLE TO THE WORK AND THAT HE HAS THE SKILL, KNOWLEDGE, COMPETENCE, ORGANIZATION AND PLANT TO EXECUTE THE WORK PROMPTLY AND EFFICIENTLY IN COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, INCLUDING THE TIME SCHEDULE. THE CONTRACTOR HAVING THE OBLIGATION TO KEEP A COMPETENT SUPERINTENDENT ON THE WORK DURING ITS PROGRESS, TO EMPLOY ONLY SKILLED PERSONNEL AND TO ENFORCE STRICT DISCIPLINE AND ORDER AMONG ITS EMPLOYEES. THE CONTRACTOR HIMSELF IS RESPONSIBLE FOR SEEING THE WORK IS INSTALLED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. FAILURE OR OMISSION ON THE PART OF THE OWNER OR THE ARCHITECT, EITHER TO DISCOVER OR BRING TO THE ATTENTION OF THE CONTRACTOR ANY DEVIATION FROM, OMISSION FROM, NONCOMPLIANCE SHALL NOT BE SET UP BY THE CONTRACTOR AS DEFENSE FOR FAILURE ON HIS PART TO INSTALL THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NOR SHALL THE PRESENCE OF ANYONE, OR ALL, OR ANY OF THE FOREGOING, AT THE SITE OR THE FACT THAT ANYONE OR ALL, OR ANY OF THE FOREGOING MAY HAVE EXAMINED THE WORK OR ANY PART OF IT BE SET UP AS DEFENSE BY THE CONTRACTOR AGAINST A CLAIM FOR FAILURE ON HIS PART TO PERFORM THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR FOR ANY NEGLECT TO FULFILL THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
7. THE OWNER WILL NOT ACCEPT REQUESTS FOR ADDITIONAL COSTS FOR WORK CONDITIONS WHICH CAN BE REASONABLY ASCERTAINED FROM THE DRAWINGS AND SPECIFICATIONS.
8. ASBESTOS-CONTAINING MATERIALS OR OTHER INDUSTRY RECOGNIZED HAZARDOUS MATERIALS OR TOXIC SUBSTANCES SHALL NOT BE USED ON THIS PROJECT.
9. LEAD-CONTAINING PAINT SHALL NOT BE USED ON THIS PROJECT.
10. SUBCONTRACTORS FOR EACH TRADE ARE ADVISED THAT INFORMATION PERTINENT TO THEIR WORK MAY OCCUR IN OTHER PORTIONS OF THE CONTRACT DOCUMENTS. REFER TO CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS AND SYMBOLS. ALL NOTES ARE TO BE REVIEWED AND APPLIED TO RELATED BUILDING COMPONENTS. NOTES APPEAR ON VARIOUS SHEETS FOR DIFFERENT SYSTEMS AND MATERIALS. SHEETS ARE TO BE REVIEWED AND NOTES ON ANY ONE SHEET ARE TO BE APPLIED ON RELATED DRAWINGS AND DETAILS.
11. THE STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS ARE OF EQUAL IMPORTANCE WITH THE ARCHITECTURAL DRAWINGS IN DEFINING THE WORK OF THE CONTRACT DOCUMENTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK WITH THE ARCHITECTURAL DRAWINGS BEFORE THE INSTALLATION OF STRUCTURAL, MECHANICAL AND ELECTRICAL WORK. SHOULD THERE BE A DISCREPANCY BETWEEN THE ARCHITECTURAL DRAWINGS AND THE ENGINEERING DRAWINGS THAT WOULD CAUSE AN AWKWARD OR IMPROPER INSTALLATION. IT SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION FOR CLARIFICATION PRIOR TO INSTALLATION OF SAID WORK. ANY WORK INSTALLED IN CONFLICT WITH THE ARCHITECTURAL DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR EXPENSE AND AT NO ADDITIONAL COST TO THE OWNER OR ARCHITECT.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURATE PLACEMENT OF BUILDINGS ON THE SITE.
13. DO NOT SCALE THE DRAWINGS. THE DRAWINGS ARE NOT NECESSARY TO SCALE. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE PRIOR TO THE START OF CONSTRUCTION. IF DISCREPANCIES ARE FOUND, THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION BEFORE COMMENCING THE WORK. EXPLICIT DIMENSIONS SHALL HAVE PRECEDENCE OVER SCALE.
14. NOTES ON DRAWINGS SHALL APPLY TO ALL SIMILAR CONDITIONS WHETHER REPEATED OR NOT. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE SHOWN. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, CONSULT THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
15. THE CONTRACTOR SHALL VISIT THE SITE AND BE KNOWLEDGEABLE OF CONDITIONS THEREON. PRIOR TO SUBMITTING A BID HE SHALL INVESTIGATE, VERIFY AND BE RESPONSIBLE FOR ALL CONDITIONS OF THE PROJECT AND SHALL NOTIFY THE OWNER OF ANY CONDITIONS REQUIRING MODIFICATION BEFORE PROCEEDING WITH THE WORK.

ISSUANCE

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR BID / ISSUED FOR PERMIT

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

PROFESSIONAL SEAL
EXPIRATION DATE:

DATE 01/08/18
DRAWN AO
CHECKED JE
APPROVED JD
PROFESSIONAL DESIGN FIRM IL # 184-000350

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

ARCHITECTURAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES

SHEET NO.
G1.0.1

JOB NO. 14-1815.01
© 2017 FGM Architects Inc.

1/4/2018 6:59:17 PM
C:\Revit Temp\2016\14-1815a_Lincolnwood PW Yard_Central_2016_annabella.orlando.rvt
Copyright 2017 FGM ARCHITECTS, INC.

VILLAGE OF LINCOLNWOOD

PUBLIC WORKS YARD EXPANSION PROJECT

7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, ILLINOIS 60712

STANDARD SYMBOLS

FEATURE	EXISTING	PROPOSED
BUFFALO BOX		
BUSH/SHRUB		
CATCH BASIN		
CLEANOUT		
COMBINE SEWER LINE		
CONTOUR	708	708
CULVERT		
DITCH/SWALE		
ELECTRIC LINE	E	E
ELECTRIC MANHOLE		
FENCE		
FIRE HYDRANT		
FLARED END SECTION		
GAS LINE	G	G
GAS MANHOLE		
GAS VALVE		
INLET		
LIGHT POLE		
OVERHEAD WIRES		
POWER POLE		
R.O.W LINE		
R.O.W MARKER		
SANITARY FORCEMAIN LINE		
SANITARY SEWER LINE		
SANITARY SEWER MANHOLE		
SIGN		
SPOT ELEVATION	x850.00	x850.0
STORM SEWER LINE		
STORM SEWER MANHOLE		
TELEPHONE LINE	T	T
TELEPHONE MANHOLE		
TELEPHONE BOX/PEDESTAL		
TREE-CONIFEROUS (SIZE/TAG#)	345	345
TREE-DECIDUOUS (SIZE/TAG#)	12"	12"
VALVE BOX		
VALVE VAULT		
WATER VALVE		
WATERMAIN LINE	W	W

EXISTING UTILITIES: WHEN THE PLANS OR SPECIAL PROVISIONS INCLUDE INFORMATION PERTAINING TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES, SUCH INFORMATION REPRESENTS ONLY THE OPINION OF THE ENGINEER AS TO THE LOCATION OF SUCH UTILITIES AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE BIDDER. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY WHATEVER IN RESPECT TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE PLANS RELATIVE TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES OR THE MANNER IN WHICH THEY ARE TO BE REMOVED OR ADJUSTED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES. HE SHALL ALSO OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES, DETAILED INFORMATION RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR REMOVING OR ADJUSTING THEM.

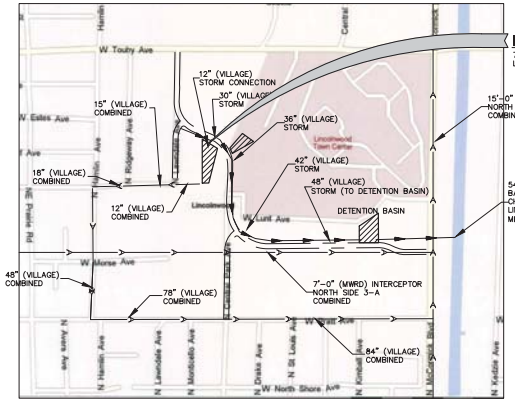
CONTRACTOR IS RESPONSIBLE FOR CONTACTING J.U.L.I.E. AT 1-800-892-0123 AND MUST ACQUIRE A DIG NUMBER A MINIMUM OF 72 HOURS PRIOR TO ANY WORK BEING DONE.

J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION CALL 811

811 Know what's below. Call before you dig.

NOTE: CONSTRUCTION MEANS, METHODS, AND JOBSITE SAFETY ARE THE COMPLETE RESPONSIBILITY OF THE CONTRACTOR.

LOCATION MAP



BENCHMARK INFORMATION:

BM # 147 – VILLAGE OF LINCOLNWOOD BENCHMARK AT SOUTH END OF CONCRETE BASE FOR LIGHT POLE ON NORTH SIDE OF PRATT APPROXIMATELY 30' WEST OF CENTERLINE OF KIMBALL
ELEVATION: 595.504

BM # 150 – VILLAGE OF LINCOLNWOOD BENCHMARK AT SOUTH END OF CONCRETE BASE FOR LIGHT POLE ON NORTH SIDE OF PRATT APPROXIMATELY 30' WEST OF CENTERLINE OF DRAKE
ELEVATION: 506.396

BM # 92 – VILLAGE OF LINCOLNWOOD BENCHMARK AT SOUTHEAST FLANGE BOLT ON HYDRANT AT NORTH EAST CORNER OF HAMLIN AND MORSE
ELEVATION: 599.496

ALL ELEVATIONS ARE ON NGVD 29 DATUM

IMPROVEMENTS ARE IN:
R13E, SEC 35, T 41N

OWNER:
VILLAGE OF LINCOLNWOOD
6900 LINCOLN AVENUE
LINCOLNWOOD, ILLINOIS 60712
PHONE: (847) 745-4717

COORDINATING/PERMITTING AGENCIES:
Village of Lincolnwood
Public Works Department 847-675-0888

Metropolitan Water Reclamation District (Local Sewers) 708-588-4055

SHEET INDEX

C1. TITLE SHEET
C2. EXISTING CONDITIONS / DEMOLITION PLAN
C3. GEOMETRIC AND UTILITY PLAN
C4. GRADING PLAN
C5. GENERAL NOTES
C6. MWRD NOTES
C7. DETAILS
C8. DETAILS
C9. MWRD EXHIBIT
EL1. GENERAL LIGHTING NOTES
EL2. LIGHTING PLAN
EL3. LIGHTING CONTROLS
EL4. LIGHTING DETAILS
EL5. PHOTOMETRIC PLAN

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt-Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt-Hamilton Associates, Inc.

TITLE SHEET

PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
2	MDH	12-8-17	PER MWRD COMMENTS
1	MDH	4-24-17	PER MWRD COMMENTS

NO.	BY	DATE	REVISION

FILE: 4700.005 PR1.dwg
DRAWN BY: LLM
DATE: 3-1-17
GHA PROJECT #: 4700.005
CHECKED BY: SDB
DATE: 3-1-17
SCALE: N.T.S.

SHEET NUMBER: C1
OF 9 SHEETS

NO.	DATE	DESCRIPTION
1	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

ISSUANCE

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
Tel: 847.478.9700 ■ Fax 847.478.9701

DATE	01/08/18
DRAWN	LLM
CHECKED	SDB
APPROVED	SDB

PROFESSIONAL DESIGN FIRM

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

TITLE SHEET

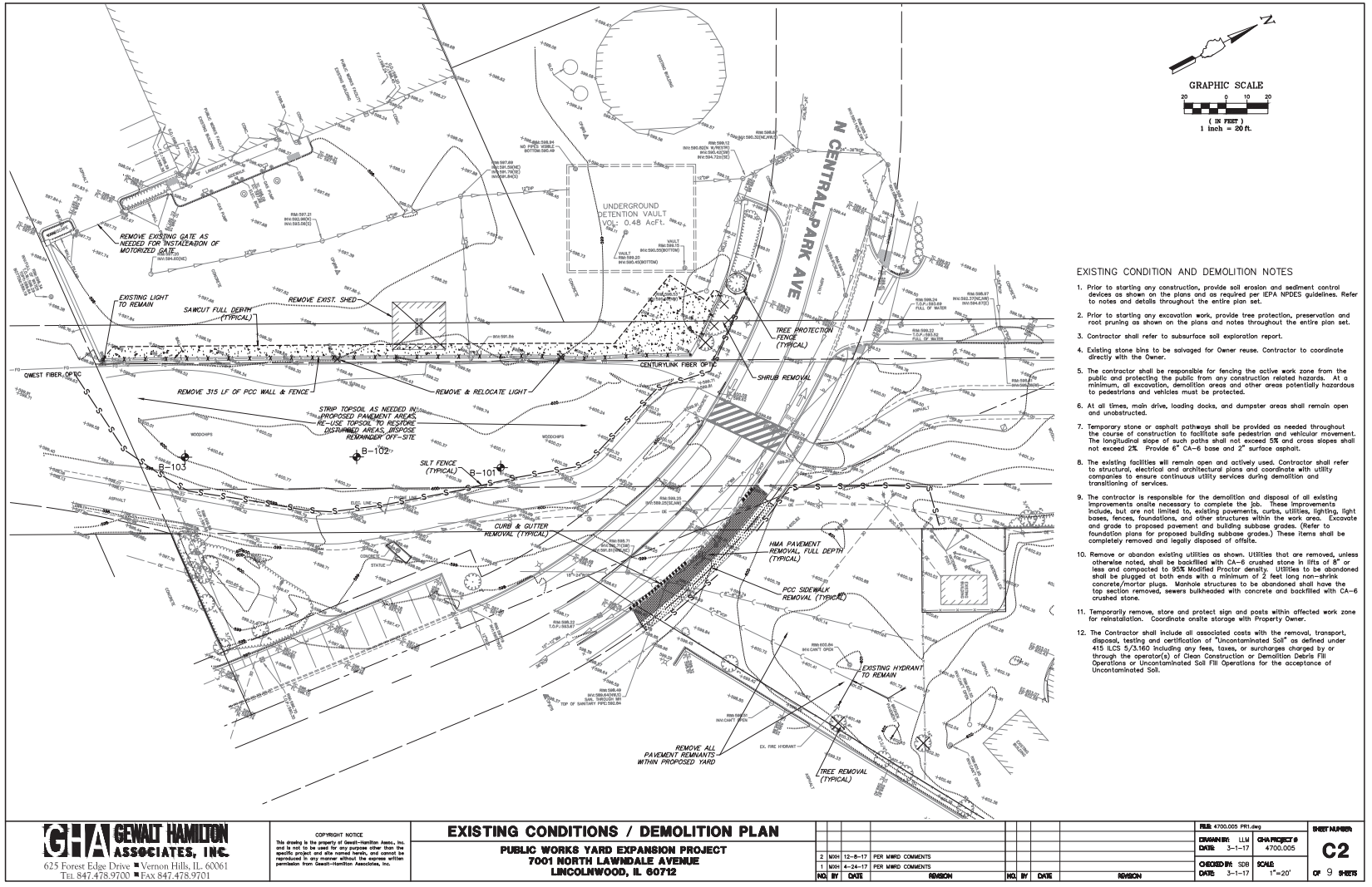
SHEET NO. C1

GHA JOB NO. 4700.005
JOB NO. 14-1815.01

© 2017 FGM Architects Inc.

Copyright (20) FGM ARCHITECTS, INC.

Return to VB Agenda



EXISTING CONDITION AND DEMOLITION NOTES

1. Prior to starting any construction, provide soil erosion and sediment control devices as shown on the plans and as required per IEPA NPDES guidelines. Refer to notes and details throughout the entire plan set.
2. Prior to starting any excavation work, provide tree protection, preservation and root pruning as shown on the plans and notes throughout the entire plan set.
3. Contractor shall refer to subsurface soil exploration report.
4. Existing stone bins to be salvaged for Owner reuse. Contractor to coordinate directly with the Owner.
5. The contractor shall be responsible for fencing the active work zone from the public and protecting the public from any construction related hazards. At a minimum, all excavation, demolition areas and other areas potentially hazardous to pedestrians and vehicles must be protected.
6. At all times, main drive, loading docks, and dumpster areas shall remain open and unobstructed.
7. Temporary stone or asphalt pathways shall be provided as needed throughout the course of construction to facilitate safe pedestrian and vehicular movement. The longitudinal slope of such paths shall not exceed 5% and cross slopes shall not exceed 2%. Provide 6" CA-6 base and 2" surface asphalt.
8. The existing facilities will remain open and actively used. Contractor shall refer to structural, electrical and architectural plans and coordinate with utility companies to ensure continuous utility services during demolition and transitioning of services.
9. The contractor is responsible for the demolition and disposal of all existing improvements onsite necessary to complete the job. These improvements include, but are not limited to, existing pavements, curbs, utilities, lighting, light bases, fences, foundations, and other structures within the work area. Excavate and grade to proposed pavement and building subbase grades. (Refer to foundation plans for proposed building subbase grades.) These items shall be completely removed and legally disposed of offsite.
10. Remove or abandon existing utilities as shown. Utilities that are removed, unless otherwise noted, shall be backfilled with CA-6 crushed stone in lifts of 8" or less and compacted to 95% Modified Proctor density. Utilities to be abandoned shall be plugged at both ends with a minimum of 2 feet long non-shrink concrete/mortar plugs. Manhole structures to be abandoned shall have the top section removed, sewers bulkheaded with concrete and backfilled with CA-6 crushed stone.
11. Temporarily remove, store and protect sign and posts within affected work zone for reinstallation. Coordinate onsite storage with Property Owner.
12. The Contractor shall include all associated costs with the removal, transport, disposal, testing and certification of "Uncontaminated Soil" as defined under 415 ILCS 5/3.160 including any fees, taxes, or surcharges charged by or through the operator(s) of Clean Construction or Demolition Debris Fill Operations or Uncontaminated Soil Fill Operations for the acceptance of Uncontaminated Soil.

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt-Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt-Hamilton Associates, Inc.

EXISTING CONDITIONS / DEMOLITION PLAN

PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
2	MDH	12-8-17	PER MWRD COMMENTS
1	MDH	4-24-17	PER MWRD COMMENTS

FILE: 4700.005 PR1.dwg
DRAWN BY: LLM
DATE: 3-1-17
GHA PROJECT # 4700.005
CHECKED BY: SDB
DATE: 3-1-17
SCALE: 1"=20'
SHEET NUMBER C2
OF 9 SHEETS

ISSUANCE

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

FGM ARCHITECTS
CHICAGO O'FALLON OAK BROOK

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

DATE	01/08/18
DRAWN	LLM
CHECKED	SDB
APPROVED	SDB

PROFESSIONAL DESIGN FIRM

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

EXISTING CONDITIONS / DEMOLITION PLAN

SHEET NO. C2

GHA JOB NO. 4700.005
JOB NO. 14-1815.01
© 2017 FGM Architects Inc.

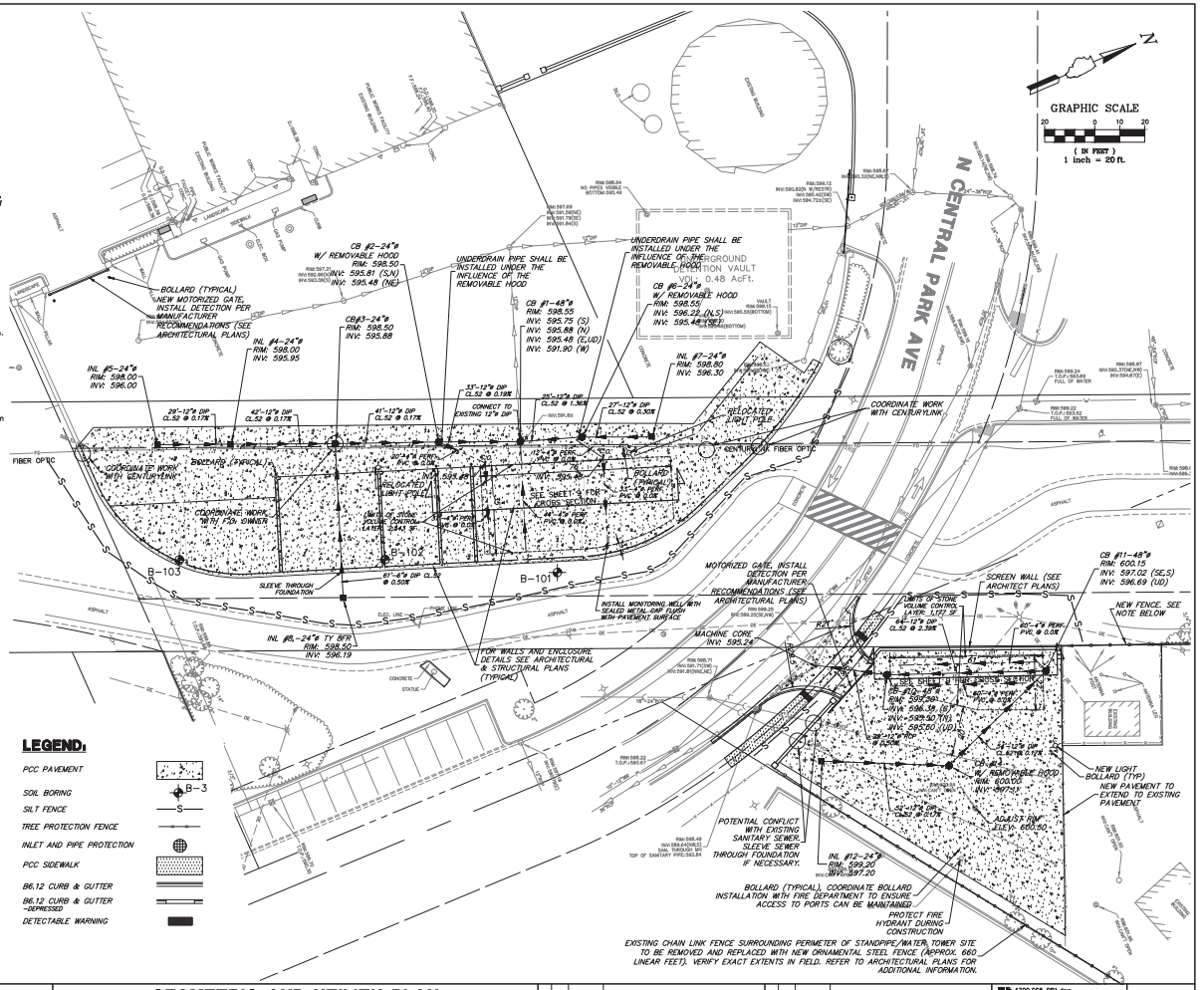
Return to VB Agenda

GEOMETRIC AND PAVING NOTES

1. All pavement dimensions are to edge of pavement.
2. Install enclosures and walls as shown. Refer to architectural plans.
3. Install PCC pavement as shown. Refer to detail sheet for specific pavement section and general notes for construction, testing and compaction requirements.
4. Contractor shall construct contraction joints, isolation joints and construction joints as necessary and to match the joint pattern of the existing pavement. New pavements shall be doweled into existing pavements with No. 6, epoxy coated bars at 24 inches on center. Contraction joints shall be sawcut 2.25 inches in depth within 24 hours of pavement installation. All joints shall be sealed in accordance with Section 452 of the Illinois Standard Specifications for Road and Bridge Construction (ISSR&BC). Typical scoring pattern will be 15' x 15' and will be determined by Architect/Owner/Engineer in field. Concrete shall be Class PV in accordance with Section 1020 of the ISSR&BC. Type III (white) curing compound with protective coat integral with curing compound shall be applied to all concrete pavements, curbs and sidewalks in accordance with Section 1022 of the ISSR&BC.
5. Contractor shall form a 3' x 3' box centered about all structures in pavement areas. Place a 3/4 inch, full depth expansion joint around box and dowel pavement. Seal joint in accordance with Section 452 of the ISSR&BC.
6. Contractor shall install temporary erosion control seed and blanket as necessary to meet soil erosion and sediment control requirements. Refer to notes and details throughout the plan set for specific material requirements.
7. For final restoration, the contractor shall be responsible for restoring all disturbed turf areas and proposed turf areas as follows:
   a. Prior to placement of topsoil restoration area subgrade material shall be rototilled and re-compacted to a maximum of 80% standard proctor to a depth of 6".
   b. Spread a minimum of 4" of existing site salvaged screened topsoil or new pulverized topsoil on all disturbed areas. Compact to 80% standard proctor.
   c. Topsoil must be free of litter, brush, rocks and earth clods of greater than 1 inch in any dimension. Contain between 1%-10% organic matter, 12%-50% clay, and less than 55% sand content. pH shall be between 6.0 and 8.0.
   d. Sod restoration areas as follows:
      i. Sod shall be 24" wide x 54" long or 2.5" by 30" long thick cut (1-1/2") of well rooted growth material.
      ii. Seed mixture shall closely match IDOT Class 1.
      iii. Sod shall be rolled after installation.
   e. Contractor shall be responsible for watering the restored area per IDOT specifications for a duration of 30 days prior to the Owner's final review and acceptance. If restoration has not shown a 'catch' or uniform stand, the contractor shall repeat reseeding or resodding until uniform stand is achieved.
8. Once restoration has been completed, the contractor shall remove erosion control devices. Silt fence trenches shall be backfilled and restored in kind. Storm structures shall be cleaned of debris.

UTILITY NOTES

1. Contractor shall contact CenturyLink and locate fiber optic line prior to performing any work. Contractor shall ensure that CenturyLink is onsite when work is performed near the fiber optic line. Contact Herb Jenrich at 773-459-5804.
2. The contractor shall verify the exact location and elevation of existing utilities prior to initiating work. Any discrepancies found between the information noted on the plans and actual field conditions, or any conflicts with proposed improvements shall be reported to the engineer immediately. The contractor shall not proceed any further until given written clarification on how to proceed.
3. Install storm sewer as shown. Refer to Storm Sewer requirement table on General Notes Sheet for pipe material, joint, frame and grate, stone bedding and testing requirements.
4. Contractor shall provide the following as-constructed documents at the conclusion of the project:
   a. Storm Sewer
      i. As-constructed locations of structures, service connections, cleanouts.
      ii. Rim and invert elevations.
      iii. Color video with transcript required for new sewer lines installed.
4. All existing structures as noted shall have the bottom of the structure and sumps vacuum cleaned.
5. All connections to the combined sewer must be watertight in conformance with ASTM C-923.
6. All connections to existing structures shall be machined cored holes.
7. The existing sewer on the property must be cleaned and televised before and after construction in the presence of a DWM Inspector. A copy of the video on a CD shall be submitted to the DWM.
8. Contractor shall ensure positive drainage to all inlets and catchbasins. Areas of surface ponding shall be corrected by the contractor at no additional expense to the Owner.
9. Drainage, sewer and valve vault rims shall be flush with adjacent finished grades. All rim elevation of structures shall be adjusted to finished grade of roadways, island, curblines, etc. If a conflict exists, notify engineer prior to final adjustment of structure elevation.
10. Existing storm structures to remain within the redevelopment area have been noted with 'Adjust Rim' or Adjust MH'. 'Adjust Rim' requires removal of frame, additional or removal of concrete rings and reinstallation of frame. 'Adjust MH' requires removal of frame, flattop or cone, and first barrel section, installation of new shorter barrel section and reinstallation of flattop or cone and frame.
11. Install site lighting per electrical plans. Refer to electrical plans for light fixture, post, make and model and foundation details. Also refer to electrical plans for final wire routing connections and requirements.
12. Install power feed conduits as shown. Refer to electrical plans for conduit and manhole details and building termination connections.



GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt-Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt-Hamilton Associates, Inc.

GEOMETRIC AND UTILITY PLAN

PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
2	MDH	12-8-17	PER MWRD COMMENTS
1	MDH	4-24-17	PER MWRD COMMENTS

NO.	BY	DATE	REVISION

FILE: 4700.005 PR1.dwg
DRAWN BY: LLM
CHECKED BY: SDB
DATE: 3-1-17
GHA PROJECT #: 4700.005
SCALE: 1"=20'
SHEET NUMBER: C3
OF 9 SHEETS

ISSUANCE

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

DATE	01/08/18
DRAWN	LLM
CHECKED	SDB
APPROVED	SDB

PROFESSIONAL DESIGN FIRM

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

GEOMETRIC AND UTILITY PLAN

SHEET NO. C3

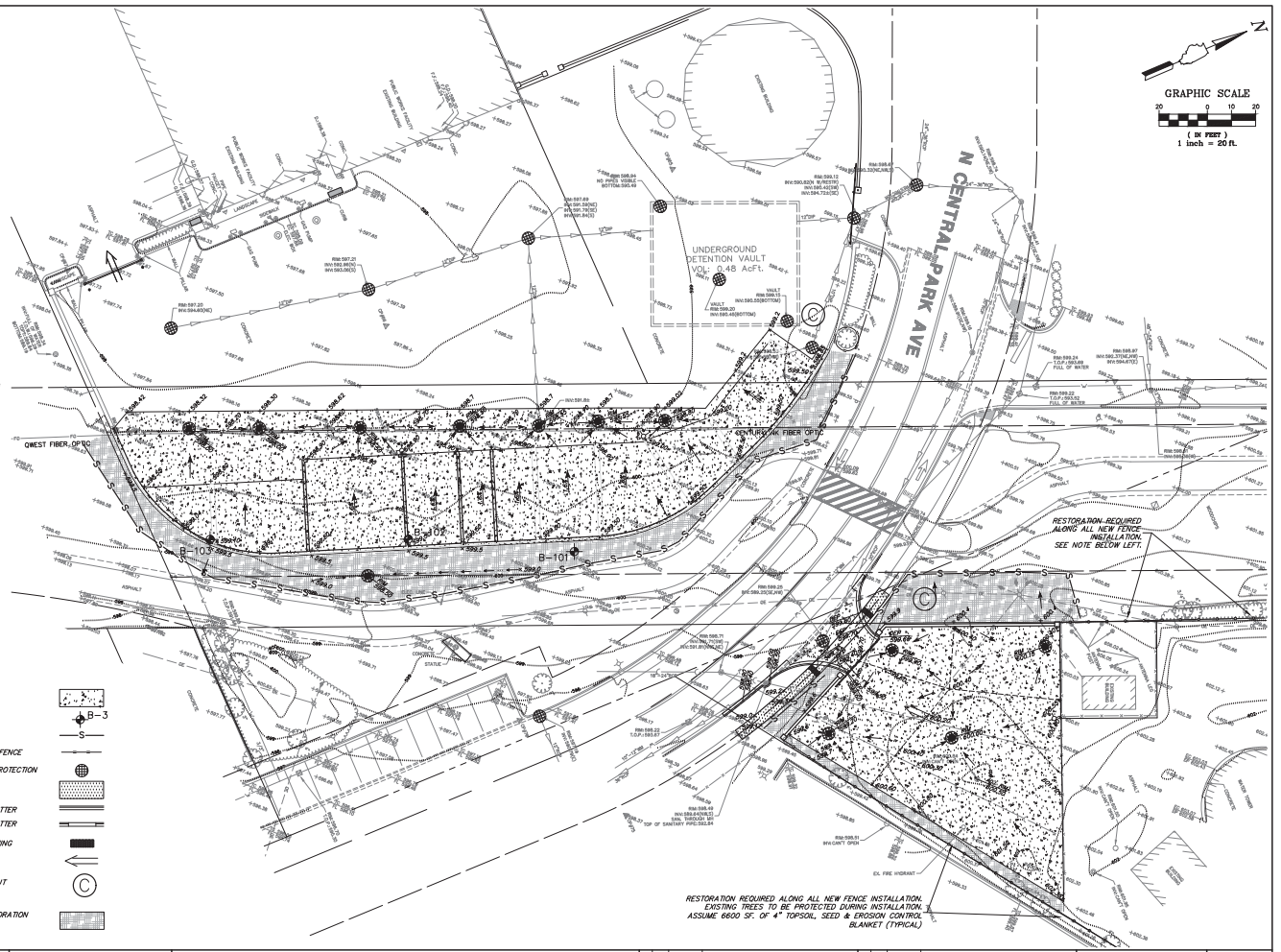
GHA JOB NO. 4700.005
JOB NO. 14-1815.01
© 2017 FGM Architects Inc.

Copyright 2017 FGM ARCHITECTS, INC.

Return to VB Agenda

GRADING NOTES

1. Prior to starting any construction, provide soil erosion and sediment control devices as shown on the plans and as required per IEPA NPDES guidelines. Refer to notes and details throughout the entire plan set.
2. Prior to starting any excavation work, provide tree protection, preservation and root pruning as shown on the plans and notes throughout the entire plan set.
3. Contractor shall refer to subsurface soil exploration report.
4. Refer to General Notes for grading, compaction and proof roll requirements.
5. Crushed concrete meeting IDOT certifications for the design plan gradations for non-porous pavement and sidewalk stone base, structural fill, and trench backfill will be permitted.
6. Crushed concrete may not be used for underdrain trench or porous fill conditions.
7. The contractor shall import or export soil as necessary to construct the site to specified plan grades. Such work is considered incidental to the contract and no additional compensation shall be allowed for such work. Minor adjustments to grades can be accommodated with Project Engineer approval.
8. The Contractor shall include all associated costs with the removal, transport, disposal, testing and certification of "Uncontaminated Soil" as defined under 415 ILCS 5/3.160 including any fees, taxes, or surcharges charged by or through the operator(s) of Clean Construction or Demolition Debris Fill Operations or Uncontaminated Soil Fill Operations for the acceptance of Uncontaminated Soil.
9. All structures shall be adjusted to meet finished turf and pavement grades.
10. Refer to soil erosion and sediment control notes and details for seed and blanket requirements for temporary stabilization.
11. Contractor shall provide the following as-constructed documents at the conclusion of the project:
    a) Lawn or open space areas
        I) Spot elevations at a maximum 50 foot grid.
        II) Spot elevation top and bottom of berms or swales
        III) Spot elevations and ridge / high and low points.
    b) Parking lot and hard surfaces.
        I) Top of curb and flowline elevations at similar locations to proposed grading.
        II) Spot elevations at summit / high and low points.
    c) Buildings
        I) Top of foundation elevations.
        II) Finished floor elevations at doorways.
12. Contractor shall ensure positive drainage to all inlets and catchbasins. Areas of surface ponding shall be corrected by the contractor at no additional expense to the Owner.
13. All lawn areas disturbed as a result of construction shall be restored to preconstruction lawn condition following restoration requirements.



LEGEND:

- PCC PAVEMENT
- SOIL BORING (B-3)
- SILT FENCE (S)
- TREE PROTECTION FENCE
- INLET AND PIPE PROTECTION
- PCC SIDEWALK
- B6.12 CURB & GUTTER
- B6.12 CURB & GUTTER –DEPRESSED
- DETECTABLE WARNING
- OVERFLOW ROUTE
- CONCRETE WASHOUT (C)
- LANDSCAPE RESTORATION SOD

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt-Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt-Hamilton Associates, Inc.

GRADING PLAN

PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
2	MDH	12-8-17	PER MWRD COMMENTS
1	MDH	4-24-17	PER MWRD COMMENTS

NO.	BY	DATE	REVISION

FILE: 4700.005 PR1.dwg
DRAWN BY: LLM
DATE: 3-1-17
GHA PROJECT #: 4700.005
CHECKED BY: SDB
DATE: 3-1-17
SCALE: 1"=20'

SHEET NUMBER: C4
OF 9 SHEETS

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

FGM ARCHITECTS
CHICAGO OAKBROOK OFALLON

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

DATE	01/08/18	PROFESSIONAL DESIGN FIRM
DRAWN	LLM	
CHECKED	SDB	
APPROVED	SDB	

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

GRADING PLAN

SHEET NO. C4

GHA JOB NO. 4700.005
JOB NO. 14-1815.01

© 2017 FGM Architects Inc.
Copyright (20) FGM ARCHITECTS, INC.

Return to VB Agenda

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE PERFORMED ACCORDING TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION, THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" LATEST EDITION, THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION, THE DETAILS IN THESE PLANS, THE CONTRACT DOCUMENTS, ALL APPLICABLE REQUIREMENTS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, THE IEPA AND ORDINANCES OF AUTHORITIES HAVING JURISDICTION AND ALL ADDENDA THERETO.
2. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
3. WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.
4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE PRIOR TO ORDERING MATERIALS. IN ADDITION, THE CONTRACTOR MUST VERIFY THE LINE AND GRADES. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSION OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS/HER OWN RISK AND EXPENSE AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR ANY COSTS INCURRED..
5. ALL PAVEMENT DIMENSIONS ARE SHOWN TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
6. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE THE MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 72 HOURS PRIOR TO BEGINNING WORK.
8. IF DURING CONSTRUCTION THE CONTRACTOR ENCOUNTERS OR OTHERWISE BECOMES AWARE OF ANY SEWERS OR UNDERDRAINS OTHER THAN THOSE SHOWN ON THE PLANS, HE/SHE SHALL INFORM THE ENGINEER, WHO SHALL DIRECT THE WORK NECESSARY TO MAINTAIN OR REPLACE THE FACILITIES IN SERVICE AND TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION IF MAINTAINED. EXISTING FACILITIES TO BE MAINTAINED THAT ARE DAMAGED BECAUSE OF NON-COMPLIANCE WITH THIS PROVISION SHALL BE REPLACED AT THE CONTRACTOR'S OWN EXPENSE.
9. THE CONTRACTOR SHALL PROVIDE TEMPORARY TOILET FACILITIES AND HAND SANITIZING STATIONS FOR THE USE OF ALL THE CONTRACTORS PERSONNEL EMPLOYED ON THE WORK SITE. THE FACILITIES SHALL BE MAINTAINED IN PROPER SANITARY CONDITION THROUGHOUT THE PROJECT. THE LOCATION OF THE TEMPORARY FACILITIES SHALL BE APPROVED BY THE ENGINEER.
10. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE NPDES PERMIT AND SWPPP MANUAL. IF NO NPDES PERMIT OR SWPPP MANUAL IS NEEDED FOR THE PROJECT THE CONTRACTOR SHALL PERFORM SOIL EROSION SEDIMENT CONTROL BEST PRACTICES OR AS DIRECTED BY THE OWNER TO PREVENT ILLICIT DISCHARGES FROM THE SITE.

UTILITY NOTES

1. UNDERGROUND WORK SHALL INCLUDE TRENCHING, DISPOSAL OF EXCESS MATERIAL, DEWATERING, INSTALLATION OF PIPE, CASTINGS, STRUCTURES, BACKFILLING OF TRENCHES AND COMPACTION, AND TESTING AS SHOWN ON THE CONSTRUCTION PLANS. FITTINGS AND ACCESSORIES NECESSARY TO COMPLETE THE WORK MAY NOT BE SPECIFIED BUT SHALL BE CONSIDERED AS INCLUDED TO THE COST OF THE CONTRACT. ALL SEWER SHALL BE INSTALLED USING A LASER AND BEGIN AT THE DOWNSTREAM END.
2. MACHINE CORE ALL CONNECTIONS TO EXISTING STRUCTURES USING A CORE DRILL. HAMMERING OR SAWING OF STRUCTURES WILL NOT BE ALLOWED.
3. ALL CONNECTIONS TO EXISTING OR DISSIMILAR STORM/SANITARY LINES SHALL BE DONE WITH STAINLESS STEEL NON-SHEAR COUPLINGS.
4. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER. ALL DOWNSPOUTS, SIDE YARD DRAINS, AND OUTSIDE DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM. FOOTING DRAINS SHALL FIRST DRAIN TO A SUMP PIT.

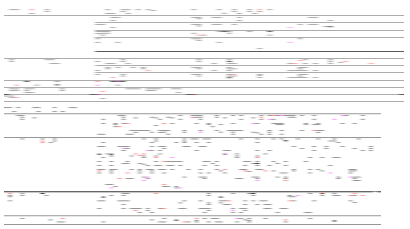
PROJECT SPECIFIC NOTES

1. THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS THAT INCLUDE; CRITICAL SPOT GRADES SUCH AS OVERFLOW ELEVATIONS, SPOT ELEVATIONS NEAR ENTRANCES, SUFFICIENT INFORMATION SUCH THAT THE ENGINEER MAY VERIFY DETENTION VOLUMES, RIM AND INVERT ELEVATIONS OF ALL SEWERS, LOCATIONS OF ALL INSTALLED UNDERGROUND UTILITIES, LOCATIONS OF ALL BURIED BENDS AND FITTINGS AND ALL FIELD CHANGES FROM THE APPROVED DRAWINGS.
2. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED BY THE CONTRACTOR AND HIS SURETY FOR A PERIOD OF 12 MONTHS FROM THE DATE OF INITIAL ACCEPTANCE OF THE WORK BY THE OWNER AGAINST ALL DEFECTS IN MATERIALS AND WORKMANSHIP OF WHATEVER NATURE.
3. ALL CONSTRUCTION WILL BE INSPECTED BY THE OWNER'S REPRESENTATIVE. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE MUNICIPALITY AS WELL AS THE STANDARD SPECIFICATIONS.
5. THE SEWER AND WATER CONTRACTOR SHALL BE REQUIRED TO BE LICENSED AND BONDED WITH THE VILLAGE OF LINCOLNWOOD BEFORE WORK IS STARTED.
6. CONTRACTOR SHALL NOTIFY THE VILLAGE OF LINCOLNWOOD 847-675-0888 AND THE PROJECT ENGINEER (847-478-9700) AT LEAST 72 HOURS PRIOR TO BEGINNING ANY WORK ON THIS PROJECT.
7. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, ENGINEER, THE MUNICIPALITY AND THEIR AGENTS, FROM ALL LIABILITY INVOLVED IN CONSTRUCTION, INSTALLATION AND TESTING OF THE WORK ON THIS PROJECT.
8. THE CONTRACTOR MUST CARRY INSURANCE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. ALL OFFICIALS, EMPLOYEES AND AGENTS OF GEWALT HAMILTON ASSOCIATES MUST BE LISTED AS ADDITIONAL INSURED.
9. ALL ELEVATIONS ARE ON NGVD 29 DATUM.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL TO ADEQUATELY INFORM AND PROTECT THE PUBLIC OF ALL CONSTRUCTION OPERATIONS.
11. PRIOR TO PLACEMENT OF FABRIC AND STONE, THE SUBGRADE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER. PROOF-ROLLING SHALL BE DONE USING A THREE AXLE DUMP TRUCK TOGETHER WITH LOAD WEIGHING AT LEAST TWENTY-FIVE (25) TONS. THE LOAD SHALL BE UNIFORMLY PLACED IN THE DUMP BODY. ALL DEFICIENCIES SHALL BE REPAIRED AND RE-PROOF-ROLLED UNTIL FOUND ACCEPTABLE TO THE ENGINEER.
13. CRUSHED CONCRETE IS NOT PERMITTED FOR USE ON THE PROJECT UNLESS PRIOR WRITTEN NOTICE IS GIVEN BY THE ENGINEER.
14. ALL STONE USED ON THE PROJECT SHALL BE CRUSHED UNLESS SPECIFICALLY NOTED OTHERWISE.
15. ALL CONNECTIONS TO EXISTING STORM MANHOLES SHALL BE INSTALLED WITH A NEOPRENE BOOT SECURED WITH DOUBLE STAINLESS STEEL STRAPS MEETING THE REQUIREMENTS OF ASTM C-923.
16. ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH APPLIED WITHIN 1 HOUR OF FINAL STRIKING.
17. ALL CONCRETE SHALL CONSIST OF PORTLAND CEMENT CONCRETE, 4" SLUMP, 6.1 BAG MIX AND AIR ENTRAINMENT OF NOT LESS THAN FIVE (5%) OR MORE THAN EIGHT (8%). CONCRETE SHALL BE A MINIMUM COMPRESSIVE STRENGTH (4000PSI) AT TWENTY EIGHT (28) DAYS.
18. ALL CONCRETE SHALL HAVE A WHITE, IDOT TYPE 3 CURING COMPOUND APPLIED TO THE SURFACE WITHIN 1 HOUR OF FINAL STRIKING AT THE MANUFACTURER RECOMMENDED APPLICATION RATE.
19. 3/4" THICK PRE-MOLDED FIBER EXPANSION JOINTS WITH 2 , 3/4" x 18" PLAIN ROUND, STEEL DOWEL BARS SHALL BE INSTALLED IN ALL CURBS AT (45') FOURTY FIVE FOOT INTERVALS AND AT ALL P.C.'S, P.T.'S AND CURB RETURNS. ALTERNATE ENDS OF THE DOWEL BARS SHALL BE GREASED AND FITTED WITH METAL EXPANSION TUBES. ALL EXPANSION JOINTS MUST BE FREE OF CONCRETE FOR FULL DEPTH. CONTRACTION JOINTS SHALL BE TOOLED AT 15' INTERVALS.
20. UNLESS OTHERWISE NOTED ON THE PLANS WHENEVER NEW CONCRETE ABUTS EXISTING/ OR NEW CONCRETE SET A 1/2" THICK PRE-MOLDED FIBER EXPANSION JOINT AND DOWEL WITH SMOOTH 12" #4 BARS @ 24" O.C. THIS INCLUDES CONCRETE POURED ADJACENT TO EXISTING SIDEWALKS, CURBS AND BUILDING. THE DOWEL BARS SHOULD BE 4" INTO EXISTING CONCRETE WITH 8" EXTENDING INTO NEW CONCRETE.
21. ALL DOWEL BARS AND TIE BARS SHALL BE EPOXY COATED UNLESS NOTED OTHERWISE.
22. ALL PAVEMENT AND BUILDING SUBGRADE SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY. ALL SUBGRADE IN LAWN AREAS SHALL BE COMPACTED TO 90% MODIFIED PROCTOR DENSITY.
23. SPREAD SCREENED TOPSOIL ON ALL DISTURBED AREAS AND PROPOSED GREEN AREAS. TOPSOIL SHALL COMPLY WITH REQUIREMENTS OF ARTICLE 1081.05.

EROSION CONTROL NOTES

1. AT A MINIMUM, THE CONTRACTOR SHALL INSTALL AND MAINTAIN SOIL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH IN THE LATEST EDITION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S URBAN MANUAL.
2. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS.
3. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ANY ROAD OF MATERIAL THAT IS FROM THE PROJECT. THIS WILL BE DONE AT THE CLOSE OF EACH DAY OF WORK OR MORE FREQUENTLY AS FIELD CONDITIONS WARRANT.
4. ALL STORM WATER STRUCTURES WITH OPEN LIDS SHALL BE PROTECTED WITH INLET FILTER BASKETS. DURING CONSTRUCTION, SEDIMENT SHALL BE REMOVED AS NEEDED, AND BASKETS SHALL BE REPAIRED OR REPLACED AS NEEDED.
5. AFTER ACHIEVING PERMANENT VEGETATION, ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE REMOVED, AND THE DRAINAGE STRUCTURES SHALL BE CLEANED.
6. THE CONTRACTOR SHALL KEEP A WATER SOURCE AT THEIR DISPOSAL FOR THE PURPOSE OF WATERING DOWN SOIL ON SITE AND ADJACENT ROADWAYS WHICH OTHERWISE MAY BECOME AIRBORNE.
7. THE CONTRACTOR SHALL STABILIZE ALL IDLE, DISTURBED AREAS WITHIN SEVEN DAYS OF CESSATION OF THE CONSTRUCTION ACTIVITIES IN THAT AREA.
8. THE CONTRACTOR IS EXPRESSLY ADVISED NOT TO DISTURB AREAS WHICH ARE OUTSIDE THOSE NECESSARY TO PROVIDE THE IMPROVEMENTS AS CALLED FOR IN THE PLANS.
9. ALL EROSION CONTROL MEASURES SHALL BE REPLACED IF DAMAGED OR MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.
10. ALL BYPASS CHANNELS, MUST BE CONSTRUCTED SO THAT CHANNEL FLOWS WILL NOT CAUSE EROSION OF EXCAVATED MATERIAL. IN EACH CASE A SEDIMENTATION BASIN MUST BE CONSTRUCTED SO AS TO ALLOW THE SEDIMENT TO SETTLE PRIOR TO THE DOWNSTREAM OUTLET OF THE PROJECT AREA.
11. PUMPS MAY BE USED AS BYPASS DEVICES, BUT IN NO CASE WILL THE WATER BE DIVERTED OUTSIDE THE PROJECT LIMIT. ALL PUMPED WATER SHALL BE FREE OF SILT. PUMPING MAY REQUIRE THE USE OF A SEDIMENT CONTAINMENT FILTER BAG AND OTHER SUPPLEMENTAL SEDIMENT CONTROL MEASURES.
12. CONCRETE WASHOUT FACILITIES SHALL BE MADE AVAILABLE IF NEEDED, AND PROPERLY MAINTAINED THROUGHOUT THE PROJECT.
13. PROPERLY MANAGE ALL MATERIAL STORAGE AREAS, PORTABLE TOILETS, AND EQUIPMENT FUELING, CLEANING, AND MAINTENACE AREAS TO ENSURE THESE AREAS ARE FREE OF SPILLS, LEAKS, OR OTHER POTENTIAL POLLUTANTS.
14. WASTE, CONSTRUCTION DEBRIS, AND BUILDING MATERIALS SHALL BE COLLECTED AND PLACED IN APPROVED RECEPTACLES.

