



Village of Lincolnwood Plan Commission

Meeting
Wednesday, October 14, 2015
7:00 P.M.

in the
Council Chambers Room
Lincolnwood Village Hall - 6900 North Lincoln Avenue

Agenda

1. **Call to Order/Roll Call**
2. **Pledge of Allegiance**
3. **Approval of Minutes**
June 3, 2015 Minutes
September 2, 2015 Minutes
4. **Case #PC-12-15: Public Hearing: 3400 West Pratt Avenue – Special Use and Variation for Construction of Senior Housing Facility and Off-Street Parking**
Request: Consideration of a request by South Bay Partners for a Special Use to permit senior housing within the MB District and a Variation to permit off-street parking to the front of the proposed building.
5. **Case #PC-13-15: Public Hearing: Zoning Code Text Amendment – Prohibition of Front Yard Parking**
Request: Consideration of a Text Amendment of Current Prohibition of off-street parking in front and corner side yards.
6. **Other Business**
7. **Next Meeting**
8. **Public Comment**
9. **Adjournment**



**DRAFT MEETING MINUTES
OF THE
PLAN COMMISSION
JUNE 3, 2015 – 7:00 P.M.**

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

MEMBERS PRESENT:

Chairman Paul Eisterhold
Irving Fishman
Patricia Goldfein
Don Sampen
Mark Yohanna

MEMBERS ABSENT:

Steven Jakubowski
Anthony Pauletto

STAFF PRESENT:

Aaron N. Cook, AICP, Community Development Manager
Ryan Johnson, Community Development Intern

I. CALL TO ORDER

Chairman Eisterhold noted a quorum of six members and called the meeting to order at 7:05 p.m.

II. PLEDGE OF ALLEGIANCE

III. APPROVAL OF MINUTES

Motion to approve the April 1, 2015 Meeting Minutes was made by Commissioner Fishman, and seconded by Commissioner Sampen.

Aye: Fishman, Sampen, Goldfein, Yohanna, and Eisterhold

Nay: None

Motion Approved: 5-0

Motion to approve the May 6, 2015 Meeting Minutes was made by Commissioner Fishman, and seconded by Commissioner Yohanna.

Aye: Fishman, Yohanna, Goldfein, Sampen, and Eisterhold

Nay: None

Motion Approved: 5-0

IV. Case #PC-02-15: Public Hearing: Proposed Text Amendment

Mr. Cook presented draft text amendment language relative to the definition of semiprivate fences. The definition states that a fence, semiprivate or semiprivate fence is a fence which is not a solid nor an open fence. Examples of these fence types are shadow box and louvered fences. Louvered fences are to be designed as follows: 1) the board-width to board-gap ratio must be a minimum of 2 to 1; 2) the angle of the boards cannot exceed 45 degrees; and 3) the fence shall allow the ability to see from one side of the fence through to the other side.

With regards to cost, Mr. Johnson explained that louvered fences are more expensive to install than solid fences due to the material required and the labor intensive installation. Shadowbox fences are constructed in panels, while louvered fences are custom made.

Chairman Eisterhold asked if the Commissioners were agreeable to a 45-degree angle since a 60-degree angle would be considered a solid fence and a 30-degree angle would be considered an open fence. Mr. Cook explained that a fence with louvers at a 45-degree angle or less is a design type that would be accepted under the semiprivate definition. Mr. Cook further explained that the above-mentioned degree numbers were used for illustrative purposes. The 2-to-1 ratio came about in an effort to control the board width because if the boards are installed too close together vertically, even at 45 degrees, you are, in essence, creating a solid type fence.

Commissioner Sampen questioned the board-width to board-gap ratio part of the definition and pointed out that this part of the definition should be reversed because if you increase the width of the boards, the more private it becomes. Commissioner Sampen asked if the word "maximum" when referring to the 2-to-1 ratio should be part of the definition. Commissioner Goldfein agreed with Commissioner Sampen and stated that she would like to see the definition include that the gap has to be 50 percent or more of the board width so the definition is easier to understand.

Commissioner Fishman believes that the semiprivate fence requirement puts an additional financial burden on our residents and is strongly opposed to this concept.

Mr. Cook presented a new draft definition to read: "Examples of this fence type are shadow box and louvered fences. Louvered fences are to be designed as follows: 1) the gap between boards must be a minimum of 50% the board-width (e.g. a six-inch board width must have a minimum three-inch gap between boards); 2) the angle of the boards cannot exceed 45 degrees; and 3) the fence shall allow the ability to see from one side of the fence through to the other side." It was agreed that a diagram should be included with the definition.

There was discussion regarding what angle should be appropriate and what the language should read with regards to both horizontal and vertical louvered fences.

It was agreed that the draft text amendment language is to read as follows: "Examples of this fence type are shadow box and louvered fences. Louvered fences are to be designed as follows:

1) the gap between boards must be a minimum of 50% the board-width (e.g. a six-inch board width must have a minimum three-inch gap between boards); 2) the angle of the boards cannot exceed a 50-degree angle from horizontal or vertical; and 3) the fence shall allow the ability to see from one side of the fence through to the other side.”

Chairman Eisterhold asked if anyone in the audience would like to address the Plan Commission regarding this Public Hearing. Let the record show that no one came forward.

Motion to approve was made by Commissioner Yohanna to approved the text amendment and allow staff to draft language in such a way to make clear that this amendment will allow both horizontal and vertical fences, and seconded by Commissioner Sampen.

Aye: Yohanna, Sampen, Goldfein, and Eisterhold

Nay: Fishman

Motion Approved: 4-1

V. NEXT MEETING

Chairman Eisterhold announced that there will be a Plan Commission Workshop meeting that will be held on Wednesday, June 24, 2015 to discuss a senior housing congregate care facility at the old Bell and Howell site.

VI. ADJOURNMENT

Hearing no further business, **motion to adjourn** was made by Commissioner Yohanna, and seconded by Commissioner Fishman. Meeting adjourned at 7:45 p.m.

Aye: Yohanna, Fishman, Goldfein, Sampen, and Eisterhold

Nay: None

Motion Approved: 5-0

Respectfully Submitted,

Kathryn M. Kasprzyk
Community Development Coordinator



**DRAFT MEETING MINUTES
OF THE
PLAN COMMISSION
SEPTEMBER 2, 2015 – 7:00 P.M.**

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

MEMBERS PRESENT:

Acting Chairman Mark Yohanna
Irving Fishman
Patricia Goldfein
Steven Jakubowski
Don Sampen

MEMBERS ABSENT:

Chairman Paul Eisterhold
Anthony Pauletto

STAFF PRESENT:

Timothy M. Clarke, AIA, Community Development Director
Aaron N. Cook, AICP, Community Development Manager
Hart N. Passman, Village Attorney

I. CALL TO ORDER

Acting Chairman Yohanna noted a quorum of four members and called the meeting to order at 7:05 p.m.

II. PLEDGE OF ALLEGIANCE

III. APPROVAL OF MINUTES

Motion to approve the August 5, 2015 Meeting Minutes was made by Commissioner Sampen, and seconded by Commissioner Jakubowski.

Aye: Sampen, Jakubowski, Fishman, Goldfein, and Yohanna

Nay: None

Motion Approved: 5-0

IV. Case #PC-10-15: Public Hearing: 6733-6735 North Lincoln Avenue – Proposed Special Use and Variations for Mixed-Use Development

Acting Chairman Yohanna swore in the Petitioners, Ms. Rebeka Hoxha and Ms. Sue Auerbach.

The property is a one-story, two-tenant commercial building which has parking in the front across the entirety of the property located at 6733-6735 North Lincoln Avenue in the R-3 Residential Zoning District. Immediately adjacent to the rear of the property is an area that is zoned residential but is being used as a parking lot for the neighboring restaurant. Photographs, site plans, elevations, and project renderings were presented for review and discussion. The proposed building is positioned approximately 25 feet from the front lot line, and there are two proposed off-street parking spaces to the front. There is a pass-through or driveway that runs underneath through the second and third floors to the south of the property which leads to the rear parking lot. Seven parking spaces are planned for the rear lot with two spaces located underneath an overhang of the building. The rear of the property will have a dumpster and landscape area which will include a proposed masonry wall.

The floor plans submitted include a first floor commercial use, the second floor will have office space and a two-bedroom residential unit of approximately 1,670-square feet, and the third floor will have a one-bedroom residential unit of approximately 1,190-square feet and a two-bedroom 1,670-square foot residential unit. There will also be an accessible rooftop terrace. Even though the landscape issues will interfere with the parking, landscape areas have been identified as well as perimeter landscaping on the rooftop with an irrigation system. The Petitioner's plan is to make this as green as possible within the limitations of the irregular lot size.

As part of this proposal, a Special Use is being requested to allow residential uses above first floor commercial. The Zoning Code was amended in January 2015 to require a Special Use for residential uses along Lincoln Avenue.

The Petitioner is requesting seven Variations. The first Variation is relief from the five-foot build-to line. The proposed building setback is 25 feet. The second Variation pertains to drive aisle width. The minimum two-way drive aisle width is 24 feet, and the Petitioner is seeking a proposed width of 12 feet. The third Variation is a reduction in off-street parking spaces. The Zoning Code requires 12 off-street parking spaces, and the proposed site plan provides 9 off-street parking spaces; 2 to the front and 7 to the rear. The fourth Variation pertains to the two parking spaces in the front of the building. The Zoning Code prohibits parking in the front of a building. The Village Board has referred this regulation, specifically as it relates to commercial property, to be heard by the Plan Commission in the near future. The fifth Variation is relief from the minimum perimeter landscape area requirement. If this Variation is not granted, it would result in the loss of three parking spaces. The Zoning Code requires a minimum eight-foot landscape area with landscape screening required. No landscape or screening is provided. The sixth Variation is relief from the minimum interior landscape requirement. The Zoning Code requires landscape islands at the end of parking rows and no landscape islands or landscaping will be provided at the ends of the parking row. The last Variation is relief from the eight-foot screening between common lot lines between residential and commercial areas. The proposed plan calls for a six-foot masonry wall.

The building use will be mainly used as a showroom for their business. They will have tile, cabinets, etc. on display. This is not a retail establishment and is not intended to be a high-volume business.

The Petitioners stated that there are a lot of issues with the lot, mainly the build-to line and the front parking. The surrounding businesses on the south side of Lincoln Avenue do have parking in the front. If the building was placed at the five-foot build-to line, they believe the building would be a nuisance and a hazard which would block the view as you drive up Lincoln Avenue. If the only parking is in the rear of the property, this would be a detriment to the Petitioner's business.

There was discussion as to the feasibility and placement of the 38-foot masonry wall. Sue Auerbach, architect for the Petitioner, said that this Variation request would be removed from their proposal; an eight-foot wall would be built if required. In reality, this wall would be screening an existing parking lot which is owned by Great Beijing. The Petitioners have tried to contact the owner regarding a cross access agreement, but have been unsuccessful. The owner is out of the country and rents out the restaurant to a family member. According to the Zoning Code parking regulations, Great Beijing requires all the parking spots they have.

It was noted that there could be a residential building built in this parking area in the future no matter how remote it may seem. Great Beijing uses this lot for parking, and the Petitioners believe that if any other use moved into that space, they would need this area for parking as well, diminishing the possibility of this being used for a residential use even though it zoned residential.

When asked what purpose this wall would serve, the Petitioners stated that this wall serves no purpose at all. The Petitioners are willing to install this wall and the five-foot landscaping barrier at any time in future if the property is ever developed as residential. The Commissioners agreed that this wall is not necessary and commended the Petitioners on their creativity. It was suggested that the Petitioners try to obtain an easement agreement for ingress and egress. With no wall, they can include a five-foot landscape barrier. Commissioner Goldfein said that landscaping should be flexible and fit the property and the proposed landscaping is reasonable.

Safety issues were discussed due to the narrowness of the drive aisle. Some suggestions included warning lights or mirrors and a speed bump could be installed for additional safety. With regards to fire safety issues, the Fire Department has stated that this is not an ideal situation, but there are other properties in town which do not have complete access as well.

The Commissioners discussed the Special Use and Variations individually. They all agreed with granting the Special Use for residential uses above commercial.

Mr. Clarke reminded the Commissioners that there needs to be a hardship with regard to the Variations. These hardships need to be identified for the Village Board. The hardship is that the property is not feasible to develop with bringing it up to the lot line. It renders the property useless.

Acting Chairman Yohanna asked if anyone in the audience had any comment regarding this Public Hearing. Let the record stated that no one from the audience came forward.

Motion to approve the requested Special Use and Variations at 6733-6735 North Lincoln Avenue to authorize the demolition of the existing structure and for construction of a new mixed-use structure and off-street parking area that would be comprised of the following items was made by Commissioner Jakubowski and seconded by Commissioner Fishman:

- A Special Use to allow the residential units to be built above the first-floor commercial and to approve the following seven Variations:
- Approve the building setback to be up to 25 feet instead of the 5-foot build-to line;
- Approve a drive aisle which would function as a two-way drive aisle which would be less than the minimum width of no less than 12 feet and that would require electronic eyes or motion detectors on both sides and a speed bump at the entrance to the drive through aisles;
- Permit less than the minimum required number of off-street parking spaces, but no less than nine;

- Permit the location of off-street parking to the front of the proposed building for not more than two spots;
- Allow no perimeter landscaping areas on the north and south sides;
- Permit less than the required interior landscape for the parking area in the back, moving the dumpster area to the back, and build a narrow landscape area on each end of the parking area to set off the property lines from the adjacent areas if the wall is not built;
- Eliminate the need for a wall and replace it with landscaping. If a building permit is issued for a residential building, the property owners would have to install an eight-foot wall;
- Finding that absent the Variations with respect to the setback, the ability to create a drive through aisle, minimum off-street parking spaces, allowing off-street parking to the front of the proposed building, and no requirement for any perimeter landscaping given the size of the property, if these Variations are not granted, the property cannot be developed and would impose conditions that would render the property useless causing an extreme hardship to the Petitioner;
- The special hardship is to the residents and to the Village should there be inadequate access which this landlocked property provides and there are going to be residents in the back of the property; and
- Staff recommended conditions include a security plan submitted to the Police Chief and knock box(es) installed as per the Fire Department.

Aye: Jakubowski, Fishman, Goldfein, Sampen, and Yohanna

Nay: None

Motion Approved: 5-0

V. Case #PC-11-15: Public Hearing: Public Hearing: Proposed Text Amendment – Short-Term Rental Property

This matter is a consideration of a proposed text amendment which was referred to the Plan Commission from the Village Board concerning regulation of short-term rental property. The Zoning Code does not have a definition for this use. The Village has received calls regarding several single-family residential properties that have been used as short-term rentals. The purpose of this discussion is to clarify the intent of these types of uses specifically in residential areas. The requested review and possible action by the Plan Commission is to identify the preferred definition of the term short-term rental property, to concur with recommended modifications to other definitions to distinguish from short-term rental property, and to identify this use as a Permitted Use, Special Use, or Prohibited Use in the Village's Zoning Districts. The Village Attorney has also presented an alternative action which would be to regulate this use through a licensing process. The licensing process would be part of the Municipal Code which is not under the direct purview of the Plan Commission. In the event the Plan Commission deems the licensing process to be most appropriate, the zoning action would be to recommend no change to the Zoning Code which would then be forwarded to the Village Board for a licensing agreement. Staff does not feel the licensing process is appropriate.

Staff presented the recommended definition of short-term rental property which is "A building or portion thereof that is primarily held out for rent on a nightly, weekly, or monthly basis for overnight lodging for transient guests". An alternative definition was given as "A building or portion thereof that is held out for rent on a nightly, weekly, or monthly basis for overnight lodging for transient

guest for more than ?? months during a twelve-month period”. The alternative definition would be difficult to prove. As a result, the first definition is recommended. This use does not include the renting of a room in which the homeowners are in residence. Mr. Clarke said that there have been two cases of housing units that have only been used for this purpose. The owners do not live in the homes and are being used as a business. The neighbors are very concerned about these homes being used essentially as a hotel.

Mr. Passman stated that this is a new issue that municipalities are dealing with. There are numerous websites on the internet that advertise this kind of use. The proposed definition has been prepared to start a conversation as how to regulate this use. Discussion points could include how long is long enough which is why the definition includes the language nightly, weekly, or monthly rental. The Village Board would like some direction as to how these kinds of uses should be restricted and defined. Once a definition has been established, the next step is to determine what Zoning Districts would this use be allowed in and would this use be a Permitted Use, a Special Use, or a Prohibited Use.

To Mr. Passman’s knowledge, Lincolnwood is one of the first communities to actively regulate this issue by proceeding with a text amendment focusing on short-term rental property. Staff stated that Skokie considers this use a bed and breakfast. Wilmette will be discussing the issue, but no details are yet available. A bed and breakfast is not allowed in any Residential Zoning District.

Motion to continue to the November 4, 2015 Plan Commission meeting was made by Commissioner Fishman, and seconded by Commissioner Sampen.

Aye: Fishman, Sampen, Goldfein, Jakubowski, and Yohanna

Nay: None

Motion Approved: 5-0

Acting Chairman Yohanna asked if anyone in the audience would like to address the Plan Commission regarding this Public Hearing. Let the record show that no one came forward.

Motion to adjourn by was made by Commissioner Fishman, and seconded by Commissioner Sampen. Meeting adjourned at 9:05 p.m.

Aye: Fishman, Sampen, Goldfein, Jakubowski, and Yohanna

Nay: None

Motion Approved: 5-0

Respectfully Submitted,

Kathryn M. Kasprzyk
Community Development Coordinator



Plan Commission Staff Report

Case #PC-12-15

October 14, 2015

Subject Property:

3400 West Pratt Avenue

Zoning District:

MB Light Manufacturing/Business District

Petitioner:

South Bay Partners, Petitioner
CenterPoint Properties Trust, Property
Owner

Nature of Request: Petitioner seeks to construct an assisted living, memory care, and independent living facility.



Requested Action:

Special Use: To allow an assisted living and independent living facility in an MB Zoning District

Variation: Variation approval to permit the location of off-street parking between the proposed building and adjoining streets.

Notification: Consistent with Village requirements, notice of the October 14, 2015 Public Hearing was published in the Lincolnwood Review dated September 24, 2015, a Public Hearing Sign was installed at 3400 West Pratt Avenue, and notice of the public hearing, dated September 24, 2015, was mailed to property owners within 250 Feet.

Summary of Request

South Bay Partners propose a senior housing facility on the 13.5-acre former Bell & Howell site. The proposed development includes 251 independent living, 88 assisted living, and 44 memory care units (total 383 units) with a total of 304 off-street parking spaces. The independent living portion of the project includes 251 off-street parking spaces, 85 of which are located within an indoor parking garage. The developer proposes 22 parking spaces for the assisted living portion of the project and 31 parking spaces for staff. No parking has been devoted for Memory Care units as the Petitioner has indicated no resident within memory care can drive. Minimum Village parking requirements for this development require 304 off-street parking spaces.

The proposal includes a single four-story building with a two-story connector between wings of the building. The facility includes communal dining rooms, activity areas, a wellness area, and an indoor pool. The existing storm water detention basins located along Pratt Avenue are proposed to be retained with an expansion to connect the two existing basins. The developer proposes to retain the existing landscape berm to screen the development along Pratt Avenue.

South Bay Partners seeks the approvals necessary to permit the proposed development of the property at 3400 West Pratt Avenue. These approvals include: 1) Special Use approval to permit an assisted and independent living facility in the MB Zoning District; and 2) a Variation to permit an off-street parking area to be located between the proposed building and adjoining streets. All other zoning requirements, building setback, parking count, etc. have been met.

Before the Plan Commission are both the Special Use request and the Variation request. The Village of Lincolnwood, through Home Rule authority, has created a process in which the Plan Commission considers zoning variations when they are requested along with Special Use. This process is intended to streamline the hearing process for the benefit of the applicant.

Special Use to Approve Assisted Living and Independent Living Facility

In 2011 the Village considered and approved a Text Amendment to the Zoning Code to allow, as a Special Use, “Assisted Living Facility” and “Independent Living Facility or Senior Housing Facility” in the MB District. This is the first Special Use request received for assisted living and independent living in the MB District since this change occurred to the Zoning Code.

The proposed use includes both an independent living and an assisted living component. The Zoning Code defines these types of facilities as:

“INDEPENDENT LIVING FACILITY or SENIOR HOUSING FACILITY

A housing development:

(1) Consisting of individual dwelling units, intended for occupancy by not more than three persons;

(2) In which occupants are provided common services, such as dining facilities, housekeeping, transportation, and social and recreational facilities, but to whom daily living or nursing services are not provided; and

(3) Which dwelling units are solely occupied by persons who are either: i) 62 years of age or older; or ii) satisfy one or more exceptions set forth in 24 C.F.R. § 100.303, as may be amended, to the provisions of the Federal Fair Housing Act (42 U.S.C. § 3601 et seq., as may be amended) governing housing for older persons.”

“ASSISTED LIVING FACILITY - A special combination of housing, supportive services, personalized assistance, and health care designed to respond to the individual needs of those who need help with activities of daily living. A facility with a central or private kitchen, dining, recreational, and other facilities, with separate bedrooms or living quarters, where the emphasis of the facility remains residential.”

As previously indicated, a total of 383 units are proposed. The Zoning Code requires minimum off-street parking spaces for uses within the Village. As proposed, the development includes two types of senior housing for which the Zoning Code includes off-street parking requirements. Below are those requirements and calculations for each of these uses:

Assisted Living: 1 space per 4 residents, plus 1 space per each full-time employee
Independent Living Facility: 1 space per dwelling unit, plus 1 space per every 2 full-time employees

Project Calculations

Assisted Living: 33 spaces + 10 spaces for employees = 43 spaces
Independent Living Facility: 251 spaces + 10 for employees = 261 spaces

The site plan indicates two primary entrances to the development both accessed by the Northeast Parkway. The project includes a single curb cut on Pratt Avenue, a reduction for the two existing Pratt Avenue curb cuts. The developer indicates that all delivery, food, and trash service will access the site via the Northeast Parkway access points.

Variations

The Petitioner seeks a Variation to permit off-street parking between the building and street. The Zoning Code, Section 7.06(5), permits off-street parking in any yard except a front yard and a yard abutting a street. As proposed, the site plan includes off-street parking between the proposed building and Northeast Parkway in two locations as well as between the building and Pratt Avenue (southeast corner of property). The subject property is a "Through lot: A lot having lot lines on two nonintersecting streets..." Application of Section 7.06(5) to the proposed development would result in off-street parking permitted only to the side of the proposed building.

On the same agenda as this consideration, is a Village Board referral for a public hearing to review the current prohibition on front yard parking for non-residential properties.

Conclusion

South Bay Partners seeks Special Use approval to construct a four-story assisted and independent living facility in the MB Zoning District located on property situated at 3400 West Pratt Avenue. In addition, a Variation is requested for the location of off-street parking proposed to be located in a front yard.

Staff convened the Development Review Team on June 17, 2015 and attached is the report from that review. Included in this document are review comments from each participating department representative. A summary of the review comments and recommendations are found on page 2 of the document. No inquiries from the public were received relative to this request in advance of the public hearing.

The subject property is designated as Industrial on Future Land Use Map contained in the Village's 2001 Comprehensive Plan. The subject property is within the NEID TIF District and pursuant to Village Board policy, TIF funds may only be used to assist non-residential

projects. If residential development occurs within the TIF, the Village shall consider removal of the property from the TIF District where practical. In 2010, a Retail Feasibility Report prepared for the Village noted a lack of retail demand for the property and indicated that a senior development of the subject property appeared suitable.

If the Plan Commission sees fit to recommend approval of Special Use and Variation, staff recommends the following conditions:

1. Submit a Security Plan for the property for Police Chief approval prior to the issuance of the Certificate of Occupancy;
2. Plans to include dedicated space for Fire Department use to include at minimum 18' x 35' ambulance garage with 12' x 12' garage door along with 14' x 15' office space with bathroom; and
3. Approval by Public Works of the disconnection and abandonment of the existing 10" water main traversing the property.

Documents Attached

1. Development Review Team Report – Review Date: June 17, 2015
2. Traffic Impact Review Memorandum Dated October 5, 2015
3. Public Hearing Application Packet
 - a. Public Hearing Application
 - b. Site Photographs
 - c. Economic Impact Analysis Report
 - d. Traffic Impact Study
 - e. Plat of Survey
 - f. Site Plan
 - g. Floor Plans and Elevations
 - h. Landscape Plans



**Village of Lincolnwood
Development Review Team
Summary Review**

**Proposed Senior Development
South Bay Partners**

3400 Pratt Avenue

(Former Bell & Howell site)

Review Date: June 17, 2015

Nature of Request

South Bay Partners and its team, propose a Senior facility for the 13.5 acre former Bell & Howell site. The proposal includes 251 Independent Living units, 90 Assisted Living units; and 44 Memory Care units for a total unit count of 385 units, which are proposed as a mix of studio, 1 and 2 bedroom units. In addition to living units, the facility includes communal dining rooms, activity areas, a Wellness Center and indoor pool.

This proposal consists of a single 4 story building with a 2 story connector segment between wings of the building. Major building entrances front onto the Northeast Parkway where two curb cuts are proposed. A single curb cut on Pratt Avenue is also proposed. 304 parking spaces for the development are proposed with 145 parking spaces located in an enclosed garage having a green roof and 159 parking spaces are located elsewhere on the property. The existing storm water detention basins located along Pratt Avenue are proposed to be retained with an expansion to connect the two existing basins.

Village Actions Required

- Zoning Approval by Village. See Community Development Report for details.

Other Actions Required

- WMO Permit from MWRD
- NPDES Storm Water Permit from IEPA

Summary of Staff Review Comments

- Add benches/trash receptacles on site plan at various property locations. Consider planters nears entranceways for seasonal flowers
- Consider a designated walking route on property for residents, consider extending sidewalk west in panhandle to Central Park, and extend sidewalk eastward on north side of detention area
- Add Stop Sign and Stop Bar notations to plans at all driveway exits
- Add thermoplastic pedestrian crosswalks to plans at driveway crossings and as appropriate throughout development
- Identify on site plan location(s) for site signage
- Identify refuse holding area(s) on the property (none indicted)
- Describe the Green Roof amenity and provide details concerning the proposed patio area
- For the 2 parking lots on the north side, add landscape buffers along street side and extend Pratt Avenue berm in area where drive lane is being removed
- Add trees to all parking bay row end caps
- Add dimensions to site plan as indicated by departments and confirm public sidewalks are 5 feet in width
- Review sight line and existing trees at west entrance from Northeast Parkway
- Provide landscape details for detention area
- Identify proposed size and location of water and sewer connections. Connections must be approved by Public Works
- Disconnection and abandonment of existing 10" public water main traversing the site is required
- Installation of a Knox Box by the Fire Department will be required
- Water supply for fire suppression must be reviewed and is recommended to be looped within the project
- Fire Department desires 18ft X 35ft ambulance garage and 14ft X 15 ft. office with bathroom access for on-site manning of an ambulance crew

- Identify fire hydrant locations. Existing locations may require abandonment
- Existing Storm Water Management Easements for the detention area need to be expanded or the ponds decreased based on HWL
- Easement required for public sidewalk areas located on private property
- Final Engineering Plans to include topographical elevations and other requirements as noted by the Village Engineer
- Fire Sprinkler system and fire alarm system required for building

Additional Documents Required/Requested

- Provide information as noted on attached Zoning Review Worksheet
- Confirm that the independent living component meets the Village's definition of Independent Living Facility
- Provide a narrative summary of prior projects by developer
- Submit an updated Land Survey
- Provide a Traffic Impact Report and Parking Supply Study
- Identify number, type and typical route for service delivery vehicles
- Provide an Economic Impact Report
- Provide Renderings of project from Pratt Avenue and Northeast Parkway perspective
- Provide the sign package for property
- Provide information to Village Engineer concerning the IEPA NFR letters issued for the property
- Provide easement document for public sidewalk located on private property
- Provide Easement document for existing sewer located on east side of property (unless it is to be abandoned)
- Provide Photometric Lighting Plan for property, consistent with Code
- Prior to building permit issuance, submit fire sprinkler, fire alarm and fire hydrant plans for review and approval
- Prior to site occupancy, provide a security plan for approval by the Police Chief

Recommended Development Approval Conditions

- Submit a Security Plan for the property for Police Chief approval prior to issuance of the Certificate of Occupancy
- Plans to include dedicated space for Fire Department use to include at minimum 18'X35 ambulance garage with 12X12' garage door along with 14'X15' office space with bathroom

- Approval by Public Works of the disconnection and abandonment of the existing 10" water main traversing property

See attached specific department comments and reviews for additional details



Village of Lincolnwood

**Individual Department Reviews
South Bay Senior Development
3400 Pratt Avenue**



Community Development Development Review

Project Information

Petitioner or Project Name: South Bay Partners

Subject Property Address: 3400 Pratt Avenue

List and Date of Plans Reviewed

Concept Site Plan dated June 9, 2015 by Mackle Consultants

The following Plans prepared by Daniel Weinbach & Partners Ltd.

- Schematic Landscape Plan dated June 9, 2015
- Tree Survey dated June 9, 2015
- Tree Survey list dated June 9, 2015

The following Plans prepared by Jensen & Halstead Ltd.

- First Floor Plan Dated June 9, 2015
- Second Floor Plan Dated June 9, 2015
- Typical Floor Plan 3/4 Floors Dated June 9, 2015
- Preliminary Renderings Dated June 9, 2015

Nature of Proposal

South Bay Partners and its team, propose a Senior facility for the 13.5 acre former Bell & Howell site. The proposal includes 251 Independent Living units, 90 Assisted Living units; and 44 Memory Care units for a total unit count of 385 units, which are proposed as a mix of studio, 1 and 2 bedroom units. In addition to living units, the facility includes communal dining rooms, activity areas, a Wellness Center and indoor pool.

This proposal consists of a single 4 story building with a 2 story connector segment between wings of the building. Major building entrances front onto the Northeast Parkway where two curb cuts are proposed. A single curb cut on Pratt Avenue is also proposed. 304 parking spaces for the development are proposed with 145 parking spaces located in an enclosed garage having a green roof and 159 parking spaces are located elsewhere on the property. The existing storm water detention basins located along Pratt Avenue are proposed to be retained with an expansion to connect the two existing basins.

Reviewer Information

Name of Reviewer Clarke/Cook
Reviewer Contact Information TClarke@lwd.org (847-745-4710) or ACook@lwd.org (847-745-4796)
Date of Plan Review June 15, 2015

Pertinent Plans, Policies and Reports

- The subject property is designated as Industrial on the Future Land Use Map contained in the Village's 2001 Comprehensive Plan
- The Subject Property is within the NEID TIF District. Pursuant to Village Board policy TIF Funds may only be used to assist non-residential projects and if residential development in the TIF occurs, the Village shall consider removal of such property from the TIF District if practical
- The 2010 Retail Feasibility Report prepared for the Village noted a lack of retail demand to the subject property and indicated that a senior development of the subject property appeared suitable

Action(s)/Approval(s) Required

Zoning approval for the project is required. Based on plans presented, the developer may choose between two zoning approval processes: 1) traditional zoning approval; or 2) approval via a Planned Unit Development (PUD). Both approaches require a public hearing before the Plan Commission and subsequent approval by the Village Board.

Traditional Zoning Approval

1. Approval of Special Use(s) and Zoning Code Variation(s) (as may be determined)
 - Variation(s) require the showing of a hardship

or

PUD Zoning Approval

2. Approval of Special Use(s) and PUD Approval
 - PUD process does not require the showing of a hardship and can provide greater flexibility.
 - Process begins with Village Board Presentation/Referral for Public Hearing (July 21, 2015).
 - PUD requires land dedication for recreational use.
 - PUD process requires preliminary PUD approval and Final PUD approval which may require separate hearings.

The requisite Public Hearing before the Plan Commission will be scheduled upon application submission and payment of the required public hearing fee.

Applicable Regulations/Requirements

The Village of Lincolnwood Zoning Code is applicable to this project for zoning approval. Based on plans reviewed, there is no Village requirement for subdivision of the property. Building and site construction is governed by the Village's set of Building Codes.

Additional Documents or Information Required/Requested

- The proposed senior uses are considered Special Uses by the Village for this site. Confirm that the Independent Living component meets the Village definition of Independent Living Facility (found below).
A housing development:
 - (1) Consisting of individual dwelling units, intended for occupancy by not more than three persons;
 - (2) In which occupants are provided common services, such as dining facilities, housekeeping, transportation, and social and recreational facilities, but to whom daily living or nursing services are not provided; and
 - (3) Which dwelling units are solely occupied by persons who are either: i) 62 years of age or older; or ii) satisfy one or more exceptions set forth in 24 C.F.R. § 100.303, as may be amended, to the provisions of the Federal Fair Housing Act (42 U.S.C. § 3601 et seq., as may be amended) governing housing for older persons.
- Due to the size of the proposed project, staff recommends the following reports/studies be prepared for consideration at the requisite public hearing:
 - Traffic Impact Report,
 - Parking Supply Study, and
 - Economic Impact Report.
- Submit an Updated Land Survey for property.
- Summarize prior projects completed by developer.
- Provide Rendering perspectives of proposed project from both Pratt Avenue and Northeast Parkway.
 - Submit a photometric lighting plan for the property in conformance with Village lighting standards.
 - Submit Sign Package and locate on site plan location of any freestanding sign(s).

Plan Review Comments

Pedestrian

- Add benches and trash receptacles at various property locations. Consider planter boxes near main entrances for seasonal flowers.
- Confirm 5 foot width for public sidewalks planned along Pratt and Northeast Parkway and provide public easement for these sidewalks at locations where sidewalk crosses onto subject property.
- Extend proposed sidewalk located along the north side of the detention basin to connect with sidewalk shown east of detention basin.
- Add to plans, crosswalks at all driveway access points and key pedestrian crossings within development. Crosswalks to be comprised of thermoplastic material.
- Consider extending sidewalk westward to Central Park on subject panhandle parcel. Consider a walking route on the property for independent residents of the development.
- Provide more detail on proposed patio area.

Traffic

- Add stop sign and stop bar notations at all exits on plans.
- Identify number, type and typical route for service delivery trucks for development.

Site Amenities

- Describe the green roof amenity and whether it is intended for use by residents of the development.

Recommended Development Approval Conditions

- None

Zoning Review Worksheet

June 15, 2015

Subject Property: 3400 Pratt Avenue

ZONING CALCULATIONS

TOTAL LOT AREA: 581,962
SQUARE FEET

BUILDING AREA: 487,700
SQUARE FEET



	<u>MAX. PERMITTED</u>	<u>PROPOSED</u>	<u>VARIATION REQUIRED</u>
TOTAL LOT COVERAGE:	SF	318,006	NO
MINIMUM LOT AREA:		581,962	NO
FLOOR AREA RATIO:	1.2 (698,354 SF)	.838	NO
BUILDING HEIGHT:	55 FT or 5 Stories whichever is less	55'	Additional Information Needed

Notes: Need building height to determine compliance with maximum height requirement.

ZONING SETBACKS

	<u>REQUIRED</u>	<u>PROPOSED</u>	<u>VARIATION REQUIRED</u>
Front yard setback:	30 Ft.	55 Ft.	NO
Interior side yard setback:	5 Ft	90 Ft.	NO
Interior side yard setback:	5 Ft.	100 Ft.	NO
Rear yard setback:	75 Ft.	150 Ft.	NO

Notes: Northeast Parkway will be considered front lot line. Building height above 45 feet results in an additional one foot setback for each foot above 45 feet.

OFF-STREET PARKING REQUIREMENTS

	<u>REQUIRED</u>	<u>PROPOSED</u>	<u>VARIATION REQUIRED</u>
Location	Rear and Side Yard Only	Located between Proposed Building and streets	YES
Number of Spaces:	285 + FTE's	304	Additional Information Needed
Number of Handicap Spaces:	8	11	NO
Size of Spaces:	9' x 18'	9' x 18.5'	NO

Driveway Dimension:	24'	27'	NO
Drive Aisle Dimension:	24'	24'-27'	NO

Notes:

Assisted living, community residence, nursing and personal care facility

1 space per 4 residents, plus 1 space per each full-time employee

Independent living facility or senior housing facility

1 space per dwelling unit, plus 1 space per every 2 full-time employees

Requirements above are tentative and based on information available. Need information on number of full-time employees (FTE).

MINIMUM LANDSCAPE REQUIREMENTS

PERIMETER LOT SCREENING

	<u>REQUIRED</u>	<u>PROPOSED</u>	<u>VARIATION REQUIRED</u>
Setback width:	8 feet (no overhang)		Additional Information Needed
Screening:	continuous 3 feet		Additional Information Needed
Concrete curb separation:	6 inch required		Additional Information Needed

Notes: Need setbacks and dimensions on site and landscape plan to determine compliance with perimeter landscape requirements.

INTERIOR LOT LANDSCAPING

	<u>REQUIRED</u>	<u>PROPOSED</u>	<u>VARIATION REQUIRED</u>
End Cap Islands Provided:	ends of parking row	Shown	NO
Interior Islands Provided:	every 20 Spaces	Shown	NO
Size of Islands:	9X20 feet		Additional Information Needed
Island Trees:	1 per island	Shown	As shown generally comply
Size of Island Trees:	2 1/2 caliper		Verify on Final Landscape Plan
Non-parking areas 50+ s.f.:	pervious/vegetative	Shown	NO
Island Topsoil Depth:	3 feet depth		Verify on Final Landscape Plan

Notes: Need setbacks and dimensions on site and landscape plan to determine compliance with interior landscape requirements.

