



PLANNING COMMISSION STAFF REPORT

Conditional Use Permit for 7000 – 57TH Avenue North

FROM: Dan Olson, City Planner

TO: Planning Commission (for October 9 Meeting)

DATE: October 3, 2023

RE: PUBLIC HEARING – Conditional Use Permit request from New Horizon Academy for a child day care center at 7000 – 57th Avenue North (Application Number 2023-06)

A. BACKGROUND

New Horizon Academy has applied for a conditional use permit (CUP) to allow a child day care center at 7000 – 57th Avenue North. The applicant is proposing to purchase the property from the current property owner and convert the existing office building to the day care center. The property is zoned Commercial (C) and child day care is a conditional use within that district.

Notice of the October 9 public hearing was published in the Sun Post on September 28, mailed to owners, renters and business tenants within 500 feet (see attachment A), and posted to all neighborhoods on Nextdoor. A sign was also posted on the property.

Attachments:

- A. Site location and public hearing mailing notice map
- B. Zoning map
- C. Photos of existing property
- D. Project narrative
- E. Site plans (25 sheets)

B. PROPOSED CONDITIONAL USE

Existing Use

The existing 15,948 sq. ft. office building was constructed in 1976 on the 59,804 sq. ft. (1.37 acre) property. The property has 78 parking spaces.

Adjacent uses

The following are the existing land uses and zoning districts surrounding this property:

- North. U-Haul self-storage facility, zoned Commercial
- East. Vehicle repair shop, Joe's Barber Shop and Masonic Lodge, all zoned Commercial
- West. Across Kentucky Avenue, office building zoned Commercial
- South. Across 57th Avenue N, Wells Fargo bank, O'Reilly auto parts store, and Huntington bank, all zoned Commercial

Proposed use

The existing office building is proposed to be converted to a child day care center. The applicant is not proposing to enlarge the building or increase the size of the parking lot, but will reduce the parking lot size to accommodate new child play areas. The floor plan (attachment E) shows ten classrooms and administrative areas. The day care will have a maximum of 189 children under the age of 5 and an average daily attendance of 143 children. There will be 29 staff members and the center will be open from 6:00 AM to 6:30 PM, Monday through Friday. The following are the notable site plan elements for this proposed day care:

- Parking. The Unified Development Code (UDC) does not have a minimum number of required parking spaces for a child day care center. The site currently contains 78 parking spaces, but the applicant is proposing to reduce that number to 43 spaces to accommodate new outdoor play areas for the children. The project narrative (attachment D) provides:
 - **Child pick-up and drop-off information.** Caregivers are required to park in the lot and bring the children into the center. New Horizon owns a small mini-bus for picking up school age children, but they have indicated that the Crystal center will only have preschool age children. That said, this CUP would not limit this facility to preschool children unless the Planning Commission and City Council want to add that as a condition.
 - **An Apple Valley traffic study.** As an example of how New Horizon's day care centers operate, in 2021 the applicant completed a detailed traffic study of its Apple Valley location.
 - **A comparative parking analysis.** The analysis compares the proposed parking needs for the Crystal location to existing New Horizon locations in the Twin Cities to demonstrate that 43 parking spaces are sufficient for this

proposed use. Staff has contacted staff of these respective cities to see if parking has been an issue:

- **Eden Prairie.** One of New Horizon's Eden Prairie locations is similar in building size and number of spaces (14,537 sq. ft. with 47 spaces). Eden Prairie staff indicated that there have been no parking issues with that (or any other) location.
- **Apple Valley.** As indicated above, New Horizon completed a detailed traffic study in 2021 for their Apple Valley location, which is 10,700 sq. ft in size with 31 parking spaces. Apple Valley staff indicated they've had no issues with parking.
- **Plymouth.** There are three Plymouth locations, the largest building being 13,023 sq. ft with 32 spaces. Plymouth staff indicated they've had no issues with parking.
- **Brooklyn Park.** There are three Brooklyn Park locations, the largest building being 12,400 sq. ft with 37 spaces. Brooklyn Park staff indicated they've had no issues with parking.
- **Lino Lakes.** The Lino Lakes center is currently under construction, but the city approved a reduction in the number of required parking spaces from 60 to 49 based on a parking study for a 12,873 sq. ft. building.

Based on the applicant's parking study and feedback from other cities, staff determines that the 43 parking spaces proposed for the Crystal location are sufficient.

- Stormwater management and erosion control measures. Since the disturbed area for this proposed use is less than one acre, the Shingle Creek Watershed requires only city review of the stormwater management plan. The proposed site plan includes both a sump catch basin with a Preserve device to capture floating debris and nyoplast drain structures with perforated bottoms to allow for infiltration. Both of these features benefit water quality and the infiltration helps to reduce water run-off rates. After the site improvements are completed the percentage of impervious surface on the property will decrease from 82% to 73% (the maximum coverage is 85% for the Commercial district). During reconstruction of the parking lot the city will require erosion control techniques to be used on-site including silt fences, a rock construction entrance, and inlet protection.

Utilities. The existing building connects to existing water, sanitary sewer, and storm sewer mains in 57th and Kentucky Avenues N. The applicant will be abandoning the existing water service to the property and add a joint domestic water/fire sprinkler system to the building. The applicant has demonstrated to West Metro Fire District's satisfaction that the existing 8" watermain is adequately sized for this use. The existing sanitary sewer service will continue to be used. A new stormwater pipe collecting roof runoff will be connected into an existing city stormwater structure. The applicant is adding a sump manhole structure in the

parking lot. The city engineer is requiring the applicant to submit a maintenance plan for the sump catch basin. This requirement has been made a condition of approval of the CUP.

- Access and circulation. There are two existing driveway accesses - one off of 57th Avenue N, which will be retained, and the other off of Kentucky Avenue N, which will be removed so that a child play area can be installed. The city's Public Works Director and the West Metro Fire Rescue District staff have reviewed the traffic circulation plan and found it adequate to meet vehicle movement into and within the site, including fire trucks and delivery vehicles.
- Building elevations. The applicant is adding manufactured stone as an accent material to the existing building elevation. This material meets the city's requirements. Elevation drawings of the existing building is attachment E.
- Landscaping. There are sixteen trees on the property, with seven trees to be removed (six of these are dying ash trees). The applicant proposes to plant 26 new trees (Hackberry, Street Keeper Honeylocust, American Linden, Pinnacle Oak, Crabapple, and Hawthorn) together with seven varieties of shrubs which will screen the parking lot and child play areas.
- Screening. Trash and recycling receptacles will be located within a new dumpster enclosure. New rooftop mechanical equipment will be screened with added parapet walls and the applicant is not adding any new ground mechanical equipment.
- Exterior Lighting. There are no existing light poles on the property but the applicant is adding five new light poles to the property, and fourteen new wall lighting fixtures. This lighting meets the city's requirements.

Recommended Findings

The following are the relevant criteria for approval of a conditional use permit in city code section 510.19:

- (a) The proposed use has been approved as a conditional use in the zoning district for which it is proposed.

Findings: **Child day care is a conditional use in the Commercial zoning district.**

- (b) The conditional use will be in accordance with the general objectives, or with any specific objective, of the city's comprehensive plan and the unified development code (UDC).

Findings: **The property is guided as Mixed Use on the 2040 Planned Land Use Map, which is described as a vertical or side-by-side mixture of multiple family residential, institutional, commercial, and industrial uses. The proposed commercial day care use is in conformance to this designation.**

- (c) The conditional use will be designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such use will not change the essential character of the same area.

Findings: Since the applicant will not increase the size of the building footprint for this day care use, the existing character of the area will not change.

- (d) Impacts such as noise, hours of activity, and exterior lighting have been sufficiently addressed to mitigate negative impacts on nearby uses.

Findings: The proposed use is not expected to generate unusual noise impacts. Hours of operation will be similar to other commercial uses in the area. New exterior lighting meets the city's requirements.

The closest single-family homes are approximately 250' to the west and are screened by a large office building located on Kentucky Avenue N. The closest apartment building is approximately 250' to the northwest. The proposed day care use is not expected to have negative impacts on these residential areas.

The proposed outdoor child play areas will be screened by landscaping. The play areas on the north side of the property will be next to a little used driveway for the U-Haul self-storage facility at 5717 West Broadway and a parking lot for the masonic lodge building at 5707 West Broadway. The play area on the south side of the property is next to a public sidewalk on 57th Avenue N.

- (e) Parking is adequately provided for the proposed conditional use.

Findings: As described in section B, above, the proposed day care will have 43 parking spaces. Based on the parking analysis provided by the applicant and the experience of other cities with similar uses, staff has determined that the number of spaces is sufficient for this use.

- (f) In the approval of a conditional use permit, the City Council may impose such conditions as it determines is necessary to make the use compatible with other uses allowed in the same district zone or vicinity.

Findings: The proposed conditions of approval for the CUP are found in section C of this staff report.

Use specific standards

The following is the relevant use specific standard in city code section 515.19, Subd. 7 for approval of a child day care, followed by staff's findings of the standard.

- a) The facility is served by arterial, collector, or municipal state aid streets and such pedestrian facilities as are necessary to accommodate the traffic generated by the facility.