STORM SEWER TABLE



GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt-Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt-Hamilton Associates, Inc.

GENERAL NOTES

PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
2	MDH	12-8-17	PER MWRD COMMENTS
1	MDH	4-24-17	PER MWRD COMMENTS

NO.	BY	DATE	REVISION

FILE: 4700.005 PR1.dwg
DRAWN BY: LLM
DATE: 3-1-17
CHECKED BY: SDB
DATE: 3-1-17
GHA PROJECT #: 4700.005
SCALE: N.T.S.

SHEET NUMBER
C5
OF 9 SHEETS

ISSUANCE

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

FGM ARCHITECTS
CHICAGO OAKBROOK O'FALLON

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

DATE	01/08/18
DRAWN	LLM
CHECKED	SDB
APPROVED	SDB

PROFESSIONAL DESIGN FIRM

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

GENERAL NOTES

SHEET NO.
C5

GHA JOB NO. 4700.005
JOB NO. 14-1815.01
© 2017 FGM Architects Inc.

Copyright 2017 FGM ARCHITECTS, INC.

o VB Agenda

A. REFERENCED SPECIFICATIONS

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
   * STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * VILLAGE OF LINCOLNWOOD MUNICIPAL CODE;
   * THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;
   * IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

B. NOTIFICATIONS

1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).
2. THE VILLAGE OF LINCOLNWOOD ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

C. GENERAL NOTES

1. ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE ~~NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)~~ NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29). CONVERSION FACTOR IS ~~_______ FT~~ FROM NGVD29 TO NAVD88 IS – 0.284 FT
2. MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.
8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

D. SANITARY SEWER

1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.
4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).
5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE		
6-INCH TO 15-INCH DIAMETER SDR 26	ASTM D-3034	ASTM D-3212
18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM F-679	ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)	ASTM D-3350 ASTM D-3035	ASTM D-3261,F-2620 (HEAT FUSION) ASTM D-3212,F-477 (GASKETED)
WATER MAIN QUALITY PVC		
4-INCH TO 36-INCH	ASTM D-2241	ASTM D-3139
4-INCH TO 12-INCH	AWWA C900	ASTM D-3139
14-INCH TO 48-INCH	AWWA C905	ASTM D-3139

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
POLYPROPYLENE (PP) PIPE		
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477

8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ¼ " TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.
10. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.
11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
    a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SHEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
    b) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
    c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
12. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
13. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.
14. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.
15. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.
16. ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.
17. EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.
18. A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

E. EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.
3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
   a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
   b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.
9. MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.
10. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
12. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.
13. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).
14. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
15. SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.
16. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.
17. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
18. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.
19. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
20. THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.
21. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.
22. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.
23. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.
24. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.

TECHNICAL GUIDANCE MANUAL

MWRD GENERAL NOTES

07/12/2016

STD. DWG. NO.18

PAGE NO. 19

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ▪ Vernon Hills, IL. 60061
TEL 847.478.9700 ▪ FAX 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt-Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt-Hamilton Associates, Inc.

MWRD NOTES

PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
2	MXH	12-8-17	PER MWRD COMMENTS
1	MXH	4-24-17	PER MWRD COMENTS

FILE: 4700.005 PR1.dwg
DRAWN BY: LLM DATE: 3-1-17
GHA PROJECT # 4700.005
CHECKED BY: SDB DATE: 3-1-17
SCALE: N.T.S.
SHEET NUMBER: C6 OF 9 SHEETS

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

ISSUANCE

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ▪ Vernon Hills, IL. 60061
TEL 847.478.9700 ▪ FAX 847.478.9701

DATE 01/08/18
DRAWN LLM
CHECKED SDB
APPROVED SDB
PROFESSIONAL DESIGN FIRM

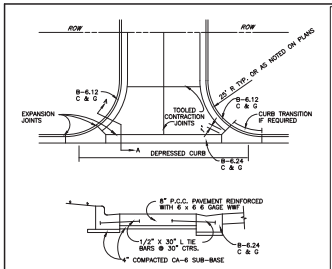
PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

MWRD NOTES

SHEET NO. C6

GHA JOB NO. 4700.005
JOB NO. 14-1815.01
© 2017 FGM Architects Inc.

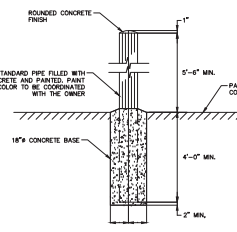
Copyright 2017 FGM ARCHITECTS, INC.



SECTION A–A

GHA GEWALT HAMILTON ASSOCIATES, INC.

DRIVEWAY ENTRANCE DETAIL



*NOT CRASH RATED

03.15.2016

GHA GEWALT HAMILTON ASSOCIATES, INC.

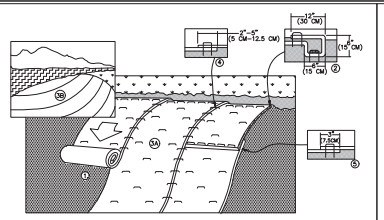
TYPICAL STEEL POST

NOTES:

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2"–5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP'S WIDTH.

NOTE:

*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.



STAPLE PLACEMENTS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. SEE STAPLE PATTERN GUIDES FOR ACTUAL RECOMMENDED PLACEMENTS.

03.15.2016

GHA GEWALT HAMILTON ASSOCIATES, INC.

EROSION CONTROL BLANKET SLOPE INSTALLATION

Stabilization Type:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Permanent Seeding			A	X	X	X	X	X	X			
Dormant Seeding	B											
Temporary Seeding			C	X	X	X	X	X	X			
Sodding			E	X	X							
Mulching	F											

A = KENTUCKY BLUEGRASS @ 80 LBS/AC. MIXED WITH PERENNIAL RYEGRASS @ 30 LBS/AC.
B = KENTUCKY BLUEGRASS @ 135 LBS/AC. MIXED WITH PERENNIAL RYEGRASS @ 45 LBS/AC.
C = SPRING OATS @ 100 LBS/AC.
D = WHEAT OR CEREAL RYE @ 150 LBS/AC.
E = SOD
F = STRAW MULCH (HYDROMULCH OR USE STRAW BLANKET) @ 2 TONS/AC.
XXX = IRRIGATION NEEDED

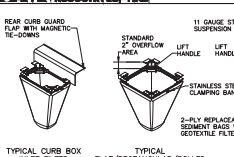
IRRIGATION SHOULD BE PROVIDED AS NECESSARY TO THOROUGHLY ESTABLISH INTENDED GROWTH.

NOTE:
SPRAYED ON PRODUCTS CANNOT BE USED NOV.–FEB.

03.15.2016

GHA GEWALT HAMILTON ASSOCIATES, INC.

TYPICAL SOIL PROTECTION CHART



TYPICAL CURB BOX INLET FILTER | TYPICAL FLAT/RECTANGULAR/ROLLED CURB INLET FILTER | TYPICAL ROUND INLET FILTER

Material Property	Test Method	Value (min. ave.)	
> Inner Filter Bag Specs (2mil thick)		Non-Woven	Woven Mono
Grab Tensile	ASTM D 4632	200 lbs	200 lbs
Mullen Burst Strength	ASTM D 3786	400 lbs	300 lbs
Trapezoid Tear	ASTM D 4533	45 lbs	75 lbs
UV Resistance	ASTM D 4355	70% at 500 hrs	90%
Apparent Opening Size (AOS)	ASTM D 4751	70 sieve (.212 mm)	40 sieve (.425 mm)
Permittivity	ASTM D 4491	1.0/sec.	2.1/sec.
Water Flow Rate	ASTM D 4491	145 gpm/sqft.	140gpm/sqft.
> Polyester Outer Reinforcement Bag Specifications			
Weight	ASTM D 3776	4.55 oz/sqyd +/-10%	
Thickness	ASTM D 1777	.040 +/- .005	
> Frame Construction			
A36 Structural Steel; 11 Gauge, Zinc Plated	ASTM A 576	Tensile Strength > 58,000 psi Yield Strength > 36,000 psi	

MAINTENANCE
1. CLEAN OUT AFTER EVERY RAIN EVENT

ACCEPTABLE MANUFACTURER'S AS LISTED BELOW:

1. INLET & PIPE PROTECTION, INC. Naperville, IL 60564 847 722–0690
2. MARATHON MATERIALS, INC. Plainfield, IL 60544 800–963–9493

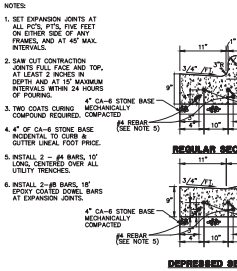
03.15.2016

GHA GEWALT HAMILTON ASSOCIATES, INC.

INLET FILTER BASKET DETAIL

NOTES:

1. SET EXPANSION JOINTS AT ALL PC'S, PT'S, FIVE FEET ON EITHER SIDE OF ANY FRAMES, AND AT 45° MAX. INTERVALS.
2. SAW CUT CONTRACTION JOINTS FULL FACE AND TOP, AT LEAST 2 INCHES IN DEPTH AND AT 15' MAXIMUM INTERVALS WITHIN 24 HOURS OF POURING.
3. TWO COATS CURING COMPOUND REQUIRED. MECHANICALLY COMPACTED
4. 4" OF CA–6 STONE BASE INCIDENTAL TO CURB & GUTTER LINEAL FOOT PRICE.
5. INSTALL 2 – #4 BARS, 10' LONG, CENTERED OVER ALL UTILITY TRENCHES.
6. INSTALL 2–#8 BARS, 18' EPOXY COATED DOWEL BARS AT EXPANSION JOINTS.



03.15.2016

GHA GEWALT HAMILTON ASSOCIATES, INC.

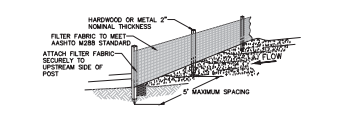
B6.12 CURB & GUTTER UNREINFORCED DETAIL

NOTES:

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF–SITE AND CAN BE PERMANENTLY STABILIZED.
4. FABRIC AND INSTALLATION SHALL MEET THE REQUIREMENTS OF AASHTO STANDARD SPECIFICATION M–288–00.
5. SLICING METHOD IS PREFERRED.

PROPERTY	TEST PROCEDURE	
Grab Elongation		
Machine Direction	ASTM D–4533	123 lbs
X–Machine Direction	ASTM D–4833	101 lbs
Permittivity	ASTM D–4491	.05 sec^{-1}
A.S.O.	ASTM D–4751	30 u.s. Sieve
UV Stability	ASTM D–4355	70%

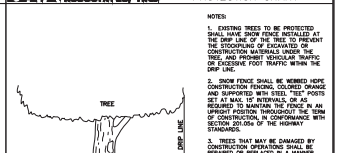
1. SET POSTS AND EXCAVATE OR SLIT–TRENCH A 6–INCH DEEP TRENCH UPSLOPE ALONG THE LINE OF THE POST
2. ATTACH AASHTO GEOTEXTILE FILTER FABRIC TO EACH POST WITH A MINIMUM OF THREE (3) FASTENERS PER POST AND EXTEND TO THE BOTTOM OF THE TRENCH. ACCEPTABLE FASTENERS INCLUDE STAPLES, ZIP–TIES, OR WIRE TIES.
3. BACKFILL AND COMPACT THE EXCAVATED SPOIL MATERIALS



03.15.2016

GHA GEWALT HAMILTON ASSOCIATES, INC.

SILT FENCE INSTALLATION DETAIL



ELEVATION

NOTES:

1. EXISTING TREES TO BE PROTECTED SHALL BE USE SNOW FENCE INSTALLED AT DRIP LINE OR GREATER WHERE POSSIBLE TO PREVENT THE STOCKPILING OF EXCAVATED OR NEW CONSTRUCTION MATERIALS UNDER THE TREE, AND PREVENT VEHICULAR TRAFFIC OR EXCESSIVE FOOT TRAFFIC WITHIN THE DRIP LINE.
2. SNOW FENCE SHALL BE WOVEN HDPE CONSTRUCTION FENCING, COLORED ORANGE AND SUPPORTED WITH STEEL "T" POSTS SET AT MAX 15' INTERVALS, OR AS REQUIRED TO MAINTAIN THE FENCE IN AN UPRIGHT POSITION THROUGHOUT THE TERM OF CONSTRUCTION, IN CONFORMANCE WITH SECTION 201.05a OF THE HIGHWAY STANDARDS.
3. TREES THAT MAY BE DAMAGED BY CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED IN A MANNER ACCEPTABLE TO THE VILLAGE.

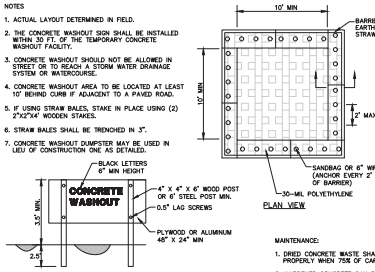
03.15.2016

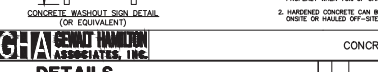
GHA GEWALT HAMILTON ASSOCIATES, INC.

TREE PROTECTION FENCING DETAIL

NOTES

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. CONCRETE WASHOUT SHOULD NOT BE ALLOWED IN STREET OR TO REACH A STORM WATER DRAINAGE SYSTEM OR WATERCOURSE.
4. CONCRETE WASHOUT AREA TO BE LOCATED AT LEAST 10' BEHIND CURB IF ADJACENT TO A PAVED ROAD.
5. IF USING STRAW BALES, STAKE IN PLACE USING (2) 2"x2"x14' WOODEN STAKES.
6. STRAW BALES SHALL BE TRENCHED IN 3".
7. CONCRETE WASHOUT DUMPSTER MAY BE USED IN LIEU OF CONSTRUCTION ONE AS DETAILED.





CONCRETE WASHOUT SIGN DETAIL (OR EQUIVALENT)

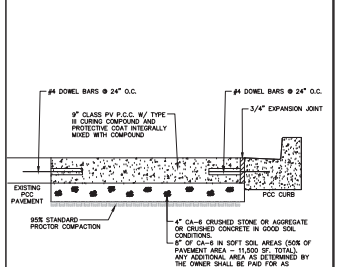
MAINTENANCE:

1. DRIED CONCRETE WASTE SHALL BE PICKED UP AND DISPOSED OF PROPERLY WHEN 75% OF CAPACITY IS REACHED.
2. HARDENED CONCRETE CAN BE PROPERLY RECYCLED AND REUSED ONSITE OR HAULED OFF–SITE TO AN APPROPRIATE FACILITY.

03.15.2016

GHA GEWALT HAMILTON ASSOCIATES, INC.

CONCRETE WASHOUT



03.15.2016

GHA GEWALT HAMILTON ASSOCIATES, INC.

PCC PAVEMENT DETAIL

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt–Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt–Hamilton Associates, Inc.

DETAILS

PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
2	MDH	12–8–17	PER MWRD COMMENTS
1	MDH	4–24–17	PER MWRD COMMENTS

NO.	BY	DATE	REVISION

FILE: 4700.005 PR1.dwg
DRAWN BY: LLM
DATE: 3–1–17
CHECKED BY: SDB
DATE: 3–1–17
GHA PROJECT #: 4700.005
SCALE: N.T.S.

SHEET NUMBER: C7
OF 9 SHEETS

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

ISSUANCE

FGM ARCHITECTS
CHICAGO | OAKBROOK | O'FALLON

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

DATE	01/08/18
DRAWN	LLM
CHECKED	SDB
APPROVED	SDB

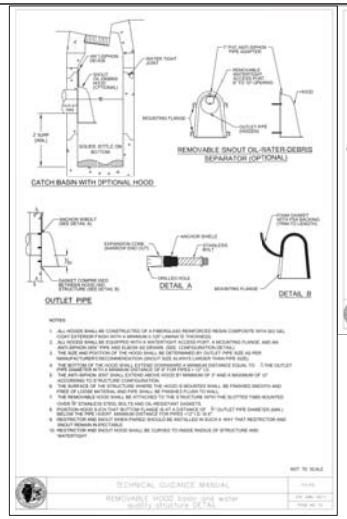
PROFESSIONAL DESIGN FIRM

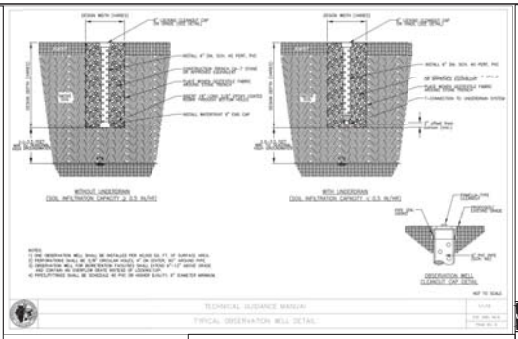
PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

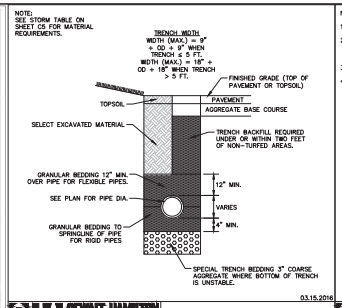
DETAILS

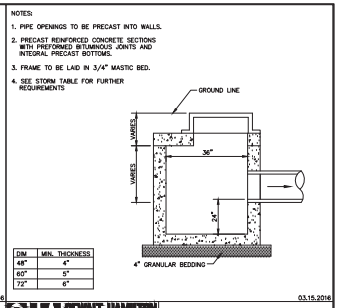
SHEET NO.
C7

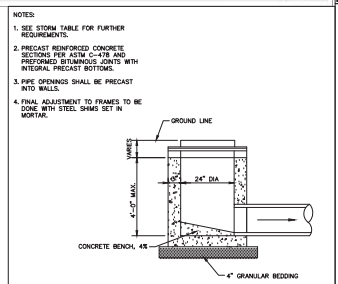
GHA JOB NO. 4700.005
JOB NO. 14-1815.01
© 2017 FGM Architects Inc.

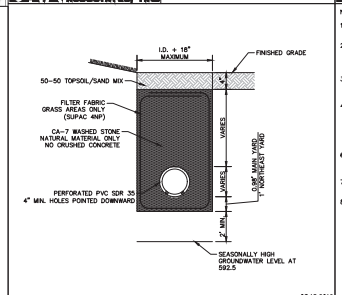


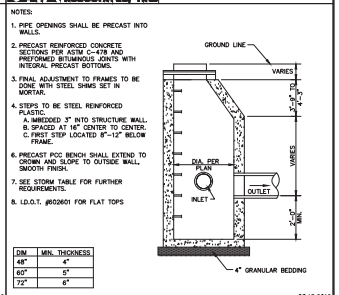


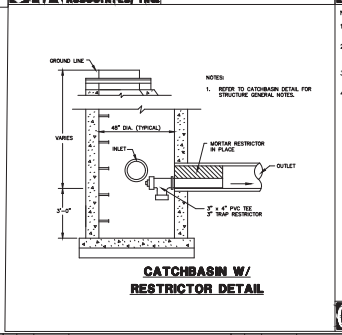


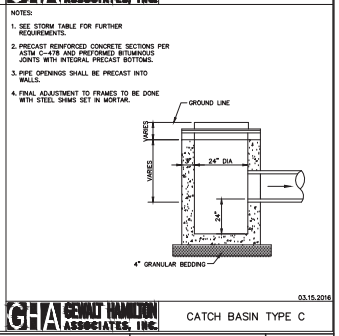












GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt-Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt-Hamilton Associates, Inc.

DETAILS

PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
2	MDH	12-8-17	PER MWRD COMMENTS
1	MDH	4-24-17	PER MWRD COMMENTS

NO.	BY	DATE	REVISION

FILE: 4700.005 PR1.dwg
DRAWN BY: LLM
DATE: 3-1-17
GHA PROJECT #: 4700.005
CHECKED BY: SDB
DATE: 3-1-17
SCALE: N.T.S.
SHEET NUMBER: C8
OF 9 SHEETS

ISSUANCE

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

FGM ARCHITECTS
CHICAGO OFALLON OAK BROOK

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

DATE	01/08/18
DRAWN	LLM
CHECKED	SDB
APPROVED	SDB

PROFESSIONAL DESIGN FIRM

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

DETAILS

SHEET NO. C8

GHA JOB NO. 4700.005
JOB NO. 14-1815.01

© 2017 FGM Architects Inc.
Copyright 2017 FGM ARCHITECTS, INC.

MAINTENANCE PLAN FOR LINCOLNWOOD PUBLIC WORKS YARD

The Owner of Lincolnwood Public Works Yard with facilities as shown on this exhibit, shall assume responsibility for the following perpetual maintenance activities:

1. General

Regular inspections and routine maintenance of general areas shall be performed on a quarterly or as-needed basis. Specific items of concern include:

- Litter and debris shall be controlled
- Landscaped areas shall be maintained with regular mowing and restored with appropriate seeding/vegetation as necessary
- Accumulated sediment shall be disposed of properly, along with any wastes generated during maintenance operations
- Riprap areas shall be repaired with the addition of new riprap, as necessary, of similar size and shape
- Roads shall be swept, vacuumed and/or washed on a regular basis

2. Stormwater Management Facilities

All components of the stormwater management facilities shall be checked quarterly between March and November and maintained as necessary to ensure proper performance. It is critical that all inflows and outflows to the detention facility are clean and performing as designed. In addition, the design volume of the detention facility shall also be maintained. Inspections for the following specific items would be conducted quarterly between March and November.

Vegetated Areas

- Regular mowing to control vegetation, no cutting of native vegetation
- Need for planting, reseeding or sodding. Supplement alternative native vegetation if a significant portion has not established (50% of the surface area). Reseed with alternative grass species if original grass cover has not successfully established
- Evidence of grazing, motorbikes or other vehicles, repair
- Check for invasive vegetation, remove where possible
- All vegetation must be maintained per the approved planting plan

3. Volume Control Facility

Routine inspections and maintenance of volume control facilities shall be performed by the Owner on a yearly or as-needed basis. Specific items of concern include:

- Facility shall be inspected yearly to verify the system is functioning properly.

4. Stormwater Collection System

The Owner shall perform two inspections per year of all components of the stormwater collection system. The inspections shall occur in the spring and fall of each year and include the following specific areas of concern.

Storm Inlets/Manholes

- Remove accumulated leaves and other debris from grates
- Reset covers/lids on as-needed basis
- Remove accumulated sediment from manhole bottom when 50% of sump is filled

Storm Sewers

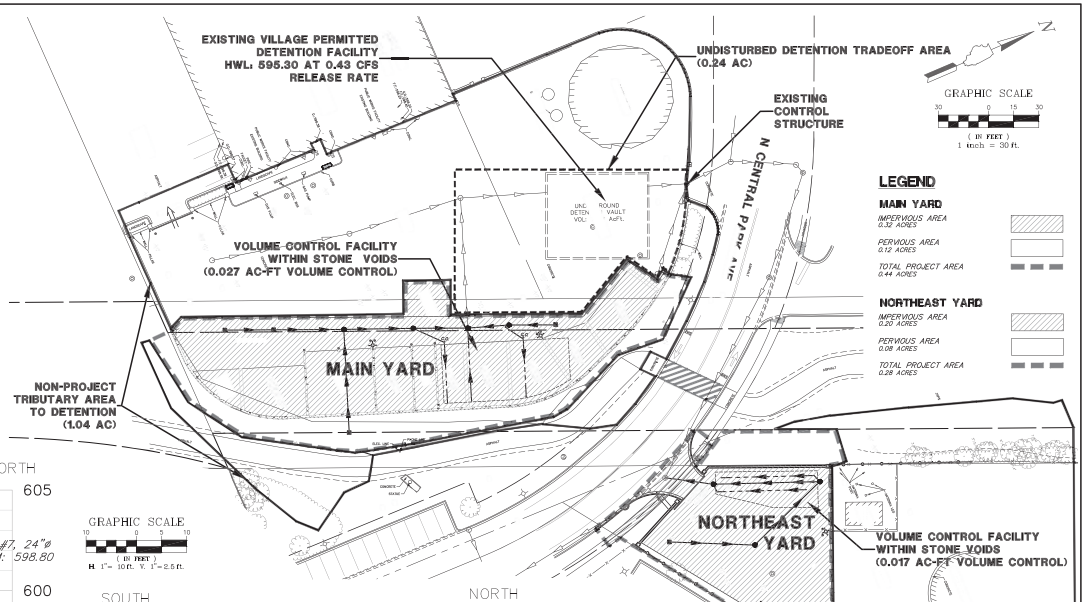
- Visually inspect pipes by removing manhole lids, make repairs as necessary
- Storm sewers shall be checked for siltation deposits at inlets, outlets, and within the conduit, clean out as necessary

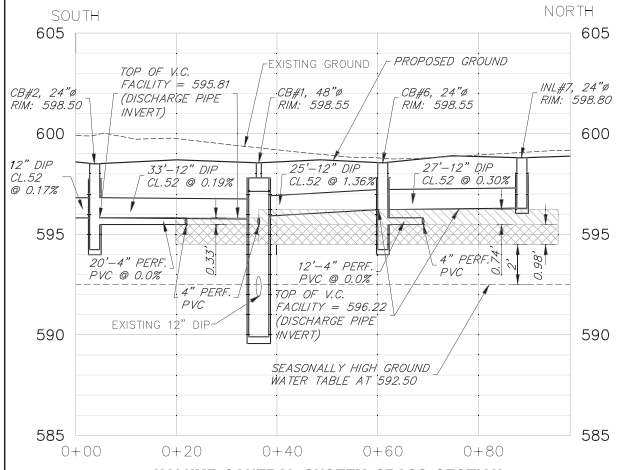
5. Vegetated Areas

- Need for planting, reseeding, or sodding. Supplement alternative native vegetation if a significant portion has not established (50% of the surface area after second growing season). Reseed with alternative native grass species if original grass cover has not successfully established.
- Evidence of grazing, motorbikes, or other vehicles, repair
- Check for invasive vegetation, remove when possible
- Regular mowing to control vegetation; it is recommended that native vegetation remain uncut
- Dead or damaged non-native grassy areas - repair with seeding with fertilization or seeding with mulch

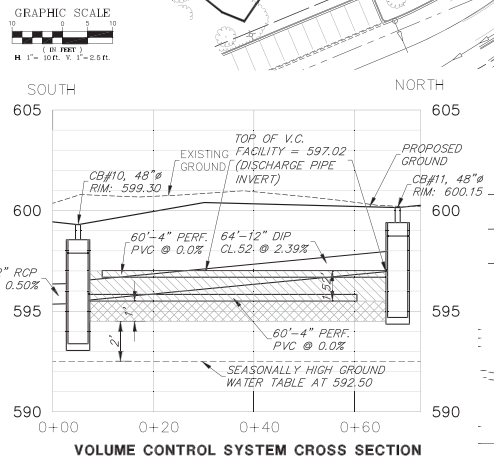
6. Qualified Sewer Construction

- Perform manhole inspections once every five years, make repairs as necessary
- Perform sewer inspections once every five years, make repairs as necessary
- Perform regular cleaning so that each sewer segment is cleaned once every 5 years





VOLUME CONTROL SYSTEM CROSS SECTION
MAIN YARD



VOLUME CONTROL SYSTEM CROSS SECTION
NORTHEAST YARD

GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ▪ Vernon Hills, IL 60061
TEL 847.478.9700 ▪ Fax 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt-Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt-Hamilton Associates, Inc.

MWRD EXHIBIT

PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
3	MXH	1-4-18	PER MWRD COMMENTS
2	MXH	12-8-17	PER MWRD COMMENTS
1	MXH	04-24-17	PER MWRD COMMENTS

FILE: 4700.005 Drainage.dwg
DRAWN BY: MXH DATE: 3-1-17
GHA PROJECT # 4700.005
CHECKED BY: MZ DATE: 3-1-17
SCALE: 1"=30'
SHEET NUMBER: C9 OF 14 SHEETS

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ▪ Vernon Hills, IL 60061
TEL 847.478.9700 ▪ FAX 847.478.9701

DATE	01/08/18	
DRAWN	LLM	
CHECKED	SDB	
APPROVED	SDB	

PROFESSIONAL DESIGN FIRM

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

SHEET NO. C9

GHA JOB NO. 4700.005
JOB NO. 14-1815.01
© 2017 FGM Architects Inc.

Copyright 2017 FGM ARCHITECTS, INC.

GENERAL LIGHTING NOTES:

1. WORK SHALL MEAN THE FURNISHING OF ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND OTHER INCIDENTALS NECESSARY OR CONVENIENT TO THE SUCCESSFUL COMPLETION OF THE PROJECT AND THE CARRYING OUT OF ALL DUTIES AND OBLIGATIONS IMPOSED BY THE CONTRACT. WORK MAY ALSO BE USED IN CONTEXT TO DESCRIBE, IN WHOLE OR IN PART, THE COMPLETED FACILITIES TO BE CONSTRUCTED, ALTERED OR REMOVED, AS DETAILED IN THE CONTRACT. THE ENGINEER WILL HAVE EXCLUSIVE AUTHORITY TO DETERMINE THE INTENT AND MEANING OF THE USAGE OF THIS TERM WHEREVER IT APPEARS IN THE CONTRACT.

2. ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE, THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION, AND ANY APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, CODES, REGULATIONS, AND ORDINANCES HAVING JURISDICTION OVER THIS WORK. IF DISCREPANCIES EXIST THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER TO DETERMINE THE PROPER COURSE OF ACTION.

3. ALL NECESSARY PERMITS , LICENSES , INSPECTIONS, TAXES, AND TESTING COSTS ASSOCIATED WITH THE ELECTRICAL WORK SPECIFIED IN THE CONTRACT DOCUMENTS. SHALL BE INCIDENTAL TO THE CONTRACT AND INCLUDED IN THE BASE BID OR UNIT PRICES OF THE ELECTRICAL PAY ITEMS.

4. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL WORK REQUIRED TO INSTALL A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM. ALL REQUIRED MATERIALS, EQUIPMENT, TOOLS, LABOR, AND INCIDENTALS, UNLESS OTHERWISE PROVIDED IN THE CONTRACT, SHALL BE INCLUDED IN THE BASE BID OR UNIT PRICES OF THE ELECTRICAL PAY ITEMS FOR THE CONTRACT WORK.

5. ALL WORK REQUIRED TO INSTALL THE PROPOSED LIGHTING SYSTEM SHALL BE INCLUDED IN THE BASE BID OR APPLICABLE PAY ITEMS.

6. IF THE CONTRACT INCLUDES PAY ITEMS THE QUANTITIES APPEARING IN THE BID SUMMARY/SCHEDULE OF QUANTITIES ARE ESTIMATES PREPARED FOR THE ESTABLISHMENT OF PAY ITEM UNIT PRICES AND THE COMPARISON OF BIDS. PAYMENT TO THE CONTRACTOR WILL BE MADE FOR THE ACTUAL MEASURED QUANTITIES PERFORMED AND ACCEPTED OR MATERIAL FURNISHED AND ACCEPTED ACCORDING TO THE CONTRACT, AND THE SCHEDULED QUANTITIES MAY BE INCREASED, DECREASED, OR OMITTED. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR EXCEED ANY ESTABLISHED PAY ITEM QUANTITY WITHOUT NOTIFICATION TO THE ENGINEER AND RECEIPT OF WRITTEN AUTHORIZATION.

7. ALL PAY ITEMS REFER TO IDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

8. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED BY THE CONTRACTOR AND HIS SURETY FOR A PERIOD OF 12 MONTHS FROM THE DATE OF INITIAL ACCEPTANCE OF THE COMPLETED WORK BY THE OWNER AGAINST ALL DEFECTS IN MATERIALS AND WORKMANSHIP OF WHATEVER NATURE.

9. THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY AMBIGUITY, OMISSIONS, OR CONFLICTS IN THE PLANS, SPECIFICATIONS, OR OTHER CONTRACT DOCUMENTS PRIOR TO BIDDING. ABSENCE OF ANY NOTIFICATIONS SHALL BE INTERPRETED TO INDICATE THAT THE CONTRACTOR HAS REVIEWED THE CONSTRUCTION DOCUMENTS AND NO DISCREPANCIES OR CONFLICTS EXIST. THEREFORE, AFTER AWARD OF THE ELECTRICAL CONTRACT, NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR ANY WORK INCLUDED IN THE SCOPE OF WORK.

10. ANY DEVICES, FIXTURES, ETC. SHOWN ON THE DRAWINGS TO REMAIN, BE REMOVED, OR BE RELOCATED IS ONLY FOR THE CONVENIENCE OF THE BIDDER, AND THE ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING A BID.

11. IF THE ELECTRICAL CONTRACTOR PROPOSES ALTERNATE EQUIPMENT SELECTIONS, THEY MUST BE LISTED ON THE BID PROPOSAL AS A DEDUCTIVE ALTERNATE. CATALOG CUTS FOR THE PROPOSED ALTERNATE EQUIPMENT SELECTIONS SHALL BE SUBMITTED WITH THE BID PROPOSAL. ALTERNATE EQUIPMENT SELECTIONS WILL NOT BE PERMITTED AFTER AWARD OF CONTRACT.

12. UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, ALL MATERIALS PERMANENTLY INCORPORATED IN THE WORK SHALL BE NEW.

13. UNLESS OTHERWISE INDICATED, ALL MATERIALS AND EQUIPMENT SHALL BEAR THE UL LABEL, OR AN APPROVED EQUIVALENT, WHENEVER SUCH LABELING IS AVAILABLE FOR THE TYPE OF MATERIAL OR EQUIPMENT BEING FURNISHED

14. THE ELECTRICAL CONTRACTOR SHALL VERIFY CONFORMANCE OF THE EQUIPMENT PRIOR TO ORDERING. ANY CHANGES REQUIRED TO ACCOMMODATE THE LOAD OR VOLTAGE OF THE ELECTRICAL SYSTEM SHALL BE SPECIFICALLY IDENTIFIED IN THE SHOP DRAWING SUBMITTAL.

15. PRIOR TO ORDERING ANY ELECTRICAL EQUIPMENT (CONTROL PANELS, POLES, LUMINAIRES, ETC.), THE ELECTRICAL CONTRACTOR SHALL SUBMIT FIVE (5) SETS OF SHOP DRAWINGS FOR ENGINEER REVIEW. SHOP DRAWINGS SHALL CONSIST OF MANUFACTURER'S CATALOG CUTS AND DESCRIPTIVE DATA SHEETS FOR ALL SPECIFIED EQUIPMENT.

16. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH ALL OTHER TRADES AND MAKE FIELD ADJUSTMENTS AS NECESSARY TO ACCOMMODATE THE PROPOSED INSTALLATION.

17. THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE INSTALLATION OF ANY COMPONENT OF THE LIGHTING SYSTEM.

18. TEST HOLES REQUIRED TO CONFIRM THE DEPTH AND LOCATION OF EXISTING UTILITIES ARE TO BE MADE BY THE CONTRACTOR AT THEIR OWN EXPENSE. RESTORATION AND BACKFILL RELATED TO THESE TEST HOLES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

19. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING.

20. THE CONTRACTOR IS RESPONSIBLE FOR METHODS OF CONSTRUCTION, JOB SITE SAFETY, AND THE SAFETY OF THE GENERAL PUBLIC IN AND NEAR THE PROJECT SITE.

21. ALL WORK, WHETHER OR NOT IT WAS INSPECTED BY THE VILLAGE, OWNER, OR ENGINEER IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR COMPLETING THE WORK, AND THE CONTRACTOR IS IN NO WAY RELIEVED OF ANY SAFETY, CONTRACTUAL, OR LEGAL OBLIGATIONS.

22. ACCESS TO WORK AREAS, INCLUDING SCHEDULED WORK, MUST HAVE PRIOR APPROVAL OF THE OWNER/LANDLOARD AND TENANT.

23. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE CIRCUIT CONNECTIONS AND/OR LIGHTING CONTROLLER MODIFICATIONS WITH THE OWNER.

24. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE SCHEDULING OF DELIVERY, RECEIVING, UNLOADING, STORING, UNPACKING, STACKING, AND PROTECTING FROM DAMAGE, VANDALISM, THEFT OR WEATHER DURING CONSTRUCTION OF ALL EQUIPMENT FURNISHED BY OR TO THE ELECTRICAL CONTRACTOR FOR THIS CONTRACT.

25. NO MATERIALS SHALL BE DELIVERED TO THE JOB SITE UNTIL A STORAGE LOCATION AND ALL PERTINENT SUBMITTALS HAVE BEEN APPROVED BY THE OWNER/ENGINEER.

26. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL SUBMITTALS, DELIVERIES, AND SCHEDULING TO MEET THE PROJECT COMPLETION DATES.

27. ALL EXISTING EQUIPMENT, TO REMAIN, SHALL BE KEPT OPERATIONAL DURING THE CONSTRUCTION PERIOD. ANY TEMPORARY WIRING OR REROUTING OF CIRCUITRY TO ACHIEVE THIS IS BY THE ELECTRICAL CONTRACTOR. ANY WORK REQUIRING EQUIPMENT SHUTDOWN MUST BE COORDINATED WITH THE OWNER/TENANT AND LANDLORD PRIOR TO DEACTIVATION. SHUT DOWN OF EXISTING SERVICES SHALL BE PERMITTED ONLY UPON WRITTEN APPROVAL FROM THE OWNER/TENANT AND LANDLORD AND THEN ONLY FOR THE ATE AND DURATION AGREED UPON. INCLUDE ALL PREMIUM TIME CHARGES IN THE BASE BID.

28. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING CLEAN AND ORDERLY WORK AREAS. UPON COMPLETION OF THE WORK DAY THE ELECTRICAL CONTRACTOR SHALL REVIEW AND CHECK THE DAYS WORK, CLEANUP DEBRIS, PUT EQUIPMENT AND UNUSED MATERIAL BACK IN APPROVED STAGING AREA, AND REMOVE SURPLUS MATERIALS FROM THE JOB SITE.

29. THE CONTRACTOR SHALL MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES FOR VERIFICATION AND APPROVAL BY THE OWNER/ENGINEER, PRIOR TO STARTING WORK.

30. IF LIGHTS ARE POSITIONED NEAR OVERHEAD UTILITIES, THE CONTRACTOR SHALL CONTACT THE LOCAL UTILITY FOR LOCATION APPROVAL.

31. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE AND COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION.

32. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.

33. POLES SHALL NOT BE ERECTED AND LEFT TO STAND WITHOUT LUMINAIRES, AND THE PROPOSED LIGHT POLES WILL NOT BE CONSIDERED COMPLETE WITHOUT THE LUMINAIRES INSTALLED.

34. THE PROPOSED ELECTRICAL PLAN SHALL BE A PROPERLY GROUNDED AC SYSTEM (120/208V, 3 PHASE, 4 WIRE).

35. ALL CONDUCTORS AND EQUIPMENT SHALL HAVE PROPER OVERCURRENT PROTECTION. OVERCURRENT PROTECTION SHALL BE PROVIDED FOR EACH LUMINAIRE AND ITS ASSOCIATED BRANCH CIRCUIT THROUGH THE USE OF POLE BASE FUSING. ALL POLE BASE FUSES SHALL BE COPPER BUSSMANN, SIZED FOR ASSOCIATED LINE/LOAD TERMINAL CONNECTIONS.

36. BRANCH CIRCUIT AND EQUIPMENT IDENTIFICATION: FURNISH AND INSTALL ENGRAVED PLASTIC NAMEPLATES (BLACK FACE WITH MINIMUM OF 1/2" HIGH WHITE LETTERS) SCREWED OR RIVETED TO THE COVER OF ALL CONTROL EQUIPMENT (DISCONNECT SWITCHES, CONTROL CABINETS, STARTERS, ETC.) INDICATING THE IDENTIFICATION TAG OF THE EQUIPMENT SERVED. ON THE INSIDE COVER OF THE CONTROL EQUIPMENT INDICATE THE PANEL AND BRANCH CIRCUIT NUMBER SERVING THE EQUIPMENT. PROVIDE PERMANENT IDENTIFICATION ON ALL DEVICES (RECEPTACLES, SWITCHES, LIGHT POLES, ETC.) INDICATING THE PANEL AND BRANCH CIRCUIT NUMBER SERVING THE DEVICE, THE BRANCH CIRCUIT NUMBER SHALL BE INDICATED ON THE INSIDE OF THE DEVICE COVER PLATE.

37. CONCRETE FOUNDATIONS SHALL BE REMOVED TO A MINIMUM OF 2 FT BELOW GRADE, AND SHALL EXTEND DEEPER WHERE REQUIRED TO FACILITATE PROPOSED CONSTRUCTION. THE UNDERGROUND CONDUIT AND CABLES SHALL BE SEPARATED FROM THE FOUNDATION AT 2.5 FT BELOW GRADE AND ABANDONED, REMOVED, OR RE-USED AS SPECIFIED IN THE CONTRACT DOCUMENTS.

38. ALL SUSPENDED CONDUITS SHALL BE RIGIDLY SUPPORTED FROM THE BUILDING STRUCTURE BY MEANS OF APPROVED CONDUIT FASTENERS, HANGERS, STRAPS, SUPPORTS, CLAMPS, ETC., FIRMLY ANCHORED IN PLACE AND SPACED AT INTERVALS NOT TO EXCEED 10 FT. ELECTRICAL RACEWAYS ARE NOT TO BE SUPPORTED OR ATTACHED TO CEILING. THE SUPPORT EQUIPMENT SHALL BE "BOLT-ON" TYPE GALVANIZED STEEL FOR EXPOSED CONSTRUCTION AND IN WET AREAS. SNAP-ON METAL CLIPS IN METAL PARTITION WALLS AND INDEPENDENTLY SUPPORTED ABOVE THE SUSPENDED CEILINGS WILL BE PERMITTED. ALL DEVICES/EQUIPMENT UTILIZED FOR THE SUPPORT OF CONDUIT SHALL BE UL LISTED FOR THE USE.

39. ALL INTERIOR CONDUIT RACEWAYS SHALL BE CONCEALED IN OR WITHIN THE: WALL, CEILING CAVITY, SLAB, GRADE, ETC., UNLESS NOTED OTHERWISE ON THE PLANS. ALL INTERIOR RACEWAYS ARE TO BE ROUTED OVERHEAD UNLESS INDICATED OTHERWISE ON THE PLANS. RACEWAYS ARE TO BE INSTALLED IN THE METHOD INDICATED ON THE ELECTRICAL PLANS, ANY DEVIATION TO THE PLAN OR FOR A PROPOSED RACEWAY TO BE ROUTED EXPOSED THROUGH A FINISHED AREA SHALL BE APPROVED IN WRITING BY THE ENGINEER PRIOR TO THE INSTALLATION. ALL CONDUIT SHALL BE ROUTED PARALLEL OR PERPENDICULAR TO WALLS AND STRUCTURAL MEMBERS, EVEN WHERE INSTALLED ABOVE A CONCEALED CEILING, WITH 90-DEGREE BENDS WHERE REQUIRED, AND SHALL BE RACKED.

40. NO INTERIOR CONDUITS SHALL BE ROUTED THROUGH OR IN H.V.A.C. DUCTS.

41. ALL JUNCTION OR PULL BOXES LOCATED ABOVE SUSPENDED CEILINGS SHALL BE MOUNTED A MINIMUM OF 12" ABOVE THE CEILING IN AN ACCESSIBLE LOCATION. ALL JUNCTION OR PULL BOXES EXPOSED TO WET, DAMP, OR OUTDOOR CONDITIONS SHALL BE CAST METAL TYPE WITH GASKETED COVERS.

42. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL SLEEVES FOR ALL INTERIOR CONDUIT PENETRATIONS THRU BLOCK OR CONCRETE WALLS, FOUNDATION WALLS OR CONCRETE FLOORS. FIREPROOF ALL OPENINGS AND PENETRATIONS CREATED BETWEEN FLOORS AND/OR ANY INTERIOR FIRE SEPARATION BLOCK WALLS FOR ELECTRICAL EQUIPMENT USE WITH AN ENGINEER APPROVED UL LISTED FIRE RETARDANT MATERIAL.

43. NO HOLES OR RECESSIONS MAY BE CUT IN WALLS, FLOORS, CEILINGS, OR ANY PART OF THE BUILDING FOR WORK UNDER THIS CONTRACT WITHOUT PRIOR APPROVAL BY THE OWNER. WORK SHALL BE PERFORMED BY A COMPETENT MECHANIC SKILLED IN THIS FIELD. ALL CUTTING SHALL BE DONE WET TO MINIMIZE THE SPREAD OF DUST, AND THE CONTRACTOR SHALL PROVIDE DUST PROTECTION AS REQUIRED BY THE OWNER. THE PORTIONS CUT FOR ACCESS MUST BE RESTORED TO THEIR ORIGINAL CONDITION AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.

44. THE ELECTRICAL CONTRACTOR SHALL WATERPROOF ALL OPENINGS AND PENETRATIONS CREATED THROUGH FOUNDATION AND EXTERIOR WALLS WITH AN ENGINEER APPROVED WATERPROOF MATERIAL.

45. UPON COMPLETION OF THE PERMANENT LIGHTING SYSTEM, THE ELECTRICAL CONTRACTOR SHALL REQUEST IN WRITING A PREFINAL INSPECTION TO GENERATE A PUNCH LIST. THE ELECTRICAL CONTRACTOR SHALL MAKE CORRECTIONS, AS REQUIRED, AND A FINAL INSPECTION SHALL BE PERFORMED. IF ANY PUNCH LIST ITEMS ARE FOUND NOT TO BE CORRECTED TO THE SATISFACTION OF THE OWNER AND ENGINEER, A REVISED PUNCH LIST WILL BE GENERATED AND ANOTHER FINAL INSPECTION WILL BE PERFORMED UPON COMPLETION OF THE PUNCH LIST ITEMS. IF PUNCH LIST ITEMS ARE STILL NOT COMPLETED AND ADDITIONAL INSPECTIONS ARE REQUIRED BY THE ENGINEER, THE ELECTRICAL CONTRACTOR WILL BE INVOICED ON A TIME AND MATERIALS BASIS UNTIL ALL PUNCH LIST ITEMS ARE CORRECTED TO THE SATISFACTION OF THE OWNER.

46. THE PROPOSED LIGHTING SYSTEM SHALL BE TESTED ACCORDING TO ART. 801.13 OF THE STANDARD SPECIFICATIONS, PRIOR TO THE FINAL INSPECTION.

47. THE ELECTRICAL CONTRACTOR SHALL FURNISH THREE (3) SETS OF CONTRACT RECORD PORTFOLIOS TO THE ENGINEER BEFORE FINAL PAYMENT WILL BE ISSUED. THE CONTRACT RECORD PORTFOLIO SHALL CONTAIN; CONTRACT RECORD DRAWINGS; SHOP DRAWINGS; COMPLETE OPERATING INSTRUCTIONS; ANY EQUIPMENT DRAWINGS INDICATING PART NUMBERS; MAINTENANCE MANUALS; WIRING DIAGRAMS; TESTING DATA; ETC., FOR ALL ITEMS OF EQUIPMENT AND DEVICES FURNISHED UNDER THIS CONTRACT.

