NOTICE OF THE
PLAN COMMISSION MEETING

The meeting of the Plan Commission is scheduled for
OCTOBER 21, 2021 beginning at **7:00** p.m.

A copy of the agenda for this meeting is attached hereto and
can be found at www.tinleypark.org.

NOTICE - MEETING MODIFICATION DUE TO COVID-19

As of June 11, 2021, Governor Pritzker moved Illinois to Phase 5. Under Phase 5, all sectors of the economy can resume at regular capacity with new safety guidelines and procedures. Pursuant to the Illinois Department of Commerce & Economic Opportunity's Guidelines, it is recommended that any individual appearing in-person wear a face-covering to cover their nose and mouth.

Meetings are open to the public, but members of the public may continue to submit their public comments or requests to speak telephonically in advance of the meeting to clerksoffice@tinleypark.org or place requests in the Drop Box at the Village Hall by noon on October 21, 2021. Please note, written comments will not be read aloud during the meeting. A copy of the Village's Temporary Public Participation Rules & Procedures is attached to this Notice.

Kristin A. Thirion
Clerk
Village of Tinley Park

VILLAGE OF TINLEY PARK
TEMPORARY PUBLIC PARTICIPATION RULES & PROCEDURES

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The Mayor of Tinley Park is issuing the following rules for all Village Board and other public meetings in order to promote social distancing as required by the aforementioned Executive Orders and the requirements of the Open Meetings Act:

Written Comments

After publication of the agenda, email comments to clerksoffice@tinleypark.org. When providing written comments to be included as public participation at a public meeting, clearly identify the following in the subject line:

- The date of the meeting;
- The type of meeting for the written comments (e.g. Village Board meeting, Zoning Board of Appeals meeting, Plan Commission meeting, etc.);
- Name and any other identifying information the participant wish to convey to the public body;
- The category of public participation (e.g., Receive Comments from the Public, Agenda Items, etc.);
- For specific Agenda Items, identify and include the specific agenda item number;
- The entire content of the comments will be subject to public release. The Village of Tinley Park is under no obligation to redact any information.

The contents of all comments will be provided to the relevant public body for their review. **Written comments will not be read aloud during the meeting. If you wish to publicly address the public body, you may request to participate via teleconference as described below.**

Comments must be submitted by 12:00 pm on the day of the meeting. However, it is strongly recommended that comments be emailed not less than twenty-four (24) hours prior to the meeting so the appropriate Board members, Commissioners, Board members, and Committee members have sufficient time to review the comments prior to the meeting.

Live Public Participation During Meeting

After publication of the agenda, those wishing to participate in a live telephone call option at a public meeting must register by 12:00 pm on the day of the meeting. A Village representative will call the participant at the relevant portion of the meeting and the participant will be allowed to participate telephonically at the meeting. To participate in a live telephone call during the meeting, a request shall be submitted by email to clerksoffice@tinleypark.org. The following information must be included the subject line:

- The date of the meeting;
- The type of meeting for the written comments (e.g. Village Board meeting, Zoning Board of Appeals meeting, Plan Commission meeting, etc.);
- Name and any other identifying information the participant wish to convey to the public body;
- The category of public participation (e.g., Receive Comments from the Public, Agenda Items, etc.); and
- For specific Agenda Items, identify and include the specific agenda item number.

If the participant provides an email address, they will receive a confirmation email that their request has been logged. If the participant provides an email address and does not receive a confirmation email, they may call (708) 444-5000 during regular business hours to confirm the application was received.

Upon successful registration, the participant's name will be placed on an internal Village list. On the date and during relevant portion of the meeting, the participant will be called by a Village representative. The Village representative will call the provided telephone number and allow the phone to ring not more than four (4) times. If the call is not answered within those four (4) rings, the call will be terminated and the Village representative will call the next participant on the list.

The public comment should be presented in a manner as if the participant is in attendance at the meeting. At the start of the call, the participant should provide their name and any other information the participant wishes to convey. For comments regarding Agenda Items, identify and include the specific agenda item number. The participant should try to address all comments to the public body as a whole and not to any member thereof. Repetitive comments are discouraged. The total comment time for any single participant is three (3) minutes. Further time up to an additional three (3) minutes may be granted by motion. A participant may not give his or her allotted minutes to another participant to increase that person's allotted time.

AGENDA FOR REGULAR MEETING
VILLAGE OF TINLEY PARK
PLAN COMMISSION

October 21, 2021 – 7:00 P.M.
Council Chambers
Village Hall – 16250 S. Oak Park Avenue

Regular Meeting Called to Order
Pledge of Allegiance
Roll Call Taken
Communications
Approval of Minutes: Minutes of the October 7, 2021 Regular Meeting

ITEM #1 PUBLIC HEARING – BROOKSIDE GLEN VILLAS (CRANA HOMES) RESIDENTIAL SUBDIVISION AND CONCEPT COMMERCIAL, 80TH AVENUE AND 191ST STREET REZONING, SPECIAL USE FOR A SUBSTANTIAL DEVIATION, PRELIMINARY/FINAL PLAT OF RESUBDIVISION

Consider recommending that the Village Board grant Frank Bradley, on behalf of Crana Homes, a Special Use for Preliminary Approval of a Substantial Deviation from the Brookside Glen Planned Unit Development (PUD) and Rezoning of a portion of the lot from B-3 (General Business and Commercial) to R-5 (Low-Density Residential) for property located at the southwest corner of 80th Avenue and 191st Street (8001 191st St.), in the Brookside Glen PUD. Preliminary Plat, Final Plat, and Preliminary Site Plan approvals are also being requested.

ITEM #2 PUBLIC HEARING – LOYOLA MEDICINE CLINIC, 17901 LAGRANGE ROAD REZONING, VARIATIONS, PRELIMINARY PLAT, AND SITE PLAN/ARCHITECTURE APPROVAL

Consider recommending that the Village Board grant Shawn Vincent on behalf of Loyola Medicine (Property Owner) a Map Amendment (rezoning) and Variations from the Zoning Code for two parcels that total approximately 26.6 acres at 17901 LaGrange Road (off of Chopin Drive and south of 179th Street). The parcels are proposed to be zoned ORI (Office & Restricted Industrial).

ITEM #3 WORKSHOP – TOBACCO AND NICOTINE-RELATED RETAIL – ZONING ORDINANCE TEXT AMENDMENT

Consider recommending that the Village Board adopt a proposed text amendment to the Tinley Park Zoning Ordinance amending Section II.B. (Definitions) and Section V.B. Schedule I (Schedule of Permitted Uses – By Use Type) regulating tobacco and nicotine-related uses.

Receive Comments from the Public
Good of the Order
Adjourn Meeting

MINUTES OF THE REGULAR MEETING OF THE PLAN COMMISSION, VILLAGE OF TINLEY PARK, COOK AND WILL COUNTIES, ILLINOIS

October 7, 2021

The meeting of the Plan Commission, Village of Tinley Park, Illinois, was held in the Council Chambers located in the Village Hall of Tinley Park, 16250 Oak Park Avenue, Tinley Park, IL on October 7, 2021.

CALL TO ORDER –CHAIRMAN GRAY called to order the Regular Meeting of the Plan Commission for October 7, 2021 at 7:01 p.m.

Lori Kosmatka called the roll.

Present and responding to roll call were the following:

James Gaskill
Angela Gatto
Frank Loscuito
Greg Maniatis
Acting Chairman Ken Shaw
Jennifer Vargas

Absent Plan Commissioners:	Chairman Garrett Gray Eduardo Mani Jennifer Vargas Kehla West
Village Officials and Staff:	Dan Ritter, Planning Manager Lori Kosmatka, Associate Planner
Petitioners:	Mark Kurensky, On behalf of Crana Homes Seth Konkey, On behalf of Loyola Medicine
Members of the Public:	None

COMMUNICATIONS – There were no communications from Village Staff.

APPROVAL OF MINUTES - Minutes of the September 2, 2021 Regular Meeting of the Plan Commission were presented for approval. A motion was made by COMMISSIONER GATTO, seconded by COMMISSIONER LOSCUITO to approve the September 2, 2021 minutes as presented. ACTING CHAIRMAN SHAW asked for a voice vote; all were in favor. He declared the motion carried.

Minutes of the July 8, 2021 Regular Meeting of the Zoning Board of Appeals were presented for approval. A motion was made by COMMISSIONER LOSCUITO, seconded by COMMISSIONER GASKILL to approve the July 8, 2021 minutes as presented. ACTING CHAIRMAN SHAW asked for a voice vote; all were in favor. He declared the motion carried.

TO: **VILLAGE OF TINLEY PARK PRESIDENT AND BOARD OF TRUSTEES**

FROM: **VILLAGE OF TINLEY PARK PLAN COMMISSION**

SUBJECT: **MINUTES OF THE OCTOBER 7, 2021 REGULAR MEETING**

ITEM #1 **WORKSHOP – BROOKSIDE GLEN VILLAS (CRANA HOMES) RESIDENTIAL SUBDIVISION AND CONCEPT COMMERCIAL, 80TH AVE AND 191ST ST REZONING, SPECIAL USE FOR A SUBSTANTIAL DEVIATION, PRELIMINARY/FINAL PLAT OF RESUBDIVISION**

Consider recommending that the Village Board grant Frank Bradley, on behalf of Crana Homes, a special use for Preliminary Approval of a Substantial Deviation from the Brookside Glen Planned Unit Development (PUD) and Rezoning of a portion of the lot from B-3 (General Business and Commercial) to R-5 (Low-Density Residential) for property located at the southwest corner of 80th Avenue and 191st Street (8001 191st St.), in the Brookside Glen PUD. Preliminary Plat, Final Plat, and Preliminary Site Plan approvals are also being requested.

Present Plan Commissioners:	James Gaskill Angela Gatto Frank Loscuito Greg Maniatis Acting Chairman Shaw
Absent Plan Commissioners:	Garrett Gray Eduardo Mani Jennifer Vargas Kehla West
Village Officials and Staff:	Kimberly Clarke, Director of Community Development Dan Ritter, Senior Planner Lori Kosmatka, Associate Planner
Petitioners:	Mark Kurensky, On behalf of Crana Homes
Members of the Public:	None

ACTING CHAIRMAN SHAW invited staff to start with the presentation of this item.

Dan Ritter, Planning Manager, summarized the Staff Report for the Commission. He noted this item came before the Commission last November for its Conceptual phase. He noted the location is the southwest corner of 191st and 80th Avenue, and east of the Magnuson apartments under construction. He provided an overview of the PUD process as three steps. The proposal is currently in the Preliminary phase. Final approvals will be in substantial conformance with what is being seen today. He reviewed the zoning including R-5 and R-6 to the west, and unincorporated county zoning to the north, B-3 to the east and ORI to the northeast. It is within the Urban Design Overlay District. The UDOD is geared toward denser, walkable development, but typically is provided for commercial development. The commercial proposal is still in the Conceptual phase. This PUD has been amended a few times in response to market demand. The area was originally larger commercial vision with big box, but market demands have now changed. Big box retailers have a large radius, and this area is between Orland Tinley and New Lenox corridors. Brookside Marketplace also serves as competition. The development now has 98 duplex units but has same layout as previously proposed. The commercial area is L shaped and would be ideally walkable from the Brookside Glen homes. The commercial percentage would be about 23%. He noted Preliminary approvals try to identify Exceptions (similar to variations but with respect to the PUD's vision and goals). Landscaping includes a perimeter buffer with the layout being internal. None of the units front the major roads. The proposed landscaping appears to generally meet the intent

of the code. Additional landscaping will be provided around the signage. The main shortage are for shrubs but there are additional understory trees substituted which are easier to maintain and provide a more vibrant look. Aluminum black fencing surrounds the development. Staff proposed the north side of the duplexes abutting the commercial area have a privacy style fence. The development is geared in mind toward empty nesters and younger families so a tot lot park will be ideal for young children and grandchildren. In the Final review the tot lot park will have a more finalized design per what the park district wants to see. Eventually it will go to the park district. There will be trhee overall types of design and models. The duplexes will be similar but not the same in order to achieve a varied streetscape. The proposal will meet the Village masonry requirements and will have a traditional design with high quality materials like Hardiboard. There will be two signs at Greenway and 80th Avenue. There will be two plats, one to rezone and a preliminary plat which lays out the basic framework. This currently does not include easements or drainage. More details will be provided on the Final review. The CC & Rs will be drafted now and forthcoming. It will be part of the PUD documents. Limitations on accessory structures will be identified. The CC & Rs cannot be less restrictive in the future unless the HOA comes for a deviation.

ACTING CHAIRMAN SHAW invited the Commissioners for comments.

COMMISSIONER LOSCUITO commented it is a very good-looking project, and that the Village doesn't have many duplexes. He asked if there would be access off 80th Avenue to the residential part.

Dan Ritter responded yes, it will be shared access with commercial because the development can only get one full access along 80th Avenue. Limited access points help avoid traffic issues. He noted the final plat will have a cross access easement for the one access point. Either commercial or residential development would be able to use the one access point.

COMMISSIONER GASKILL had no comment.

COMMISSIONER GATTO asked if a parking/traffic study had been done at the previous consideration with the Village.

Dan Ritter responded he did not believe so, because going to the residences was less than the previous commercial approval as B-3. Access points were worked through with engineering and planning before it came to the conceptual level. Originally, they had more access point on Greenway which were then consolidated.

COMMISSIONER GATTO recalled that residents came and talked about people cutting through the development.

Dan Ritter noted that if it were rush hour, it might make sense, but it would be a longer route and a slower drive. The cut through would likely just be the Magnuson and Greenway streets and not the residential areas. It would act like a through-street and shouldn't get major traffic increases. It would probably worse if it was commercial there.

Kimberly Clarke, Community Development Director, agreed that it would be difficult to stop people from going through if they already know about it.

ACTING CHAIRMAN SHAW asked what the concern was about a pass through, if it was coming off 191st Eastbound and through 80th southbound.

Dan Ritter responded yes, and that he wasn't aware of a major issue with the light. If emergency vehicles were coming through it could take up to 20 or 30 minutes to cycle through to catch back up.

ACTING CHAIRMAN SHAW asked if this currently is an issue with traffic coming down Magnuson.

Dan Ritter noted he believed it was construction traffic that came up as an issue on Magnuson, but it was more a thought of what the residents didn't want. He was not aware of this being a current problem.

ACTING CHAIRMAN SHAW wanted to know what the concern was to the point about the change in zoning similar to the question about the traffic study. If anything, he believed it would be a reduction.

Dan Ritter noted this would be downzoning from a traffic standpoint.

COMMISSIONER GATTO noted it looks great and feels it would be great for that corner. She feels there is a high demand and is a great option for seniors becoming empty nesters living in a 2-story option.

COMMISSIONER MANIATIS had no comment.

ACTING CHAIRMAN SHAW noted his primary concern was the mix of going from 100% commercial to the current proposal indicates a loss of commercial. He believes the remaining uses would be fast food, convenience store, and bank that was indicated on the corner. He felt realistically it would more likely be a gas station on the corner. What is left for commercial seems small. He didn't know the history of the discussions, but believes the commercial space in the initial proposal was smaller, and was increased by request of the Village.

Dan Ritter noted that worked with the access point. Originally it was just along 191st, but it was expanded to wrap around the corner because the corner has the high visibility. The access point had to be far from the corner anyways.

ACTING CHAIRMAN SHAW said that makes for a more attractive development.

Dan Ritter noted that the petitioner's team can explain the market more. They have shared this information before. There hasn't been an interest in bigger developments. He knew that grocery stores were what we wanted to see in this area. There is still a lot of other commercially zoned lots available in this area though. There hasn't been too much interest for a large-scale grocery store.

ACTING CHAIRMAN SHAW noted once it's built it's likely not going to be redone. He acknowledged that there was previously comments from the community, and asked if there were any new comments on this submittal.

Dan Ritter responded that the Village hasn't received any comment yet. The notice that did go out directs the public to the upcoming public hearing. The tot lot park and traffic were the issues centered on.

ACTING CHAIRMAN SHAW noted with respect to the tot lot, that at the 80th Avenue entry there were pathways. He wondered what path people would take such as from the townhomes. He asked if a similar pathway was considered to go straight to the park. He noted Bristol Park has a path that goes straight to the train station. A path to the tot lot would be nice.

Dan Ritter clarified that the area would be from south going up where the bend is located. He could pose this to the petitioner.

ACTING CHAIRMAN SHAW noted there are a couple entryways there. To the south it's two U-shaped roadways. He suggested aligning with one of those to have a crosswalk. He's seen tot lots in other neighborhoods where people drive there.

Dan Ritter responded he would ask the petitioner to look at this as a possible 5- or 6-foot easement.

Mark Kurensky with HKM Architects & Planners introduced himself and spoke on behalf of the petitioner. He addressed the tot lots. This will be a public right of way with sidewalks on both sides. The entrance on Greenway aligns with the residential to the south, so if someone in the townhomes to the south they would come up that entrance and cut a half block over to the tot lot. He looked at putting an additional path in, but felt that those living next to it may not want it. He pointed out the paths currently proposed have more than 5- or 6-feet space such as the one to the north towards 80th Avenue. This path allows residents to access the commercial stores. In regards to the path to the tot lot, there is limited space and the petitioner doesn't feel it is warranted because of the sidewalk. He also noted that it would be preferable to have people cross where there is a four-way intersection because it's safer. He addressed the retail. They did not work from the south up. The petitioner had asked the architect what was viable. The architect had then put in realistic footprints of retail products and then fit residential. They are trying to create as much incentive and realistic layout to encourage retail to come.

ACTING CHAIRMAN SHAW asked that if the residential comes first, the entryway on 80th Avenue would be a 90 degree turn.

Dan Ritter responded that they will have to work it out on the final engineering plans, but yes, it would be a 90 degree turn and not stub it.

ACTING CHAIRMAN SHAW noted at the previous consideration there was discussion about housing mix. He asked if this information would be available in the meeting minutes.

Dan Ritter responded yes, and that the minutes were not in the current staff packet.

ACTING CHAIRMAN SHAW noted the south entrance on Magnuson aligns with an existing entry to make an intersection, but the one at the northwest corner doesn't really align up with the entryway to the future apartments. It appears to be offset. He asked if this placement of the roads was discussed in regards to alignment, traffic going through, and sight lines. He felt that exiting the development at the northwest point going left may be eventually blinded by landscaping.

Mark Kurensky responded yes. Not much traffic will go out of either development. When you look at the alignment of the residential access of Magnuson, it is at the longest section of the straightaway, centrally located. The retail is on the outside curve which is safer. The south entrance aligns with the southbound entrance. They looked at this with the safest locations in mind. They would be happy to work on the tree placement so a trunk wouldn't block visibility.

Dan Ritter noted that in final engineering plans the details like sight lines are figured out.

ACTING CHAIRMAN SHAW noted he was happy to hear that his concerns were already discussed and though about. He echoed other comments that it looks like a well done development. He would like to read up more on the housing mix. It seems like it will fill a need in the Village.

Dan Ritter noted this type of housing works as a good transitioned buffer from commercial. Crana Homes typically builds more traditional style of single-family detached homes.

ACTING CHAIRMAN SHAW noted with respect to the neighboring Brookside Glen Magnuson apartments that if this were a massive retail development, then the concerns would be more likely. This does create a nicer transition, softening the impact.

Dan Ritter noted the majority of residents would be on that roadway. If this was commercial, then there would be more outside traffic on that residential street.

ACTING CHAIRMAN SHAW asked if there is any action on this item tonight.

Dan Ritter responded no, that this is just a workshop.

ACTING CHAIRMAN SHAW asked if there were any additional comments from the commissioners. Hearing none, he confirmed with Dan Ritter that this was enough information.

Dan Ritter stated that the public hearing is in two weeks on October 21st.

TO: **VILLAGE OF TINLEY PARK PRESIDENT AND BOARD OF TRUSTEES**

FROM: **VILLAGE OF TINLEY PARK PLAN COMMISSION**

SUBJECT: **MINUTES OF THE OCTOBER 7, 2021 REGULAR MEETING**

ITEM #2 **WORKSHOP – LOYOLA MEDICINE CLINIC, 17901 LAGRANGE ROAD REZONING, VARIATIONS, PRELIMINARY PLAT, AND SITE PLAN/ARCHITECTURE APPROVAL**

Consider recommending that the Village Board grant Shawn Vincent on behalf of Loyola Medicine (Property Owner) a Map Amendment (rezoning) and Variations from the Zoning Code for two parcels that total approximately 26.6 acres at 17901 LaGrange Road (off of Chopin Drive and south of 179th Street). The parcels are proposed to be zoned ORI (Office & Restricted Industrial).

Present Plan Commissioners:	James Gaskill Angela Gatto Frank Loscuito Greg Maniatis Acting Chairman Shaw
Absent Plan Commissioners:	Garrett Gray Eduardo Mani Jennifer Vargas Kehla West
Village Officials and Staff:	Kimberly Clarke, Director of Community Development Dan Ritter, Senior Planner Lori Kosmatka, Associate Planner
Petitioners:	Seth Konkey, on behalf of Loyola Medicine
Members of the Public:	None

ACTING CHAIRMAN SHAW invited staff to start with the presentation of this item.

Dan Ritter, Senior Planner, summarized the Staff Report for the Commission. This included background information, existing conditions, regulations, the development proposal, and the relief sought. It is located in an area with existing medical facilities nearby. The site contains two parcels and has a vacant right-of-way on the former 96th Avenue to the west, which previously underwent a jurisdictional transfer to the Village. He noted the site and surrounding area currently lack utilities, and would include future utility extensions as part of Loyola's agreements. The area is zoned a mix of B-3 and ORI. The proposed use is for a 72,000 sq ft outpatient medical facility comprised of an ambulatory medical clinic for primary care and a cancer care center with infusion rooms. The facility will include exam rooms, CT and linear accelerator suites. The use will expand Loyola Medicine to the larger southwest suburban area and will complement the existing medical uses along the La Grange corridor. He presented the site plan. He noted several aspects including the building orientation, landscaping, parking, access points and walkways. A crosswalk could potentially be added to cross 179th Street. It was recommended to remove the stub to La Grange Road unless approved by IDOT. The stub otherwise could be a hazard. The proposal provides stormwater detention and wetland mitigation. The site requires MWRD approval and is just for the Loyola Medicine development. Additional land could be available for detention if needed, at the southeast part of the site. He noted that the property is subject to the Urban Design Overlay District regulations. The site would require a variation to the UDOD's curb cuts and setbacks. Landscaping includes the existing wetland in the area. They have a significant bufferyard and a berm on La Grange that they are planning to plant on. This will make it attractive for those travelling on La Grange Road as well as for the patients receiving treatment. He noted the plan does need additional bufferyard plantings and potentially parking landscape

islands. They may need to make some adjustments and may need to clarify their waiver requests for the public hearing. The architecture is subject to Village masonry standards of 60%. The proposal originally began with predominantly precast concrete and now has added face brick for a more balanced look. A variance would still be required. Signage will include three ground signs and three wall signs thus requiring a variation on quantity and size, but more detail is needed. Directional signs will also be needed. A parking variation is also requested. Lighting information was not provided. He reviewed the approvals needed for the project. He noted the project requires Rezoning, Variations, Preliminary Plat, Site Plan and Architectural approvals.

COMMISSIONER MANIATIS had no comment.

COMMISSIONER GATTO noted that 179th Street is busy and has only two lanes. She asked if there are any plans to expand.

Kimberly Clarke, Community Development Director, responded that it is solely in their discretion. There is right-of-way there. The County might require signalization.

COMMISSIONER GATTO noted she doesn't have any concern with the parking, and that the plan looks great even if it is a low percentage of brick.

COMMISSIONER GASKILL had no questions.

COMMISSIONER LOSCUITO followed upon COMMISSIONER GATTO'S comment regarding the traffic. His concern is regarding the main entry on Chopin. He asked if there is a traffic issue would a light go in off 179th.

Kimberly Clarke responded it could and that staff would encourage directional signage. There could be a light potentially if an issue triggers or warrants it.

Dan Ritter noted if it is warranted then spacing between the lights need to be considered. They need to be tied together to avoid backup issues.

COMMISSIONER LOSCUITO noted there's no guarantee they'll have access off La Grange or 179th. He asked if Chopin would be the main access.

Dan Ritter responded yes.

COMMISSIONER LOSCUITO commented that this facility looks great and will appear to fit in with the area. He would like to see if the crosswalk could be added across La Grange avenue on the south side.

Dan Ritter responded it would be on the east side of LaGrange going over 179th to the commercial businesses there.

COMMISSIONER LOSCUITO clarified it would be like an "L" crossing 179th. He commented that parking is not a problem to him. Calculating parking needs is more of an art than a science.

ACTING CHAIRMAN SHAW commented he also did not have concerns about the parking. He believes our parking standards are high to begin with. He feels the façade looks well thought-out, and this will be a good development. It will further spur development given the infrastructure. The 179th entrance eastbound is only one way. He asked if that is a county requirement.

Dan Ritter responded that the thought is that it wouldn't be permitted there. They are going with what they know they can potentially get.

The petitioner's representative Seth Konkey noted they may only get a right in/right out.

ACTING CHAIRMAN SHAW noted there is a steep long curve. A left turn would be difficult. He asked if the right of way still exists for the old LaGrange Road.

Kimberly Clarke responded that the IDOT right-of-way is deteriorated. We have the right to use it for roadway purposes, but it's technically under the IDOT ownership. She noted this was how Eagle Drive got developed and

serviced. It cut out IDOT's permitting process by the Village controlling and managing it. She clarified that no structures can be on this right-of-way land.

ACTING CHAIRMAN SHAW noted he is trying to envision the La Grange entry but it doesn't seem practical.

Kimberly Clarke responded that in theory they could take the old 96th Ave right of way and go south to T into 183rd street where that intersection would be established. She confirmed they also own the small triangular parcel.

ACTING CHAIRMAN SHAW noted the ground signs are fixed and that they are not electronic.

Kimberly Clarke responded that they are not shown as LED signs. She commented that Seth, Julie and the Loyola have been exceptional. The team stepped up, partnered with us with a fantastic plan that will service the community as a whole. She thanked them. They are professional and listed to staff, and came through with the renderings of the brick. The Village doesn't always get to work with top notch folks.

ACTING CHAIRMAN SHAW noted he was impressed with the speed and thoroughness of this proposal.

Seth Konkey, representing the petitioner, spoke. He thanked Kimberly, Dan, Colby, and the rest of the Village's development team. They were working with the Village multiple times a week to make sure we were working together and hearing each sides comments, concerns, and priorities. They have a large interest in the speed of this process to open the facility sooner than later. He echoed Kimberly's sentiments and feels the same way.

ACTING CHAIRMAN SHAW noted this is scheduled for the October 21st public hearing. He confirmed with Dan that staff has enough information to go on.

Dan Ritter responded yes, and that there may be more information available at the public hearing.

Kimberly Clarke asked the petitioner if there was anything else to add.

Seth Konkey responded no, and that the staff did a great job telling the story. There may be some additional work needed to address the landscaping. He noted that the proposal goes above and beyond in some areas and needs variance in other areas. He noted that the team wanted to put landscaping where it is impactful for patients. Patients in the cancer center are often being treated for four to six hours receiving infusion. The team feels the parking numbers make sense. They have tried to control the access on 179th the best they can, but are still subject to the Cook Department of Transportation. They are still trying to get access for La Grange Road. Access is important for patients. They need to see where they are going and to get in. The team did not have any specific questions at the moment. He thanked the Village for their time.

ACTING CHAIRMAN SHAW commented it sounded like a couple of the open items were closed already.

Seth Konkey handed Kimberly Clarke with some additional materials.

COMMENTS FROM THE PUBLIC –

ACTING CHAIRMAN SHAW asked if there were comments from the public. Hearing none, he asked for the Good of the Order.

GOOD OF THE ORDER –

Dan Ritter noted the Village Manager changed on Tuesday's Village Board meeting. Dave Niemeyer retired and Assistant Village Manager Pat Carr was promoted. Staff is excited for Dave to continue his career as an executive recruiter, but he will be missed. Pat Carr has been here for many years and is moving up from Assistant Village Manager. He also noted that he and Kimberly just returned today from the APA Illinois conference which was taking place over three days. For any Commissioner's interested there's usually a commissioner track, which could be budgeted for next year. Chairman Gray had previously expressed interest. He's hoping to have some kind of training for the whole team through the APA Illinois chapter soon with the newly combined group. It helps to have outside people walking through training. That training is through the Illinois APA. Avocado Theory is close to opening. They have some exterior work to do and are training the employees.

Kimberly Clarke noted Dan Ritter was officially promoted to Planning Manager. He stepped up to the role upon Paula Wallrich's retirement. Regarding the APA conference, she commented that Bloomington-Normal is an inspirational town transformed through long-term planning. She hopes Tinley Park could be similar someday if given the development we hope to achieve. We now have a popcorn place moving into The Boulevard and are having some good conversation with restaurants. The residential portion is 100% leased out. The team is looking for opportunities to build on their knowledge base. Staff has learned some interesting things at the conference particularly on the future of single-family housing and pedestrian/public realm. She asked that the commissioners let staff know as soon as possible if they can't make a meeting in advance so they can plan.

ACTING CHAIRMAN SHAW echoed the comments on Dave Niemeyer's retirement and the new role for Pat Carr. He feels The Boulevard exceeded expectations in how quickly and completely it leased out in the first phase. Having been a part of that process the first time around and given many of the community's concerns, he is very pleased the project came to fruition. Some of the concerns were that the units would not rent, but it is exceeding those expectations.

COMMISSIONER GATTO agreed. She noted that she was initially worried because she has seen what has happened with other developments in surrounding areas. Being leased out 100% is amazing.

ACTING CHAIRMAN SHAW feels that in our roles we should always have healthy skepticism. He noted that the new 7-Eleven is moving along well, and the old 7-Eleven closed. He asked staff if there was anything to note on that.

Kimberly Clarke responded she would like to reach out to the owner to see what their plans are. There are some other properties next to it for sale. It is a prime redevelopment opportunity. She'd like to work with the property owner to think bigger picture.

Dan Ritter clarified it is still being leased by 7-Eleven for a little bit, which is why staff wants to have those initial discussions so the owner will not sit on the property. He believes they will have a good conversation. It would be nice to see a convenience store again in that area whether there or somewhere else nearby. COMMISSIONER GATTO noted it was a busy 7-Eleven. The Harlem one will be in a busy area.

ACTING CHAIRMAN SHAW noted how many kids like to ride to a store. He feels the new location is a positive for the community. Dan Ritter noted that it was impressive how much was put in for two former single-family residential lots. A lot of planning was involved to make the circulation and traffic work well.

ACTING CHAIRMAN SHAW asked for additional comments. Hearing none, he asked to adjourn the meeting.

CLOSE MEETING -

A Motion was made by COMMISSIONER GATTO, seconded by COMMISSIONER GASKILL to adjourn the October 7, 2021 Plan Commission meeting.

ACTING CHAIRMAN SHAW asked for a voice vote; all were in favor. He declared the motion carried and adjourned the meeting at 8:54 P.M.

PLAN COMMISSION STAFF REPORT

October 21, 2021 – Public Hearing

Brookside Glen Villa's (Crana Homes) – Rezoning & Preliminary PUD

8001 191st Street (Southwest corner of 191st St and 80th Ave)

Petitioner
Frank Bradley, on behalf of Crana Homes

Property Location
8001 191st Street
(SW Corner of 191st St and Magnuson Ln)

PINs
19-09-11-200-014-0000

Zoning
Current: B-3
Proposed: R-5 and B-3

Approvals Sought
- Rezoning
- Special Use for Preliminary PUD Approval
- Site Plan Approval
- Preliminary and Final Plat Approval

Project Planner
Daniel Ritter, AICP
Planning Manager

EXECUTIVE SUMMARY

The Petitioner, Frank Bradley on behalf of Crana Homes, is a local builder and developer that has been involved with the development of Brookside Glen Planned Unit Development (PUD) since its creation in 1990. He has owned the ~31-acre parcel located at the southwest corner of 191st Street and 80th Avenue for over 30 years that is zoned B-3 (General Business and Commercial District). While it has been actively marketed for commercial development over that time period, there has been no viable commercial interest in the property.

In November 2020, Crana Homes approached the Village about splitting off a portion of the property for low-density two-family attached (duplex) housing. Mr. Bradley feels there is a strong market for this type of housing that has not been provided in the Village. The development would have no age limits but presents a strong demand for seniors and empty nesters. The plan was run through a "concept approval" plan outlined in the PUD section of the zoning code. No zoning entitlements were received but feedback from the Plan Commission and Village Board was generally positive. Direction was given to come up with high-quality housing designs, reduce monotony, and pursue a small park location with the Frankfort Square Park District due to the increase in the PUD's housing density.

The plan as proposed includes more specific approvals including subdividing of the land, rezoning the portion to be used for the residential development to R-5 (Low-Density Residential), preliminary PUD approval, and preliminary plat approval. The proposed plan provides for ~7.2-acres of commercial uses and ~24.1-acres of residential uses. The current preliminary proposal would create certain entitlements for the proposed residential development, but is required to return for approval of final details of the project including the final plat and site plans.

Changes from the October 7, 2021 Workshop Staff Report are indicated in RED.

EXISTING SITE & HISTORY

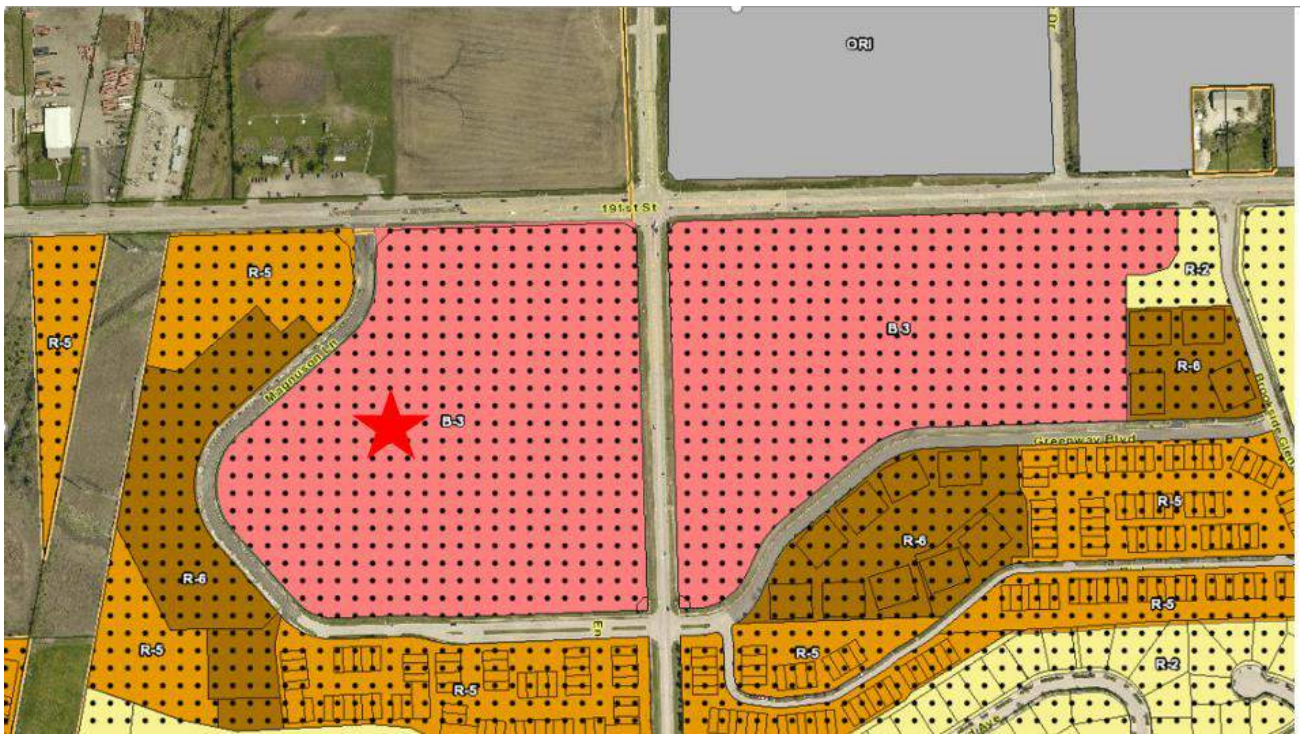
The subject site is a 31.3-acre parcel within the Brookside Glen Planned Unit Development (PUD). The Brookside Glen PUD was approved as part of an annexation of 828-acres in 1990. Since that time, there have been amendments to the Agreement as well as several PUD modifications and rezonings. This is typical for a property of this size that has responded to market trends and fluctuating economic conditions over time. The subject property was originally planned and zoned for the Village's most intense commercial district B-3 (General Business and Commercial District) which includes such uses as hotels, indoor recreation, retail membership clubs, theaters, and large retail centers. This is the same zoning as the Brookside Marketplace commercial development at Harlem Ave and 191st St.

In December of 2017, the Village Board approved plans for the *Residences at Magnuson* which includes four multi-family structures with 144 dwelling units as well as a clubhouse and various amenities. The project is currently under construction. The *Residences at Magnuson* is located immediately west of the subject property. A history of amendments to the Brookside Glen PUD is attached as Exhibit A.

ZONING & NEARBY LAND USES

The subject property is zoned B-3 (General Business and Commercial District) and is part of the Brookside Glen PUD. The property to the west is zoned R-6 (Medium-Density Residential) with a multifamily development under construction. To the south, the property is zoned R-5 (Low-Density Residential) and is developed with townhomes. To the east, across 80th Avenue, is undeveloped B-3 property with R-6 and R-5 zoning immediately to the south. To the north is an undeveloped parcel in unincorporated Will County zoned C-6, which is intended to accommodate commercial recreation, amusement, and entertainment uses. The property to the northeast is an undeveloped parcel zoned ORI (Office and Restricted Industrial).

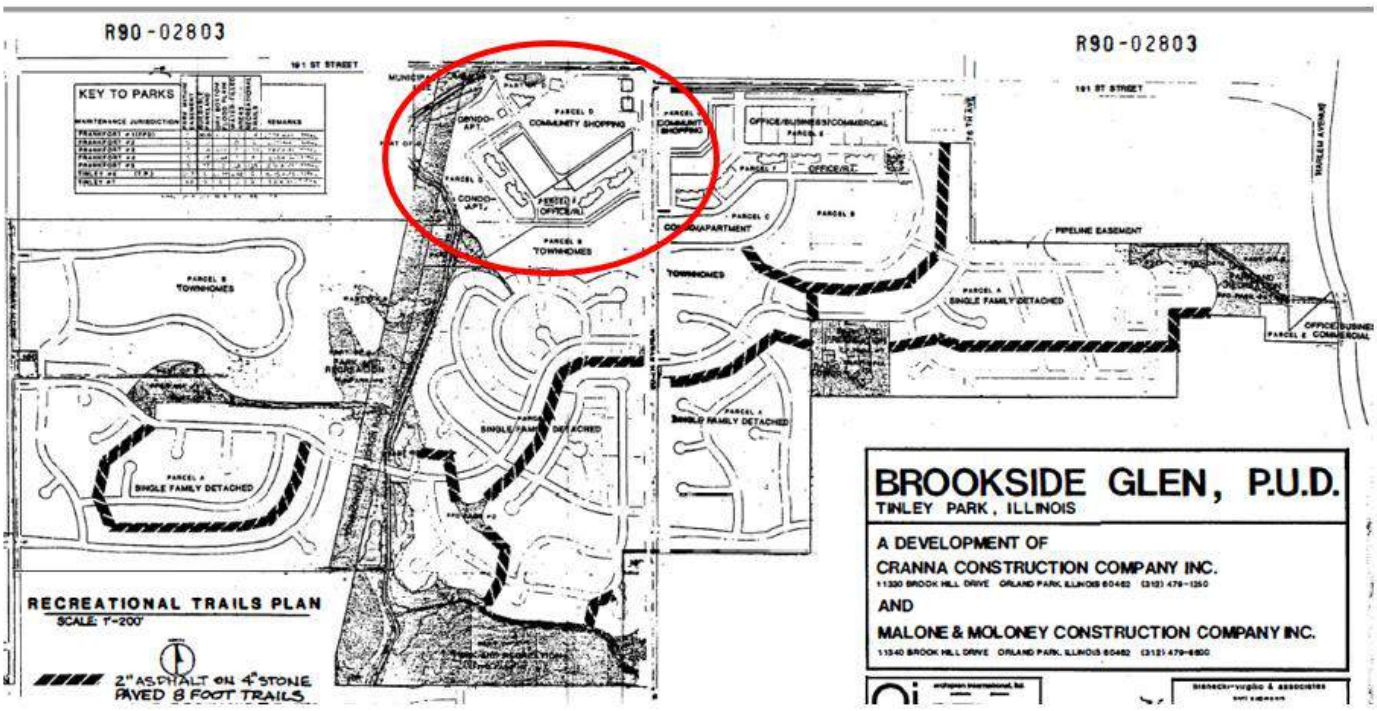
The subject parcel is also located within the Urban Design Overlay District (UD-1) that is intended to regulate non-residential buildings to "accommodate the automobile, but are primarily designed to promote non-motorized and public transportation movements to, within, and among properties". UD-1 attempts to create a streetscape that is defined by buildings rather than parking lots. Residential development is not regulated by this overlay district).



UNDERSTANDING PLANNED UNIT DEVELOPMENTS (PUDs)

In 1990, the annexation of 828-acres for the Brookside Glen PUD was a significant endeavor for the Village of Tinley Park. To plan for a development of this magnitude, the Village utilized a common master planning technique by annexing the parcel as a PUD. It is important to understand that a PUD inherently provides flexibility in its planning and zoning. The PUD approved in 1990 provided a master plan for the 828-acre property as a guide to its future potential. As stated in Section VII of the Zoning Ordinance, the purpose of a PUD is "*to facilitate and encourage the construction of imaginative and coordinated developments and to provide relief from the subdivision and zoning requirements which are designed for conventional developments, but which may inhibit innovation of design and cause undue hardship with regard to developing a parcel of land to its best possible use*." The Applicant is requesting the change in land use due to his inability to develop the parcel in accordance with the original intent for commercial development. The retail market has changed significantly since 1990 with internet sales taking the lead over on-site purchases. Brick and mortar commercial development is stagnant and parasitic at best with new construction luring tenants from existing centers. The Village is working toward maintaining the current inventory of commercial property and has recently incentivized several commercial properties along Harlem Avenue, however attracting larger commercial development for parcels of this size has been difficult. The subject parcel remains attractive for retail development however, it is more likely to be at a smaller scale. In addition, the original intent to use office development as a buffer for the residential uses to the south is also compromised with the declining commercial office market.

The concept plan approved with the Annexation in 1990 is depicted below. Amendments to the original PUD changed the alignment for Greenway Boulevard and provided for the townhomes that currently exist to the south.



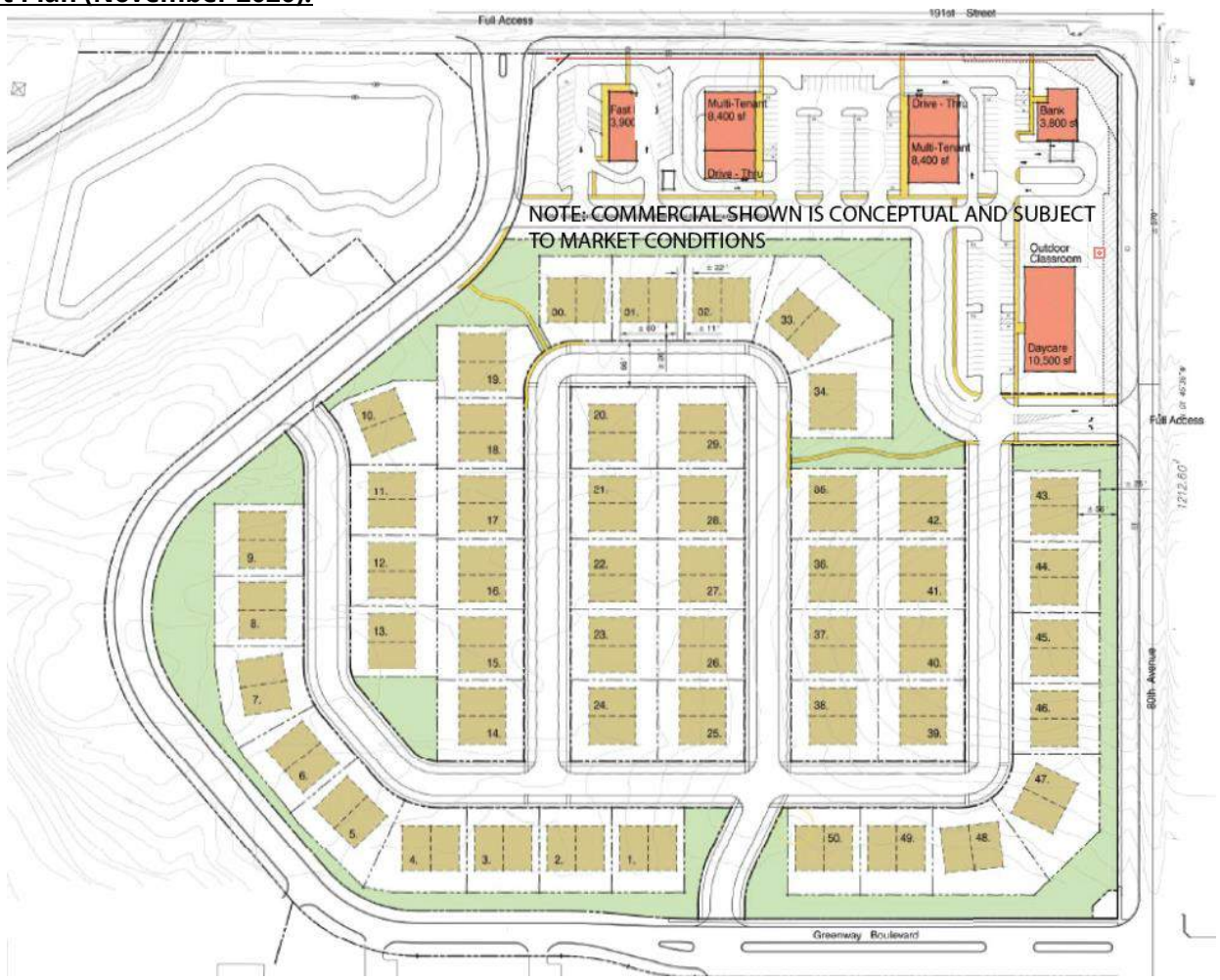
PRELIMINARY PUD/SITE PLAN APPROVAL

PUD Process

The issue before the Plan Commission is to preliminarily approve the proposed site plan, PUD documents, and land use changes to the original PUD approved in 1990. Since the proposed plan will change the original concept or intent of the original development, it is considered a Substantial Deviation. The Plan Commission is required to act in the same manner as required for concept or final approvals. However, there are various approval levels that bring different review processes and entitlements. Most often, changes are minor and they can go straight to final. However, in bigger and multi-phased development "Conceptual" and "Preliminary" approvals are important. By spreading out the review into different levels, the level of detail becomes clearer. This is a benefit to the Plan Commission and Village Board to better understand the PUD's proposal and purpose. It also benefits the developer by having them only spend time and money developing plans they need. Preliminary and Final approvals including a public hearing and a recommendation will then be forwarded from the Plan Commission to the Village Board of Trustees for final action. The Preliminary CC&Rs (Covenants, Conditions, and Restrictions) and plans will all be exhibits of the approved ordinance and the final plans, plats, and CC&R's will need to be in substantial conformance with them.

Proposed is a Preliminary PUD Plan, which brings more detailed entitlement than the previous concept level review did, which is mainly for general feedback purposes. Preliminary approval essentially gives them the ability to do what they are proposing as long as final plans are substantially in conformance with the plans and proposal. They will need to come back for final PUD and Plat approvals, however, those are usually just a formality once final engineering plans are completed for a certain phase of the project. Additionally, preliminary approval is only being sought for the residential portion of the development. The commercial portion will remain conceptual and will need preliminary and final approvals in the future when that is developed in whole or in part.

Concept Plan (November 2020):



Preliminary Plan - Residential Only (October 2021)

Preliminary Proposal and Rezoning

Crana Homes is proposing to construct 49 duplex buildings with 98 total units to function as a buffer between the commercial area fronting 191st Street and 80th Avenue and the townhomes to the south of Greenway Boulevard. This is a minor reduction from the concept approval which had 50 buildings and 100 units.

The plan will change the property's land use mix from 100% commercial to approximately 23% commercial and 77% residential. The commercial area identifies five structures with labels of "fast food, multi-tenant, drive-thru restaurant, bank, and daycare". These uses are for illustrative/concept purposes only to show what could be reasonably developed within the area and how access will be accounted for. The zoning designation will remain B-3 (General Business and Commercial) for the commercial property and therefore any future uses will need to conform with that zoning district. The residential portion of the development will be rezoned to R-5 (Low-Density Residential). The site plan as proposed respects the intent of the Urban Design Overlay District (UD-1) by limiting the parking fields to the side or rear of the structures on the commercially zoned property. If the concept plan is approved further refinement of the site plans will indicate additional landscaping and bicycle parking.

Setbacks and density regulations for the R-5 zoning district are shown as being met on all lots for "single-family semi-detached housing" (this is the formal description of a duplex by the zoning ordinances definition). The residential area includes duplex housing that maintains an internal orientation of all units thereby preventing any direct access from a unit to the external road system. This allows for greater screening along the perimeter and a more comfortable living environment for residents.

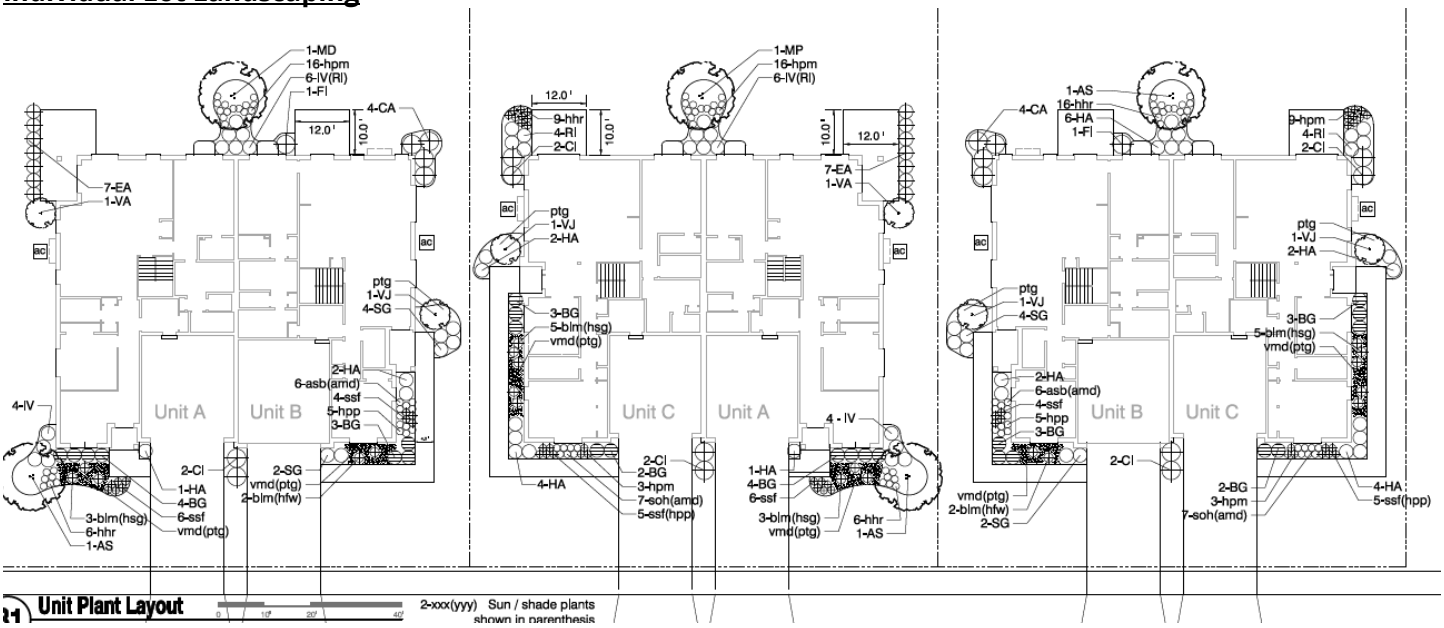
Exceptions

Any items that don't meet the Zoning Ordinance are considered "Exceptions" instead of Variations and are covered by the PUD approval. While it is not necessary to call out all Exceptions shown in the Plans, staff often outlines these so that the Commission and Village Board understand what flexibility is being given to the development through the PUD process. No specific exceptions were identified with the proposed plans. However, there may be some exceptions identified with final approval when all details are set.

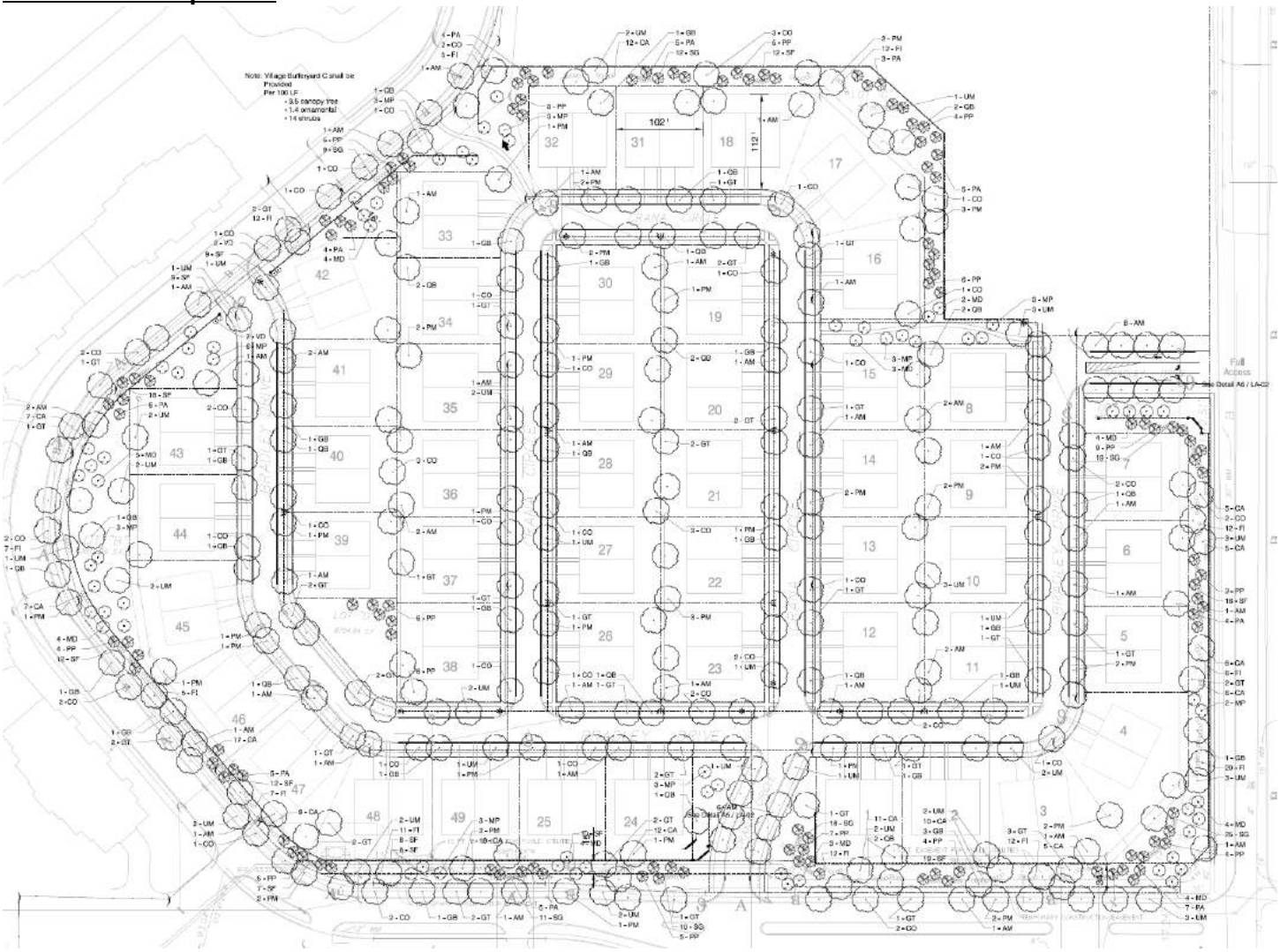
LANDSCAPING

A landscape buffer is proposed along the entire perimeter to serve as an additional buffer to adjacent uses (see below). This buffer ranges in depth from 15' at its narrowest to 30' at its widest. This is in addition to the 30 rear yard setback for the duplexes with frontage on Greenway Boulevard. The landscape buffer along the perimeter of the property meets the bufferyard requirement. Compared to the concept plan, this preliminary plan has more detail with regard to plantings. The canopy tree and parkway requirements are met and while there are some minor deficiencies with shrubs in some bufferyards, these are made up by a surplus of more substantial understory trees, which also can require less long-term care and maintenance. Landscaping was also not proposed around the sign. The requirement of 2 sq. ft. of landscaping for each 1 sq. ft. of sign face will need to be met. This would be approved with the final PUD approval or sign permit and will also result in additional shrubs. Staff believes the proposed plan is largely in compliance with the intent of the Landscape Ordinance and will be a benefit to the future residents of the subdivision.

Individual Lot Landscaping



Overall Landscape Plan



Landscape Analysis

BUFFERYARD REQUIREMENTS							
Bufferyard Location	**Required Width**	**Proposed Width**	**Length**	**Required Plantings**	**Proposed Plantings**	**Deficit**	**Comments**
North ("C" Bufferyard)	25'	25'+	1,050'	37 CT 15 US 147 SH	38 CT 37 US 63 SH	**+1 CT** **+22 US** **-84 SH**	
East ("C" Bufferyard)	25'	25'	595'	21 CT 9 US 84 SH	13 CT 34 US 90 SH	**-** **+25 US** **+6 SH**	
South ("B" Bufferyard)	20'	30' avg.	917'	22 CT 6 US 110 SH	22 CT 36 US 116 SH	**-** **+30 US** **+6 SH**	
West ("B" Bufferyard)	20'	15'	1,162'	28 CT 7 US 140 SH	28 CT 61 US 123 SH	**-** **+54 US** **-17 SH**	

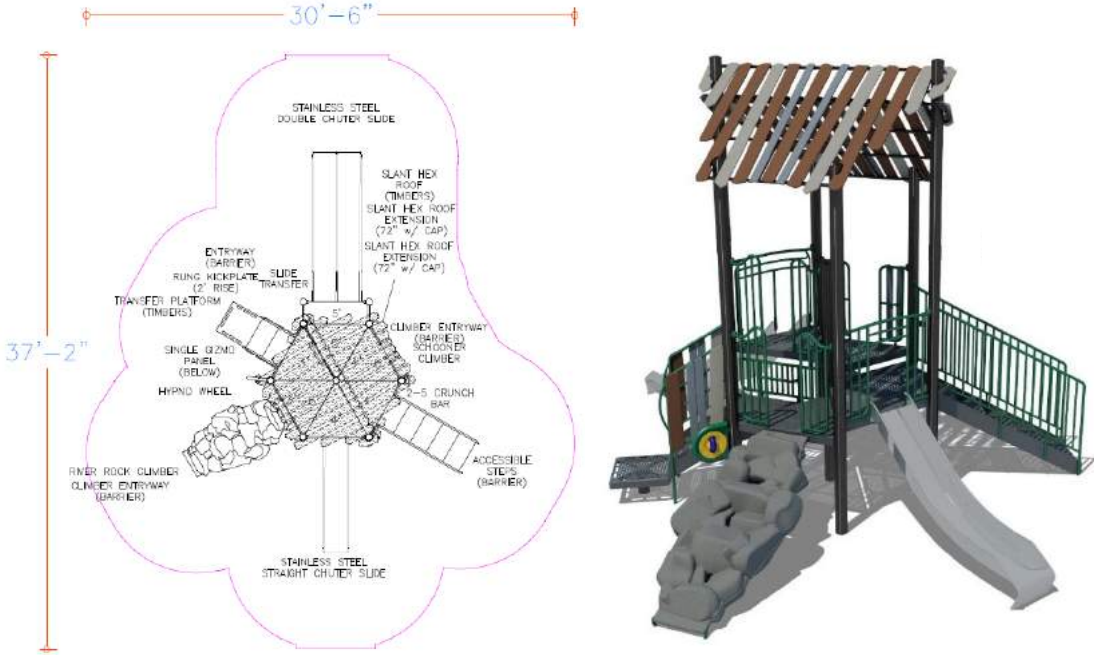
Please note the following abbreviations: CT = Canopy Tree, US = Understory Tree, SH = Shrub, T = Tree.

Fencing

The majority of the site will be enclosed with an open-style aluminum fence. However, the north property line will have a solid picket-style fence at the recommendation of staff. The solid fence will ensure adequate privacy for the residents that back up to the north property line. It will help to avoid any issues with light glare and noise when the commercially zoned property is eventually developed.

Tot Lot Park

Based on feedback from conceptual plan review and discussion with the Frankfort Square Park District, the developer has agreed to construct a tot lot park as part of the development that would be donated to the Frankfort Square Park District upon its completion. The park space will help offset the residential density being added with the conversion to residential. There is no age limit for the development, so the park will benefit both young families with children and older families with grandchildren. The specific design of the park site and equipment is subject to the Frankfort Square Park District approval but will be completed by the developer as part of the development. A similar "tot lot" playground design is shown below.



CIRCULATION

Access is limited to one point of access on Greenway Boulevard for the residential section and two points of access on Magnuson Lane—one for the residential area and one for the commercial area. Only one point of access is provided for 80th Avenue. Shared access to this point on 80th Avenue is indicated on the Plat of Subdivision. Earlier versions of the plan included four points of access on Greenway Blvd. Staff recommended this change to minimize traffic and congestion on Greenway Boulevard.

Full access is provided on 80th Avenue that serves both the commercial and residential areas. Staff encouraged the applicant to increase the commercial area slightly and "wrap" the corner with commercial uses, thereby allowing for full access on 80th Avenue. The land use designations in the commercial section are for illustration purposes only. Once a developer is identified for the commercial area, the plans will be finalized with an end-user in mind. The plan does however reflect requirements of the Urban Overlay District which attempts to limit parking fields to the side or rear of the building so that the architecture of the buildings will dominate the streetscape rather than parking lots. Approval of the commercial area provides direction to future planning as to the layout and access of this area.

An internal sidewalk system has been provided throughout the commercial and residential areas. Some refinement during site plan approvals will be necessary for the commercial area to ensure safe separation between pedestrian and vehicular traffic. Sidewalks along all street frontages (Magnuson Dr, Greenway Blvd, and 80th Ave) are proposed. The phasing of the plan will be clarified in the final PUD approval stage; however, they have agreed to complete the sidewalk along 191st Street with the residential development (as opposed to waiting for the commercial development to complete it).

ARCHITECTURE

Per the applicant, the design of this project is focused "*on the active adult market. To that end, all homes will have a bedroom on the first floor, and some may have secondary bedrooms on a partial second floor. The maintenance free focus for this lifestyle will include Association maintained landscape for the homes and yards, in addition to the Association common spaces."* While it is age-targeted, there are no age limits, and maybe an attractive home for young families as well.

Architectural elevations were further defined and are traditional architectural product that is typical for Crana Homes style. While the architecture is purposefully similar in most attached single-family products (Townhomes and duplexes), there are multiple models and various exterior options to bring a unique appearance to each building. These options including varying brick color, siding color, roof lines, gables, and partial second floor options. With all of the available options, it will make for a unique look to the different buildings that avoids an overly monotonous and repetitive look. Below is an example of how some of the streetscapes might look with scaled setbacks between buildings. Additionally, the overall design of the subdivision leads to many curved roads and varying frontages, so there will not be long lines of buildings; further leading to an attractive streetscape and subdivision. At staff's request, the petitioner did explore the possibility of side loaded garages to reduce the visibility of garage doors. Under the current design only about 4-5 units could be possible due to the roadway and site layouts. To implement side loaded garages would mean likely redesigning the site or the models, which is not feasible.

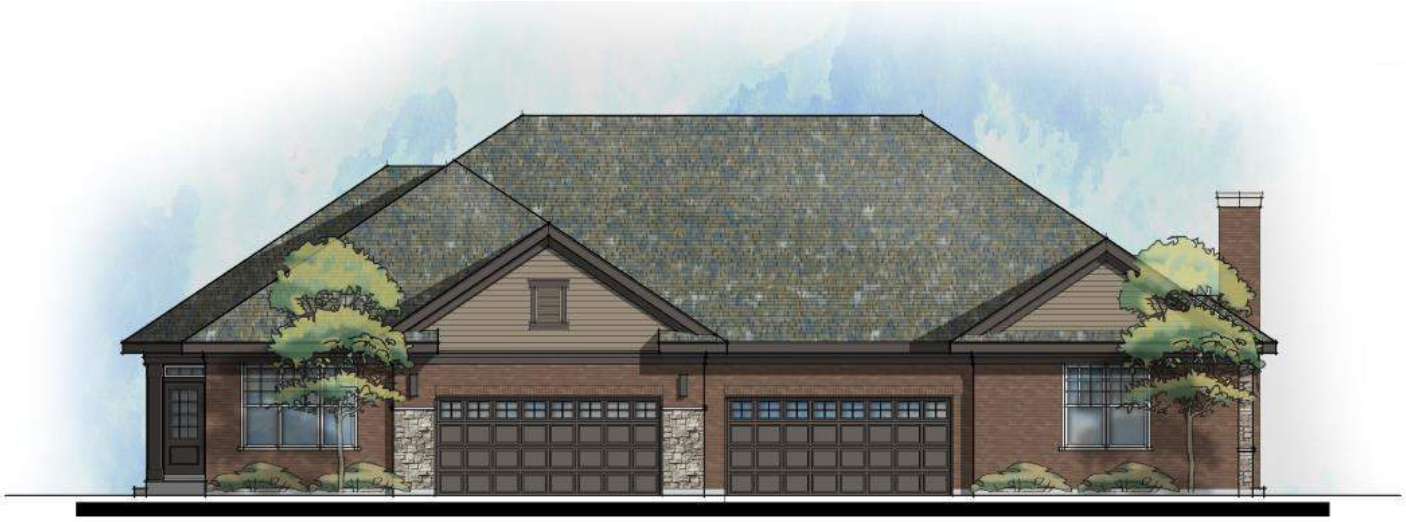
One issue staff has noted in past townhomes and duplex approvals are the desire for residents in the future to complete expansions of the structure, often by way of a "sunroom". However, these "sunroom" additions are by definition a building addition and often lower the quality and appearance of the overall development due to their lower construction quality, materials, and durability. The current proposal would not permit any sunroom or other building additions. This would be a requirement of the CC&Rs but also the PUD regulations. Any future change to that would need to go back through a special use/deviation process.

Streetscape Example

Elevation Options Examples

Unit A Front Elevation w/ Gable Opt.

Unit B Front Elevation



Unit B1 Front Elevation

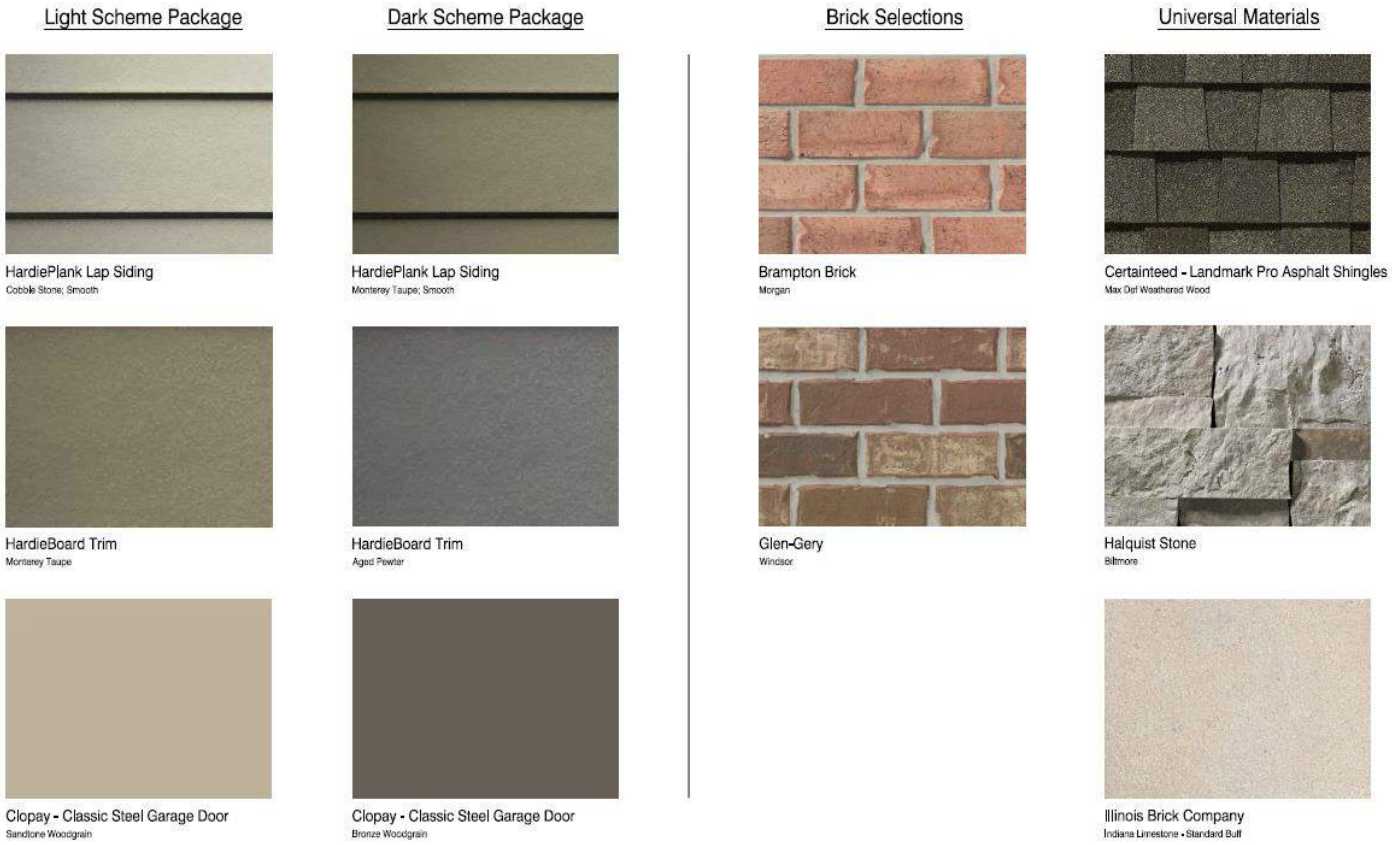
Unit C Front Elevation

Unit C Front Elevation
w/ Opt 2nd Flr.

Unit A Front Elevation

Materials

The proposed building materials used include stone at the base and red or brown brick for the majority of the structure. Brick and stone are proposed to be on all sides of the first floor, in compliance with the Zoning Ordinance's masonry requirements. Hardie Board (fiber cement siding) is used for the trim, dormers, and limited second floor siding elements. Hardie Board is a name brand fiber cement board product that is typically higher quality and more durable than vinyl siding. These proposed materials are required to be used as part of the PUD Ordinance and any changes in materials type requires revisions to the PUD.



SIGNAGE

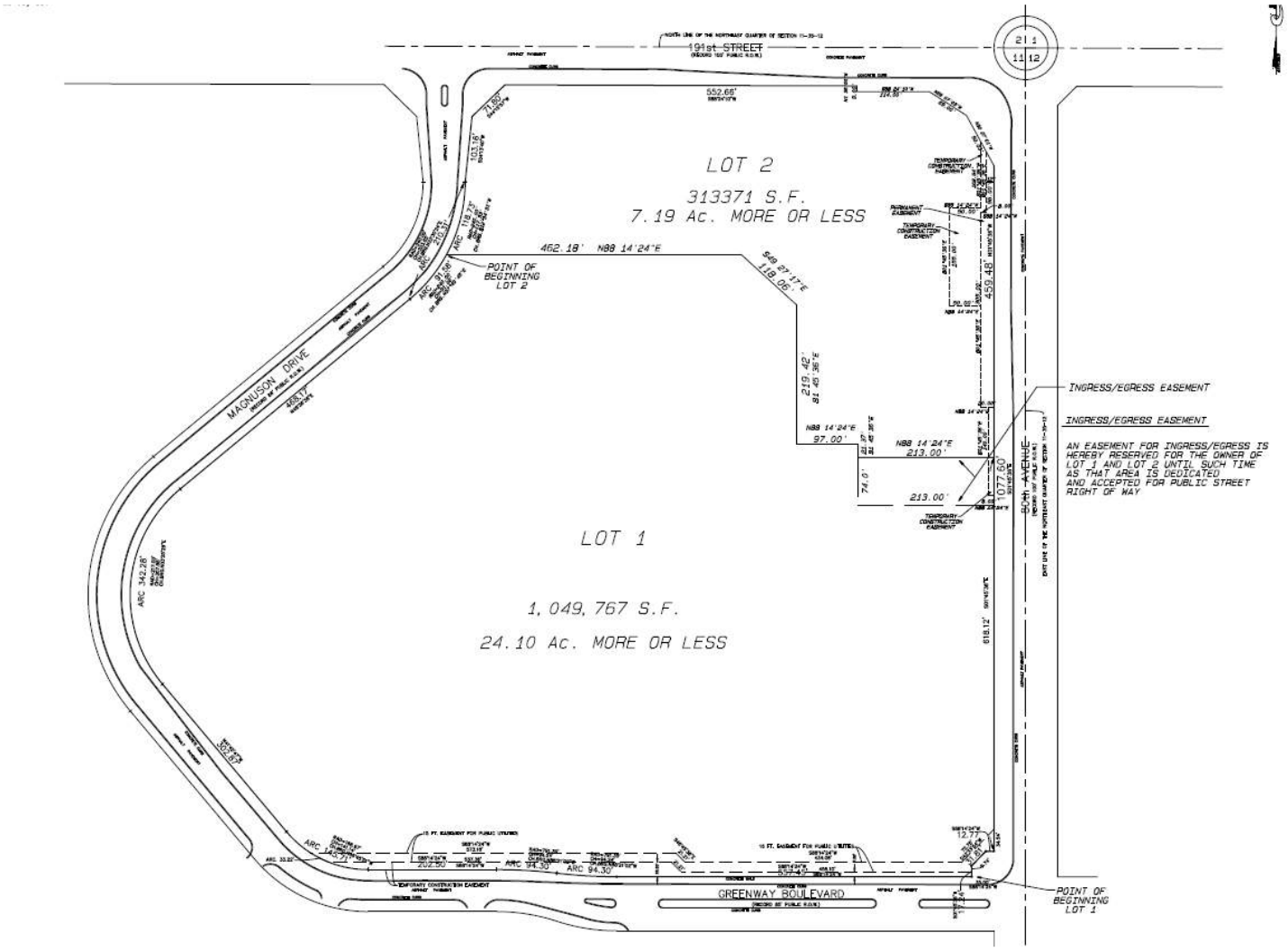
Two single-sided subdivision entry signs are proposed for the residential development. One at the entrance off of 80th Avenue and a second along Greenway Blvd. The signs are 6-foot-high with brick and fencing matching the rest of the development. The overall brick portion of the sign is approximately 108 sq. ft. but the signage potion for the subdivision is only 24 sq. ft. The design meets the zoning allowances for residential subdivision signs. These signs will be placed in outlots and maintained by the Homeowner's Association (HOA) after completion of the project.

Two existing monument signs are also located at the northwest and southwest corners of Greenway Blvd and 80th Avenue for the larger Brookside Glen area. The signs are not part of the proposed development but the new signs were designed to complement the style of the existing Brookside Glen signs.

PLAT APPROVALS

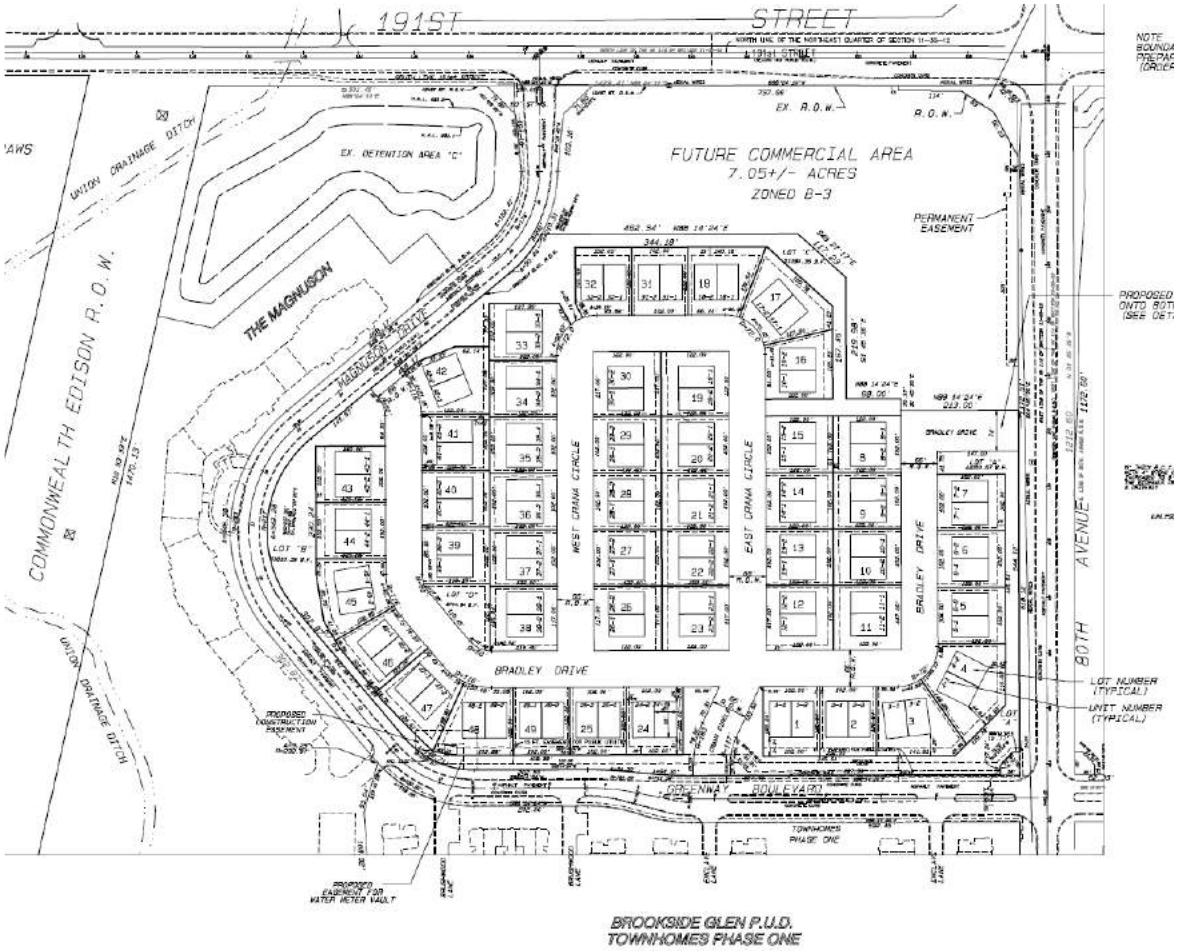
Final Plat of Subdivision (2 Lots)

The purpose of the first plat is to break the existing single lot into two lots that would allow for two separate zoning districts and developments to occur. The division is rather simple and will be final, meaning if the proposed development didn't move forward, they could each be sold off separately and will keep the underlying zoning district being requested. However, the proposed lots are developable on their own based on the concept plans. A cross-access easement was required with this subdivision due to the need to share an access point on 80th Avenue, and the importance of that access point to each lot's future.



Preliminary Plat of Subdivision (Residential)

Unlike the Final Plat, the Preliminary Plat does not formally create any lots of record. However, this plat shows likely dimensions of the proposed residential lots and outlots and gives the developer the right to move forward with the subdivision. The final plat will need to be in substantial conformance with this preliminary plat but requires additional information like signature blocks, exact property lines, and easement locations. A preliminary plat stops short of being final because final engineering usually has not been completed and minor changes may still be required. The Petitioner will return for Final Plat and PUD approval once final engineering has been completed.



Workshop Review

Plan Commission reviewed the plans and was largely supportive of the proposed development. The housing styles, quality and overall development design were complimented. It was noted as a positive that resident feedback was heard and the public "tot lot" park was added to the development. Questions included specifics about the roadway access point locations and walkways that were answered to the Commission's satisfaction.

STANDARDS FOR REZONING APPROVAL

The Zoning Code does not establish any specific criteria that must be met in order for the Village Board to approve a rezoning request. Likewise, Illinois Statutes does not provide any specific criteria. Historically, Illinois courts have used eight factors enunciated in two court cases. The following "LaSalle Standards" have been supplied for the Commission to consider. Staff has prepared draft responses for these Standards below. The standards can be modified, or changes as the Plan Commission deems fit based on their findings from the public hearing.

a. The existing uses and zoning of nearby property;
   - The R-5 zoning is consistent with neighboring residential uses in the area and creates a transition to the business district.

b. The extent to which property values are diminished by the particular zoning;
   - The zoning change is not anticipated to lower any property values.

c. The extent to which the destruction of property values of the complaining party benefits the health, safety, or general welfare of the public;
   - No property value reductions or complaining parties have been identified.

d. The relative gain to the public as compared to the hardship imposed on the individual property owner;
   - The development includes new housing and a housing type not currently available in Tinley Park that will benefit the public along with additional property tax not generated by vacant land.

e. The suitability of the property for the zoned purpose;
   - The property has sufficient roadways, utilities, and location for residential uses.

f. The length of time the property has been vacant as zoned, compared to development in the vicinity of the property;
   - The property is one of the few remaining vacant parcels in the Brookside Glen PUD. The lot has remained vacant and had little interest as a commercial development for over 30 years. The most attractive and developable commercial frontage along 191st St and 80th Ave will remain as B-3 zoning.

g. The public need for the proposed use; and
   - There is a strong demand for additional housing in the area and single-story duplex housing specifically has not been constructed in many years. The housing is attractive to seniors, empty-nesters, and young families.

h. The thoroughness with which the municipality has planned and zoned its land use.
   - The area was originally planned for a large "big-box" commercial area as part of the Brookside Glen PUD. However, as with large PUDs, changes in the market trends can result in changes to the PUD master plan.

STANDARDS FOR A SPECIAL USE

Section X.J.5. of the Zoning Ordinance lists standards that need to be considered by the Plan Commission when analyzing a Special Use request. Staff has prepared draft responses for these Standards below. The standards can be modified, or changes as the Plan Commission deems fit based on their findings from the public hearing.

X.J.5. Standards: No Special Use shall be recommended by the Plan Commission unless said Commission shall find:

a. That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare;

- There is no danger to the public with additional duplex housing proposed.

b. That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood;

- Residential housing surrounds the development. A residential development is less intense than the originally planned "big box" commercial development.

c. That the establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district;

- The remaining land has been planned in concept for reasonably expected commercial uses. The commercial and residential developments have been planned together.

d. That adequate utilities, access roads, drainage, and/or other necessary facilities have been or are being provided;

- There is adequate roadways, utilities, and drainage existing around the site and proposed throughout in the new development.

e. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets;

- The ingress and egress access points have been reviewed by the Village Engineer for their best placement on the site and for overall traffic flow for the area.

f. That the Special Use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the Village Board pursuant to the recommendation of the Plan Commission. The Village Board shall impose such conditions and restrictions upon the premises benefited by a Special Use Permit as may be necessary to ensure compliance with the above standards, to reduce or minimize the effect of such permit upon other properties in the neighborhood, and to better carry out the general intent of this Ordinance. Failure to comply with such conditions or restrictions shall constitute a violation of this Ordinance; and

- The buildings will comply with all other code requirements of the Village not covered by an Exception to the Zoning Ordinance indicated in the PUD documents and plans.

g. The extent to which the Special Use contributes directly or indirectly to the economic development of the community as a whole.

- The development will add additional residents that help support surrounding businesses and add additional property taxes where the vacant land currently provides very little.

STANDARDS AND CRITERIA FOR A PLANNED UNIT DEVELOPMENT

Section VII.C. of the Zoning Ordinance lists standards that need to be considered by the Plan Commission for a Planned Unit Development (PUD). The Plan Commission is encouraged to consider these standards (listed below) as well as the Applicant's responses (attached) when analyzing the PUD request. Specific findings are not provided as these are already specific criteria that must be met for the Plan Commission to recommend approval to the Village Board.

a. The site of the proposed planned unit development is not less than five (5) acres in area, is under single ownership and/or unified control, and is suitable to be planned and developed, or redeveloped, as a unit and in a manner consistent with the purpose and intent of this Ordinance and with the Comprehensive Plan of the Village.

b. The planned development will not substantially injure or damage the use, value and enjoyment of the surrounding property nor hinder or prevent the development of surrounding property in accordance with the land use plan of the Village.

c. The uses permitted in the development are necessary or desirable and that the need for such uses has been clearly demonstrated.

d. The proposed development will not impose an undue burden on public facilities and services, such as sewer and water systems, police and fire protection.

e. The proposed development can be substantially completed within the period of time specified in the schedule of development submitted by the developer.

f. The street system serving the planned development is adequate to carry the traffic that will be imposed upon the streets by the proposed development, and that the streets and driveways on the site of the planned development will be adequate to serve the residents or occupants of the proposed development.

g. When a Planned Unit Development proposes the use of private streets, common driveways, private recreation facilities or common open space, the developer shall provide and submit as part of the application the method and arrangement whereby these private facilities shall be operated and maintained.

h. The general development plan shall contain such proposed covenants, easements and other provisions relating to the bulk, location and density of residential buildings, non- residential uses and structures and public facilities as are necessary for the welfare of the planned development and the Village. All such covenants shall specifically provide for enforcement by the Village of Tinley Park in addition to the land owners within the development.

i. The developer shall provide and record easements and covenants, and shall make such other arrangements as furnishing a performance bond, escrow deposit, or other financial guarantees as may be reasonably required to assure performance in accordance with the development plan and to protect the public interest in the event of abandonment of said plan before completion.

j. Any exceptions or modifications of the zoning, subdivision, or other regulations that would otherwise be applicable to the site are warranted by the design of the proposed development plan, and the amenities incorporated in it, are consistent with the general interest of the public.

STANDARDS FOR SITE PLAN & ARCHITECTUAL APPROVAL

Section III.T.2. of the Zoning Ordinance requires that the conditions listed below must be met and reviewed for Site Plan approval. Specific findings are not required but all standards shall be considered to have been met upon review from the Plan Commission.

Architectural

a. Building Materials: The size of the structure will dictate the required building materials (Section V.C. Supplementary District Regulations). Where tilt-up or pre-cast masonry walls (with face or thin brick inlay) are allowed vertical articulation, features are encouraged to mask the joint lines. Concrete panels must incorporate architectural finishes that comply with "Building Articulation" (Section III.U.5.h.) standards. Cast in place concrete may be used as an accent alternate building material (no greater than 15% per façade) provided there is sufficient articulation and detail to diminish it's the appearance if used on large, blank walls.

b. Cohesive Building Design: Buildings must be built with approved materials and provide architectural interest on all sides of the structure. Whatever an architectural style is chosen, a consistent style of architectural composition and building materials are to be applied on all building facades.

c. Compatible Architecture: All construction, whether it be new or part of an addition or renovation of an existing structure, must be compatible with the character of the site, adjacent structures and streetscape. Avoid architecture or building materials that significantly diverge from adjacent architecture. Maintain the rhythm of the block in terms of scale, massing and setback. Where a development includes outlots they shall be designed with compatible consistent architecture with the primary building(s). Site lighting, landscaping and architecture shall reflect a consistent design statement throughout the development.

d. Color: Color choices shall consider the context of the surrounding area and shall not be used for purposes of "attention getting" or branding of the proposed use. Color choices shall be harmonious with the surrounding buildings; excessively bright or brilliant colors are to be avoided except to be used on a minor scale for accents.

e. Sustainable architectural design: The overall design must meet the needs of the current use without compromising the ability of future uses. Do not let the current use dictate an architecture so unique that it limits its potential for other uses (i.e. Medieval Times).

f. Defined Entry: Entrance shall be readily identifiable from public right-of-way or parking fields. The entry can be clearly defined by using unique architecture, a canopy, overhang or some other type of weather protection, some form of roof element or enhanced landscaping.

g. Roof: For buildings 10,000 sf or less a pitched roof is required or a parapet that extends the full exterior of the building. For buildings with a continuous roof line of 100 feet of more, a change of at least five feet in height must be made for every 75 feet.

h. Building Articulation: Large expanses of walls void of color, material or texture variation are to be avoided. The use of material and color changes, articulation of details around doors, windows, plate lines, the provision of architectural details such as "belly-bands" (decorative cladding that runs horizontally around the building), the use of recessed design elements, exposed expansion joints, reveals, change in texture, or other methods of visual relief are encouraged as a means to minimize the oppressiveness of large expanses of walls and break down the overall scale of the building into intermediate scaled parts. On commercial buildings, facades greater than 100 feet must include some form of articulation of the façade through the use of recesses or projections of at least 6 inches for at least 20% of the length of the façade. For industrial buildings efforts to break up the long façade shall be accomplished through a change in building material, color or vertical breaks of three feet or more every 250 feet.

i. Screen Mechanicals: All mechanical devices shall be screened from all public views.

j. Trash Enclosures: Trash enclosures must be screened on three sides by a masonry wall consistent with the architecture and building material of the building it serves. Gates must be kept closed at all times and constructed of a durable material such as wood or steel. They shall not be located in the front or corner side yard and shall be set behind the front building façade.