Findings: In the 2040 Comprehensive Plan this section of West Broadway, which is less than 300 feet from the property, is identified as a major collector street. Also, 56th Avenue N. (Bass Lake Road) which is less than 500' from the property, is identified as an arterial. While Kentucky and 57th are not state aid streets, their 48' width exceeds the 38' minimum for state aid streets with parking on both sides. There are existing sidewalks along both Kentucky and 57th Avenues North.

C. REQUESTED ACTION

The Planning Commission is being asked to make a recommendation to the City Council to either deny or approve the CUP to allow new Horizon Academy to operate a child day care center at 7000 – 57th Avenue North. The Commission may reference the findings in Section B, above. Staff recommends approval of the conditional use permit, subject to the following conditions of approval:

1. The following are the requirements before a building permit can be issued for the interior improvements to the building:
 - a. Submittal deadline. The applicant shall submit the permit application for the interior building renovation by October 17, 2024 or submit a request for City Council approval of a one-year extension by October 3, 2024.
 - b. Site improvement agreement. Sign a site improvement agreement with the city and provide an escrow to guarantee installation of the parking lot improvements and landscaping plan.
 - c. Maintenance plan. Provide a maintenance plan for the sump catch basin (CBMH1) for city approval.
2. Compliance. This conditional use permit is subject to the applicable requirements of the city code, and the applicant is required to comply with all applicable federal, state, and local laws, rules, regulations, and ordinances, and is required to obtain such other permits and permissions as may be required.
3. No Waiver. Failure by the City to take action with respect to any violation of any condition, covenant or term of this conditional use permit shall not be deemed to be a waiver of such condition, covenant, or term or any subsequent violation of the same or any other condition, covenant, or term.
4. Revocation. The violation of any terms or conditions of this conditional use permit including, but not limited to, any applicable federal, state, or local laws, rules, regulations, and ordinances, may result in revocation of the conditional use permit. The applicant shall be given written notice of any violation and reasonable time, as determined by the City, to cure the violation before a revocation of the permit will occur.
5. Binding Effect. This conditional use permit, and the conditions placed on it, are binding on the applicant, their successors and assigns, shall run with the property, and shall not in any way be affected by the subsequent sale, lease, or other change from current ownership, until the conditional use permit is terminated or revoked as provided herein. The obligations of the applicant under this conditional use permit

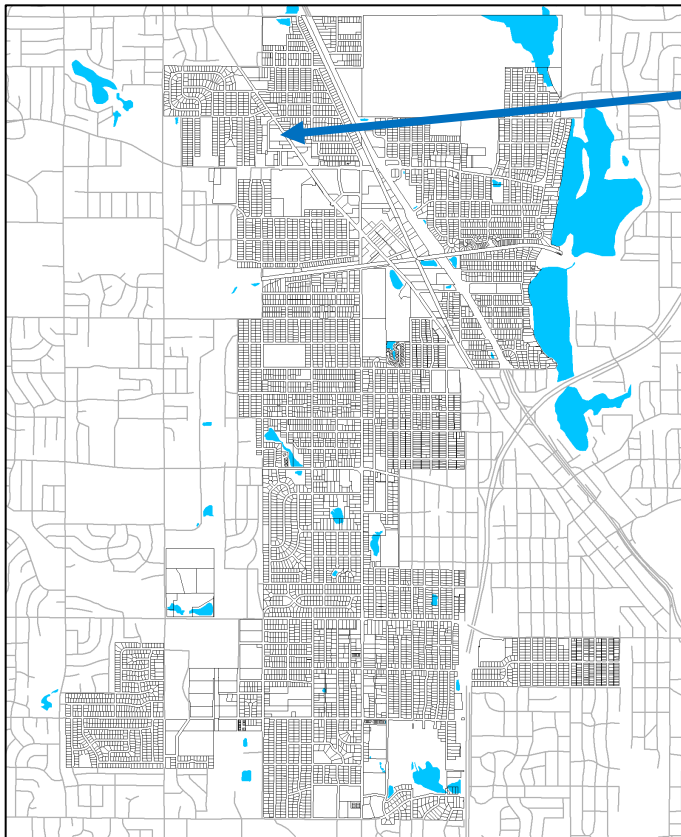
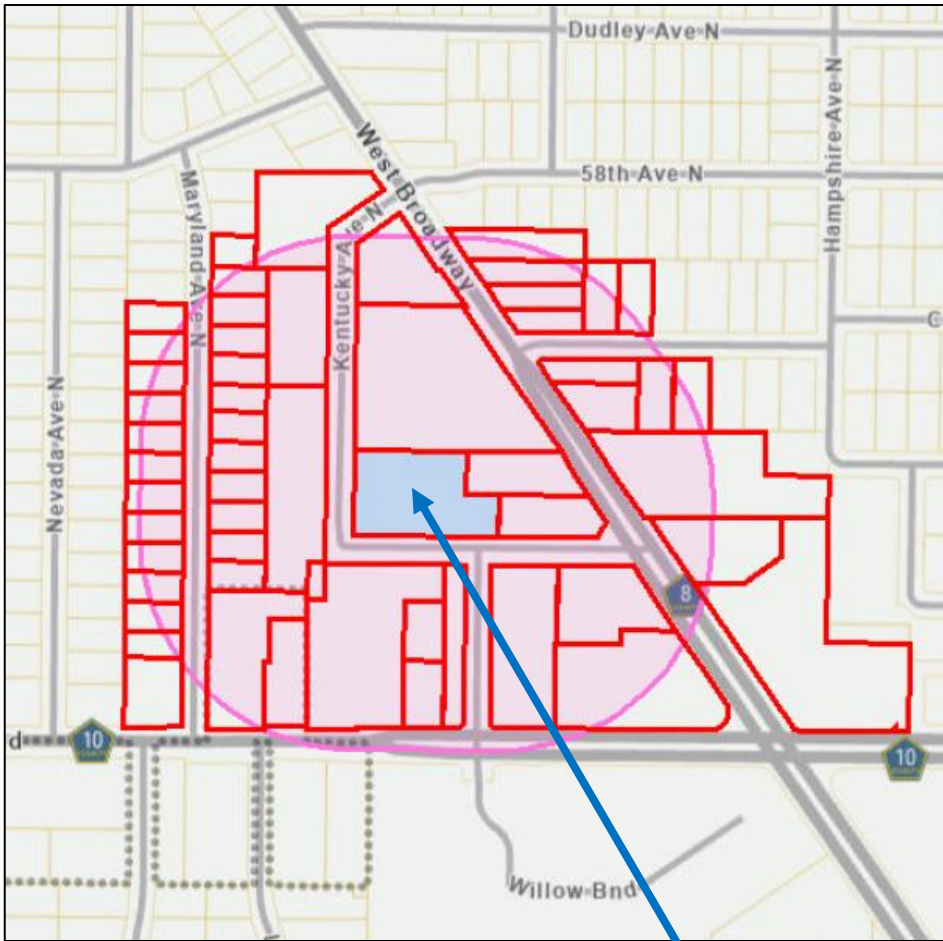
shall also be the obligations of the current and any subsequent owners of the property.

6. Acceptance of Conditions. Utilization of the property for any of the uses allowed by this conditional use permit shall automatically be deemed acceptance of, and agreement to, the terms and conditions of this conditional use permit without qualification, reservation, or exception.

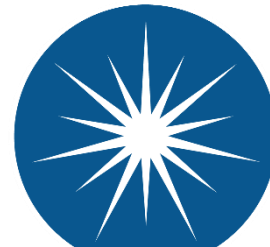
City Council action is anticipated on October 17, 2023.