48. EXISTING ITEMS (CURBS, LANDSCAPING, SIDEWALKS, FENCING, ETC.) DISTURBED BY THE ELECTRICAL INSTALLATION BEYOND THE LIMITS OF THE SITE CONSTRUCTION, SHALL BE RESTORED TO THEIR LIKE NEW CONDITION BY THE ELECTRICAL CONTRACTOR TO THE SATISFACTION OF THE OWNER, AT THE EXPENSE OF THE CONTRACTOR.

49. ALL RACEWAYS WHICH EXTEND OUTSIDE OF A STRUCTURE OR DUCT BANK BUT ARE NOT TERMINATED IN A CABINET, JUNCTION BOX, PULL BOX, HANDHOLE, POST, POLE, OR PEDESTAL SHALL EXTEND A MINIMUM OR 12" (OR THE LENGTH SHOWN ON THE PLANS) BEYOND THE STRUCTURE OR DUCT BANK. THE END OF THIS EXTENSION SHALL BE CAPPED AND SEALED WITH A CAP DESIGNED FOR THE CONDUIT TO BE CAPPED. THE ENDS OF RIGID METAL CONDUIT TO BE CAPPED SHALL BE THREADED, THE THREADS PROTECTED WITH FULL GALVANIZING, AND CAPPED WITH A THREADED GALVANIZED STEEL CAP. THE ENDS OF RIGID NONMETALLIC CONDUIT AND COILABLE NONMETALLIC CONDUIT SHALL BE CAPPED WITH A RIGID PVC CAP OF NOT LESS THAN 3 MM (0.125") THICK. THE CAP SHALL BE SEALED TO THE CONDUIT USING A ROOM-TEMPERATURE-VULCANIZING (RTV) SEALANT COMPATIBLE WITH THE MATERIAL OF BOTH THE CAP AND THE CONDUIT. A WASHER OR SIMILAR METAL RING SHALL BE GLUED TO THE INSIDE CENTER OF THE CAP WITH EPOXY, AND THE PULL CORD SHALL BE TIED TO THIS RING

50. CONDUIT REQUIREMENTS:
- 50.1. ALL CONDUIT PROVIDED BY THIS CONTRACT SHALL CONFORM TO SECTION 1088.01 OF IDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- 50.2. ALL UNDERGROUND CONDUIT SHALL BE INSTALLED AT A MINIMUM DEPTH OF 30 INCHES UNLESS OTHERWISE INDICATED.
- 50.3. CONDUIT SHALL BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS AND OTHER UTILITIES.
- 50.4. CHANGES IN DIRECTION SHALL BE ACCOMPLISHED BY UNIFORMLY BENDING THE CONDUIT TO FIT THE RADIUS, OR STANDARD FITTINGS MAY BE USED.
- 50.5. ALL BENDS MUST BE MADE WITH A STANDARD PIPE BENDER.
- 50.6. IF THE CONDUIT IS CUT, IT SHALL BE CUT SQUARE, REAMED, AND CLEANED TO REMOVE ALL BURRS AND CUTTINGS. WHEN NECESSARY THE PIPE SHALL BE RE-THREADED.
- 50.7. ALL CONDUIT AND FITTINGS SHALL HAVE THE BURRS AND ROUGH PLACES SMOOTHED AND ALL CONDUIT RUNS SHALL BE CLEANED AND SWABBED BEFORE CABLES OR DUCT ARE INSTALLED.

51. CABLE REQUIREMENTS:
- 51.1. THE UNDERGROUND CABLE SIZED NO. 2 AWG AND SMALLER SHALL BE U.L. LISTED TYPE RHH/RHW AND MAY BE TYPE RHH/RHW/USE. UNDERGROUND CABLE SIZED LARGER THAN NO. 2 AWG SHALL BE U.L. LISTED TYPE RHH/RHW/USE
- 51.2. THE ABOVE GROUND CABLE, LOCATED INSIDE BUILDINGS AND NOT SUBJECT TO MOISTURE, SHALL BE U.L. LISTED TYPE THHN.
- 51.3. THE CABLE SHALL BE RATED 600 VOLTS.
- 51.4. THE RHH/RHW/USE CABLE SHALL BE RATED AT A MINIMUM OF 90 C DRY AND 75 C WET AND SHALL BE SUITABLE FOR INSTALLATION IN WET AND DRY LOCATIONS, AND SHALL BE RESISTANT TO OILS AND CHEMICALS.
- 51.5. COATED CONDUCTORS SHALL BE ACCORDING TO ASTM B 33, ASTM B 8, ICEA S-95-658/NEMA WC70 AND UL STANDARD 44.
- 51.6. CABLE INSULATION DESIGNATED AS XLP SHALL INCORPORATE CROSS-LINKED POLYETHYLENE (XLP) INSULATION AS SPECIFIED AND SHALL MEET OR EXCEED THE REQUIREMENTS OF ICEA S-95-658, NEMA WC70, AND U.L. STANDARD 44
- 51.7. THE UL LISTING MARK, CABLE VOLTAGE, INSULATION TYPE AND RATINGS, AS WELL AS THE CABLE SIZE SHALL ALL BE CLEARLY PRINTED ON THE CABLE IN A COLOR CONTRASTING WITH THE INSULATION COLOR.
- 51.8. ALL ELECTRIC CABLES INSTALLED SHALL BE COLOR CODED.
- 51.9. EACH WIRE INSTALLED SHALL BE IDENTIFIED WITH ITS COMPLETE CIRCUIT NUMBER AT EACH TERMINATION, SPLICE, JUNCTION BOX OR OTHER LOCATION WHERE THE WIRE IS ACCESSIBLE.
- 51.10. THE CABLE IDENTIFICATION LABELS SHALL BE WEATHER AND UV RESISTANT.
- 51.11. WIRING IDENTIFICATION MARKERS SHALL BE EITHER CLOTH TAPE OR CLIP-ON. CLOTH TAPE WIRE MARKERS IDENTIFICATION SHALL BE MADE USING SELF-STICKING WIRE MARKERS, WRAPPED AROUND THE WIRE. THE MARKERS SHALL HAVE BLACK CHARACTERS NOT LESS THAN 5/16 IN. HIGH ON A WHITE OR YELLOW BACKGROUND. MARKERS SHALL BE IN STRIPS NOT LESS THAN 1 1/2 IN. LONG AND SHALL BE MADE OF A HIGH-TACK CLOTH TAPE WITH PRINTING PROTECTED BY A CLEAR, PERMANENT OVERCOATING. CLIP-ON WIRE MARKERS SHALL BE WHITE WITH BLACK LETTERING. THE PROPER SIZE OF WIRE MARKERS SHALL BE USED TO PREVENT SLIPPING OF THE MARKERS ON THE CABLE.
- 51.12. POLE WIRE SHALL RUN FROM HANDHOLE TO LUMINAIRE.
- 51.13. POLE WIRE SHALL BE SIZED NO. 10, RATED 600 V, RHW/USE-2, AND HAVE COPPER CONDUCTORS, STRANDED IN CONFORMANCE WITH ASTM B 8. POLE WIRE SHALL BE INSULATED WITH CROSS-LINKED POLYETHYLENE (XLP) INSULATION.
- 51.14. ALL CABLE RUNS SHALL BE INSTALLED WITHOUT UNDERGROUND SPLICES OR JUNCTION BOX, UNLESS OTHERWISE INDICATED ON THE PLANS. UNDERGROUND SPLICING OF CABLES WILL NOT BE PERMITTED.

52. GROUNDING REQUIREMENTS:
- 52.1. ALL FOUNDATIONS SHALL BE EQUIPPED WITH A GROUNDING ROD.
- 52.2. GROUNDING CONNECTIONS AT THE FOUNDATIONS SHALL BE MADE WITH A GROUND CLAMP, AND SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO FRAMING LIGHT POLE.
- 52.3. THE EQUIPMENT GROUNDING CONDUCTOR (GREEN WIRE) SHALL BE INSULATED.
- 52.4. THE GROUNDING CONDUCTOR SHALL EXTEND CONTINUOUSLY WITH ALL CIRCUIT CONDUCTORS, AND SHALL BE BONDED TO THE SYSTEM GROUND AT THE CONTROL PANEL.
- 52.5. THE GROUNDING CONDUCTOR SHALL BE SPLICED AND BONDED AT EACH POLE.

53. ELECTRICAL TAPE SHALL BE ALL WEATHER VINYL PLASTIC TAPE RESISTANT TO ABRASION, PUNCTURE, FLAME, OIL, ACIDS, ALKALIES, AND WEATHERING, CONFORMING TO FEDERAL SPECIFICATION MIL-I-24391, ASTM D1000 AND SHALL BE LISTED UNDER UL 510 STANDARD. THICKNESS SHALL NOT BE LESS THAN 0.215 MM (8.5 MILS) AND WIDTH SHALL NOT BE LESS THAN 20 MM (3/4-INCH)."

GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ▪ Vernon Hills, IL. 60061
TEL 847.478.9700 ▪ FAX 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt-Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt-Hamilton Associates, Inc.

GENERAL LIGHTING NOTES

PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
2	MXH	12-8-17	PER MWRD COMMENTS
1	MXH	4-24-17	PER MWRD COMMENTS

NO.	BY	DATE	REVISION

FILE: 4700.005 EL.dwg
DRAWN BY: LLM DATE: 3-1-17
GHA PROJECT # 4700.005
CHECKED BY: SDB DATE: 3-1-17
SCALE: NTS
SHEET NUMBER: EL1 OF 5 SHEETS

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

ISSUANCE

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ▪ Vernon Hills, IL. 60061
TEL 847.478.9700 ▪ FAX 847.478.9701

DATE 01/08/18
DRAWN LLM
CHECKED SDB
APPROVED SDB
PROFESSIONAL DESIGN FIRM

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

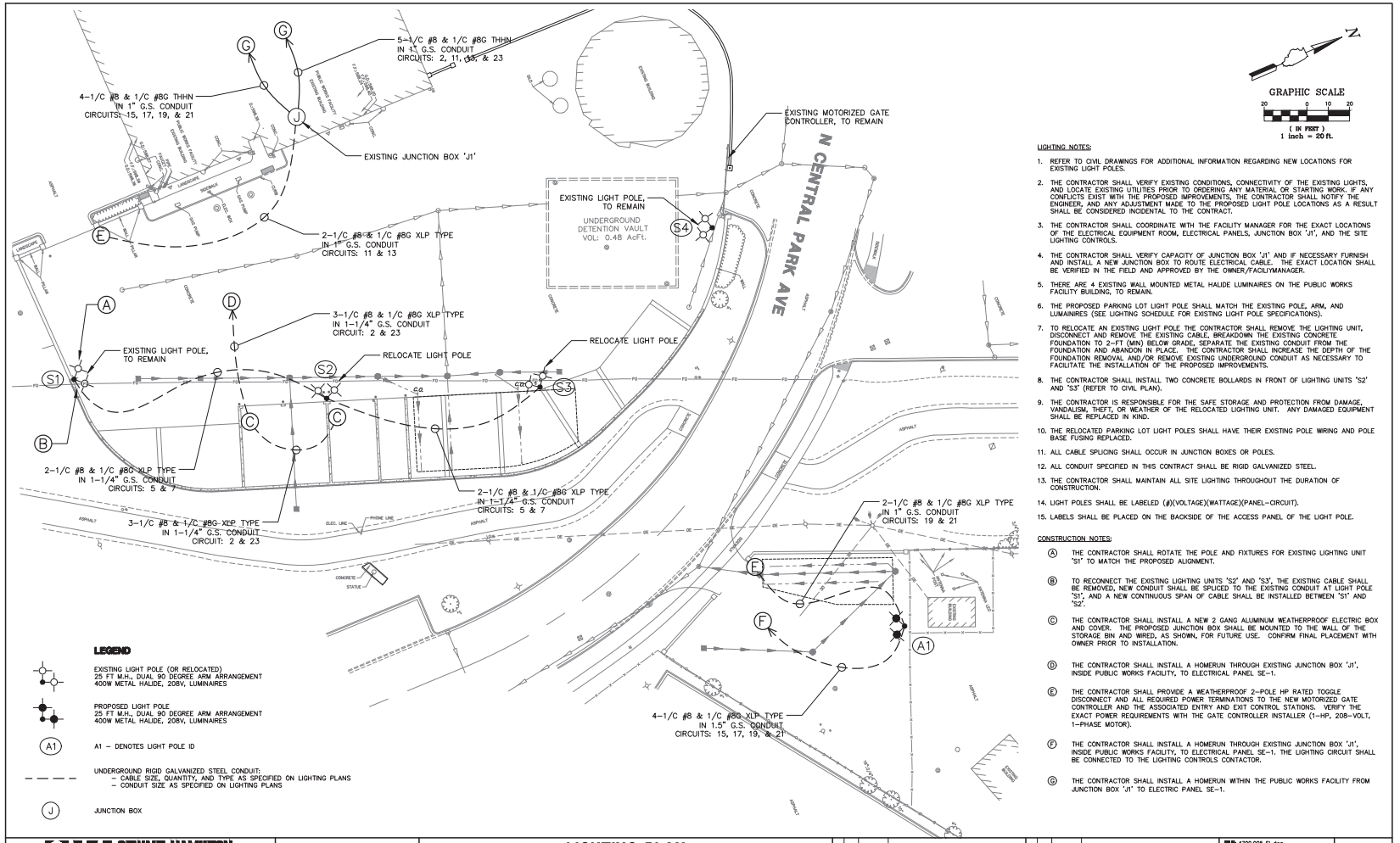
GENERAL LIGHTING NOTES

SHEET NO.
EL1

GHA JOB NO. 4700.005
JOB NO. 14-1815.01
© 2017 FGM Architects Inc.

Copyright 2017 FGM ARCHITECTS, INC.

Return to VB Agenda



LIGHTING NOTES:

1. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING NEW LOCATIONS FOR EXISTING LIGHT POLES.
2. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS, CONNECTIVITY OF THE EXISTING LIGHTS, AND LOCATE EXISTING UTILITIES PRIOR TO ORDERING ANY MATERIAL OR STARTING WORK. IF ANY CONFLICTS EXIST WITH THE PROPOSED IMPROVEMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, AND ANY ADJUSTMENT MADE TO THE PROPOSED LIGHT POLE LOCATIONS AS A RESULT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
3. THE CONTRACTOR SHALL COORDINATE WITH THE FACILITY MANAGER FOR THE EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT ROOM, ELECTRICAL PANELS, JUNCTION BOX 'J1', AND THE SITE LIGHTING CONTROLS.
4. THE CONTRACTOR SHALL VERIFY CAPACITY OF JUNCTION BOX 'J1' AND IF NECESSARY FURNISH AND INSTALL A NEW JUNCTION BOX TO ROUTE ELECTRICAL CABLE. THE EXACT LOCATION SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE OWNER/FACILYMANAGER.
5. THERE ARE 4 EXISTING WALL MOUNTED METAL HAUIDE LUMINAIRES ON THE PUBLIC WORKS FACILITY BUILDING, TO REMAIN.
6. THE PROPOSED PARKING LOT LIGHT POLE SHALL MATCH THE EXISTING POLE, ARM, AND LUMAINIRES (SEE LIGHTING SCHEDULE FOR EXISTING LIGHT POLE SPECIFICATIONS).
7. TO RELOCATE AN EXISTING LIGHT POLE THE CONTRACTOR SHALL REMOVE THE LIGHTING UNIT, DISCONNECT AND REMOVE THE EXISTING CABLE, BREAKDOWN THE EXISTING CONCRETE FOUNDATION TO 2-FT (MIN) BELOW GRADE, SEPARATE THE EXISTING CONDUIT FROM THE FOUNDATION AND ABANDON IN PLACE. THE CONTRACTOR SHALL INCREASE THE DEPTH OF THE FOUNDATION REMOVAL AND/OR REMOVE EXISTING UNDERGROUND CONDUIT AS NECESSARY TO FACILITATE THE INSTALLATION OF THE PROPOSED IMPROVEMENTS.
8. THE CONTRACTOR SHALL INSTALL TWO CONCRETE BOLLARDS IN FRONT OF LIGHTING UNITS 'S2' AND 'S3' (REFER TO CIVIL PLAN).
9. THE CONTRACTOR IS RESPONSIBLE FOR THE SAFE STORAGE AND PROTECTION FROM DAMAGE, VANDALISM, THEFT, OR WEATHER OF THE RELOCATED LIGHTING UNIT. ANY DAMAGED EQUIPMENT SHALL BE REPLACED IN KIND.
10. THE RELOCATED PARKING LOT LIGHT POLES SHALL HAVE THEIR EXISTING POLE WIRING AND POLE BASE FUSING REPLACED.
11. ALL CABLE SPLICING SHALL OCCUR IN JUNCTION BOXES OR POLES.
12. ALL CONDUIT SPECIFIED IN THIS CONTRACT SHALL BE RIGID GALVANIZED STEEL.
13. THE CONTRACTOR SHALL MAINTAIN ALL SITE LIGHTING THROUGHOUT THE DURATION OF CONSTRUCTION.
14. LIGHT POLES SHALL BE LABELED (#)(VOLTAGE)(WATTAGE)(PANEL–CIRCUIT).
15. LABELS SHALL BE PLACED ON THE BACKSIDE OF THE ACCESS PANEL OF THE LIGHT POLE.

CONSTRUCTION NOTES:

Ⓐ THE CONTRACTOR SHALL ROTATE THE POLE AND FIXTURES FOR EXISTING LIGHTING UNIT 'S1' TO MATCH THE PROPOSED ALIGNMENT.

Ⓑ TO RECONNECT THE EXISTING LIGHTING UNITS 'S2' AND 'S3', THE EXISTING CABLE SHALL BE REMOVED, NEW CONDUIT SHALL BE SPLICED TO THE EXISTING CONDUIT AT LIGHT POLE 'S1', AND A NEW CONTINUOUS SPAN OF CABLE SHALL BE INSTALLED BETWEEN 'S1' AND 'S2'.

Ⓒ THE CONTRACTOR SHALL INSTALL A NEW 2 GANG ALUMINUM WEATHERPROOF ELECTRIC BOX AND COVER. THE PROPOSED JUNCTION BOX SHALL BE MOUNTED TO THE WALL OF THE STORAGE BIN AND WIRED, AS SHOWN, FOR FUTURE USE. CONFIRM FINAL PLACEMENT WITH OWNER PRIOR TO INSTALLATION.

Ⓓ THE CONTRACTOR SHALL INSTALL A HOMERUN THROUGH EXISTING JUNCTION BOX 'J1', INSIDE PUBLIC WORKS FACILITY, TO ELECTRICAL PANEL SE–1.

Ⓔ THE CONTRACTOR SHALL PROVIDE A WEATHERPROOF 2–POLE HP RATED TOGGLE DISCONNECT AND ALL REQUIRED POWER TERMINATIONS TO THE NEW MOTORIZED GATE CONTROLLER AND THE ASSOCIATED ENTRY AND EXIT CONTROL STATIONS. VERIFY THE EXACT POWER REQUIREMENTS WITH THE GATE CONTROLLER INSTALLER (1–HP, 208–VOLT, 1–PHASE MOTOR).

Ⓕ THE CONTRACTOR SHALL INSTALL A HOMERUN THROUGH EXISTING JUNCTION BOX 'J1', INSIDE PUBLIC WORKS FACILITY, TO ELECTRICAL PANEL SE–1. THE LIGHTING CIRCUIT SHALL BE CONNECTED TO THE LIGHTING CONTROLS CONTACTOR.

Ⓖ THE CONTRACTOR SHALL INSTALL A HOMERUN WITHIN THE PUBLIC WORKS FACILITY FROM JUNCTION BOX 'J1' TO ELECTRIC PANEL SE–1.

GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt–Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt–Hamilton Associates, Inc.

LIGHTING PLAN

PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
2	MDH	12–8–17	PER MWRD COMMENTS
1	MDH	4–24–17	PER MWRD COMMENTS

FILE: 4700.005 EL.dwg
DRAWN BY: LLM
DATE: 3–1–17
GHA PROJECT #: 4700.005
CHECKED BY: SDB
DATE: 3–1–17
SCALE: 1"=20'
SHEET NUMBER: EL2
OF 5 SHEETS

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

ISSUANCE

FGM ARCHITECTS
OAK BROOK ■ CHICAGO ■ OFALLON

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

DATE	01/08/18	
DRAWN	LLM	
CHECKED	SDB	
APPROVED	SDB	

PROFESSIONAL DESIGN FIRM

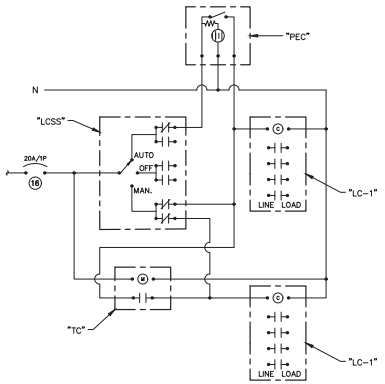
PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

LIGHTING PLAN

SHEET NO.
EL2

GHA JOB NO. 4700.005
JOB NO. 14-1815.01
© 2017 FGM Architects Inc.

Copyright 2017 FGM ARCHITECTS, INC.



1 EXISTING SITE LIGHTING CONTROL WIRING SCHEMATIC

NO SCALE

EXISTING LIGHTING CONTROLLER EQUIPMENT:

LIGHTING CONTACTOR 'LC-1': FOUR (4) POLE (2-ACTIVE & 2 SPARE) WITH NEMA 1 ENCLOSURE, 30 AMPERE RATED CONTACTS, 120-VOLT CONTROL COIL, ELECTRICALLY HELD. AS MANUFACTURED BY SQUARE D OR APPROVED EQUAL CONTROLS SITE 'NIGHT LIGHTING' (NL) BRANCH CIRCUITS (SE-1: 2-4), WIRED FOR PHOTOCELL 'ON' AND 'OFF' CONTROL ('ON' FROM DUSK TO DAWN).

LIGHTING CONTACTOR 'LC-2': FOUR POLE (2-ACTIVE & 2- SPARE) WITH NEMA 1 ENCLOSURE, 30 AMPERE RATED CONTACTS, 120-VOLT CONTROL COIL, ELECTRICALLY HELD. AS MANUFACTURED BY SQUARE D OR APPROVED EQUAL CONTROLS ALL SITE LIGHTING BRANCH CIRCUITS ('SE-1': 6-8) NOT CONTROLLED BY THE CONTACTOR 'LC-1', WIRED FOR PHOTOCELL 'ON' AND TIME SWITCH 'OFF' CONTROL ('ON' FROM DUSK TO TIME OFF).

ELECTRONIC TIME SWITCH 'TS': SINGLE SINGLE THROW, 24-HOUR DIAL, 30 AMPERE RATED CONTACTS, 120-277 VOLT CLOCK MOTOR, BATTERY BACKUP, AS MANUFACTURED BY INTERMATIC (MODEL #ET102C) OR APPROVED EQUAL SET 'ON' AND 'OFF' TIMES AS REQUESTED BY OWNER, ROUTE PHOTO CELL 'SWITCHED' LEG THRU CONTACTS FOR CONTROL OF CONTACTOR 'LC-2'.

EXTERIOR LIGHTING CONTROL SELECTOR SWITCH 'LCSS': 3-POSITION, 30 MM, BLACK KNOB, METALLIC HOUSING 'J' CAM ('SQUARE D' #9001KS498); TWO (2) DIRECT ACTING CONTACT BLOCKS ('SQUARE D' #9001KA3), MOUNTED ON SIDE-1 FOR 'CLOSED-OPEN-CLOSED' OPERATION (PHOTOCELL/LC-1), MOUNTED ON SIDE-2 FOR 'CLOSED-OPEN-OPEN' OPERATION (TIME SWITCH LC-2), ALUMINUM LEGEND PLATE, BLACK FIELD WITH SILVER LETTERS, 'MAN.-OFF-AUTO' ('SQUARE D' #9001KN262); PROVIDE BLACK FACE NAMEPLATE WITH 3/16" HIGH LETTERS STATING 'EXTERIOR LIGHTING CONTROL'.

PHOTOELECTRIC CELL 'PEC': STEM MOUNTED TYPE WITH SLIDE TYPE LIGHT LEVEL ADJUSTMENT, 2000 WATT RATED 120-277 VOLT CONTROL, AS MANUFACTURED BY INTERMATIC (MODEL #K4136M) OR APPROVED EQUAL MOUNTED ABOVE ROOF LINE PER MANUFACTURER'S INSTRUCTIONS.

2 EXISTING PANEL "SE-1" LOAD SCHEDULE

NO SCALE

PANEL NAME: SE-1

TYPE: BOLT-ON | MAIN: 100A
MOUNTING: SURFACE - INTERIOR ONLY | SOLID NEUTRAL | VOLTS: 120/208
FED FROM: PANEL LRP-1B | GROUND BUS | PHASE: 3
AIC RATING: 10,000 | WIRE: 4

CKT NO.	LOAD DESCRIPTION	CONNECTED LOAD A	B	C	BREAKER AMP	P	BREAKER AMP	P	CONNECTED LOAD A	B	C	LOAD DESCRIPTION	CKT NO.
1	SITE 'NL' LIGHTING	1,380			30	2	---					SPACE	2
3			1,380		---	---	15	2	920			GATE CONTROLLER	4
5	SITE LIGHTING			1,380	30	2	---	---			920		6
7		1,380			---	---			---	---		SPACE	8
9	SPARE		---		20	1	15	2		920		IRRIGATION PUMP	10
11	SPARE			---	20	1	---	---			920		12
13	SPARE	---			20	1	20	1	500			IRRIGATION CONTROLS	14
15	SPACE		---				20	1		500		LIGHTING CONTROLS	16
17	SPACE			---					---	---		SPACE	18
19	SPACE	---								---		SPACE	20
21	SPACE		---						---			SPACE	22
23	SPACE			---							---	SPACE	24

CONNECTED LOADS	PHASE	WATTS
	A	3,260
	B	3,280
	C	3,220
	TOTAL:	10,200

3 PROPOSED PANEL "SE-1" LOAD SCHEDULE

NO SCALE

PANEL NAME: SE-1

TYPE: BOLT-ON | MAIN: 100A
MOUNTING: SURFACE - INTERIOR ONLY | SOLID NEUTRAL | VOLTS: 120/208
FED FROM: PANEL LRP-1B | GROUND BUS | PHASE: 3
AIC RATING: 10,000 | WIRE: 4

CKT NO.	LOAD DESCRIPTION	CONNECTED LOAD A	B	C	BREAKER AMP	P	BREAKER AMP	P	CONNECTED LOAD A	B	C	LOAD DESCRIPTION	CKT NO.
1	SITE 'NL' LIGHTING	1,380			30	2	20	1	---			FUTURE LIGHTING	2
3			1,380		---	---	15	2		920		GATE CONTROLLER	4
5	SITE LIGHTING			1,380	30	2	---	---			920	(MAIN YARD-NORTH)	6
7		1,380			---	---			---	---		SPACE	8
9	SPARE		---		20	1	15	2		920		IRRIGATION PUMP	10
11	GATE CONTROLLER			920	15	2	---	---			920		12
13	(MAIN YARD-WEST)	920			---	---	20	1	500			IRRIGATION CONTROLS	14
15	SITE LIGHTING		460		30	2	20	1		500		LIGHTING CONTROLS	16
17	(AUX. YARD)			460	---	---			---			SPACE	18
19	GATE CONTROLLER	920			15	2				---		SPACE	20
21	(AUX. YARD)		920		---	---			---			SPACE	22
23	FUTURE LIGHTING			---	20	1					---	SPACE	24

CONNECTED LOADS	PHASE	WATTS
	A	5,100
	B	5,100
	C	4,600
	TOTAL:	14,800

ELECTRICAL PANEL "SE-1" DESIGN AND MODIFICATION NOTES:

1. THE CONTRACTOR SHALL VERIFY THE EXISTING PANELBOARD MANUFACTURER AND MATCH ALL PROPOSED EQUIPMENT.
2. ALL COMPONENTS SHALL HAVE A MINIMUM RATINGS OF 10,000 AIC AVAILABLE FAULT CURRENT.
3. ALL CIRCUIT BREAKERS SHALL BE OF THE BOLT-ON TYPE, RATED FOR SWITCHING DUTY, AND RATED FOR THE AVAILABLE FAULT CURRENT WITH MINIMUM OF 10,000 AIC.
4. ALL CIRCUIT BREAKERS OF A 2-POLE OR 3-POLE CONFIGURATION SHALL HAVE A COMMON TRIP MECHANISM. HANDLE TIES WILL NOT BE PERMITTED.
5. ALL CIRCUIT BREAKERS SIZES AND QUANTITIES INDICATED ON SCHEDULE ARE FOR THE CONVENIENCE OF THE BIDDER ONLY. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND SUPPLYING ALL REQUIRED BRANCH BREAKERS.
6. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ENGRAVED PLASTIC NAMEPLATES, BLACK FACE WITH MINIMUM OF ½" HIGH WHITE LETTERS SCREWED TO THE COVERS FOR ALL PANELBOARDS INDICATING THE PANEL.
7. THE CONTRACTOR SHALL MODIFY THE PANELBOARDS CARD DIRECTORY. THE BRANCH CIRCUIT POSITIONS SHALL BE NUMBERED FOR IDENTIFICATION. DIRECTORIES SHALL BE TYPED WITH A DESCRIPTION OF THE EQUIPMENT SERVED FOR EACH BRANCH CIRCUIT POSITION. ALL DIRECTORIES SHALL BE LOCATED IN A HOLDER WITH A CLEAR VIEWING PANEL. GLUE ON NON-REMOVABLE TYPE DIRECTORIES ARE NOT ACCEPTABLE.
8. ALL FUSES FEEDING DISTRIBUTION AND PANELBOARDS ARE BUSSMANN 'LPS-R' OR 'LPN-R'.
9. THE FUSIBLE SWITCH UNITS IN DISTRIBUTION EQUIPMENT ARE VACU-BREAK WITH CLASS 'R' REJECTION TYPE FUSE CUPS.

ELECTRICAL PANEL "SE-1" CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL COMPLETE ALL PANEL CONNECTIONS AS SHOWN ON THE LIGHTING PLANS.
2. THE CONTRACTOR SHALL MOVE THE SPARE 20 AMP SINGLE POLE BREAKER FROM CIRCUIT NUMBER 11 TO CIRCUIT NUMBER 2.
3. THE CONTRACTOR SHALL MOVE THE SPARE 20 AMP SINGLE POLE BREAKER FROM CIRCUIT NUMBER 13 TO CIRCUIT NUMBER 23.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL TWO (2) 15 AMP, TWO POLE, CIRCUIT BREAKER FOR THE PROPOSED GATE CONTROLLERS (CIRCUIT NUMBERS 11, 13, 19, & 21).
5. THE CONTRACTOR SHALL FURNISH AND INSTALL A SINGLE 30 AMP, TWO POLE, CIRCUIT BREAKER FOR THE PROPOSED SITE LIGHTING IN THE AUXILIARY YARD ON THE NORTH SIDE OF CENTRAL PARK AVE (CIRCUIT NUMBERS 15 & 17).

GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt-Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt-Hamilton Associates, Inc.

LIGHTING CONTROLS
PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
2	MDH	12-8-17	PER MWRD COMMENTS
1	MDH	4-24-17	PER MWRD COMMENTS

FILE: 4700.005 EL.dwg
DRAWN BY: LLM | GHA PROJECT #: 4700.005
DATE: 3-1-17
CHECKED BY: SDB | SCALE: NTS
DATE: 3-1-17

SHEET NUMBER EL3 OF 5 SHEETS

ISSUANCE

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

FGM ARCHITECTS
OAK BROOK | CHICAGO | O'FALLON

GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

	DATE	
DRAWN	01/08/18	LLM
CHECKED		SDB
APPROVED		SDB

PROFESSIONAL DESIGN FIRM

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

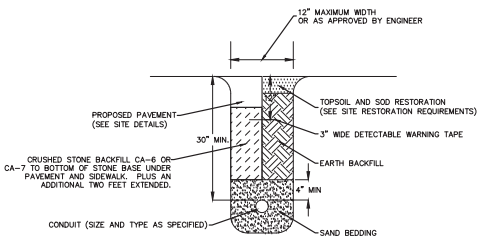
LIGHTING CONTROLS

SHEET NO. EL3

GHA JOB NO. 4700.005
JOB NO. 14-1815.01

© 2017 FGM Architects Inc.

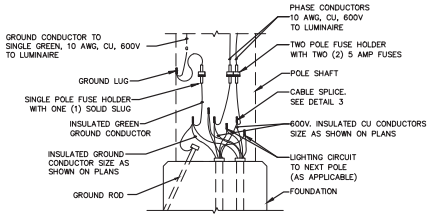
Return to VB Agenda



1 TYPICAL CONDUIT IN TRENCH DETAIL
NO SCALE

NOTES:

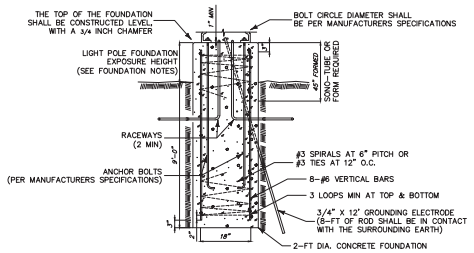
1. CONDUIT SHALL BE SURROUNDED BY 4" OF COMPACTED SAND.
2. BACKFILL SHALL BE PLACED AND COMPACTED IN 8" LIFTS
3. EARTH BACKFILL SHALL BE COMPACTED TO 95% OF THE DENSITY OF SURROUNDING UNDISTURBED SOIL.



2 POLE BASE WIRING DIAGRAM
NO SCALE

NOTES:

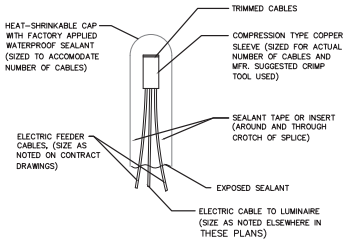
1. ALL FUSE HOLDERS SHALL INCLUDE BOOTS



5 LIGHT POLE FOUNDATION DETAIL
NO SCALE

FOUNDATION NOTES:

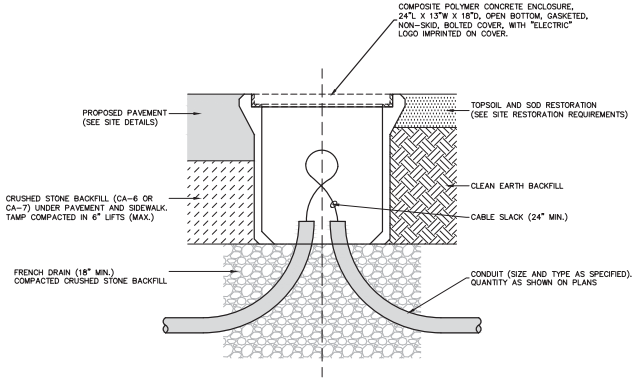
1. THE BOLT CIRCLE DIAMETER SHALL BE SIZED PER LIGHT POLE MANUFACTURER'S SPECIFICATIONS (4 EA).
2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
3. THE LIGHT POLE FOUNDATIONS SHALL BE EXPOSED 30-INCHES ABOVE FINISHED GRADE. IF THE FOUNDATION HEIGHT DOES NOT MEET THESE SPECIFICATIONS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
5. THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION A MIN. OF 45 IN. FROM THE TOP AND A MAX. OF 50% OF THE TOTAL DEPTH. FOUNDATION TOP SHALL BE CHAMFERED 3/4 -IN.
6. THE EXPOSED PORTION OF THE FOUNDATION SHALL BE HAND FINISHED AND BRUSHED.
7. THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE FOR A MINIMUM OF 3-7 DAYS ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
8. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD.
9. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
10. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
11. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES WITH A MINIMUM OF 3 INCHES OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
12. ANCHOR RODS SHALL PROJECT 2-3/4 IN. ABOVE THE TOP OF THE FOUNDATION (OR AS SPECIFIED BY THE LIGHT POLE MANUFACTURER).
13. THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6 IN. PITCH OR MAY SUBSTITUTE #3 TIES AT 12 IN. O.C. WITH THE APPROVAL OF THE ENGINEER.
14. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
15. THE RACEWAYS SHALL PROJECT 1 IN. ABOVE THE TOP OF THE FOUNDATION AND SHALL TERMINATE WITH A GROUNDING BUSHING (AS APPLICABLE).
16. RACEWAYS SHALL BE 3.5" PVC FOR UNIT DUCT AND RIGID GALVANIZED STEEL (OF THE SAME SIZE) WHEN STEEL IS UTILIZED FOR UNDERGROUND CONDUIT SPANS. EXTRA RACEWAYS SHALL EXTEND 12 IN. BEYOND THE FOUNDATION AND BE CAPPED. RIGID GALVANIZED STEEL RACEWAYS SHALL BE INSTALLED WITH A GROUNDING BUSHING.



3 SPLICING ELECTRIC CABLES BASIC MATERIALS AND METHODS
NO SCALE

NOTES:

1. THE NUMBER OF CABLES IN SPLICE MAY VARY



4 COMPOSITE HANDHOLE DETAIL
NO SCALE

NOTES:

1. HANDHOLE SHALL BE UL LISTED (OR EQUIVALENT)
2. EARTH BACKFILL SHALL BE COMPACTED TO 95% OF THE DENSITY OF SURROUNDING UNDISTURBED SOIL.
3. HANDHOLE SHALL BE RATED BASED ON APPLICATION AND LOCATION:
   A. GRASS OR PARKWAY WITH NO VEHICULAR TRAFFIC - TIER 5
   B. SIDEWALK WITH NO VEHICULAR TRAFFIC - TIER 8
   C. DRIVEWAY OR PARKING LOT WITH OCCASIONAL VEHICULAR TRAFFIC - TIER 22
   D. DELIBERATE VEHICULAR TRAFFIC - AASHTO H-20

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt-Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt-Hamilton Associates, Inc.

LIGHTING DETAILS

PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
2	MDH	12-8-17	PER MWRD COMMENTS
1	MDH	4-24-17	PER MWRD COMMENTS

NO.	BY	DATE	REVISION

FILE: 4700.005 EL.dwg
DRAWN BY: LLM
DATE: 3-1-17
GHA PROJECT # 4700.005
CHECKED BY: SDB
DATE: 3-1-17
SCALE: NTS

SHEET NUMBER
EL4
OF 5 SHEETS

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

ISSUANCE

FGM ARCHITECTS
OAK BROOK ■ CHICAGO ■ OFALLON

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

DATE	01/08/18
DRAWN	LLM
CHECKED	SDB
APPROVED	SDB

PROFESSIONAL DESIGN FIRM

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

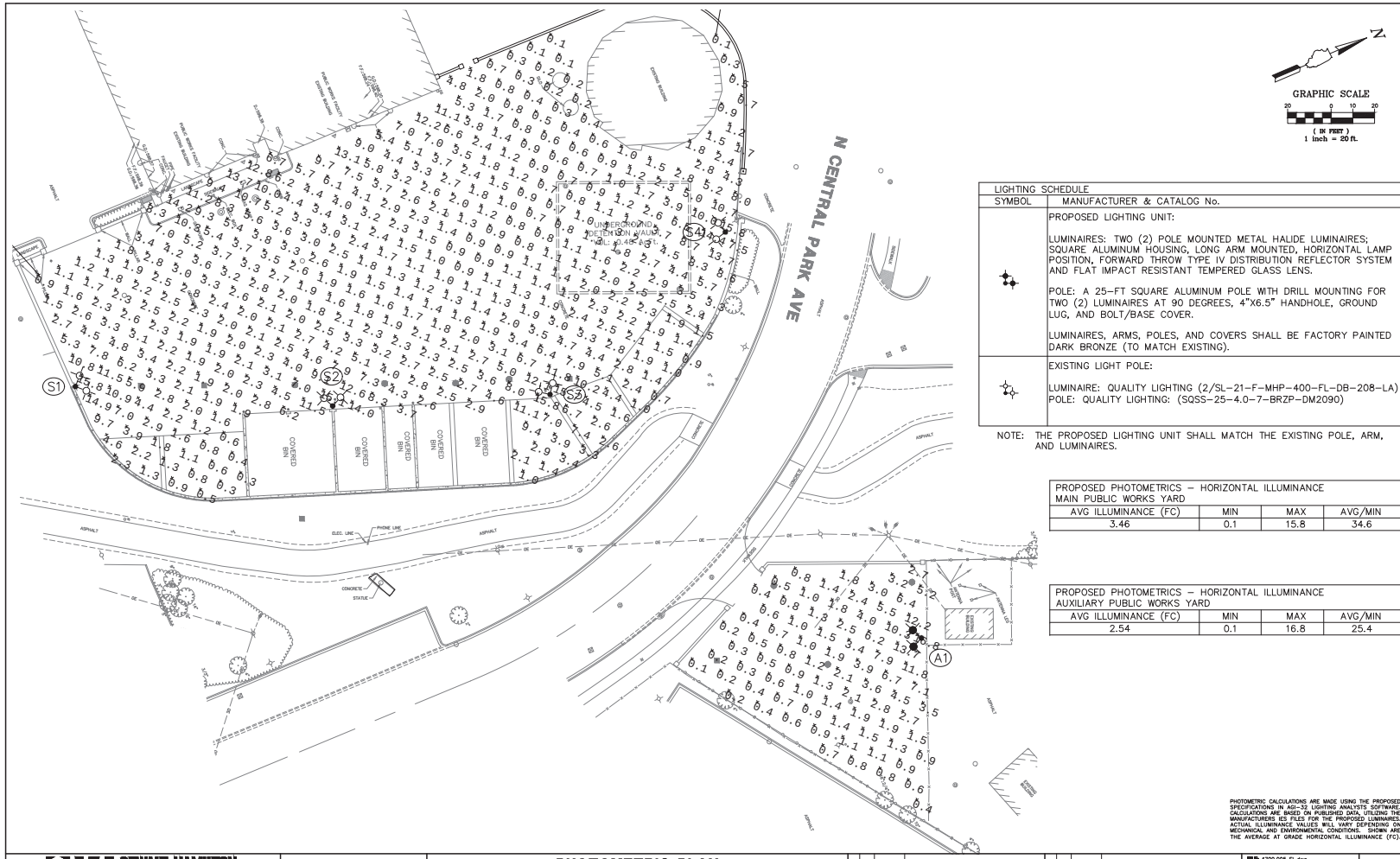
LIGHTING DETAILS

SHEET NO.
EL4

GHA JOB NO. 4700.005
JOB NO. 14-1815.01
© 2017 FGM Architects Inc.

Copyright 2017 FGM ARCHITECTS, INC.

Return to VB Agenda



LIGHTING SCHEDULE	
SYMBOL	MANUFACTURER & CATALOG No.
	PROPOSED LIGHTING UNIT: LUMINAIRES: TWO (2) POLE MOUNTED METAL HALIDE LUMINAIRES; SQUARE ALUMINUM HOUSING, LONG ARM MOUNTED, HORIZONTAL LAMP POSITION, FORWARD THROW TYPE IV DISTRIBUTION REFLECTOR SYSTEM AND FLAT IMPACT RESISTANT TEMPERED GLASS LENS. POLE: A 25-FT SQUARE ALUMINUM POLE WITH DRILL MOUNTING FOR TWO (2) LUMINAIRES AT 90 DEGREES, 4"X6.5" HANDHOLE, GROUND LUG, AND BOLT/BASE COVER. LUMINAIRES, ARMS, POLES, AND COVERS SHALL BE FACTORY PAINTED DARK BRONZE (TO MATCH EXISTING).
	EXISTING LIGHT POLE: LUMINAIRE: QUALITY LIGHTING (2/SL-21-F-MHP-400-FL-DB-208-LA) POLE: QUALITY LIGHTING: (SQSS-25-4.0-7-BRZP-DM2090)

NOTE: THE PROPOSED LIGHTING UNIT SHALL MATCH THE EXISTING POLE, ARM, AND LUMINAIRES.

PROPOSED PHOTOMETRICS – HORIZONTAL ILLUMINANCE MAIN PUBLIC WORKS YARD			
AVG ILLUMINANCE (FC)	MIN	MAX	AVG/MIN
3.46	0.1	15.8	34.6

PROPOSED PHOTOMETRICS – HORIZONTAL ILLUMINANCE AUXILIARY PUBLIC WORKS YARD			
AVG ILLUMINANCE (FC)	MIN	MAX	AVG/MIN
2.54	0.1	16.8	25.4

PHOTOMETRIC CALCULATIONS ARE MADE USING THE PROPOSED SPECIFICATIONS IN AGI-32 LIGHTING ANALYSTS SOFTWARE. CALCULATIONS ARE BASED ON PUBLISHED DATA, UTILIZING THE MANUFACTURERS IES FILES FOR THE PROPOSED LUMINAIRES. ACTUAL ILLUMINANCE VALUES WILL VARY DEPENDING ON MECHANICAL AND ENVIRONMENTAL CONDITIONS. SHOWN ARE THE AVERAGE AT GRADE HORIZONTAL ILLUMINANCE (FC).

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ Fax 847.478.9701

COPYRIGHT NOTICE
This drawing is the property of Gewalt-Hamilton Assoc., Inc. and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from Gewalt-Hamilton Associates, Inc.

PHOTOMETRIC PLAN

PUBLIC WORKS YARD EXPANSION PROJECT
7001 NORTH LAWNDALE AVENUE
LINCOLNWOOD, IL 60712

NO.	BY	DATE	REVISION
2	MDH	12-8-17	PER MWRD COMMENTS
1	MDH	4-24-17	PER MWRD COMMENTS

FILE: 4700.005 EL.dwg
DRAWN BY: LLM
DATE: 3-1-17
GHA PROJECT #: 4700.005
CHECKED BY: SDB
DATE: 3-1-17
SCALE: 1"=20'

SHEET NUMBER
EL5
OF 5 SHEETS

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

DATE	01/08/18
DRAWN	LLM
CHECKED	SDB
APPROVED	SDB

PROFESSIONAL DESIGN FIRM

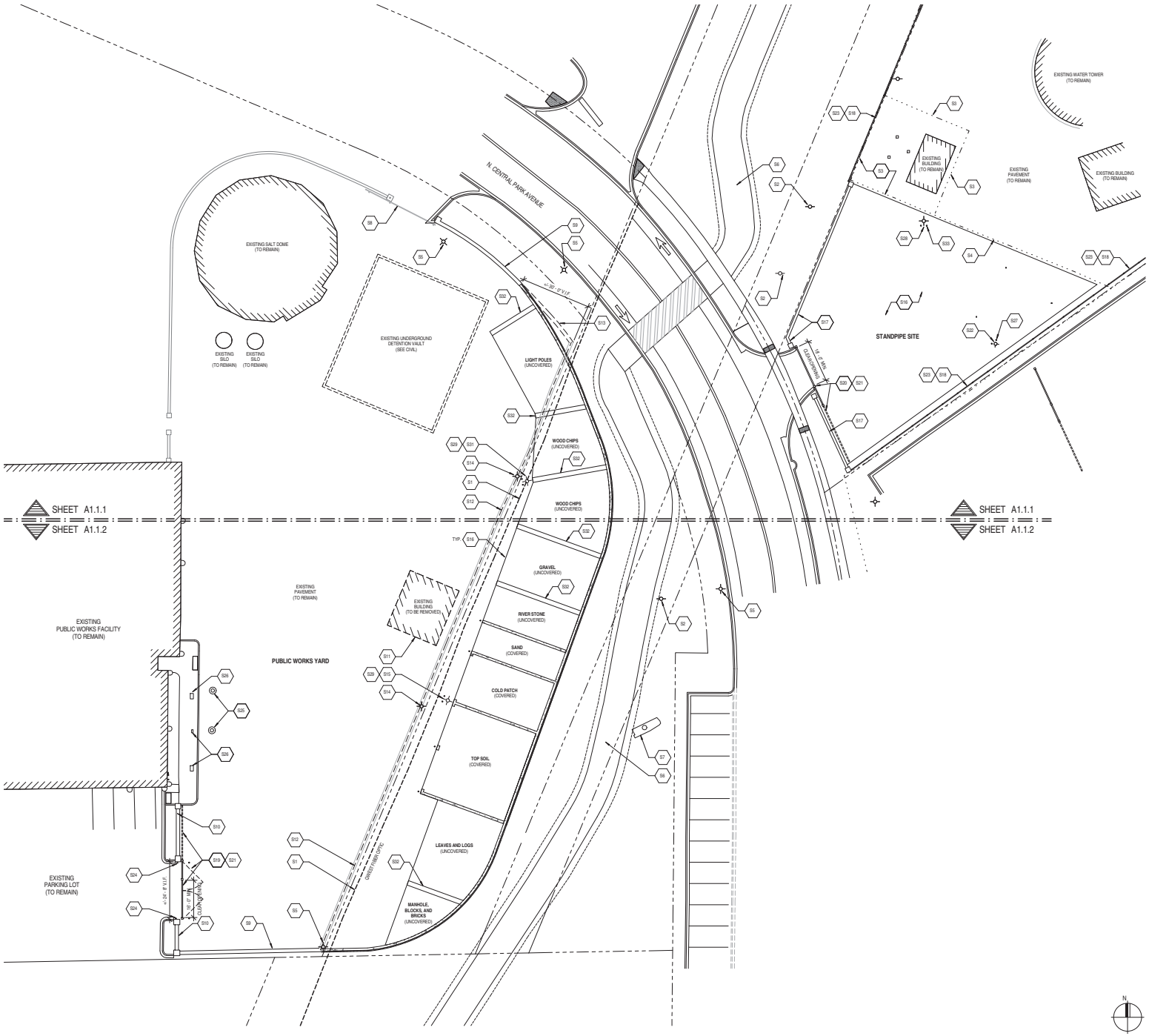
PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

PHOTOMETRIC PLAN

SHEET NO.
EL5

GHA JOB NO. 4700.005
JOB NO. 14-1815.01

© 2017 FGM Architects Inc.
Copyright (c) 2017 FGM ARCHITECTS, INC.