Site Design

a. Building/parking location: Buildings shall be located in a position of prominence with parking located to the rear or side of the main structure when possible. Parking areas shall be designed so as to provide continuous circulation avoiding dead-end parking aisles. Drive-through facilities shall be located to the rear or side of the structure and not dominate the aesthetics of the building. Architecture for canopies of drive-through areas shall be consistent with the architecture of the main structure.

b. Loading Areas: Loading docks shall be located at the rear or side of buildings whenever possible and screened from view from public rights-of-way.

c. Outdoor Storage: Outdoor storage areas shall be located at the rear of the site in accordance with Section III.O.1. (Open Storage). No open storage is allowed in front or corner side yards and are not permitted to occupy areas designated for parking, driveways or walkways.

d. Interior Circulation: Shared parking and cross access easements are encouraged with adjacent properties of similar use. Where possible visitor/employee traffic shall be separate from truck or equipment traffic.

e. Pedestrian Access: Public and interior sidewalks shall be provided to encourage pedestrian traffic. Bicycle use shall be encouraged by providing dedicated bikeways and parking. Where pedestrians or bicycles must cross vehicle pathways a cross walk shall be provided that is distinguished by a different pavement material or color.

MOTIONS TO CONSIDER

If the Plan Commission wishes to take action on the Petitioner's requests, the appropriate wording of the motions are listed below. The protocol for the writing of a motion is to write it in the affirmative so that a positive or negative recommendation correlates to the Petitioner's proposal. By making a motion, it does not indicate a specific recommendation in support or against the plan.

Motion 1 (Map Amendment/Rezoning):
"…make a motion to recommend that the Village Board grant the Petitioner, Frank Bradley on behalf of Crana Homes, a Map Amendment (rezoning) of the Lot 1 of the Brookside Glen Villas Subdivision at 8001 191st Street (on the southwest corner of 191st St and 80th Ave) from the existing B-3 (General Business & Commercial) zoning district to the R-5 (Low-Density Residential) zoning district in the Brookside Glen Planned Unit Development, and adopt the Findings of Fact as proposed in the October 21, 2021 Staff Report."

Motion 2 (Special Use for a Preliminary Substantial Deviation PUD):
"…make a motion to recommend that the Village Board grant a Special Use Permit to the Petitioner, Frank Bradley on behalf of Crana Homes, for Preliminary Approval of a Substantial Deviation to the Brookside Glen Planned Unit Development for the property located at 8001 191st Street (on the southwest corner of 191st St and 80th Ave), to be zoned R-5 (Low-Density Residential) and developed with 98 single-family semi-detached duplex units, in accordance with all plans and documents submitted and listed herein, and adopt the Findings of Fact as proposed by in the October 21, 2021 Staff Report."

Motion 3 (Preliminary PUD Plat):
"…make a motion to recommend that the Village Board grant approval to the Petitioner, Frank Bradley on behalf of Crana Homes, Preliminary PUD Plat Approval for Brookside Glen Villas Resubdivision (dated July 21, 2021) in accordance with the Preliminary Plat submitted and listed herein, subject to the condition that the Plat approval is subject to approval by the Village Engineer and Village Attorney."

Motion 4 (Final Plat of Subdivision):
"…make a motion to recommend that the Village Board grant approval to the Petitioner, Frank Bradley on behalf of Crana Homes, Final Plat of Subdivision Approval for Brookside Glen Villas Subdivision in accordance with the Final Plat (dated September 30, 2021) submitted and listed herein, subject to the condition that the Final Plat approval is subject to Final approval by the Village Engineer and Village Attorney."

LIST OF REVIEWED PLANS

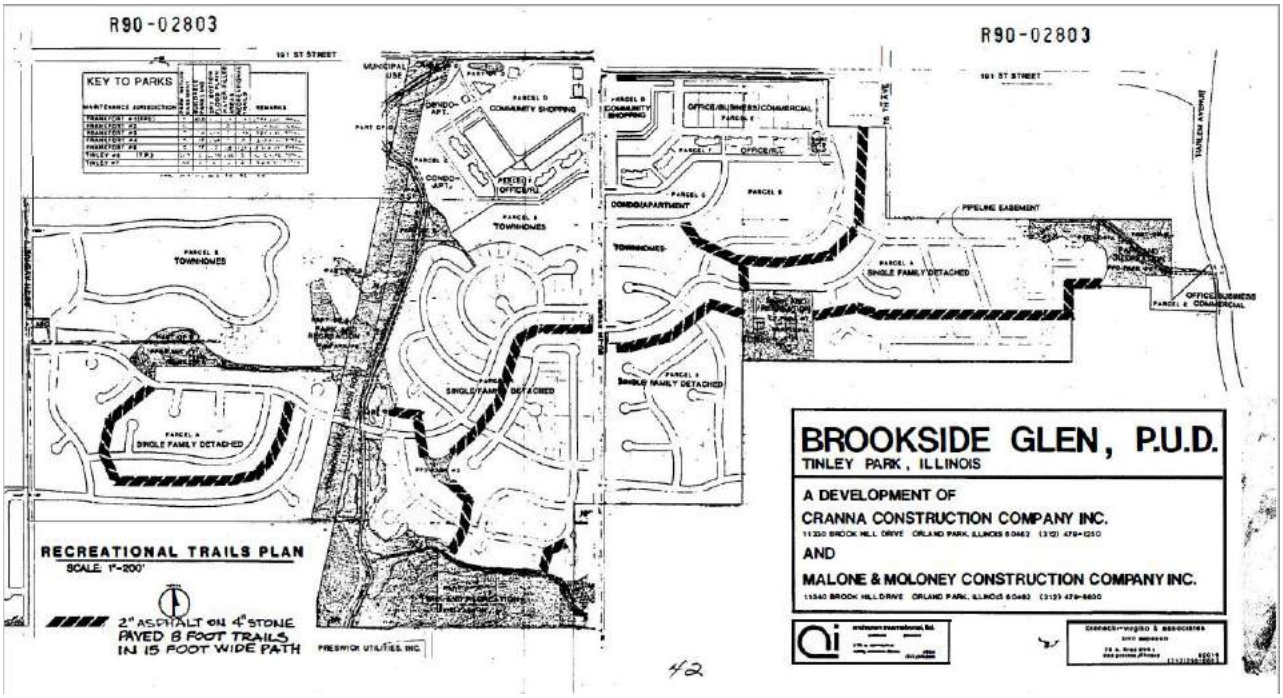
	Submitted Sheet Name	Prepared By	Date On Sheet
	Plat of Survey	G & B	12.3.2019
	Preliminary Final Site Plan and Site Data	HKM	7.27.21
	Preliminary Improvement (Engineering) Plans and Preliminary Plat	BVA	7.21.21
	Preliminary Landscape Plan	HKM	9.3.21
	Final Plat of Subdivision	G&B	9.30.21
	Auto-turn Templates	BVA	
	Monument Sign Elevation	HKM	7.27.21
	Brookside – Sales Center Site Plan	HKM	7.27.21
	Elevations and Streetscape Examples	HKM	7.27.21
	Material Board	HKM	7.27.21
	Aluminum Fence and Light Specifications	Crana	
	Preliminary Declaration of Covenants for Brookside Glen Villas	Crana	N/A

BVA = Branecki-Virgilio & Associates (Civil Engineer)
HKM = HKM Architects + Planners, Inc
G & B = Gremley & Biedermann Surveyors

Exhibit A - Brookside Glen PUD Timeline

- **1989:** A Pre-Annexation Agreement was adopted as Ordinance 89-O-052.

- **1990:** The Annexation Agreement (Resolution 90-R-002) was adopted on January 11, 1990. This agreement also accounted for the Special Use Permit for the Brookside Glen Planned Unit Development. Below is Exhibit C from the Annexation Agreement denoted approved landuses.



The Brookside Glen property was officially annexed under Ordinance 90-O-004 and Ordinance 90-O-005. The first amendment to the Brookside Glen Annexation Agreement was adopted on February 6, 1990 (90-R-004).

Ordinance 90-O-008 was adopted on February 27, 1990 (although the ordinance itself incorrectly states the adoption year as 1989). This ordinance annexed the Brookside Glen property again due to concerns with proper notice for the annexation. Ordinance 90-O-009 officially rezoned the Brookside Glen property following annexation.

- **1994:** Amendment to the Brookside Glen Annexation Agreement was approved on October 25, 1994 as Resolution 94-R-030 (labeled in error as 94-O-030). This amendment included changes to some of the standards for the single-family residential lots, updated fees, discussed requirements for dedication of public streets and sidewalks, and discussed water mains and sanitary sewers.

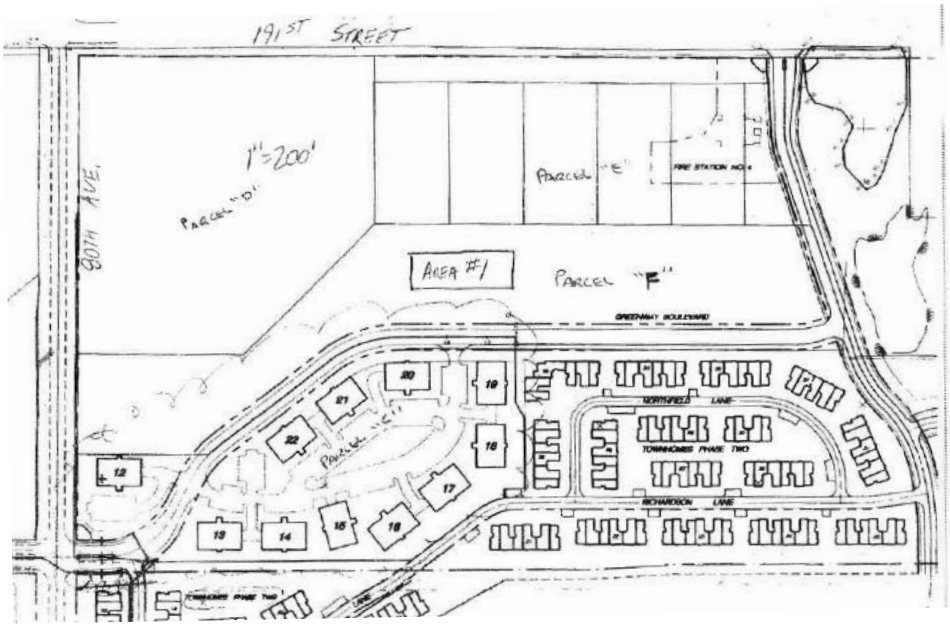
- **1998:** A parcel is annexed and added to the Brookside Glen PUD per Ordinance 98-O-018 and Ordinance 98-O-019 on March 17, 1998. A 200' x 209' parcel was annexed and added to the Brookside Glen PUD. The parcel was not available in 1990 when the original PUD was approved. The property that was annexed is located near approximately 19501 88th Avenue (currently this is approximately Brookside Glen Drive and 88th Avenue).

- **1999:** Staff notes that the November 4, 1999 Plan Commission meeting minutes indicate that the New Lenox Pumping Station was considered for a Special Use Permit.

- **2000**: A Substantial Deviation to the original Brookside Glen Planned Unit Development was approved on February 15, 2000 as Ordinance 2000-O-006. This Substantial Deviation amended the acreage and dwelling units

for single-family, townhomes, and condominiums. The allowable acreage of condominiums increased from 21.5 acres to 27 acres and the allowable number of dwelling units increased from 258 to 352 dwelling units. The Ordinance also allowed for an increase in the allowable building height for the condominium buildings (from three stories to four stories with underground parking). The Substantial Deviation was considered at the Plan Commission meetings on 4/15/1999, 5/6/1999,8/5/1999 and 9/16/1999 and the Village Board meetings on 9/7/1999, 9/21/1999, 1/4/2000, 1/18/2000, 2/1/2000, and 2/15/2000. It appears this is when Greenway Boulevard alignment was changed.

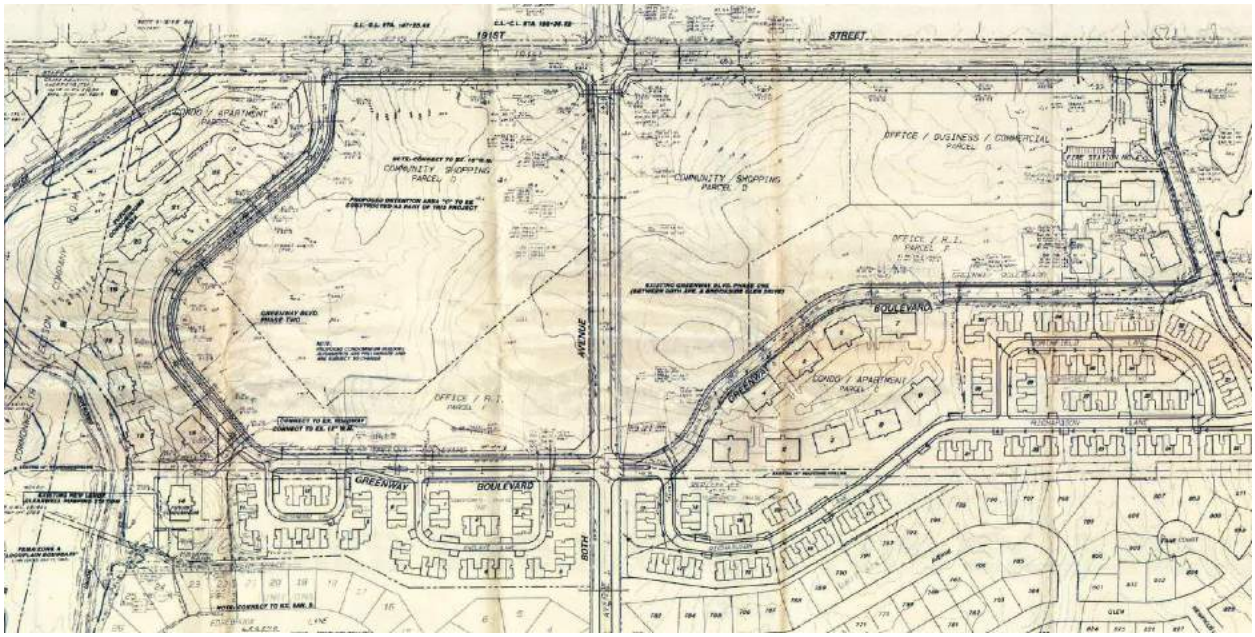
Excerpt from the Site Plan for the Southwest Corner of 191st Street and 80th Avenue
(Staff believes this was included with the Legal Notice for the Substantial Deviation in 1999)



Excerpt from the Site Plan for the Southeast Corner of 191st Street and 80th Avenue
(Staff believes this was included with the Legal Notice for the Substantial Deviation in 1999)

- **2001:** The Plat for Brookside Place Phase I was recorded on January 12, 2001 and included the first seven (7) multi-family buildings (see buildings 1-7 on the image on the following page). The buildings had sixteen (16) units each for a total of one hundred twelve (112) dwelling units. The Plan Commission recommended approval of the Plat on October 5, 2000.

- **2002:** The Plat for Brookside Place Phase II was recorded on June 28, 2002 and included two (2) multi-family buildings (see buildings 8-9 on the image on the following page). The buildings had sixteen (16) units each for a total of thirty-two (32) dwelling units. The Plan Commission recommended approval of the Plat on February 21, 2002.



Excerpt from Engineering Plans for Brookside Place (2002)

- **2004:** The Plat for Brookside Place Phase III was recorded on August 5, 2004 and included four (4) multi-family buildings (see buildings 10-13 on the image below). The buildings had sixteen (16) units each for a total of sixty-four (64) dwelling units. The Plan Commission recommended approval of the Plat on May 20, 2004.

- **2016**: Karli Mayher submits an application ("The Residences at Brookside Glen") on July 5, 2016 for two (2) four-story, one hundred, forty-four (144) unit multi-family apartment buildings, with surface parking and parking in garages at the rear of the site and an accompanying clubhouse building. On July 11, 2017 Village Board concurred with the Plan Commission's recommendation to deny the project.

- **2017:** Karlie Mayher submits revised plans on October 2, 2017. These plans include four (4) multi-family residential structures with thirty-six (36) dwelling units per building for a total of 144 dwelling units. Village Board approved December 5, 2017.

- **November 2020:** Conceptual Approval given to proceed with a rezoning and Deviation for the subject site to be rezoned to allow for semi-detached duplexes at the Southwest corner near the intersection of 191st Street and 80th Avenue. The 31-acre site will keep commercial zoning on around 7.2 acres along 191st Street and 80th Avenue. No entitlement or rezoning given but met with general support by the Plan Commission and Village Board.

Village of Tinley Park
Community Development Dept.
16250 S. Oak Park Ave.
Tinley Park, IL 60477
708-444-5100

VILLAGE OF TINLEY PARK, ILLINOIS

PLANNING AND ZONING GENERAL APPLICATION

REQUEST INFORMATION

*Additional Information is Required for Specific Requests as Outlined in Specific Addendums

- [x] **Special Use for:** A Substantial Deviation
- [ ] **Planned Unit Development (PUD)** [ ] Concept [ ] Preliminary [ ] Final [ ] Deviation
- [ ] **Variation** [ ] *Residential* [ ] *Commercial* for _____
- [ ] **Annexation**
- [x] **Rezoning (Map Amendment) From** _____ **to** _____
- [x] **Plat (Subdivision, Consolidation, Public Easement)** [x] *Preliminary* [ ] *Final*
- [x] **Site Plan**
- [ ] **Landscape Change Approval**
- [ ] **Other:** _____

PROJECT & PROPERTY INFORMATION

Project Name: Brookside Glen Villas

Project Description: Proposed Duplex Home Development

Project Address: near SW crnr 191st St. and 80th Ave.

Property Index No. (PIN): 19-09-11-200-014-0000

Zoning District: B-3

Lot Dimensions & Area: see Plat of Survey

Estimated Project Cost: $ _____

OWNER OF RECORD INFORMATION

Please supply proper documentation of ownership and/or designated representative for any corporation.

Name of Owner: Crana Homes, Inc.

Company: Crana Homes, Inc.

Street Address: [redacted]

City, State & Zip: [redacted]

E-Mail Address: _____

Phone Number: [redacted]

APPLICANT INFORMATION

- [x] **Same as Owner of Record**

All correspondence and invoices will be sent to the applicant. If applicant is different than owner, "Authorized Representative Consent" section must be completed.

Name of Applicant: _____

Company: _____

Relation To Project: _____

Street Address: _____

City, State & Zip: _____

E-Mail Address: _____

Phone Number: _____

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VILLAGE OF TINLEY PARK, ILLINOIS

PLANNING AND ZONING GENERAL APPLICATION

Authorized Representative Consent

It is required that the property owner or his designated representative be present at all requests made to the Plan Commission and Zoning Board of Appeals. During the course of a meeting, questions may arise regarding the overall project, the property, property improvements, special conditions attached to recommendations among other aspects of any formal request. The representative present must have knowledge of the property and all aspects of the project. They must have the authority to make commitments related to the project and property. Failure to have the property owner or designated representative present at the public meeting can lead to substantial delays to the project approval. If the owner cannot be present or does not wish to speak at the public meeting, the following statement must be signed by the owner for an authorized repetitive.

I hereby authorize _____ *(print clearly) to act on my behalf and advise that they have full authority to act as my/our representative in regards to the subject property and project, including modifying any project or request. I agree to be bound by all terms and agreements made by the designated representative.*

Property Owner Signature: _____

Property Owner Name (Print): _____

Acknowledgements

- Applicant acknowledges, understands and agrees that under Illinois law, the Village President (Mayor), Village Trustees, Village Manager, Corporation Counsel and/or any employee or agent of the Village or any Planning and Zoning Commission member or Chair, does not have the authority to bind or obligate the Village in any way and therefore cannot bind or obligate the Village. Further, Applicant acknowledges, understands and agrees that only formal action (including, but not limited to, motions, resolutions, and ordinances) by the Board of Trustees, properly voting in an open meeting, can obligate the Village or confer any rights or entitlement on the applicant, legal, equitable, or otherwise.
- Members of the Plan Commission, Zoning Board of Appeals, Village Board as well as Village Staff may conduct inspections of subject site(s) as part of the pre-hearing and fact finding review of requests. These individuals are given permission to inspect the property in regards to the request being made.
- Required public notice signs will be obtained and installed by the Petitioner on their property for a minimum of 10 days prior to the public hearing. These may be provided by the Village or may need to be produced by the petitioner.
- The request is accompanied by all addendums and required additional information and all applicable fees are paid before scheduling any public meetings or hearings.
- Applicant verifies that all outstanding fees and monies owed to the Village of Tinley Park have been paid.
- Any applicable recapture, impact, engineering, contracted review or other required fees and donations shall be paid prior to issuance of any building permits, occupancy permits, or business licenses.
- The Owner and Applicant by signing this application certify that the above information and all supporting addendums and documentation is true and correct to the best of their knowledge.

Property Owner Signature: [redacted] _____

Property Owner Name (Print): _____

Applicant Signature:
(If other than Owner) _____

Applicant's Name (Print): _____

Date: _____

Village of Tinley Park
Community Development Dept.
16250 S. Oak Park Ave.
Tinley Park, IL 60477
708-444-5100

VILLAGE OF TINLEY PARK, ILLINOIS
SPECIAL USE ADDENDUM

APPLICATION & SUBMITTAL REQUIREMENTS

A complete application consists of the following items submitted in a comprehensive package. If materials are submitted separately or are incomplete they may not be accepted and may delay the review and hearing dates until a complete application package is received. The following information is being provided in order to assist applicants with the process of requesting a **Special Use** permit from the terms of the Zoning Ordinance (Section 5-B). This information is a summary of the application submittal requirements and may be modified based upon the particular nature and scope of the specific request.

Depending upon meeting schedules, legal notification requirements, and the specific type and scope of the request, this process generally takes between 45 to 60 days from the date of submission of a complete application package. Please schedule a pre-application meeting with Planning Department staff to review the feasibility of the proposal, discuss applicable Ordinance requirements, discuss submittal requirements, and receive some preliminary feedback on any concept plans prior to making a submittal.

☑ General Application form is complete and is signed by the property owner(s) and applicant (if applicable).

☑ Ownership documentation is submitted indicating proper ownership through a title report or title policy. If a corporation or partnership, documentation of the authorized agent must be supplied as well. All beneficiaries of a property must be disclosed.

☑ A written project narrative detailing the general nature and specific aspects of the proposal being requested. Details on any employee numbers, parking requirements, property changes, existing uses/tenants, hours of operation or any other business operations should be indicated. Any additional requests such as Site Plan approval or a Variation should be indicated in the narrative as well.

☑ A Plat of Survey of the property that is prepared by a register land surveyor and has all up-to-date structures and property improvements indicated.

☑ Site Plan and/or Interior layout plans that indicate how the property and site will be utilized.

☑ Responses to all Standards for a Special Use on the following page (can be submitted separately along with the narrative, but all standards must be addressed).

☑ $500 Special Use hearing fee.

STANDARDS AND CRITERIA FOR A SPECIAL USE

Section X.J. of the Village of Tinley Park Zoning Ordinance requires that no Special Use be recommended by the Plan Commission unless the Commission finds that all of the following statements, A-G listed below, are true and supported by facts. Petitioners must respond to and confirm each and every one of the following findings by providing the facts supporting such findings. The statements made on this sheet will be made part of the official public record, will be discussed in detail during the public meetings and will be provided to any interested party requesting a copy. Please provide factual evidence that the proposed Special Use meets the statements below. If additional space is required, you may provide the responses on a separate document or page.

A. That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare.

SEE SEPARATE ATTACHMENT FOR RESPONSES

B. That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood.

C. That the establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.

D. That adequate utilities, access roads, drainage, and/or other necessary facilities have been or are being provided.

E. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

F. That the Special Use shall in all other respects conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the Village Board pursuant to the recommendation of the Plan Commission.

G. The extent to which the Special Use contributes directly or indirectly to the economic development of the community as a whole.

STANDARDS AND CRITERIA FOR A SPECIAL USE

A. That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare.

The proposed residential and neighborhood commercial uses are types of land uses that are currently found throughout the community and will support and enhance, not endanger, the public health, safety and general welfare.

B. That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood.

There is existing residential to the south and west which will benefit from the proposed residential adjacent to them.

C. That the establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.

The development of this parcel will continue the orderly development of residential uses from the south and west, and completes the development up to the natural boundaries of 191st St. and 80th Ave.

D. That adequate utilities, access roads, drainage, and/or other necessary facilities have been or are being provided.

The necessary utilities were installed and located adjacent to this parcel as part of the overall 800 acre PUD.

E. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

The proposed road layout uses Greenway Blvd as the primary access to utilize the existing intersections of Greenway Blvd./191st St. and Greenway Blvd./80th Ave. An additional access off of 80th Ave. is provided to support the commercial use.

F. That the Special Use shall in all other respects conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the Village Board pursuant to the recommendation of the Plan Commission.

The proposed residential and neighborhood commercial uses are intended to comply with the respective underlying districts.

G. The extent to which the Special Use contributes directly or indirectly to the economic development of the community as a whole.

The improvement of this long vacant parcel will contribute to the economic development by providing neighborhood commercial uses as well as active adult focused residential.

BROOKSIDE GLEN VILLAS

TINLEY PARK, ILLINOIS

PROJECT NARRATIVE

Crana Homes, In. is proposing to construct 49 Duplex Buildings (98 Single Family Homes) on the property south of 191st Street, west of 80th Avenue, and north and east of Greenway Boulevard (near the southwest corner of 191st Street and 80th Avenue in the Village of Tinley Park, IL

The property is currently zoned B-3 (General Business and Commercial District) and was part of the Brookside Glen PUD (Planned Unit Development).

The total site area of this project is approximately 31.4 acres of which 0.3 acres were taken for the proposed 80th Avenue R.O.W. improvements. The site is proposed to contain approximately 24.1 acres of residential area and approximately 7.0 acres of commercial area. The residential area is proposed to be rezoned to R-5 and the proposed commercial area will remain as B-3 zoning.

Current zoning surrounding the parcels is described as follows:

North

Undeveloped parcel in unincorporated Will County zoned C-6 which is intended to accommodate commercial recreation, amusement and entertainment uses.

Northeast

Zoned ORI (Office and Restricted Industrial)

South

Zoned R-5, Existing Townhomes, Brookside Glen PUD Townhomes Phase One

West

Zoned R-6 currently under construction for 144 dwelling units

The subject parcel is located within the Urban Design Overlay District (UD-1) that is intended to regulate non-residential buildings to "accommodate the automobile but are primarily designed to promote non-motorized and public transportation movements within, and among properties."

UD-1 attempts to create a streetscape that is defined by buildings rather than parking lots.

The above information was presented by Village Staff in the Plan Commission Staff Report for the November 19, 2020 Public Hearing.

Concept Plans for the proposed development were previously presented to and approved by the Village Plan Commission.

We understand the next steps in the approval process is to apply for a Site Plan Addendum, a Plat Addendum, Special Use Addendum for a substantial deviation, and Rezoning Addendum.

After approval of the Preliminary Plans, Final Plans, and a Final Plat of Subdivision will be prepared and submitted for review and approval

Village of Tinley Park
Community Development Dept.
16250 S. Oak Park Ave.
Tinley Park, IL 60477
708-444-5100

VILLAGE OF TINLEY PARK, ILLINOIS

REZONING (MAP AMENDMENT) ADDENDUM

APPLICATION & SUBMITTAL REQUIREMENTS

A complete application consists of the following items submitted in a comprehensive package. If materials are submitted separately or are incomplete they may not be accepted and may delay the review and meeting dates until a complete application package is received. The following information is being provided in order to assist applicants with the process of requesting a **Map Amendment for Rezoning** from the terms of the Zoning Ordinance. This information is a summary of the application submittal requirements and may be modified based upon the particular nature and scope of the specific request.

Depending upon meeting schedules, legal notification requirements, and the specific type and scope of the request, this process generally takes between 45 to 60 days from the date of submission of a complete application package. Please schedule a pre-application meeting with Planning Department staff to review the feasibility of the proposal, discuss applicable Ordinance requirements, discuss submittal requirements, and receive some preliminary feedback on any concept ideas or plans prior to making a submittal.

☑ General Application form is complete and is signed by the property owner(s) and applicant (if applicable).

☑ Ownership documentation is submitted indicating proper ownership through a title report or title policy. If a corporation or partnership, documentation of the authorized agent must be supplied as well. All beneficiaries of a property must be disclosed.

☑ Response to LaSalle Factors/Criteria listed below.

☑ A written project narrative detailing the general nature and specific aspects of the proposal being requested. Details should include the existing zoning designation, the proposed designation and the intended future use and function of the site. The narrative should describe how the rezoning conforms to the Village's Comprehensive Plan as well as how it works with adjacent and nearby existing and proposed land uses. Any additional requests such as a Site Plan approval, Special Use permit or Variation should be indicated in the narrative as well.

☑ A Plat of Survey of the property, including the legal description, that is prepared by a register land surveyor and has all up-to-date structures and property improvements indicated.

☑ It is standard practice and policy that zoning is not changed without specific plans for development that can be attached to the zoning change. Site Plan or interior layout plans that indicate how the property and site will be utilized and developed should be submitted and it is likely site plan approval will be required at the same time.

☑ $750 Map Amendment/Rezoning hearing fee.

LASALLE FACTORS/CRITERIA FOR REZONING (MAP AMENDMENT)

The Zoning Code does not establish any specific criteria that must be met in order for the Village Board to approve a rezoning request. Likewise, Illinois Statutes does not provide any specific criteria. Historically, Illinois courts have used eight factors enunciated in two court cases, LaSalle Bank of Chicago v. Count of Cook (1957) and Sinclair Pipeline v. Village of Richton Park (1960), when evaluating the validity of zoning changes. The so-called "LaSalle factors" are listed below. Village staff and officials will take these factors into consideration when evaluating and deciding rezoning requests. The petitioner should prepare their own responses to the "LaSalle Factors" with factual evidence to defend the requested rezoning. If additional space is required, you may provide the responses on a separate document or page.

A. The existing uses and zoning of nearby property;

SEE SEPARATE ATTACHMENT FOR RESPONSES

B. The extent to which property values are diminished by the particular zoning;

C. The extent to which the destruction of property values of the complaining party benefits the health, safety, or general welfare of the public;

D. The relative gain to the public as compared to the hardship imposed on the individual property owner;

E. The suitability of the property for the zoned purpose;

F. The length of time the property has been vacant as zoned, compared to development in the vicinity of the property;

G. The public need for the proposed use; and

H. The thoroughness with which the municipality has planned and zoned its land use.

LASALLE FACTORS/CRITRIA FOR REZONING (MAP AMENDMENT

A. The existing uses and zoning of nearby property;

Subject Parcel: Zoned Tinley Park B-3 (General Business and Commercial District)

Current zoning surrounding the parcels is described as follows:

North

Undeveloped parcel in unincorporated Will County zoned C-6 which is intended to accommodate commercial recreation, amusement and entertainment uses.

Northeast

Zoned ORI (Office and Restricted Industrial)

South

Zoned R-5, Existing Townhomes, Brookside Glen PUD Townhomes Phase One

West

Zoned R-6 currently under construction for 144 dwelling units

B. The extent to which property values are diminished by the particular zoning;

The proposed rezoning should not reduce the property values of neighboring properties. The proposed rezoning will be more compatible with the zoned residential areas immediately south and west of the subject parcel. The increased compatibility with the existing residential zoned parcels should weigh in favor of the applicant's request for rezoning.

C. The extent to which the destruction of property values of the complaining party benefits the health, safety or general welfare of the public;

The proposed rezoning of approximately 24.1 acres of the parcel to R-5 zoning will not affect the health, safety, or general welfare of the public in any foreseeable way.

D. ***The relative gain to the public as compared to the hardship imposed on the individual property owner;***

The subject parcel has sat vacant since Brookside Glen PUD was approved in 1990. Since that time there has not been any serious market interest for commercial property at this location. It is not anticipated that a large commercial development for the parcel will ever occur. The proposed residential land use for that part of the parcel that is proposed for residential home sites would be a good neighbor to the existing adjacent residential areas. In addition, the proposed duplex development will provide a housing product not currently available within Brookside Glen PUD. This relative gain to the public compared to the hardship to the property owner not being able to sell the property currently zoned commercial should weigh in favor of the applicant's request for rezoning.

E. ***The suitability of the property for the zoned purpose;***

The property is well suited for rezoning to R-5 residential zoning as it complements the existing adjacent residential areas. This suitability should weigh in favor of the applicant's request for rezoning.

F. ***The length of time the property has been vacant as zoned, compared to development in the vicinity of the property;***

The property has sat vacant for approximately 30 years. Rezoning would put the property to use as the current demand for residential housing is high while the current supply of new residential homes is low. This potential to develop the property and sell the homes quickly should weigh in favor of the applicant's request for rezoning.

G. ***The public need for the proposed use;***

The neighborhood of duplex homes that will have a master bedroom on the first floor will provide the Village with a desired and needed housing type. This should weigh in favor of the applicant's request for rezoning.

H. ***The thoroughness with which the municipality has planned and zoned its land use;***

At the time the property was zoned as part of Brookside Glen PUD the local , regional , and national retail markets were quite different than today. Retail centers now have high vacancy rates as the demand for brick and mortar stores has declined. The advent of online retailing has permanently decreased the demand for large commercial areas. This decreased demand for large commercial areas should weigh in favor of the applicant's request for rezoning.

Site Data

General		
Site Area		± 31.12 ac.
Commercial	23%	± 7.05 ac.
Residential	77%	± 24.07 ac.
Passive Open Space		±3.6 ac.
Commercial		
Site Area		± 7.05 ac.
Gross Bldg. SF		± 37,000 sf
Parking		± 227
- Ratio		6.1
Residential		98 Units
Site Area		± 24.07 ac.
Density		4.1 units/ac.
R-5 Duplex Lot		49 Lots
- Front Yard		25'
- Side Yard		10'
- Rear Yard		30'
Typical Residential Lot		49 Lots
Lot Area		12,444 sf
Building Area		± 3,600 - 4,800 sf
FAR		± .29 - .38
Lot Coverage		± .37 - .40
Bldg Height	(to Mean Height)	20'-6"
Greenspace		± 47-50%

0 75' 150' 300'

HKM Architecture Planning Landscape Architecture

Brookside Glen Villas - Crana Homes

Final Site Plan

July 27, 2021

PRELIMINARY

IMPROVEMENT PLANS

FOR

BROOKSIDE GLEN VILLAS

TINLEY PARK, WILL COUNTY, ILLINOIS

LEGAL DESCRIPTION

A SUBDIVISION IN PART OF THE NORTHEAST 1/4 OF SECTION 11, TOWNSHIP 36 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN WILL COUNTY, ILLINOIS.

INDEX TO PLAN SHEETS

N

DRAINAGE CERTIFICATE

STATE OF ILLINOIS))SS
COUNTY OF COOK)

THE UNDERSIGNED HEREBY CERTIFY THAT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF SUCH SUBDIVISION OR ANY PART THEREOF, OR, THAT IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, REASONABLE PROVISION HAS BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS, OR DRAINS WHICH THE SUBDIVIDER HAS A RIGHT TO USE, AND THAT SUCH SURFACE WATERS WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THE SUBDIVISION.

DATED THIS 21ST DAY OF JULY A.D., 2021.

Theodore Mark Virgilio

IL. REGISTERED PROFESSIONAL ENG.

062-041359

STATE REGISTRATION NUMBER

11/30/2021

REGISTRATION EXPIRATION DATE

DEVELOPER

OWNER: **CRANA HOMES, INC.**
19839 MULROY CIRCLE
TINLEY PARK, ILLINOIS 60487

ENGINEER: **BRANECKI-VIRGILIO & ASSOCIATES**
Consulting Civil Engineers
79 NORTH BROADWAY
DES PLAINES, ILLINOIS 60016
847-298-4525

THEODORE MARK VIRGILIO
062-041359
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

Theodore Mark Virgilio

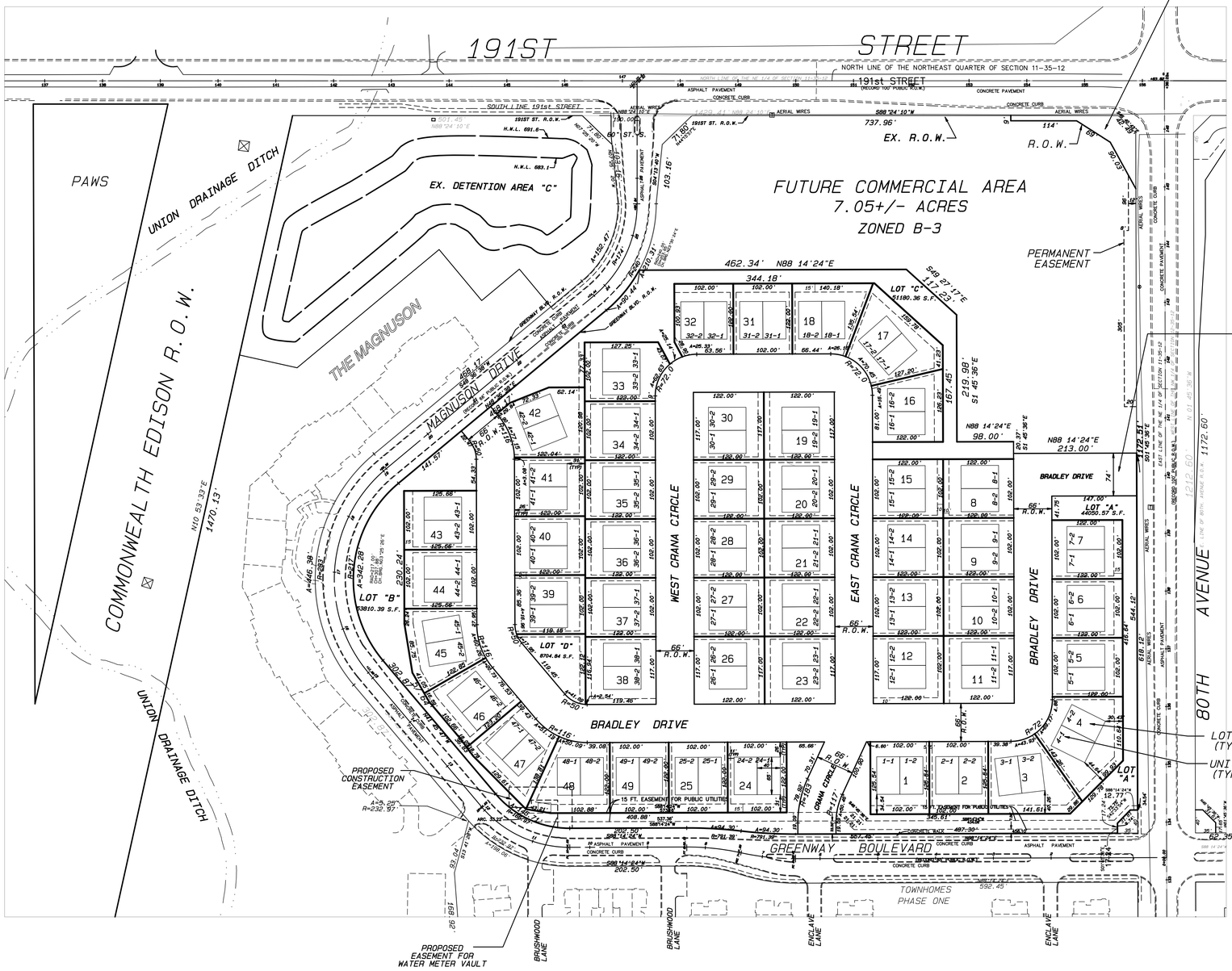
DATE: MARCH 29, 2021
REVISED: APRIL 16, 2021
JULY 21, 2021

SHEET NO. 1 OF 5 FILE NO. 993

TITLE SHEET

BROOKSIDE GLEN VILLAS

TINLEY PARK, WILL COUNTY, ILLINOIS



R.O.W. TAKING
APPROX. 0.3 Ac.
(NOT INCLUDED)

NOTE
BOUNDARY BASED ON PLAT OF SURVEY PREPARED BY GREMLEY & BIEDERMANN, INC. (ORDER NO. 2019-27400-001)

N

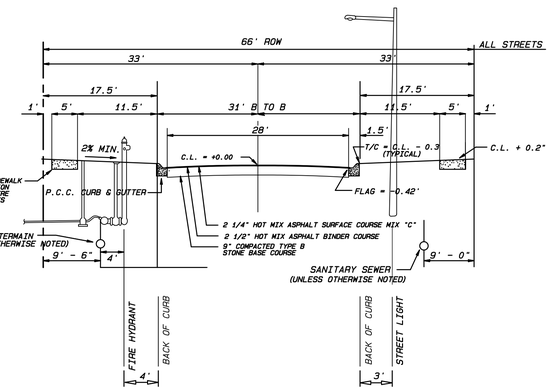
SCALE: 1" = 100'

0 50 100 200

SITE DATA

AREA	31.12 Ac.
COMMERCIAL AREA	7.05 Ac.
RESIDENTIAL AREA	24.07 Ac.
PROPOSED ZONING	R-5
NUMBER OF DUPLEX UNITS	98
TYPICAL LOT SIZE	102' X 122'
TYPICAL CORNER LOT SIZE	117' X 122'
DENSITY	4.1 UNITS/AC.
FRONT YARD SETBACK	25 FT.
SIDE YARD SETBACK	10 FT.
REAR YARD SETBACK	30 FT.

PROPOSED FULL ACCESS ENTRANCE ONTO BOTH AVENUE (SEE DETAIL SHEET #5)



TYPICAL STREET CROSS-SECTIONS

NOTES:

1. ALL CURB RETURN RADII SHALL BE 20' TO B/C UNLESS OTHERWISE NOTED
2. COMPACTED BASE COURSE TO EXTEND FROM PROPOSED BACK OF CURB TO PROPOSED BACK OF CURB (TYPICAL)
3. FIRE HYDRANTS TO BE LOCATED 4 FT. BEYOND BACK OF CURB
4. STREET LIGHTS TO BE LOCATED 3 FT. BEYOND BACK OF CURB
5. PAVMENT DESIGN FOR BRADLEY DRIVE FRONTING THE FUTURE COMMERCIAL AREA TO BE AS MUTUALLY AGREED BETWEEN THE VILLAGE AND OWNER
6. TYPICAL P.C.C. CURB AND GUTTER SHALL BE 2 1/2 INCH ROLL TYPE CURB

BROOKSIDE GLEN P.U.D.
TOWNHOMES PHASE ONE

PRELIMINARY PLAT

PRELIMINARY GEOMETRIC PLAN

GEOMETRIC PLAN

BRANECKI - VIRGILIO & ASSOCIATES
Consulting Civil Engineers
79 NORTH BROADWAY
DES PLAINES, ILLINOIS 60016
847-298-4525

SCALE: 1" = 100'

DRAWN BY:

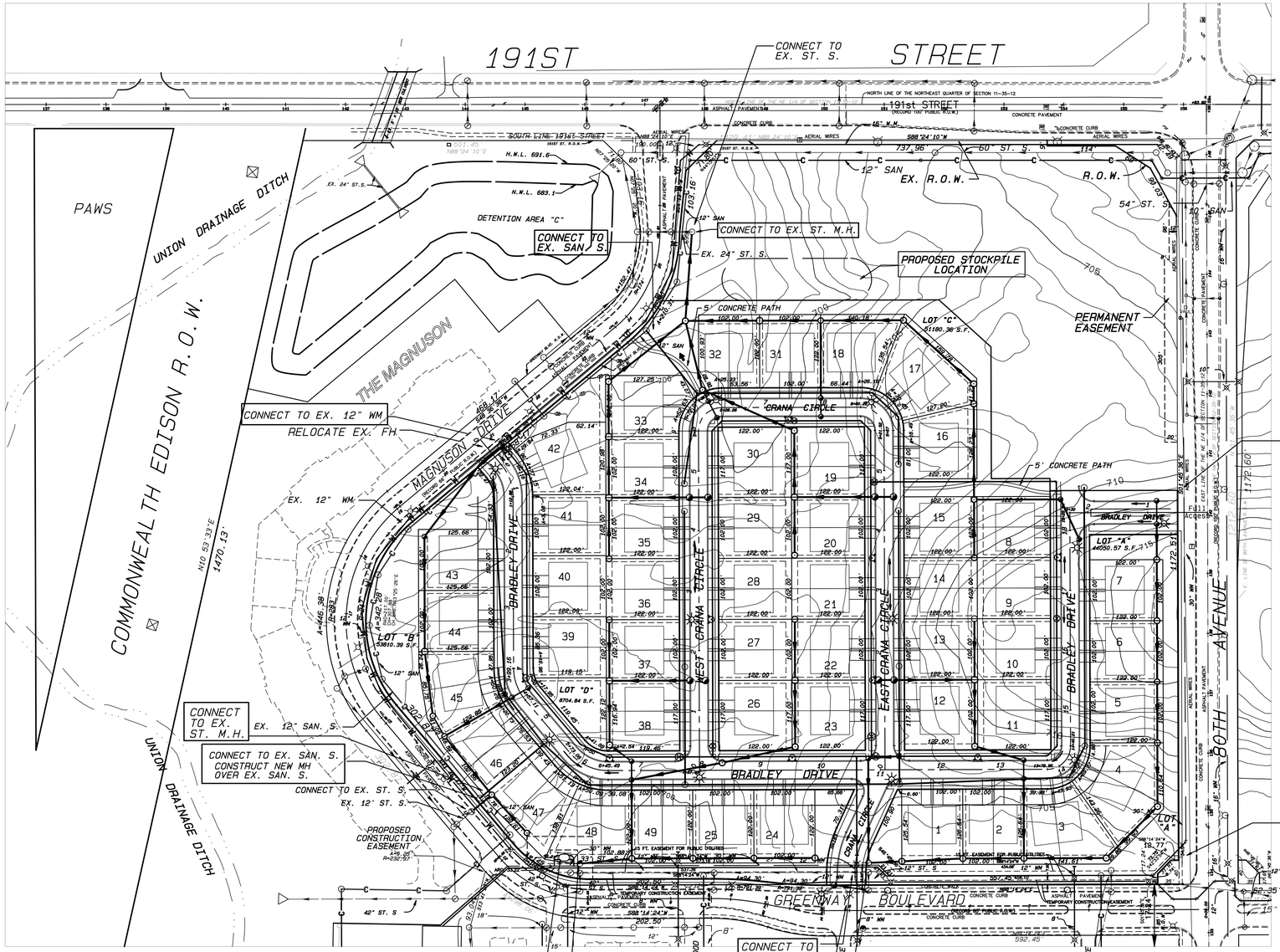
DATE: MAR. 29, 2021

FILE NUMBER 993

REVISIONS
APRIL 16, 2021
JULY 21, 2021

BROOKSIDE GLEN VILLAS

TINLEY PARK, WILL COUNTY, ILLINOIS



N

SCALE: 1" = 100'

0 50 100 200

LEGEND

- EXISTING SANITARY SEWER & MANHOLE
- EXISTING WATERMAIN, FIRE HYDRANT & GATE VALVE
- EXISTING STORM SEWER & MANHOLE
- EXISTING STORM SEWER & INLET
- PROPOSED SANITARY SEWER & MANHOLE
- PROPOSED WATERMAIN, FIRE HYDRANT & GATE VALVE
- PROPOSED WATERMAIN TEE
- PROPOSED WATERMAIN BEND
- PROPOSED WATERMAIN CROSS
- PROPOSED STORM SEWER & MANHOLE
- PROPOSED STORM SEWER & INLET MANHOLE
- PROPOSED STORM SEWER & INLET
- PROPOSED STORM SEWER & END SECTION
- PROPOSED HOUSE SANITARY SERVICE
- PROPOSED HOUSE WATER SERVICE
- 695 EXISTING CONTOUR
- EXISTING STREET LIGHT (FROM GREMLEY & BIEDERMANN SURVEY)
- PROPOSED STREET LIGHT

NOTES:

1. SANITARY SEWER TO BE 8" DIAMETER
2. WATERMAIN TO BE 8" DIAMETER
3. STORM SEWER TO BE SIZED AS PART OF FINAL ENGINEERING PLANS
4. SIDEWALKS TO BE CONSTRUCTED IN PHASES ALONG THE FUTURE COMMERCIAL AREA AND AT LOCATIONS MUTUALLY AGREED BETWEEN THE VILLAGE AND OWNER

PROPOSED TRAFFIC SIGNAGE

PROVIDE STOP SIGN AND STOP BARS AT THE FOLLOWING INTERSECTIONS:

1. BRADLEY DRIVE - 80TH AVENUE
2. CRANA CIRCLE - GREENWAY BOULEVARD
3. BRADLEY CIRCLE - MAGNUSON DRIVE

PRELIMINARY

PRELIMINARY SEWER AND WATERMAIN PLAN

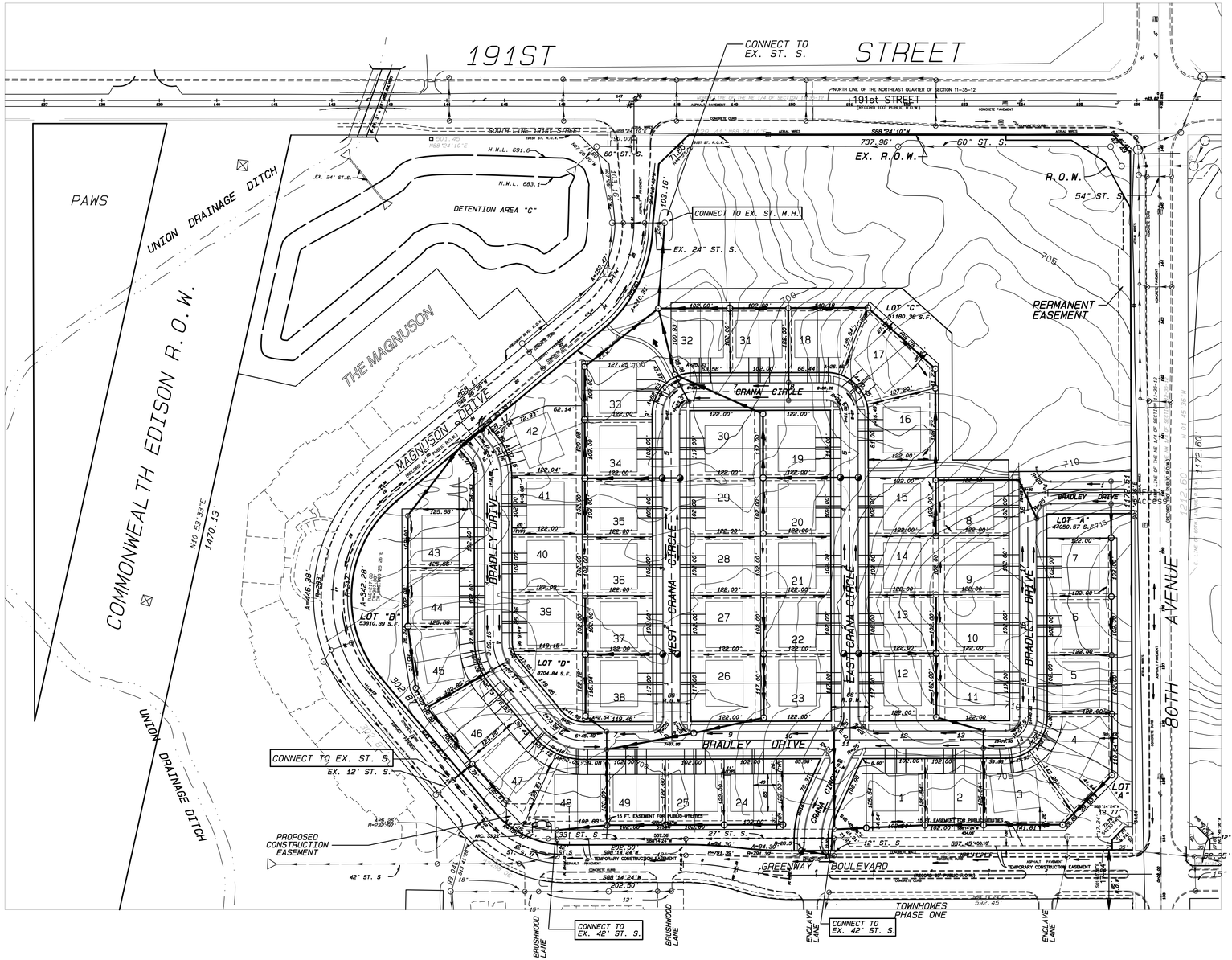
SEWER AND WATERMAIN PLAN

BRANECKI - VIRGILIO & ASSOCIATES
Consulting Civil Engineers
79 NORTH BROADWAY
DES PLAINES, ILLINOIS 60016
847-298-4525

SCALE: 1" = 100'	REVISIONS
DRAWN BY:	APRIL 16, 2021
DATE: MAR. 29, 2021	JULY 21, 2021
FILE NUMBER 993	

BROOKSIDE GLEN VILLAS

TINLEY PARK, WILL COUNTY, ILLINOIS



N

SCALE: 1" = 100'

0 50 100 200

LEGEND

- EXISTING STORM SEWER & MANHOLE
- 700 EXISTING CONTOUR
- PROPOSED DRAINAGE DIRECTION
- PROPOSED STORM SEWER & MANHOLE OR MANHOLE CATCH BASIN (AS NOTED)
- PROPOSED INLET-MANHOLE OR INLET-MANHOLE CATCH BASIN (AS NOTED)

PRELIMINARY

GRADING PLAN

BRANECKI - VIRGILIO & ASSOCIATES
Consulting Civil Engineers
79 NORTH BROADWAY
DES PLAINES, ILLINOIS 60016
847-298-4525

SCALE: 1" = 100'	REVISIONS
DRAWN BY:	APRIL 16, 2021 JULY 21, 2021
DATE: MAR. 29, 2021	
FILE NUMBER 993	

SHEET 4 OF 5

PRELIMINARY GRADING PLAN

BROOKSIDE GLEN VILLAS

TINLEY PARK, WILL COUNTY, ILLINOIS

BROOKSIDE GLEN VILLAS

FUTURE COMMERCIAL AREA

BRADLEY DRIVE

NORTH LINE BROOKSIDE GLEN VILLAS

PROPOSED ACCESS ONTO 80TH AVENUE

PERMANENT EASEMENT

PROPOSED CURB & GUTTER (PER IDOT WIDENING PLAN)

MATCH PROPOSED IDOT EDGE OF PAVEMENT

R.O.W. TAKING

PROPOSED CONCRETE SIDWALK

EX. R.O.W.

PROP. SIDEWALK

CONNECT TO EX. SIDEWALK

MATCH PROPOSED IDOT EDGE OF PAVEMENT

PROPOSED CONCRETE MEDIAN PER IDOT WIDENING PLAN

REPLACE PROPOSED CONCRETE MEDIAN WITH PROPOSED CONCRETE PAVEMENT

PROP. IDOT R.O.W.

191ST STREET

80TH AVENUE

GREENWAY BLVD

LOT "A"

LOT "A"

Full Access

ONLY

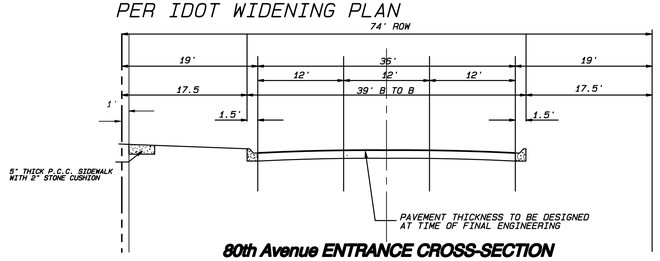
NO LEFT TURN

SCALE: 1" = 50'

0 25 50 100

NOTE:
VILLAGE TO OBTAIN PERMISSION TO CONSTRUCT ACCESS ONTO 80TH AVENUE AND 80TH AVENUE PLAN MODIFICATIONS

NOTE:
SIDEWALK LOCATIONS NORTH OF BRADLEY DRIVE TOWARD 191ST STREET AND ALONG 191ST STREET TOWARD 80TH AVENUE SHALL BE AS MUTUALLY AGREED BETWEEN THE VILLAGE AND OWNER



80th Avenue ENTRANCE CROSS-SECTION
SECTION A - A

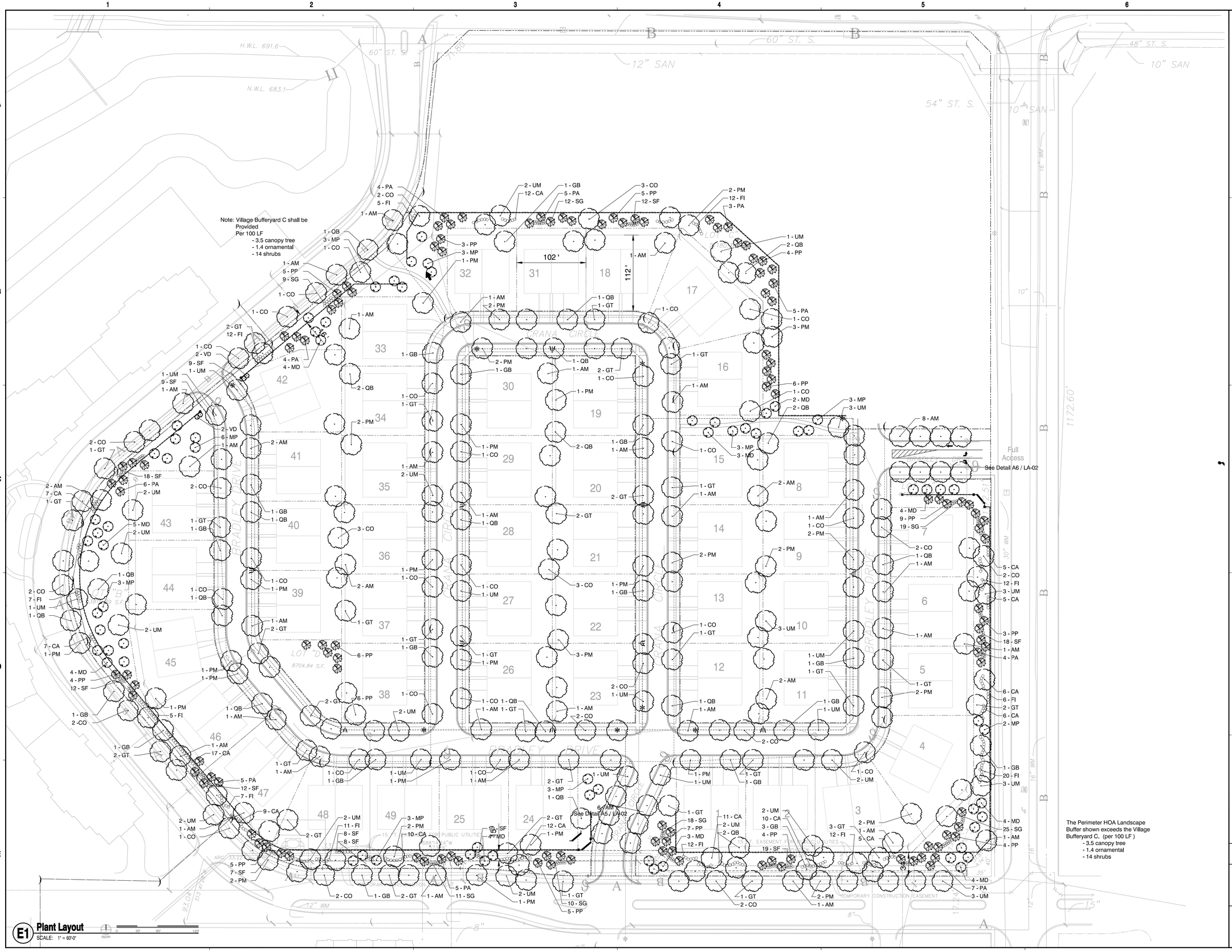
PRELIMINARY

PROP. 80TH AVE FULL ACCESS DETAIL

BRANECKI - VIRGILIO & ASSOCIATES
Consulting Civil Engineers
79 NORTH BROADWAY
DES PLAINES, ILLINOIS 60016
847-298-4525

SCALE: 1" = 50'	REVISIONS
DRAWN BY:	APRIL 16, 2021
DATE: APRIL 9, 2021	JULY 21, 2021
FILE NUMBER 993	SHEET 5 OF 5

80TH AVE FULL ACCESS DETAIL



HKM

ARCHITECTS + PLANNERS, INC.

43 South Vail Avenue
Arlington Heights, Illinois 60005

P 847.392.9200
F 847.392.9009

HKM DESIGN FIRM NO.: 184-001735

Crana Homes

Tinley Park, Illinois

Brookside Glen Villas

191st + 80th
Tinely Park, Illinois

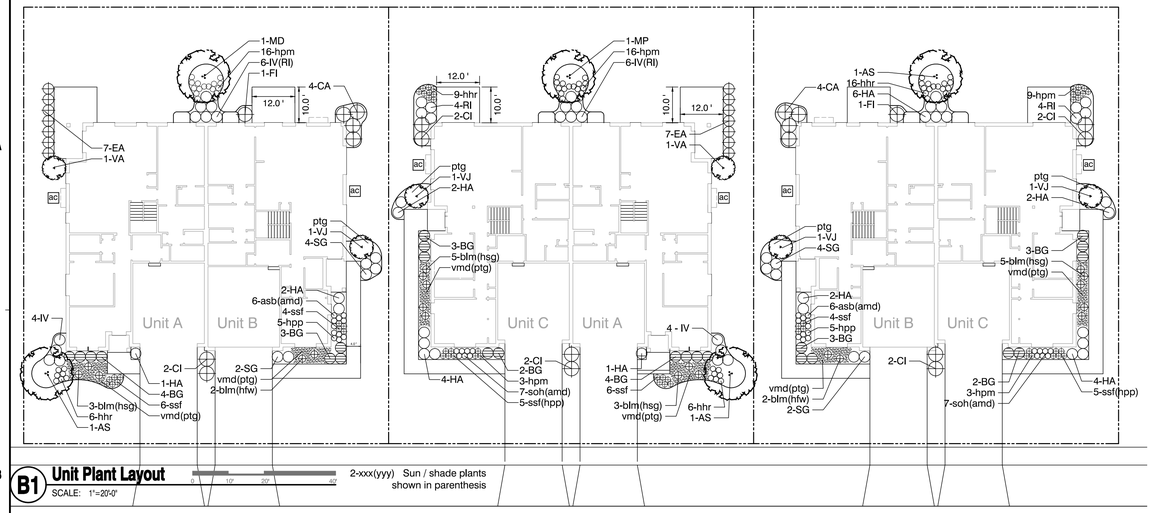
no.	revision	init.	date
1	Rev. per Village Comments		2021.07.27
2	Rev. per Village Comments		2021.09.03

Overall Landscape Plan

date	drawn by	checked by
2021-04-21		mhk

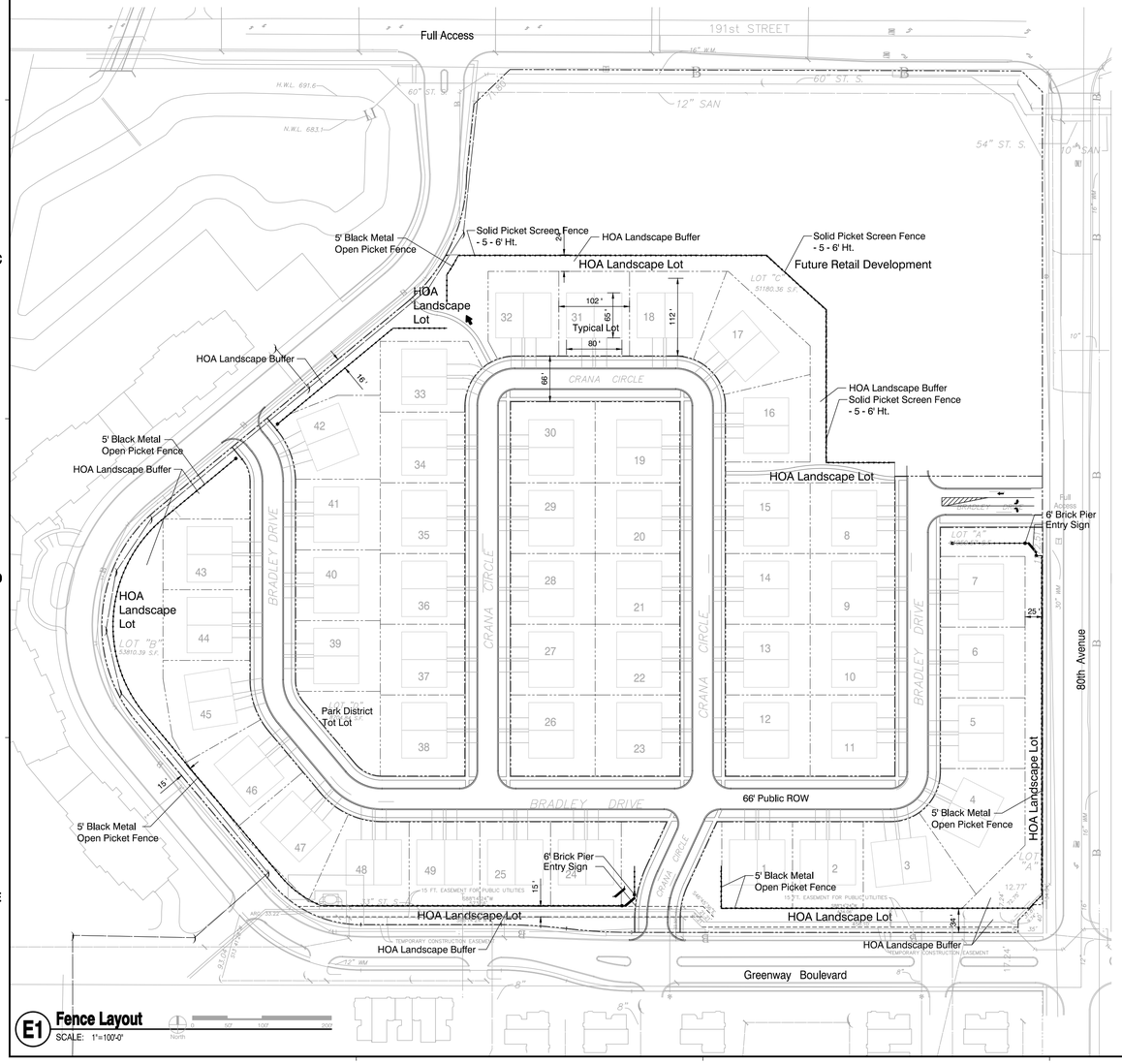
Job No. 19015

Sheet No. LA-01

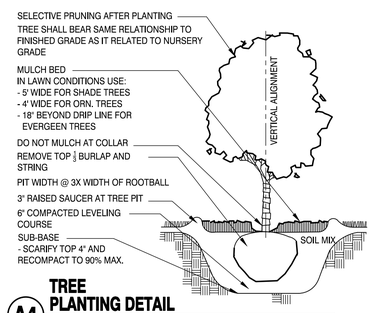


B1 Unit Plant Layout
SCALE: 1"=20'-0"

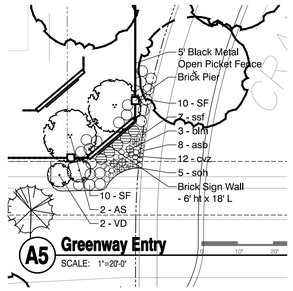
2-xxx(yyy) Sun / shade plants shown in parenthesis



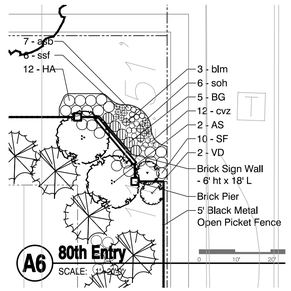
E1 Fence Layout
SCALE: 1"=100'-0"



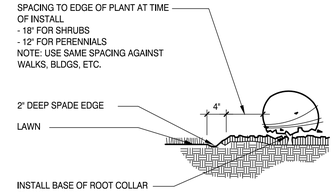
A4 TREE PLANTING DETAIL
SCALE: nts



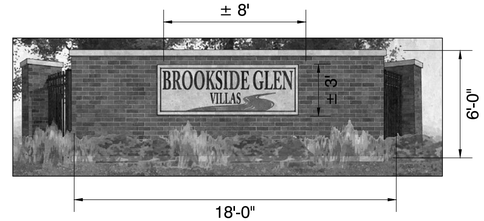
A5 Greenway Entry
SCALE: 1"=20'-0"



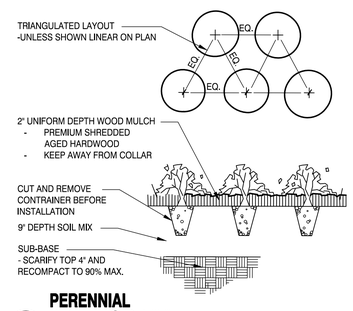
A6 80th Entry
SCALE: 1"=20'-0"



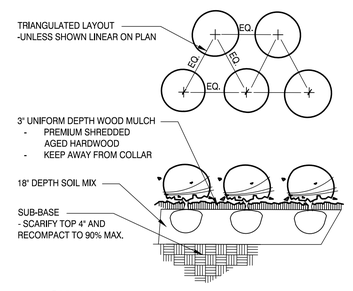
B4 PLANTING EDGE DETAIL
SCALE: nts



B5 Entry Sign Elevation
SCALE: 1/4" = 1'-0"



C4 PERENNIAL PLANTING DETAIL
SCALE: nts



D4 SHRUB PLANTING DETAIL
SCALE: nts

1. Landscape contractor to inspect site prior to the start of any work and notify Architect of any site deficiencies.
2. All landscape areas shall have a minimum of 6" pulverized topsoil free of debris.
3. Mulch all plant beds with premium hardwood mulch.
   - 3" depth for Trees and Shrubs
   - 2" depth for Perennials
4. All lawn areas to be sod or seed with erosion blanket.
5. Plant species and cultivars are shown for representative character and final species are subject to constant improvement and refinement.
6. Plant counts are for the convenience of the contractor only and are supercede by the quantities shown on the layout.

E4 NOTES
SCALE: -

Trees

sym	Botanic Name		Common Name	Size
AM	Acer freemanni ' Marmo'	20 x 15	Marmo Freeman Maple	MS 8-10' Ht. BB
AS	Amelanchier 'Autumn Brilliance'		A. Brilliance Serviceberry	MS 8-10' Ht. BB
CO	Celtis occidentalus 'Chicagoland'		Chicagoland Hackberry	2.5" BB
GT	Gleditsia triacanthos 'Skyline'		Skyline Honeylocust	3" BB
GB	Ginkgo biloba		Columnar Ginkgo	2.5" BB
MR	Malus 'Red Jewel'	12-15 x 8-10	Red Jewel Crabapple	MS 6-8' Ht. BB
MD	Malus 'Donald Wyman'	20 x 25	Donald Wyman Crabapple	MS 6-8' Ht. BB
PA	Picea abies		Norway Spruce	8' Ht. BB
PM	Platinus acerifolia 'Morton Circle'		Morton Circle Planetree	2.5" BB
PP	Picea pungens		Colorado Spruce	8' Ht. BB
QB	Quercus bicolor		Swamp White Oak	2" BB
UM	Ulmus davidiana 'Morton'		Morton Elm	2.5" BB

Shrubs

sym	Botanic Name	Common Name	Size
BG	Buxus x 'Glencoe'	Glencoe Boxwood	24" BB
CA	Cotoneaster acutifolius	Peking Cotoneaster	24" BB
CI	Cornus sericea 'Isantii'	Isanti Redosier Dogwood	24" BB
EA	Euonymus alatus 'Compactum'	Compact BurningBush	24" BB
FI	Forsythia x intermedia 'NH Gold'	New Hampshire Gold Forsythia	18" BB
HA	Hydrangea arborescens 'Annabelle'	Annabelle Hydrangea	18" BB
IV	Itea virginica 'Morton'	Morton Sweetspire	18" BB
VA	Viburnum dentatum "Autumn Jazz' (8-10 x 6-8)	Autumn Jazz Viburnum	3' BB
VJ	Viburnum x 'Juddii' (6-8 x 8-10)	Judd Viburnum	3' BB
RI	Ribes alpinum 'Green Mound'	Alpine Currant	24" BB
SF	Spiraea x bumalda 'Froebelii'	Froebel Spirea	18" BB
SG	Spiraea japonica 'Gold Flame'	Gold Flame Spirea	18" BB

Perennials

sym	Botanic Name	Common Name	Size
amd	Astilbe 'Maggie Daley'	Maggie Daley Astilbe	#1 Cont.
asb	Allium 'Summer Beauty'	Summer Beauty Onion	#1 Cont.
blm	Baptisia australis	Blue False Indigo	#1 Cont.
cvz	Coreopsis verticillata "Zagreb"	Zagreb Tickseed	#1 Cont.
hhr	Hemerocallis 'Happy Returns'	Repeat Blooming Y. Daylilly	#1 Cont.
hpm	Hemerocallis 'Pardon Me'	Repeat Blooming R. Daylilly	#1 Cont.
hpp	Heuchera 'Palace Purple'	Purple Coralbells	#1 Cont.
hfw	Hosta 'Frances Williams'	Frances Williams Hosta	#1 Cont.
hsg	Hosta siebolda 'Guacamole'	Guacamole Hosta	#1 Cont.
ptg	Pachysandra terminalis "Green Carpet'	Pachysandra	9" o.c. Flats
soh	Stachys officinalis 'Hummelo'	Hummelo Betony	#1 Cont.
ssf	Sedum spectable 'Autumn Fire'	Autumn Fire Stonecrop	#1 Cont.
vmd	Vinca minor 'Dart's Blue'	Darts Blue Periwinkle	9" o.c. Flats

(xxx) Denotes Shade option based upon unit orientaion

F5 Plant List
SCALE: -

HKM
ARCHITECTS + PLANNERS, INC.
43 South Vail Avenue
Arlington Heights, Illinois 60005
P 847.392.9200
F 847.392.9009

Crana Homes
Tinley Park, Illinois

Brookside Glen Villas
191st + 80th
Tinely Park, Illinois

no.	revision	init.	date
1	Rev. per Village Comments		2021.07.27
2	2021.09.03	Rev. per Village Comments	

Details + Unit Landscape Plan

date 2021-04-21 drawn by checked by mhk

Job No. **19015**

Sheet No. **LA-02**

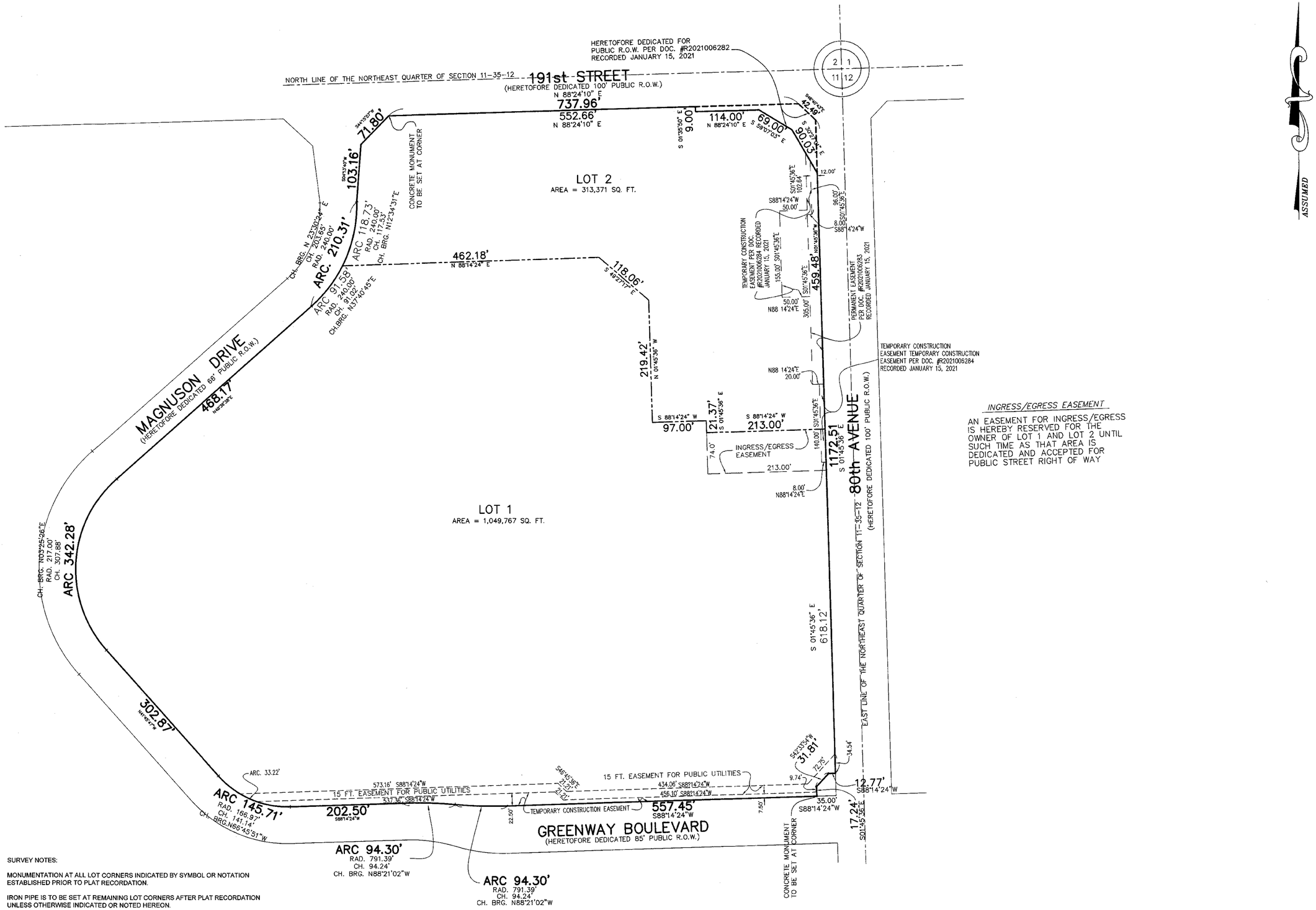
P.I.N. __-__-___-_____

Owner: Marquette Bank
9533 West 143rd Street
Orland Park, IL 60462

Brookside Glen Villas Subdivision

BEING A SUBDIVISION IN PART OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 35 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN WILL COUNTY, ILLINOIS.

GRAPHIC SCALE
60 0 40 80
(IN FEET)
1" = 80'



SURVEY NOTES:

MONUMENTATION AT ALL LOT CORNERS INDICATED BY SYMBOL OR NOTATION ESTABLISHED PRIOR TO PLAT RECORDATION.

IRON PIPE IS TO BE SET AT REMAINING LOT CORNERS AFTER PLAT RECORDATION UNLESS OTHERWISE INDICATED OR NOTED HEREON.

NO DIMENSIONS SHALL BE ASSUMED BY SCALE MEASUREMENT UPON THIS PLAT.

ORDERED BY: CRANNA HOMES INC		CHECKED:	DRAWN:
ADDRESS: BROOKSIDE GLEN P.U.D. WEST COMMERCIAL AREA			BB

GREMLEY & BIEDERMANN
A DIVISION OF PLCS CORPORATION
LICENSE NO. 184-003332
PROFESSIONAL LAND SURVEYORS
4505 NORTH ELSTON AVENUE, CHICAGO, IL 60630
TELEPHONE: (773) 685-5002 EMAIL: INFO@PLCS-SURVEY.COM

ORDER NO.	DATE:	PAGE NO.
2021-29306-001	SEPTEMBER 30, 2021	1 OF 2
	SCALE: 1 INCH = 60 FEET	

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Brookside Glen Villas Subdivision

BEING A SUBDIVISION IN PART OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 35 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN WILL COUNTY, ILLINOIS.

VILLAGE OF TINLEY PARK
BOARD OF TRUSTEES CERTIFICATE
State of Illinois)
)ss
County of Cook)

Approved by the President and Board of Trustees of the Village Of Tinley Park, Illinois, This _____Day of_____A.D.20_____.

By:_____
Village President

Attest:_____
Village Clerk

VILLAGE OF TINLEY PARK
PLAN COMMISSION CERTIFICATE
State of Illinois)
)ss
County of Cook)

Approved by the Plan Commission of the Village of Tinley Park, Illinois at a meeting held this _____Day of_____A.D.20_____.

By:_____
Chairman

Attest:_____
Secretary

VILLAGE OF TINLEY PARK
VILLAGE COLLECTOR CERTIFICATE
State of Illinois)
)ss
County of Cook)

I find no deferred installments of outstanding unpaid special assessments due against any of the land included in the above plat.

Dated:_____A.D. 20_____.

_____
Village Collector
Village of Tinley Park, Illinois

COUNTY RECORDER CERTIFICATE
State of Illinois)
)ss
County of Will)

This instrument number _____was filed for record in the recorders office of Will County aforesaid on the _____day of _____ A.D. 20_____, at _____ o'clock _____ M. and recorded in Book _____ of plats, on page _____.

_____
Will County Recorder

COUNTY CLERK CERTIFICATE
State of Illinois)
)ss
County of Will)

This is to certify that I find no delinquent or unpaid current taxes or special assessments against any of the real estate described in the foregoing certificates. Dated this_____day of _____A.D. 20_____.

_____
Will County Clerk

TAX MAPPING CERTIFICATE
State of Illinois)
)ss
County of Will)

I,_____, Director of the Tax Mapping and Platting Office, do hereby certify that I have checked the property description on this plat against available county records and find said description to be true and correct. The property herein described is located in Tax Map#_____ and identified as permanent real estate
tax index number
(PIN)_____.

Dated this _____day of _____ A.D. 20_____.

_____
Director

OWNER CERTIFICATE
State of _____)
)ss
County of _____)

The undersigned, as Trustee under Trust Agreement _____ and bearing date _____ and under deed in trust bearing date _____ and recorded in the Recorder's Office of Will County, Illinois, _____ as document #_____ does hereby certify that it is as such trustee, the owner of the property described hereon and that as such owner has caused the said property to be surveyed and subdivided as shown on the plat hereon drawn. Dated this _____day of _____ A. D. 20_____.

_____
as trustee, as aforesaid, and not personally

By: _____
President

Attest: _____
Secretary

State of Illinois)
)ss
County of _____)

I, _____, a Notary Public in and for the county in the state aforesaid, do hereby certify that _____, _____ President of _____ and_____, _____ Secretary of said _____, personally known to me to be the same persons whose names are subscribed to the foregoing instrument as such _____ President and _____ Secretary respectively, appeared before me this day in person and acknowledged that they signed and delivered the said instrument as their own free and voluntary act and as the free and voluntary act of said _____ for the uses and purposes therein set forth, and the said _____ Secretary did also then and there acknowledge that he (or she) as custodian of the corporate seal of said _____ did affix the said corporate seal of said _____ to said instrument as his (or her) own free and voluntary act and as the free and voluntary act of said _____ for the uses and purposes therein set forth. Given under my hand and notarial seal this _____day of _____ A.D. 20_____.

_____
Notary Public

VILLAGE ENGINEER CERTIFICATE
State of Illinois)
)ss
County of Cook)

Approved by the Village Engineer of the Village of Tinley Park, Illinois, this_____Day

of_____A.D.20_____.

By:_____
Village Engineer

SURVEYORS CERTIFICATE
STATE OF ILLINOIS)
COUNTY OF COOK)SS

I, _____, A PROFESSIONAL ILLINOIS LAND SURVEYOR, DO HEREBY CERTIFY THAT I HAVE SURVEYED AND SUBDIVIDED:
, IN THE MANNER REPRESENTED ON THE PLAT HEREON DRAWN.

THAT PART OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 35 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTH LINE OF GREENWAY BOULEVARD AND WEST LINE OF 80TH. AVENUE THENCE SOUTH 88 DEGREES 14 MINUTES 24 SECONDS WEST ALONG SAID NORTH LINE 35.00 FEET TO THE POINT OF BEGINNING; THE NEXT 11 COURSES BEING ALONG THE NORTH AND EAST LINES OF GREENWAY BOULEVARD AFORESAID; THENCE CONTINUING SOUTH 88 DEGREES 14 MINUTES 24 SECONDS WEST 557.45 FEET; THENCE 94.30 FEET ALONG THE ARC OF A CIRCLE HAVING A RADIUS OF 791.39 FEET CONCAVE NORTHERLY AND WHOSE CHORD BEARS NORTH 88 DEGREES 21 MINUTES 02 SECONDS WEST A DISTANCE OF 94.24 FEET; THENCE 94.30 FEET ALONG THE ARC OF A CIRCLE HAVING A RADIUS OF 791.39 FEET CONCAVE SOUTHERLY AND WHOSE CHORD BEARS NORTH 88 DEGREES 21 MINUTES 02 SECONDS WEST A DISTANCE OF 94.24 FEET; THENCE SOUTH 88 DEGREES 14 MINUTES 24 SECONDS WEST 202.50 FEET; THENCE 145.71 FEET ALONG THE ARC OF A CIRCLE HAVING A RADIUS OF 166.97 FEET CONCAVE NORTHEASTERLY AND WHOSE CHORD BEARS NORTH 66 DEGREES 45 MINUTES 51 SECONDS WEST A DISTANCE OF 141.14 FEET; THENCE NORTH 41 DEGREES 45 MINUTES 47 SECONDS WEST 302.87 FEET; THENCE 342.28 FEET ALONG THE ARC OF A CIRCLE HAVING A RADIUS OF 217.00 FEET CONCAVE EASTERLY AND WHOSE CHORD BEARS NORTH 03 DEGREES 25 MINUTES 26 SECONDS EAST A DISTANCE OF 307.88 FEET; THENCE NORTH 48 DEGREES 36 MINUTES 38 SECONDS EAST 468.17 FEET; THENCE 210.31 FEET ALONG THE ARC OF A CIRCLE HAVING A RADIUS OF 240.00 FEET CONCAVE NORTHWESTERLY AND WHOSE CHORD BEARS NORTH 23 DEGREES 30 MINUTES 24 SECONDS EAST A DISTANCE OF 203.65 FEET; THENCE NORTH 04 DEGREES 13 MINUTES 40 SECONDS EAST 103.16 FEET; THENCE NORTH 44 DEGREES 15 MINUTES 57 SECONDS WEST 71.80 FEET TO A POINT ON THE SOUTH LINE OF 191ST. STREET; THENCE NORTH 88 DEGREES 24 MINUTES 10 SECONDS EAST, ALONG THE SOUTH LINE OF 191ST. STREET 737.96 FEET; THENCE SOUTH 48 DEGREES 40 MINUTES 43 SECONDS EAST 42.49 FEET TO A POINT ON THE WEST LINE OF 80TH AVENUE; THENCE SOUTH 01 DEGREES 45 MINUTES 36 SECONDS EAST ALONG THE WEST LINE OF 80TH AVENUE 1172.51 FEET; THENCE SOUTH 88 DEGREES 14 MINUTES 24 SECONDS WEST 12.77 FEET; THENCE SOUTH 42 DEGREES 33 MINUTES 54 SECONDS WEST 31.81 FEET; THENCE SOUTH 01 DEGREES 45 MINUTES 36 SECONDS EAST 17.24 FEET, TO THE POINT OF BEGINNING, EXCEPT THAT PART TAKEN FOR STREET PER DOC. #R2021006282 RECORDED JANUARY 15, 2021, IN WILL COUNTY, ILLINOIS.

CONTAINING 1,363,138 SQUARE FEET OR 31.29 ACRES, MORE OR LESS.

I FURTHER CERTIFY THAT THE PROPERTY DESCRIBED HEREON IS LOCATED WITHIN THE CORPORATE LIMITS OF THE TINLEY PARK, WILL COUNTY, ILLINOIS, WHICH HAS ADOPTED A PLAN AND IS EXERCISING THE SPECIAL POWERS AUTHORIZED BY DIVISION 12 ARTICLE 11 OF THE ILLINOIS MUNICIPAL CODE.

I FURTHER CERTIFY THAT ALL OF THE PROPERTY APPEARS IN ZONE X ON THE FLOOD INSURANCE RATE MAP,WILL COUNTY, ILLINOIS, COMMUNITY PANEL NO. 17197C 0212 G, MAP REVISED FEBRUARY 15, 2019 AND PANEL NO. 17197C 0216 G, MAP REVISED FEBRUARY 15, 2019

DIMENSIONS ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF AND ARE CORRECTED TO A TEMPERATURE OF 62° FAHRENHEIT.

FIELD MEASUREMENTS COMPLETED ON DECEMBER 3, 2019.

SIGNED ON _____.

BY:

_____
PROFESSIONAL ILLINOIS LAND SURVEYOR NO. 2802
MY LICENSE EXPIRES NOVEMBER 30, 2022

ORDERED BY: CRANNA HOMES INC		CHECKED:	DRAWN: BB
ADDRESS: BROOKSIDE GLEN P.U.D. WEST COMMERCIAL AREA			

GREMLEY & BIEDERMANN
A Division of PLCS, Corporation
License No. 184-005532
Professional Land Surveyors
4505 North Elston Avenue, Chicago, IL 60630
Telephone: (773) 685-5102 Email: INFO@PLCS-SURVEY.COM

ORDER NO. 2021-29306-001	DATE: SEPTEMBER 30, 2021 SCALE: 1 INCH = 80 FEET	PAGE NO. 2 OF 2

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191ST STREET

NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 11-35-12

191st STREET (RECORD 100' PUBLIC R.O.W.)

SOUTH LINE 191st STREET

PAWS

UNION DRAINAGE DITCH

EX. DETENTION AREA "C"

FUTURE COMMERCIAL AREA
7.05+/- ACRES
ZONED B-3

GREENWAY BOULEVARD (RECORD 100' PUBLIC R.O.W.)

BRADLEY DRIVE

CRANIA CIRCLE

LOT "A" 44050.57 S.F.

LOT "B" 53810.39 S.F.

LOT "C" 51180.36 S.F.

LOT "D" 8704.84 S.F.

80TH AVENUE

TOWNHOMES
PHASE ONE

15 FT. EASEMENT FOR PUBLIC UTILITIES

UNION DRAINAGE DITCH

191ST STREET

NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 11-35-12

191st STREET (RECORD 100' PUBLIC R.O.W.)