Site Location and Public Hearing Notice Mailing Map

Attachment A



7000 – 57th Ave N

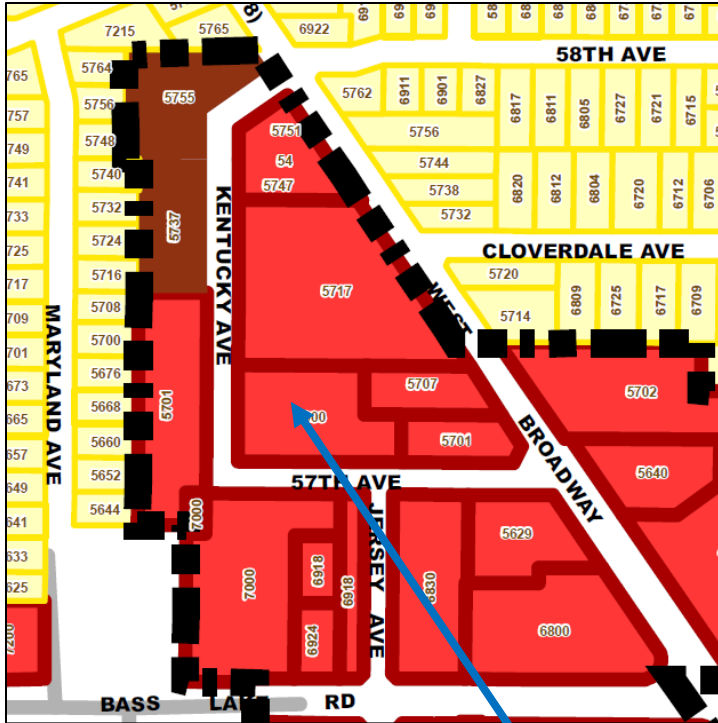


CITY of CRYSTAL

4141 Douglas Dr. N.
Crystal MN 55422

Zoning Map

Attachment B

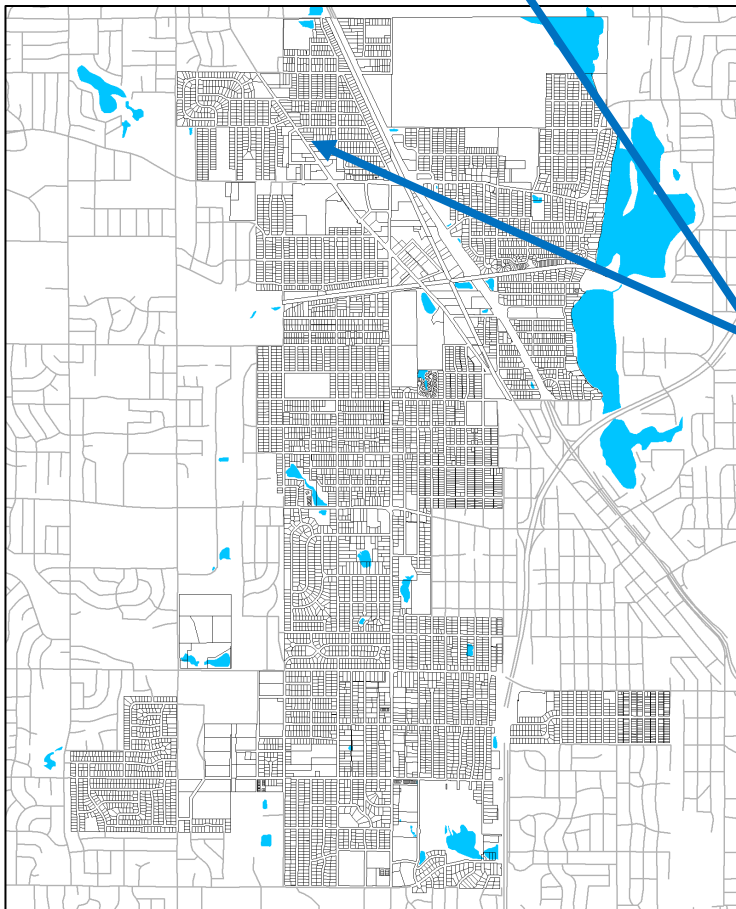


BASE ZONING DISTRICTS:

- R1 - LOW DENSITY RESIDENTIAL
- R2 - MEDIUM DENSITY RESIDENTIAL
- R3 - HIGH DENSITY RESIDENTIAL
- C - COMMERCIAL
- TC - TOWN CENTER
- I - INDUSTRIAL
- AP - AIRPORT DISTRICT

OVERLAY DISTRICTS:

- Planned Development Districts (PD)
- Town Center Planned Development (TC-PD)
- Properties Rezoned to TC-PD
- Floodplain Overlay District



7000 – 57th Ave N



CITY of CRYSTAL

4141 Douglas Dr. N.
Crystal MN 55422



East side of building facing parking lot



Looking south at parking lot



West side of building along Kentucky Avenue North



North side of property



September 21, 2023 (REVISED)

SUMMARY REPORT

TO: Mr. Dan Olson; City Planner, City of Crystal

FROM: A. Peter Hilger, AIA philger@rylaur.com

**RE: New Horizon Academy
7000 57th Avenue North**

Please find attached all applications and documentation necessary for the City of Crystal to review and hopefully approve this proposed development. Following is a narrative summary of the proposed project.

ABOUT NEW HORIZON ACADEMY

New Horizon Academy is a high-quality early learning provider that is 4-Star Parent Aware rated and accredited by the National Association for the Education of Young Children (“NAEYC”), the gold standard in the early childhood industry. New Horizon Academy has been serving metro area families since 1972 and seeks to fill a market gap at this location. The school will be fully functional within this existing structure requiring substantial remodeling to meet their criteria. They expect this to be a first-class, purpose-built facility designed by New Horizon Academy for existing and new families seeking high quality, educational child care.

ABOUT THE SITE

The site is presently known as Crystal Square, located on the northeast corner of Kentucky and 57th Avenue North. Constructed in 1976, it is a modest low-rise 1-story office building serving multiple tenants on short term leases. The site has an existing but “tired” parking area, much of which will be re-purposed into age-appropriate play areas.

The site is currently zoned Commercial within Zone “X”, within the town Center Overlay District. Childcare is an approved use by Conditional use Permit, as presently applied, and is consistent with the City’s Comprehensive Plan. The site is in an area determined to be outside the 0.2% annual chance flood plain.

The proposed use as a childcare center does not generate any environmental concerns, nor does it generate noise (except children at play – hopefully deemed a pleasant sound). Hours of operation are generally 6:00 AM to 6:00 or 6:30 PM, Monday through Friday. New parking lot and building lighting is proposed to be glare free and energy efficient.

A Phase 1 and Phase 2 Environmental Evaluation has been completed, detecting environmental groundwater contamination from off-site sources that must be mitigated. New Horizon has experience with this process and has retained Braun Intertec to provide the Remediation Action Plan, such plan to include a vapor mitigation plan.

BUILDING AND OCCUPANCY

At 15,948 SF, this single-story building is intended to be visually re-purposed to blend with, and improve, the general characteristics of its commercial neighbors. The actual program breaks down as follows:

Infants: 3 rooms @ 12 = 36
Transition: 1 room @14 = 14
Toddler: 2 rooms @14 = 28
Toddler: 1 room @ 21 = 21
Preschool: 3 rooms @20= 60
Preschool: 1 room @ 30 = 30

TOTAL CHILD COUNT: 189 + 29 staff

Typical Industry Occupancy Rate 80% (conservative)

TOTAL Planned Population Daily Density: 141

With accessory spaces as follows:

Large Motor Play Space: 1200 SF for use by occupants
Various Storage, Service and Administrative functions
An office for a community social services liaison
A sensory/calming environment (new to New Horizon)

Operationally, on any typical operating day during the school year at New Horizon's typical existing centers that are slightly smaller than this center, daily attendance averaged 143 children (typical school capacity is 172 children, 75% occupancy rate) and 23 staff, including families that have two children attending. Average for childcare centers generally is a 60% occupancy rate at any given time. It is important to note that licensed capacity is strictly focused on design standards for classrooms and play spaces. Rarely are any centers fully occupied. Occupancy always fluctuates and is rarely over 80% of licensed capacity. Finally, many staff also have their own children in the program, or also rely on public transportation, ride sharing and other means to access the site.

A segregated trash enclosure is proposed on the east side of the property, constructed of similar ribbed rockface concrete block to match the building.

The building will be re-classified as Type V-N construction, I-4 occupancy with a new fire sprinkler system for the entire building.

ARCHITECTURE

The existing architecture features alternating panels of deep ribbed corduroy concrete block units alternating with panels of 4' wide glass. The spandrel above and below the windows is an exposed aggregate treatment. Overall, the alternating panel treatment is expected to remain, however we propose to raise several parapet areas comprised of stucco that are symmetrically placed along the four more-or-less equal facades to break up the stark horizontality of the building. As there are no parapets presently, this would enable some limited blocking of sight lines to existing rooftop units. Two of these stucco parapets would also host a wall sign panel along the street frontages. Finally, we are proposing adding some concrete stone materials to the front curved element as well as create a larger covered entry canopy, subsuming the existing, almost invisible roof covering. The panels would be treated with a New Horizon blue metal accent stripe.

PLAY SPACES

New Horizon Academy is committed to well-designed play-spaces, ones that do not rely solely upon large motor skill equipment, but also some natural elements that invite a child's explorative curiosity in keeping with their mission. The plans call for the three different play areas (infant, toddler, and preschool). Additionally, the play areas will utilize best practices for safety. The play areas are all designed well above the licensing standard minimum areas, summarized as follows:

- Infant area: 1020 SF / 12 children = one room per play (crawl) session
- Toddler Area: 36600 SF / 48 children > 63 licensed (limit two rooms max per session)
- Preschool Area: 9,735 SF / 129 children = 129 licensed (likely 1 or 2 classrooms per session)

FENCING, LANDSCAPING AND SCREENING

Each of the three age-segregated play areas are proposed to be fenced with a 6'-0" high black steel ornamental picket style (no screening or opacity) where fronting a property boundary. Internal fences separating play spaces from each other are 5' high (such as between Toddler and Preschool play-spaces). The south street frontage along 57th Avenue North would have only 18% of its overall length fenced up to the utility easement line (enclosing the Infant play space). 60% of the Kentucky Avenue North frontage would be fenced, primarily protecting the discharge pathway from the toddler classrooms to the toddler play-space on the northwest corner of the lot. In all but the roughly 54' exposed to the play area, the fence is setback approximately 16' from the property line demarcated by the existing city sidewalk, reduced to 5' setback for approximately 40' at the Toddler play-space. All fence gates would be secured with panic hardware and pool alarms.

The proposed landscape is an attractive and diverse planting, providing seasonal interest throughout the year. Plants were selected to match the site conditions, and to meet the city landscape standards.

Existing and proposed utilities on the west side of the site limit the ability to provide the required 18 deciduous overstory trees along street frontages. To make up for this deficiency, additional trees have been added throughout the site, for a total of 19 overstory, and 7 understory trees. There is an electric utility easement along 57th Av., and a drainage and utility easement that runs the length of the east perimeter. These were noted on the survey, and it needs to be confirmed whether trees and shrubs can be planted in these areas.