KEYNOTES - REFERENCE	
KEY NUMBER	DESCRIPTION

KEYNOTES - SHEET	
KEY NUMBER	DESCRIPTION
S1	EXISTING UNDERGROUND QWEST FIBER OPTIC LINE TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
S2	EXISTING COMED SITE POLES AND INFRASTRUCTURE TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
S3	EXISTING 4-SIDED PROTECTIVE FENCE AROUND CELL TOWER AND RELATED INFRASTRUCTURE TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
S4	EXISTING FENCE AND GATE SEPARATING STANDPIPE/WATER TOWER SITE FROM LIMITS OF NEW WORK TO REMAIN. CONTRACTOR TO EVALUATE IF TEMPORARY REMOVAL AND REINSTALLATION OF FENCE IS NECESSARY TO ACCOMMODATE CONSTRUCTION ACTIVITIES.
S5	EXISTING LIGHT POLE TO REMAIN.
S6	EXISTING BIKE PATH TO REMAIN.
S7	EXISTING SITE SCULPTURE TO REMAIN.
S8	EXISTING MOTORIZED SLIDING SITE ENTRY GATE TO REMAIN. GATE TO BE REFERENCED AS A MINIMUM IMASS FOR THE COMPONENTS AND STANDARDS THAT SHALL BE PROVIDED FOR NEW CANTILEVER SLIDE GATES.
S9	EXISTING CONCRETE AND MASONRY PERIMETER YARD WALL TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
S10	EXISTING CONCRETE AND MASONRY COMBINATION PERIMETER YARD WALL AND ORNAMENTAL FENCE TO REMAIN.
S11	REMOVE EXISTING STORAGE STRUCTURE IN ITS ENTIRETY TO ACCOMMODATE NEW WORK.
S12	DASHED LINES DENOTE EXISTING PERIMETER YARD CHAIN LINK FENCE TO BE REMOVED TO ACCOMMODATE NEW WORK. CONFIRM WITH OWNER IF FENCE COMPONENTS ARE TO BE SALVAGED PRIOR TO REMOVAL.
S13	DASHED LINES DENOTE PORTION OF EXISTING CONCRETE AND MASONRY PERIMETER YARD WALL TO BE REMOVED IN ITS ENTIRETY WITHIN LIMITS INDICATED TO ACCOMMODATE NEW WORK.
S14	EXISTING LIGHT POLE TO BE REMOVED AND RELOCATED TO ACCOMMODATE NEW WORK. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
S15	RELOCATED EXISTING LIGHT POLE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. NOTE: PLACEMENT OF LIGHT POLE FOUNDATIONS SHALL BE INDEPENDENT FROM AND NOT CONFLICT WITH BIN WALL STRUCTURAL FOUNDATIONS AND FOOTINGS, OR EXISTING UNDERGROUND INFRASTRUCTURE TYP. PROVIDE ADEQUATE CLEARANCES AS REQUIRED.
S16	NEW CONCRETE PAVEMENT. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
S17	PROVIDE NEW CONCRETE AND MASONRY SCREEN WALL AT ENTRY TO SITE AS SHOWN. REFER TO ENLARGED PLANS AND EXTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION.
S18	EXISTING CHAIN LINK FENCE SURROUNDING PERIMETER OF STANDPIPE/WATER TOWER SITE TO BE REMOVED AND REPLACED WITH NEW PREFINISHED ORNAMENTAL STEEL FENCE. ESTIMATED EXTENT OF NEW LINEAR FENCE TO BE PROVIDED IS 660 LINEAR FEET. VERIFY EXACT EXTENTS IN FIELD. REFER TO EXTERIOR ELEVATIONS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
S19	EXISTING MANUALLY OPERATED SWING GATE TO BE REMOVED AND REPLACED WITH NEW PREFINISHED MOTORIZED SLIDING GATE. EXISTING CONDITIONS AND DIMENSIONAL GATE WIDTH TO BE VERIFIED IN FIELD. TYP. REFER TO ELECTRICAL DRAWINGS FOR CONNECTIONS TO ELECTRICAL INFRASTRUCTURE.
S20	PROVIDE NEW PREFINISHED MOTORIZED ALUMINUM CANTILEVER SLIDING GATE, IN OPENING CONFIGURATION AS SHOWN. REFER TO ELECTRICAL DRAWINGS FOR CONNECTIONS TO ELECTRICAL INFRASTRUCTURE.
S21	SLIDING GATE BASIS OF DESIGN: TRANSPORT II ALUMINUM CANTILEVER GATE, BY AMERISTAR FENCE. NOTE: GATE DESIGN INTENDED TO MATCH AESTHETICS AND STYLE OF ORNAMENTAL FENCE, TYP.
S22	EXISTING SITE HYDRANT TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
S23	PREFINISHED ORNAMENTAL FENCE BASIS OF DESIGN: MONTAGE INDUSTRIAL STEEL FENCE, 2-RAIL MAJESTIC DESIGN, BY AMERISTAR FENCE.
S24	EXISTING CONCRETE BOLLARD TO REMAIN.
S25	EXISTING UNDERGROUND GAS TANKS TO REMAIN.
S26	EXISTING GAS PUMPS AND CONTROLS TO REMAIN.
S27	PROVIDE NEW CONCRETE BOLLARDS, AS SHOWN. REFER TO CIVIL DRAWINGS FOR DETAILS AND ADDITIONAL INFORMATION.
S28	NEW SITE LIGHT POLE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
S29	RELOCATED EXISTING LIGHT POLE TO BE FLANKED BY NEW CONCRETE BOLLARDS, EACH SIDE. REFER TO CIVIL DRAWINGS FOR DETAILS AND ADDITIONAL INFORMATION.
S31	RELOCATED EXISTING LIGHT POLE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. NOTE: PLACEMENT OF LIGHT POLE FOUNDATIONS SHALL BE INDEPENDENT FROM AND NOT CONFLICT WITH EXISTING UNDERGROUND FIBER OPTIC LINE. PROVIDE ADEQUATE CLEARANCES TO EXISTING INFRASTRUCTURE AS REQUIRED.
S32	EXISTING PRECAST CONCRETE BLOCK BIN DIVIDER WALLS TO BE REMOVED AND SALVAGED ON SITE. PRECAST BLOCKS TO BE RECONFIGURED IN NEW LAYOUT AS SHOWN. EXISTING BLOCKS 2'-0" WIDE, 2'-0" HIGH AND VARIED IN LENGTH.
S33	NEW LIGHT POLE TO BE FLANKED BY NEW CONCRETE BOLLARDS, EACH SIDE. REFER TO CIVIL DRAWINGS FOR DETAILS AND ADDITIONAL INFORMATION.

NO.	DATE	DESCRIPTION
	01/09/18	ISSUED FOR BID / ISSUED FOR PERMIT

ISSUANCE

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	01/09/18
DRAWN	AO
CHECKED	JE
APPROVED	JD

PROFESSIONAL DESIGN FIRM
L.A. # 184.000300

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

OVERALL ARCHITECTURAL SITE PLAN

SHEET NO.
A1.1.0

JOB NO. 14-1815.01

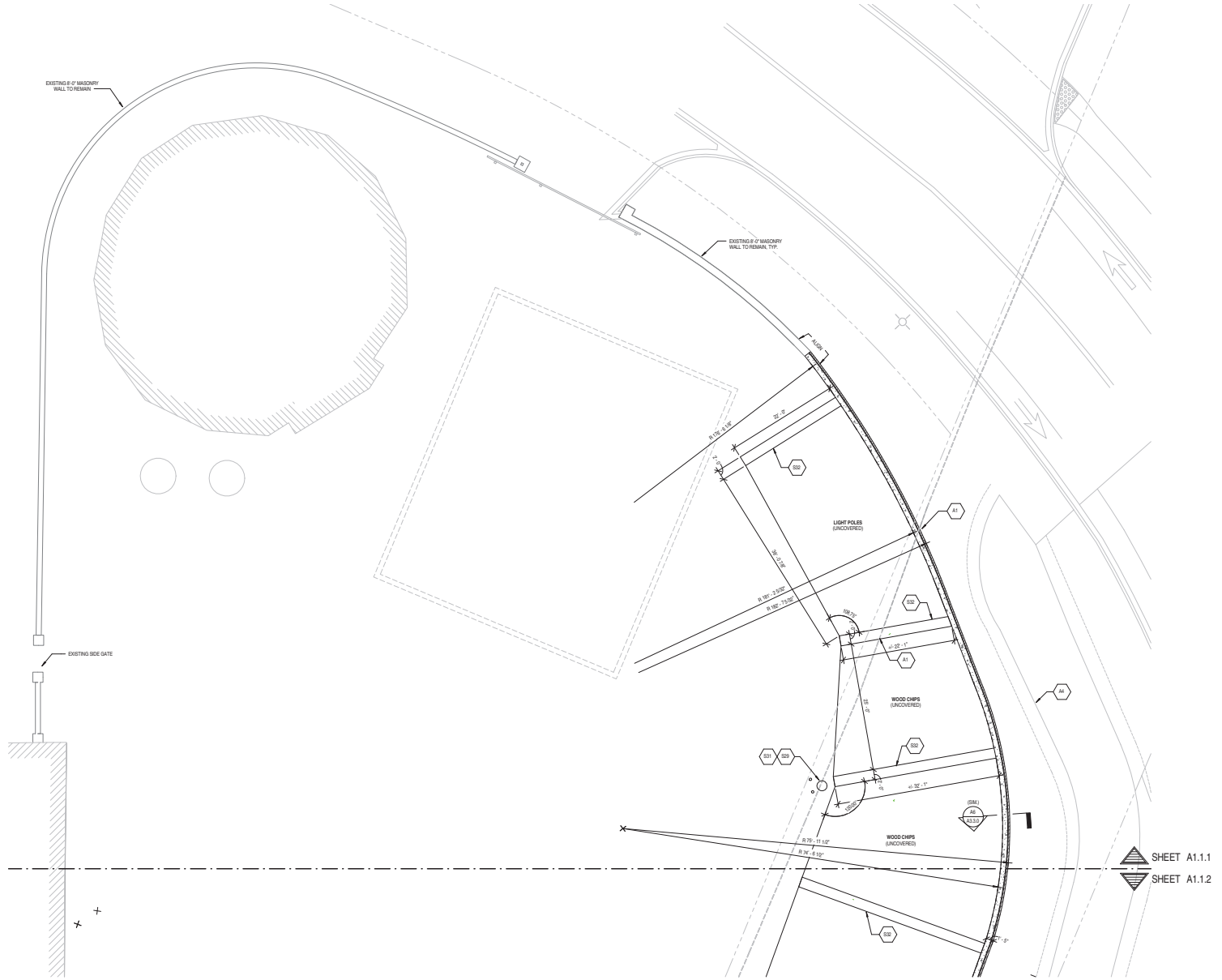
© 2017 FGM Architects Inc.

A1 OVERALL ARCHITECTURAL SITE PLAN
1/16" = 1'-0"

A21 NOTATIONS

1/9/2018 12:00:50 AM
C:\Revit Temp\2016\14-1815o_Lincolnwood PW Yard_Central_2016_annabella.olanda.rvt

Copyright 2017 FGM ARCHITECTS, INC.



KEYNOTES - REFERENCE	
KEY NUMBER	DESCRIPTION

KEYNOTES - SHEET	
KEY NUMBER	DESCRIPTION
A1	PROVIDE SLEEVE THROUGH FOUNDATION WALL AS REQUIRED TO RESOLVE POTENTIAL CONFLICT WITH LOCATION OF EXISTING UNDERGROUND FIBER OPTIC LINE. REFER TO STRUCTURAL AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
A4	EXISTING SITE COMPONENTS AND BOUNDARY INFORMATION SHOWN IN HALFTONE FOR CLARITY. REFER TO OVERALL SITE PLAN SHEET A1.1.0 FOR PERTINENT DETAILS.
S29	RELOCATED EXISTING LIGHT POLE TO BE FLANKED BY NEW CONCRETE BOLLARDS, EACH SIDE. REFER TO CIVIL DRAWINGS FOR DETAILS AND ADDITIONAL INFORMATION.
S31	RELOCATED EXISTING LIGHT POLE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. NOTE: PLACEMENT OF LIGHT POLE FOUNDATIONS SHALL BE INDEPENDENT FROM AND NOT CONFLICT WITH EXISTING UNDERGROUND FIBER OPTIC LINE. PROVIDE ADEQUATE CLEARANCES TO EXISTING INFRASTRUCTURE AS REQUIRED.
S32	EXISTING PRECAST CONCRETE BLOCK BIN DIVIDER WALLS TO BE REMOVED AND SALVAGED ON SITE. PRECAST BLOCKS TO BE RECONFIGURED IN NEW LAYOUT AS SHOWN. EXISTING BLOCKS 2'-0" WIDE, 2'-0" HIGH AND VARIED IN LENGTH.

GENERAL FLOOR PLAN NOTES

1. WALL AND PARTITION DIMENSIONS ARE SHOWN TO FINISHED FACE OF WALL.
2. DIMENSIONS FOR AREAS DRAWN AT A LARGER SCALE ARE SHOWN ON ENLARGED SCALE PLANS.
3. UNLESS OTHERWISE NOTED, WALLS AND PARTITIONS WHICH ARE LAID OUT RADIALLY, ARE DIMENSIONED BY RADIAN (DEGREES) FROM THE NEAREST GRID LINES.
4. UNLESS OTHERWISE NOTED, WALLS AND PARTITIONS WHICH ARE SHOWN TO BE ON A GRID LINE OR IMMEDIATELY NEXT TO A GRID LINE SHALL BE LOCATED PARALLEL WITH THE GRID LINE WITH THE FACE OF THE WALL 1" AWAY FROM THE LEG OF THE STEEL JOIST. (SEE DETAIL A—/A2.—)
5. UNLESS OTHERWISE NOTED, WALL AND PARTITIONS WHICH ARE LAID OUT CONCENTRICALLY ARE DIMENSIONED FROM THE NEAREST GRID AND SHALL BE LAID OUT ALONG THE ESTABLISHED RADIUS.
6. WALLS AND PARTITIONS WHICH ARE NOT INTENDED TO BE LAID OUT ON A RADIUS, ARE SHOWN TO BE PERPENDICULAR (–) OR AT SOME ANGLE (–) TO THE ADJOINING WALLS OR PERPENDICULAR TO A GRID LINE (–).
7. DIMENSIONS ALONG CURVED LINES ARE ACTUAL CURVED DIMENSIONED ARC LENGTHS.
8. EQUIPMENT SHOWN DOTTED IS NOT IN CONTRACT AND IS SHOWN FOR COORDINATION PURPOSES, UNLESS NOTED OTHERWISE
9. USE OF SPECIFICATION SECTION NUMBERS WITHIN KEY NOTES IS MADE SOLELY FOR CONVENIENCE IN COORDINATION AND WITHOUT LIMITATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE WORK IN ACCORDANCE TO THE CONTRACT DOCUMENTS IN THEIR ENTIRETY
10. USE OF MANUFACTURER'S CONTENT WITHIN THE DRAWINGS IS MADE SOLELY FOR CONVENIENCE IN ILLUSTRATING THE REQUIREMENTS OF THE PROJECT. THE CONTRACTOR IS REQUIRED TO PROVIDE PRODUCTS SPECIFIED AND APPROVED THROUGH THE SUBMITTAL PROCESS.

NO.	DATE	DESCRIPTION
	01/09/18	ISSUED FOR BID / ISSUED FOR PERMIT

ISSUANCE

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	01/09/18	
DRAWN	AC	
CHECKED	JE	
APPROVED	JD	

PROFESSIONAL DESIGN FIRM
L # 184.003300

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

ENLARGED ARCHITECTURAL SITE PLAN - NORTH

SHEET NO.
A1.1.1

JOB NO. 14-1815.01

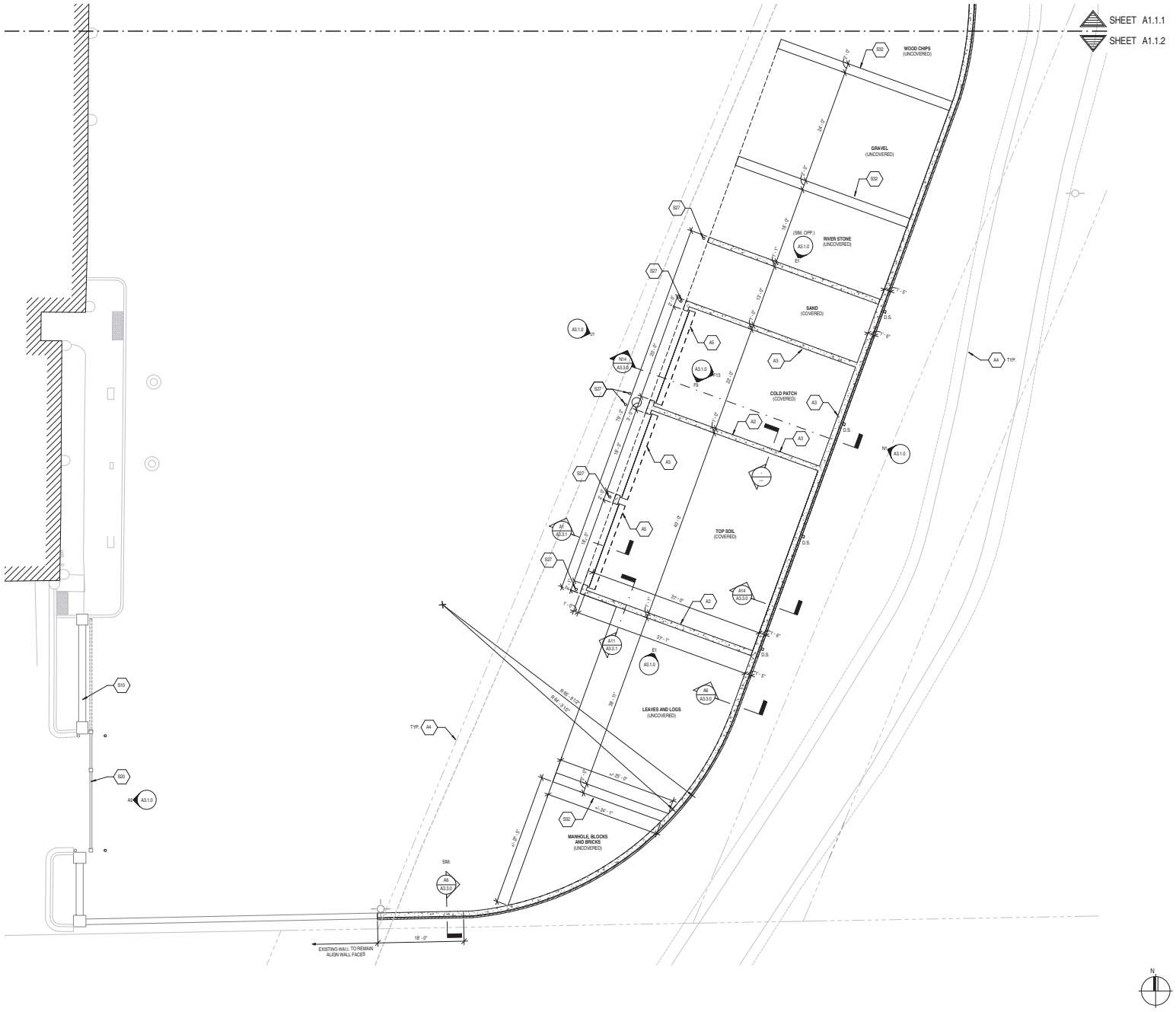
© 2017 FGM Architects Inc.

A1 ENLARGED ARCHITECTURAL SITE PLAN - NORTH
1/8" = 1'-0"

A21 NOTATIONS

1/9/2018 12:33:53 AM
C:\Revit Temp\2016\14-1815cLincolnwood PW Yard_Central_2016_annabella.alanab.rvt

Copyright 2017 FGM ARCHITECTS, INC.



KEYNOTES - REFERENCE	
KEY NUMBER	DESCRIPTION

KEYNOTES - SHEET	
KEY NUMBER	DESCRIPTION
A2	PROVIDE AN ELECTRICAL STUB/ WEATHERPROOF JUNCTION BOX TO INTERIOR WALL AS SHOWN. FOR OWNER'S FUTURE USE. COORDINATE PLACEMENT OF STUB WITH OWNER PRIOR TO INSTALLATION. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
A3	PROVIDE (2) ROWS OF THREADED RODS, EMBEDDED INTO FACE OF CAST-IN-PLACE CONCRETE WALL, THROUGHOUT ENTIRE LENGTH OF WALL FOR OWNER USE. REFER TO INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION.
A4	EXISTING SITE COMPONENTS AND BOUNDARY INFORMATION SHOWN IN HALFTONE FOR CLARITY. REFER TO OVERALL SITE PLAN SHEET A1.1.0 FOR PERTINENT DETAILS.
A5	DASHED LINES DENOTE FUTURE LOCATION OF OVERHEAD COILING DOOR, TO BE FURNISHED AND INSTALLED BY OWNER AT A LATER DATE.
S10	EXISTING CONCRETE AND MASONRY COMBINATION PERIMETER YARD WALL AND ORNAMENTAL FENCE TO REMAIN.
S20	PROVIDE NEW PREFINISHED MOTORIZED ALUMINUM CANTILEVER SLIDING GATE. IN OPENING CONFIGURATION AS SHOWN. REFER TO ELECTRICAL DRAWINGS FOR CONNECTIONS TO ELECTRICAL INFRASTRUCTURE.
S27	PROVIDE NEW CONCRETE BOLLARDS, AS SHOWN. REFER TO CIVIL DRAWINGS FOR DETAILS AND ADDITIONAL INFORMATION.
S32	EXISTING PRECAST CONCRETE BLOCK BIN DIVIDER WALLS TO BE REMOVED AND SALVAGED ON SITE. PRECAST BLOCKS TO BE RECONFIGURED IN NEW LAYOUT AS SHOWN. EXISTING BLOCKS 2'-0" WIDE, 2'-0" HIGH AND VARIED IN LENGTH.

GENERAL FLOOR PLAN NOTES

1. WALL AND PARTITION DIMENSIONS ARE SHOWN TO FINISHED FACE OF WALL.
2. DIMENSIONS FOR AREAS DRAWN AT A LARGER SCALE ARE SHOWN ON ENLARGED SCALE PLANS.
3. UNLESS OTHERWISE NOTED, WALLS AND PARTITIONS WHICH ARE LAID OUT RADIALLY, ARE DIMENSIONED BY RADIAN (DEGREES) FROM THE NEAREST GRID LINES.
4. UNLESS OTHERWISE NOTED, WALLS AND PARTITIONS WHICH ARE SHOWN TO BE ON A GRID LINE OR IMMEDIATELY NEXT TO A GRID LINE SHALL BE LOCATED PARALLEL WITH THE GRID LINE WITH THE FACE OF THE WALL 1" AWAY FROM THE LEG OF THE STEEL JOIST. (SEE DETAIL A-/A2.-)
5. UNLESS OTHERWISE NOTED, WALL AND PARTITIONS WHICH ARE LAID OUT CONCENTRICALLY ARE DIMENSIONED FROM THE NEAREST GRID AND SHALL BE LAID OUT ALONG THE ESTABLISHED RADIUS.
6. WALLS AND PARTITIONS WHICH ARE NOT INTENDED TO BE LAID OUT ON A RADIUS, ARE SHOWN TO BE PERPENDICULAR (⊥) OR AT SOME ANGLE (⌐) TO THE ADJOINING WALLS OR PERPENDICULAR TO A GRID LINE (⌐).
7. DIMENSIONS ALONG CURVED LINES ARE ACTUAL CURVED DIMENSIONED ARC LENGTHS.
8. EQUIPMENT SHOWN DOTTED IS NOT IN CONTRACT AND IS SHOWN FOR COORDINATION PURPOSES, UNLESS NOTED OTHERWISE
9. USE OF SPECIFICATION SECTION NUMBERS WITHIN KEY NOTES IS MADE SOLELY FOR CONVENIENCE IN COORDINATION AND WITHOUT LIMITATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE WORK IN ACCORDANCE TO THE CONTRACT DOCUMENTS IN THEIR ENTIRETY
10. USE OF MANUFACTURER'S CONTENT WITHIN THE DRAWINGS IS MADE SOLELY FOR CONVENIENCE IN ILLUSTRATING THE REQUIREMENTS OF THE PROJECT. THE CONTRACTOR IS REQUIRED TO PROVIDE PRODUCTS SPECIFIED AND APPROVED THROUGH THE SUBMITTAL PROCESS.

NO.	DATE	ISSUANCE DESCRIPTION
	01/09/18	ISSUED FOR BID / ISSUED FOR PERMIT

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

PROFESSIONAL SEAL
EXPIRATION DATE:

DATE	01/09/18
DRAWN	AO
CHECKED	JE
APPROVED	JD

PROFESSIONAL DESIGN FIRM
L.A. # 184.000300

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

ENLARGED ARCHITECTURAL SITE PLAN - SOUTH

SHEET NO.
A1.1.2

JOB NO. 14-1815.01

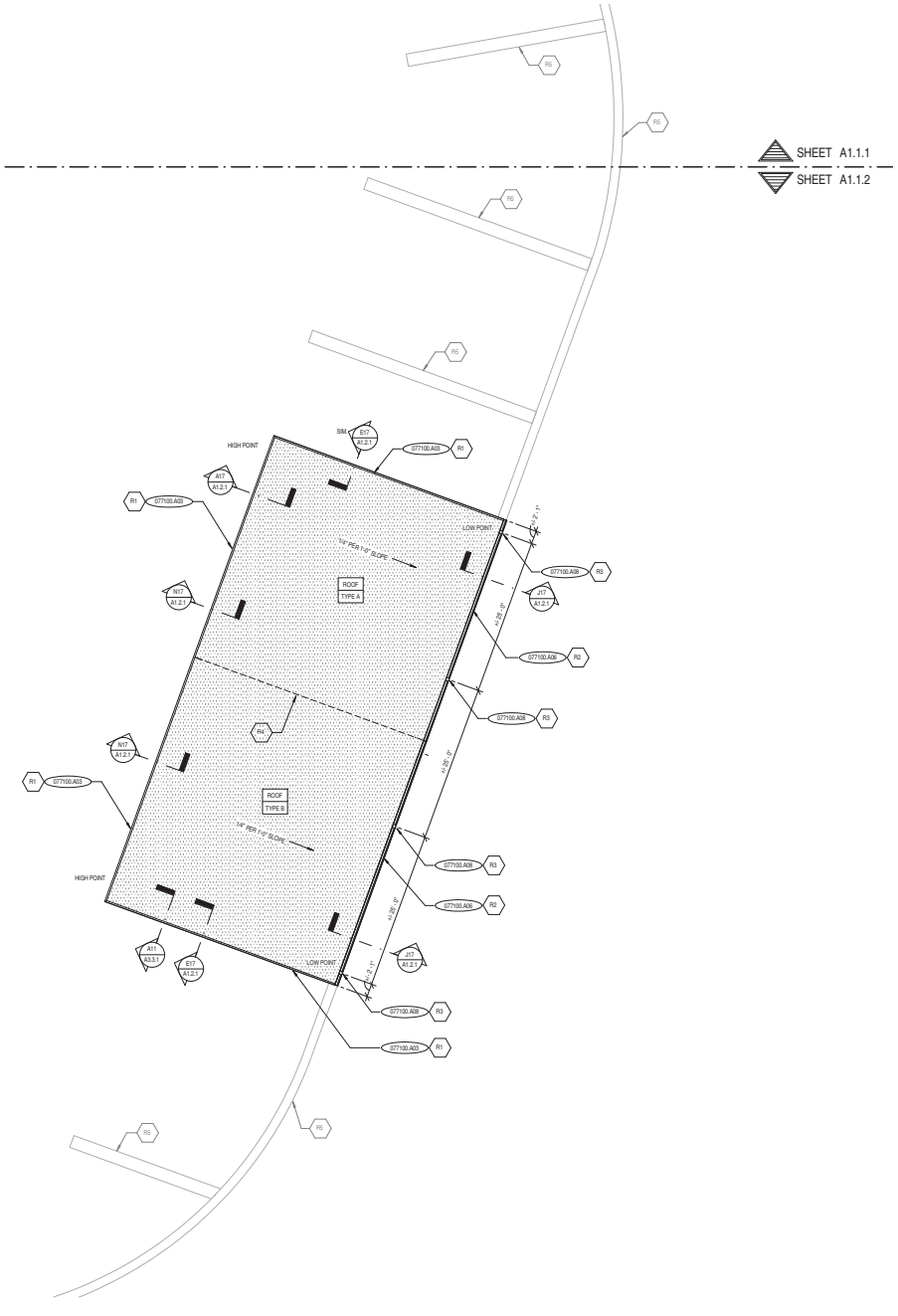
© 2017 FGM Architects Inc.

A1 ENLARGED ARCHITECTURAL SITE PLAN - SOUTH
1/8" = 1'-0"

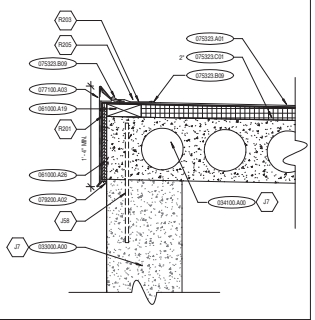
A21 NOTATIONS

1/9/2018 12:33:16 AM
C:\Revit Temp\2016\14-1815o_Lincolnwood PW Yard_Central_2016_annabella.olanda.rvt

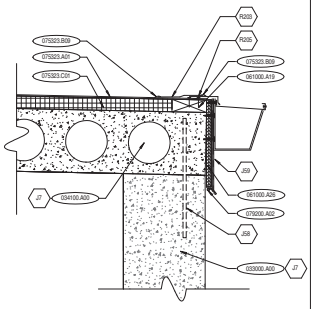
Copyright 2017 FGM ARCHITECTS, INC.



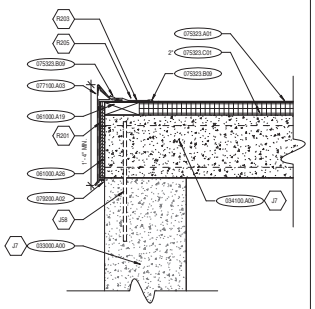
A1 ROOF PLAN
1/8" = 1'-0"



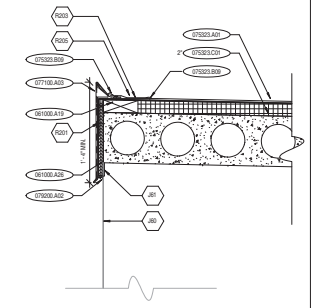
N17 ROOF DETAIL
1 1/2" = 1'-0"



J17 ROOF DETAIL
1 1/2" = 1'-0"



E17 ROOF DETAIL
1 1/2" = 1'-0"



A17 ROOF DETAIL
1 1/2" = 1'-0"

KEYNOTES - REFERENCE

KEY NUMBER	DESCRIPTION
033000.A00	CAST-IN-PLACE CONCRETE
034100.A00	PRECAST STRUCTURAL CONCRETE
061000.A19	WOOD BLOCKING, CANTS, AND NAILER
061000.A26	EXTERIOR GRADE PLYWOOD
075323.A01	EPDM ROOFING MEMBRANE
075323.B09	ROOFING SEALANT
075323.C01	ROOF INSULATION
077100.A03	CANTED ROOF EDGE FASCIA AND OR GRAVEL STOP
077100.A06	GUTTER
077100.A08	DOWNSPOUT
079200.A02	SEALANT

KEYNOTES - SHEET

KEY NUMBER	DESCRIPTION
J7	SEE STRUCTURAL SERIES
J58	STRUCTURAL DOWEL, REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
J59	PROVIDE ALUMINUM FASCIA ELEMENT BEHIND AND BELOW GUTTER AS SHOWN SUCH THAT FINISHED FASCIA PROFILE IS CONTINUOUS AROUND THE BUILDING AND ALSO CONCEALS THE JUNCTURE BETWEEN THE ROOF STRUCTURE AND WALL STRUCTURE, PER THE DESIGN INTENT.
J60	HALF TONE LINE DENOTES EDGE OF EXTERIOR WALL BEYOND.
J61	ALUMINUM FASCIA MATERIAL TO WRAP AROUND ALL SIDES OF PLYWOOD SUCH THAT NO SUBSTRATE IS LEFT EXPOSED.
R1	PREFINISHED ALUMINUM FASCIA WITH GRAVEL STOP COPING EDGE. COLOR TO BE SELECTED BY OWNER FROM MANUFACTURER'S COMPLETE AVAILABLE RANGE.
R2	PREFINISHED ALUMINUM GUTTER, MINIMUM 4" X 5" SIZE. COLOR TO BE SELECTED BY OWNER FROM MANUFACTURER'S COMPLETE AVAILABLE RANGE AND SHALL MATCH COPING.
R3	PREFINISHED ALUMINUM DOWNSPOUT, MINIMUM SIZE 3" X 4". COLOR TO BE SELECTED BY OWNER FROM MANUFACTURER'S COMPLETE AVAILABLE RANGE.
R4	DASHED LINE DENOTES SEPARATION BETWEEN ROOF PLANK STRUCTURE TYPES, SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
R5	GRAYSCALE LINES DENOTE EDGE OF YARD DIVIDER WALL AND SCREEN WALLS BELOW, TYP.
R201	EXTENDED MEMBRANE UP AND OVER PARAPET WALL AND SECURE
R203	ADHERED FLASHING MEMBRANE (EXTEND APPROXIMATELY 2" BEYOND FLANGE)
R205	FASTENERS 3" TO 6" O.C. STAGGER

J21 NOTATIONS

E21 GENERAL ROOF NOTES

ROOF TYPES

ROOF TYPE A	EPDM ROOF CONSTRUCTION	- EPDM ROOFING MEMBRANE - 2" MINIMUM POLYISOCYANURATE RIGID ROOF INSULATION - 8" PRECAST CONCRETE ROOF PLANKS, SLOPED (SEE STRUCT.)
ROOF TYPE B	EPDM ROOF CONSTRUCTION	- EPDM ROOFING MEMBRANE - 2" MINIMUM POLYISOCYANURATE RIGID ROOF INSULATION - 10" PRECAST CONCRETE ROOF PLANKS, SLOPED (SEE STRUCT.)

A21 NOT USED

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR BID / ISSUED FOR PERMIT

ISSUANCE

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

PROFESSIONAL SEAL
EXPIRATION DATE:

DATE 01/08/18
DRAWN AC
CHECKED JE
APPROVED JD
PROTOTYPICAL DESIGN FIRM
I.A.# 184.000300

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

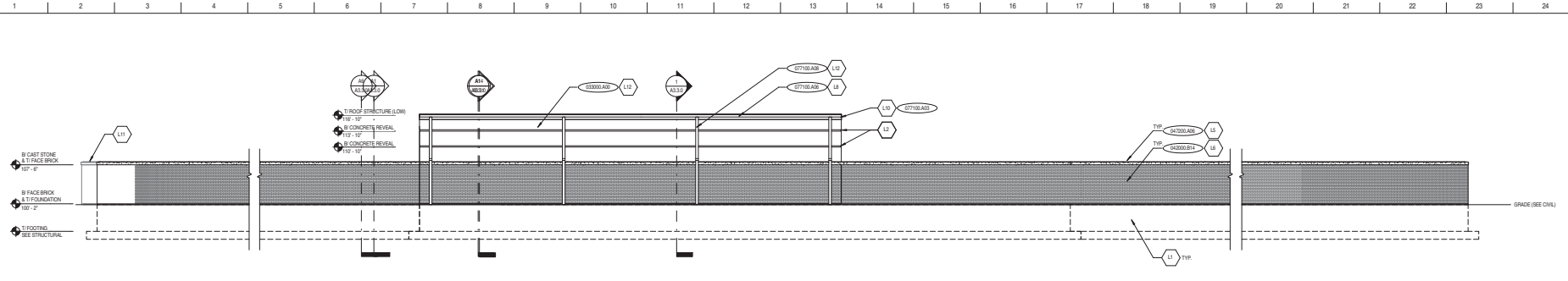
ROOF PLAN AND ROOF DETAILS

SHEET NO.
A1.2.1

JOB NO. 14-1815.01

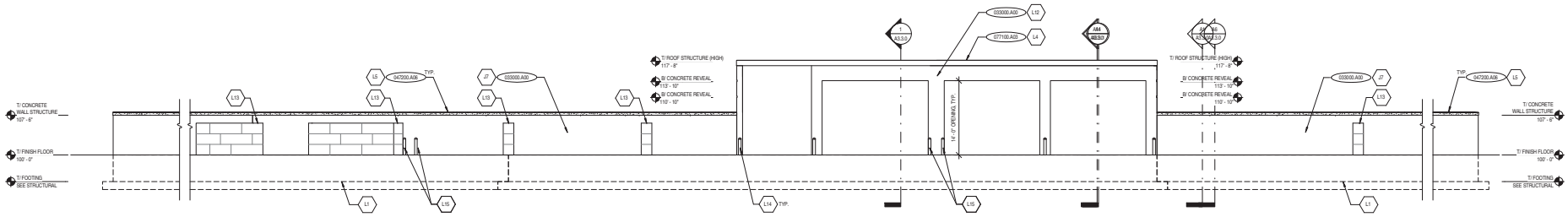
© 2017 FGM Architects Inc.

1/8/2018 10:07:24 PM
C:\Revit Temp\2016\14-1815cLincolnwood PW Yard_Central_2016_annabella.adamdb.rvt
Copyright 2017 FGM ARCHITECTS, INC.



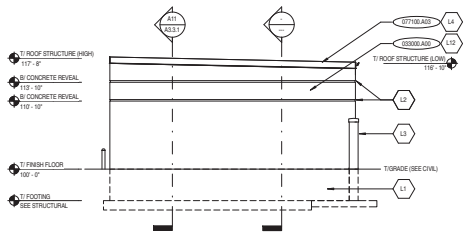
N1 EAST EXTERIOR ELEVATION

1/8" = 1'-0"



J1 WEST EXTERIOR ELEVATION

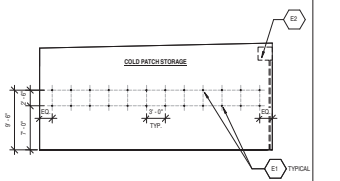
1/8" = 1'-0"



NOTE: NORTH EXTERIOR ELEVATION SIMILAR OPPOSITE

E1 SOUTH EXTERIOR ELEVATION

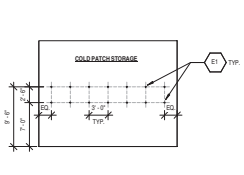
1/8" = 1'-0"



NOTE: NORTH INTERIOR ELEVATION SIMILAR OPPOSITE

F9 SOUTH INTERIOR ELEVATION

1/8" = 1'-0"



F13 EAST INTERIOR ELEVATION

1/8" = 1'-0"

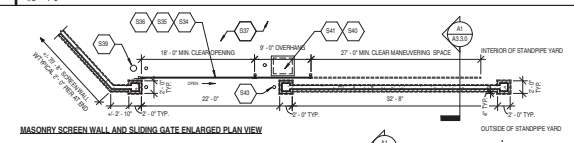
KEYNOTES - REFERENCE

KEY NUMBER	DESCRIPTION
033000.A00	CAST-IN-PLACE CONCRETE
042000.B14	BRICK
047200.A06	CAST STONE COPING
077100.A03	CANTED ROOF EDGE FASCIA AND OR GRAVEL STOP
077100.A06	GUTTER
077100.A08	DOWNSPOUT

F17 NOTATIONS

KEYNOTES - SHEET

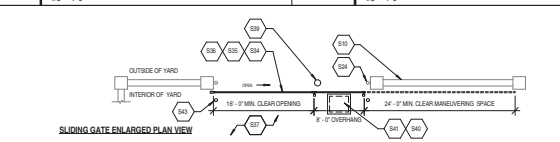
KEY NUMBER	DESCRIPTION
E1	PROVIDE THREADED RODS, EMBEDDED INTO FACE OF CAST-IN-PLACE CONCRETE WALL AS SHOWN. THREADED RODS TO PROTRUDE OUTWARDS FROM FACE OF WALL 2". CONTRACTOR TO REVIEW PROPOSED CONFIGURATION WITH OWNER AND CONFIRM PLACEMENT PRIOR TO INSTALLATION. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
E2	DASHED LINES DENOTE FUTURE LOCATION OF OVERHEAD COILING DOOR, TO BE FURNISHED AND INSTALLED BY OWNER AT A LATER DATE.
J7	SEE STRUCTURAL SERIES
L1	DASHED LINES REPRESENT OUTLINE OF FOUNDATION WALL AND FOOTING BELOW. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
L2	PROVIDE 2" HIGH X 1" DEEP REVEAL WITHIN CAST-IN-PLACE CONCRETE WALL. REFER TO WALL SECTIONS FOR ADDITIONAL INFORMATION.
L3	OUTLINE OF ADJACENT PERIMETER WALL. REFER TO FLOOR PLAN FOR ADDITIONAL INFORMATION.
L4	PREFINISHED ALUMINUM FASCIA WITH GRAVEL STOP COPING EDGE, COLOR TO BE SELECTED BY OWNER FROM MANUFACTURER'S COMPLETE AVAILABLE RANGE.
L5	COLOR AND TEXTURE OF CAST STONE CAP TO MATCH EXISTING ON SITE. CONTRACTOR TO REVIEW EXISTING CONDITIONS AND PROVIDE OWNER WITH SAMPLE OPTIONS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
L6	COLOR, TEXTURE, AND SIZE OF FACE BRICK TO MATCH EXISTING ON SITE. CONTRACTOR TO REVIEW EXISTING CONDITIONS AND PROVIDE OWNER WITH SAMPLE OPTIONS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
L8	PREFINISHED ALUMINUM GUTTER, MINIMUM 4" X 6" SIZE. COLOR TO BE SELECTED BY OWNER FROM MANUFACTURER'S COMPLETE AVAILABLE RANGE AND SHALL MATCH COPING.
L10	ALUMINUM FASCIA ELEMENT BEHIND GUTTER. REFER TO ROOF DETAILS FOR ADDITIONAL INFORMATION. COLOR TO MATCH TYPICAL FASCIA/COPING ELEMENT AROUND BUILDING.
L11	PROFILE OF EXISTING SITE SCREEN WALL BEYOND. PROFILES OF NEW WALL ELEMENTS TO MATCH EXISTING, TYP.
L12	EXTERIOR FACE OF EXPOSED CAST-IN-PLACE CONCRETE WALL WILL RECEIVE PAINTED FINISH, TO BE APPLIED IN THE FIELD BY OWNER AT A FUTURE DATE. SURFACE FINISH OF CAST IN PLACE CONCRETE TO BE PREPARED ACCORDINGLY, SUCH THAT IT IS SUITABLE TO RECEIVE A FINAL PAINTED FINISH.
L13	EXISTING PRECAST CONCRETE BLOCK BIN DIVIDER WALLS, IN NEW CONFIGURATION AS SHOWN.
L14	CONCRETE BOLLARD, REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
L15	CONCRETE BOLLARD, INTENDED TO FLANK EACH SIDE OF SITE LIGHT POLE FIXTURE. REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
S10	EXISTING CONCRETE AND MASONRY COMBINATION PERIMETER YARD WALL AND ORNAMENTAL FENCE TO REMAIN.
S24	EXISTING CONCRETE BOLLARD TO REMAIN.
S34	FURNISH AND INSTALL MOTORIZED ALUMINUM CANTILEVER SLIDING GATE, TO BE LOCATED WITHIN EXISTING SCREEN WALL OPENING. WIDTH OF EXISTING OPENING TO BE VERIFIED IN THE FIELD. IF POSSIBLE, MAXIMIZE CLEAR OPENING WIDTH OF GATE, WHILE ALLOWING SUFFICIENT CLEARANCE FOR ALL GATE AND OPERATOR COMPONENTS AND COUNTERBALANCE ASSEMBLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFO.
S35	AS RECOMMENDED BY GATE MANUFACTURER, CONTRACTOR SHALL ENSURE THAT THE MOTOR IS SIZED TO HANDLE THE GATE SIZE INSTALLED AND THAT THE MOTOR'S ELECTRICAL CHARACTERISTICS WILL FUNCTION WITHIN THE EXISTING ELECTRICAL SYSTEM OF THE PUBLIC WORKS FACILITY.
S36	CONTRACTOR SHALL BE RESPONSIBLE FOR BRINGING ELECTRICAL POWER TO THE GATE OPERATOR NECESSARY FOR ITS PROPER OPERATION AND SHALL MAKE ALL FINAL CONNECTIONS TO THE OPERATOR.
S37	PROVIDE IN GROUND "FREE EXIT" DETECTOR LOOP WITHIN PAVEMENT, IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. PLACEMENT OF INFRASTRUCTURE TO BE COORDINATED IN THE FIELD WITH OWNER AND MANUFACTURER PRIOR TO INSTALLATION.
S38	PROVIDE POCKETS TO MATCH REMAINDER OF GATE WITHIN SLIDING GATE OVERHANG PANEL.
S39	PROVIDE CHIP KEY PAD, NEAR GATE ENTRY. PLACEMENT TO BE COORDINATED IN THE FIELD WITH OWNER.
S40	EXISTING FLEET VEHICLES EQUIPPED WITH PUSH BUTTON REMOTES FOR ENTRY/EXIT INTO SITE. NEW GATE OPERATORS TO BE PROGRAMMED WITH SAME CODES AS EXISTING CONDITIONS TO ENSURE CONTINUITY IN CONFIGURATION OF SYSTEMS AND CONSISTENCY OF USER FUNCTION.
S41	GATE OPERATOR AND PAD, INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
S42	GATE MOUNTING POSTS, WITHIN CONCRETE SLEEVE. INSTALL PER MANUFACTURER RECOMMENDATIONS.
S43	PROVIDE NEW CONCRETE BOLLARDS ON EACH SIDE OF GATE OPENING WIDTH, AS SHOWN. COORDINATE EXACT LOCATION IN THE FIELD WITH OWNER. REFER TO CIVIL DRAWINGS FOR DETAILS AND ADDITIONAL INFORMATION.