SOUTH LINE 191st STREET

PAWS

UNION DRAINAGE DITCH

EX. DETENTION AREA "C"

FUTURE COMMERCIAL AREA
7.05+/- ACRES
ZONED B-3

LOT "B"
53810.39 S.F.

LOT "C"
51180.36 S.F.

LOT "D"
9704.84 S.F.

LOT "A"
44050.57 S.F.

GREENWAY BOULEVARD (RECORDED 66' PUBLIC R.O.W.)

CRANA CIRCLE

BRADLEY DRIVE

80TH AVENUE

TOWNHOMES
PHASE ONE

15 FT. EASEMENT FOR PUBLIC UTILITIES

UNION DRAINAGE DITCH

191ST STREET
NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 11-35-12
191st STREET (RECORD 100' PUBLIC R.O.W.)
SOUTH LINE 191st STREET
ASPHALT PAVEMENT
CONCRETE CURB
CONCRETE PAVEMENT
AERIAL WIRES
737.96'
PAWS
UNION DRAINAGE DITCH
EX. DETENTION AREA "C"
FUTURE COMMERCIAL AREA
7.05+/- ACRES
ZONED B-3
GREENWAY BOULEVARD (RECORD 66' PUBLIC R.O.W.)
CRANA CIRCLE
BRADLEY DRIVE
LOT "A"
LOT "B"
LOT "C"
LOT "D"
80TH AVENUE
EAST LINE OF THE NE 1/4 OF SECTION 11-35-12
(RECORD 100' PUBLIC R.O.W.)
15 FT. EASEMENT FOR PUBLIC UTILITIES
CONCRETE WALK
TOWNHOMES
PHASE ONE
N10 53'33"E
1470.13'
1172.60'
462.34'
344.18'
219.98'
167.45'
544.12'
592.45'
202.50'
537.36'
66' R.O.W.

Lot 7

Lot 6

Lot 5

Asphalt Parking Lot

Wheel Stop

24.0 '

20.0 '

10.0 '

10.0 ' typ.

8.0 '

8.5 '

Accessible Stall and Signage

Leasing Sign

Model Unit A

Model Unit B

Model Unit C

Fence

Sales Office

Model Sign

Model Sign

Model Sign

Fence

North

0 10' 20' 40'

HKM Brookside Glen Villas Crana Homes

Architecture Planning Landscape Architecture

Model Unit Layout

June 14, 2021


BROOKSIDE GLEN
VILLAS

Unit A Front Elevation w/ Gable Opt. | Unit B Front Elevation | Unit C Front Elevation w/ Opt 2nd Flr. | Unit A Front Elevation | Unit B1 Front Elevation | Unit C Front Elevation w/ Gable Opt.

Unit A Front Elevation | Unit B Front Elevation | Unit C Front Elevation w/ Opt 2nd Flr. | Unit A Front Elevation | Unit B1 Front Elevation | Unit C Front Elevation w/ Gable Opt.

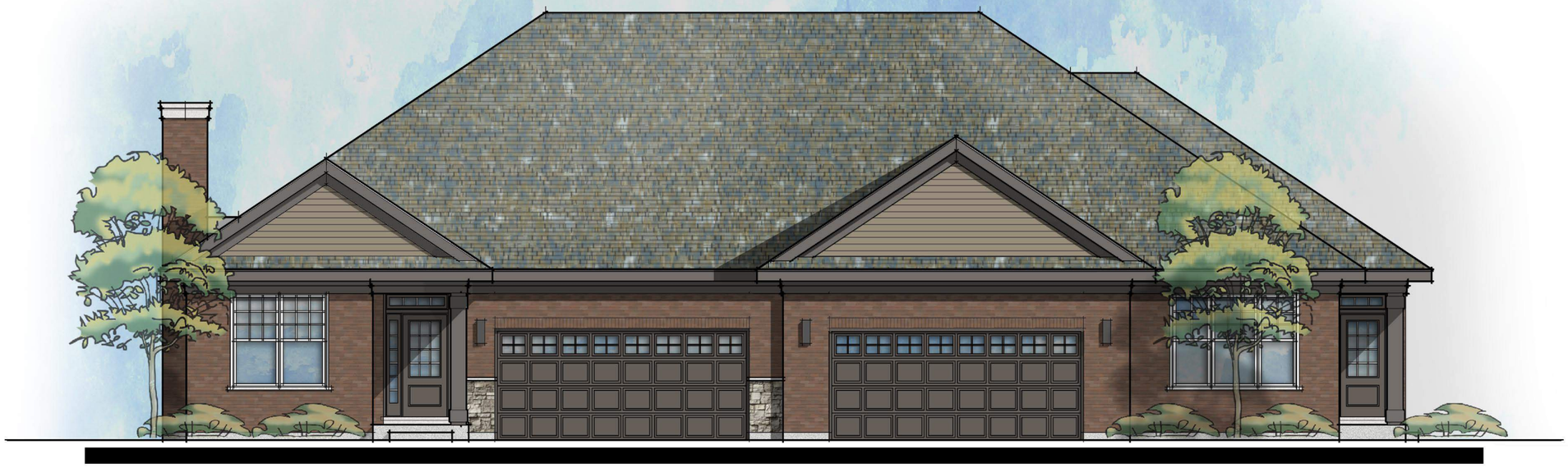
0 10' 20' 40'

HKM Architecture Planning Landscape Architecture

Brookside Glen Villas - Crana Homes

Potential Streetscapes

July 27, 2021



Unit A Front Elevation w/ Gable Opt.

Unit B Front Elevation

Unit B Side Elevation

0 4' 8' 16'

HKM Architecture Planning Landscape Architecture

Brookside Glen Villas - Crana Homes

Building AB Elevations

July 27, 2021

Unit A Front Elevation w/ Gable Opt.

Unit B Front Elevation

Unit B Side Elevation

0 4' 8' 16'

HKM Architecture Planning Landscape Architecture

Brookside Glen Villas - Crana Homes

Building AB Elevations

July 27, 2021

Unit A Front Elevation w/ Gable Opt.

Unit B Front Elevation

Unit B Side Elevation

0 4' 8' 16'

HKM Architecture Planning Landscape Architecture

Brookside Glen Villas - Crana Homes

Building AB Elevations

July 27, 2021

Unit A Front Elevation w/ Gable Opt.

Unit B Front Elevation

Unit B Side Elevation

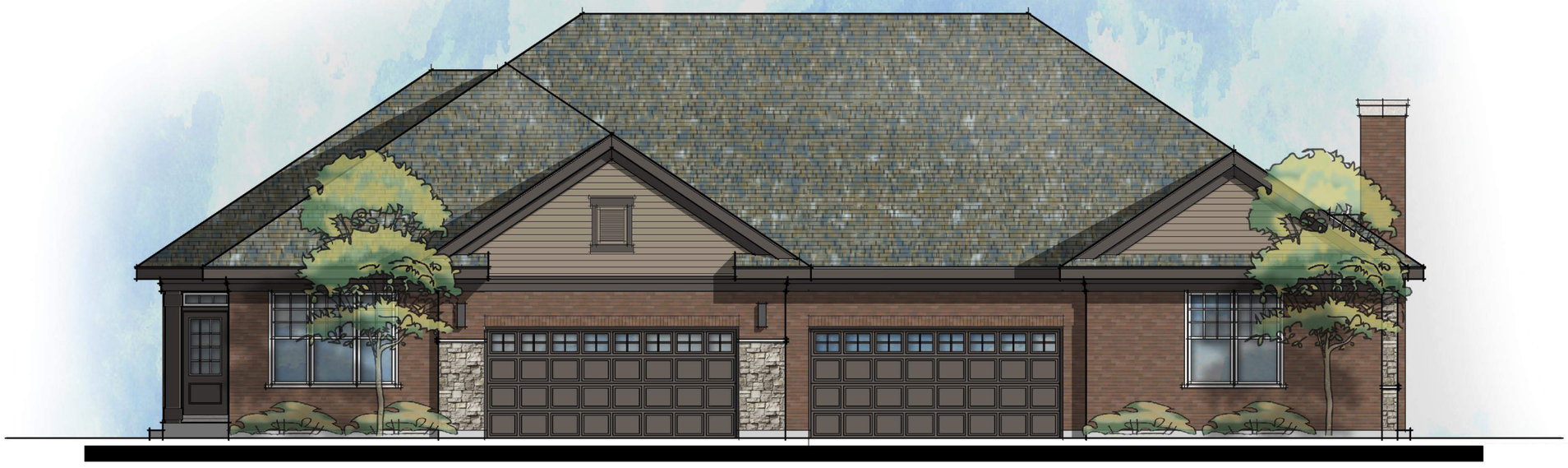
0 4' 8' 16'

HKM Architecture Planning Landscape Architecture

Brookside Glen Villas - Crana Homes

Building AB Elevations

July 27, 2021



Unit B1 Front Elevation

Unit C Front Elevation

Unit C Side Elevation

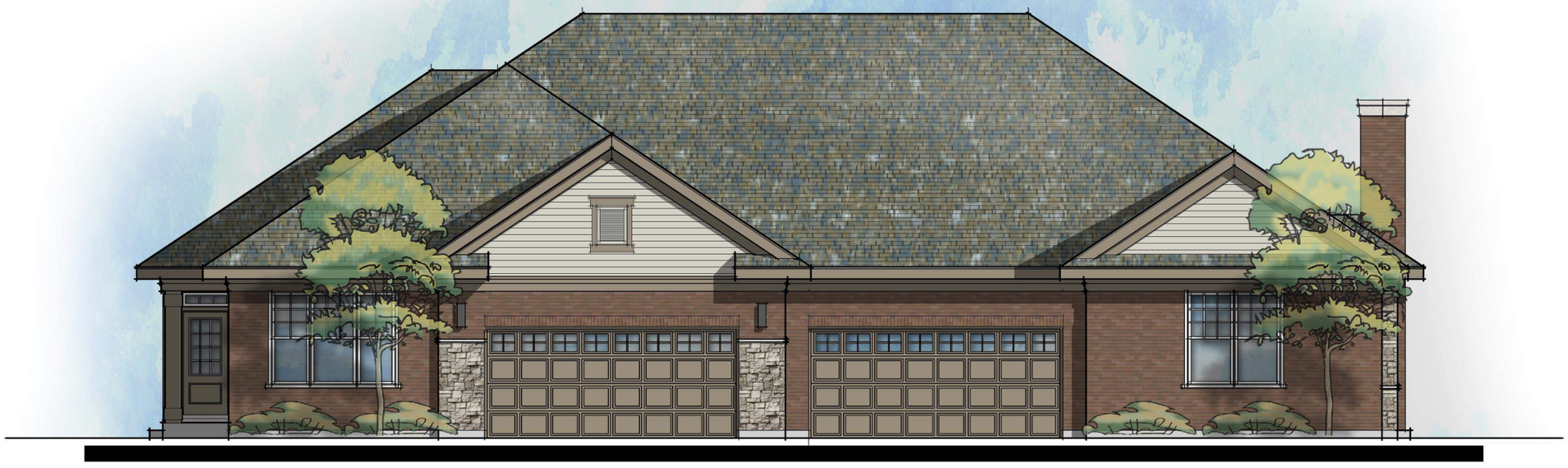
0 4' 8' 16'

HKM Architecture Planning Landscape Architecture

Brookside Glen Villas - Crana Homes

Building BC Elevations

July 27, 2021



Unit B1 Front Elevation

Unit C Front Elevation

Unit C Side Elevation

0 4' 8' 16'

HKM Architecture Planning Landscape Architecture

Brookside Glen Villas - Crana Homes

Building BC Elevations

July 27, 2021

Unit B1 Front Elevation

Unit C Front Elevation

Unit C Side Elevation

0 4' 8' 16'

HKM Architecture Planning Landscape Architecture

Brookside Glen Villas - Crana Homes

Building BC Elevations

July 27, 2021

Unit B1 Front Elevation

Unit C Front Elevation

Unit C Side Elevation

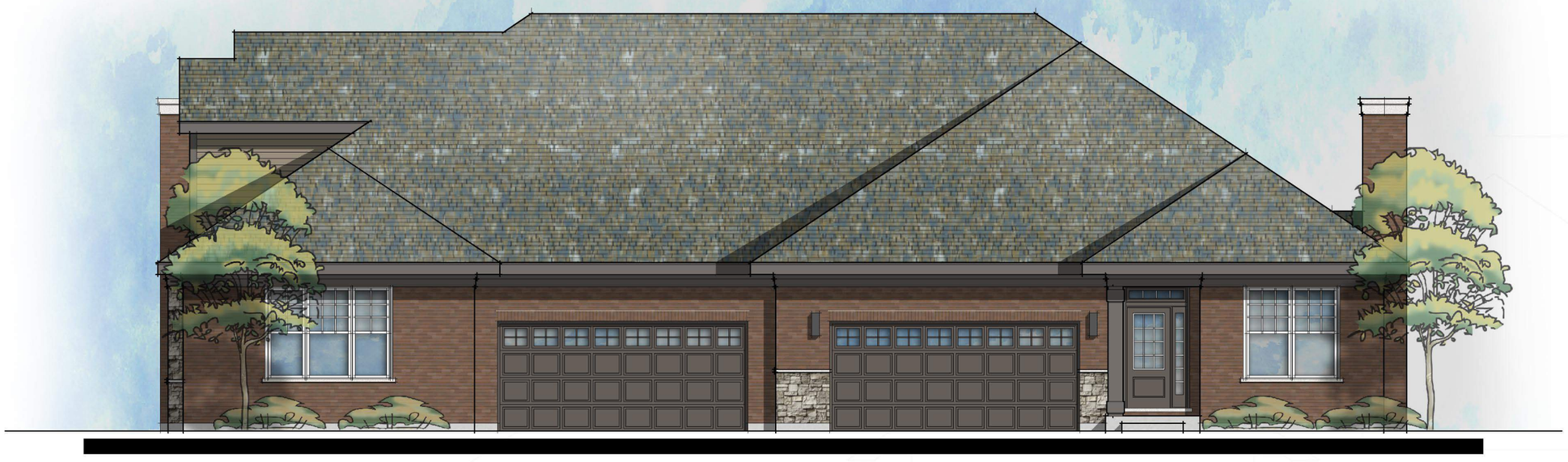
0 4' 8' 16'

HKM Architecture Planning Landscape Architecture

Brookside Glen Villas - Crana Homes

Building BC Elevations

July 27, 2021



Unit C Front Elevation
w/ Opt 2nd Flr.

Unit A Front Elevation

Unit C Side Elevation
w/ Opt 2nd Flr.

0 4' 8' 16'

HKM Architecture Planning Landscape Architecture

Brookside Glen Villas - Crana Homes

Building CA Elevations w/ Opt. 2nd Floor

July 27, 2021

Unit C Front Elevation
w/ Opt 2nd Flr.

Unit A Front Elevation

Unit C Side Elevation
w/ Opt 2nd Flr.

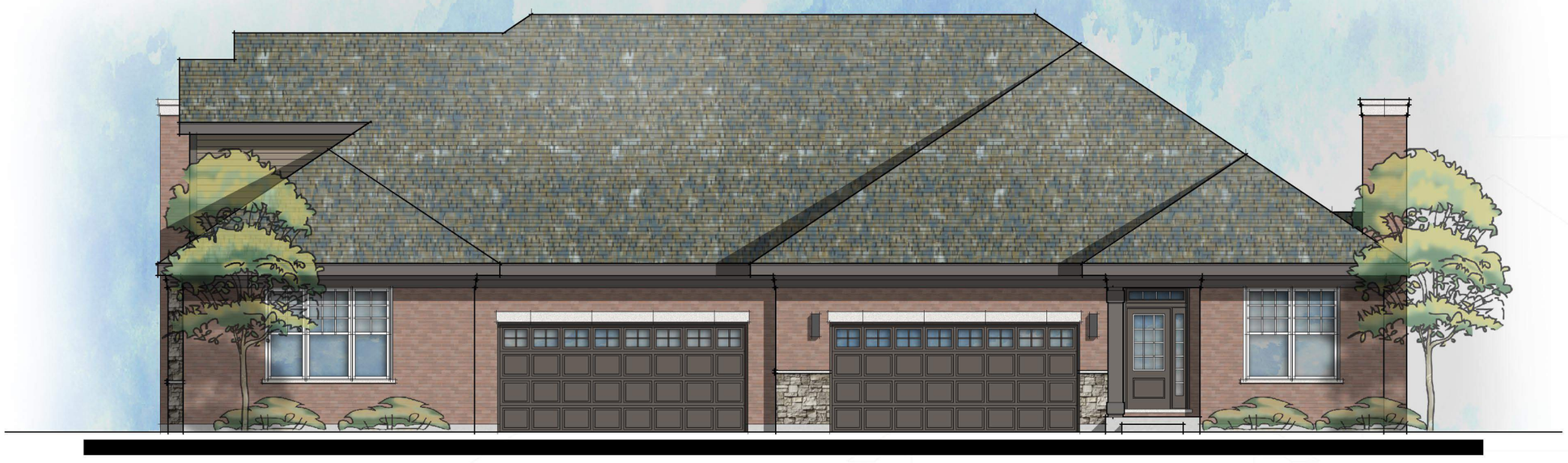
0 4' 8' 16'

HKM Architecture Planning Landscape Architecture

Brookside Glen Villas - Crana Homes

Building CA Elevations w/ Opt. 2nd Floor

July 27, 2021



Unit C Front Elevation
w/ Opt 2nd Flr.

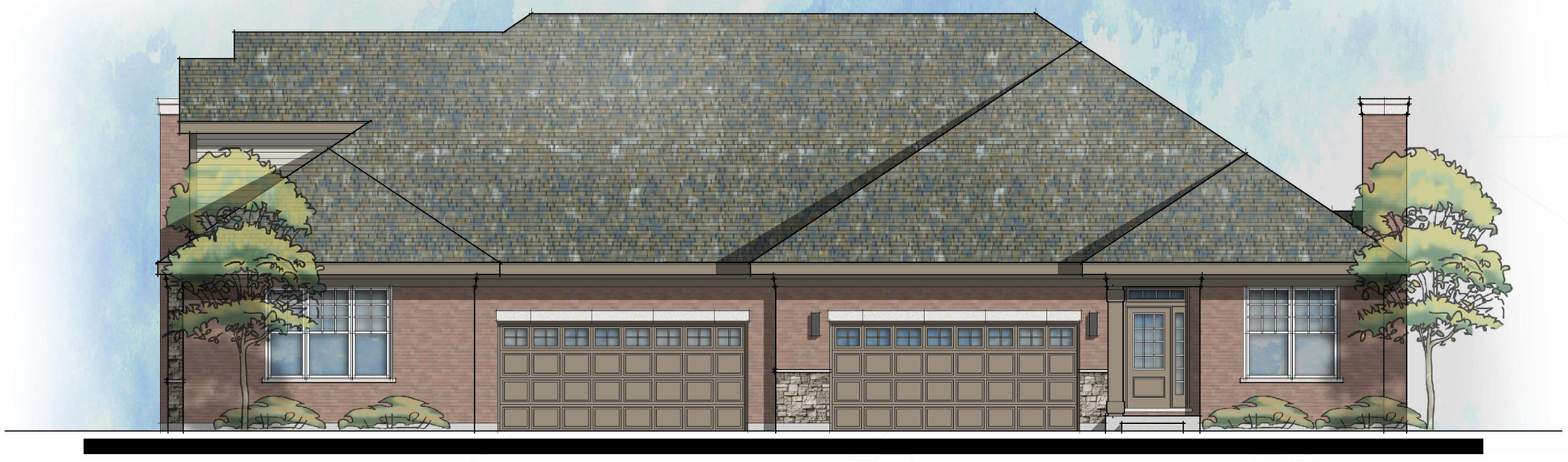
Unit A Front Elevation

Unit C Side Elevation
w/ Opt 2nd Flr.

0 4' 8' 16'

HKM Brookside Glen Villas - Crana Homes
Architecture Planning Landscape Architecture

Building CA Elevations w/ Opt. 2nd Floor
July 27, 2021



Unit C Front Elevation
w/ Opt 2nd Flr.

Unit A Front Elevation

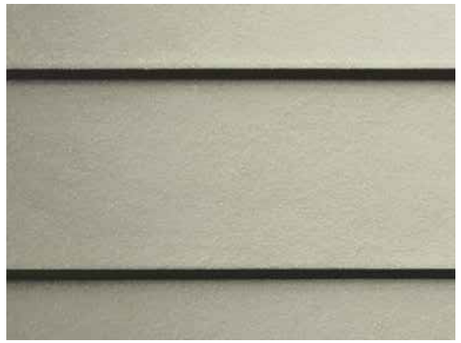
Unit C Side Elevation
w/ Opt 2nd Flr.

0 4' 8' 16'

HKM Brookside Glen Villas - Crana Homes
Architecture Planning Landscape Architecture

Building CA Elevations w/ Opt. 2nd Floor
July 27, 2021

Light Scheme Package



HardiePlank Lap Siding

Cobble Stone; Smooth

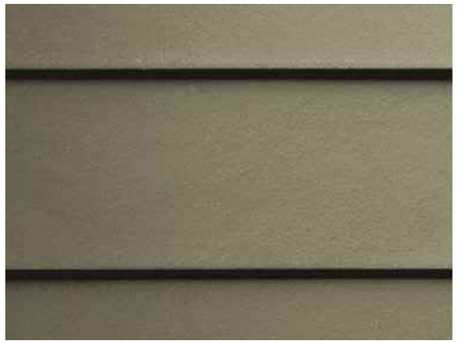
HardieBoard Trim

Monterey Taupe

Clopay - Classic Steel Garage Door

Sandtone Woodgrain

Dark Scheme Package



HardiePlank Lap Siding

Monterey Taupe; Smooth

HardieBoard Trim

Aged Pewter

Clopay - Classic Steel Garage Door

Bronze Woodgrain

Brick Selections

Brampton Brick

Morgan

Glen-Gery

Windsor

Universal Materials

Certainteed - Landmark Pro Asphalt Shingles

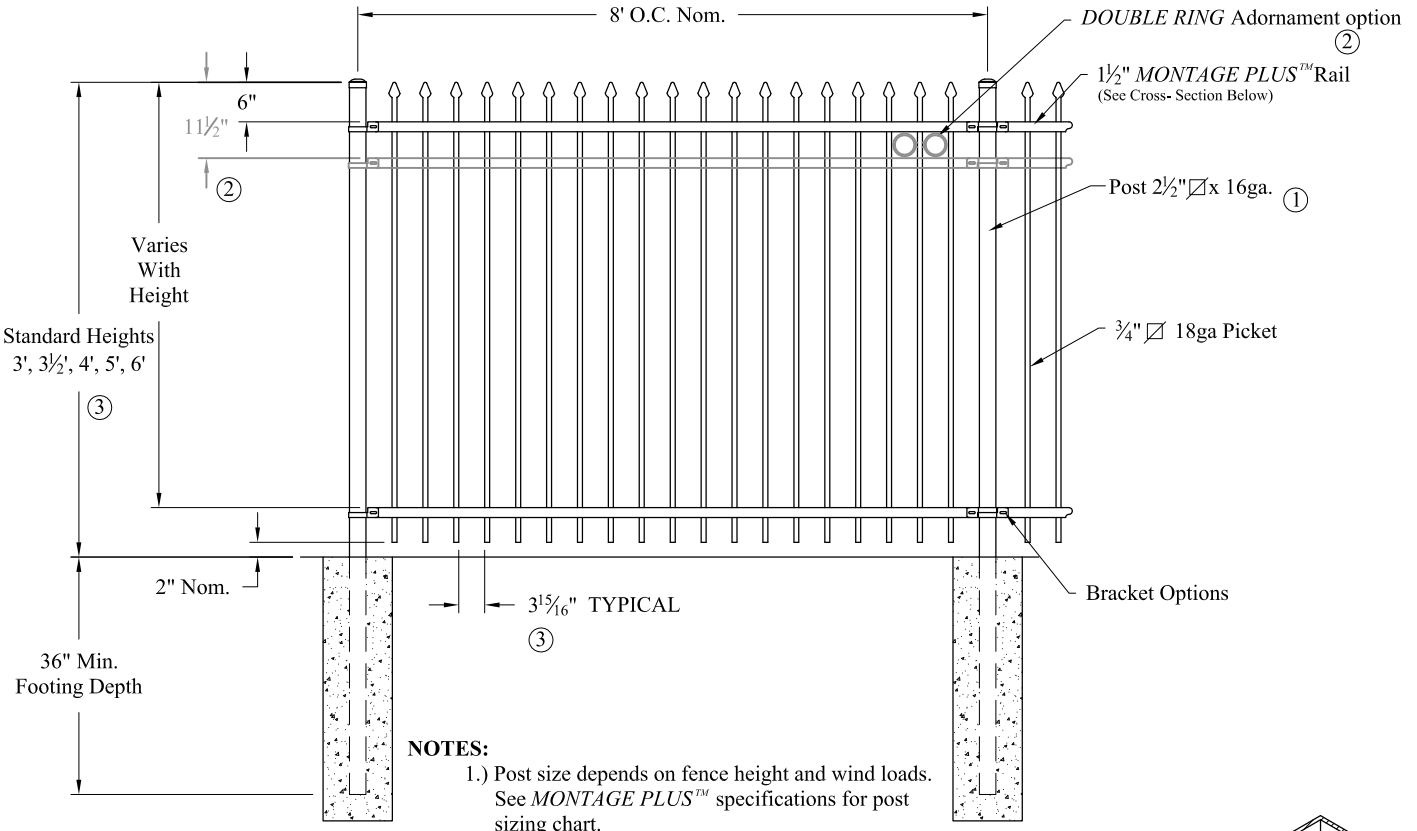
Max Def Weathered Wood

Halquist Stone

Biltmore

Illinois Brick Company

Indiana Limestone - Standard Buff

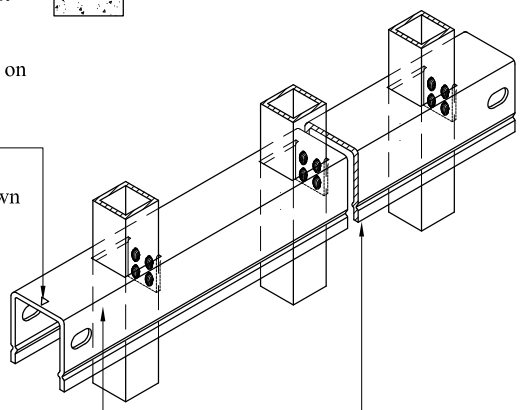


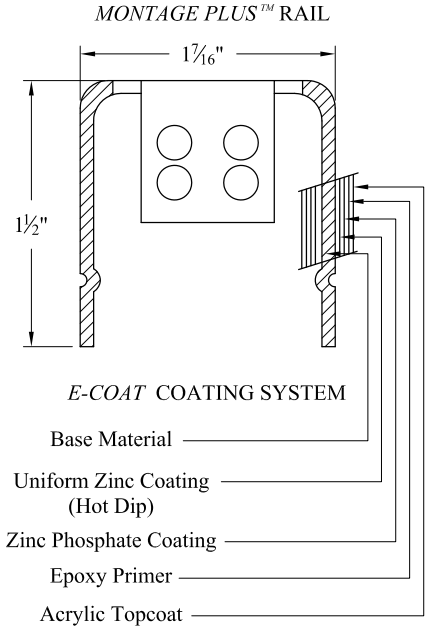
NOTES:

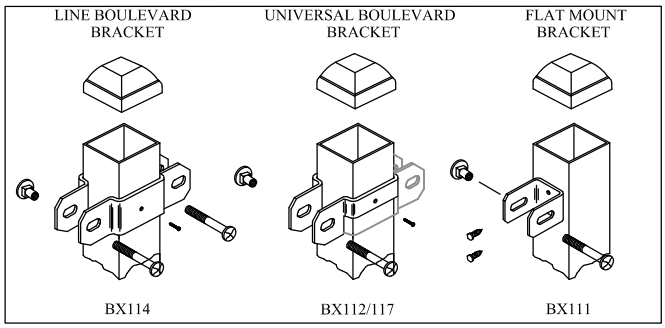
1.) Post size depends on fence height and wind loads. See *MONTAGE PLUS™* specifications for post sizing chart.

2.) Third rail required for *Double Rings*.

3.) Available in 3" air space and/or Flush Bottom on most heights.







COMMERCIAL STRENGTH WELDED STEEL PANEL

PRE-ASSEMBLED

Values shown are nominal and not to be used for installation purposes. See product specification for installation requirements.

1RCISO

Title: **MONTAGE PLUS CLASSIC 2/3-RAIL**

DR: CI	SH . 1of 1	SCALE: DO NOT SCALE	
CK: ME	Date 6/28/10		REV: e

AMERISTAR®
1555 N. Mingo
Tulsa, OK 74116
1-888-333-3422
www.ameristarfence.com

Capanna™ 10.25" 1 Light Wall Light Olde Bronze®

49924OZ

SPECIFICATIONS

Certifications/Qualifications	
	www.kichler.com/warranty
Dimensions	
Base Backplate	4.50 X 6.75
Extension	7.75"
Weight	2.80 LBS
Height from center of Wall opening (Spec Sheet)	2.00"
Height	10.25"
Width	6.50"
Light Source	
Lamp Included	Not Included
Lamp Type	A19
Light Source	Incandescent
Max or Nominal Watt	60W
# of Bulbs/LED Modules	1
Max Wattage/Range	60W
Socket Type	Medium
Socket Wire	150"
Mounting/Installation	
Interior/Exterior	Exterior
Location Rating	Wet
Mounting Weight	1.70 LBS

FIXTURE ATTRIBUTES

Housing	
Diffuser Description	Clear Water
Primary Material	ALUMINUM
Product/Ordering Information	
SKU	49924OZ
Finish	Olde Bronze
Style	Transitional
UPC	783927568593
Finish Options	
Olde Bronze	

ALSO IN THIS FAMILY

49925OZ

49926OZ

49927OZ

49924BKT

49925BKT

49926BKT

AFTER RECORDING, RETURN TO:
James E. DeBruyn, Attorney
DeBruyn, Taylor and DeBruyn Ltd.
15252 S. Harlem Avenue
Orland Park, IL 60462

THIS DOCUMENT PREPARED BY:
James E. DeBruyn, Attorney
DeBruyn, Taylor and DeBruyn Ltd.
15252 S. Harlem Avenue
Orland Park, IL 60462

GENERAL PROPERTY ADDRESS:

191st Street and 80th Avenue
Tinley Park, IL 60487

PERMANENT INDEX NO.:

_____

_____

DECLARATION OF COVENANTS AND RESTRICTIONS FOR BROOKSIDE GLEN VILLAS

THIS DECLARATION, made on the date hereinafter set forth, **MARQUETTE BANK, NOT INDIVIDUALLY, BUT SOLELY AS TRUSTEE UNDER TRUST AGREEMENT DATED JANUARY 4, 2000 AND KNOWN AS TRUST NO. 15084**, hereinafter referred to as "Declarant",

WITNESSETH:

Declarant is the Owner of the property legally described herein in the Village of Tinley Park, Will County, Illinois, legally described as follows:

Lots 1 through 49, both inclusive, in Brookside Glen Villas Subdivision, being a subdivision of that part of the Southeast 1/4 and the Southwest 1/4 of the Southwest 1/4 of Section 10, Township 35 North, Range 12, East of the Third Principal Meridian, lying East of the Easterly right-of-way line of Commonwealth Edison Company, recorded as Document No. _____, in the Office of the Recorder of Deeds of Will County, Illinois.

Declarant desires to create on portions of the property described above from time to time a residential community of townhouses; and

Declarant desires to provide for the preservation of the values and amenities in said community and for the maintenance of said open spaces common to the community; and

In furtherance of these desires, an association has been or will be incorporated under the laws of the State of Illinois as a not-for-profit corporation known as BROOKSIDE GLEN VILLAS TOWNHOME ASSOCIATION, with the powers of maintaining and administering the Townhome properties and facilities, administering and enforcing the covenants and restrictions, and collecting and disbursing the assessments and charges hereinafter created; and

Declarant will, from time to time, convey portions of said properties described below as "Townhomes" to Owners, hereinafter defined, and portions thereof described as "Common Areas" to the Association; all subject to the protective covenants, conditions, restrictions, reservations, liens and charges as hereinafter set forth; and

Declarant hereby declares that all of the properties described herein are to be held, sold and conveyed subject to the following easements, restrictions, covenants and conditions as hereinafter set forth, all of which are for the purpose of enhancing and protecting the value, desirability and attractiveness of the real property. These easements, covenants, restrictions, and conditions will run with the real property and shall be binding on all parties having or acquiring any right, title or interest in the described properties, or any part thereof and shall inure to the benefit of each Owner thereof and their successors and assigns. Said easements, restrictions, covenants, and conditions will immediately attach to the real property upon conveyance or transfer thereof by the Declarant referring to this Declaration or by instrument legally describing and specifically subjecting property hereto.

ARTICLE I
DEFINITIONS

The following terms shall be defined as follows for the purposes of this Declaration:

(a) "Articles of Incorporation" means the Articles of Incorporation of the Association, filed or to be filed with the Secretary of State of Illinois, attached hereto as Exhibit B.

(b) "Association" means Brookside Glen Villas Townhome Association, an Illinois not-for-profit corporation, established pursuant to the Articles of Incorporation.

(c) "Board" or "Board Members" means the Board of Directors of the Association, including the First Board, as set forth more fully in the By-Laws.

(d) "Building Area" means that part of Lots 1 through 49, inclusive, upon which a building will be constructed consisting of two (2) or more residential units sharing a common party wall as depicted on the Plat by a line dividing the Lot and the building into individual Townhome Units. For purposes of sales contracts and marketing materials, each Townhome may be identified by Building Number following by a Unit Number indicating its location within that building as set forth on the Plat for Brookside Glen Villas. No part of the Townhome Building may be constructed beyond the boundary of the Lot except for patios, decks and balconies or any other appurtenances constructed by the Developer.

(e) "By-Laws" means the By-Laws of the Association, attached hereto as Exhibit C.

(f) "Common Expenses" means the expenses of administration, operation, protection and preservation of the Common Area, and the expenses of maintenance and repair thereof and any and all replacements and additions thereto, and all reserves created for such maintenance, repair, replacement or additions.

(g) "Common Area" means all portions of the Property identified on the Plat except the Townhomes, and shall include, but not be limited to, Outlots A, B and C, any recreational facilities, utility lines, undedicated roads and drives, all outdoor landscaping, the landscaped entranceways, fencing and walkways, storm water detention facilities, ponds and parking areas.

(h) "Corrective Amendment" means the Amendment defined in Article XIV.

(i) "Declaration" means this instrument, by which the Development is submitted to the provisions of this Declaration, as hereinafter provided, and such Declaration as amended from time to time.

(j) "Declarant" means Marquette Bank, not individually, but solely as Trustee under Trust Agreement dated January 4, 2000 and known as Trust No. 15084, and any assignee or successor thereof.

(k) "Development" means (i) all the land, property and space comprising the Parcel and all improvements and structures now or hereafter erected, constructed or contained thereon or therein; (ii) all easements, rights and appurtenances now or hereafter belonging to the Parcel; and (iii) all fixtures, facilities and equipment now or hereafter located on the Parcel which are intended for the mutual use, benefit or enjoyment of all Townhome Owners.

(l) "First Board" means the Board as initially constituted, consisting of the Directors listed in the Articles of Incorporation and any subsequent Board appointed by the Declarant pursuant to Article IV of this Declaration.

(m) "Lot" means any one of the individual Lots numbered 1 through 49, inclusive, as depicted on Brookside Glen Villas Plat recorded in the Office of the Recorder of Deeds of Will County, Illinois, on _____ as Document No. R_____ designed and approved for construction of Townhomes.

(n) "Majority" or "majority of the Owners or Voting Members" means more than fifty percent (50%) of the Voting Members entitled to vote from time to time pursuant to the By-Laws. Any specific percentage of Owners or Voting Members means such percentage of the aggregate number of Owners or Voting Members entitled to vote from time to time pursuant to the By-Laws.

(o) "Maintenance Reserve" means that the reserve which is defined in Article V.

(p) "Owner" means the one or more natural individuals, subdivision builder, corporations, partnerships, trustees or other legal entities whose estates or interests, individually or collectively, aggregate fee simple ownership of a Townhome, and unless specifically provided otherwise herein, the Developer shall be deemed an Owner with respect to any Townhome to which the Developer or Trustee holds title.

(q) "Parcel" shall mean and refer to that portion of the real estate (as hereinafter defined) designated and approved for the construction of Townhomes, including all Common Area as defined in (g) above and legally described in Exhibit A and any additional portions of the Real Estate added by amendment to this Declaration.

(r) "Person" means a natural individual, corporation, partnership, trustee or other legal entity capable of holding title to real property.

(s) "Party Wall" means any wall which is built as part of the original construction of two (2) or more Townhomes and located on the Lot or boundary between each Townhome.

(t) "Plat" means the Brookside Glen Villas Plat recorded in the Office of the Recorder of Deeds of Will County, Illinois, on _____ as Document No. R_____, as amended from time to time.

(u) "Preliminary Budget" means that budget which is attached as Exhibit D, as that budget may be amended from time to time, which will serve as the budget for the Association until an Annual Budget is prepared, as more fully set forth in the By-Laws.

(v) "Real Estate" means that portion of the Brookside Glen Villas approved and to be developed for residential townhome use as contained and set forth in the Plat.

(w) "Record" or "Recording" refers to record or recording in the Office of the Recorder of Deeds of Will County, Illinois.

(x) "Townhome" or "Unit" means collectively (i) a Townhome located in the Development intended for use exclusively as living quarters for a single family; (ii) the individual Lot, or portion thereof, that is conveyed to the Townhome Owner in connection with the sale of such Townhome to said Townhome Owner; and (iii) all appurtenances to such Townhome and Lot. For purposes of this definition, a Townhome may or may not share a party wall with an adjacent Townhome. The Townhomes shall be of different design and style as determined by the Development.

(y) "Turnover Date" means the earlier of:

(i) the date ten (10) years from the date of recording of this Declaration; or

(ii) the first date on which deeds for or possession of seventy-five percent (75%) of the Townhomes contemplated to be located on the Real Estate have been delivered to Owners other than the Declarant.

(z) "Village" means the Village of Tinley Park, Illinois.

(aa) "Voting Member" means an Owner entitled to vote on a matter before the Association, as defined in the By-Laws.

ARTICLE II
DECLARATION

Section 1: Submission of Parcel to this Declaration. The Declarant, as the owner of the Parcel, declares that the Parcel shall be held, transferred, sold, conveyed and occupied subject to the terms of this Declaration.

Section 2: Plat of Subdivision.

(a) The Declarant has recorded a Plat of Subdivision for the Development in the Office of the Recorder of Deeds of Will County, Illinois, on _____ as Document No. R_____. The Declarant also reserves the right to amend any such Plat of Subdivision from time to time and to record such amendments.

(b) In furtherance of the foregoing, a power coupled with an interest is hereby granted to the Declarant as attorney-in-fact, to record the Plat or Plats of Subdivision described above. Every deed, mortgage or other instrument with respect to a Townhome, and the acceptance thereof, shall be deemed a grant to the Declarant of, and an acknowledgment of and consent to, such power to record such Plat or Plats of Subdivision, and shall be deemed to reserve to the Declarant the power to amend the Plat or Plats of Subdivision described above.

(c) Restriction on Subdivision. Except for Declarant, no owner shall, by deed, plat, court decree or otherwise, subdivide, portion or in any waiver cause any portion of the Parcel to be separated into any tracts or lots different from that which was originally conveyed.

Section 3: Townhomes. The legal description of each Townhome in the Plat of Subdivision for the Development as recorded, shall consist of the Building Number, the Unit Number and the Lot Number upon which the building is located, of such Townhome Property as shown on such Plat of Subdivision for the Development. Every deed, lease, mortgage or other instrument pertaining to a Townhome shall legally describe a Townhome by its identifying the Building Number, the Unit Number and the Lot Number upon which the building is located,

as shown on such Plat of Subdivision and every such description shall be deemed good and sufficient for all purposes. No Townhome Owner shall, by deed, plat, court decree or otherwise, subdivide or in any manner cause his Townhome to be separated into any tracts, parcels or interests different from the whole Townhome as described herein.

ARTICLE III
ADMINISTRATION AND OPERATION

Section 1: Administration. The Declarant has caused or may cause to be incorporated under the laws of the State of Illinois, a not-for-profit corporation (herein referred to as "the Association") under the name of "BROOKSIDE GLEN VILLAS TOWNHOME ASSOCIATION" or a similar name. The Association shall be the governing body for all Townhome Owners and the Development, for the purposes of maintenance, repair, replacement, administration and operation of the Development, as provided in this Declaration and the By-Laws. The initial By-Laws of the Association shall be the By-Laws attached to this Declaration as Exhibit C. The fiscal year of the Association shall be as set forth in the By-Laws; provided, however, that such fiscal year may be changed from time to time as the Board deems advisable, by duly adopted resolutions of the Board. The Association shall not be deemed to be conducting a business of any kind. All activities undertaken by the Association shall be held and applied by it, for the sole benefit of the Townhome Owners in accordance with the provisions of this Declaration and the By-Laws. Each Townhome Owner shall be, ipso facto, a member of the Association so long as he shall be a Townhome Owner. A Townhome Owner's membership in the Association shall terminate, ipso facto, when he ceases to be a Townhome Owner. Upon the conveyance or transfer of a Townhome Owner's ownership interest in his Townhome to a new Townhome Owner, the new Owner shall simultaneously with such conveyance, ipso facto, succeed to the former Townhome Owner's membership in the Association. Each Townhome Owner shall have one vote per Townhome on all matters on which the Townhome Owners are entitled to vote as members of the Association. Notwithstanding the foregoing sentence, or any other provision of this Declaration and the By-Laws, the Board shall have the right and power to suspend the voting rights of any Townhome Owner during such period the Townhome Owner's Common Expense assessments, or any other monetary obligations due and owing the Association from the Townhome Owner, remains delinquent and unpaid.

All membership rights of a Townhome Owner with the exception of voting rights will be deemed to be assigned to a tenant or contract purchaser upon occupancy of the Townhome in question by said tenant or contract purchaser. The Townhome Owner shall not be relieved or released from any obligations under this Declaration by assignment of his membership rights to a tenant or contract purchaser.

Section 2: Board of Directors. The Board shall consist of three (3) Directors. The initial Board shall be appointed by the Declarant. Thereafter, Directors shall be elected at the regular annual meeting of Association members by vote of the Townhome Owners. As long as the Declarant holds title to any Townhome, the Declarant shall have the right, at its option, to appoint at least one (1) Director to the Board.

In every election for Directors, voting shall be cumulative and every Townhome Owner shall have the right to vote, in person or by proxy. Those Directors receiving the greatest number of votes shall be deemed elected. Every elected Director shall hold office for a term of one year and thereafter until his successor shall be elected and qualified. The First Meeting may be held, subject to the provisions of the By-Laws, on any date, at the option of the First Board, provided, however, that the First Meeting shall be held no later than thirty (30) days after the date the Declarant has sold and delivered its deeds for seventy-five percent (75%) of the Townhomes to be located on the Parcel or ten (10) years from the date hereof, whichever is first to occur.

Section 3: Management of Property. The Board shall have the authority to engage the services of an agent (herein sometimes referred to as the "Managing Agent") to maintain, repair, replace, administer and operate the Development, or any part thereof, to the extent deemed advisable by the Board, upon such reasonable terms as the Board may determine, but in no event under a contract exceeding three (3) years in duration. The cost of such services shall be a Common Expense.

Section 4: Non-Liability. The Directors, Board, Officers of the Association and the Declarant shall not be liable to the Townhome Owners for any mistake in judgment or for any other act or omission of any kind whatsoever as such Directors, Board, Officers, or Declarant, except for an act or omission found by a court to constitute gross negligence, willful misconduct or fraud. The Association shall indemnify and hold harmless each of the Directors and Officers of the Association, the Board, and the Declarant, against all contractual and other liabilities arising out of any contract made by or other act of such Directors, Board, Officers, or Declarant, on behalf of the Townhome Owners, or arising out of their status as such Directors, Board, Officers, or Declarant, unless any such contract or act shall have been made fraudulently, through willful misconduct or with gross negligence. It is intended that the foregoing indemnification shall include indemnification against all costs and expenses (including, without limitation, counsel fees, amounts of judgments paid and amounts paid in settlement) reasonably incurred in connection with the successful defense of any claim, action, suit or proceeding of any kind whatsoever, whether civil, criminal, administrative, or of any other nature, in which the Declarant or any such Director or Officer may be involved by virtue of such person being or having been such Director, Officer, or Declarant; provided, however, that such indemnity shall not be operative with respect to (i) any matter as to which such person shall have been finally adjudged in such action, suit or proceeding to be guilty of criminal activity or liable for gross negligence, willful misconduct or fraud in the performance of his duties (if any) as such Director, Officer, or Declarant; or (ii) any matter settled or compromised, unless, with respect to either clause (i) or (ii) above, in the opinion of independent legal counsel, selected by or in a manner determined by the Board, there is no reasonable ground for such person being adjudged liable for gross negligence, willful misconduct or fraud in the performance of his duties (if any) as such Director, Officer, or Declarant. The Association shall have the responsibility for raising and power to raise, by special assessment or otherwise, any sums required to discharge its obligations under this paragraph or the By-Laws, provided, however, that the liability of each Townhome Owner arising out of any contract made by or other act of said Directors, Board, Officers, or Declarant, or out of the aforesaid indemnity in favor of said Directors, Board, Officers, or Declarant, shall be limited to such Townhome Owner's Share of the total liability at the time loss or damage is incurred by the Association or any Townhome Owner due to such liability. Every agreement made by said Directors, Board, Officers, or Declarant or by the Managing Agent on behalf of the Townhome Owners or Association shall be construed as though said agreement expressly provided that said Directors, Board, Officers, or Declarant or the Managing Agent, as the case may be, are acting only as agents for the Townhome Owners or Association without assuming any personal liability thereunder (except as Townhome Owners in the event that any of the aforesaid persons are Townhome Owners) and that each Townhome Owner's liability thereunder shall be limited to such Townhome Owner's Share of the total liability at the time loss or damage is incurred by the Association or any Townhome Owner due to such liability.

Section 5: Board's Determination. In the event of any dispute or disagreement between any Townhome Owners relating to the Development, or any question of interpretation or application of the provisions of this Declaration or the By-Laws, the resolution thereof by the Board shall be final and binding upon any and all such Townhome Owners.

Section 6: Limitation of Board's Power. Notwithstanding any provision in this Declaration, the Board shall not have the power or duty to act in any way which materially impairs the development of the Development or the Parcel, as contemplated in the Declaration, or which impairs or infringes the Declarant's rights set forth in this Declaration or the By-Laws.

ARTICLE IV
COMMON AREA

Section 1: Ownership of the Common Area. Title to the Common Area shall be conveyed to and held by the Association. The Declarant reserves the right, in its absolute and sole discretion, to determine which Common Areas will be conveyed to the Association as well as the timing and terms of any conveyances.

Section 2: Use of the Common Area and Certain Easements.

(a) Right to Use the Common Area. Each Townhome Owner shall have the right to use the Common Area in common with all other Townhome Owners, as may be required for the purposes of access and ingress to, egress from and use, occupancy and enjoyment of the Townhome owned by such Townhome Owner, subject to the easements described in Paragraphs 7(c) and 7(d) hereof. Said rights to use the Common Area shall extend not only to each Townhome Owner but also to his agents, servants, tenants, contract purchasers, family members and guests. Said rights to use the Common Area shall be subject to and governed by the provisions of this Declaration, the By-Laws and the rules and regulations adopted by the Board for the Development.

(b) Detention Areas. It is the Declarant's current intention that all detention ponds and detention areas identified on Brookside Glen Villas Plat will be transferred to and maintained by Brookside Glen Villas Townhome Association. There shall be no right of the general public other than the Developer, Townhome Owners and Occupants to have access to any detention pond or detention area and these Common Areas are hereby designated to be for the private benefit of those having an interest in the Development. The Association, through its Board, shall have the right to restrict public access to these Common Detention Areas, to assess each Owner a uniform charge for the maintenance, operation, repair or restoration of any portion of the Common Detention Areas, to enforce collection of said assessments and all other provisions of this Declaration, and to promulgate such additional rules and regulations as may be necessary for the proper administration of the Common Detention Area.

Section 3: Blanket Easement in Favor of Declarant and Other Parties and Other Easements. The Common Area shall be subject to a blanket easement in favor of the Declarant, and its representatives, agents, associates, employees, contractors, subcontractors, tenants, successors and assigns, for the benefit of the Parcel and for purposes of (i) access and ingress to and egress from said Common Area and the Parcel; (ii) construction, installation, repair, replacement and restoration of utilities, streets, roads, buildings, landscaping and any other improvements on the Parcel; (iii) tapping into and using sewer and water lines and other utility facilities and lines on or adjacent to the Parcel; and (iv) advertising and selling Townhomes being constructed by Declarant on the Parcel. The Declarant shall restore or repair any damage caused by its exercise of the foregoing blanket easement. The Association, and the Board acting on behalf of the Association, shall have the authority to lease, grant concessions or grant easements with respect to parts of the Common Area, subject to the provisions of this Declaration and the By-Laws. All revenue derived by the Association from such easements, leases or concessions or from other sources shall be held by the Association and used for the sole benefit of the Townhome Owners, pursuant to such rules, resolutions or regulations as the Board may adopt or prescribe.

Section 4: Blanket Easements for Utilities and Commercial Entertainment. The Common Area shall be subject to a blanket easement in favor of Illinois Bell Telephone Company, Commonwealth Edison Company, Northern Illinois Gas Company and all other public utilities serving the Real Estate, and any entity providing cable television or other commercial entertainment to the Real Estate, and the Village of Tinley Park, granting such utilities and entities the right to install, lay, construct, operate, maintain, renew, repair or replace conduits, cables, pipes, electrical wiring, transformers and switching apparatus and other equipment including housings for such equipment, into, over, under, along, on and through said Common Area and the aforesaid individual Lots (not, however, underlying any individual Townhome) for the purpose of providing utility and commercial entertainment services to the Real Estate, or any parts thereof, together with reasonable rights of ingress to and egress from the Real Estate, for such purposes. The Declarant and the Association, and the Board acting on behalf of the Association, may hereafter grant other or additional easements for utility and commercial entertainment purposes for the benefit of the Real Estate and the aforesaid individual Lots (not, however, underlying any individual Townhome), and each Townhome Owner hereby grants the Declarant, the Association, and the Board acting on behalf of the Association, an irrevocable power of attorney to execute, acknowledge and record in the name of such Townhome Owner, such instruments as may be necessary or appropriate to effectuate the foregoing.

Police, fire, water, health and other authorized municipal officials, employees and vehicles of the Village of Tinley Park shall have the right of ingress and egress to the Real Estate for performance of official duties and to enforce all municipal ordinances.

No private agreement of any adjoining Townhome Owners shall modify or abrogate any of the provisions contained in this paragraph, which shall be binding upon the heirs, administrators, successors and assigns of the Townhome Owners; but no person shall be liable for any act or omission respecting such provisions, except such as took place while such person was a Townhome Owner.

The Association is hereby granted a perpetual easement over all of the Lots in the Development for the purpose of maintenance, repairs and replacements as required by this Declaration.

Section 5: Mutual Easements for Encroachments. If any Townhome shall encroach upon another Townhome as a result of initial construction or settlement thereafter, there shall be deemed to be mutual easements in favor of the Owners of the Townhomes involved to the extent of such encroachments so long as same shall exist.

Section 6: Private Streets. All the private roadways or drives in the Development shall be part of the Common Area and may be used for street purposes, subject to reasonable rules and regulations adopted by the Board or Association. The cost of maintenance and upkeep of such private roadways shall be a Common Expense. Said private roadways and drives shall be burdened with the easements set forth in this Declaration as well as in any deed or deeds of conveyance.

Section 7: Administration of Common Area Prior to Election of Initial Board. Until the appointment of the initial Board, the same rights, titles, powers, privileges, trusts, duties, and obligations vested in or imposed upon the Board by the Act and in the Declaration and By-Laws shall be held and performed by the Declarant.

Within sixty (60) days following election of the initial Board other than the Declarant, the Declarant shall deliver to the Board:

(a) All original documents as recorded or filed pertaining to the Property, its administration and the Association, such as the Declaration, By-Laws, Articles of Incorporation, other Townhome Instruments, annual reports, minutes and rules and regulations, contracts, leases, or other agreements entered into by the Association. If any original documents are unavailable, a copy may be provided if certified by affidavit of the Declarant, or an officer or agent of the Declarant, as being a complete copy of the actual document (as recorded or filed, if applicable).

(b) A detailed accounting by the Declarant, setting forth the source and nature of receipts and expenditures in connection with the management, maintenance and operation of the Property and copies of all insurance policies and a list of any loans and advances to the Association which are outstanding.

(c) Association funds which shall have been at all times segregated from any other moneys of the Declarant.

(d) A schedule of all real or personal property, equipment and fixtures belonging to the Association, including documents, transferring the Property, warranties, if any, for all real and personal property and equipment, deeds, title insurance policies, and all tax bills; and

(d) A list of all litigation, administrative action and arbitrations involving the Association, any notices of governmental bodies involving actions taken or which may be taken concerning the Association, engineering and architectural drawings and specifications as approved by any governmental authority, all other documents filed with any other governmental authority, all governmental certificates, correspondence involving enforcement of any Association requirements, copies of any

documents relating to disputes involving Owners, and originals of all documents relating to everything listed in this Section.

ARTICLE V
COVENANTS FOR ASSESSMENTS TO MAINTAIN COMMON AREA

Section 1: Creation of the Lien and Personal Obligation of Assessments. The Declarant, for each Townhome Property owned within the properties, hereby covenants, and each Owner of any Townhome Property by acceptance of a deed therefore, whether or not it shall be so expressed in any such deed or conveyance, is deemed to covenant and agree to pay to the Association: (1) annual assessments or charges, and (2) special assessments for capital improvements, such assessments to be fixed, established and collected from time to time as hereinafter provided. The annual and special assessments, together with such interest thereon and costs of collection thereof, as hereinafter provided, shall be a charge on the land and shall be a continuing lien upon the property against which each such assessment is made. Each such assessment, together with such interest at the rate of twelve percent (12%) per annum, plus late charges, administrative fees, costs and reasonable attorneys' fees, which shall also be the personal obligation of the person who was the Owner of such property at the time when the assessment fell due. The personal obligation shall pass to his successors in title unless expressly waived by the Association and they shall become jointly and severally liable therefore with such Owner.

Section 2: Purpose of Assessments. The assessments levied by the Association shall be used exclusively for the purpose of promoting the recreation, health, safety and welfare of the residents in the Parcel and, in particular, for the improvements and maintenance of the Townhome Property, services and facilities devoted to this purpose and related to the use and enjoyment of the Common Area and of the Townhomes situated upon such Properties, and for the payment of taxes and insurance on the Common Areas and facilities thereon; for repair, replacement and additions thereto and management and for supervision thereof and association expenses.

Section 3: Calculation of Assessments for Common Expenses. Each year on or before November 30, the Board shall adopt and furnish each Owner with a budget for the ensuing calendar year, which shall show the following with reasonable explanations and itemizations:

(a) The estimated Common Expenses;

(b) The estimated amount, if any, to maintain adequate reserves for Common Expenses including, without limitation, amounts to maintain the Maintenance Reserve;

(c) The estimated net available cash receipts from the operation and use of the Common Area, plus estimated excess funds, if any, from the current year's assessments;

(d) The assessment amount payable by each Owner, which is hereby defined as the amount determined in (a) above, plus the amount determined in (b) above, minus the amount determined in (c) above;

(e) That portion of the assessment which shall be payable by the Owner of each Parcel which is subject to assessment hereunder each month until a revised assessment becomes effective, which monthly amount shall be equal to assessment, divided by the number of Townhome Properties, divided by twelve (12), so that each Owner shall pay an equal assessment for each Townhome Property owned.

Anything herein to the contrary notwithstanding the following provisions shall apply with respect to the period prior to the Turnover Date. Any budget prepared by the Board prior to the Turnover Date shall be based on the assumptions that (i) the Real Estate has been fully constructed as shown on Declarant's then current plan for the Development; and (ii) all proposed Homes have been sold and are occupied. The current plan for the Real Estate shall be kept on file with the

Association and may be modified from time to time by Declarant. Declarant shall not be obligated to pay any assessments to the Association prior to the Turnover Date. However, if with respect to the period commencing on the date of the Recording of this Declaration and ending on the Turnover Date, the amount of assessment payable by Owners (other than Declarant) less the portions thereof which are to be added to Reserves is less than the Common Expenses actually incurred with respect to such period, then the Declarant shall pay the difference to the Association. From time to time prior to the Turnover Date, the Declarant shall deposit with the Association amounts which reasonable approximate Declarant's obligation hereunder as estimated by the Declarant. A final accounting and settlement of the amount, if any, owed by the Declarant to the Association shall be made as soon as practicable after the Turnover Date.

Section 4: Payment of Assessments. On or before the 1st day of January of the ensuing calendar year, and on the first day of each month thereafter until the effective date of the next annual or revised assessment, each Owner of a Parcel which is subject to assessment shall pay to the Association, or as the Board may direct, that portion of the assessment which is payable by each Owner of a Townhome Property under Section 3(e). Any payment more than five (5) days late shall be subject to a late charge equal to ten percent (10%) of the payment due.

Section 5: Revised Assessment. If, after the Initial Development Period, the assessment proves inadequate for any reason (including nonpayment of any Owner's assessment) or proves to exceed funds reasonably needed, then the Board may increase or decrease the assessment payable under Section 3(e) by giving written notice thereof (together with a revised budget and explanation for the adjustment) to each Owner not less than ten (10) day s prior to the effective date of the revised assessment.

Section 6: Maintenance Reserve. The Association shall segregate and maintain special reserve accounts to be used solely for making capital expenditures in connection with the Common Area and those portions of the Home Exteriors with respect to which the Association is responsible for repair and replacement (the "Maintenance Reserve"). The Board shall determine the appropriate level of the Maintenance Reserve based on a periodic review of the useful life of improvements to the Common Area, the portions of the Townhome Exteriors for which the Association is responsible and other property owned by the Association and periodic projections of the cost of anticipated major repairs or replacements to the Common Area, the portions of the Townhome Exteriors for which the Association is responsible and the purchase of other property to be used by the Association in connection with its duties hereunder. Each budget shall disclose that percentage of the assessment amount to be added to the Maintenance Reserve and each Owner shall be deemed to make a capital contribution to the Association equal to such percentages multiplied by each installment of the assessment paid by such Owner.

Section 7: Initial Capital Contribution. Upon the closing of the first sale of a Townhome Property by the Declarant to a Purchaser for value, the purchasing Owner shall make a capital contribution to the Association in an amount equal to the greater of (i) two (2) months' assessment at the rate which shall be effective with respect to the Parcel as of the closing; or (ii) $250.00. Said amount shall be held and used by the Association for its working capital needs.

Section 8: Special Assessments for Capital Improvements. In addition to the monthly assessments authorized above, the Association may levy in any assessment year, a special assessment applicable to that year only, for the purpose of defraying, in whole or in part, the cost of any construction or reconstruction, unexpected repair or replacement of a described capital improvement upon the Common Area, including the necessary fixtures and personal property related thereto, provided that any such assessment shall have the assent of a majority of the Board on any expenditure of $10,000.00 or any expenditure greater than $10,000.00 or contracts for more than two (2) years, and two-thirds (2/3) of the votes of members who are voting in person or by proxy at a meeting duly called for this purpose, written notice of which shall be sent to all members not less than thirty (30) days nor more than sixty (60) days in advance of the meeting setting forth the purpose of the meeting.

Section 9: Quorum for Any Action Authorized Under Section 8 Requiring a Vote by the Members. At the first meeting called, as provided in Section 8 above, the presence at the meeting of members or of proxies

entitled to cast fifty percent (50%) of all the votes of membership shall constitute a quorum. If the required quorum is not present at any meeting, another meeting may be called subject to the notice requirement set forth in Section 8, and the required quorum at any such subsequent meeting shall be members or proxies entitled to cast thirty percent (30%) of the votes of each class of membership. No such subsequent meeting shall be held more than sixty (60) days following the initial meeting.

Section 10: Uniform Rate of Assessments. Both monthly and special assessments must be fixed at a uniform rate for all Townhome Properties and collected on a monthly basis.

Section 11: Date of Commencement of Annual Assessment: Due Dates. The monthly assessments provided for herein shall commence as to such Townhome Property on the first day of the month following the conveyance of such Townhome Property by the Declarant to the initial owner thereof. The assessment for the month of closing shall be adjusted according to the number of days remaining in the month, and paid at closing by the Purchaser. The Board of Directors shall fix the amount of the annual assessment against each Townhome Property at least thirty (30) days in advance of each annual assessment period. Written notice of the annual assessment shall be sent to every Owner subject thereto. The due dates shall be established by the Board of Directors for both annual and special assessments. The Association shall, upon written demand, at any time furnish a certificate in writing signed by an Officer of the Association setting forth whether the assessments on a specified Townhome Property have been paid. A reasonable charge may be made by the Board or its Managing Agent for the issuance of these certificates. Such certificate shall be conclusive evidence of payment of any assessment therein stated to have been paid.

Section 12: Effect of Non-Payment of Assessments: Remedies of the Association. Any assessments which are not paid when due shall be delinquent. If the assessment is not paid within thirty (30) days after the due date, the assessment shall bear interest from the date of delinquency at the rate of twelve (12%) percent per annum plus late charge, and the Association may bring an action at law against the Owner personally obligated to pay the same, or foreclose the lien against the property. Interest, costs and reasonable attorneys' fees of any such action shall be added to the amount of such assessment. No Owner may waive or otherwise escape liability for the assessments provided for herein by non-use of the Common Area or abandonment of his Townhome Property. A collecting agent may be designated by the Board of Directors who is also the mortgagee (or its servicing agent) of the Owner's mortgage on his Townhome Property, and the mortgage may be declared in default in the event such assessment shall become delinquent and is not paid within thirty (30) days after the delinquency date, it being understood and agreed that the non-payment of such assessment materially affects and jeopardizes the value and security of the Townhome Property so mortgaged.

Section 13: Subordination of the Lien to Mortgages. The lien of the assessments provided for herein shall be subordinate to the lien of any mortgage or mortgages. Sale or transfer of any Townhome Property which is subject to any mortgage, pursuant to a decree of foreclosure under such mortgage or any proceeding in lieu of foreclosure thereof, shall extinguish the lien of such assessments as to payments thereof which became due prior to the earlier of such sale or transfer or the appointment of a receiver or mortgagor in possession. No sale or transfer shall relieve such Townhome Property from liability for any assessments thereafter becoming due or from the lien thereof.

Section 14: Exempt Property. The following property subject to this Declaration shall be exempt from the assessments created herein: (a) all properties dedicated to and accepted by a local public authority; and (b) the Common Area. However, no land or improvements devoted to dwelling use shall be exempt from said assessments after the initial sale of such dwelling or Townhouse by the Declarant.

Section 15: Exempt Townhome Property. Prior to the time a townhouse, house or other dwelling is constructed on a Townhome Property and conveyed by the Declarant, it shall be exempted from the assessment, charges and liens created herein. On completed townhouses for which certificates of occupancy have been issued, but which Townhome Properties are not yet sold and conveyed, the Declarant shall be responsible for the maintenance of such Townhome Properties in a manner typical of the average maintenance of the Townhomes in the properties.

ARTICLE VI
MAINTENANCE DUTIES AND RIGHTS

Section 1: The Association. In addition to its other powers, rights and duties as set forth in these covenants and in its Articles of Incorporation, By-Laws and Rules and Regulations, and as any of the same may be amended, shall exclusively maintain and otherwise manage all the Common Areas, including the common parking area, private streets, all landscaped islands, all equipment forming a part of the underground sprinkler system including pumps, pipes, conduits and other incidental components and all driveways serving the Parcel in whole or in part, maintain the exterior of all Townhomes, including the trim and exterior walls, roofs, gutters and downspouts; shall exclusively maintain and manage all landscaping, trees, shrubs and grass lawns of open areas; remove rubbish and remove snow on all walks, driveways, streets, and walks of the townhouses; maintain signs, entrance and outdoor lighting; pay fire and casualty insurance premiums for the Association as specified in Article IX and real estate and personal property taxes attributable to the Common Areas; and paint the exterior of all Townhome Properties in a uniform or complimentary manner during any reasonable hours on any day after giving reasonable notice to the Townhome Owner, except that landscape work shall not require any advance notice. In furtherance of the above duties and all other powers, rights, and duties of the Association, the Association for itself, its agents, successors and assigns, is hereby granted the right and easement to enter in and upon all yard areas and walks of the Townhome Properties in the subdivision and for exterior routine maintenance to enter in and upon Townhouses upon such Townhome Properties.

The extent and frequency of the activities of the Association in carrying out the duties of maintenance and management set forth above shall be decided by the Board of Directors, and the Board of Directors may appoint committees to advise the Board on such matter. The Board of Directors may also promulgate Rules and Regulations to aid in carrying out of said maintenance and management duties, and may amend said Rules and Regulations from time to time.

In the event that the need for maintenance or repair is caused through the willful or negligent act of the Owner, his family, or guests, or invitees, the cost of such maintenance or repairs shall be added to and become a part of the assessment to which such Townhome Property is subject.

Section 2: Townhome Owners. Except as provided in the following subparagraph, each Townhome Owner at his own expense, shall furnish and be responsible for all maintenance, repairs and replacements within his own Townhome, including the foundation, partition walls, decks and patios, if any; sewer, water and electrical lines to the point of entrance into the townhouses and facilities; and for the maintenance, repairs and replacements of all parts of windows and sliding glass doors and the air-conditioning compressor with its ancillary equipment located on a Townhome. If due to the act or neglect of a Townhome Owner, or of his agent, servant, tenant, contract purchaser, family member, guest, invitee, licensee or household pet, damage shall be caused to the Common Area or to a Townhome not owned by said Townhome Owner, or maintenance, repairs or replacements are required which would otherwise be a Common Expense, then such Townhome Owner shall pay for such damage or such maintenance, repairs and replacements, as may be determined by the Association to the extent not covered by insurance (including the amount of any applicable deductible). The authorized representatives of the Association, Board or Managing Agent shall be entitled to reasonable access to any of the Townhomes as may be required in connection with maintenance, repairs and replacements of the Common Area, or any equipment, facilities or fixtures affecting or serving any Townhome or the Common Area, and the repair, maintenance and replacement of the entire underground sprinkler system that may be installed in the future, including pumps, pipes, conduits and such other additional or ancillary equipment as is necessary for its proper operation.

In addition to the Common Areas, the Association may, at its discretion, maintain certain items located on individual Townhome Properties, with or without additional charge to the Townhome Owners, as follows:

(a) Replacement of trees, grass and shrubs.

(b) Repair and maintenance of patios, decks or other Townhome Owner installed improvements.

(c) Repair and maintenance of sewer and water lines to the point of entry into the Townhome.

(d) Removal of snow from walks.

(e) Repair and maintenance of outside electrical fixtures.

The cost of the foregoing items of landscaping, maintenance, repairs and replacements which the Association is required to furnish shall be a Common Expense, except as provided in the following sentence. Any exterior maintenance which the Association is not required to furnish and which is furnished at the request of any Townhome Owner, or which has been made necessary by reason of the willful or negligent act or omission of any Townhome Owner or of his agent, servant, tenant, contract purchaser, family member, guest, invitee, licensee or household pet, the expense of which is not reimbursed by the proceeds of any insurance (including the amount of any applicable deductible), shall be assessed only against that Townhome upon which such maintenance is done and shall be added to and become a part of the annual assessment or charge to which such Townhome is subject and shall be a lien on that Townhome and the personal obligation of the Townhome Owner thereof and shall become due and payable in all respects and to the same extent as provided herein for the payment of Association assessments by Townhome Owners.

If the Association furnishes maintenance with respect to a Townhome at the request of a Townhome Owner other than as required by this Declaration, the Association may require such Townhome Owner to pay the cost thereof in advance.

Section 3: Default in Performance. In the event the Declarant or the Association (as the case may be) defaults in its obligation to maintain and repair the Common Area and such default adversely affects the health, safety and welfare of the Townhome Owners and Occupants, the Village of Tinley Park shall have the right (but not the obligation) after thirty (30) days written notice to the Declarant or the Association (as the case may be) specifying the nature of such default, to enter upon the Common Area and cause such default to be cured, either directly or through individual contractors engaged by said Village in connection therewith, and shall upon demand be reimbursed by the Declarant or the Association (as the case may be) for all costs so incurred and such costs shall, with interest thereon and costs of collection as herein provided with respect to assessments for Common Expenses, become a continuing lien on the Townhomes and the Common Area until paid (subject and subordinate, however, to the lien of any prior recorded mortgage against a Townhome) and the Declarant or the Association shall levy assessments for the payment thereof under the applicable provisions in this Declaration. Nothing set forth in this paragraph shall prohibit the Board from contracting directly with the Village of Tinley Park to perform maintenance and repair on the Common Areas.

ARTICLE VII
USE AND RIGHTS IN COMMON AREAS

Section 1: Use and Rights of Owners and the Association. Except as the right may be suspended under Article V, Section 12 herein for non-payment of delinquent assessments, or as provided below, each Owner, at the time he becomes an Owner and for so long as he is an Owner, is hereby granted an easement of use and access to all of the Common Areas and the facilities thereon, subject to the Rules and Regulations of the Association as promulgated from time to time. This easement of use and access granted to each Owner shall be deemed to be attached to the Owner's Townhome Property and shall run with the land, shall be deemed to be granted to each successive Owner of the Townhome Property, and shall include all tenants, contract purchasers, agents, servants, family members, guests and invitees of each Owner.

The Association shall have the right to suspend the use and access by an Owner to any of the Common Areas and the facilities thereon, except for ingress and egress to the Owner's Townhome Property, for a period not to exceed thirty (30) days for any infraction of its promulgated rules and regulations. The Association shall have the right to charge reasonable admission and other fees for the use of any facilities situated upon the Common Areas. The Association shall have the right, in accordance with its Articles of Incorporation and By-Laws, to borrow money for the purpose of improving all or portions of the Common Areas and the rights of such

mortgagee in said Common Areas shall be superior to the rights of the Owners herein, except for the Owner's rights of ingress and egress to his Townhome Property, and the Association shall have the right to take such steps as are reasonably necessary to protect such mortgaged Common Areas from foreclosure. The Association, with the assent of a majority of the Owners, as further specified in its Articles of Incorporation and By-Laws, shall have the right to dedicate all or portions of the Common Areas to the general public for public use provided each Owner shall have ingress and egress to his Townhome Property. It is understood and agreed by each Owner that fee title to his Townhome Property which may be abutting any Common Area shall in no event extend to any such Common Area, but such Common Area is reserved to the Declarant to be conveyed by it to the Association for the common enjoyment of all the Owners.

Section 2: Use and Rights of Declarant. As part of the overall program of development of the Property into a residential community and to encourage the marketing thereof, the Declarant shall have the right of use of the Common Areas and facilities thereon without charge during the sales and construction period on the Property in aid in its marketing.

ARTICLE VIII
BUILDING AND USE RESTRICTIONS

Section 1: Buildings/Structures. The properties are hereby restricted to residential dwellings and any ancillary and accessory uses and the buildings in connection therewith. All buildings or structures erected shall be residential in nature and except for the renovation or conversion thereof by the Declarant or its agents, no subsequent buildings or structures other than townhouses shall be built on any Townhome Property where the Declarant has theretofore constructed a townhouse, except as specifically authorized by the Declarant or its successors in interest and the Village of Tinley Park. No building or structure of a temporary character, trailer, basement, tent, shack, garage, barn or other outbuilding shall be used or constructed on any Townhome Property at any time as a residence or otherwise either temporarily or permanently.

Section 2: Animals. No animals, livestock or poultry of any kind shall be raised, bred or kept in any Townhome Property except that up to one (1) dog, up to two (2) cats or other household pets may be kept provided they are not kept, bred or maintained for any commercial purpose and do not exceed fifteen (15) pounds. Any such pet causing or creating a nuisance or unreasonable disturbance shall be permanently removed from the Townhome Property upon thirty (30) days' written notice from the Association. Pets shall be leashed at all times and may not be tethered outside or left unattended when outside any Townhome Property, and no pet shall be permitted to defecate on any Parcel. Any pet excrement shall be immediately removed from public or private property by the pet's owner. Additional rules and regulations pertaining to maintenance of dogs and cats shall be prescribed by the Association, including the removal of any pet creating a nuisance.

Section 3: Signage. "For rent" or "for sale" signs shall be strictly regulated by the Board. Provided, however, no such sign shall be permitted by Owners, except by the Declarant prior to the sale of the last Townhome Property developed by the Declarant. No advertising signs, billboards, objects of unsightly appearance or nuisances shall be erected, placed or permitted to remain on any Townhome Property. No Townhome Property shall be used in any way for any purpose which may endanger the health or unreasonably disturb the residents on the properties. No commercial activities of any kind whatever shall be conducted in any building or on any part of the properties except activities intended primarily to serve the residents of the properties. Nothing contained herein shall prevent home office activities not violative of Village of Tinley Park zoning codes. The foregoing restrictions shall not apply to the commercial activities, signs and billboards, if any, of the Declarant during the construction and sales period or by the Association in furtherance of its powers and purposes set forth herein and in its Articles of Incorporation, By-Laws, Rules and Regulations as the same may be amended from time to time.

Section 4: Landscaping Alteration. No landscaping as installed by the Declarant shall be altered.

Section 5: Exterior Maintenance. No clothes lines are permitted. There will be no storage of any type permitted in the yard or patio area or any Townhome Property, and all rubbish, trash, garbage and refuse receptacles shall be stored in a non-visible area of the Townhome Property. The storage of boats, recreational

vehicles, commercial vehicles and dilapidated or disabled vehicles are strictly prohibited. No vehicle shall be parked so as to obstruct any main sidewalks or access to any garage.

Section 6: No Nuisance. No noxious or offensive activity shall be carried on in the Premises nor shall anything be done therein, either willfully or negligently, which may be or become an annoyance or nuisance to the Residents or detracts from the general appearance of the Development and shall be removed as determined by the Association.

Section 7: Antennae and Satellite Dishes. No antenna or satellite dishes shall be installed or allowed to remain on any portion of the Common Area. The installation of all antennae and satellite dishes on the Townhome Property shall be governed by additional rules and regulations pertaining to the method and location of installation, size restrictions and compatibility with overall appearance of the Development as may be prescribed by the Association in accordance with regulations propounded by the Federal Communication Commission.

Section 8: Structural Impairment. Nothing shall be done in, on or to any part of the premises which would impair the structural integrity of any Townhome located thereon nor shall any Owner paint, decorate or adorn the outside of his Townhome or install on the exterior any canopy, awning or other equipment, fixtures or items of any kind without the express approval of the Association.

Section 9: Drainage Pattern. No person shall obstruct, alter or in any manner modify the established drainage pattern from, on or over any Townhome or Lot or any portion of the Common Area; nor shall any Person obstruct, alter or in any way modify any drainage swales, devices and/or facilities now installed or to be installed by the Declarant or the Association. The Declarant reserves the right for itself and the Association to enter upon any Townhome Lot and the Common Area to correct, as it may deem necessary, any drainage condition. Sump pump and sump pump drain lines must be kept operational by Townhome Owners.

Section 10: Decorating and Maintenance. Each Townhome Owner shall maintain in good condition his or her Townhome, at the expense of said Owners, including, but not limited to, interior painting, wall-papering, window washing, cleaning, paneling, floor covering, draperies, window shades, and storm and screen doors. Each Owner shall install and maintain in the windows of every room of his or her Townhome, other than the bathrooms, kitchen and utility room, white or white-lined room drapes or curtains.

Section 11: Personal Property. Articles of personal property belonging to any Townhome Owner, such as baby carriages, bicycles, wagons, toys, furniture, clothing and other articles shall not be stored or kept on or in any portion of the Common Area, except as specifically designated by the Board.

Section 12: Electrical. No Townhome Owner shall overload the electrical wiring in his Townhome or operate any machines, appliances, accessories or equipment in such manner as to cause, in the judgment of the Board, an unreasonable disturbance to others.

Section 13: Energy Saving Devices. No storm doors or other energy saving devices upon doors or windows shall be installed in or on any Townhome without the prior written consent of the Board.

The Association reserves the right to enter upon any Townhome to correct or eliminate nuisances or violations of any or all of the foregoing, and to correct any failure of the Townhome Owner to properly maintain those areas and items not the responsibility of the Association. The cost of such work shall be assessed by the Association against the individual Townhome Owner and such assessments shall be due and payable in the month assessed. In the event payment of such special assessment is not made, such special assessments shall become a lien on the property, the personal obligation of the Townhome Owner and subject to all covenants for assessments contained in this Declaration and the By-Laws.

ARTICLE IX
SALE, LEASING OR OTHER ALIENATION

Section 1: Sale or Lease. The Association shall have no right of first refusal on any sale, devise, bequest, gift, transfer, enforcement sale, or inheritance of any Townhome.

Section 2: Lease. The Board may impose, by its Rules and Regulations, reasonable restrictions in the leasing of units. Such restrictions shall include, but are not limited to, the following:

(a) Prior information as to the proposed tenant;

(b) Restrictions as to the number of occupants;

(c) Restrictions as to the duration of leases;

(d) Regulations regarding the inclusion in all leases of such reasonable provisions so as to insure enforcement of the Declaration, By-Laws, and Rules and Regulations.

Section 3: Owner Guarantee. The Townhome Owner making a lease shall not be relieved thereby from any of his obligations hereunder. Each Townhome Owner making a lease unconditionally guarantees to the Association and to the other Townhome Owners that his respective lessees and sublessees will faithfully abide by the provisions of this Declaration and the Rules and Regulations of the Association. In the event that any lessee or sublessee fails to do so, the responsible Townhome Owner shall promptly indemnify the Association and the other Townhome Owners for all losses caused thereby and shall take appropriate action in the matter to correct such failure including termination of tenancy and judicial proceedings. If any Townhome Owner fails to take such action, the Association may do so, in its own behalf and/or in the Townhome Owner's name. The Board may adopt such rules and regulations applicable to the leasing of Units as it deems advisable or necessary.

Section 4: Applicable Rules and Regulations. Notwithstanding anything contained in this Declaration and By-Laws, the provisions of this Article IX and any rules or regulations adopted pursuant hereto by the Board shall not at any time apply to any Townhomes owned by the Trustee or the Developer.

ARTICLE X
PARTY WALLS

Each Townhome Owner shall be subject to the following limitations and restrictions with respect to Party Walls constructed within the Development, as follows:

(a) Every wall which is built as a part of the original construction within the Development and placed on the dividing line between separate Townhomes shall constitute and be considered a Party Wall, and as to such Wall each of the Townhome Owners immediately adjacent shall have the obligations and be entitled to the rights and privileges of this Declaration and to the extent not inconsistent herewith, the general rules of law regarding party walls.

(b) If any Party Wall is damaged or destroyed through the act or acts of any adjoining Townhome Owner, or his agents, servants, guests or members of his family, whether such act is willful, negligent or accidental, such Townhome Owner shall forthwith proceed to rebuild or repair the same to as good a condition as formerly without cost to the other adjoining Townhome Owner.

(c) Any Party Wall damaged or destroyed by some act or event other than that produced by one of the adjacent Townhome Owners, his agents, servants, guests or family, shall be rebuilt or repaired by both adjoining Townhome Owners to the same good condition as formerly, at their joint and equal expenses and as promptly as reasonably possible.

(d) Any Townhome Owner who proposes to modify, rebuild, repair or make additions to his own Townhome in any manner which requires the extension, alteration or modification or any Party Wall, shall first obtain the written consent of the adjacent Townhome Owner and any governmental permits as may be required, in addition to meeting the other requirements of this Declaration.

(e) In the event of a disagreement between adjoining Townhome Owners with respect to the repair, reconstruction or maintenance of a Party Wall or with respect to sharing the cost of repairing, rebuilding or maintaining the same, then upon the written request of either of said Townhome Owners to the Board, the matter shall be submitted to it for arbitration under such rules as it may from time to time adopt.

(f) No private agreement of any adjoining Townhome Owners shall modify or abrogate any of the provisions contained in this Article X, which shall be binding upon the heirs, administrators, successors and assigns of the Townhome Owners; but no person shall be liable for any act or omission respecting such provisions, except such as took place while such person was a Townhome Owner.

ARTICLE XI
REMEDIES FOR NONCOMPLIANCE

In the event of any default by any Townhome Owner under the provisions of this Declaration, the By-Laws or the rules and regulations of the Board or Association, the Association, and its successors or assigns, or the Board and its agents, shall have the right to levy a fine against the defaulting Townhome Owner in an amount reasonably determined by the Board and in addition shall have all of the rights and remedies which may be provided for in this Declaration, the By-Laws, Article IX of the Illinois Code of Civil Procedure, or the aforesaid rules and regulations, or which may be available at law or in equity, and may prosecute any action or other proceeding against such defaulting Townhome Owner and/or others (i) for enforcement or foreclosure of any lien and the appointment of a receiver for the Townhome, without notice and without regard to the value of such Townhome or ownership interest or the solvency of such Townhome Owner, or (ii) for damages, injunction or specific performance, or (iii) for judgment for payment of money and collection thereof, or (iv) for the right to take possession of the Townhome, rent the Townhome and apply the rents received to payment of unpaid assessments and interest accrued thereon, or to sell the Townhome at a judicial sale, or (v) for any combination of the above remedies, or for any other relief now or hereafter permitted.

The proceeds of any judicial sale of a Townhome, pursuant to the preceding subparagraph, shall first be paid to discharge court costs, court reporter charges, reasonable attorneys' fees and all other expenses of the proceeding and sale, and all such items shall be taxed against the defaulting Townhome Owner in any final judgment. Any balance of such proceeds remaining after satisfaction of said costs, charges, fees and expenses and any unpaid assessments hereunder and liens shall be paid to the Townhome Owner. Upon the confirmation of such sale, the purchaser shall thereupon be entitled to a deed to the Townhome and to immediate possession of the Townhome sold, and may apply to the court for a writ of assistance for the purpose of acquiring such possession, and it shall be a condition of any such sale, and the judgment shall so provide, that the purchaser shall take the Townhome sold subject to this Declaration, the By-Laws and the rules and regulations of the Board or Association. All expenses of the Association in connection with any such actions or proceedings, including court costs and attorneys' fees and other fees and expenses and all damages, liquidated or otherwise, together with interest thereon at the rate of eighteen percent (18%) per year, or such greater percentage as may be permitted under the laws of the State of Illinois, until paid, shall be charged to and assessed against such defaulting Townhome Owner, and shall be added to and deemed part of his share of the Common Expenses, and the Association shall have a lien for all of the same, as well as for nonpayment of his share of the Common Expenses, upon the Townhome of such defaulting Townhome Owner and upon all of his additions and improvements thereto, and upon all of his personal property located in his Townhome or elsewhere on the Development, provided, however, that such lien shall be subordinate to the lien of a prior recorded mortgage on the Townhome of such Townhome Owner, except for the amount of the proportionate share of said Common Expenses which becomes due and payable from and after the date on which the mortgagee or a purchaser at a foreclosure sale under such

mortgage either takes possession of the Townhome or accepts a conveyance of any interest therein or the date on which the mortgagee causes a receiver to be appointed for the Townhome.

In the event of any such default by any Townhome Owner, the Association, the Board and the Managing Agent, if so authorized by the Board, shall have the authority to correct such default and to do whatever may be necessary for such purpose, and all expenses in connection therewith shall be charged to and assessed against such defaulting Townhome Owner, and shall be added to and deemed part of his respective share of the Common Expenses, and the Association shall have a lien for all of the same upon the defaulting Townhome Owner's Townhome and upon all of his additions and improvements thereto, and upon all of his personal property located in his Townhome or elsewhere on the Development, provided, however, that such lien shall be subordinate to the lien of a prior recorded mortgage on the Townhome of such Townhome Owner, except for the amount of the proportionate share of said Common Expenses which becomes due and payable from and after the date on which the mortgagee under said mortgage or a purchaser at a foreclosure sale either takes possession of the Townhome or accepts a conveyance of any interest therein or the date on which the mortgagee causes a receiver to be appointed for the Townhome. Any and all such rights and remedies may be exercised at any time and from time to time, cumulatively or otherwise, by the Association or the Board. The provisions of this Article XI applicable to the priority of liens held by mortgagees shall not be amended or modified without the express and prior written consent of all mortgagees of record.

ARTICLE XII
INSURANCE/CONDEMNATION

Section 1: Insurance.

(a) The Board shall have the authority to and shall obtain insurance for the Common Area, against loss, damage or destruction by fire, vandalism, malicious mischief and such other hazards as are covered under standard extended coverage insurance provisions, of the full insurance replacement cost of the Common Area, and against such other hazards and for such amounts as the Board may deem advisable. Full insurable replacement cost shall be deemed the cost of restoring the Common Area to substantially the same condition in which it existed prior to said damage or destruction. Such insurance coverage for the Common Area shall be written in the name of, and the proceeds thereof shall be payable to, the Association. The premiums for such insurance coverage on the Common Area shall be a Common Expense.

The Board shall have authority to and shall obtain comprehensive public liability insurance, in such amounts as it deems desirable, and shall have authority to obtain workmen's compensation insurance and other liability insurance as it deems desirable, insuring each Townhome Owner, mortgagee of record, if any, the Association, its Officers and Directors, Board and Employees, the Declarant and the Managing Agent, if any, from liability in connection with the Common Area. The premiums for all said public liability insurance shall be a Common Expense.

The Board shall have authority to and may obtain such insurance, in such amounts, from such sources and in such forms as it deems desirable, insuring each Director of the Board, Officer of the Association, and each member of any committee appointed pursuant to the By-Laws of the Association from liability arising from the fact that said person is or was a Director or officer of the Association, or a member of such committee. The premiums for such insurance shall be a Common Expense.

The Board shall have authority on behalf of the Association to participate in a cooperative program with other community associations in the Village of Tinley Park to obtain liability insurance on behalf of the Association. The Board must be satisfied with all the provisions of such a proposed participation agreement before it enrolls the Association in it.

(b) Each Townhome Owner shall, at his own expense, obtain and maintain, throughout the period of his ownership of a Townhome, insurance on his Townhome as well as his additions and improvements thereto, against loss, damage or destruction by fire, vandalism, malicious mischief and such other hazards as are covered under standard extended coverage insurance provisions, for the full insurable replacement cost of his Townhome and against such other hazards as the Board may provide by resolution, such insurance coverage to be in form, substance, amount and with an insurance carrier satisfactory to the Board. The Board reserves the right, but shall be under no obligation, to require any Townhome Owner to increase the coverage on his Townhome up to the full insurable replacement cost thereof if the Board reasonably determines that such Townhome is not so insured. Full insurable replacement cost shall be deemed the cost of restoring such Townhome or any part thereof to substantially the same condition in which it existed prior to said damage or destruction. Such insurance coverage shall name the Association as an additional insured thereunder as the Association's interest may appear. Each such policy of insurance shall contain, if possible, a waiver of subrogation rights by the insurer against the other Townhome Owners and the Association. Each Townhome Owner shall submit to the Association a certificate of insurance naming the Association as an additional insured thereunder. Subject to the following sentence, the proceeds of such insurance shall be payable to the Townhome Owner and the Association as their interests may appear and shall be used to restore such Townhome to the same condition in which it existed prior to such damage or destruction; and the Association shall have the right to compel the Townhome Owner to so apply such proceeds. Subject to the rights of any mortgagee under a recorded mortgage on such Townhome, the Association shall have the right, at its election, to collect and receipt for any such insurance proceeds.

Section 2: Damage or Destruction.

(a) In the event the Common Area shall suffer damage or destruction from any cause, the proceeds of any policy insuring against such loss or damage and payable by reason thereof shall be applied to cause such damage or destruction to be reconstructed, repaired or restored unless the Board decides that such proceeds not be so applied.

(b) In the event of damage to or destruction of, by fire or other casualty, any Townhome, or any portion thereof, the Townhome Owner of any such Townhome covenants and agrees that such Townhome Owner shall commence repairing or rebuilding, within a reasonable time after such damage or destruction (not to exceed six months), the Townhome in a substantial and workmanlike manner, using materials comparable to or better than those used in the original structure, and that all construction performed by or caused to be performed by such Townhome Owner shall conform in all respects to the laws and ordinances regulating the construction of buildings in force at the time of such repair or rebuilding. All available insurance proceeds shall be applied to such repairing and rebuilding; the excess, if any, to be paid to the Townhome Owner. The exterior of such Townhome, when rebuilt, shall be substantially similar to and of architectural design in conformity with the exterior of such Townhome prior to the damage or destruction. All rebuilding performed in accordance with the provisions of this paragraph shall be subject to the approval of the Association. In the event that any Townhome Owner shall fail to perform the necessary repair or rebuilding in accordance with the provisions hereof, then the Association may but shall not be required to cause such repair or rebuilding to be furnished, provided and installed in accordance with the provisions hereof and the total cost thereof shall be the personal obligation of the Townhome Owner. In any such event, the Association shall have and is hereby given a continuing lien on the Townhome to which any such repair or rebuilding is furnished by the Association in the aggregate amount of (i) the cost thereof; (ii) interest at the maximum rate permitted by the laws of Illinois from the date of the Association's payment of such costs; and (iii) reasonable attorneys' fees and any court or other costs incurred by the Association in connection therewith, which lien shall bind such Townhome in the hands of such Townhome Owner, his heirs, devisees, personal representative, grantees, and assigns. In the event such Townhome Owner does not forthwith fully repay the Association therefore as aforesaid, such lien may be foreclosed against the Townhome by the Association, in

the same manner as hereinabove provided in connection with unpaid assessments. The Association's lien described in this paragraph, shall be subordinate to the lien of any mortgage now or hereafter placed upon the Townhome.