The ash tree that is not impacted by the proposed stormwater management system, appears to already have Emerald Ash borer damage, and limits the opportunity to treat for prevention. A note is on the drawing to have an arborist review and confirm.

The landscape will be fully irrigated with a system using water efficient technologies such as water saving sensors, a flow meter, and dripline in the planting beds.

SIGNAGE

We are proposing to create slightly raised wall sign panel areas on the Kentucky and 57th Street frontages, symmetrically balanced on the new parapet treatment. In addition, a sign over the new entrance canopy facing the parking lot is proposed. All signage areas are well below the allowable areas.

We are proposing, at a minimum, to remodel the existing building monument sign, but would like to explore the option for a pylon type sign at this location.

PARKING

The existing parking lot is primarily the same layout as present, however a bit shortened to accommodate the preschool play area, and reverting to one curb cut off of 57th. The school “bus” used by new Horizon is typically a small expanded van. The lot is expected to accommodate 43 parking spaces, including 2 designated handicap stalls.

Children are not dropped off at the sidewalk or parking lot. Every child is brought into the center by their caregivers. The 10 stalls along the front of the building are typically reserved for this function, the peak time of which is 7-10 AM and 3:30 – 6:30PM. The time of stall occupancy is fairly shorty, typically 5-10 minutes maximum.

The City of Crystal does not regulate the quantity of childcare parking stalls. Therefore, we are proposing our judgment from operating so many centers, as well as a traffic study generated on our behalf for a typical center (attached for reference), and other data to support our design. Further, it should be noted that there is on street parking on both Kentucky and 57th Avenue, though except in tight urban areas, we do not like to rely on on-street parking.

First, the Institute of Traffic Engineers (ITE) Parking Generation Manual has established three separate calculation metrics:

- a rate of 0.24 spaces per student, Using $0.24 \times 189 \text{ students} = 45 \text{ parking stalls}$, 2 stalls less than we have planned.
- An average of 2.45 stalls per 1,000 SF = $15,948 \text{ gross} \times 90\% = 14,353 \text{ SF net} / 1,000 = 14.3 \times 2.45 = 39 \text{ stalls}$
- an average of 1.22 spaces per employee = $29 \times 1.22 = 35 \text{ stalls}$

ITE Parking Generation Manual, 5th Edition - Daycare Center #560	Average 2.45 per 1,000 SF	Average 0.24 per student	Average 1.22 spaces per employee	Average of 3 ITE Factors
# stalls applied to our site:	39.07	45.36	35.38	40

Averaging these three factors yields a parking stall count of **40 stalls**, less than the 43 stalls we are proposing.

Second, New Horizon Academy has commissioned a traffic study of their existing Apple Valley center, of a similar though slightly smaller size (17more children in Crystal), to provide empirical evidence of the licensed occupant load calculations and their impact on parking.

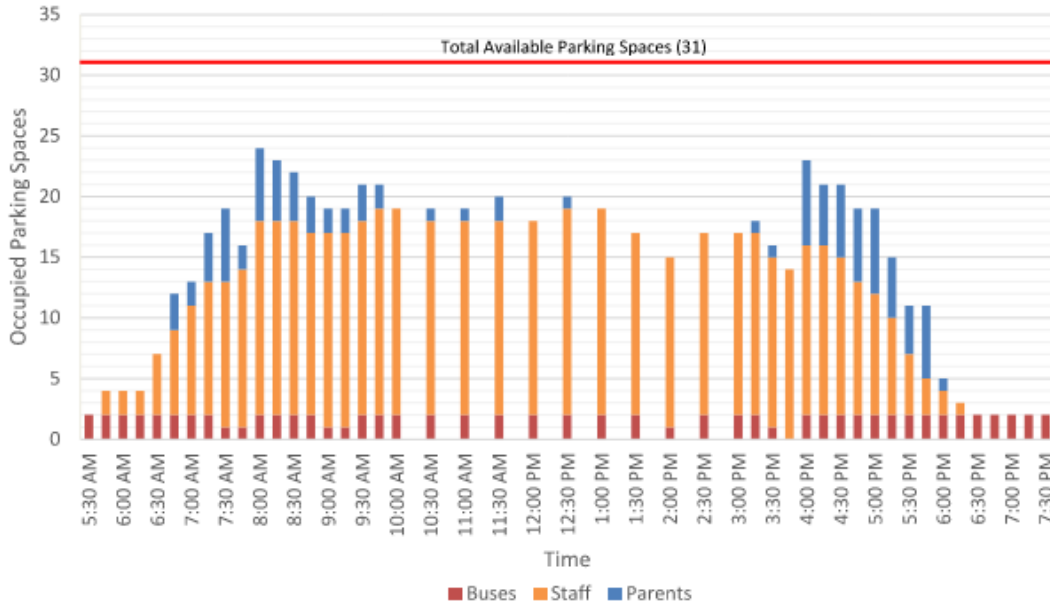
Following are the actual peak hour and 14-hpour total traffic trip generation for a typical week at the existing centers of similar size and design:

Table 1 – Entering and Exiting Volumes (2021)

Time Period	Entering	Exiting	Total
AM (7:15 - 8:15 AM)	61	56	117
PM (4:30 - 5:30 PM)	54	64	118
Daily (14-hr total)	259	259	518

The following chart summarizes the density of use of the parking lot from the Apple Valley center from 5:30 - 7:30: From this study, the maximum number of occupied parking spaces at any given time was 24, occurring at 8:00 AM during the morning peak.

Figure 2 - Parking Lot Occupancy



Further New Horizon Academy has tied the employment at any given time to occupant load factors and parking demands for employees. Please see attached letter referencing employment and parking.

Finally, there is plenty of regional justification for a lower standard. Rylaur has designed over 100 childcare centers around the City and country, and offers the following examples of parking densities for similarly designed and managed facilities in suburban locations:

Though this data is for a smaller capacity center, the data suggests an average of 5.42 occupants per stall, meaning our 43 stall parking lot could support 233 occupants, well above our planned capacity.

DEVELOPED SITE COMPARISONS - CHILD CARE SIZE/OCCUPANCY/PARKING

SUBURBAN	Total Bldg Area	Pre- School Age Licensed Capacity	School Age*	Total	Staff	Parking Stalls	Ratio: Stall/Bldg Area	Ratio: Occupants*/Stall
Lino Lakes	12,873	138	0	138	22	45	286	3.56
Eden Prarire-1	9,915	124	30	154	23	38	261	3.87
Blaine	10,733	142	30	172	21	39	275	4.18
Lakeville	10,560	122	27	149	21	33	320	4.33
Plymouth-1	5,872	87	20	107	22	25	235	4.36
Brooklyn Park-3	12,400	143	20	163	21	37	335	4.43
Shakopee-1	12,522	146	30	176	24	38	330	4.47
Eden Prarire-2	14,537	189	0	189	34	47	309	4.74
Elk River	10,560	112	30	142	21	28	377	4.75
Maple Grove	5,873	87	20	107	22	22	267	4.95
Coon Rapids	10,139	142	30	172	23	33	307	5.00
Eagan	11,928	132	30	162	24	31	385	5.03
Plymouth-2	13,023	141	0	141	23	32	407	5.13
Brooklyn Park-2	9,614	126	0	126	23	28	343	5.32
Plymouth-3	10,733	142	30	172	25	31	346	5.39
Brooklyn Park-1	10,947	126	0	126	23	27	405	5.52
Apple Valley	10,563	142	30	172	21	29	364	5.62
St. Louis Park	10,140	138	30	168	26	28	362	5.86
Rosemount	12,106	176	0	176	25	34	356	5.91
Shakopee-2	11,000	154	30	184	24	27	407	6.59
St. Paul - North (suburban)	14,082	166	30	196	26	27	522	7.11
Edina	10,085	132	0	132	20	21	480	7.24
AVERAGE	10,803	135		156	23	32	351	5.01
CRYSTAL SITE	15,948	189	0	189	29	43	371	5.07

As you can see from this comparative study, we are right in line with regional evidence and experience, providing slightly more parking than other codes and traffic standards would allow, not even counting street parking. Based upon this evidence from three separate source calculations, we respectfully request the parking determination to properly reflect the proposed design.

SUMMARY

We respectfully request your approval of the proposed Conditional Use Permit, as we believe this to be a good fit for the neighborhood and the Crystal community, and is well integrated into the immediate neighborhood.

Thank you for your consideration. If you have questions, or need additional information, please advise.

END OF SUMMARY REPORT

Attachments:

- New Horizon Traffic Study - Apple Valley, SEH, October 20, 2021
- Letter from New Horizon Academy describing employee count and parking experience.



September 21, 2023

Dan Olson
City Planner
4141 Douglas Dr. N.
Crystal, MN 55422

SENT VIA U.S. MAIL

Re: 7000 57th Avenue N., Crystal, MN

Dear Dan,

As requested, this letter confirms that 43 parking stalls as noted on the plans submitted to the City on September 13th is more than adequate to meet our operational needs.