MASONRY SCREEN WALL AND SLIDING GATE ENLARGED PLAN VIEW

A1 SOUTHWEST EXTERIOR ELEVATION (NORTH STANDPIPE SITE)

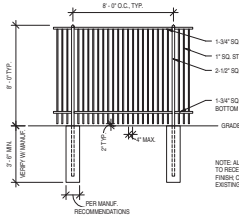
1/8" = 1'-0"



SLIDING GATE ENLARGED PLAN VIEW

A9 EXISTING YARD CANTILEVER GATE ENLARGED PLAN AND WEST ELEVATION

1/8" = 1'-0"



NOTE: ALL FENCE COMPONENTS TO RECEIVE FACTORY APPLIED FINISH. COLOR TO MATCH EXISTING CONDITIONS ON SITE.

A17 TYP. ORNAMENTAL FENCE ELEV.

1/4" = 1'-0"

A21 NOTATIONS

ISSUANCE

NO.	DATE	DESCRIPTION
	01/09/18	ISSUED FOR BID / ISSUED FOR PERMIT

FGM ARCHITECTS
CHICAGO
OAKBROOK
O'FALLON

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	01/09/18
DRAWN	AC
CHECKED	JE
APPROVED	JD

PROTOTYPICAL DESIGN FIRM
L # 184.000300

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

EXTERIOR BUILDING AND SITE ELEVATIONS, INTERIOR BUILDING ELEVATIONS

SHEET NO.
A3.1.0

JOB NO. 14-1815.01

© 2017 FGM Architects Inc.

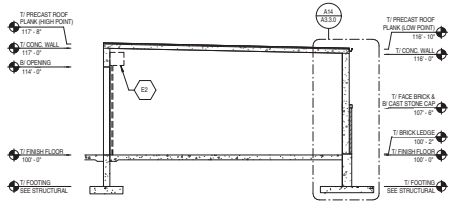
1/9/2018 12:19:27 AM
C:\Revit Temp\2016\14-1815o_Lincolnwood PW Yard_Central_2016_ornabella.olarnab.rvt
Copyright 2017 FGM ARCHITECTS, INC.

N1 NOT USED

N6 NOT USED

N14 BUILDING SECTION

1/8" = 1'-0"



KEYNOTES - REFERENCE

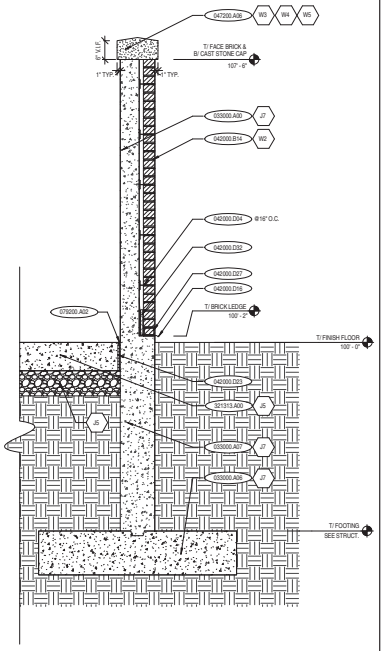
KEY NUMBER	DESCRIPTION
033000.A00	CAST-IN-PLACE CONCRETE
033000.A06	CONCRETE FOOTING
033000.A07	CONCRETE FOUNDATION WALL
034100.A00	PRECAST STRUCTURAL CONCRETE
042000.B14	BRICK
042000.D04	TIES AND ANCHORS
042000.D16	FLEXIBLE FLASHING
042000.D23	PREMOLDED COMPRESSIBLE FILLER STRIP
042000.D27	CELLULAR PLASTIC WEEPVENT
042000.D32	CAVITY DRAINAGE MATERIAL
047200.A06	CAST STONE COPING
079200.A02	SEALANT
321313.A00	CEMENT CONCRETE PAVEMENT

KEYNOTES - SHEET

KEY NUMBER	DESCRIPTION
E2	DASHED LINES DENOTE FUTURE LOCATION OF OVERHEAD COILING DOOR, TO BE FURNISHED AND INSTALLED BY OWNER AT A LATER DATE.
J5	SEE CIVIL SERIES
J7	SEE STRUCTURAL SERIES
W1	ALL MASONRY WALLS TO BE REINFORCED. JOINT REINFORCING @ 16" O.C. HORIZONTALLY & VERTICALLY, TYP.
W2	FACE BRICK COLOR, SIZE, FINISH, ETC. TO MATCH EXISTING CONDITIONS. VERIFY IN FIELD.
W3	PROVIDE INTEGRAL DRIP EDGE, TYP.
W4	NOTE: ALL CAST STONE JOINTS TO BE RAKED BACK - INSERT BACKER ROD AND SEALANT, TYP.
W5	CAST STONE WALL CAP COLOR, HEIGHT, FINISH, ETC. TO MATCH EXISTING CONDITIONS. VERIFY IN FIELD.

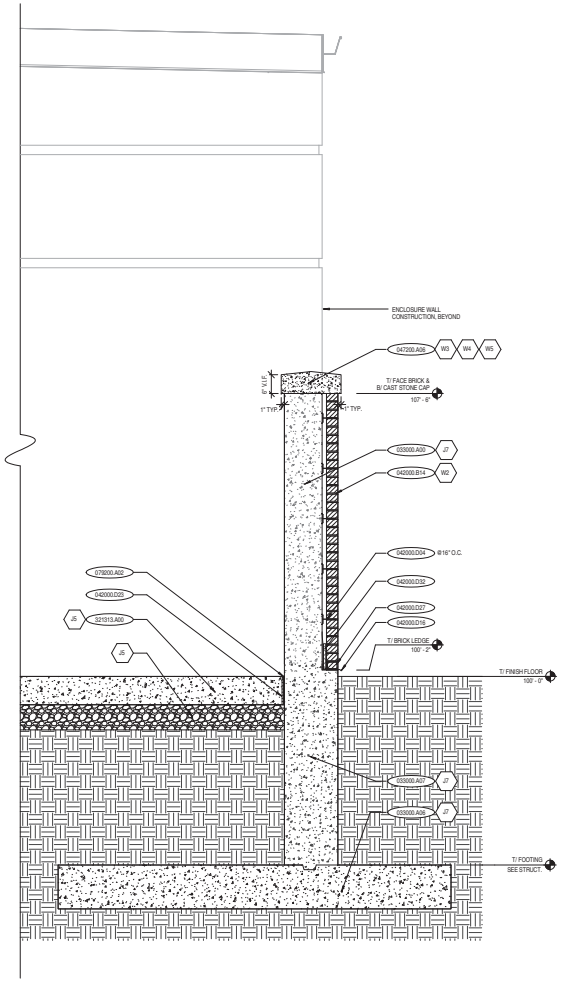
A1 WALL SECTION

3/4" = 1'-0"



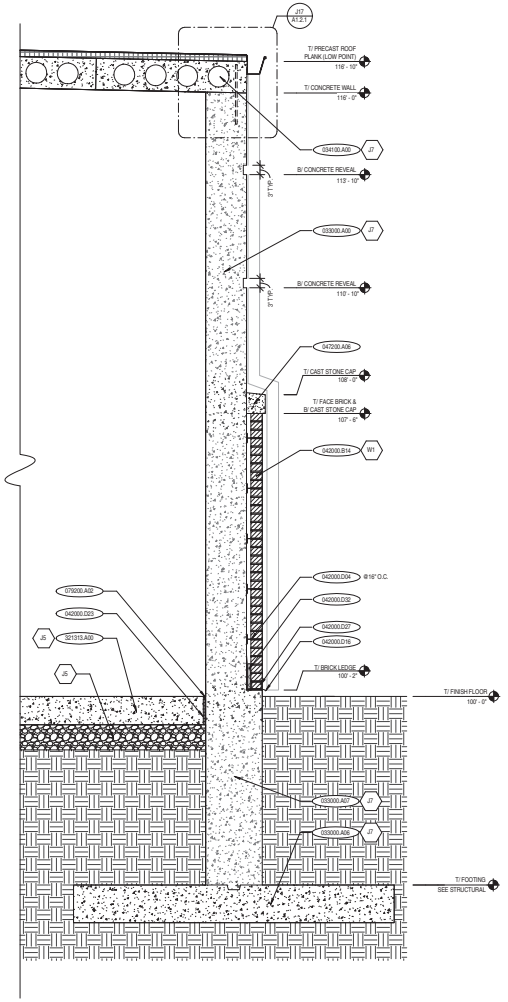
A6 WALL SECTION

3/4" = 1'-0"



A14 WALL SECTION

3/4" = 1'-0"



A21 NOTATIONS

NO.	DATE	DESCRIPTION
	01/09/18	ISSUED FOR BID / ISSUED FOR PERMIT

ISSUANCE

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	01/09/18
DRAWN	AC
CHECKED	JE
APPROVED	JD

PROTOTYPICAL DESIGN FIRM
I.A.# 184.003300

PUBLIC WORKS YARD EXPANSION PROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60712

WALL SECTIONS AND EXTERIOR WALL DETAILS

SHEET NO.

A3.3.0

JOB NO. 14-1815.01

© 2017 FGM Architects Inc.

1/9/2018 12:32:44 AM
C:\Revit Temp\2016\14-1815o_Lincolnwood PW Yard_Central_2016_annabella.alanab.rvt
Copyright 2017 FGM ARCHITECTS, INC.

Return to VB Agenda

1 GENERAL NOTES

1.1 CODES AND DESIGN CRITERIA
a BUILDING CODE: INTERNATIONAL BUILDING CODE 2009
b RISK CATEGORY II
1.2 DESIGN LOADS
a ROOF LOAD
DEAD LOAD 15 PSF SUPERIMPOSED
LIVE LOAD 30 PSF
b SNOW LOAD
GROUND SNOW LOAD Pg 25 PSF
IMPORTANCE FACTOR Is 1.0
SNOW EXPOSURE FACTOR Ce 1.0
SNOW THERMAL FACTOR Ct 1.0
FLAT ROOF SNOW LOAD Pf 17.5 PSF
c WIND LOADS (ASCE7-05)
MWFRS
BASIC WIND SPEED 90 mph (3 SEC GUST)
RISK CATEGORY II
WIND EXPOSURE B
INTERNAL PRESSURE COEFFICIENT +/- .18
COMPONENTS & CLADDING
TRIBUTARY AREA 20 SQUARE FEET
ROOF ZONE 1 +6/-15 PSF
ROOF ZONE 2 +6/-22 PSF
ROOF ZONE 3 +6/-31 PSF
WALLS (TRIBUTARY AREA > 20 SQUARE FEET)
WALL ZONE 4 +14/-16 PSF
WALL ZONE 5 +14/-19 PSF
d SEISMIC LOADS
RISK CATEGORY II
SEISMIC IMPORTANCE FACTOR 1.0
Ss 0.16 Sds 0.17
S1 0.06 Sd1 0.09
SITE CLASS D
SEISMIC DESIGN CATEGORY B
BASIC SEISMIC FORCE RESISTING SYSTEM:
RESPONSE MODIFICATION FACTOR R 4.0
SEISMIC RESPONSE COEFFICIENT Cs 0.043
DESIGN BASE SHEAR (LRFD) 37k
ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE
1.3 GENERAL REQUIREMENTS
a DEFINITIONS
PRIMARY STRUCTURAL SYSTEM IS THE COMPLETED COMBINATION OF ELEMENTS WHICH SERVE TO SUPPORT THE BUILDING'S SELF-WEIGHT, THE APPLICABLE LIVE LOAD, AND THE ENVIRONMENTAL LOADS SUCH AS WIND, SEISMIC.
PRE-ENGINEERED STRUCTURAL ELEMENTS ARE STRUCTURAL ELEMENTS WHICH ARE SPECIFIED BY THE OWNER AS DESIGN DELEGATED ITEMS TO BE THE DESIGN RESPONSIBILITY OF A SPECIALTY STRUCTURAL ENGINEER (SSE)
SPECIAL INSPECTION IS INSPECTION PERFORMED BY A QUALIFIED PERSON, APPROVED BY THE BUILDING OFFICIAL, FOR THE TYPES OF WORK REQUIRING INSPECTION PER THE GOVERNING CODES AND CONTRACT DOCUMENTS.
SPECIALTY STRUCTURAL ENGINEER (SSE) IS A LICENSED PROFESSIONAL/STRUCTURAL ENGINEER, NOT THE SER, WHO IS RESPONSIBLE FOR SEALING PLANS AND DESIGNS FOR PRE-ENGINEERED STRUCTURAL ELEMENTS WHICH ARE NECESSARY FOR THE STRUCTURE TO BE COMPLETED AND THE OWNER HAS DESIGNATED AS DESIGN DELEGATED ITEMS.
STRUCTURAL ENGINEER OF RECORD (SER) IS THE STRUCTURAL ENGINEER WHO IS LEGALLY ELIGIBLE TO SEAL THE STRUCTURAL DOCUMENTS FOR A BUILDING PROJECT. THE SER IS RESPONSIBLE FOR THE DESIGN OF THE PRIMARY STRUCTURAL SYSTEM.
DESIGNATED REPRESENTATIVE FOR CONSTRUCTION (DRC - I.E., CONSTRUCTION MANAGER OR GENERAL CONTRACTOR) IS RESPONSIBLE FOR THE OVERALL CONSTRUCTION OF THE PROJECT INCLUDING PROJECT SCHEDULING, JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION.
SPECIAL INSPECTOR: A QUALIFIED PERSON EMPLOYED OR RETAINED BY AN APPROVED AGENCY AND APPROVED BY THE BUILDING OFFICIAL AS HAVING THE COMPETENCE NECESSARY TO INSPECT A PARTICULAR TYPE OF CONSTRUCTION REQUIRING SPECIAL INSPECTION.
b THE STRUCTURAL DRAWINGS ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE GEOTECHNICAL REPORT.
c THE DRC SHALL COORDINATE WITH THE MECHANICAL AND ARCHITECTURAL DRAWINGS AND WITH THE MECHANICAL CONTRACTOR, THE LOCATION OF ALL MECHANICAL EQUIPMENT.
d THE DRC SHALL NOTIFY THE ARCHITECT IF THE WEIGHTS OF MECHANICAL UNITS ETC. ARE DIFFERENT FROM THE WEIGHTS POSTED ON THE DESIGN DRAWINGS. DISCREPANCIES SHALL BE RESOLVED BEFORE PROCEEDING WITH CONSTRUCTION.
e THE DRC SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY OF ANY DISCREPANCIES TO AVOID THE POSSIBILITY OF UNNECESSARY FUTURE PROBLEMS AND POSSIBLE FIELD ORDERS. FAILURE TO DO SO WILL PUT THE FULL RESPONSIBILITY OF CORRECTION ON THE DRC.
f THE DRC SHALL COORDINATE THE WORK OF ALL TRADES AND MAKE NECESSARY INVESTIGATIONS AND FIELD MEASUREMENTS.
g DO NOT SCALE DRAWINGS.
h THE SER HAS NO SUPERVISORY RESPONSIBILITY, HAS NO CONTROL OF OR RESPONSIBILITY FOR THE MEANS, METHODS, TECHNIQUES, PROCEDURES OR SEQUENCE OF CONSTRUCTION, HAS NO RESPONSIBILITY FOR THE FAILURE OF ANY CONTRACTOR TO PERFORM THE WORK IN ACCORDANCE WITH THE DESIGN DOCUMENTS AND NO RESPONSIBILITY TO DEVISE, IMPLEMENT OR ENFORCE ANY SAFETY PRECAUTIONS OR PROGRAMS FOR THE PROJECT
1.4 SLEEVES, ANCHORAGES, OPENINGS, ETC.
a IN GENERAL, STRUCTURAL DRAWINGS DO NOT SHOW EQUIPMENT PADS, DRAINS, HOLES, ANCHORAGES, INSERTS AND SLEEVES FOR ITEMS PASSING THROUGH OR ATTACHED TO CONCRETE OR FRAMING. REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND PROJECT SPECIFICATIONS. ADJUST EQUIPMENT PADS AND SUB FRAMING TO FIT EQUIPMENT FURNISHED.
b PROVIDE SUB FRAMING FOR EQUIPMENT SUPPORTED ON OR SUSPENDED FROM THE STRUCTURE.
1.5 STRUCTURAL STABILITY AND CONSTRUCTION
a INDIVIDUAL STRUCTURAL COMPONENTS ARE DESIGNED TO SUPPORT LOADS IN THEIR FINAL ERECTED POSITION AS PART OF THE TOTAL COMPLETED STRUCTURE.
b DRC TO PROVIDE TEMPORARY GUYING AND BRACING AS REQUIRED UNTIL ALL CONSTRUCTION AFFECTING LATERAL STABILITY IS COMPLETED.
c DRC SHALL BE SOLELY RESPONSIBLE FOR STABILITY OF STRUCTURE, ITS PARTS BY USE OF GUYING, BRACING, SHORING, BARRICADES, SAFETY RAILINGS AND DEVICES DURING THE ENTIRE PERIOD OF CONSTRUCTION.
d DRC SHALL BE SOLELY RESPONSIBLE FOR ALL JOB SITE SAFETY AND MEANS AND METHOD OF CONSTRUCTION.
1.6 SHOP DRAWINGS AND TEST REPORTS
a DRC SHALL CHECK ALL SHOP DRAWINGS BEFORE SUBMITTAL TO SER FOR REVIEW.
b DRC SHALL PREPARE A SHOP DRAWING SUBMITTAL SCHEDULE WITH A MINIMUM OF TWO WEEKS INCLUDED FOR THE SER'S REVIEW OF EACH SUBMITTAL LISTED BELOW.
c REVIEW BY SER WILL BE FOR CONFORMANCE TO GENERAL LAYOUT AND DESIGN INTENT ONLY.
d CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ACCURACY OF DIMENSIONS, FABRICATION, FIT UP OF PARTS AND BILLS OF MATERIALS.
e CONTRACTOR SHALL COORDINATE WORK OF VARIOUS TRADES AND MAKE NECESSARY FIELD MEASUREMENTS.
f THE CONTRACT SPECIFICATIONS PROVIDE A COMPLETE LISTING OF SUBMITTALS. THE FOLLOWING IS A SUMMARY OF THE REQUIRED SUBMITTALS:
CONCRETE
CONCRETE MIX DESIGNS WITH ASSOCIATED HISTORICAL TEST DATA
REINFORCING STEEL PLACEMENT DRAWINGS PER ACI 315
PRECAST CONCRETE
PLACEMENT DRAWINGS
PRECAST WALL PANELS
SHOP PLACEMENT DRAWINGS
ENGINEERING ANALYSIS SIGNED AND SEALED BY LICENSED SSE.
MISCELLANEOUS METALS (STAIRS/HANDRAIL/GUARD RAIL/LADDERS ETC.)
STRUCTURAL STEEL SHOP DRAWINGS
DESIGN CALCULATIONS SIGNED AND SEALED BY LICENSED SSE.

UNDERPINNING/SHORING PROCEDURES AND SEALED CALCULATIONS
1.7 DEFERRED SUBMITTALS - OWNER SPECIFIED DESIGN DELEGATED COMPONENTS
a CERTAIN COMPONENTS OF THE COMPLETED CONSTRUCTION ARE DESIGN DELEGATED TO THE MANUFACTURER OF THE COMPONENT. THE MANUFACTURER'S SSE SHALL BE RESPONSIBLE FOR THE DESIGN OF THE COMPONENT. THE FOLLOWING ARE DESIGNATED TO BE DESIGN DELEGATED COMPONENTS ON THIS PROJECT:
b PRECAST CONCRETE PLAN AND PRECAST WALL SYSTEMS
c MISCELLANEOUS METALS (STAIRS, GUARDRAIL, HANDRAIL, LADDERS, ETC.)
d TEMPORARY SHORING AND BRACING
e TEMPORARY EARTH RETENTION SYSTEMS
f OTHER WORK AS LISTED ON DRAWINGS, SPECIFICATIONS AND CUSTOMARY INDUSTRY STANDARDS. WHERE DELEGATION OF DESIGN IS SPECIFIED,
g THE MANUFACTURER SHALL BE RESPONSIBLE FOR RETAINING THE SERVICES OF A LICENSED SPECIALTY STRUCTURAL ENGINEER (SSE) IN THE STATE HAVING JURISDICTION. THE SSE SHALL DESIGN AND DETAIL COMPONENTS TO MEET GOVERNING BUILDING CODES, STANDARDS AND THE SPECIFIED PERFORMANCE CRITERIA. SIGNED AND SEALED CALCULATIONS SHALL BE SUBMITTED FOR RECORD. THE DESIGN DELEGATED SSE SHALL BE SOLELY RESPONSIBLE FOR THE DESIGN OF THE COMPONENT.
h SSE SUBMITTALS WILL BE REVIEWED BY THE SER FOR LOADING CRITERIA AND GENERAL CONFORMANCE TO THE PRIMARY STRUCTURAL SYSTEM.
1.8 DEMOLITION
a THE ARCHITECTURAL/STRUCTURAL DEMOLITION DRAWINGS INDICATE THE GENERAL AREAS OF DEMOLITION. THE DRC SHALL VERIFY IN THE FIELD ALL ITEMS TO BE REMOVED TO MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
b THE DRC SHALL CAREFULLY REMOVE ONLY THE EXISTING ITEMS IDENTIFIED ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
c IN NO CASE SHALL THE REMOVAL OF ANY PORTION OF THE EXISTING STRUCTURE BE PERFORMED IN SUCH A WAY AS TO AFFECT THE STRUCTURAL INTEGRITY OF THE REMAINING PORTION OF THE BUILDING.
d THE CONTRACTOR SHALL NOTIFY THE SER IMMEDIATELY OF ANY STRUCTURAL ITEMS WHICH NEED TO BE DEMOLISHED BUT ARE NOT CLEARLY IDENTIFIED ON THE STRUCTURAL OR ARCHITECTURAL DRAWINGS.
e THE CONTRACTOR SHALL MINIMIZE THE EXTENT OF THE DEMOLITION TO THE EXISTING STRUCTURE TO ONLY THAT REQUIRED TO INSTALL THE NEW BUILDING MODIFICATIONS.

1.9 STRUCTURAL TESTS AND INSPECTIONS (IBC 2009)

a AN INDEPENDENT APPROVED AGENCY SHALL PROVIDE SPECIAL INSPECTIONS AND TESTS DURING CONSTRUCTION IN ACCORDANCE WITH CHAPTER 17 OF IBC 2009.
b THE APPROVED AGENCY'S SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.
c THE APPROVED AGENCY SHALL KEEP RECORDS OF ALL SPECIAL INSPECTIONS AND TESTS AND SUBMIT REPORTS TO THE BUILDING OFFICIAL AND THE SER.
d ALL DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE DRC FOR CORRECTION. IF UNCORRECTED, THE APPROVED AGENCY SHALL NOTIFY THE BUILDING OFFICIAL AND THE SER.
e REFER TO IBC 2009 1703 FOR SUBMITTALS TO THE BUILDING OFFICIAL IN ADDITION TO THE REPORTS.
f THE APPROVED AGENCY SHALL SUBMIT A FINAL REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS IN CONFORMANCE WITH THE APPROVED CONTRACT DOCUMENTS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THIS CODE.
g QUALITY CONTROL SHALL BE THE RESPONSIBILITY OF THE FABRICATOR/ERECTOR IN ACCORDANCE WITH AISC360-05 CHAPTER N.
h JOB SITE VISITS BY THE SER DO NOT CONSTITUTE AN OFFICIAL SPECIAL INSPECTION.

STATEMENT OF SPECIAL INSPECTIONS:

a REFER TO THE REFERENCED DOCUMENTS (IBC 2009 CHAPTER 17, AISC 360-05 CHAPTER N, ACI530-08 CHAPTER 3,) FOR ADDITIONAL DESCRIPTIONS OF REQUIREMENTS.
b THE FOLLOWING LIST OF MATERIALS AND WORK REQUIRE SPECIAL INSPECTIONS (P) PERIODIC; (C) CONTINUOUS

CONCRETE CONSTRUCTION (IBC 2009 TABLE 1704.4)

1 REINFORCEMENT PLACEMENT (P)
2 REINFORCING BAR WELDING (P)
3 ANCHORS CAST IN CONCRETE (P)
4 POST INSTALLED ANCHORS
a ADHESIVE (C)
b MECHANICAL (P)
5 VERIFY USE OF REQUIRED MIX (P)
6 STRENGTH, SLUMP, AIR, TEMPERATURE TEST OF CONCRETE PRIOR TO PLACEMENT (C)
7 CONCRETE PLACEMENT (C)
8 VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES (P)
9 INSPECT ERECTION OF PRECAST MEMBERS INCLUDING CONNECTIONS (P)
10 INSPECT FORMWORK (P)

SOILS (IBC 2009 TABLE 1704.7)

1 VERIFY BEARING CAPACITY BELOW SHALLOW FOUNDATIONS (P)
2 VERIFY EXCAVATIONS EXTEND TO PROPER DEPTH AND REACHED PROPER MATERIAL (P).
3 PERFORM CLASSIFICATION AND TESTING OF COMPACTED MATERIAL (P)
4 VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED MATERIAL (C).
5 PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PROPERLY PREPARED (P)
6 VERIFY SOIL IMPROVEMENT HAS BEEN PERFORMED PROPERLY (P)

2 FOUNDATIONS

2.1 GENERAL
a THE FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT PREPARED BY SMC #22869 AND DATED 8/25/16. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL GEOTECHNICAL REQUIREMENTS.
b SUMMARY OF GEOTECHNICAL DESIGN VALUES
SHALLOW STRIP AND SPREAD FOOTINGS
ALLOWABLE SOIL BEARING PRESSURE 500 PSF
DEPTH OF FOOTING BELOW FINISHED GRADE 5'-6".
BACKFILL - GRANULAR
DENSITY - 115 PCF
ACTIVE LATERAL PRESSURE (UN RESTRAINED) - 45 PSF/FT
AT REST LATERAL PRESSURE (RESTRAINED) - 60 PSF/FT
SURCHARGE COEFFICIENT (UN-RESTRAINED) - .3 X LOAD(PSF) - PSF
SURCHARGE COEFFICIENT (RESTRAINED) - .5 X LOAD (PSF) - PSF
COEFFICIENT OF SLIDING RESISTANCE - .4
c CONTRACTOR SHALL LOCATE ALL EXISTING BELOW GRADE UTILITIES AND INTERFERENCES PRIOR TO START OF WORK. NOTIFY THE SER OF ANY INTERFERENCE.
d REFER TO CIVIL DRAWINGS FOR ALL SOIL IMPROVEMENT, SITE PREPARATION, GRADING, EROSION PROTECTION AND SITE UTILITY WORK.
e STRIP TOPSOIL AND FILL MATERIALS OVER THE ENTIRE BUILDING AREA.
f PROTECT ALL EXPOSED SURFACES IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
g MAINTAIN ALL EXCAVATIONS FREE OF WATER CONTINUOUSLY
h DRC SHALL BE RESPONSIBLE FOR ALL SHORING/BRACING OF EXCAVATIONS.
i ALL SHALLOW FOUNDATIONS SHALL BE LOCATED SHALL BEAR AT SUFFICIENT DEPTH TO PROVIDE ADEQUATE FROST COVERAGE PER LOCAL REQUIREMENTS.
j A GEOTECHNICAL TESTING SERVICE SHALL CONFIRM ALL SOIL BEARING CAPACITIES PRIOR TO PLACEMENT OF CONCRETE FOUNDATIONS.
k DO NOT BACKFILL BEHIND BASEMENT WALLS UNTIL ALL FRAMING IS COMPLETED UNLESS TEMPORARY BRACING/SHORING IS PROVIDED BY THE DRC'S SSE.
l ALL STRUCTURAL FILL AND GENERAL FILL SHALL MEET THE REQUIREMENTS OF THE GEOTECHNICAL REPORT INCLUDING MATERIAL SPECIFICATION AND COMPACTION REQUIREMENTS.
m ALL BASEMENT AND RETAINING WALLS ARE DESIGNED CONSIDERING A GRANULAR BACKFILL MATERIAL.
2.2 SHORING AND UNDERPINNING FOUNDATIONS
a SHORING AND UNDERPINNING ARE DESIGNATED AS A DELEGATED DESIGN ITEMS AND SHALL BE DESIGNED BY THE DRC'S GEOTECHNICAL ENGINEER AND LICENSED PROFESSIONAL ENGINEER.
b ALL SHORING OF EXISTING FOUNDATIONS REQUIRED BY THE DRC DUE TO EXCAVATIONS NEAR EXISTING STRUCTURES AND UNDERPINNING OF EXISTING FOUNDATIONS AS INDICATED ON THE DESIGN DRAWINGS IS A DELEGATED DESIGN ITEM AND SHALL BE DESIGNED BY THE DRC'S GEOTECHNICAL AND LICENSED STRUCTURAL ENGINEERS.
c ANY UNDERPINNING PROCEDURES INDICATED ON THE DESIGN DRAWINGS ARE CONCEPTUAL ONLY AND SHALL BE CONFIRMED BY THE DRC'S GEOTECHNICAL AND STRUCTURAL ENGINEERS.
d SUBMIT SHORING AND UNDERPINNING PROCEDURES AND SEALED CALCULATIONS TO THE ARCHITECT FOR RECORD PURPOSES ONLY.

3 CONCRETE CONSTRUCTION

3.1 CAST IN PLACE CONCRETE
a GENERAL REQUIREMENTS
ALL WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301-10, SPECIFICATION FOR STRUCTURAL CONCRETE, EXCEPT AS MODIFIED BY THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
SUBMITTALS
CONCRETE MIXES WITH HISTORICAL TEST DATA.
MATERIAL CERTIFICATES: CEMENT, AGGREGATES, ADMIXTURES, REINFORCING STEEL
REINFORCING STEEL PLACEMENT DRAWINGS
b PRODUCTS
REINFORCING BARS: ASTM A615 GRADE 60
REINFORCING BARS WELDABLE: ASTM A706 GRADE 60
PLAIN WIRE FABRIC: ASTM A185
PORTLAND CEMENT: ASTM C150 TYPE I OR II.
AGGREGATES: ASTM C33
WATER: POTABLE ASTM C94
ADMIXTURES
AIR ENTRAINING ASTM C260
CHEMICAL ADMIXTURES ASTM C 494
AIR CONTENT FOR CONCRETE EXPOSED TO WEATHER: 4 TO 7%.
SLUMP: 4"
CONCRETE STRENGTH: F'C 4,000 PSI AT 28 DAYS
MIXING PER ASTM C94
CURING COMPOUNDS: ASTM C309 OR C1315
c EXECUTION
CONCRETE COVER
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
CONCRETE EXPOSED TO EARTH OR WEATHER 2"
CONCRETE NOT EXPOSED TO WEATHER 1-1/2"
ALL FOOTINGS, WALL FOOTINGS, GRADE BEAMS AND PILE/CAISSON CAPS SHALL BE FORMED UNLESS NOTED.
LAP SPLICE LENGTHS PER ACI 318 CHAPTERS 12 USING A CLASS B SPLICE. ALL WELDED WIRE FABRIC SHALL BE LAPPED ONE GRID MINIMUM
LOCATE JOINTS AS SHOWN ON PLANS; WHERE NOT SHOWN, CONTROL OR CONSTRUCTION JOINTS SHALL BE PLACED IN ACCORDANCE WITH ACI RECOMMENDATIONS I.E., A MAXIMUM PANEL SIZE (IN FEET) EQUAL TO APPROXIMATELY THREE TIMES THE THICKNESS OF THE SLAB (IN INCHES) IN BOTH DIRECTIONS.
HOOK ENDS OF BARS INTERRUPTED BY OPENINGS.
HOOK TOP BARS AT ALL CONCRETE EDGES, AT ALL WALL AND SLAB OPENINGS,
PROVIDE 2-#5 BARS X OPENING WIDTH PLUS 4 FEET (2 FEET EACH SIDE) EACH FACE, UNLESS SHOWN OTHERWISE.
PLACEMENT OF CONCRETE IN COLD WEATHER SHALL COMPLY WITH ACI306
PLACEMENT OF CONCRETE IN HOT WEATHER SHALL COMPLY WITH ACI305
TOLERANCES SHALL MEET ACI 117, ACI 301 AND ACI 318 AS A MINIMUM.
3.2 PRECAST CONCRETE SLABS
a PRECAST CONCRETE SLABS ARE DESIGNATED AS A DELEGATED DESIGN ITEM AND SHALL BE DESIGNED BY THE CONTRACTOR'S LICENSED PROFESSIONAL ENGINEER.
b PRECAST SLABS AS INDICATED ON PLANS, SECTIONS AND DETAILS ARE DESIGNATED AND SHOWN AS THOSE MANUFACTURED BY THE FLEXICORE COMPANY. APPROVED ALTERNATE SECTIONS OF EQUAL STRENGTH AND THICKNESS BY OTHER MANUFACTURERS MAY BE SUBSTITUTED.
c ALL EMBEDDED PLATES SHALL BE ASTM A36.
d COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 5000 PSI MINIMUM AT 28 DAYS; RELEASE STRENGTH AT PRESTRESS SHALL NOT BE LESS THAN 3500 PSI.
e FABRICATE PRECAST CONCRETE SLABS IN ACCORDANCE WITH PCI MNL-116.
f COORDINATE WITH OTHER TRADES FOR INSTALLATION OF ITEMS TO BE CAST-IN HOLLOW CORE SLABS.
g REFER TO CONCRETE NOTES FOR TOPPING REQUIREMENTS. TOPPING SHALL HAVE CONTROL JOINTS SAW CUT A MAXIMUM OF 20'-0" ON CENTER AND AT ALL LOCATIONS OF CRACK POTENTIAL SUCH AS RE-ENTRANT CORNERS, VERY THIN WIDTHS, ETC. TOPPINGS DESIGNATED TO BE STRUCTURAL SHALL HAVE CONTROL JOINTS LOCATED PARALLEL WITH THE SPAN OF THE PLANK ONLY AND THEY SHALL BE LOCATED A MAXIMUM OF 15' ON CENTER AND LOCATED OVER A GROUT JOINT.
3.3 PRECAST CONCRETE WALL PANELS
a PRECAST CONCRETE BEARING WALL PANELS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONSTRUCTION. PANELS SHALL BE DESIGNED FOR THE GRAVITY, WIND AND SEISMIC LOADS INDICATED.
b PANELS SHALL BE DESIGNED AND DETAILED AS "INTERMEDIATE REINFORCED PRECAST SHEAR WALLS" AS DEFINED IN ASCE 7-05.
c PANEL SHALL ALSO BE DESIGNED FOR ALL LOCAL WIND, SEISMIC AND ERECTION LOADS PER THE GOVERNING BUILDING CODE. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
d MANUFACTURER SHALL PROVIDE TEMPORARY BRACING AND DEAD MEN AS REQUIRED TO STABILIZE PANELS PRIOR TO THE INSTALLATION OF THE ROOF FRAMING.
e PROVIDE STAINLESS STEEL DOVE TAIL ANCHORS @ 16" O.C. IN AREAS WITH BRICK VENEER.
f WALL PANELS SHALL MEET THE REQUIREMENTS OF PCI-MNL-116 (117 FOR ARCHITECTURALLY EXPOSED PANELS.

A1 **STRUCTURAL GENERAL NOTES**
NONE

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

ISSUANCE

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

PROFESSIONAL SEAL
EXPIRATION DATE:

DATE 01/08/18
DRAWN PW
CHECKED KA
APPROVED KA
PROFESSIONAL DESIGN FIRM IL # 184-000350

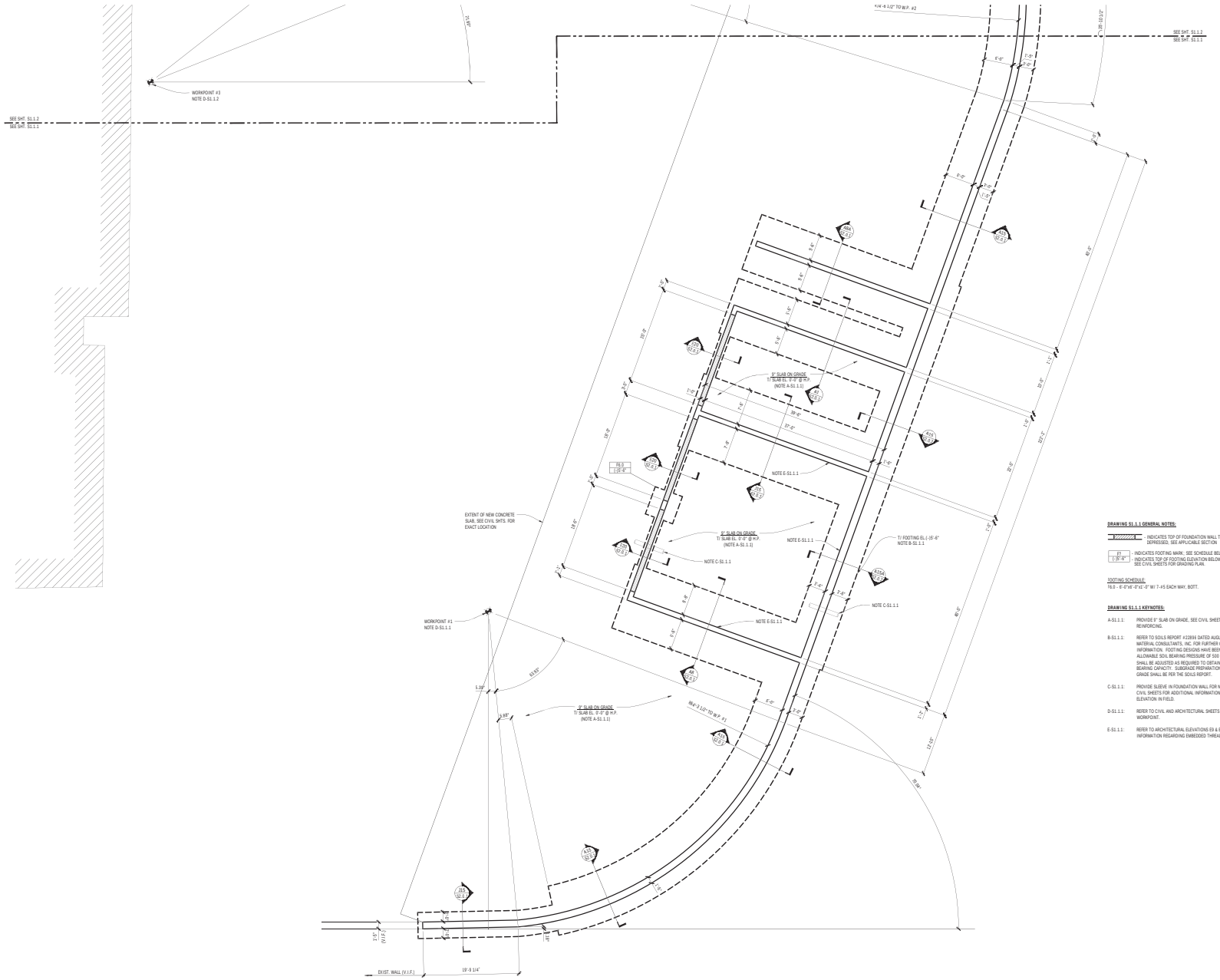
PUBLIC WORKS YARD EXPANSION PRROJECT
VILLAGE OF LINCOLNWOOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60172

STRUCTURAL GENERAL NOTES

SHEET NO.
S0.1.0

JOB NO. 14-1815.01
© 2017 FGM Architects Inc.

Copyright 2017 FGM ARCHITECTS, INC.
2/6/2017 5:12:09 PM



DRAWING S1.1.1 GENERAL NOTES:

- INDICATES TOP OF FOUNDATION WALL TO BE DEPRESSED, SEE APPLICABLE SECTION
- F3 (-)5'-6" — INDICATES FOOTING MARK, SEE SCHEDULE BELOW
- INDICATES TOP OF FOOTING ELEVATION BELOW FINISH GRADE. SEE CIVIL SHEETS FOR GRADING PLAN.

FOOTING SCHEDULE:
F6.0 - 6'-0"x6'-0"x1'-0" W/ 7-#5 EACH WAY, BOTT.

DRAWING S1.1.1 KEYNOTES:

A-S1.1.1: PROVIDE 5" SLAB ON GRADE, SEE CIVIL SHEETS FOR EXTEND AND REINFORCING.

B-S1.1.1: REFER TO SOILS REPORT #22894 DATED AUGUST 25, 2016 BY SOIL AND MATERIAL CONSULTANTS, INC. FOR FURTHER GEOTECHNICAL INFORMATION. FOOTING DESIGNS HAVE BEEN BASED ON A MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 500 psf. FOOTING ELEVATIONS SHALL BE ADJUSTED AS REQUIRED TO OBTAIN A MINIMUM 500 psf BEARING CAPACITY. SUBGRADE PREPARATION BELOW THE SLAB ON GRADE SHALL BE PER THE SOILS REPORT.

C-S1.1.1: PROVIDE SLEEVE IN FOUNDATION WALL FOR NEW SEWER LINE. REFER TO CIVIL SHEETS FOR ADDITIONAL INFORMATION. VERIFY LOCATION AND ELEVATION IN FIELD.

D-S1.1.1: REFER TO CIVIL AND ARCHITECTURAL SHEETS FOR LOCATION OF WORKPOINT.

E-S1.1.1: REFER TO ARCHITECTURAL ELEVATIONS E9 & E15 FOR FURTHER INFORMATION REGARDING EMBEDDED THREADED ROD IN WALLS.

A1 PARTIAL FOUNDATION PLAN - SOUTH
1/16" = 1'-0"

ISSUANCE

NO.	DATE	DESCRIPTION
	01/09/18	ISSUED FOR PERMIT / ISSUED FOR BID

FGM ARCHITECTS
OAK BROOK
CHICAGO
O'FALLON

PROFESSIONAL SEAL
EXPIRATION DATE:

DATE	01/09/18
DRAWN	PW
CHECKED	KA
APPROVED	KA

PROFESSIONAL DESIGN FIRM
L.A.R.#184.000589

PUBLIC WORKS YARD EXPANSION PRROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60172

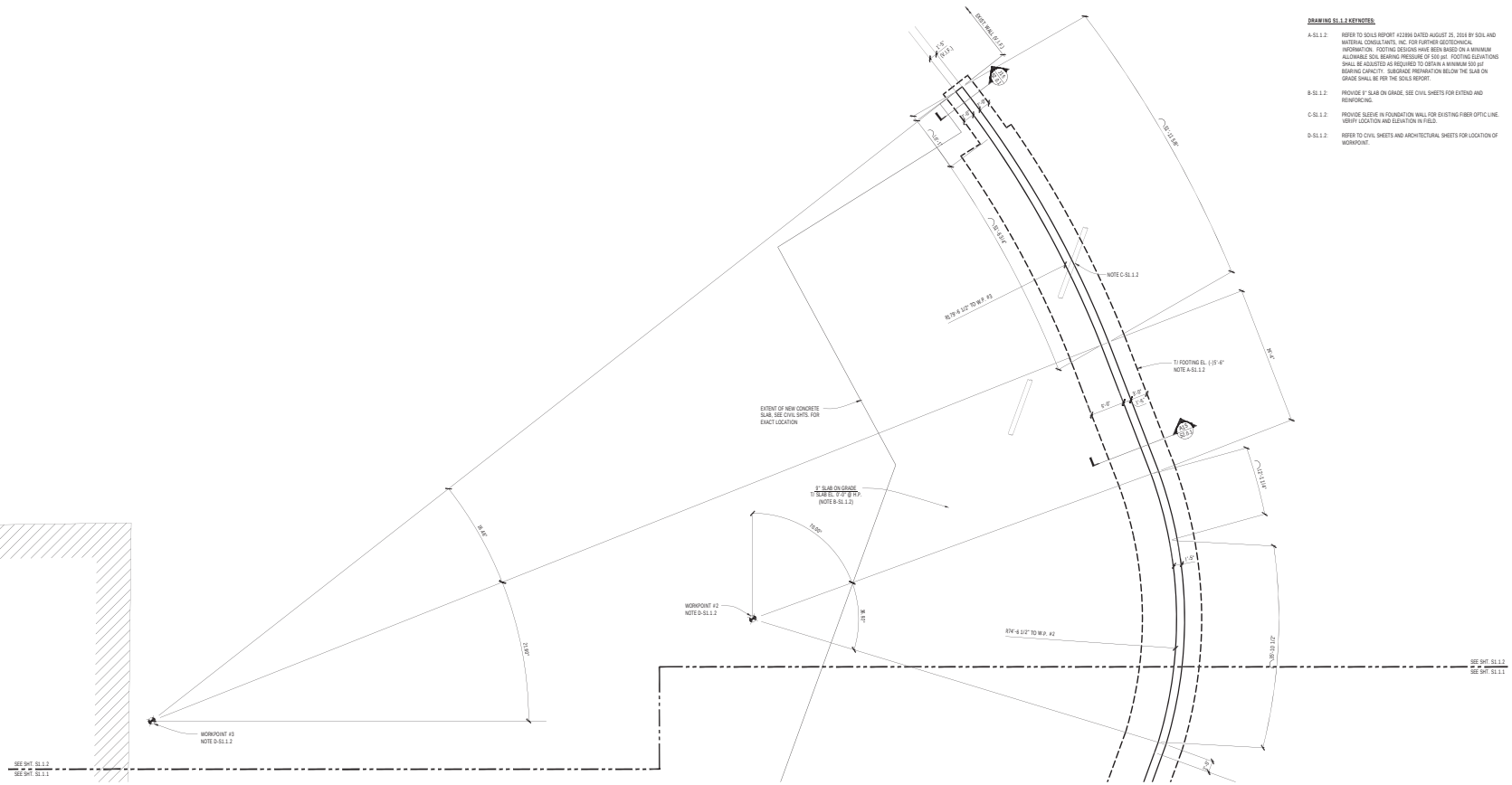
PARTIAL FOUNDATION PLAN - SOUTH

SHEET NO.
S1.1.1

JOB NO. 14-1815.01

© 2017 FGM Architects Inc.

2/6/2017 5:12:09 PM
Copyright (c) 2017 FGM ARCHITECTS, INC.



DRAWING S1.1.2 KEYNOTES:

A-S1.1.2: REFER TO SOILS REPORT #22896 DATED AUGUST 25, 2016 BY SOIL AND MATERIAL CONSULTANTS, INC. FOR FURTHER GEOTECHNICAL INFORMATION. FOOTING DESIGNS HAVE BEEN BASED ON A MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 500 psf. FOOTING ELEVATIONS SHALL BE ADJUSTED AS REQUIRED TO OBTAIN A MINIMUM 500 psf BEARING CAPACITY. SUBGRADE PREPARATION BELOW THE SLAB ON GRADE SHALL BE PER THE SOILS REPORT.

B-S1.1.2: PROVIDE 5" SLAB ON GRADE, SEE CIVIL SHEETS FOR EXTEND AND REINFORCING.

C-S1.1.2: PROVIDE SLEEVE IN FOUNDATION WALL FOR EXISTING FIBER OPTIC LINE. VERIFY LOCATION AND ELEVATION IN FIELD.

D-S1.1.2: REFER TO CIVIL SHEETS AND ARCHITECTURAL SHEETS FOR LOCATION OF WORKPOINT.