ARTICLE XIII
GRANT OF EASEMENT

There is hereby granted a non-exclusive easement appurtenant to each Townhome Property and perpetual easement on, over and across the Common Area for the purpose of access and ingress and egress to the benefitted parcel. Each Townhome Owner shall have the right to use the Common Area in common with all other Townhome Owners as may be required for the purpose of access, ingress to, egress from, use, occupancy and enjoyment of the Townhome Property owned by such Townhome Owner. Such right to use the Common Area shall extend to not only such Townhome Owner, but also to such Townhome Owner's agents, servants, tenants, lessees, family members, customers, invitees and guests. Such rights to use of the Common Area shall be subject to the rules and regulations of the Board of the Association. The Board of the Association shall have the authority to grant additional easements with respect to the Common Area.

All easements herein described are easements appurtenant, running with the land; they shall at all times inure to the benefit of and be binding on the undersigned, all its grantees and their respective heirs, successors, personal representatives or assigns perpetually in full force and effect.

Reference in the respective deeds of conveyance, or in any mortgage or trust deed or other evidence of obligation, to the easements and covenants herein described shall be sufficient to create and reserve such easements and covenants to the respective grantees, mortgagees or trustees of said parcels as fully and completely as though said easements and covenants were fully recited and set forth in their entirety in such documents.

ARTICLE XIV
RIGHTS RESERVED BY DECLARANT

Section 1: Special Amendments. Anything herein to the contrary notwithstanding, Declarant reserves the right and power to Record a special amendment ("Special Amendment") to this Declaration at any time and from time to time which amends this Declaration: (i) to comply with requirements of the Federal National Mortgage Association, the Government National Mortgage Association, the Federal Home Loan Mortgage Corporation, or any other governmental agency or any other public, quasi-public or private entity which performs (or may in the future perform) functions similar to those currently performed by such entities; (ii) to induce any of such agencies or entities to make, purchase, sell, insure, guarantee or otherwise deal with First Mortgages covering Lots; (iii) to correct errors, omissions or inconsistencies in the Declaration or any Exhibit; (iv) to bring the Declaration into compliance with applicable laws, ordinances or governmental regulations; (v) to change the product line and elevations during the course of construction provided that all efforts will be made to continue with the overall esthetics and harmony of the community; or (vi) to make any other modifications that the Declarant deems necessary to further the best interests of the development. In furtherance of the foregoing, a power coupled with an interest is hereby reserved and granted to the Declarant to make or consent to a Special Amendment on behalf of each Owner. Each deed, mortgage, trust deed, other evidence of obligation, or other instrument affecting a Lot and the acceptance thereof shall be deemed to be a grant and acknowledgment of, and a consent to the reservation of, the power to the Declarant to make, execute and record Special Amendments. The right and power to make Special Amendments hereunder shall terminate at such times as Declarant no longer holds or controls title to any portion of the Development Area.

Section 2: Easements for Storm Water Management. The Declarant reserves the right to enter into agreement and easements for the use of easement areas, detention areas and storm water management facilities constructed by Declarant with adjoining property owners, and, in connection therewith enter into such agreements for joint maintenance of such detention and storm water facilities on behalf of the Association as Declarant sees fit.

Section 3: In General. In addition to any rights or powers reserved to the Declarant under the provisions of this Declaration or the By-Laws, the Declarant shall have the rights and powers set forth in this Article. Anything in this Declaration or the By-Laws to the contrary notwithstanding, the provisions set forth in this Article shall govern. If not sooner terminated as provided in this Article, the provisions of this Article shall terminate and be of no further force and effect from and after such time as the Declarant or Declarant's beneficiary is no longer vested with or controls title to any part of the Premises.

Section 4: Promotion of Project. In connection with the promotion, sale or rental of any improvements upon the Premises: (a) the Declarant shall have the right and power, within its sole discretion, to construct such temporary or permanent improvements, or to do such acts or other things in, on, or to the Premises as the Declarant may, from time to time, determine to be necessary or advisable, including, without limitation, the right to construct and maintain model homes, sales or leasing offices, parking areas, advertising signs, lighting and banners, or other promotional facilities at such locations and in such forms as the Declarant may deem advisable; and (b) Declarant, Declarant's beneficiary and their respective agents, prospective purchasers and tenants, shall have the right of ingress, egress and parking in and through, and the right to use and enjoy the Common Area, at any and all reasonable times without fee or charge. The Declarant shall have the right and power to sell or lease any Townhome Property owned by it to any person or entity which it deems appropriate in its sole discretion.

Section 5: Construction on Premises. The Declarant hereby reserves the right and power to make such improvements to the Common Area (including landscaping) as the Declarant deems to be necessary or appropriate. In connection with the rights provided in this Section, the Declarant, Declarant's beneficiary and their respective agents and contractors, shall have the right of ingress, egress and parking on the Common Area and the right to store dirt, construction equipment and materials on the Common Area without the payment of any fee or charge whatsoever.

Section 6: Grant of Easements and Dedications. Declarant shall have the right to dedicate portions of the Common Area to the County, the Municipality or other governmental authority which has jurisdiction over such real estate. Declarant shall also have the right to reserve or grant easements over the Common Area to any governmental authority, public or private utility for the installation and maintenance of electrical and telephone conduit and liens, gas, sewer or water lines, or any other utility services serving any portion of the Premises.

Section 7: Declarant Control of Association. The first and all subsequent Boards shall consist of that number of persons from time to time designated by the Declarant, which persons may, but need not, be Voting Members. Declarant's rights under this section to appoint the members of the Board shall terminate on the first to occur of: (a) the sale of seventy-five percent (75%) of the total Townhomes to be constructed on the Real Estate; (b) the giving of written notice by mail by the Declarant to the members of its Association of Declarant's election to terminate such rights, and Declarant shall have no further obligation with respect to the operation of the Association following said notice; or (c) ten (10) years from the date of recording hereof. The date on which the Declarant's rights under this Section shall terminate shall be referred to as the "Turnover Date". From and after the Turnover Date, the Board shall be consisted and elected as provided in the By-Laws. Prior to the Turnover Date, all of the voting rights at each meeting of the Owners shall be vested exclusively in the Declarant and the Owners shall have no voting rights.

Section 8: Other Rights. The Declarant shall have the right and power to execute all documents and do all other acts and things affecting the Premises which, Declarant determines are necessary or desirable in connection with the rights of Declarant under this Declaration, including Amendment of this Declaration prior to turnover. Each deed, mortgage, trust deed, or other evidence of obligation, or other instrument affecting title and the acceptance thereof shall be deemed to be a grant and acknowledgment of, and a consent to the reservation of, the power of the Declarant to make, execute and record an amendment.

ARTICLE XV
CHANGE, MODIFICATION OR RECISSION

In addition to amendment of this Declaration as heretofore and hereinafter provided, subject to the following subparagraph, and unless otherwise provided herein, this Declaration may be changed, modified or rescinded by an instrument in writing, setting forth such change, modification or rescission, signed and acknowledged by the President or a Vice President of the Association, and approved by the Townhome Owners having two-thirds (2/3) or more of the total votes, said approval to be evidenced by Certification of an officer of the Association attached and incorporated into the Amendment.

Neither this Declaration nor the By-Laws may be changed, modified or rescinded so as to eliminate, impair, limit or abridge any rights of the Declarant or any of the mortgagees of record of Townhomes under this Declaration or the By-Laws without the prior written consent of the Declarant or all such mortgagees of record as the case may be. No change, modification or rescission pursuant to this paragraph, which has a material impact upon the duties and responsibilities of the Village of Tinley Park shall be valid without submission of such change, modification or rescission to the Village for its approval. Such approval shall not be unreasonably withheld by the Village. All rights inuring to the Declarant under this Declaration and the By-Laws shall also inure to its successors and assigns.

Any change, modification or rescission of this Declaration, whether accomplished under the provisions of this paragraph or another paragraph of this Declaration, shall be effective upon recording of the instrument which accomplishes such change, modification or rescission.

ARTICLE XVI
NOTICES

Notices provided for in this Declaration or the By-Laws shall be in writing. Prior to the Turnover Date, notices shall be addressed to the Association or Board as follows:

Brookside Glen Villas Townhome Association

_____

_____

Thereafter and provided the President of the Board is a Townhome Owner, to:

President of the Board of
Brookside Glen Villas Townhome Association
(addressed to his or her Townhome)

or at such other address as hereinafter provided. Such notices shall be addressed to any Townhome Owner, as the case may be, at his Townhome or at such other address as hereinafter provided by such Townhome Owner in writing. Such notices shall be addressed to any mortgagee of a Townhome, as the case may be, at the address provided to the Association by such mortgagee for that purpose, or at such other address as hereinafter provided. The Association or Board may designate a different address or addresses for notices to them, respectively, by giving written notice of such change of address to all Townhome Owners. Any Townhome Owner or mortgagee of a Townhome may designate a different address for notices to them by giving written notice to the Association. Notices required to be delivered to any devisee or recipient of a Townhome from, or personal representative of, a deceased Townhome Owner shall be addressed to such party at the address appearing for said party in the records of the court where the estate of such deceased Townhome Owner is being administered. Notices addressed as above provided shall be deemed delivered when mailed by United States first class mail, or when delivered in person, or, if addressed to a Townhome Owner, mailed by United States first class mail to his Townhome Address or such address as provided in writing.

Upon written request to the Board, the holder of any recorded mortgage encumbering any Townhome shall be given a copy of all notices permitted or required by this Declaration to be given to the Townhome Owner of the Townhome which is subject to such mortgage.

ARTICLE XVII
GENERAL PROVISIONS

Section 1: Enforcement. The Association, shall have the right to enforce, by any proceeding at law or in equity, all restrictions, conditions, covenants, reservations, liens and charges now or hereafter imposed by the provisions of this Declaration and shall be specifically entitled in all respects to reasonable attorneys fees and costs incurred by the Association from any defaulting or non-complying Owner. Failure by the Association to enforce any covenant or restriction herein contained shall in no event be deemed a waiver of the right to do so thereafter. The Association is hereby granted all rights granted to Townhome Associations pursuant to Illinois law, now in place or hereafter enacted, to enforce this Declaration or procure payment of the Assessments as herein provided. Nothing contained herein shall be deemed to require the Association or the Declarant to comply with any term or provision of or submit any property to an act commonly known as the Illinois Condominium Act.

Section 2: Severability. Invalidation of any one of these covenants or restrictions by judgment or court order shall in no way affect any other provisions which shall remain in full force and effect.

Section 3: Successors and Assigns of Trustee and Developer. Every right, power or easement granted to or reserved by the Trustee and/or Developer in this Declaration, the By-Laws or in the rules and regulations of the Board or Association shall inure to the benefit of and may be exercised by the Trustee and Developer's respective successors and assigns to whom either expressly assigns their respective rights hereunder.

Section 4: Land Trustee as Townhome Owner. In the event title to any Townhome is conveyed to a land title holding trust under the terms of which all powers of management, operation and control of the Townhome remains vested in the trust beneficiaries, then the beneficiaries thereunder shall be considered Townhome Owners for all purposes hereunder, and they shall be responsible for payment of all obligations, liens or indebtedness and for the performance of all agreements, covenants and undertakings chargeable or created under this Declaration against such Townhomes. No claim shall be made against any such title holding trustee personally for payment of any lien or obligation hereunder created, and the trustee shall not be obligated to sequester funds or trust property to apply in whole or in part against such lien or obligation. The amount of any such lien or obligation shall continue to be a charge or lien upon the Townhome and the beneficiaries of such trust, notwithstanding any transfers or the beneficial interest of any such trust or any transfer of title to such Townhome. By directing said trustee to take title to said Townhome, said beneficiaries agree to be bound by the foregoing provisions.

Section 5: Binding Effect. The covenants and restrictions of this Declaration shall run with and bind the land, and shall inure to benefit of and be enforceable by the Association, or the Owner of any Townhome Property subject to this Declaration, their respective legal representatives, heirs, successors and assigns, for a term of twenty (20) years from the date this Declaration is recorded, after which time said covenants shall be automatically extended for successive periods of ten (10) years.

Section 6: Perpetuities and Other Invalidity. If any of the options, privileges, covenants or rights created by this Declaration would otherwise be unlawful or void for violation of (a) the rule against perpetuities or some analogous statutory provision; (b) the rule restricting restraints on alienation; or (c) any other statutory or common law rules imposing time limits, then such provisions shall continue only until twenty-one (21) years after the death of the survivor of the now living lawful descendants of the President of the United States at the time this Declaration is recorded.

ARTICLE XVIII
ANNEXING ADDITIONAL PROPERTY

Section 1: In General. Declarant reserves the right at any time and from time to time prior to ten (10) years from the date of Recording of this Declaration to annex, add and subject additional portions of the Real Estate to the provisions of this Declaration as additional Parcels by recording a supplement to this Declaration (a "Supplemental Declaration"), as hereinafter provided. Any portion of the Real Estate which is subjected to this Declaration by a Supplemental Declaration shall be referred to as "Added Parcel"; any portion of any Added Parcel which is made part of the Common Area shall be referred to as "Added Common Area"; and any Units contained in the Added Premises shall be referred to as "Added Units". After the expiration of said ten (10) year period, Declarant may exercise the rights described herein to annex, add and subject additional portions of the Real Estate to the provisions of this Declaration, provided that the consent of the Owners (by number) of two-thirds (2/3) of all Unit Owners then subject to this Declaration is first obtained.

Section 2: Power to Amend. Declarant hereby retains the right and power to Record a Supplemental Declaration, at any time and from time to time, which amends or supplements Exhibit A, and the property described in this agreement. A Supplement Declaration may contain such additional provisions affecting the use of the Added Parcel or the rights and obligations of owners of any part or parts of the Added Parcel as the Declarant deems necessary or appropriate.

Section 3: Effect of Supplement Declaration. Upon the recording of a Supplemental Declaration by Declarant which annexes and subjects Added Parcels, Added Common Area, or Added Units to this Declaration, as provided in this Articles, then:

(a) The easements, restrictions, conditions, covenants, reservations, liens, charges, rights, benefits and privileges set forth and described herein shall run with and bind the Added Parcel and inure to the benefit of and be binding on any Person having at any time any interest or estate in the Added Parcel in the same manner, to the same extent and with the same force and effect that this Declaration applies to the Parcel, and Persons having an interest or estate in the Parcel, subjected to this Declaration prior to the date of the recording of the Supplemental Declaration;

(b) Every Owner of an Added Unit shall be a member of the Association on the same terms and subject to the same qualifications and limitations as those members who are Owners of Units immediately prior to the recording of such Supplemental Declaration;

(c) In all other respects, all of the provisions of this Declaration shall include and apply to the Added Parcel (including the Added Common Area or the Added Units, if any) made subject to this Declaration by any such Supplemental Declaration and the Owners, mortgagees, and lessees thereof, with equal meaning and of like force and effect and the same as if such Added Parcel were subjected to this Declaration at the time of the recording hereof;

(d) The recording of each Supplemental Declaration shall not alter the amount of the lien for any charges made to a Unit or its Owner prior to such recording;

(e) The Declarant shall have and enjoy with respect to the Added Parcel all rights, powers and easements reserved by the Declarant in this Declaration, plus any additional rights, powers and easements set forth in the Supplemental Declaration; and

(f) Each Owner of an Added Unit which is subject to assessment hereunder shall be responsible for the payment of the assessment pursuant to Article V, Section 3, but shall not be responsible for the payment of any special assessment which was levied prior to the time that the Added Parcel became subject to assessment hereunder.

IN WITNESS WHEREOF, **Marquette Bank, not individually, but solely as Trustee under Trust Agreement dated January 4, 2000 and known as Trust No. 15084**, has caused its corporate seal to be affixed hereunto and caused its name to be signed in these presents by its _____ and attested by its _____ this _____ day of _____, 2021.

MARQUETTE BANK, NOT INDIVIDUALLY, BUT SOLELY AS TRUSTEE UNDER TRUST AGREEMENT DATED JANUARY 4, 2000 AND KNOWN AS TRUST NO. 15084

By:_____

Its:_____

ATTEST:

By:_____

Its:_____

STATE OF ILLINOIS)
) SS.
COUNTY OF COOK)

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, do hereby certify that _____ of **Marquette Bank, not individually, but solely as Trustee under Trust Agreement dated January 4, 2000 and known as Trust No. 15084**, personally known to me to be the same persons whose names are subscribed to the foregoing instrument as such _____, respectively, appeared before me this day in person and acknowledged that he or she signed and delivered the said instrument as his or her own free and voluntary act and as the free and voluntary act of **Marquette Bank, not individually, but solely as Trustee under Trust Agreement dated January 4, 2000 and known as Trust No. 15084**, for the uses and purposes therein set forth.

Given under my hand and notarial seal this _____ day of _____, 2021.

_____
Notary Public

TRUSTEE EXCULPATION

It is expressly understood and agreed, anything herein to the contrary notwithstanding, that each and all of the representations, covenants, undertakings and agreements of said Declarant are nevertheless, each and every one of them, made and intended not as personal representations, covenants, undertakings and agreements by the Declarant personally, but are made and intended for the purpose of binding only that portion of the trust property specifically described herein, and this instrument is executed and delivered by said Declarant not in its own right, but solely in the exercise of the powers conferred upon it as Trustee, as aforesaid, and that no personal liability or personal responsibility is assumed by nor shall at any time be asserted or enforceable against MARQUETTE BANK or any of the beneficiaries under the Trust Agreement, on account of this instrument or on account of any representation, covenant, undertaking or agreement of said Declarant in this instrument contained, either expressed or implied, all such personal liability, if any, being expressly waived and released. It is understood and agreed by the parties hereto, anything to the contrary notwithstanding, that the Declarant will act only on the direction of the beneficiaries.

Signed as of the day and year first above written.

MARQUETTE BANK, NOT INDIVIDUALLY, BUT SOLELY AS TRUSTEE UNDER TRUST AGREEMENT DATED JANUARY 4, 2000 AND KNOWN AS TRUST NO. 15084

By:_____

Its:_____

ATTEST:

By:_____

Its:_____

EXHIBIT A

LEGAL DESCRIPTION

EXHIBIT B

ARTICLES OF INCORPORATION OF ASSOCIATION

EXHIBIT C

BY-LAWS OF BROOKSIDE GLEN VILLAS TOWNHOME ASSOCIATION

ARTICLE I
NAME OF ASSOCIATION AND DEFINITION OF TERMS

Section 1: Name. The name of the Association is "BROOKSIDE GLEN VILLAS TOWNHOME ASSOCIATION".

Section 2: Definitions. Any term used in these By-Laws that is defined in the Declaration of Covenants and Restrictions for BROOKSIDE GLEN VILLAS TOWNHOMES ("Declaration"), recorded as Document No. _____, to which a copy of these By-Laws is attached as Exhibit C thereto, shall have the same definition herein that is set forth in said Declaration. The term "member" as used in these By-Laws means Townhome Owner, except where the context requires otherwise.

ARTICLE II
MEMBERS

Section 1: Eligibility. The members of the Association shall consist of all the Townhome Owners in the Development.

Section 2: Succession. The membership of each Townhome Owner in the Association shall terminate when said Townhome Owner ceases to be a Townhome Owner, and upon the sale, transfer or other disposition of such Townhome Owner's Townhome, said Townhome Owner's membership in the Association shall be transferred ipso facto to the new Townhome Owner.

Section 3: Annual Meetings. The First Meeting shall be held on a date to be determined as provided in the Declaration. Thereafter there shall be an annual meeting of Townhome Owners on the second Tuesday of September following such First Meeting, and on the second Tuesday of September of each succeeding year thereafter at 7:30 p.m., or at such other reasonable time or date as may be designated by the Board. Each such meeting of Townhome Owners shall be held at such place in Will County, Illinois, and at such time and date as shall be specified in the written notice of such meeting which shall be sent to all Townhome Owners at least ten (10) days prior to the date of such meeting.

Section 4: Special Meetings. A special meeting of the Townhome Owners may be called at any time by the President of the Association, by a majority of the Directors of the Board or upon written request of at least twenty-five percent (25%) of all Townhome Owners. Said special meeting shall be called by sending written notice thereof to all Townhome Owners not less than ten (10) days prior to the date of said meeting, stating the date, time and place of said special meeting and the matters to be considered.

Section 5: Delivery of Notice of Meetings. Notice of a meeting may be delivered either personally or by mail to a Townhome Owner at the address given to the Board by said Townhome Owner for such purpose, or to the Townhome Owner's Townhome, if no other address for such purpose has been given to the Board.

Section 6: Voting. Each Townhome Owner shall have one (1) vote. If any Townhome Owner consists of more than one (1) person, the voting rights of such Townhome Owner shall not be divided but shall be exercised as if the Townhome Owner consisted of only one (1) person, in accordance with the proxy or other designation made by the persons constituting such Townhome Owner. The Declarant may exercise all voting rights with respect to the Townhomes owned by the Declarant from time to time.

Notwithstanding the foregoing, or any other provision of the By-Laws, the Board shall have the right and power to suspend the voting rights of any Townhome Owner during such period the Townhome Owner's Common

Expense assessments, or any other monetary obligations due and owing the Association from the Townhome Owner, remains delinquent and unpaid.

Section 8: Proxies. At all meetings of Townhome Owners, each Townhome Owner may vote in person or by proxy. All proxies shall be in writing and filed with the Secretary of the Association. Every proxy shall be revocable and shall automatically cease upon conveyance by the Townhome Owner of his Townhome.

ARTICLE III
BOARD OF DIRECTORS

Section 1: Number, Election and Term of Office. The Board shall consist of three (3) Directors. Except for the initial Board, which shall be appointed by the Declarant at the first meeting, Directors shall be elected in accordance with Article III of the Declaration and at the regular annual meeting of Association members by vote of the Townhome Owners. As long as the Declarant holds title to any Townhome, the Declarant shall have the right, at its option, to appoint at least one (1) Director to the Board.

In every election for Directors, voting shall be cumulative and every Townhome Owner shall have the right to vote, in person or by proxy. Those Directors receiving the greatest number of votes shall be deemed elected. Every elected Director shall hold office for a term of one (1) year and thereafter until his successor shall be elected and qualified.

A majority of the total number of Directors on the Board from time to time shall constitute a quorum. Except for Directors appointed by the Declarant, each Director shall be a Townhome Owner, the spouse of a Townhome Owner (or, if a Townhome Owner is a trustee of a trust, a Director may be a beneficiary of such trust or the spouse of such beneficiary) or one (1) of the persons whose estates or interests aggregate fee simple ownership of a Townhome. If a Director shall cease to meet the requirements set forth in the preceding sentence during his term, or in the event of the death, resignation or refusal or inability to act of any Director, he shall thereupon cease to be a Director and his place on the Board shall be deemed vacant. Any vacancy occurring on the Board may be filled by a majority vote of the remaining Directors thereof, except that any vacant position on the Board, which was last filled (i) by a Director appointed by the Declarant, may be filled only by a person appointed by the Declarant; or (ii) by a Director selected by a committee of Townhome Owners, may be filled only by a substitute Director selected by such committee. Any Director elected or appointed to fill a vacancy shall hold office for a term equal to the unexpired term of the Director whom he succeeds. Any Director may be removed from office, with or without cause, by a vote of two-thirds (2/3) of all Townhome Owners, and in any such case such Director's place on the Board shall be filled as hereinabove provided.

Section 2: Meetings. A regular annual meeting of the Board shall be held within ten (10) days following the regular annual meeting of Townhome Owners. Regular meetings of the Board other than the aforesaid regular annual meeting shall be with such frequency and at such place and hour as may be fixed from time to time by resolution of the Board. Special meetings of the Board shall be held upon a call by the President of the Association or by a majority of the Board on not less than forty-eight (48) hours notice to each Director, delivered personally, by mail or by telephone. Any Director may waive notice of a meeting, or consent to the holding of a meeting without notice, or consent to any action of the Board without meeting. A Director's attendance at a meeting shall constitute his waiver of notice of said meeting. The Directors shall have the right to take action in the absence of a meeting which they could take at a meeting by obtaining the written approval of all the Directors. Action so approved shall have the same effect as though taken at a meeting of the Directors.

Section 3: Compensation. Directors shall receive no compensation for their services, provided, however, any Director may be reimbursed for his actual expenses incurred in the performance of his duties, except that the Declarant shall be entitled to charge a reasonable management fee prior to the turnover of the Association.

Section 4: Powers and Duties. The Board shall have the following powers and duties:

(a) to elect and remove the officers of the Association as hereinafter provided, or any Director which a majority of the Board determines, in good faith, to be involved in criminal activity;

(b) to administer the affairs of the Association and the Development;

(c) to engage the services of a Managing Agent to maintain, repair, replace, administer and operate the Development or any part thereof upon such terms and for such compensation and with such authority as the Board may approve;

(d) to formulate policies for the administration, management and operation of the Development;

(e) to adopt rules and regulations, with written notice thereof to all Townhome Owners, governing the administration, management, operation and use of the Development and the Common Area and also governing the personal conduct of the Townhome Owners and their guests and invitees and to amend such rules and regulations from time to time;

(f) to establish penalties and fines for the violation of the provisions of the Declaration, these By-Laws or the aforesaid rules and regulations;

(g) to provide for the maintenance, repair and replacement of the Common Area and portions of the Townhomes as provided in the Declaration, payment therefor, and to approve payment vouchers or to delegate such approval to the officers of the Association or the Managing Agent;

(h) to declare the office of a Director to be vacant in the event such Director shall be absent from three (3) consecutive regular meetings of the Board;

(i) to provide for the designation, hiring and removal of employees and other personnel, including accountants and attorneys, and to contract for any services deemed necessary or desirable by the Board, and to make purchases for the maintenance, repair, replacement, administration, management and operation of the Development and the Common Area and to delegate any such powers to the Managing Agent (and to any employees or other personnel of the Managing Agent);

(j) To appoint committees of the Board as the Board deems appropriate and to delegate to such committees the Board's authority to carry out certain duties of the Board;

(k) to determine from time to time the fiscal year of the Association as the Board deems advisable;

(l) to estimate the amount of the annual budget, and to provide the manner of assessing and collecting from the Townhome Owners (excluding the Declarant) their respective shares of the Common Expenses;

(m) to grant licenses, concessions or easements over portions of the Common Area;

(n) to cause to be kept a complete record of all of its acts and corporate affairs and to present a statement thereof to the members at each regular annual meeting of the members or at any special meeting when such statement is requested in writing by twenty-five percent (25%) of the members;

(o) to the extent the Board deems necessary or appropriate, to cause any officers or employees having fiscal responsibilities to be bonded;

(p) unless otherwise provided herein or in the Declaration, to comply with the instructions of a majority of the Townhome Owners as expressed in a resolution duly adopted at any annual or special meeting of the Townhome Owners;

(q) to suspend the voting rights of any Townhome Owner during such period the Townhome Owner's Common Expense Assessment, or any other monetary obligations due and owing the Association from the Townhome Owner, remains delinquent and unpaid; and

(r) to exercise all other powers and duties of the Townhome Owners as a group, and all powers and duties of the Board set forth in the Declaration, and to give effect to the provisions of the Declaration.

Section 5: Limitation of Board's Power. Notwithstanding any provision in this Article or elsewhere in these By-Laws, the Board shall not have the power or duty to act in any way which materially impairs the development of the Development, as contemplated in the Declaration, or which impairs or infringes Declarant's rights set forth in the Declaration, and the Deeds and Plats of Subdivision of record.

ARTICLE IV
OFFICERS

Section 1: Designation. At each regular annual meeting, the Directors present at said meeting shall elect the following officers of the Association by a majority vote:

(a) a President, who: (i) shall be a Director; (ii) shall preside over the meetings of the Board and of the Townhome Owners; (iii) shall be the chief executive officer of the Association; (iv) shall see that orders and resolutions of the Board are carried out; and (v) shall sign all leases, mortgages, deeds, contracts and other written instruments on behalf of the Association, other than checks issued in the normal course of the Association's affairs;

(b) a Vice-President who shall be a Director, shall act in the place and stead of the President in the event of the President's absence, inability or refusal to act, and shall exercise and discharge such other duties as may be required of him by the Board;

(c) a Secretary, who: (i) shall record the notes and keep the minutes of all meetings of the Board and of the Townhome Owners; (ii) shall keep the corporate seal of the Association (if the Association has a corporate seal) and affix it on all appropriate papers; (iii) shall serve notice of meetings of the Board and of the members; (iv) shall keep appropriate current records showing the members of the Association together with their addresses; and (v) shall, in general, perform all the duties incident to the office of Secretary;

(d) a Treasurer, who: (i) shall be responsible for financial records and books of account and the manner in which such records and books are kept and reported; (ii) shall disburse such funds as directed by resolution of the Board; (iii) shall sign all checks and promissory notes of the Association; (iv) may, but shall not be required to, cause an annual audit of the Association's books to be made by a public accountant at the completion of each fiscal year; and (v) shall prepare annual budget and a statement of income and expenditures to be presented to the membership at its regular annual meeting, and deliver a copy of each to the members; and

(e) such additional officers as the Board shall see fit to elect.

Section 2: Powers. The respective officers shall have the general powers usually vested in such officers; provided that the Board may delegate any specific powers to any other officer or impose such limitations or restrictions upon the powers of any officer as the Board may see fit.

Section 3: Term of Office. Each officer shall hold office for a term of one year and thereafter until his successor shall have been elected and qualified.

Section 4: Vacancies. A vacancy in any office shall be filled by the Board by a majority vote of the Directors at a regular or special meeting of said Board. Any officer elected to fill a vacancy shall hold office for a term equal to the unexpired term of the officer he succeeds. Any officer may be removed with or without cause at any time by the Board at a regular or special meeting thereof.

Section 5: Compensation. The officers shall receive no compensation for their services, provided, however, any officer may be reimbursed for his actual expenses incurred in the performance of his duties.

ARTICLE V
ASSESSMENTS

Section 1: Annual Budget. The Board shall cause to be prepared an estimated annual budget for each fiscal year of the Association. Such budget shall take into account the estimated Common Expenses and cash requirements for the year, including management, salaries, wages, payroll taxes, real estate taxes on the Common Area, legal and accounting fees, supplies, materials, equipment, parts, services, maintenance, repairs, replacements, landscaping, snow removal, garbage and refuse removal, insurance, fuel, power, water service and water usage charges, utilities, maintenance of security to the extent deemed appropriate by the Board, exterior maintenance of the Townhomes as specified in the Declaration and all other Common Expenses. The annual budget shall also take into account the estimated net available cash income for such fiscal year. The annual budget shall provide for a reserve for contingencies for the year and a reserve for replacements, in reasonable amounts as determined by the Board. The Board shall periodically secure professional advice regarding the adequacy of the reserve funds for contingencies and replacements. The contingency and replacement accounts shall not be used for any other purpose than that for which they are established and maintained. To the extent that the assessments and other cash income collected from the Townhome Owners during the preceding year exceed the expenditures for such preceding year, the surplus shall either be transferred to reserves or applied to the coming year to reduce capital requirements of the budget.

Section 2: Assessments. The estimated annual budget for each fiscal year and any amendments or changes thereto shall be approved by the Board. On or before the first day of the first month and of each succeeding month of the year covered by the annual budget, each Townhome Owner shall pay such Townhome Owner's Share of the monthly assessment for the Common Expenses in accordance with the provisions of the Declaration. The Townhome Owner's Share shall be determined as set forth in the Declaration. Pursuant to rules and regulations duly adopted by the Board, the Board may assess a late charge against any Townhome Owner who fails to pay the monthly assessment on his Townhome when due. Copies of said estimated annual budget and any amendments or changes thereto shall be furnished by the Board to each Townhome Owner not less than 30 days before the first monthly assessment, based upon said annual budget or amended or changed annual budget, is due. In the event that the Board shall not approve an estimated annual budget or shall fail to determine new monthly assessments for any year, or shall be delayed in doing so, each Townhome Owner shall continue to pay each month the amount of his prior respective monthly assessment to the Managing Agent or as may be otherwise directed by the Board. No Townhome Owner (except the Declarant) shall be relieved of his obligation to pay his assessment by abandoning or not using his Townhome or the Common Area.

Section 3: Partial Year or Month. For the first fiscal year, the annual budget shall be as approved by the First Board. If such first fiscal year, or any succeeding fiscal year, shall be less than a full year, then the monthly assessments for each Townhome Owner shall be proportionate to the number of months and days in such period covered by such budget.

Section 4: Annual Report. Within ninety (90) days after the end of each fiscal year covered by an annual budget, or as soon thereafter as shall be practicable, the Board shall cause to be furnished to each Townhome Owner a statement for such year so ended, showing the receipts and expenditures and such other information as the Board may deem desirable.

Section 5: Supplemental Budget. In the event that during the course of any year it shall appear to the Board that the monthly assessments, determined in accordance with the estimated annual budget for such year, are insufficient or inadequate to cover the estimated Common Expenses for the remainder of such year, than the Board shall prepare and approve a supplemental budget covering the estimated deficiency for the remainder of such year, copies of which supplemental budget shall be furnished to each Townhome Owner, and thereupon a supplemental assessment shall be made to each Townhome Owner for his proportionate share of such supplemental budget.

Section 6: Capital Expenditures and Long Term Contracts. Except for capital expenditures and contracts specifically authorized by the Declaration and these By-Laws, the Board shall not approve any capital expenditure in excess of Ten Thousand Dollars ($10,000.00) (unless required for emergency repair, protection or operation of the Common Area) nor enter into any contract for more than two (2) years, without the prior approval of two-thirds (2/3) of the Townhome Owners.

Section 7: Lien. It shall be the duty of every Townhome Owner (excluding Declarant) to pay his proportionate share of the Common Expenses, as assessed in the manner herein and in the Declaration provided.

If any Townhome Owner shall fail or refuse to make any such payment of the Common Expenses when due, the amount thereof (plus any late charge assessed against such Townhome Owner), together with interest and late charges thereon after said Common Expenses become due and payable, at the maximum rate permitted by the laws of the State of Illinois, and costs of collection, including reasonable attorneys' fees, shall constitute a lien on the interest of such Townhome Owner in the Development, and upon the personal property of such Townhome Owner located in his Townhome or elsewhere in the Development, provided, however, that such lien shall be subordinate to the lien of a prior recorded mortgage held by a mortgagee on the interest of such Townhome Owner, except for the amount of the proportionate share of Common Expenses which becomes due and payable from and after the date on which such mortgagee or a purchaser at a foreclosure sale either takes possession of the Townhome or accepts a conveyance of any interest therein or the date on which said mortgagee causes a receiver to be appointed for the Townhome.

The Association, or its successors and assigns, or the Board or its agents, shall have the right to bring an action at law against the Townhome Owner personally obligated to pay the same or to maintain a suit to foreclose any such lien against the Townhome, and there shall be added to the amount due the costs of said suit and other fees and expenses, together with interest and late charges at the highest legal rate and reasonable attorneys' fees. Furthermore, if any Townhome Owner shall fail or refuse to pay when due his proportionate share of the Common Expenses and such Townhome Owner withholds possession of his Townhome, after demand by the Board or the Association in writing setting forth the amount claimed, the Board or the Association shall have the right to immediate possession of such Townhome. The Board or the Association shall have the authority to exercise and enforce any and all rights and remedies in the manner prescribed by Article IX of the Illinois Code of Civil Procedure, the Declaration or these By-Laws or as are otherwise available at law or in equity, for the collection of all unpaid assessments.

Section 8: Records and Statement of Account. The Board shall cause to be kept detailed and accurate records in chronological order of the receipts and expenditures of the Association, specifying and itemizing the Common Expenses incurred. Payment vouchers may be approved in such manner as the Board may determine.

Upon receipt of ten (10) days written notice to it or to the Association from a Townhome Owner or mortgagee of record, and upon payment of a reasonable fee, the Board shall furnish to said Townhome Owner or mortgagee, as the case may be, a statement of the account setting forth the amount of any unpaid assessments or other charges due and owing from said Townhome Owner. If a Board or Managing Agent certificate states an assessment has been paid, such certificate shall be conclusive evidence of such payment.

The books, records and papers of the Association shall, by appointment during reasonable business hours, be subject to inspection by any member upon written notice and statement of a proper purpose. The Declaration,

the Articles of Incorporation and these By-Laws shall be available for inspection by any member at the principal office of the Association, where copies shall be available for purchase at reasonable cost.

Section 9: Discharge of Liens. The Board may cause the Association to discharge any mechanic's lien or other encumbrance which, in the opinion of the Board, may constitute a lien against the Development or the Common Area, rather than a lien against only a particular Townhome. When less than all the Townhome Owners are responsible for the existence of any such lien, the Townhome Owners responsible therefor shall be jointly and severally liable for the amount necessary to discharge the same and for all costs and expenses, including attorneys' fees, incurred by reason of such lien.

Section 10. Holding of Funds. All funds collected hereunder shall be held and expended for the purposes designated herein, and (except for such special assessments as may be levied hereunder against less than all the Townhome Owners and for such adjustments as may be required to reflect delinquent or prepaid assessments) shall be deemed to be held for the sole benefit, use and account of all Townhome Owners equally.

ARTICLE VI
CONTRACTUAL POWERS

Contracts or other transactions between the Association and one or more of its Directors or between the Association and any corporation, firm or association in which one or more of the Directors of the Association are directors, or are financially interested, are prohibited.

ARTICLE VII
INDEMNIFICATION

Section 1: General. The Association shall indemnify any person who was or is a party, or is threatened to be made a party, to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Association), by reason of the fact that he is or was a Director, an officer of the Association or a member of any committee appointed pursuant to these By-Laws, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by or imposed on him in connection with such action, suit or proceeding provided said person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Association, and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the Association, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful.

The Association shall indemnify any person who was or is a party, or is threatened to be made a party, to any threatened, pending or completed action, suit or proceeding by or in the right of the Association to procure a judgment in its favor by reason of the fact that he is or was a Director, an officer of the Association or a member of any committee appointed pursuant to these By-Laws, against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit provided said person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Association, except that no indemnification shall be made in respect to any claim, issue or matter as to which such person shall have been adjudged to be liable for gross negligence, willful misconduct or fraud in the performance of his duty to the Association.

Section 2: Success on Merits. To the extent that a Director, an officer of the Association or a member of any committee appointed pursuant to these By-Laws has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in Section 1 of this Article VII, or in defense of any claim, issue or matter therein, he shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him in connection therewith.

Section 3: Determination of Right to Indemnify. Any indemnification under Sections 1 and 2 of this Article VII shall be made by the Association only as authorized in the specific case upon a determination that indemnification of the Director or the officer or the member of such committee is proper in the circumstances because he has met the applicable standard of conduct set forth in such Sections 1 and 2. Such determination shall be made (i) by the Board by a majority vote of a quorum consisting of those Directors who were not parties to such action, suit or proceeding; or (ii) if such a quorum is not obtainable, or even if obtainable, if a quorum of disinterested Directors so directs, by independent legal counsel in a written opinion; or (iii) by a majority of the members of the Association.

Section 4: Advance Payment. Expenses incurred in defending a civil or criminal action, suit or proceeding may be paid by the Association in advance of the final disposition of such action, suit or proceeding as authorized by the Board in the specific case upon receipt of an undertaking by or on behalf of the Director, the officer or the member of such committee to be indemnified to repay such amount unless it shall ultimately be determined that he is entitled to be indemnified by the Association as authorized in this Article VII.

Section 5: Non-Exclusivity. The indemnification provided by this Article VII shall not be deemed exclusive of any other rights to which a person seeking indemnification may be entitled under any statute, agreement, vote of members of the Association or disinterested Directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be a Director, officer or member of such committee, and shall inure to the benefit of the heirs, executors and administrators of any such person.

ARTICLE VIII
AMENDMENTS

These By-Laws may be amended or modified at any time, or from time to time in the same manner as provided in Article XIII of the Declaration; provided that (i) any provisions relating to the rights of the Declarant shall not be amended without the written consent of the Declarant; and (ii) no provision of these By-Laws may be amended or modified so as to conflict with the provisions of the Declaration. These By-Laws may also be amended by the Declarant for the purposes and by the procedure set forth in Article XIII of the Declaration. No amendment to these By-Laws shall become effective until recorded with the Will County Recorder of Deeds.

ARTICLE IX
CONFLICT BETWEEN DECLARATION AND BY-LAWS

In the event of any conflict between any provision of these By-Laws and a provision of the Declaration, the provision of the Declaration shall control.

ARTICLE X
CORPORATE SEAL

The Association may have a seal in circular form having within its circumference the words: "BROOKSIDE GLEN VILLAS TOWNHOME ASSOCIATION".

ARTICLE XI
FISCAL YEAR

Unless the Board adopts a resolution to the contrary, the fiscal year of the Association shall begin on the 1st day of January and end on the 31st day of December of every year, except that the first fiscal year shall begin on the date of incorporation.

IN WITNESS WHEREOF, we, being all the Directors of BROOKSIDE GLEN VILLAS TOWNHOME ASSOCIATION, have hereunto set our hands this _____ day of _____, 2021.

_____

_____

_____

_____

_____

EXHIBIT D

BUDGET

PLAN COMMISSION STAFF REPORT

October 21, 2021 – Public Hearing

Loyola Southwest Ambulatory Care Center

17901 LaGrange Road

Petitioner
Shawn Vincent, on behalf of Loyola Medicine

Property Location
17901 LaGrange Road

PIN
27-34-300-005-0000;
27-34-300-011-0000

Zoning

Existing:
B-3 (General Business and Commercial) & ORI (Office and Restricted Industrial)

Proposed:
ORI (Office and Restricted Industrial)

Approvals Sought
- Site Plan/ Architecture Approval
- Variations
- Rezoning
- Final Plat Approval

Project Planner
Kimberly Clarke, AICP
Community Development Director

Daniel Ritter, AICP
Planning Manager

EXECUTIVE SUMMARY

The Petitioner, Shawn Vincent on behalf of Loyola Medicine (property owner), is requesting Rezoning to the Office & Restricted Industrial (ORI) zoning district and variations from the masonry, urban design overlay district, signage, and parking requirements at the property located at 17901 LaGrange Road. Additionally, Site Plan approval and Preliminary Plat are requested.

The property is to be developed into a two-story tall, 72,000 sq. Ft. medical center on a 25.75-acre lot at the southeast corner of LaGrange Road and 179th Street. The medical clinic will be entirely outpatient. Services include an ambulatory medical clinic for primary care, a range of medical specialties, and a cancer care center. The property is currently two lots with two different zoning districts (ORI and B-3); it is proposed to be consolidated into one lot and zoned ORI. The south portion of the lot would remain undeveloped and farmed until such time it can be subdivided or developed in the future.

This proposed project is expected to begin site and foundation work this fall/winter and be operational in 2023. It is anticipated to bring additional jobs to the area and provide needed medical services to 1,500 patients a week.

Changes from the October 7, 2021 Workshop Staff Report are indicated in RED.

EXISTING SITE & HISTORY

The subject site consists of two lots with a total of 25.75-acres, located at the southeast corner of La Grange Road and 179th Street. Parcel one was recently purchased by Loyola, it is the northernmost parcel, approximately 4.13-acres in size, and is zoned B-3 (General Business and Commercial). This parcel was annexed into the Village in 1982. Parcel two has been owned by Loyola for many years and consists of an "L" shaped area zoned ORI (Office Restricted Industrial) approximately 21.62-acres. This site was annexed into the Village in 1984. Both properties have been most recently utilized for farming purposes.

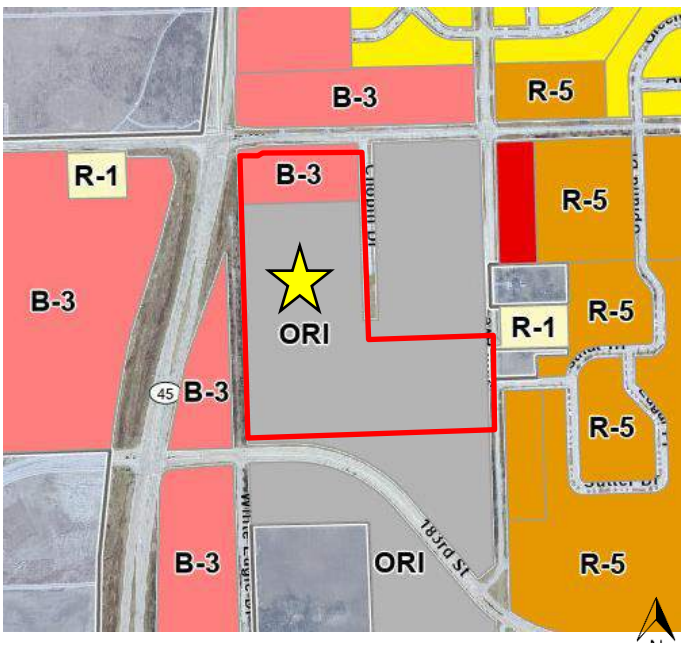
Location Map 17901 La Grange Road

The western edge of the site abuts property formerly occupied by 96th Avenue before the LaGrange Road reconfiguration; the area remains under IDOT's ownership and control. In 1992, The Village of Tinley Park received Jurisdictional Transfer (JT) of the Cook County segment of Old US Route 45 (96th Avenue) that was no longer used after US Route 45 (LaGrange Road) was realigned for the interchange with Interstate 80. The right-of-way can be used for local transportation-related needs, but restricts permanent buildings or structures within the JT. The Village has utilized approximately 1,000 feet of this 96th Avenue ROW south of 183rd Street for a roadway, renamed White Eagle Drive that provides access to the hotels, restaurants, as well as adjacent properties yet to be developed.

In the interest of economic development, the Village is engineering extensions of our utility systems (water and sanitary sewer) to service adjacent land that has long remained undeveloped, in part because the cost of extending the utilities for any single owner or development is prohibitive. Loyola is partnering with the Village through an easement agreement to use a portion of their land to install a sanitary sewer lift station to service the area.

ZONING & NEARBY LAND USES

The zoning for the site and nearby area is a mix of B-3 (General Business & Commercial) and ORI (Office, Restricted Industrial) zoning districts. There are several businesses to the north with a combination of freestanding buildings and multi-tenant strip centers. The Advocate Medical Campus Southwest is located to the west along with vacant land on LaGrange Road. The northwest corner of the intersection is the 966-acre Orland Grassland Nature Preserve. Directly east is Moraine Valley Community College which was constructed circa 2008. Lawn Funeral Home and residences are located further to the east along 94th Avenue. The site is also located within the Urban Design Overlay District (UDOD), which promotes walkability, lesser front yard setbacks, and overall a more urbanized look. Staff has worked with the Petitioner to ensure that the spirit of the UDOD is met where possible. The site will have planned for pedestrian connections and sidewalks throughout the site.

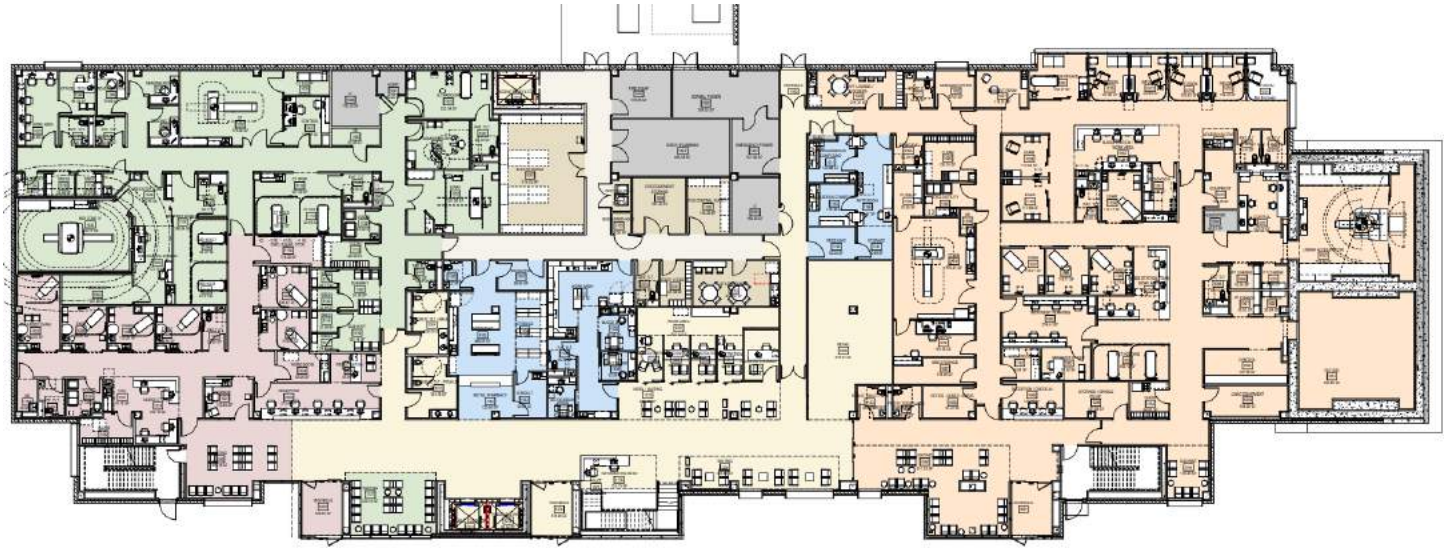


Zoning Map

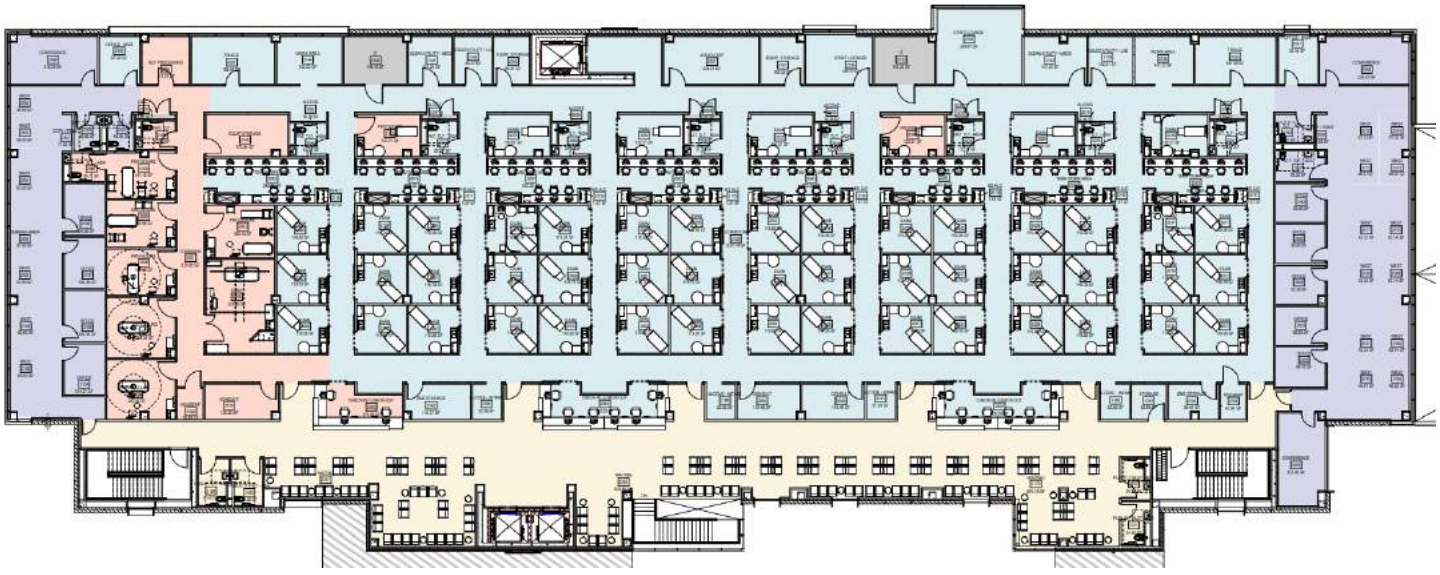
PROPOSED USE

The petitioner is proposing a 72,000 sq. ft. two-story, ambulatory medical clinic for primary care with a range of medical specialties including orthopedic surgery, oncology, cardiology, pulmonary medicine, urology, and general surgery. There will be no overnight accommodations and no patient will be present outside of the anticipated working hours on weekdays 7 a.m. thru 8 p.m., and weekends 8 a.m. thru 3 p.m. A cancer care center will be provided on the north end of the building with exam rooms, infusion rooms as well as CT and Linear Accelerator suites. The overall use is considered a "Medical Clinic", which is a permitted use in the proposed ORI zoning district.

There is a clustering of other medical users along the LaGrange Road Corridor such as Alpha Med, DuPage Medical Group Immediate Care Center, and Advocate Medical Campus. In addition, there are hotels, food establishments and a local community college nearby and with the close proximity to the I-80 interchange it makes this an ideal location for Loyola to expand their medical availability to service the larger southwest suburban area.



Floor Plan 1st Floor



Floor Plan 2nd Floor

SITE PLAN

Overall

The property will be developed as a medical campus with the building perpendicular to 179th Street and the parking lots situated along Chopin Drive. While there is a large right-of-way setback, the building is oriented to have its highest visibility from LaGrange Road, where there is heavier traffic and most customers will be traveling to and from the site.

The building will have two main public entrances facing east towards the parking lot and Chopin Drive. One entrance is for the main medical center and ambulatory care and the second entrance is for the cancer care center. These areas generally have their own drop-off/pick-up areas and parking fields. However, patients and visitors can park anywhere on the property and they are connected internal to the building.

There will be a variety of gardens and sitting areas provided for patients that may be getting treatment for extended periods. These are located in the northwest corner of the site along 179th Street and part of the required landscaped bufferyard.

An employee entrance, break area, and loading will happen at the rear of the building that faces west towards LaGrange Road. This area will be largely screened from view by a screen wall, overhead canopy, and landscaping.

Vehicle Access

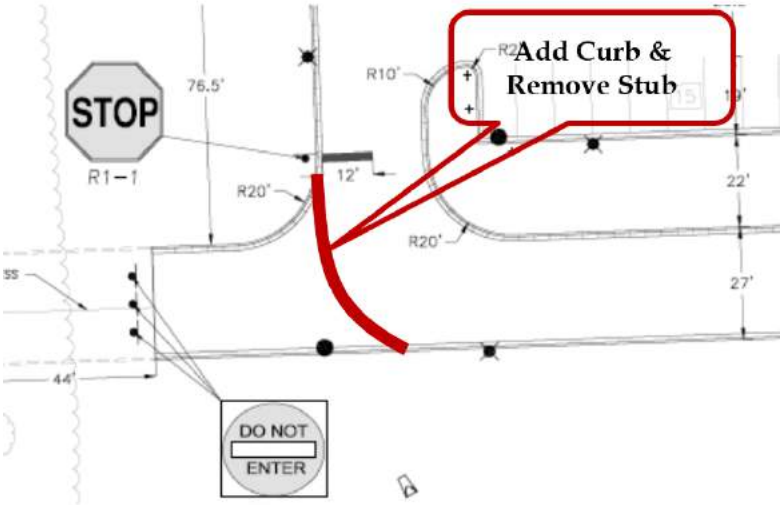
The plan provides multiple access points to the site. The main full access points will be on Chopin Drive which connects to 179th Street to the north. A right-in/right-out is indicated on LaGrange Road. That access point allowance will be determined by IDOT as it traverses their property and connects to their roadway. The LaGrange access point is a strong preference of the Petitioner since the majority of their traffic will enter and leave via LaGrange Road. However, the access point main or may not be possible due to grading and IDOT standards for LaGrange Road. Its approval may lag behind the rest of the site, but the site has been designed to be successful regardless. Additionally, a right-in only is shown as a possibility on 179th Street; this access will be subject to Cook County DOT review. The two access points on Chopin Drive align with the two access points (the main access and one for emergency access sonly) for Moraine Valley Community College to the east.

~~Open Item #1: A condition is recommended clarifying that approval of access points on 179th Street (Cook County DOT) and LaGrange Road (IDOT) are subject to approval by their controlling jurisdictions.~~

The UDOD only permits one curb cut for a property. The goal is to limit vehicle access points, which makes the area more walkable with one controlled point of access. However, that requirement is not feasible due to the size and scale of the subject site and the amount of traffic. The subject site is requesting to have as many as 4 curb cut access points as described above.

~~Open Item #2: Discuss Variation required from UDOD for additional curb cuts.~~

Since the LaGrange Road access may lag behind the project significantly, staff is recommending that the plans be revised to remove the "stubbed" access point on the southwest corner of the site and create a rounded curbed bend unless preliminary or Final IDOT approval is given to that access ahead of the site's construction. This will provide the more conservative approach to the initial construction by avoiding an awkward dead end that can be a safety hazard, but still allow for the connection when approved in the future.



~~Open Item #3: Discuss plan revision to remove "stubbed" access point to LaGrange Road.~~

Walkways and Sidewalks

An extensive walkway system is proposed around the building and through the parking lot that will provide a safe route for pedestrians. This walkway system is also proposed to tie into the public walkway system. Public sidewalks will also be constructed around the site along 179th Street and Chopin Drive as required by the Village's subdivision code.

Stormwater

There are stormwater detention areas proposed at the northeast corner and the southwest corner of the property. The image to the right shows how the two parcels are to be developed. Only 12.6-acres of the total 25.75-acre site is proposed to be developed, while the remaining southern 13-acres will remain farmed. The site is proposed to be one lot at this time, with a future subdivision possible for the remaining undeveloped land. The proposed detention will only be designed to accommodate the proposed Loyola development and additional detention will be needed if the remaining vacant land is developed in the future.

Setbacks and Site Layout

The required building setbacks for the Urban Design Overlay District include a 20' maximum front yard, 10' minimum side yard, and 10' minimum rear yard. Additionally, parking setbacks include a 25' front yard setback and 10' side yard setbacks. The site fronts three public right of ways and three front yards, so it would be very difficult to meet these setbacks on such a large lot. The Petitioner chose to focus the building's main frontage nearest to LaGrange Road which is the most heavily traveled, while using the other side as a second frontage that is adjacent to the building's parking field. This requires Variations from these various UDOD requirements as noted in the table below in red due to the requirements for a maximum setback along public frontages and limited front yard parking. The proposal meets the overall development pattern in the area and is a unique use that will require a focus on traffic access since there are customers traveling for medical care and ambulatory service on the site. Pedestrian accommodations have been made in and around the site to help meet the intent of the overlay district.

~~Open Item #4: Discuss building and parking setback Variations required from UDOD regulations.~~

Urban Design Overlay District Setbacks			
	Proposed	Required	Difference
Building – Front (179th)	95.5′	20′ Max.	+75.5
Building - Front (LaGrange)	125.3′	20′ Max.	+115.3′
Building – Front (Chopin)	~300′ (specific number not noted)	20′ Max.	+ More than 280′
Building - Rear	+231.2′	10′ Min.	+221.2′
Parking – Front (179th)	~70′ (specific number not note don plans)	25′ Min.	+~45′
Parking – Front (Lagrange)	65.7′	25′ Min.	+40.7′
Parking – Front (Chopin)	15′	25′ Min.	-10′

Engineering and Utilities

The plans require final engineering review and approvals. Additionally, the plans are subject to review by a variety of other jurisdictions including MWRD, IDOT, Cook County, IEPA, and others. Any comments or corrections are not expected to significantly change the final site plans. However, staff recommends a standard condition be placed on the approvals, requiring final engineering review and approval of all plans.

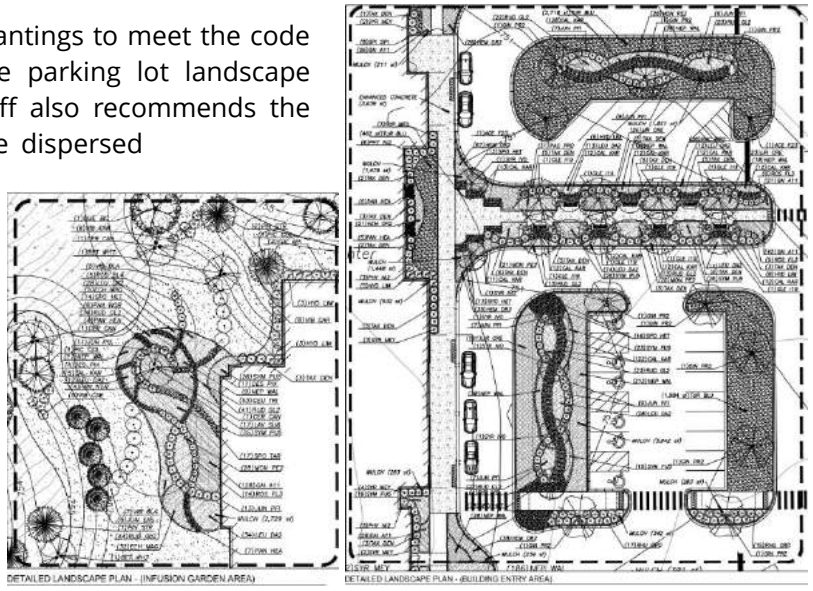
~~***Open Item #5: Staff is recommending the site plan approval be conditioned upon final engineering review and approval.***~~

LANDSCAPE

The property has an existing wetland area at the northwest corner that is currently in the process of being mitigated by the owner. The property will have two detention areas one at the northeast corner of the site and the largest at the far south end of the site. The plan has drive-thru aisles for drop off at each entrance. There is a heavy emphasis on landscaping this area to make it an attractive entryway feature for the medical center. On the west side of the building facing LaGrange Road is proposed 3′-4′ berm and an infusion garden. The infusion garden is on the north end where the cancer center will be and the goal is to provide a tranquil area for patience to have a calming natural area to look at while being treated. On the west side there is also a planned employee paver patio area with a potential overhead trellis.

The plan needs to provide additional bufferyard plantings to meet the code requirements. In addition, landscaping within the parking lot landscape islands do not fully meet code requirements. Staff also recommends the buffer plantings for south property line should be dispersed along the drive aisle and the open space to create a more natural aesthetic vs. lining them all within the 25′ wide bufferyard. The north and west bufferyards could also have required bufferyard plantings outside of the 25′ wide bufferyard to create a more natural appearance.

Revised Plans included additional landscaping in areas along the south and west sides of the property. Some waivers are requested but generally offset by other additional landscaping located throughout the site.



Landscaping @ Infusion Center (Left) and Building Entry (Right)

~~***Open Item #6: Review proposed landscaping plan and waiver requests.***~~

ARCHITECTURE

The facility is intended to maintain the Loyola branding which is based off their main campus location in Maywood. The architecture has a modern look with the use of cooler colors and accent materials of metal and glass. The applicant initially proposed an all precast building with metal and glass accents as seen below.

First Proposal-38% precast panels; 36% glass and 26% metal panels

Second Proposal Option 1- incorporated a brick base around the building. This image provides 5% face brick; 34% precast panels; 31% glass and 29% metal panels

Second Proposal Option 2- incorporated face brick at the entrance points only. This image provides 32% face brick; 26% precast panels; 31% glass and 11% metal panels.

Final Proposal- This last image incorporates face brick on the base and the main entrances but in a gray stone. This brings the building closer to the masonry requirements with 38% face brick; 19% precast panels; 31% glass and 11% metal panels. A variation is still required.

Mechanical equipment will be either housed internally or located in screened locations on the rooftop. An at grade electrical transformer and at grad emergency generator will be located in the service yard on the west side of the proposed project.

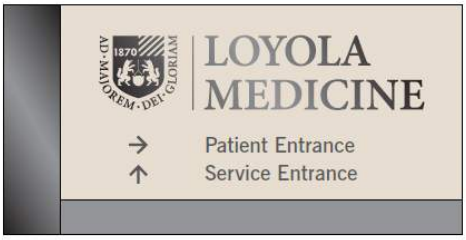
The code provisions for Urban Design Overlay District include building design standards for non-residential buildings. Notable, the code states the main entrance to a building shall be oriented toward the major street, be prominent, and pedestrian accessible.

~~Open Item #7: Review and discuss the proposed architecture and variation in face brick requirement~~

SIGNAGE

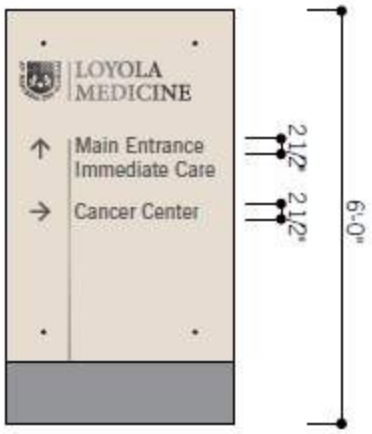
Signage for the project is provided but conceptual and details of the designs may change. The petitioner is providing multiple signs on site due to the large size of the property. There are three monuments signs proposed for the site. The first is proposed at the northwest corner of the site closest to the intersection of LaGrange Road and 179th Street. The second ground sign is at the northwest corner of the site closest to the intersection of Chopin Drive and 179th Street and the last ground sign is at the main entrance drive off of Chopin Drive. Properties within the ORI District are permitted to have one (1) ground base sign per adjacent public frontage with a maximum of two (2) ground based signs. There are anticipated wall signs to be placed above the two entrances on the east side of the building as well as on the west side of the building facing LaGrange Road. With the conceptual designs, it appears a variation to grant an additional wall sign will be needed. The code permits one (1) wall sign per frontage not to exceed 120 sq. ft. per sign. With the two "wings" of the building, the applicant is proposing walls signs that identify the entrances for their patients. The sizes of the signs were not supplied.

Additional signage information was supplied for review and all ground sign and wall signs appear they will meet size requirements on the site. The specific designs are still conceptual but expected to be similar to the attached sign package. Variations are requested for the additional ground and wall signs.



~~***Open Item #8: Discuss proposed ground sign variation to permit one additional ground sign and one additional wall sign. Petitioner to clarify proposed ground sign and wall sign sizes and any need for additional variations.***~~

Directional signs are also important in medical facilities that have emergency care and multiple services offered. Directional signs are permitted at a maximum of 4 ft. in height and a maximum of 6 sq. ft. in size with no logos or organizational names located on them. No details were supplied for the location, design, or size of directional signs. The Petitioner needs to supply additional sign details and will need to meet the code or request a variation from the requirements.



Directional sign information was supplied. Due to the unique medical use and various entrances, Variation relief is requested to allow larger and taller signs with the Loyola Medicine name on them. This will assist patients who may be in a hurry or have medical conditions to more easily read the signs and identify where they should go on the site.

~~***Open Item #9: Discuss the need to supply details or responses for any directional sign relief.***~~

PARKING

The petitioner has supplied a parking demand study by Eriksson Engineering Associates, Ltd., which summarizes the proposed parking use. The proposed development will include 330 parking spaces (28 of which will be accessible and 14 electric vehicle recharging parking spaces), and 2 loading spaces. The property's use is classified within the current Zoning code parking requirements as *Medical or Dental Office* use. Parking requirements are based on a minimum of two spaces for each office, exam room or treatment room, plus one space for each employee. The petitioner has provided a count of the facility's rooms and employees. The proposal includes 83 exam/treatment rooms, 20 offices, 35 workstations, and 130 employees. The code requires a minimum of 406 parking spaces. The code also requires a minimum of four loading spaces for buildings with a gross floor area of 70,001 to 120,000 square feet. The development will require a 76-parking stall Variation from Section VIII.A.10 of the Zoning Ordinance to permit 330 parking stalls instead of the required minimum of 406 stalls. The development will also require a two-loading space Variation from Section VIII.B. of the Zoning Ordinance to permit two loading spaces instead of the required minimum of four spaces.

Tinley Park Zoning Code Requirements

Use	Sized	Tinley Park Zoning Code Requirement	Required Parking
Medical or Dental Office	83 exam/treatment rooms 20 offices 35 work stations 130 employees	Two (2) spaces for each office, examination room, or treatment room, plus one (1) space for each employee	**406 spaces**

The petitioner suggests that the zoning code parking requirement is based on the outdated healthcare practice of doctors seeing patients in their office after the exam, whereas the current healthcare model uses technology to allow this consultation in the exam rooms. The 55 offices and workstations are anticipated to only be used by doctors and staff, which are already accounted for in the employee count. If the parking requirement is adjusted for this factor, the overall parking need would only be 296 spaces, which is less than the proposed supply.

Eriksson Engineering has also provided two national sources for medical office parking, which conclude that the anticipated parking demand of only 225 spaces and 229 spaces, each less than the zoning code requirement. Eriksson Engineering has recommended the provision of 330 spaces on the site which is 44% higher than the national demand estimates.

Furthermore, the petitioner states in their operational narrative that they are confident that ample parking will be provided for the proposed use, and has stated that, if required, additional site space is available for this purpose.

The development will partially meet the Urban Design Overlay District code provisions for parking. The overlay district requires the parking setbacks are 25' minimum front yard, 10' minimum side yard, and zero-foot rear yard. The parking setback along Chopin Drive is proposed as 15', which is deficient by 10' and will require a Variation from the Zoning Code.

~~***Open Item #10: Discuss proposed parking and loading variations to permit 330 parking spaces instead of the 406 parking spaces required, and two loading spaces instead of the four loading spaces required.***~~

LIGHTING

Photometric plans and lighting cutsheets are attached to the packet. The plans and lighting details conform with all applicable lighting codes and regulations.

~~***Open Item #11: Petitioner needs to supply photometric plans and light spec sheets for review.***~~

SPECIAL APPROVALS NEEDED (REZONING AND VARIATIONS)

Rezoning

The smaller parcel adjacent to 179th Street is zoned B-3 (General Business & Commercial District) and the remaining larger "L" shaped parcel is zoned ORI (Office & Restricted Industrial District). The applicant is seeking to rezone the smaller parcel to the ORI District which will be consistent with all of the land surrounding the Loyola properties. The Zoning Ordinance describes the zoning district as follows:

"*The ORI Office and Restricted Industrial District is intended to provide land for medium to large office buildings, research activities, and non-objectionable industrial activities which are attractively landscaped and designed to create a "park-like" setting. The low intensity and limiting restrictions are intended to provide for permitted uses which will be compatible with adjacent residential and commercial developments.*"

~~***Open Item #12: Discuss the requested rezoning of the subject property to the ORI (Office Restricted Industrial) zoning district.***~~

Variations

1. Urban Design Overlay District
    a. A Variation from Section V.D.2.D.(2) (Urban Design Overlay District – Dimensional Standards) of the Zoning Ordinance to permit a setback of approximately 95.5 feet (179th St Frontage), 125.3 feet (LaGrange Rd Frontage), and over 300 feet (Chopin Rd Frontage) instead of the required 20 foot maximum.
    b. A Variation from Section V.D.2.D.(2) (Urban Design Overlay District – Dimensional Standards) of the Zoning Ordinance to permit a surface parking lot to be located 15 feet from the eastern (Chopin Dr) front yard property line instead of the required 25 foot minimum setback.
    c. A Variation from Section V.D.2.C.(2).f. (Urban Design Overlay District – Access) of the Zoning Ordinance to permit up to four curb cut access point where a maximum of one is permitted per property.

2. Parking Requirements
    a. A Variation from Section VIII.A.10. (Number of Parking Spaces Required) of the Zoning Ordinance to permit 330 parking stalls were a minimum total of 406 stalls are required.
    b. A Variation from Section VIII.B.3. (Number of Off-Street Loading Spaces) of the Zoning Ordinance to permit a total of 2 loading spaces were a minimum of 4 loading spaces is required.

3. Masonry/Exterior Materials
    a. A Variation from Section V.C.7.F. (Commercial and Office Exterior Requirements) of the Zoning Ordinance to permit exterior elevations with 36-42% face brick, where a minimum is 60% face brick is required, per the attached elevations.
    b. A Variation from Section V.C.7.G. (Commercial and Office Exterior Requirements) of the Zoning Ordinance to permit exterior elevations with alternative building materials (precast concrete masonry, metal panels, and glass panels) to exceed the maximum of 15% of the exterior façade.

4. Signage
    a. A Variation from Section IX.H.2. (Industrial/Office Freestanding Signs) of the Zoning Ordinance to permit a total of three ground signs where a maximum of two are permitted (one per public frontage).
    b. A Variation from Section IX.H.1. (Industrial/Office Wall Signs) of the Zoning Ordinance to permit up to two wall signs (at a maximum of 120 sq. ft. each) on the east elevation where only one sign is permitted.
    c. A Variation from Section IX.H.1. (Industrial/Office Wall Signs) of the Zoning Ordinance to permit a wall sign on the west elevation to be up to 200 sq. ft. in size where a maximum of 120 sq. ft. is allowed.
    d. A Variation from Section IX.L.2. (Directional Signs) of the Zoning Ordinance to permit the site's directional signs to be up to six feet in height, 20 sq. ft. in signage area and indicate an organizational name where the maximum height is four feet, maximum size is 6 sq. ft., and the organizational name is not permitted.

~~***Open Item #13: Discuss all requested Variations.***~~

Plat of Consolidation

The proposed plat consolidates the two lots into one to avoid building a structure over a property line. Additionally, all required easements (utility, drainage, detention, cross-access, etc.) and dedications (sidewalk, roadway, etc.) will be included in separate Plats of Easement or Dedication when final engineering and jurisdiction approvals are received. The Plat has recommended conditions ensuring it received proper engineering and legal approvals. It also notes that a separate Plat of Easement is required to go to Village Board for approval and be recorded once final engineering has been completed.

~~***Open Item #14: Discuss the preliminary Plat and the petitioner's timeframe for submittal prior to the Village Board review/approval.***~~

STANDARDS FOR REZONING APPROVAL

The Zoning Code does not establish any specific criteria that must be met in order for the Village Board to approve a rezoning request. Likewise, Illinois Statutes does not provide any specific criteria. Historically, Illinois courts have used eight factors enunciated in two court cases. The following "LaSalle Standards" have been supplied for the Commission to consider. Staff will prepare draft responses for these Standards within the next Staff Report for the public hearing.

a. The existing uses and zoning of nearby property;

- Surrounding uses are primarily commercial and institutional uses. The LaGrange Rd corridor has similar ORI zoning and medical clinic uses.

b. The extent to which property values are diminished by the particular zoning;

- The rezoning would make the two lots a similar zoning district. No surrounding property values are expected to be affected.

c. The extent to which the destruction of property values of the complaining party benefits the health, safety, or general welfare of the public;

- There is no evidence or expectation of affecting property values based on the zoning change.

d. The relative gain to the public as compared to the hardship imposed on the individual property owner;

- The use would be permitted in either of the existing zoning districts. The rezoning is simply to align the zoning districts so the lots can be consolidated.

e. The suitability of the property for the zoned purpose;

- The site is suitable being developed with a medical clinic use that is permitted in the zoning district.

f. The length of time the property has been vacant as zoned, compared to development in the vicinity of the property;

- The property has been vacant for many years and not previously developed. The two different zoning districts would make consolidating or developing the lots difficult.

g. The public need for the proposed use; and

- Additional medical service uses and provider options in the area benefits the community and larger metropolitan area's overall health and wellness. The medical clinic increases employment and drives traffic to the area that helps to support other surrounding commercial uses.

h. The thoroughness with which the municipality has planned and zoned its land use.

- The area has largely been considered for a commercial use in previous plans but did not anticipate the lots would be developed together. Medical service uses have been approved nearby along the LaGrange Road corridor.

STANDARDS FOR A VARIATION

Section X.G.4. of the Zoning Ordinance states the Plan Commission shall not recommend a Variation of the regulations of the Zoning Ordinance unless it shall have made Findings of Fact, based upon the evidence presented for each of the Standards for Variations listed below. The Plan Commission must provide findings for the first three standards; the remaining standards are provided to help the Plan Commission further analyze the request. Staff will prepare draft responses for these Standards within the next Staff

1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in the district in which it is located.

2. The plight of the owner is due to unique circumstances.

3. The Variation, if granted, will not alter the essential character of the locality.

4. Additionally, the Plan Commission shall also, in making its determination whether there are practical difficulties or particular hardships, take into consideration the extent to which the following facts favorable to the Petitioner have been established by the evidence:

    a. The particular physical surroundings, shape, or topographical condition of the specific property involved would result in a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of the regulations were carried out;

    b. The conditions upon which the petition for a Variation is based would not be applicable, generally, to other property within the same zoning classification;

    c. The purpose of the Variation is not based exclusively upon a desire to make more money out of the property;

    d. The alleged difficulty or hardship has not been created by the owner of the property, or by a previous owner;

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

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

STANDARDS FOR SITE PLAN & ARCHITECTUAL APPROVAL

Section III.T.2. of the Zoning Ordinance requires that the conditions listed below must be met and reviewed for Site Plan approval. Specific findings are not required but all standards shall be considered to have been met upon review from the Plan Commission.

Architectural

a. Building Materials: The size of the structure will dictate the required building materials (Section V.C. Supplementary District Regulations). Where tilt-up or pre-cast masonry walls (with face or thin brick inlay) are allowed vertical articulation, features are encouraged to mask the joint lines. Concrete panels must incorporate architectural finishes that comply with "Building Articulation" (Section III.U.5.h.) standards. Cast in place concrete may be used as an accent alternate building material (no greater than 15% per façade) provided there is sufficient articulation and detail to diminish it's the appearance if used on large, blank walls.

b. Cohesive Building Design: Buildings must be built with approved materials and provide architectural interest on all sides of the structure. Whatever an architectural style is chosen, a consistent style of architectural composition and building materials are to be applied on all building facades.

c. Compatible Architecture: All construction, whether it be new or part of an addition or renovation of an existing structure, must be compatible with the character of the site, adjacent structures and streetscape. Avoid architecture or building materials that significantly diverge from adjacent architecture. Maintain the rhythm of the block in terms of scale, massing and setback. Where a development includes outlots they shall be designed with compatible consistent architecture with the primary building(s). Site lighting, landscaping and architecture shall reflect a consistent design statement throughout the development.

d. Color: Color choices shall consider the context of the surrounding area and shall not be used for purposes of "attention getting" or branding of the proposed use. Color choices shall be harmonious with the surrounding buildings; excessively bright or brilliant colors are to be avoided except to be used on a minor scale for accents.

e. Sustainable architectural design: The overall design must meet the needs of the current use without compromising the ability of future uses. Do not let the current use dictate an architecture so unique that it limits its potential for other uses (i.e. Medieval Times).

f. Defined Entry: Entrance shall be readily identifiable from public right-of-way or parking fields. The entry can be clearly defined by using unique architecture, a canopy, overhang or some other type of weather protection, some form of roof element or enhanced landscaping.

g. Roof: For buildings 10,000 sf or less a pitched roof is required or a parapet that extends the full exterior of the building. For buildings with a continuous roof line of 100 feet of more, a change of at least five feet in height must be made for every 75 feet.

h. Building Articulation: Large expanses of walls void of color, material or texture variation are to be avoided. The use of material and color changes, articulation of details around doors, windows, plate lines, the provision of architectural details such as "belly-bands" (decorative cladding that runs horizontally around the building), the use of recessed design elements, exposed expansion joints, reveals, change in texture, or other methods of visual relief are encouraged as a means to minimize the oppressiveness of large expanses of walls and break down the overall scale of the building into intermediate scaled parts. On commercial buildings, facades greater than 100 feet must include some form of articulation of the façade through the use of recesses or projections of at least 6 inches for at least 20% of the length of the façade. For industrial buildings efforts to break up the long façade shall be accomplished through a change in building material, color or vertical breaks of three feet or more every 250 feet.

i. Screen Mechanicals: All mechanical devices shall be screened from all public views.

j. Trash Enclosures: Trash enclosures must be screened on three sides by a masonry wall consistent with the architecture and building material of the building it serves. Gates must be kept closed at all times and constructed of a durable material such as wood or steel. They shall not be located in the front or corner side yard and shall be set behind the front building façade.

Site Design

a. Building/parking location: Buildings shall be located in a position of prominence with parking located to the rear or side of the main structure when possible. Parking areas shall be designed so as to provide continuous circulation avoiding dead-end parking aisles. Drive-through facilities shall be located to the rear or side of the structure and not dominate the aesthetics of the building. Architecture for canopies of drive-through areas shall be consistent with the architecture of the main structure.

b. Loading Areas: Loading docks shall be located at the rear or side of buildings whenever possible and screened from view from public rights-of-way.

c. Outdoor Storage: Outdoor storage areas shall be located at the rear of the site in accordance with Section III.O.1. (Open Storage). No open storage is allowed in front or corner side yards and are not permitted to occupy areas designated for parking, driveways or walkways.

d. Interior Circulation: Shared parking and cross access easements are encouraged with adjacent properties of similar use. Where possible visitor/employee traffic shall be separate from truck or equipment traffic.

e. Pedestrian Access: Public and interior sidewalks shall be provided to encourage pedestrian traffic. Bicycle use shall be encouraged by providing dedicated bikeways and parking. Where pedestrians or bicycles must cross vehicle pathways a cross walk shall be provided that is distinguished by a different pavement material or color.

MOTIONS TO CONSIDER

If the Plan Commission wishes to act on the Petitioner's requests, the appropriate wording of the motions is listed below. The protocol for the writing of a motion is to write it in the affirmative so that a positive or negative recommendation correlates to the Petitioner's proposal. By making a motion, it does not indicate a specific recommendation in support or against the plan. The Commission may choose to modify, add, or delete from the recommended motions and recommended conditions.

Motion 1 (Map Amendment/Rezoning):
"…make a motion to recommend that the Village Board grant the Petitioner, Shawn Vincent on behalf of Loyola Medicine, a Map Amendment (rezoning) of the lot at the southeast corner of 179th Street and LaGrange Rd, commonly referred to as 17901 LaGrange Road (96th Ave/ Rt.45) from the existing B-3 (General Business & Commercial) zoning district to the ORI (Office and Restricted Industrial) zoning district, and adopt the Findings of Fact as proposed in the October 21, 2021 Staff Report."

Motion 2 (Variations):
"…make a motion to recommend that the Village Board grant Variations from the Zoning Ordinance to the Petitioner, Shawn Vincent on behalf of Loyola Medicine, as listed in the October 21, 2021 Staff Report for parking requirements, exterior masonry requirements, signage, and Urban Design Overlay District requirements at the property located at 17901 LaGrange Road in the ORI (Office and Restricted Industrial) zoning district, in accordance with the plans submitted and adopt Findings of Fact proposed in the October 21, 2021 Staff Report."

Motion 3 (Site Plan/Architectural Approval):
"…make a motion to grant the Petitioner, Shawn Vincent on behalf of Loyola Medicine, Site Plan and Architectural Approval for a new medical clinic at 17901 LaGrange Road in the ORI (Office and Restricted Industrial) zoning district, in accordance with the submitted plans and subject to the following conditions:

1. *Site Plan Approval is subject to approval of the required Variations and development agreement by the Village Board.*
2. *Site Plan Approval is subject to other jurisdictional reviews and approval including IDOT, Cook County DOT, MWRD, IEPA, and any others. Any substantial changes to the plans required by other jurisdictional requirements may require additional approvals.*
3. *Site Plan Approval is subject to Engineering and Building Department permit review and approval of final plans including any grading or drainage changes."*

Motion 4 (Final Plat):
"…make a motion to recommend that the Village Board grant approval to the Petitioner, Shawn Vincent on behalf of Loyola Medicine, Final Plat of Consolidation Approval for Loyola Medicine in accordance with the Final Plat (dated October 12, 2021) submitted and listed herein, subject to the condition that the Final Plat approval is subject to the following conditions:

1. *Final approval by the Village Engineer and Village Attorney.*
2. *A separate Plat of Easement shall be approved by the Village Board and recorded for all required public easements prior to building occupancy."*

LIST OF REVIEWED PLANS

	Submitted Sheet Name	Prepared By	Date On Sheet
	Application	Loyola Medicine	9/15/21
	Operational Narrative	HOK	9/15/21
	Zoning Review	HOK	9/15/21
	Plat of Survey 5/24/2021	JLH Land Surveying	5/24/21
	Development Parcel (Preliminary Topographic Base Sheet C100)	Eriksson	n/a
	Overall Plan (Floor Plans)	HOK	n/a
	Roof Plan, Sheet A003	HOK	7/28/21
	Site Plan – Color (not updated, for color rendering only)	HOK	8/4/21
	Landscape Plan Sheets L100, L200, L201 and Review Responses	HOK	10/12/21
	Exterior Renderings (Elevations)	HOK	9/30/21
	Signage Concepts	HOK	10/14/21
	Parking Study	Eriksson	9/15/21
	Traffic Study	Eriksson	9/15/21
	AutoTurn Vehicle Analysis	HOK	9/28/21
	Civil Engineering Plans	HOK and Eriksson	9/28/21
	Plat of Consolidation	Eriksson	10/12/21
	Photometrics and Lighting Details	HOK	9/10/21

Erikson = Erikson Engineering Associates
HOK = Hellmuth, Obata, Kassabaum, Inc. (Architecture, Planning, Engineering)

LOYOLA MEDICINE

Loyola Southwest Ambulatory Care Center

September 15, 2021

Operational Narrative

The proposed project would be for a medical clinic facility with the following operational assumptions:

1) The building is an ambulatory medical clinic for primary care and a range of medical specialties including orthopedic surgery, oncology, cardiology, pulmonary medicine, urology, audiology and general surgery.
2) While the number of physician providers may vary depending on rotation at other locations, the typical working day provider presence will exceed six licensed physicians when the facility opens. The facility anticipates a maximum number of 130 employees at any given time.
3) While general surgeons, orthopedic surgeons and other surgical specialties may perform consultations, examinations and minor procedures, the facility is not intended to be used for surgery – patients will not undergo procedures that require general anesthesia in this facility nor will they require monitored recovery in a post-anesthesia care unit. Some patients may receive partial, "twilight" sedation for some minor procedures or treatment however this will not apply to any more than a maximum of three patients in the facility at any given time. The second level will house 50 exam rooms, 8 procedure rooms and an X-Ray suite.
4) The facility is not intended to serve inpatients. No overnight accommodations will be provided, and no patient will be present outside of the limited operating hours. The anticipated working hours will be weekdays 7AM thru 8PM, and weekends 8AM thru 3PM.
5) While an "Immediate Care Center" housing triage and exam rooms is included in the facility program, this is intended for walk-in patients seeking care for urgent but not emergent or life-threatening medical issues.
6) A cancer care center is provided with exam rooms, infusion rooms as well at CT and Linear Accelerator suites.
7) An imaging center is provided housing at CT, MRI, Ultrasound, X-Ray and Mammography suites.
8) The facility will house a small retail pharmacy as well as a pharmacy to support Oncology operations.
9) The facility is provided with a Laboratory to support multiple operations.

LOYOLA MEDICINE

Loyola Southwest Ambulatory Care Center

September 15, 2021

Zoning Review

The subject properties are on the Southwest corner of the intersection of 179th Street and LaGrange Road in Tinley Park, Illinois. Parcel One is the northern most parcel along 179th street, while Parcel Two abuts the previous property along its southern edge and continues to the south.

Parcel One is approximately 179,860sf feet and is zoned Commercial B-3. It abuts 179th street along it's northern edge, and Chopin Drive along its eastern edge. The western edge of the site abuts property formerly occupied by 96th Avenue before the LaGrange Road reconfiguration. The owner proposes to utilize this entire parcel for development.

Parcel Two is significantly larger at 941,710 sf and consists of an "L' shaped area and is zoned Industrial ORI. The northern part of this "L" shaped property has Chopin Drive along it's eastern edge with the western boundary being the former 96th Avenue property. The lower portion of the "L" has 94th Avenue along it's eastern face, another property to the south and the former 96th Avenue property along it's western face. In conjunction with Parcel One, the owner proposes to only develop the northern leg of the "L' shaped property and the lower bar will remain for future development.

PARCEL ONE GENERAL PROVISIONS SUMMARY

Zoning: General Business and Commercial B-3
Use: Medical Clinic – permitted in the district
Lot Area: 7,500 sf minimum – proposed parcel is 179,860 sf.
Lot Width: 60 foot minimum – proposed parcel has 604 feet of width
Lot Depth: 125 foot minimum – proposed parcel has 298 feet of depth
Front Yard Minimum Setback: 25 feet – proposed project meets requirement
Side Yard Minimum Setback: 10 feet if provided – proposed project meets requirement
Combined Side Yards Minimum Setback: 16 feet – proposed project meets requirement
Rear Yard Setback: 25 feet – proposed project meets requirement
Maximum Stories: 3 – proposed project has 2 stories
Maximum Building Height: 35 feet – Building main elements do not exceed 35 feet. The structure does have supplemental structures that exceed this height but they meet the requirements noted within the code.
Maximum floor area ratio: 1.0 –Combined area of the facility on both parcels is approximately 72,000sf which would allow the proposed project to fall within these guidelines.
Lot Coverage Maximum: 50% - proposed project does not exceed this lot coverage
Permitted Encroachments

a. Canopy: The proposed project includes two canopies in the eastern front yard. This is a permitted use and does not project more than 10 feet into the required yard and is at least 7 feet above the average of the adjoining ground. It is not within 5 feet of any property line.
b. Bay windows: The proposed project includes bay windows in the eastern front yard. These are permitted uses and do not project more than 3 feet into the required yard.

OH+K

c. Eaves and Gutters: The proposed project has eaves in some locations and will be internally drained. These are permitted uses and to not project more than 4 feet into required yards.
d. Flagpoles: The project may include flagpoles which are a permitted use.
e. Mechanical Equipment: The majority of the project mechanical equipment will be either housed internally or located in screened locations on the rooftop. An at-grade electrical transformer and at-grade emergency generator will be located in the service yard on the west side of the proposed project. These are permitted uses in the rear yard and neither of these are located within 5 feet of a property line.
f. Patio: The proposed project has an exterior at-grade patio in the rear yard along the western face of the project. This is a permitted use and in no case is closer than 5 feet to any property line.
g. Pergola: The proposed project includes an open-topped pergola in its western rear yard. This is a permitted use and does not extend into the required yard more than 35% of the minimum setback. In no case is it within 5 feet of any property line.
h. Additional Encroachments: The proposed project will utilize widened sidewalks and entryways, outdoor plaza and garden. These are allowable within the B-3 district.