Our Crystal school will be licensed for 189 children. At 100% occupancy, we would have approximately 29 staff in the school at one time, leaving 14 stalls for parent drop off and pick up. However, it should be noted that it is extremely rare for a childcare school to be 100% occupied. Rather, the number of parking stalls required by families and staff varies depending on the occupancy level of the school and the schedules of the families. Generally, the average occupancy level of a childcare school is around 60%. Under this scenario, this school will average about 113 children a day which would require at most 19 staff at any one-time. In addition, staff schedules stagger throughout the day with the majority of staff arriving between 7:00 a.m. and 10:00 a.m. and leaving between 3:00 p.m. and 6:30 p.m. Drop off and pick up times also stagger throughout the day depending on the schedules of the families, with peak times typically between 7:00 a.m. and 9:00 a.m. for drop off, and between 3:30 p.m. and 6:00 p.m. for pickup. Most of the families are only parked for a few minutes during each of these times.

In the extremely rare and virtually implausible case that we would reach 100% capacity, the absolute highest number of staff on-site at any one-time would be 29 staff (which would occur between the hours of 11:00 a.m. and 3:00 p.m. when few parents are dropping off or picking up). Assuming that each staff member would drive their own car and would not ride share, use mass transit, bike, walk or use any other means to get to and from work, we would not need more than 29 parking stalls. However, this would also be extremely rare. Many staff use alternate transportation methods, and we anticipate that this trend will only continue. In addition, on average, 20% of our families have 2 or more children enrolled in our schools. This also decreases our parking needs.

I hope this addresses any concerns you have on this issue. Please let me know if you have any questions or would like to discuss further. I can be reached via email at jdunkley@nhacademy.net or at 763-383-6282.

Sincerely,

Jill Dunkley
General Counsel
Executive Vice President



Building a Better World
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MEMORANDUM

TO: Heidi Pross, Senior Director of Construction & Facilities – New Horizon Academy
John Rosen, Vice President of Real Estate Development – New Horizon Academy

FROM: Erin Jordan, PE (IA, MN, WI)
Leo Johnson, EIT

DATE: October 20, 2021

RE: New Horizon Academy Traffic Study - Apple Valley Facility
SEH No. NHOAC 163219 14.00

BACKGROUND

New Horizon Academy has requested that data be collected at the existing Apple Valley, MN facility located at 14088 141st St W. This facility has an approximate 10,700 gross floor area (GFA) and a student capacity of 172. The data would determine trips generated and parking required for a prototypical, approximately 85% occupied New Horizon Academy Facility. The purpose is to use this study as part of the approval process for the development of future New Horizon Academy projects and determine a specific parking generation rate for New Horizon Academy facilities.

This memorandum provides a summary of the trips entering and exiting the daycare during a weekday, parking lot utilization for buses, parents, and staff, and drop-off/pick-up parking space occupancy times. On the day of data collection (Tuesday, September 14th, 2021), the facility was operating at approximately 83% occupancy with 143 students and there were 23 staff members in attendance. Based on information provided by New Horizon Academy, a facility is considered operating at a very high-capacity utilization at 85% occupancy; it is rare to have a facility 100% occupied.

DATA COLLECTION

Trip Generation

On Tuesday, September 14th, 2021, turning movements entering and exiting the daycare were collected at the west driveway along 141st St W and the south driveway along Upper 141st St W from 5:30 AM to 7:30 PM. The peak hours of activity were found to be from 7:15 AM to 8:15 AM and from 4:30 PM to 5:30 PM.

Table 1 summarizes the entering and exiting trips from the development during the peak hours and the 14-hour total.

Table 1 – Entering and Exiting Volumes (2021)

Time Period	Entering	Exiting	Total
AM (7:15 - 8:15 AM)	61	56	117
PM (4:30 - 5:30 PM)	54	64	118
Daily (14-hr total)	259	259	518

Figure 1 also shows the turning movements into and out of the daycare during the AM and PM peak hours as well as the 14-hour totals.

The Attachment includes the raw turning movement count data for the 14-hour period.

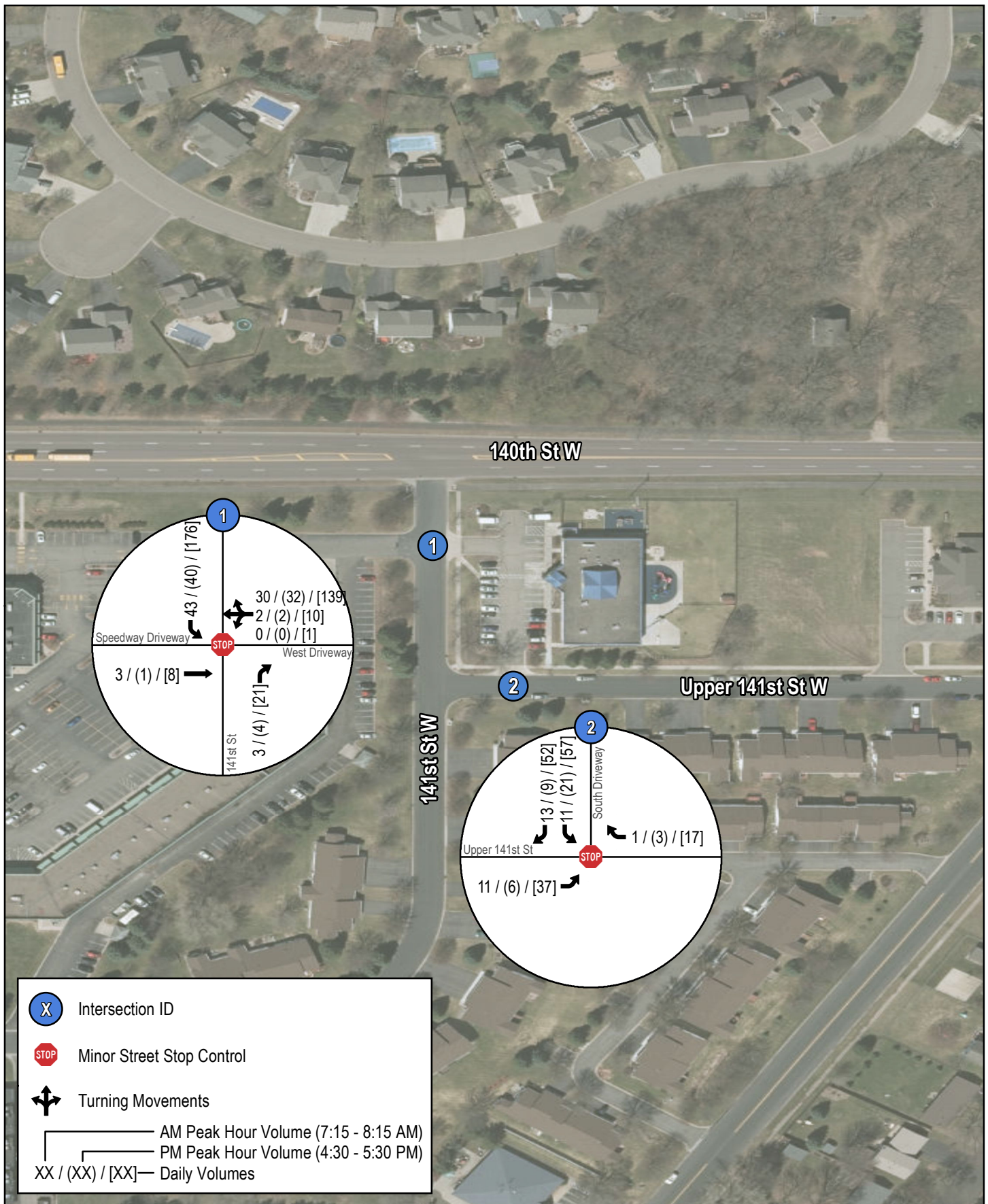
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Path: X:\KOWIN\NHOAC\1632195-final-dgn\51-drawings\90-GISTraffic\Figure 1 - 2021 Existing Conditions.mxd



Legend

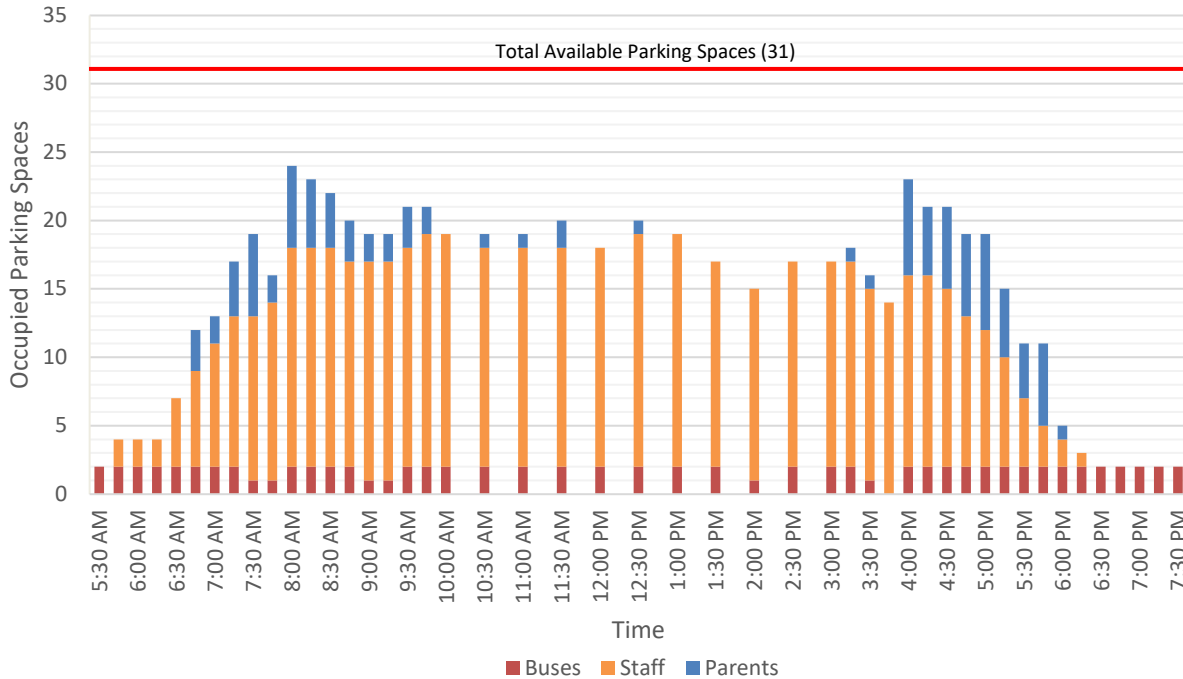
- Intersection ID
- Minor Street Stop Control
- Turning Movements
- AM Peak Hour Volume (7:15 - 8:15 AM)
- PM Peak Hour Volume (4:30 - 5:30 PM)
- XX / (XX) / [XX] — Daily Volumes