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

ISSUANCE

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	01/08/18	
DRAWN	PW	
CHECKED	KA	
APPROVED	KA	

PROFESSIONAL DESIGN FIRM: L # 184.005293

PUBLIC WORKS YARD EXPANSION PRROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60172

PARTIAL FOUNDATION PLAN - NORTH

SHEET NO.
S1.1.2

JOB NO. 14-1815.01

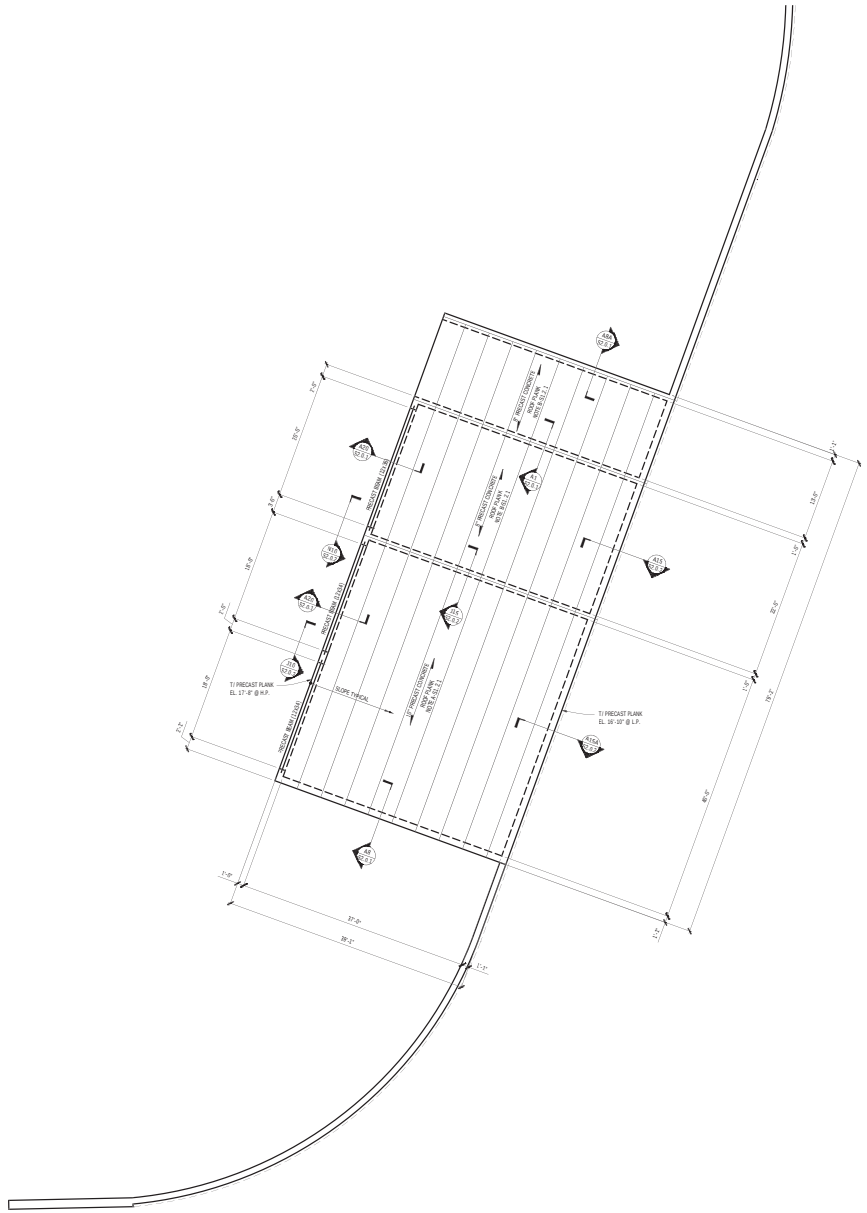
© 2017 FGM Architects Inc.

A1 PARTIAL FOUNDATION PLAN - NORTH
1/16" = 1'-0"

2/6/2017 5:12:09 PM

Copyright 2017 FGM ARCHITECTS, INC.

Return to VB Agenda



DRAWING S1.2.1 KEYNOTES:

A-S1.2.1: PROVIDE 10" PRECAST CONCRETE PLANKS TO SUPPORT A 30 psf LIVE LOAD AND A SUPERIMPOSED DEAD LOAD OF 15 psf. PRECASTER SHALL PROVIDE SADDLES FOR ALL OPENINGS AS REQUIRED.

B-S1.2.1: PROVIDE 8" PRECAST CONCRETE PLANKS TO SUPPORT A 30 psf LIVE LOAD AND A SUPERIMPOSED DEAD LOAD OF 15 psf. PRECASTER SHALL PROVIDE SADDLES FOR ALL OPENINGS AS REQUIRED.

N

NO.	DATE	ISSUANCE DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE 01/08/18
DRAWN PW
CHECKED KA
APPROVED KA

PROFESSIONAL DESIGN FIRM: L.A.R.# 001519

PUBLIC WORKS YARD EXPANSION PRROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60172

PARTIAL ROOF PLAN - SOUTH

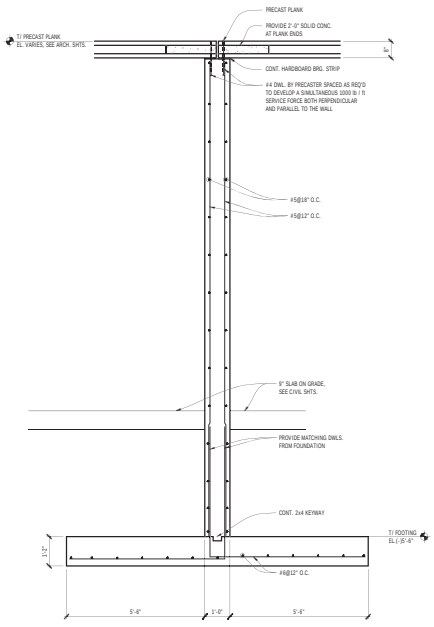
SHEET NO.
S1.2.1

JOB NO. 14-1815.01

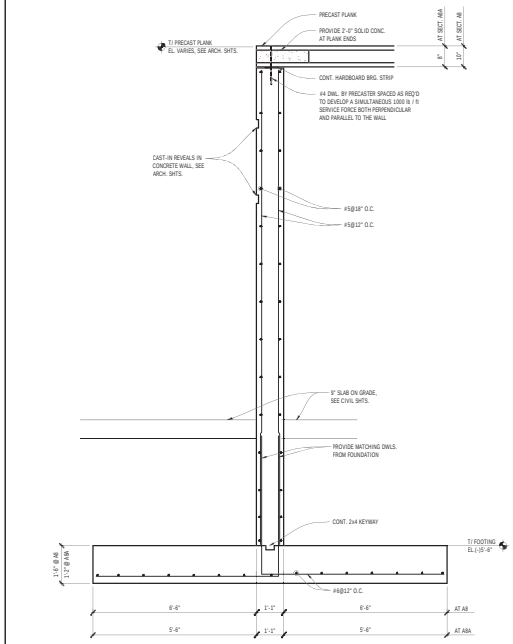
© 2017 FGM Architects Inc.

A1 **PARTIAL ROOF PLAN - SOUTH**
1/16" = 1'-0"

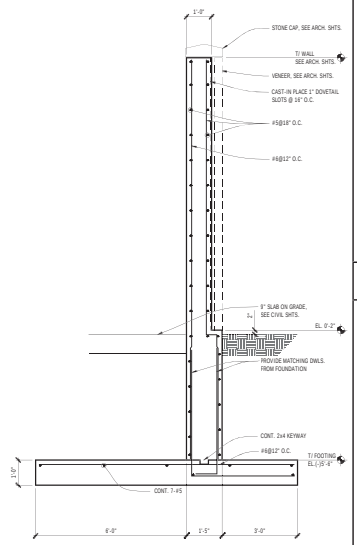
2/6/2017 5:12:09 PM
Copyright (c)2017 FGM ARCHITECTS, INC.



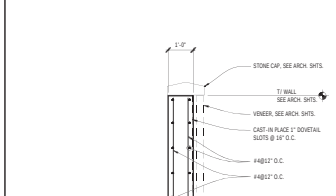
A1 WALL SECTION
1/2" = 1'-0"



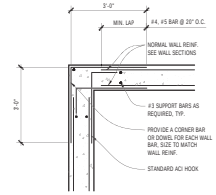
A8 / A8A WALL SECTION
1/2" = 1'-0"



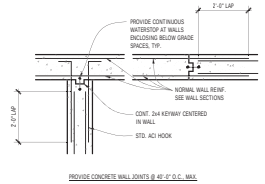
A15 WALL SECTION
1/2" = 1'-0"



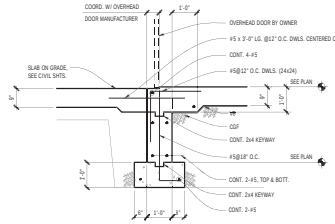
J15 WALL SECTION
1/2" = 1'-0"



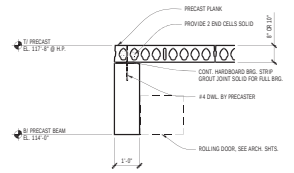
N20 TYPICAL WALL CORNER
NONE



J20 TYPICAL WALL JOINTS
NONE



E20 WALL SECTION
1/2" = 1'-0"



A20 WALL SECTION
1/2" = 1'-0"

NO.	DATE	DESCRIPTION
	01/08/18	ISSUED FOR PERMIT / ISSUED FOR BID

ISSUANCE

FGM ARCHITECTS
CHICAGO · OAK BROOK · O'FALLON

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	01/08/18
DRAWN	PW
CHECKED	KA
APPROVED	KA

PROFESSIONAL DESIGN FIRM: IL # 184-005950

PUBLIC WORKS YARD EXPANSION PRROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60172

DETAILS AND SECTIONS

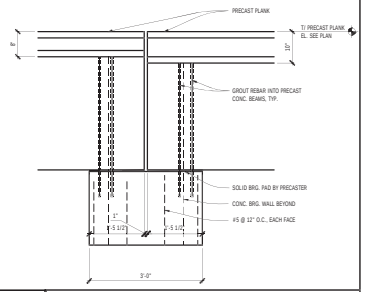
SHEET NO.
S2.0.1

JOB NO. 14-1815.01

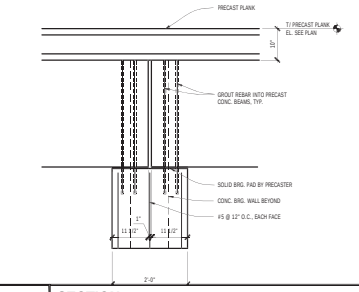
© 2017 FGM Architects Inc.

2/6/2017 5:12:09 PM
Copyright 208 FGM ARCHITECTS, INC.

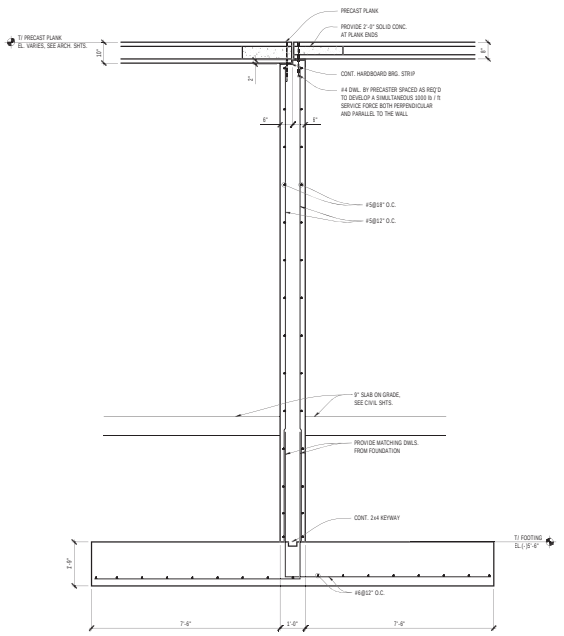
Return to VB Agenda



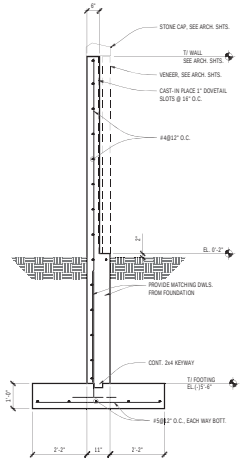
N10 SECTION
3/4" = 1'-0"



J10 SECTION
3/4" = 1'-0"

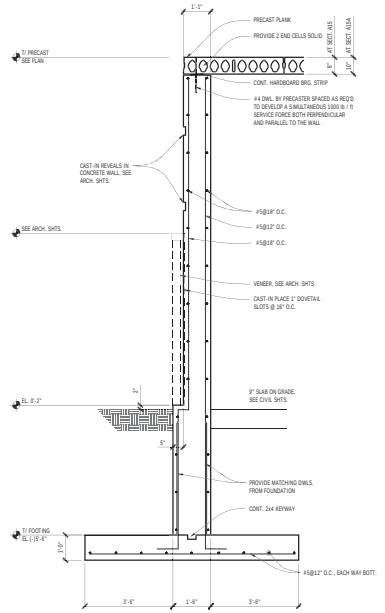


J15 WALL SECTION
1/2" = 1'-0"



NOTE:
SEE ARCH. SHEETS FOR WALL LOCATIONS AND EXTENTS

A10 TYPICAL NORTH WATER TOWER SITE SCREEN WALL SECTION
1/2" = 1'-0"



A15 / A15A WALL SECTION
1/2" = 1'-0"

NO.	DATE	DESCRIPTION
	01/08/19	ISSUED FOR PERMIT / ISSUED FOR BID

ISSUANCE

FGM ARCHITECTS
OAK BROOK
CHICAGO
O'FALLON

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	01/08/19
DRAWN	PW
CHECKED	KA
APPROVED	KA

PROFESSIONAL DESIGN FIRM: L.A.R.A-005150

PUBLIC WORKS YARD EXPANSION PRROJECT
VILLAGE OF LINCOLNWOOD
7001 North Lawndale Avenue
Lincolnwood, IL 60172

DETAILS AND SECTIONS

SHEET NO.
S2.0.2

JOB NO. 14-1815.01

© 2017 FGM Architects Inc.

2/6/2017 5:12:09 PM
Copyright (c) 2008 FGM ARCHITECTS, INC.

ATTACHMENT D

Except for such work as may be required to properly maintain lights and barricades, no work will be permitted on Sundays, legal holidays, Passover, Rosh Hashanah, Yom Kippur, Hanukkah, and on weekdays between 7:00 p.m. and 7:00 a.m. On Saturdays, no work shall begin before 9:00 a.m. or proceed after 5:00 p.m. without specific permission of the Engineer (Village of Lincolnwood).

Return to VB Agenda

APPENDIX 1

PREVAILING WAGE RESOLUTION

VILLAGE OF LINCOLNWOOD

RESOLUTION NO.R2017-1979

A RESOLUTION DETERMINING THE PREVAILING RATE OF WAGES IN THE VILLAGE OF LINCOLNWOOD

WHEREAS, the State of Illinois has enacted the "Prevailing Wage Act," 820 ILCS 130/0.01 *et seq.* ***("Act");*** and

WHEREAS, the Act requires that the Village investigate and ascertain the prevailing rate of wages as defined in the Act for laborers, mechanics, and other workers in the locality of Cook County employed in performing construction of public works for the Village; and

WHEREAS, the Village President and Board of Trustees have determined that it will serve and be in the best interest of the Village to adopt this Resolution;

NOW, THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LINCOLNWOOD, COOK COUNTY, ILLINOIS, as follows:

SECTION 1. RECITALS. The facts and statements contained in the preamble to this Resolution are found to be true and correct and are hereby adopted as part of this Resolution.

SECTION 2. ASCERTAINMENT AND APPLICATION OF PREVAILING WAGES. To the extent and as required by the Act, the general prevailing rate of wages in Cook County for laborers, mechanics, and other workers engaged in construction of public works coming under the jurisdiction of the Village is hereby ascertained to be the same as the prevailing rate of wages for construction work in the Cook County area as determined by the Department of Labor of the State of Illinois as of July 2015, a copy of that determination being attached hereto and incorporated herein by reference as **Exhibit A.** As required by the Act, any and all revisions of the prevailing rate of wages by the Department of Labor of the State of Illinois will supersede the Department's July 2015 determination and apply to any and all public works construction undertaken by the Village.

SECTION 3. CONTRACTORS' RESPONSIBILITY. Each contractor or subcontractor engaged in construction of public works for the Village to which the general prevailing rate of hourly wages are required by the Act to be paid must submit to the Village a certified payroll on a monthly basis, in accordance with Section 5 of the Act. The certified payroll must consist of a complete copy of those records required to be made and kept by the Act. The certified payroll must be accompanied by a statement signed by the contractor or subcontractor that

certifies that:
(A) such records are true and accurate; (B) the hourly rate paid is not less than the general prevailing rate of hourly wages required by the Act; and (C) the contractor or subcontractor is aware that filing a certified payroll that he or she knows to be false is a Class A misdemeanor. A general contractor may rely on the certification of a lower tier subcontractor, provided that the general contractor does not knowingly rely upon a subcontractor's false certification. Upon seven business days' notice, the contractor and each subcontractor must make available for inspection the records required to be made and kept by the Act: (i) to the Village and its officers and agents, and to the Director of the Illinois Department of Labor and his or her deputies and agents, and all other federal, State, or local law enforcement agencies and prosecutors; and (ii) at all reasonable hours at a location within the State.

SECTION 4. DEFINITIONS; APPLICABILITY. The definition of any term appearing in this Resolution that also is used in the Act is the same as in the Act. Nothing in this Resolution is to be construed to apply to the general prevailing rate of wages for Cook County, as ascertained pursuant to this Resolution, to any work or employment except public works construction of the Village conducted in Cook County to the extent required by the Act.

SECTION 5. POSTING AND INSPECTION. The Village Clerk is directed to publicly post or keep available for inspection by any interested party in the main office of the Village this determination or any revisions to the prevailing rate of wages for Cook County. A copy of this determination or of any revised determination of prevailing rate of wages for Cook County then in effect will be attached to all public works construction contract specifications.

SECTION 6. FILING. The Village Clerk is hereby directed to promptly file a certified copy of this Resolution with both the Secretary of State Index Division of the State of Illinois and the Department of Labor of the State of Illinois.

SECTION 7. PUBLICATION. The Village Clerk is hereby directed to cause a copy of this Resolution to be published in a newspaper of general circulation within the area within 30 days after its filing with the Secretary of State Index Division of the State of Illinois and the Department of Labor of the State of Illinois, which publication will constitute notice that this determination is effective and is the determination of the Village.

SECTION 8. MAILING UPON REQUEST. The Village Clerk is hereby directed to mail a copy of this determination to any employer, and to any association of employers, and to any person or association of employees who have filed their names and addresses, requesting copies of any determination stating the particular rates and the particular class of workers whose wages will be affected by such rates.

SECTION 9. EFFECTIVE DATE. This Resolution will be in full force and effect from and after its passage and approval as provided by law.

[SIGNATURE PAGE FOLLOWS]

Return to VB Agenda

PASSED this 2nd day of May, 2017.

AYES: Trustees Patel, Cope, Ikezoe-Halevi, Spino,

Nickell

NAYS: None

ABSENT: None

ABSTENTION: None

APPROVED by me this 2nd day of May, 2017.

ent

Barry Bass, President
Village of Lincolnwood, Cook County, Illinois

ATTESTED and FILED in my office this
2nd day of May, 2017

Beryl Herman, Village Clerk
Village of Lincolnwood, Cook County, Illinois

Return to VB Agenda

VILLAGE OF LINCOLNWOOD

CONTRACT FOR THE CONSTRUCTION OF

THE PUBLIC WORKS YARD EXPANSION PROJECT

BIDDER'S PROPOSAL

Full Name of Bidder Stuckey Construction Company, Inc ("***Bidder***")

Principal Office Address 2020 N. Lewis Ave, Waukegan, IL 60087

Local Office Address _____

Contact Person Edwin Stuckey Telephone 847-336-8575

TO: Village of Lincolnwood ("***Owner***")
6900 North Lincoln Avenue
Lincolnwood, Illinois 60712

Attention: Andrew Letson, Director of Public Works

Bidder warrants and represents that Bidder has carefully examined the Work Site described below and its environs and has reviewed and understood all documents included, referred to, or mentioned in this bound set of documents, including Addenda Nos. 1, which are securely stapled to the end of this Bidder's Proposal [if none, write "NONE"] ("*Bid Package*").

Bidder acknowledges and agrees that all terms capitalized in this Bidder's Proposal shall have the meaning given to them in the documents included in the Bid Package.

1. **Work Proposal**

A. Contract and Work. If this Bidder's Proposal is accepted, Bidder proposes, and agrees, that Bidder will contract with Owner, in the form of the Contract included in the Bid Package: (1) to provide, perform and complete at the site or sites described in the Bid Package ("***Work Site***") and in the manner described and specified in the Bid Package all necessary work, labor, services, transportation, equipment, materials, apparatus, machinery, tools, fuels, gas, electric, water, waste disposal, information, data and other means and items necessary for the Public Works Yard Expansion Project as described in detail in the Specifications; (2) to procure and furnish all permits, licenses and other governmental approvals and authorizations necessary in connection therewith except as otherwise expressly provided in Attachment A to the Contract

included in the Bid Package; (3) to procure and furnish all Bonds and all certificates and policies of insurance specified in the Bid Package; (4) to pay all applicable federal, state and local taxes; (5) to do all other things required of Contractor by the Contract; and (6) to provide, perform and complete all of the foregoing in a proper and workmanlike manner and in full compliance with, and as required by or pursuant to, the Contract; all of which is herein referred to as the "Work."

B. Manner and Time of Performance. If this Bidder's Proposal is accepted, Bidder proposes, and agrees, that the Bidder will perform the Work in the manner and time prescribed in the Bid Package and according to the requirements of Owner pursuant thereto.

C. General. If this Bidder's Proposal is accepted, Bidder proposes, and agrees, that Bidder will do all other things required of Bidder or Contractor, as the case may be, by the Bid Package.

2. **Contract Price Proposal**

If this Bidder's Proposal is accepted, Bidder will, except as otherwise provided in Section 2.1 of the Contract, take in full payment for all Work and other matters set forth under Section 1 above, including overhead and profit; taxes, contributions, and premiums; and compensation to all subcontractors and suppliers, the compensation set forth on the following "Schedule of Prices" ("***Price Proposal***"), which Schedule of Prices Bidder understands and agrees will be made a part of the Contract:

SCHEDULE OF PRICES

A. LUMP SUM CONTRACT

For providing, performing, and completing all Work, the total Contract Price of:

ONE MILLION, FIVE HUNDRED TWENTY-THREE THOUSAND Dollars and NO Cents
(in writing) (in writing)

$ 1,523,000. Dollars and 00 Cents
(in figures) (in figures)

UNIT PRICE ITEM

ITEM	UOM	ESTIMATED QTY	UNIT PRICE	EXTENSION
EARTH EXCAVATION	CUBIC YARD	285	$36.00	$10,260.00
NON-SPECIAL WASTE DISPOSAL	CUBIC YARD	142	$95.00	$13,490.00

B. BASIS FOR DETERMINING PRICES

It is expressly understood and agreed that:

1. Owner is not subject to state or local sales, use and excise taxes and no such taxes are included in this Schedule of Prices;

2. All other applicable federal, state, and local taxes of every kind and nature applicable to the Work as well as all taxes, contributions, and premiums for unemployment insurance, old age or retirement benefits, pensions, annuities, or other similar benefits are included in this Schedule of Prices; and

3. All costs, royalties, and fees arising from the use on, or the incorporation into, the Work of patented equipment, materials, supplies, tools, appliances, devices, processes, or inventions are included in this Schedule of Prices.

All claim or right to claim any additional compensation by reason of the payment of any such tax, contribution, or premium or any such cost, royalty or fee is hereby waived and released.

3. **Contract Time Proposal**

If this Bidder's Proposal is accepted, Bidder will commence the Work not later than the "***Commencement Date***" set forth in Attachment A to the Contract and will perform the Work diligently and continuously and will complete the Work not later than the ***"Completion Date"*** set forth in Attachment A to the Contract.

4. **Firm Proposal**

All prices and other terms stated in this Bidder's Proposal are firm and shall not be subject to withdrawal, escalation, or change for a period of 60 days after the date on which any Bidder's Proposal is opened or such extended acceptance date for Bidder's Proposals as may be established pursuant to Sections 10 and 13 of the General Instructions to Bidders.

5. **Bidder Representations**

A. No Collusion. Bidder warrants and represents that the only persons, firms, or corporations interested in this Bidder's Proposal as principals are those named in Bidder's Sworn Acknowledgment attached hereto and that this Bidder's Proposal is made without collusion with any other person, firm or corporation.

B. Not Barred. Bidder warrants, represents and certifies that it is not barred by law from contracting with Owner or with any unit of state or local government.

C. Qualified. Bidder warrants and represents that it has the requisite experience, ability, capital, facilities, plant, organization and staff to enable Bidder to perform the Work successfully and promptly and to commence and complete the Work within the Contract Price and Contract Time Proposals set forth above. In support thereof, Bidder submits the attached Sworn Work History Statement. In the event Bidder is preliminarily deemed to be one of the most favorable to the interests of Owner, Bidder hereby agrees to furnish upon request, within two business days or such longer period as may be set forth in the request, such additional information as may be necessary to satisfy Owner that Bidder is adequately prepared to fulfill the Contract.

D. Owner's Reliance. Bidder acknowledges that Owner is relying on all warranties, representations and statements made by Bidder in this Bidder's Proposal.

6. **Surety and Insurance**

Bidder herewith tenders surety and insurance commitment letters as specified in Section 6 of the Invitation for Bidder's Proposals.

7. **Bid Security**

Bidder herewith tenders a Cashier's Check, Certified Check, or Bid Bond as specified in Section 6 of the Invitation for Bidder's Proposals for the sum of 3% dollars ("***Bid Security***").

8. **Owner's Remedies**

Bidder acknowledges and agrees that should Bidder fail to timely submit all additional information that is requested of it; or should Bidder, if Owner awards Bidder the Contract, fail to timely submit all the Bonds and all the certificates and policies of insurance required of it; or should Bidder, if Owner awards Bidder the Contract, fail to timely execute the Contract, Contractor's Certification and all other required documentation related to the Contract, it will be difficult and impracticable to ascertain and determine the amount of damage that Owner will sustain by reason of any such failure and, for such reason, Owner shall have the right, at its option in the event of any such default by Bidder, to retain or recover as reasonably estimated liquidated damages, and not as a penalty, the entire amount of the Bid Security or to exercise any and all equitable remedies it may have against Bidder.

9. **Owner's Rights**

Bidder acknowledges and agrees that Owner reserves the right to reject any and all Bidder's Proposals, reserves the right to accept or reject any item of any Bidder's Proposal and reserves such other rights as are set forth in Section 13 of the General Instructions to Bidders.

Return to VB Agenda

10. **Bidder's Obligations**

In submitting this Bidder's Proposal, Bidder understands and agrees that it shall be bound by each and every term, condition or provision contained in the Bid Package, which are by this reference incorporated herein and made a part hereof.

DATED this 25th day of January, 2018.

ATTEST:

By: Edwin Stuckey

Title: Edwin Stuckey, President

Stuckey Construction Company, Inc

Bidder

By:

Title: Sonya Cartwright, Secretary

SEE GENERAL INSTRUCTIONS TO BIDDERS, SECTION 7, FOR SIGNATURE REQUIREMENTS

Return to VB Agenda

VILLAGE OF LINCOLNWOOD

CONTRACT FOR THE CONSTRUCTION OF

THE PUBLIC WORKS YARD EXPANSION PROJECT

BIDDER'S SWORN ACKNOWLEDGEMENT

Edwin Stuckey ("***Deponent***"), being first duly sworn on oath, deposes and states that the undersigned Bidder is organized as indicated below and that all statements herein made are made on behalf of such Bidder in support of its Bidder's Proposal for the above Contract and that Deponent is authorized to make them.

Deponent also deposes and states that Bidder has carefully prepared, reviewed and checked its Bidder's Proposal and that the statements contained in its Bidder's Proposal and in this Acknowledgement are true and correct.

COMPLETE APPLICABLE SECTION ONLY

1. **Corporation**

Bidder is a corporation that is organized and existing under the laws of the State of Wisconsin, that is qualified to do business in the State of Illinois, and that is operating under the legal name of Stuckey Construction Company, Inc.

The officers of the corporation are as follows:

TITLE	NAME	ADDRESS
President	Edwin Stuckey	2020 N. Lewis Ave, Waukegan, IL 60087
Vice President	Paul Stuckey	2020 N. Lewis Ave, Waukegan, IL 60087
Secretary	Sonya Cartwright	2020 N. Lewis Ave, Waukegan, IL 60087
Treasurer	John Carroll	2020 N. Lewis Ave, Waukegan, IL 60087

2. **Partnership**

Bidder is a partnership that is organized, existing and registered under the laws of the State of _____ pursuant to that certain Partnership Agreement dated as of __/__/__ that is qualified to do business in the State of Illinois, and that is operating under the legal name of _____.

The general partners of the partnership are as follows:

ACKNOWLEDGEMENT

NAME	**ADDRESS**
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

3. **Individual**

Bidder is an individual whose full name is _____ whose residence address is and whose business address is _____. If operating under a trade or assumed name said trade or assumed name is as follows: _____**[TRADE OR ASSUMED NAME]**.

4. **Joint Venture**

Bidder is a joint venture that is organized and existing under the laws of the State of _____ pursuant to that certain Joint Venture Agreement dated as of __/__/__ that is qualified to do business in the State of Illinois, and that is operating under the legal name of _____.

The signatories to the aforesaid Joint Venture Agreement are as follows:

Return to VB Agenda

ACKNOWLEDGEMENT

NAME (and ENTITY TYPE) **ADDRESS**

_____(___) _____

_____(___) _____

_____(___) _____

[For each signatory, indicate type of entity (Corporation = "C"; Partnership = "P"; and Individual = "I") and provide, on separate sheets, the information required in Paragraph 1, 2, or 3 above, as applicable]

DATED this 25th day of January, 2018.

ATTEST:

Stuckey Construction Company, Inc
Bidder

By: _____

Title: Edwin Stuckey, President

By: _____

Title: Sonya Cartwright, Secretary

Subscribed and Sworn to
Before me this 25 day
of January, 2018

_____
Notary Public

My Commission Expires: 8/20/20.

"OFFICIAL SEAL"
Michael L. Hirvela
Notary Public, State of Illinois
My Commission Expires 08-20-2020

[SEAL]

SEE GENERAL INSTRUCTIONS TO BIDDERS, SECTION 7, FOR SIGNATURE REQUIREMENTS

Return to VB Agenda

VILLAGE OF LINCOLNWOOD

CONTRACT FOR THE CONSTRUCTION OF

THE PUBLIC WORKS YARD EXPANSION PROJECT

BIDDER'S SWORN WORK HISTORY STATEMENT (Only required of new Bidders)

Edwin Stuckey

("***Deponent***"), being first duly sworn on oath, deposes and states that all statements made in this Sworn Work History Statement are made on behalf of the undersigned Bidder in support of its Bidder's Proposal for the above Contract and that Deponent is authorized to make them.

Deponent also deposes and states that Bidder has carefully prepared, reviewed and checked this Sworn Work History Statement and that the statements contained in this Sworn Work History Statement are true and correct.

IF NECESSARY FOR FULL DISCLOSURE, ADD SEPARATE SHEETS

JOINT VENTURES MUST SUBMIT SEPARATE SWORN WORK HISTORY STATEMENTS FOR THE JOINT VENTURE AND FOR EACH SIGNATORY TO THE JOINT VENTURE AGREEMENT

1. **Nature of Business**

State the nature of Bidder's business: General Contractor

2. **Composition of Work**

During the past three years, Bidder's work has consisted of:

0 % Federal	75 % As Contractor	20 % Bidder's Forces
95 % Other Public	25 % As Subcontractor	60 % Subcontractors
5 % Private		20 % Materials

3. **Years in Business**

State the number of years that Bidder, under its current name and organization, has been continuously engaged in the aforesaid business: 22 years

WORK HISTORY STATEMENT

4. **Predecessor Organizations**

If Bidder has been in business under its current name and organization for less than five years, list any predecessor organizations:

NAME	ADDRESS	YEARS

5. **Business Licenses**

List all business licenses currently held by Bidder:

ISSUING AGENCY	TYPE	NUMBER	EXPIRATION
Illinois Business Authorization	Certificate of Registration	2734-2778	06/30/2022

6. **Related Experience**

List three projects most comparable to the Work completed by Bidder, or its predecessors, in the past five years:

	PROJECT ONE	PROJECT TWO	PROJECT THREE
Owner Name	Lincolnshire/Prairie School District 103	Northbrook Park District	Community High School District #128
Owner Address	Gilbane Building Company	Corporate Construction Services	STR Partners
Reference	Zack Wotherspoon	Namette Powers	Sandra Moon
Telephone Number	773-695-3500	630-271-0500	312-242-4167
Type of Work	Concrete	Pool	Football Field/ Parking Lot

Return to VB Agenda

WORK HISTORY STATEMENT

	PROJECT ONE	PROJECT TWO	PROJECT THREE
Contractor (If Bidder was) (Subcontractor)			
Amount of Contract	$1,247,000.00	$807,000.00	$1,621,000.00
Date Completed	August 2017	June 2017	January 2016

DATED this 25th day of January, 2018.

ATTEST:

Stuckey Construction Company, Inc
Bidder

By: Edwin Stuckey

Title: Edwin Stuckey, President

By:

Title: Sonya Cartwright, Secretary

Subscribed and Sworn to
Before me this 25 day
of January, 2 018

My Commission Expires: 8/20/20

"OFFICIAL SEAL"
Michael L. Hirvela
Notary Public, State of Illinois
My Commission Expires 08-20-2020

[SEAL]

Notary Public

SEE GENERAL INSTRUCTIONS TO BIDDERS, SECTION 7, FOR SIGNATURE REQUIREMENTS

Return to VB Agenda

See Attached Bid Bond

BID BOND

KNOW ALL MEN BY THESE PRESENTS: that

_____,
(Here insert full name and address of Bidder)

as Principal, hereinafter called Bidder, and

_____,
(Here insert full name and address of Surety)

as Surety, a corporation organized and existing under the laws of the State of _____, hereinafter called Surety, are held and firmly bound unto Village of _____, as Obligee, hereinafter called Owner, in the full and just sum of _____ Dollars ($_____), for the payment of which sum of money well and truly to be made, Bidder and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Bidder has submitted a Bidder's Proposal dated _____, to Owner entitled "_____" (the "Proposal"), the terms and conditions of which are by this reference incorporated herein as though fully set forth herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT if Bidder shall timely submit all additional information that is required of it and, if the Proposal shall be accepted by Owner, Bidder shall (1) timely submit all the Bonds and all the certificates and policies of insurance required of it, (2) timely execute the Contract Agreement and the Contractor's Certification, in the form included in the bound Bid Package, and all other required documentation related to the Contract, and (3) in all other respects, perform the agreement created by Owner's acceptance of the Proposal, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that the obligations of Surety under this bond shall be in no way impaired or affected by any extension of the time within which Owner may accept the Proposal, and Surety does hereby waive notice of any such extension. Owner shall have no obligation to actually incur any expense or correct any deficient performance of Bidder in order to be entitled to receive the proceeds of this bond. No right of action shall accrue on this bond to or for the use of any person or corporation other than Owner or the heirs, executors, administrators or successors of Owner.

Signed and sealed this _____day of _____, 201__.

Attest/Witness:	PRINCIPAL
By: _____	By: _____
Title: _____	Title: _____
Attest/Witness:	SURETY
By: _____	By: _____
Title: _____	Title: _____

Return to VB Agenda

VALERI Agency, Inc.

INNOVATIVE INSURANCE SOLUTIONS

January 24, 2018

To: Village of Lincolnwood
Public Works Yard Expansion Project

Re: Stuckey Construction Co., Inc., Waukegan, IL

To Whom It May Concern:

As the Agent representing the Insurance Carrier, Cincinnati Insurance Company, we are confirming that the insurance requirements set forth in the Contract have been reviewed and we are prepared to provide required certificates and policies of insurance upon award of the Contract to Bidder Stuckey Contruction Co., Inc.

If you have any questions, or if we can be of any other assistance, please do not hesitate to give our office a call.

Sincerely,

VALERI AGENCY, INC.

Jeffrey A. Valeri
President

JAV/ss

6309 60th Street
Suite 200
Kenosha, Wisconsin 53144

Telephone: 262-654-0221
Fax: 262-654-7967
www.ValeriAgency.com

Return to VB Agenda

The Cincinnati Insurance Company ▪ The Cincinnati Indemnity Company
The Cincinnati Casualty Company ▪ The Cincinnati Specialty Underwriters Insurance Company
The Cincinnati Life Insurance Company

Dave McGraw
Surety Department

5490 Caddis Bend #301
Fitchburg, WI 53711
Phone 608-630-9798
Dave_mcgraw@cinfin.com

January 23, 2018

To: Village of Lincolnwood
Public Works Yard Expansion Project

Re: Stuckey Construction Company, Inc.
Waukegan, IL

To Whom It May Concern:

The Cincinnati Insurance Company has provided Surety Credit for this contractor since 2017. We are impressed with their professionalism, financial strength, and project management. Cincinnati Insurance is rated A+ by A.M. Best Company, and we have a Treasury Listing in excess of $400 million.

We are in a position to write bonds for this contractor in amounts of $25,000,000 single job, and $30,000,000 aggregate work program. These are not maximum limits, and the availability of surety credit is subject to normal underwriting requirements at the time of the request. We are prepared to provide Performance and Payment bonds (standard AIA 312 forms) on this project provided Stuckey has an acceptable low bid.

Any specific request for bonds will be underwritten on its own merits and any arrangements for bonds required by any contract is a matter between the contractor and the surety, and we assume no liability to third parties if for any reason we do not execute a requested bond.

Feel free to contact me at 608-630-9798 if I can be of further assistance.

Sincerely,

Dave McGraw

David T. McGraw
Sr. Regional Director

Mailing Address: Dave McGraw Cincinnati Insurance Companies, 5490 Caddis Bend #301, Fitchburg, WI 53711-7166

Return to VB Agenda

THE CINCINNATI INSURANCE COMPANY

Bid Bond

CONTRACTOR (Name, legal status and address):

STUCKEY CONSTRUCTION CO., INC.
2020 N. LEWIS AVENUE
WAUKEGAN, IL 60087

SURETY (Name, legal status and principal place of business):

THE CINCINNATI INSURANCE COMPANY
6200 S. GILMORE ROAD
FAIRFIELD, OHIO 45014-5141

OWNER (Name, legal status and address):
VILLAGE OF LINCOLNWOOD
6900 NORTH LINCOLN AVENUE
LINCOLNWOOD, IL 60712

BOND AMOUNT:
THREE PERCENT OF BASE BID (3%)

This document has important legal consequences, Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

PROJECT (Name, location or address, and Project number, if any):

Project Number, if any:

Village of Lincolnwood Public Works Yard Expansion Project

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond the sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirements shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 15TH day of January, 2018

(Witness)	(Principal) (Seal)
	Edwin Stuckey, President (Title)
(Witness)	THE CINCINNATI INSURANCE COMPANY (Surety) (Seal)
	(Title) Attorney-In-Fact

The Company executing this bond vouches that this document conforms to American Institute of Architects Document A310, 2010 Edition.
S-2000-AIA (11/10) PUBLIC

Return to VB Agenda

THE CINCINNATI INSURANCE COMPANY

Fairfield, Ohio

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That THE CINCINNATI INSURANCE COMPANY, a corporation organized under the laws of the State of Ohio, and having its principal office in the City of Fairfield, Ohio, does hereby constitute and appoint

Peter D. Valeri; Daniel J. Valeri; Jeffrey A. Valeri; Patricia A. Hill; Suzanne Simmons;
Irene O. Sekulic and/or Carly Tellez

of Kenosha, Wisconsin its true and lawful Attorney(s)-in-Fact to sign, execute, seal and deliver on its behalf as Surety, and as its act and deed, any and all bonds, policies, undertakings, or other like instruments, as follows:

Any such obligations in the United States, up to
Fifty Million and No/100 Dollars ($50,000,000.00).

This appointment is made under and by authority of the following resolution passed by the Board of Directors of said Company at a meeting held in the principal office of the Company, a quorum being present and voting, on the 6th day of December, 1958, which resolution is still in effect:

"RESOLVED, that the President or any Vice President be hereby authorized, and empowered to appoint Attorneys-in-Fact of the Company to execute any and all bonds, policies, undertakings, or other like instruments on behalf of the Corporation, and may authorize any officer or any such Attorney-in-Fact to affix the corporate seal; and may with or without cause modify or revoke any such appointment or authority. Any such writings so executed by such Attorneys-in-Fact shall be binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company."

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company at a meeting duly called and held on the 7th day of December, 1973.

"RESOLVED, that the signature of the President or a Vice President and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the Secretary or Assistant Secretary and the seal of the Company may be affixed by facsimile to any certificate of any such power and any such power of certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certified by certificate so executed and sealed shall, with respect to any bond or undertaking to which it is attached, continue to be valid and binding on the Company."

IN WITNESS WHEREOF, THE CINCINNATI INSURANCE COMPANY has caused these presents to be sealed with its corporate seal, duly attested by its Vice President this 8th day of March, 2017.

THE CINCINNATI INSURANCE COMPANY

Stephen A. Jutte
Vice President

STATE OF OHIO) ss:
COUNTY OF BUTLER)

On this 8th day of March, 2017, before me came the above-named Vice President of THE CINCINNATI INSURANCE COMPANY, to me personally known to be the officer described herein, and acknowledged that the seal affixed to the preceding instrument is the corporate seal of said Company and the corporate seal and the signature of the officer were duly affixed and subscribed to said instrument by the authority and direction of said corporation.

Mark J. Huller
MARK J. HULLER, Attorney at Law
NOTARY PUBLIC - STATE OF OHIO
My commission has no expiration
date. Section 147.03 O.R.C.

I, the undersigned Secretary or Assistant Secretary of THE CINCINNATI INSURANCE COMPANY, hereby certify that the above is a true and correct copy of the Original Power of Attorney issued by said Company, and do hereby further certify that the said Power of Attorney is still in full force and effect.

GIVEN under my hand and seal of said Company at Fairfield, Ohio.
this 15th day of January, 2018

Steven D. Dan
Secretary

BN-1005 (3/17)

Return to VB Agenda

FGM ARCHITECTS

February 27, 2018

Mr. Andrew Letson
Director of Public Works
Village of Lincolnwood
7001 N. Lawndale Avenue
Lincolnwood, IL 60712
Email: aletson@lwd.org

Re: Village of Lincolnwood
Public Works Yard Expansion
FGM# 14-1815.01

Dear Mr. Letson:

Enclosed please find the Bid Tabulation for the above referenced Project. Bids were received on January 25, 2018 with seven bidders responding.

The apparent low bidder is Stuckey Construction Company, Inc. with a lump sum bid of **$1,523,000.00**. No alternates were included within the bid.

FGM Architects has reviewed the qualifications and references provided by Stuckey Construction and find that they are a responsible bidder and therefore see no reason not to recommend contract award.

Please let us know your decision at your earliest convenience. Upon your direction, FGM Architects will provide assistance for the issuance of the construction contract for signatures and Notice of Intent letter to the contractor to proceed with the project. It is further anticipated that a preconstruction kick-off meeting be scheduled by FGM Architects with the contractor and Public Works Department within the upcoming month to review project schedule.

If you have any questions or comments, please don't hesitate to call me.

Sincerely,

Annabella Orlando, AIA, LEED AP BD+C
Senior Associate

Cc: John Dzarnowski, johnd@fgmarchitects.com

1211 W. 22nd Street, Suite 700
Oak Brook, Illinois 60523-2109
630.574.8300 PHONE 630.574.9292 FAX
fgmarchitects.com

Return to VB Agenda

VILLAGE OF LINCOLNWOOD

ORDINANCE NO. 2018-_____

AN ORDINANCE WAIVING COMPETITIVE BIDDING AND APPROVING AN AGREEMENT WITH FGM ARCHITECTS, INC., OF CHICAGO, ILLINOIS, FOR THE PROVISION OF CONSTRUCTION ADMINISTRATION SERVICES FOR THE PUBLIC WORKS YARD EXPANSION PROJECT IN A TOTAL AMOUNT NOT TO EXCEED $79,000

ADOPTED BY THE
PRESIDENT AND BOARD OF TRUSTEES
OF THE VILLAGE OF LINCOLNWOOD
THIS ____ DAY OF _____, 2018.

Published in pamphlet form
by the authority of the
President and Board of Trustees
of the Village of Lincolnwood,
Cook County, Illinois this
_____ day of _____, 2018

_____
Village Clerk

AN ORDINANCE WAIVING COMPETITIVE BIDDING AND APPROVING AN AGREEMENT WITH FGM ARCHITECTS, INC., OF CHICAGO, ILLINOIS, FOR THE PROVISION OF CONSTRUCTION ADMINISTRATION SERVICES FOR THE PUBLIC WORKS YARD EXPANSION PROJECT IN A TOTAL AMOUNT NOT TO EXCEED $79,000

WHEREAS, the Village of Lincolnwood is a home rule municipal corporation in accordance with Article VII, Section 6(a) of the Constitution of the State of Illinois of 1970; and

WHEREAS, the Village is the record title owner of that certain property located at 7001 North Lawndale Avenue in the Village, which property is used as the Village Public Works facility (***"Public Works Property"***); and

WHEREAS, the eastern portion of the Public Works Property consists of an open-air material storage yard (***"Public Works Yard"***) that abuts the former Union Pacific right-of-way (***"UP Right-of-Way"***); and

WHEREAS, in 2008, the Village commenced formal proceedings to acquire the UP Right-of-Way, and in February 2014, the Village commenced formal negotiations with the Union Pacific Railroad Company for the acquisition of the UP Right-of-Way; and

WHEREAS, in anticipation of its acquisition of the UP Right-of-Way, on March 4, 2014, the Village President and Board of Trustees adopted Resolution No. R2014-1782, approving a contract with FGM Architects, Inc., of Chicago, Illinois (***"FGM"***), for the design of an expansion of the Public Works Yard into a portion of the UP Right-of-Way (***"Expansion Project"***); and

WHEREAS, the Village closed on the purchase of the UP Right-of-Way on April 18, 2016; and

WHEREAS, the Village now desires to implement and complete the Expansion Project; and

WHEREAS, in order to effectively and efficiently complete the Expansion Project, the Village has determined that it will serve and be in the best interest of the Village to retain a third-party firm for the provision of construction administration services for the implementation and completion of the Expansion Project (***"Construction Administration Services"***); and

WHEREAS, FGM has submitted a proposal to the Village for the provision of the Construction Administration Services, in an amount not to exceed $79,000; and

WHEREAS, having successfully completed the design of the Expansion Project, FGM is uniquely familiar with the Public Works Yard and with the Expansion Project; and

WHEREAS, the Village President and Board of Trustees have determined that FGM is uniquely qualified to provide the Construction Administration Services in an efficient and cost-effective manner, and that is appropriate and in the best interests of the Village for FGM to

provide the Construction Administration Services for the implementation and completion of the Expansion Project; and

WHEREAS, the Village now desires to enter into an agreement with FGM for the provision of the Construction Administration Services for the implementation and completion of the Expansion Project, in an amount not to exceed $79,000 (***"Agreement"***); and

WHEREAS, in order to enter into the Agreement with FGM, the President and Board of Trustees have determined that it is appropriate to waive competitive bidding for the Agreement and the provision of the Construction Administration Services by FGM, pursuant to Section 8-8-13 of the Municipal Code of Lincolnwood (***"Village Code"***); and

WHEREAS, the President and Board of Trustees has determined that it will serve and be in the best interests of the Village to enter into the Agreement with FGM;

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LINCOLNWOOD, COOK COUNTY, ILLINOIS, as follows:

SECTION 1. RECITALS. The facts and statements contained in the preamble to this Ordinance are found to be true and correct and are hereby adopted as part of this Ordinance.

SECTION 2. WAIVER OF COMPETITIVE BIDDING. The advertising and bidding requirements for the Agreement, and for the provision of the Construction Administration Services by FGM for the implementation and completion of the Expansion Project, are hereby waived in accordance with Section 8-8-13 of the Village Code and the home rule powers of the Village.

SECTION 3. APPROVAL OF AGREEMENT. The Agreement by and between the Village and FGM is hereby approved in substantially the form attached to this Ordinance as **Exhibit A** and in final form acceptable to the Village Manager and the Village Attorney.