FOUNDATION PLANTING REQUIREMENTS

	<u>REQUIRED</u>	<u>PROPOSED</u>	<u>VARIATION REQUIRED</u>
Setback Width:	6 feet front and sides of bldg.	Shown	Add dimensions to site/landscape plan to verify compliance
Concrete Curb:	6 inch required		Verify on Final Engineering Plan

Notes: None

PARKWAY LANDSCAPING REQUIREMENTS

	<u>REQUIRED</u>	<u>PROPOSED</u>	<u>VARIATION REQUIRED</u>
Parkway Plantings:	Sod or Vegetative Ground Cover	Shown	NO
Impervious Material In Parkway:	All impervious material prohibited	None Shown	NO
Structure/Obstructions In Parkway:	No structures or obstruction may be erected	None Shown	NO
Parkway Trees:	One parkway tree for each 25 lineal feet	Existing and Proposed Shown	Verify on Final Landscape Plan
Public Sidewalks:	A 5-foot public sidewalk in B1, B2 & M Districts	Shown	Easement Required

Notes: None

REVIEWED BY: Aaron N. Cook, AICP

DATE: June 15, 2015



Landscaping Review

Development Review

Project Information

Petitioner or Project Name	South Bay Partners
Subject Property Address	3400 W. Pratt Avenue
List and Date of Plans Reviewed	Site plan prepared by Mackie Consultants Schematic Landscape Plan prepared by David Weinbach & Partners Ltd. Tree Survey prepared by David Weinbach & Partners Ltd. Tree Survey List prepared by David Weinbach & Partners Ltd.
Nature of Proposal	Review of schematic landscape plan and associated existing tree survey in relationship to proposed development.

Review Information

Name of Reviewer:	Douglas Gotham, RLA
Reviewer Contact Information:	CBBEL, 847-823-0500 dgotham@cbbel.com
Date of Plan Review:	6-18-15

Action(s)/Approval(s) Required

- None

Applicable Regulations/Requirements

- Village Code – Chapter 15, Article VI: Site Development Standards Part D. Landscaping

Additional Documents or Information Required/Requested

- As the project progresses we will need to review detailed landscape and irrigation plans plus details of selected site elements such as benches, pedestrian level lighting, and fencing.
- Final plans will need to show tree protection techniques and replacement

Plan Review Comments

- The two parking lots on the north side of the development will need landscape buffers along the street side. See attached Illustration.
- All planting beds at the ends of the parking bay rows need to have trees as indicated section 6.14, item (2) b. See attached Illustration.
- The site plan indicates a 'patio area' on the north side of the building. Will this area be fenced? If so, what is the height, style and material of the fencing?
- No exterior refuse holding areas are indicated. Will there be any? If so they will need to be screened with landscaping.
- At the west entrance along Northeast Parkway three spruce trees are indicated to be saved which is commendable but I am concerned about traffic visibility at the intersection of the entrance and the east – west internal roadway.
- On the site plan a detention basin is shown on the south side of the development. Where is its overland flow route and how is that handled in the landscaping? How will the shoreline (emergent zone) be treated? How are the areas around the inlets and outlets treated?
- Will there be any downspouts on the building and if so how will they be handled in the landscape?
- The previous development provided a berm and extensive landscaping along West Pratt Avenue and we can see that it is the intent of the developer to save and maintain it, however we suggest that this berm and quality of landscape be continued in the area of the former south entrance.

Recommended Development Approval Conditions

- None as of now.

Need a landscape buffer here

NORTHEAST PARKWAY

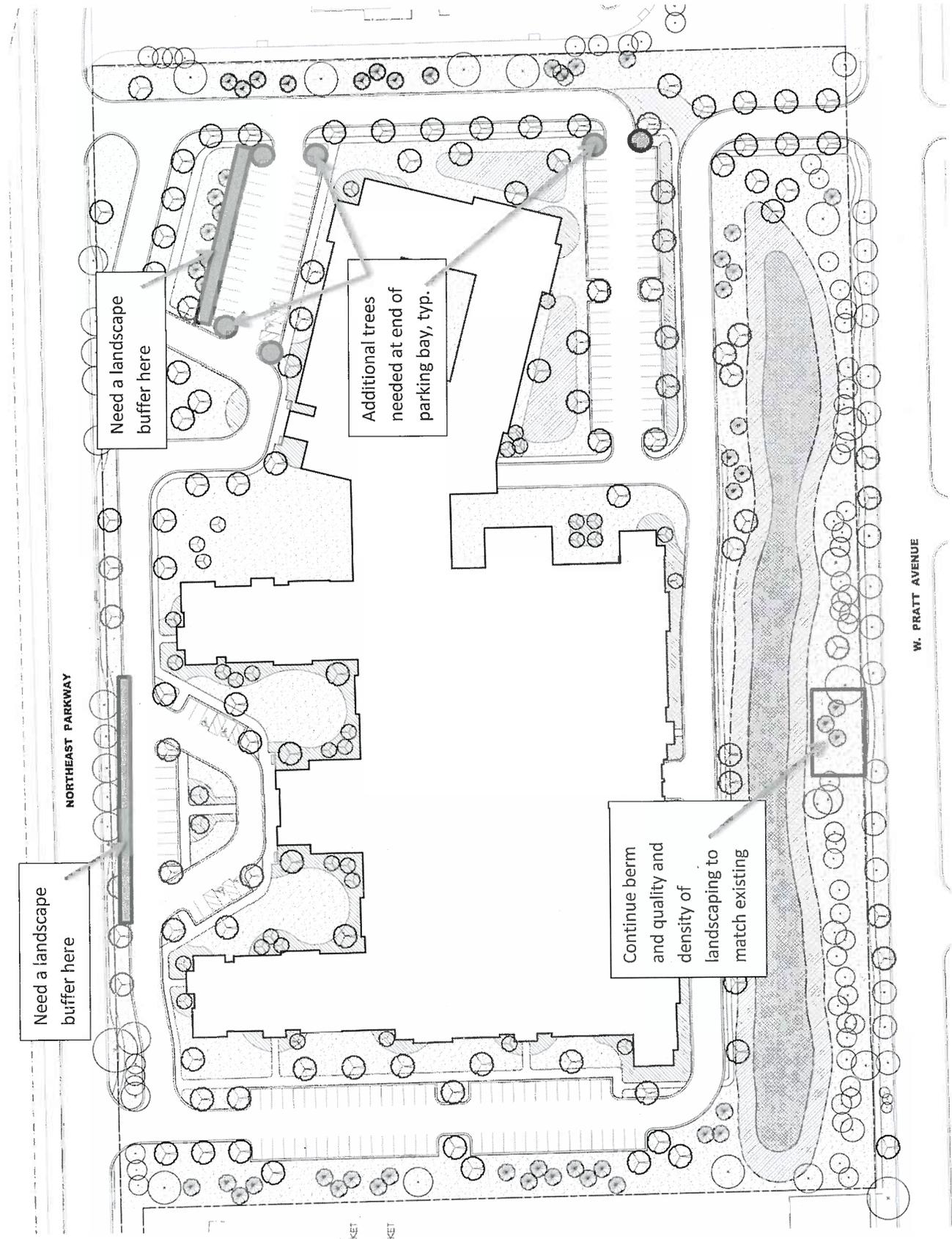
Need a landscape buffer here

Additional trees needed at end of parking bay, typ.

Continue berm and quality and density of landscaping to match existing

W. PRATT AVENUE

MIX LANEET
IX LANEET





Lincolnwood Engineering Department

Development Review

Project Information

Petitioner or Project Name: South Bay Partners

Subject Property Address: 3400 West Pratt Avenue

List and Date of Plans Reviewed:

List and Date of Plans Reviewed

- ALTA/ACSM survey prepared by Manhard Consultants Dated May 19, 2015
- Concept Site Plan dated June 9, 2015 by Mackle Consultants

The following Plans prepared by Daniel Weinbach & Partners Ltd.

- Schematic Landscape Plan dated June 9, 2015
- Tree Survey dated June 9, 2015
- Tree Survey list dated June 9, 2015

The following Plans prepared by Jensen & Halstead Ltd.

- First Floor Plan Dated June 9, 2015
- Second Floor Plan Dated June 9, 2015
- Typical Floor Plan 3/4 Floors Dated June 9, 2015
- Preliminary Renderings Dated June 9, 2015

Nature of Proposal:

South Bay Partners and its team, propose a Senior facility for the 13.5 acre former Bell & Howell site. The proposal includes 251 Independent Living units, 90 Assisted Living units; and 44 Memory Care units for a total unit count of 385 units, which are proposed as a mix of studio, 1 and 2 bedroom units. In addition to living units, the facility includes communal dining rooms, activity areas, a Wellness Center and indoor pool.

This proposal consists of a single 4 story building with a 2 story connector segment between wings of the building. Major building entrances front onto the Northeast Parkway where two curb cuts are proposed. A single curb cut on Pratt Avenue is also proposed. 304 parking spaces for the development are proposed with 145 parking spaces located in an enclosed garage having a green roof and 159 parking spaces are located elsewhere on the property. The existing storm water detention basins located along Pratt Avenue are proposed to be retained with an expansion to connect the two existing basins.

Review Information

Name of Reviewer:	James Amelio, PE
Reviewer Contact Information:	p:847.745.4862 jamelio@lwd.org
Date of Plan Review:	June 15, 2015

Action(s)/Approval(s) Required

- This project will require a Watershed Management Ordinance (WMO) permit from Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) for runoff requirements, volume control, and potentially qualified sewer construction.
- This project will require an NPDES Stormwater permit from the Illinois Environmental Protection Agency for the site disturbance.

Applicable Regulations/Requirements

- Project is subject to WMO requirements

Additional Documents or Information Required/Requested

- Provide a Lighting and Photometric Plan for the property consistent with Code

Plan Review Comments:

- The final engineering submittal shall include separate plan sheets for demolition activities and proposed activities. The plans shall be at a standard engineering scale.
- The ALTA/ACSM Survey notes that several NFR letters are recorded against the site (00201383325 and 0819134103). The applicant should provide the information to the Village and his design team to ensure that areas containing contaminated materials are not disturbed by the proposed scope of work.
- The boundary of the HWL for the southern detention pond extends beyond that of the existing stormwater management easements. Either the footprint of the easement will need to be increased or the footprint of the detention pond will need to be decreased.
- The final engineering plans shall indicate if the existing sanitary service will be reused or abandoned. The installation of a grease separator will need to be included within the scope of the improvements.
- The final engineering plans shall indicate if the existing water service line will be partially reused or abandoned entirely. Portions of the existing main will need to be removed to allow for the building's construction, but a portion of it can be saved to use as its building service line for both domestic and fire suppression use.

- No existing or proposed topographic elevations are shown on the submitted plans. The final engineering submittal shall include all existing and proposed site grading.
- The final engineering submittal shall include all applicable pavement and utility standard details and specifications.
- The final engineering submittal shall include all applicable SESC standard details and specifications

Recommended Development Approval Conditions

- None



Lincolnwood Public Works Department

Development Review

Project Information

Petitioner or Project Name: South Bay Partners

Subject Property Address: 3400 Pratt Avenue

List and Date of Plans Reviewed:

- ALTA/ACSM survey prepared by Manhard Consultants dated May 19, 2015
- Concept Site Plan prepared by Mackle Consultants dated June 9, 2015

The following plans prepared by Daniel Weinbach & Partners Ltd.

- Schematic Landscape Plan dated June 9, 2015
- Tree survey dated June 9, 2015
- Tree survey list dated June 9, 2015

The following plans prepared by Jensen & Halstead Ltd.

- First floor plan dated June 9, 2015
- Second floor plan dated June 9, 2015
- Typical floor plan 3/4 floors dated June 9, 2015
- Preliminary renderings dated June 9, 2015

Nature of Proposal:

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Review Information

Name of Reviewer:	Andrew Letson, Assistant to the Public Works Director
Reviewer Contact:	Work: 847-745-4851 aletson@lwd.org
Date of Plan Review:	June 16, 2015

Action(s)/Approval(s) Required

- Location and size of water and sewer connections must be approved
- Disconnection and abandonment of the existing 10" water main
- Disconnection and abandonment of the existing fire hydrants
- Locations of new fire hydrants and connections to existing or new water main
- Removal of parkway trees

Applicable Regulations/Requirements

- Section 12-2 (Water Main and Sewer Connections)
- Section 6-1-1 (Sidewalk Construction)
- Section 6-5-10 (Application for Parkway Tree Removal)

Additional Documents or Information Required/Requested

- Water and sewer connections are not indicated on the plan, please provide a detail regarding their size and location
- Please provide the location of proposed fire hydrants on the property

Plan Review Comments:

- New sidewalks must be installed with a minimum width of 5 feet. Please identify who will be responsible for the maintenance of the sidewalk along Northeast Parkway. If it is to be the Village, an easement will need to be granted.
- Note that the combined sewer on Northeast Parkway is a MWRD interceptor and cannot be used for connection to the facility's sewer service. The combined sewer on Pratt Avenue is approximately 16-18 feet deep. There is an existing combined sewer that runs approximately 78 feet from the east side of the property that can be used for connection of the service line. Since this is a public sewer, the Village is going to require an easement. If the applicant wishes to have the sewer abandoned, it will need to be properly disconnected at the connection on Pratt.
- Pratt Avenue was resurfaced approximately 3 years ago, as such; it would be preferable to connect the water service to the main on Northeast Parkway

- The existing street lights need to be maintained
- Any parkway trees proposed for removal need to be evaluated by the Village Arborist and either replacement or payment into a fund for use in planting parkway trees in other parts of the Village may be required.

Recommended Development Approval Conditions

- Development may only proceed upon successful disconnection and abandonment of the existing 10" public water main located on the property



Map created on June 15, 2015.
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Disclaimer: This map is for general information purposes only. Although the information is believed to be generally accurate, errors may exist, and the user should independently confirm for accuracy. The map does not constitute a regulatory determination and is not a base for engineering design. A Registered Land Surveyor should be consulted to determine precise location boundaries on the ground.



LINCOLNWOOD FIRE DEPARTMENT

6900 N. LINCOLN AVENUE – LINCOLNWOOD, ILLINOIS - 60712

PHONE: 847-673-1545 FAX: 847-673-7456

Development Review

Project Information

Petitioner or Project Name: Senior Housing Development
Subject Property Address: 3400 Pratt
List and Date of Plans Reviewed: Plat of Survey, Conceptual Site Plan, Landscape Plan, Preliminary Renderings & Floor Plans – Reviewed 6-10-2015
Nature of Proposal: 251 Independent Living Units, 90 Assisted Living, and 44 Memory Center Units, for a total of 385 units in two 4 story structures with a two story connector comprised of common areas and shared back-of-house functions.

Review Information

Name of Reviewer: Lt. Clyde Heineman
Reviewer Contact Information: Lincolnwood Fire Department – 847-673-1545 – cheineman@lwd.org
Date of Plan Review: 6-10-2015

Action(s)/Approval(s) Required

- Fire sprinkler plans to be submitted, reviewed, and approved prior to construction of the system.
- Fire alarm plans to be submitted, reviewed, and approved prior to construction of the system.
- Fire hydrant layout plans to be submitted, reviewed, and approved prior to construction of the system.

Applicable Regulations/Requirements

- All plans will be reviewed to the currently adopted versions of the NFPA code set including, *but not limited to* NFPA 1 Fire Code 2009 Edition, NFPA 13 Standard for the Installation of Sprinkler Systems 2010 Edition, NFPA 70 National Electrical Code® 2011 Edition, NFPA 72 National Fire Alarm and Signaling Code 2010 Edition, NFPA 80 Standard for Fire Doors and Other Opening Protectives 2010 Edition, NFPA 101® *Life Safety Code*® 2012 Edition, NFPA 110 Standard for Emergency and Standby Power Systems 2010 Edition, as well as the 2006 International Fire Code and local amendments.
-

Additional Documents or Information Required/Requested

- The calculation of all spaces for occupancy loads, exit requirements, and travel distances to be provided in accordance with 2012 *Life Safety Code* "Table 7.3.1.2 Occupant Load Factor".

Building Square Footage: Unknown
Proposed Occupancy Type: Residential Apartments, Ambulatory Healthcare, Healthcare
Proposed Occupancy Load: To Be Determined

Plan Review Comments

- The current proposed position of the structure on the site appears to provide ready access on all sides for fire suppression purposes.
- Water supply for fire suppression to be addressed. Fire hydrants on a looped supply within the project and integrated with the existing water supply lines on Pratt Avenue to the south and Northeast Parkway to the north recommended. This interior loop connected on both the north and south to the existing village mains will help to avoid any "dead end" effect.
- A NFPA 13 compliant sprinkler system shall be installed throughout.
- Fire Department Connection location to be within 100' of a fire hydrant. Fire Department Connection location to be determined in conjunction with the Fire Prevention Bureau, the sprinkler contractor and the plan reviewer prior to final design.
- A complete fire alarm system compliant with NFPA 72® National Fire Alarm & Signaling Code shall be provided as required by NFPA 101® *Life Safety Code*®.
- The fire alarm system is required to be connected to the fire department dispatch center by way of the Village of Lincoln fire alarm radio network. The fire alarm contractor will be required to coordinate with the Village of Lincoln for installation of the radio by the Village's radio contractor at the completion of the alarm systems installation.

Recommended Conditions

- The fire department proposes the addition of an integrated 18'x35' ambulance garage with 12'x12' garage door and accompanying 14'x15' office with bathroom facilities for daily manning of an on-site ambulance and crew.
 - The installation of a Knox Box® (Key Box) at the entrance(s) chosen by the fire department will be required.
-



LINCOLNWOOD POLICE DEPARTMENT

6900 N. Lincoln Avenue, Lincolnwood, IL 60712

(847) 673-2167

Development Review

Project Information

Petitioner or Project Name:	CenterPoint/South Bay Partners
Subject Property Address:	3400 West Pratt Avenue
List and Date of Plans Reviewed:	June 16, 2015. Site Plan prepared in concert with Jensen & Halstead Architects and Charles Hall Construction.
Nature of Proposal:	Review of the plans on the site for a four story single structure independent living, assisted living and memory care facility

Review Information

Name of Reviewer:	Lieutenant Randall Rathmell			
Reviewer Contact Information:	Work:	847 745-4751	Cell:	847 980-7894
	Email	rrathmell@lwd.org		
Date of Plan Review:	June 16, 2015			

Action(s)/Approval(s) Required

- None

Applicable Regulations/Requirements

- None

Additional Documents or Information Required/Requested

- Photometric Lighting Plan
- A Security Plan

Plan Review Comments

- Consider installing Security Gates with locking mechanisms for the access driveways to maintain security after-hours
- Prepare a Security Plan for the property for approval by the Police Chief prior to issuance of the Certificate of Occupancy to include alarms, cameras, sensor lights, exterior video surveillance cameras and intrusion detectors made visible to potential offenders and to assist in any criminal investigation

- Request a traffic impact study to include parking and the installation of Stop signs, Stop bars and appropriate pedestrian crosswalks at the exit driveways onto Pratt Avenue and Northeast Parkway
- Consider the construction of public sidewalks on both Pratt Avenue and Northeast Parkway to facilitate the increase of pedestrian and pedestrian traffic near the property

Recommended Development Approval Conditions

- None



PLAN REVIEW MEMORANDUM

TO: Aaron Cook - Community Development Manager
Kathy Kasprzyk - Community Development
Josie Braovac - Community Development

FROM: James Amelio, PE - Village Engineer
Paul Bourke, PE – CBBEL

ACCEPTED

DATE: 10/05/2015

REVISE AND
RESUBMIT

SUBJECT: 3400 Pratt

I have reviewed the following documents associated with the subject project:

- Traffic Impact Study prepared by KLOA bearing a date of July 31, 2015.

We offer the following comments for your consideration:

1. Estimated Site Traffic Generation (Page 11): In using Land use codes 253 and 254 of the (ITE) Trip Generation Manual, 9th Edition, the estimated site-generated volumes shown in in Table 1 (page 11) appear reasonable and generally consistent with that calculated from the Manual using pages 516, 517, 532, 533, 535 and 537. It should be noted that the amount of total new trips of 241 shown in Table 1 are slightly less than that calculated (from the Manual) of 258 trips but the Memory Care units are over represented since the land use (253) of Assisted Living was used (for both the proposed Memory Care and Assisted Living units) as stated in the KLOA report.
2. Background Conditions (Page 13): Upon review of Figure 7 (Page 14) and the traffic impact study for the proposed redevelopment of the adjacent Dominick’s site, it was confirmed the 2021 projected traffic volumes do include projected traffic from the redeveloped Dominick’s site as stated in the KLOA report (page 13).
3. Discussion and Recommendations (*McCormick Boulevard with Northeast Parkway* - Page 18): Upon review of the attached SYNCHRO analysis reports, the projected queuing (309 feet) of the EB right turn lane on Northeast Parkway at McCormick Boulevard in the PM peak hour could result in a significant impact in traffic operations resulting in right turn traffic queuing through and blocking the retail access drive to west (located approximately 265 feet west of McCormick Boulevard) as well as some right turners being “split failed” – taking a second cycle to clear the intersection. In an effort to better manage future EB right turn queues at this location, adjustment to the signal timing to increase the EB split time and/or signal modifications to add a EB right-turn overlap may be warranted.

4. Discussion and Recommendations (*McCormick Boulevard with Pratt Avenue* - Page 18): Upon review of the attached SYNCHRO analysis reports, the proposed site traffic on EB Pratt Avenue is anticipated to be very low and have a limited to no impact on traffic operations on Pratt Avenue (including the intersection with McCormick Boulevard) and should require no roadway improvements or signal modifications as stated in the KLOA report (page 18).

In summary, our review indicates that the estimated traffic volume is reasonable; the study is holistic in that it includes this site and the adjacent vacant Dominick's site. The study indicates there should be minimal to no impacts along Pratt and that there is potential need to readjust the timing for eastbound right hand turns at McCormick and Northeast Parkway. In regards to the latter, the Village should monitor the operation of the entrance to the now vacant Dominick's site upon redevelopment. If queuing presents a problem, then the Village should approach IDOT for a signal timing change.

If you have questions or need additional information, please call me at (847) 745-4862 or send an e-mail to jamelio@lwd.org.



VILLAGE OF LINCOLNWOOD Public Hearing Application
 Community Development Department Special Use & PUD

SUBJECT PROPERTY

Property Address: 3400 W. PRATT AVENUE
10-35-203-011-0000

Permanent Real Estate Index Number(s): 10-35-203-012-0000

Zoning District MB Lot Area: PARCEL 1, LOT 3 & PARCEL 2
BELL AND HOWELL SUBDIVISION

List all existing structures on the property. Include fencing, sheds, garages, pools, etc.

FENCE ALONG EAST BOUNDARY, CURBS & ASPHALT THROUGHOUT, RESIDUAL
CRUSHED CONCRETE FROM (PREVIOUSLY) RAZZO BUILDING(S)

Are there existing development restrictions affecting the property? Yes ___ No
 (Examples: previous variations, conditions, easements, covenants)

If yes, describe: STORMWATER MANAGEMENT EASEMENT (DOC NO. 0010897333), ILLINOIS BELL TELEPHONE
AND COMMONWEALTH EASEMENT (DOC NO. 15956140), Sewer EASEMENT (DOC NO. 15853452)

REQUESTED ACTION

- Special Use - Non-Residential Planned Unit Development (PUD)
 Special Use - Residential Other: Off-street parking. Will
Chapter 15: Zoning request parking in 'yard'
7.06 General a building a street
Standards for
off-street
parking facilities

PROJECT DESCRIPTION

Describe the Request and Project: Requested is a Special Use for a senior living
facility planned to be 251 independent living apartments, 88 assisted living units, and
44 memory care units. To accommodate the requisite parking spaces, the design
would also need approval of parking in the "yard" abutting the street.

PROPERTY OWNER INFORMATION

Property Owner(s):

Name: (List all beneficiaries if Trust): CENTERPOINT PROPERTIES TRUST

Address: 1808 SWIFT DRIVE OAKBROOK, IL 60521

Telephone: (630) 586-8167 Fax: (630) 586-8010 E-mail Address: eharrington@
centerpoint-prop.com

Petitioner (if different from owner):

Name: SOUTH BAY PARTNERS Relationship to Property: PURCHASER OF PROPERTY

Address: 5307 E. MOCKWING BIRD LANE, SUITE 1010 DALLAS, TX 75206

Telephone: (214) 370-2629 Fax: (214) 370-2699 E-mail Address: carroll@southbay/ld.com

Check all documents that are attached:

- Plat of Survey
- Site Plan
- Proof of Ownership (Signature below)
- Floor Plans
- Elevations
- Applicable Zoning Worksheet
- Photos of the property
- PDF files of all drawings

For Office Use Only

Fee: _____ Deposit: _____

Date Received: _____

Checked By: _____

The article(s), section(s) and paragraph(s) of the Village of Lincolnwood Zoning Ordinance from which the Action is being sought:

**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.*

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 severally 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: ADAM ARNOLD c/o SOUTH BAY PARTNERS
Address: 5307 E. MOCKINGBIRD LN. SUITE 1010
City, State: DALLAS, TX 75206

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 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

Edward Harrington 9-10-2015
Signature Date

Edward Harrington
PRINT NAME

PETITIONER (if different than property owner)

Adam Arnold 9/10/2015
Signature Date

Adam A. Arnold
PRINT NAME



VILLAGE OF LINCOLNWOOD COMMUNITY DEVELOPMENT DEPARTMENT

SPECIAL USE STANDARDS

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

1. Please explain how the use is necessary for the public convenience at this location, and the subject property is deemed suitable for the use.

This former Bell and Howell site has sat vacant for years while other opportunities have come and gone - seemingly because the previous retail, housing, and industrial development proposals were not the right fit for the neighborhood. Conversely, an independent study determined that the site's highest and best use would be senior housing. Thus, a senior housing development, such as we are proposing, will best suit the public's interest for this site.

2. Please explain how the use is so designed, located and proposed to be operated that the public health safety and welfare will be protected.

Senior living, specifically senior housing coupled with medical care like assisted living and memory care, by definition is healthcare, and therefore serves the public health and welfare of the community in which it is located. Our proposed facility not only includes independent living, but also assisted living - with an increased level of care, and memory care - with an acute level of care for residents with Alzheimer's and other dementia related conditions.

3. Please explain how this use would not cause substantial injury to the value of other property in the neighborhood in which it is located.

Senior living is generally considered an asset to the community in which it is located. A private pay senior living development like we are proposing has an aesthetically pleasing architecture and an upper middle class resident base. All of these will positively contribute to both the property's value and the values of the surrounding properties. In addition, a profitable commercial business will increase the taxable property value of the site many fold above the currently vacant site.

4. The Special use is consistent with the goals and policies of the Comprehensive Plan.

Specifically, “Business, Commercial and Industrial Areas”

OBJECTIVE	POLICY	DEVELOPER ACTIONS
<p>Promote the growth and redevelopment of business & commercial areas.</p>	<ul style="list-style-type: none"> -Encourage the location of new or expanding businesses in existing commercial locations that would benefit from redevelopment. -Provide assistance programs for commercial property owners who rehabilitate their properties. -Consider land assembly where needed to facilitate commercial redevelopment. -Expand the number of off-street parking spaces where needed to serve established business areas. -Promote restoration of parkway landscaping as properties are redeveloped. -Consider vacating street segments intersecting with Lincoln Avenue, Devon Avenue and other commercial streets, to create larger redevelopment sites, create safer, more efficient traffic patterns and provide better buffers for residential areas. 	<ul style="list-style-type: none"> -Redevelopment of this former Bell & Howell site will bring new business and taxable revenue to the Village. -Assistance programs from the Village would be considered. -No assembly of land will be needed for this proposed development. -All parking for the residents and staff will be on-site and off-street. -New, parkway landscaping will benefit community aesthetics. <p><i>Note: The low senior housing densities also would benefit the Neighborhood/Residential goal/policy of, “establishing bulk and density controls to ensure that new construction and additions are compatible with existing single family development.</i></p>
<p>Keep property taxes low.</p>	<p>-Encourage non-residential land uses that enhance the Village tax base, yet attract minimal non-local traffic.</p>	<p>-Senior housing, while residential, increases the Village’s tax base with minimal impact on traffic due to the fact that few independent seniors drive, almost no assisted living residents drive, and no memory care residents drive. Building staff who drive is minimal.</p>
<p>Maintain viable industrial areas as employment</p>	<p>-Pursue development of the East-West Connector Road to improve circulation within the Northeast Business Park and help to divert industrial traffic</p>	<p>-Site will have the main two ingress/egress points along Northeast Parkway on the</p>

<p>centers.</p>	<p>from Pratt Avenue.</p> <ul style="list-style-type: none"> -Identify ways to increase the parking supply in industrial areas. -Upgrade rights-of-way to industrial street standards when undertaking street improvements in industrial areas. -Upgrade the image of Lincolnwood’s industrial areas through coordinated improvement programs. -Upgrade street lighting on public streets within the Northeast Business Park to improve security and safety. 	<p>North side of the site. Only one drive will open to Pratt on the South. The main point of the southern/Pratt access point will be for egress and fire compliance.</p> <ul style="list-style-type: none"> -All parking required for the development will be internal to the development and thus free street parking for neighboring, industrial use. -Bordering a light industrial business to the West, our attractive residential/commercial building should upgrade that area’s image. -Site will be well lighted to insure the security of the residents, their property, the building, the adjoining neighbors, and passing traffic.
<p>Reduce land use conflicts between residential and non-residential uses.</p>	<ul style="list-style-type: none"> -Augment development requirements for buffering and landscaping between residential and non-residential uses. -Encourage creative ways to provide parking and enhance landscaping of private property. -Require on-site provisions for storm water detention, encouraging underground detention where appropriate, with respect to new commercial and industrial development. 	<ul style="list-style-type: none"> -The landscaping design, storm water detention, and berms in the storm water easement along Pratt Avenue will naturally create an attractive, vegetative buffer between our building and the neighborhoods to the south. -The site plan currently accounts for 304 parking spaces with 85 of those being in an interior garage. The 219 surface spaces are segmented into smaller “lots” which will be encased with vegetation to shield parking. -Storm water detention is designed to be accommodated onsite in the landscaped easements along Pratt Avenue.

		<p><i>Note1: proposed landscaping also impacts Community Appearance and Infrastructure goal/policy of, “emphasize the use of landscaping and screening materials as a means of unifying and softening boundaries between public and private property”, as well as, “Encourage businesses to provide landscaping to enhance the appearance of off-street parking lots.</i></p> <p><i>Note2: proposed storm water management also impacts Community Appearance and Infrastructure goal/policy of, “continue to enforce the Village’s storm water management ordinance”, as well as, “undertake improvement projects needed to maintain and upgrade public infrastructure.”</i></p>
<p>Establish and maintain a positive community identity along arterial streets.</p>	<ul style="list-style-type: none"> -Establish appearance review standards within the Zoning Ordinance for non-residential development. -Amend the property maintenance code as needed to provide effective enforcement power. -Enforce the provision of the sign ordinance. -Establish landscaping requirements for new and existing commercial and industrial developments. -Require business owners to screen private parking lots, preferably with plant material. -Encourage consolidation of driveways and parking lot entrances and narrowing their width in order to create a safer pedestrian environment and pleasant image along Lincolnwood’s commercial streets. -Develop façade and streetscape improvement programs along major arterial streets. 	<ul style="list-style-type: none"> -Building materials and landscape design of the site provide for an aesthetic addition to the Village and neighborhood. -Monument signage is designed to exceed Village aesthetic standards. -Landscape design creates a complement to the neighborhood and aspires to a “park-like” appearance. -Parking will be trimmed with landscaping to screen view from public streets. -Drives have been consolidated to focus ingress/egress from Northeast Parkway and

		<p>minimize traffic at the single Pratt Avenue drive. <i>Note: proposed signage also impacts Community Appearance and Infrastructure goal/policy of, “upgrade business signage through enforcement of the Village’s signage regulations.”</i> <i>Note2: proposed ingress/egress also impacts Circulation and Community Linkage goal of, “promote safe, efficient circulation within Lincolnwood”, “slow traffic on arterial streets to facilitate pedestrian and bicycle crossings”, and “enhance pedestrian access and safety through infrastructure improvements and modifications.”</i></p>
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5. The special use would not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the underlying zoning district.

The site is developed on all four sides, and not prone for future development. The requested amendments are minor and specific to the site:

- **Height – 55’**
- **Parking – 304 parking spaces (including 12 ADA accessible spaces)**
- **Setbacks – See plans**
 - **North: 55’**
 - **East: 90’**
 - **South: 150’**
 - **West: 100’**

Neighboring properties would not feel the effect of these small exceptions and would not project a need to incorporate these, similar, or exceeding exceptions.

6. Please explain how the special use is so designed to provide adequate utilities, access roads, drainage, or necessary facilities.

The site has been previously utility served as a commercial business. We are working now to determine how to best tie into the existing water, sewer, gas, and electricity infrastructure. Based on available utility atlas pages, we anticipate water and sanitary sewer connections are available to existing mains in both the Pratt Avenue and Northeast Parkway rights-of-way fronting the property.

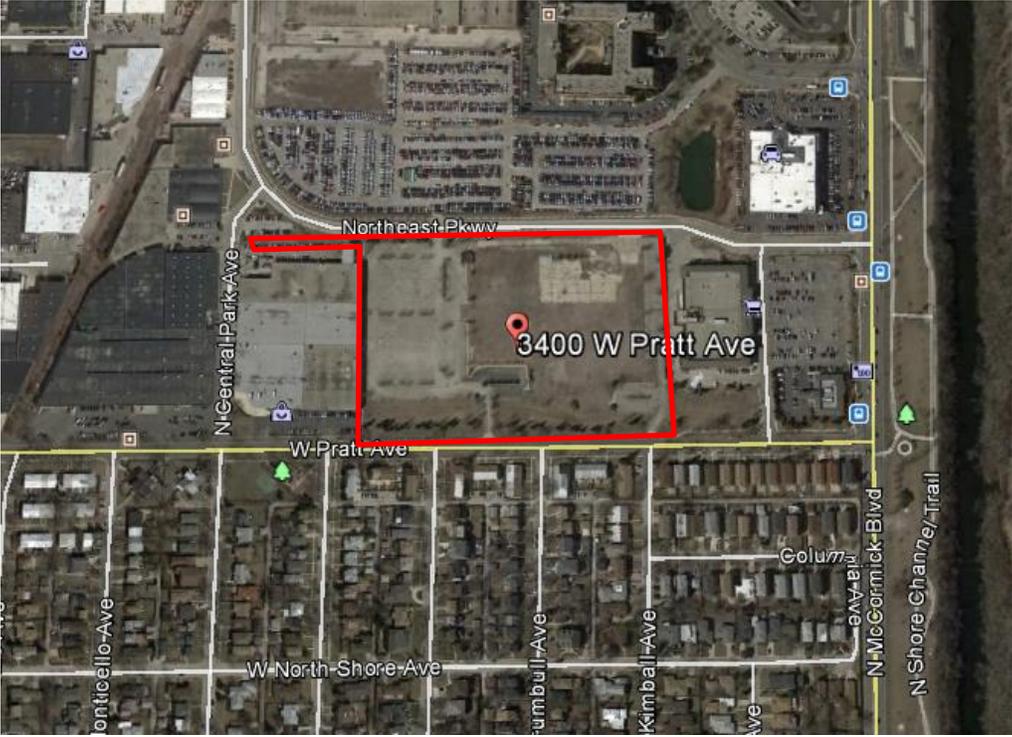
We will need to address an existing water main that runs north/south through the site. We will plan to vacate that easement, and cap that main at either end of the line. In coordination with the village engineer, appropriate water main connections or extensions will be made to avoid long, dead-end fire hydrant leads.

Drainage will be provided with a combination of sheet flow and storm sewer. The existing detention ponds will be maintained with minor adjustments to provide the required storm water management.

7. Please explain how the special use is so designed to provide ingress and egress to minimize traffic congestion on public streets.

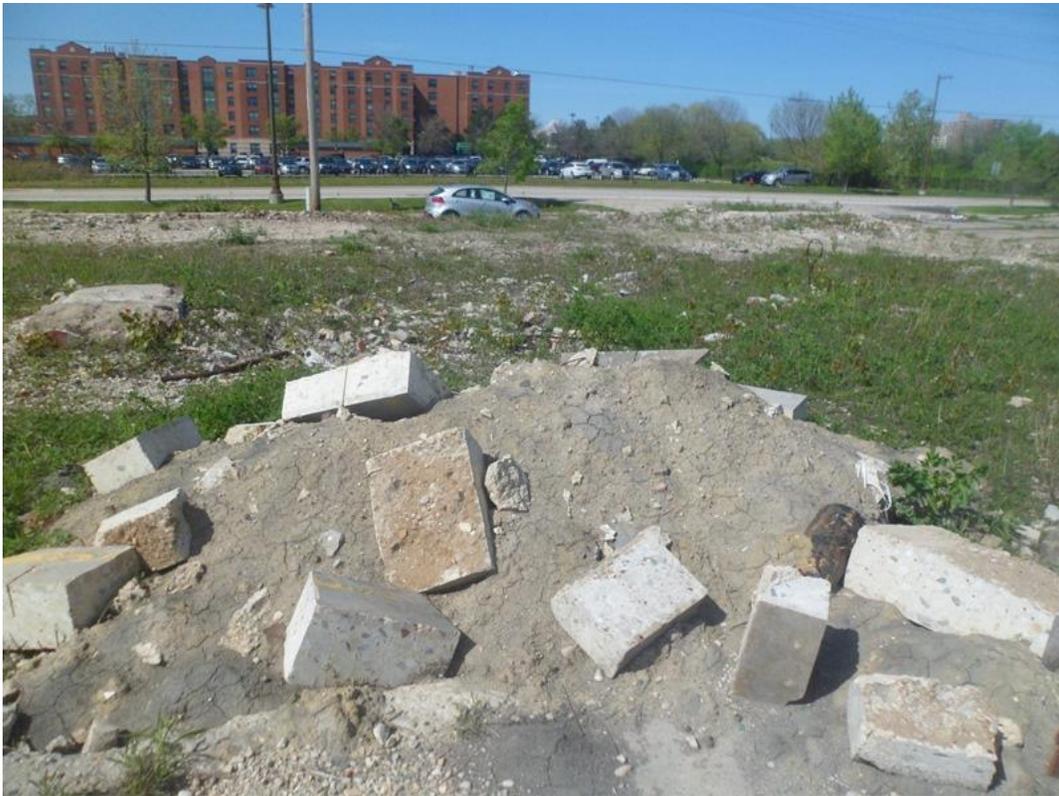
The site is bounded by Northeast Parkway on the North and Pratt Avenue on the South. The three functionalities of the site: independent living, assisted living, and memory care, create minimal traffic densities. The most significant of the three traffic contributors are the residents of the independent living units whose ingress/egress drives would be to the north on Northeast Parkway. Assisted living residents, by nature, do not drive much and memory care residents do not drive at all. Any traffic associated with the assisted living and memory care residents will be almost entirely caregiver/employee derived. A single ingress/egress drive on Pratt Avenue will be used for emergency vehicle use. All delivery, food, and trash service will serve the site from the Northeast Parkway ingress/egress points.