Parking Lot Occupancy

Parking data was processed every 15 minutes during the peak pick up and drop off hours and every 30 minutes during non-peak periods. Parking data was collected by observing two traffic cameras filming the parking lot activity. There is a total of 31 parking spaces, including two accessible parking spaces and two school bus parking spaces.

Figure 2 shows the parking lot occupancy from 5:30 AM to 7:30 PM for buses, staff, and parent activity.

Figure 2 - Parking Lot Occupancy



The maximum parking spaces occupied during the day was 24 spaces, which occurred at 8:00 AM. Once the PM pick-up period began, the maximum parking spaces occupied was 23 spaces, which occurred at 4:00 PM. These totals include the spaces occupied by school buses and staff and indicate that the current parking lot provides adequate capacity for the site.

Duration of Parking Space Occupancy

The amount of time vehicles were parked during the AM peak (drop-off) and PM peak (pick-up) times was measured from when the vehicle came to a stop in a parking space until the vehicle began exiting the parking space. Parking times were collected from video of the parking spaces in the northeast section of the parking lot between the daycare entrance and the daycare bus parking area, which was observed to have the highest pick-up/drop-off activity in the parking lot. The west and southeast portions of the parking lot were found to be used primarily by employees who parked for the day.

AM Peak Hour (Drop-off)

- The average occupancy time was for 4 minutes 28 seconds
- The median time was 5 minutes 59 seconds
- The fastest a parent occupied a space was for 1 minutes 15 seconds
- The slowest a parent occupied a space was for 7 minutes 40 seconds

PM Peak Hour (Pick-up)

- The average parent occupied a parking space for 6 minutes 10 seconds
- The median time was 3 minutes 56 seconds
- The fastest a parent occupied a space was for 1 minutes 43 seconds
- The slowest a parent occupied a space was for 11 minutes 37 seconds

Between the two peak hours, the average time a parent occupied a parking stall was 5 minutes and 19 seconds and the average median time was 4 minutes and 58 seconds.

Table 2 shows the drop-off and pick-up parking space occupancy data.

Table 2 – Duration of Parking Space Occupancy

Count	Drop-Off Parking Space Occupancy Time	Pick-Up Parking Space Occupancy Time
1	0:07:03	0:07:12
2	0:06:17	0:03:32
3	0:03:39	0:11:37
4	0:02:54	0:05:55
5	0:03:17	0:06:02
6	0:05:52	0:06:17
7	0:06:38	0:09:41
8	0:03:29	0:05:59
9	0:03:30	0:03:21
10	0:02:55	0:07:53
11	0:05:29	0:05:08
12	0:03:01	0:04:21
13	0:03:45	0:11:04
14	0:03:49	0:07:58
15	0:05:05	0:04:00
16	0:05:17	0:06:43
17	0:07:40	0:07:47
18	0:03:47	0:08:28
19	0:04:04	0:04:04
20	0:06:22	0:05:13
21	0:02:29	0:03:38
22	0:07:32	0:04:17
23	0:07:06	0:01:43
24	0:02:47	
25	0:02:58	
26	0:05:44	
27	0:03:14	
28	0:01:15	
29	0:03:34	
30	0:03:56	
31	0:04:17	
32	0:04:38	
33	0:04:13	

PARKING GENERATION

ITE Parking Generation Manual, 5th Edition

The Institute of Transportation Engineers (ITE) conducts parking demand research and routinely publishes the findings and data in its Parking Generation Manual. This manual is one of the most used and accepted tools among traffic engineers to estimate parking demand for land uses. The *ITE Parking Generation Manual, 5th Edition* includes data for a Day Care Center and parking generation rates based on size of the facility, number of employees, and number of students. Table 3 summarizes the estimated parking generation using the ITE rates, assuming a 100% occupied Apple Valley facility with 27 employees and 172 students as a conservative approach.

Table 3 – ITE Parking Generation Manual, 5th Edition

Day Care Center – 100% Occupied			
Units (X)	1,000 SF GFA	Employees	Students
Quantity	10.7	27	172
Rate (Stalls per X)	2.45	1.22	0.24
Parking Generation	26	33	41

New Horizon Academy Parking Generation

The data collected at this New Horizon Academy facility revealed the parking demand specific to New Horizon Academy facilities. Mirroring the units provided in the *ITE Parking Generation Manual*, three parking generation rates were calculated based on the maximum parking occupancy (24), the size of the facility (10,700 SF), and number of employees (23) and students in attendance (143) on the day of observation.

Rates were calculated using the following equations:

1,000 SF GFA Rate

$$\text{Maximum used parking stalls} \div 1,000 \text{ SF Gross Floor Area} =$$

$$24 \text{ stalls} \div \left(\frac{10,700 \text{ SF}}{1,000 \text{ SF}} \right) = 2.24 \text{ stalls per 1,000 SF GFA}$$

Employees Rate

$$\text{Maximum used parking stalls} \div \text{Employees in attendance on day of observation} =$$

$$24 \text{ stalls} \div 23 \text{ employees} = 1.04 \text{ stalls per employee}$$

Students Rate

$$\text{Maximum used parking stalls} \div \text{Students in attendance on day of observation} =$$

$$24 \text{ stalls} \div 143 \text{ students} = 0.17 \text{ stalls per student}$$

Table 4 summarizes the New Horizon Academy specific parking generation using the calculated rates, assuming a 100% occupied facility with 27 employees and 172 students as a conservative approach.

Table 4 – New Horizon Academy Parking Generation

New Horizon Academy – 100% Occupied			
Units (X)	1,000 SF GFA	Employees	Students
Quantity	10.7	27	172
Rate (Stalls per X)	2.24	1.04	0.17
Parking Generation	24	28	29

As shown in Tables 3 and 4, the ITE parking generations are comparable to the New Horizon Academy parking generations, with the ITE parking generation showing slightly higher demand. ITE best practices and engineering judgment recommends utilizing site-specific data whenever possible to determine parking generation for similar land uses to achieve the most appropriate designs.

Using the New Horizon Academy parking generation rates, the recommended number of parking stalls recommended for a New Horizon Academy facility should be based on the maximum parking generation among the three units and for 100% occupancy. For example, the facility in Apple Valley requires a maximum of 29 parking stalls when the site is at 100% student capacity, which is accommodated with the available 31 parking stalls.

It is recommended that planning efforts use the New Horizon Academy specific parking generation rates determined in this memo (see Table 4) to help define the number of parking stalls required for maximum capacity at future facilities.

Attachments:

- Turning Movement Counts

c: Scott Blank, AIA-SEH

Attachment - Turning Movement Counts

Location: New Horizon Apple Valley West Driveway
 Count Date: 9/14/2021
 Counted By: LJ



TURNING MOVEMENT COUNT DATA

All Vehicles

Start Time	141st St				West Driveway				141st St				Speedway Driveway				Int. Total
	Southbound				Westbound				Northbound				Eastbound				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
5:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	3
6:15	5	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	7
6:30	3	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	5
6:45	5	0	0	0	0	1	5	0	0	0	1	0	0	1	0	0	13
7:00	8	0	0	0	0	0	4	0	0	0	1	0	0	0	0	0	13
7:15	9	0	0	0	0	0	7	0	0	0	1	0	0	1	0	0	18
7:30	11	0	0	0	0	1	9	0	0	0	0	0	0	0	0	0	21
7:45	11	0	0	0	0	1	5	0	0	0	2	0	0	0	0	0	19
8:00	12	0	0	0	0	0	9	0	0	0	0	0	0	2	0	0	23
8:15	7	0	0	0	0	1	5	0	0	0	1	0	0	0	0	0	14
8:30	3	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	9
8:45	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	5
9:00	5	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	7
9:15	4	0	0	0	0	0	3	1	0	0	1	0	0	0	0	0	8
9:30	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
9:45	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
10:00	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
11:30	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
11:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:00	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3
12:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	3
12:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
13:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
14:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
14:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
15:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
15:15	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	6
15:30	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
15:45	8	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	10
16:00	5	0	0	0	0	0	8	0	0	0	2	0	0	0	0	0	15
16:15	11	0	0	0	0	1	5	0	0	0	1	0	0	0	0	0	18
16:30	10	0	0	0	0	1	7	0	0	0	0	0	0	1	0	0	19
16:45	12	0	0	0	0	0	10	0	0	0	1	0	0	0	0	0	23
17:00	8	0	0	0	0	0	11	0	0	0	1	0	0	0	0	0	20
17:15	10	0	0	0	0	1	4	0	0	0	2	0	0	0	0	0	17
17:30	7	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	12
17:45	7	0	0	0	0	0	8	0	0	0	1	0	0	0	0	0	16
18:00	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3
18:15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	176	0	0	0	1	10	139	1	0	0	21	0	0	8	0	0	354
Cars+	172	0	0	0	1	9	135	0	0	0	20	0	0	8	0	0	345
Trucks	4	0	0	0	0	1	4	1	0	0	1	0	0	0	0	0	10
% Trucks	2.3	0.0	0.0	0.0	0.0	10.0	2.9	100.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	2.8
	2.3				3.3				4.8				0.0				