Accessory Structures: The project does not propose any accessory structures

Fences: The project does not propose any fences

Floodplain: The project does not fall within any defined floodplain area

Open Storage / Outdoor Sales: The project does not propose to utilize any outdoors area for storage or sales

Portable Storage: The project does not propose to utilize any portable storage devices

Donation Devices: The project does not propose to utilize any donation devices

Parking Requirements

a. Does not apply
b. Street / Lot line – The project does not propose to provide parking between the street and the lot line.
c. Unregistered vehicles - the project does not propose to provide any vehicle storage
d. Vehicle storage – the project does not propose to provide any vehicle storage
e. Transport Noxious materials - the project does not anticipate that any noxious substances will need to be transported
f. Does not apply
g. Recreational Vehicle – the project does not propose any RV parking
h. Recreational / Boats **–** the project does not provide any boat parking

Parking Numbers: We have submitted a parking report for the project. It reflects the use patterns at other similar facilities in which the Owner and Design team have taken part. The owner is confident that ample parking will be provided for proposed use. If additional parking is required, addition site space is available for this purpose.

Regulation of Parking on Private Property: The owner is willing to enter into the required contract that will permit the Police Department to regulate parking and traffic on the site. All traffic control devices on the site will comply with the village statutory provisions.

PARCEL TWO GENERAL PROVISIONS SUMMARY

Zoning: Office and Restricted Industrial ORI
Use: Medical Clinic – permitted in the district
Lot Area: 40,000 sf minimum – proposed developed part of parcel is 368,942 sf.
Lot Width: 150 foot minimum – proposed parcel has 604 feet of width
Lot Depth: 200 foot minimum – proposed development part of parcel has 611 feet of depth
Front Yard Minimum Setback: 50 feet – proposed project meets requirement
Side Yard Minimum Setback: 25 feet – proposed project meets requirement
Combined Side Yards Minimum Setback: 50 feet – proposed project meets requirement
Rear Yard Setback: 30 feet – proposed project meets requirement
Maximum Stories: 5 – proposed project has 2 stories
Maximum Building Height: 65 feet – Proposed project does not exceed height
Maximum floor area ratio: 1.5 –Combined area of the facility on both parcels is approximately 72,000sf which would allow the proposed project to fall within these guidelines.
Lot Coverage Maximum: 50% - proposed project does not exceed this lot coverage
Permitted Encroachments

a. Canopy: The proposed project includes two canopies in the eastern front yard. This is a permitted use and does not project more than 10 feet into the required yard and is at least 7 feet above the average of the adjoining ground. It is not within 5 feet of any property line.
b. Bay windows: The proposed project includes bay windows in the eastern front yard. These are permitted uses and do not project more than 3 feet into the required yard.
c. Eaves and Gutters: The proposed project has eaves in some locations and will be internally drained. These are permitted uses and to not project more than 4 feet into required yards.
d. Flagpoles: The project may include flagpoles which are a permitted use.
e. Mechanical Equipment: The majority of the project mechanical equipment will be either housed internally or located in screened locations on the rooftop. An at-grade electrical transformer and at-grade emergency generator will be located in the service yard on the west side of the proposed project. These are permitted uses in the rear yard and neither of these are located within 5 feet of a property line.

Accessory Structures: The project does not propose any accessory structures
Fences: The project does not propose any fences
Floodplain: The project does not fall within any defined floodplain area
Open Storage / Outdoor Sales: The project does not propose to utilize any outdoors area for storage or sales
Portable Storage: The project does not propose to utilize any portable storage devices
Donation Devices: The project does not propose to utilize any donation devices
Parking Numbers: We have submitted a parking report for the project. It reflects the use patterns at other similar facilities in which the Owner and Design team have taken part. The owner is confident that ample parking will be provided for the proposed use. If additional parking is required, addition site space is available for this purpose.
Regulation of Parking on Private Property: The owner is willing to enter into the required contract that

will permit the Police Department to regulate parking and traffic on the site. All traffic control devices on the site will comply with the village statutory provisions.

Site Plan Review

The owner understands that a review process will be conducted to confirm compliance with village of Tinley Park requirements related to the site plan. The Developers Agreement denotes that an early approval process will take place associated with the building footings only to allow that work to proceed while the remaining design elements mature. Some select information has been provided to assist in that review process. The owner expects that full approval of the proposed project scope will take place an interactive process with village officials.

Personal Wireless Service Facilities

The owner does not intend on providing any supplemental wireless service facilities associated with the proposed project. If a Distributed Antenna system is provided at a later date, the Village will be engaged in the review process.

Home Occupations

Not applicable with this proposed project

General Requirements

A. Business conducted wholly within the building: The proposed project complies

B. Does not apply

C. No objectional odors, dust, smoke, noise, vibration or waste: The proposed project complies.

D. Open spaces: Open spaces on the project not used for the building purposes will be open to the sky and planted with trees, shrubbery and grass.

E. Parking of trucks not exceeding 1-1/2 tons: The project does not propose any parking of trucks outside of normal business hours.

F. Use of Face Brick: The owner will propose building materials that are complementary of the system brand standards. The owner proposes to negotiate this provision.

1. 3,000sf or less: 100% face brick does not apply
2. 3,000 – 40,000sf: 75% face brick does not apply
3. 40,000 – 80,000sf: 60% face brick
4. Greater than 80,000: 25% face brick does not apply

G. Alternate Materials: Alternate materials may be provided if they do not constitute more than 15% of the façade. The owner will propose building materials that are complementary of the system brand standards. The owner proposes to negotiate this provision.

Visual Environment Provisions

A. Landscaping plan approvals: The owner proposes to provide landscaping materials sensitive to the proposed project and reflective of the quality of the brand. Plans will be submitted for village comments.

B. Village Escrow policy: The owner intends on completing landscape work as part of the base project.

Performance Standards -

A. **Noise:** The owner proposes to provide a project that does not exceed 65 dBa at the lot line nor 65 dBA at any zone boundary.
B. **Vibration:** The owner proposes to provide a project that does not exceed particle velocities of 0.05 in/sec at the lot line nor 0.10 in/sec at the zone boundary.
C. **Air Pollution:** The owner proposes to provide a project that complies with Illinois Air Pollution Control Regulations and Performance Standards governing smoke, steam, particulate matter, toxic matter and odors.

Fire and Explosion Hazards

A. **Detonable Materials:** The proposed project does not anticipate any storage of detonable materials.
B. **Flammable Solids:** The proposed project will be provided with an automatic fire extinguishing system and any storage of significant flammable materials with be in 2-hour rated enclosures.
C. **Flammable Liquids and Gases:** The facility does not anticipate the storage of flammable liquids inside the facility above the 55-gallon threshold for which the provisions were written. An exterior diesel day-tank will be provided for the at-grade emergency generator, but the size of that tank has not yet been established. Flammable gases that may be present in the facility will be in individual small canisters and stored in numbers that would not meet threshold requirements.

Glare

1a. Luminate design: The style and light standard will be consistent with the architectural style in the principal building

1b. Pathway lighting: Pathways and sidewalks will be lighted with low level fixtures that do not have pole heights that exceed 8 feet.

1c. Lighting plane: All building lighting for both security and aesthetics will be rated U0 per IES TM 15-11 and will have no light above a 90-degree plane. Floodlighting of the facility is not anticipated.

1d. Parking Lot lighting: All parking area lighting fixtures shall be rated U0per IES TM 15-11 with no lighting above a 90-degree plane.

1e. Parking Lot Light Poles: Poles supporting lighting will not exceed the Commercial district stand of 25 feet in height.

2a. Standards and Requirements: Facility lighting is provided in accordance with the standards of the Illuminating Engineering Society of North America (IESNA).

UD -1 Urban Design Overlay District

Both of the subject properties fall within the Urban Design Overlay District. The owner understands this district in intended to promote specific design standards concern with the character and placement of non-residential buildings, including related parking and other accessory uses, as well as the role and nature of the spaces between buildings and the public streets.

A. **District Intentions:** The district is intended to accommodate the automobile but are primarily designed to promote non-motorized and public transportation movements to, within and

among the properties. These regulations apply to buildings with a footprint below 100,000sf.

B. **Parking Lots:** The intent is to create a streetscape that is defined by buildings rather than parking lots, loading facilities, trash storage and other service operations. Surface parking lots are to be located to the rear or side of the building. Our proposed project provides parking to the side and to the rear of the facility. The turning of the facility 90-degrees to the street provides for parking in this manner that remains proximate to the entry points. The service area for the facility is oriented away from the public access points and is screened from public view by a combination of landscape berms and screen walls.

C. **Access:** A 6-foot-wide public sidewalk is to be provided along both the north and east property lines of the proposed project. These sidewalks will be tied directly into an internal circulation network that will also collect pedestrians accessing the building from the parking lots. The project will open with two access points along Chopin Drive. These access points will align with existing access points into the parking lot for the adjacent college property. The facility intends on pursuing an additional right-in, right-out access point along LaGrange with the Illinois Department of Transportation.

D. **Dimensional Standards:**

E. **Building Design and Signage:** The facility is intended to support this section with the inclusion of canopies and glass curtainwall elements. The main entry points will be oriented so they will be clearly visible from both the street as well as the major access points. The owner anticipates discussions with the village regarding standards related to wall signage opportunities.

F. **Large Scale Development:** The project is limited to two-stories and includes entries integrated into the expected landscape program. The plantings in the parking lots will also serve to reduce their impact and provide a more natural setting.

Off-Street Parking Requirements

The facility is provided with adequate parking open to the air. Loyola has conducted operations is a number of similar facilities and is confident that the parking proposed will be more than sufficient given the expected use patterns. If additional parking ends up being needed, then additional space has been provided for expansion should it be needed. The standard parking spaces meet the zoning requirements of 9 feet x 18.5 feet. A parking study has been provided.

Off-Street Loading Requirements

Also based on use patterns at other facilities, two off-street loading spaces are provided, each measuring 12 feet x 35 feet. These spaces will be at grade and will not be provided with overhead covering. They are located on the side away from the main access points and will not require a vehicle to project into a street, sidewalk or alley while being loaded or unloaded.

Development and Maintenance of Parking and Loading Areas

The proposed project provides screening elements for our parking and loading spaces and we feel that they meet the intent of the provision. Parking is not provided within 10 feet of the facility but is sited to provide for proximate access for patients and staff. All parking areas will be asphalt pavement and some portions of the service access pathway will be provided with concrete paving. Lighting for these areas will be arranged to reflect light away from adjoining

premises. Drainage for all parking will utilize retention basins located within the development boundaries.

Signage Regulations

The owner is aware of the signage regulations in the village ordinance. Signage applications for the project are still in development but conceptual information has been provided. The project proposes signage in two distinct applications. Three subtle ground signs are contemplated at both of the 179th street property corners, as well as the predominant entry point on Chopin Drive. These will be set back at least 10 feet from property lines to comply with village ordinances. Additional signage is contemplated on the building to better differentiate the multiple entry points and this signage is still in development.

Flagpoles / Light banners

The proposed project may provide flagpoles. The owner is aware of the Village requirements for these elements and if provided, the project will comply. The owner will also likely utilize some banners attached to project light standards. If provided, these elements will comply with the village requirements of not more than 2 per pole and no banner can exceed 8 sf.

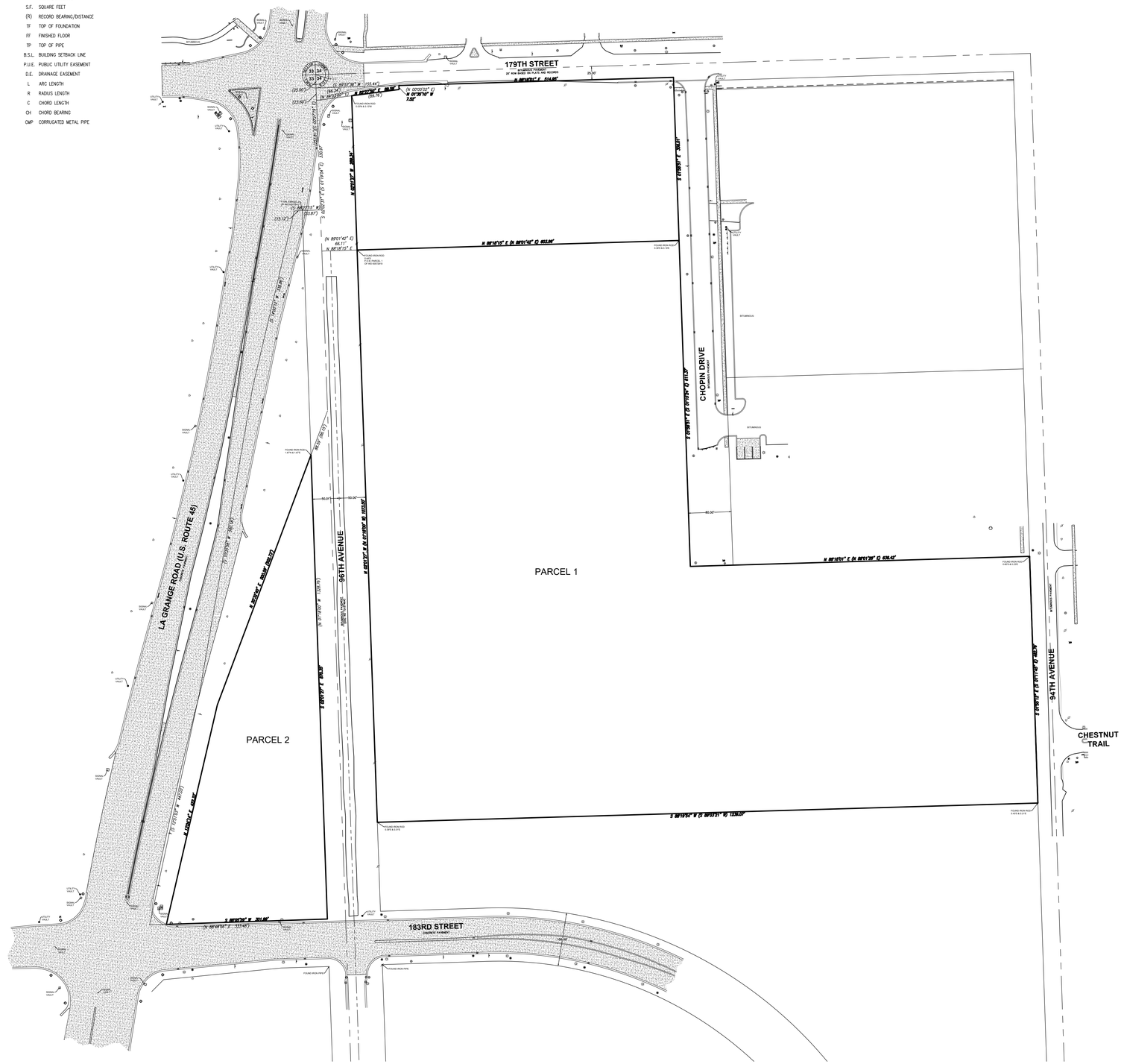
Window / Door Signage

If provided, the owner will provide signage compliant with the village ordinance.

PLAT OF SURVEY

LEGEND & ABBREVIATIONS

	UTILITY POLE		MANHOLE	P.O.C.	POINT OF COMMENCEMENT
	LIGHT POLE	Ⓢ	SANITARY MANHOLE	P.O.B.	POINT OF BEGINNING
T	TRANSFORMER		STORM STRUCTURE (CLOSED)	°	DEGREES
	UTILITY PEDESTAL		STORM STRUCTURE (OPEN)	'	FEET/MINUTES
	TRAFFIC SIGNAL		CURB INLET	"	INCHES/SECONDS
TS	SIGNAL BOX	Ⓥ	VALVE VAULT	S.F.	SQUARE FEET
	GAS VALVE		FLARED END SECTION	(R)	RECORD BEARING/DISTANCE
	WATER VALVE	—W—	WATER LINE	TF	TOP OF FOUNDATION
△	ELECTRIC METER	—T—	TELEPHONE/CATV LINE	FF	FINISHED FLOOR
▲	GAS METER	—G—	GAS LINE	TP	TOP OF PIPE
	FIRE HYDRANT	—E—	ELECTRIC LINE	B.S.L.	BUILDING SETBACK LINE
Ⓐ	AUTO SPRINKLER	—OHW—	OVERHEAD WIRES	P.U.E.	PUBLIC UTILITY EASEMENT
Ⓜ	MONITORING WELL	—STM—	STORM SEWER	D.E.	DRAINAGE EASEMENT
⊗	GROUND LIGHT	—SAN—	SANITARY SEWER	L	ARC LENGTH
•	BOLLARD	—X—	CHAIN LINK FENCE	R	RADIUS LENGTH
◐	B/BOX	—□—	STOCKADE FENCE	C	CHORD LENGTH
	SIGN		GUARD RAIL	CH	CHORD BEARING
	FLAG POLE	▨	CONCRETE SURFACE	CMP	CORRUGATED METAL PIPE



RECORD DESCRIPTION

WARRANTY DEED 00572810:

PARCEL 1
THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 34, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID SOUTHWEST 1/4; THENCE SOUTH 01°19'04" EAST, ALONG THE WEST LINE OF SAID SOUTHWEST 1/4, A DISTANCE OF 330.97 FEET TO THE SOUTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SOUTHWEST 1/4; THENCE NORTH 89°01'42" EAST, ALONG THE LAST DESCRIBED LINE, 66.11 FEET TO THE EAST LINE OF 96TH AVENUE PER DOCUMENT NUMBER 10157484, RECORDED SEPTEMBER 26, 1928, FOR THE POINT OF BEGINNING; THENCE CONTINUING NORTH 89°01'42" EAST, ALONG THE SOUTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SOUTHWEST 1/4, A DISTANCE OF 603.96 FEET TO THE WEST LINE OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF SAID SOUTHWEST 1/4; THENCE SOUTH 01°15'24" EAST, ALONG THE LAST DESCRIBED LINE, 611.37 FEET TO THE SOUTH LINE OF THE NORTH 942.37 FEET OF THE NORTHWEST 1/4 OF SAID SOUTHWEST 1/4; THENCE NORTH 89°01'28" EAST, ALONG THE LAST DESCRIBED LINE, 636.42 FEET TO THE WEST LINE OF THE EAST 33.00 FEET OF THE WEST 1/2 OF SAID SOUTHWEST 1/4, SAID LINE ALSO BEING THE WEST LINE OF 94TH AVENUE; THENCE SOUTH 01°11'45" EAST, ALONG THE LAST DESCRIBED LINE, 462.76 FEET; THENCE SOUTH 89°03'21" WEST 1239.07 FEET TO THE AFORESAID EAST LINE OF 96TH AVENUE; THENCE NORTH 01°18'00" WEST, ALONG THE LAST DESCRIBED LINE, 1073.50 FEET TO THE POINT OF BEGINNING, ALL IN COOK COUNTY, ILLINOIS.

PARCEL 2
THAT PART OF THE EAST 1/2 OF THE SOUTHEAST 1/4 OF SECTION 33, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID SOUTHEAST 1/4; THENCE SOUTH 01°19'04" EAST, ALONG THE EAST LINE OF SAID SOUTHEAST 1/4, A DISTANCE OF 253.81 FEET; THENCE SOUTH 88°27'15" WEST 33.87 FEET TO THE WEST LINE OF 96TH AVENUE PER DOCUMENT NUMBER 10157484, RECORDED SEPTEMBER 26, 1928, FOR THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 88°27'15" WEST 15.12 FEET TO THE WESTERLY LINE OF THE DEED RECORDED AUGUST 23, 1993 AS DOCUMENT NUMBER 93667499; THENCE SOUTHERLY, ALONG THE WESTERLY LINE OF SAID DEED, THE FOLLOWING THREE COURSES: SOUTH 14°00'12" WEST 338.86 FEET; SOUTH 10°35'58" WEST 580.18 FEET; SOUTH 12°51'03" WEST 447.03 FEET; THENCE NORTH 88°48'56" EAST 333.48 FEET TO SAID WEST LINE OF 96TH AVENUE; THENCE NORTH 01°18'00" WEST, ALONG THE LAST DESCRIBED LINE, 1328.76 FEET TO THE POINT OF BEGINNING, ALL IN COOK COUNTY, ILLINOIS.

EXCEPT THAT PART TAKEN FOR RIGHT OF WAY AS SHOWN ON PLAT OF HIGHWAYS R-91-006-95.

FIDELITY NATIONAL TITLE INSURANCE COMPANY COMMITMENT NUMBER OC21001080 DATED JUNE 2, 2021:

THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 34, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, (EXCEPT THAT PART THEREOF TAKEN FOR 96TH AVENUE), ALSO EXCEPTING THAT PART OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 34, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4; THENCE ON AN ASSUMED BEARING OF SOUTH 00 DEGREES 27 MINUTES 19 SECONDS EAST 25.00 FEET ALONG THE WEST LINE OF THE SAID NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4, TO THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 00 DEGREES 27 MINUTES 19 SECONDS EAST 23.60 FEET, ALONG THE WEST LINE OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4; THENCE NORTH 84 DEGREES 03 MINUTES 02 SECONDS EAST, 66.34 FEET, TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED 2017", THENCE CONTINUING NORTH 84 DEGREES 03 MINUTES 02 SECONDS EAST, 89.76 FEET, TO A 5/8' REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER IPLS 2017", THENCE NORTH 00 DEGREES 00 MINUTES 02 SECONDS EAST, 7.52 FEET, TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF 179TH STREET; THENCE SOUTH 89 DEGREES 57 MINUTES 38 SECONDS WEST, 155.44 FEET, ALONG THE SAID SOUTH RIGHT OF WAY LINE OF 179TH STREET, TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS

Jim Harpole
James L. Harpole, PLS 08/25/2021
Illinois Professional Land Surveyor No. 4046
In the State of Illinois, Expires 11-30-2022
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

JAMES L.
HARPOLE
035-004046
SHOREWOOD
IL

JLH LAND SURVEYING INC.
Illinois Professional Design Firm No. 184.007120
910 Geneva Street, Shorewood, Illinois 60404
815.729.4000 www.jlhsurvey.com

SURVEY PREPARED FOR:
ERIKSSON ENGINEERING ASSOCIATES, LTD.

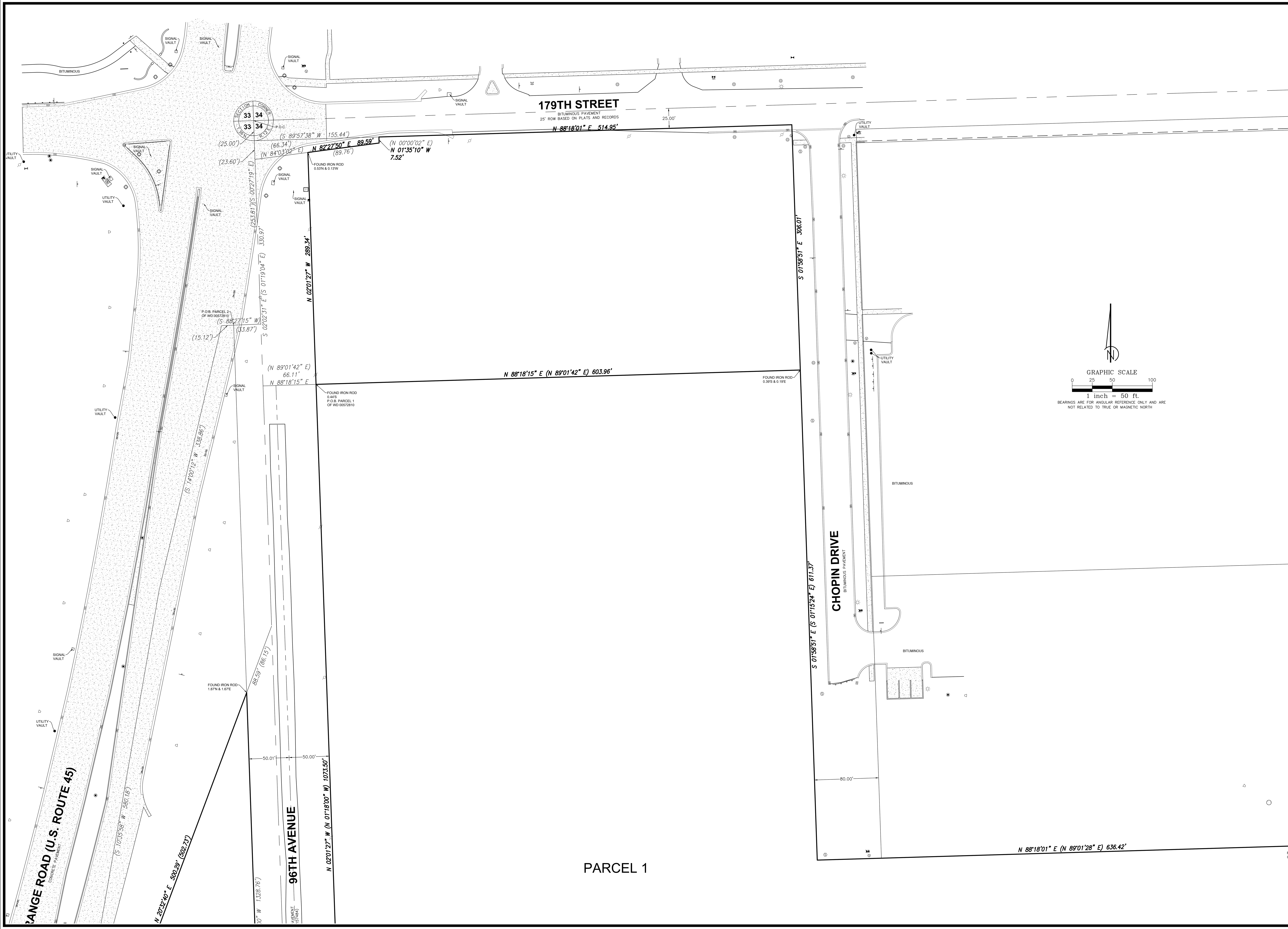
DATE	REVISIONS	BY

PLAT OF SURVEY
TINLEY PARK, ILLINOIS
LOYOLA - TINLEY PARK MOB

PROJ. MGR.: JLH
DRAWN BY:
CHECK BY:
FIELD DATE: 05/24/21
SCALE: 1"=50'

SHEET
1 OF 4

21-703-100



179TH STREET
BITUMINOUS PAVEMENT
25' ROW BASED ON PLATS AND RECORDS
25.00'
N 88°18'01" E 514.95'
(S 89°57'38" W 155.44')
N 82°27'50" E 89.59'
(89.76')
(N 00°00'02" E)
N 01°35'10" W
7.52'
(N 84°03'02" E)
(66.34')
(25.00')
(23.60')
33
34
33
34
FOUND IRON ROD
0.53'N & 0.13'W
N 02°01'27" W 289.34'
S 01°58'51" E 306.01'
P.O.B. PARCEL 2
OF WD 00572810
(S 88°27'15" W)
(15.12')
(33.87')
(N 89°01'42" E)
66.11'
N 88°18'15" E
N 88°18'15" E (N 89°01'42" E) 603.96'
FOUND IRON ROD
0.44'S
P.O.B. PARCEL 1
OF WD 00572810
FOUND IRON ROD
0.39'S & 0.19'E
GRAPHIC SCALE
0
25
50
100
1 inch = 50 ft.
BEARINGS ARE FOR ANGULAR REFERENCE ONLY AND ARE
NOT RELATED TO TRUE OR MAGNETIC NORTH
BITUMINOUS
CHOPIN DRIVE
BITUMINOUS PAVEMENT
S 01°58'51" E (S 01°15'24" E) 611.37'
BITUMINOUS
80.00'
N 88°18'01" E (N 89°01'28" E) 636.42'
PARCEL 1
96TH AVENUE
N 02°01'27" W (N 01°18'00" W) 1073.50'
50.01'
50.00'
FOUND IRON ROD
1.87'N & 1.67'E
88.59' (86.15')
(S 14°00'12" W 338.86')
(S 10°35'58" W 560.18')
N 20°32'40" E 500.29' (502.73')
RANGE ROAD (U.S. ROUTE 45)
CONCRETE PAVEMENT
SIGNAL VAULT
UTILITY VAULT

JLH LAND SURVEYING INC.

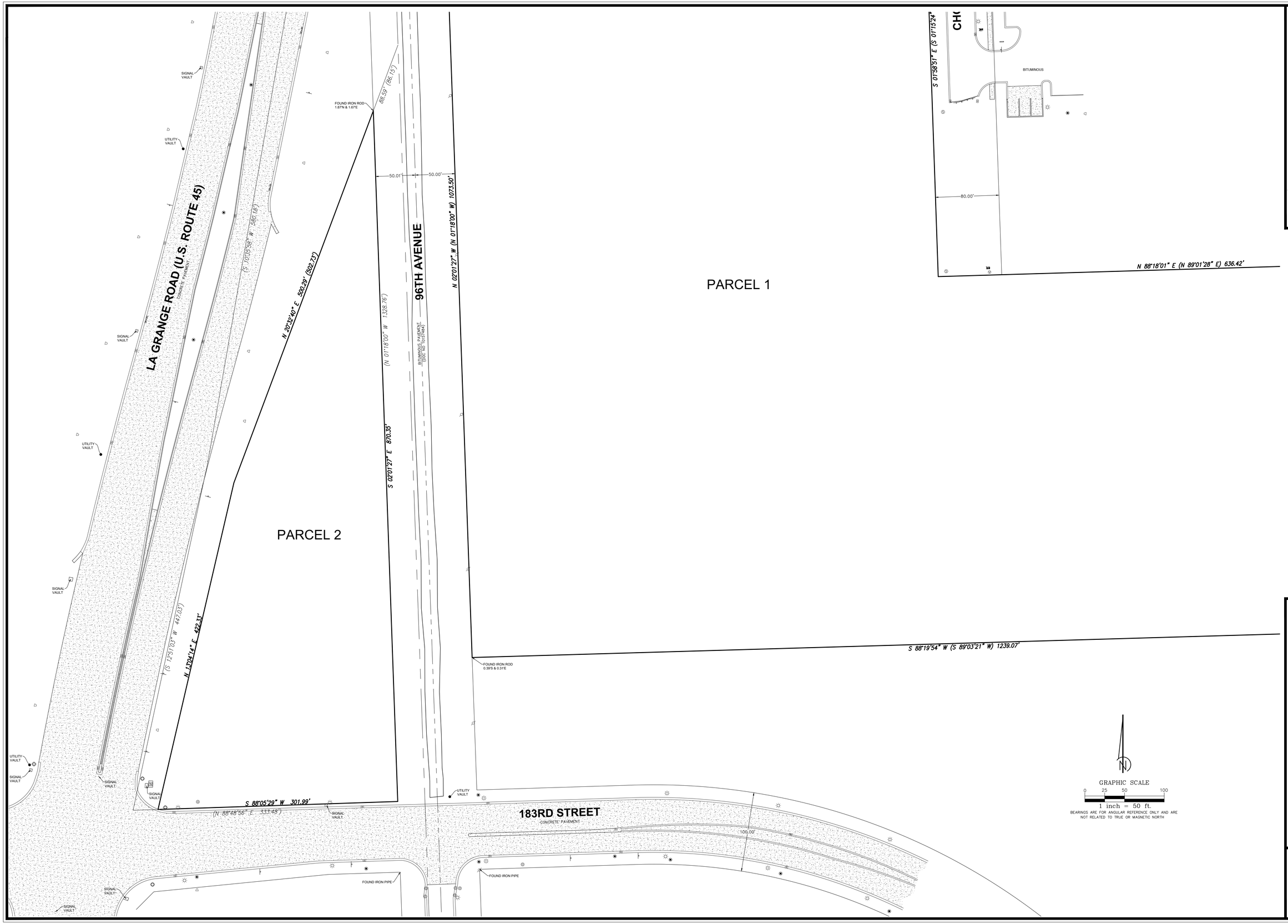
Illinois Professional Design Firm No. 184.007120
910 Geneva Street, Shorewood, Illinois 60404
815.729.4000 www.jlhsurvey.com

PLAT OF SURVEY

TINLEY PARK, ILLINOIS

LOYOLA - TINLEY PARK MOB

21-703-100



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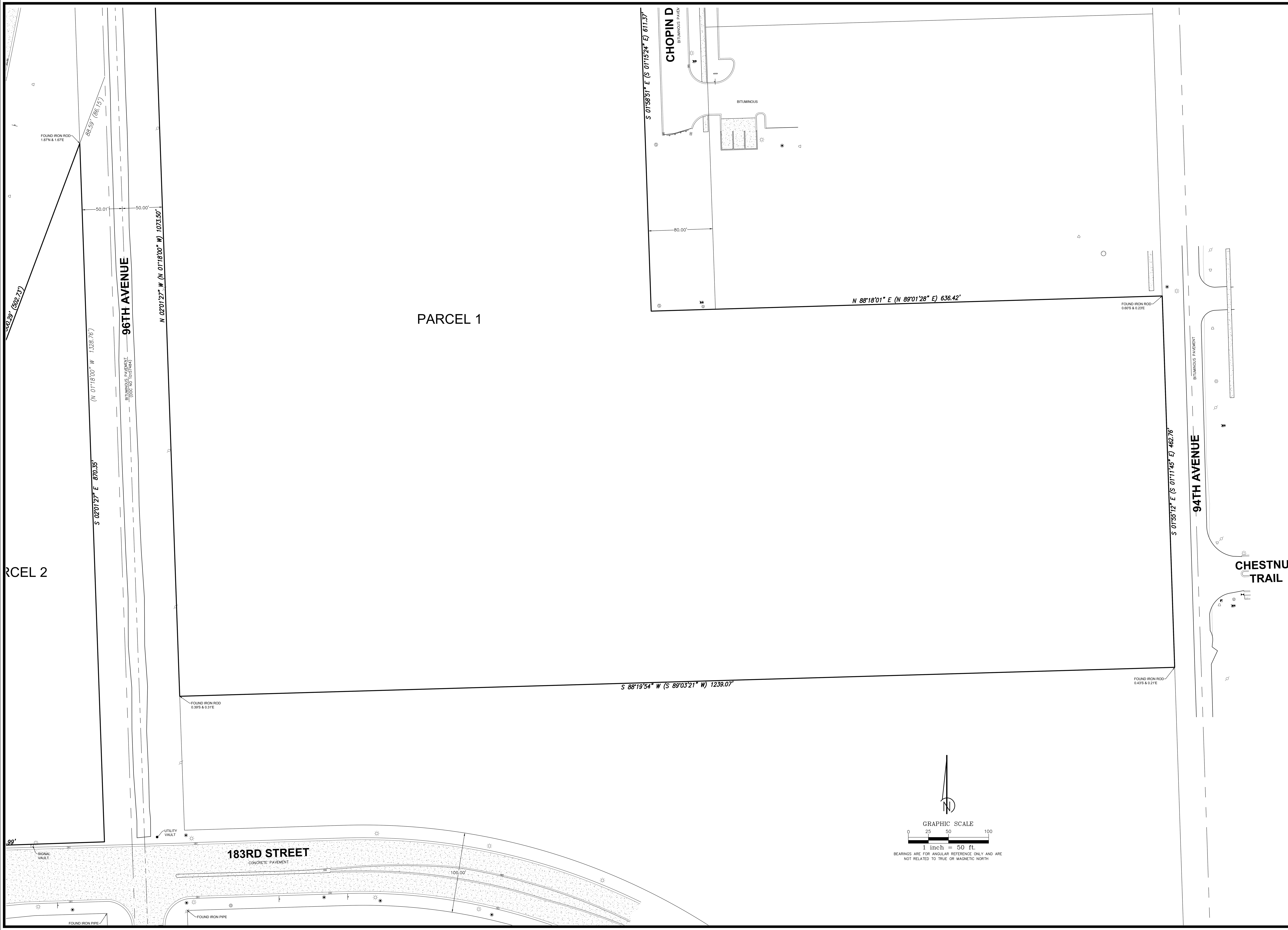
PLAT OF SURVEY
TINLEY PARK, ILLINOIS
LOYOLA - TINLEY PARK MOB

SHEET 3 OF 4

21-703-100



PARCEL 1
RCEL 2
96TH AVENUE
94TH AVENUE
CHOPIN D
CHESTNUT TRAIL
183RD STREET
CONCRETE PAVEMENT
BITUMINOUS PAVEMENT
BITUMINOUS
N 88°18'01" E (N 89°01'28" E) 636.42'
S 88°19'54" W (S 89°03'21" W) 1239.07'
N 02°01'27" W (N 01°18'00" W) 1073.50'
S 01°55'12" E (S 01°11'45" E) 462.76'
S 01°58'51" E (S 01°15'24" E) 611.37'
S 02°01'27" E 870.35'
(N 01°18'00" W 1328.76')
88.59' (86.15')
(502.73')
50.01'
50.00'
80.00'
100.00'
FOUND IRON ROD 1.87'N & 1.67'E
FOUND IRON ROD 0.60'S & 0.23'E
FOUND IRON ROD 0.43'S & 0.21'E
FOUND IRON ROD 0.39'S & 0.31'E
FOUND IRON PIPE
FOUND IRON PIPE
UTILITY VAULT
SIGNAL VAULT
GRAPHIC SCALE
0 25 50 100
1 inch = 50 ft.
BEARINGS ARE FOR ANGULAR REFERENCE ONLY AND ARE NOT RELATED TO TRUE OR MAGNETIC NORTH

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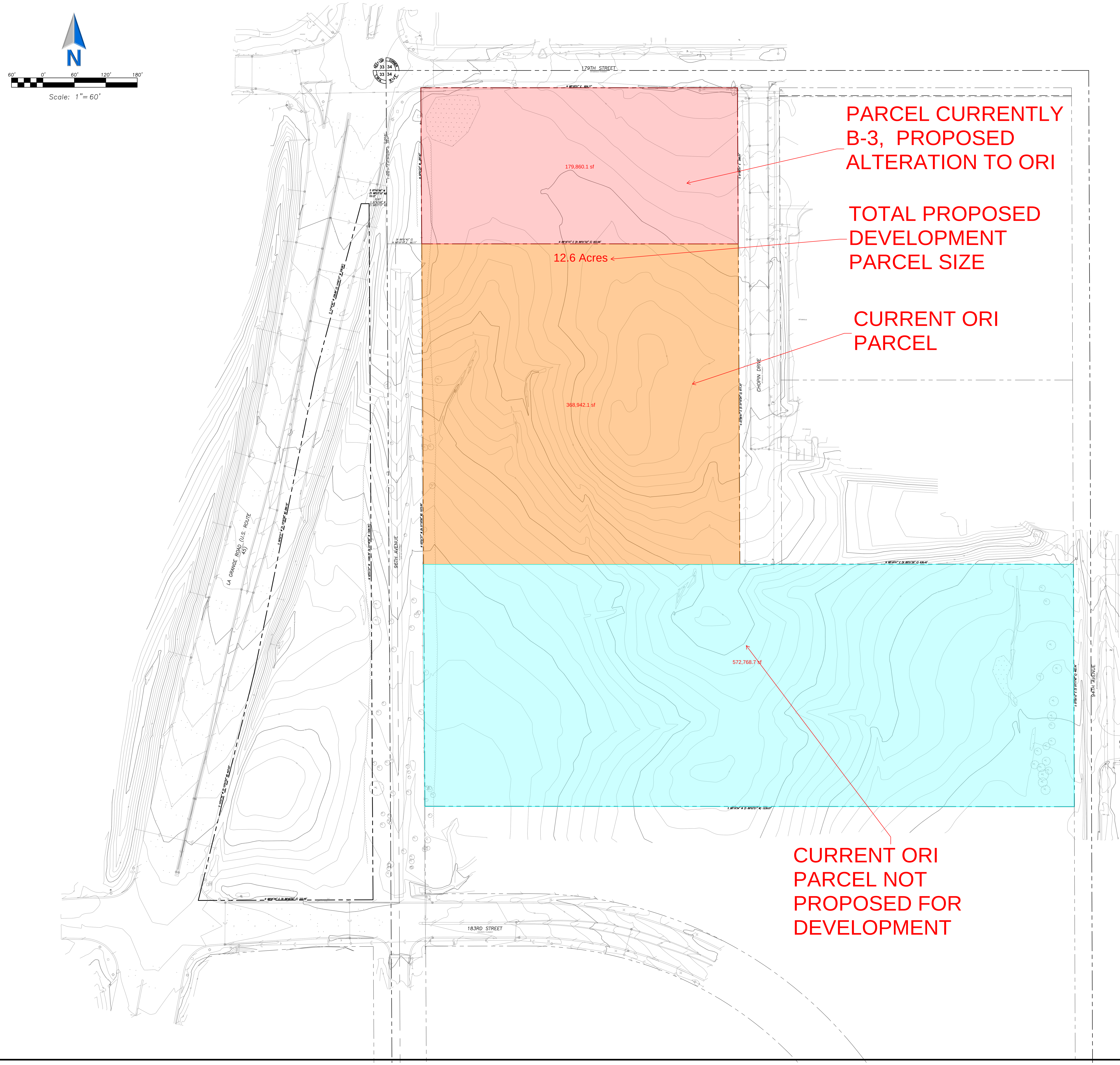
PLAT OF SURVEY

TINLEY PARK, ILLINOIS

LOYOLA - TINLEY PARK MOB

SHEET 4 OF 4

21-703-100



SURVEY PROVIDED BY:

Plat of Survey and Topography Provided By JLH Surveying For Eriksson Engineering on May 25,2021.

PROJECT BENCHMARKS

1.

J.U.L.I.E.

Note: The exact location of all utilities shall be verified by the contractor prior to construction activities. For utility locations call: J.U.L.I.E. 1 (800) 892–0123

ERIKSSON ENGINEERING ASSOCIATES, LTD.
145 COMMERCE DRIVE, SUITE A
GRAYSLAKE, ILLINOIS 60030
PHONE (847) 223-4804
FAX (847) 223-4864
EMAIL INFO@EEA-LTD.COM
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-003220
EXPIRES: 04/30/2021

LOYOLA A.C.C.

179TH & LAGRANGE
TINLEY PARK, ILLINOIS

Reserved for Seal:

No.	Date	Description
1	XX/XX/XX	XXXXXXXX

Design By:	Approved By:	Date:
XXX	XXX	XX/XX/XX

Sheet Title:

PRELIMINARY TOPOGRAPHIC BASE SHEET

Sheet No:

C100

LOYOLA SOUTHWEST AMBULATORY CARE CENTER

LOYOLA MEDICINE

DD-010

LEVEL 1 OVERALL PLAN

1/8" = 1'-0"

21.03050.00

o h+k

LOYOLA SOUTHWEST AMBULATORY CARE CENTER

LOYOLA MEDICINE

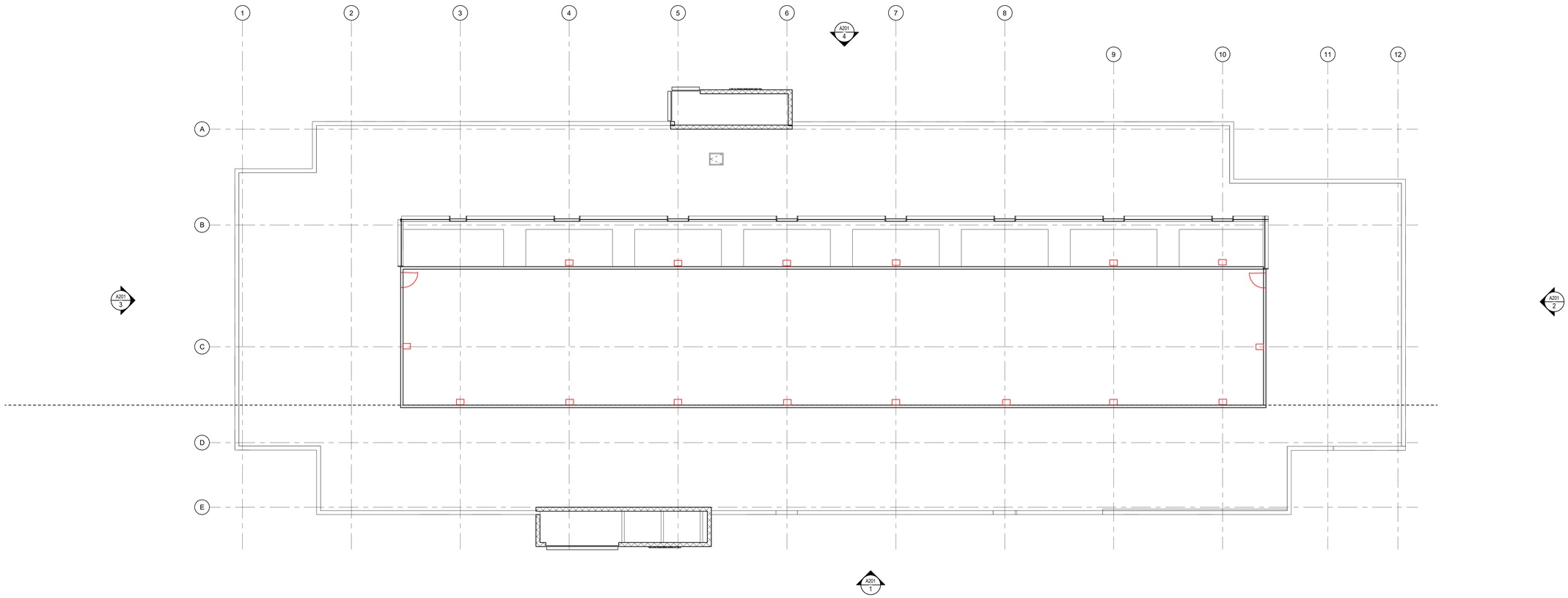
DD-020

LEVEL 2 OVERALL PLAN

1/8" = 1'-0"

21.03050.00

o h+k



1 ROOF
3/32" = 1'-0"

GENERAL PLAN NOTES

1. SEE SHEET G001 FOR GRAPHIC LEGEND INFORMATION.
2. SEE SHEET G002 FOR ADDITIONAL PLAN SPECIFIC GENERAL NOTES.
3. SEE SHEET G010 FOR WALL DEVICE ALIGNMENT DIAGRAMS. PROVIDE ADDITIONAL CONCEALED FRAMING FOR EXACT PLACEMENT.
4. SEE SHEET G002 FOR OPEN CEILING ORGANIZATION GENERAL NOTES AND G010 FOR OPEN CEILING ORGANIZATION GUIDE.
5. SEE SHEET SERIES A15X FOR SCHEMATIC 3-DIMENSIONAL SPACE DEPICTIONS.
6. SEE ALSO SEPARATELY ISSUED HOK "INTERIOR WAYFINDING AND GRAPHICS" PACKAGE DATED YYYY-MM-DD FOR ADDITIONAL INFORMATION AND FOR SCOPE NOT DESCRIBED AT THIS DOCUMENTATION SET.

KEYNOTE LEGEND

LOYOLA MEDICINE
1870 AD MAJOREM DEI GLORIAM

Project
LOYOLA SOUTHWEST AMBULATORY CARE CENTER
179th and LaGrange Road
Tinley Park, IL 60487

Prepared For
LOYOLA UNIVERSITY HEALTH SYSTEM
2160 South 1st Avenue, Maywood, IL 60153

Hellmuth, Obata & Kassabaum, Inc.
333 South Wabash Avenue, 14th Floor
Chicago, IL 60604 USA
t +1 312 782 1000 f +1 312 782 6727

In Association with

IMEG Corporation
Structural, Mechanical, Electrical, Plumbing, Fire Protection, Technology Engineering
1100 Warrenville Road, Suite 400W
Naperville, IL 60563

Eriksson Engineering Associates, Ltd.
Civil Engineering, Landscape Design
145 Commerce Drive, Suite A
Grayslake, IL 60030

Key Plan

Professional Seals

NOT FOR CONSTRUCTION

No.	Description	Date
A	ISSUED WITH SCHEMATIC DESIGN	2021-07-28

Project No: 21.03050.00

Sheet Title
COMPOSITE PLAN - ROOF

Original is 48 x 36. Do not scale contents of this drawing.

Sheet Number
A003

2021-07-28 10:46:57 AM

N

Scale: 1"= 30'

PLANT SCHEDULE (Overall Complete)

CANOPY TREES	BOTANICAL / COMMON NAME	COND	SIZE	QTY
ACE STA	ACER MIYABEI 'STATE STREET' / MIYABEI MAPLE	B & B	2.5" CAL.	13
ACE F23	ACER X FREEMANII / FREEMAN MAPLE	B & B	2.5" CAL.	21
CEL OC2	CELTIS OCCIDENTALIS / COMMON HACKBERRY	B & B	2.5" CAL.	22
GIN PR2	GINKGO BILOBA 'PRINCETON SENTRY' / PRINCETON SENTRY GINKGO	B & B	2.5" CAL.	19
GLE I19	GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE' / THORNLESS SKYLINE HONEYLOCUST	B & B	2.5" CAL.	24
GYM DIO	GYMNOCLADUS DIOICA 'ESPRESSO' / KENTUCKY COFFEETREE	B & B	2.5" CAL.	10
PLA MO3	PLATANUS X ACERIFOLIA 'MORTON CIRCLE' TM / EXCLAMATION LONDON PLANE TREE	B & B	2.5" CAL.	9
QUE BIC	QUERCUS BICOLOR / SWAMP WHITE OAK	B & B	2.5" CAL.	15
QUE MAC	QUERCUS MACROCARPA / BURR OAK	B & B	2.5" CAL.	13
QUE RUB	QUERCUS RUBRA / RED OAK	B & B	2.5" CAL.	12
TIL RE2	TILIA AMERICANA 'REDMOND' / REDMOND AMERICAN LINDEN	B & B	2.5" CAL.	22
ULM PTM	ULMUS X 'MORTON GLOSSY' TM / TRIUMPH ELM	B & B	2.5" CAL.	10

EVERGREEN TREES	BOTANICAL / COMMON NAME	COND	SIZE	QTY
JUN EAS	JUNIPERUS VIRGINIANA / EASTERN REDCEDAR	B & B	6' HT.	10
JUN CUP	JUNIPERUS VIRGINIANA 'CUPRESSIFOLIA' / HILLSPIRE JUNIPER	B & B	6' HT.	12
PIC COL	PICEA PUNGENS 'COLORADO GREEN' / GREEN SPRUCE	B & B	8' HT.	6
PIN STR	PINUS STROBUS / WHITE PINE	B & B	8' HT.	13

UNDERSTORY TREES	BOTANICAL / COMMON NAME	COND	SIZE	QTY
BET WH7	BETULA POPULIFOLIA 'WHITESPIRE' / WHITESPIRE BIRCH	B & B	8' CLUMP	3
CER CAN	CERCIS CANADENSIS / EASTERN REDBUD	B & B	8' CLUMP	16
SYR IVO	SYRINGA RETICULATA 'IVORY SILK' / IVORY SILK JAPANESE TREE LILAC	B & B	2.5" CAL.	9

DECIDUOUS SHRUBS	BOTANICAL / COMMON NAME	COND.	SIZE	QTY
ARO RED	ARONIA ARBUTIFOLIA / RED CHOKEBERRY	B & B	30\" HT.	38
COT ACU	COTONEASTER ACUTIFOLIUS / PEKING COTONEASTER	B & B	36" HT.	14
FOT AIR	FOTHERGILLA GARDENII 'MT. AIRY' / MOUNT AIRY FOTHERGILLIA	B & B	24" HT.	10
HYD LIM	HYDRANGEA PANICULATA 'LIMELIGHT' / LIMELIGHT HYDRANGEA	B & B	24" HT.	27
PHY NI2	PHYSOCARPUS OPULIFOLIUS / NINEBARK	B & B	30" HT.	21
RHU GRO	RHUS AROMATICA 'GRO-LOW' / GRO-LOW FRAGRANT SUMAC	5 GAL	24" HT.	121
RIB GRE	RIBES ALPINUM 'GREEN MOUND' / GREEN MOUND ALPINE CURRANT	B & B	24" HT.	14
ROS BL4	ROSA BLANDA / SMOOTH ROSE	CONT.	5 GAL.	5
ROS FL3	ROSA X 'FLOWER CARPET CORAL' / ROSE	5 GAL	24" SPREAD.	51
SPI SPI	SPIRAEA JAPONICA 'LITTLE PRINCESS' / LITTLE PRINCESS JAPANESE SPIREA	B & B	18" HT.	8
SYR MEY	SYRINGA MEYERI 'PALIBIN' / DWARF KOREAN LILAC	B & B	30" HT.	16
SYR BL2	SYRINGA X 'BLOOMERANG' / BLOOMERANG LILAC	B & B	30" HT.	14
VIB CAR	VIBURNUM CARLESII / KOREAN SPICE VIBURNUM	B & B	36" HT.	19
VIB BLA	VIBURNUM PRUNIFOLIUM / BLACKHAW VIBURNUM	B & B	36" HT.	56
WEI SP9	WEIGELA FLORIDA 'BOKRASPIWI' / SPILLED WINE WEIGELA	CONT.	5 GAL.	10

EVERGREEN SHRUBS	BOTANICAL / COMMON NAME	COND.	SIZE	QTY
JUN PFI	JUNIPERUS CHINENSIS 'KALLAYS COMPACT' / KALLAY COMPACT PFITZER JUNIPER	B & B	24" SPREAD.	90
JUN FOR	JUNIPERUS CHINENSIS 'SEA GREEN' / SEA GREEN JUNIPER	B & B	24" SPREAD.	43
TAX DEN	TAXUS X MEDIA 'DENSIFORMIS' / DENSE YEW	B & B	30" HT.	77

GRASSES	BOTANICAL / COMMON NAME	COND.	SIZE	QTY
CAL KAR	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / FEATHER REED GRASS	CONT.	#1	408
DES PIX	DESCHAMPSIA CESPITOSA 'PIXIE FOUNTAIN' / PIXIE FOUNTAIN TUFTED HAIR GRASS	CONT.	#1	15
PAN HEA	PANICUM VIRGATUM 'HEAVY METAL' / BLUE SWITCH GRASS	CONT.	#1	21
PAN NOR	PANICUM VIRGATUM 'NORTH WIND' / NORTHWIND SWITCH GRASS	CONT.	#1	28
SPO HET	SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED	CONT.	#1	215
SPO TAR	SPOROBOLUS HETEROLEPIS 'TARA' / PRAIRIE DROPSEED	CONT.	#1	17

PERENNIALS	BOTANICAL / COMMON NAME	COND.	SIZE	QTY
LAV SU6	LAVANDULA ANGUSTIFOLIA 'SUPER BLUE' / SUPER BLUE ENGLISH LAVENDER	CONT.	#1	17

GROUND COVERS	BOTANICAL / COMMON NAME	COND	SIZE	QTY
ECH MAG	ECHINACEA PURPUREA 'MAGNUS' / MAGNUS PURPLE CONEFLOWER	CONT.	#1	37
GAI A11	GAILLARDIA X 'ARIZONA SUN' / BLANKET FLOWER	CONT.	#1	302
GEU TRI	GEUM TRIFLORUM / PRAIRIE SMOKE	CONT.	QUART	82
HEM OR2	HEMEROCALLIS X 'STELLA DE ORO' / STELLA DE ORO DAYLILY	CONT.	#1	276
HOS LIB	HOSTA X 'LIBERTY' / PLANTAIN LILY	CONT.	#1	14
LEU DA2	LEUCANTHEMUM X SUPERBUM 'DAISY MAY' / SHASTA DAISY	CONT.	#1	154
LIR CRE	LIRIOPE SPICATA / CREEPING LILY TURF	CONT.	QUART	325
MON PE2	MONARDA DIDYMA 'PETITE DELIGHT' / PETITE DELIGHT BEE BALM	CONT.	#1	102
NEP WAL	NEPETA X FAASSENII 'WALKERS LOW' / WALKERS LOW CATMINT	CONT.	#1	1,213
PAC PRO	PACHYSANDRA PROCUMBENS / ALLEGHENY SPURGE	CONT.	QUART	57
RUD GL2	RUDBECKIA FULGIDA 'GLODSTRUM' / BLACK-EYED SUSAN	CONT.	#1	215
SYM PU5	SYMPHYOTRICHUM NOVAE-ANGLIAE 'PURPLE DOME' / NEW ENGLAND ASTER	CONT.	#1	207

TURF GRASS	BOTANICAL / COMMON NAME	COND	SIZE	QTY
TUR DRO	TURF SEED / DROUGHT TOLERANT SEED BLEND	SEED	S.F.	118,923 SF
TUR BLU	TURF SOD BLUEGRASS / KENTUCKY BLUEGRASS	ROLLED	SOD	7,512 SF

SITE MATERIALS SCHEDULE (Overall Complete)

▨	LOW-PROFILE PRAIRIE –	140,966 SF
☐	WET PRAIRIE SEDGES –	54,195 SF
☐	ENHANCED CONCRETE –	4,840 SF
▨	MULCH –	21,024 SF

LANDSCAPE NOTES:

1. PLANT QUANTITIES SHOWN IN THE PLANT SCHEDULE ARE FOR CONVENIENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIALS SHOWN ON THE PLAN AND SHOULD NOT RELY ON THE PLANT SCHEDULE FOR DETERMINING QUANTITIES.
2. ALL PLANT MATERIALS SHALL BE NURSERY GROWN STOCK AND SHALL BE FREE FROM ANY DEFORMITIES, DISEASES OR INSECT DAMAGE. ANY MATERIALS WITH DAMAGED OR CROOKED/DISFIGURED LEADERS, BARK ABRASION, SUNSCALD, INSECT DAMAGE, ETC. ARE NOT ACCEPTABLE AND WILL BE REJECTED. TREES WITH MULTIPLE LEADERS WILL BE REJECTED UNLESS CALLED OUT IN THE PLANT SCHEDULE AS MULTI-STEM. NO PRUNING TO BE DONE AT THE TIME OF INSTALLATION EXCEPT FOR DEAD OR BROKEN LIMBS.
3. ALL LANDSCAPE IMPROVEMENTS SHALL MEET MUNICIPALITY REQUIREMENTS AND GUIDELINES, WHICH SHALL BE VERIFIED BY MUNICIPAL AUTHORITIES.
4. ALL PLANTING OPERATIONS SHALL BE COMPLETED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICES. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, PROPER PLANTING BED AND TREE PIT PREPARATION, PLANTING MIX, PRUNING, STAKING AND GUYING, WRAPPING, SPRAYING, FERTILIZATION, PLANTING AND ADEQUATE MAINTENANCE OF MATERIALS DURING CONSTRUCTION ACTIVITIES.
5. ALL PLANT MATERIALS SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. ANY MATERIALS INSTALLED WITHOUT APPROVAL MAY BE REJECTED.
6. THE CONTRACTOR SHALL GUARANTEE PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY OWNER. THE CONTRACTOR SHALL OUTLINE PROPER MAINTENANCE PROCEDURES TO THE OWNER AT THE TIME OF ACCEPTANCE. DURING THE GUARANTEE PERIOD, DEAD OR DISEASED MATERIALS SHALL BE REPLACED AT NO COST TO THE OWNER. AT THE END OF THE GUARANTEE PERIOD THE CONTRACTOR SHALL OBTAIN FINAL ACCEPTANCE FROM THE OWNER.
7. ANY EXISTING TREES TO BE RETAINED SHALL BE PROTECTED FROM SOIL COMPACTION AND OTHER DAMAGES THAT MAY OCCUR DURING CONSTRUCTION ACTIVITIES BY ERECTING FENCING AROUND SUCH MATERIALS AT A DISTANCE OF 8.5' FROM THE TRUNK.
8. ALL GRASS, CLUMPS, OTHER VEGETATION, DEBRIS, STONES, ETC.. SHALL BE RAKED OR OTHERWISE REMOVED FROM PLANTING AND LAWN AREAS PRIOR TO INITIATION OF INSTALLATION PROCEDURES.
9. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INITIATING PLANTING OPERATIONS. THE CONTRACTOR SHALL REPAIR/ REPLACE AND UTILITY, PAVING, CURBING, ETC.. WHICH IS DAMAGED DURING PLANTING OPERATIONS.
10. SIZE AND GRADING STANDARDS OF PLANT MATERIALS SHALL CONFORM TO THE LATEST EDITION OF ANSI Z60.1, AMERICAN STANDARDS FOR NURSERY STOCK, BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
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12. ALL PLANT MATERIAL ON THIS PLANTING PLAN REPRESENTS THE INTENTION AND INTENSITY OF THE PROPOSED LANDSCAPE MATERIAL. THE EXACT SPECIES AND LOCATIONS MAY VARY IN THE FIELD DO TO MODIFICATIONS IN THE SITE IMPROVEMENTS AND THE AVAILABILITY OF PLANT MATERIAL AT THE TIME OF INSTALLATION. ANY SUCH CHANGES MUST FIRST BE APPROVED BY THE CITY IN WRITING
13. ALL PLANT MATERIAL SHALL BE PLANTED WITH A MINIMUM OF SIX INCHES OF ORGANIC SOIL AND MULCHED WITH A SHREDDED BARK MATERIAL TO A MINIMUM 3" DEPTH.
14. ALL BEDS SHALL BE EDGED, HAVE WEED PREEMERGENTS APPLIED AT THE RECOMMENDED RATE.
15. ALL PARKWAYS SHALL HAVE LAWN ESTABLISHED WITH SEED A GROUNDCOVER, UNLESS OTHERWISE NOTED.
16. ALL LAWN AREAS ON THIS PLAN SHALL BE GRADED SMOOTH AND TOPPED WITH AT LEAST 4" OF TOPSOIL. ALL LAWN AREAS TO BE ESTABLISHED USING SEED BLANKET UNLESS OTHERWISE NOTED. BLANKET TO BE S75 OR APPROVED EQUAL
17. THIS LANDSCAPE PLAN ASSUMES THE SITE WILL BE PREPARED WITH TOP SOIL SUITABLE FOR THE ESTABLISHMENT OF THE LANDSCAPE MATERIAL PRESENTED ON THIS PLAN. IF ADDITIONAL TOP SOIL IS REQUIRED IT IS UP TO THE LANDSCAPE CONTRACTOR ON THE PROJECT TO PROVIDE, SPREAD AND PREPARE THE SITE AS NEEDED FOR THE IMPLEMENTATION OF THIS LANDSCAPE PLAN.
18. CONTRACTORS MUST VERIFY ALL QUANTITIES AND OBTAIN ALL PROPER PERMITS AND LICENSES FROM THE PROPER AUTHORITIES.
19. ALL MATERIAL MUST MEET INDUSTRY STANDARDS AND THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REFUSE ANY POOR MATERIAL OR WORKMANSHIP.
20. LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR UNSEEN SITE CONDITIONS.
21. ALL PLANTINGS SHALL BE SPACED EQUAL DISTANT, BACK FILLED WITH AMENDED SOIL IN A HOLE TWICE THE ROOTBALL DIAMETER, WATERED, FERTILIZED, PRUNED, AND HAVE ALL TAGS AND ROPES REMOVED.
22. LAWN AND BED AREAS SHALL BE ROTOTILLED, RAKED OF CLUMPS AND DEBRIS.
23. REMOVE ALL DEAD AND DISEASED PLANT MATERIAL FROM SITE AND DISPOSE OF PROPERLY.
24. PLANTS TO BE PLANTED SO THAT ROOT FLARE IS AT THE GRADE OF THE AREA WHERE PLANTED. NO PRUNING TO BE DONE AT THE TIME OF INSTALLATION EXCEPT TO REMOVE DEAD OR BROKEN LIMBS.

LOYOLA MEDICINE

Project
LOYOLA SOUTHWEST AMBULATORY CARE CENTER
17901 LaGrange Road
Tinley Park, IL 60487

Prepared For
LOYOLA UNIVERSITY HEALTH SYSTEM
2160 South 1st Avenue, Maywood, IL 60153

Hellmuth, Obata & Kassabaum, Inc.
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Chicago, IL 60604 USA
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In Association with

IMEG Corporation
Structural, Mechanical, Electrical, Plumbing, Fire Protection,
Technology, Engineering and Medical Equipment Planning
1100 Warrenville Road, Suite 400W
Naperville, IL 60563

Eriksson Engineering Associates, Ltd.
Civil Engineering, Landscape Design
145 Commerce Drive, Suite A
Grayslake, IL 60030

Key Plan

Professional Seals

NOT FOR CONSTRUCTION

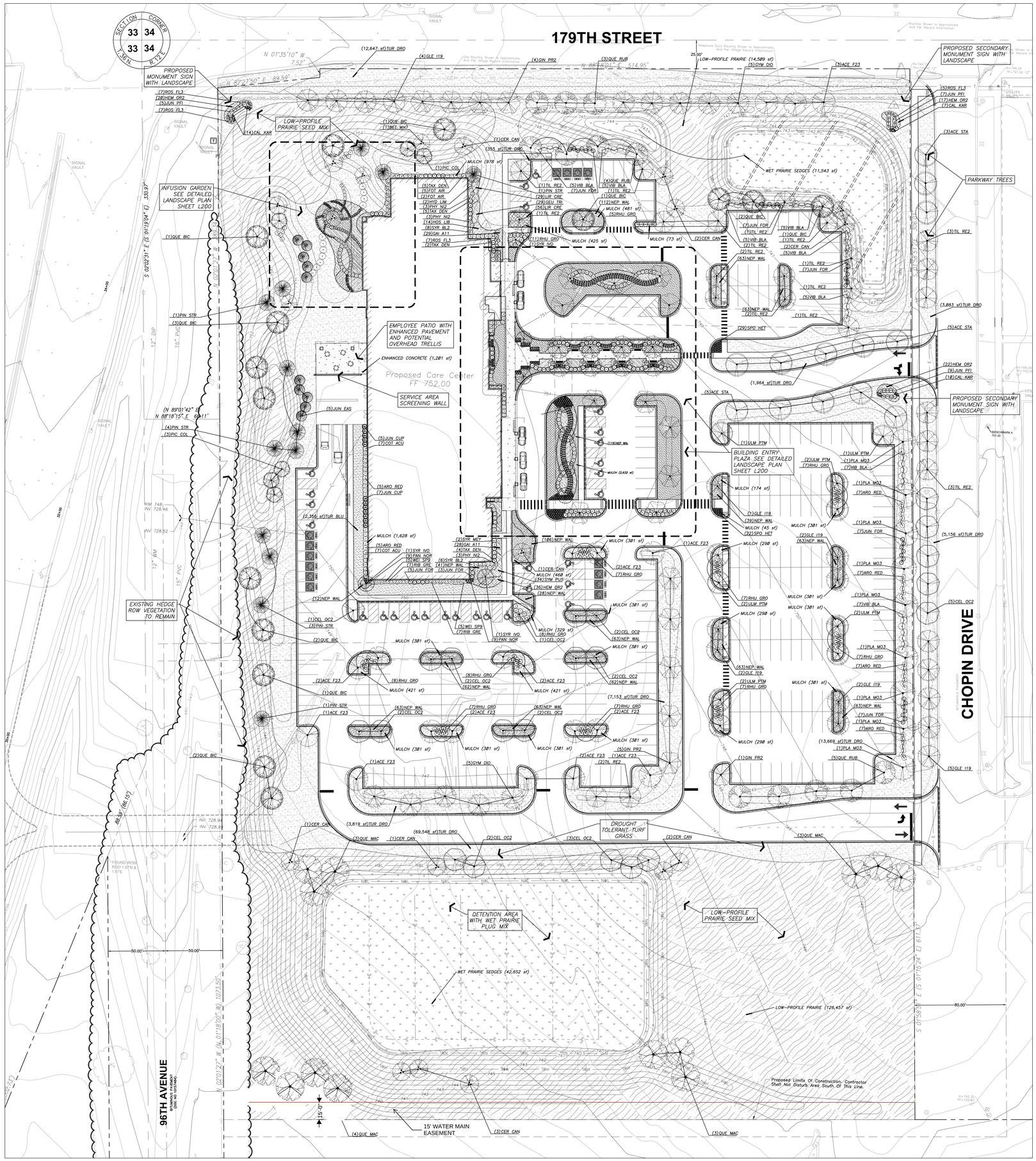
No.	Description	Date
1	ISSUE WITH SITE WORK AND FOUNDATION PERMIT	2021-09-10
2	ISSUE PER VILLAGE REVIEW COMMENTS	2021-10-12

Project No: 21.03050.00

Sheet Title
LANDSCAPE PLAN

Original is 48 x 36. Do not scale contents of this drawing.

Sheet Number
L100



Scale: 1"=30'

PLANT SCHEDULE (Overall Complete)

CANOPY TREES	BOTANICAL / COMMON NAME	COND	SIZE	QTY
ACE STA	ACER MIYABEI 'STATE STREET' / MIYABEI MAPLE	B & B	2.5" CAL.	13
ACE F23	ACER X FREEMANII / FREEMAN MAPLE	B & B	2.5" CAL.	21
CEL OC2	CELTIS OCCIDENTALIS / COMMON HACKBERRY	B & B	2.5" CAL.	27
GIN PR2	GINKGO BILOBA 'PRINCETON SENTRY' / PRINCETON SENTRY GINKGO	B & B	2.5" CAL.	19
GLE I19	GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE' / THORNLESS SKYLINE HONEYLOCUST	B & B	2.5" CAL.	24
GYM DIO	GYMNOCLADUS DIOICA 'ESPRESSO' / KENTUCKY COFFEETREE	B & B	2.5" CAL.	10
PLA MO3	PLATANUS X ACERIFOLIA 'MORTON CIRCLE' TM / EXCLAMATION LONDON PLANE TREE	B & B	2.5" CAL.	9
QUE BIC	QUERCUS BICOLOR / SWAMP WHITE OAK	B & B	2.5" CAL.	15
QUE MAC	QUERCUS MACROCARPA / BURR OAK	B & B	2.5" CAL.	13
QUE RUB	QUERCUS RUBRA / RED OAK	B & B	2.5" CAL.	12
TIL RE2	TILIA AMERICANA 'REDMOND' / REDMOND AMERICAN LINDEN	B & B	2.5" CAL.	22
ULM PTM	ULMUS X 'MORTON GLOSSY' TM / TRIUMPH ELM	B & B	2.5" CAL.	10
EVERGREEN TREES	**BOTANICAL / COMMON NAME**	**COND**	**SIZE**	**QTY**
JUN EAS	JUNIPERUS VIRGINIANA / EASTERN REDCEDAR	B & B	6' HT.	10
JUN CUP	JUNIPERUS VIRGINIANA 'CUPRESSIFOLIA' / HILLSPIRE JUNIPER	B & B	6' HT.	12
PIC COL	PICEA PUNGENS 'COLORADO GREEN' / GREEN SPRUCE	B & B	8' HT.	6
PIN STR	PINUS STROBUS / WHITE PINE	B & B	8' HT.	13
UNDERSTORY TREES	**BOTANICAL / COMMON NAME**	**COND**	**SIZE**	**QTY**
BET WH7	BETULA POPULIFOLIA 'WHITESPIRE' / WHITESPIRE BIRCH	B & B	8' CLUMP	3
CER CAN	CERCIS CANADENSIS / EASTERN REDBUD	B & B	8' CLUMP	16
SYR IVO	SYRINGA RETICULATA 'IVORY SILK' / IVORY SILK JAPANESE TREE LILAC	B & B	2.5" CAL.	9
DECIDUOUS SHRUBS	**BOTANICAL / COMMON NAME**	**COND.**	**SIZE**	**QTY**
ARO RED	ARONIA ARBUTIFOLIA / RED CHOKEBERRY	B & B	30\" HT.	38
COT ACU	COTONEASTER ACUTIFOLIUS / PEKING COTONEASTER	B & B	36" HT.	14
FOT AIR	FOTHERGILLA GARDENII 'MT. AIRY' / MOUNT AIRY FOTHERGILLIA	B & B	24" HT.	10
HYD LIM	HYDRANGEA PANICULATA 'LIMELIGHT' / LIMELIGHT HYDRANGEA	B & B	24" HT.	27
PHY NI2	PHYSOCARPUS OPULIFOLIUS / NINEBARK	B & B	30" HT.	21
RHU GRO	RHUS AROMATICA 'GRO-LOW' / GRO-LOW FRAGRANT SUMAC	5 GAL	24" HT.	121
RIB GRE	RIBES ALPINUM 'GREEN MOUND' / GREEN MOUND ALPINE CURRANT	B & B	24" HT.	14
ROS BL4	ROSA BLANDA / SMOOTH ROSE	CONT.	5 GAL.	5
ROS FL3	ROSA X 'FLOWER CARPET CORAL' / ROSE	5 GAL	24" SPREAD.	51
SPI SPI	SPIRAEA JAPONICA 'LITTLE PRINCESS' / LITTLE PRINCESS JAPANESE SPIREA	B & B	18" HT.	8
SYR MEY	SYRINGA MEYERI 'PALIBIN' / DWARF KOREAN LILAC	B & B	30" HT.	16
SYR BL2	SYRINGA X 'BLOOMERANG' / BLOOMERANG LILAC	B & B	30" HT.	14
VIB CAR	VIBURNUM CARLESII / KOREAN SPICE VIBURNUM	B & B	36" HT.	19
VIB BLA	VIBURNUM PRUNIFOLIUM / BLACKHAW VIBURNUM	B & B	36" HT.	56
WEI SP9	WEIGELA FLORIDA 'BOKRASPIWI' / SPILLED WINE WEIGELA	CONT.	5 GAL.	10
EVERGREEN SHRUBS	**BOTANICAL / COMMON NAME**	**COND.**	**SIZE**	**QTY**
JUN PFI	JUNIPERUS CHINENSIS 'KALLAYS COMPACT' / KALLAY COMPACT PFITZER JUNIPER	B & B	24" SPREAD.	90
JUN FOR	JUNIPERUS CHINENSIS 'SEA GREEN' / SEA GREEN JUNIPER	B & B	24" SPREAD.	43
TAX DEN	TAXUS X MEDIA 'DENSIFORMIS' / DENSE YEW	B & B	30" HT.	77
GRASSES	**BOTANICAL / COMMON NAME**	**COND.**	**SIZE**	**QTY**
CAL KAR	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / FEATHER REED GRASS	CONT.	#1	408
DES PIX	DESCHAMPSIA CESPITOSA 'PIXIE FOUNTAIN' / PIXIE FOUNTAIN TUFTED HAIR GRASS	CONT.	#1	15
PAN HEA	PANICUM VIRGATUM 'HEAVY METAL' / BLUE SWITCH GRASS	CONT.	#1	21
PAN NOR	PANICUM VIRGATUM 'NORTH WIND' / NORTHWIND SWITCH GRASS	CONT.	#1	28
SPO HET	SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED	CONT.	#1	215
SPO TAR	SPOROBOLUS HETEROLEPIS 'TARA' / PRAIRIE DROPSEED	CONT.	#1	17
PERENNIALS	**BOTANICAL / COMMON NAME**	**COND.**	**SIZE**	**QTY**
LAV SU6	LAVANDULA ANGUSTIFOLIA 'SUPER BLUE' / SUPER BLUE ENGLISH LAVENDER	CONT.	#1	17
GROUND COVERS	**BOTANICAL / COMMON NAME**	**COND**	**SIZE**	**QTY**
ECH MAG	ECHINACEA PURPUREA 'MAGNUS' / MAGNUS PURPLE CONEFLOWER	CONT.	#1	37
GAI A11	GAILLARDIA X 'ARIZONA SUN' / BLANKET FLOWER	CONT.	#1	302
GEU TRI	GEUM TRIFLORUM / PRAIRIE SMOKE	CONT.	QUART	82
HEM OR2	HEMEROCALLIS X 'STELLA DE ORO' / STELLA DE ORO DAYLILY	CONT.	#1	276
HOS LIB	HOSTA X 'LIBERTY' / PLANTAIN LILY	CONT.	#1	14
LEU DA2	LEUCANTHEMUM X SUPERBUM 'DAISY MAY' / SHASTA DAISY	CONT.	#1	154
LIR CRE	LIRIOPE SPICATA / CREEPING LILY TURF	CONT.	QUART	325
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NEP WAL	NEPETA X FAASSENII 'WALKERS LOW' / WALKERS LOW CATMINT	CONT.	#1	1,213
PAC PRO	PACHYSANDRA PROCUMBENS / ALLEGHENY SPURGE	CONT.	QUART	57
RUD GL2	RUDBECKIA FULGIDA 'GLODSTRUM' / BLACK-EYED SUSAN	CONT.	#1	215
SYM PU5	SYMPHYOTRICHUM NOVAE-ANGLIAE 'PURPLE DOME' / NEW ENGLAND ASTER	CONT.	#1	207
TURF GRASS	**BOTANICAL / COMMON NAME**	**COND**	**SIZE**	**QTY**
TUR DRO	TURF SEED / DROUGHT TOLERANT SEED BLEND	SEED	S.F.	117,394 SF
TUR BLU	TURF SOD BLUEGRASS / KENTUCKY BLUEGRASS	ROLLED	SOD	7,512 SF

SITE MATERIALS SCHEDULE (Overall Complete)

▨	LOW-PROFILE PRAIRIE	140,966 SF
▨	WET PRAIRIE SEDGES	54,195 SF
▨	ENHANCED CONCRETE	4,840 SF
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14. ALL BEDS SHALL BE EDGED, HAVE WEED PREEMERGENTS APPLIED AT THE RECOMMENDED RATE.
15. ALL PARKWAYS SHALL HAVE LAWN ESTABLISHED WITH SEED A GROUNDCOVER, UNLESS OTHERWISE NOTED.
16. ALL LAWN AREAS ON THIS PLAN SHALL BE GRADED SMOOTH AND TOPPED WITH AT LEAST 4" OF TOPSOIL. ALL LAWN AREAS TO BE ESTABLISHED USING SEED BLANKET UNLESS OTHERWISE NOTED. BLANKET TO BE S75 OR APPROVED EQUAL
17. THIS LANDSCAPE PLAN ASSUMES THE SITE WILL BE PREPARED WITH TOP SOIL SUITABLE FOR THE ESTABLISHMENT OF THE LANDSCAPE MATERIAL PRESENTED ON THIS PLAN. IF ADDITIONAL TOP SOIL IS REQUIRED IT IS UP TO THE LANDSCAPE CONTRACTOR ON THE PROJECT TO PROVIDE, SPREAD AND PREPARE THE SITE AS NEEDED FOR THE IMPLEMENTATION OF THIS LANDSCAPE PLAN.
18. CONTRACTORS MUST VERIFY ALL QUANTITIES AND OBTAIN ALL PROPER PERMITS AND LICENSES FROM THE PROPER AUTHORITIES.
19. ALL MATERIAL MUST MEET INDUSTRY STANDARDS AND THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REFUSE ANY POOR MATERIAL OR WORKMANSHIP.
20. LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR UNSEEN SITE CONDITIONS.
21. ALL PLANTINGS SHALL BE SPACED EQUAL DISTANT, BACK FILLED WITH AMENDED SOIL IN A HOLE TWICE THE ROOTBALL DIAMETER, WATERED, FERTILIZED, PRUNED, AND HAVE ALL TAGS AND ROPES REMOVED.
22. LAWN AND BED AREAS SHALL BE ROTOTILLED, RAKED OF CLUMPS AND DEBRIS.
23. REMOVE ALL DEAD AND DISEASED PLANT MATERIAL FROM SITE AND DISPOSE OF PROPERLY.
24. PLANTS TO BE PLANTED SO THAT ROOT FLARE IS AT THE GRADE OF THE AREA WHERE PLANTED. NO PRUNING TO BE DONE AT THE TIME OF INSTALLATION EXCEPT TO REMOVE DEAD OR BROKEN LIMBS.

LOYOLA
MEDICINE

Project
LOYOLA SOUTHWEST
AMBULATORY CARE
CENTER
17901 LaGrange Road
Tinley Park, IL 60487

Prepared For
LOYOLA UNIVERSITY
HEALTH SYSTEM
2160 South 1st Avenue, Maywood, IL 60153

Hellmuth, Obata & Kassabaum, Inc.
333 South Wabash Avenue, 14th Floor
Chicago, IL 60604 USA
t +1 312 782 1000 f +1 312 782 6727

In Association with

IMEG Corporation
Structural, Mechanical, Electrical, Plumbing, Fire Protection,
Technology, Engineering and Medical Equipment Planning
1100 Warrenville Road, Suite 400W
Naperville, IL 60563

Eriksson Engineering Associates, Ltd.
Civil Engineering, Landscape Design
145 Commerce Drive, Suite A
Grayslake, IL 60030

Key Plan

Professional Seals

NOT FOR CONSTRUCTION

No.	Description	Date
1	ISSUE WITH SITE WORK AND FOUNDATION PERMIT	2021-09-10
2	ISSUE PER VILLAGE REVIEW COMMENTS	2021-10-12

Project No: 21.03050.00

Sheet Title

LANDSCAPE PLAN

Original is 48 x 36. Do not scale contents of this drawing.

Sheet Number

L100

LANDSCAPING

The Village Landscape Architect conducted a second review of the plans and offers the following comments:

Compliance with the Municipal Code:

1. Section 158.07 of the Municipal Code requires a bufferyard on all sides of the subject property. Proposed plantings do not fully meet Code. Refer to Table A below for an audit of required and proposed plantings. *Response: We have revised the landscape plan to add some of the additional plantings where practical. As discussed at the workshop strict application of the landscape ordinance needs to take into consideration unique sites and conditions and be adapted as needed to meet the site conditions and the context of the surrounding area.*

2. Section 158.14.10 of the Municipal Code requires a 10' wide landscape area to front 70% of the side of all buildings which front dedicated streets. Proposed plantings exceed code Code. Refer to Table A below for an audit of required and proposed plantings. While not all planting beds are the required 10' wide, the additional plantings above the required minimum could be considered to offset this requirement, pending staff approval. *Response: We agree with staff on this point and appreciate the flexibility in the interpretation of the code.*

3. Section 158.14.11 of the Municipal Code requires 1 tree per 10,000 square feet of lot area for commercial/office development (in this case, ~551,962 s.f.). Proposed plantings do not fully meet Code. Refer to Table A below for an audit of required and proposed plantings. Room exists on site to be able to achieve this requirement. *Response: We interpret this to not be a separate planting requirement but rather applies in cases where there are no other planting, screening or bufferyard planting requirements. Since there are far more trees proposed as part of this project by virtue of meeting the other planting requirements there is no need to implement this portion of the ordinance.*

4. Section 158.19.2 of the Municipal Code requires parkway plantings at an intensity of 1 tree per 25 feet of frontage. Proposed plantings meet Code. Refer to Table A below for an audit of required and proposed plantings. *Response: We meet this planting requirement.*

5. Section 158.20.1(b) of the Municipal Code requires all parking to be screened from the view of adjacent properties and streets by plantings, berming or low fence/wall. Proposed plantings do not fully meet Code. Refer to Table A below for an audit of required and proposed plantings. This can easily be achieved by extending plantings in front of all parking spaces. *Response: We feel we have met the intent of this portion of the ordinance by providing the groupings of shrubs along the portions of the parking lots that front the adjacent public streets. We have added additional trees between the shrub groupings to provide addition screening.*

6. Section 158.20.1(i) of the Municipal Code requires at least 15% of the parking lot shall be covered by landscaping. Proposed plantings meet Code. Refer to Table A below for an audit of required and proposed plantings. *Response: We have provided more than the code minimum for internal landscape area as illustrated in the summary table below.*

7. Section 158.20.2(b) of the Municipal Code requires parking lot landscape islands to include at least one (1) tree and one (1) shrub per two hundred (200) square feet of island green area. Proposed plantings do not fully meet Code. Refer to Table A below for an audit of required and proposed plantings. Areas existing around some of the parking lots to add additional trees. Another alternative is to consider upsizing trees from 2.5" cal. to 4" cal. *Response: We feel the interior landscape planting for the required landscape area should be based on what is required (15% of the vehicular use area) not on the extra landscape area we are providing. Our site plan provides over 9,400 S.F. of landscape area than is required by code. Making the petitioner provide additional plantings for these areas' disincentives providing the additional landscape area. We would like some relief from the strict application of this requirement. That being said we have added some additional tree plantings south of the south access drive.*

General Comments:

1. Required buffer plantings for south property line should be dispersed along the drive aisle and the open space to create a more natural aesthetic vs. lining them all within the 25' wide bufferyard. The north and west bufferyards could also have required bufferyard plantings outside of the 25' wide bufferyard to create a more natural

appearance. *Response: We believe that adding these bufferyard planting requirements to south portion of the property in not in keeping with the proposed low-profile prairie plantings. Additionally, we feel that the open area distance between the south end of the development parcel and balance of the parcel to be left in agricultural use for the foreseeable future also should be considered. We would ask that the south bufferyard planting requirements be waived in lieu of the proposed 240' of open low-profile prairie landscape treatment.*

2. Information for project signage is needed to accurately account for required plantings. *Response: The signage is still being developed for the project. We will continue to work with Staff to meet the landscape requirements for in and around the project signs.*

Table A

Please review the landscape requirements within the following tables on the next page. Deficiencies must be addressed in a revised Landscape Plan. Please note the following abbreviations: CT = Canopy Tree, US = Understory Tree, SH = Shrub, T = Tree.

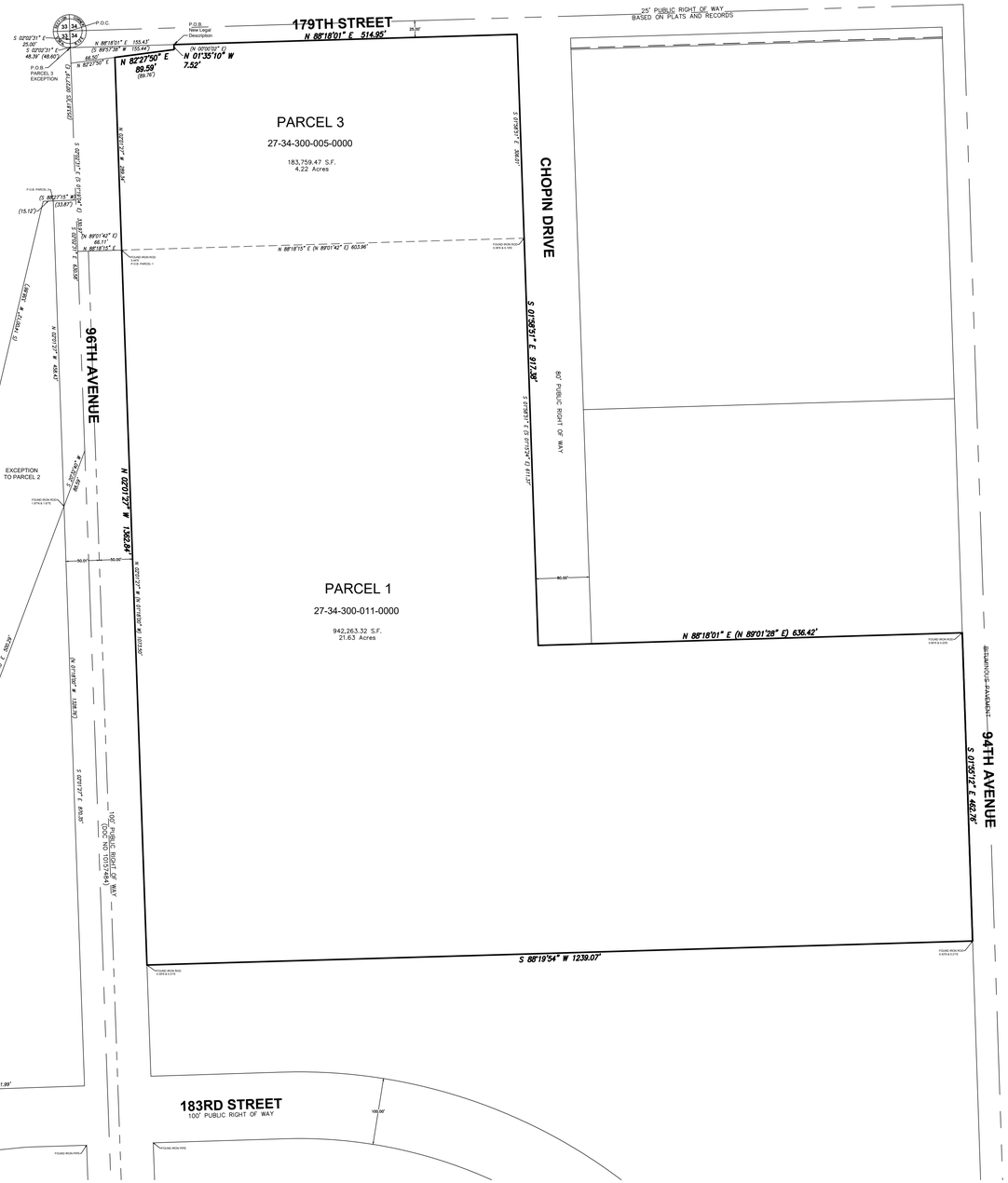
BUFFERYARD REQUIREMENTS							
Bufferyard Location	**Required Width**	**Proposed Width**	**Length**	**Required Plantings**	**Proposed Plantings**	**Deficit**	**Comments**
North ("C" Bufferyard)	25'	25'	570'	20 CT 8 US 80 SH	0 CT 2 US 0 SH	**- 20 CT** **- 6 US** **- 80 SH**	Plantings between bufferyard and building counted.
South ("C" Bufferyard)	25'	25'	603'	22 CT 9 US 85 SH	0 CT 0 US 0 SH	**- 22 CT** **- 9 US** **- 85 SH**	
East ("C" Bufferyard)	15'	15'	635'	29 CT 12 US 115 SH	2 CT 0 US 56 SH	**- 27 CT** **- 12 US** **- 59 SH**	
West ("C" Bufferyard)	25'	25'	635'	23 CT 9 US 89 SH	0 CT 9 US 28 SH	**- 23 CT** **-** **- 61 SH**	Plantings between bufferyard and building counted.

INTERIOR LOT LANDSCAPING REQUIREMENTS				
Location	**Requirement**	**Proposed**	**Deficit**	**Comments**
Foundation	Landscape coverage along 70% of building foundation that faces public right-of-way; 10' wide landscaped area (882 LF x 70% = **617 LF REQUIRED**)	72% (635 LF)	**0**	Not all proposed planting beds minimum of 10' wide.
Interior	56 canopy trees (551,962 s.f./10,000 s.f.)	35 CT	**-21 CT**	Evergreen and ornamental trees were included as part of the proposed plantings.