**3400 W. Pratt Avenue
Site Images**











914 S. Wabash Avenue mainoffice@areainc.net
Chicago, IL 60605 www.areainc.net

Telephone 312.461.9332
Fax 312.461.0015

July 29, 2015

Mr. Adam Arnold
South Bay Partners
5307 Mockingbird Lane #1010
Dallas, Texas 75206

Dear Mr. Arnold:

Per your request, Applied Real Estate Analysis (AREA), Inc., has prepared the following estimate of the potential impact that the development of a 385-unit retirement community at 3400 West Pratt Avenue would have on the Village of Lincolnwood. Applied Real Estate Analysis is a Chicago-based real estate and public policy consulting firm that has been assisting public agencies, not-for-profit organizations and private developers with issues related to real estate and economic development.

Description of Proposed Development Plan

The proposed development site and its surroundings are predominately commercial and industrial land uses on adjacent parcels, set amidst residential neighborhoods. There is an existing age-restricted development just north of the site.

The proposed site is 13.5 acres with the building covering 28 percent or 168,128 square feet. The site plan shows 145 garage parking space and 159 surface parking spaces. Providing parking for 304 automobiles. The unit mix for the housing development is 251 independent living units, 90 assisted living units, and 44 units for memory care residents.

Potential Positive Impacts

Taxes. The most direct impact associated with any new development is the taxes it will generate. Because the development site is currently vacant, the proposed development will dramatically increase the amount of taxes that the Village will receive from the site. AREA has reviewed assessed value and tax records for several large scale residential complexes for seniors in Lincolnwood and adjacent communities. Lincolnwood Place, located just north of the proposed development site is probably the most comparable property analyzed. For 2014 the assessed valuation on Lincolnwood Place was \$2,767,363. With the Village's equalization factor of 2.7253, the equalized assessed valuation (EAV) was \$7,541,894. Taxes were \$602,402, an effective tax rate of \$7.987

per \$100 of EAV as opposed to the Village's composite tax rate of 9.853. The lower taxes resulted from the application of two exemptions secured through the Cook County Assessor's office. This valuation and tax level was similar to those seen on other housing complexes for seniors in Lincolnwood, Glenview and Morton Grove.

The "market" value assigned to senior housing complexes by the Assessor's office tends to be considerably below what one would anticipate based on the size and rents levels for the developments. We have thus used the assessed value of existing properties to estimate the potential taxes on the proposed development. New properties tend to have a higher value than older properties with similar characteristics. Therefore, we assigned a higher value to the proposed development than the assessor has placed on Lincolnwood Place. The resulting taxes to the Village and locatable below shows taxes to the Village of Lincolnwood and local school districts based on an assumed value of \$30,000,000 to \$35,000,000. Most local property taxes go to the schools but the Village of Lincolnwood could receive a potential increase in taxes of \$75,000 to \$90,000.

Potential Taxes and Tax Revenues for New Lincolnwood Retirement Community		
"Market" Value	\$ 30,000,000	\$ 35,000,000
Assessed Value	\$ 3,000,000	\$ 3,500,000
Equalized Assessed Value	\$ 8,175,900	\$ 9,538,550
Taxes	\$ 805,571	\$ 939,833
Composite Tax Rate	9.853	9.853
District74	\$ 279,698	\$ 326,314
HS	\$ 298,420	\$ 348,157
Village of Lincolnwood	\$ 78,734	\$ 91,856

There are a variety of other potential benefits to the Village of Lincolnwood that will result from the new development. However, these benefits are less direct and will also benefit adjacent communities.

Employment. There will be 80 to 100 permanent jobs created by the new facility. While many of these jobs are likely to go to Lincolnwood residents, but they could also be taken by residents of neighboring communities. The wages paid to these individuals will then recycle through the local economy. Many of the new employees will shop in local stores, even if they do not live in the village. This will result in additional sales taxes for the Village.

Other Expenditures. The proposed development will have an annual operating budget of \$10 million to \$12 million dollars. While a major portion of this budget will be for salaries, it will also be used to purchase cleaning and maintenance supplies, food for the community's dining facility, and services provided by outside vendors. While not all of these expenditures will go to local firms, some will. Various input-output models have been developed to assess the impact these types of expenditures on local economies. AREA uses the IMPLAN model. Because the economies of local communities are so intertwined, the economic impact of these expenditures is spread throughout Cook

County. Many details for the proposed development are still in the planning stages so we can only estimate the potential impact at a very general level. Typically, dollars from this type of project recirculate through the local economy about 1.5 times. Therefore, the total economic impact will be between \$15,000,000 and \$18,000,000 each year. Although this impact will be spread throughout the county, it will be concentrated in Lincolnwood and the surrounding communities.

Cost Impacts

In addition to the benefits that emanate to the community from a new development, there are also costs associated with supplying services to the development. For new subdivisions, additional cost include additional infrastructure to maintain, education services, and possibly additional recreation services. Some developments may be large enough to add to the cost of providing fire and police services. Fortunately, senior housing requires very few services. For an infill site the infrastructure and service cost are minimal and mostly covered through development and user fees. There is no added burden on the schools and there will be less new traffic generated than for a similar sized conventional apartment complex. The main potential impact could be the need for increased ambulance service.

Village Ambulance Services. Over the past 15 years, 11.4 percent of all ambulance calls in the village were to Lincolnwood Place. Last year, almost one in five calls were to Lincolnwood Place. Based on the experience at Lincolnwood Place, it is probable that the proposed development will generate between 250 and 350 ambulance runs per year. However, the cost of this service will not be felt directly by the Village of Lincolnwood. The Village contracts for its fire protection and Emergency medical services through Paramedic Services of Illinois. The \$2,725,000 annual contract covers the salaries of all fire and emergency service personnel and all operating costs for the fire department and its ambulance service. Although much of the cost of actually operating the ambulance service is charged users of the service, some cost may not be fully recouped. Because the Village has a fixed-fee contract with the service provider, any additional operating costs associated with increased service are not paid by the Village. However, the Village does own the fire trucks and ambulances that are operated by Paramedic Services of Illinois.

During the initial discussions between the developer and the potential for including space for an ambulance at the facility has been discussed. Adding space for an ambulance on site could result in the purchase of a new ambulance. A new ambulance could cost between \$80,000 and \$100,000.

Cost Versus Benefits

The only significant direct cost to the Village that AREA was able to identify was the potential need to purchase a new ambulance. The approximately \$80,000 to \$100,000 cost would be offset by one to two years of increased tax revenues. After that, the additional tax revenues would more than cover any minor indirect cost that might be

Mr. Adam Arnold

4 of 4

July 29, 2015

associated with the new development. Other indirect benefits to the Village of Lincolnwood will include increases in sales taxes resulting from increased expenditures

by employees of the facility. Overall, the potential benefits from this development are greater than the potential costs.

Sincerely,

APPLIED REAL ESTATE ANALYSIS, INC.

A handwritten signature in cursive script that reads "Robert E. Miller".

Robert E. Miller, CRE®
Senior Vice President

MEMORANDUM TO: Adam Arnold
South Bay Partners, Ltd.

FROM: Brendan May
Consultant

Michael A Werthmann, PE, PTOE
Principal

DATE: July 31, 2015

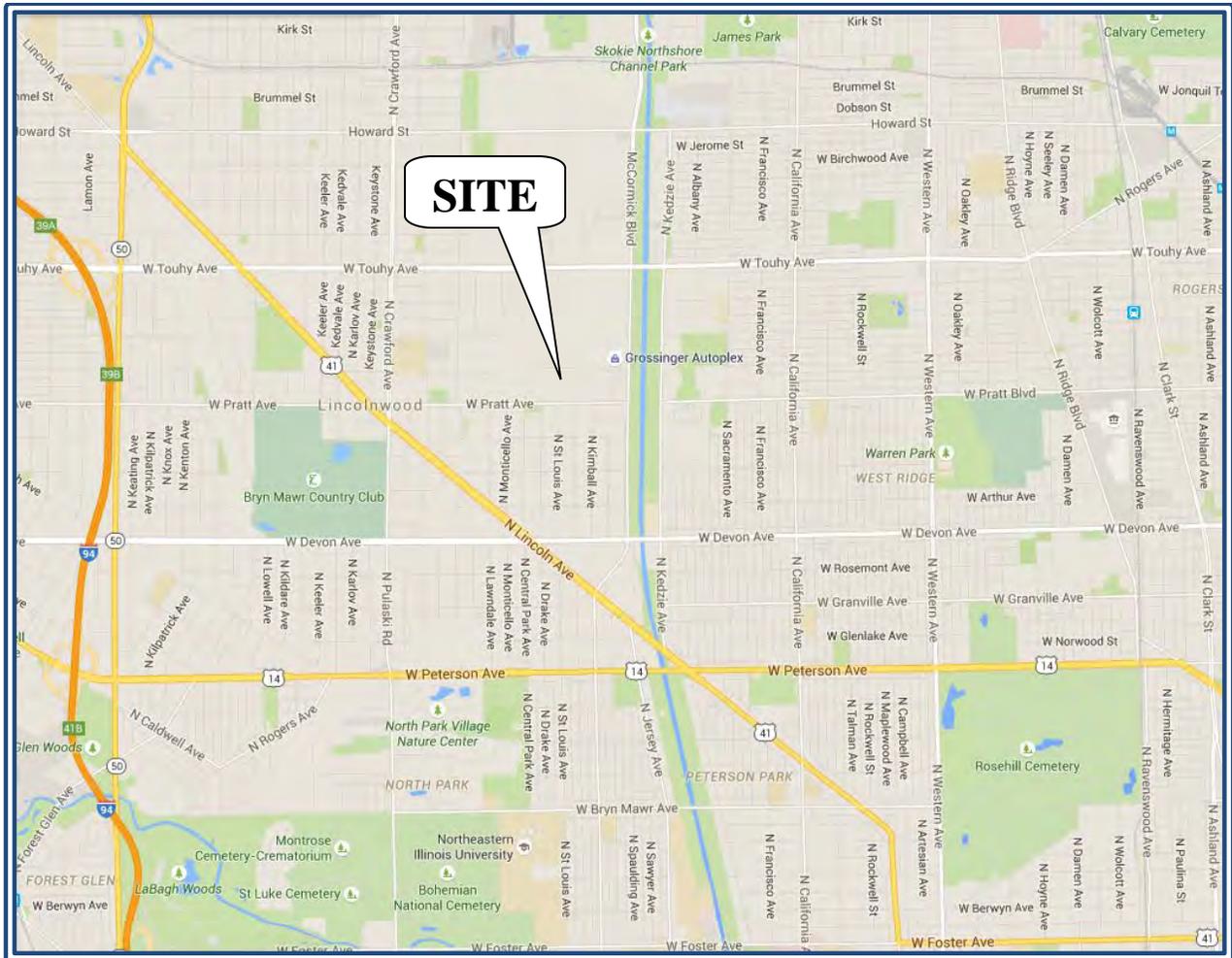
SUBJECT: Traffic Impact Study
Proposed Senior Housing Development
Lincolnwood, Illinois

This memorandum summarizes the results and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed senior housing development to be located in Lincolnwood, Illinois. The site, which contains a parking lot, is bounded by Northeast Parkway on the north and Pratt Avenue on the south and located approximately 1,000 feet west of McCormick Avenue. As proposed, the site will be developed with a senior living development consisting of 249 independent living units, 90 assisted living units and 44 memory care units. Primary access to the development will be provided via three access drives on Northeast Parkway and secondary access will be provided via one access drive on Pratt Avenue aligned opposite Kimball Avenue. **Figure 1** shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site area.

The purpose of this traffic study was to examine background traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area and determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed development.

The following sections of this memorandum present the following:

- Existing roadway conditions
- A description of the proposed development
- Directional distribution of development-generated traffic
- Vehicle trip generation for the proposed development
- Traffic analyses for the weekday morning, weekday evening and Saturday midday peak hours for both existing and future conditions
- Recommendations with respect to site access for the future condition



Site Location

Figure 1



Aerial View of Site

Figure 2

Existing Conditions

In order to project future traffic conditions in the site area, three general components of existing conditions were considered: (1) the geographical location of the site and land uses in the area, (2) the characteristics of the roadways in the site vicinity and (3) traffic volumes on these roads.

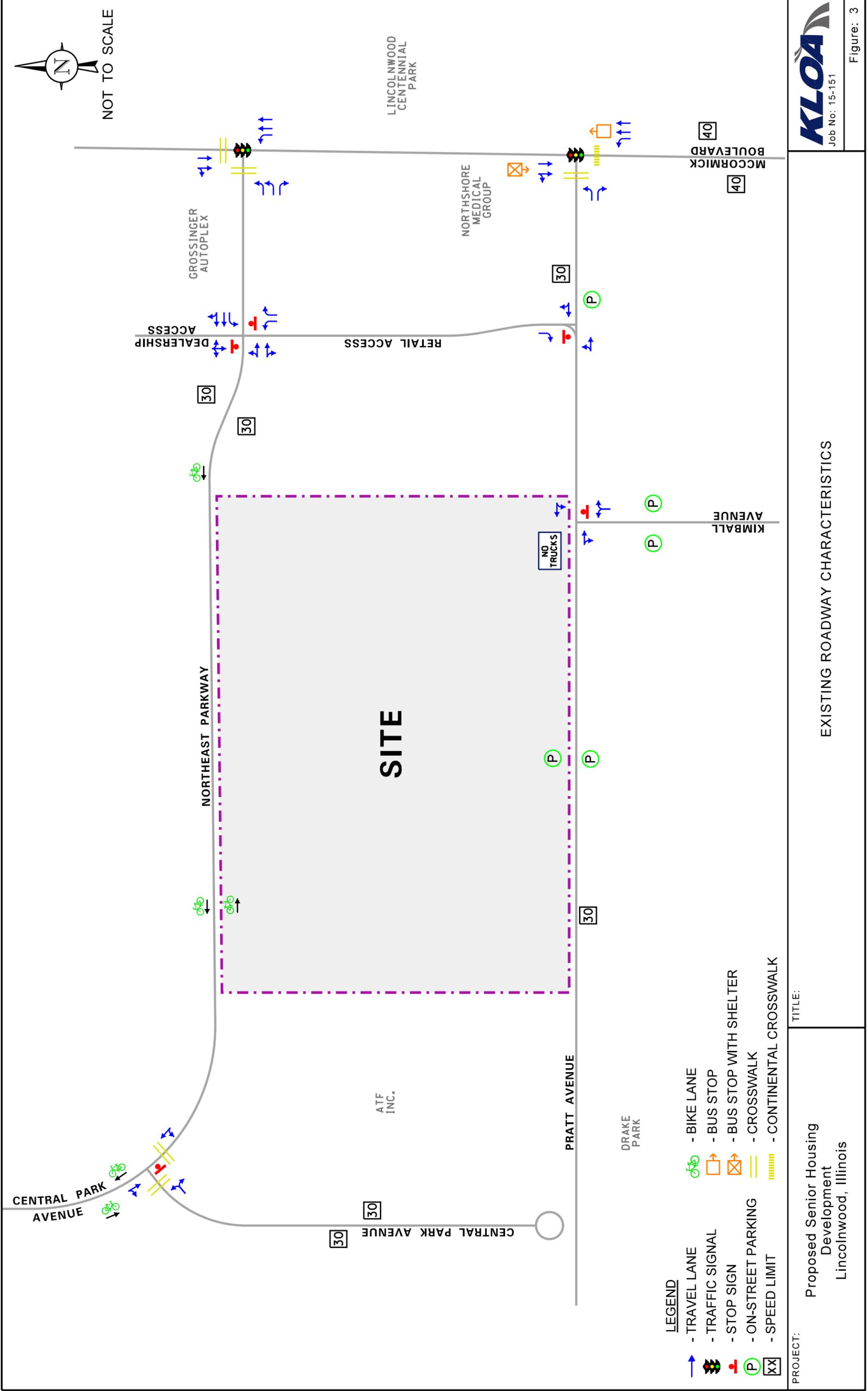
Site Location

The proposed site is bounded by Northeast Parkway on the north and Pratt Avenue on the south and located approximately 1,000 feet west of McCormick Boulevard. Land uses in the vicinity of the site include Lincolnwood Town Center to the north, Lincolnwood Centennial Park, Grossinger Autoplex, a vacant Dominick's grocery store and Northshore Medical Group to the east, residential land uses to the south and commercial developments, including ATF, Inc., to the west.

Existing Roadway System

The characteristics of the existing roadways within the study area are described below and are illustrated in **Figure 3**.

McCormick Boulevard is a north-south roadway that has two through lanes in each direction. At its signalized intersection with Pratt Avenue, McCormick Boulevard provides an exclusive left-turn lane and two through lanes on the northbound approach and an exclusive through lane and a shared through/right-turn lane on the southbound approach. The northbound approach provides a high visibility crosswalk with pedestrian countdown signals. At its signalized intersection with Northeast Parkway, McCormick Boulevard provides an exclusive left-turn lane and two through lanes on the northbound approach and an exclusive through lane and shared through/right-turn lane on the southbound approach. The southbound approach provides a standard style crosswalk with pedestrian countdown signals. CTA Bus Routes 82 and 96 run along McCormick Boulevard with Route 86 operating seven days a week and Route 96 only operating Monday through Friday. McCormick Boulevard is under the jurisdiction of the Illinois Department of Transportation, is designated as a Strategic Regional Arterial (SRA) route, carries an average daily traffic (ADT) volume of approximately 34,000 vehicles per day and has a posted speed limit of 40 miles per hour.



Northeast Parkway is an east-west roadway that extends from McCormick Boulevard to Central Park Avenue and has one through lane in each direction. East of the site, Northeast Parkway widens to provide two through lanes in each direction. At its signalized intersection with McCormick Boulevard, Northeast Parkway provides dual left-turn lanes, an exclusive right-turn lane and a standard crosswalk with pedestrian countdown signals. At its unsignalized intersection with the Grossinger access drive and the Dominick's retail center access drive, Northeast Parkway provides a shared left-turn/through lane and a shared through/right-turn lane on the eastbound approach and an exclusive left-turn lane, an exclusive through lane and a shared through/right-turn lane on the westbound approach. At its unsignalized intersection with Central Park Avenue, Northeast Parkway provides a shared left-turn/through lane and a crosswalk on the westbound approach. Bike lanes are provided in each direction of Northeast Parkway along the two-lane section of the roadway. Northeast Parkway is under the jurisdiction of the Village of Lincolnwood and has a posted speed limit of 30 miles per hour.

Pratt Avenue is an east-west roadway that extends from McCormick Boulevard to Central Avenue and has one lane in each direction. At its signalized intersection with McCormick Boulevard, Pratt Avenue provides a shared through/right-turn lane and a crosswalk with pedestrian countdown signals. At its unsignalized intersection with Kimball Avenue, Pratt Avenue provides a shared through/right-turn lane on the eastbound approach and a shared left-turn/through lane and a crosswalk on the westbound approach. Parking is permitted on both sides of the roadway and trucks are prohibited on Pratt Avenue west of Kimball Avenue. Pratt Avenue is under the jurisdiction of the Village of Lincolnwood and has a posted speed limit of 30 miles per hour.

Central Park Avenue is generally a north-south roadway that extends from Lawndale Avenue/Lunt Avenue to its terminus approximately 70 feet north of Pratt Avenue. It has one lane in each direction and with bike lanes provided on both sides of the roadway. At its unsignalized intersection with Northeast Parkway, Central Park Avenue provides a shared left/right-turn lane that is under stop sign control on the northbound approach and a shared through/right-turn lane on the southbound approach. The northbound approach provides a standard style crosswalk. Central Park Avenue is under the jurisdiction of the Village of Lincolnwood and has a posted speed limit of 30 miles per hour.

Kimball Avenue is a north-south roadway that provides one lane in each direction and extends from Pratt Avenue south to Devon Avenue. At its unsignalized intersection with Pratt Avenue, Kimball Avenue provides a shared left/right-turn lane that is under stop sign control. Parking is permitted on both sides of the roadway. Kimball Avenue is under the jurisdiction of the Village of Lincolnwood and has a posted speed limit of 20 miles per hour.

Existing Peak Hour Traffic Volumes

Manual vehicle traffic counts were conducted on Thursday, July 16, 2015 during the weekday morning (7:00 to 9:00 A.M.), weekday evening (4:00 to 6:00 P.M.) and Saturday midday (12:00 to 2:00 P.M.) peak periods at the following intersections:

- McCormick Boulevard with Northeast Parkway
- McCormick Boulevard with Pratt Avenue
- Northeast Parkway with Grossinger Autoplex Access Drive/Dominick's Retail Center Access Drive
- Northeast Parkway with Central Park Avenue
- Pratt Avenue with Dominick's Retail Center Access Drive

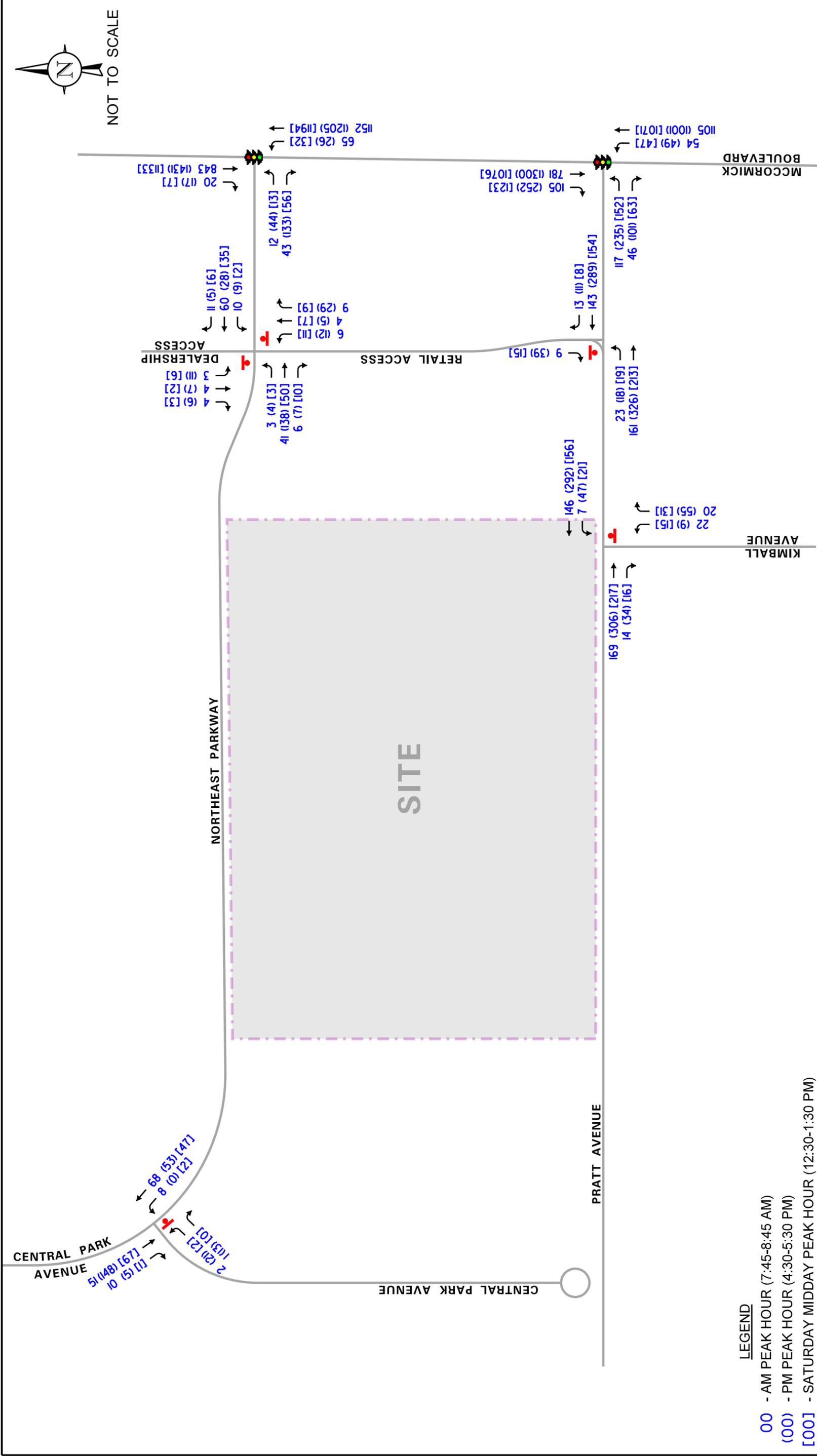
Summaries of the traffic counts indicate that the weekday morning peak hour occurs from 7:45 to 8:45 A.M., the evening peak hour occurs from 4:30 to 5:30 P.M. and the Saturday midday peak hour occurs from 12:30 to 1:30 P.M. **Figure 4** illustrates the existing peak hour traffic volumes.

Development Traffic Characteristics

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed development, including the directional distribution and volumes of traffic that it will generate.

Proposed Development Plan

The plans call for developing the site with a four-story senior housing development that will consist of 249 independent living units, 90 assisted living units and 44 memory care units. In addition, a two-story common area will be provided that will include dining rooms, a covered pool, exercise facilities and activity rooms. A total of 302 parking spaces will be provided including a 145-space enclosed parking garage.



PROJECT:	Proposed Senior Housing Development Lincolnwood, Illinois
TITLE:	EXISTING TRAFFIC VOLUMES
 Job No: 15-151 Figure: 4	

Proposed Development Access

Primary access to the development is proposed to be provided via three full movement access drives on Northeast Parkway as described below:

- The easterly access drive will be located near the eastern site boundary and will provide primary access to the parking spaces and pick-up/drop-off circle for the memory care portion of the development.
- The westerly access drive will be located along the western site boundary and will provide primary access to the parking spaces and pick-up/drop-off circle for the independent living portion of the development.
- The middle access drive is to be located approximately 230 feet east of the western property line and will provide access to the independent living drop-off/pick-up circle. Since the access drive will primarily be providing inbound access to the drop-off/pick-up circle, consideration should be given to restricting the access drive to inbound movements only.

All three access drives will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

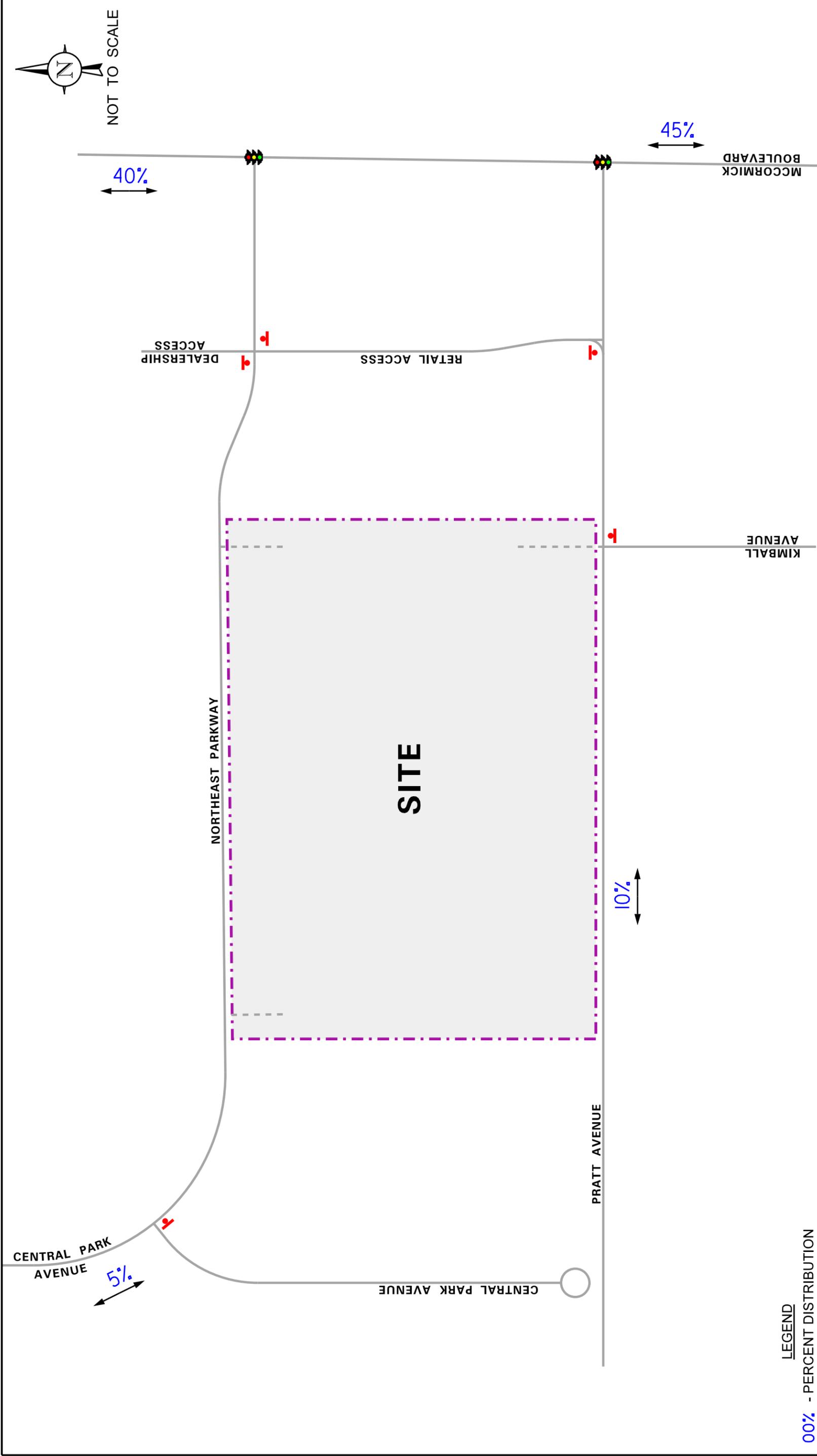
Secondary access to the development will be provided on Pratt Avenue aligned opposite Kimball Avenue. This access drive will provide access to the rear of the development and will be primarily used by employees of the development and as an emergency access. The access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

Pedestrian Facilities

Sidewalks will be provided along the site frontages along both Pratt Avenue and Northeast Parkway connecting to the existing sidewalk system. The Pratt Avenue sidewalk will allow pedestrians to access the Dominick's retail center east of the site and the sidewalks along McCormick Boulevard.

Directional Distribution of Site Traffic

The directional distribution was estimated based on existing travel patterns as determined from the traffic counts and previous studies conducted in the area. **Figure 5** illustrates the estimated directional distribution of traffic generated by the proposed development.



PROJECT: Proposed Senior Housing Development Lincolnwood, Illinois	TITLE: ESTIMATED DIRECTIONAL DISTRIBUTION	 Job No: 15-151 Figure: 5
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Estimated Site Traffic Generation

The number of new peak hour vehicle trips estimated to be generated by the proposed development was based on vehicle trip generation rates contained in *Trip Generation Manual*, 9th Edition, published by the Institute of Transportation Engineers (ITE). Since the ITE *Trip Generation Manual* does not provide rates for memory care units, the Assisted Living (Land-Use Code 254) rates were used to estimate the trips to be generated by the memory care units as well as the assisted living units. It should be noted that this provides a worst case analysis as none of the residents in the memory care units own a vehicle and drive. In addition, the Congregate Care Facility (Land-Use Code 253) rates were generally used to estimate the trips to be generated by the independent living units. **Table 1** shows the estimated number of new peak hour trips to be generated by the proposed development.

Table 1
ESTIMATED SITE-GENERATED TRAFFIC VOLUMES

Land-Use	Units	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Independent Living	249	18	14	32	24	19	43	31	25	56
Assisted Living	134	<u>16</u>	<u>8</u>	<u>24</u>	<u>19</u>	<u>19</u>	<u>38</u>	<u>24</u>	<u>24</u>	<u>48</u>
Total New Trips		34	22	56	43	38	81	55	49	104

Development Traffic Assignment

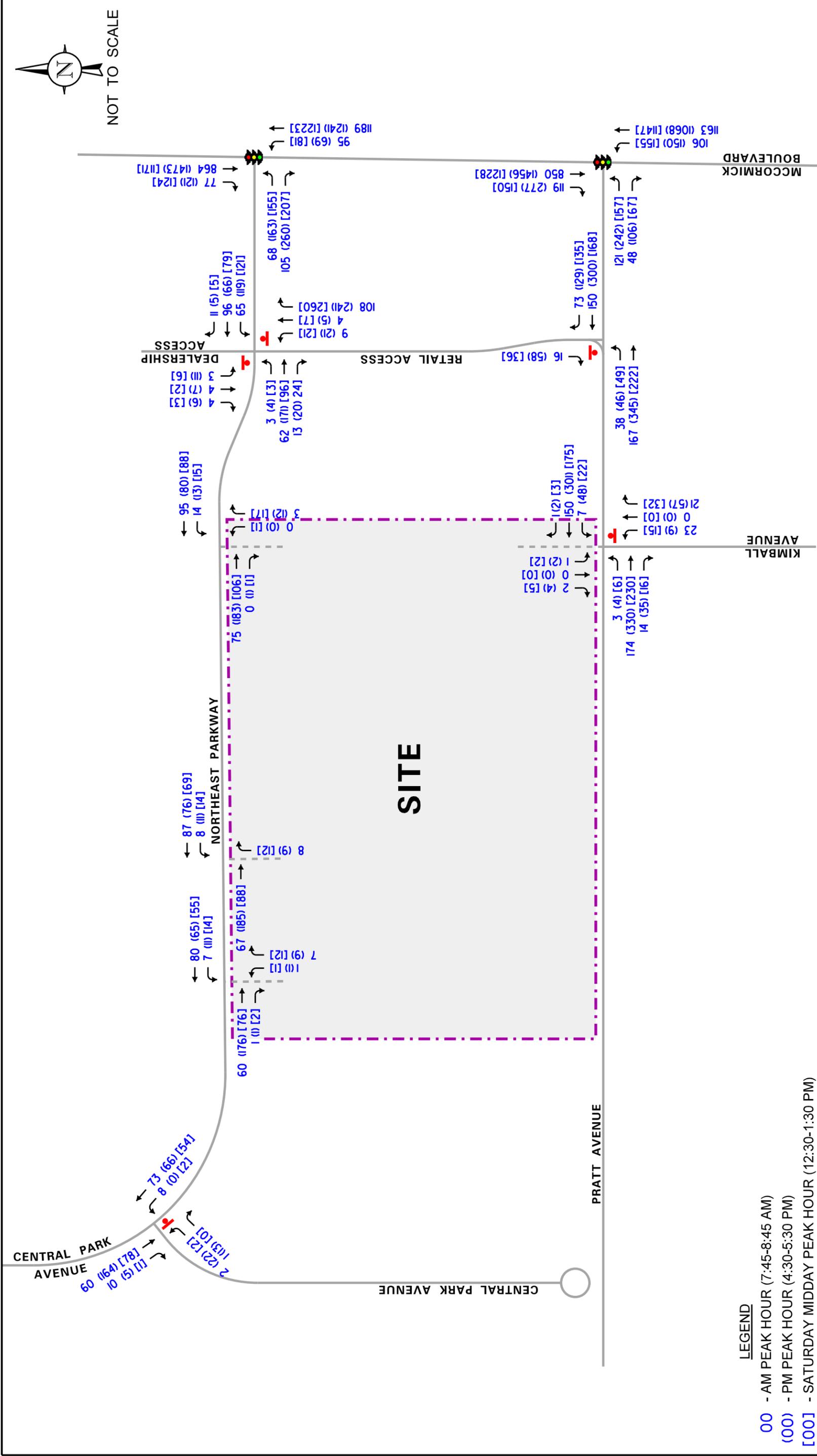
The estimated weekday morning, weekday evening and Saturday midday peak hour traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5) and are illustrated in **Figure 6**.

Background Traffic Conditions

The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on the Chicago Metropolitan Agency for Planning's (CMAP) *2040 Forecast of Population, Households and Employment* the existing traffic volumes were increased by half a percent per year for six years to project Year 2021 conditions. Furthermore, the projected Year 2021 traffic volumes also includes the traffic estimated to be generated by the redevelopment of the vacant Dominick's store which is proposed to contain a Planet Fitness, a grocery store and a retail space, as well as an additional outlot building.

Total Projected Traffic Volumes

The existing traffic volumes accounting for growth were combined with the peak hour traffic volumes generated by the development (Figure 6) and the traffic estimated to be generated by other area developments to determine the projected Year 2021 traffic volumes that are shown in **Figure 7**.



PROJECT: Proposed Senior Housing Development
Lincolnwood, Illinois

TITLE: YEAR 2021 TOTAL PROJECTED TRAFFIC VOLUMES

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Traffic Evaluation

The following provides an evaluation conducted for the weekday morning, weekday evening and Saturday midday peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives are projected to operate and whether any roadway improvements or modifications are required.

Traffic Analyses

Capacity analyses were performed for the key intersections included in the study area to determine the ability of the existing street system to accommodate existing and future traffic demands. Analyses were performed for the existing and total projected peak hour traffic conditions.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM), 2010* and using Synchro/SimTraffic 8 software. The analysis for the traffic signal controlled intersections were accomplished using field measured cycle lengths and phasings to determine the average overall vehicle delay and levels of service.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing and Year 2021 total projected conditions are presented in **Table 2** and **Table 3**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 2
CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
McCormick Boulevard with Northeast Parkway ¹						
• Overall	A	3.4	A	6.2	A	3.7
• Northbound Approach	A	1.5	A	2.8	A	1.7
• Southbound Approach	A	4.5	A	6.2	A	4.5
• Eastbound Approach	C	29.4	C	29.6	C	27.4
McCormick Boulevard with Pratt Avenue ¹						
• Overall	A	8.8	B	14.9	B	10.5
• Northbound Approach	A	4.9	A	7.0	A	5.7
• Southbound Approach	A	5.4	B	10.3	A	6.8
• Eastbound Approach	E	55.2	E	60.8	E	55.8
Northeast Parkway with Grossinger/Site Access Driveway ²						
• Northbound Approach	A	9.1	A	9.6	A	9.2
• Southbound Approach	A	9.4	B	10.1	A	9.2
• Eastbound Lefts	A	0.9	A	0.4	A	0.7
• Westbound Lefts	A	7.3	A	7.6	A	7.9
Pratt Avenue with Site Access Driveway ²						
• Southbound Approach	A	9.1	B	10.4	A	9.2
• Eastbound Lefts	A	1.1	A	0.6	A	0.7
Northeast Parkway with Central Park Avenue ²						
• Northbound Approach	A	9.6	B	10.4	A	9.2
• Westbound Lefts	A	0.8	--	--	A	0.3
Pratt Avenue with Kimball Avenue ²						
• Northbound Approach	B	10.5	B	12.0	B	10.9
• Westbound Lefts	A	0.4	A	1.5	A	1.1

LOS = Level of Service

Delay is measured in seconds.