SECTION 4. EXECUTION OF AGREEMENT. The Village President and the Village Clerk are hereby authorized and directed to execute and attest, on behalf of the Village, the Agreement upon receipt by the Village Clerk of at least one original copy of the Agreement executed by FGM; provided, however, that if the executed copy of the Agreement is not received by the Village Clerk within 30 days after the effective date of this Ordinance, then this authority to execute and attest will, at the option of the President and Board of Trustees, be null and void.

SECTION 5. SEVERABILITY. If any provision of this Ordinance or part thereof is held invalid by a court of competent jurisdiction, the remaining provisions of this Ordinance will remain in full force and effect, and are to be interpreted, applied, and enforced so as to achieve, as near as may be, the purpose and intent of this Ordinance to the greatest extent permitted by applicable law.

SECTION 6. EFFECTIVE DATE. This Ordinance will be in full force and effect from and after its passage, by a vote of two-thirds of the Board of Trustees, and approval and publication in the manner provided by law.

PASSED this _____ day of March, 2018.

AYES: _____

NAYS:_____

ABSENT:____

ABSTENTION:_____

APPROVED by me this _____ day of March, 2018.

_____
Barry I. Bass, President
Village of Lincolnwood, Cook County, Illinois

ATTESTED and FILED in my office this
_____ day of _____, 2018

_____
Beryl Herman, Village Clerk
Village of Lincolnwood, Cook County, Illinois

#55228866_v1

Return to VB Agenda

VILLAGE OF LINCOLNWOOD
PROFESSIONAL SERVICES AGREEMENT

This **PROFESSIONAL SERVICES AGREEMENT** (***"Agreement"***) is dated as of the _____ day of March, 2018, and is by and between the **VILLAGE OF LINCOLNWOOD**, an Illinois home rule municipal corporation (***"Village"***), and the Consultant identified in Section 1.A of this Agreement.

IN CONSIDERATION OF the recitals and the mutual covenants and agreements set forth in this Agreement, and pursuant to the Village's statutory and home rule powers, the parties agree as follows:

SECTION 1. CONSULTANT.

A. Engagement of Consultant. The Village desires to engage the Consultant identified below to perform and to provide all necessary professional consulting services to perform the work in connection with the project identified below:

Consultant Name (*"Consultant"*): **FGM Architects**

Address: **1211 West 22nd Street**
Suite 705
Oak Brook, IL 60523

Telephone No.: **630-368-8319**

Email: **johnd@fgmarchitects.com**

Project Name/Description:

Agreement Amount: **$79,000**

B. Project Description. Perform construction administration services for the expansion of the Public Works yard. Services include:

- Assist with the administration of the construction contract, including shop drawings and other submittal reviews
- Prepare agenda and attend pre-construction meeting
- Attend bi-weekly site meetings with the Village and contractor to answer questions relating to the design and ensure conformance with the construction documents
- Review payment request from the contractor
- Prepare a punch-list and follow up with completion of the identified deficiencies

as more fully described in the proposal attached to this Agreement as **Exhibit A** (***"Proposal"***).

C. Representations of Consultant. The Consultant represents that it is financially solvent, has the necessary financial resources, and is sufficiently experienced and competent to perform and complete the consulting services that are set forth in the Proposal (***"Services"***) in a manner consistent with the standards of professional practice by recognized consulting firms providing services of a similar nature.

SECTION 2. SCOPE OF SERVICES.

A. Retention of the Consultant. The Village retains the Consultant to perform, and the Consultant agrees to perform, the Services.

B. Services. The Consultant shall provide the Services pursuant to the terms and conditions of this Agreement.

C. Commencement; Time of Performance. The Consultant shall commence the Services immediately upon receipt of written notice from the Village that this Agreement has been fully executed by the Parties (***"Commencement Date"***). The Consultant shall diligently and continuously prosecute the Services until the completion of the Services or upon the termination of this Agreement by the Village, but in no event later than the date that is 210 days after the Commencement Date (***"Time of Performance"***). The Village may modify the Time of Performance at any time upon 15 days prior written notice to the Consultant. Delays caused by the Village, the Village's contractor, or other unforeseen events caused by a third party shall extend the Time of Performance in equal proportion to the delay caused by the Village, the Village's contractor, or other unforeseen events caused by a third party.

D. Reporting. The Consultant shall regularly report to the Village Administrator, or his designee, regarding the progress of the Services during the term of this Agreement.

SECTION 3. COMPENSATION AND METHOD OF PAYMENT.

A. Agreement Amount. The total amount paid by the Village for the Services pursuant to this Agreement shall not exceed the amount identified as the Agreement Amount in Section 1.A of this Agreement. No claim for additional compensation shall be valid unless made in accordance with Sections 3.D or 3.E of this Agreement.

B. Invoices and Payment. The Consultant shall submit invoices in an approved format to the Village for costs incurred by the Consultant in performing the Services. The amount billed in each invoice for the Services shall be based

solely upon the rates set forth in the Proposal. The Village shall pay to the Consultant the amount billed within 45 days after receiving such an invoice.

C. Records. The Consultant shall maintain records showing actual time devoted and costs incurred, and shall permit the Village to inspect and audit all data and records of the Consultant for work done pursuant to this Agreement. The records shall be made available to the Village at reasonable times during the term of this Agreement, and for one year after the termination of this Agreement.

D. Claim In Addition To Agreement Amount.

1. The Consultant shall provide written notice to the Village of any claim for additional compensation as a result of action taken by the Village, within 15 days after the occurrence of such action.

2. The Consultant acknowledges and agrees that: (a) the provision of written notice pursuant to Section 3.D.1 of this Agreement shall not be deemed or interpreted as entitling the Consultant to any additional compensation; and (b) any changes in the Agreement Amount shall be valid only upon written amendment pursuant to Section 8.A of this Agreement.

3. Regardless of the decision of the Village relative to a claim submitted by the Consultant, the Consultant shall proceed with all of the work required to complete the Services under this Agreement, as determined by the Village, without interruption.

E. Additional Services. The Consultant acknowledges and agrees that the Village shall not be liable for any costs incurred by the Consultant in connection with any services provided by the Consultant that are outside the scope of this Agreement (***"Additional Services"***), regardless of whether such Additional Services are requested or directed by the Village, except upon the prior written consent of the Village.

F. Taxes, Benefits, and Royalties. Each payment by the Village to the Consultant includes all applicable federal, state, and Village taxes of every kind and nature applicable to the Services, as well as all taxes, contributions, and premiums for unemployment insurance, old age or retirement benefits, pensions, annuities, or similar benefits, and all costs, royalties, and fees arising from the use on, or the incorporation into, the Services, of patented or copyrighted equipment, materials, supplies, tools, appliances, devices, processes, or inventions. All claims or rights to claim additional compensation by reason of the payment of any such tax, contribution, premium, cost, royalty, or fee are hereby waived and released by the Consultant.

G. Final Acceptance. The Services, or, if the Services are to be performed in separate phases, each phase of the Services, shall be considered complete on the

date of final written acceptance by the Village of the Services or each phase of the Services, as the case may be, which acceptance shall not be unreasonably withheld or delayed.

SECTION 4. PERSONNEL; SUBCONTRACTORS.

A. Key Project Personnel. The Key Project Personnel identified in the Proposal shall be primarily responsible for carrying out the Services on behalf of the Consultant. The Key Project Personnel shall not be changed without the Village's prior written approval.

B. Availability of Personnel. The Consultant shall provide all personnel necessary to complete the Services including, without limitation, any Key Project Personnel identified in this Agreement. The Consultant shall notify the Village as soon as practicable prior to terminating the employment of, reassigning, or receiving notice of the resignation of, any Key Project Personnel. The Consultant shall have no claim for damages and shall not bill the Village for additional time and materials charges as the result of any portion of the Services which must be duplicated or redone due to such termination or for any delay or extension of the Time of Performance as a result of any such termination, reassignment, or resignation.

C. Approval and Use of Subcontractors. The Consultant shall perform the Services with its own personnel and under the management, supervision, and control of its own organization unless otherwise approved in advance by the Village in writing. All subcontractors and subcontracts used by the Consultant shall be acceptable to, and approved in advance by, the Village. The Village's approval of any subcontractor or subcontract shall not relieve the Consultant of full responsibility and liability for the provision, performance, and completion of the Services as required by this Agreement. All Services performed under any subcontract shall be subject to all of the provisions of this Agreement in the same manner as if performed by employees of the Consultant. For purposes of this Agreement, the term "Consultant" shall be deemed also to refer to all subcontractors of the Consultant, and every subcontract shall include a provision binding the subcontractor to all provisions of this Agreement.

D. Removal of Personnel and Subcontractors. If any personnel or subcontractor fails to perform the Services in a manner satisfactory to the Village and consistent with commonly accepted professional practices, the Consultant shall immediately upon notice from the Village remove and replace such personnel or subcontractor. The Consultant shall have no claim for damages, for compensation in excess of the amount contained in this Agreement, or for a delay or extension of the Time of Performance as a result of any such removal or replacement.

SECTION 5. CONFIDENTIAL INFORMATION.

A. Confidential Information. The term ***"Confidential Information"*** shall mean information in the possession or under the control of the Village relating to the technical, business, or corporate affairs of the Village; Village property; user information, including, without limitation, any information pertaining to usage of the Village's computer system, including and without limitation, any information obtained from server logs or other records of electronic or machine readable form; and the existence of, and terms and conditions of, this Agreement. Village Confidential Information shall not include information that can be demonstrated: (1) to have been rightfully in the possession of the Consultant from a source other than the Village prior to the time of disclosure of such information to the Consultant pursuant to this Agreement (***"Time of Disclosure"***); (2) to have been in the public domain prior to the Time of Disclosure; (3) to have become part of the public domain after the Time of Disclosure by a publication or by any other means except an unauthorized act or omission or breach of this Agreement on the part of the Consultant or the Village; or (4) to have been supplied to the Consultant after the Time of Disclosure without restriction by a third party who is under no obligation to the Village to maintain such information in confidence.

B. No Disclosure of Confidential Information by the Consultant. The Consultant acknowledges that it shall, in performing the Services for the Village under this Agreement, have access, or be directly or indirectly exposed, to Confidential Information. The Consultant shall hold confidential all Confidential Information and shall not disclose or use such Confidential Information without the express prior written consent of the Village. The Consultant shall use reasonable measures at least as strict as those the Consultant uses to protect its own confidential information. Such measures shall include, without limitation, requiring employees and subcontractors of the Consultant to execute a non-disclosure agreement before obtaining access to Confidential Information.

SECTION 6. STANDARD OF SERVICES AND INDEMNIFICATION.

A. Representation and Certification of Services. The Consultant represents and certifies that the Services shall be performed in accordance with the standards of professional practice, care, and diligence practiced by recognized consulting firms in performing services of a similar nature in existence at the Time of Performance. The representations and certifications expressed shall be in addition to any other representations and certifications expressed in this Agreement, or expressed or implied by law, which are hereby reserved unto the Village.

B. Indemnification. The Consultant shall, and does hereby agree to, indemnify and save harmless the Village against all damages, liability, claims, losses, and expenses (including attorneys' fees) that may arise, or be alleged to have arisen, out of or in connection with the Consultant's performance of, or failure to

perform, the Services or any part thereof, or any failure to meet the representations and certifications set forth in Section 6.A of this Agreement.

C. Insurance. The Consultant shall provide, at its sole cost and expense, liability insurance in the aggregate amount of $1,000,000, which insurance shall include, without limitation, reasonable and customary protection for all activities associated with the Services. The insurance shall be for a minimum of $1,000,000 per occurrence for bodily injury and $1,000,000 per occurrence for property damage. The Consultant shall cause the Village to be named as an additional insured on the general liability insurance policy described in this Section 6.C. Not later than 10 days after the Commencement Date, the Consultant shall provide the Village with either: (a) a copy of the entire insurance policy; or (b) a Certificate of Insurance along with a letter from the broker issuing the insurance policy to the effect that the Certificate accurately reflects the contents of the insurance policy. The insurance coverages and limits set forth in this Section 6.C shall be deemed to be minimum coverages and limits, and shall not be construed in any way as a limitation on the Consultant's duty to carry adequate insurance or on the Consultant's liability for losses or damages under this Agreement.

D. No Personal Liability. No elected or appointed official or employee of the Village shall be personally liable, in law or in contract, to the Consultant as the result of the execution of this Agreement.

SECTION 7. CONSULTANT AGREEMENT GENERAL PROVISIONS.

A. Relationship of the Parties. The Consultant shall act as an independent contractor in providing and performing the Services. Nothing in, nor done pursuant to, this Agreement shall be construed: (1) to create the relationship of principal and agent, employer and employee, partners, or joint venturers between the Village and Consultant; or (2) to create any relationship between the Village and any subcontractor of the Consultant.

B. Conflict of Interest. The Consultant represents and certifies that, to the best of its knowledge: (1) no Village employee or agent is interested in the business of the Consultant or this Agreement; (2) as of the date of this Agreement, neither the Consultant nor any person employed or associated with the Consultant has any interest that would conflict in any manner or degree with the performance of the obligations under this Agreement; and (3) neither the Consultant nor any person employed by or associated with the Consultant shall at any time during the term of this Agreement obtain or acquire any interest that would conflict in any manner or degree with the performance of the obligations under this Agreement.

C. No Collusion. The Consultant represents and certifies that the Consultant is not barred from contracting with a unit of state or local government

as a result of: (1) a delinquency in the payment of any tax administered by the Illinois Department of Revenue, unless the Consultant is contesting, in accordance with the procedures established by the appropriate revenue act, its liability for the tax or the amount of the tax, as set forth in Section 11-42.1-1 *et seq.* of the Illinois Municipal Code, 65 ILCS 5/11-42.1-1 *et seq.*; or (2) a violation of either Section 33E-3 or Section 33E-4 of Article 33E of the Criminal Code of 1961, 720 ILCS 5/33E-1 *et seq*. The Consultant represents that the only persons, firms, or corporations interested in this Agreement as principals are those disclosed to the Village prior to the execution of this Agreement, and that this Agreement is made without collusion with any other person, firm, or corporation. If at any time it shall be found that the Consultant has, in procuring this Agreement, colluded with any other person, firm, or corporation, then the Consultant shall be liable to the Village for all loss or damage that the Village may suffer, and this Agreement shall, at the Village's option, be null and void.

D. Termination. Notwithstanding any other provision hereof, the Village may terminate this Agreement at any time upon 15 days written notice to the Consultant. In the event that this Agreement is so terminated, the Consultant shall be paid for Services actually performed and reimbursable expenses actually incurred, if any, prior to termination, not exceeding the value of the Services completed, which shall be determined on the basis of the rates set forth in the Proposal.

E. Compliance With Laws and Grants.

1. Compliance with Laws. The Consultant shall give all notices, pay all fees, and take all other action that may be necessary to ensure that the Services are provided, performed, and completed in accordance with all required governmental permits, licenses, or other approvals and authorizations that may be required in connection with providing, performing, and completing the Services, and with all applicable statutes, ordinances, rules, and regulations, including, without limitation: any applicable prevailing wage laws; the Fair Labor Standards Act; any statutes regarding qualification to do business; any statutes requiring preference to laborers of specified classes; any statutes prohibiting discrimination because of, or requiring affirmative action based on, race, creed, color, national origin, age, sex, or other prohibited classification, including, without limitation, the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 *et seq.*, and the Illinois Human Rights Act, 775 ILCS 5/1-101 *et seq*. The Consultant shall also comply with all conditions of any federal, state, or local grant received by the Village or the Consultant with respect to this Agreement or the Services. Further, the Consultant shall have a written sexual harassment policy in compliance with Section 2-105 of the Illinois Human Rights Act.

2. Liability for Noncompliance. The Consultant shall be solely liable for any fines or civil penalties that are imposed by any governmental or quasi-

governmental agency or body that may arise, or be alleged to have arisen, out of or in connection with the Consultant's, or any of its subcontractors, performance of, or failure to perform, the Services or any part thereof.

3. Required Provisions. Every provision of law required by law to be inserted into this Agreement shall be deemed to be inserted herein.

F. Default. If it should appear at any time that the Consultant has failed or refused to prosecute, or has delayed in the prosecution of, the Services with diligence at a rate that assures completion of the Services in full compliance with the requirements of this Agreement, or has otherwise failed, refused, or delayed to perform or satisfy the Services or any other requirement of this Agreement (***"Event of Default"***), and fails to cure any such Event of Default within ten business days after the Consultant's receipt of written notice of such Event of Default from the Village, then the Village shall have the right, without prejudice to any other remedies provided by law or equity, to pursue any one or more of the following remedies:

1. Cure by Consultant. The Village may require the Consultant, within a reasonable time, to complete or correct all or any part of the Services that are the subject of the Event of Default; and to take any or all other action necessary to bring the Consultant and the Services into compliance with this Agreement.

2. Termination of Agreement by Village. The Village may terminate this Agreement without liability for further payment of amounts due or to become due under this Agreement after the effective date of termination.

3. Withholding of Payment by Village. The Village may withhold from any payment, whether or not previously approved, or may recover from the Consultant, any and all costs, including attorneys' fees and administrative expenses, incurred by the Village as the result of any Event of Default by the Consultant or as a result of actions taken by the Village in response to any Event of Default by the Consultant.

G. No Additional Obligation. The Parties acknowledge and agree that the Village is under no obligation under this Agreement or otherwise to negotiate or enter into any other or additional contracts or agreements with the Consultant or with any vendor solicited or recommended by the Consultant.

H. Village Council Authority. Notwithstanding any provision of this Agreement, any negotiations or agreements with, or representations by the Consultant to, vendors shall be subject to the approval of the Village Council. For purposes of this Section 7.H, "vendors" shall mean entities engaged in subcontracts for the provision of additional services directly to the Village. The Village shall not be liable to any vendor or third party for any agreements made by the Consultant without the knowledge and approval of the Village Council.

I. Mutual Cooperation. The Village agrees to cooperate with the Consultant in the performance of the Services, including meeting with the Consultant and providing the Consultant with such non-confidential information that the Village may have that may be relevant and helpful to the Consultant's performance of the Services. The Consultant agrees to cooperate with the Village in the performance and completion of the Services and with any other consultants engaged by the Village.

J. News Releases. The Consultant shall not issue any news releases, advertisements, or other public statements regarding the Services without the prior written consent of the Village Administrator.

K. Ownership. Designs, drawings, plans, specifications, photos, reports, information, observations, calculations, notes, and any other documents, data, or information, in any form, prepared, collected, or received from the Village by the Consultant in connection with any or all of the Services to be performed under this Agreement (***"Documents"***) shall be and remain the exclusive property of the Village. At the Village's request, or upon termination of this Agreement, the Consultant shall cause the Documents to be promptly delivered to the Village.

L. GIS Data. The Village has developed digital map information through Geographic Information Systems Technology (***"GIS Data"***) concerning the real property located within the Village. If requested to do so by the Consultant, the Village agrees to supply the Consultant with a digital copy of the GIS Data, subject to the following conditions:

1. Limited Access to GIS Data. The GIS Data provided by the Village shall be limited to the scope of the Services that the Consultant is to provide for the Village;

2. Purpose of GIS Data. The Consultant shall limit its use of the GIS Data to its intended purpose of furtherance of the Services; and

3. Agreement with Respect to GIS Data. The Consultant does hereby acknowledge and agree that:

a. Trade Secrets of the Village. The GIS Data constitutes proprietary materials and trade secrets of the Village, and shall remain the property of the Village;

b. Consent of Village Required. The Consultant will not provide or make available the GIS Data in any form to anyone without the prior written consent of the Village Administrator;

c. Supply to Village. At the request of the Village, the Consultant shall supply the Village with any and all information that may have been developed by the Consultant based on the GIS Data;

d. No Guarantee of Accuracy. The Village makes no guarantee as to the accuracy, completeness, or suitability of the GIS Data in regard to the Consultant's intended use thereof; and

e. Discontinuation of Use. At such time as the Services have been completed to the satisfaction of the Village, the Consultant shall cease its use of the GIS Data for any purpose whatsoever, and remove the GIS Data from all of the Consultant's databases, files, and records; and, upon request, an authorized representative of the Village shall be afforded sufficient access to the Consultant's premises and data processing equipment to verify compliance by the Consultant with this Section 7.L.3.e.

SECTION 8. GENERAL PROVISIONS.

A. Amendment. No amendment or modification to this Agreement shall be effective until it is reduced to writing and approved and executed by the Village and the Broker in accordance with all applicable statutory procedures.

B. Assignment. This Agreement may not be assigned by the Village or by the Consultant without the prior written consent of the other party.

C. Binding Effect. The terms of this Agreement shall bind and inure to the benefit of the Village, the Consultant, and their agents, successors, and assigns.

D. Notice. All notices required or permitted to be given under this Agreement shall be in writing and shall be delivered (1) personally, (2) by a reputable overnight courier, or by (3) by certified mail, return receipt requested, and deposited in the U.S. Mail, postage prepaid. Unless otherwise expressly provided in this Agreement, notices shall be deemed received upon the earlier of: (a) actual receipt; (b) one business day after deposit with an overnight courier, as evidenced by a receipt of deposit; or (c) four business days following deposit in the U.S. mail, as evidenced by a return receipt. By notice complying with the requirements of this Section 8.D, each party shall have the right to change the address or the addressee, or both, for all future notices and communications to the other party, but no notice of a change of addressee or address shall be effective until actually received.

Notices and communications to the Village shall be addressed to, and delivered at, the following address:

Village of Lincolnwood
Village Hall
6900 North Lincoln Avenue.

Lincolnwood, Illinois 60712
Attention: Village Manager

With a copy to:

Holland & Knight LLP
131 S. Dearborn, 30th Floor
Chicago, Illinois 60603
Attention: Steven M. Elrod, Corporation Counsel

Notices and communications to the Consultant shall be addressed to, and delivered at, the following address:

John Dzarnowski
FGM Architects
1211 22nd Street Suite 700
Oak Brook, IL 60523

E. Third Party Beneficiary. No claim as a third party beneficiary under this Agreement by any person, firm, or corporation shall be made or be valid against the Village.

F. Provisions Severable. If any term, covenant, condition, or provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder of the provisions shall remain in full force and effect and shall in no way be affected, impaired, or invalidated.

G. Time. Time is of the essence in the performance of all terms and provisions of this Agreement.

H. Calendar Days and Time. Unless otherwise provided in this Agreement, any reference in this Agreement to "day" or "days" shall mean calendar days and not business days. If the date for giving of any notice required to be given, or the performance of any obligation, under this Agreement falls on a Saturday, Sunday, or federal holiday, then the notice or obligation may be given or performed on the next business day after that Saturday, Sunday, or federal holiday.

I. Governing Laws. This Agreement shall be governed by, construed and enforced in accordance with the internal laws, but not the conflicts of laws rules, of the State of Illinois.

J. Authority to Execute.

1. The Village. The Village hereby warrants and represents to the Consultant that the persons executing this Agreement on its behalf have been properly authorized to do so by its corporate authorities.

2. The Consultant. The Consultant hereby warrants and represents to the Village that the persons executing this Agreement on its behalf have the full and complete right, power, and authority to enter into this Agreement and to agree to the terms, provisions, and conditions set forth in this Agreement and that all legal actions needed to authorize the execution, delivery, and performance of this Agreement have been taken.

K. Entire Agreement. This Agreement constitutes the entire agreement between the parties to this Agreement and supersedes all prior agreements and negotiations between the parties, whether written or oral, relating to the subject matter of this Agreement.

L. Waiver. Neither the Village nor the Consultant shall be under any obligation to exercise any of the rights granted to them in this Agreement except as it shall determine to be in its best interest from time to time. The failure of the Village or the Consultant to exercise at any time any such rights shall not be deemed or construed as a waiver of that right, nor shall the failure void or affect the Village's or the Consultant's right to enforce such rights or any other rights.

M. Consents. Unless otherwise provided in this Agreement, whenever the consent, permission, authorization, approval, acknowledgement, or similar indication of assent of any party to this Agreement, or of any duly authorized officer, employee, agent, or representative of any party to this Agreement, is required in this Agreement, the consent, permission, authorization, approval, acknowledgement, or similar indication of assent shall be in writing.

N. Grammatical Usage and Construction. In construing this Agreement, pronouns include all genders and the plural includes the singular and vice versa.

O. Interpretation. This Agreement shall be construed without regard to the identity of the party who drafted the various provisions of this Agreement. Moreover, each and every provision of this Agreement shall be construed as though all parties to this Agreement participated equally in the drafting of this Agreement. As a result of the foregoing, any rule or construction that a document is to be construed against the drafting party shall not be applicable to this Agreement.

P. Headings. The headings, titles, and captions in this Agreement have been inserted only for convenience and in no way define, limit, extend, or describe the scope or intent of this Agreement.

Q. Exhibits. Exhibits A attached to this Agreement are, by this reference, incorporated in and made a part of this Agreement. In the event of a conflict between an Exhibit and the text of this Agreement, the text of this Agreement shall control.

R. Rights Cumulative. Unless expressly provided to the contrary in this Agreement, each and every one of the rights, remedies, and benefits provided by this Agreement shall be cumulative and shall not be exclusive of any other rights, remedies, and benefits allowed by law.

S. Counterpart Execution. This Agreement may be executed in several counterparts, each of which, when executed, shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

SIGNATURES ON FOLLOWING PAGE

IN WITNESS WHEREOF, the Parties have executed this Agreement this _____ day of _____, 20__.

ATTEST:

VILLAGE OF LINCOLNWOOD

By: _____
Beryl Herman,
Village Clerk

By: _____
Timothy C. Wiberg,
Village Manager

ATTEST:

CONSULTANT

By:_____
Andy Jasek, AIA
Executive Vice President

By: _____
John Dzarnowski, AIA
President

Return to VB Agenda

EXHIBIT A

PROPOSAL

Return to VB Agenda

FGM ARCHITECTS

January 26, 2018

Mr. Andrew Letson
Director of Public Works
Village of Lincolnwood
7001 N. Lawndale Avenue
Lincolnwood, IL 60712

Re: Contract Administration Services for Public Works Yard Expansion

Dear Andrew:

FGM Architects is pleased to submit this proposal to the Village of Lincolnwood for architectural and engineering contract administration services supporting the construction phase of the renovations and yard expansion to the Public Works Facility.

We have enclosed a copy of our proposal for your review. Should you have any questions regarding the enclosed or require additional information please let us know. We look forward to the opportunity to assist the Village of Lincolnwood further with this project and continue working with your team.

Sincerely,
FGM Architects Inc.

John C. Dzarnowski, AIA
Director, Municipal and Recreation

Annabella Orlando, AIA, LEED AP BD+C
Senior Associate

1211 West 22nd Street, Suite 700
Oak Brook, IL 60523-2109

630.574.8300 PHONE 630.574.9292 FAX

Return to VB Agenda

FGM ARCHITECTS

Proposal for

Contract Administration Services

for

VILLAGE OF LINCOLNWOOD PUBLIC WORKS YARD EXPANSION
7001 N. Lawndale Avenue
Lincolnwood, IL 60712

Submitted to:

VILLAGE OF LINCOLNWOOD
Public Works Department
7001 N. Lawndale Avenue
Lincolnwood, IL 60712

By:

FGM ARCHITECTS INC.
1211 West 22nd Street, Suite 700
Oak Brook, IL 60523

January 26, 2018

FGM ARCHITECTS

1.0 SCOPE OF PROJECT

1.0.1 Village of Lincolnwood, hereinafter referred to as the Owner, intends to renovate and expand the yard of the Public Works Facility. Scope of construction work will be inclusive of demolition of selective site elements, construction of new cast-in-place concrete walls, expanded concrete pavement areas, underground utility work and installation of new ornamental fences and operable gates.

1.0.2 The property for the Project is currently owned by the Village of Lincolnwood.

1.0.3 The project will be delivered by a General Contractor with an anticipated construction duration of four months (16 weeks).

1.0.4 Owner's proposed project schedule is as follows:

Construction Mobilization	April 2, 2018 – April 6, 2018
Construction Commences	April 9, 2018
Substantial Completion	July 6, 2018
Final Completion	July 20, 2018
Project Closeout	July 23, 2018 – August 3, 2018

2.0 SCOPE OF ARCHITECT'S SERVICES

FGM Architects Inc., hereinafter referred to as FGM or Architect, shall provide the following professional Architectural services for the Project:

2.1 Design Services

2.1.1 Preliminary Design Phase

2.1.1.1 No services at this time. Design services previously performed under separate contract.

2.1.2 Construction Document Phase

2.1.2.1 No services at this time. Design services previously performed under separate contract.

2.2 Construction Procurement Services

2.2.1 Bidding or Negotiation Phase

2.2.1.1 No services at this time. Construction procurement services in progress and performed under separate contract.

2.3 Contract Administration Services

2.3.1 Construction Phase - Administration of the Contract

2.3.1.1 FGM shall assist with the administration of construction contracts including shop drawing and other submittal review as required.

2.3.1.2 Prepare agenda and attend one (1) preconstruction meeting.

2.3.1.3 Attend an average of one (1) On-Site Owner/Architect/Contractor (OAC)

1211 West 22nd Street, Suite 700
Oak Brook, IL 60523-2109

630.574.8300 PHONE 630.574.9292 FAX

FGM ARCHITECTS

meeting combined with one (1) On-Site Observation visit bi-weekly to monitor Construction Phase activities for general conformance with Construction Documents, to include a minimum of eight (8) combined On-Site meetings / site visits.
Should additional meetings and/or site visits be required, proposal is inclusive of an additional four (4) combined visits, not to exceed a total of twelve (12) combined On-Site meetings / site visits.

2.3.1.4 FGM shall assist with the review and certification of payment to Contractors.

2.3.1.5 Prepare Punch-List and related follow up of same. We have included one (1) meeting for preparation of punch-list and one (1) punch-list follow up meeting.

2.4 Consultants

2.4.1 FGM has included a structural engineering consultant and a civil engineering consultant as part of this proposal.

2.4.2 Survey, geotechnical (soil borings), material testing and hazardous waste engineering services are not included in this proposal.

3.0 ARCHITECT'S COMPENSATION

The Village of Lincolnwood shall compensate FGM for professional Architectural services rendered in connection with the Project under this Proposal as follows:

3.1 For all professional services in connection with the Project as described, we propose an **Hourly Fee not-to-exceed $75,000 plus Reimbursable Expenses** as defined within this Proposal.

3.2 For any Additional Services authorized by the Owner beyond the scope of this Proposal including but not limited to: major revisions to previously approved design or construction documents, additional reports and/or documentation, detailed environmental impact studies, traffic studies, financial or demographic studies, presentations or coordination with outside agencies, utility authorities, or services not customarily furnished in accordance with generally accepted architectural practice, FGM shall be compensated on the basis of the hourly rates described in the attached Hourly Rate Schedule for the professional and technical employees engaged on the Project plus Reimbursable Expenses. Consultants Hourly Billing Rate Schedule for the Project shall be forwarded to Owner upon Owner's request.

3.3 In addition to the compensation above, FGM shall be reimbursed for additional expenses in connection with the Project, invoiced to the Owner at One Hundred Ten Percent (1.10) times Architect's actual direct cost of same, as noted below. Local travel (travel less than 100 miles), phone, fax, and printing of review sets for design coordination shall not be charged as a Reimbursable Expense. We

1211 West 22nd Street, Suite 700
Oak Brook, IL 60523-2109
630.574.8300 PHONE 630.574.9292 FAX

FGM ARCHITECTS

recommend establishing a total **Reimbursable Allowance of $4,000** which FGM shall not exceed without prior written approval of the Village for the below items.

3.3.1 Expense of postage, delivery and mileage in excess of 100 miles per trip.

3.3.2 Expense of Contract Document printing for bidding, permitting and construction purposes.

3.3.3 Expense of models authorized by the Owner.

3.3.4 Fees and expenses of special consultants not included in this Proposal, as identified in 2.4 above.

3.3.5 Any fees paid by FGM to authorities having jurisdiction over the project.

3.4 Payments

3.4.1 Payments shall be made by the Owner to FGM upon receipt of Architect's invoice and in accordance with the Local Government Prompt Payment Act.

3.4.2 Non-payment of invoices shall constitute grounds for discontinuing service.

4.0 Form of Agreement

4.1 Should our proposal be acceptable, it is our intention to enter into a formal agreement using an AIA Standard Form of Agreement Between Owner and Architect, with modifications as mutually agreeable.

We appreciate this opportunity to be of service to the Village of Lincolnwood for this Project.

FGM ARCHITECTS INC.

1211 West 22nd Street, Suite 700
Oak Brook, IL 60523-2109

630.574.8300 PHONE 630.574.9292 FAX

Return to VB Agenda

FGM ARCHITECTS

HOURLY RATE SCHEDULE

Effective November I, 2017*

Where the fee arrangements are to be on an hourly basis, the rates shall be those that prevail at the time services are rendered. Current rates are as follows:

Arch IV	$185.00
Arch III	145.00
Arch II	115.00
Arch I	90.00
Project Administrator III	$110.00
Project Administrator II	85.00
Project Administrator I	75.00
Principal	$250.00

**Rates are subject to adjustment each November 1st.*

FGM ARCHITECTS INC.

1211 West 22nd Street, Suite 700
Oak Brook, IL 60523-2109

630.574.8300 PHONE 630.574.9292 FAX

Return to VB Agenda

MEMORANDUM

TO: Timothy Wiberg, Village Manager

FROM: Andrew Letson, Public Works Director

DATE: February 6, 2018

SUBJECT: Public Works Yard Expansion

Background
In 2003, the Village constructed Northeast Parkway, which was a new road connecting McCormick Boulevard with the Northeast Industrial District (NEID). The new road crossed the Union Pacific Railroad directly behind the Public Works Facility, which is located at 7001 N. Lawndale Avenue. When the road was constructed, the Public Works material storage yard, located directly behind the Public Works Facility, was open and unsightly. The yard is used to store bulk materials such as dirt, stone, sand, and playground quality woodchips used in daily operations as well as logs, waste woodchips (from tree removals), and spoils from underground repairs prior to removal by a third party contractor. There was a desire at the time to improve the aesthetic of the area as it was made readily visible by the public following construction of the new road.

In 2007, the Village built out the material storage yard to its current condition, which includes underground stormwater detention, a new concrete yard, and an eight-foot tall masonry wall surrounding three sides of the yard. The rear of the yard abutted the Union Pacific right-of-way and was constructed with a black chain link fence. At the time, the Village Board approved the concept of expanding the yard further to the east to maximize the useable space if the Village was able to acquire the Union Pacific right-of-way. Since the plan was to expand the yard into the former UP property, the chain-link fence was a temporary solution. Due to the anticipated time that it would take to acquire the property, the project was planned to be constructed in two phases, with the first being completed in 2007.

In early 2014, the Village began negotiating with the Union Pacific to purchase the right-of-way for the purpose of constructing a multi-use recreation path on the property. In preparation of constructing the previously envisioned improvements, the Village Board authorized the execution of an agreement with FGM Architects (FGM) for services to design an expansion of the existing yard and improvements to the area surrounding the standpipe, located across the street from the rear of the Public Works Facility. The Village ultimately purchased the property in April 2016 and has since constructed a recreation path and public parking lot on the land. Design of the yard expansion improvements is complete and the project is scheduled for construction in the summer of 2018.

Purpose and Scope of Improvements

The proposed improvements are intended to improve the functional capacity of the Public Works Department and enhance the aesthetics of the Village-owned properties.

When the 2007 project was constructed, a temporary chain link fence was installed along the east side of the property rather than the permanent masonry wall that was installed on the other three sides of the yard. At the time, the Village Board anticipated that the Union Pacific right-of-way would be purchased, the yard expanded, and the masonry wall completed shortly thereafter. The existing chain link fence is insufficient as evidenced by the fact that it was damaged by some large logs that were deposited in the yard following tree removal operations. It was also never meant to act as permanent fence. It is often subjected to large equipment and debris causing stress on the material.

The area in front of the standpipe is a gravel yard that is used to temporarily store spoils from underground repairs and debris that is removed from sewers before it is hauled away by a third party contractor. The piles of debris are unsightly and the area does not drain well. The proposed improvements include the installation of a masonry wall fronting Central Park Avenue and a decorative, security fence around the entire standpipe property.

Since the initial improvements in 2007, the surrounding area was rezoned as MB (Manufacturing/Business) from M (Manufacturing) and a portion of the surrounding area has been designated as a retail overlay district indicating the Village's desire for non-manufacturing uses. Additionally, the construction of the recreation path has brought different users into the area. For these reasons, there is a need to improve the overall aesthetic of the Village-owned properties.

The existing yard is undersized for the Department's current needs. In addition to the bulk materials previously described, the yard is also used to store Police vehicles that have been brought in for repair, spare parts for emergency repairs including segments of pipe, street light poles, bases and arms, as well as equipment for traffic control such as signage, yellow horses (barricades) and arrow boards. The tight condition of the yard often places larger vehicles such as dump trucks, fire trucks, and the sewer cleaning vehicle in conflict with each other, especially near the fuel station, at times leading to

accidents. For example, in 2017 a Public Works employee struck the sewer cleaning vehicle with the front end loader, causing approximately $1,800 in damage to one of the water tanks. To resolve this issue, the yard is proposed to be expanded 60 feet to the east, providing more space for larger storage bins and more room for vehicles to maneuver.

In 2012, the Public Works Department built a shed for storage of topsoil to reduce loss caused by contact with moisture. Currently, sand and stone are stored outdoors and during the winter months can freeze, making it difficult to use the material in cases of emergency repairs such as water main breaks. Additionally, cold patch asphalt, which is used during the winter months to temporarily repair potholes and roadway excavations, is stored inside the Public Works garage to prevent it from freezing. Storing this material indoors takes away a parking space that could otherwise be used to reduce the number of vehicles parked in the center aisle of the garage overnight. Parking a lot of vehicles in the center aisle requires those vehicles to be relocated if an emergency, such as a water main break, occurs after hours, reducing the Department's ability to respond to emergencies quickly. The proposed improvements would include covered storage bins for sand, stone, cold patch asphalt, and topsoil to mitigate the issues described above.

The 2007 improvements included a motorized, sliding gate on the north side of the yard. The swing gate on the south side is manually operated and needs to remain locked throughout the day to ensure security of the facility to reduce the frequency of fly dumping in the Village's dumpsters. From time to time, contractors working on a Village project will request to store materials or equipment in the Public Works yard since it is secure. When this occurs, staff needs to be present to allow the contractor to retrieve their vehicles. Since contractors often begin work before the Public Works Department opens, this often requires a staff member to be present on overtime. The proposed improvements would include a motorized gate with a keypad, allowing staff to provide a temporary access code to contractors performing work for the Village. A motorized gate would also be installed at the standpipe.

Budget Request

Construction was anticipated to take place in the current fiscal year, but was placed on hold until the completion of the tri-annual assessment to ensure that the NEID TIF would have sufficient revenue. The project is now expected to begin in early April 2018 and be complete by the end of July 2018. A total of $110,000 is anticipated to be spent in the current fiscal year, with the remaining $1,620,000 being appropriated to the FY 2018/19 NEID TIF budget. This amount is inclusive of construction and construction oversight costs and has been recommended for approval by the Economic Development Commission. To date, about $45,000 has been spent to design the project.

Attachments

1. Photos of Existing Conditions
2. Proposed Site Plan

Return to VB Agenda

Request for Board Action

REFERRED TO BOARD: March 6, 2018 **AGENDA ITEM NO: 4**

ORIGINATING DEPARTMENT: Village Manager's Office

SUBJECT: Consideration of an Ordinance Authorizing Negotiations and Final Bona Fide Offers to Purchase Title to Certain Real Property Located at 4500 – 4560 W. Touhy Avenue and 7350 N. Lincoln Avenue

SUMMARY AND BACKGROUND OF SUBJECT MATTER:
The properties located at 4500 – 4560 W. Touhy and 7350 N. Lincoln Avenue have been vacant since the former Purple Hotel building was demolished in 2013. Redevelopment of this site has been a top priority of the Village ever since. Towards that end, the Village included the properties in a Tax Increment Financing (TIF) District in 2011 (the District's boundaries were amended in 2014 to include the property at 7350 N. Lincoln Avenue), and in 2017 the Village Board approved a concept plan prepared by The Lakota Group which outlined the scale and nature of development desired by the Village at this site.

Despite these efforts, the site has remained vacant and in disrepair. In order to take control over how this key site is redeveloped, the Village is now considering taking action to purchase the property with the goal of ultimately conducting a competitive process to determine who the developer will be to redevelop the site.

If approved, the subject Ordinance will authorize the Village President, Village Manager and Village Attorney to negotiate in good faith with the current owner of the subject parcels for the purchase of the properties by the Village

FINANCIAL IMPACT:
To be determined.

DOCUMENTS ATTACHED:
1. Proposed Ordinance

RECOMMENDED MOTION:
Moved to approve an Ordinance authorizing negotiations and final bona fide offers to purchase title to certain reap property located at 4500-4560 W. Touhy Avenue and 7350 N. Lincoln Avenue.

Return to VB Agenda

VILLAGE OF LINCOLNWOOD

ORDINANCE NO. 2018-_____

AN ORDINANCE AUTHORIZING NEGOTIATIONS AND FINAL BONA FIDE OFFERS TO PURCHASE TITLE TO CERTAIN REAL PROPERTY LOCATED AT 4500-4560 WEST TOUHY AVENUE AND 7350 NORTH LINCOLN AVENUE

ADOPTED BY THE
PRESIDENT AND BOARD OF TRUSTEES
OF THE VILLAGE OF LINCOLNWOOD
THIS ____ DAY OF _____, 2018.

Published in pamphlet form
by the authority of the
President and Board of Trustees
of the Village of Lincolnwood,
Cook County, Illinois this
_____ day of _____, 2018

_____
Village Clerk

Return to VB Agenda

ORDINANCE NO. _____

AN ORDINANCE AUTHORIZING NEGOTIATIONS AND FINAL BONA FIDE OFFERS TO PURCHASE TITLE TO CERTAIN REAL PROPERTY LOCATED AT 4500-4560 WEST TOUHY AVENUE AND 7350 NORTH LINCOLN AVENUE

WHEREAS, the Village of Lincolnwood is an Illinois home rule municipal corporation; and

WHEREAS, the property located at 4500 West Touhy Avenue in the Village (***"Hotel Property"***) was formerly improved with, and used as, a hotel, restaurant and ancillary facilities, and was commonly known as the Purple Hotel (collectively, the ***"Hotel Building"***); and

WHEREAS, the Hotel Property has remained vacant since the 2013 demolition of the Hotel Building; and

WHEREAS, the properties located at 7350 North Lincoln Avenue and at 4560 West Touhy Avenue, both in the Village (collectively, the ***"Adjacent Properties"***), are adjacent to the Hotel Property, and are also vacant; and

WHEREAS, the Village desires that the Hotel Property and the Adjacent Properties (collectively, the ***"Subject Property"***) be redeveloped; and

WHEREAS, on February 17, 2011, following extensive studies, public hearings, and meetings of a joint review board, the President and the Board of Trustees of the Village (***"Corporate Authorities"***) adopted: (i) Ordinance No. 2011-2930, approving a redevelopment plan and project prepared by Kane, McKenna and Associates, Inc. (***"Redevelopment Plan and Project"***) for an area generally including the properties located at the northwest, southwest, and southeast corners of the intersection of Lincoln Avenue and Touhy Avenue in the Village (***"Lincoln-Touhy Redevelopment Project Area"***); (ii) Ordinance No. 2011-2931, designating the Lincoln-Touhy Redevelopment Project Area as a redevelopment project area pursuant to the Tax Increment Allocation Redevelopment Act, 65 ILCS 5/11-74.4-1 et seq. (***"TIF Act"***); and (iii) Ordinance No. 2011-2932, adopting tax increment allocation financing for the Lincoln-Touhy Redevelopment Project Area, pursuant to the TIF Act; and

WHEREAS, on June 3, 2014, following further studies, public hearings, and meetings of a joint review board, the Corporate Authorities adopted: (i) Ordinance No. 2014-3099, approving an amended redevelopment plan and project prepared by Kane, McKenna and Associates, Inc. (***"Amended Redevelopment Plan and Project"***) to include both the Lincoln-Touhy Redevelopment Project Area and the real property generally located immediately west and north thereof, along the north side of Touhy Avenue and the west side of Lincoln Avenue (***"Adjacent Redevelopment Area"***); (ii) Ordinance No. 2014-3100, amending the Lincoln-Touhy Redevelopment Project Area to include the Adjacent Redevelopment Area, pursuant to the TIF Act; and (iii) Ordinance No. 2014-3101, adopting tax increment allocation financing for the amended Lincoln-Touhy Redevelopment Project Area (***"Amended Redevelopment Area"***), pursuant to the TIF Act; and

WHEREAS, the Subject Property is located within the Lincoln-Touhy Redevelopment Project Area, and is identified and legally described in **Exhibit A** attached to and, by this reference, made a part of this Ordinance; and

WHEREAS, in December, 2016, the Village entered into an agreement with a professional planning consultant, The Lakota Group, of Chicago, Illinois (***"Lakota"***), for the provision of design services and planning work related to the preparation of conceptual site plans for the redevelopment of the Subject Property; and

WHEREAS, Lakota prepared several alternative conceptual site plans for the redevelopment of the Subject Property in accordance with the Amended Redevelopment Plan and Project; and

WHEREAS, based upon the input of an ad hoc Development Steering Committee comprised of various Village officials, Lakota revised and finalized its conceptual site plan for the redevelopment of the Subject Property; and

WHEREAS, on August 15, 2017, in order to facilitate the redevelopment of the Subject Property and to encourage the development community to invest in the Subject Property and the Village, the Corporate Authorities approved Resolution No. R2017-1998, adopting the recommended conceptual site plan prepared by Lakota (***"Conceptual Site Plan"***); and

WHEREAS, despite the Village's efforts, its extensive study of the Lincoln-Touhy Redevelopment Project Area, and its adoption of the Conceptual Site Plan, to date, the Subject Property has not been redeveloped and remains vacant; and

WHEREAS, the Subject Property remains vacant and blighted; and

WHEREAS, the Village desires to commence negotiation in good faith with the owner of the Subject Property for the acquisition of title to the Subject Property, with the goal of reaching mutual agreement with the owner on a price at which the owner would be willing to sell the Subject Property to the Village and at which the Village would be willing to purchase title to the Subject Property; and

WHEREAS, the Subject Property will be used for development that is consistent with the Amended Redevelopment Plan and Project and the Conceptual Site Plan; and

WHEREAS, upon acquisition of the Subject Property, the Village will execute and record against the Subject Property an enforceable written agreement, deed restriction, or similar encumbrance to assure that the development project for, and the use of, the Subject Property remain consistent with those land uses, goals, and purposes set forth in the Amended Redevelopment Plan and Project and the Conceptual Site Plan for a period of at least 40 years; and

WHEREAS, in order to acquire the Subject Property, the Corporate Authorities specifically find that it is necessary, advisable, and in the best interests of the Village to commence good faith negotiations for the acquisition of title to the Subject Property;

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LINCOLNWOOD, COOK COUNTY, ILLINOIS, as follows:

SECTION 1. RECITALS. The facts and statements contained in the preamble to this Ordinance are found to be true and correct and are hereby adopted as part of this Ordinance.

SECTION 2. ACQUISITIONS ARE NECESSARY, CONVENIENT, AND DESIRABLE. The Corporate Authorities find that it is necessary, convenient, and desirable for the Village to acquire title to the Subject Property in furtherance of development that is consistent with the Amended Redevelopment Plan and Project and the Conceptual Site Plan. The Corporate Authorities find that the location of the Subject Property is proper and appropriate for those purposes.

SECTION 3. AUTHORIZATION TO NEGOTIATE AND TO MAKE FINAL OFFERS. The Corporate Authorities, in furtherance of the findings and purposes set forth in this Ordinance, hereby authorize and direct the Village President, the Village Manager, and the Village Attorney, to negotiate in good faith with, and to make a final bona fide offer to the owner of the Subject Property for the purchase of title to the Subject Property, all in accordance with the directions and authority given by the Corporate Authorities.