PARKWAY STANDARDS					
Location	**Requirement**	**Required Trees**	**Proposed Trees**	**Deficit**	**Comments**
Parkway	1 Tree per 25 Lineal Feet	38	38	**0**	

PARKING LOT LANDSCAPING STANDARDS				
Location	**Requirement**	**Provided**	**Deficit**	**Comments**
Parking Lot	15% of parking lot (182,869 s.f.) to be landscaped or 27,430 square feet	36,913 square feet	**+9,483 square feet**	Turf lawn landscaped islands included in calculations.
Parking Lot	Continuous screening of adjacent properties and streets – 1,050 LF required.	466 LF	**-584 LF**	
Parking Lot Islands	1 tree and 1 shrub per 200 square feet of island (36,913 s.f.) or 185 CT and 185 SH	106 CT 218 SH	**-79 CT** **+33 SH**	

SIGNAGE LANDSCAPING STANDARDS				
Location	**Requirement**	**Provided**	**Deficit**	**Comments**
Ground-Mounted Signs	2 sq. ft. of landscaping for each 1 sq. ft. of sign face	Unknown / Not Provided	**Unknown**	Planting details for all signs need to be provided. Signs do include landscaping as proposed.



PLAT OF CONSOLIDATION

OF PART OF THE SOUTHEAST 1/4 OF SECTION 33, TOWNSHIP 36 NORTH, RANGE 12, AND
A PART OF THE SOUTHWEST 1/4 OF SECTION 34, TOWNSHIP 36 NORTH, RANGE 12,
EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS,

VILLAGE PLAN COMMISSION

STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

REVIEWED AND APPROVED BY THE PLAN COMMISSION

THIS ___ DAY OF ___________________________, 2021.

____
CHAIRMAN

VILLAGE BOARD OF TRUSTEES

STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

ACCEPTED AND APPROVED BY THE BOARD OF TRUSTEES

THIS _____ DAY OF _________________________________, 2021.

____
PRESIDENT

____
VILLAGE CLERK

VILLAGE ENGINEER

STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

APPROVED BY THE VILLAGE ENGINEER OF THE VILLAGE OF TINLEY PARK, COOK COUNTY, ILLINOIS.

DATED THIS _____ DAY OF ____________________________, 2021.

____
VILLAGE CLERK

OWNER'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

THIS IS TO CERTIFY THAT ____, IS THE OWNER OF THE PROPERTY DESCRIBED BELOW AND AS SUCH OWNER, HAS CAUSED THE SAME TO BE PLATTED AS SHOWN HEREON, FOR THE USES AND PURPOSES THEREIN SET FORTH AND AS ALLOWED AND PROVIDED BY STATUTES, AND SAID OWNER, DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE AFORESAID.

DATED AT _____________, WISCONSIN, THIS _____ DAY OF ____________, A.D., 20__.
CITY DATE MONTH

BY: ________________________ TITLE: ________________________
SIGNATURE PRINT TITLE

ATTEST: ______________________ TITLE:_______________________
SIGNATURE PRINT TITLE

NOTARY'S CERTIFICATE

STATE OF ___________)
) SS
COUNTY OF __________)

I, ____________________________, A NOTARY PUBLIC IN AND FOR THE SAID COUNTY
PRINT NAME

IN THE STATE AFORESAID, DO HEREBY CERTIFY THAT ________________________,
PRINT NAME

________________, AND ________________________________, ________________,
TITLE PRINT NAME TITLE

OF SAID OWNER, WHO ARE PERSONALLY KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FORGOING INSTRUMENT AS SUCH

_________________ AND ___________________ RESPECTFULLY, APPEARED
TITLE TITLE

BEFORE ME THIS DAY IN PERSON AND JOINTLY AND SEVERALLY ACKNOWLEDGED THAT THEY SIGNED AND DELIVERED THE SAID INSTRUMENT AS THEIR OWN FREE AND VOLUNTARY ACT AND AS THE FREE AND VOLUNTARY ACT OF SAID OWNER FOR THE USES AND PURPOSES THEREIN SET FORTH.

GIVEN UNDER MY HAND AND NOTARIAL SEAL

THIS ________ DAY OF ____________, A.D., 20___.
DATE MONTH

____
NOTARY PUBLIC SIGNATURE

____
PRINT NAME

MY COMMISSION EXPIRES ON ______________ _________, A.D., 20___.
MONTH DATE

SURVEYOR'S AUTHORIZATION TO RECORD

STATE OF ILLINOIS)
) SS
COUNTY OF WILL)

I HEREBY DESIGNATE _________________________________, AND/OR REPRESENTATIVES THEREOF, TO RECORD THIS PLAT, A TRUE COPY WHICH HAS BEEN RETAINED BY ME TO ASSURE NO CHANGES HAVE BEEN MADE TO SAID PLAT;

DATED THIS ____ OF _____________________, 2021 AT SHOREWOOD, WILL COUNTY, ILLINOIS.

JLH LAND SURVEYING, INC.
ILLINOIS PROFESSIONAL DESIGN FIRM 184-007120
LICENSE EXPIRES APRIL 30, 2022

BY; ____
JAMES L. HARPOLE
ILLINOIS PROFESSIONAL LAND SURVEYOR # 3190
LICENSE EXPIRES NOVEMBER 30, A.D., 2022.

LAND AREA:

PARCEL 1
942,263.32 SF± OR 21.63 ACRES±

PARCEL 3
183,759.47 SF± OR 4.21 ACRES±

BEARINGS ARE FOR ANGULAR REFERENCE ONLY AND ARE NOT RELATED TO TRUE OR MAGNETIC NORTH

VICINITY MAP

PERMANENT INDEX NUMBERS:
27-34-300-005-0000, 27-34-300-011-0000

NEW LEGAL DESCRIPTION

THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 34, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID SOUTHWEST 1/4; THENCE SOUTH 02°02'31" EAST, ALONG THE WEST LINE OF SAID SOUTHWEST 1/4, A DISTANCE OF 25.00 FEET; THENCE NORTH 88°18'01" EAST, 155.43 FEET FOR A POINT OF BEGINNING; THENCE CONTINUING NORTH 88°08'010" EAST, ALONG THE SOUTH RIGHT OF WAY LINE FOR 179TH STREET, 514.95 FEET TO THE WESTERLY RIGHT OF WAY LINE FOR CHOPIN DRIVE; THENCE SOUTH 01°58'51" EAST, 917.38 FEET ALONG SAID WESTERLY RIGHT OF WAY LINE; THENCE NORTH 88°18'01" EAST 636.42 FEET; THENCE 01°55'12" EAST, 462.76 FEET; THENCE SOUTH 88°19'54" WEST, 1239.07 FEET; THENCE NORTH 02°01'27" WEST, 1362.84 FEET; THENCE NORTH 82°27'50" EAST, 89.59 FEET; THENCE NORTH 01°35'10" WEST, 7.52 FEET TO SAID POINT OF BEGINNING, ALL IN COOK COUNTY, ILLINOIS.

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF WILL)

THIS IS TO CERTIFY THAT I, JAMES L. HARPOLE, ILLINOIS LAND SURVEYOR NO. 3190, HAVE SURVEYED THE FOLLOWING DESCRIBED PROPERTY;

PARCEL 1
THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 34, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID SOUTHWEST 1/4; THENCE SOUTH 01°19'04" EAST, ALONG THE WEST LINE OF SAID SOUTHWEST 1/4, A DISTANCE OF 330.97 FEET TO THE SOUTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SOUTHWEST 1/4; THENCE NORTH 89°01'42" EAST, ALONG THE LAST DESCRIBED LINE, 66.11 FEET TO THE EAST LINE OF 96TH AVENUE PER DOCUMENT NUMBER 10157484, RECORDED SEPTEMBER 26, 1928, FOR THE POINT OF BEGINNING; THENCE CONTINUING NORTH 89°01'42" EAST, ALONG THE SOUTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SOUTHWEST 1/4, A DISTANCE OF 603.96 FEET TO THE WEST LINE OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF SAID SOUTHWEST 1/4; THENCE SOUTH 01°15'24" EAST, ALONG THE LAST DESCRIBED LINE, 611.37 FEET TO THE SOUTH LINE OF THE NORTH 942.37 FEET OF THE NORTHWEST 1/4 OF SAID SOUTHWEST 1/4; THENCE NORTH 89°01'28" EAST, ALONG THE LAST DESCRIBED LINE, 636.42 FEET TO THE WEST LINE OF THE EAST 33.00 FEET OF THE WEST 1/2 OF SAID SOUTHWEST 1/4, SAID LINE ALSO BEING THE WEST LINE OF 94TH AVENUE; THENCE SOUTH 01°11'45" EAST, ALONG THE LAST DESCRIBED LINE, 462.76 FEET; THENCE SOUTH 89°03'21" WEST 1239.07 FEET TO THE AFORESAID EAST LINE OF 96TH AVENUE; THENCE NORTH 01°18'00" WEST, ALONG THE LAST DESCRIBED LINE, 1073.50 FEET TO THE POINT OF BEGINNING, ALL IN COOK COUNTY, ILLINOIS.

PARCEL 3:
THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 34, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, (EXCEPT THAT PART THEREOF TAKEN FOR 96TH AVENUE), ALSO EXCEPTING THAT PART OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 34, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4; THENCE ON AN ASSUMED BEARING OF SOUTH 00 DEGREES 27 MINUTES 19 SECONDS EAST 25.00 FEET ALONG THE WEST LINE OF THE SAID NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4, TO THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 00 DEGREES 27 MINUTES 19 SECONDS EAST 23.60 FEET, ALONG THE WEST LINE OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4; THENCE NORTH 84 DEGREES 03 MINUTES 02 SECONDS EAST, 66.34 FEET, TO A 5/8" REBAR WITH AN ALLIED CAP STAMPED 2017", THENCE CONTINUING NORTH 84 DEGREES 03 MINUTES 02 SECONDS EAST, 89.76 FEET, TO A 5/8' REBAR WITH AN ALLIED CAP STAMPED "STATE OF ILLINOIS DIVISION OF HIGHWAYS RIGHT OF WAY CORNER IPLS 2017", THENCE NORTH 00 DEGREES 00 MINUTES 02 SECONDS EAST, 7.52 FEET, TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF 179TH STREET; THENCE SOUTH 89 DEGREES 57 MINUTES 38 SECONDS WEST, 155.44 FEET, ALONG THE SAID SOUTH RIGHT OF WAY LINE OF 179TH STREET, TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS

AS SHOWN BY THE ANNEXED PLAT WHICH IS A CORRECT REPRESENTATION OF SAID SURVEY. ALL BEARINGS AND DISTANCES ARE SHOWN IN FEET AND DECIMALS THEREOF AND ARE RELATIVE TO ILLINOIS STATE PLANE COORDINATES. I FURTHER CERTIFY THAT ALL REGULATIONS ENACTED BY THE VILLAGE BOARD RELATIVE TO PLATS AND SUBDIVISIONS HAVE BEEN COMPLIED WITH IN THE PREPARATION OF THIS PLAT.

GIVEN UNDER MY HAND AND SEAL AT SHOREWOOD, ILLINOIS, THIS ____ OF ______________________, 20___.

____
JAMES L. HARPOLE

ILLINOIS PROFESSIONAL LAND SURVEYOR # 3190
LICENSE EXPIRES NOVEMBER 30, A.D., 2022.

JLH LAND SURVEYING INC.
Illinois Professional Design Firm No. 184.007120
910 Geneva Street, Shorewood, Illinois 60404
815.729.4000 www.jlhsurvey.com

SURVEY PREPARED FOR:
Eriksson Engineering Associates, LTD
135 S. Jefferson St., Suite 135
Chicago, IL 60661
Phone: 312-463-0551

DATE	REVISIONS	BY
10/14/21	ADD NEW LEGAL DESCRIPTION	JAH

PLAT OF CONSOLIDATION
TINLEY PARK, ILLINOIS
LOYOLA - TINLEY PARK MOB

PROJ. MGR.: JLH
DRAWN BY: JAH
CHECK BY: JLH
FIELD DATE: 10/12/2021
SCALE: 1"=100'

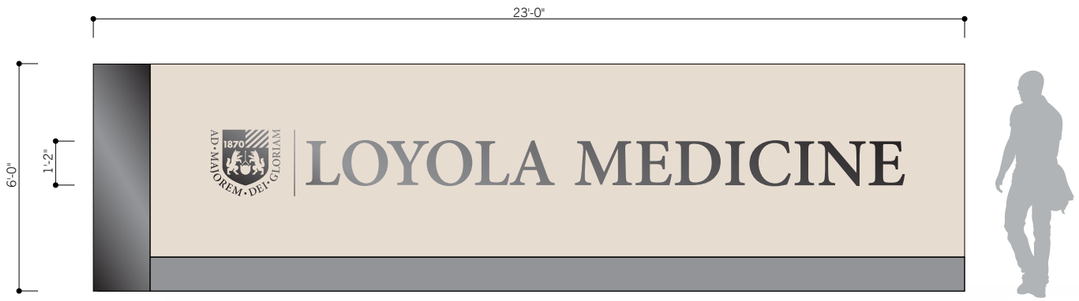
SHEET
1 OF 1

21-703-100

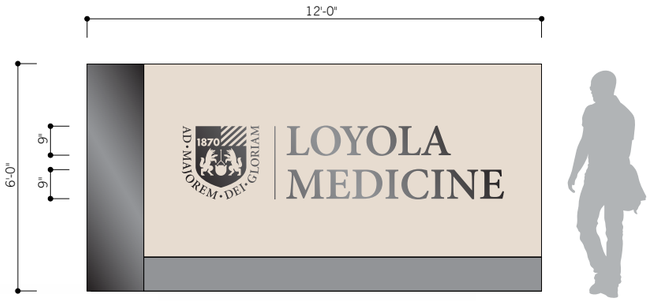
T:\2021_PROJECTS\21-703-100\dwg\21-703-100_Consolidation.dwg, 10/14/2021 8:59:03 AM

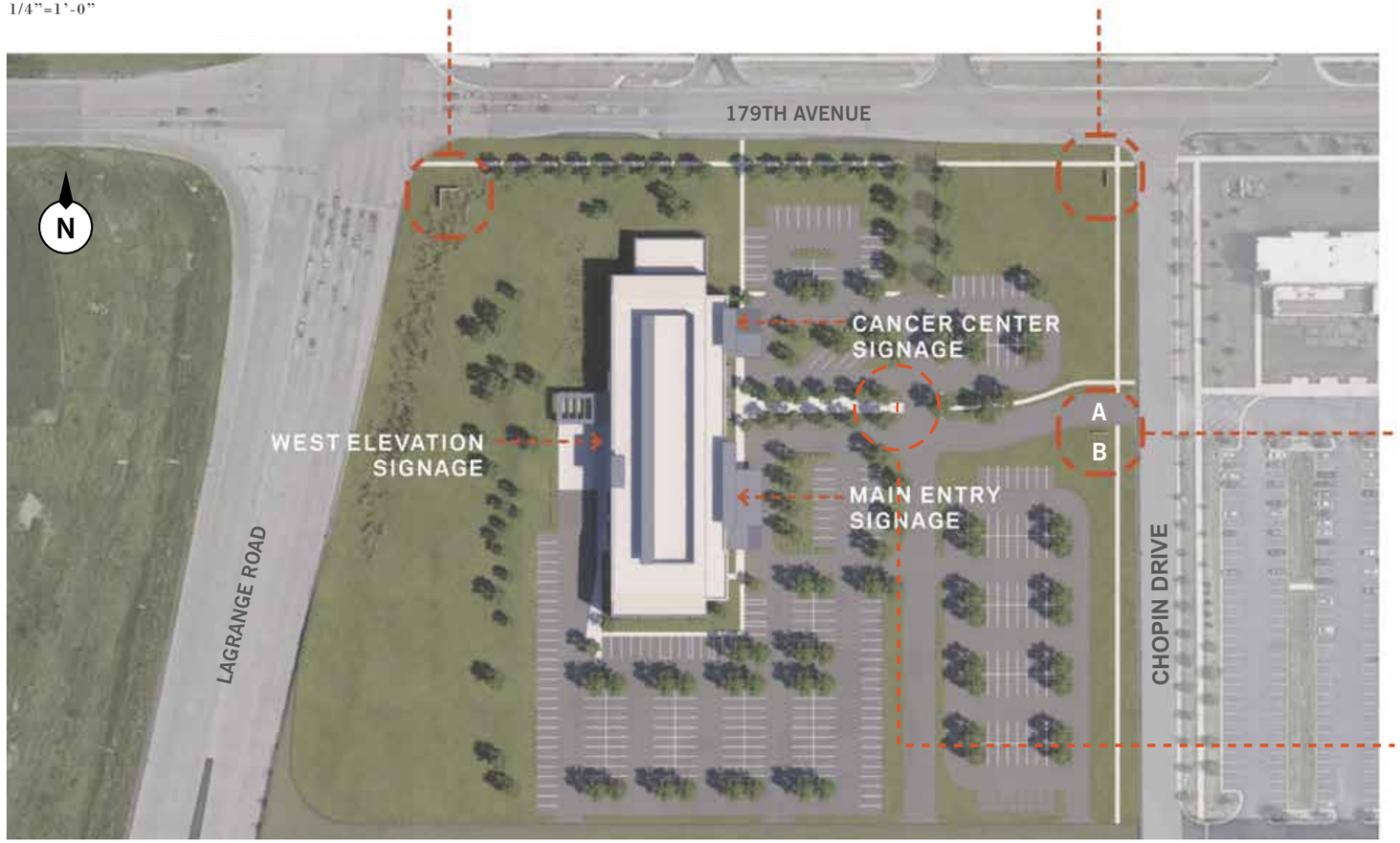
Vehicular Signage

SITE PLAN

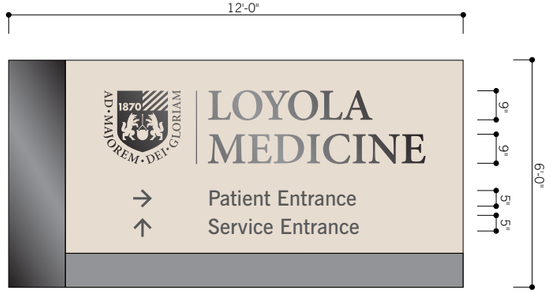


SCALE: 1/4"=1'-0"



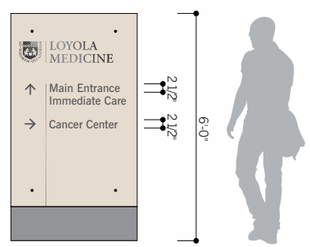


SITE PLAN



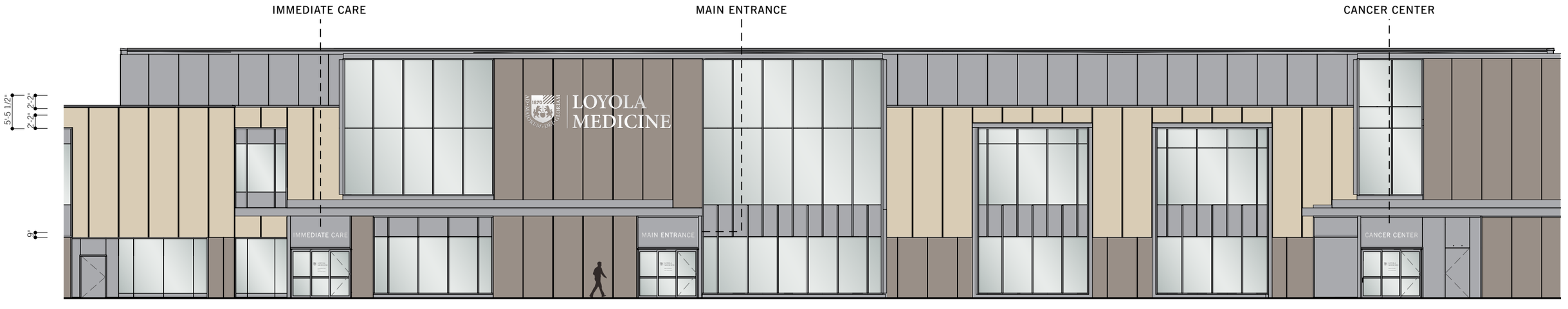
OPTION 1 (A SIDE)

OPTION 2



Building Signage

EAST & WEST ELEVATIONS



EAST ELEVATION

WEST ELEVATION

ELEVATIONS
SCALE: 1/16"=1'-0"

Entrance Letters

EAST ELEVATION

SCALE: 1/4"=1'-0"

SCALE: 1/4"=1'-0"

SCALE: 1/4"=1'-0"

EAST ELEVATION

ELEVATION
SCALE: 1/16"=1'-0"

LOYOLA MEDICINE

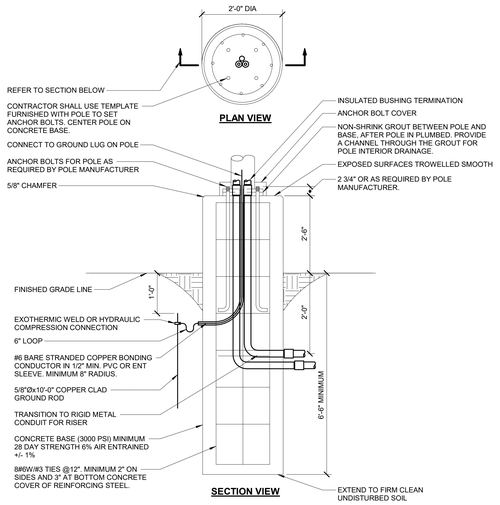
Loyola University Medical Center
Southwest Ambulatory Care Center
Tinley Park

Cardosi Kiper Design Group
2437 South Western Avenue
Chicago, Illinois 60608

P 773.523.9300
F 773.523.9305
www.ck-dg.com

Phase 2.0 - Schematic Design

10.14.21



1 EXTENDED POLE BASE DETAIL

NO SCALE

LED LUMINAIRE SCHEDULE

(DESC) DOOR:
FA - FLAT ALUMINUM
FS - FLAT STEEL
RA - REGRESSED ALUMINUM
RS - REGRESSED STEEL
FINISH:
PAF - PAINT AFTER FABRICATION
CFSA - COLOR-FINISH SELECTION BY ARCHITECT

DISTRIBUTION:
II - ANSI/IES TYPE 2 DISTRIBUTION
III - ANSI/IES TYPE 3 DISTRIBUTION
IV - ANSI/IES TYPE 4 DISTRIBUTION
V - ANSI/IES TYPE 5 DISTRIBUTION

BEAMWIDTH:
NSP - VERY NARROW SPOT
SP - SPOT
MD - MEDIUM
WD - WIDE
VWD - VERY WIDE
WW - WALL WASH

(L/L) LENS/LOUVER:
A - .125" ACRYLIC
B - BAFFLE/LOUVER
C - CLEAR ALZAK
F - FROSTED ACRYLIC
G - TEMPERED GLASS
K - KSH12 .125" ACRYLIC
K19 - KSH19 .156" ACRYLIC
M - MATTE DIFFUSE CLEAR
N - NONE
P - POLYCARBONATE
R - HIGH IMPACT DR ACRYLIC
SS - SEMI-SPECULAR CLEAR
O - OTHER (SEE DESCRIPTION)
[DESIGN SPECIFIC BLANKS]

(MTG) MOUNTING:
CL - CEILING SURFACE
CV - COVE
FR - FLANGED RECESSED
P - PERIMETER
PL - POLE
RE - RECESSED
SP - SUSPENDED
SU - SURFACE
UC - UNDER CABINET
WL - WALL
O - OTHER (SEE DESCRIPTION)

(WATT) PER: FIX - FIXTURE, FT - FOOT, LAMP

(TYPE) LED
LED - LIGHT EMITTING DIODE
TLED - TUBULAR LED LAMP
OLED - ORGANIC LED
DLED - DYNAMIC TUNABLE LED
RGB - COLOR CHANGING LED
RGBW - COLOR CHANGING + WHITE
RGBA - COLOR CHANGING + AMBER
RLED - RETROFIT LED
WLED - WARM DIM LED

(TYPE) DRIVER:
0-10V - 0-10V DIMMING
DALI - DIGITAL ADDRESSABLE
DMX - DIGITAL MULTIPLEX
EB - ELECTRONIC
ELV - ELECTRONIC LOW VOLTAGE
EM - EMERGENCY BATTERY
HL - HIGH/LOW (100%/33%) STEP DIM
LINE - LINE VOLTAGE DIMMING
ML - MULTI-LEVEL SWITCHING
MV - MULTI-VOLTAGE ELECTRONIC
REM - REMOTE
O - OTHER (SEE DESCRIPTION)

CATALOG NUMBER SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. THE COMPLETE DESCRIPTION AND THE SPECIFICATION SHALL BE COORDINATED WITH THE CATALOG NUMBER TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE FIRST MANUFACTURER LISTED IS THE BASIS OF DESIGN.

VERIFY AND COORDINATE ALL CEILING TYPES WITH LUMINAIRE MOUNTING AND TRIM REQUIREMENTS PRIOR TO THE RELEASE OF THE LUMINAIRE ORDER.
CONFIRM ALL COLORS AND FINISHES OF ALL LUMINAIRE COMPONENTS WITH ARCHITECT AND INTERIOR DESIGNER PRIOR TO THE RELEASE OF THE LUMINAIRE ORDER.
UNLESS INDICATED ON LIGHTING PLANS OR BELOW, REFER TO ARCHITECTURAL AND INTERIOR DESIGN ELEVATIONS, SECTIONS AND DETAILS FOR ALL SUSPENDED AND WALL MOUNTED LUMINAIRE MOUNTING HEIGHTS.

EXTERIOR CORRELATED COLOR TEMPERATURE 4000K, COLOR RENDERING INDEX (CRI) AT OR ABOVE 85, UNLESS NOTED OTHERWISE.

				DIMENSIONS				WATT		LED			DRIVER		
ITEM	DESCRIPTION	L/L	MTG	L	W	H	DIA.	ANSI WATTS	PER	TYPE	QTY	DELIVERED LUMENS (MIN)	VOLTS	TYPE	MANUFACTURER AND MODEL
F1	LINEAR LED 6" WIDE RECESSED SLOT WITH FROSTED LENS. COORDINATE MOUNTING AND DIMENSIONS WITH FLOOR PLANS. WET LOCATION LISTED OR IP65 RATED.	O	RE	4'-0"	1'-0"	4 1/2"		30 W	FIX	LED	1	2500	277 V	0-10V	FOCAL POINT SEEM 6 PHILIPS TRUEGROOVE LUMENWEREX VIA 5 LED AXIS LIGHTING BEAM 6 LED
S1	SITE LUMINAIRE, DIE-CAST ALUMINUM HOUSING WITH INTEGRAL HEAT SINK WITH THERMOSET POWDER COATED FINISH, TYPE III SHORT DISTRIBUTION WITH BACK LIGHT CONTROL. COLOR SELECTION BY ARCHITECT FROM STANDARD COLORS. IP 65 LISTED. LAMP SUPPORT. 4" SQUARE STRAIGHT STEEL POLE WITH INTERNAL VIBRATION DAMPER, ANCHOR BASE. PROVIDE FIXTURE WITH 100/33% BI-LEVEL DIMMING DRIVERS.	A	PL	4'-0"	4'-0"	5 1/2"		70 W	FIX	LED	1	7200	277 V	MV/HL	LITHONIA DSX1 LED P2 40K BLC MVOLT LUMARK MCGRAW-EDDISON
S2	SITE LUMINAIRE, DIE-CAST ALUMINUM HOUSING WITH INTEGRAL HEAT SINK WITH THERMOSET POWDER COATED FINISH, TYPE V WIDE DISTRIBUTION. COLOR SELECTION BY ARCHITECT FROM STANDARD COLORS. IP 65 LISTED. LAMP SUPPORT. 4" SQUARE STRAIGHT STEEL POLE WITH INTERNAL VIBRATION DAMPER, ANCHOR BASE. PROVIDE FIXTURE WITH 100/33% BI-LEVEL DIMMING DRIVERS.	A	PL	4'-0"	4'-0"	5 1/2"		70 W	FIX	LED	1	9000	277 V	MV/HL	LITHONIA DSX1 LED P2 40K T5W MVOLT LUMARK MCGRAW-EDDISON
S3	SITE LUMINAIRE, DIE-CAST ALUMINUM HOUSING WITH INTEGRAL HEAT SINK WITH THERMOSET POWDER COATED FINISH, TYPE IV MEDIUM DISTRIBUTION. COLOR SELECTION BY ARCHITECT FROM STANDARD COLORS. IP 65 LISTED. LAMP SUPPORT. 4" SQUARE STRAIGHT STEEL POLE WITH INTERNAL VIBRATION DAMPER, ANCHOR BASE. PROVIDE FIXTURE WITH 100/33% BI-LEVEL DIMMING DRIVERS.	A	PL	4'-0"	4'-0"	5 1/2"		70 W	FIX	LED	1	8700	277 V	MV/HL	LITHONIA DSX1 LED P2 40K T4M MVOLT LUMARK MCGRAW-EDDISON
S3A	DOUBLE HEAD (MOUNTED IN 180 DEGREE CONFIGURATION) SITE LUMINAIRE, DIE-CAST ALUMINUM HOUSING WITH INTEGRAL HEAT SINK WITH THERMOSET POWDER COATED FINISH, TYPE IV MEDIUM DISTRIBUTION. COLOR SELECTION BY ARCHITECT FROM STANDARD COLORS. IP 65 LISTED. LAMP SUPPORT. 4" SQUARE STRAIGHT STEEL POLE WITH INTERNAL VIBRATION DAMPER, ANCHOR BASE. PROVIDE FIXTURE WITH 100/33% BI-LEVEL DIMMING DRIVERS.	A	PL	4'-0"	4'-0"	5 1/2"		140 W	FIX	LED	1	8700	277 V	MV/HL	LITHONIA DSX1 LED P2 40K T4M MVOLT LUMARK MCGRAW-EDDISON
S4	SITE LUMINAIRE, DIE-CAST ALUMINUM HOUSING WITH INTEGRAL HEAT SINK WITH THERMOSET POWDER COATED FINISH, TYPE II MEDIUM DISTRIBUTION. COLOR SELECTION BY ARCHITECT FROM STANDARD COLORS. IP 65 LISTED. LAMP SUPPORT. 4" SQUARE STRAIGHT STEEL POLE WITH INTERNAL VIBRATION DAMPER, ANCHOR BASE. PROVIDE FIXTURE WITH 100/33% BI-LEVEL DIMMING DRIVERS.	A	PL	4'-0"	4'-0"	5 1/2"		70 W	FIX	LED	1	8900	277 V	MV/HL	LITHONIA DSX1 LED P2 40K T2M MVOLT LUMARK MCGRAW-EDDISON
WL1	EXTERIOR WALL PACK LED. DIE CAST ALUMINUM HOUSING, FULLY GASKETED,IP-65 RATED. COORDINATED FINISH WITH ARCHITECT. COORDINATE INSTALLATION HEIGHT WITH ARCHITECTURAL ELEVATIONS.	G	WL	1'-4"	10"	10 1/2"		35 W	FIX	LED	1	3000	277 V	0-10V	LITHONIA WST ECLIPSE LIGHTING WM MCGRAW EDISON IST

LIGHTING SEQUENCE OF OPERATION

NOTES:
1. (L##) DENOTES THE LIGHTING SEQUENCE OF OPERATIONS FOR THIS SPACE.
2. VERIFY AND COORDINATE ALL TIME CLOCK SETTINGS WITH OWNER PRIOR TO FINAL PROGRAMMING.
3. THE LIGHTING CONTROL SYSTEM SHALL MEET THE REQUIREMENTS OF 2018 INTERNATIONAL ENERGY CONSERVATION CODE.

PLAN ID	LIGHTING SWITCHED
(LE1)	SEQUENCE: ASTRONOMICAL TIME CLOCK WITH PHOTOCELL CONTROL ON: LIGHTS ARE TURNED ON 30 MINUTES BEFORE DUSK OR WHEN AVAILABLE DAYLIGHT IS LESS THAN 50 LUX. ADJUST: CANOPY AND PARKING LOT LIGHTING SHALL REDUCE TO 33% FROM 1 HOUR AFTER BUILDING CLOSES TO ONE HOUR BEFORE BUILDING OPENING. OFF: LIGHTS ARE TURNED OFF 30 MINUTES AFTER DAWN OR WHEN AVAILABLE DAYLIGHT IS GREATER THAN 5 FOOT CANDLES.

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Illinois Design Firm Registration #184007637-0014

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0 1 2 3

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LOYOLA MEDICINE
1870
AD MAJOREM DEI GLORIAM

Project
LOYOLA SOUTHWEST AMBULATORY CARE CENTER
179th and LaGrange Road
Tinley Park, IL 60487

Prepared For
LOYOLA UNIVERSITY HEALTH SYSTEMS
2160 South 1st Avenue, Maywood, IL 60153

Hellmuth, Obata & Kassabaum, Inc.
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Chicago, IL 60604 USA
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In Association with

IMEG Corporation
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Eriksson Engineering Associates, Ltd.
Civil Engineering, Landscape Design
145 Commerce Drive, Suite A
Grayslake, IL 60030

Key Plan

Professional Seals

9/10/2021 for permit

LICENSED PROFESSIONAL ENGINEER
ANTHONY J. VAITSAITT
062.066829
STATE OF ILLINOIS

No.	Description	Date

Project No: Project Number

Sheet Title

ELECTRICAL SITE PLAN COVERSHEET

Original is 48 x 36. Do not scale contents of this drawing.

Sheet Number

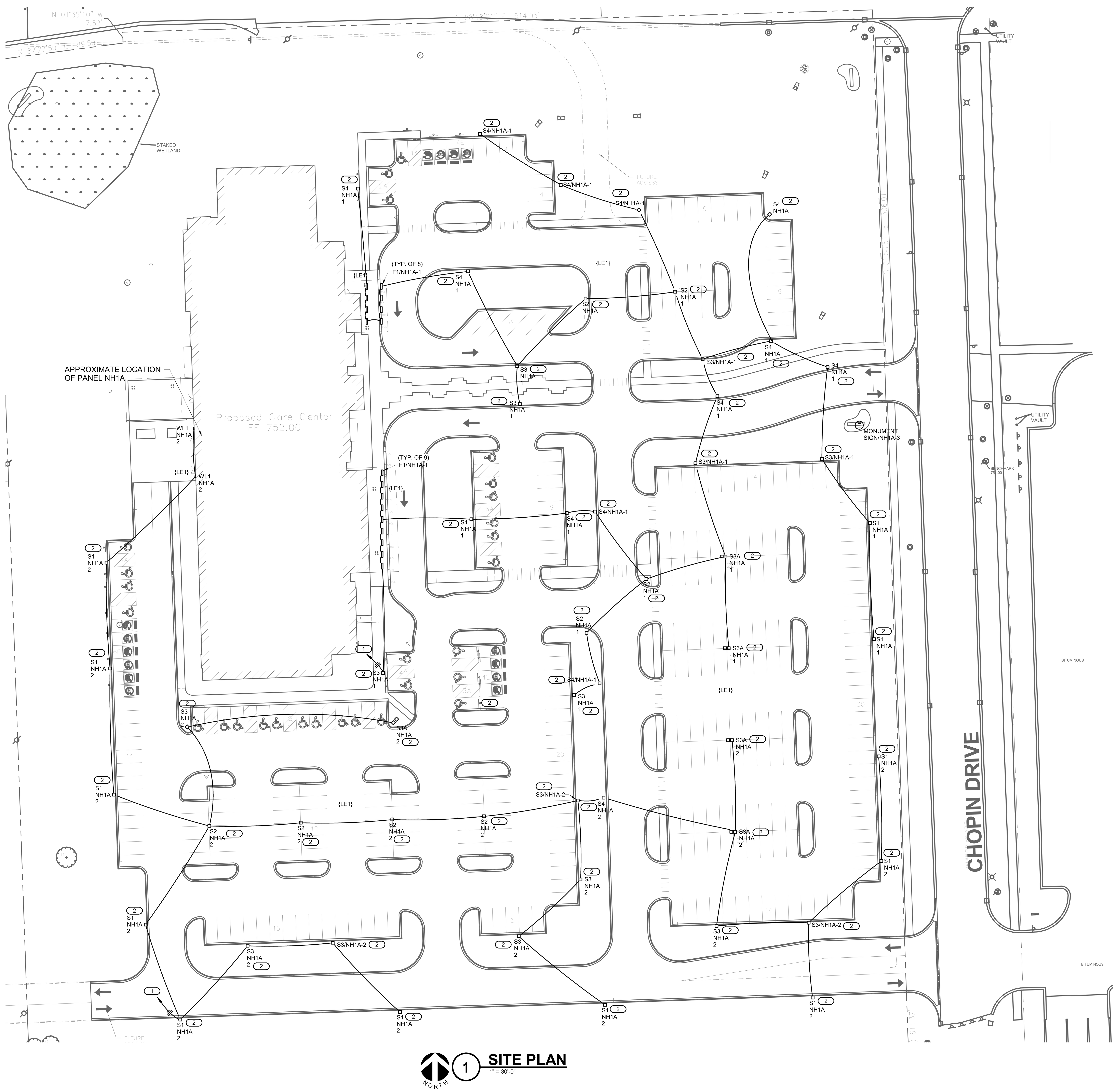
ES000

SHEET NOTES:

1. ALL NORMAL LIGHTING/POWER CIRCUITS IN THIS AREA CORRESPOND TO PANEL 'NH1A', UNLESS NOTED OTHERWISE.
2. ALL CONDUCTORS SHALL BE COPPER WITH THHN/THWN TYPE INSULATIONS.
3. ALL CONDUITS BELOW GRADE SHALL BE PVC. ALL CONDUITS ABOVE GRADE IN INTERIOR SPACES SHALL BE EMT, AND RMC FOR EXTERIOR SPACES.

KEYNOTES: (#)

1. CONNECT TO A SPARE 20A/1P CIRCUIT BREAKER IN PANEL NH1A USING 2#8 AND 1#8 GROUND IN A 1" CONDUIT. ROUTE FIXTURE THROUGH A DEDICATED POWER SUPPLY CONNECTED INTO THE LIGHTING CONTROL SYSTEM.
2. MOUNT FIXTURE ON 20' POLE WITH 2' BASE, SO THAT FIXTURE MOUNTING HEIGHT IS 22' REFER TO 3/ES000 FOR EXTENDED POLE BASE DETAIL.



1 **SITE PLAN**
1" = 30'-0"

LOYOLA MEDICINE
AD · MAJOREM · DEI · GLORIAM
1870

Project
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Key Plan

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Project No: Project Number

Sheet Title
ELECTRICAL SITE PLAN

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Sheet Number
ES001

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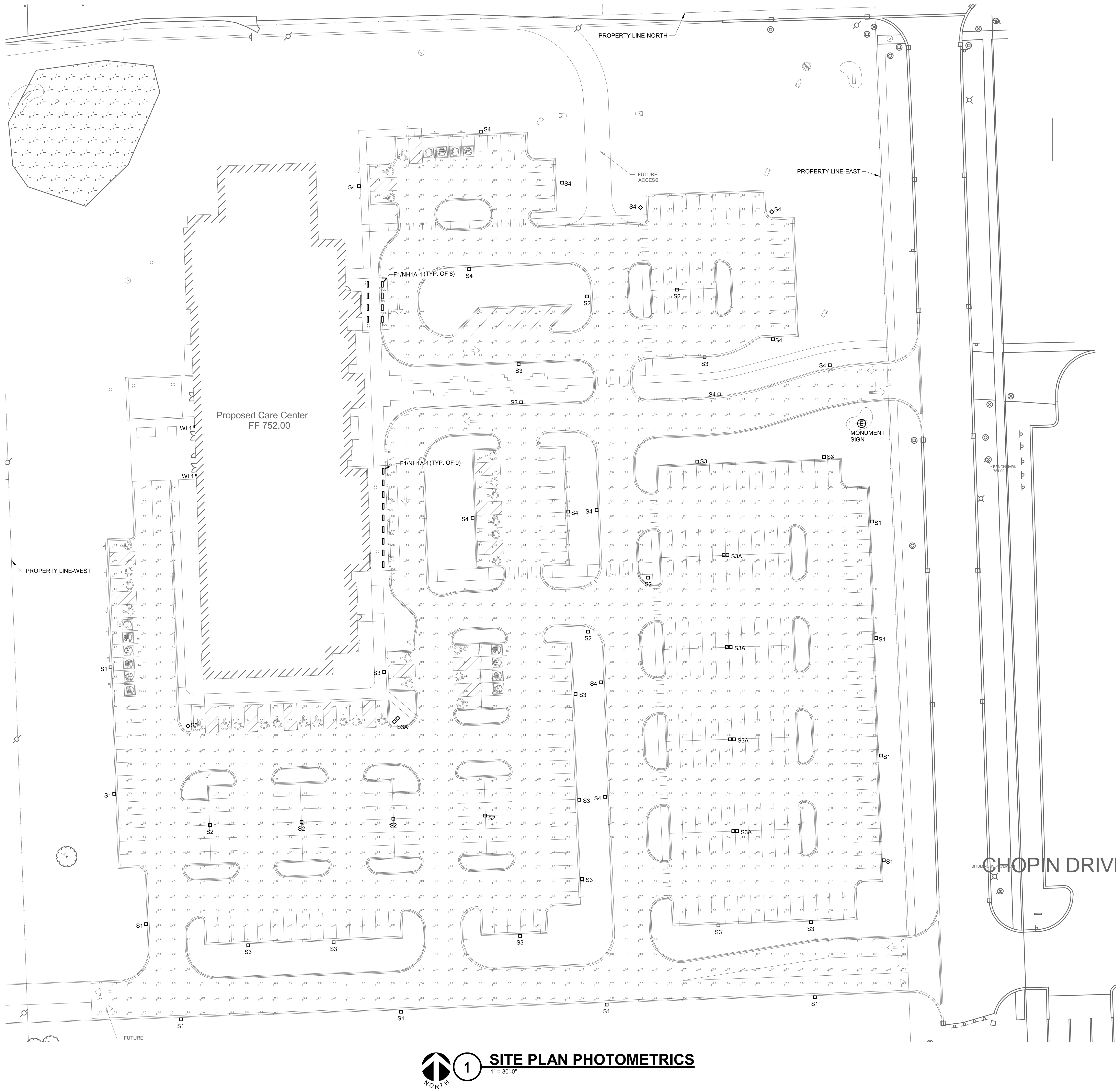
STATISTICS						
DESCRIPTION	SYMBOL	AVG	MAX	MIN	MAX/MIN	AVG/MIN
PARKING LOT	+	1.7 fc	5.3 fc	0.2 fc	26.5:1	8.5:1
PROPERTY LINE - EAST	x	0.1 fc	1.1 fc	0.0 fc	N/A	N/A
PROPERTY LINE - NORTH	x	0.0 fc	0.0 fc	0.0 fc	N/A	N/A
PROPERTY LINE - WEST	x	0.0 fc	0.0 fc	0.0 fc	N/A	N/A



1 SITE PLAN PHOTOMETRICS

1" = 30'-0"

NORTH

Project

LOYOLA SOUTHWEST AMBULATORY CARE CENTER

179th and LaGrange Road
Tinley Park, IL 60487

Prepared For

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Key Plan

Professional Seals

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No.	Description	Date

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Illinois Design Firm Registration #184007637-0014

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Project No: Project Number

Sheet Title

ELECTRICAL SITE PLAN PHOTOMETRICS

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Sheet Number

ES002

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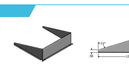

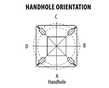

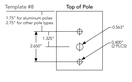

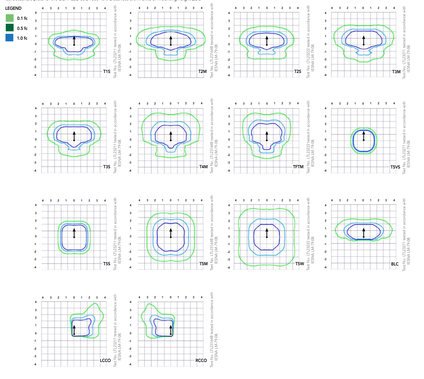

D-Series Size 1
LED Area Luminaire
Introduction
Ordering Information

Ordering Information
Options
Drilling

Photometric Diagrams

Performance Data

Performance Data

Performance Data

Performance Data

FEATURES & SPECIFICATIONS

Seem 6

SPECIFICATIONS
ORDERING

Ordering Guide
Linear Circuitry, Zones & Factory Options

Ordering Guide Worksheet
Linear Circuitry, Zones & Factory Options

LOYOLA MEDICINE

Project
LOYOLA SOUTHWEST AMBULATORY CARE CENTER
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Key Plan

Professional Seals

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Sheet Title

ELECTRICAL SITE PLAN CUTSHEETS

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Sheet Number

ES003

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WST LED

Architectural Wall Sconce

Buy American

Catalog Number

Notes

Type WL1

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

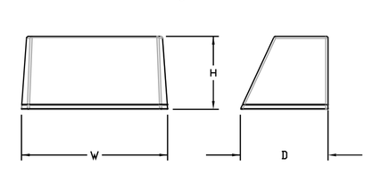
Luminaire

Height: 8-1/2" (21.59 cm)

Width: 17" (43.18 cm)

Depth: 10-3/16" (25.9 cm)

Weight: 20 lbs (9.1 kg)

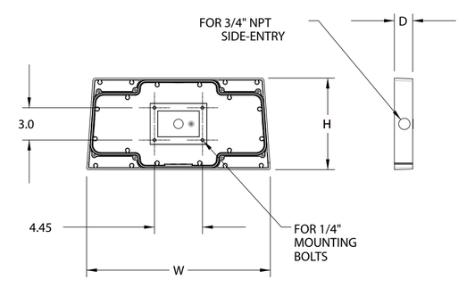


Optional Back Box (PBBW)

Height: 8.49" (21.56 cm)

Width: 17.01" (43.21 cm)

Depth: 1.70" (4.32 cm)

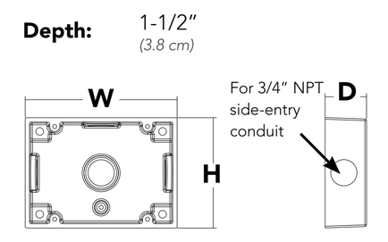


Optional Back Box (BBW)

Height: 4" (10.2 cm)

Width: 5-1/2" (14.0 cm)

Depth: 1-1/2" (3.8 cm)



A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background[1]

To learn more about A+, visit www.acuitybrands.com/aplus.

See ordering tree for details.

A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: WST LED P1 40K VF MVOLT DDBTXD

Series	Performance Package	Color temperature	Distribution	Voltage	Mounting
WST LED	P1 1,500 Lumen package	27K 2700 K	VF Visual comfort forward throw	MVOLT[1]	**Shipped included**
	P2 3,000 Lumen package	30K 3000 K	VW Visual comfort wide	120[2]	(blank) Surface mounting bracket
	P3 6,000 Lumen package	40K 4000 K		208[2]	**Shipped separately**
		50K 5000 K		240[2]	BBW Surface-mounted back box[3]
				277[2]	PBBW Premium surface-mounted back box[3,4]
				347[2]	
				480[2]	

Options

Option	Description
NLTAIR2 PIR	nLIGHT AIR Wireless enabled motion/ambient sensor for 8'-15' mounting heights[5,6,7]
NLTAIR2 PIRH	nLIGHT AIR Wireless enabled motion/ambient sensor for 15'-30' mounting heights[5,6,7]
PE	Photoelectric cell, button type[8]
PER	NEMA twist-lock receptacle only (controls ordered separate)[9]
PER5	Five-wire receptacle only (controls ordered separate)[9]
PER7	Seven-wire receptacle only (controls ordered separate)[9]
PIR	Motion/Ambient Light Sensor, 8-15' mounting height[5,6]
PIR1FC3V	Motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[5,6]
PIRH	180° motion/ambient light sensor, 15-30' mounting height[5,6]
PIRH1FC3V	Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[5,6]
SF	Single fuse (120, 277, 347V)[2]
DF	Double fuse (208, 240, 480V)[2]
DS	Dual switching[10]
DMG	0-10V dimming extend out back of housing for external control (control ordered separate)[11]
E7WH	Emergency battery backup, Non CEC compliant (7W)[7]
E7WC	Emergency battery backup, CA Title 20 Noncompliant (cold, 7W)[7,12]
E7WHR	Remote emergency battery backup, CA Title 20 Noncompliant (remote 7W)[7,13]
E20WH	Emergency battery pack 18W constant power, Certified in CA Title 20 MAEDBS[7]
E20WC	Emergency battery pack -20°C 18W constant power, Certified in CA Title 20 MAEDBS[7,12]
E23WHR	Remote emergency battery backup, CA Title 20 Noncompliant (remote 20W)[7,12,14]
LCE	Left side conduit entry[15]
RCE	Right side conduit entry[15]
Shipped separately	
RBPW	Retrofit back plate[3]
VG	Vandal guard[15]
WG	Wire guard[15]

Finish (required)

Code	Finish
DDBXD	Dark bronze
DBLXD	Black
DNAXD	Natural aluminum
DWHXD	White
DSSXD	Sandstone
DDBTXD	Textured dark bronze
DBLBXD	Textured black
DNATXD	Textured natural aluminum
DWHGXD	Textured white
DSSTXD	Textured sandstone

Accessories

Ordered and shipped separately.

Catalog	Description
WSTVCPBBW DDBXD U	Premium Surface - mounted back box
WSBBW DDBTXD U	Surface - mounted back box
RBPW DDBXD U	Retrofit back plate
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V)[17]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V)[17]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V)[17]

NOTES

1. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
2. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
3. Also available as a separate accessory; see accessories information.
4. Top conduit entry standard.
5. Not available with VG or WG. See PER Table.
6. Reference Motion Sensor table.
7. Not available with 347/480V.
8. Need to specify 120, 208, 240 or 277 voltage.
9. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
10. Not available with Emergency options, PE or PER options.
11. DMG option not available with standalone or networked sensors/controls.
12. Battery pack rated for -20° to 40°C.
13. Comes with PBBW.
14. Warranty period is 3-years.
15. Not available with BBW.
16. Must order with fixture; not an accessory.
17. Requires luminaire to be specified with PER, PER5 or PER7 option. See PER Table.

Emergency Battery Operation

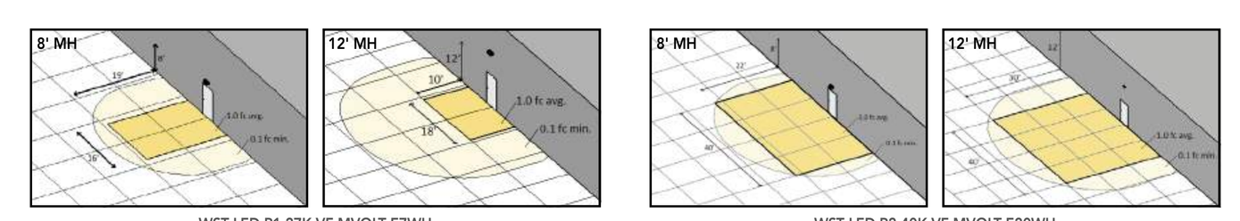
The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product.

All emergency backup configurations include an independent secondary driver with an integral relay to immediately detect AC power loss, meeting interpretations of NFPA 70/NEC 2008 - 700.16

The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time supply power is lost, per International Building Code Section 1006 and NFPA 101 Life Safety Code Section 7.9, provided luminaires are mounted at an appropriate height and illuminate an open space with no major obstructions.

The examples below show illuminance of 1 fc average and 0.1 fc minimum of the P1 power package and VF distribution product in emergency mode.

10' x 10' Gridlines
8' and 12' Mounting Height



WST LED P1 27K VF MVOLT E7WH

WST LED P2 40K VF MVOLT E20WH

LITHONIA LIGHTING COMMERCIAL OUTDOOR One Lithonia Way • Conyers, Georgia 30012 • Phone: 800-705-SERV (7378) • www.lithonia.com WST-LED Rev. 03/17/21
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Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.02
20°C	68°F	1.01
25°C	**77°F**	**1.00**
30°C	86°F	0.99
40°C	104°F	0.98

Projected LED Lumen Maintenance

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.95	>0.92	>0.87

Electrical Load

Performance package	System Watts	Current (A) 120	208	240	277	347	480
P1	11	0.1	0.06	0.05	0.04	---	---
	14	---	---	---	---	0.04	0.03
P1 DS	14	0.12	0.07	0.06	0.06	---	---
P2	25	0.21	0.13	0.11	0.1	---	---
	30	---	---	---	---	0.09	0.06
P2 DS	25	0.21	0.13	0.11	0.1	---	---
P3	50	0.42	0.24	0.21	0.19	---	---
	56	---	---	---	---	0.16	0.12
P3 DS	52	0.43	0.26	0.23	0.21	---	---

Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Ramp-up Time	Dwell Time	Ramp-down Time
*PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	3 sec	5 min	5 min
PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	3 sec	5 min	5 min

*for use with site wide Dusk to Dawn control

PER Table

Control	PER (3 wire)	PER5 (5 wire)	PER5 (5 wire) Wire 4/Wire5	PER7 (7 wire)	PER7 (7 wire) Wire 4/Wire5	PER7 (7 wire) Wire 6/Wire7
Photocontrol Only (On/Off)	Recommended	Alternate	Wired to dimming leads on driver	Alternate	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM	Will not work	Recommended	Wired to dimming leads on driver	Alternate	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM with Motion	Will not work	Alternate	Wired to dimming leads on driver	Alternate	Wired to dimming leads on driver	Wires Capped inside fixture
Futureproof*	Will not work	Alternate	Wired to dimming leads on driver	Recommended	Wired to dimming leads on driver	Wires Capped inside fixture
Futureproof* with Motion	Will not work	Alternate	Wired to dimming leads on driver	Recommended	Wired to dimming leads on driver	Wires Capped inside fixture

Recommended
Will not work
Alternate

*Futureproof means: Ability to change controls in the future.

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts.

Performance Package	System Watts (MVOLT[1])	Dist. Type	27K (2700K, 70 CRI) Lumens	B	U	G	LPW	30K (3000K, 70 CRI) Lumens	B	U	G	LPW	40K (4000K, 70 CRI) Lumens	B	U	G	LPW	50K (5000K, 70 CRI) Lumens	B	U	G	LPW
P1	12W	VF	1,494	0	0	0	125	1,529	0	0	0	127	1,639	0	0	0	137	1,639	0	0	0	137
		VW	1,513	0	0	0	126	1,548	0	0	0	129	1,659	0	0	0	138	1,660	0	0	0	138
P2	25W	VF	3,163	1	0	1	127	3,237	1	0	1	129	3,469	1	0	1	139	3,468	1	0	1	139
		VW	3,201	1	0	0	128	3,276	1	0	0	131	3,512	1	0	0	140	3,512	1	0	0	140
P3	50W	VF	6,025	1	0	1	121	6,165	1	0	1	123	6,609	1	0	1	132	6,607	1	0	1	132
		VW	6,098	1	0	1	122	6,240	1	0	1	125	6,689	1	0	1	134	6,691	1	0	1	134

LITHONIA LIGHTING COMMERCIAL OUTDOOR One Lithonia Way • Conyers, Georgia 30012 • Phone: 800-705-SERV (7378) • www.lithonia.com WST-LED Rev. 03/17/21
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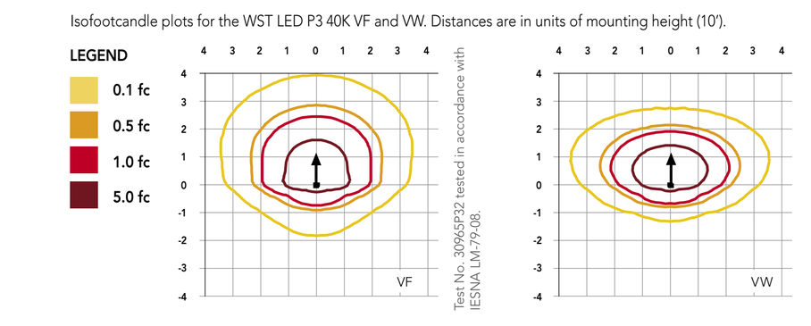
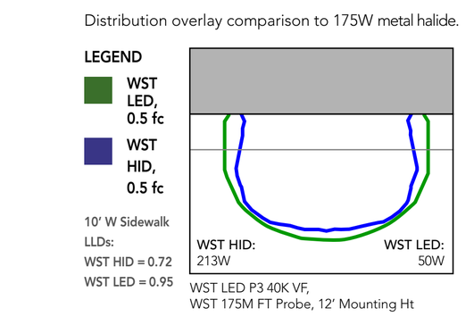
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's WST LED homepage.

Isofootcandle plots for the WST LED P3 40K VF and VW. Distances are in units of mounting height (10').



Distribution overlay comparison to 175W metal halide.



WST LED P3 40K VF, WST 175M FT Probe, 12' Mounting Ht

FEATURES & SPECIFICATIONS

INTENDED USE
The classic architectural shape of the WST LED was designed for applications such as hospitals, schools, malls, restaurants, and commercial buildings. The long life LEDs and driver make this luminaire nearly maintenance-free.

CONSTRUCTION
The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP65 rating for the luminaire.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS
Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WST LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine(s) consist of 98 high-efficacy LEDs mounted to a metal core circuit board and integral aluminum heat sinks to maximize heat dissipation and promote long life (100,000 hrs at 40°C, L87). Class 2 electronic driver has a power factor >90%, THD <20%. Easily-serviceable surge protection device meets a minimum Category B (per ANSI/IEEE C62.41.2).

INSTALLATION
A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections.

LISTINGS
CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. PIR and back box options are rated for wet location. Rated for -30°C to 40°C ambient.

DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

BUY AMERICAN
This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FARS, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY
5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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LOYOLA MEDICINE
AD • MAIOREM • DEI • GLORIAM 1870

Project
LOYOLA SOUTHWEST AMBULATORY CARE CENTER
179th and LaGrange Road
Tinley Park, IL 60487

Prepared For
LOYOLA UNIVERSITY HEALTH SYSTEMS
2160 South 1st Avenue, Maywood, IL 60153

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In Association with

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Structural, Mechanical, Electrical, Plumbing, Fire Protection, Technology, Engineering and Medical Equipment Planning
1100 Warrenville Road, Suite 400W
Naperville, IL 60563

Eriksson Engineering Associates, Ltd.
Civil Engineering, Landscape Design
145 Commerce Drive, Suite A
Grayslake, IL 60030

Key Plan

Professional Seals

LICENSED PROFESSIONAL ENGINEER
ANTHONY J. VANSANT
062.066829
STATE OF ILLINOIS

No.	Description	Date

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Illinois Design Firm Registration #184007637-0014

REFERENCE SCALE IN INCHES
0 1 2 3

Project No. Project Number

Sheet Title

ELECTRICAL SITE PLAN CUTSHEETS

Original is 48 x 36. Do not scale contents of this drawing.

Sheet Number

ES004

9/10/2021 6:42:58 PM

Memorandum

TO: Mr. Seth Konkey
Loyola University Health System

Mr. Kent Davidson
HOK

FROM: Stephen B. Corcoran, P.E., PTOE
Director of Traffic Engineering

DATE: September 15, 2021

RE: Parking Demand Study
Loyola University Health System
Tinley Park, Illinois

Eriksson Engineering Associates, Ltd. (EEA) was retained by Loyola University Health System (LUHS) to conduct a parking study for their proposed medical facility at the southeast corner of LaGrange Road (US 45) and 179th Street in Tinley Park, Illinois. LUHS is planning to build a new 70,995 square foot medical building with 330 parking spaces. The purpose of this memorandum was to assess the parking needs and requirements of the development.

Proposed Parking Supply

The development plan for the site shows a total of 330 parking spaces including 28 accessible and 14 electric vehicle recharging parking spaces.

Tinley Park Parking Requirements

The parking requirements for the project are based on the Village of Tinley Park Zoning Code and its parking requirements for medical and dental offices. The required parking is based on the anticipated staffing and the number of offices, exam, or treatment rooms. The resulting zoning code requirement is 406 spaces (see **Table 1)**. The proposed site plan provides 330 parking spaces which is less than Tinley Park's parking requirement of 406 spaces. A parking variation 76 (18%) spaces is required.

Table 1
Tinley Park Zoning Code Requirements

Use	Sized	Tinley Park Zoning Code Requirement	Required Parking
Medical or Dental Office	83 exam/treatment rooms 20 offices 35 work stations 130 employees	Two (2) spaces for each office, examination room, or treatment room, plus one (1) space for each employee	**406 spaces**

The code requirement for offices is based on now outdated healthcare practice of doctors seeing patients in their office after the exam to discuss diagnoses or treatments. The current healthcare model uses technology that allows the doctor/staff to perform these functions in the exam rooms.

Since the offices and workstations (55 in total) in the proposed project are only for the use of the doctors and staff and do not have space for a consultation with patients. The employees at these locations are already accounted for in the one parking space per employee requirement. As a result, the zoning code over estimates the parking demand by 110 spaces (55 office/work stations x 2 spaces for each). If the parking requirement was adjusted this factor, the overall parking need would be 296 spaces which is less than the proposed supply.

National Parking Data

Two national sources for medical office parking data were reviewed to estimate the parking demand for the building. The Institute of Transportation of Engineers' publication Parking Generation, 5th Edition provides parking demand data on medical offices and urgent care centers from around the country. Two other studies of medical offices and cancer centers were conducted by Walker Parking Consultants. **Table 2** summarizes the anticipated parking demand based on these sources which is less than the village zoning code requirements. The ITE data indicates that 225 spaces and the Walker data shows 229 parking spaces are needed. Copies of the data calculations and studies are included in the **Appendix**.

Table 2
National Parking Requirements

Use	Size (sq. ft.)	ITE	Walker
Urgent Care	3,585	5	187
Medical Office(1)	46,045	220	
Imaging	8,300		
Cancer Center(2)	13,065		42
Totals	**70,995**	**225**	**229**

(1) ITE Land Use Code 720 – Medical and Dental Offices
(2) ITE Land Use Code 650 – Urgent Care

Recommendations

Table 3 shows the parking demand summary for the medical facility based on the previously mentioned sources. EEA's recommendation is to provide 330 parking spaces on the site which is 44% higher than the national demand estimates. It provides 130 spaces for all the staff and 200 spaces for patients.

Table 3
Parking Requirement Summary

Source	Required Parking	Parking Ratio
Tinley Park Zoning Code	406	5.72
Proposed Supply	**330**	**4.65**
Walker Parking Data	229	3.22
ITE Data	225	3.17

Conclusions

This parking study reviewed the parking requirements and needs of a new medical facility at the southwest corner of US 45 and 179th Street in Tinley Park, Illinois. The results of the study are summarized below:

1. The proposed medical facility will be 70,995 square feet with 83 exam/treatment rooms, 20 offices, 35 work stations, 130 employees.
2. The Village of Tinley Park's zoning code requires a total of 406 parking spaces and a variation of 76 spaces is requested.
3. National parking data show the estimated demand to be 225 to 229 vehicles.
4. A total of 330 parking spaces including 28 accessible spaces and 14 electric vehicle recharging parking spaces will adequately serve the parking needs of the development.

ERIKSSON ENGINEERING ASSOCIATES, LTD.

Appendix

- **ITE Parking Calculations**
- **Walker Parking Surveys**
    - **Medical Office**
    - **Canter Centers**
- **Site Plan**

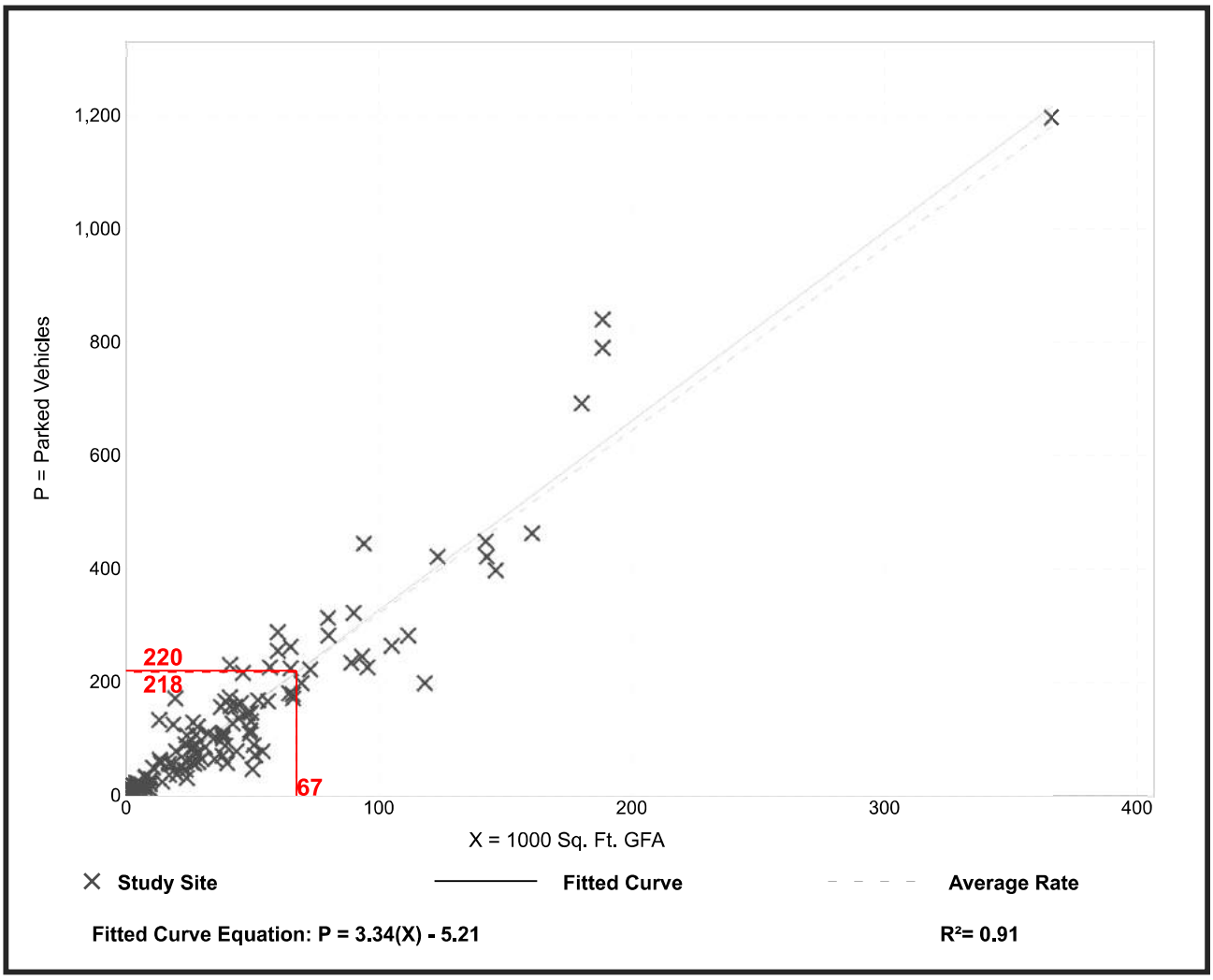
Medical-Dental Office Building
(720)

Peak Period Parking Demand vs: **1000 Sq. Ft. GFA**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **9:00 a.m. - 4:00 p.m.**
Number of Studies: 117
Avg. 1000 Sq. Ft. GFA: 46

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
3.23	0.96 - 10.27	2.73 / 4.59	3.04 - 3.42	1.05 (33%)

Data Plot and Equation



Parking Generation Manual, 5th Edition ● Institute of Transportation Engineers

Free-Standing Emergency Room
(650)

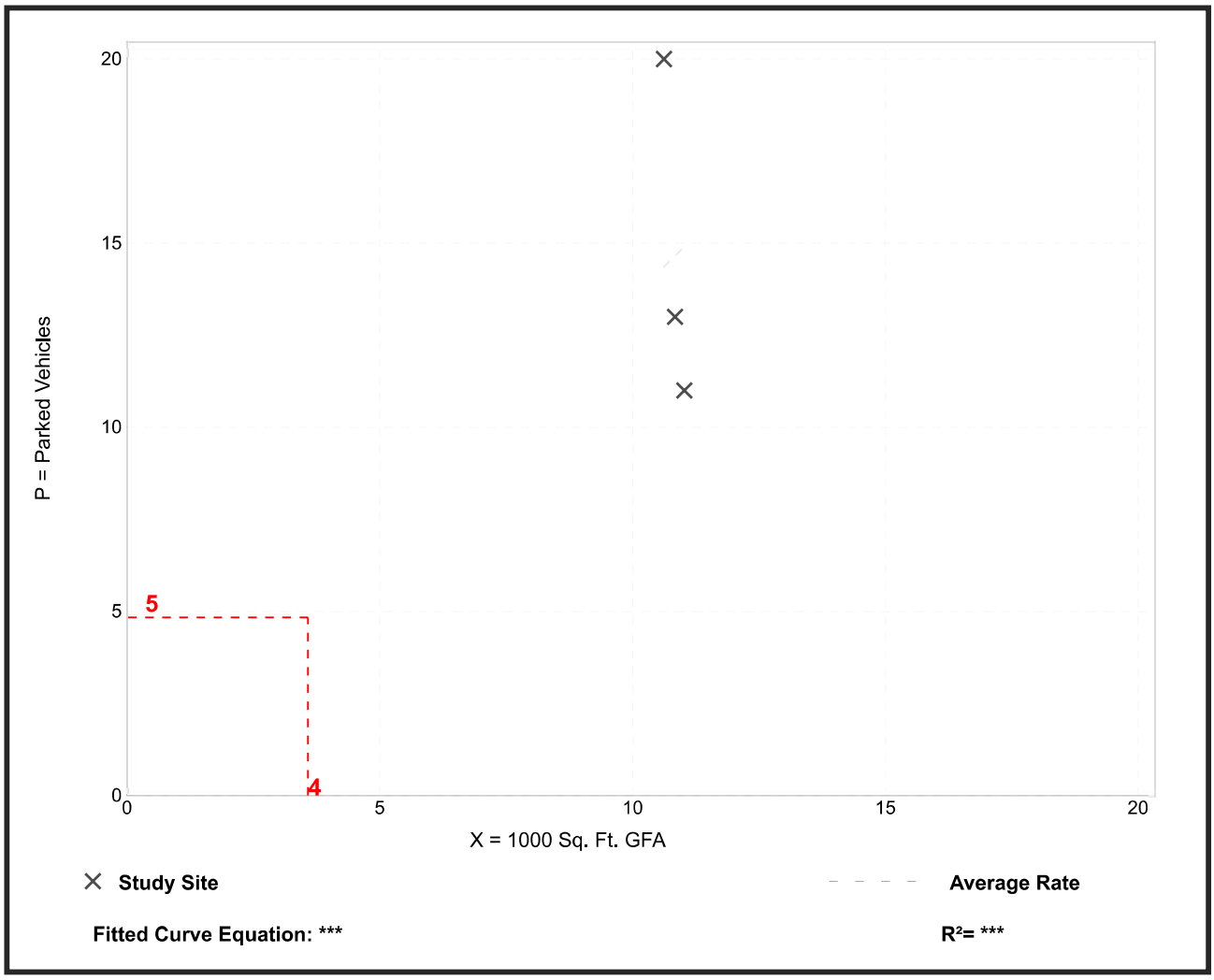
Peak Period Parking Demand vs: **1000 Sq. Ft. GFA**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **10:00 a.m. - 5:00 p.m.**
Number of Studies: 3
Avg. 1000 Sq. Ft. GFA: 11

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.35	1.00 - 1.88	1.06 / 1.88	***	0.46 (34%)

Data Plot and Equation

Caution – Small Sample Size



Parking Requirements for Medical Office Buildings

RESEARCH WAS CONDUCTED WITH THE FOLLOWING KEY OBJECTIVES: COLLECT PRIMARY AND SECONDARY DATA DESCRIBING MEDICAL OFFICE BUILDING PARKING NEEDS; IDENTIFY MUNICIPAL CODE REQUIREMENTS FOR THOSE BUILDINGS SURVEYED; AND SUMMARIZE FINDINGS BY MEAN AND 85TH-PERCENTILE VALUES. PROVIDING 4.5 SPACES PER 1,000 GROSS SQUARE FEET OF BUILDING SPACE IS GENERALLY SUFFICIENT TO MEET MEDICAL OFFICE BUILDING PEAK-HOUR NEEDS.

BY JOHN W. DORSETT, AICP AND MARK J. LUKASICK

FIFTY MEDICAL OFFICE BUILDINGS (MOBs) located throughout the United States were studied to determine their parking requirements. Following is a summary of key findings and conclusions:

- A total of 4.5 parking spaces per 1,000 gross square feet (GSF) of building area should be provided for MOBs. This recommendation includes an effective supply cushion of spaces; this cushion is equal to about 10 percent of the supply and is necessary for a number of reasons, including but not limited to user convenience and to compensate for the temporary loss of spaces due to construction, maintenance and snow removal.
- The number of cars parked at MOBs during the 11 a.m. peak hour typically falls short of both the parking supplies and the number of parking spaces required by zoning ordinances.
  - This suggests that most zoning ordinances require more parking spaces than most MOBs need.
  - Ninety-two percent of this study's MOBs are legally required to provide more parking spaces than were occupied during the peak hour.
  - Sixty percent of this study's MOBs must comply with zoning ordinances that exceed this study's recommended parking capacity.
- The observed mean peak-hour parking accumulation rate for 50 MOBs is 3.23 spaces per 1,000 GSF of occupied building area. This is lower than the 3.53 spaces reported in the Institute of Transportation Engineers' (ITE) *Parking Generation, 3rd Edition* and the 4.11 spaces reported in ITE's *Parking Generation, 2nd Edition*.[1,2]
- The observed 85th-percentile peak-hour parking accumulation rate for 50 MOBs is 4.21 parked cars per 1,000 GSF of occupied building area.

STUDY PURPOSE

The development of MOBs continues in response to the aging population and consequent increases in demands for health care. One particular challenge for planners is to properly determine the number of parking spaces needed for MOBs. In response to this challenge, a study was conducted to document the parking requirements of MOBs. A major component of this study included new primary research.

Most municipal zoning ordinances base MOB parking requirements on the amount of GSF rather than the number of physicians, employees, or patients/visitors. This study gathers data from various MOBs, calculates parking demand ratios per 1,000 GSF and provides a database that can be used for project planning purposes. This research project had the following objectives:

- To identify and reference historical MOB peak-hour parking demand ratios;
- To create a database of MOB peak-hour parking demand ratios that employ the number of parking spaces needed per 1,000 GSF, the variable most commonly referenced by municipal codes;
- To compile a comparative list of municipal code requirements for those MOBs surveyed; and
- To summarize findings by mean and 85th-percentile values.

Meeting these objectives provides information useful to planners who project MOB parking demand.

METHODOLOGY

Prior to beginning primary research, secondary sources of data were researched. The second and third editions of *Parking Generation* contained a summary of several MOB parking demand studies. To complete the primary research, the following steps were performed:

- A sample of 50 stand-alone MOBs located throughout the United States was selected.
- The following variables were researched for each MOB:
  - city and state;
  - number of floors;
  - building GSF;
  - building occupancy rate;
  - number of suites;
  - municipal code parking requirements (number of spaces per 1,000 GSF); and
  - parking space supply.
- The number of parking spaces required by zoning ordinance was calculated.
- The supply of parking spaces was inventoried and the number of spaces provided per 1,000 GSF was calculated.
- The number of parked vehicles during the peak time of the day was counted.
- The number of spaces per 1,000 GSF was determined based on the occupied building GSF and the numbers of vehicles counted at the peak accumulation or occupancy.
- The mean and 85th percentile, by spaces per 1,000 GSF of occupied building space, were summarized for the following:
  - code requirements;
  - parking space supply; and
  - observed peak-hour parking occupancy.

ITE PARKING GENERATION RATES

ITE updated its *Parking Generation* publication in 2004. Table 1 provides a comparison between these published data and the primary data collected for this study.

Table 1. Parking ratio comparison.

	Walker data collection	ITE *Parking Generation, 3rd Edition*
Peak period	10:00 a.m.–12:00 p.m.	10:00 a.m.–12:00 p.m. 2:00 p.m.–5:00 p.m.
Number of study sites	50	18
Average size of study sites (GFA)	62,427	43,000
Average peak-period parking demand	3.23 spaces per 1,000 sf	3.53 spaces per 1,000 sf
85th-percentile parking demand	4.21 spaces per 1,000 sf	4.30 spaces per 1,000 sf
Range of rates	1.38–8.90 spaces per 1,000 sf	2.34–5.35 spaces per 1,000 sf

Note: Peak occurred mid-week.

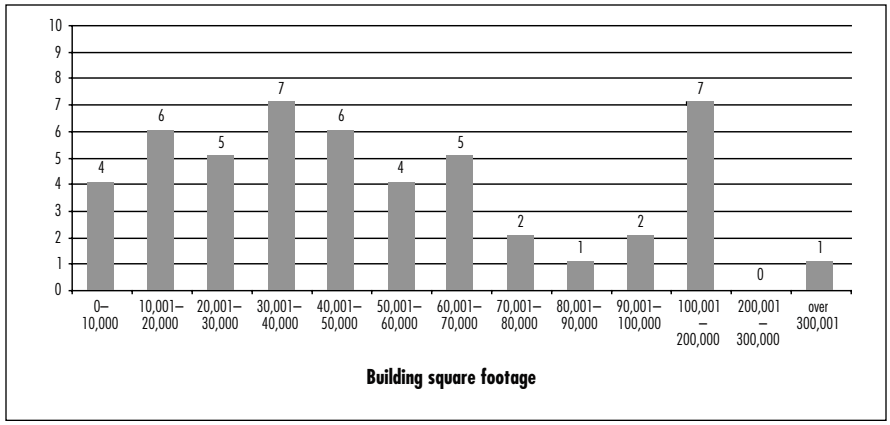


Figure 1. Number of MOBs by size.

DATA COLLECTION RESULTS

Number of Buildings by State

Fifty free-standing MBOs were surveyed on Mondays and Wednesdays from March through August, during what was believed to represent typical activity levels for MOBs. Suburban locations were selected to allow a clean computation of the parking demand ratio, without the influence of adjacent land uses present in an urban environment and without the influence of mass transit.

A convenience sample was drawn based on geographic proximity of individuals collecting the data to the MOBs. Twenty of the MOBs surveyed were located in Illinois. The remaining 30 properties surveyed were located in the following states: California (6), Florida (3), Georgia (3), Indiana (9), Massachusetts (3), Minnesota (3) and Pennsylvania (3).

The average number of parking spaces per 1,000 GSF ranged from 2.78 for the three Georgia MOBs studied to 5.60 for the three Pennsylvania MOBs surveyed. Following is the supply of parking spaces per 1,000 GSF, by state:

- Illinois: 4.47
- Florida: 5.24
- Indiana: 5.36
- Minnesota: 4.39
- California: 3.20
- Pennsylvania: 5.60
- Georgia: 2.78
- Massachusetts: 4.69

Number of Buildings by Size

The MOBs identified then were compared on the basis of occupied GSF. As shown in Figure 1, about three-fourths of the buildings surveyed were 70,000 GSF or less.

Municipal Code Requirements

Thirty-one locations, or 62 percent of those MOBs surveyed were required by code to provide 4.01 or more parking spaces per 1,000 GSF. Table 2 illustrates the number of parking spaces required by municipal zoning ordinances.

Parking Supply

Each individual MOB's parking supply was inventoried. Out of the 50 MOBs surveyed, 27 facilities, or approximately 54 percent, supplied 4.01 or more parking spaces (rounded to nearest whole number) per 1,000 GSF.

Figure 2 illustrates the number of parking spaces supplied per 1,000 GSF. Most of the facilities surveyed provided or nearly provided the number of code-required spaces. In some cases, the parking space supply fell short of the code requirement.

Parking Demand

Parking occupancy counts were taken for the MOB parking spaces to determine parking utilization during the 11 a.m. peak hour. These counts were compared to the occupied GSF of the building. The peak hour was determined based on the consultants' experience with hundreds of studies over the last 30 years. A majority of the facilities surveyed had peak-hour parking occupancies of 4.0 or fewer spaces per 1,000 GSF. This statistic fell significantly below both the legally required number of parking spaces and the observed parking supplies.

The following shows the total number of parking facilities surveyed (at the peak hour) by range of occupied parking spaces per 1,000 GSF:

Spaces per 1,000 GSF	Number of Facilities
1.00 to 2.00	7
2.01 to 3.00	18
3.01 to 4.00	14
4.01 to 5.00	9
5.01 to 6.00	0
6.01 to 7.00	1
7.01 to 8.00	0
8.01 to 9.00	1

Figure 3 shows each parking facility's parking demand in descending order. Observed peak-hour parking demand for the sample ranged from 1.38 to 8.90 spaces per 1,000 GSF. The observed mean and median peak-hour parking demand rates were 3.23 and 3.03, respectively. The 85th-percentile rate was 4.21 spaces per 1,000 GSF.

Table 2. Municipal code requirements for MOBs.

Number of parking spaces required by code	Number of facilities	
1.00 to 2.00 / 1,000 sf	1	2 percent
2.01 to 3.00 / 1,000 sf	6	12 percent
3.01 to 4.00 / 1,000 sf	12	24 percent
4.01 to 5.00 / 1,000 sf	20	40 percent
5.01 to 6.00 / 1,000 sf	6	12 percent
6.01 to 7.00 / 1,000 sf	1	2 percent
7.01 to 8.00 / 1,000 sf	2	4 percent
8.01 to 9.00 / 1,000 sf	1	2 percent
9.01 to 10.00 / 1,000 sf	1	2 percent
	50	100 percent

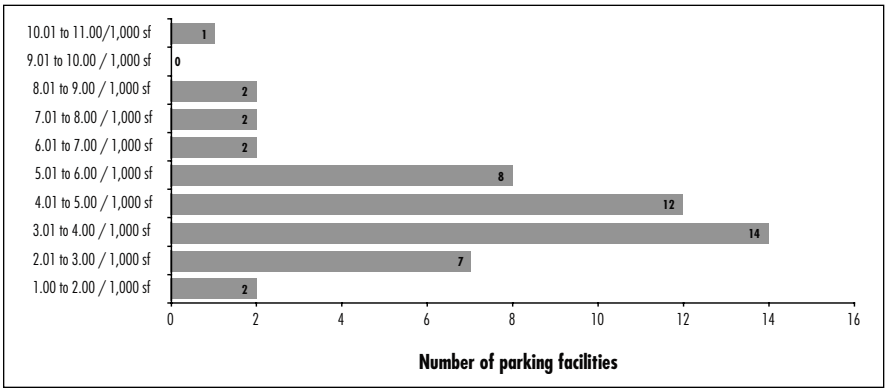


Figure 2. Parking supply provided by MOBs.

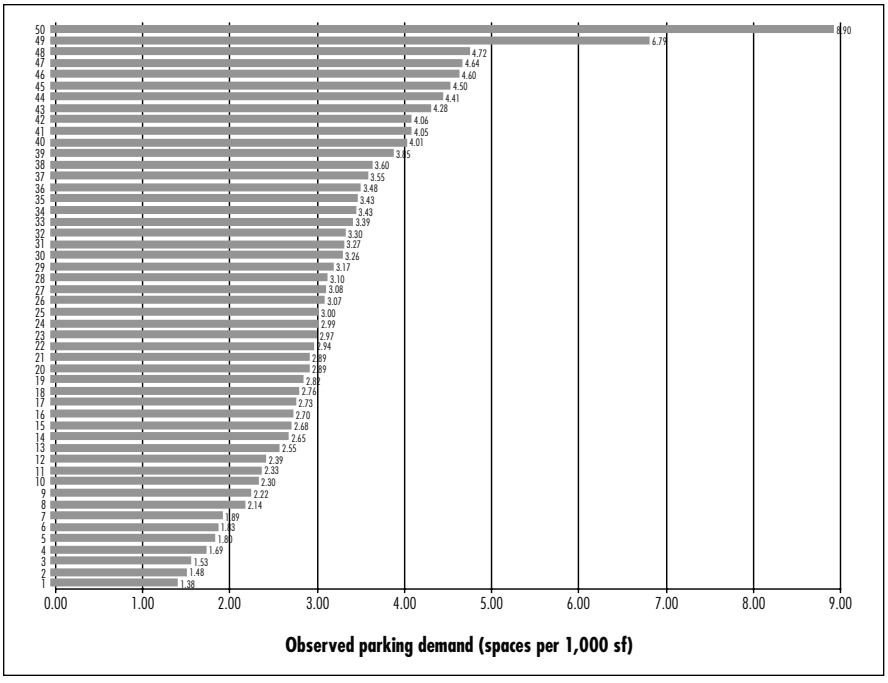


Figure 3. Observed peak-hour parking demand by MOB.

CONCLUSIONS

Fifty MOBs were surveyed as part of this research. Following is a summary of findings:

- The most common code requirement for the MOBs surveyed was 5.0 parking spaces per 1,000 GSF. Nineteen MOBs, or 38 percent of the sample, were required to provide 5.0 parking spaces per 1,000 GSF.
- The mean and median number of parking spaces provided per 1,000 GSF was 4.50 and 4.39, respectively.
- ITE calculated a mean demand of 3.53 parking spaces per 1,000 GSF (*Parking Generation*, *3rd Edition*) compared to 3.23 parking spaces per 1,000 GSF found in this study.
- ITE's 85th-percentile demand of 4.30 parking spaces per 1,000 GSF (*Parking Generation*, *3rd Edition*) is comparable to the 85th-percentile peak-hour

MEDICAL OFFICE				
Peak-hour parking spaces occupied vs. 1,000 GSF				
Occupied building area on a weekday between 10 a.m. and 12 noon				
PARKING GENERATION RATES				
Average rate	**Range of rates**	**Standard deviation**	**Number of studies**	**Average 1,000 GSF occupied building area**
3.23	1.38–8.90	1.27	50	62,427

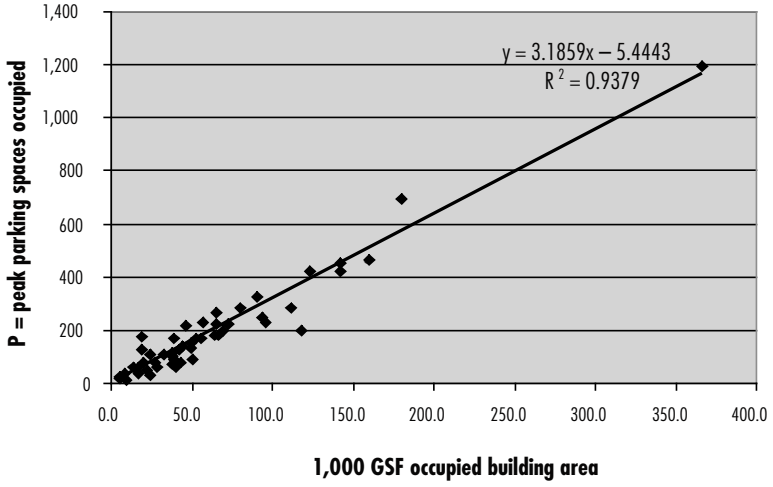


Figure 4. Data plot and statistical summary.

observation of 4.21 parking spaces per 1,000 GSF found in this study.

- Based on these findings, designing parking facilities to accommodate 4.5 spaces per 1,000 GSF of building space should be sufficient to meet the peak-hour parking demands of most medical office buildings. This recommendation is an 85th-percentile recommendation, which is consistent with other recognized and published industry standards, including the landmark November 2005 *Shared Parking* publication issued by the Urban Land Institute and the International Council of Shopping Centers. Sixty percent, or 30 of the 50 MOBs, are located in municipalities that now require more parking than the recommended 4.5 spaces per 1,000 GSF. ■

References

1. *Parking Generation, 3rd Edition*. Washington, DC, USA: Institute of Transportation Engineers (ITE), 2004.

2. *Parking Generation, 2nd Edition.* Washington, DC: ITE, 1987.

JOHN W. DORSETT, *AICP, is a senior vice president and shareholder of Walker Parking Consultants. He directs the firm's Consulting Resources Group, which specializes in parking-related engagements including access and revenue control systems, airport landside planning, financial, functional design planning, operations and traffic engineering.*

MARK J. LUKASICK *is a parking consultant with Walker Parking Consultants. He has more than 20 years of experience in hands-on parking operations and parking consulting. He may be contacted at mark.lukasick@walkerparking.com with any questions pertaining to this article.*

** Note: Opinions expressed herein are those of the authors and do not reflect official* ITE Journal *policy unless so stated.*

Parking Requirements for Outpatient Cancer Care Centers

A parking demand study of outpatient cancer centers was conducted to determine the peak period range, mean, median, and 85th percentile values of parked cars per 1,000 gross square feet (GSF) of building space. Providing 3.5 or 4.5 spaces per 1,000 GSF for medium/large (≥15,000 GSF) or small (<15,000 GSF) outpatient cancer centers, respectively, is an 85th percentile recommendation consistent with recognized and published industry standards.

BY JOHN W. DORSETT, AICP, CPP

Study Purpose

The development of cancer care centers continues in response to our aging population and consequent increased demands for health care. One particular challenge for planners is to properly determine the number of parking spaces needed without any preexisting or published data regarding parking requirements for outpatient cancer care centers. In response to this challenge, Walker Parking Consultants conducted a study documenting the parking requirements of this land use type. A major component of this study includes new primary research.

This study gathers data from various cancer centers, calculates parking demand ratios per 1,000 gross square feet (GSF), and provides a database that can be used for project planning purposes.

The following are the objectives of this research project:

- To identify and report on outpatient cancer center peak hour parking demand ratios;
- To create a database of outpatient cancer center peak hour parking demand ratios that employ the number of parking spaces needed per 1,000 GSF, the variable most commonly referenced by municipal codes; and
- To summarize findings by mean, median, and 85th percentile values.