1 - Signalized Intersection

2 - Unsignalized Intersection

Table 3
CAPACITY ANALYSES RESULTS – PROJECTED CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
McCormick Boulevard with Northeast Parkway ¹						
• Overall	A	5.8	B	15.5	A	9.6
• Northbound Approach	A	2.0	A	3.7	A	2.6
• Southbound Approach	A	5.8	A	9.2	A	7.6
• Eastbound Approach	C	34.5	E	76.0	D	42.2
McCormick Boulevard with Pratt Avenue ¹						
• Overall	A	9.2	B	18.7	B	11.8
• Northbound Approach	A	5.2	B	13.0	A	7.3
• Southbound Approach	A	6.2	B	14.2	A	8.9
• Eastbound Approach	E	55.5	E	61.0	E	55.6
Northeast Parkway with Grossinger/Retail Access Driveway ²						
• Northbound Approach	A	9.2	B	10.7	B	10.5
• Southbound Approach	B	10.9	C	16.4	C	16.6
• Eastbound Lefts	A	0.7	A	0.3	A	0.4
• Westbound Lefts	A	7.5	A	7.9	A	8.5
Pratt Avenue with Retail Access Driveway ²						
• Southbound Approach	A	9.4	B	11.2	A	9.7
• Eastbound Lefts	A	1.7	A	1.5	A	1.8
Northeast Parkway with Central Park Avenue ²						
• Northbound Approach	A	9.7	B	10.7	A	9.3
• Westbound Lefts	A	0.8	--	--	A	0.3
Pratt Avenue with Kimball Avenue/Site Access Drive ²						
• Northbound Approach	B	10.6	B	12.4	B	11.2
• Southbound Approach	A	9.9	B	13.7	B	10.6
• Eastbound Lefts	A	0.1	A	0.1	A	0.2
• Westbound Lefts	A	0.4	A	1.5	A	1.0
Northeast Parkway with Westerly Access Drive ²						
• Northbound Approach	A	8.7	A	9.3	A	8.8
• Westbound Lefts	A	0.6	A	1.2	A	1.6
Northeast Parkway with Middle Access Drive ²						
• Northbound Approach	A	8.6	A	9.3	A	8.8
• Westbound Lefts	A	0.7	A	1.0	A	1.3
Northeast Parkway with Easterly Access Drive ²						
• Northbound Approach	A	8.7	A	9.4	A	8.9
• Westbound Approach	A	1.0	A	1.1	A	1.2

LOS = Level of Service

Delay is measured in seconds.

1 - Signalized Intersection

2 - Unsignalized Intersection

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements to accommodate the development traffic.

McCormick Boulevard with Northeast Parkway

The results of the capacity analysis indicate that this intersection currently operates at an acceptable Level of Service (LOS) A during the weekday morning, weekday evening and Saturday midday peak hours. Under projected conditions, the intersection is projected to continue operating at an acceptable LOS B or better with increases in delay of approximately ten seconds or less. Furthermore, 95th percentile queues for the northbound-to-westbound left-turn movement are projected to be contained within the provided storage. It should be noted that during the evening peak hour the Northeast Parkway approach is projected to operate at a LOS E. However, a review of the traffic simulation indicates that queuing of eastbound traffic will not be significant and that the majority of traffic will clear the intersection every cycle.

McCormick Boulevard with Pratt Avenue

The results of the capacity analysis indicate that this intersection currently operates and is projected to continue operating at a LOS A during the weekday morning peak hour and at a LOS B during the weekday evening and Saturday midday peak hours with increases in delay of less than four seconds during the peak hours. Furthermore, 95th percentile queues for the northbound-to-westbound left-turn movement are projected to be contained within the provided storage. It should be noted that the Pratt Avenue approach currently operates at LOS E and is projected to continue operating at a LOS E with minimal increases in delay. Given that the proposed development is projected to generate a very limited volume of eastbound traffic on Pratt Avenue as only the secondary access drive is proposed to be located on Pratt Avenue, the proposed development is projected to have a limited impact on Pratt Avenue and its approach with McCormick Boulevard. As such, no roadway improvements or signal modifications are required at this intersection.

Northeast Parkway with Grossinger/Former Dominick's Access Drives

The results of the capacity analysis indicate that the access drives at this intersection currently operate at a LOS B or better during the weekday morning, weekday evening and Saturday midday peak hours. Under projected conditions, these access drives are projected to operate at an acceptable LOS C or better during the peak hours with maximum increases in delay of approximately seven seconds. Furthermore, eastbound and westbound left-turn movements into the access drives are projected to maintain a LOS A with 95th percentile queues of one vehicle. As such, no roadway or traffic control improvements are required at this intersection.

Pratt Avenue with Retail Center Access Drive

The results of the capacity analysis indicate that this access drive currently operates at a LOS B or better during the weekday morning, weekday evening and Saturday midday peak hours. Under future conditions, this access drive is projected to continue operating at a LOS B with increases in delay of less than one second and 95th percentile queues of one vehicle. Furthermore, eastbound left-turn movements into the access drive are projected to maintain a LOS A during the peak hours with 95th percentile queues of one vehicle. As such, no roadway or traffic control improvements are required at this intersection.

Northeast Parkway with Central Park Avenue

The results of the capacity analysis indicate that the northbound approach at this intersection is currently operating at a LOS B or better during the peak hours. Under future conditions, this intersection is projected to continue to operate at a LOS B or better with increases in delay of less than one second. Furthermore, 95th percentile queue lengths for the westbound-to-southbound left-turn movement onto Central Park Avenue are projected to be one vehicle. As such, no roadway or traffic control improvements are required at this intersection.

Northeast Parkway with Site Access Drives

Primary access to the development is proposed to be provided via three full movement access drives on Northeast Parkway as described below:

- The easterly access drive will be located near the eastern site boundary and will provide primary access to the parking spaces and pick-up/drop-off circle for the memory care portion of the development.
- The westerly access drive will be located along the western site boundary and will provide primary access to the parking spaces and pick-up/drop-off circle for the independent living portion of the development.
- The middle access drive is to be located approximately 230 feet east of the western property line and will provide access to the independent living drop-off/pick-up circle. Since the access drive will primarily be providing inbound access to the drop-off/pick-up circle, consideration should be given to restricting the access drive to inbound movements only.

All three access drives will provide one inbound lane and one outbound lane with outbound movements under stop sign control. Given the limited traffic projected to use the access drives, separate right-turn or left-turn lanes are not required on Northeast Parkway serving any of the access drives.

The results of the capacity analysis indicate that the proposed access drives on Northeast Parkway are projected to operate at a LOS A during the weekday morning, weekday evening and Saturday midday peak hours. Furthermore, 95th percentile queues for the westbound left-turn movement to the access drives are projected to be one vehicle. As such, the proposed access drives will be adequate to accommodate the projected development-generated traffic and will have minimal impact on the operation of Northeast Parkway.

Pratt Avenue with Kimball Avenue/Site Access Drive

Secondary access to the development will be provided on Pratt Avenue aligned opposite Kimball Avenue. This access drive will provide access to the rear of the development and will be primarily used by employees of the development and as an emergency access. The access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control. Given the limited traffic projected to use this access drive, separate right-turn or left-turn lanes are not required on Pratt Avenue serving the proposed access drive or Kimball Avenue.

The results of the capacity analysis indicate that the Kimball Avenue approach at this intersection is currently operating at a LOS B during the weekday morning, weekday evening and Saturday midday peak hours. Under future conditions, the Kimball Avenue approach is projected to continue to operate at a LOS B and the proposed access drive is projected to operate at a LOS A during the morning peak hour and at a LOS B during the weekday evening and Saturday midday peak hours. Furthermore, the westbound left-turn movement to Kimball Avenue is projected to maintain a LOS A and the eastbound left-turn movement to the access drive is projected to operate at a LOS A with 95th percentile queues of one vehicle for both movements. As such, the proposed access drive will have a limited impact on the operation of this intersection and no roadway or traffic control improvements will be necessary.

Internal Circulation

Given the proximity of the east-west circulation road to Northeast Parkway, the following signage and striping improvements are recommended within the site to ensure efficient and orderly access to, from and through the development.

- *Westerly Access Drive with Circulation Roadway.* A Do Not Block Intersection sign should be provided for northbound traffic just south of the intersection so that outbound traffic does not block inbound access to the circulation roadway east of the internal intersection.
- *Middle Access Drive with Circulation Roadway.* Both approaches of the circulation road should be under stop sign control with painted stop bars so as to provide the inbound access drive with the right-of-way at the internal intersection.
- *Easterly Access Drive with Circulation Roadway.* A Do Not Block Intersection sign should be located on the circulation approach at this intersection so that outbound traffic does not block access for inbound traffic to the circulation roadway south of the internal intersection.

Conclusion

Based on the proposed development plans and the preceding traffic impact study, the following conclusions and recommendations are made:

- The volume of new traffic to be generated by the proposed development can be accommodated by the existing roadway system.
- The proposed development traffic will have a limited impact on the operation of the study area intersections as the intersections have sufficient reserve capacity to accommodate the development-generated traffic.
- Primary access to the development will be provided via three access drives on Northeast Parkway. Only secondary access will be provided on Pratt Avenue. As such, the majority of the development traffic is projected to traverse Northeast Parkway as opposed to Pratt Avenue.
- The proposed access system will be adequate in accommodating site traffic and will provide efficient and flexible access to the development. Since the middle access drive will primarily be providing inbound access to the independent living drop-off/pick-up circle, consideration should be given to restricting the access drive to inbound movements only.
- Several signage and striping improvements have been recommended within the site to ensure efficient and orderly access to, from and through the development.

Appendix

Traffic Count Summary Sheets



Kenfig Lindgren, O'Hara, Aboona, Inc.

Kenfig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: McCormick Boulevard with
Northeast Parkway
Site Code:
Start Date: 07/16/2015
Page No: 1

Turning Movement Data

Start Time	Northeast Pkwy Eastbound					McCormick Blvd Northbound					McCormick Blvd Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:00 AM	0	2	10	0	12	0	13	225	0	238	0	166	4	0	170	420
7:15 AM	0	0	8	0	8	0	15	295	0	310	0	138	3	0	141	459
7:30 AM	0	0	3	1	3	0	16	306	0	322	0	163	2	0	165	490
7:45 AM	0	2	6	1	8	0	18	315	0	333	0	223	3	0	226	567
Hourly Total	0	4	27	2	31	0	62	1141	0	1203	0	690	12	0	702	1936
8:00 AM	0	4	16	2	20	0	19	268	0	287	0	188	2	0	190	497
8:15 AM	0	3	7	0	10	0	15	273	0	288	0	187	6	1	193	491
8:30 AM	0	3	14	1	17	0	13	296	0	309	0	245	9	1	254	580
8:45 AM	0	5	11	0	16	0	16	277	1	293	0	226	11	2	237	546
Hourly Total	0	15	48	3	63	0	63	1114	1	1177	0	846	28	4	874	2114
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	16	41	1	57	0	8	257	0	265	0	352	11	2	363	685
4:15 PM	0	2	11	3	13	0	8	295	0	303	0	362	3	0	365	681
4:30 PM	0	9	49	1	58	0	5	272	0	277	0	392	5	0	397	732
4:45 PM	0	10	17	0	27	0	3	324	0	327	0	328	4	0	332	686
Hourly Total	0	37	118	5	155	0	24	1148	0	1172	0	1434	23	2	1457	2784
5:00 PM	0	6	35	0	41	0	10	295	0	305	0	374	4	0	378	724
5:15 PM	0	19	32	0	51	0	8	314	0	322	0	337	4	0	341	714
5:30 PM	0	10	27	3	37	0	11	308	0	319	0	342	6	0	348	704
5:45 PM	0	20	24	0	44	0	7	291	0	298	0	329	4	0	333	675
Hourly Total	0	55	118	3	173	0	36	1208	0	1244	0	1382	18	0	1400	2817
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM	0	4	27	2	31	0	10	257	0	267	0	252	5	2	257	555
12:15 PM	0	7	9	3	16	0	10	244	0	254	0	295	4	1	299	569
12:30 PM	0	3	10	3	13	0	14	296	0	310	1	279	2	5	282	605
12:45 PM	0	4	16	0	20	0	11	280	0	292	1	291	2	0	294	606
Hourly Total	0	18	62	8	80	0	45	1077	0	1123	2	1117	13	8	1132	2335
1:00 PM	0	5	15	2	20	0	3	286	0	289	0	264	2	1	266	575
1:15 PM	0	1	15	2	16	0	4	332	0	336	0	299	1	0	300	652
1:30 PM	0	8	16	0	24	0	7	255	0	262	0	244	4	0	248	534
1:45 PM	0	4	16	0	20	0	5	299	0	304	0	303	6	0	309	633
Hourly Total	0	18	62	4	80	0	19	1172	0	1191	0	1110	13	1	1123	2394
Grand Total	0	147	435	25	582	0	1	249	1	7110	2	6579	107	15	6688	14380
Approach %	0.0	25.3	74.7	-	-	0.0	0.0	3.5	96.5	-	0.0	98.4	1.6	-	-	-
Total %	0.0	1.0	3.0	-	4.0	0.0	0.0	1.7	47.7	-	0.0	45.8	0.7	-	46.5	-
Lights	0	145	429	-	574	1	242	6727	-	6970	2	6422	102	-	6526	14070
% Lights	-	98.6	98.6	-	98.6	100.0	97.2	98.1	-	98.0	100.0	97.6	95.3	-	97.6	97.8
Buses	0	1	0	-	1	0	0	62	-	62	0	66	2	-	68	131

% Buses	-	0.7	0.0	-	0.2	0.0	0.0	0.0	0.9	-	0.9	0.0	1.0	1.9	-	1.0	0.9
Single-Unit Trucks	0	1	3	-	4	0	6	60	-	66	0	83	2	-	85	155	
% Single-Unit Trucks	-	0.7	0.7	-	0.7	0.0	2.4	0.9	-	0.9	0.0	1.3	1.9	-	1.3	1.1	
Articulated Trucks	0	0	3	-	3	0	1	10	-	11	0	8	1	-	9	23	
% Articulated Trucks	-	0.0	0.7	-	0.5	0.0	0.4	0.1	-	0.2	0.0	0.1	0.9	-	0.1	0.2	
Bicycles on Road	0	0	0	-	0	0	0	1	-	1	0	0	0	-	0	1	
% Bicycles on Road	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	
Pedestrians	-	-	-	-	-	-	-	-	-	1	-	-	-	-	15	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	



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Count Name: McCormick Boulevard with Pratt
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Turning Movement Data

Start Time	Pratt Avenue Eastbound					McCormick Blvd Northbound					McCormick Blvd Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	21	12	0	33	0	8	214	0	222	0	182	14	0	176	431
7:15 AM	0	20	13	0	33	0	8	283	0	291	0	125	17	0	142	466
7:30 AM	0	28	13	2	41	0	12	287	1	299	0	163	14	0	177	517
7:45 AM	0	35	14	0	49	0	14	306	0	320	0	185	28	0	213	582
Hourly Total	0	104	52	2	156	0	42	1090	1	1132	0	635	73	0	708	1996
8:00 AM	0	14	12	1	26	0	13	269	3	282	0	196	20	0	216	524
8:15 AM	0	38	14	0	52	0	11	250	1	261	0	169	24	0	193	506
8:30 AM	0	30	6	1	36	0	16	280	4	296	0	218	33	0	251	583
8:45 AM	0	48	19	0	67	0	24	248	2	272	0	212	29	0	241	580
Hourly Total	0	130	51	2	181	0	64	1047	10	1111	0	795	106	0	901	2193
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	38	30	0	68	0	14	228	2	242	0	363	48	0	411	721
4:15 PM	0	49	25	0	74	0	13	249	0	262	0	310	55	0	365	701
4:30 PM	0	46	19	0	65	1	7	237	3	245	0	363	81	0	444	754
4:45 PM	0	75	24	1	99	0	6	240	2	246	0	296	55	0	351	696
Hourly Total	0	208	98	1	306	1	40	954	7	995	0	1332	239	0	1571	2872
5:00 PM	0	65	33	2	98	0	20	257	0	277	0	319	68	0	387	762
5:15 PM	0	49	25	0	74	0	16	267	0	283	0	322	48	0	370	727
5:30 PM	0	71	30	3	101	0	10	239	2	249	0	314	50	0	364	714
5:45 PM	0	77	33	0	110	0	14	233	2	247	0	290	65	3	355	712
Hourly Total	0	262	121	5	383	0	60	996	4	1056	0	1245	231	3	1476	2915
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM	0	30	21	2	51	0	5	239	7	244	0	280	27	0	307	602
12:15 PM	0	29	16	0	45	0	7	214	0	221	0	241	30	0	271	537
12:30 PM	0	44	18	2	62	0	11	274	1	285	0	282	37	0	319	666
12:45 PM	0	28	10	0	38	0	17	256	1	273	0	242	35	0	277	588
Hourly Total	0	131	65	4	196	0	40	983	9	1023	0	1045	129	0	1174	2393
1:00 PM	0	34	20	0	54	0	4	266	2	270	0	279	21	0	300	624
1:15 PM	0	46	15	0	61	0	15	275	2	280	0	273	30	0	303	654
1:30 PM	0	22	7	0	29	0	15	253	1	268	0	251	31	0	282	579
1:45 PM	0	43	15	0	58	0	8	238	0	246	0	254	40	0	294	598
Hourly Total	0	145	57	0	202	0	42	1032	5	1074	0	1067	122	0	1179	2455
Grand Total	0	980	444	14	1424	1	288	6102	36	6391	0	6109	900	3	7009	14824
Approach %	0.0	68.8	31.2	-	-	0.0	4.5	95.5	-	-	0.0	87.2	12.8	-	-	-
Total %	0.0	6.6	3.0	-	9.6	0.0	1.9	41.2	-	43.1	0.0	41.2	6.1	-	47.3	-
Lights	0	976	443	-	1419	1	285	5961	-	6247	0	5949	886	-	6835	14501
% Lights	-	99.6	99.8	-	99.6	100.0	99.0	97.7	-	97.7	-	97.4	98.4	-	97.5	97.8
Buses	0	2	0	-	2	0	0	59	-	59	0	63	5	-	68	129

% Buses	-	0.2	0.0	-	0.1	0.0	0.0	0.0	1.0	-	0.9	-	1.0	0.6	-	1.0	0.9
Single-Unit Trucks	0	1	0	-	1	0	2	66	-	68	0	87	9	-	96	165	
% Single-Unit Trucks	-	0.1	0.0	-	0.1	0.0	0.7	1.1	-	1.1	-	1.4	1.0	-	1.4	1.1	
Articulated Trucks	0	1	0	-	1	0	0	15	0	15	0	10	0	-	10	28	
% Articulated Trucks	-	0.1	0.0	-	0.1	0.0	0.0	0.2	-	0.2	-	0.2	0.0	-	0.1	0.2	
Bicycles on Road	0	0	1	-	1	0	1	1	1	2	0	0	0	-	0	3	
% Bicycles on Road	-	0.0	0.2	-	0.1	0.0	0.3	0.0	0.0	0.0	-	0.0	0.0	-	0.0	0.0	
Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				100.0					100.0				100.0			100.0	



Kenig, Lindgren, O'Hara, Aboona, Inc.

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Northeast Parkway with
Dealership Access
Site Code:
Start Date: 07/16/2015
Page No: 1

Turning Movement Data

Start Time	Northeast Pkwy Eastbound						Northeast Pkwy Westbound						Dominicks Access Northbound						Dealership Access Southbound						Int. Total		
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total			
7:00 AM	0	0	7	1	0	8	1	5	12	3	5	21	0	0	1	1	1	0	0	0	0	1	0	3	1		
7:15 AM	0	0	10	0	0	10	0	1	11	4	1	16	0	0	0	0	0	0	0	0	0	1	0	1	1		
7:30 AM	0	0	2	0	1	2	1	2	15	1	0	19	0	2	2	0	1	1	3	0	0	0	0	0	0		
7:45 AM	0	0	6	1	0	7	0	1	19	0	1	20	0	2	1	2	0	5	0	0	2	0	0	2	34		
Hourly Total	0	0	25	2	1	27	2	9	57	8	7	76	0	5	2	4	1	11	0	0	4	0	4	4	118		
8:00 AM	0	1	15	3	0	19	0	2	18	2	4	22	0	0	2	3	0	5	0	0	1	1	0	2	48		
8:15 AM	0	1	7	0	0	8	0	3	16	3	2	22	0	0	3	1	3	0	7	0	1	0	1	1	2	39	
8:30 AM	0	1	13	2	0	16	0	4	7	6	1	17	0	0	1	0	0	2	0	2	1	1	2	6	5	40	
8:45 AM	0	2	10	2	0	14	0	7	19	3	7	29	1	0	1	4	1	6	0	3	0	1	1	12	4	53	
Hourly Total	0	5	45	7	0	57	0	16	60	14	14	90	1	4	4	11	1	20	0	6	2	5	19	13	180		
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4:00 PM	0	4	48	7	0	59	1	7	12	2	6	22	0	8	1	5	0	14	0	3	1	4	3	3	8	103	
4:15 PM	0	1	11	6	2	18	0	2	10	0	3	12	0	4	1	2	0	7	0	0	5	3	3	0	8	45	
4:30 PM	1	2	48	4	0	55	0	3	6	0	6	9	0	3	2	8	0	13	0	4	2	2	3	0	9	86	
4:45 PM	0	0	18	3	0	21	1	1	6	1	1	9	0	1	1	5	1	7	0	3	0	1	1	0	4	41	
Hourly Total	1	7	125	20	2	153	2	13	34	3	16	52	0	16	5	20	1	41	0	10	8	11	3	3	29	275	
5:00 PM	0	0	30	0	0	30	0	3	8	3	12	14	0	6	2	10	0	18	0	1	5	2	2	0	8	70	
5:15 PM	0	1	42	0	0	43	0	1	8	1	0	10	0	2	0	6	0	8	0	3	0	0	0	0	3	64	
5:30 PM	0	2	25	4	0	31	0	3	10	6	0	19	0	4	1	6	0	11	0	3	1	3	1	1	7	68	
5:45 PM	0	1	35	4	0	40	0	1	8	2	1	11	0	5	0	4	0	9	0	3	2	1	1	1	6	66	
Hourly Total	0	4	132	8	0	144	0	8	34	12	13	54	0	17	3	26	0	46	0	10	8	6	6	2	24	268	
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
12:00 PM	0	3	27	5	1	35	0	2	10	3	1	15	0	1	1	3	0	5	0	2	0	1	1	0	3	58	
12:15 PM	0	1	9	1	1	11	0	1	9	4	0	14	0	3	0	6	0	9	0	3	2	2	2	1	7	41	
12:30 PM	0	1	9	2	0	12	0	1	14	2	0	17	0	4	1	3	0	8	0	1	1	1	1	0	3	40	
12:45 PM	0	1	16	2	0	19	0	1	11	3	0	15	0	3	2	2	0	7	0	1	0	2	2	0	3	44	
Hourly Total	0	6	61	10	2	77	0	5	44	12	1	61	0	11	4	14	0	29	0	7	3	6	1	1	16	183	
1:00 PM	0	0	12	4	1	16	0	0	6	0	0	6	0	0	1	3	4	0	8	0	2	1	0	4	3	33	
1:15 PM	0	1	13	2	0	16	0	0	4	1	0	5	0	3	1	0	0	4	0	2	0	0	0	0	2	27	
1:30 PM	0	1	13	3	0	17	1	0	7	3	0	11	0	0	3	4	0	7	0	3	3	1	1	2	7	42	
Hourly Total	1	0	16	3	0	20	1	1	9	0	0	10	0	1	3	3	0	7	0	2	2	4	2	2	2	39	
1:45 PM	0	1	13	3	0	17	1	0	7	3	0	11	0	0	3	4	0	7	0	3	3	3	1	1	2	7	42
Hourly Total	1	0	16	3	0	20	1	1	9	0	0	10	0	1	3	3	0	7	0	2	2	4	2	2	2	39	
Grand Total	2	24	442	59	6	527	5	52	255	53	53	365	1	58	28	86	3	173	0	42	29	29	37	100	1165		
Approach %	0.4	4.6	83.9	11.2	-	-	1.4	14.2	69.9	14.5	-	-	0.6	33.5	16.2	49.7	-	-	0.0	42.0	29.0	29.0	-	-	-		
Total %	0.2	2.1	37.9	5.1	-	45.2	0.4	4.5	21.9	4.5	-	31.3	0.1	5.0	2.4	7.4	-	14.8	0.0	3.6	2.5	2.5	-	-	8.6		
Lights	2	23	429	59	-	513	4	51	242	52	-	349	1	57	28	84	-	170	0	42	29	29	-	-	100		
% Lights	100.0	95.8	97.1	100.0	-	97.3	80.0	98.1	94.9	98.1	-	95.6	100.0	98.3	100.0	97.7	-	98.3	-	100.0	100.0	100.0	-	-	100.0	97.2	

Lincolnwood, IL Weather: Warm and PM Rain
 Pratt Ave and Access Drive West of McCormick
 Thursday July 16, 2015

07/20/15
 09:38:12

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 1 pratt/acc/thurs

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
700	0	0	0	0	14	0	0	0	0	0	22	4	40
715	2	0	0	1	24	0	0	0	0	0	35	4	66
730	0	0	0	6	22	0	0	0	0	0	40	3	71
745	1	0	0	4	39	0	0	0	0	0	46	10	100
800	5	0	0	3	28	0	0	0	0	0	36	3	75
815	2	0	1	4	29	0	0	0	0	0	50	6	92
830	1	0	0	2	47	0	0	0	0	0	29	4	83
845	3	0	0	3	53	0	0	0	0	0	58	8	125
1600	12	0	0	5	63	0	0	0	0	0	75	3	158
1615	8	0	0	7	72	0	0	0	0	0	83	3	173
1630	14	0	0	2	82	0	0	0	0	0	66	6	170
1645	6	0	0	4	73	0	0	0	0	0	89	3	175
1700	13	0	0	5	71	0	0	0	0	0	100	5	194
1715	6	0	0	0	72	0	0	0	0	0	71	4	153
1730	4	0	0	3	55	0	0	0	0	0	94	8	164
1745	10	0	0	1	80	0	0	0	0	0	103	5	199
Total	87	0	1	50	824	0	0	0	0	0	997	79	2038

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - Totals

Intersection # 1 pratt/acc/thurs

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
700	0	14	0	26	4	22	0	14	40
715	2	25	0	39	5	35	0	26	66
730	0	28	0	43	9	40	0	22	71
745	1	43	0	56	14	46	0	40	100
800	5	31	0	39	6	36	0	33	75
815	3	33	0	56	10	51	0	31	92
830	1	49	0	33	6	29	0	48	83
845	3	56	0	66	11	58	0	56	125
1600	12	68	0	78	8	75	0	75	158
1615	8	79	0	86	10	83	0	80	173
1630	14	84	0	72	8	66	0	96	170
1645	6	77	0	92	7	89	0	79	175
1700	13	76	0	105	10	100	0	84	194
1715	6	72	0	75	4	71	0	78	153
1730	4	58	0	102	11	94	0	59	164
1745	10	81	0	108	6	103	0	90	199
Total	88	874	0	1076	129	998	0	911	2038

Lincolnwood, IL Weather: Warm and PM Rain
 Pratt Ave and Access Drive West of McCormick
 Thursday July 16, 2015

07/20/15
 09:38:12

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: by Movement

Intersection # 1 pratt/acc/thurs

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
700	0	0	0	0	56	0	0	0	0	88	16	160	
715	8	0	0	4	96	0	0	0	0	140	16	264	
730	0	0	0	24	88	0	0	0	0	160	12	284	
745	4	0	0	16	156	0	0	0	0	184	40	400	
800	20	0	0	12	112	0	0	0	0	144	12	300	
815	8	0	4	16	116	0	0	0	0	200	24	368	
830	4	0	0	8	188	0	0	0	0	116	16	332	
845	12	0	0	12	212	0	0	0	0	232	32	500	
1600	48	0	0	20	252	0	0	0	0	300	12	632	
1615	32	0	0	28	288	0	0	0	0	332	12	692	
1630	56	0	0	8	328	0	0	0	0	264	24	680	
1645	24	0	0	16	292	0	0	0	0	356	12	700	
1700	52	0	0	20	284	0	0	0	0	400	20	776	
1715	24	0	0	0	288	0	0	0	0	284	16	612	
1730	16	0	0	12	220	0	0	0	0	376	32	656	
1745	40	0	0	4	320	0	0	0	0	412	20	796	

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: Appr/Exit Totals

Intersection # 1 pratt/acc/thurs

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
700	0	56	0	104	16	88	0	56	160
715	8	100	0	156	20	140	0	104	264
730	0	112	0	172	36	160	0	88	284
745	4	172	0	224	56	184	0	160	400
800	20	124	0	156	24	144	0	132	300
815	12	132	0	224	40	204	0	124	368
830	4	196	0	132	24	116	0	192	332
845	12	224	0	264	44	232	0	224	500
1600	48	272	0	312	32	300	0	300	632
1615	32	316	0	344	40	332	0	320	692
1630	56	336	0	288	32	264	0	384	680
1645	24	308	0	368	28	356	0	316	700
1700	52	304	0	420	40	400	0	336	776
1715	24	288	0	300	16	284	0	312	612
1730	16	232	0	408	44	376	0	236	656
1745	40	324	0	432	24	412	0	360	796

Lincolnwood, IL Weather: Warm and PM Rain
 Pratt Ave and Access Drive West of McCormick
 Thursday July 16, 2015

07/20/15
 09:38:12

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: by Movement

Intersection # 1 pratt/acc/thurs

```

=====
Begin   N-Approach   E-Approach   S-Approach   W-Approach   Int
Time    RT   TH   LT    RT   TH   LT    RT   TH   LT    RT   TH   LT   Total
=====
 700     3    0    0    11  99    0     0    0    0     0  143  21   277
 715     8    0    0    14 113    0     0    0    0     0  157  20   312
 730     8    0    1    17 118    0     0    0    0     0  172  22   338
 745     9    0    1    13 143    0     0    0    0     0  161  23   350
 800    11    0    1    12 157    0     0    0    0     0  173  21   375
 815     6    0    1     9 129    0     0    0    0     0  137  18  300*
 830     4    0    0     5 100    0     0    0    0     0   87  12  208*
 845     3    0    0     3  53    0     0    0    0     0   58   8  125*
-----
1600    40    0    0    18 290    0     0    0    0     0  313  15  676
1615    41    0    0    18 298    0     0    0    0     0  338  17  712
1630    39    0    0    11 298    0     0    0    0     0  326  18  692
1645    29    0    0    12 271    0     0    0    0     0  354  20  686
1700    33    0    0     9 278    0     0    0    0     0  368  22  710
1715    20    0    0     4 207    0     0    0    0     0  268  17  516*
1730    14    0    0     4 135    0     0    0    0     0  197  13  363*
1745    10    0    0     1  80    0     0    0    0     0  103   5  199*
=====
  
```

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: Appr/Exit Totals

Intersection # 1 pratt/acc/thurs

```

=====
Begin   Approach Totals   Exit Totals   Int
Time    N     E     S     W     N     E     S     W     Total
=====
 700     3   110     0   164     32  143     0   102   277
 715     8   127     0   177     34  157     0   121   312
 730     9   135     0   194     39  173     0   126   338
 745    10   156     0   184     36  162     0   152   350
 800    12   169     0   194     33  174     0   168   375
 815     7   138     0   155     27  138     0   135  300*
 830     4   105     0    99     17   87     0   104  208*
 845     3    56     0    66     11   58     0    56  125*
-----
1600    40   308     0   328     33  313     0   330   676
1615    41   316     0   355     35  338     0   339   712
1630    39   309     0   344     29  326     0   337   692
1645    29   283     0   374     32  354     0   300   686
1700    33   287     0   390     31  368     0   311   710
1715    20   211     0   285     21  268     0   227  516*
1730    14   139     0   210     17  197     0   149  363*
1745    10    81     0   108     6   103     0    90  199*
=====
  
```

Lincolnwood, IL Weather: Hot and Dry
 Pratt Ave and Access Drive West of McCormick
 Saturday July 18, 2015

07/20/15
 09:41:35

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 2 pratt/acc/sat

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
1200	3	0	0	2	39	0	0	0	0	0	45	3	92
1215	4	0	1	3	43	0	0	0	0	0	44	1	96
1230	3	0	0	4	40	0	0	0	0	0	55	4	106
1245	3	0	0	2	44	0	0	0	0	0	41	6	96
1300	7	0	0	1	33	0	0	0	0	0	60	5	106
1315	2	0	0	1	37	0	0	0	0	0	57	4	101
1330	7	0	0	1	39	0	0	0	0	0	33	3	83
1345	3	0	0	1	47	0	0	0	0	0	51	4	106
Total	32	0	1	15	322	0	0	0	0	0	386	30	786

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - Totals

Intersection # 2 pratt/acc/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1200	3	41	0	48	5	45	0	42	92
1215	5	46	0	45	4	45	0	47	96
1230	3	44	0	59	8	55	0	43	106
1245	3	46	0	47	8	41	0	47	96
1300	7	34	0	65	6	60	0	40	106
1315	2	38	0	61	5	57	0	39	101
1330	7	40	0	36	4	33	0	46	83
1345	3	48	0	55	5	51	0	50	106
Total	33	337	0	416	45	387	0	354	786

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: by Movement

Intersection # 2 pratt/acc/sat

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
1200	12	0	0	8	156	0	0	0	0	180	12	368	
1215	16	0	4	12	172	0	0	0	0	176	4	384	
1230	12	0	0	16	160	0	0	0	0	220	16	424	
1245	12	0	0	8	176	0	0	0	0	164	24	384	
1300	28	0	0	4	132	0	0	0	0	240	20	424	
1315	8	0	0	4	148	0	0	0	0	228	16	404	
1330	28	0	0	4	156	0	0	0	0	132	12	332	
1345	12	0	0	4	188	0	0	0	0	204	16	424	

Lincolnwood, IL Weather: Hot and Dry
 Pratt Ave and Access Drive West of McCormick
 Saturday July 18, 2015

07/20/15
 09:41:35

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: Appr/Exit Totals

Intersection # 2 pratt/acc/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1200	12	164	0	192	20	180	0	168	368
1215	20	184	0	180	16	180	0	188	384
1230	12	176	0	236	32	220	0	172	424
1245	12	184	0	188	32	164	0	188	384
1300	28	136	0	260	24	240	0	160	424
1315	8	152	0	244	20	228	0	156	404
1330	28	160	0	144	16	132	0	184	332
1345	12	192	0	220	20	204	0	200	424

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: by Movement

Intersection # 2 pratt/acc/sat

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
1200	13	0	1	11	166	0	0	0	0	0	185	14	390
1215	17	0	1	10	160	0	0	0	0	0	200	16	404
1230	15	0	0	8	154	0	0	0	0	0	213	19	409
1245	19	0	0	5	153	0	0	0	0	0	191	18	386
1300	19	0	0	4	156	0	0	0	0	0	201	16	396
1315	12	0	0	3	123	0	0	0	0	0	141	11	290*
1330	10	0	0	2	86	0	0	0	0	0	84	7	189*
1345	3	0	0	1	47	0	0	0	0	0	51	4	106*

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: Appr/Exit Totals

Intersection # 2 pratt/acc/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1200	14	177	0	199	25	186	0	179	390
1215	18	170	0	216	26	201	0	177	404
1230	15	162	0	232	27	213	0	169	409
1245	19	158	0	209	23	191	0	172	386
1300	19	160	0	217	20	201	0	175	396
1315	12	126	0	152	14	141	0	135	290*
1330	10	88	0	91	9	84	0	96	189*
1345	3	48	0	55	5	51	0	50	106*

Capacity Analyses Summary Sheets

Lanes, Volumes, Timings
 1: McCormick Boulevard & Northeast Parkway

7/28/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	12	43	65	1157	843	20
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Storage Length (ft)	100	0	300			0
Storage Lanes	1	1	1			0
Taper Length (ft)	80		155			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	0.95
Fr _t		0.850			0.996	
Fl _t Protected	0.950		0.950			
Satd. Flow (prot)	3502	1538	1805	3689	3397	0
Fl _t Permitted	0.950		0.284			
Satd. Flow (perm)	3502	1538	540	3689	3397	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		47			5	
Link Speed (mph)	30			40	40	
Link Distance (ft)	338			609	771	
Travel Time (s)	7.7			10.4	13.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	0%	3%	6%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	13	47	71	1258	938	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	19.0	19.0	9.0	110.0	101.0	
Total Split (s)	19.0	19.0	9.0	111.0	102.0	
Total Split (%)	14.6%	14.6%	6.9%	85.4%	78.5%	
Yellow Time (s)	4.5	4.5	3.0	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.0	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effect Green (s)	8.5	8.5	115.3	113.5	106.1	
Actuated g/C Ratio	0.07	0.07	0.89	0.87	0.82	
v/c Ratio	0.06	0.33	0.13	0.39	0.34	
Control Delay	57.1	21.8	1.5	1.4	4.5	
Queue Delay	0.0	0.0	0.0	0.1	0.0	
Total Delay	57.1	21.8	1.5	1.5	4.5	
LOS	E	C	A	A	A	
Approach Delay	29.4			1.5	4.5	
Approach LOS	C			A	A	
Queue Length 50th (ft)	5	0	6	56	108	
Queue Length 95th (ft)	16	39	10	63	151	
Internal Link Dist (ft)	258			529	691	