Location: New Horizon Apple Valley South Driveway
 Count Date: 9/14/2021
 Counted By: LJ

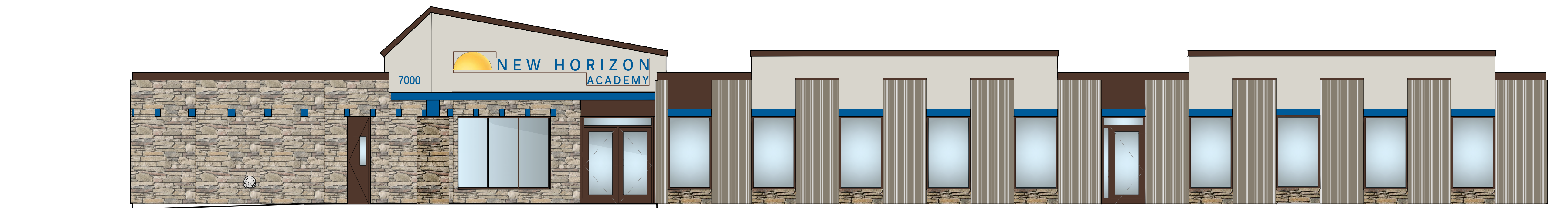


TURNING MOVEMENT COUNT DATA

All Vehicles

Start Time	South Driveway				Upper 141st St				0				Upper 141st St				Int. Total
	Southbound				Westbound				Northbound				Eastbound				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
5:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
5:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15	1	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	4
6:30	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	2
6:45	1	0	2	0	0	0	1	0	0	0	0	0	3	0	0	0	7
7:00	3	0	2	0	0	0	2	0	0	0	0	0	2	0	0	0	9
7:15	2	0	3	0	0	0	0	0	0	0	0	0	3	0	0	0	8
7:30	3	0	4	0	0	0	0	0	0	0	0	0	2	0	0	0	9
7:45	3	0	1	0	0	0	1	0	0	0	0	0	4	0	0	0	9
8:00	3	0	5	0	0	0	0	0	0	0	0	0	2	0	0	0	10
8:15	1	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	4
8:30	0	0	2	0	0	0	1	0	0	0	0	0	1	0	0	0	4
8:45	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
9:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
14:30	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
14:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
15:00	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	3
15:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	3
16:00	1	0	3	0	0	0	0	0	0	0	0	0	4	0	0	0	8
16:15	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	6
16:30	4	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	8
16:45	4	0	3	0	0	0	1	0	0	0	0	0	3	0	0	0	11
17:00	4	0	1	0	0	0	2	0	0	0	0	0	1	0	0	0	8
17:15	9	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	12
17:30	5	0	1	0	0	0	2	0	0	0	0	0	1	0	0	0	9
17:45	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
18:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	57	0	52	0	0	0	17	0	0	0	0	0	37	0	0	0	162
Cars+	54	0	52	0	0	0	16	0	0	0	0	0	35	0	0	0	157
Trucks	3	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	6
% Trucks	5.3	0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	
	2.8				5.9				0.0				5.4				3.7

Attachment E



SHEET INDEX	
Architectural Sheets	Site Lighting Sheet
G000 COVER SHEET	E0.1 SITE PHOTOMETRIC CALCS
Civil Sheets	E0.2 SITE PHOTOMETRIC LIGHTING SHEETS
V1.0 TITLE SURVEY	
C0.1 TITLE SHEET	Landscape Sheets
C1.0 REMOVALS PLAN	L1 LANDSCAPE PLAN
C2.0 SITE PLAN	L2 LANDSCAPE DETAILS & NOTES
C3.0 GRADING PLAN	Architectural Sheets
C4.0 UTILITY PLAN	A001 SITE PLAN
C5.0 CIVIL DETAILS	A101 FLOOR PLAN
C5.1 CIVIL DETAILS	D101 DEMO PLAN
C5.2 CIVIL DETAILS	A101 FLOOR PLAN
SW1.0 SWPPP - EXISTING CONDITIONS	A120 ROOF PLAN
SW1.1 SWPPP - PROPOSED CONDITIONS	A201 BUILDING SECTION
SW1.2 SWPPP - DETAILS	A301 BUILDING SECTION w/SIGHTLINE STUDY
SW1.3 SWPPP - NARRATIVE	

CONSULTANT INDEX	
Client	Architect
NEW HORIZON ACADEMY HEIDI PROSS 3405 ANNAPOLIS LANE NORTH SUITE 100 PLYMOUTH, MN 55447 P: 763-383-6216 Email: hpross@nhacademy.net	RYLAUR, LLC A. PETER HILGER, AIA 14 PHEASANT LANE NORTH OAKS, MN 55127 P: 612-868-3636 Email: philger@rylaur.com
Civil Engineer	Landscape Design
CIVIL SITE GROUP DAVID KNAEBLE 5000 GLENWOOD AVENUE GOLDEN VALLEY, MN 55422 P: 763-234-7523 Email: dknaeble@civilsitegroup.com	SIMONET DESIGN CARMEN SIMONET, PLA P: 651-695-0273 Email: carmen@simonetdesign.com
Site Lighting	
STEEN ENGINEERING, INC. JOHN ALSETH P: 763-235-4796 Email: johna@steeneng.com	



**7000 57th AVENUE N.
CRYSTAL, MN 55428**

CITY RE-SUBMITTAL 9.26.23

PROPOSED OCCUPANT LOAD ANALYSIS					
TOTAL BUILDING	OCCUPANT LOAD BASED ON IBC				
ROOM NAME & NUMBER (1)	NET SQ. FT. AREA (2)(3)	FACTOR (3)	CHILDREN TOTAL	STAFF TOTAL (4)	OPERATIONAL OCC. LOAD (6)
INFANT 1	446	1/35	12	3	15
INFANT 2	447	1/35	12	3	15
INFANT 3	518	1/35	12	3	15
TODDLER TRANSITION	638	1/35	14	2	16
TODDLER 1	639	1/35	14	2	16
TODDLER 2	663	1/35	14	2	16
TODDLER 3	854	1/35	21	3	24
PRESCHOOL 1	755	1/35	20	2	22
PRESCHOOL 2	754	1/35	20	2	22
PRESCHOOL 3	751	1/35	20	2	22
PRESCHOOL 4	1171	1/35	30	3	33
RECEPTION (5)	103	1/150	-	1	1 (Receptionist)
DIRECTOR OFFICE (5)	138	1/150	-	1	1 (Director)
KITCHEN (5)	313	1/200	-	-	1 (not FTE)
CONFERENCE R. (5)	241 net	1/15	-	-	-
TOTAL LICENSING OCCUPANT LOAD	8,404 SF		189	29	219 Licensed Occupants
LICENSING OPERATIONAL STAFF = 29 EMPLOYEES & (1) KITCHEN EMPLOYEE, Not Full Time (not FTE) MNSBC LIFE SAFETY EXITING STAFF = 30 EMPLOYEES					
LARGE MOTOR GYM "LMR" (Accessory)	1178 SF	1/35	34		
TOTAL MSBC EXITING OCCUPANT LOAD: As shown on Life Safety Plan = 148 Occupants					
OTHER REQUIREMENTS:					
PER IBC TABLE 803.13 IN SPRINKLERED BUILDINGS EXIT WAYS & CHILDREN'S ROOM TO HAVE CLASS B FINISHES. (I-4)					
PER IBC TABLE 1017.2 IN SPRINKLERED BUILDINGS, TRAVEL DISTANCE FROM ANY ROOM LOCATION SHALL BE MAXIMUM 200 FEET FOR OCCUPANCY TYPE I-4.					
PER CHAPTER 9, FIRE ALARM SYSTEM REQUIRED AND PROVIDED.					