Meeting these objectives provides information useful to planners who project outpatient cancer center parking demand.

One limitation of this study is that it focuses on outpatient cancer care center parking demand and not parking demand for other types of cancer care centers. Cancer care centers can be classified into the following three categories:

- National Cancer Institute (NCI)–designated cancer centers are institutions that are dedicated to research into more effective approaches to prevent, diagnose, and treat cancer. Most of the 67 NCI-designated cancer centers are affiliated with university medical centers, while others are freestanding centers that engage only in cancer research. Their missions typically include cancer research, clinical programs, training for researchers and caregivers, and public education and outreach.
- Community-based outpatient cancer centers, which tend to be smaller, community-based treatment centers that often range from 5,000 to 50,000 ft.^{2} and in some cases are larger. All care is provided on an outpatient basis.
- Cancer hospitals, which tend to be larger, more comprehensive treatment centers that attract patients from several hundred miles and focus on clinical treatment on both an inpatient and outpatient basis. These facilities tend to be about 250,000 ft.^{2}. Typical services include surgery, radiation therapy, chemotherapy, and supportive therapies including pain management, nutrition therapy, naturopathic medicine, oncology rehabilitation, mind-body medicine, and spiritual support.

The application of this study's results should be limited to outpatient cancer care centers and should not be used for NCI-designated cancer centers or cancer hospitals.

Methodology

This study is important to health care planners and developers because prior to this study, there were no published data regarding parking requirements for outpatient cancer centers. To complete our primary research, we performed the following steps:

- Identified 53 standalone outpatient cancer centers located throughout the United States.
- Researched the following variables for each property:

  - Freestanding location dedicated exclusively to oncology care;
  - City, state, and ZIP code;
  - Building GSF; and
  - Parking space supply.
- Calculated the number of spaces provided per 1,000 GSF.
- Counted the number of parked vehicles during the peak time of a weekday.
- Determined the number of spaces per 1,000 GSF based on the occupied building GSF and the numbers of vehicles counted at the peak accumulation or occupancy.
- Summarized, by spaces per 1,000 GSF of occupied building space, the mean, median, and 85th percentile, for the following:
  - Parking space supply; and
  - Observed peak period parking occupancy.
- Developed recommendations regarding the number of spaces to be provided by outpatient cancer care centers.

Internet searches were conducted to identify freestanding cancer care centers, which in this study are defined as centers that specialize in cancer care treatment; occupy a building that exclusively houses a cancer care center; and have adjacent parking that meets the parking needs of the cancer care center, while at the same time, is not used by occupants of adjacent buildings. Freestanding centers were identified and selected for study to protect the integrity of the data. Many cancer care centers are integrated into existing medical centers, and it is not practical, and in many cases not feasible, to accurately determine the parking requirements of these integrated centers.

The Internet search focused on metropolitan areas where Walker Parking Consultants has offices. These geographic areas were selected because of the convenient proximity offered to Walker staff members, who then performed field visits to collect the following information: (a) verification of the existence of a freestanding cancer center and confirmation of the likely integrity of the data to be collected; (b) inventory of the existing on-site parking spaces; and (c) count of the number of on-site parked cars between the hours of 10:00 a.m. to noon or 1:00 to 3:00 p.m. on a weekday.

Table 1. Number of outpatient cancer centers by size.

15,000–85,000 GSF	30
< 15,000 GSF	23

Previous studies by Walker indicate that parking demand at medical centers peaks on a weekday during the late morning hours up to the lunch hour and carries on until mid-afternoon. This was confirmed through a parking accumulation study performed at St. Vincent Center for Cancer Care, Indianapolis, IN, USA, on September 25, 2012. During this study, the numbers of parked cars were counted at 9:30 and 11:00 a.m. and 1:30 and 3:00 p.m., with little difference in the four counts.

Data Collection Results

Profile of Cancer Centers Included in This Study

Fifty-three freestanding outpatient cancer centers were included within this study. These centers range in size from 3,650 to 85,000 GSF, with properties in Arizona (1), California (3), Colorado (6), Florida (14), Illinois (8), Indiana (6), Maine (1), Massachusetts (1), Michigan (8), New Jersey (1), New York (1), and Texas (3).

The median square footage of the 53 centers is 16,076 GSF. Centers focus on outpatient cancer care, which can include patient consultations and check-ups, chemotherapy, and radiation treatments.

Number of Buildings by Size

The outpatient cancer centers identified were then compared on the basis of occupied GSF. Table 1 shows that 57 percent of the buildings surveyed occupied 15,000 or more GSF of occupied floor area, and 43 percent of the buildings surveyed were less than 15,000 GSF.

Parking Supply

Each individual outpatient cancer center's parking supply was inventoried. The mean, median, and 85th percentile number of parking spaces supplied per 1,000 square feet of GSF were 5.46, 5.02, and 7.81, respectively. Figure 1 illustrates the number of parking spaces supplied per 1,000 GSF.

Most of the facilities surveyed provide an overabundance of parking and significantly more spaces than are demanded by users. The mean, median, and 85th percentile parking occupancies recorded for the 53 properties were 55 percent, 54 percent, and 74 percent.

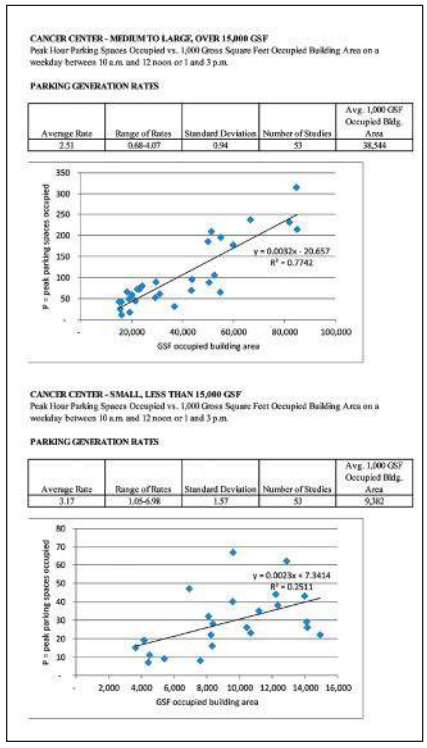


Figure 1. Data plot and statistical summary.

Parking Demand

Parking occupancy counts were recorded for the outpatient cancer center parking spaces to determine parking utilization during the peak period of 10:00 a.m. to noon or 1:00 to 3:00 p.m. Care was taken to avoid the noon lunch hour, as some employees spend their lunch hour off site and the number of patient appointments is fewer. These counts were compared with the occupied GSF of the building.

Table 2 lists the total number of parking facilities surveyed (at the peak hour) by range of occupied parking spaces per 1,000 GSF. Observed peak hour parking demand for the sample ranged from 0.68 to 6.98 spaces per 1,000 GSF. The observed mean and median peak hour parking demand rates were 2.80 and 2.76, respectively. The 85th percentile rate was 3.77 spaces per 1,000 GSF.

The data set shows a significant difference in parking generation rates depending on the size of the facility. Smaller centers, those defined as less than 15,000 GSF of

Table 2. Occupied spaces.

per 1,000 GSF	Number of Facilities
0.00 to 1.00	3
1.01 to 2.00	13
2.01 to 3.00	15
3.01 to 4.00	15
4.01 to 5.00	5
5.01 to 6.00	0
6.01 to 7.00	2

Table 3. Parked cars by size of outpatient cancer center

Type of Center	#	Ratio of Peak Period Parked Cars per 1,000 Occupied GSF		
		Mean	Median	85th Percentile
Medium/Large: 15,000–85,000 GSF	30	2.51	2.69	3.55
Small: < 15,000 GSF	23	3.17	3.08	4.44

building area, generated more parked cars per thousand square feet of GSF than medium and larger centers, those centers that exceed 15,000 GSF of building area.

Table 3 shows the mean, median, and 85th percentile statistics separated by medium/large centers and small centers.

Parking Requirements for Medical Office Buildings

Walker studies parking demand characteristics of medical office buildings as a routine course of its practice, often when it conducts hospital parking studies. Previously, Walker performed a special study of 50 medical office buildings (MOBs), and the results of this study were published by the Institute of Transportation Engineers in 2007. This study served as the basis for the recommended number of parking spaces for MOBs as documented in the second edition of *Shared Parking*, a joint publication of the Urban Land Institute (ULI) and International Council of Shopping Centers (ICSC), and an industry standard that was vetted and approved by dozens of parking and transportation consulting professionals. *Shared Parking* recommends 4.50 spaces per thousand square feet of gross floor area.[1] The observed mean peak-hour parking accumulation rate for 50 MOBs is 3.17 spaces per 1,000 GSF of occupied building area. These MOB parking generation rates are greater than those parking generation rates observed for medium and large outpatient cancer centers but comparable to the parking generation rates observed for small outpatient cancer centers.

Parking Supply at Cancer Hospitals

Although limited data on parking requirements for cancer hospitals were collected, enough information was collected to determine that cancer hospitals should be excluded from the study of outpatient cancer care centers. Five cancer hospitals operated by Cancer Treatment Centers of America (CTCA) were briefly studied, and these fit the previous profile of cancer hospitals.

Based on information obtained through the Internet, including CTCA's website and Google Maps, these facilities provide 1.80 to 2.66 spaces per thousand square feet of building area. This information suggests that this type of facility generates demand for even fewer spaces than an outpatient cancer center. Further study is recommended for this type of cancer center.

Conclusions

Fifty-three outpatient cancer centers were surveyed as part of this research. The following is a summary of findings:

- Medium- to large-sized outpatient cancer care centers, defined as those with at least 15,000 GSF of building area, generate parking demand at a rate that is less than the rate generated by the typical medical office building.
- Small outpatient cancer care centers, defined as those with less than 15,000 GSF of building area, generate parking demand at a rate that is similar to typical medical office buildings.
- An industry-standard 85th percentile-type of recommendation for medium/large and small outpatient cancer care centers is 3.5 and 4.5 parking spaces per 1,000 GSF of building area, respectively. This recommendation can be expected to provide sufficient parking for outpatient cancer centers. This recommendation includes an effective supply cushion of spaces equal to about 10 percent of the supply and is necessary for a number of reasons, including user convenience and compensation for the temporary loss of spaces due to construction, maintenance, and snow removal.
- The numbers of cars parked at outpatient cancer centers during the 10:00 a.m. to 3:00 p.m. peak hours is almost always exceeded by the number of on-site parking spaces. This suggests that most developers are building more parking spaces than most outpatient cancer centers need. The observed mean parking supply ratio for the 30 medium and large and 23 small outpatient cancer centers is 4.77 and 6.35 spaces per 1,000 GSF of occupied building area, respectively.
- The observed mean peak hour parking accumulation rate for the 30 medium and large and 23 small outpatient cancer centers is 2.51 and 3.17 spaces per 1,000 GSF of occupied building area.
- The observed 85th percentile peak hour parking accumulation rate for the 30 medium and large and 23 small outpatient cancer centers is 3.55 and 4.44 spaces per 1,000 GSF of occupied building area. ■

References

1. Smith, M.S. Urban Land Institute and International Council of Shopping Centers. *Shared Parking*, Second Edition, 2005.

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Table 4. Outpatient Cancer Center Statistical Data

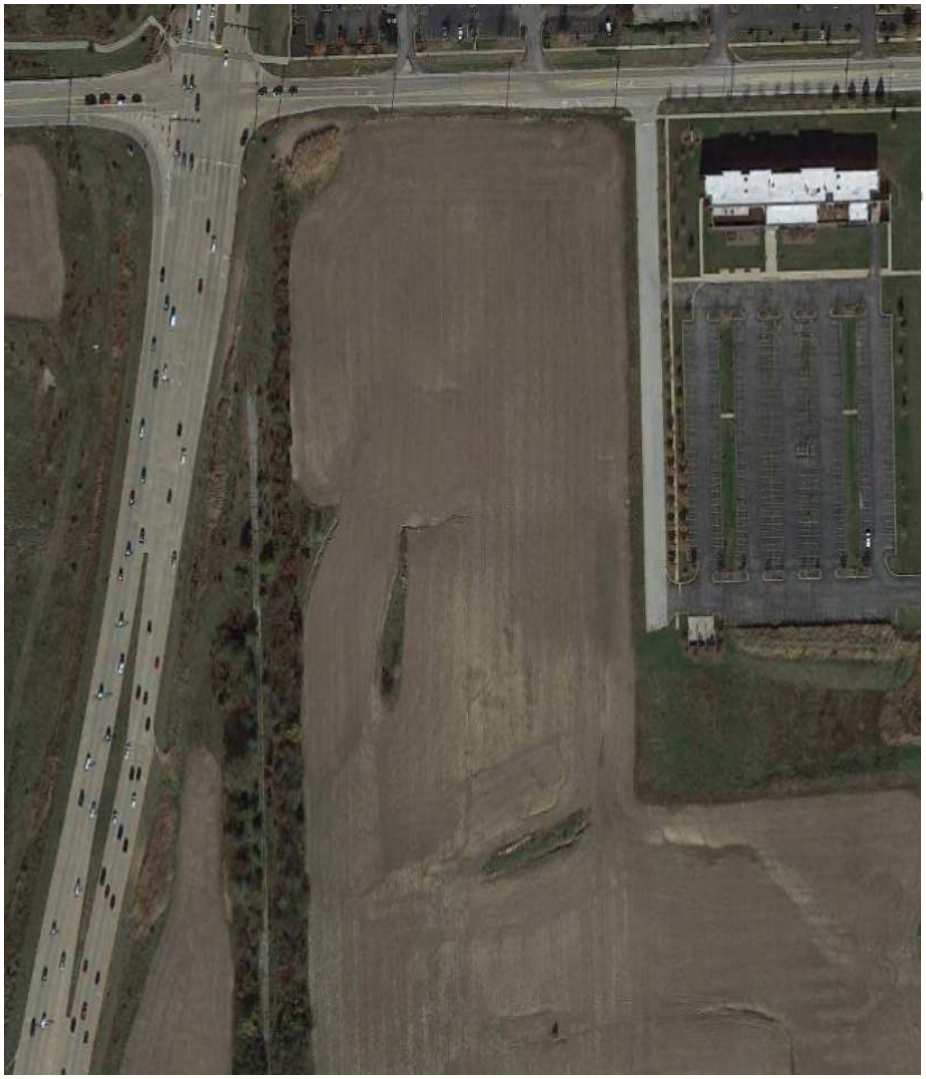
#	Cancer Ctr. State	Sq. Ft.	Source	# Pkg. Spaces	Spaces/ ksf*	Occupancy	Cars/ksf	Count Date	Time of Day	% Occupancy
1	New Jersey	85,000	Assessor's Office	264	3.11	214	2.52	10/11	10:15	81%
2	Massachusetts	84,678	Assessor's Office	550	6.50	315	3.72	10/15	11:00	57%
3	Arizona	82,000	Facility website	409	4.99	231	2.82	11/1	14:00	56%
4	Illinois	66,655	Assessor's Office	416	6.24	237	3.56	10/11	13:00	57%
5	Maine	59,894	Assessor's Office	244	4.07	177	2.96	10/17	11:00	73%
6	Michigan	55,000	Online ad	230	4.18	195	3.55	10/9	15:00	85%
7	Illinois	54,838	Assessor's Office	130	2.37	65	1.19	10/18	15:00	50%
8	Indiana	52,540	Assessor's website	189	3.60	105	2.00	10/8	14:45	56%
9	Indiana	51,327	Assessor's Office	346	6.74	209	4.07	9/25	11:00	60%
10	Florida	50,426	Assessor's website	391	7.75	88	1.75	10/11	14:00	23%
11	New York	50,000	Facility website	284	5.68	185	3.70	10/10	13:00	65%
12	Michigan	43,664	Assessor's Office	184	4.21	95	2.18	10/23	10:00	52%
13	Colorado	43,460	Assessor's Office	383	8.81	69	1.59	10/11	11:00	18%
14	Illinois	36,842	Assessor's Office	92	2.50	31	0.84	10/12	11:15	34%
15	Michigan	31,068	Assessor's Office	88	2.83	61	1.96	10/23	10:30	69%
16	Michigan	29,539	Assessor's website	99	3.35	89	3.01	10/9	10:15	90%
17	Indiana	29,307	Assessor's Office	81	2.76	52	1.77	10/23	10:00	64%
18	Illinois	24,173	Assessor's Office	112	4.63	80	3.31	10/17	13:45	71%
19	Colorado	23,105	Assessor's Office	118	5.11	72	3.12	10/19	11:15	61%
20	Florida	22,216	Assessor's Office	134	6.03	72	3.24	10/24	10:30	54%
21	Florida	21,503	Assessor's Office	126	5.86	44	2.05	10/24	14:30	35%
22	California	20,100	Assessor's website	74	3.68	59	2.94	10/10	10:30	80%
23	Indiana	19,928	Assessor's Office	100	5.02	55	2.76	10/10	10:00	55%
24	Colorado	19,254	Assessor's Office	97	5.04	17	0.88	10/11	13:30	18%
25	Texas	19,000	Houston Chronicle	112	5.89	49	2.58	10/9	11:45	44%
26	Michigan	18,148	Assessor's Office	108	5.95	66	3.64	10/23	10:00	61%
27	Illinois	16,076	Assessor's Office	14	0.87	11	0.68	10/17	13:30	79%
28	Indiana	16,000	Architect factsheet	118	7.38	42	2.63	10/11	10:00	36%
29	Texas	15,514	Costar	53	3.42	25	1.61	10/9	11:00	47%
30	Michigan	15,061	Assessor's Office	68	4.51	42	2.79	10/23	15:00	62%
31	Michigan	14,929	Assessor's Office	155	10.38	22	1.47	10/23	14:45	14%
32	Colorado	14,142	Assessor's Office	71	5.02	26	1.84	10/18	13:15	37%
33	Michigan	14,100	Assessor's Office	64	4.54	29	2.06	10/9	11:00	45%
34	Illinois	13,977	Assessor's Office	112	8.01	43	3.08	10/18	11:00	38%
35	Colorado	12,882	Assessor's Office	85	6.60	62	4.81	10/11	14:15	73%
36	Indiana	12,340	Assessor's Office	71	5.75	38	3.08	10/10	11:45	54%
37	Florida	12,220	Assessor's website	61	4.99	44	3.60	10/11	14:30	72%
38	Colorado	11,185	Assessor's Office	67	5.99	35	3.13	10/11	13:15	52%
39	Illinois	10,681	Assessor's website	101	9.46	23	2.15	10/10	12:30	23%
40	Texas	10,444	Assessor's Office	46	4.40	26	2.49	10/24	11:30	57%
41	Florida	9,600	Assessor's website	83	8.65	67	6.98	10/22	10:00	81%
42	Florida	9,579	Assessor's Office	77	8.04	40	4.18	10/24	11:15	52%
43	Florida	8,372	Assessor's website	55	6.57	28	3.34	10/19	11:15	51%
44	Florida	8,324	Assessor's Office	31	3.72	16	1.92	10/22	14:00	52%
45	Florida	8,249	Assessor's Office	42	5.09	22	2.67	10/22	11:00	52%
46	Florida	8,104	Assessor's website	23	2.84	32	3.95	10/23	11:15	139%
47	California	7,600	Assessor's website	28	3.68	8	1.05	10/10	11:00	29%
48	Florida	6,923	Assessor's website	52	7.51	47	6.79	10/19	10:45	90%
49	Florida	5,401	Assessor's Office	25	4.63	9	1.67	10/24	13:15	36%
50	California	4,500	Assessor's website	19	4.22	11	2.44	10/10	10:00	58%
51	Florida	4,416	Assessor's website	22	4.98	7	1.59	10/11	14:45	32%
52	Florida	4,168	Assessor's website	42	10.08	19	4.56	10/19	11:45	45%
53	Illinois	3,650	Assessor's website	40	10.96	15	4.11	10/10	10:15	38%

* ksf = 1,000 square feet

Loyola SW ACC Medical Facility

Traffic Study

Tinley Park, Illinois



Prepared For:

LOYOLA MEDICINE

Prepared by:

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1 – INTRODUCTION AND EXISTING CONDITIONS

Eriksson Engineering Associates, Ltd. was retained by Loyola University Health System. to conduct a traffic impact study for their proposed medical facility in Tinley Park, Illinois. It will be located on the southeast corner of 179th Street and US 45. The purpose of the study was to observe the existing traffic patterns around the site, determine the traffic characteristics of the proposed development, and develop access recommendations.

Site Location and Area Land-Use

The proposed medical facility will be located on the vacant land on the southeast corner of 179th Street and US 45 in Tinley Park, Illinois. It is bounded by LaGrange Road (US 45) to the west, 179th Street to the north, and the Moraine Valley Community College Southwest Education Center to the east Additional vacant land is south of the site.

Land uses around the site include a commercial shopping center located north of the site. A community college, Moraine Valley Community College, is located east of the site. Vacant land is located to the west across US 45 and south to 183rd Street.

Figure 1 illustrates the site location, surrounding land-uses, and area roadways.

Roadway Characteristics

A description of the area roadways around the site is provided below:

LaGrange Road (US 45) is a six lane north-south Strategic Regional Arterial (SRA) road extending through Tinley Park. There are three travel lanes in each direction. At the signalized intersections with 179th Street and 183rd Street, there are separate left-turn (duals northbound and single southbound and right-turn lanes are provided (except at 179th Street). It is under the jurisdiction of the Illinois Department of Transportation (IDOT) and has a speed limit of 45 miles per hour (mph).

179th Street is a two/three lane east-west local street that extends through the Villages of Tinley Park and Orlando Park from Southwest Highway to 80th Avenue. It is under the jurisdiction of Cook County Department of Transportation and Highways (CCDOTH) with two lanes and a 40-mph speed limit. At its signalized intersections with LaGrange Road (US 45) and 94th Street, 179th Street has separate left-turn lanes and a separate eastbound right-turn lane at US 45.

183rd Street is a four-lane major collector serving the areas along I-80. It is under the jurisdiction of CCDOTH with two lanes and a 35-mph speed limit. At its signalized intersection with LaGrange Road (US 45), it has a southbound left-turn lane, a thru lane, and a shared thru/right-turn lane.

94th Avenue is a two-lane local street. It is under the jurisdiction of CCDOTH and a 45-mph speed limit. At its signalized intersection with 179th Street, it has separate left-turn lanes and a southbound right-turn lane.

Figure 2 illustrates the existing intersection traffic control and travels lanes around the site.

Existing Traffic Volumes

Weekday morning (7:00 to 9:00 AM), afternoon (4:00 to 6:00 PM), and Saturday (11:00 AM to 1:00 PM) traffic counts were conducted in July 2021 at the study area intersections. These counts showed the peak-hours of traffic occurring from 7:45 to 8:45 AM and 4:45 to 5:45 PM during the weekday. At the time of the traffic counts, Moraine Valley Community College had minimal activity due to its summer schedule.

Since these counts were conducted during the ongoing pandemic, they were compared to 2018 traffic counts on US 45 and 179th Street and adjusted accordingly to represent pre-pandemic conditions (See **Figure 3**). Additional traffic was added to the existing base conditions to represent the typical operation of MVCC. **Figure 4** illustrates the directional distribution analysis of college traffic. **Figure 5** shows the college traffic assignments and **Figure 6** shows the 2021 adjusted existing base traffic volumes.

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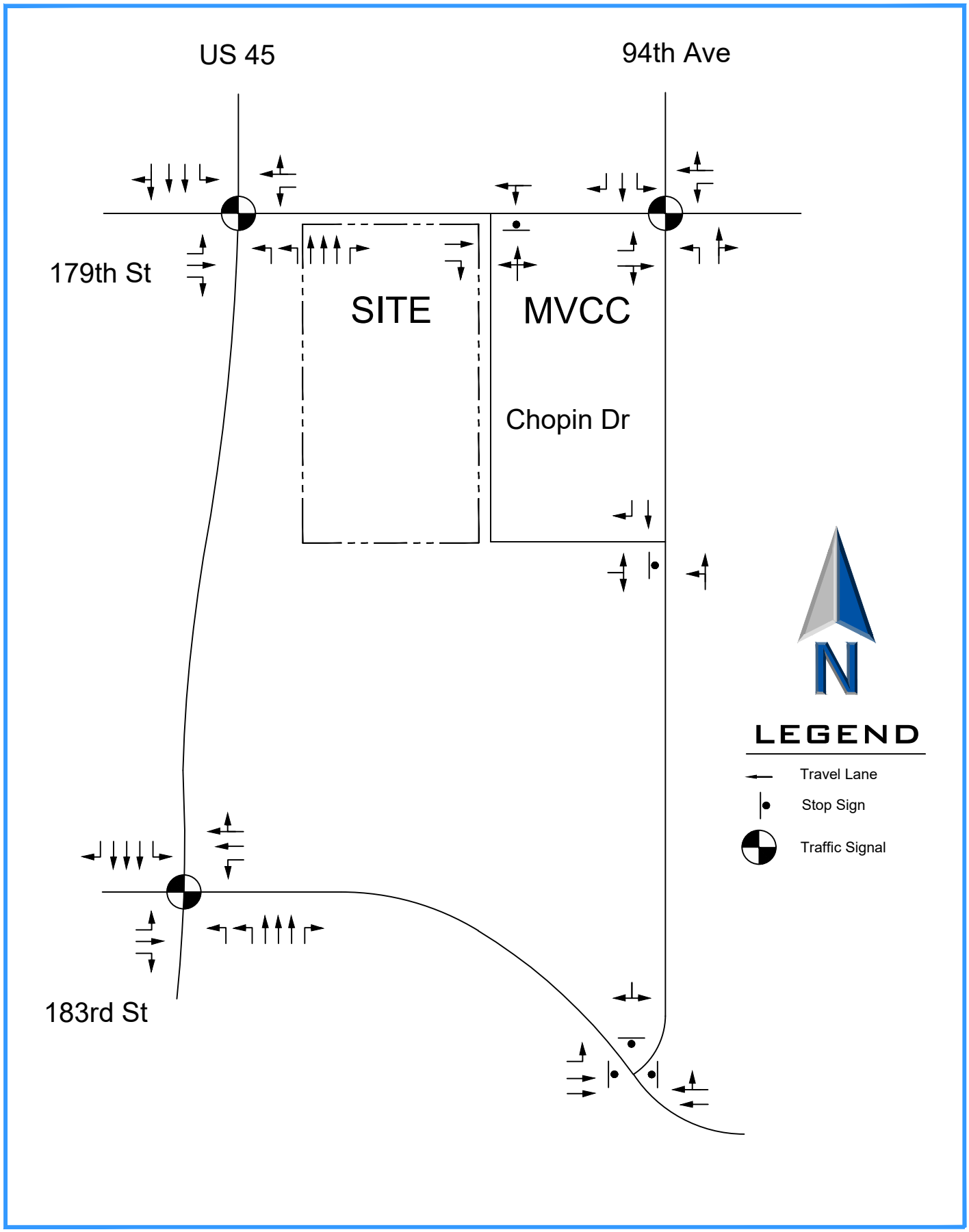
Site Location and Area Roadways

Figure 1



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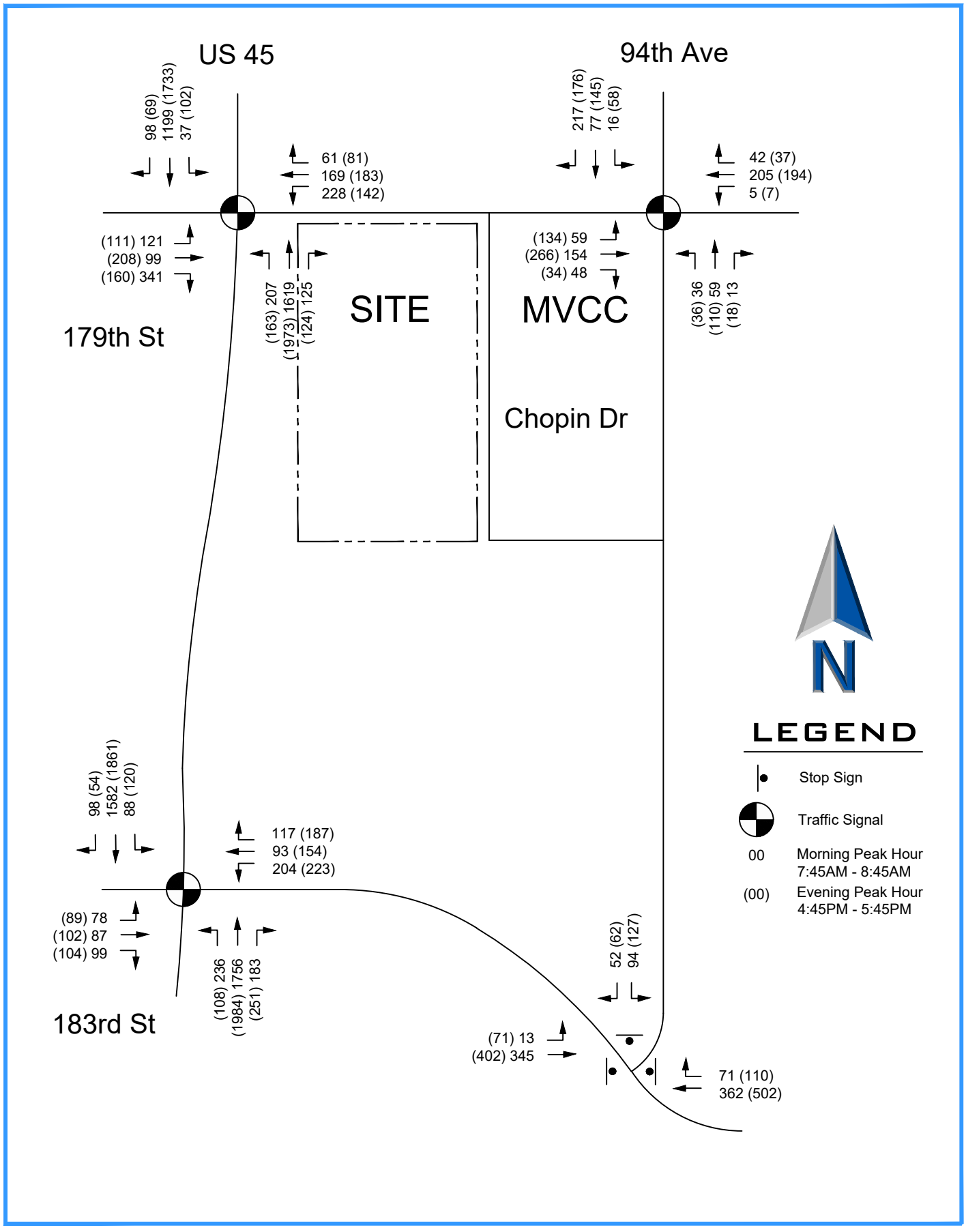
Existing Geometrics

Figure 2



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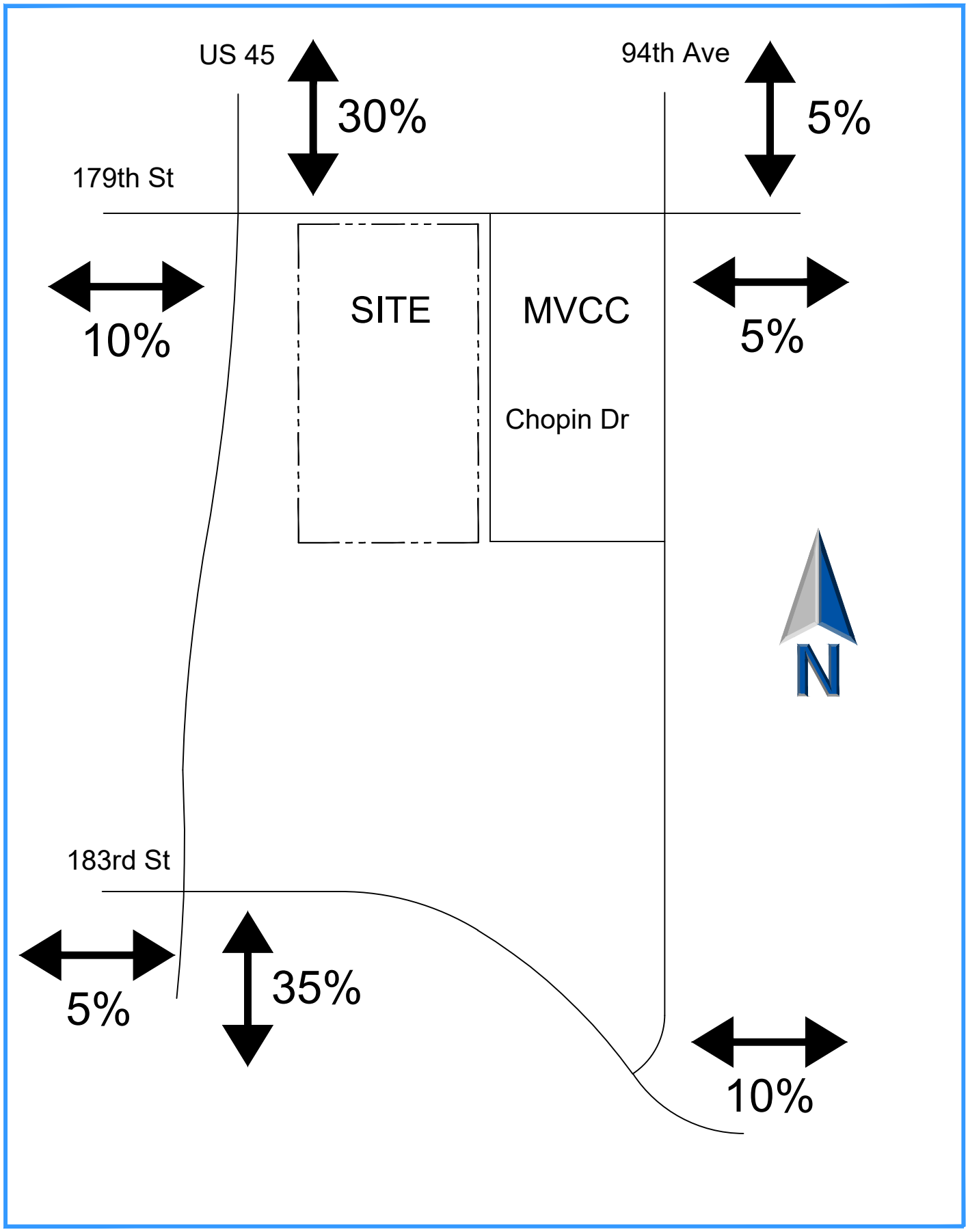
2021 Adjusted Existing Volumes

Figure 3



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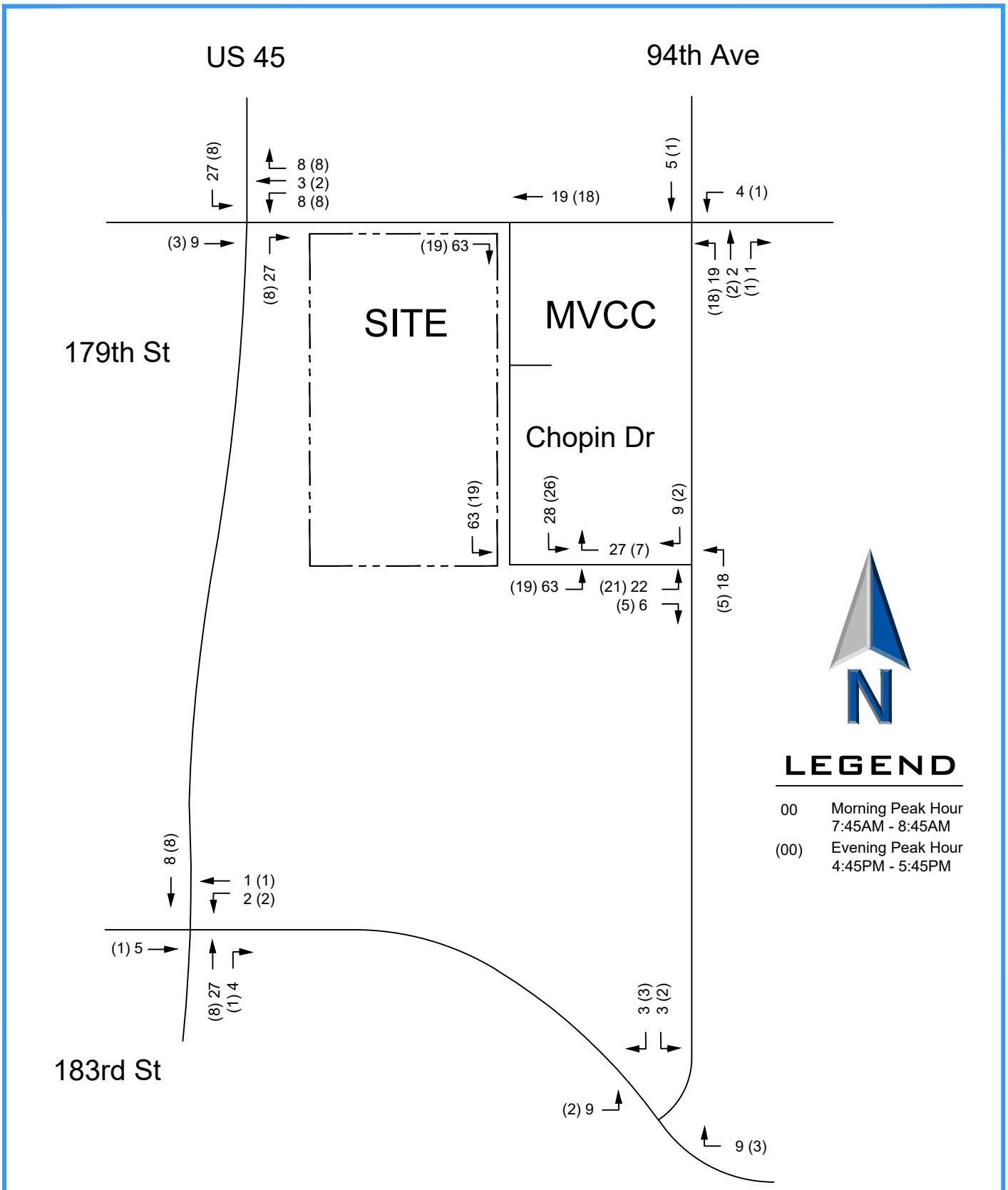
College Directional Distribution

Figure 4



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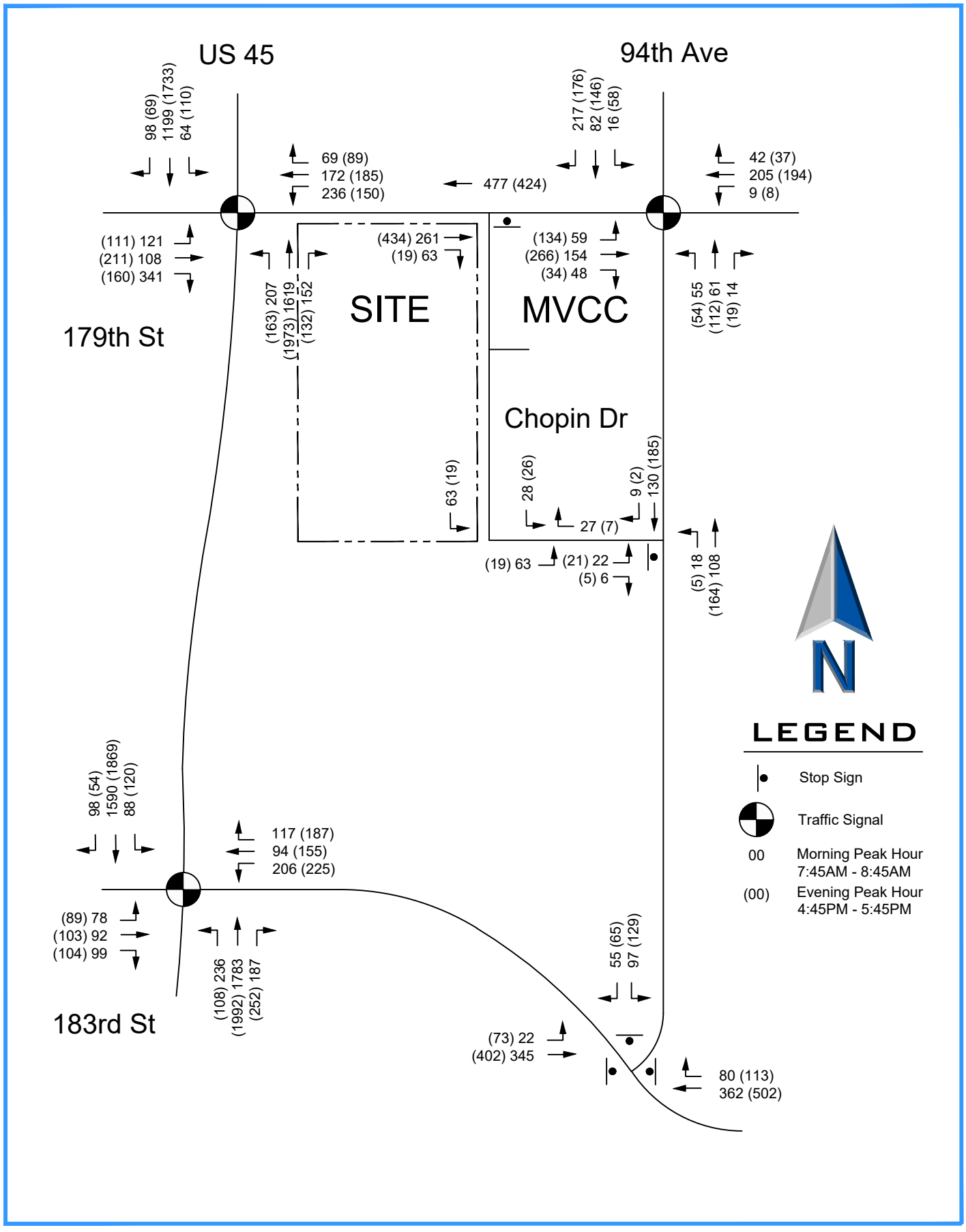
College Site Volumes

Figure 5



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2021 Adjusted Existing + College Volume

Figure 6

2 - SITE TRAFFIC CHARACTERISTICS

Site Plan

The site plan calls for the construction of a medical facility on the western side of the parcel with parking on the remainder of the site. The proposed building totals 70,995 square feet on the west side of the site to be completed by the Year 2023. It will have a combination of medical offices, imaging, cancer center, and urgent cares uses.

Trip Generation

Traffic estimates were made using data provided by the Institute of Transportation Engineer's Trip Generation 10th Ed. manual which contains trip generation surveys of other similar medical office and immediate care land-uses. The rate of vehicle trip generation was applied to each building and the results are shown in **Table 1.** Copies of the trip generation calculations are located in the **Appendix**.

Table 1
Site Traffic Volumes

Use	ITE Code	Size (sq. ft.)	Morning Peak			Evening Peak		
			In	Out	Total	In	Out	Total
Medical Office	720	67,410	122	35	157	65	166	231
Immediate Care	650	3,585	2	2	4	2	3	5
Total		**70,995**	**124**	**37**	**161**	**67**	**169**	**236**

Trip Distribution

The trip distribution for development is based on a combination of the existing traffic conditions, the distribution of employees and patients in the area, and the road network. The distribution of traffic for the building is shown on **Table 2** and **Figure 7**.

Table 2
Directional Distribution

Direction	Percentage
North on US 45	35%
South on US 45	35%
North on 94th Avenue	10%
East on 179th Street	5%
West on 179th Street	5%
East on 183rd Street	5%
West on 183rd Street	5%
Total	**100%**

Site Access

Three access drives are proposed to serve the site with two full access driveways on Chopin Drive and a right-in and -out drive on US 45.

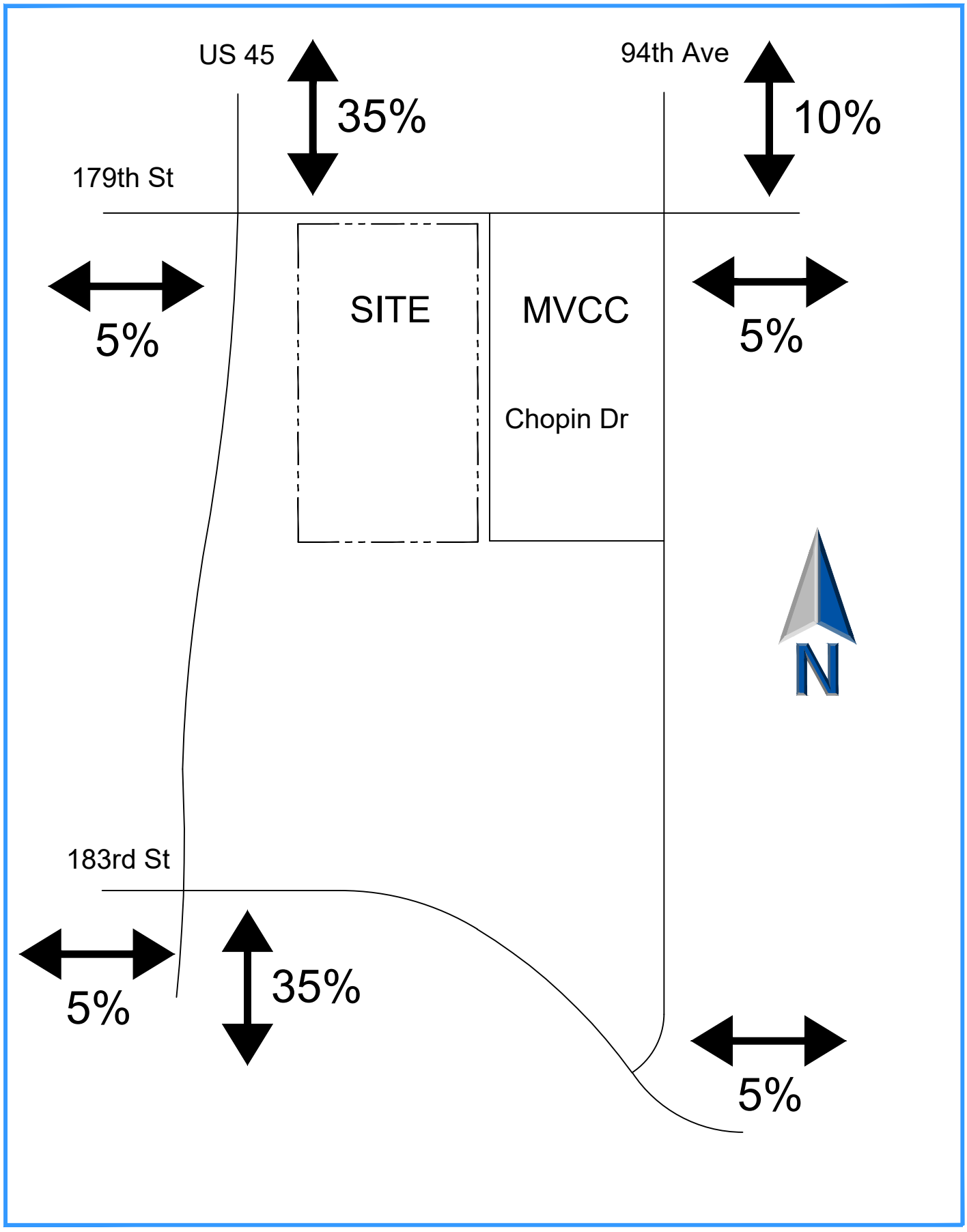
Site Traffic Trip Assignments

The future vehicular trips that are generated by the development were distributed to the area roadways based on the directional distribution analysis and the proposed site plan. **Figure 8** displays the trip assignment for the medical site traffic volumes.

The total future traffic volumes on the adjacent road system are a combination of the existing traffic volumes, projected non-site growth in those volumes, and the site traffic. Construction and opening of the medical office building is planned to be completed in 2022. Total traffic volumes are estimated for a period five years after the projected opening which is the Year 2027.

Data was provided by the Chicago Metropolitan Agency for Planning (CMAP) on the projected growth rates of the Average Daily Traffic (ADT) on US 45 and 179th Street which varied from 0.7 to 1.3%/year. The annual growth was applied to the 2021 traffic volumes to determine the Year 2026 future traffic volumes without the project (**Figure 9**). A copy of the CMAP letter is included in the **Appendix**.

The projected total traffic volumes for the Year 2027 combined the 2027 base volumes with the project site traffic assignments and are summarized in **Figure 10**.



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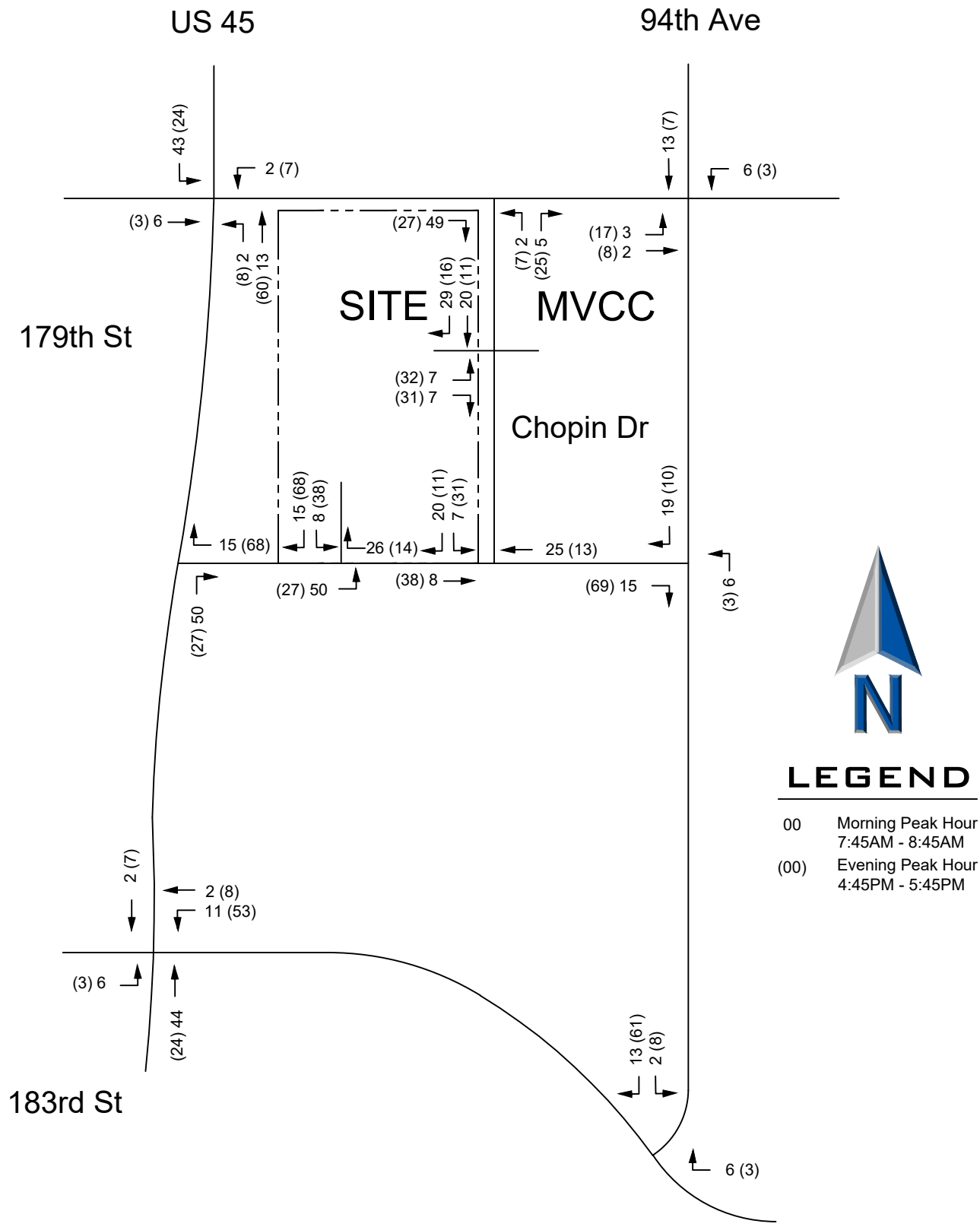
Medical Directional Distribution

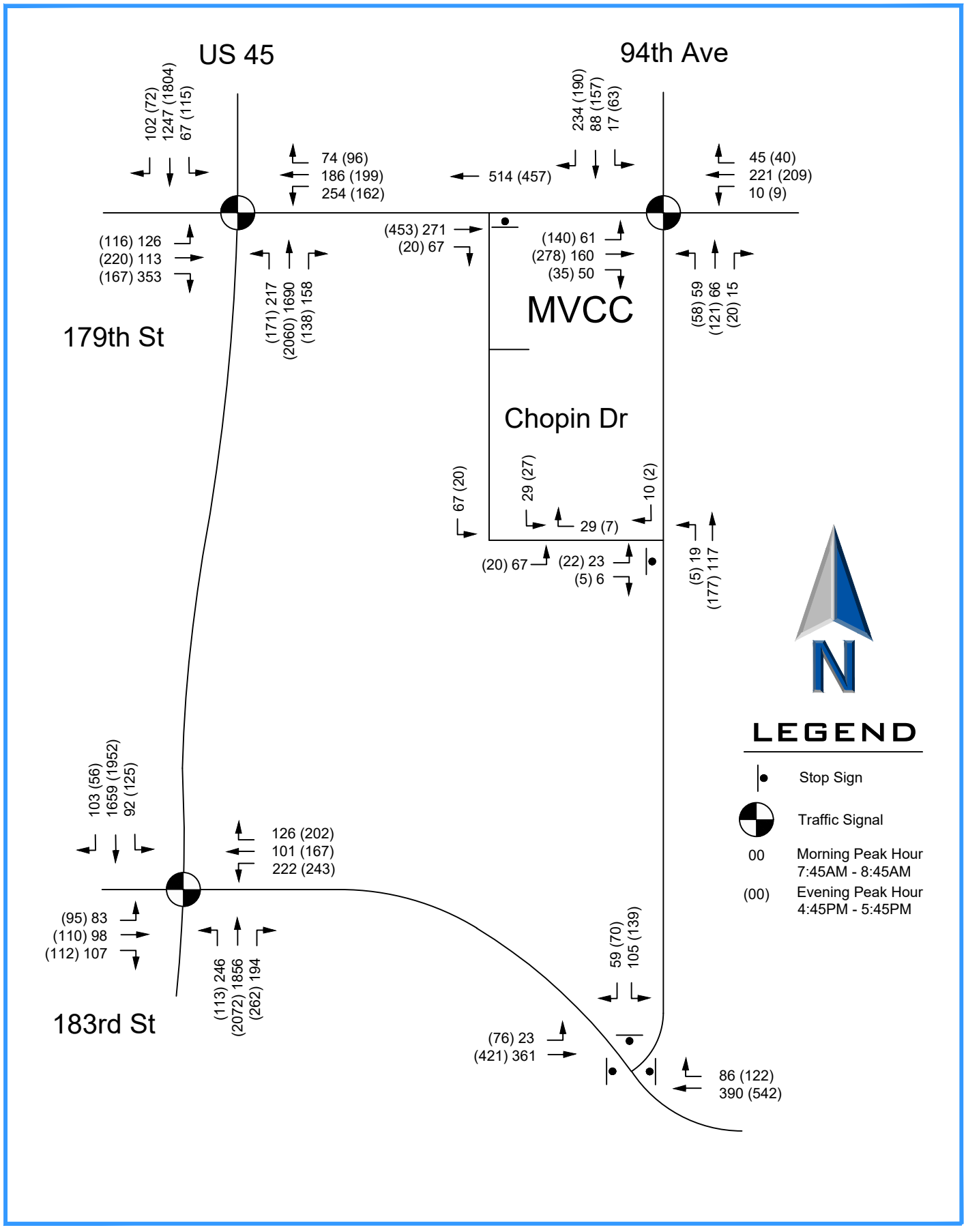
Figure 7



ERIKSSON ENGINEERING ASSOCIATES, LTD.

Medical Facility with US 45 Access

Figure 8



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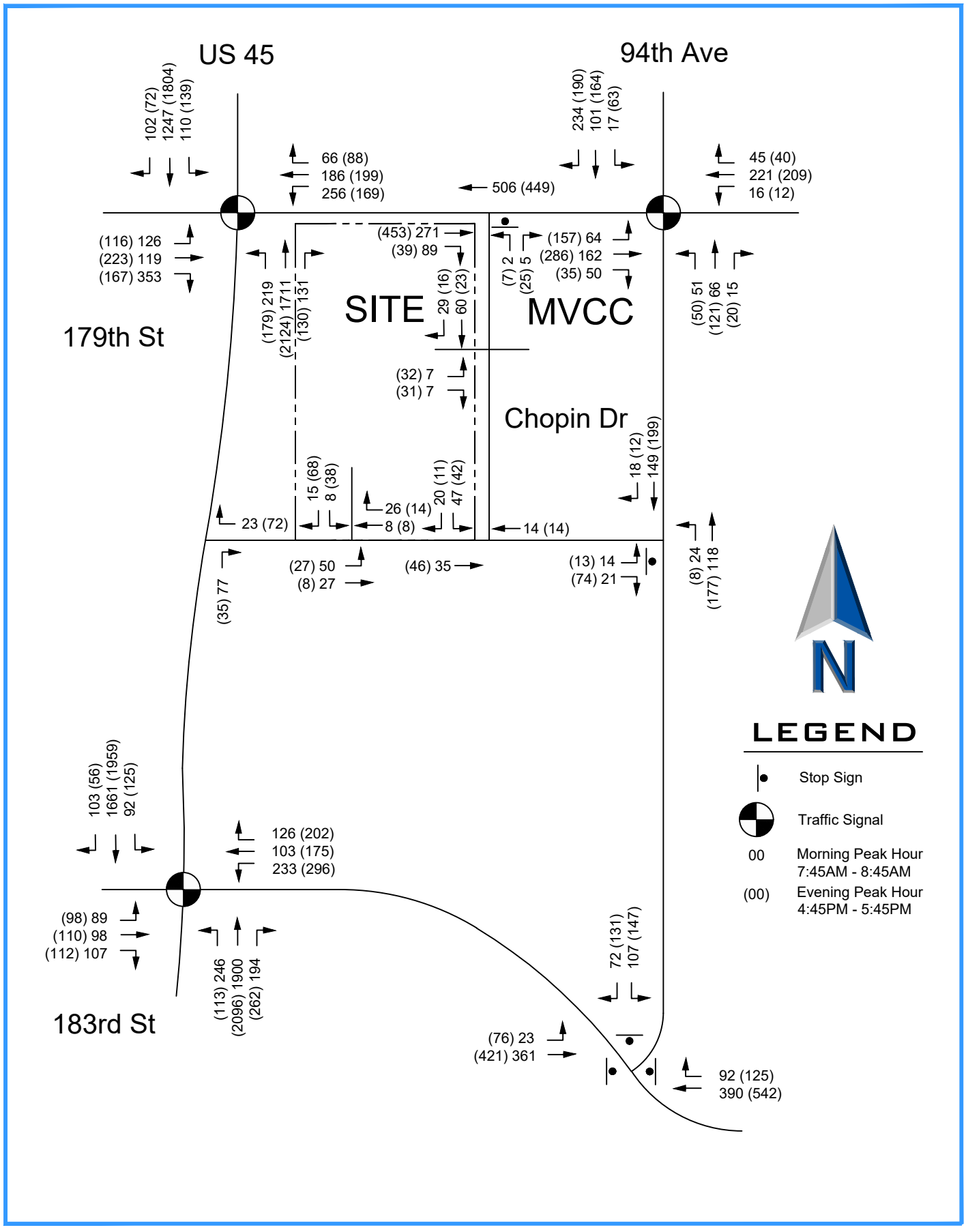
2027 Projected Traffic Volumes without Site

Figure 9



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2027 Projected Traffic Volumes: US 45 Access

Figure 10

3 - ANALYSES

Intersection Capacity Analyses

An intersection's ability to accommodate traffic flow is based on the average control delay experienced by vehicles passing through the intersection. The intersection and individual traffic movements are assigned a level of service (LOS), ranging from A to F based on the control delay created by a traffic signal or stop sign. Control delay consists of the initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. LOS A has the best traffic flow and least delay. LOS E represents saturated or at capacity conditions. LOS F experiences oversaturated conditions and extensive delays. The Highway Capacity Manual definitions for levels of service and the corresponding control delay for both signalized and unsignalized intersections are shown in **Table 3**.

Capacity analyses were conducted for each intersection using the SYNCHRO computer program to determine the existing and future operating conditions of the access system. These analyses were performed for the weekday and Saturday peak-hours. Copies of the capacity analyses are included in the **Appendix**.

Table 3
Level of Service Criteria for Intersections

Level of Service	Description	Control Delay (seconds/vehicle)	
		Signals	Stop Signs
A	Minimal delay and few stops	<10	<10
B	Low delay with more stops	>10-20	>10-15
C	Light congestion	>20-35	>15-25
D	Congestion is more noticeable with longer delays	>35-55	>25-35
E	High delays and number of stops	>55-80	>35-50
F	Unacceptable delays and over capacity	>80	>50

Source: Highway Capacity Manual

External Intersection Operations

Analyses were completed at the intersections of the four streets in the study area. **Table 4** summarizes the results of the existing and the projected traffic conditions for each scenario. Overall, each intersection works at a good level of service.

Table 4
External Roadways
Intersection Level of Service and Delay

Scenario	Peak Hour	Intersection			
		US 45 at:		94th Street at:	
		179th St.	183rd St.	179th St.	183rd St.
		Signal	Signal	Signal	Stop SIgn
2021 Existing	AM	C-26.5	C-27.3	B-14.6	B-13.1
	PM	D-39.4	C-24.2	C-26.9	C-23.3
2027 Total	AM	D-35.2	C-30.5	B-15.9	B-14.9
	PM	D-42.3	C-28.1	C-22.7	D-25.4

The signalized intersections along US 45 at 179th and 183rd Street work under acceptable levels of service now and into the future. However, individual movements (left-turning and crossing traffic) operate at a poor level of service due to the limited green time given to them. Much of the green time is dedicated to the north-south movements on US 45 to maximize traffic flow and progression. No additional improvements are recommended.

Shared Driveways

MVCC and the medical facility will share two existing driveways on 179th Street and 94th Avenue. **Table 5** shows the results of the capacity analyses. The existing driveway on 179th Street is full access and operates well today. When the medical facility is occupied, the evening peak-hours operate at a level of service E because it is more difficult to make left-turns out. It is recommended that peak-hour restrictions be implemented from 4:00 to 6:00 PM. Left-turns would then be made at the 94th Avenue traffic signal. No improvements are proposed at this time on 94th Avenue.

Table 5
2027 Intersection Level of Service and Delay
Loyola/MVCC Driveways on 179th and 94th

Scenario	Peak Hour	Intersection Movement		
		EB Approach	WB Approach	NB Approach
Chopin Drive on 179th Street				
2021 Existing	AM		A-0.0	C-15.5
	PM		A-0.0	E-44.7
2027 Total	AM		A-0.0	B-11.6
	PM		B-0.0	D-32.3
Loyola/MVCC Driveway 94th Avenue				
2021 Existing	AM	A-9.3		A-7.6
	PM	A-9.9		A-7.6
2027 Total	AM	B-12.0		A-8.3
	PM	B-10.3		A-7.7

Site Driveways

Table 6 shows the driveway operating conditions.

North Loyola/MVCC Drive on Chopin Drive

The north site driveway on the west side of Chopin Drive is aligned with the MVCC emergency access driveway. It will have one inbound and one outbound lane under stop control. Under each scenario, it operates with minimal delays. The benefit of this drive is direct access into the site from 179th Street. No exiting traffic would be permitted.

South Loyola/MVCC Drive on Chopin Drive

The south site driveway on the west side of Chopin Drive is aligned with the MVCC south driveway. It will have one inbound and two outbound lanes (left-turn and straight) under stop control. Under each scenario, it operates with minimal delays. Since it is a three-legged intersection with primarily turning movements between each street/drive, a three-way sop control is recommended.

Table 6
2027 Intersection Level of Service and Delay
Chopin Drive at Loyola/MVCC Driveways

Scenarios	Peak Hour	Intersection		
		N. Loyola and Chopin	S. Loyola and Chopin	US 45 Right-out
2021 Existing	AM	A-0.0	A-7.3	
	PM	A-0.0	A-7.3	
Drive on US 45	AM	A-0.0	A-7.3	A-9.9
	PM	A-0.0	A-7.3	B-10.9

US 45 Access Drive

A right-in and out driveway is proposed on US 45 that will allow northbound US 45 traffic enter the site and avoid 179th Street and would divert some of the MVCC traffic also. It would be located south of the northbound right-turn lane at 179th Street with one inbound and one outbound lane under stop control. A separate right-turn lane is warranted and would require 215 feet of storage and a 220-deceleration taper. It will be 690 feet south of 179th Street and 870 feet north of 183rd Street.

4 - SUMMARY

This report summarizes the results of traffic and parking study for a proposed medical facility in Tinley Park, Illinois. The findings of the study are:

- The volume of traffic generated by the development will have no adverse impact on peak-hour traffic conditions on the surrounding street system.
- Recommended off-site roadway improvements consist of a right-in and out driveway on US 45 that will allow northbound US 45 traffic enter the site and avoid 179th Street and would divert some of the MVCC traffic also. A separate right-turn lane is warranted and would require 215 feet of storage and a 220-deceleration taper. It will be 690 feet south of 179th Street and 870 feet north of 183rd Street.

Appendix

- **Existing 2021 Traffic Counts**
- **CMAP Letter**
- **ITE Trip Generation Calculations**
- **Intersection Capacity Analyses**
    - **2021 Existing Conditions**
    - **2027 Total Traffic Volumes**

Appendix

- **Existing 2021 Traffic Counts**

94th Ave and 179th St

Tinley Park, IL															
	94th Ave Southbound			179th St Westbound			94th Ave Northbound			179th St Eastbound			15	60	Peak
Begin Time	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Minute Totals	Minute Totals	Hour Factor
	Tuesday July 20, 2021														
7:00 AM	30	8	1	4	30	2	1	8	3	7	12	5	111	645	0.78
7:15 AM	24	17	1	6	39	2	1	9	4	12	23	19	157	725	0.88
7:30 AM	46	14	3	6	37	2	0	11	6	14	24	7	170	763	0.92
7:45 AM	51	13	3	12	48	0	0	16	7	13	32	12	207	**807**	**0.94**
8:00 AM	42	19	6	3	37	2	7	12	10	9	35	9	191	752	0.88
8:15 AM	41	21	1	9	43	1	2	8	7	14	33	15	195		
8:30 AM	55	14	4	13	50	1	3	15	7	5	33	14	214		
8:45 AM	26	16	2	7	42	0	1	10	6	8	14	20	152		
Total	315	122	21	60	326	10	15	89	50	82	206	101			
7:45-8:45 AM	**189**	**67**	**14**	**37**	**178**	**4**	**12**	**51**	**31**	**41**	**133**	**50**	**807**		
	Tuesday July 20, 2021														
4:00 PM	42	34	12	15	34	1	2	28	6	11	46	31	262	1103	0.95
4:15 PM	57	28	15	8	35	2	4	37	11	10	50	33	290	1161	0.91
4:30 PM	40	31	11	6	46	0	4	23	21	7	54	28	271	1152	0.90
4:45 PM	42	41	13	6	38	2	3	20	10	14	63	28	280	**1165**	**0.91**
5:00 PM	41	44	10	9	57	1	4	42	14	5	55	38	320	1135	0.89
5:15 PM	42	31	19	15	45	0	5	22	6	9	60	27	281		
5:30 PM	51	29	16	7	54	4	6	26	6	5	45	35	284		
5:45 PM	48	39	12	7	46	0	3	18	8	9	43	17	250		
Total	363	277	108	73	355	10	31	216	82	70	416	237			
4:45-5:45 PM	**176**	**145**	**58**	**37**	**194**	**7**	**18**	**110**	**36**	**33**	**223**	**128**	**1165**		

94th Ave and 183rd St

Tinley Park, IL															
	94th Ave Southbound			183rd St Westbound			94th Ave Northbound			183rd St Eastbound			15	60	Peak
Begin Time	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Minute Totals	Minute Totals	Hour Factor
	Tuesday July 27, 2021														
7:00 AM	21		13	16	67						59	5	181	740	0.90
7:15 AM	10		10	8	60						66	4	158	822	0.78
7:30 AM	9		12	19	81						83	1	205	858	0.82
7:45 AM	9		22	12	70						83	0	196	**805**	**0.77**
8:00 AM	15		32	17	109						89	1	263	760	0.72
8:15 AM	13		16	20	71						68	6	194		
8:30 AM	8		12	13	65						49	5	152		
8:45 AM	7		14	17	69						37	7	151		
Total	92	0	131	122	592	0	0	0	0	0	534	29			
7:45-8:45 AM	**45**	**0**	**82**	**62**	**315**	**0**	**0**	**0**	**0**	**0**	**289**	**12**	**805**		
	Tuesday July 27, 2021														
4:00 PM	12		20	24	100						76	15	247	1061	0.87
4:15 PM	9		22	22	88						70	14	225	1188	0.79
4:30 PM	9		26	43	113						94	19	304	1222	0.82
4:45 PM	14		32	40	100						86	13	285	**1155**	**0.77**
5:00 PM	22		45	36	147						109	15	374	1093	0.73
5:15 PM	9		25	17	116						74	18	259		
5:30 PM	11		25	17	86						82	16	237		
5:45 PM	8		28	25	76						81	5	223		
Total	94	0	223	224	826	0	0	0	0	0	672	115			
4:45-5:45 PM	**56**	**0**	**127**	**110**	**449**	**0**	**0**	**0**	**0**	**0**	**351**	**62**	**1155**		

US 45 and 179th St

Tinley Park, IL															
	US 45 Southbound			179th St Westbound			US 45 Northbound			179th St Eastbound			15	60	Peak
Begin Time	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Minute Totals	Minute Totals	Hour Factor
	Thursday July 29, 2021														
7:00 AM	9	199	7	16	10	37	15	249	23	62	20	16	663	3257	0.84
7:15 AM	13	211	5	13	21	53	13	272	24	87	23	20	755	3423	0.89
7:30 AM	16	257	14	10	26	53	23	385	39	81	30	30	964	3555	0.92
7:45 AM	19	264	6	10	22	48	23	310	40	82	23	28	875	**3539**	**0.93**
8:00 AM	20	235	9	11	15	41	22	336	34	65	19	22	829	3508	0.93
8:15 AM	22	233	6	8	33	50	24	352	53	62	18	26	887		
8:30 AM	24	255	11	12	36	48	35	355	46	72	25	29	948		
8:45 AM	25	226	12	23	27	25	27	326	27	68	36	22	844		
Total	148	1880	70	103	190	355	182	2585	286	579	194	193			
7:45-8:45 AM	**85**	**987**	**32**	**41**	**106**	**187**	**104**	**1353**	**173**	**281**	**85**	**105**	**3539**		
	Thursday July 29, 2021														
4:00 PM	25	445	21	24	61	39	27	430	29	17	65	24	1207	4940	0.96
4:15 PM	14	429	21	22	60	49	23	445	29	23	74	25	1214	4993	0.97
4:30 PM	16	471	24	26	48	40	18	495	25	34	60	31	1288	5026	0.98
4:45 PM	16	417	20	19	36	31	26	505	31	44	61	25	1231	**4994**	**0.99**
5:00 PM	21	415	17	24	40	37	37	506	41	36	53	33	1260	4963	0.98
5:15 PM	12	452	29	14	32	42	23	484	37	44	50	28	1247		
5:30 PM	20	449	36	14	30	32	38	478	54	36	44	25	1256		
5:45 PM	16	411	30	15	35	31	26	469	55	39	46	27	1200		
Total	140	3489	198	158	342	301	218	3812	301	273	453	218			
4:45-5:45 PM	**69**	**1733**	**102**	**71**	**138**	**142**	**124**	**1973**	**163**	**160**	**208**	**111**	**4994**		

US 45 and 183rd St

Tinley Park, IL															
	US 45 Southbound			183rd St Westbound			US 45 Northbound			183rd St Eastbound			15	60	Peak
Begin Time	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Minute Totals	Minute Totals	Hour Factor
	Wednesday July 28, 2021														
7:00 AM	25	259	16	11	16	36	26	303	25	21	12	2	752	3601	0.84
7:15 AM	19	280	18	9	19	38	29	326	31	28	19	10	826	3759	0.88
7:30 AM	19	310	29	20	24	34	32	356	55	37	21	14	951	3881	0.91
7:45 AM	23	344	29	25	14	43	53	416	51	19	32	23	1072	**3961**	**0.92**
8:00 AM	24	335	15	22	10	27	42	339	45	22	14	15	910	3829	0.93
8:15 AM	14	326	15	22	19	37	36	369	58	21	18	13	948		
8:30 AM	24	371	18	33	17	33	28	403	51	24	12	17	1031		
8:45 AM	23	317	15	34	30	36	27	369	37	28	16	8	940		
Total	171	2542	155	176	149	284	273	2881	353	200	144	102			
7:45-8:45 AM	**85**	**1376**	**77**	**102**	**60**	**140**	**159**	**1527**	**205**	**86**	**76**	**68**	**3961**		
	Wednesday July 28, 2021														
4:00 PM	10	444	30	27	33	38	67	443	28	24	38	26	1208	5010	0.95
4:15 PM	13	442	26	37	27	48	55	447	22	28	28	24	1197	5130	0.97
4:30 PM	21	503	31	54	32	47	59	482	28	23	24	20	1324	5193	0.98
4:45 PM	13	421	28	35	44	55	66	522	32	32	15	18	1281	**5214**	**0.97**
5:00 PM	8	467	29	72	41	56	73	472	29	32	29	20	1328	5107	0.95
5:15 PM	14	481	28	36	46	58	47	459	22	20	25	24	1260		
5:30 PM	19	481	34	43	23	55	65	521	25	20	33	26	1345		
5:45 PM	11	462	20	29	18	39	51	474	16	19	18	17	1174		
Total	109	3701	226	333	264	396	483	3820	202	198	210	175			
4:45-5:45 PM	**54**	**1850**	**119**	**186**	**154**	**224**	**251**	**1974**	**108**	**104**	**102**	**88**	**5214**		

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Appendix

- **CMAP Letter**

Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607

312-454-0400
cmap.illinois.gov

June 22, 2021

Stephen B. Corcoran, P.E., PTOE
Director of Traffic Services
Eriksson Engineering Associates
145 Commerce Drive
Suite A
Grayslake, IL 60030

Subject: ***US 45 - 179th Street - 94th Avenue - 183rd Street***
IDOT

Dear Mr. Corcoran:

In response to a request made on your behalf and dated June 21, 2021, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
US 45 south of 183rd St	41,100	50,600
183rd St east of US 45	8,750	12,500
179th St east of US 45	8,000	11,400
179th St west of US 45	12,700	15,600
94th Ave north of 183rd St	7,000	10,000

Traffic projections are developed using existing ADT data provided in the request letter and the results from the December 2020 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Rios (IDOT)
2021_CY_TrafficForecast\TinleyPark\ck-75-21\ck-75-21.docx

Appendix

- **ITE Trip Generation Calculations**

Free-Standing Emergency Room
(650)

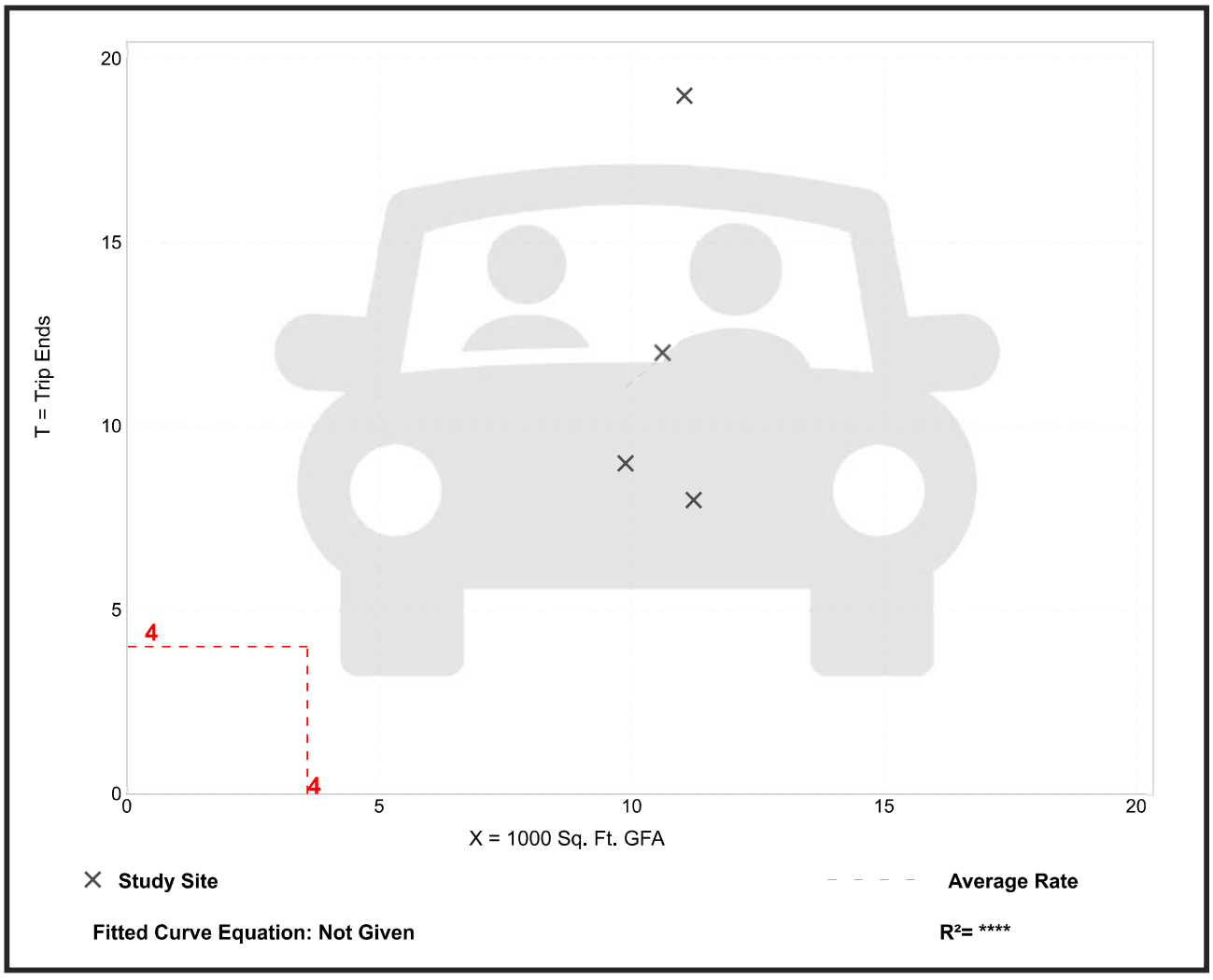
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
Avg. 1000 Sq. Ft. GFA: 11
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.12	0.71 - 1.72	0.44

Data Plot and Equation

Caution – Small Sample Size



Free-Standing Emergency Room
(650)

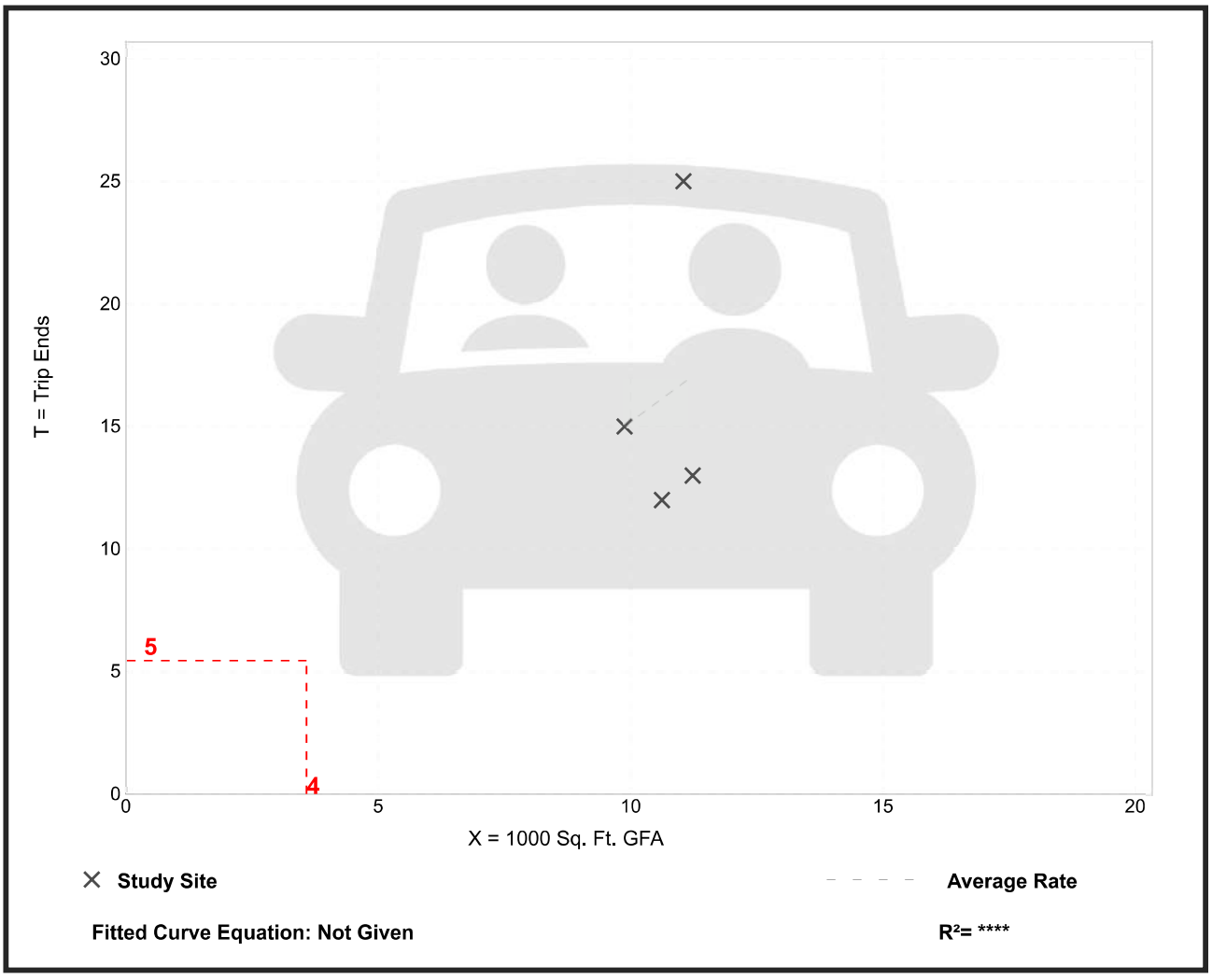
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
Avg. 1000 Sq. Ft. GFA: 11
Directional Distribution: 46% entering, 54% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.52	1.13 - 2.26	0.54

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

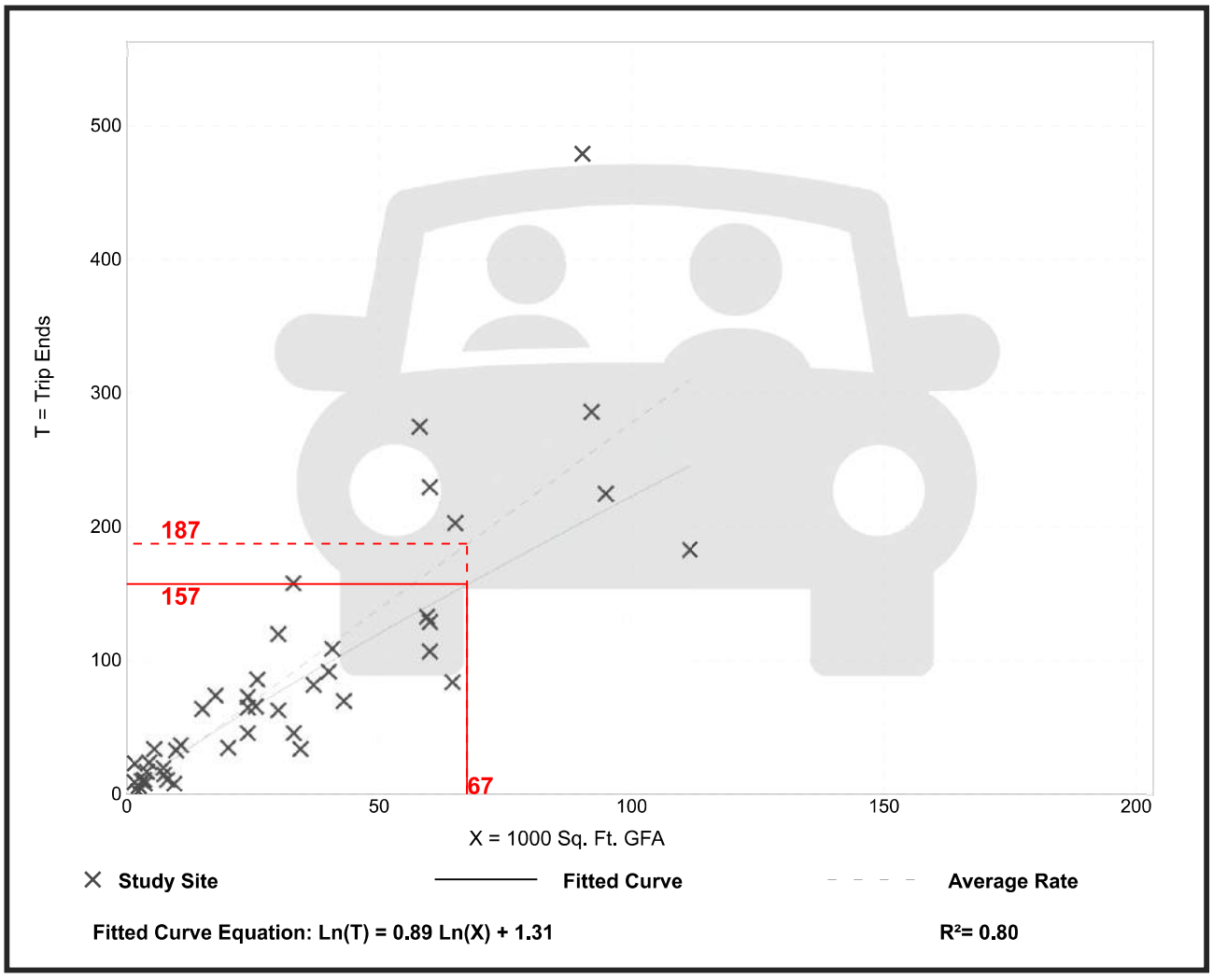
Medical-Dental Office Building
(720)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 44
Avg. 1000 Sq. Ft. GFA: 32
Directional Distribution: 78% entering, 22% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.78	0.85 - 14.30	1.28

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.89 Ln(X) + 1.31

R^2= 0.80

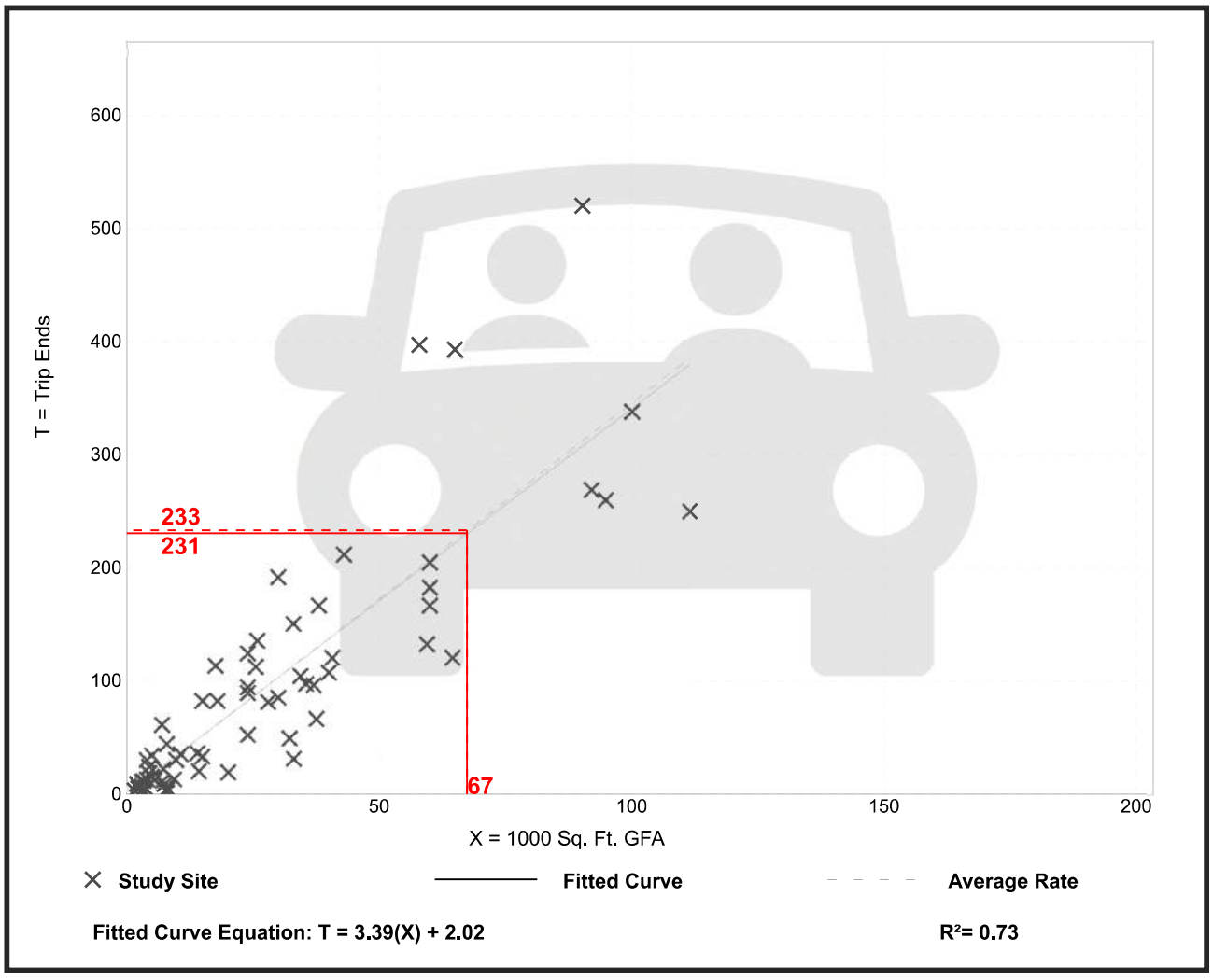
Medical-Dental Office Building
(720)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 65
Avg. 1000 Sq. Ft. GFA: 28
Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.46	0.25 - 8.86	1.58