Lanes, Volumes, Timings
 1: McCormick Boulevard & Northeast Parkway

7/28/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Turn Bay Length (ft)	100		300			
Base Capacity (vph)	350	196	539	3221	2772	
Starvation Cap Reductn	0	0	0	455	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.04	0.24	0.13	0.45	0.34	

Intersection Summary

Area Type:	Other
Cycle Length:	130
Actuated Cycle Length:	130
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle:	130
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.39
Intersection Signal Delay:	3.4
Intersection LOS:	A
Intersection Capacity Utilization	47.5%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 1: McCormick Boulevard & Northeast Parkway



Lanes, Volumes, Timings 2: McCormick Boulevard & Pratt Avenue

7/28/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	117	46	54	1105	781	105
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Storage Length (ft)	0	25	150			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		140			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.850			0.982	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1736	3623	3264	0
Flt Permitted	0.950		0.271			
Satd. Flow (perm)	1805	1615	495	3623	3264	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		27			23	
Link Speed (mph)	30			40	40	
Link Distance (ft)	307			646	609	
Travel Time (s)	7.0			11.0	10.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	4%	3%	7%	4%
Bus Blockages (#/hr)	0	0	0	9	9	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	124	49	57	1176	943	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	31.0	31.0	9.0	99.0	90.0	
Total Split (s)	31.0	31.0	9.0	99.0	90.0	
Total Split (%)	23.8%	23.8%	6.9%	76.2%	69.2%	
Yellow Time (s)	4.5	4.5	3.0	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.0	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effct Green (s)	15.2	15.2	105.8	102.8	95.2	
Actuated g/C Ratio	0.12	0.12	0.81	0.79	0.73	
v/c Ratio	0.59	0.23	0.12	0.41	0.39	
Control Delay	65.3	29.8	3.4	5.0	5.3	
Queue Delay	0.0	0.0	0.0	0.0	0.1	
Total Delay	65.3	29.8	3.4	5.0	5.4	
LOS	E	C	A	A	A	
Approach Delay	55.2			4.9	5.4	
Approach LOS	E			A	A	
Queue Length 50th (ft)	101	17	7	134	76	
Queue Length 95th (ft)	160	54	19	202	98	

Lanes, Volumes, Timings

2: McCormick Boulevard & Pratt Avenue

7/28/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	227			566	529	
Turn Bay Length (ft)		25	150			
Base Capacity (vph)	347	332	464	2866	2395	
Starvation Cap Reductn	0	0	0	0	314	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.36	0.15	0.12	0.41	0.45	

Intersection Summary

Area Type:	Other
Cycle Length:	130
Actuated Cycle Length:	130
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle:	130
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.59
Intersection Signal Delay:	8.8
Intersection LOS:	A
Intersection Capacity Utilization	48.3%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 2: McCormick Boulevard & Pratt Avenue



HCM Unsignalized Intersection Capacity Analysis

3: Retail Access Drive/Grossinger Access Drive & Northeast Parkway

7/28/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔		↔	↔↔		↔	↔			↔↔	
Volume (veh/h)	3	43	6	10	64	11	6	4	9	3	4	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	4	51	7	12	76	13	7	5	11	4	5	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					338							
pX, platoon unblocked												
vC, conflicting volume	89			58			131	175	29	152	172	45
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	89			58			131	175	29	152	172	45
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	99	99	100	99	100
cM capacity (veh/h)	1519			1559			820	715	1045	787	718	1022

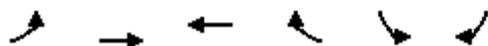
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1
Volume Total	29	33	12	51	38	7	15	13
Volume Left	4	0	12	0	0	7	0	4
Volume Right	0	7	0	0	13	0	11	5
cSH	1519	1700	1559	1700	1700	820	915	827
Volume to Capacity	0.00	0.02	0.01	0.03	0.02	0.01	0.02	0.02
Queue Length 95th (ft)	0	0	1	0	0	1	1	1
Control Delay (s)	0.9	0.0	7.3	0.0	0.0	9.4	9.0	9.4
Lane LOS	A		A			A	A	A
Approach Delay (s)	0.4		0.9			9.1		9.4
Approach LOS						A		A

Intersection Summary		
Average Delay		2.2
Intersection Capacity Utilization	17.2%	ICU Level of Service
Analysis Period (min)		15
		A

HCM Unsignalized Intersection Capacity Analysis

4: Pratt Avenue & Retail Access Drive

7/28/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	23	161	143	13	0	9
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	26	183	162	15	0	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			307			
pX, platoon unblocked						
vC, conflicting volume	177				405	170
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	177				405	170
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				100	99
cM capacity (veh/h)	1411				594	879

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	209	177	10
Volume Left	26	0	0
Volume Right	0	15	10
cSH	1411	1700	879
Volume to Capacity	0.02	0.10	0.01
Queue Length 95th (ft)	1	0	1
Control Delay (s)	1.1	0.0	9.1
Lane LOS	A		A
Approach Delay (s)	1.1	0.0	9.1
Approach LOS			A

Intersection Summary			
Average Delay		0.8	
Intersection Capacity Utilization	24.7%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

5: Kimball Avenue/Access Drive & Pratt Avenue

7/28/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	0	169	14	7	146	0	22	0	20	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	0	176	15	7	152	0	23	0	21	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					669							
pX, platoon unblocked												
vC, conflicting volume	152			191			350	350	183	371	357	152
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	152			191			350	350	183	371	357	152
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			96	100	98	100	100	100
cM capacity (veh/h)	1441			1395			597	574	864	573	569	899
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	191	159	44	0								
Volume Left	0	7	23	0								
Volume Right	15	0	21	0								
cSH	1441	1395	700	1700								
Volume to Capacity	0.00	0.01	0.06	0.00								
Queue Length 95th (ft)	0	0	5	0								
Control Delay (s)	0.0	0.4	10.5	0.0								
Lane LOS		A	B	A								
Approach Delay (s)	0.0	0.4	10.5	0.0								
Approach LOS			B	A								
Intersection Summary												
Average Delay			1.3									
Intersection Capacity Utilization			23.4%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

6: Central Park Avenue & Northeast Parkway

7/28/2015



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑			↑	↑	
Volume (veh/h)	51	10	8	66	2	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	71	14	11	92	3	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			85		192	78
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			85		192	78
tC, single (s)			4.1		6.4	7.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	4.2
p0 queue free %			99		100	100
cM capacity (veh/h)			1525		796	767

Direction, Lane #	SE 1	NW 1	NE 1
Volume Total	85	103	4
Volume Left	0	11	3
Volume Right	14	0	1
cSH	1700	1525	786
Volume to Capacity	0.05	0.01	0.01
Queue Length 95th (ft)	0	1	0
Control Delay (s)	0.0	0.8	9.6
Lane LOS		A	A
Approach Delay (s)	0.0	0.8	9.6
Approach LOS			A

Intersection Summary			
Average Delay		0.7	
Intersection Capacity Utilization		20.2%	ICU Level of Service
Analysis Period (min)		15	A

Lanes, Volumes, Timings
 1: McCormick Boulevard & Northeast Parkway

7/28/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	45	133	26	1210	1431	17
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Storage Length (ft)	100	0	300			0
Storage Lanes	1	1	1			0
Taper Length (ft)	80		155			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	0.95
Frt		0.850			0.998	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3502	1615	1805	3689	3533	0
Flt Permitted	0.950		0.141			
Satd. Flow (perm)	3502	1615	268	3689	3533	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		134			2	
Link Speed (mph)	30			40	40	
Link Distance (ft)	338			609	771	
Travel Time (s)	7.7			10.4	13.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	3%	2%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	47	139	27	1260	1509	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	19.0	19.0	9.0	110.0	101.0	
Total Split (s)	19.0	19.0	9.0	111.0	102.0	
Total Split (%)	14.6%	14.6%	6.9%	85.4%	78.5%	
Yellow Time (s)	4.5	4.5	3.0	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.0	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effect Green (s)	9.4	9.4	111.6	108.6	103.3	
Actuated g/C Ratio	0.07	0.07	0.86	0.84	0.79	
v/c Ratio	0.19	0.58	0.09	0.41	0.54	
Control Delay	57.6	20.1	2.1	2.7	6.2	
Queue Delay	0.0	0.0	0.0	0.1	0.0	
Total Delay	57.6	20.2	2.1	2.8	6.2	
LOS	E	C	A	A	A	
Approach Delay	29.6			2.8	6.2	
Approach LOS	C			A	A	
Queue Length 50th (ft)	19	4	3	108	219	
Queue Length 95th (ft)	38	68	m6	121	320	
Internal Link Dist (ft)	258			529	691	

Lanes, Volumes, Timings
 1: McCormick Boulevard & Northeast Parkway

7/28/2015

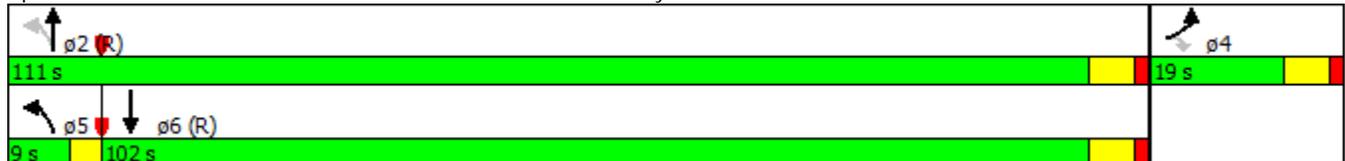


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Turn Bay Length (ft)	100		300			
Base Capacity (vph)	350	282	300	3082	2808	
Starvation Cap Reductn	0	0	0	504	0	
Spillback Cap Reductn	0	1	0	0	48	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.13	0.49	0.09	0.49	0.55	

Intersection Summary

Area Type: Other
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.58
 Intersection Signal Delay: 6.2
 Intersection LOS: A
 Intersection Capacity Utilization 58.3%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: McCormick Boulevard & Northeast Parkway



Lanes, Volumes, Timings 2: McCormick Boulevard & Pratt Avenue

7/28/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	235	101	49	1001	1312	252
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Storage Length (ft)	0	25	150			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		140			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Fr _t		0.850			0.976	
Fl _t Protected	0.950		0.950			
Satd. Flow (prot)	1770	1599	1736	3623	3396	0
Fl _t Permitted	0.950		0.099			
Satd. Flow (perm)	1770	1599	181	3623	3396	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		29			34	
Link Speed (mph)	30			40	40	
Link Distance (ft)	307			646	609	
Travel Time (s)	7.0			11.0	10.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	1%	4%	3%	2%	0%
Bus Blockages (#/hr)	0	0	0	9	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	240	103	50	1021	1596	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	31.0	31.0	9.0	99.0	90.0	
Total Split (s)	31.0	31.0	9.0	99.0	90.0	
Total Split (%)	23.8%	23.8%	6.9%	76.2%	69.2%	
Yellow Time (s)	4.5	4.5	3.0	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.0	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effct Green (s)	22.1	22.1	98.9	95.9	88.6	
Actuated g/C Ratio	0.17	0.17	0.76	0.74	0.68	
v/c Ratio	0.80	0.35	0.24	0.38	0.69	
Control Delay	71.2	36.4	7.1	7.0	10.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	71.2	36.4	7.1	7.0	10.3	
LOS	E	D	A	A	B	
Approach Delay	60.8			7.0	10.3	
Approach LOS	E			A	B	
Queue Length 50th (ft)	193	54	10	154	422	
Queue Length 95th (ft)	286	109	21	195	171	

Lanes, Volumes, Timings
 2: McCormick Boulevard & Pratt Avenue

7/28/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	227			566	529	
Turn Bay Length (ft)		25	150			
Base Capacity (vph)	340	330	210	2672	2325	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.71	0.31	0.24	0.38	0.69	

Intersection Summary

Area Type:	Other
Cycle Length:	130
Actuated Cycle Length:	130
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle:	130
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.80
Intersection Signal Delay:	14.9
Intersection LOS:	B
Intersection Capacity Utilization	67.3%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 2: McCormick Boulevard & Pratt Avenue



HCM Unsignalized Intersection Capacity Analysis

3: Retail Access Drive/Grossinger Access Drive & Northeast Parkway

7/28/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕		↙	↕↕		↙	↕			↕↕	
Volume (veh/h)	4	138	7	9	29	5	12	5	29	11	7	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Hourly flow rate (vph)	5	182	9	12	38	7	16	7	38	14	9	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					338							
pX, platoon unblocked												
vC, conflicting volume	45			191			252	265	95	208	266	22
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	45			191			252	265	95	208	266	22
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			98	99	96	98	99	99
cM capacity (veh/h)	1576			1395			667	636	949	695	635	1056

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1
Volume Total	96	100	12	25	19	16	45	32
Volume Left	5	0	12	0	0	16	0	14
Volume Right	0	9	0	0	7	0	38	8
cSH	1576	1700	1395	1700	1700	667	885	738
Volume to Capacity	0.00	0.06	0.01	0.01	0.01	0.02	0.05	0.04
Queue Length 95th (ft)	0	0	1	0	0	2	4	3
Control Delay (s)	0.4	0.0	7.6	0.0	0.0	10.5	9.3	10.1
Lane LOS	A		A			B	A	B
Approach Delay (s)	0.2		1.6			9.6		10.1
Approach LOS						A		B

Intersection Summary		
Average Delay		3.0
Intersection Capacity Utilization	22.2%	ICU Level of Service
Analysis Period (min)		15
		A

HCM Unsignalized Intersection Capacity Analysis

4: Pratt Avenue & Retail Access Drive

7/28/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	18	333	289	11	0	39
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	20	374	325	12	0	44
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			307			
pX, platoon unblocked						
vC, conflicting volume	337				746	331
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	337				746	331
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				100	94
cM capacity (veh/h)	1233				378	715

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	394	337	44
Volume Left	20	0	0
Volume Right	0	12	44
cSH	1233	1700	715
Volume to Capacity	0.02	0.20	0.06
Queue Length 95th (ft)	1	0	5
Control Delay (s)	0.6	0.0	10.4
Lane LOS	A		B
Approach Delay (s)	0.6	0.0	10.4
Approach LOS			B

Intersection Summary			
Average Delay		0.9	
Intersection Capacity Utilization		35.5%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis

5: Kimball Avenue/Access Drive & Pratt Avenue

7/28/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	0	306	34	47	292	0	9	0	55	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	0	336	37	52	321	0	10	0	60	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					679							
pX, platoon unblocked												
vC, conflicting volume	321			374			779	779	355	840	798	321
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	321			374			779	779	355	840	798	321
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			96			97	100	91	100	100	100
cM capacity (veh/h)	1250			1196			305	315	689	253	307	725

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	374	373	70	0
Volume Left	0	52	10	0
Volume Right	37	0	60	0
cSH	1250	1196	585	1700
Volume to Capacity	0.00	0.04	0.12	0.00
Queue Length 95th (ft)	0	3	10	0
Control Delay (s)	0.0	1.5	12.0	0.0
Lane LOS		A	B	A
Approach Delay (s)	0.0	1.5	12.0	0.0
Approach LOS			B	A

Intersection Summary			
Average Delay		1.7	
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

6: Central Park Avenue & Northeast Parkway

7/28/2015



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	➡			↔	↔	
Volume (veh/h)	148	5	0	53	21	13
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73
Hourly flow rate (vph)	203	7	0	73	29	18
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			210		279	206
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			210		279	206
tC, single (s)			4.1		6.6	6.4
tC, 2 stage (s)						
tF (s)			2.2		3.7	3.4
p0 queue free %			100		96	98
cM capacity (veh/h)			1373		667	800

Direction, Lane #	SE 1	NW 1	NE 1
Volume Total	210	73	47
Volume Left	0	0	29
Volume Right	7	0	18
cSH	1700	1373	712
Volume to Capacity	0.12	0.00	0.07
Queue Length 95th (ft)	0	0	5
Control Delay (s)	0.0	0.0	10.4
Lane LOS			B
Approach Delay (s)	0.0	0.0	10.4
Approach LOS			B

Intersection Summary			
Average Delay		1.5	
Intersection Capacity Utilization		18.1%	ICU Level of Service A
Analysis Period (min)		15	

Lanes, Volumes, Timings
 1: McCormick Boulevard & Northeast Parkway

7/28/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	13	56	33	1194	1143	9
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Storage Length (ft)	100	0	300			0
Storage Lanes	1	1	1			0
Taper Length (ft)	80		155			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	0.95
Fr _t		0.850			0.999	
Fl _t Protected	0.950		0.950			
Satd. Flow (prot)	3502	1615	1805	3725	3536	0
Fl _t Permitted	0.950		0.208			
Satd. Flow (perm)	3502	1615	395	3725	3536	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		59			2	
Link Speed (mph)	30			40	40	
Link Distance (ft)	338			609	771	
Travel Time (s)	7.7			10.4	13.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	59	35	1257	1212	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	19.0	19.0	9.0	110.0	101.0	
Total Split (s)	19.0	19.0	9.0	111.0	102.0	
Total Split (%)	14.6%	14.6%	6.9%	85.4%	78.5%	
Yellow Time (s)	4.5	4.5	3.0	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.0	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effect Green (s)	8.6	8.6	115.2	113.4	108.0	
Actuated g/C Ratio	0.07	0.07	0.89	0.87	0.83	
v/c Ratio	0.06	0.37	0.08	0.39	0.41	
Control Delay	56.9	20.4	1.6	1.6	4.5	
Queue Delay	0.0	0.0	0.0	0.1	0.0	
Total Delay	56.9	20.4	1.6	1.7	4.5	
LOS	E	C	A	A	A	
Approach Delay	27.4			1.7	4.5	
Approach LOS	C			A	A	
Queue Length 50th (ft)	5	0	3	72	153	
Queue Length 95th (ft)	17	44	m6	79	210	
Internal Link Dist (ft)	258			529	691	

Lanes, Volumes, Timings
 1: McCormick Boulevard & Northeast Parkway

7/28/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Turn Bay Length (ft)	100		300			
Base Capacity (vph)	350	214	415	3249	2938	
Starvation Cap Reductn	0	0	0	465	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.04	0.28	0.08	0.45	0.41	

Intersection Summary

Area Type: Other
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.41
 Intersection Signal Delay: 3.7
 Intersection LOS: A
 Intersection Capacity Utilization 48.5%
 ICU Level of Service A
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: McCormick Boulevard & Northeast Parkway



Lanes, Volumes, Timings 2: McCormick Boulevard & Pratt Avenue

7/28/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	152	63	47	1075	1076	123
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Storage Length (ft)	0	25	150			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		140			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Fr _t		0.850			0.985	
Fl _t Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1703	3725	3458	0
Fl _t Permitted	0.950		0.173			
Satd. Flow (perm)	1805	1615	310	3725	3458	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		28			19	
Link Speed (mph)	30			40	40	
Link Distance (ft)	307			646	609	
Travel Time (s)	7.0			11.0	10.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	6%	1%	2%	0%
Bus Blockages (#/hr)	0	0	0	5	5	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	162	67	50	1144	1276	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	31.0	31.0	9.0	99.0	90.0	
Total Split (s)	31.0	31.0	9.0	99.0	90.0	
Total Split (%)	23.8%	23.8%	6.9%	76.2%	69.2%	
Yellow Time (s)	4.5	4.5	3.0	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.0	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effct Green (s)	17.8	17.8	103.2	100.2	92.6	
Actuated g/C Ratio	0.14	0.14	0.79	0.77	0.71	
v/c Ratio	0.66	0.27	0.16	0.40	0.52	
Control Delay	65.3	32.8	4.6	5.8	6.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	65.3	32.8	4.6	5.8	6.8	
LOS	E	C	A	A	A	
Approach Delay	55.8			5.7	6.8	
Approach LOS	E			A	A	
Queue Length 50th (ft)	131	30	8	144	107	
Queue Length 95th (ft)	197	71	20	215	131	

Lanes, Volumes, Timings

2: McCormick Boulevard & Pratt Avenue

7/28/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	227			566	529	
Turn Bay Length (ft)		25	150			
Base Capacity (vph)	347	333	314	2870	2467	
Starvation Cap Reductn	0	0	0	0	99	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.47	0.20	0.16	0.40	0.54	

Intersection Summary

Area Type:	Other
Cycle Length:	130
Actuated Cycle Length:	130
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle:	130
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.66
Intersection Signal Delay:	10.5
Intersection LOS:	B
Intersection Capacity Utilization	57.5%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 2: McCormick Boulevard & Pratt Avenue



HCM Unsignalized Intersection Capacity Analysis

3: Retail Access Drive/Grossinger Access Drive & Northeast Parkway

7/28/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕		↕	↕↕		↕	↕			↕↕	
Volume (veh/h)	3	54	10	1	35	6	11	7	9	6	2	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	4	66	12	1	43	7	13	9	11	7	2	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					338							
pX, platoon unblocked												
vC, conflicting volume	50			78			108	132	39	104	134	25
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	50			78			108	132	39	104	134	25
tC, single (s)	4.1			5.1			7.7	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.7			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			98	99	99	99	100	100
cM capacity (veh/h)	1570			1229			830	760	1031	852	758	1052

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1
Volume Total	37	45	1	28	22	13	20	13
Volume Left	4	0	1	0	0	13	0	7
Volume Right	0	12	0	0	7	0	11	4
cSH	1570	1700	1229	1700	1700	830	892	877
Volume to Capacity	0.00	0.03	0.00	0.02	0.01	0.02	0.02	0.02
Queue Length 95th (ft)	0	0	0	0	0	1	2	1
Control Delay (s)	0.7	0.0	7.9	0.0	0.0	9.4	9.1	9.2
Lane LOS	A		A			A	A	A
Approach Delay (s)	0.3		0.2			9.2		9.2
Approach LOS						A		A

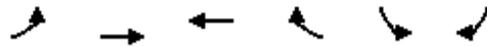
Intersection Summary

Average Delay		2.6						
Intersection Capacity Utilization		16.6%		ICU Level of Service			A	
Analysis Period (min)		15						

HCM Unsignalized Intersection Capacity Analysis

4: Pratt Avenue & Retail Access Drive

7/28/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	19	213	160	8	0	15
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	20	222	167	8	0	16
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			307			
pX, platoon unblocked						
vC, conflicting volume	175				432	171
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	175				432	171
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	98
cM capacity (veh/h)	1414				576	878

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	242	175	16
Volume Left	20	0	0
Volume Right	0	8	16
cSH	1414	1700	878
Volume to Capacity	0.01	0.10	0.02
Queue Length 95th (ft)	1	0	1
Control Delay (s)	0.7	0.0	9.2
Lane LOS	A		A
Approach Delay (s)	0.7	0.0	9.2
Approach LOS			A

Intersection Summary			
Average Delay		0.7	
Intersection Capacity Utilization		27.8%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis

5: Kimball Avenue/Access Drive & Pratt Avenue

7/28/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	0	217	16	21	156	0	15	0	31	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	1.00
Hourly flow rate (vph)	0	238	18	23	171	0	16	0	34	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					675							
pX, platoon unblocked												
vC, conflicting volume	171			256			465	465	247	499	474	171
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	171			256			465	465	247	499	474	171
tC, single (s)	4.1			4.1			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			98			97	100	96	100	100	100
cM capacity (veh/h)	1418			1292			504	489	782	458	483	877

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	256	195	51	0
Volume Left	0	23	16	0
Volume Right	18	0	34	0
cSH	1418	1292	663	1700
Volume to Capacity	0.00	0.02	0.08	0.00
Queue Length 95th (ft)	0	1	6	0
Control Delay (s)	0.0	1.1	10.9	0.0
Lane LOS		A	B	A
Approach Delay (s)	0.0	1.1	10.9	0.0
Approach LOS			B	A

Intersection Summary			
Average Delay		1.5	
Intersection Capacity Utilization	35.1%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

6: Central Park Avenue & Northeast Parkway

7/28/2015



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑			↑	↑	
Volume (veh/h)	67	1	2	47	2	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	80	1	2	56	2	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			81		141	80
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			81		141	80
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1529		855	985

Direction, Lane #	SE 1	NW 1	NE 1
Volume Total	81	58	2
Volume Left	0	2	2
Volume Right	1	0	0
cSH	1700	1529	855
Volume to Capacity	0.05	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.3	9.2
Lane LOS		A	A
Approach Delay (s)	0.0	0.3	9.2
Approach LOS			A

Intersection Summary			
Average Delay		0.3	
Intersection Capacity Utilization		14.1%	ICU Level of Service A
Analysis Period (min)		15	

Lanes, Volumes, Timings
 1: McCormick Boulevard & Northeast Parkway

7/29/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	68	105	95	1189	864	77
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Storage Length (ft)	100	0	300			0
Storage Lanes	1	1	1			0
Taper Length (ft)	80		155			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	0.95
Fr _t		0.850			0.988	
Fl _t Protected	0.950		0.950			
Satd. Flow (prot)	3502	1538	1805	3689	3381	0
Fl _t Permitted	0.950		0.252			
Satd. Flow (perm)	3502	1538	479	3689	3381	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		114			20	
Link Speed (mph)	30			40	40	
Link Distance (ft)	338			609	771	
Travel Time (s)	7.7			10.4	13.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	0%	3%	6%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	74	114	103	1292	1023	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	19.0	19.0	9.0	110.0	101.0	
Total Split (s)	19.0	19.0	9.0	111.0	102.0	
Total Split (%)	14.6%	14.6%	6.9%	85.4%	78.5%	
Yellow Time (s)	4.5	4.5	3.0	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.0	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effect Green (s)	9.6	9.6	111.4	108.4	99.0	
Actuated g/C Ratio	0.07	0.07	0.86	0.83	0.76	
v/c Ratio	0.29	0.52	0.22	0.42	0.40	
Control Delay	59.2	18.5	2.2	1.9	5.8	
Queue Delay	0.0	0.0	0.0	0.1	0.0	
Total Delay	59.2	18.5	2.2	2.0	5.8	
LOS	E	B	A	A	A	
Approach Delay	34.5			2.0	5.8	
Approach LOS	C			A	A	
Queue Length 50th (ft)	30	0	9	58	128	
Queue Length 95th (ft)	55	57	14	65	179	
Internal Link Dist (ft)	258			529	691	

Lanes, Volumes, Timings
 1: McCormick Boulevard & Northeast Parkway

7/29/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Turn Bay Length (ft)	100		300			
Base Capacity (vph)	350	256	475	3074	2580	
Starvation Cap Reductn	0	0	0	398	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.21	0.45	0.22	0.48	0.40	

Intersection Summary

Area Type:	Other
Cycle Length:	130
Actuated Cycle Length:	130
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle:	130
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.52
Intersection Signal Delay:	5.8
Intersection LOS:	A
Intersection Capacity Utilization	51.6%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 1: McCormick Boulevard & Northeast Parkway

 111 s	 19 s
 9 s	 102 s

Lanes, Volumes, Timings 2: McCormick Boulevard & Pratt Avenue

7/29/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	121	48	106	1163	850	119
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Storage Length (ft)	0	25	150			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		140			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Fr _t		0.850			0.982	
Fl _t Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1736	3623	3265	0
Fl _t Permitted	0.950		0.239			
Satd. Flow (perm)	1805	1615	437	3623	3265	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		27			24	
Link Speed (mph)	30			40	40	
Link Distance (ft)	307			646	609	
Travel Time (s)	7.0			11.0	10.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	4%	3%	7%	4%
Bus Blockages (#/hr)	0	0	0	9	9	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	129	51	113	1237	1031	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	31.0	31.0	9.0	99.0	90.0	
Total Split (s)	31.0	31.0	9.0	99.0	90.0	
Total Split (%)	23.8%	23.8%	6.9%	76.2%	69.2%	
Yellow Time (s)	4.5	4.5	3.0	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.0	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effct Green (s)	15.5	15.5	105.5	102.5	92.2	
Actuated g/C Ratio	0.12	0.12	0.81	0.79	0.71	
v/c Ratio	0.60	0.24	0.26	0.43	0.44	
Control Delay	65.4	30.3	4.4	5.3	6.2	
Queue Delay	0.0	0.0	0.0	0.0	0.1	
Total Delay	65.4	30.3	4.4	5.3	6.2	
LOS	E	C	A	A	A	
Approach Delay	55.5			5.2	6.2	
Approach LOS	E			A	A	
Queue Length 50th (ft)	105	18	16	147	89	
Queue Length 95th (ft)	165	56	34	221	121	

Lanes, Volumes, Timings
 2: McCormick Boulevard & Pratt Avenue

7/29/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	227			566	529	
Turn Bay Length (ft)		25	150			
Base Capacity (vph)	347	332	427	2856	2322	
Starvation Cap Reductn	0	0	0	0	247	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.37	0.15	0.26	0.43	0.50	

Intersection Summary	
Area Type:	Other
Cycle Length:	130
Actuated Cycle Length:	130
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle:	130
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.60
Intersection Signal Delay:	9.2
Intersection Capacity Utilization	53.2%
Analysis Period (min)	15
Intersection LOS:	A
ICU Level of Service	A

Splits and Phases: 2: McCormick Boulevard & Pratt Avenue



HCM Unsignalized Intersection Capacity Analysis

3: Retail Access Drive/Grossinger Access Drive & Northeast Parkway

7/30/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕		↕	↕↕		↕	↕			↕↕	
Volume (veh/h)	3	62	13	65	96	11	9	4	108	3	4	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	3	65	14	68	101	12	9	4	114	3	4	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					338							
pX, platoon unblocked												
vC, conflicting volume	113			79			272	328	39	398	329	56
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	113			79			272	328	39	398	329	56
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			96			99	99	89	99	99	100
cM capacity (veh/h)	1489			1532			634	566	1030	461	566	1005

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1
Volume Total	36	46	68	67	45	9	118	12
Volume Left	3	0	68	0	0	9	0	3
Volume Right	0	14	0	0	12	0	114	4
cSH	1489	1700	1532	1700	1700	634	1001	627
Volume to Capacity	0.00	0.03	0.04	0.04	0.03	0.01	0.12	0.02
Queue Length 95th (ft)	0	0	4	0	0	1	10	1
Control Delay (s)	0.7	0.0	7.5	0.0	0.0	10.8	9.1	10.9
Lane LOS	A		A			B	A	B
Approach Delay (s)	0.3		2.8			9.2		10.9
Approach LOS						A		B

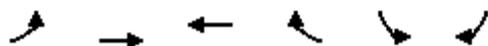
Intersection Summary

Average Delay	4.6
Intersection Capacity Utilization	23.8%
ICU Level of Service	A
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis

4: Pratt Avenue & Retail Access Drive

7/30/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔			↔
Volume (veh/h)	38	167	150	73	0	16
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	43	190	170	83	0	18
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			307			
pX, platoon unblocked						
vC, conflicting volume	253				488	212
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	253				488	212
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				100	98
cM capacity (veh/h)	1324				525	833

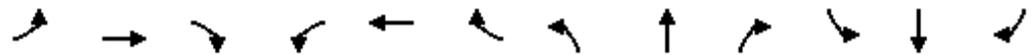
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	233	253	18
Volume Left	43	0	0
Volume Right	0	83	18
cSH	1324	1700	833
Volume to Capacity	0.03	0.15	0.02
Queue Length 95th (ft)	3	0	2
Control Delay (s)	1.7	0.0	9.4
Lane LOS	A		A
Approach Delay (s)	1.7	0.0	9.4
Approach LOS			A

Intersection Summary			
Average Delay		1.1	
Intersection Capacity Utilization	29.9%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

5: Kimball Avenue/Access Drive & Pratt Avenue

7/30/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	3	174	14	7	150	1	23	0	21	1	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	3	181	15	7	156	1	24	0	22	1	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					669							
pX, platoon unblocked												
vC, conflicting volume	157			196			368	367	189	388	373	157
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	157			196			368	367	189	388	373	157
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			96	100	97	100	100	100
cM capacity (veh/h)	1435			1389			578	561	859	557	556	894

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	199	165	46	3
Volume Left	3	7	24	1
Volume Right	15	1	22	2
cSH	1435	1389	685	744
Volume to Capacity	0.00	0.01	0.07	0.00
Queue Length 95th (ft)	0	0	5	0
Control Delay (s)	0.1	0.4	10.6	9.9
Lane LOS	A	A	B	A
Approach Delay (s)	0.1	0.4	10.6	9.9
Approach LOS			B	A

Intersection Summary			
Average Delay		1.5	
Intersection Capacity Utilization	22.7%		ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis

6: Central Park Avenue & Northeast Parkway

7/30/2015



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑			↑	↑	
Volume (veh/h)	60	10	8	73	2	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	83	14	11	101	3	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			97		214	90
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			97		214	90
tC, single (s)			4.1		6.4	7.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	4.2
p0 queue free %			99		100	100
cM capacity (veh/h)			1509		773	754

Direction, Lane #	SE 1	NW 1	NE 1
Volume Total	97	112	4
Volume Left	0	11	3
Volume Right	14	0	1
cSH	1700	1509	767
Volume to Capacity	0.06	0.01	0.01
Queue Length 95th (ft)	0	1	0
Control Delay (s)	0.0	0.8	9.7
Lane LOS		A	A
Approach Delay (s)	0.0	0.8	9.7
Approach LOS			A

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization		20.5%	ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

7: Westerly Access Drive & Northeast Parkway

7/30/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↘	↙
Volume (veh/h)	60	1	7	80	1	7
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	63	1	7	84	1	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			64		163	64
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			64		163	64
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1551		829	1006

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	64	92	8
Volume Left	0	7	1
Volume Right	1	0	7
cSH	1700	1551	980
Volume to Capacity	0.04	0.00	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.6	8.7
Lane LOS		A	A
Approach Delay (s)	0.0	0.6	8.7
Approach LOS			A

Intersection Summary			
Average Delay		0.8	
Intersection Capacity Utilization	20.0%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

8: Middle Access Drive & Northeast Parkway

7/30/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	67	0	8	87	0	8
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	71	0	8	92	0	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			71		179	71
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			71		179	71
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1543		811	998

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	71	100	8
Volume Left	0	8	0
Volume Right	0	0	8
cSH	1700	1543	998
Volume to Capacity	0.04	0.01	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.7	8.6
Lane LOS		A	A
Approach Delay (s)	0.0	0.7	8.6
Approach LOS			A

Intersection Summary			
Average Delay		0.8	
Intersection Capacity Utilization	21.2%		ICU Level of Service A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

9: Easterly Access Drive & Northeast Parkway

7/30/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↘	↙
Volume (veh/h)	75	0	14	95	0	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	79	0	15	100	0	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	706					
pX, platoon unblocked						
vC, conflicting volume			79		208	79
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			79		208	79
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	100
cM capacity (veh/h)			1532		777	987

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	79	115	3
Volume Left	0	15	0
Volume Right	0	0	3
cSH	1700	1532	987
Volume to Capacity	0.05	0.01	0.00
Queue Length 95th (ft)	0	1	0
Control Delay (s)	0.0	1.0	8.7
Lane LOS		A	A
Approach Delay (s)	0.0	1.0	8.7
Approach LOS			A

Intersection Summary			
Average Delay		0.7	
Intersection Capacity Utilization	22.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lanes, Volumes, Timings
1: McCormick Boulevard & Northeast Parkway

7/29/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	163	260	69	1241	1473	121
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Storage Length (ft)	100	0	300			0
Storage Lanes	1	1	1			0
Taper Length (ft)	80		155			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	0.95
Fr _t		0.850			0.989	
Fl _t Protected	0.950		0.950			
Satd. Flow (prot)	3502	1615	1805	3689	3503	0
Fl _t Permitted	0.950		0.106			
Satd. Flow (perm)	3502	1615	201	3689	3503	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		128			18	
Link Speed (mph)	30			40	40	
Link Distance (ft)	338			609	771	
Travel Time (s)	7.7			10.4	13.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	3%	2%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	170	271	72	1293	1660	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	19.0	19.0	9.0	110.0	101.0	
Total Split (s)	19.0	19.0	9.0	111.0	102.0	
Total Split (%)	14.6%	14.6%	6.9%	85.4%	78.5%	
Yellow Time (s)	4.5	4.5	3.0	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.0	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effect Green (s)	13.0	13.0	108.0	105.0	97.8	
Actuated g/C Ratio	0.10	0.10	0.83	0.81	0.75	
v/c Ratio	0.49	0.98	0.30	0.43	0.63	
Control Delay	60.5	80.5	5.8	3.5	9.1	
Queue Delay	0.0	5.3	0.0	0.1	0.1	
Total Delay	60.5	85.8	5.8	3.6	9.2	
LOS	E	F	A	A	A	
Approach Delay	76.0			3.7	9.2	
Approach LOS	E			A	A	
Queue Length 50th (ft)	71	126	10	113	318	
Queue Length 95th (ft)	109	#309	m13	121	380	
Internal Link Dist (ft)	258			529	691	

Lanes, Volumes, Timings
 1: McCormick Boulevard & Northeast Parkway

7/29/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Turn Bay Length (ft)	100		300			
Base Capacity (vph)	350	276	241	2979	2639	
Starvation Cap Reductn	0	0	0	430	0	
Spillback Cap Reductn	0	6	0	0	184	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.49	1.00	0.30	0.51	0.68	

Intersection Summary

Area Type: Other
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.98
 Intersection Signal Delay: 15.5
 Intersection LOS: B
 Intersection Capacity Utilization 70.7%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: McCormick Boulevard & Northeast Parkway