SECTION 4. LIMITATION OF AUTHORITY. The Corporate Authorities hereby declare that the authorization set forth in Section 3 of this Ordinance is expressly limited to only the Subject Property identified and legally described in Exhibit A to this Ordinance. Neither the Village President, the Village Manager, the Village Attorney, nor any other employee, agent, or representative of the Village may negotiate for the purchase of title to any other parcel of real property or portion thereof. Further, the authorization set forth in Section 3 of this Ordinance is for the limited purposes of development that is consistent with the Amended Redevelopment Plan and Project and the Conceptual Site Plan.

SECTION 5. SEVERABILITY. If any provision of this Ordinance or part thereof is held invalid by a court of competent jurisdiction, the remaining provisions of this Ordinance are to remain in full force and effect, and are to be interpreted, applied, and enforced so as to achieve, as near as may be, the purpose and intent of this Ordinance to the greatest extent permitted by applicable law.

SECTION 6. EFFECTIVE DATE. This Ordinance will be in full force and effect from and after its passage, approval, and publication in the manner provided by law.

[SIGNATURE PAGE FOLLOWS]

PASSED this _____ day of March, 2018.

AYES: _____

NAYS:_____

ABSENT:_____

ABSTENTION:_____

APPROVED by me this _____ day of March, 2018.

_____
Barry I. Bass, President
Village of Lincolnwood, Cook County, Illinois

ATTESTED and FILED in my office this _____ day of _____, 2018

_____
Beryl Herman, Village Clerk
Village of Lincolnwood, Cook County, Illinois

EXHIBIT A

IDENTIFICATION AND LEGAL DESCRIPTION OF SUBJECT PROPERTY

4500 WEST TOUHY AVENUE

Lots 6, 8, 9, and 10 in Lincoln-Touhy Addition to Lincolnwood, being a subdivision in the southwest ¼ of Section 27, Township 41 North, Range 13, east of the Third Principal Meridian (except parts taken for highway purposes), in Cook County, Illinois.

Commonly known as: 4500 West Touhy Avenue, Lincolnwood, Illinois

PIN: 10-27-317-050-0000
10-27-317-052-0000
10-27-317-055-0000

4560 WEST TOUHY AVENUE

Lot 7 in Lincoln-Touhy Addition to Lincolnwood, being a subdivision in the Southwest ¼ of Section 27, Township 41 North, Range 13, East of the Third Principal Meridian, in Cook County, Illinois.

Commonly known as: 4560 West Touhy Avenue, Lincolnwood, Illinois

PIN: 10-27-317-051-0000

7350 NORTH LINCOLN AVENUE

Lot 5 in Lincolnwood -Touhy Addition to Lincolnwood, being a Subdivision in the South West ¼ of Section 27, Township 41 North, Range 13, East of the Third Principal Meridian, in Cook County, Illinois.

Commonly known as: 7350 North Lincoln Avenue, Lincolnwood, Illinois

PIN: 10-27-317-049-0000

Return to VB Agenda

Request for Board Action

REFERRED TO BOARD: March 6, 2018 **AGENDA ITEM NO: 5**

ORIGINATING DEPARTMENT: Community Development

SUBJECT: Consideration of a Recommendation by the Plan Commission to Adopt an Ordinance Approving Zoning Code Text Amendments Related to Increased Permitted Building Coverage for the Construction of Two-Car Garages in the R-3 and R-4 Zoning Districts

SUMMARY AND BACKGROUND OF SUBJECT MATTER:
Since 2013, there have been several requests for Variations from the maximum permitted building coverage in order to allow for the construction of a standard two-car garage on a single-family residential property. Generally, the pre-existing property had a one-car garage, and the Petitioner was seeking to upgrade to a two-car garage. During the most recent cases, members of the Zoning Board of Appeals stated that a two-car garage should be considered a minimum standard in the Village. Granting these requests, and permitting the construction of two-car garages in the future, presents two primary benefits: First, it removes a barrier to reinvestment in neighborhoods that face significant challenges related to the size of the lots and age of the homes; and secondly, more two-car garages would accommodate additional off-street parking on blocks where curbside parking is often in high demand.

Relevant History
Since 2013, there have been five Variation requests related to building coverage for the purposes of building a two-car garage. Four of the requests were for properties located in the R-3 Zoning District, while one request was for a property located in the R-4 Zoning District. In both the R-3 and R-4 Zoning Districts, the current maximum permitted building coverage for single-family homes is 35 percent.

The Variations granted for these requests allow for building coverages between 36.6 percent and 38.7 percent. Generally, the requested Variation accommodated a standard two-car garage. Where the request was for garages larger than a standard two-car garage, the Zoning Board of Appeals and Village Board worked with the Petitioner to reduce the size of the garage and, therefore, the magnitude of the Variation being sought. In some instances, the building coverage Variation request was made in conjunction with requests for relief from other Code requirements.

Recommended Code Amendments
Prior to the Plan Commission Public Hearing, staff conducted research and provided recommendations to the following relevant questions. The draft Ordinance attached to this memorandum reflects the staff recommendations for each question:

Where should a new standard be applicable?
The properties of all of the recent Variation requests related to the current building coverage regulation were located in the R-3 or R-4 Zoning Districts. Based on this, and the fact that properties in the R-1 and R-2 Zoning Districts typically do not have detached garages and generally have lot sizes that can

accommodate more contemporary amenities, staff recommends that the new standard be applied to properties in the R-3 and R-4 Zoning Districts.

What should be the revised standard for building coverage?
Previous Variation requests sought approval for a total building coverage between 36.6 percent and 38.7 percent. Based on these precedents and the characteristics of lots in the R-3 and R-4 Zoning Districts, staff recommends a 40 percent maximum for building coverage, but only when the following conditions can be met:

- The proposed garage cannot exceed 500 square feet;
- The building coverage of all other elements on the property cannot exceed the current 35% building coverage maximum; and
- The proposed garage is compliant with all other zoning requirements (i.e. maximum impervious coverage, setbacks, accessory building height, etc.)

Presumably, any proposed garages that cannot meet all of the standards above would be required to go through the regular Variation process.

What issues might this permissibility have on surrounding properties?
Staff does not anticipate any substantial negative impacts on surrounding properties. In recent Variation cases related to this standard, one-car garages have been replaced with two-car garages in generally the same location on the property and in a manner that is compliant with accessory structure setbacks. Neighboring properties have not been subjected to any unusual or unexpected impacts.

During the Committee of the Whole discussion regarding this proposed Text Amendment, Village Trustees discussed possible impacts related to flooding. However, local flooding related to development is more directly tied to impervious coverage. If a new two-car garage is permitted to exceed the 35% building coverage maximum but must still comply with the 60% impervious coverage maximum, the garage will have no additional stormwater impact compared to the same area being used for a patio or another type of impervious surface that would permitted according to the Code.

How should these new standards be administered?
There are two potential ways that the proposed regulation could be administered: 1) through staff zoning compliance review as part of Building Permit; or 2) through the Village's existing Minor Variation process. Based on staff's opinion that the impacts to surrounding properties would be minimal and the Village's interest in removing barriers related to time and cost of development, staff recommends that the new regulation be administered through staff zoning compliance review as part of Building Permit. This minimizes the amount of time necessary for approval for projects that meet all other code requirements.

Plan Commission Discussion
A Plan Commission Public Hearing related to this matter was originally opened on December 6, 2017. Plan Commission discussion of the matter took place during the Plan Commission's February 6, 2018 meeting.

Generally, Plan Commissioners agreed with the intent of the proposed Code Amendment and the benefits it would have for both property owners and neighboring properties. Commissioners discussed the two options for administering the regulations. Ultimately, they reached a consensus that administering the regulations through staff zoning compliance review is most appropriate since it minimizes the length of time required for approval of an improvement that the Village has deemed appropriate.

Chairman Yohanna asked of anyone from the public would like to address the Plan Commission on this matter. No one from the public came forward.

By a vote of 5-0, the Plan Commission unanimously approved a motion to recommend approval of the recommendations as presented by staff.

FINANCIAL IMPACT:
None

DOCUMENTS ATTACHED:
1. Proposed Ordinance
2. September 19, 2017 Committee of the Whole Memo
3. September 19, 2017 Committee of the Whole Minutes
4. February 7, 2018 Plan Commission Staff Report
5. February 7, 2018 Plan Commission Minutes Excerpt (Draft)
6. Pertinent Zoning Code Sections
7. Village Board PowerPoint Presentation

RECOMMENDED MOTION:
Move to approve an Ordinance approving Zoning Code Text Amendments related to increased permitted building coverage for the construction of two-car garages in the R-3 and R-4 Zoning Districts.

Return to VB Agenda

VILLAGE OF LINCOLNWOOD

ORDINANCE NO. 2018-_____

AN ORDINANCE AMENDING THE VILLAGE OF LINCOLNWOOD ZONING ORDINANCE REGARDING GARAGES IN RESIDENTIAL DISTRICTS

ADOPTED BY THE
PRESIDENT AND BOARD OF TRUSTEES
OF THE VILLAGE OF LINCOLNWOOD
THIS ____ DAY OF MARCH, 2018.

Published in pamphlet form
by the authority of the
President and Board of Trustees
of the Village of Lincolnwood,
Cook County, Illinois
this _____ day of _____, 2018

Return to VB Agenda

ORDINANCE NO. 2018-_____

AN ORDINANCE AMENDING THE VILLAGE OF LINCOLNWOOD ZONING ORDINANCE REGARDING GARAGES IN RESIDENTIAL DISTRICTS

WHEREAS, the Village of Lincolnwood is a home rule municipal corporation in accordance with Article VII, Section 6(a) of the Constitution of the State of Illinois of 1970; and

WHEREAS, the Village has the authority to adopt ordinances and to promulgate rules and regulations that pertain to its government and affairs; and

WHEREAS, Sections 4.11 and 4.12 of "The Village of Lincolnwood Zoning Ordinance," as amended ("***Zoning Ordinance***"), set forth bulk regulations for residential zoning districts in the Village; and

WHEREAS, the Village President and Board of Trustees desire to amend Sections 4.11 and 4.12 of the Zoning Ordinance to increase the permissible maximum building coverage in residential districts in order to facilitate the construction of one- and two-car garages (collectively, the ***"Proposed Amendments"***); and

WHEREAS, pursuant to notice duly published in the *Lincolnwood Review* on November 16, 2017, the Lincolnwood Plan Commission (***"Plan Commission"***) conducted a public hearing on December 6, 2017, January 3, 2018, and February 7, 2018, concerning the Proposed Amendments; and

WHEREAS, at the conclusion of the public hearing, the Plan Commission made findings and recommended that the President and Board of Trustees adopt the Proposed Amendments; and

WHEREAS, having considered the findings and recommendations of the Plan Commission, the President and Board of Trustees have found and determined that the adoption of the Proposed Amendments, as set forth in this Ordinance, is in the best interests of the Village and its residents;

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LINCOLNWOOD, COOK COUNTY, ILLINOIS, as follows:

SECTION 1. RECITALS. The facts and statements contained in the preamble to this Ordinance are found to be true and correct and are hereby adopted as part of this Ordinance.

SECTION 2. AREA, BULK, DENSITY AND SETBACK STANDARDS: R-1, R-2, AND R-3 DISTRICTS. Section 4.11 of Article IV of the Zoning Ordinance is hereby amended further to read as follows:

"**4.11 AREA, BULK, DENSITY AND SETBACK STANDARDS: R-1, R-2, AND R-3 DISTRICTS.**

		Residential Zones	
Use Category	**R-1**	**R-2**	**R-3**
Lot Standards (single-family dwelling units)			
Minimum lot size (square feet)	9,000 SF	7,000 SF	5,400 SF
Maximum impervious coverage: %	60%	60%	60%
Maximum building coverage (%)	35%	35%	35% **(Note 4)**

* * *

Note 4 In the R-3 District, the Zoning Administrator may approve a building coverage of up to 40% to accommodate the construction of a one- or two-car garage that meets the following standards:

a) The garage does not exceed 500 square feet in floor area;

b) The total building coverage of all other structures on the lot does not exceed 35%, unless otherwise authorized through a variation granted in accordance with Section 5.15 of this Zoning Ordinance; and

c) The proposed garage is compliant with all other requirements set forth in this Zoning Ordinance, except as otherwise authorized through a variation granted in accordance with Section 5.15 of this Zoning Ordinance.

Lot Standards

1) Maximum impervious coverage of 60% includes all surfaces that do not allow water penetration (driveways, paving bricks, composed stone, building foundation etc.

2) Maximum building coverage ~~of 35%~~ means the percentage of the lot occupied by any building**,** including accessory buildings or structure."

* * *

SECTION 3. AREA, BULK, DENSITY AND SETBACK STANDARDS: R-4 DISTRICT. Section 4.121 of Article IV of the Zoning Ordinance is hereby amended further to read as follows:

"**4.12 AREA, BULK, DENSITY AND SETBACK STANDARDS: R-4 - GENERAL RESIDENCE DISTRICT.**

	Zoning District
	Residential Zone
Use Category	**R-4**
Lot Standards	
Minimum lot size (square feet)	5,400 SF
Minimum lot area all non-SF dwelling types (per unit)	3,000 SF
Minimum lot width (feet) detached single-family with attached garage	60 feet
Maximum impervious coverage single-family (%)	60%
Maximum building coverage single-family (%) **(Note 6)**	35%

* * *

Notes:

1) Height does not apply to multifamily dwellings or nonresidential structures/35 feet or 2 stories, whichever is less

2) Yards general, for buildings more than 30 feet in height, each front, side and rear yard as required above shall be increased in width or depth by two feet for each additional one foot of building height over 30 feet

3) Where a side wall faces a front or a rear wall, and there are more than 4 windows per floor, 2 of which are bathroom or storage, then the building separation shall not be less than 40 feet or 50 feet where one of the walls contains an entrance door.

4) Where a side wall faces another side wall, and there are more than 4 windows per floor, 2 of which are bathroom or storage, then the building separation shall not be less than 40 feet or 50 feet where one of the walls contains an entrance door.

5) See Section 4.10(2)b for an additional requirement concerning minimum front yard setbacks.

6) In the R-4 District, the Zoning Administrator may approve a building coverage of up to 40% to accommodate the construction of a one- or two-car garage that meets the following standards:

a) **The garage does not exceed 500 square feet in floor area;**

b) **The total building coverage of all other structures on the lot does not exceed 35%, unless otherwise authorized through a variation granted in accordance with Section 5.15 of this Zoning Ordinance; and**

c) **The proposed garage is compliant with all other requirements set forth in this Zoning Ordinance, except as otherwise authorized through a variation granted in accordance with Section 5.15 of this Zoning Ordinance.**

Lot Standards

1) Maximum building coverage ~~of 35%~~ means the percentage of the lot occupied by any building**,** including accessory buildings or structure."

* * *

SECTION 4. SEVERABILITY. If any provision of this Ordinance or part thereof is will remain in full force and effect, and are be interpreted, applied, and enforced so as to achieve, as near as may be, the purpose and intent of this Ordinance to the greatest extent permitted by applicable law.

SECTION 5. EFFECTIVE DATE. This Ordinance will be in full force and effect from and after its passage, approval, and publication in the manner provided by law.

[SIGNATURE PAGE FOLLOWS]

PASSED this _____ day of March, 2018.

AYES:_____

NAYS:_____

ABSENT:_____

ABSTENTION:_____

APPROVED by me this _____ day of March, 2018.

_____
Barry I. Bass, President
Village of Lincolnwood, Cook County, Illinois

ATTESTED and FILED in my office the _____ day of March, 2018.

_____
Beryl Herman, Village Clerk
Village of Lincolnwood, Cook County, Illinois

Return to VB Agenda

VILLAGE OF LINCOLNWOOD
PRESIDENT AND BOARD OF TRUSTEES
COMMITTEE OF THE WHOLE MEETING
VILLAGE HALL COUNCIL CHAMBERS
SEPTEMBER 19, 2017

Call to Order

President Bass called the Committee of the Whole meeting of the Lincolnwood Board of Trustees to order at 5:45 P.M., Tuesday, September 19, 2017, in the Council Chambers of the Municipal Complex, 6900 North Lincoln Avenue, Village of Lincolnwood, County of Cook and State of Illinois.

Roll Call

On roll call by Village Clerk Beryl Herman the following were:
PRESENT: President Bass, Trustees Hlepas Nickell, Spino, Patel, Ikezoe-Halevi (5:50), Cope (6:05), Sugarman (6:20)
ABSENT: None

A quorum was present. Also present: Timothy Wiberg, Village Manager, Ashley Engelmann, Assistant Village Manager; Steven Elrod, Village Attorney; Heather McFarland, Management Analyst; Charles Meyer, Assistant to the Village Manager; Steve McNellis, Community Development Director; Andrew Letson, Public Works Director; Nadim Badran, Assistant to the Public Works Director; Doug Hammel, Community Development Manager; Robert LaMantia, Police Chief; Michael Hansen, Fire Chief

Regular Business

1. Discussion Concerning Proposed Zoning Code Text Amendments

The item was presented by Mr. Hammel using PowerPoint.

Mr. Wiberg stated that the goal here is to be responsible and development friendly, but maintain Village standards.

Residential First Floor Height

Existing Regulation:
*Minor Variation process used for property owners seeking relief.
*12 Variation requests since new Zoning Code adopted in 2008

Minor Variation Process

*Steps	*Days
• Application received	Timer begins

Return to VB Agenda

- Notice sent to surrounding properties — max. 5 days
- Notice period closes — min. 10 days
- Decision sent to surrounding properties — max. 5 days
- Appeal period closes — min. 10 days

If approved, Variation granted — max. 5 days
If denied – case goes to ZBA — min. 60 days

*Best case scenario: 30 days *Worst case scenario: 90 days

Proposed Amendment

*Amendment to Sections 4.11 and 4.12 of the Zoning Ordinance related to increase the maximum first floor height

Considerations

*What number could capture most of the variations that have been requested?
*Would modifying the standard to accommodate past requests result in a change to neighborhood character?
*Should new construction and additions to existing homes be treated the same?
*Are there certain instances that could be permitted to have a higher elevation through code provisions rather than changing the standard for all development?

Building Coverage for Two-Car Garage

Existing Regulation:
*Minor Variations process used for property owners seeking relief
*6 Variation requests since 2012

Challenges

*Variety of lot sizes throughout Lincolnwood
- Variety of compliant lot sizes
- Non- compliant lot sizes

*Era of development
- Nature of residential amenities
  ^Modern Kitchens
  ^Two- car garages
  ^Storage (i.e. sheds)

Case Study

*R3 Zoning
*Required minimum lot area: 5,400 sf
*Based on minimum required lot area:
- Max building coverage: 1,890 sf
- Max lot coverage: 3,240 sf
- Max FAR: 3,564 sf

Five additional case studies were exhibited.

Considerations

*Should a two-car garage be considered the standard for Lincolnwood/
*Should the Code provide flexibility in certain areas of the Village or on lots with certain characteristics?
*What adverse effects might be caused if building coverage allowances are increased?
*How does building coverage relate to lot coverage, FAR or other regulations?

Approval of Extended Hours of Operation

Current Regulations

*Construction permitted:

- Mondays through Fridays, 7AM – 6PM
- Saturdays, 7AM – Noon

*Construction NOT permitted:

- Sundays
- Six major federal holidays

Current Procedure for Relief

*Applicant submits a request to the Village
*Depending on the case, staff identifies relevant conditions
*Ordinance drafted for Village Board consideration

Over the past six months, two requests have been approved through the Village Board Consent Agenda for extended hours of operation for improvements on private property.

Potential Alternative Process

*Applicant submits a request to the Village
*Staff administers any relevant conditions for approval
*Village Manager considers approval
*Work is completed and inspected

Two case studies were presented:

Case Study

*Commercial property adjacent to residential alley
*Parking lot crack sealing, coating and striping
*Sought permission for Saturday afternoon/Sunday morning work to maintain business operations

Case Study

*Staff requested that they notify neighboring properties of request prior to approval

Return to VB Agenda

MEMORANDUM

TO: Timothy Wiberg, Village Manager

FROM: Steve McNellis, Community Development Director
Doug Hammel, Community Development Manager

DATE: September 19, 2017

SUBJECT: Proposed Development-Friendly Zoning and Building Code Text Amendments

This memorandum presents the first in a series of Zoning and Building Code regulations that staff believes warrant discussion and amendment based on input from the Village Board, Plan Commission, and Economic Development Commission. Staff anticipates bringing a new group of potential Code amendments to the Village Board approximately every six weeks. This will allow the opportunity to move these amendments through the Public Hearing process at a reasonable pace, that will not result in an overwhelming number of amendments being heard at one meeting.

The amendments for consideration in this memorandum and in future discussions have arisen primarily because they represent either: 1) repeated routine approvals of specific Variation requests; or 2) provide opportunities to remove development hindrances and be more business-friendly. In general, staff believes the proposed amendments no longer add the same value as they once did and should not require a lengthy review process in public meetings. In some cases, times and values have changed, and, in others, there are Code restrictions in place that protect the overall character of the community, making certain Code requirements unnecessary.

For each issue, the memorandum describes the relevant regulations, the impetus for its review, relevant policy questions that can be discussed as part of the formal amendment and hearing

process, and, where appropriate, potential regulatory solutions to be explored. The Code amendments recommended for consideration and referral include:

- Residential First Floor Height
- Building Coverage for Two-Car Garages
- Authority to Grant Permission for Extended Hours of Construction

Residential First Floor Height

Section 4.11 of the Zoning Ordinance states that the maximum permitted first floor height for single-family structures is three feet. (First floor height is measured from the top of the curb at its highest point along the front property line to the top of the finished first floor of the structure.) The intent of this regulation is to continue the natural rhythm of home facades and prevent homes whose first floors are elevated to a point where they are not consistent with the character and proportions of existing homes in Village neighborhoods. Since 2015, three Variations from this regulation have been requested, and all have been granted. These Variations have been granted through the Minor Variation process (see Attachment #1 for the Minor Variation process) which provides Village staff with the authority to grant such a Variation for up to 15 percent of the requirement, or 5.4 inches. Variations that have been granted typically relate to additions that seek to match the existing finished floor height, though there was a recent request for a floor height Variation to accommodate stormwater considerations related to a new single-family home. The value in sending these requests through a Minor Variation process, which takes approximately one month, is not evident based upon consistent approvals.

Relevant policy questions to be explored through the amendment process include the following:

- Is there a different metric for finished first floor height that would accommodate common Variation requests such as for a building addition?
- If so, would that modified metric result in any significant impacts on neighborhood character?
- Should new home construction be treated the same way as existing homes for the purposes of this regulation?
- Are there specific conditions or objectives that would warrant Variation from the existing requirement, as opposed to changing the requirement altogether?

Building Coverage for Two-Car Garages

Sections 4.11 and 4.12 of the Zoning Ordinance state that the maximum building coverage for a single-family home in the R-1, R-2, R-3 and R-4 Zoning Districts shall be no more than 35% of the area of the lot (see Attachment #2). The Zoning Ordinance defines "building coverage" as "*the horizontal area measured within the outside of the exterior walls of the ground floor of all*

principle and accessory buildings on a lot." This regulation often adversely impacts smaller lots in parts of Lincolnwood that wish to upgrade one-car garages to two-car garages. In recent deliberations involving cases where relief from this regulation has been sought, the Zoning Board of Appeals has stated it believes a two-car garage should be the accepted minimum standard for single-family homes in Lincolnwood. The 35% building coverage maximum can be especially prohibitive in neighborhoods with older homes on small lots that require upgrades to remain market competitive and have an inadequate amount of off-street parking for residents. Over the past seven years, there have been five requests for Variations from this regulation. In most cases, these Variations have been approved when the request was related to the provision of a standard two-car garage.

Relevant policy questions to be explored through the amendment process include the following:

- Should the Village generally support the notion that a two-car garage is the minimum standard for all single-family residences?
- Are there areas or Zoning Districts in Lincolnwood where this issue is most prominent and deserves particular attention?
- If so, what are the characteristics of those lots (i.e. typical lot size, typical existing building coverage) that make it difficult to meet the 35% maximum building coverage requirement?
- Are there instances where providing a higher percentage of permitted building coverage would have an adverse impact on neighboring properties or the community in general?
- What impact would a new building coverage standard have on the ability to meet lot coverage (the total percentage of the lot covered by all impervious surfaces) standards?

Authority to Grant Permission for Extended Hours of Construction

Chapter 14, Section 14-14-10 (see Attachment #3) of the Village Code establishes permitted contractor hours for construction in Lincolnwood. Generally, construction is allowed between 7:00 a.m. and 6:00 p.m. Monday through Friday, and between 7:00 a.m. and 12:00 p.m. on Saturday. No work is permitted on Sundays or on six federal holidays. Over the past six months, there have been two requests related to extended hours of construction on private property (the installation of new driving range screening at the Bryn Mawr Country Club and paving work associated with a commercial driveway in the B-1 District intended to minimize disruption to business operations). Such requests currently require the Village Board to adopt an Ordinance waiving enforcement of this section of the Code during specified dates and times. In the case of each of the recent requests, they were approved on the Consent Agenda with no discussion. As an alternative to adoption of an Ordinance, which involves a time delay, staff recommends the Village Board consider granting authority to approve extended hours of construction to the Village Manager.

Relevant policy questions to be explored through the amendment process include the following:

- Are there certain types of improvements that should qualify for extended hours of construction based on their limited impacts to surrounding properties?
- Are there certain zoning districts where extended hours of construction should not be permitted based on potential impacts to Lincolnwood residents?
- What types of notification or documentation should be provided by the Petitioner prior to approval of extended hours of construction?
- What criteria should the Petitioner meet prior to approval for extended hours of construction?

RECOMMENDATION

Staff recommends the Village Board consider referring to the Plan Commission, for a Public Hearing, Text Amendments addressing Residential First Floor Height and Building Coverage for two-car garages. In addition, it is recommended direction be provided to staff to prepare an Ordinance addressing authority to grant Extended Construction Hours.

Documents Attached

1. First Floor Height Regulations
2. Building Coverage Permissibility
3. Permitted Hours of Construction

Attachment #1 – Regulations related to Minor Variations for First Floor Height Elevation

Chapter 15, Section 5.14 Minor Variations

A. Purpose. A Variation is a grant of relief to a property owner from the exact standards of this Zoning Ordinance, issued when undue hardship would be caused by the literal enforcement of this Zoning Ordinance. Additionally, a Variation is intended to provide relief where the requirements of this Zoning Ordinance render the land difficult or impossible to use because of some unique or special characteristic of the property itself. The intent is not to simply remove an inconvenience or financial burden that the requirements of this Zoning Ordinance may impose on a property owner. Conditions existing prior to adoption of this Zoning Ordinance shall not require a Variation.

B. Definition. Only those Variations specifically listed in Section 5.14(3) shall be classified as Minor Variations and may be approved in accordance with this Section 5.14 only for single- or multiple-family residential uses.

C. Authorized Minor Variations. The Zoning Officer shall have the authority to grant the following Minor Variations for single- or multiple-family residential uses:
   a. A reduction of up to 15% of the minimum required lot area;
   b. A reduction of up to 10% of the minimum required side or rear yard setback;
   c. A reduction of the minimum required side or rear yard setback, up to the extent of any existing encroachment into such setbacks by existing, legal nonconforming structures on the same lot;
   d. A reduction of up to 10% of the required spacing between two or more single-family attached or multiple-family buildings, in the R-4 District only; and
   e. An increase of up to 15% in the finished first floor height.

D. Initiation. An application for a Minor Variation may be made by the owner of the subject property or an authorized representative thereof.

E. Criteria. In determining whether in a specific case there are practical difficulties or particular hardships in the way of carrying out the strict letter of this Zoning Ordinance, the Zoning Officer shall take into consideration the extent to which the following facts are established:
   a. The requested Minor Variation is consistent with the stated intent and purposes of this Zoning Ordinance;
   b. The particular physical surroundings, shape, or topographical conditions of the subject property would bring a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of this Zoning Ordinance is enforced;
   c. The conditions upon which the petition for Variation is based would not be applicable generally to other property within the same zoning district;

d. The Variation is not solely and exclusively for the purpose of enhancing the value of or increasing the revenue from the property;
e. The alleged difficulty or hardship has not been created by any person presently having an interest in the property;
f. The granting of the Variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located;
g. The Variation granted is the minimum change to the Zoning Ordinance standards necessary to alleviate the practical hardship on the subject property; and
h. The proposed Variation will not impair an adequate supply of light and air to adjacent property, or substantially increase the danger of fire, or otherwise endanger the public safety, or substantially diminish or impair property values within the neighborhood.

F. Processing. An application for a Minor Variation shall be filed with the Zoning Officer. After receipt of all required information and payment of all required fees, the application will be reviewed and decided in accordance with the following procedure:
   a. Notice and opportunity to comment. Within five days after submission to the Zoning Officer of a completed application for a Minor Variation, the applicant shall give notice in writing to property owner(s) of each lot lying within 250 feet, including streets, of the property lines of the subject property for which the Minor Variation is sought. The notice shall indicate that the application shall be available for review and comment at Village Hall for at least 10 days following the date of the notice. Any interested party may submit written comments concerning the application to the Village Zoning Officer.
   b. Zoning Officer's decision. Within 30 days after receipt of a completed application for a Minor Variation, the Zoning Officer shall, by written order, either approve, approve with conditions, or deny the requested Minor Variation. Upon denial by the Zoning Officer of the requested Minor Variation, the applicant shall have the right, but not the obligation, to resubmit its request as a Major Variation pursuant to Section 5.15 of this Zoning Ordinance.
   c. Notification and record of decision. The Zoning Officer shall send his or her decision within 30 days after the date thereof to the applicant and to all other persons previously notified pursuant to Section 5.14(5)a of this Zoning Ordinance. At least once per calendar year, the Zoning Officer shall provide to the Plan Commission and to the Zoning Board of Appeals a listing of his or her decisions, by address, regarding each application for a Minor Variation.
   d. Appeal. The applicant, or any person to whom notice of the Minor Variation was sent pursuant to Section 5.14(5)a of this Zoning Ordinance, may appeal the decision of the Zoning Officer to the Zoning Board of Appeals within 10 working days after the date of the notice issued pursuant to Section 5.14(5)c of this Zoning Ordinance.

Attachment #2 – Regulations related to Building Coverage for Two-Car Garages

Chapter 15, Section 4.11 Area, bulk, density and setback standards: R-1, R-2, and R-3 Districts.

	Residential Zones		
Use Category	**R-1**	**R-2**	**R-3**
Lot Standards (single-family dwelling units)			
Minimum lot size (square feet)	9,000 SF	7,000 SF	5,400 SF
Maximum impervious coverage: %	60%	60%	60%
Maximum building coverage (%)	35%	35%	35%

Chapter 15, Section 4.12 Area, bulk, density and setback standards: R-4 - General Residence District.

	Residential Zone
Use Category	**R-4**
Lot Standards	
Minimum lot size (square feet)	5,400 SF
Minimum lot area all non-SF dwelling types (per unit)	3,000 SF
Minimum lot width (feet) detached single-family with attached garage	60 feet
Maximum impervious coverage single-family (%)	60%
Maximum building coverage single-family (%)	35%

Attachment #3 – Regulations related to Extended Hours of Construction

Chapter 14, Section 14-14-10. Site management Standards

M. Permissible hours of construction. All work undertaken pursuant to a permit may occur only between 7:00 a.m. and 6:00 p.m. Monday through Friday, and between 7:00 a.m. and 12:00 p.m. on Saturday. No work shall be permitted on Sundays or on the following federal holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day. However, construction activities performed without compensation by a person upon his or her own place of residence shall be permitted on any day and time; provided, however, that noise emissions associated with such work shall not be plainly audible beyond the boundaries of the property from which it emanates before 7:00 a.m. or after 8:00 p.m. on Mondays through Fridays, or before 8:00 a.m. or after 8:00 p.m. on Saturdays and Sundays.

DRAFT

VI. Case #PC-14-17: Public Hearing: Zoning Code Text Amendment for Building Coverage Related to the Construction of a Two-Car Garage *(Continued from January 3, 2018 and December 6, 2017)*

Chairman Yohanna announced the continuation of Case #PC-14-17 for consideration of a Zoning Code Text Amendment to consider modifying Building Coverage regulations as they relate to the construction of a two-car garage depending on certain property characteristics.

Development Manager Hammel stated this request is in response to a number of requests to build a standard two-car garage which would exceed the current maximum building coverage of 35 percent. The Zoning Board of Appeals and the Village Board requested the Plan Commission consider an appropriate text amendment to be made to allow smaller properties in the Village to be maintained in a more contemporary manner. It was noted there were five Variation requests since 2013; four in the R-3 Residential Zoning District and one in the R-4 Residential Zoning District. The Zoning Board of Appeals stated a two-car garage should be the building standard and notification should not be a requirement.

Staff's recommendation is to permit a 40 percent maximum building coverage for the construction of two-car garages with a maximum size of 500-square feet in the R-3 and R-4 Residential Zoning Districts, all other buildings cannot exceed 35 percent coverage, and must comply with all other zoning requirements. If these standards cannot be met, the regular Variation process would be required. This proposed standard is to streamline the approval process.

The Village Board expressed concerns regarding local flooding. Staff noted that local flooding should not be increased beyond what would otherwise be allowed on the property and anticipates no negative impacts specifically related to this modified standard.

Development Manager Hammel reviewed the administration of these proposed standards. Instead of the current Variation process, staff would confirm compliance through a zoning review. There would be no public notice required and approval within five to ten business days. The Minor Variation process does include mailed notices to properties within 250 feet. Approval takes approximately 25 business days. Commissioner Pauletto stated removing cars from the street is a good practice and the Village should encourage the building two-car garages. Commissioner Pauletto would like to streamline the process with only a staff review. Commissioner Sampen concurred. There was discussion whether or not mailed notices should be required even if reviewed by staff only.

Chairman Yohanna asked if there was anyone from the audience who would like to address the Plan Commission on this matter. Let the record state that no one came forward.

Motion to recommend approval of the 40 percent maximum building lot coverage in the R-3 and R-4 Residential Zoning Districts for the construction of two-car garages, by staff review only, was made by Commissioner Auerbach and seconded by Commissioner Pauletto.

Aye: Auerbach, Pauletto, Kohn, Sampen, and Yohanna
Nay: None
Motion Approved: 5-0

Return to VB Agenda

Plan Commission Staff Report
Case # PC-14-17
February 7, 2018

Subject: Consideration of Text Amendments to Modify the Regulations related to Building Coverage pertaining to the Construction of a Two-Car Garage

Requested Action: Text Amendments to Chapter 15 Zoning of the Village Code to allow permitted building coverage to be exceeded for the purposes of constructing a standard two-car garage in some residential districts.

Petitioner: Village Board (referred on September 19, 2017)

Notification: Notice was published in the Lincolnwood Review on November 16, 2017. The matter was continued at the December 6, 2017 and January 3, 2018 regular meetings of the Plan Commission.

Background

Since 2013, there have been several requests for Variations from the maximum permitted building coverage in order to allow for the construction of a standard two-car garage. Generally, the pre-existing property had a one-car garage, and the Petitioner was seeking to upgrade to a two-car garage. During the most recent cases, members of the Zoning Board of Appeals stated that a two-car garage should be considered a minimum standard in the Village. The requested Variations have typically come in the southeast portion of the Village. Granting these requests, and permitting the construction of two-car garages in these neighborhoods in the future, presents two primary benefits. First, it removes a barrier to reinvestment in neighborhoods that face significant challenges related to the size of the lots and age of the homes. This could be a factor in maintaining the market viability of these properties. Secondly, more two-car garages would accommodate additional off-street parking on blocks where curbside parking is often in high demand.

On September 19, 2017, the Village Board expressed support for a zoning amendment that would enhance the permissibility of this sort of improvement. This staff report presents a series of findings related to past Variation requests, as well as key policy questions to be considered by the Plan Commission that will guide the drafting of proposed zoning text.

Relevant History

Since 2013, there have been five Variation requests related to building coverage for the purposes of building a two-car garage. Four of the requests were for properties located in the R-3 zoning district, while one request was for a property located in the R-4 zoning district. In both the R-3 and R-4 zoning districts, the current maximum permitted building coverage for single-family homes is 35%.

The Variations granted for these requests allow for building coverages between 36.6% and 38.7%. Generally, the requested variation accommodated a standard two-car garage. Where the request was for garages larger than a standard two-car garage, the Zoning Board of Appeals and Village Board worked with the petitioner to reduce the size of the garage and, therefore, the magnitude of the Variation being sought. In some instances, the building coverage Variation request was made in conjunction with requests for relief from other code requirements, demonstrating the challenges the subject lots faced in installing a standard garage.

2013-2017 Building Coverage Variations related to the Construction of a Two-Car Garage

Year	Address	Zoning District	Approved Building Coverage	Size of Approved Garage
2013	6849 N Keeler	R-3	38.3%	598 sq. ft.
2014	3350 W Columbia	R-4	Request Withdrawn	N/A
2016	3738 West Columbia	R-3	38.4%	722 sq. ft. (including an addition to the first floor)
2017	6641 N Trumbull	R-3	38.7%	400 sq. ft.
2017	3620 W Northshore	R-3	36.6%	440 sq. ft.

Considerations

Plan Commission discussion related to a potential text amendment should consider the following:

Where should a new standard be applicable?

Staff recommends that the new standard be applied to properties in the R-3 and R-4 districts. This is based on the fact that properties in the R-1 and R-2 districts typically do not have detached garages and generally have lot sizes that can accommodate more contemporary amenities (such as a two-car garage) without exceeding the 35% building coverage maximum.

What should be the revised standard for building coverage?

Based on previous cases and the characteristics of lots in the R-3 and R-4 districts, staff recommends a 40% maximum for building coverage, but only under the following circumstances:

- The proposed garage cannot exceed 500 square feet;
- The building coverage of all other elements on the property cannot exceed the current 35% building coverage maximum; and
- The proposed garage is compliant with all other zoning requirements (i.e. maximum impervious coverage, setbacks, accessory building height, etc.)

Presumably, any proposed garages that cannot meet the standards above would be required to go through the regular Variation process.

What issues might this permissibility have on surrounding properties?
Staff does not anticipate any substantial negative impacts on surrounding properties. In recent Variation cases related to this standard, one-car garages have been replaced with two-car garages in generally the same location on the property and in a manner that is compliant with accessory structure setbacks. Neighboring properties have not been subjected to any unusual or unexpected impacts.

During the Committee of the Whole discussion regarding this proposed text amendment, Village Trustees discussed possible impacts related to flooding. However, local flooding related to development is more directly tied to impervious coverage. If a new two-car garage is permitted to exceed the 35% building coverage maximum but must still comply with the 60% impervious coverage maximum, the garage will have no additional stormwater impact compared to the same area being used for a patio or another type of impervious surface that would permitted according to the code.

How should these new standards be administered?
Staff has identified two potential ways that the new standards could be administered within the context of the current Zoning Ordinance:

- *Staff review:* This alternative would allow staff to approve proposed two-car garages that meet the standards as part of regular building permit review. There would be no public notification of the request, and, depending on other factors, approval and construction could be done in as few as five business days.
- *Minor Variation:* This alternative would allow proposed garages that meet the standards to be approved through the Village's existing Minor Variation process. This process includes mailed notification to surrounding property owners in two phases; one to make them aware of the property owner's request, and another to notify them of the Zoning Administrator's ruling and provide an opportunity for objection or appeal. The Minor Variation process takes about 25 calendar days.

Recommended Action
Staff is recommending Text Amendments to the Village Zoning Code necessary to permit the construction of a two-car garage in certain portions of the Village in excess of the 35% maximum building coverage standard as described in this staff report and deliberated as a part of Public Hearings regarding this case. Based on the direction provided by the Plan Commission, and assuming there is consensus regarding this direction, staff will prepare proposed Code Language for review by the Plan Commission at the March 7, 2017 regular Plan Commission meeting.

Documents Attached
1. Current Regulations related to Building Coverage Standards

Attachment #1 - Current Regulations related to Building Coverage Standards

Excerpts from Sections 4.11 and 4.12

Lot Standards	Residential Zones			
	R-1	R-2	R-3	R-4
Minimum Lot Size (square feet)	9,000 SF	7,000 SF	5,400 SF	5,400 SF
Maximum impervious coverage: %	60%	60%	60%	60%
Maximum building coverage: %	35%	35%	35%	35%

Notes 1 and 2 in Section 4.11:

1) Maximum impervious coverage of 60% includes all surfaces that do not allow water penetration (driveways, paving bricks, composed stone, building foundation etc.)
2) Maximum building coverage of 35% means the percentage of the lot occupied by any building including accessory buildings or structure.

Return to VB Agenda

Attachment #6 - Current Regulations related to Building Coverage Standards

Excerpts from Sections 4.11 and 4.12

Lot Standards	Residential Zones			
	R-1	R-2	R-3	R-4
Minimum Lot Size (square feet)	9,000 SF	7,000 SF	5,400 SF	5,400 SF
Maximum impervious coverage: %	60%	60%	60%	60%
Maximum building coverage: %	35%	35%	35%	35%

Notes 1 and 2 in Section 4.11:

1) Maximum impervious coverage of 60% includes all surfaces that do not allow water penetration (driveways, paving bricks, composed stone, building foundation etc.)
2) Maximum building coverage of 35% means the percentage of the lot occupied by any building including accessory buildings or structure.

Return to VB Agenda

Case #PC-14-17

Potential Text Amendments

for

Building Coverage related to the Development of Two-Car Garages

Return to VB Agenda

Existing Regulation

- Major Variations process used for property owners seeking relief
- 5 Variation requests since 2013

		Residential Zones		
	Use Category	**R-1**	**R-2**	**R-3**
	Lot Standards (single-family dwelling units)			
	Minimum lot size (square feet)	9,000 SF	7,000 SF	5,400 SF
	Maximum impervious coverage: %	60%	60%	60%
*	Maximum building coverage (%)	35%	35%	35%
	Minimum Ground Floor Area Per Dwelling			
	SF detached 1-story dwelling without basement	1,700 SF	1,400 SF	1,300 SF
	SF detached 1-story dwelling with basement	1,500 SF	1,200 SF	1,100 SF
	SF detached dwellings with (1 + stories)	1,000 SF	800 SF	700 SF
	Building Standards			
	Maximum building height (feet) peaked roof SF detached measured to roof peak	35 feet	35 feet	35 feet
	Maximum building height (feet) flat roof SF detached measured to the highest point of the flat roof	22 feet	22 feet	22 feet
	Finished 1st floor height limit SF residential (elevation at top of curb to the top of the finished first floor)	Max. 3 feet	Max. 3 feet	Max. 3 feet
	Maximum building height (feet) nonresidential	40 feet	40 feet	40 feet
	Maximum FAR			
	SF detached, lot size ≥ 6,000 SF	0.6	0.6	0.6
	SF detached, lot size < 6,000 SF or total floor area < 3,600 SF	0.66	0.66	0.66
	Nonresidential permitted or special uses	0.5	0.5	0.5
	Yard Standards			
	Minimum front setback (feet) (Note 3)	25 feet	25 feet	25 feet
	Maximum front yard coverage with impervious surface (%)	50%	50%	50%
	Minimum interior side setback (feet) single-family	5 feet or 10% of lot	5 feet or 10% of lot	5 feet or 10% of lot

*** Also applies to the R-4 District.**

Return to VB Agenda

Challenges

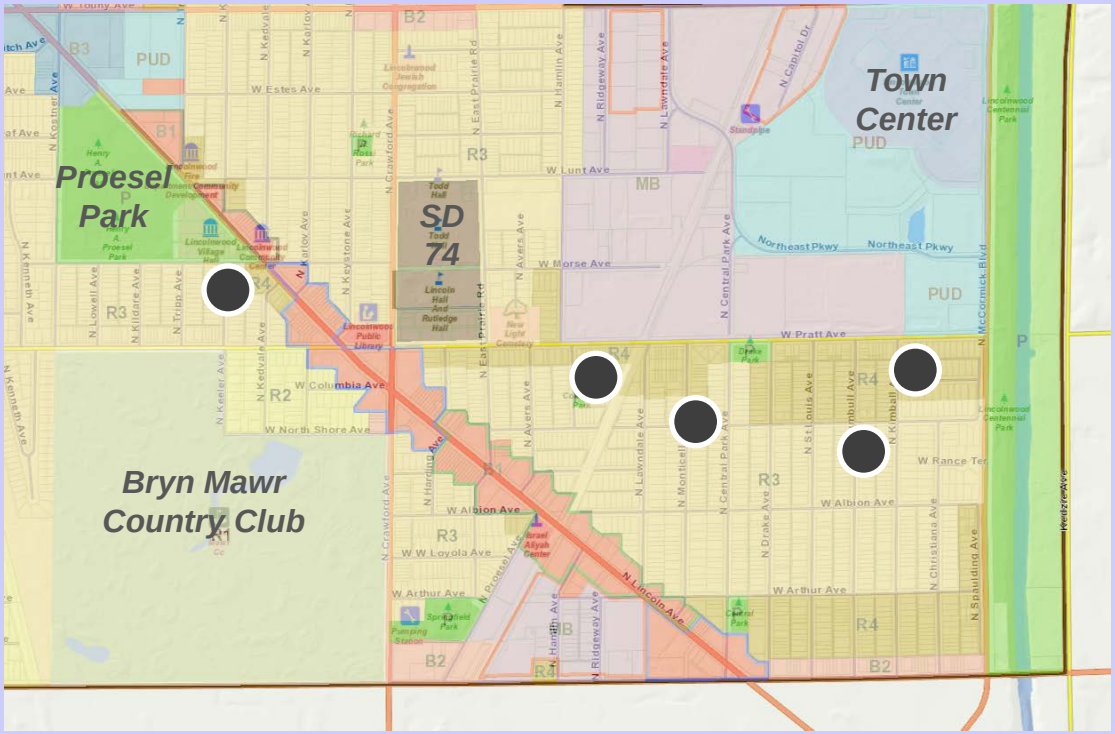
- Variety of lot sizes throughout Lincolnwood
- Era of development
  - –Nature of residential amenities
    - •Modern kitchens
    - •Two-car garages
    - •Storage (i.e. sheds)
- ***Smaller lots have greater difficulty providing modern amenities***

Return to VB Agenda

Discussion Questions

- **Where should a new standard be applicable?**

- Requests since 2013:
  - –R-1: none
  - –R-2: none
  - –R-3:
    - •6849 Keeler
    - •3738 Columbia
    - •6641 Trumbull
    - •3620 North Shore
  - –R-4:
    - •3350 Columbia



Return to VB Agenda

Discussion Questions

- **Where should a new standard be applicable?**
- R-1 and R-2 Districts:
  - –Larger lots that can accommodate additional building area
  - –Most homes built with attached garages
  - –No alleys
  - –Less demand for on-street parking
- R-3 and R-4 Districts:
  - –Smaller lots (less permitted area for building coverage based on same percentage)
  - –Several homes seeking upgrades
  - –Demand for on-street parking
  - –All recent Variation requests in R-3 and R-4 Districts

Return to VB Agenda

Discussion Questions

- **Where should a new standard be applicable?**
- Proposed Ordinance would allow a greater building coverage percentage for the addition of a one- or two-car garage in the R-3 and R-4 Districts

Return to VB Agenda

Discussion Questions

- **What should be the revised standard for building coverage?**

- Resulting Building Coverage for Past Approvals
  - –38.3%
  - –38.4%
  - –38.7%
  - –36.6%

Return to VB Agenda

Discussion Questions

- **What should be the revised standard for building coverage?**

- Proposed Ordinance allows for a building coverage of up to 40% for the addition of a one- or two-car garage with the following conditions:
  - –Max. garage area of 500 sq. ft.
  - –All other buildings cannot exceed 35% coverage
  - –Compliance with all other zoning requirements

*If standards cannot be met, regular Variation process would be required.

Return to VB Agenda

Discussion Questions

- **How should the new standards be administered?**

- Proposed Ordinance would allow approval through staff zoning compliance review as part of Building Permit process
  - –Minimized time and property owner cost for approval
  - –Any additional zoning relief would follow established procedures for public review and approval

Return to VB Agenda

Requested Action

Approval of an Ordinance establishing a maximum building coverage of 40% and related standards for the purposes of installing a one- or two-car garage in the R-3 and R-4 zoning districts