Data Plot and Equation



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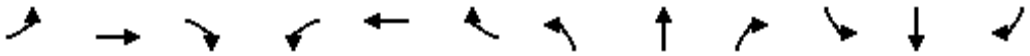
Appendix

- **Intersection Capacity Analyses**
  - **2021 Existing Conditions**

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	108	341	236	172	69	207	1619	152	64	1199	98
Future Volume (vph)	121	108	341	236	172	69	207	1619	152	64	1199	98
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	2000	1900	1900	1900	1900
Storage Length (ft)	140		500	202		0	306		306	340		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	165			191			221			170		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.91	1.00	1.00	0.91	0.91
Frt			0.850		0.957				0.850		0.989	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1905	1538	1719	1732	0	3335	5200	1538	1719	4886	0
Flt Permitted	0.433			0.522			0.950			0.950		
Satd. Flow (perm)	784	1905	1538	945	1732	0	3335	5200	1538	1719	4886	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			323		14				163		12	
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		1724			779			1706			1336	
Travel Time (s)		29.4			13.3			25.8			20.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	130	116	367	254	185	74	223	1741	163	69	1289	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	130	116	367	254	259	0	223	1741	163	69	1394	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Free	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

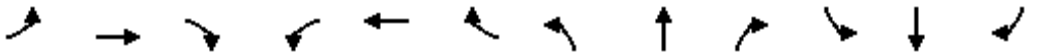


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		Free	8					2			
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0	3.0	3.0	15.0	
Minimum Split (s)	6.5	14.5		6.5	14.5		7.5	21.5	6.5	7.5	21.5	
Total Split (s)	16.9	26.0		23.4	32.5		23.4	61.1	23.4	19.5	57.2	
Total Split (%)	13.0%	20.0%		18.0%	25.0%		18.0%	47.0%	18.0%	15.0%	44.0%	
Maximum Green (s)	13.4	19.5		19.9	26.0		18.9	54.6	19.9	15.0	50.7	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5	3.5	3.5	4.5	
All-Red Time (s)	0.0	2.0		0.0	2.0		1.0	2.0	0.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.5		3.5	6.5		4.5	6.5	3.5	4.5	6.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	5.0		3.0	5.0		3.0	7.0	3.0	3.0	7.0	
Recall Mode	None	None		None	None		None	C-Max	None	None	C-Max	
Walk Time (s)					7.0							
Flash Dont Walk (s)					11.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	31.7	16.9	130.0	41.8	23.5		14.0	65.3	90.2	10.6	59.7	
Actuated g/C Ratio	0.24	0.13	1.00	0.32	0.18		0.11	0.50	0.69	0.08	0.46	
v/c Ratio	0.47	0.47	0.24	0.61	0.80		0.62	0.67	0.15	0.50	0.62	
Control Delay	37.6	58.2	0.4	41.2	66.4		82.1	12.6	0.2	68.4	29.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	37.6	58.2	0.4	41.2	66.4		82.1	12.6	0.2	68.4	29.0	
LOS	D	E	A	D	E		F	B	A	E	C	
Approach Delay		19.2			54.0			18.9			30.9	
Approach LOS		B			D			B			C	
Queue Length 50th (ft)	77	91	0	164	196		103	128	0	57	330	
Queue Length 95th (ft)	127	151	0	241	#295		147	142	m0	104	411	
Internal Link Dist (ft)		1644			699			1626			1256	
Turn Bay Length (ft)	140		500	202			306		306	340		
Base Capacity (vph)	296	285	1538	422	357		484	2610	1132	198	2250	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.44	0.41	0.24	0.60	0.73		0.46	0.67	0.14	0.35	0.62	

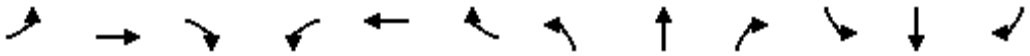
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 68 (52%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 26.5		Intersection LOS: C	
Intersection Capacity Utilization 71.1%		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: US 45 & 179th Street



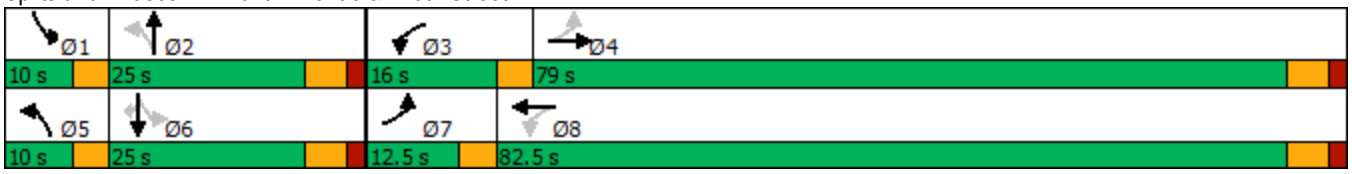
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	154	48	9	205	42	36	61	14	16	82	217
Future Volume (vph)	59	154	48	9	205	42	36	61	14	16	82	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	90		0	184		0	182		182
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	160			96			190			185		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.964			0.974			0.972				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1796	0	1770	1814	0	1770	1811	0	1770	1863	1583
Flt Permitted	0.455			0.624			0.665			0.705		
Satd. Flow (perm)	848	1796	0	1162	1814	0	1239	1811	0	1313	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			14			7				231
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		635			1010			691			578	
Travel Time (s)		10.8			17.2			10.5			8.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	63	164	51	10	218	45	38	65	15	17	87	231
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	215	0	10	263	0	38	80	0	17	87	231
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6



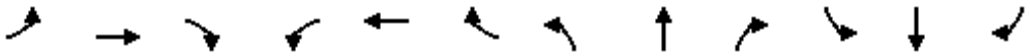
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	8.0
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0		9.5	24.0	24.0
Total Split (s)	12.5	79.0		16.0	82.5		10.0	25.0		10.0	25.0	25.0
Total Split (%)	9.6%	60.8%		12.3%	63.5%		7.7%	19.2%		7.7%	19.2%	19.2%
Maximum Green (s)	9.0	73.0		12.5	76.5		6.5	19.0		6.5	19.0	19.0
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	Max		None	Max	Max
Walk Time (s)		7.0			7.0			7.0			7.0	7.0
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	24.9	20.9		22.1	16.4		25.0	21.4		24.3	19.7	19.7
Actuated g/C Ratio	0.43	0.36		0.38	0.28		0.43	0.37		0.42	0.34	0.34
v/c Ratio	0.13	0.32		0.02	0.50		0.06	0.12		0.03	0.14	0.33
Control Delay	10.8	15.2		10.4	22.9		11.4	15.1		11.4	18.2	5.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	10.8	15.2		10.4	22.9		11.4	15.1		11.4	18.2	5.0
LOS	B	B		B	C		B	B		B	B	A
Approach Delay		14.2			22.4			13.9			8.8	
Approach LOS		B			C			B			A	
Queue Length 50th (ft)	10	38		2	72		8	17		4	20	0
Queue Length 95th (ft)	34	125		10	164		25	57		15	64	49
Internal Link Dist (ft)		555			930			611			498	
Turn Bay Length (ft)	160			90			184			182		182
Base Capacity (vph)	514	1796		639	1814		597	673		607	633	690
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.12	0.12		0.02	0.14		0.06	0.12		0.03	0.14	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 57.9			
Natural Cycle: 70			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 14.6		Intersection LOS: B	
Intersection Capacity Utilization 43.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: 94th Avenue & 179th Street



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	92	99	206	94	117	236	1783	187	88	1590	98
Future Volume (vph)	78	92	99	206	94	117	236	1783	187	88	1590	98
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	401		285	192		0	360		244	435		0
Storage Lanes	1		1	1		0	2		1	1		1
Taper Length (ft)	155			104			300			154		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.917				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1905	1538	1719	3153	0	3335	5200	1538	1719	5200	1538
Flt Permitted	0.609			0.512			0.950			0.950		
Satd. Flow (perm)	1102	1905	1538	926	3153	0	3335	5200	1538	1719	5200	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155		127				177			164
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		1270			1966			1452			1706	
Travel Time (s)		21.6			33.5			22.0			25.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	85	100	108	224	102	127	257	1938	203	96	1728	107
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	100	108	224	229	0	257	1938	203	96	1728	107
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8					2			6
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	8.0	8.0	3.0	8.0		3.0	15.0	15.0	3.0	15.0	15.0
Minimum Split (s)	6.5	14.5	14.5	6.5	14.5		7.5	20.5	20.5	7.5	20.5	20.5
Total Split (s)	15.6	20.8	20.8	19.5	24.7		23.4	72.8	72.8	16.9	66.3	66.3
Total Split (%)	12.0%	16.0%	16.0%	15.0%	19.0%		18.0%	56.0%	56.0%	13.0%	51.0%	51.0%
Maximum Green (s)	12.1	14.3	14.3	16.0	18.2		18.9	67.3	67.3	12.4	60.8	60.8
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5	3.5	4.5	4.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.5	6.5	3.5	6.5		4.5	5.5	5.5	4.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	24.8	11.7	11.7	33.7	17.2		15.2	71.6	71.6	11.2	67.6	67.6
Actuated g/C Ratio	0.19	0.09	0.09	0.26	0.13		0.12	0.55	0.55	0.09	0.52	0.52
v/c Ratio	0.33	0.58	0.39	0.67	0.43		0.66	0.68	0.22	0.65	0.64	0.12
Control Delay	40.5	70.1	6.2	51.2	25.2		63.2	23.1	3.9	67.6	24.1	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.5	70.1	6.2	51.2	25.2		63.2	23.1	3.9	67.6	24.1	3.9
LOS	D	E	A	D	C		E	C	A	E	C	A
Approach Delay		38.0			38.1			25.8			25.2	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	56	82	0	160	41		108	429	10	80	262	0
Queue Length 95th (ft)	99	140	18	237	81		150	502	49	m136	394	m23
Internal Link Dist (ft)		1190			1886			1372			1626	
Turn Bay Length (ft)	401		285	192			360		244	435		
Base Capacity (vph)	285	209	307	337	550		484	2864	926	164	2705	878
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.48	0.35	0.66	0.42		0.53	0.68	0.22	0.59	0.64	0.12

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 52 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 27.3		Intersection LOS: C	
Intersection Capacity Utilization 72.8%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: US 45 & 183rd Street

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	261	63	0	458	19	0
Future Vol, veh/h	261	63	0	458	19	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	120	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	284	68	0	498	21	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	352	0	782	284
Stage 1	-	-	-	-	284	-
Stage 2	-	-	-	-	498	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1207	-	363	755
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	611	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1207	-	363	755
Mov Cap-2 Maneuver	-	-	-	-	363	-
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	611	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	15.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	363	-	-	1207	-
HCM Lane V/C Ratio	0.057	-	-	-	-
HCM Control Delay (s)	15.5	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	6	18	108	130	9
Future Vol, veh/h	3	6	18	108	130	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	7	20	117	141	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	298	141	151	0	-	0
Stage 1	141	-	-	-	-	-
Stage 2	157	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	693	907	1430	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	871	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	683	907	1430	-	-	-
Mov Cap-2 Maneuver	683	-	-	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	871	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	1.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1430	-	818	-	-
HCM Lane V/C Ratio	0.014	-	0.012	-	-
HCM Control Delay (s)	7.6	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	13.1
Intersection LOS	B

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	97	55	22	345	362	80
Future Vol, veh/h	97	55	22	345	362	80
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	126	71	29	448	470	104
Number of Lanes	1	0	1	2	2	0

Approach	SB	SE	NW
Opposing Approach		NW	SE
Opposing Lanes	0	2	3
Conflicting Approach Left	NW	SB	
Conflicting Lanes Left	2	1	0
Conflicting Approach Right	SE		SB
Conflicting Lanes Right	3	0	1
HCM Control Delay	14	10.5	15
HCM LOS	B	B	B

Lane	NWLn1	NWLn2	SELn1	SELn2	SELn3	SBLn1
Vol Left, %	0%	0%	100%	0%	0%	64%
Vol Thru, %	100%	60%	0%	100%	100%	0%
Vol Right, %	0%	40%	0%	0%	0%	36%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	241	201	22	173	173	152
LT Vol	0	0	22	0	0	97
Through Vol	241	121	0	173	173	0
RT Vol	0	80	0	0	0	55
Lane Flow Rate	313	261	29	224	224	197
Geometry Grp	8	8	7	7	7	7
Degree of Util (X)	0.548	0.435	0.052	0.376	0.267	0.381
Departure Headway (Hd)	6.295	6.012	6.553	6.045	4.285	6.951
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	570	597	546	594	833	517
Service Time	4.047	3.763	4.302	3.794	2.033	4.705
HCM Lane V/C Ratio	0.549	0.437	0.053	0.377	0.269	0.381
HCM Control Delay	16.5	13.3	9.7	12.4	8.6	14
HCM Lane LOS	C	B	A	B	A	B
HCM 95th-tile Q	3.3	2.2	0.2	1.7	1.1	1.8

Intersection	
Intersection Delay, s/veh	23.3
Intersection LOS	C

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	129	65	73	402	502	113
Future Vol, veh/h	129	65	73	402	502	113
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	168	84	95	522	652	147
Number of Lanes	1	0	1	2	2	0

Approach	SB	SE	NW
Opposing Approach		NW	SE
Opposing Lanes	0	2	3
Conflicting Approach Left	NW	SB	
Conflicting Lanes Left	2	1	0
Conflicting Approach Right	SE		SB
Conflicting Lanes Right	3	0	1
HCM Control Delay	19.8	13.3	32.1
HCM LOS	C	B	D

Lane	NWLn1	NWLn2	SELn1	SELn2	SELn3	SBLn1
Vol Left, %	0%	0%	100%	0%	0%	66%
Vol Thru, %	100%	60%	0%	100%	100%	0%
Vol Right, %	0%	40%	0%	0%	0%	34%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	335	280	73	201	201	194
LT Vol	0	0	73	0	0	129
Through Vol	335	167	0	201	201	0
RT Vol	0	113	0	0	0	65
Lane Flow Rate	435	364	95	261	261	252
Geometry Grp	8	8	7	7	7	7
Degree of Util (X)	0.858	0.69	0.195	0.499	0.371	0.55
Departure Headway (Hd)	7.11	6.822	7.395	6.884	5.11	7.858
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	509	532	486	525	705	461
Service Time	4.846	4.557	5.127	4.615	2.841	5.591
HCM Lane V/C Ratio	0.855	0.684	0.195	0.497	0.37	0.547
HCM Control Delay	39.4	23.4	11.9	16.3	10.8	19.8
HCM Lane LOS	E	C	B	C	B	C
HCM 95th-tile Q	9	5.3	0.7	2.8	1.7	3.3

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	414	19	0	405	18	0
Future Vol, veh/h	414	19	0	405	18	0
Conflicting Peds, #/hr	0	0	405	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	120	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	450	21	0	440	20	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	876	0	1295	855
Stage 1	-	-	-	-	855	-
Stage 2	-	-	-	-	440	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	771	-	179	358
Stage 1	-	-	-	-	417	-
Stage 2	-	-	-	-	649	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	474	-	110	220
Mov Cap-2 Maneuver	-	-	-	-	110	-
Stage 1	-	-	-	-	256	-
Stage 2	-	-	-	-	649	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	44.7
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	110	-	-	474	-
HCM Lane V/C Ratio	0.178	-	-	-	-
HCM Control Delay (s)	44.7	-	-	0	-
HCM Lane LOS	E	-	-	A	-
HCM 95th %tile Q(veh)	0.6	-	-	0	-

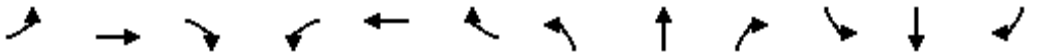
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	5	5	164	185	2
Future Vol, veh/h	3	5	5	164	185	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	5	5	178	201	2

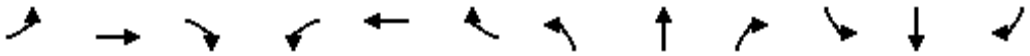
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	389	201	203	0	-	0
Stage 1	201	-	-	-	-	-
Stage 2	188	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	615	840	1369	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	844	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	613	840	1369	-	-	-
Mov Cap-2 Maneuver	613	-	-	-	-	-
Stage 1	830	-	-	-	-	-
Stage 2	844	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1369	-	738	-	-
HCM Lane V/C Ratio	0.004	-	0.012	-	-
HCM Control Delay (s)	7.6	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	211	160	150	185	89	163	1973	132	110	1733	69
Future Volume (vph)	111	211	160	150	185	89	163	1973	132	110	1733	69
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	2000	1900	1900	1900	1900
Storage Length (ft)	140		500	202		0	306		306	340		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	165			191			221			170		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.91	1.00	1.00	0.91	0.91
Frt			0.850		0.951				0.850		0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1905	1538	1719	1721	0	3335	5200	1538	1719	4910	0
Flt Permitted	0.281			0.299			0.950			0.950		
Satd. Flow (perm)	508	1905	1538	541	1721	0	3335	5200	1538	1719	4910	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			203		15				133		5	
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		1724			779			1706			1336	
Travel Time (s)		29.4			13.3			25.8			20.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	112	213	162	152	187	90	165	1993	133	111	1751	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	213	162	152	277	0	165	1993	133	111	1821	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Free	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

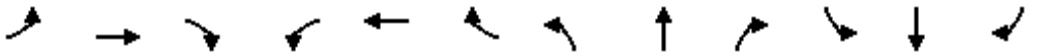


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		Free	8					2			
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0	3.0	3.0	15.0	
Minimum Split (s)	6.5	14.5		6.5	14.5		7.5	21.5	6.5	7.5	21.5	
Total Split (s)	16.8	23.8		23.8	30.8		25.2	72.8	23.8	19.6	67.2	
Total Split (%)	12.0%	17.0%		17.0%	22.0%		18.0%	52.0%	17.0%	14.0%	48.0%	
Maximum Green (s)	13.3	17.3		20.3	24.3		20.7	66.3	20.3	15.1	60.7	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5	3.5	3.5	4.5	
All-Red Time (s)	0.0	2.0		0.0	2.0		1.0	2.0	0.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.5		3.5	6.5		4.5	6.5	3.5	4.5	6.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	5.0		3.0	5.0		3.0	7.0	3.0	3.0	7.0	
Recall Mode	None	None		None	None		None	C-Max	None	None	C-Max	
Walk Time (s)					7.0							
Flash Dont Walk (s)					11.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	35.6	21.2	140.0	41.8	24.6		12.3	69.8	91.2	13.1	70.6	
Actuated g/C Ratio	0.25	0.15	1.00	0.30	0.18		0.09	0.50	0.65	0.09	0.50	
v/c Ratio	0.49	0.74	0.11	0.53	0.88		0.57	0.77	0.13	0.69	0.73	
Control Delay	43.7	72.9	0.1	43.9	80.8		56.9	39.7	3.0	83.1	30.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	43.7	72.9	0.1	43.9	80.8		56.9	39.7	3.0	83.1	30.2	
LOS	D	E	A	D	F		E	D	A	F	C	
Approach Delay		42.0			67.7			38.8			33.2	
Approach LOS		D			E			D			C	
Queue Length 50th (ft)	75	185	0	104	235		79	470	0	99	476	
Queue Length 95th (ft)	126	#348	0	166	#402		m108	564	m24	165	564	
Internal Link Dist (ft)		1644			699			1626			1256	
Turn Bay Length (ft)	140		500	202			306		306	340		
Base Capacity (vph)	250	287	1538	335	320		493	2592	1102	185	2478	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.45	0.74	0.11	0.45	0.87		0.33	0.77	0.12	0.60	0.73	

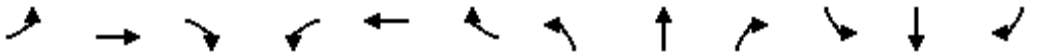
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 49 (35%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 39.4		Intersection LOS: D	
Intersection Capacity Utilization 81.5%		ICU Level of Service D	
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: US 45 & 179th Street



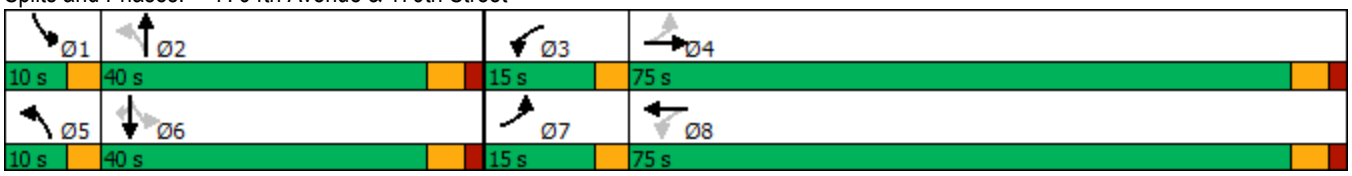
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	252	33	8	194	37	36	112	19	58	146	175
Future Volume (vph)	129	252	33	8	194	37	36	112	19	58	146	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	90		0	184		0	182		182
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	160			96			190			185		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.983			0.976			0.978				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1831	0	1770	1818	0	1770	1822	0	1770	1863	1583
Flt Permitted	0.379			0.570			0.656			0.641		
Satd. Flow (perm)	706	1831	0	1062	1818	0	1222	1822	0	1194	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			10			6				192
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		635			1010			691			578	
Travel Time (s)		10.8			17.2			10.5			8.8	
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
Adj. Flow (vph)	142	277	36	9	213	41	40	123	21	64	160	192
Shared Lane Traffic (%)												
Lane Group Flow (vph)	142	313	0	9	254	0	40	144	0	64	160	192
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6

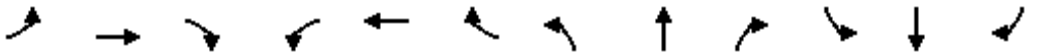


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	8.0
Minimum Split (s)	6.5	21.0		6.5	21.0		6.5	14.0		6.5	14.0	14.0
Total Split (s)	15.0	75.0		15.0	75.0		10.0	40.0		10.0	40.0	40.0
Total Split (%)	10.7%	53.6%		10.7%	53.6%		7.1%	28.6%		7.1%	28.6%	28.6%
Maximum Green (s)	11.5	69.0		11.5	69.0		6.5	34.0		6.5	34.0	34.0
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	Max		None	Max	Max
Walk Time (s)		7.0			7.0			7.0			7.0	7.0
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	34.0	29.7		26.1	17.7		41.7	34.3		42.5	36.3	36.3
Actuated g/C Ratio	0.40	0.35		0.30	0.21		0.49	0.40		0.50	0.42	0.42
v/c Ratio	0.35	0.49		0.02	0.66		0.06	0.20		0.10	0.20	0.25
Control Delay	19.8	25.8		16.4	39.8		11.5	18.8		11.7	18.8	4.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	19.8	25.8		16.4	39.8		11.5	18.8		11.7	18.8	4.1
LOS	B	C		B	D		B	B		B	B	A
Approach Delay		23.9			39.0			17.2			10.9	
Approach LOS		C			D			B			B	
Queue Length 50th (ft)	51	128		3	127		10	49		16	58	0
Queue Length 95th (ft)	90	239		12	206		29	100		41	113	43
Internal Link Dist (ft)		555			930			611			498	
Turn Bay Length (ft)	160			90			184			182		182
Base Capacity (vph)	424	1490		489	1480		639	733		637	790	782
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.33	0.21		0.02	0.17		0.06	0.20		0.10	0.20	0.25

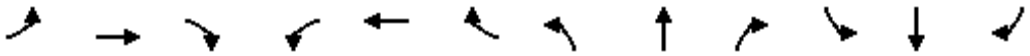
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 85.6			
Natural Cycle: 50			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 21.9		Intersection LOS: C	
Intersection Capacity Utilization 47.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: 94th Avenue & 179th Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	103	104	225	155	187	108	1992	252	120	1869	54
Future Volume (vph)	89	103	104	225	155	187	108	1992	252	120	1869	54
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	401		285	192		0	360		244	435		0
Storage Lanes	1		1	1		0	2		1	1		1
Taper Length (ft)	155			104			300			154		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.918				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1905	1538	1719	3156	0	3335	5200	1538	1719	5200	1538
Flt Permitted	0.540			0.478			0.950			0.950		
Satd. Flow (perm)	977	1905	1538	865	3156	0	3335	5200	1538	1719	5200	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109		192				184			117
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		1270			1966			1452			1706	
Travel Time (s)		21.6			33.5			22.0			25.8	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	92	106	107	232	160	193	111	2054	260	124	1927	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	106	107	232	353	0	111	2054	260	124	1927	56
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8					2			6
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	7.9	7.9	3.0	7.9		3.0	14.0	14.0	3.0	14.0	14.0
Minimum Split (s)	9.5	14.4	14.4	9.5	14.4		9.5	19.5	19.5	9.5	19.5	19.5
Total Split (s)	15.4	22.4	22.4	26.6	33.6		18.2	72.8	72.8	18.2	72.8	72.8
Total Split (%)	11.0%	16.0%	16.0%	19.0%	24.0%		13.0%	52.0%	52.0%	13.0%	52.0%	52.0%
Maximum Green (s)	11.9	15.9	15.9	23.1	27.1		13.7	67.3	67.3	13.7	67.3	67.3
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5	3.5	4.5	4.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.5	6.5	3.5	6.5		4.5	5.5	5.5	4.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	26.1	12.7	12.7	39.3	22.4		10.0	73.6	73.6	13.6	77.2	77.2
Actuated g/C Ratio	0.19	0.09	0.09	0.28	0.16		0.07	0.53	0.53	0.10	0.55	0.55
v/c Ratio	0.39	0.62	0.45	0.63	0.53		0.47	0.75	0.29	0.75	0.67	0.06
Control Delay	42.3	76.2	15.8	49.2	26.3		68.4	29.4	7.2	106.4	7.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.3	76.2	15.8	49.2	26.3		68.4	29.4	7.2	106.4	7.2	0.1
LOS	D	E	B	D	C		E	C	A	F	A	A
Approach Delay		44.8			35.4			28.8			12.8	
Approach LOS		D			D			C			B	
Queue Length 50th (ft)	63	94	0	174	68		51	553	36	119	90	0
Queue Length 95th (ft)	105	156	56	244	117		81	641	94	m#171	100	m0
Internal Link Dist (ft)		1190			1886			1372			1626	
Turn Bay Length (ft)	401		285	192			360		244	435		
Base Capacity (vph)	255	216	271	383	765		326	2733	895	176	2866	900
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.49	0.39	0.61	0.46		0.34	0.75	0.29	0.70	0.67	0.06

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 66 (47%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 24.2 Intersection LOS: C
Intersection Capacity Utilization 79.3% ICU Level of Service D
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: 13: US 45 & 183rd Street

Appendix

- **Intersection Capacity Analyses**
- **2027 Total Traffic**
  - **Access on US 45**

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	271	89	0	506	2	5
Future Vol, veh/h	271	89	0	506	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	120	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	295	97	0	550	2	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	392	0	845	295
Stage 1	-	-	-	-	295	-
Stage 2	-	-	-	-	550	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1167	-	333	744
Stage 1	-	-	-	-	755	-
Stage 2	-	-	-	-	578	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1167	-	333	744
Mov Cap-2 Maneuver	-	-	-	-	333	-
Stage 1	-	-	-	-	755	-
Stage 2	-	-	-	-	578	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	550	-	-	1167	-
HCM Lane V/C Ratio	0.014	-	-	-	-
HCM Control Delay (s)	11.6	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	0	7	0	0	0	0	0	0	0	60	29
Future Vol, veh/h	7	0	7	0	0	0	0	0	0	0	60	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	8	0	0	0	0	0	0	0	65	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	81	81	81	85	97	0	97	0	0	0	0	0
Stage 1	81	81	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	85	97	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	907	809	979	901	793	-	1496	-	-	-	-	-
Stage 1	927	828	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	923	815	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	809	979	894	793	-	1496	-	-	-	-	-
Mov Cap-2 Maneuver	-	809	-	894	793	-	-	-	-	-	-	-
Stage 1	927	828	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	916	815	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		0	0	0
HCM LOS	-	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1496	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0	0	-	-
HCM Lane LOS	A	-	-	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	21	24	118	149	18
Future Vol, veh/h	14	21	24	118	149	18
Conflicting Peds, #/hr	0	0	117	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	23	26	128	162	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	459	279	299	0	-	0
Stage 1	279	-	-	-	-	-
Stage 2	180	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	560	760	1262	-	-	-
Stage 1	768	-	-	-	-	-
Stage 2	851	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	432	675	1121	-	-	-
Mov Cap-2 Maneuver	432	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	757	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1121	-	551	-	-
HCM Lane V/C Ratio	0.023	-	0.069	-	-
HCM Control Delay (s)	8.3	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	35	6	0	47	20
Future Vol, veh/h	0	35	6	0	47	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	38	7	0	51	22
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.3	7.2	7.3
HCM LOS	A	A	A

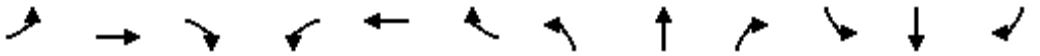
Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	70%
Vol Thru, %	100%	100%	0%
Vol Right, %	0%	0%	30%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	35	6	67
LT Vol	0	0	47
Through Vol	35	6	0
RT Vol	0	0	20
Lane Flow Rate	38	7	73
Geometry Grp	1	1	1
Degree of Util (X)	0.043	0.007	0.08
Departure Headway (Hd)	4.067	4.091	3.973
Convergence, Y/N	Yes	Yes	Yes
Cap	879	872	902
Service Time	2.098	2.129	1.993
HCM Lane V/C Ratio	0.043	0.008	0.081
HCM Control Delay	7.3	7.2	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0	0.3

Intersection	
Intersection Delay, s/veh	14.9
Intersection LOS	B

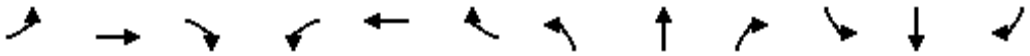
Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	107	72	23	361	390	92
Future Vol, veh/h	107	72	23	361	390	92
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	139	94	30	469	506	119
Number of Lanes	1	0	1	2	2	0

Approach	SB	SE	NW
Opposing Approach		NW	SE
Opposing Lanes	0	2	3
Conflicting Approach Left	NW	SB	
Conflicting Lanes Left	2	1	0
Conflicting Approach Right	SE		SB
Conflicting Lanes Right	3	0	1
HCM Control Delay	15.8	11.3	17.4
HCM LOS	C	B	C

Lane	NWLn1	NWLn2	SELn1	SELn2	SELn3	SBLn1
Vol Left, %	0%	0%	100%	0%	0%	60%
Vol Thru, %	100%	59%	0%	100%	100%	0%
Vol Right, %	0%	41%	0%	0%	0%	40%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	260	222	23	181	181	179
LT Vol	0	0	23	0	0	107
Through Vol	260	130	0	181	181	0
RT Vol	0	92	0	0	0	72
Lane Flow Rate	338	288	30	234	234	232
Geometry Grp	8	8	7	7	7	7
Degree of Util (X)	0.613	0.5	0.057	0.411	0.296	0.458
Departure Headway (Hd)	6.539	6.244	6.819	6.31	4.545	7.09
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	550	574	523	567	783	507
Service Time	4.307	4.012	4.587	4.078	2.312	4.859
HCM Lane V/C Ratio	0.615	0.502	0.057	0.413	0.299	0.458
HCM Control Delay	19.2	15.2	10	13.5	9.2	15.8
HCM Lane LOS	C	C	A	B	A	C
HCM 95th-tile Q	4.1	2.8	0.2	2	1.2	2.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	126	119	353	256	186	66	219	1711	131	110	1247	102
Future Volume (vph)	126	119	353	256	186	66	219	1711	131	110	1247	102
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	2000	1900	1900	1900	1900
Storage Length (ft)	140		500	202		0	306		306	340		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	165			191			221			170		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.91	1.00	1.00	0.91	0.91
Frt			0.850		0.961				0.850		0.989	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1905	1538	1719	1739	0	3335	5200	1538	1719	4886	0
Flt Permitted	0.408			0.491			0.950			0.950		
Satd. Flow (perm)	738	1905	1538	888	1739	0	3335	5200	1538	1719	4886	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			312		12				141		12	
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		1724			779			747			1336	
Travel Time (s)		29.4			13.3			11.3			20.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	135	128	380	275	200	71	235	1840	141	118	1341	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	135	128	380	275	271	0	235	1840	141	118	1451	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Free	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	



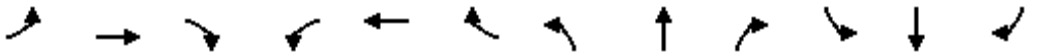
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		Free	8					2			
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0	3.0	3.0	15.0	
Minimum Split (s)	6.5	14.5		6.5	14.5		7.5	21.5	6.5	7.5	21.5	
Total Split (s)	16.9	26.0		23.4	32.5		23.4	61.1	23.4	19.5	57.2	
Total Split (%)	13.0%	20.0%		18.0%	25.0%		18.0%	47.0%	18.0%	15.0%	44.0%	
Maximum Green (s)	13.4	19.5		19.9	26.0		18.9	54.6	19.9	15.0	50.7	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5	3.5	3.5	4.5	
All-Red Time (s)	0.0	2.0		0.0	2.0		1.0	2.0	0.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.5		3.5	6.5		4.5	6.5	3.5	4.5	6.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	5.0		3.0	5.0		3.0	7.0	3.0	3.0	7.0	
Recall Mode	None	None		None	None		None	C-Max	None	None	C-Max	
Walk Time (s)					7.0							
Flash Dont Walk (s)					11.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	32.1	17.2	130.0	42.6	24.1		14.4	59.9	85.3	13.0	58.5	
Actuated g/C Ratio	0.25	0.13	1.00	0.33	0.19		0.11	0.46	0.66	0.10	0.45	
v/c Ratio	0.50	0.51	0.25	0.67	0.82		0.64	0.77	0.13	0.69	0.66	
Control Delay	38.0	59.3	0.4	43.1	68.0		45.1	36.1	10.8	76.7	30.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	38.0	59.3	0.4	43.1	68.0		45.1	36.1	10.8	76.7	30.6	
LOS	D	E	A	D	E		D	D	B	E	C	
Approach Delay		20.0			55.5			35.4			34.0	
Approach LOS		C			E			D			C	
90th %ile Green (s)	13.4	19.5		19.9	26.0		18.3	54.6	19.9	15.0	51.3	
90th %ile Term Code	Max	Max		Max	Max		Gap	Coord	Max	Max	Coord	
70th %ile Green (s)	13.4	19.5		19.9	26.0		16.0	54.6	19.9	15.0	53.6	
70th %ile Term Code	Max	Hold		Max	Max		Gap	Coord	Max	Max	Coord	
50th %ile Green (s)	13.0	19.5		19.9	26.4		14.4	55.4	19.9	14.2	55.2	
50th %ile Term Code	Gap	Hold		Max	Max		Gap	Coord	Max	Gap	Coord	
30th %ile Green (s)	11.2	15.5		19.2	23.5		12.8	62.3	19.2	12.0	61.5	
30th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Coord	Gap	Gap	Coord	
10th %ile Green (s)	8.8	11.9		15.6	18.7		10.5	72.7	15.6	8.8	71.0	
10th %ile Term Code	Gap	Hold		Gap	Gap		Gap	Coord	Gap	Gap	Coord	
Queue Length 50th (ft)	79	100	0	178	207		84	586	49	97	358	
Queue Length 95th (ft)	131	165	0	262	#332		m117	630	m81	163	437	
Internal Link Dist (ft)		1644			699			667			1256	
Turn Bay Length (ft)	140		500	202			306		306	340		
Base Capacity (vph)	291	285	1538	417	358		484	2397	1068	198	2205	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.46	0.45	0.25	0.66	0.76		0.49	0.77	0.13	0.60	0.66	

Intersection Summary

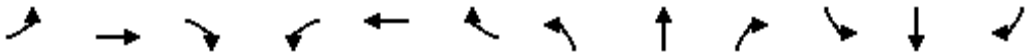
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 68 (52%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 35.2	Intersection LOS: D
Intersection Capacity Utilization 76.3%	ICU Level of Service D
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: US 45 & 179th Street



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	162	50	16	221	45	51	66	15	17	101	234
Future Volume (vph)	64	162	50	16	221	45	51	66	15	17	101	234
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	90		0	184		0	182		182
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	160			96			190			185		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.965			0.975			0.972				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1798	0	1770	1816	0	1770	1811	0	1770	1863	1583
Flt Permitted	0.410			0.618			0.617			0.701		
Satd. Flow (perm)	764	1798	0	1151	1816	0	1149	1811	0	1306	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			14			7				249
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		635			1010			691			578	
Travel Time (s)		10.8			17.2			10.5			8.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	68	172	53	17	235	48	54	70	16	18	107	249
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	225	0	17	283	0	54	86	0	18	107	249
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6



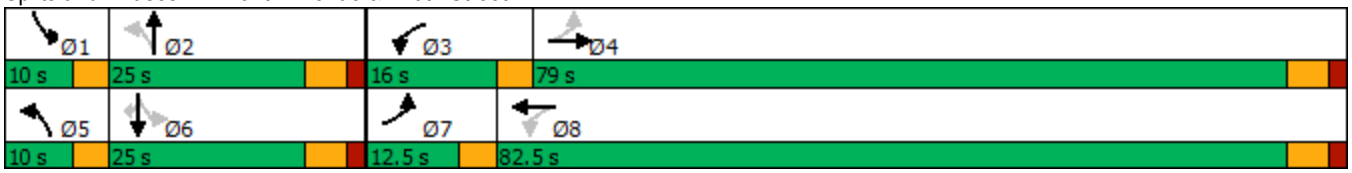
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	8.0
Minimum Split (s)	6.5	21.0		6.5	21.0		6.5	14.0		6.5	14.0	14.0
Total Split (s)	12.5	79.0		16.0	82.5		10.0	25.0		10.0	25.0	25.0
Total Split (%)	9.6%	60.8%		12.3%	63.5%		7.7%	19.2%		7.7%	19.2%	19.2%
Maximum Green (s)	9.0	73.0		12.5	76.5		6.5	19.0		6.5	19.0	19.0
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	Max		None	Max	Max
Walk Time (s)		7.0			7.0			7.0			7.0	7.0
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	27.6	23.5		23.8	16.7		26.9	23.2		25.4	19.6	19.6
Actuated g/C Ratio	0.44	0.38		0.38	0.27		0.43	0.37		0.41	0.31	0.31
v/c Ratio	0.15	0.33		0.03	0.57		0.10	0.13		0.03	0.18	0.37
Control Delay	11.5	15.8		11.0	26.1		11.9	15.6		11.6	20.5	5.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	11.5	15.8		11.0	26.1		11.9	15.6		11.6	20.5	5.2
LOS	B	B		B	C		B	B		B	C	A
Approach Delay		14.8			25.3			14.2			9.9	
Approach LOS		B			C			B			A	
90th %ile Green (s)	8.8	22.7		6.5	20.4		6.5	19.0		6.5	19.0	19.0
90th %ile Term Code	Gap	Hold		Gap	Gap		Max	MaxR		Max	MaxR	MaxR
70th %ile Green (s)	8.3	28.8		0.0	17.0		6.5	29.0		0.0	19.0	19.0
70th %ile Term Code	Gap	Hold		Skip	Gap		Max	Hold		Skip	MaxR	MaxR
50th %ile Green (s)	7.4	25.9		0.0	15.0		6.5	29.0		0.0	19.0	19.0
50th %ile Term Code	Gap	Hold		Skip	Min		Max	Hold		Skip	MaxR	MaxR
30th %ile Green (s)	6.7	25.2		0.0	15.0		0.0	19.0		0.0	19.0	19.0
30th %ile Term Code	Gap	Hold		Skip	Min		Skip	MaxR		Skip	MaxR	MaxR
10th %ile Green (s)	0.0	15.0		0.0	15.0		0.0	19.0		0.0	19.0	19.0
10th %ile Term Code	Skip	Min		Skip	Min		Skip	MaxR		Skip	MaxR	MaxR
Queue Length 50th (ft)	16	57		4	101		11	18		4	33	0
Queue Length 95th (ft)	36	131		14	177		34	62		16	77	51
Internal Link Dist (ft)		555			930			611			498	
Turn Bay Length (ft)	160			90			184			182		182
Base Capacity (vph)	486	1795		639	1816		561	677		585	583	666
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.14	0.13		0.03	0.16		0.10	0.13		0.03	0.18	0.37

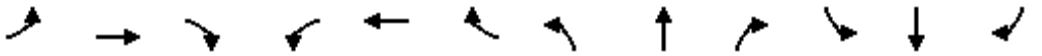
Intersection Summary

Area Type: Other

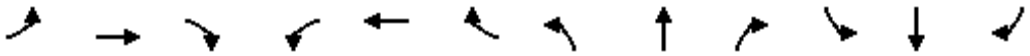
Cycle Length: 130	
Actuated Cycle Length: 62.5	
Natural Cycle: 50	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 15.9	Intersection LOS: B
Intersection Capacity Utilization 45.5%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 73.7	
70th %ile Actuated Cycle: 69.8	
50th %ile Actuated Cycle: 66.9	
30th %ile Actuated Cycle: 56.2	
10th %ile Actuated Cycle: 46	

Splits and Phases: 7: 94th Avenue & 179th Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	98	107	233	103	126	246	1900	194	92	1661	103
Future Volume (vph)	89	98	107	233	103	126	246	1900	194	92	1661	103
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	401		285	192		0	360		244	435		0
Storage Lanes	1		1	1		0	2		1	1		1
Taper Length (ft)	155			104			300			154		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.917				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1905	1538	1719	3153	0	3335	5200	1538	1719	5200	1538
Flt Permitted	0.597			0.490			0.950			0.950		
Satd. Flow (perm)	1080	1905	1538	887	3153	0	3335	5200	1538	1719	5200	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155		137				172			164
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		1270			1966			1452			961	
Travel Time (s)		21.6			33.5			22.0			14.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	97	107	116	253	112	137	267	2065	211	100	1805	112
Shared Lane Traffic (%)												
Lane Group Flow (vph)	97	107	116	253	249	0	267	2065	211	100	1805	112
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8					2			6
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	8.0	8.0	3.0	8.0		3.0	14.9	14.9	3.0	15.0	15.0
Minimum Split (s)	6.5	14.5	14.5	6.5	14.5		7.5	20.4	20.4	7.5	20.5	20.5
Total Split (s)	15.6	20.8	20.8	19.5	24.7		23.4	72.8	72.8	16.9	66.3	66.3
Total Split (%)	12.0%	16.0%	16.0%	15.0%	19.0%		18.0%	56.0%	56.0%	13.0%	51.0%	51.0%
Maximum Green (s)	12.1	14.3	14.3	16.0	18.2		18.9	67.3	67.3	12.4	60.8	60.8
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5	3.5	4.5	4.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.5	6.5	3.5	6.5		4.5	5.5	5.5	4.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	25.4	12.0	12.0	34.3	17.3		15.4	70.9	70.9	11.3	66.8	66.8
Actuated g/C Ratio	0.20	0.09	0.09	0.26	0.13		0.12	0.55	0.55	0.09	0.51	0.51
v/c Ratio	0.37	0.61	0.41	0.76	0.46		0.68	0.73	0.23	0.67	0.68	0.13
Control Delay	41.2	71.3	7.5	56.7	25.8		63.5	24.8	4.5	68.2	30.2	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.2	71.3	7.5	56.7	25.8		63.5	24.8	4.5	68.2	30.2	5.7
LOS	D	E	A	E	C		E	C	A	E	C	A
Approach Delay		39.0			41.3			27.2			30.7	
Approach LOS		D			D			C			C	
90th %ile Green (s)	12.1	14.3	14.3	16.0	18.2		18.9	67.3	67.3	12.4	60.8	60.8
90th %ile Term Code	Max	Max	Max	Max	Hold		Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	12.1	14.3	14.3	16.0	18.2		17.3	67.3	67.3	12.4	62.4	62.4
70th %ile Term Code	Max	Max	Max	Max	Hold		Gap	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	11.1	12.6	12.6	16.0	17.5		15.6	68.5	68.5	12.9	65.8	65.8
50th %ile Term Code	Gap	Gap	Gap	Max	Hold		Gap	Coord	Coord	Gap	Coord	Coord
30th %ile Green (s)	9.6	10.7	10.7	16.0	17.1		13.9	72.5	72.5	10.8	69.4	69.4
30th %ile Term Code	Gap	Gap	Gap	Max	Hold		Gap	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	7.3	8.0	8.0	14.9	15.6		11.4	79.1	79.1	8.0	75.7	75.7
10th %ile Term Code	Gap	Min	Min	Gap	Hold		Gap	Coord	Coord	Gap	Coord	Coord
Queue Length 50th (ft)	63	88	0	183	45		112	483	15	69	515	21
Queue Length 95th (ft)	110	149	26	268	87		155	555	56	m122	595	m49
Internal Link Dist (ft)		1190			1886			1372			881	
Turn Bay Length (ft)	401		285	192			360		244	435		
Base Capacity (vph)	284	209	307	335	559		484	2838	917	164	2673	870
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.51	0.38	0.76	0.45		0.55	0.73	0.23	0.61	0.68	0.13

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 30.5	Intersection LOS: C
Intersection Capacity Utilization 76.6%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: US 45 & 183rd Street

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	23	2038	77	0	1856
Future Volume (vph)	0	23	2038	77	0	1856
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		240	0	
Storage Lanes	0	1		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.86
Frt		0.865		0.850		
Flt Protected						
Satd. Flow (prot)	0	1611	5085	1583	0	6408
Flt Permitted						
Satd. Flow (perm)	0	1611	5085	1583	0	6408
Link Speed (mph)	30		45			45
Link Distance (ft)	663		961			747
Travel Time (s)	15.1		14.6			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	25	2215	84	0	2017
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	25	2215	84	0	2017
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		24			24
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	453	39	0	449	7	25
Future Vol, veh/h	453	39	0	449	7	25
Conflicting Peds, #/hr	0	0	405	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	120	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	492	42	0	488	8	27

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	939	0	1385	897
Stage 1	-	-	-	-	897	-
Stage 2	-	-	-	-	488	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	730	-	158	339
Stage 1	-	-	-	-	398	-
Stage 2	-	-	-	-	617	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	448	-	97	208
Mov Cap-2 Maneuver	-	-	-	-	97	-
Stage 1	-	-	-	-	244	-
Stage 2	-	-	-	-	617	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	32.3
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	166	-	-	448	-
HCM Lane V/C Ratio	0.21	-	-	-	-
HCM Control Delay (s)	32.3	-	-	0	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q(veh)	0.8	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	32	0	31	0	0	0	0	0	0	0	23	16
Future Vol, veh/h	32	0	31	0	0	0	0	0	0	0	23	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	0	34	0	0	0	0	0	0	0	25	17

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	34	34	34	51	42	0	42	0	0	0	0	0
Stage 1	34	34	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	51	42	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	973	859	1039	948	850	-	1567	-	-	-	-	-
Stage 1	982	867	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	962	860	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	859	1039	918	850	-	1567	-	-	-	-	-
Mov Cap-2 Maneuver	-	859	-	918	850	-	-	-	-	-	-	-
Stage 1	982	867	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	931	860	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		0	0	0
HCM LOS	-	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1567	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0	0	-	-
HCM Lane LOS	A	-	-	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	74	8	177	199	12
Future Vol, veh/h	13	74	8	177	199	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	80	9	192	216	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	426	216	229	0	-	0
Stage 1	216	-	-	-	-	-
Stage 2	210	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	585	824	1339	-	-	-
Stage 1	820	-	-	-	-	-
Stage 2	825	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	580	824	1339	-	-	-
Mov Cap-2 Maneuver	580	-	-	-	-	-
Stage 1	813	-	-	-	-	-
Stage 2	825	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1339	-	775	-	-
HCM Lane V/C Ratio	0.006	-	0.122	-	-
HCM Control Delay (s)	7.7	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	46	14	0	42	11
Future Vol, veh/h	0	46	14	0	42	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	50	15	0	46	12
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.3	7.2	7.4
HCM LOS	A	A	A

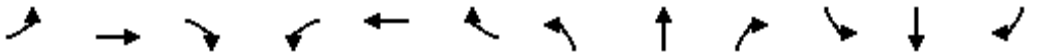
Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	79%
Vol Thru, %	100%	100%	0%
Vol Right, %	0%	0%	21%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	46	14	53
LT Vol	0	0	42
Through Vol	46	14	0
RT Vol	0	0	11
Lane Flow Rate	50	15	58
Geometry Grp	1	1	1
Degree of Util (X)	0.056	0.017	0.065
Departure Headway (Hd)	4.047	4.072	4.081
Convergence, Y/N	Yes	Yes	Yes
Cap	884	876	877
Service Time	2.077	2.11	2.11
HCM Lane V/C Ratio	0.057	0.017	0.066
HCM Control Delay	7.3	7.2	7.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.1	0.2

Intersection	
Intersection Delay, s/veh	25.4
Intersection LOS	D

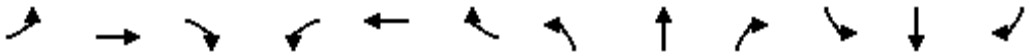
Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	147	131	76	421	542	125
Future Vol, veh/h	147	131	76	421	542	125
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	156	90	501	645	149
Number of Lanes	1	0	1	2	2	0

Approach	SB	SE	NW
Opposing Approach		NW	SE
Opposing Lanes	0	2	3
Conflicting Approach Left	NW	SB	
Conflicting Lanes Left	2	1	0
Conflicting Approach Right	SE		SB
Conflicting Lanes Right	3	0	1
HCM Control Delay	23.7	13.7	34.7
HCM LOS	C	B	D

Lane	NWLn1	NWLn2	SELn1	SELn2	SELn3	SBLn1
Vol Left, %	0%	0%	100%	0%	0%	53%
Vol Thru, %	100%	59%	0%	100%	100%	0%
Vol Right, %	0%	41%	0%	0%	0%	47%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	361	306	76	211	211	278
LT Vol	0	0	76	0	0	147
Through Vol	361	181	0	211	211	0
RT Vol	0	125	0	0	0	131
Lane Flow Rate	430	364	90	251	251	303
Geometry Grp	8	8	7	7	7	7
Degree of Util (X)	0.875	0.71	0.192	0.495	0.371	0.649
Departure Headway (Hd)	7.322	7.028	7.624	7.111	5.332	7.709
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	495	513	471	506	674	470
Service Time	5.065	4.771	5.363	4.85	3.071	5.446
HCM Lane V/C Ratio	0.869	0.71	0.191	0.496	0.372	0.645
HCM Control Delay	42.7	25.2	12.2	16.7	11.2	23.7
HCM Lane LOS	E	D	B	C	B	C
HCM 95th-tile Q	9.4	5.6	0.7	2.7	1.7	4.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	223	167	169	199	88	179	2124	130	139	1804	72
Future Volume (vph)	116	223	167	169	199	88	179	2124	130	139	1804	72
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	2000	1900	1900	1900	1900
Storage Length (ft)	140		500	202		0	306		306	340		0
Storage Lanes	1		1	1		0	2		1	1		0
Taper Length (ft)	165			191			221			170		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.91	1.00	1.00	0.91	0.91
Frt			0.850		0.954				0.850		0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1905	1538	1719	1726	0	3335	5200	1538	1719	4910	0
Flt Permitted	0.339			0.256			0.950			0.950		
Satd. Flow (perm)	613	1905	1538	463	1726	0	3335	5200	1538	1719	4910	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169		14				131		5	
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		1724			779			731			1336	
Travel Time (s)		29.4			13.3			11.1			20.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	117	225	169	171	201	89	181	2145	131	140	1822	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	117	225	169	171	290	0	181	2145	131	140	1895	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Free	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	



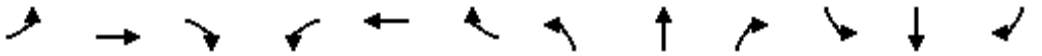
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		Free	8					2			
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0	3.0	3.0	15.0	
Minimum Split (s)	6.5	14.5		6.5	14.5		7.5	21.5	6.5	7.5	21.5	
Total Split (s)	13.0	23.8		23.8	34.6		25.2	66.4	23.8	26.0	67.2	
Total Split (%)	9.3%	17.0%		17.0%	24.7%		18.0%	47.4%	17.0%	18.6%	48.0%	
Maximum Green (s)	9.5	17.3		20.3	28.1		20.7	59.9	20.3	21.5	60.7	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5	3.5	3.5	4.5	
All-Red Time (s)	0.0	2.0		0.0	2.0		1.0	2.0	0.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.5		3.5	6.5		4.5	6.5	3.5	4.5	6.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	5.0		3.0	5.0		3.0	7.0	3.0	3.0	7.0	
Recall Mode	None	None		None	None		None	C-Max	None	None	C-Max	
Walk Time (s)					7.0							
Flash Dont Walk (s)					11.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	32.8	20.5	140.0	42.7	27.1		12.9	66.2	88.6	16.4	69.7	
Actuated g/C Ratio	0.23	0.15	1.00	0.30	0.19		0.09	0.47	0.63	0.12	0.50	
v/c Ratio	0.54	0.81	0.11	0.60	0.84		0.59	0.87	0.13	0.70	0.77	
Control Delay	47.1	79.7	0.1	46.7	73.0		57.4	44.8	3.5	77.1	32.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	47.1	79.7	0.1	46.7	73.0		57.4	44.8	3.5	77.1	32.1	
LOS	D	E	A	D	E		E	D	A	E	C	
Approach Delay		45.9			63.2			43.5			35.2	
Approach LOS		D			E			D			D	
90th %ile Green (s)	9.5	17.3		20.3	28.1		16.5	59.9	20.3	21.5	64.9	
90th %ile Term Code	Max	Max		Max	Max		Gap	Coord	Max	Max	Coord	
70th %ile Green (s)	9.5	19.1		18.5	28.1		14.4	62.3	18.5	19.1	67.0	
70th %ile Term Code	Max	Max		Gap	Max		Gap	Coord	Gap	Gap	Coord	
50th %ile Green (s)	9.5	21.6		16.0	28.1		12.9	64.8	16.0	16.6	68.5	
50th %ile Term Code	Max	Max		Gap	Max		Gap	Coord	Gap	Gap	Coord	
30th %ile Green (s)	9.5	23.9		13.7	28.1		11.4	67.2	13.7	14.2	70.0	
30th %ile Term Code	Max	Max		Gap	Hold		Gap	Coord	Gap	Gap	Coord	
10th %ile Green (s)	8.3	20.7		10.8	23.2		9.3	77.0	10.8	10.5	78.2	
10th %ile Term Code	Gap	Gap		Gap	Hold		Gap	Coord	Gap	Gap	Coord	
Queue Length 50th (ft)	78	199	0	119	243		88	510	1	124	513	
Queue Length 95th (ft)	130	#373	0	184	#387		m108	#642	m19	192	607	
Internal Link Dist (ft)		1644			699			651			1256	
Turn Bay Length (ft)	140		500	202			306		306	340		
Base Capacity (vph)	219	279	1538	323	357		493	2460	1066	263	2447	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.53	0.81	0.11	0.53	0.81		0.37	0.87	0.12	0.53	0.77	

Intersection Summary

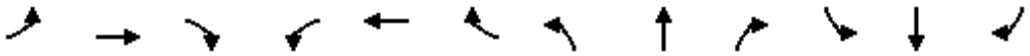
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 49 (35%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 42.3	Intersection LOS: D
Intersection Capacity Utilization 86.9%	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: 1: US 45 & 179th Street



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	286	35	12	209	40	50	121	20	63	164	190
Future Volume (vph)	157	286	35	12	209	40	50	121	20	63	164	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	90		0	184		0	182		182
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	160			96			190			185		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.976			0.979				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1833	0	1770	1818	0	1770	1824	0	1770	1863	1583
Flt Permitted	0.357			0.550			0.641			0.657		
Satd. Flow (perm)	665	1833	0	1025	1818	0	1194	1824	0	1224	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			10			6				209
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		635			1010			691			578	
Travel Time (s)		10.8			17.2			10.5			8.8	
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
Adj. Flow (vph)	173	314	38	13	230	44	55	133	22	69	180	209
Shared Lane Traffic (%)												
Lane Group Flow (vph)	173	352	0	13	274	0	55	155	0	69	180	209
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6



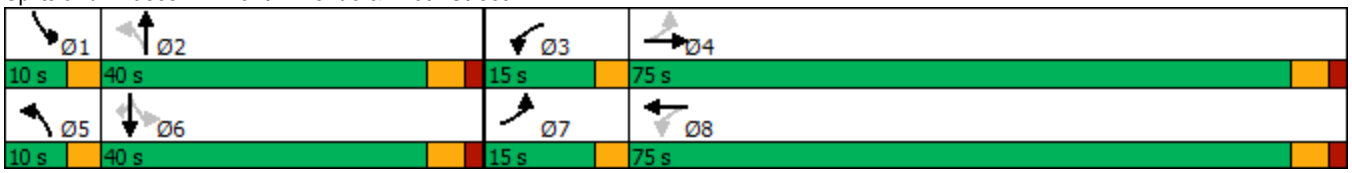
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	8.0
Minimum Split (s)	6.5	21.0		6.5	21.0		6.5	14.0		6.5	14.0	14.0
Total Split (s)	15.0	75.0		15.0	75.0		10.0	40.0		10.0	40.0	40.0
Total Split (%)	10.7%	53.6%		10.7%	53.6%		7.1%	28.6%		7.1%	28.6%	28.6%
Maximum Green (s)	11.5	69.0		11.5	69.0		6.5	34.0		6.5	34.0	34.0
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	Max		None	Max	Max
Walk Time (s)		7.0			7.0			7.0			7.0	7.0
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	35.3	31.0		27.0	18.6		41.7	34.3		41.9	34.3	34.3
Actuated g/C Ratio	0.41	0.36		0.31	0.21		0.48	0.39		0.48	0.39	0.39
v/c Ratio	0.43	0.54		0.04	0.69		0.09	0.21		0.11	0.24	0.28
Control Delay	20.8	26.7		16.2	40.9		12.2	19.6		12.3	20.6	4.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	20.8	26.7		16.2	40.9		12.2	19.6		12.3	20.6	4.2
LOS	C	C		B	D		B	B		B	C	A
Approach Delay		24.7			39.8			17.7			11.9	
Approach LOS		C			D			B			B	
90th %ile Green (s)	11.5	29.4		6.6	24.5		6.5	34.0		6.5	34.0	34.0
90th %ile Term Code	Max	Hold		Gap	Gap		Max	MaxR		Max	MaxR	MaxR
70th %ile Green (s)	11.5	35.5		0.0	20.5		6.5	34.0		6.5	34.0	34.0
70th %ile Term Code	Max	Hold		Skip	Gap		Max	MaxR		Max	MaxR	MaxR
50th %ile Green (s)	11.5	33.0		0.0	18.0		6.5	34.0		6.5	34.0	34.0
50th %ile Term Code	Max	Hold		Skip	Gap		Max	MaxR		Max	MaxR	MaxR
30th %ile Green (s)	11.0	29.9		0.0	15.4		6.2	34.0		6.5	34.3	34.3
30th %ile Term Code	Gap	Hold		Skip	Gap		Gap	MaxR		Max	Hold	Hold
10th %ile Green (s)	8.3	26.8		0.0	15.0		0.0	34.0		0.0	34.0	34.0
10th %ile Term Code	Gap	Hold		Skip	Min		Skip	MaxR		Skip	MaxR	MaxR
Queue Length 50th (ft)	63	148		4	140		14	55		18	68	0
Queue Length 95th (ft)	107	273		15	223		37	110		45	129	46
Internal Link Dist (ft)		555			930			611			498	
Turn Bay Length (ft)	160			90			184			182		182
Base Capacity (vph)	418	1468		484	1457		617	723		631	736	751
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.41	0.24		0.03	0.19		0.09	0.21		0.11	0.24	0.28

Intersection Summary

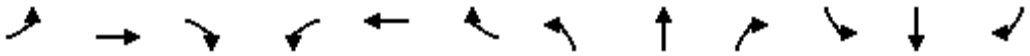
Area Type: Other

Cycle Length: 140	
Actuated Cycle Length: 86.9	
Natural Cycle: 50	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 22.7	Intersection LOS: C
Intersection Capacity Utilization 50.8%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 95.5	
70th %ile Actuated Cycle: 91.5	
50th %ile Actuated Cycle: 89	
30th %ile Actuated Cycle: 85.9	
10th %ile Actuated Cycle: 72.8	

Splits and Phases: 7: 94th Avenue & 179th Street



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	110	112	296	175	202	113	2096	262	125	1959	56
Future Volume (vph)	98	110	112	296	175	202	113	2096	262	125	1959	56
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	401		285	192		0	360		244	435		0
Storage Lanes	1		1	1		0	2		1	1		1
Taper Length (ft)	155			104			300			154		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.920				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1905	1538	1719	3163	0	3335	5200	1538	1719	5200	1538
Flt Permitted	0.522			0.458			0.950			0.950		
Satd. Flow (perm)	945	1905	1538	829	3163	0	3335	5200	1538	1719	5200	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			144		184				170			117
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		1270			1966			1452			975	
Travel Time (s)		21.6			33.5			22.0			14.8	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	101	113	115	305	180	208	116	2161	270	129	2020	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	101	113	115	305	388	0	116	2161	270	129	2020	58
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	



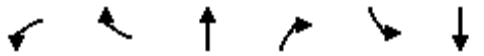
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8					2			6
Detector Phase	7	4	4	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	7.9	7.9	3.0	7.9		3.0	14.0	14.0	3.0	14.0	14.0
Minimum Split (s)	9.5	14.4	14.4	9.5	14.4		9.5	19.5	19.5	9.5	19.5	19.5
Total Split (s)	15.4	22.4	22.4	26.6	33.6		18.2	68.0	68.0	23.0	72.8	72.8
Total Split (%)	11.0%	16.0%	16.0%	19.0%	24.0%		13.0%	48.6%	48.6%	16.4%	52.0%	52.0%
Maximum Green (s)	11.9	15.9	15.9	23.1	27.1		13.7	62.5	62.5	18.5	67.3	67.3
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5		3.5	4.5	4.5	3.5	4.5	4.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.5	6.5	3.5	6.5		4.5	5.5	5.5	4.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	26.6	13.1	13.1	41.8	24.7		10.2	69.6	69.6	15.1	74.5	74.5
Actuated g/C Ratio	0.19	0.09	0.09	0.30	0.18		0.07	0.50	0.50	0.11	0.53	0.53
v/c Ratio	0.42	0.64	0.42	0.78	0.55		0.48	0.84	0.32	0.70	0.73	0.07
Control Delay	42.2	77.0	8.7	56.6	29.7		68.5	35.2	9.6	97.7	10.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.2	77.0	8.7	56.6	29.7		68.5	35.2	9.6	97.7	10.2	0.1
LOS	D	E	A	E	C		E	D	A	F	B	A
Approach Delay		42.4			41.5			34.0			15.0	
Approach LOS		D			D			C			B	
90th %ile Green (s)	11.9	15.9	15.9	23.1	27.1		13.1	62.5	62.5	18.5	67.9	67.9
90th %ile Term Code	Max	Max	Max	Max	Hold		Gap	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	11.9	15.6	15.6	23.1	26.8		11.4	63.2	63.2	18.1	69.9	69.9
70th %ile Term Code	Max	Gap	Gap	Max	Hold		Gap	Coord	Coord	Gap	Coord	Coord
50th %ile Green (s)	11.5	13.6	13.6	23.1	25.2		10.2	67.5	67.5	15.8	73.1	73.1
50th %ile Term Code	Gap	Gap	Gap	Max	Hold		Gap	Coord	Coord	Gap	Coord	Coord
30th %ile Green (s)	9.9	11.6	11.6	23.1	24.8		9.0	71.9	71.9	13.4	76.3	76.3
30th %ile Term Code	Gap	Gap	Gap	Max	Hold		Gap	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	7.7	8.6	8.6	18.9	19.8		7.3	82.7	82.7	9.8	85.2	85.2
10th %ile Term Code	Gap	Gap	Gap	Gap	Hold		Gap	Coord	Coord	Gap	Coord	Coord
Queue Length 50th (ft)	68	100	0	234	87		53	626	49	124	131	0
Queue Length 95th (ft)	114	165	34	327	140		85	746	119	m168	151	m0
Internal Link Dist (ft)		1190			1886			1372			895	
Turn Bay Length (ft)	401		285	192			360		244	435		
Base Capacity (vph)	254	216	302	394	760		326	2583	849	227	2766	872
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.52	0.38	0.77	0.51		0.36	0.84	0.32	0.57	0.73	0.07

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	

Offset: 66 (47%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 28.1	Intersection LOS: C
Intersection Capacity Utilization 85.5%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: US 45 & 183rd Street



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	72	2361	35	0	2140
Future Volume (vph)	0	72	2361	35	0	2140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		240	0	
Storage Lanes	0	1		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.86
Frt		0.865		0.850		
Flt Protected						
Satd. Flow (prot)	0	1611	5085	1583	0	6408
Flt Permitted						
Satd. Flow (perm)	0	1611	5085	1583	0	6408
Link Speed (mph)	30		45			45
Link Distance (ft)	648		975			731
Travel Time (s)	14.7		14.8			11.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	78	2566	38	0	2326
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	78	2566	38	0	2326
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		24			24
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.7%		ICU Level of Service B	
Analysis Period (min) 15			

PLAN COMMISSION STAFF REPORT

October 21, 2021 - Workshop

Zoning Code Text Amendment - Tobacco and Nicotine-Related Uses

Petitioner
Village of Tinley Park

Code Section
Section II (Definitions) and Section V (District Regulations) of Zoning Ordinance

Approvals Sought
Text Amendment

Project Planner
Lori Kosmatka
Associate Planner

EXECUTIVE SUMMARY

Planning staff periodically reviews the appropriateness and adequacy of various Zoning Ordinance regulations for any potential issues or inconsistencies. A lack of specific regulations related to tobacco and nicotine related uses (vaping, e-cig, hookah, nicotine products, etc.) was noticed as a potential concern.

Staff notes that tobacco and nicotine related uses are not specifically defined or regulated in the Zoning Ordinance. Since the adoption of the current Zoning Ordinance in 1978 tobacco-related uses have been regulated under a generic "*Retail Stores*" definition. Generic "Retail Stores" are permitted in the B-2 (Community Shopping) and B-3 (General Business and Commercial) zoning districts and prohibited in all others. Tobacco-related retail establishments have grown in popularity and evolved significantly over the years. These uses may pose some unique concerns related to their locations and overall regulation, as compared to other types of "retail stores". Additionally, in recent years, a clustering of tobacco-related stores has been observed in the Village.

On September 7, 2021 at the Village Committee of the Whole meeting, Village staff sought direction on how to address tobacco-related uses. The Committee's recommendations included making a specific tobacco-related use definition and requiring them to be special uses in the primary business districts. The Special Use process would be used analyze how they fit into the proposed area and existing concentration of similar uses. The Committee recommended researching and presenting the changes for the Plan Commission to provide them with a recommendation.

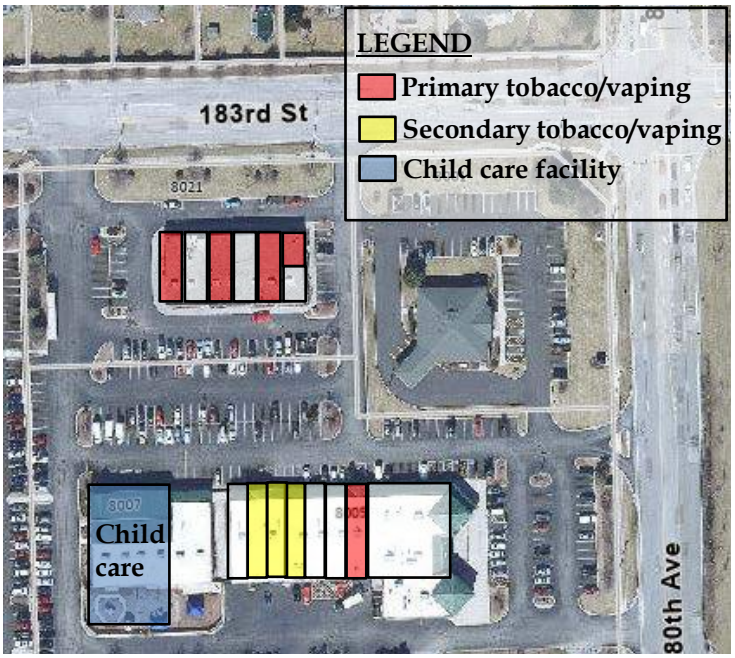
Staff has researched and drafted potential amendment options for the Commission's discussion. Staff is proposing a text amendment to provide specific definitions for tobacco and nicotine-related uses and product types, and to regulate accordingly per zoning districts. Retail sales of tobacco and nicotine-related products are generally differentiated by primary and secondary (accessory) business use levels of retail within an establishment. Staff recommends regulating the more intense primary business level as a Special Use in the B-2 and B-3 zoning districts with additional restrictions, while permitting the accessory use level (products are typically sold at retail/convenience stores, gas stations, etc.) in the B-1, B-2, B-3, B-4, and B-5 zoning districts. Staff also recommends clarifying language in the Legacy District's use table but maintaining it as a prohibited use.

BACKGROUND

Since the adoption of the Zoning Ordinance in 1978, tobacco and nicotine-related (vaping, e-cig, hookah, nicotine products) uses have been regulated under a generic "*Retail Stores*" definition, which are permitted in the B-2 (Community Shopping) and B-3 (General Business and Commercial) zoning districts and prohibited in all others. There are no definitions in the Zoning Ordinance specific to tobacco-related uses.

Tobacco-related uses are referred to elsewhere in the Village Code of Ordinances within Title XI: Business Regulations. The references include Chapter 120 "Comprehensive Regulation of Tobacco Products", Chapter 124 "Other Businesses: Tobacco Dealers", and within the fee schedules of Sec. 110.25. Chapter 120 defines "*Tobacco Shop" as "a retail establishment which derives at least 65% of its gross revenue from the sale of tobacco products*". The Village's fee schedules break down "*Tobacco dealer*" into either "*primary business*" or "*secondary business*", but no further distinction is provided. These Village ordinances relate to the licensing and legal requirements for these establishments. They are not related to zoning requirements. However, when possible, the Village tries to keep consistency across different regulations to avoid confusion.

According to Village records, there are currently 27 Tobacco dealer locations who pay an annual fee to the Village (*see attachment*). These locations include both tobacco as a primary and an accessory (secondary) use. Planning staff has yet to confirm the completeness and accuracy of the locations listed but it provides a sense of the total number of locations operating in the village. In addition to these stores, two hookah/cigar lounges exist in the Village (Habano/Pink Hookah and Cigar at 7615 159th Street and Hollywood Smokes at 6857 159th St). Additionally, at least 2 other businesses have current change of use applications submitted for primary tobacco-related store uses.



Existing Clustering of Tobacco/Vaping (Nicotine) Uses at 183rd St. & 80th Ave.

Existing conditions include a clustering of tobacco-related uses within the Village. The southwest corner of 183rd Street and 80th Avenue currently has several tobacco dealers. These locations are within the M-1 (General Manufacturing) zoning district but allows for business uses similar to the B-3 district at this intersection through the PUD regulations. 8021 183rd Street is a six-tenant building, four of which have tobacco or nicotine related uses. The multi-tenant building 185 feet to the south currently has six tenant units, including Will Tobacco and CD Liquors. The Tutor Time child-care facility is approximately 175 feet west of CD Liquors. Additionally, there are a number of tobacco-related uses along the 159th Street corridor.

Currently, the only zoning-related restriction the Village has for tobacco uses is a minimum distance to youth-oriented facilities. This is regulated in Sec. 120.10 "Proximity to Certain Institutions" restricting sale or delivery of tobacco products within 100 feet of any school, child care facility or other building used for education or recreational programs for persons under the age of 18 years.

In order to align with the other Village Code sections and address the varied intensity of use, Staff recommends the Village looks at addressing other Chapters of the Village Code as necessary. This may include defining primary and secondary Tobacco dealers, and providing contemporary definitions of products.

EVOLUTION OF USES AND DEFINITIONS

Over the years, products relating to tobacco use have expanded while the retail nature of tobacco establishments have grown and evolved. In addition to traditional tobacco products, e-cigarettes and alternative nicotine products are available to the consumer. These uses and products may pose some unique concerns related to their locations and overall regulation, as compared to other types of "retail stores".

Definitions

The State of Illinois state statutes Sec. 410 ILCS 82/1 and Sec. 720 ILCS 675 provide comprehensive definitions for these contemporary uses. The state statues define tobacco product, e-cigarette, alternative nicotine products, and retail tobacco stores. Local municipalities provide definitions with varying scope, and are regulated in varying manners.

Some definitions are be more or less quantitative and specific to allow additional flexibility as products continue to change, and some provide exclusions. For example, the Village of Orland Park's recent tobacco ordinance enacted earlier this year defines tobacco products in a similar manner to the state statutes, and excludes marijuana and any products specifically approved by the U.S. Food and Drug Administration for use in reducing, treating, or eliminating nicotine or tobacco dependence or for other medical purposes. Tobacco dealers are usually defined as primary and secondary (accessory) types for licensing and zoning regulation. Some municipalities differentiate this by identifying those who derive a minimum percentage of product gross revenue and/or devoting a minimum percentage of gross floor area to the display, advertising, merchandising, or stock of products, while noting that the sale of other products is merely incidental. The percentages vary substantially among municipalities anywhere from 10% to 80%. In the licensing regulations of Chapter 120, the Village currently defines "*Tobacco Shop" as "a retail establishment which derives at least 65% of its gross revenue from the sale of tobacco products*".

Limitations on Location and Density

Regulations can include limitations on locations relative to certain institutions, and density of tobacco stores. Minimum distances from youth-oriented facilities typically reflect the Village's 100-foot current regulation, though some municipalities increase the distance and include more institutions such as playgrounds, parks, and libraries. A community may choose to increase the minimum distance, and provide the option to apply for reduction of the distance requirement. The City of Aurora requires a 250-foot minimum distance, but allows reduction based upon a submitting a plan of conduct and fee, and receiving approval via an administrative hearing officer's findings. Beyond the minimum distance, effects on surrounding uses and properties are an aspect of the special use process that is reviewable.

Minimum distances to other tobacco stores are sometimes established in order to limit the density of tobacco stores in a community, such as at the corner of a typical intersection. Generally, this applies to primary uses and excludes secondary (accessory) uses. In nearby communities, Village of Frankfort restrictively regulates that licensed tobacco stores not be located within 2,000 feet of each other, meanwhile Village of Orland Park regulates that licensed primary tobacco or alternative nicotine product retailers and distributors not be within 1,000 feet of each other. Other Chicagoland communities are not as restrictive. One concern of tobacco retailers concentrating in a particular geographic area may include a chance of market conditions potentially leading to an additional impact on community health and safety. High competition between retailers could lead to lowering of prices, which in turn could increase a community's smoking rates.

Regulations can include limitations on quantity as well. A maximum quantity (cap) of dealers may be established within municipal licensing requirements, typically broken down into primary and secondary uses. This is not recommended by staff as a zoning regulation. If a total cap is desired, it would be better controlled by licensing requirements, similar to liquor licenses.

One additional regulation to consider is the method of measurement when calculating use distances. Some municipalities measure from the property lines of the lots or parcels on which the business locations are situated. Others may measure to the building line or the nearest portal of the building or structure.

Special Use and Zoning Districts

Zoning controls, including a Special Use, would allow the Village discretion to authorize and regulate the location and operation of tobacco and nicotine related dealers as appropriate for the Village, while not unduly burdening legitimate business activities of the dealers. Special Uses may be related to a particular intensity or use type. Village of Frankfort is one neighboring community requiring Special Use for tobacco stores. The Special Use may be more specific. For example, the Village of Antioch's zoning code does not specifically regulate tobacco, but does regulate vaping as a Special Use within their B-1 Business Convenience District. Zoning allowances may also differ based on zoning district. A greater allowance for secondary (accessory) uses of tobacco or nicotine related products could be provided based on the nature of the primary use. In other words, supermarkets may provide accessory sales, which would be permitted in more zoning districts than a primary tobacco store. The City of Aurora only has one use classification of "Cigarette or tobacco shops" but the allowances differ as being permitted in the business and manufacturing districts, and only as an accessory use in their office restricted industrial district.

When considering a Special Use the Commission has the ability to consider certain conditions where there is a rational nexus between the condition and the perceived impact of the proposed use; the conditions must be "specifically and uniquely attributable" to the proposal under review. Further the Zoning Ordinance provides Standards (Section X.J.5.) for consideration by the Plan Commission. Below please find the Standards outlined in the Zoning Ordinance.

X.J.5. Standards: No Special Use shall be recommended by the Plan Commission unless said Commission shall find:

a. *That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare;*

b. *That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood;*

c. *That the establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district;*

d. *That adequate utilities, access roads, drainage, and/or other necessary facilities have been or are being provided;*

e. *That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets;*

f. *That the Special Use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the Village Board pursuant to the recommendation of the Plan Commission. The Village Board shall impose such conditions and restrictions upon the premises benefited by a Special Use Permit as may be necessary to ensure compliance with the above standards, to reduce or minimize the effect of such permit upon other properties in the neighborhood, and to better carry out the general intent of this Ordinance. Failure to comply with such conditions or restrictions shall constitute a violation of this Ordinance; and*

g. *The extent to which the Special Use contributes directly or indirectly to the economic development of the community as a whole.*

Additional Regulations

Indoor smoking or sampling of tobacco and nicotine related products may also be regulated. Current state smoking regulations (410 ILCS 82/ Smoke Free Illinois Act) already prohibits indoor smoking of tobacco and nicotine-related products at any locations that are in a shared or multi-tenant building (unless established prior to the law's passage). Additional regulations could prohibit indoor smoking in all buildings which would include hookah or cigar lounges. Village of Frankfort currently prohibits smoking and/or sampling of tobacco and tobacco related products within the indoor area of any licensed tobacco store.

PROPOSED CHANGES

Zoning Code Definitions

Staff proposes the following definitions to the Zoning Ordinance which helps capture the scope of contemporary tobacco and nicotine related uses and products, while aligning with the gross revenue percentage currently identified in the Village's Chapter 120 "Comprehensive Regulation of Tobacco Products":

> *Tobacco Store*: A retail establishment that derives 65% or more of its gross revenue from the sale of tobacco products, electronic cigarettes, and alternative nicotine products, and in which the sale of other products is merely incidental.
>
> *Accessory Tobacco Sales*: A retail establishment that derives less than 65% of its gross revenue from the sale of tobacco products, electronic cigarettes, and alternative nicotine products, and in which the sale of other non-tobacco-related products is the primary function.
>
> *Tobacco Product*: (1) Any product which contains, is made, or derived from tobacco or used to deliver nicotine or other substances intended for human consumption, whether smoked, heated, chewed, dissolved, inhaled, snorted, sniffed, or ingested by any other means, including, but not limited to, cigarettes, cigars, little cigars, cheroots, stogies, periques, granulated, plug cut, crimp cut, ready rubbed and other smoking tobacco, snuff, snuff flour, bidis, snus, mints, hand gels, Cavendish, plug and twist tobacco, fine cut and other chewing tobaccos, shorts, refuse scraps, clippings, cutting, and sweepings of tobacco; (2) electronic smoking devices; (3) notwithstanding any provision of subsections (1) and (2) to the contrary, "Tobacco Product" includes any component, part, accessory, or associated tobacco paraphernalia of a tobacco product whether or not sold separately. Excluded from this definition is any product that contains marijuana and any products specifically approved by the U.S. Food and Drug Administration for use in reducing, treating, or eliminating nicotine or tobacco dependence or for other medical purposes when these products are being marketed and sold solely for such approved purpose.
>
> *Alternative Nicotine Products*: As defined in the Illinois Compiled Statutes, 720 ILCS 675/1.5, a product or device not consisting of or containing tobacco that provides for the ingestion into the body of nicotine, whether by chewing, smoking, absorbing, dissolving, inhaling, snorting, sniffing, or by any other means. "The Definition of Alternative Nicotine Product" excludes cigarettes, smokeless tobacco, or other tobacco products and any product approved by the United States Food and Drug Administration as a non-tobacco product for sale as a tobacco cessation product, as a tobacco dependence product, or for other medical purposes, and is being marketed and sold solely for that approved purpose.

Open Item #1: Discuss scope of definitions for two use types: Tobacco Store (primary), and Accessory Tobacco Sales (secondary).

Open Item #2: Discuss scope of definitions for product types of tobacco products (which includes electronic smoking devices), and alternative nicotine products.

Zoning Code Use Chart

Staff recommends the below specific use classifications, retaining the presence in the B-2 and B-3 zoning districts, but limiting Tobacco Stores to require a Special Use. Additionally, clarifying the allowance of Accessory Tobacco Sales in the B-1, B-2, B-3, B-4, and B-5 zoning districts. All other districts would be prohibited. A footnote can be added to accommodate any supplementary regulations the Commission believes should be implemented.

RETAIL USES	B-1	B-2	B-3	B-4	B-5
Tobacco Store		S#	S#		
Accessory Tobacco Sales	P	P	P	P	P

Footnote #: Maximum of one Tobacco Store per zoning lot. Must comply with other Village regulations of tobacco and nicotine related products and dealers as outlined in Chapter 120 and Chapter 124.

Legacy Code Use Chart

The Legacy Code currently prohibits "*Retail sales of tobacco, hookah, cigarette, cigar, e-cigarette, and vapor products as a principal use*", and provides a Special Use for "*Cigar lounge as a principal use (with or without retail sales as an accessory use*". Staff proposes to change the language to identify Tobacco Stores. Staff notes that the lounge use is currently limited to cigars. Staff does not propose to expand the lounge use beyond cigars to include hookahs or vaping, but the Village may consider it.

Legacy Code Use	Legacy Code Allowance
Tobacco Store	Prohibited
Cigar lounge as a principal use (with or without retail sales as an accessory)	Special Use

Open items for Discussion

Open Item #3: Discuss proposed allowances to permit Accessory Tobacco Sales, require Special Use for Tobacco Stores in the B-2 and B-3 zoning districts, and prohibit Tobacco Stores elsewhere, including the Legacy District. Discuss any other recommended supplementary requirements.

Open Item #4: Discuss if a maximum of one Tobacco Store per zoning lot is preferred.

Open Item #5: Discuss if a minimum distance between Tobacco Stores is preferred or else left open to consider as part of the Special Use review process. If preferred, discuss the method of measurement to determine distances.

Nonconforming Uses

Existing primary businesses selling tobacco and nicotine-related products will be affected by this proposal. If they become nonconforming upon the adoption of the ordinance, they would be subject to Section VI "Nonconforming Uses" of the Zoning Ordinance. This section will allow any existing businesses to continue operation as they exist and further are permitted to seek a Special Use to come into conformance with code requirements. However, the requirements for a special use and any other supplementary regulations will need to be met by any future businesses. Additionally, any sale or transfer of the business to a different owner would require the business to come into conformance with the current regulations, including obtaining a Special Use Permit. Staff does not propose any unique grandfathering clause nor changes to the nonconforming use allowances. In certain instances, this would mean the eventual elimination of the use if located in a way that does not permit a new owner to obtain a Special Use. Staff plans on notifying existing businesses of any changes so they are aware of any new requirements going forward.

RECOMMENDATION

Based on Village Trustee direction, Staff is recommending, the Zoning Ordinance be amended to include definitions for tobacco and nicotine related uses, regulating Tobacco Stores as a Special Use within in the B-2 and B-3 zoning districts. The Special Use review process will allow the Board to use discretion to authorize and regulate the location and operation of tobacco and nicotine related dealers as appropriate for the Village.

Upon completion of a successful Plan Commission Workshop staff will draft an ordinance reflecting the amendments. A Public Hearing has been scheduled for November 4, 2021 at the regular Plan Commission meeting.

Licensee Browse
Village of Tinley Park

Full Primary Address	Last Name	Business Name	Home Phone #	Primary contact first name	Primary contact last name	Primary contact email address
8021 W 183RD ST UNIT A-1 TINLEY PARK IL 60487	1ST STOP TOBACCO	8021 AA, INC.	( ) -	PRADEEP	PATEL	pradeep17241@gmail.com
7601 159TH ST TINLEY PARK IL 60477	7-ELEVEN #30129G	PRAYAG, INC.	( ) -	KASHYAP	SHUKLA	
8005 W 183RD ST UNITS F-G-H TINLEY PARK IL 60487	CD LIQUORS	ARH INC.	( ) -	RUPAL	BHATT	
8401 W 159TH ST TINLEY PARK IL 60487	CIRCLE K #4706757	RDK VENTURES, LLC	( ) -	CAROLE	OWINGS	cowings@circlekmidwest.com
6800 W 159TH ST TINLEY PARK IL 60477	DELTA SONIC CAR WASH SYST. INC	DELTA SONIC CAR WASH SYST. INC	(708) 614-0772		DELTA SONIC CAR WASH SYSTEMS	
8021 W 183RD ST SUITE F TINLEY PARK IL 60487	ELITE CIGARS & TOBACCO	TINLEY MART, INC.	( ) -	AYHAM	HAMAD	
19420 HARLEM AVE TINLEY PARK IL 60487	GAS N WASH HARLEM AVENUE	LENNY'S GAS N WASH HARLEM AVE., LLC	( ) -	LEONARD	MC ENERY	
6857 W 159TH ST TINLEY PARK IL 60477	HOLLYWOOD TOBACCO & CIGARS	TRIO RETAIL GROUP, INC.	( ) -	HASSAN	SAID	
7101 W 183RD ST SUITE 107 TINLEY PARK IL 60477	IN AND OUT LIQUOR, INC.	IN AND OUT LIQUOR, INC.	( ) -	LAITH	SWAISS	
17113 HARLEM AVE TINLEY PARK IL 60477	JEWEL FOOD STORES #3165	JEWEL FOOD STORES #3165	( ) -		JEWEL FOOD STORES, INC.	nasc.tax@safeway.com
16948 S OAK PARK AVE TINLEY PARK IL 60477	MORE LIQUOR	E AND B LIQUORS, INC.	( ) -	PRAVIN	PATEL	
17113 HARLEM AVE TINLEY PARK IL 60477	OSCO DRUG #3165	AMERICAN DRUG STORES	(708) 532-7334		AMERICAN DRUG STORES LLC	nasc.tax@safeway.com
16100 HARLEM AVE TINLEY PARK IL 60477	SAM'S CLUB #6485	SAM'S WEST, INC.	(708) 429-6069	JACEY	WINDEL	complic@wal-mart.com
16663 80TH AVE TINLEY PARK IL 60477	SHOP N GO, INC.	SHOP N GO, INC.	( ) -	AHMAD	ALHAMDAN	
7301 W 183RD ST UNIT C TINLEY PARK IL 60477	SMOKEY TOP	SMOKEY TOP, INC.	( ) -	JESSICA	HAMOURI	jessicahamouri@ymail.com
7201 W 183RD ST TINLEY PARK IL 60477	SPEEDWAY #7427	SPEEDWAY, LLC	(708) 532-3373		SPEEDWAY, LLC	tlalexander@speedway.com
18460 S 80TH AVE TINLEY PARK IL 60487	SPEEDWAY 1413	SPEEDWAY, LLC	( ) -		SPEEDWAY, LLC	tlalexander@speedway.com
9410 179TH ST TINLEY PARK IL 60487	THE CORNER STORE	YARA'S CORNER STORE	( ) -	BAHA	SWAISS	
16723 80TH AVE TINLEY PARK IL 60477	TINLEY MARKET	TINLEY MARKET	( ) -	KHALED	AYYAD	
16701 S OAK PARK AVE TINLEY PARK IL 60477-1609	TINLEY PARK GAS & FOOD	TINLEY PARK GAS & FOOD	( ) -	ANEEZA	KHAN	
8005 183RD ST SUITE D TINLEY PARK IL 60487	TINLEY PARK SMOKES INC.	TINLEY PARK SMOKES INC.	( ) -	HASSAN	AOUN	
8005 W 183RD ST UNIT C TINLEY PARK IL 60487	TINLEY PARK TOBACCO OUTLET INC	TINLEY PARK TOBACCO OUTLET INC.	( ) -	HAKIME	OUN	
15915 S 76TH AVE TINLEY PARK IL 60477	TINLEY WINE & SPIRITS	TINLEY SPIRITS INC.	( ) -	JAMIL	SALMAN	jamilsalman2005@yahoo.com
15916 HARLEM AVE TINLEY PARK IL 60477	U.S. SMOKE & VAPE, INC.	U.S. SMOKE & VAPE, INC.	( ) -	IMAD	MUSLEH	
16675 S OAK PARK AVE TINLEY PARK IL 60477	WALGREENS #04743	WALGREENS #04743	(708) 429-0770		BOND DRUG CO. OF ILLINOIS	taxlicenserenewals@walgreens.com
8400 W 171ST ST TINLEY PARK IL 60487	WALGREENS #09331	WALGREENS #09331	( ) -		BOND DRUG CO. OF ILLINOIS	taxlicenserenewals@walgreens.com
17101 HARLEM AVE TINLEY PARK IL 60477	YADY'S CARWASH INC.	YADY'S CARWASH INC.	( ) -	LUIS	ACOSTA	

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