Lanes, Volumes, Timings
2: McCormick Boulevard & Pratt Avenue

7/29/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	242	106	150	1068	1456	277
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Storage Length (ft)	0	25	150			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		140			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Fr _t		0.850			0.976	
Fl _t Protected	0.950		0.950			
Satd. Flow (prot)	1770	1599	1736	3623	3396	0
Fl _t Permitted	0.950		0.063			
Satd. Flow (perm)	1770	1599	115	3623	3396	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		30			34	
Link Speed (mph)	30			40	40	
Link Distance (ft)	307			646	609	
Travel Time (s)	7.0			11.0	10.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	1%	4%	3%	2%	0%
Bus Blockages (#/hr)	0	0	0	9	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	247	108	153	1090	1769	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	31.0	31.0	9.0	99.0	90.0	
Total Split (s)	31.0	31.0	9.0	99.0	90.0	
Total Split (%)	23.8%	23.8%	6.9%	76.2%	69.2%	
Yellow Time (s)	4.5	4.5	3.0	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.0	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effct Green (s)	22.5	22.5	98.5	95.5	84.5	
Actuated g/C Ratio	0.17	0.17	0.76	0.73	0.65	
v/c Ratio	0.81	0.36	0.82	0.41	0.80	
Control Delay	71.7	36.7	53.7	7.3	14.1	
Queue Delay	0.0	0.0	0.0	0.0	0.1	
Total Delay	71.7	36.7	53.7	7.3	14.2	
LOS	E	D	D	A	B	
Approach Delay	61.0			13.0	14.2	
Approach LOS	E			B	B	
Queue Length 50th (ft)	199	57	58	172	533	
Queue Length 95th (ft)	#300	113	#128	213	m471	

Lanes, Volumes, Timings

2: McCormick Boulevard & Pratt Avenue

7/29/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	227			566	529	
Turn Bay Length (ft)		25	150			
Base Capacity (vph)	340	331	186	2661	2220	
Starvation Cap Reductn	0	0	0	0	32	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.73	0.33	0.82	0.41	0.81	

Intersection Summary

Area Type:	Other
Cycle Length:	130
Actuated Cycle Length:	130
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle:	130
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.82
Intersection Signal Delay:	18.7
Intersection LOS:	B
Intersection Capacity Utilization	84.1%
ICU Level of Service	E
Analysis Period (min)	15
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m	Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: McCormick Boulevard & Pratt Avenue



HCM Unsignalized Intersection Capacity Analysis

3: Retail Access Drive/Grossinger Access Drive & Northeast Parkway

7/30/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕		↕	↕↕		↕	↕			↕↕	
Volume (veh/h)	4	171	20	119	66	5	21	5	241	11	7	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	4	180	21	125	69	5	22	5	254	12	7	6
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					338							
pX, platoon unblocked												
vC, conflicting volume	75			201			494	524	101	677	532	37
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	75			201			494	524	101	677	532	37
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			91			95	99	73	95	98	99
cM capacity (veh/h)	1537			1383			421	418	942	230	414	1033

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1
Volume Total	94	111	125	46	28	22	259	25
Volume Left	4	0	125	0	0	22	0	12
Volume Right	0	21	0	0	5	0	254	6
cSH	1537	1700	1383	1700	1700	421	918	340
Volume to Capacity	0.00	0.07	0.09	0.03	0.02	0.05	0.28	0.07
Queue Length 95th (ft)	0	0	7	0	0	4	29	6
Control Delay (s)	0.3	0.0	7.9	0.0	0.0	14.0	10.5	16.4
Lane LOS	A		A			B	B	C
Approach Delay (s)	0.2		4.9			10.7		16.4
Approach LOS						B		C

Intersection Summary

Average Delay		6.3						
Intersection Capacity Utilization		37.3%		ICU Level of Service			A	
Analysis Period (min)		15						

HCM Unsignalized Intersection Capacity Analysis

4: Pratt Avenue & Retail Access Drive

7/30/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔			↗
Volume (veh/h)	46	345	300	129	0	58
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	52	388	337	145	0	65
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			307			
pX, platoon unblocked						
vC, conflicting volume	482				901	410
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	482				901	410
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				100	90
cM capacity (veh/h)	1091				297	646

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	439	482	65
Volume Left	52	0	0
Volume Right	0	145	65
cSH	1091	1700	646
Volume to Capacity	0.05	0.28	0.10
Queue Length 95th (ft)	4	0	8
Control Delay (s)	1.5	0.0	11.2
Lane LOS	A		B
Approach Delay (s)	1.5	0.0	11.2
Approach LOS			B

Intersection Summary			
Average Delay		1.4	
Intersection Capacity Utilization		51.0%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis

5: Kimball Avenue/Access Drive & Pratt Avenue

7/30/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	4	330	35	48	301	2	9	0	57	2	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	4	363	38	53	331	2	10	0	63	2	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					679							
pX, platoon unblocked												
vC, conflicting volume	333			401			832	829	382	891	847	332
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	333			401			832	829	382	891	847	332
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			96	100	91	99	100	99
cM capacity (veh/h)	1238			1169			278	293	665	232	286	714

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	405	386	73	7
Volume Left	4	53	10	2
Volume Right	38	2	63	4
cSH	1238	1169	559	421
Volume to Capacity	0.00	0.05	0.13	0.02
Queue Length 95th (ft)	0	4	11	1
Control Delay (s)	0.1	1.5	12.4	13.7
Lane LOS	A	A	B	B
Approach Delay (s)	0.1	1.5	12.4	13.7
Approach LOS			B	B

Intersection Summary			
Average Delay		1.9	
Intersection Capacity Utilization		52.7%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis

6: Central Park Avenue & Northeast Parkway

7/30/2015



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	➡			↔	↔	
Volume (veh/h)	164	5	0	66	22	13
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73
Hourly flow rate (vph)	225	7	0	90	30	18
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			232		318	228
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			232		318	228
tC, single (s)			4.1		6.6	6.4
tC, 2 stage (s)						
tF (s)			2.2		3.7	3.4
p0 queue free %			100		95	98
cM capacity (veh/h)			1348		632	778

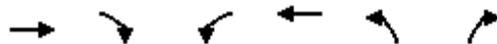
Direction, Lane #	SE 1	NW 1	NE 1
Volume Total	232	90	48
Volume Left	0	0	30
Volume Right	7	0	18
cSH	1700	1348	679
Volume to Capacity	0.14	0.00	0.07
Queue Length 95th (ft)	0	0	6
Control Delay (s)	0.0	0.0	10.7
Lane LOS			B
Approach Delay (s)	0.0	0.0	10.7
Approach LOS			B

Intersection Summary			
Average Delay		1.4	
Intersection Capacity Utilization		18.9%	ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

7: Westerly Access Drive & Northeast Parkway

7/30/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↔	↔
Volume (veh/h)	176	1	11	65	1	9
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	185	1	12	68	1	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			186		277	186
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			186		277	186
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1400		711	862

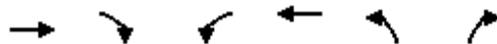
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	186	80	11
Volume Left	0	12	1
Volume Right	1	0	9
cSH	1700	1400	844
Volume to Capacity	0.11	0.01	0.01
Queue Length 95th (ft)	0	1	1
Control Delay (s)	0.0	1.2	9.3
Lane LOS		A	A
Approach Delay (s)	0.0	1.2	9.3
Approach LOS			A

Intersection Summary			
Average Delay		0.7	
Intersection Capacity Utilization	22.8%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

8: Middle Access Drive & Northeast Parkway

7/30/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↘	↙
Volume (veh/h)	185	0	11	76	0	9
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	195	0	12	80	0	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			195		298	195
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			195		298	195
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1390		692	852

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	195	92	9
Volume Left	0	12	0
Volume Right	0	0	9
cSH	1700	1390	852
Volume to Capacity	0.11	0.01	0.01
Queue Length 95th (ft)	0	1	1
Control Delay (s)	0.0	1.0	9.3
Lane LOS		A	A
Approach Delay (s)	0.0	1.0	9.3
Approach LOS			A

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization	23.3%		ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis

9: Easterly Access Drive & Northeast Parkway

7/30/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↘	↙
Volume (veh/h)	183	1	13	80	1	12
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	193	1	14	84	1	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	696					
pX, platoon unblocked						
vC, conflicting volume			194		305	193
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			194		305	193
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1392		685	853

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	194	98	14
Volume Left	0	14	1
Volume Right	1	0	13
cSH	1700	1392	838
Volume to Capacity	0.11	0.01	0.02
Queue Length 95th (ft)	0	1	1
Control Delay (s)	0.0	1.1	9.4
Lane LOS		A	A
Approach Delay (s)	0.0	1.1	9.4
Approach LOS			A

Intersection Summary			
Average Delay		0.8	
Intersection Capacity Utilization	25.2%		ICU Level of Service
Analysis Period (min)	15		A

Lanes, Volumes, Timings
1: McCormick Boulevard & Northeast Parkway

7/29/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	155	207	81	1223	1171	124
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Storage Length (ft)	100	0	300			0
Storage Lanes	1	1	1			0
Taper Length (ft)	80		155			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	0.95
Fr _t		0.850			0.986	
Fl _t Protected	0.950		0.950			
Satd. Flow (prot)	3502	1615	1805	3725	3496	0
Fl _t Permitted	0.950		0.162			
Satd. Flow (perm)	3502	1615	308	3725	3496	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		177			24	
Link Speed (mph)	30			40	40	
Link Distance (ft)	338			609	771	
Travel Time (s)	7.7			10.4	13.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	163	218	85	1287	1364	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	19.0	19.0	9.0	110.0	101.0	
Total Split (s)	19.0	19.0	9.0	111.0	102.0	
Total Split (%)	14.6%	14.6%	6.9%	85.4%	78.5%	
Yellow Time (s)	4.5	4.5	3.0	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.0	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effect Green (s)	11.7	11.7	109.3	106.3	97.2	
Actuated g/C Ratio	0.09	0.09	0.84	0.82	0.75	
v/c Ratio	0.52	0.71	0.26	0.42	0.52	
Control Delay	62.3	27.0	3.5	2.5	7.6	
Queue Delay	0.0	0.1	0.0	0.1	0.0	
Total Delay	62.3	27.1	3.5	2.6	7.6	
LOS	E	C	A	A	A	
Approach Delay	42.2			2.6	7.6	
Approach LOS	D			A	A	
Queue Length 50th (ft)	68	33	9	74	222	
Queue Length 95th (ft)	105	119	14	80	269	
Internal Link Dist (ft)	258			529	691	

Lanes, Volumes, Timings
 1: McCormick Boulevard & Northeast Parkway

7/29/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Turn Bay Length (ft)	100		300			
Base Capacity (vph)	350	320	329	3045	2620	
Starvation Cap Reductn	0	0	0	395	0	
Spillback Cap Reductn	0	2	0	0	40	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.47	0.69	0.26	0.49	0.53	

Intersection Summary

Area Type:	Other
Cycle Length:	130
Actuated Cycle Length:	130
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle:	130
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.71
Intersection Signal Delay:	9.6
Intersection LOS:	A
Intersection Capacity Utilization	60.8%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 1: McCormick Boulevard & Northeast Parkway

 111 s	 19 s
 9 s	 102 s

Lanes, Volumes, Timings

2: McCormick Boulevard & Pratt Avenue

7/29/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	157	67	155	1147	1228	150
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Storage Length (ft)	0	25	150			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		140			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Fr _t		0.850			0.984	
Fl _t Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1703	3725	3455	0
Fl _t Permitted	0.950		0.124			
Satd. Flow (perm)	1805	1615	222	3725	3455	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		29			20	
Link Speed (mph)	30			40	40	
Link Distance (ft)	307			646	609	
Travel Time (s)	7.0			11.0	10.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	6%	1%	2%	0%
Bus Blockages (#/hr)	0	0	0	5	5	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	167	71	165	1220	1466	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	31.0	31.0	9.0	99.0	90.0	
Total Split (s)	31.0	31.0	9.0	99.0	90.0	
Total Split (%)	23.8%	23.8%	6.9%	76.2%	69.2%	
Yellow Time (s)	4.5	4.5	3.0	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.0	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effct Green (s)	18.2	18.2	102.8	99.8	88.6	
Actuated g/C Ratio	0.14	0.14	0.79	0.77	0.68	
v/c Ratio	0.66	0.28	0.61	0.43	0.62	
Control Delay	65.2	32.9	15.7	6.1	8.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	65.2	32.9	15.7	6.1	8.9	
LOS	E	C	B	A	A	
Approach Delay	55.6			7.3	8.9	
Approach LOS	E			A	A	
Queue Length 50th (ft)	135	32	27	160	153	
Queue Length 95th (ft)	202	75	#83	239	191	

Lanes, Volumes, Timings

2: McCormick Boulevard & Pratt Avenue

7/29/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	227			566	529	
Turn Bay Length (ft)		25	150			
Base Capacity (vph)	347	334	269	2860	2360	
Starvation Cap Reductn	0	0	0	0	39	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.48	0.21	0.61	0.43	0.63	

Intersection Summary

Area Type: Other
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.66
 Intersection Signal Delay: 11.8
 Intersection LOS: B
 Intersection Capacity Utilization 69.3%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 2: McCormick Boulevard & Pratt Avenue



HCM Unsignalized Intersection Capacity Analysis

3: Retail Access Drive/Grossinger Access Drive & Northeast Parkway

7/30/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕		↕	↕↕		↕	↕			↕↕	
Volume (veh/h)	3	96	24	121	79	5	21	7	260	6	2	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	3	101	25	127	83	5	22	7	274	6	2	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					338							
pX, platoon unblocked												
vC, conflicting volume	88			126			421	463	63	675	473	44
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	88			126			421	463	63	675	473	44
tC, single (s)	4.1			5.1			7.7	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.7			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			89			95	98	72	97	100	100
cM capacity (veh/h)	1520			1169			453	444	995	225	438	1023

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1
Volume Total	54	76	127	55	33	22	281	12
Volume Left	3	0	127	0	0	22	0	6
Volume Right	0	25	0	0	5	0	274	3
cSH	1520	1700	1169	1700	1700	453	963	322
Volume to Capacity	0.00	0.04	0.11	0.03	0.02	0.05	0.29	0.04
Queue Length 95th (ft)	0	0	9	0	0	4	30	3
Control Delay (s)	0.4	0.0	8.5	0.0	0.0	13.4	10.3	16.6
Lane LOS	A		A			B	B	C
Approach Delay (s)	0.2		5.0			10.5		16.6
Approach LOS						B		C

Intersection Summary		
Average Delay		6.8
Intersection Capacity Utilization	36.5%	ICU Level of Service
Analysis Period (min)		15
		A

HCM Unsignalized Intersection Capacity Analysis

4: Pratt Avenue & Retail Access Drive

7/30/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↶			↷
Volume (veh/h)	49	222	168	135	0	36
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	51	231	175	141	0	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			307			
pX, platoon unblocked						
vC, conflicting volume	316				579	245
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	316				579	245
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				100	95
cM capacity (veh/h)	1256				461	798

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	282	316	38
Volume Left	51	0	0
Volume Right	0	141	38
cSH	1256	1700	798
Volume to Capacity	0.04	0.19	0.05
Queue Length 95th (ft)	3	0	4
Control Delay (s)	1.8	0.0	9.7
Lane LOS	A		A
Approach Delay (s)	1.8	0.0	9.7
Approach LOS			A

Intersection Summary			
Average Delay		1.4	
Intersection Capacity Utilization		38.1%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis

5: Kimball Avenue/Access Drive & Pratt Avenue

7/30/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	6	230	16	22	175	3	15	0	32	2	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	1.00
Hourly flow rate (vph)	7	253	18	24	192	3	16	0	35	2	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					675							
pX, platoon unblocked												
vC, conflicting volume	196			270			522	519	262	552	526	194
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	196			270			522	519	262	552	526	194
tC, single (s)	4.1			4.1			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			98			96	100	95	99	100	99
cM capacity (veh/h)	1389			1276			457	453	767	419	449	853

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	277	220	52	7
Volume Left	7	24	16	2
Volume Right	18	3	35	5
cSH	1389	1276	631	648
Volume to Capacity	0.00	0.02	0.08	0.01
Queue Length 95th (ft)	0	1	7	1
Control Delay (s)	0.2	1.0	11.2	10.6
Lane LOS	A	A	B	B
Approach Delay (s)	0.2	1.0	11.2	10.6
Approach LOS			B	B

Intersection Summary			
Average Delay		1.7	
Intersection Capacity Utilization		31.2%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis

6: Central Park Avenue & Northeast Parkway

7/30/2015



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	➡			↔	↔	
Volume (veh/h)	78	1	2	54	2	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	93	1	2	64	2	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			94		162	93
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			94		162	93
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1513		832	969

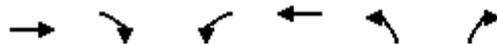
Direction, Lane #	SE 1	NW 1	NE 1
Volume Total	94	67	2
Volume Left	0	2	2
Volume Right	1	0	0
cSH	1700	1513	832
Volume to Capacity	0.06	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.3	9.3
Lane LOS		A	A
Approach Delay (s)	0.0	0.3	9.3
Approach LOS			A

Intersection Summary			
Average Delay		0.2	
Intersection Capacity Utilization		14.5%	ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

7: Westerly Access Drive & Northeast Parkway

7/30/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	←	↘
Volume (veh/h)	76	2	14	55	1	12
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	80	2	15	58	1	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			82		168	81
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			82		168	81
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1528		819	984

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	82	73	14
Volume Left	0	15	1
Volume Right	2	0	13
cSH	1700	1528	969
Volume to Capacity	0.05	0.01	0.01
Queue Length 95th (ft)	0	1	1
Control Delay (s)	0.0	1.6	8.8
Lane LOS		A	A
Approach Delay (s)	0.0	1.6	8.8
Approach LOS			A

Intersection Summary			
Average Delay		1.4	
Intersection Capacity Utilization	20.3%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

8: Middle Access Drive & Northeast Parkway

7/30/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↔	
Volume (veh/h)	88	0	14	69	0	12
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	93	0	15	73	0	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			93		195	93
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			93		195	93
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1515		791	970

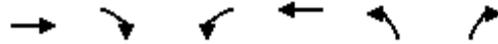
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	93	87	13
Volume Left	0	15	0
Volume Right	0	0	13
cSH	1700	1515	970
Volume to Capacity	0.05	0.01	0.01
Queue Length 95th (ft)	0	1	1
Control Delay (s)	0.0	1.3	8.8
Lane LOS		A	A
Approach Delay (s)	0.0	1.3	8.8
Approach LOS			A

Intersection Summary			
Average Delay		1.2	
Intersection Capacity Utilization	21.1%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

9: Easterly Access Drive & Northeast Parkway

7/30/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↔	↔
Volume (veh/h)	106	1	15	88	1	17
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	112	1	16	93	1	18
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	696					
pX, platoon unblocked						
vC, conflicting volume			113		236	112
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			113		236	112
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	98
cM capacity (veh/h)			1489		748	946

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	113	108	19
Volume Left	0	16	1
Volume Right	1	0	18
cSH	1700	1489	933
Volume to Capacity	0.07	0.01	0.02
Queue Length 95th (ft)	0	1	2
Control Delay (s)	0.0	1.2	8.9
Lane LOS		A	A
Approach Delay (s)	0.0	1.2	8.9
Approach LOS			A

Intersection Summary			
Average Delay		1.2	
Intersection Capacity Utilization	22.1%	ICU Level of Service	A
Analysis Period (min)	15		

Level of Service Criteria

LEVEL OF SERVICE CRITERIA

Signalized Intersections		
Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor and the cycle length is long. Most cycles fail to clear the queue.	>80.0

Unsignalized Intersections		
Level of Service	Average Total Delay (SEC/VEH)	
A	0 - 10	
B	> 10 - 15	
C	> 15 - 25	
D	> 25 - 35	
E	> 35 - 50	
F	> 50	

Source: *Highway Capacity Manual*, 2010.

PLAT OF SURVEY

JAMES SCHAEFFER & SCHIMMING, INC.

Land Surveyors

2300 N. Barrington Road - Suite 140 - Hoffman Estates, Illinois 60135-2033 - Phone (847) 885-3322



Parcel 1:

Of parcel of land in the Northeast 1/4 of Section 35, Township 41 North, Range 13 East of the Third Principal Meridian, bounded and described as follows:

Beginning at the point of intersection of a line 4000 feet North of and parallel with the South line of the Northeast 1/4 of said Section 35 and the West line of the East 660.00 feet of the Northeast 1/4 of said Section 35; thence South 89°07'50" West along said line 4000 feet North of and parallel with the South line of the Northeast 1/4 of said Section 35 a distance of 1553.48 feet to a point 4000 feet East (as measured along said parallel line) of a line 3300 feet East of the West line of the Northeast 1/4 of said Section 35; thence North 01°52'30" West a distance of 617.74 feet to the point of beginning; thence North 89°07'50" West along the South line of the Northeast 1/4 of said Section 35 a distance of 1553.48 feet to a point on the West line of the East 660.00 feet of the Northeast 1/4 of said Section 35 a distance of 616.59 feet to the point of beginning, in Cook County, Illinois.

EXCEPTION TO PARCEL 1 (CONTINUED):

That part of the Northeast quarter of Section 35, Township 41 North, Range 13 East of the Third Principal Meridian, in Cook County, Illinois, described as follows:

Commencing at the Southeast corner of said Northeast quarter; thence Westerly on an assumed bearing of South 88 degrees 40 minutes 43 seconds West on the South line of said Northeast quarter 660.00 feet to the West line of the East 660.00 feet of said Northeast quarter; thence North 00 degrees 53 minutes 33 seconds East on said West line 40.00 feet to the North line of the South 4000 feet of said Northeast quarter and to the point of beginning; thence continuing North 00 degrees 53 minutes 33 seconds East on said West line 23.00 feet to a 1/2" note with an Allied cap stamped "State of Illinois Division of Highways ROW Center PLS 2377"; thence South 44 degrees 34 minutes 28 seconds West 28.74 feet to 1/2" note with an Allied cap stamped "State of Illinois Division of Highways ROW Corner PLS 2377" and to a point on the North line of the South 4000 feet of said Northeast quarter; thence North 88 degrees 40 minutes 43 seconds East on said North line 20.00 feet to the point of beginning, as measured on said North line.

PARCEL 2

A TRACT OF LAND BEING PART OF THE SOUTH 1/2 OF THE SOUTH 1/2 OF THE NORTHEAST 1/4 OF SECTION 35, TOWNSHIP 41 NORTH, RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:
Beginning at the intersection of the North line of the South 1/2 of the South 1/2 of the Northeast 1/4 of said Section 35 and the West line of the East 660.00 feet of the Northeast 1/4 of said Section 35; thence South 89°07'50" West along said line 4000 feet North of and parallel with the South line of the Northeast 1/4 of said Section 35 a distance of 1553.48 feet to a point 4000 feet East (as measured along said parallel line) of a line 3300 feet East of the West line of the Northeast 1/4 of said Section 35; thence North 01°52'30" West a distance of 617.74 feet to the point of beginning; thence North 89°07'50" West along the South line of the Northeast 1/4 of said Section 35 a distance of 1553.48 feet to a point on the West line of the East 660.00 feet of the Northeast 1/4 of said Section 35 a distance of 616.59 feet to the point of beginning, in Cook County, Illinois.

PARCEL 3

EASEMENT IN FAVOR OF THE CHICAGO & NORTHWESTERN RAILROAD COMPANY FOR THE RIGHT OF WAY FOR THE TRACKS AND MAINTENANCE AND OPERATION OF AN INDUSTRIAL SPUR TRACK FOR THE BENEFIT OF A PORTION OF PARCEL 1, ON OVER AND ACROSS THE FOLLOWING DESCRIBED REAL ESTATE:
A TRACT OF LAND BEING PART OF THE SOUTH 1/2 OF THE SOUTH 1/2 OF THE NORTHEAST 1/4 OF SECTION 35, TOWNSHIP 41 NORTH, RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:
Beginning at the intersection of the North line of the South 1/2 of the South 1/2 of the Northeast 1/4 of said Section 35 and the West line of the East 660.00 feet of the Northeast 1/4 of said Section 35; thence South 89°07'50" West along said line 4000 feet North of and parallel with the South line of the Northeast 1/4 of said Section 35 a distance of 1553.48 feet to a point 4000 feet East (as measured along said parallel line) of a line 3300 feet East of the West line of the Northeast 1/4 of said Section 35; thence North 01°52'30" West a distance of 617.74 feet to the point of beginning; thence North 89°07'50" West along the South line of the Northeast 1/4 of said Section 35 a distance of 1553.48 feet to a point on the West line of the East 660.00 feet of the Northeast 1/4 of said Section 35 a distance of 616.59 feet to the point of beginning, in Cook County, Illinois.

PARCEL 4

EASEMENT IN FAVOR OF THE CHICAGO & NORTHWESTERN RAILROAD COMPANY FOR THE RIGHT OF WAY FOR THE TRACKS AND MAINTENANCE AND OPERATION OF AN INDUSTRIAL SPUR TRACK FOR THE BENEFIT OF A PORTION OF PARCEL 1, ON OVER AND ACROSS THE FOLLOWING DESCRIBED REAL ESTATE:
A TRACT OF LAND BEING PART OF THE SOUTH 1/2 OF THE SOUTH 1/2 OF THE NORTHEAST 1/4 OF SECTION 35, TOWNSHIP 41 NORTH, RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:
Beginning at the intersection of the North line of the South 1/2 of the South 1/2 of the Northeast 1/4 of said Section 35 and the West line of the East 660.00 feet of the Northeast 1/4 of said Section 35; thence South 89°07'50" West along said line 4000 feet North of and parallel with the South line of the Northeast 1/4 of said Section 35 a distance of 1553.48 feet to a point 4000 feet East (as measured along said parallel line) of a line 3300 feet East of the West line of the Northeast 1/4 of said Section 35; thence North 01°52'30" West a distance of 617.74 feet to the point of beginning; thence North 89°07'50" West along the South line of the Northeast 1/4 of said Section 35 a distance of 1553.48 feet to a point on the West line of the East 660.00 feet of the Northeast 1/4 of said Section 35 a distance of 616.59 feet to the point of beginning, in Cook County, Illinois.

STATE OF ILLINOIS
COUNTY OF COOK

TO: BELL & HOWELL COMPANY
BELL & HOWELL COMPANY MANAGEMENT PRODUCTS COMPANY
1500 LINDENWOOD CENTER, L.L.C.
LAKELAND NATIONAL BANK
NORTHERN TRUST COMPANY
CHICAGO TITLE INSURANCE COMPANY

This is to certify that this map or plat and the survey on which it is based were made in accordance with the Minimum Standard Detail requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA, ACSM and NSPS in 1997, and includes items 1.4, 7.6, 8.5, 10.1, 11a, 11b and 13 of Table A thereof, and pursuant to the Accuracy Standards (as adopted by ALTA and ACSM) and in effect on the date of this certification of an "ALTA" survey.

I do certify that the property described herein is located in Zone "C", Zone "C" being an area of minimal flooding as delineated in the National Flood Insurance Program's Flood Insurance Rate Map Community-Plan No. 170074-0020-B, Effective Date of June 1, 1981.

Hoffman Estates, March 19, A.D. 1998
Douglas L. Root, Illinois Professional Land Surveyor No. 1920



Note!

Commitment for Title Insurance provided by Chicago Title Insurance Company under Order No. 1401 007699944 and dated December 3, 1997.
Total number of parking stalls, as pointed, total 592 of which 10 are physically challenged parking stalls.
Iron pipes at all property corners.

GRAPHIC SCALE



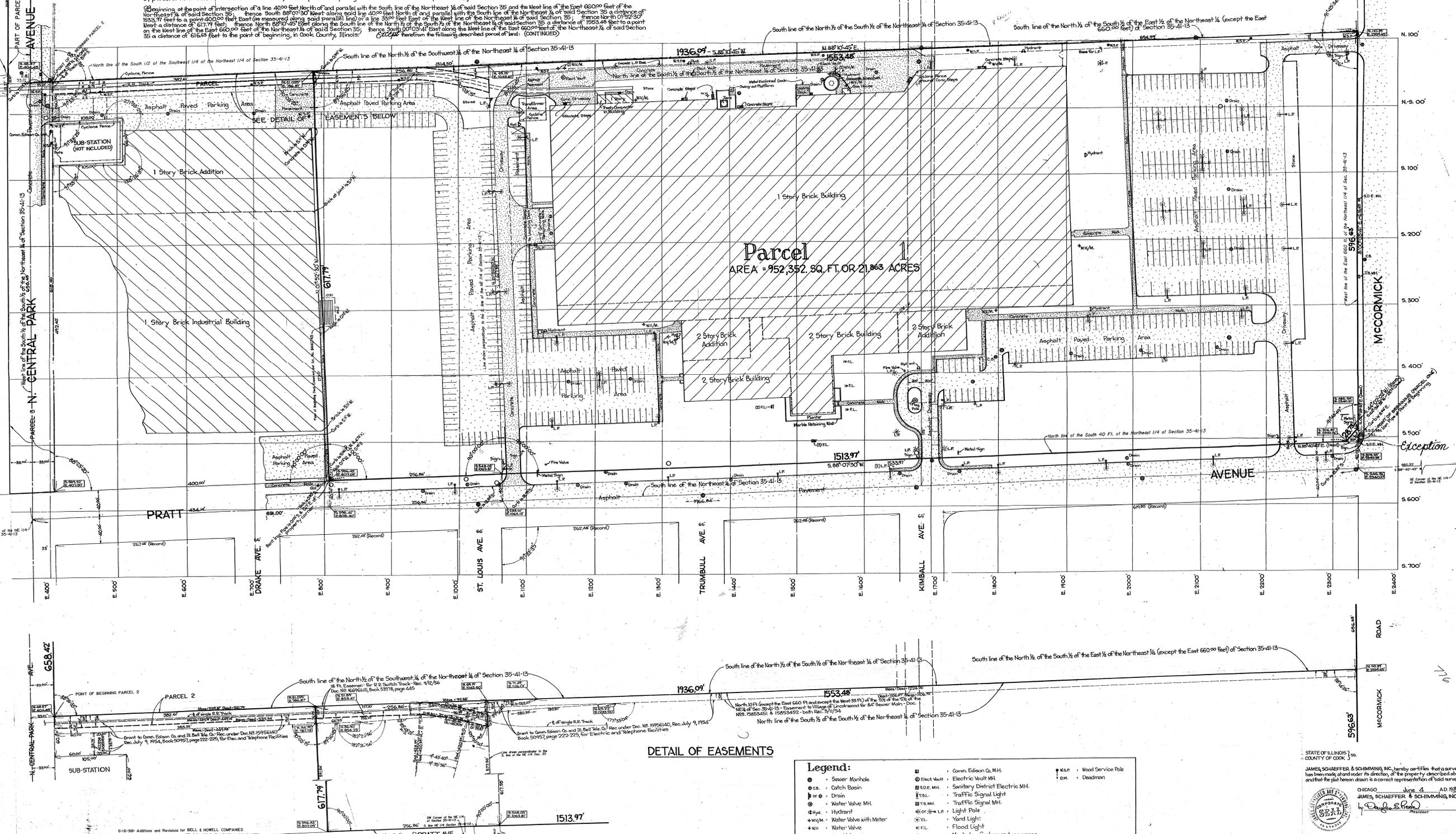
BASE SCALE: 1 inch = 40' feet.
Distances are marked in feet and decimal parts thereof.
ORDERED BY: Mr. Gary Salt
ORDERED FOR: BELL & HOWELL COMPANY
CHECKED BY: S.M.
SURVEYED BY: T.J., T.R. & D.R. [Signature]

CONSIDER ALL POINTS BEFORE BUILDING BY SALES AND AT ONCE REPORT ANY DIFFERENCES FOR BUILDING LINE AND OTHER RESTRICTIONS NOT SHOWN HEREON. REFER TO YOUR ABSTRACT, DEED, CONTRACT AND ZONING ORDINANCE.

ORDER NO. 98-1823 "S"



© JAMES SCHAEFFER & SCHIMMING, INC. 1997 "ALL RIGHTS RESERVED"

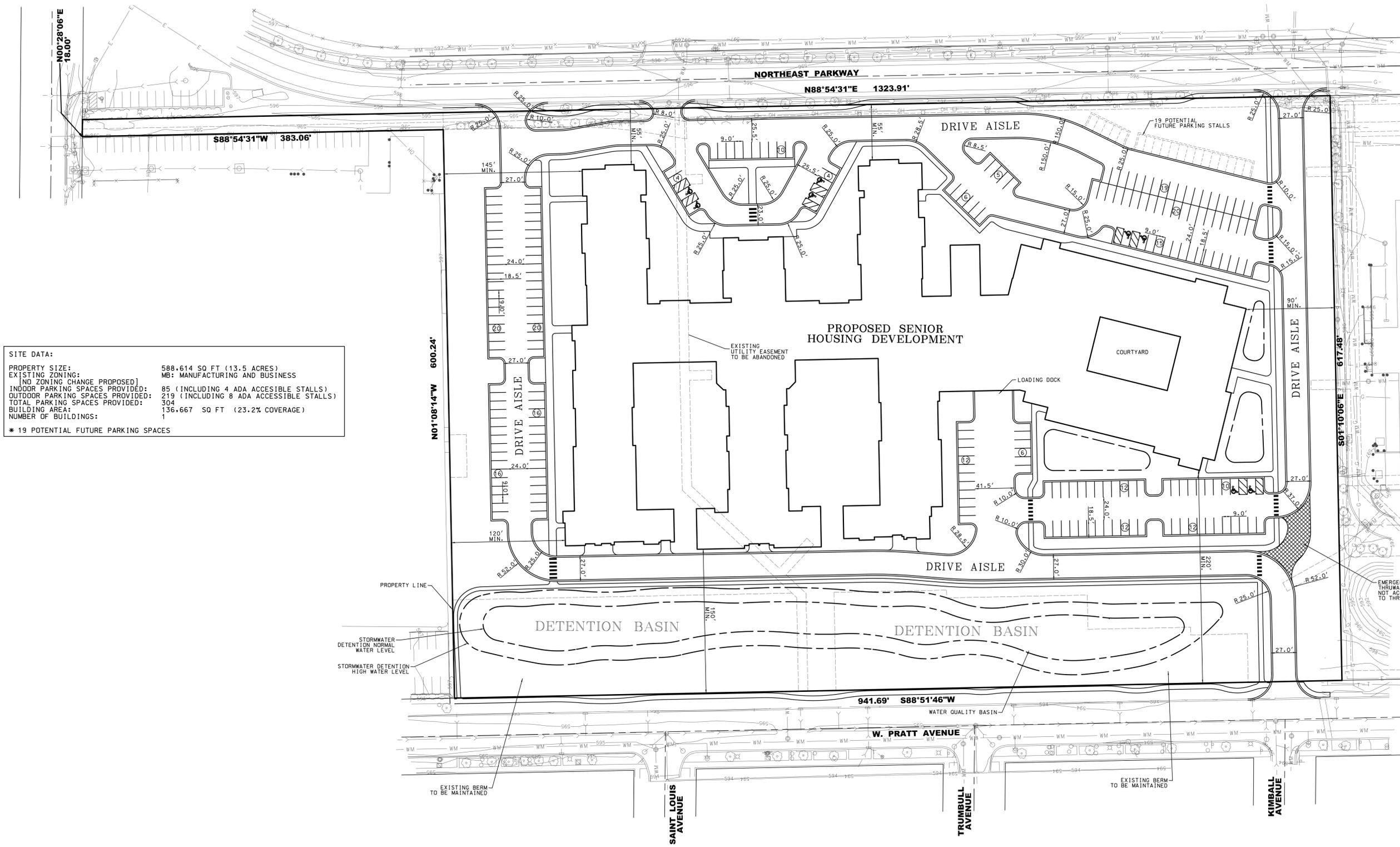
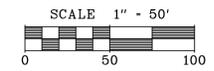


Parcel 1
AREA = 952,352.89 SQ. FT. OR 21.863 ACRES

Legend:

○	Sewer Manhole	■	Comm. Edison Co. M.H.	⬆	Wood Service Pole
○	Catch Basin	□	Electric Vault M.H.	⬆	Deadman
○	Drain	□	Sanitary District Electric M.H.		
○	Water Valve M.H.	□	Traffic Signal Light		
○	Hydrant	□	Traffic Signal M.H.		
○	Water Valve with Meter	○	Light Pole		
○	Water Valve	○	Yard Light		
○	Gas Valve	○	Flood Light		
		○	Manhole of unknown type or use		

STATE OF ILLINOIS
COUNTY OF COOK
JAMES SCHAEFFER & SCHIMMING, INC. hereby certifies that a survey has been made and under its direction of the property described above and that the plan herein drawn is a correct representation of said survey.
CHICAGO, ILLINOIS, June 1, A.D. 1998.
JAMES SCHAEFFER & SCHIMMING, INC.
[Signature]



SITE DATA:

PROPERTY SIZE: 588,614 SQ FT (13.5 ACRES)
 EXISTING ZONING: MB: MANUFACTURING AND BUSINESS
 [NO ZONING CHANGE PROPOSED]
 INDOOR PARKING SPACES PROVIDED: 85 (INCLUDING 4 ADA ACCESSIBLE STALLS)
 OUTDOOR PARKING SPACES PROVIDED: 219 (INCLUDING 8 ADA ACCESSIBLE STALLS)
 TOTAL PARKING SPACES PROVIDED: 304
 BUILDING AREA: 136,667 SQ FT (23.2% COVERAGE)
 NUMBER OF BUILDINGS: 1

* 19 POTENTIAL FUTURE PARKING SPACES

9/11/2015 9:58:28 AM K:\2676\Engineering\2676\Site Plan.rvt



Mackie Consultants, LLC
 9575 W. Higgins Road, Suite 500
 Rosemont, IL 60018
 (847)696-1400
 www.mackieconsult.com

CLIENT:
SOUTH BAY PARTNERS
 5307 E MOCKINGBIRD LANE
 SUITE 1010
 DALLAS, TX 75206

DATE	DESCRIPTION OF REVISION	BY	SCALE
9-11-15	REVISED PER UPDATED SITE LAYOUT	KEH	1" = 50'
7-29-15	REVISED PER UPDATED SITE LAYOUT	KEH	
7-28-15	REVISED PER UPDATED SITE LAYOUT	KEH	
7-15-15	REVISED PER UPDATED SITE LAYOUT	KEH	
7-10-15	REVISED PER UPDATED SITE LAYOUT	KEH	

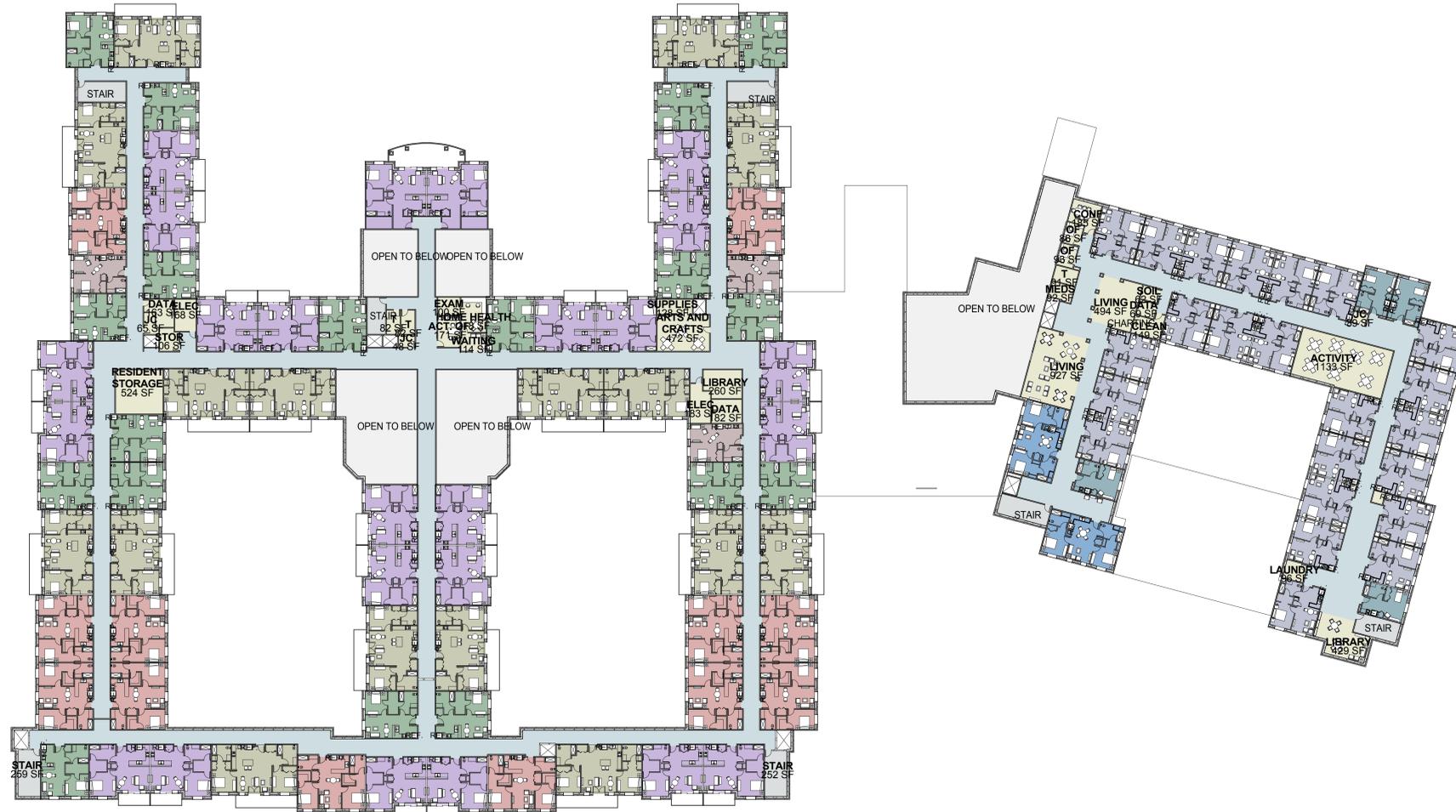
CONCEPT SITE PLAN
SENIOR HOUSING DEVELOPMENT
LINCOLNWOOD, ILLINOIS

SHEET
1 OF 1
 PROJECT NUMBER: 2676
 © MACKIE CONSULTANTS LLC, 2015
 ILLINOIS FIRM LICENSE 184-002694



Department Legend

- 1 BED
- 1 BED SMALL
- 2 BED
- 2 BED DEEP
- a
- AL 1 BED
- AL 2 Bed
- AL STUDIO
- ALCOVE
- CIRC/COMMON
- GARAGE
- OPEN TO BELOW



① SECOND FLOOR
1" = 30'-0"

Project Status 06/08/15

Revisions:

No.	Date	Description

Project
LINCOLNWOOD

3400 W. PRATT AVENUE

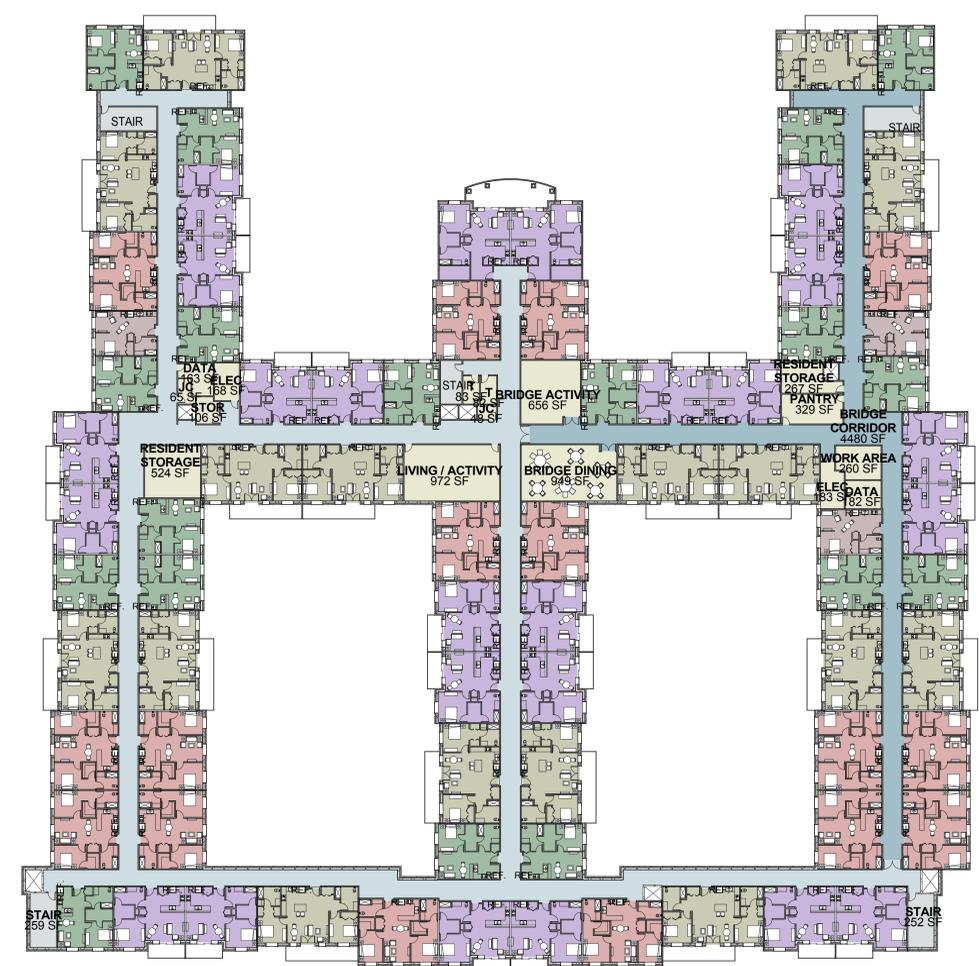
SOUTH BAY PARTNERS

Sheet Title
SECOND FLOOR PLAN

Project No. Project Number Sheet Number
Date 09.08.2015
Drawn by GDS
Checked by GDS
Approved by GDS
A3.02
Sheet of Sheets

Department Legend

- 1 BED
- 1 BED SMALL
- 2 BED
- 2 BED DEEP
- a
- AL 1 BED
- AL 2 Bed
- AL STUDIO
- ALCOVE
- b
- CIRC/COMMON
- GARAGE



Project Status 06/11/15

Revisions:

No.	Date	Description

Project
 LINCOLNWOOD
 3400 W. PRATT AVENUE
 SOUTH BAY PARTNERS

Sheet Title
FOURTH FLOOR PLAN

Project No.	Project Number	Sheet Number
Date	09.08.2015	A3.04
Drawn by	Author	
Checked by	Checker	
Approved by	Approver	
		Sheet of Sheets

① FOURTH FLOOR PLAN
 1" = 30'-0"





**DANIEL WEINBACH
&
PARTNERS, LTD.**

Landscape Architects

53 W. Jackson Blvd.
Suite 250
Chicago, IL 60604

312 427-2888
www.dwpitd.com

Revisions

8.
7.
6.
5.
4.
3.
2.

1. ISSUED VILLAGE SUBMITTAL 09/11/15

Project

**SENIOR
HOUSING
DEVELOPMENT**

3400 W. PRATT AVENUE
LINCOLNWOOD, ILLINOIS

Sheet Title

**LANDSCAPE
KEY PLAN**

Date

09/11/15

Project No.

DWP 15-142

Scale

1" = 40'-0"

Sheet No.

L-1.0

Drawn By

EB

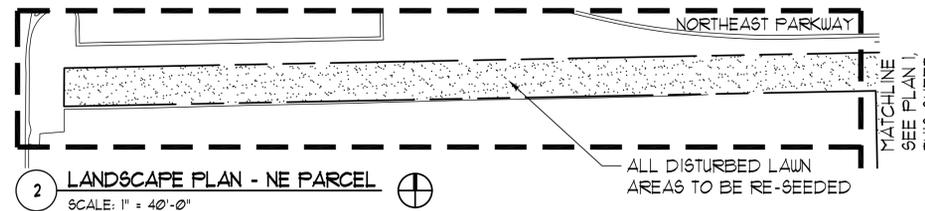
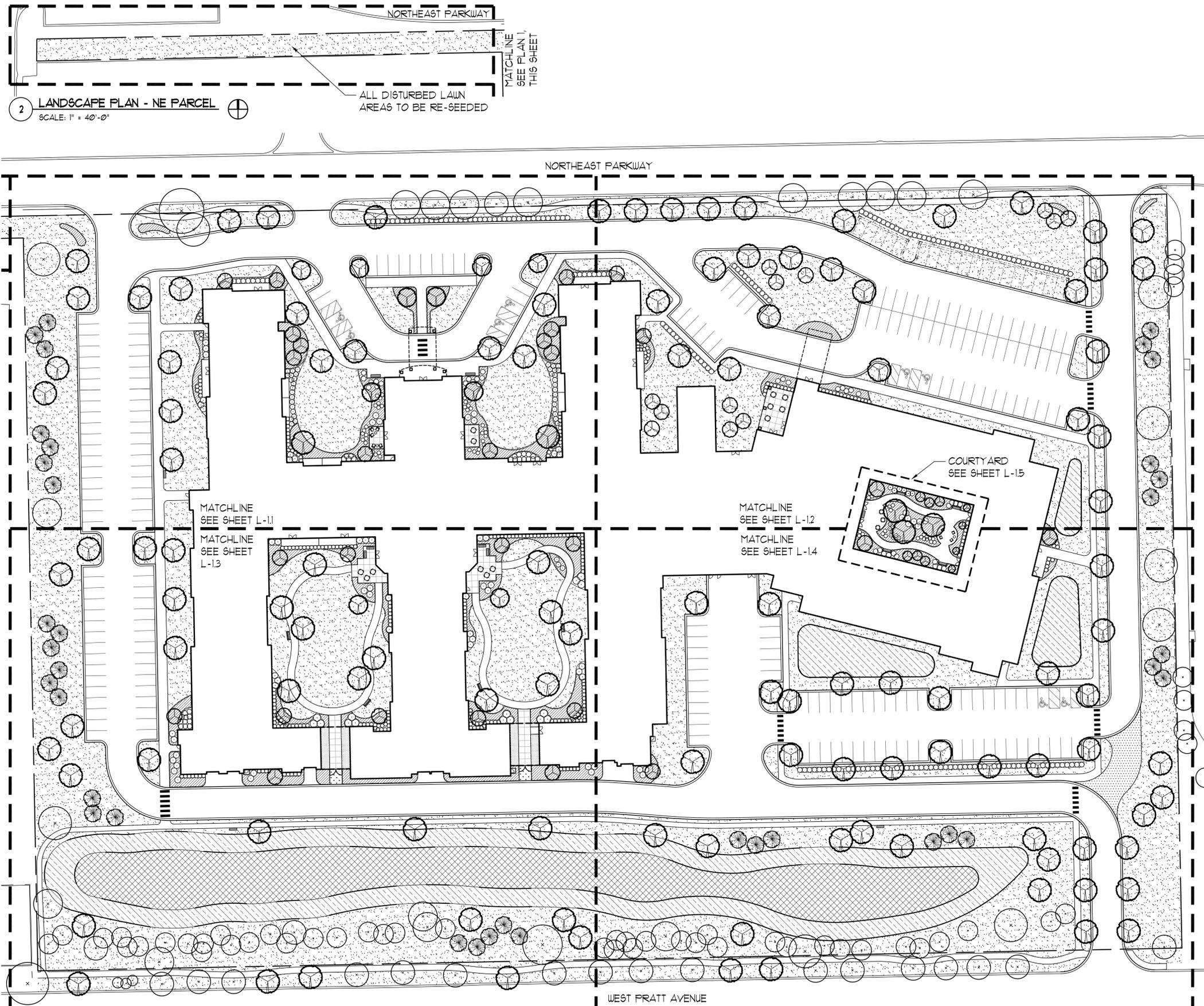
Approved

WS

LEGEND

- EXISTING TREES TO REMAIN
- NEW TREES & SHRUBS
- NEW PERENNIALS & GROUNDCOVER
- SEEDED LAWN
- DETENTION BOTTOM SEED MIX WITH EROSION CONTROL BLANKET
- DETENTION SLOPE SEED MIX WITH EROSION CONTROL BLANKET
- REINFORCED SOD
- GRASSPAVE FIRELANE

SEE GENERAL NOTES, SHEET L-16
FOR ADDITIONAL INFORMATION



1 LANDSCAPE KEY PLAN
SCALE: 1" = 40'-0"



**DANIEL WEINBACH
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Landscape Architects

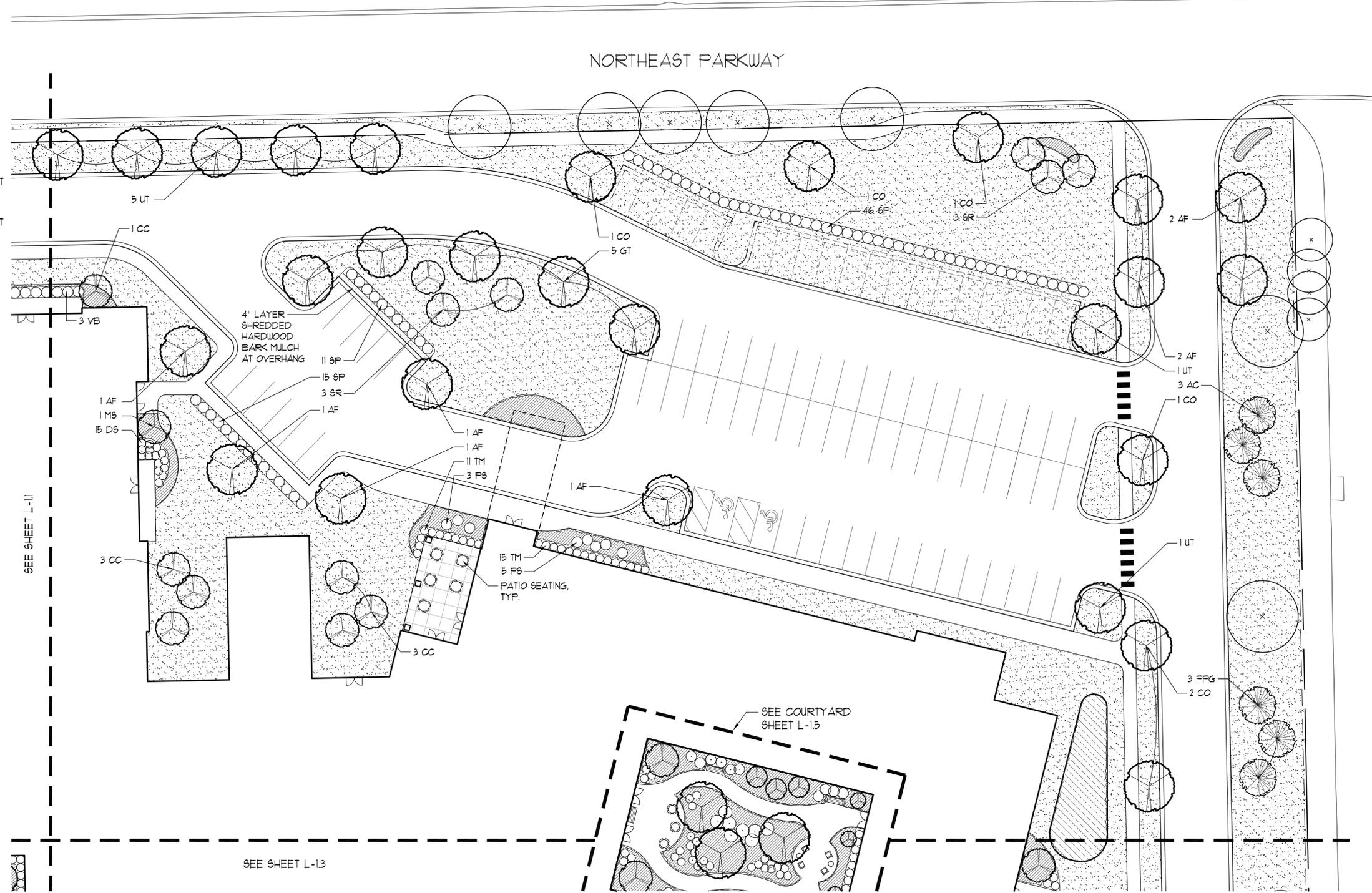
53 W. Jackson Blvd.
Suite 250
Chicago, IL 60604

312 427-2888
www.dwpitd.com

LEGEND

-  EXISTING TREES TO REMAIN
-  NEW PERENNIALS & GROUND COVER
-  SEEDED LAWN
-  DETENTION BOTTOM SEED MIX WITH EROSION CONTROL BLANKET
-  DETENTION SLOPE SEED MIX WITH EROSION CONTROL BLANKET
-  REINFORCED SOD
-  GRASSPAVE FIRELANE

SEE GENERAL NOTES, SHEET L-16 FOR ADDITIONAL INFORMATION



1 PRELIMINARY LANDSCAPE PLAN - NE
SCALE: 1" = 20'-0"

Revisions	
8.	
7.	
6.	
5.	
4.	
3.	
2.	
1.	ISSUED VILLAGE SUBMITTAL 09/11/15

Project

SENIOR HOUSING DEVELOPMENT

3400 W. PRATT AVENUE
LINCOLNWOOD, ILLINOIS

Sheet Title

LANDSCAPE PLAN NE

Date 09/11/15	Project No. DWP 15-142
Scale 1" = 20'-0"	Sheet No. L-1.2
Drawn By EB	
Approved WS	



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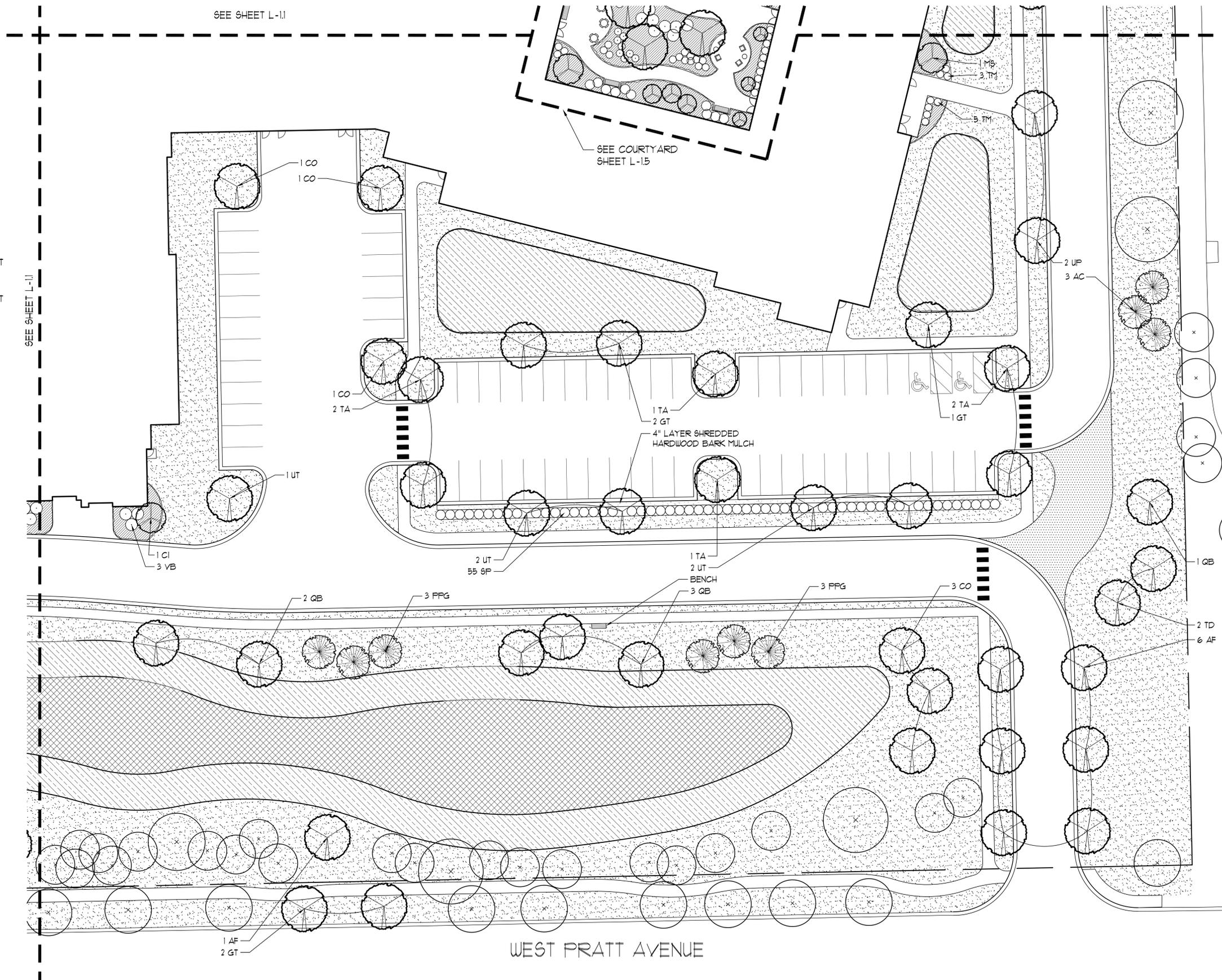
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Suite 250
Chicago, IL 60604

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LEGEND

-  EXISTING TREES TO REMAIN
-  NEW PERENNIALS & GROUND COVER
-  SEEDED LAWN
-  DETENTION BOTTOM SEED MIX WITH EROSION CONTROL BLANKET
-  DETENTION SLOPE SEED MIX WITH EROSION CONTROL BLANKET
-  REINFORCED SOD
-  GRASSPAVE FIRELANE

SEE GENERAL NOTES, SHEET L-1/6 FOR ADDITIONAL INFORMATION



WEST PRATT AVENUE

1 PRELIMINARY LANDSCAPE PLAN - SE
SCALE: 1" = 20'-0"

Revisions	
8.	
7.	
6.	
5.	
4.	
3.	
2.	

1. ISSUED VILLAGE SUBMITTAL 09/11/15

Project
SENIOR HOUSING DEVELOPMENT
3400 W. PRATT AVENUE
LINCOLNWOOD, ILLINOIS

Sheet Title
LANDSCAPE PLAN SE

Date 09/11/15	Project No. DWP 15-142
Scale 1" = 20'-0"	Sheet No. L-1.4
Drawn By EB	
Approved WS	



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PARTNERS, LTD.**

Landscape Architects

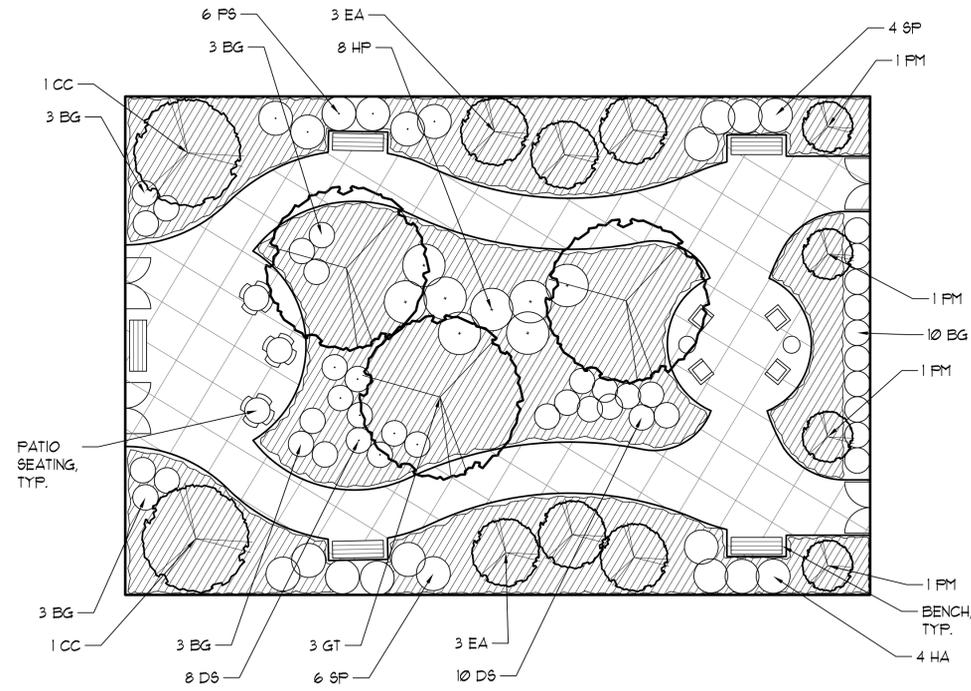
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Suite 250
Chicago, IL 60604

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www.dwpjtd.com

LEGEND

- EXISTING TREES TO REMAIN
- NEW PERENNIALS & GROUND COVER
- SEEDED LAWN
- DETENTION BOTTOM SEED MIX WITH EROSION CONTROL BLANKET
- DETENTION SLOPE SEED MIX WITH EROSION CONTROL BLANKET
- REINFORCED SOD
- GRASSPAVE FIRELANE

SEE GENERAL NOTES, SHEET L-1/6 FOR ADDITIONAL INFORMATION



1 COURTYARD LANDSCAPE PLAN
SCALE: 1" = 10'-0"

PLANT LIST

CODE	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	ADDITIONAL NOTES
DECIDUOUS TREES - SHADE					
AF	ACER x FREEMANII 'JEFFERSRED'	AUTUMN BLAZE MAPLE	2 1/2" CALIFER	33	BRANCHED UP 6'
CO	CELTIS OCCIDENTALIS	COMMON HACKBERRY	2 1/2" CALIFER	21	BRANCHED UP 6'
GT	GLEDITSIA T. VAR. INERMIS 'SKYLINE'	SKYLINE HONEYLOCUST	2 1/2" CALIFER	21	BRANCHED UP 6'
PC	PYRUS CALLERYANA 'CHANTICLEER'	CHANTICLEER PEAR	2 1/2" CALIFER	10	
QB	QUERCUS BICOLOR	SUAMP WHITE OAK	2 1/2" CALIFER	9	BRANCHED UP 6'
QM	QUERCUS MACROCARPA	BUR OAK	2 1/2" CALIFER	2	BRANCHED UP 6'
TA	TILIA AMERICANA 'REDMOND'	REDMOND LINDEN	2 1/2" CALIFER	6	BRANCHED UP 6'
TD	TAXODIUM DISTICHUM	COMMON BALDCYPRESS	2 1/2" CALIFER	4	BRANCHED UP 6'
UP	ULMUS WILSONIANA 'PROSPECTOR'	PROSPECTOR OAK	2 1/2" CALIFER	11	BRANCHED UP 6'
UT	ULMUS x MORTON GLOSSY'	TRUMPH ELM	2 1/2" CALIFER	12	BRANCHED UP 6'
DECIDUOUS TREES - ORNAMENTAL					
AG	AMELANCHIER x G. 'AUTUMN BRILLIANCE'	APPLE SERVICEBERRY	6' HT	12	CLUMP FORM
BP	BETULA POPULIFOLIA 'WHITESPIRE SR.'	WHITESPIRE SR. GRAY BIRCH	12' HT x 8" W	2	CLUMP FORM, 3 TRUNKS
CC	CERCIS CANADENSIS	EASTERN REDBUD	6' HT	16	CLUMP FORM
CI	CRATEGUS CRUGGALLI VAR. INERMIS	THORNLESS COCKSPUR HAWTHORN	6' HT	3	CLUMP FORM
MR	MALUS 'RED JEWEL'	RED JEWEL CRABAPPLE	6' HT	1	CLUMP FORM
MS	MAGNOLIA STELLATA	STAR MAGNOLIA	6' HT	2	CLUMP FORM
SR	SYRINGA RETICULATA 'IVORY SILK'	IVORY SILK JAPANESE TREE LILAC	6' HT	6	
EVERGREEN TREES					
AC	ABIES CONCOLOR	WHITE FIR	5' HT	21	
PPG	PICEA FUNGENS	COLORADO GREEN SPRUCE	5' HT	15	
DECIDUOUS SHRUBS					
BD	BIDDLEIA DAVIDII 'BLACK KNIGHT'	BLACK KNIGHT BUTTERFLY BUSH	5 GALLON	6	
DS	DIERVILLA SESSILIFOLIA 'BUTTERFLY'	BUTTERFLY BUSH HONEYBUCKLE	5 GALLON	10	
EA	EUONYMUS ALATUS 'COMPACTUS'	COMPACT BURNING BUSH	30" HT x 30" W	6	
HA	HYDRANGEA ARBORESCENS 'ANNABELLE'	ANNABELLE HYDRANGEA	5 GALLON	21	
HF	HYDRANGEA PANICULATA 'BULK'	QUICK FIRE HYDRANGEA	5 GALLON	12	
HP	HYDRANGEA PANICULATA 'LIMELIGHT'	LIMELIGHT HYDRANGEA	5 GALLON	11	
FM	PHYSOCCARPUS OPULIFOLIUS 'MONLO'	DIABLO NINEBARK	36" HT x 30" W	41	
FS	PHYSOCCARPUS OPULIFOLIUS 'SEWARD'	SUMMER WINE NINEBARK	24" HT x 24" W	11	
SB	SPIRAEA BETULIFOLIA 'TOR'	TOR BIRCHLEAF SPIREA	24" HT x 24" W	40	
SP	SYRINGA PATULA 'MISS KIM'	MISS KIM LILAC	24" HT x 24" W	113	
VB	VIBURNUM DETATUM 'CHRISTOM'	BLUE MUFFIN VIBURNUM	30" HT x 24" W	46	
VD	VIBURNUM DENTATUM 'MORTON'	NORTHERN BURGUNDY VIBURNUM	36" HT x 36" W	9	
EVERGREEN SHRUBS					
BG	BUXUS MICROPHYLLA 'GREEN MOUND'	GREEN MOUND BOXWOOD	15" HT x 15" W	22	
TM	TAXUS x MEDIA 'TAUNTON'	TAUNTON DENSE YEW	18" HT x 18" W	258	

PERENNIALS, ORNAMENTAL GRASSES AND GROUNDCOVERS

CODE	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	ADDITIONAL NOTES
AB	ASTILBE x ARDENSII 'BEAUTY OF LISSE'	COLOR FLASH LIME ASTILBE	1 GALLON	0	SPACED 18" O.C.
AL	ASTILBE x ARDENSII 'FANAL'	FANAL ASTILBE	1 GALLON	0	SPACED 18" O.C.
BC	BOUTELOUA CURTIPENDULA	SIDE OATS GRAMA	1 GALLON	0	SPACED 18" O.C.
CH	CHAMANTHIUM LATIFOLIUM	NORTHERN SEA OATS	1 GALLON	0	SPACED 18" O.C.
CJ	COREOPSIS VERTICILLATA 'JETHRO TULL'	JETHRO TULL COREOPSIS	1 GALLON	0	SPACED 15" O.C.
CK	CALAMAGROSTIS ACUT. 'KARL FOERSTER'	FEATHER REED GRASS	1 GALLON	0	SPACED 24" O.C.
CW	CALAMAGROSTIS ACUT. 'OVERDAM'	WHITE FEATHER REED GRASS	1 GALLON	0	SPACED 24" O.C.
EF	EUONYMUS FORTUNEI COLORATUS	PURPLE LEAF WINTERCREEPER	3" POT	0	SPACED 10" O.C.
EP	ECHINACEA 'CBG CONE 2'	PIXIE MEADOURBRITE CONEFLOWER	1 GALLON	0	SPACED 15" O.C.
GM	GERANIUM SANGUINEUM 'MAX FREI'	MAX FREI BLOODY CRANESBILL	1 GALLON	0	SPACED 15" O.C.
GS	GERANIUM SANGUINEUM 'STRIATUM'	STRIATUM BLOODY CRANESBILL	1 GALLON	0	SPACED 18" O.C.
HJ	HEMEROCALLIS 'JOYLENE NICOLE'	JOYLENE NICOLE DAYLILY	1 GALLON	0	SPACED 18" O.C.
HN	HEMEROCALLIS 'SUMMER WINE'	SUMMER WINE DAYLILY	1 GALLON	0	SPACED 18" O.C.
HR	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	1 GALLON	0	SPACED 18" O.C.
HS	HEMEROCALLIS 'STRAWBERRY CANDY'	STRAWBERRY CANDY DAYLILY	1 GALLON	0	SPACED 18" O.C.
HW	HEMEROCALLIS 'LITTLE WINE CUP'	LITTLE WINE CUP DAYLILY	1 GALLON	0	SPACED 15" O.C.
HE	HEUCHERA 'GEORGIA PEACH'	GEORGIA PEACH CORAL BELLS	1 GALLON	0	SPACED 15" O.C.
HM	HEUCHERA MICRANTHA 'PURPLE PALACE'	PURPLE PALACE CORAL BELLS	1 GALLON	0	SPACED 18" O.C.
HB	HOSTA 'LIBERTY'	LIBERTY HOSTA	1 GALLON	0	SPACED 18" O.C.
HF	HOSTA 'FRANCEE'	FRANCEE HOSTA	1 GALLON	0	SPACED 18" O.C.
HJ	HOSTA 'JUNE'	JUNE HOSTA	1 GALLON	0	SPACED 18" O.C.
HY	HOSTA 'HALCYON'	HALCYON HOSTA	1 GALLON	0	SPACED 12" O.C.
LR	LIRIOPE SPICATA	CREeping LILY TURF	1 QUART	0	SPACED 18" O.C.
LS	LIATRIS SPICATA 'KOBOLD'	KOBOLD BLAZING STAR	1 GALLON	0	SPACED 24" O.C.
MO	MATTEUCCIICIA PENNSYLVANICA	OSTRICH FERN	1 GALLON	0	SPACED 24" O.C.
MS	MISCANTHUS SINENSIS VAR. PURPURASCENS	PURPLE MAIDEN GRASS	1 GALLON	0	SPACED 24" O.C.
NF	NEPETA x FAASSENII 'WALKERS LOW'	WALKERS LOW CATMINT	1 GALLON	0	SPACED 18" O.C.
OC	OSMUNDA CINNAMOMEA	CINNAMON FERN	1 GALLON	0	SPACED 24" O.C.
FA	FENNETUM ALOPECUROIDES 'HAMELN'	DWARF FOUNTAIN GRASS	1 GALLON	0	SPACED 18" O.C.
FK	FEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE'	LITTLE SPIRE RUSSIAN SAGE	1 GALLON	0	SPACED 18" O.C.
PT	PACHYSANDRA TERMINALIS 'GREEN CARPET'	GREEN CARPET PACHYSANDRA	3" POT	0	SPACED 8" O.C.
PV	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCHGRASS	1 GALLON	0	SPACED 24" O.C.
RF	RUDBECKIA FULGIDA 'GOLDSTURM'	BLACK-EYED SUSAN	1 GALLON	0	SPACED 18" O.C.
SA	SEDUM x 'AUTUMN JOY'	AUTUMN JOY SEDUM	1 GALLON	0	SPACED 18" O.C.
SH	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	1 GALLON	0	SPACED 24" O.C.
SN	SALVIA NEMEROSA 'MAYNACHT'	MAY KNIGHT SALVIA	1 GALLON	0	SPACED 15" O.C.
VM	VINCA MINOR 'DART'S BLUE'	DART'S BLUE PERIWINKLE	3" POT	0	SPACED 10" O.C.

Revisions

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1. ISSUED VILLAGE SUBMITTAL 09/11/15

Project

**SENIOR
HOUSING
DEVELOPMENT**

3400 W. PRATT AVENUE
LINCOLNWOOD, ILLINOIS

Sheet Title

**DETAIL PLANS &
PLANT LISTS**

Date

09/11/15

Project No.

DWP 15-142

Scale

AS NOTED

Sheet No.

Drawn By

EB

L-1.5

Approved

WS



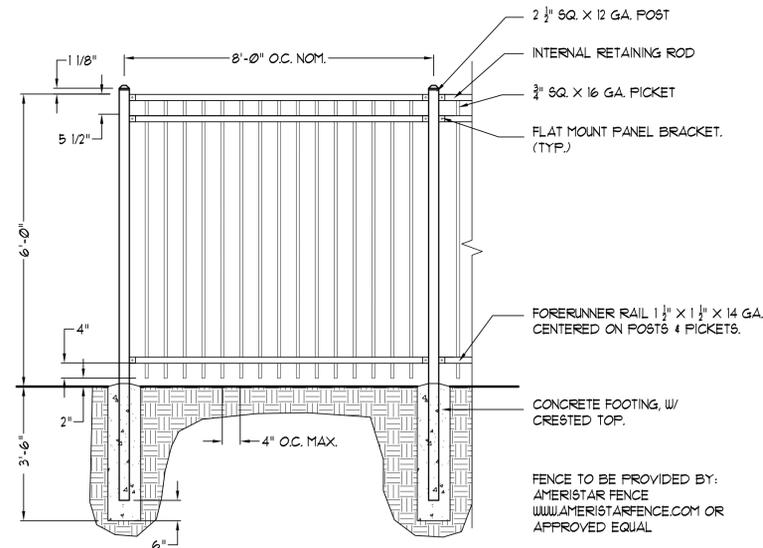
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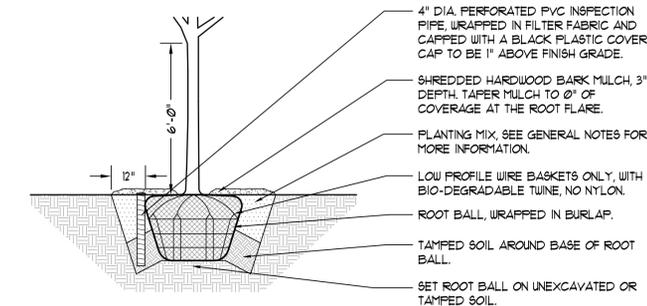
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NOTE: ALL FENCING COMPONENTS TO BE BLACK IN COLOR AS SUPPLIED BY THE MANUFACTURER.



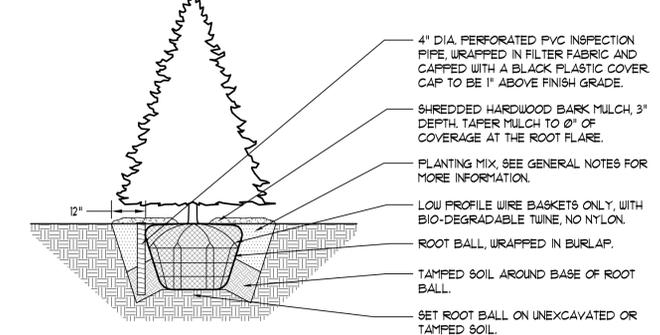
1 6' HT. ORNAMENTAL METAL FENCE
NOT TO SCALE

LOCATE ALL UNDERGROUND UTILITIES PRIOR TO DIGGING. TREE PIT WIDTH TO BE EXTENDED 12" AROUND THE ENTIRE ROOT BALL AS SHOWN IN THE DETAIL BELOW. TEST TREE PIT FOR DRAINAGE PRIOR TO INSTALLING TREE. PRUNE OFF ALL DEAD, BROKEN OR SCARRED BRANCHES, AND SHAPE PRUNE AS DIRECTED BY THE LANDSCAPE ARCHITECT. FOR TREES UP TO 4" CALIPER OR 12' HEIGHT, REMOVE APPROXIMATELY 5% - 10% OF THE OVERALL BRANCHING. FOR TREES OVER 4" CALIPER OR 12' HEIGHT, REMOVE APPROXIMATELY 15% - 20% OF THE OVERALL BRANCHING. LOCATE ROOT FLARE IN ROOT BALL AND SET TREE HEIGHT SO THAT ROOT FLARE IS FLUSH WITH FINISH GRADE. WATER IN THE PLANTING MIX THOROUGHLY, WHILE KEEPING THE TREE PLUMB. STRAIGHTEN TREE IF SETTLING OCCURS. CONTRACTOR TO UN-TIE AND REMOVE TWINE FROM AROUND ROOT FLARE OF TREE AT THE END OF THE WARRANTY PERIOD.



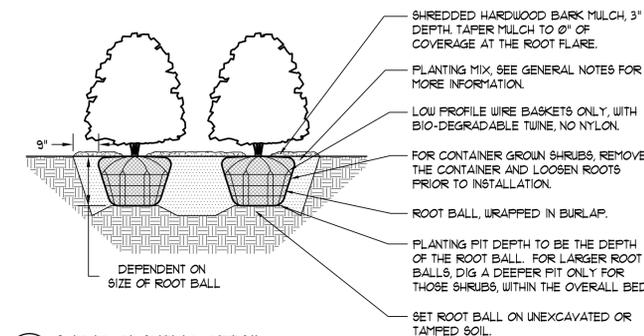
4 DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE

LOCATE ALL UNDERGROUND UTILITIES PRIOR TO DIGGING. TREE PIT WIDTH TO BE EXTENDED 12" AROUND THE ENTIRE ROOT BALL AS SHOWN IN THE DETAIL BELOW. TEST TREE PIT FOR DRAINAGE PRIOR TO INSTALLING TREE. PRUNE OFF ALL DEAD, BROKEN OR SCARRED BRANCHES, AND REMOVED ANY DOUBLE LEADERS. LOCATE ROOT FLARE IN ROOT BALL AND SET TREE HEIGHT SO THAT ROOT FLARE IS FLUSH WITH FINISH GRADE. WATER IN THE PLANTING MIX THOROUGHLY, WHILE KEEPING THE TREE PLUMB. STRAIGHTEN TREE IF SETTLING OCCURS. CONTRACTOR TO UN-TIE AND REMOVE TWINE FROM AROUND ROOT FLARE AT THE END OF THE WARRANTY PERIOD.



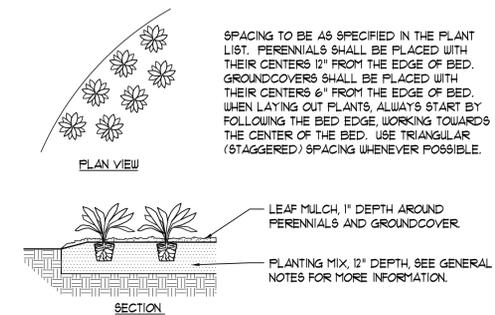
1 EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE

LOCATE ALL UNDERGROUND UTILITIES PRIOR TO DIGGING. SHRUB PIT WIDTH TO BE EXTENDED 9" AROUND THE ENTIRE ROOT BALL AS SHOWN IN THE DETAIL BELOW. TEST SHRUB PIT FOR DRAINAGE PRIOR TO INSTALLING SHRUB. PRUNE OFF ALL DEAD, BROKEN OR SCARRED BRANCHES, AND SHAPE PRUNE AS DIRECTED BY THE LANDSCAPE ARCHITECT. LOCATE ROOT FLARE IN ROOT BALL AND SET SHRUB HEIGHT SO THAT ROOT FLARE IS FLUSH WITH FINISH GRADE. WATER IN THE PLANTING MIX THOROUGHLY, WHILE KEEPING THE SHRUB PLUMB. STRAIGHTEN SHRUB IF SETTLING OCCURS. MULCH LIMITS FOR SHRUBS TO EXTEND TO ALL EDGES OF PLANTING BEDS, SEE PLANS FOR BED LAYOUTS. CONTRACTOR TO UN-TIE AND REMOVE TWINE FROM AROUND ROOT FLARE AT THE TIME OF PLANTING.



1 SHRUB PLANTING DETAIL
NOT TO SCALE

LOCATE ALL UNDERGROUND UTILITIES PRIOR TO DIGGING. EXCAVATE ENTIRE PERENNIAL / GROUNDCOVER BED, AND BACKFILL WITH PLANTING MIX AS SPECIFIED. BED HEIGHT IS TO BE 2" ABOVE FINISH GRADE AND WELL DRAINED. MULCH LIMITS FOR PERENNIAL BEDS TO EXTEND TO ALL EDGES OF THE BEDS, SEE PLANS FOR BED LAYOUTS. SEE PLANT LIST FOR PLANT SPACING. GAPS BETWEEN PLANTS SHALL BE NO GREATER THAN THE SPECIFIED SPACING FOR THAT PARTICULAR PLANT.



4 PERENNIAL AND GROUNDCOVER PLANTING DETAIL
NOT TO SCALE

GENERAL NOTES

- LAWN GRASS TO BE A SEEDED TALL FESCUE MIX SIMILAR TO RTF OR BLACK BEAUTY SOD MIX, 250 LBS/ACRE.
- THE BOTTOM OF THE DETENTION WILL BE SEEDED WITH PRAIRIE MOON NURSERY 'DETENTION BASIN SEED MIX', PH# 866-411-8156, RATE RECOMMENDED BY NURSERY.
- THE SIDE SLOPES OF THE DETENTION AREAS WILL BE SEEDED WITH PRAIRIE MOON NURSERY 'SHORT SEDGE MEADOW SEED MIX', PH# 866-411-8156, RATE AS RECOMMENDED BY NURSERY.
- SEE SHEET LT-20 FOR TREE PRESERVATION NOTES.
- AN AUTOMATIC IRRIGATION SYSTEM OF QUICK COUPLERS WILL BE PROVIDED ON THE SITE FOR WATERING THE LAWN AND PLANT BEDS. THE DETENTION AREAS WILL NOT BE IRRIGATED.
- THE GROUNDCOVER AND PERENNIALS WILL BE SELECTED FROM THE PALETTE PROVIDED ON SHEET L-15. THESE PLANTINGS WILL BE DETAILED AT A LATER DATE.

Revisions

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1. ISSUED VILLAGE SUBMITTAL 09/11/15

Project

SENIOR HOUSING DEVELOPMENT

3400 W. PRATT AVENUE
LINCOLNWOOD, ILLINOIS

Sheet Title

DETAILS & NOTES

Date 09/11/15	Project No. DWP 15-142
Scale NOT TO SCALE	Sheet No. L-2.0
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Approved WS	

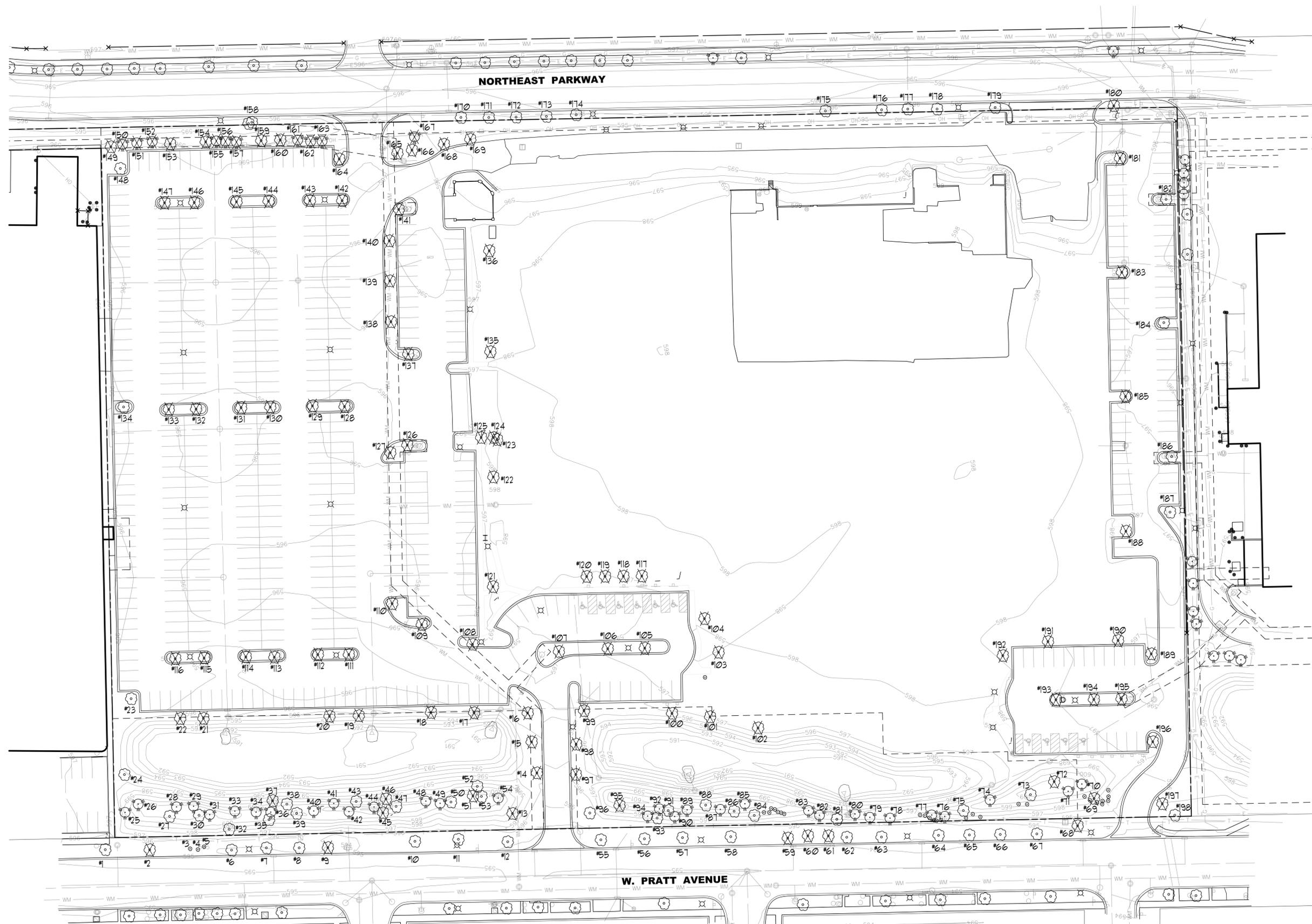


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① TREE SURVEY
SCALE: 1" = 40'-0"

⊗ TREES TO BE REMOVED

Revisions

- 8.
- 7.
- 6.
- 5.
- 4.
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- 2.

1. ISSUED VILLAGE SUBMITTAL 09/11/15

Project

**SENIOR
HOUSING
DEVELOPMENT**

3400 W. PRATT AVENUE
LINCOLNWOOD, ILLINOIS

Sheet Title

TREE SURVEY

Date

09/11/15

Project No.

DWP 15-142

Scale

1" = 40'-0"

Sheet No.

Drawn By

EB

LT-1.0

Approved

WS

TREE SURVEY

TREE NO.	SPECIES	SIZE	CONDITION
#1	HONEYLOCUST	22 CAL.	GOOD
#2	OAK	2" CAL.	POOR, REMOVE
#3	SERVICEBERRY	7' HT.	GOOD
#4	SERVICEBERRY	7' HT.	GOOD
#5	SERVICEBERRY	7' HT.	GOOD
#6	OAK	4" CAL.	GOOD
#7	OAK	4" CAL.	GOOD
#8	OAK	4" CAL.	GOOD
#9	OAK	4" CAL.	POOR, REMOVE
#10	OAK	4" CAL.	GOOD
#11	OAK	4" CAL.	GOOD
#12	OAK	4" CAL.	FAIR
#13	SERVICEBERRY	14' HT.	POOR, REMOVE
#14	LINDEN	10" CAL.	GOOD, REMOVE
#15	LINDEN	10" CAL.	GOOD, REMOVE
#16	LINDEN	10" CAL.	GOOD, REMOVE
#17	ASH	10" CAL.	GOOD, REMOVE
#18	ASH	10" CAL.	GOOD, REMOVE
#19	MAPLE	6" CAL.	GOOD, REMOVE
#20	MAPLE	6" CAL.	GOOD, REMOVE
#21	MAPLE	6" CAL.	GOOD, REMOVE
#22	MAPLE	6" CAL.	GOOD, REMOVE
#23	HONEYLOCUST	10" CAL.	GOOD
#24	OAK	8" CAL.	GOOD
#25	SPRUCE	12" CAL.	GOOD
#26	SPRUCE	12" CAL.	GOOD
#27	ELM	MULTI, 15' HT.	GOOD
#28	FIR	10" CAL.	GOOD
#29	FIR	10" CAL.	GOOD
#30	CRABAPPLE	8' HT.	GOOD
#31	FIR	10" CAL.	GOOD
#32	ASH	8" CAL.	GOOD, REMOVE
#33	FIR	8" CAL.	GOOD
#34	FIR	8" CAL.	GOOD
#35	HAWTHORN	4" CAL.	GOOD
#36	FIR	8" CAL.	GOOD
#37	ASH	6" CAL.	GOOD, REMOVE
#38	HAWTHORN	4" CAL.	GOOD
#39	HAWTHORN	4" CAL.	GOOD
#40	SPRUCE	14" CAL.	GOOD
#41	SPRUCE	12" CAL.	GOOD
#42	SPRUCE	12" CAL.	GOOD
#43	OAK	4" CAL.	GOOD
#44	SPRUCE	10" CAL.	GOOD
#45	CRABAPPLE	8' HT.	POOR
#46	ASH	4" CAL.	GOOD, REMOVE
#47	CRABAPPLE	8' HT.	GOOD
#48	FIR	8" CAL.	GOOD
#49	FIR	10" CAL.	GOOD
#50	HAWTHORN	4" CAL.	GOOD

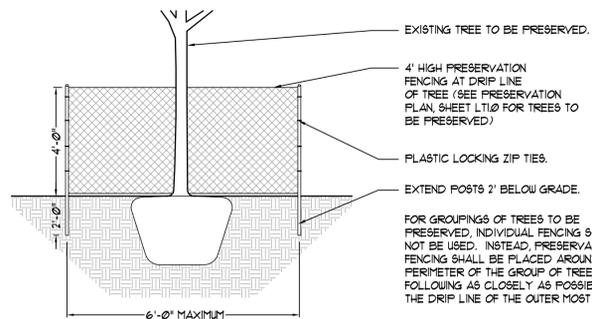
TREE NO.	SPECIES	SIZE	CONDITION
#51	MULBERRY	6" CAL.	REMOVE
#52	MAPLE	8" CAL.	GOOD
#53	BLACK CHERRY	4" CAL.	GOOD
#54	FIR	10" CAL.	GOOD
#55	OAK	2" CAL.	GOOD
#56	LARCH	2" CAL.	GOOD
#57	LARCH	2" CAL.	GOOD
#58	ELM	2" CAL.	GOOD
#59	DEAD	2" CAL.	DEAD, REMOVE
#60	DEAD	2" CAL.	DEAD, REMOVE
#61	DEAD	2" CAL.	DEAD, REMOVE
#62	OAK	2" CAL.	GOOD
#63	OAK	2" CAL.	GOOD
#64	ELM	2" CAL.	GOOD
#65	ELM	2" CAL.	GOOD
#66	COFFEE TREE	2" CAL.	GOOD
#67	OAK	2" CAL.	GOOD
#68	TUPELO	2" CAL.	GOOD, REMOVE
#69	SERVICEBERRY	15' HT.	GOOD, REMOVE
#70	FIR	12" CAL.	GOOD
#71	SPRUCE	12" CAL.	GOOD
#72	ASH	12" CAL.	GOOD, REMOVE
#73	ASH	12" CAL.	GOOD, REMOVE
#74	SPRUCE	12" CAL.	GOOD
#75	HAWTHORN	4" CAL.	GOOD
#76	FIR	8" CAL.	GOOD
#77	FIR	8" CAL.	GOOD
#78	FIR	8" CAL.	GOOD
#79	FIR	8" CAL.	GOOD
#80	FIR	8" CAL.	GOOD
#81	OAK	10" CAL.	GOOD
#82	SPRUCE	10" CAL.	GOOD
#83	SPRUCE	10" CAL.	GOOD
#84	CRABAPPLE	15' HT.	GOOD
#85	SPRUCE	10" CAL.	GOOD
#86	CRABAPPLE	15' HT.	GOOD
#87	SPRUCE	10" CAL.	GOOD
#88	MAPLE	8" CAL.	GOOD
#89	FIR	12" CAL.	GOOD
#90	FIR	12" CAL.	GOOD
#91	HAWTHORN	2" CAL.	GOOD
#92	SPRUCE	10" CAL.	GOOD
#93	HAWTHORN	2" CAL.	GOOD
#94	SPRUCE	10" CAL.	GOOD
#95	ASH	10" CAL.	GOOD, REMOVE
#96	MAPLE	16" CAL.	GOOD
#97	LINDEN	10" CAL.	GOOD, REMOVE
#98	LINDEN	10" CAL.	GOOD, REMOVE
#99	LINDEN	10" CAL.	GOOD, REMOVE
#100	MAPLE	6" CAL.	GOOD, REMOVE

TREE NO.	SPECIES	SIZE	CONDITION
#101	MULBERRY	MULTI, 18' HT.	REMOVE
#102	MIX	OVERGROWN	REMOVE
#103	MAPLE	MULTI, 20' HT.	POOR, REMOVE
#104	MAPLE	MULTI, 20' HT.	POOR, REMOVE
#105	KATSURA	MULTI, 15' HT.	GOOD, REMOVE
#106	KATSURA	MULTI, 15' HT.	GOOD, REMOVE
#107	KATSURA	MULTI, 15' HT.	GOOD, REMOVE
#108	HONEYLOCUST	4" CAL.	GOOD, REMOVE
#109	HONEYLOCUST	6" CAL.	GOOD, REMOVE
#110	HONEYLOCUST	6" CAL.	GOOD, REMOVE
#111	HONEYLOCUST	4" CAL.	GOOD, REMOVE
#112	HONEYLOCUST	4" CAL.	GOOD, REMOVE
#113	HONEYLOCUST	4" CAL.	GOOD, REMOVE
#114	HONEYLOCUST	4" CAL.	GOOD, REMOVE
#115	HONEYLOCUST	4" CAL.	GOOD, REMOVE
#116	HONEYLOCUST	4" CAL.	FAIR, REMOVE
#117	SERVICEBERRY	MULTI, 10' HT.	GOOD, REMOVE
#118	SERVICEBERRY	MULTI, 10' HT.	FAIR, REMOVE
#119	SERVICEBERRY	MULTI, 10' HT.	GOOD, REMOVE
#120	SERVICEBERRY	MULTI, 10' HT.	GOOD, REMOVE
#121	HONEYLOCUST	10" CAL.	GOOD, REMOVE
#122	HONEYLOCUST	10" CAL.	GOOD, REMOVE
#123	SERVICEBERRY	MULTI, 8' HT.	POOR, REMOVE
#124	ELM	6" CAL.	POOR, REMOVE
#125	ELM	4" CAL.	GOOD, REMOVE
#126	HONEYLOCUST	6" CAL.	GOOD, REMOVE
#127	HONEYLOCUST	6" CAL.	GOOD, REMOVE
#128	HONEYLOCUST	6" CAL.	GOOD, REMOVE
#129	HONEYLOCUST	6" CAL.	GOOD, REMOVE
#130	HONEYLOCUST	6" CAL.	GOOD, REMOVE
#131	HONEYLOCUST	6" CAL.	GOOD, REMOVE
#132	HONEYLOCUST	6" CAL.	GOOD, REMOVE
#133	HONEYLOCUST	4" CAL.	DEAD, REMOVE
#134	HONEYLOCUST	6" CAL.	GOOD
#135	HAWTHORN	MULTI, 15' HT.	GOOD, REMOVE
#136	HAWTHORN	MULTI, 15' HT.	GOOD, REMOVE
#137	HONEYLOCUST	8" CAL.	GOOD, REMOVE
#138	HONEYLOCUST	10" CAL.	GOOD, REMOVE
#139	HONEYLOCUST	10" CAL.	GOOD, REMOVE
#140	HONEYLOCUST	10" CAL.	GOOD, REMOVE
#141	HONEYLOCUST	10" CAL.	GOOD, REMOVE
#142	HONEYLOCUST	6" CAL.	DEAD, REMOVE
#143	HONEYLOCUST	6" CAL.	DEAD, REMOVE
#144	HONEYLOCUST	6" CAL.	FAIR, REMOVE
#145	HONEYLOCUST	8" CAL.	GOOD, REMOVE
#146	HONEYLOCUST	10" CAL.	FAIR, REMOVE
#147	HONEYLOCUST	10" CAL.	GOOD, REMOVE
#148	HONEYLOCUST	10" CAL.	GOOD
#149	ASH	10" CAL.	GOOD, REMOVE
#150	SPRUCE	12" CAL.	GOOD, REMOVE

TREE NO.	SPECIES	SIZE	CONDITION
#151	SPRUCE	12" CAL.	GOOD, REMOVE
#152	SPRUCE	12" CAL.	GOOD, REMOVE
#153	MAPLE	6" CAL.	GOOD, REMOVE
#154	MAPLE	5" CAL.	GOOD, REMOVE
#155	SPRUCE	10" CAL.	GOOD, REMOVE
#156	SPRUCE	10" CAL.	GOOD, REMOVE
#157	SPRUCE	8" CAL.	GOOD, REMOVE
#158	COTTONWOOD	20 & 15" CAL.	GOOD
#159	ASH	12" CAL.	GOOD, REMOVE
#160	ASH	6" CAL.	POOR, REMOVE
#161	SPRUCE	12" CAL.	GOOD, REMOVE
#162	SPRUCE	12" CAL.	GOOD, REMOVE
#163	SPRUCE	10" CAL.	GOOD, REMOVE
#164	MAPLE	6" CAL.	FAIR, REMOVE
#165	SERVICEBERRY	MULTI, 10' HT.	GOOD, REMOVE
#166	SERVICEBERRY	MULTI, 10' HT.	GOOD, REMOVE
#167	SPRUCE	6" CAL.	GOOD, REMOVE
#168	ASH	10" CAL.	GOOD, REMOVE
#169	ASH	10" CAL.	GOOD, REMOVE
#170	HACKBERRY	6" CAL.	GOOD
#171	HACKBERRY	6" CAL.	GOOD
#172	HACKBERRY	6" CAL.	GOOD
#173	HACKBERRY	4" CAL.	GOOD
#174	HACKBERRY	6" CAL.	GOOD
#175	HACKBERRY	6" CAL.	GOOD
#176	HACKBERRY	6" CAL.	GOOD
#177	HACKBERRY	6" CAL.	GOOD
#178	HACKBERRY	6" CAL.	GOOD
#179	HACKBERRY	6" CAL.	GOOD
#180	HACKBERRY	6" CAL.	GOOD, REMOVE
#181	HONEYLOCUST	12" CAL.	GOOD, REMOVE
#182	HONEYLOCUST	12" CAL.	GOOD
#183	HONEYLOCUST	12" CAL.	GOOD, REMOVE
#184	HONEYLOCUST	12" CAL.	GOOD
#185	HONEYLOCUST	6" CAL.	GOOD, REMOVE
#186	HONEYLOCUST	14" CAL.	GOOD
#187	HONEYLOCUST	12" CAL.	GOOD
#188	HONEYLOCUST	10" CAL.	GOOD, REMOVE
#189	MAPLE	4" CAL.	FAIR, REMOVE
#190	MULBERRY	MULTI, 12' HT.	REMOVE
#191	MULBERRY	MULTI, 12' HT.	REMOVE
#192	HONEYLOCUST	24" CAL.	POOR, REMOVE
#193	LINDEN	5" CAL.	GOOD, REMOVE
#194	LINDEN	5" CAL.	GOOD, REMOVE
#195	LINDEN	5" CAL.	GOOD, REMOVE
#196	MAPLE	4" CAL.	FAIR, REMOVE
#197	TUPELO	2" CAL.	GOOD, REMOVE
#198	TUPELO	2" CAL.	GOOD

NOTE: TRIM ANY DEAD GROWTH OUT OF EXISTING TREES TO REMAIN.

FENCING SHALL BE LOCATED AS SHOWN ON THE TREE PRESERVATION PLAN (LT10). FENCE SHALL BE PLACED SO THAT THE POSTS FACE THE TREE. AFTER INSTALLING ALL POSTS, TIGHTLY WRAP THE FABRIC ACROSS THE POSTS TO PREVENT SAGGING. POSTS SHALL BE PLACED A MAXIMUM OF 6' ON CENTER. SAFETY FENCE FABRIC SHALL BE ORANGE CONTRACTOR'S GRADE SMOOTH TOP DIAMOND PLASTIC FENCE. POSTS SHALL BE 6" LONG HEAVY DUTY GALVANIZED STEEL T-POSTS, SET TO A DEPTH OF 2' BELOW GRADE. POST SHALL NOT BE DRIVEN INTO EXISTING ROOTS. LOCKING TIES SHALL BE 8" PLASTIC LOCKING ZIP TIES, 4 PER POST. ANY ALTERATIONS TO THE FENCING LAYOUT MUST BE APPROVED BY LANDSCAPE ARCHITECT.



1 TREE PRESERVATION DETAIL - SNOW MESH FENCING
NOT TO SCALE

TREE PROTECTION NOTES

- ALL EXISTING TREE LOCATIONS AND SIZES ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL FIELD CONDITIONS, PRIOR TO THE START OF CONSTRUCTION.
- ALL TREES TO REMAIN AS NOTED ON THE DRAWINGS ARE TO BE ENCLOSED WITH A TREE PROTECTION FENCE, PRIOR TO THE START OF CONSTRUCTION. THE FENCE SHALL CONSIST OF 4' TALL ORANGE PLASTIC FENCE WITH METAL POSTS SPACED NO FURTHER THAN 6' APART. THE FENCE IS TO BE LOCATED UNDER THE OUTER EDGES OF THE TREE'S CANOPY, BUT NO CLOSER THAN 5' AWAY FROM THE TREE'S TRUNK. LANDSCAPE ARCHITECT TO APPROVE FENCE LOCATION.
- NO MATERIALS OR VEHICLES SHALL BE STORED, DRIVEN OR PARKED WITHIN TREE PROTECTION FENCING.
- ALL GRADING, CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE FORBIDDEN FROM ENCRDACHING WITHIN THE TREE PROTECTION FENCING.
- CRUSHED LIMESTONE OR ANY MATERIALS THAT MAY BE DETRIMENTAL TO TREES SHALL NOT BE DUMPED WITHIN THE TREE PROTECTION FENCING NOR SHALL THEY BE LOCATED AT ANY HIGHER ELEVATION WHERE DRAINAGE TOWARD THE TREE(S) COULD CONCEIVABLY AFFECT THE HEALTH OF SAID TREE(S).
- IF IT IS THE CONTRACTOR'S OPINION THAT ANY OF THE TREES TO BE PRESERVED WILL BE NEGATIVELY AFFECTED DURING THE CONSTRUCTION PROCESS, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY.
- THE CONTRACTOR IS TO MAINTAIN THE PROTECTION FENCING THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS UNTIL NEW LANDSCAPING BEGINS AND THE LANDSCAPE ARCHITECT APPROVES REMOVAL OF THE FENCING.
- IF ROOTS OF A TREE TO REMAIN ARE EXPOSED, THE LANDSCAPE ARCHITECT IS TO BE CONTACTED AT ONCE.
- ALL TREES TO BE PRESERVED SHALL BE PRUNED TO REMOVE EXISTING DEAD WOOD TO COMPENSATE FOR ROOT LOSS DURING CONSTRUCTION BY A QUALIFIED ARBORIST WITH A MINIMUM 5 YEARS EXPERIENCE AT THE DIRECTION OF THE LANDSCAPE ARCHITECT.
- IF THE CONTRACTOR DAMAGES A TREE TO BE PROTECTED SO THAT IT DOES NOT SURVIVE HE SHALL BE RESPONSIBLE FOR REPLACING THE TREE IN KIND OR REPLACING IT WITH TREES ABOUT THE SAME NUMBER OF CALIPER INCHES (MEASURED 6" ABOVE THE GROUND). THE LANDSCAPE ARCHITECT IS TO APPROVE THE REPLACEMENT TREES.



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Revisions

8.

7.

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1. ISSUED VILLAGE SUBMITTAL 09/11/15

Project

SENIOR HOUSING DEVELOPMENT

3400 W. PRATT AVENUE
LINCOLNWOOD, ILLINOIS

Sheet Title

TREE SURVEY LIST & TREE PROTECTION DETAILS

Date 09/11/15

Project No. DWP 15-142

Scale NOT TO SCALE

Sheet No.

Drawn By EB

LT-2.0

Approved WS



Plan Commission Staff Report

Case #PC-13-15

October 14, 2015

Subject Property: Text Amendment Consideration Applicable to B-1, B-2, B-3, O, and MB Districts

Requested Action: Text Amendment to Article VII Section 7.06(5) to consider parking in front and corner side yard of non-residential properties.

Petitioner: Village Board

Summary

Currently, the Zoning Ordinance permits open-air, off-street parking spaces in any yard except a front yard and a corner side yard (“front yard parking”). This requirement applies to all properties in Lincolnwood. The existing standard requires all newly constructed off-street parking spaces to be located to the side and rear of the principal structure on a lot.

This matter has been referred to the Plan Commission by the Village Board for consideration as it pertains to commercial property. This referral was prompted as the result of a Variation request by the owner of a dental practice at 7370 North Cicero Avenue. The dentist sought approval to expand an existing off-street parking lot into the front yard. The Zoning Board of Appeals unanimously recommended the Variation be denied. Subsequently, the Village Board directed the Plan Commission to review the prohibition of front yard parking.

Amending Section 7.06(5) would result in off-street parking located between the principal structure and a public street (either in a front yard or corner side yard). Many commercial properties have been developed previously with off-street parking located between the principal structure and the street. This existing condition is allowed as an existing legal non-conforming condition; however, all new/expanded parking lot construction cannot take place in the front yard or corner side yard unless a variation is granted.

Prior Review of Regulation

In October 2012, the Village Board considered a Variation request made by the property owner of 3837 West Sherwin Avenue to permit off-street parking in front of the existing single-family residence. The property owner received an interior remodel permit to convert the attached garage into living space. By converting the attached garage into living space, the driveway no longer led to an approved parking space and the driveway became an off-street parking space in a front yard.

The Zoning Board of Appeals forwarded the Village Board a negative recommendation on the requested Variation. The Village Board continued the requested Variation indefinitely and directed the Plan Commission to review the off-street parking location requirements.

At its January 9, 2013 meeting, the Plan Commission considered the matter of allowed locations of off-street parking spaces. The Plan Commission reviewed the regulation for both residential and non-residential properties; however, the focus was at that time on residential properties. Several Plan Commission members stated that the existing standard is appropriate as written and that no change is needed. The Plan Commission concluded that if unique situations merit consideration a Variation may be sought.

Research of Neighboring Communities

Staff reviewed the regulations of nine neighboring communities and found that only two communities, Glenview and Niles, permit parking in front yards in all zoning districts. Three communities (Skokie, Des Plaines, and Wilmette) allow parking in front yards within some zoning districts. In these communities, relief from the regulation is reviewed as a zoning Variation. Three communities (Evanston, Morton Grove, and Park Ridge) were found to prohibit front yard parking by various zoning regulations and relief from the standard is considered via a zoning Variation. Winnetka advised staff that all off-street parking in commercial districts require Special Use approval.

Recent Variation Requests

Below is a summary of recent variation requests concerning front yard parking and the outcome.

Property Address	Date of Action	Project Type	ZBA or PC	Approved/Denied
3400 W Pratt	10/14/2015	New Construction – Senior Housing	PC	PENDING
6733 N Lincoln	9/2/2015	New Construction - Mixed use development containing apartments, office, and retail space with parking.	PC	Recommended Approval 5-0 Pending Village Board
7370 N Cicero	6/17/2015	Parking Lot Expansion - Dental office	ZBA	Recommended Denial 7-0 VB Referred for Text Amendment
4007 W Touhy	3/20/2015	New Construction - Bank (The Private Bank)	ZBA	Recommended Approval 6-0 Village Board Concurred
7350 N Keeler	6/19/2013	Single-family Residential	ZBA	Recommended Denial 6-0 Village Board Concurred
6540 N Lincoln	1/16/2013	Existing Condition/Expansion - Medical office (IL Bone and Joint)	ZBA	Recommended Approval 6-0 Village Board Concurred
3837 Sherwin	9/12/2012	Single-family Residential	ZBA	Recommended Denial 5-0 Village Board Concurred

Considerations

Recently, improvements in the Village have occurred in creating designated on-street parking spaces on major roads such as Lincoln Avenue. The Village continues to review opportunities to better identify and improve the supply of on-street parking.

In administering the current off-street parking regulation prohibiting front yard parking, staff has not found that this prohibition has been an impediment to development. Projects such as Oberweis and Meatheads have been developed in compliance with this standard while other developments such as The Private Bank have sought and received Variations for their development.

The existing prohibition on front yard parking is one that can be categorized as a community aesthetic. The issue is whether or not it is appropriate for off-street parking spaces to be located between the public right-of-way and the principal structure. Front yard parking, especially absent any landscape screening, was considered one of the visual detriments of the Lincoln Avenue corridor by the Lincoln Avenue Task Force in its review of this corridor. To address this detriment, the Task Force recommended a number of measures including requiring a build-to line and placing parking at the rear of properties for new developments and encouraging the landscape screening of existing front yard parking located in the corridor.

Attachments:

1. Zoning Ordinance Section 7.06(5)

Close

Print Resize: 

Village of Lincolnwood, IL
Friday, October 9, 2015

Chapter 15. Zoning

Article VII. OFF-STREET PARKING AND LOADING

7.06. General standards for off-street parking facilities.

Off-street parking facilities shall be provided in accordance with regulations hereinafter set forth.

- (1) Use. Off-street parking facilities required herein listed shall be solely for the parking of automobiles of patrons, occupants, or employees. When bus transportation is provided for patrons, occupants or employees of a specific establishment, additional open or enclosed off-street parking spaces for each bus to be parked on the premises shall be provided in accordance with subsection 7.06(4) through (7) of this article.
- (2) Computation. When determination of the number of off-street parking spaces required by this Zoning Ordinance results in a requirement of a fractional space, any fraction of 1/2 or less may be disregarded while a fraction in excess of 1/2 shall be counted as one parking space.
- (3) Access. Each required off-street parking space shall open directly upon an aisle or driveway of such width and design as to provide safe and efficient means of vehicular access to such parking space. All off-street parking facilities shall be designed with appropriate means of vehicular access to a street or alley in a manner which will least interfere with traffic movement.
- (4) Handicapped accessible spaces. The minimum number and dimension of parking spaces set aside as handicapped spaces shall be provided in accordance with the standards of the of the Illinois Capitol Development Board, as set forth in Illinois Accessibility Code, dated April 24, 1997, as may be amended from time to time.
- (5) In yards. Open-air, off-street parking spaces, may be located in any yard except a front yard and a side yard abutting a street, subject however to the provisions herein.
- (6) Design and maintenance.
 - a. Open and enclosed parking spaces. Parking spaces may be open-air or enclosed in a building and shall be accessed by a private drive that meets the following minimum aisle width standards:

Table 7.06.01

Parking Angle	Width (feet)	Length (feet)	One-Way (feet)	Two-Way (feet)
Parallel	9	22	12	20
30°	9	19	12	20
45°	9	19	16	20
60°	9	18	19	20
90°	9	18	20	24
Compact	9	16	20	25