CODE SUMMARY	
THIS SUMMARY BASED ON:	2020 MN STATE BUILDING CODE
USE GROUP CLASSIFICATIONS:	GROUP I-4 (MSBC 308.6)
PER MN RULES 1305.0308 (308.5)	
WHEN GREATER THAN 5 CHILDREN (I-4)	
CONSTRUCTION TYPE (SECTION 602.5):	TYPE VB SPRINKLERED
ALLOWABLE NUMBER OF STORIES	1 + 1 per MSBC 504.2
ACTUAL NUMBER OF STORIES:	1 Story
LOCATION OF THIS SPACE	At Grade
ACTUAL BUILDING AREA:	15,950 SF
ALLOWABLE AREA (TBL 503 & 506.3 Increase)	27,000 SF
OCCUPANCY SEPARATION (TABLE 508.4):	NONE
FIRE RESISTANCE RATING (TABLE 601):	NONE
FIRE RESISTANCE RATING (TABLE 602):	NONE
PARKING SUMMARY	
ZONING REQUIREMENT FOR DAYCARE FACILITY = Refer to Parking Analysis Report	
NUMBER OF STAFF	= 29 OCCUPANTS
NUMBER OF CHILDREN	= 189 OCCUPANTS
NUMBER OF PARKING STALLS	= 43 STALLS PROVIDED
BICYCLE PARKING SPOTS PROVIDED ON SITE	

A. PETER HILGER #15862

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Architect under the laws of the State of Minnesota



Drawing Date:

09.12.2023

Drawing History/Revisions:

City Review Comments 09.26.23

Project Architect:

A. PETER HILGER, AIA

Drawn By:

VJH

Checked By:

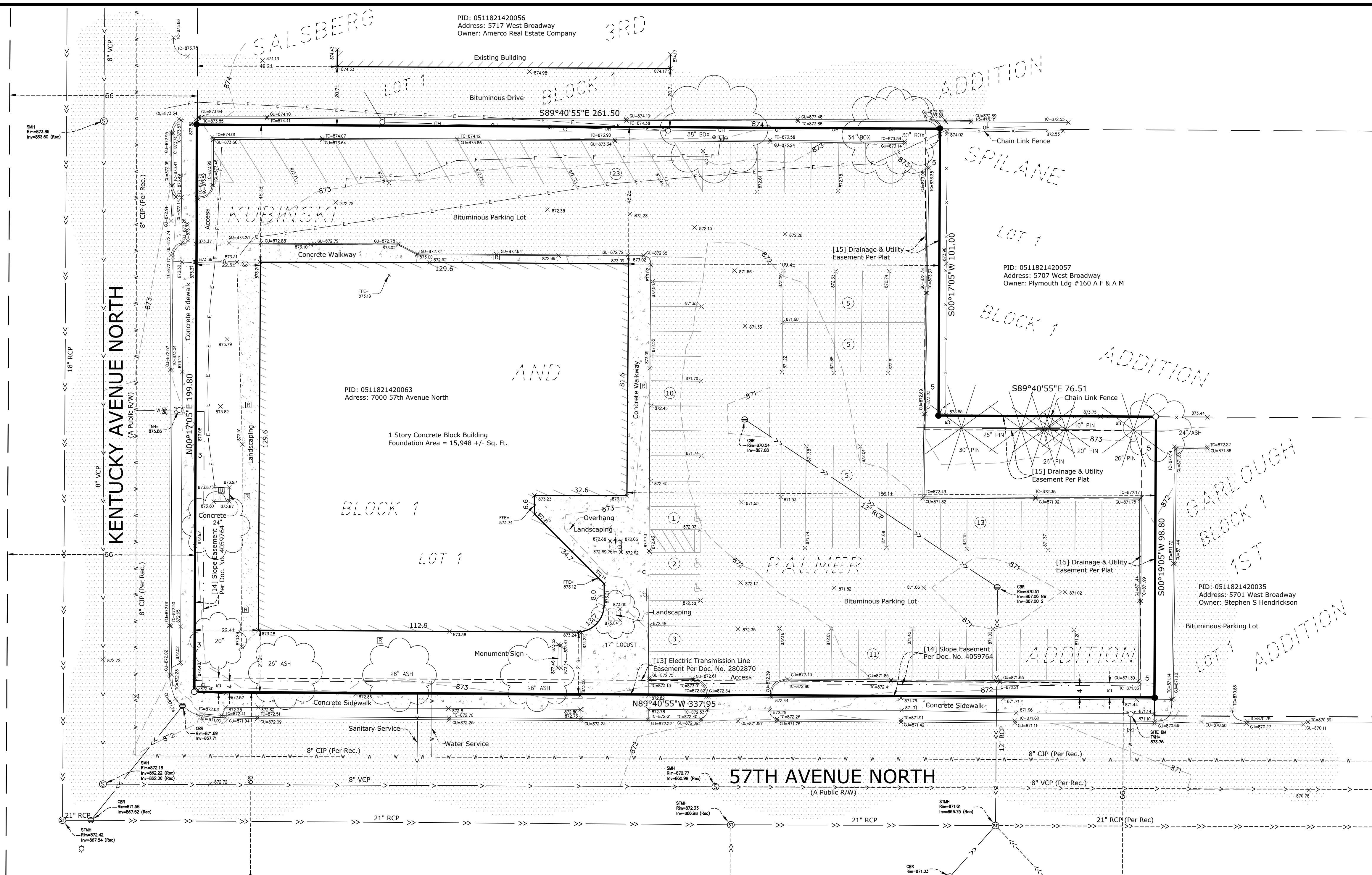
APH

SHEET TITLE:

COVER SHEET

Sheet No

G000



PID: 0511821420056
Address: 5717 West Broadway
Owner: Amerco Real Estate Company

PID: 0511821420057
Address: 5707 West Broadway
Owner: Plymouth Ldg #160 A F & A M

PID: 0511821420063
Address: 7000 57th Avenue North

PID: 0511821420035
Address: 5701 West Broadway
Owner: Stephen S Hendrickson

DESCRIPTION OF PROPERTY SURVEYED

Lot 1, Block 1, Kubinski and Palmer Addition.
Hennepin County, Minnesota
Abstract Property

GENERAL SURVEY NOTES

- Bearings are based on the Hennepin County Coordinate System (1986 Adjustment).
- Elevations are based on the NGVD 29 Datum. Site Benchmark is the top nut of the fire hydrant located on the north side of 57th Avenue North, approximately 10 feet southwest of the southeast corner of the subject property, as shown hereon. Elevation = 873.76
- We have shown the location of utilities to the best of our ability based on observed evidence together with evidence from the following sources: plans obtained from utility companies, plans provided by client, markings by utility companies and other appropriate sources. We have used this information to develop a view of the underground utilities for this site. However, lacking excavation, the exact location of underground features cannot be accurately, completely and reliably depicted. Where additional or more detailed information is required, the client is advised that excavation may be necessary. Also, please note that seasonal conditions may inhibit our ability to visibly observe all the utilities located on the subject property.

ALTA/NSPS LAND TITLE SURVEY NOTES
(numbered per Table A)

- Monuments placed and/or found at all major corners of the boundary of the surveyed property as shown hereon.
- Site Address: 7000 57th Avenue North, Crystal, Minnesota 55428.
- This property is contained in Zone X (area determined to be outside the 0.2% annual chance floodplain) per Flood Insurance Rate Map, Community Panel No. 27053C0211F, effective date of November 4, 2016.
- The Gross land area is 59,804 +/- square feet or 1.373 +/- acres.
- (a) Exterior dimensions of buildings at ground level as shown hereon.
- Substantial features observed in the process of conducting the fieldwork as shown hereon. Please note that seasonal conditions may inhibit our ability to visibly observe all site features located on the subject property.
- The number of striped parking stalls on this site are as follows: 75 Regular + 3 Handicap = 78 Total Parking Stalls.
- The names of the adjoining owners of the platted lands, as shown hereon, are based on information obtained from the Hennepin County Interactive Property Map.

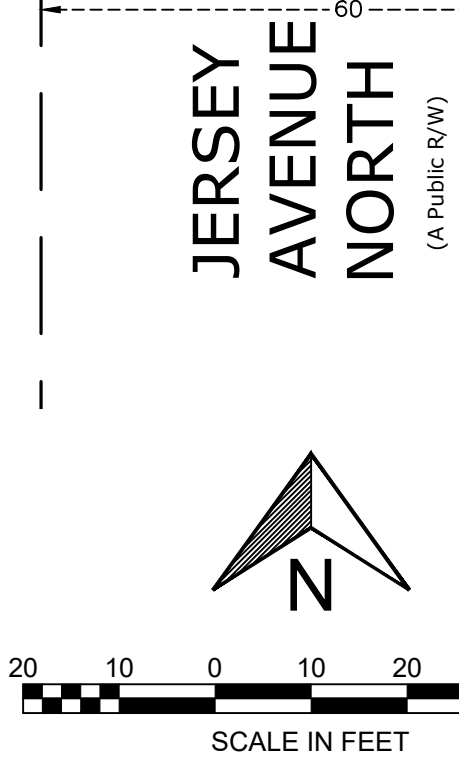
SURVEY REPORT

- This map and report was prepared with the benefit of a Commitment for Title Insurance issued by Commercial Partners Title, a division of Fidelity National Title Insurance Company, as agent for Fidelity National Title Insurance Company, File No. CP72024, dated April 14, 2023. We note the following with regards to Schedule B II Exceptions of the herein referenced Title Commitment:
 - Item no.'s 1-12 are not survey related.
 - The following are numbered per the referenced Title Commitment:
 - Terms and conditions of easement for electric transmission line purposes, in favor of Northern States Power Company, as set forth in instrument dated November 19, 1952, filed March 20, 1953, as Document No. 2802870. **Easement is located along the south 5 feet of the subject property, as shown hereon.**
 - Rights and easements in favor of the City of Crystal, acquired in Condemnation, as evidenced by Final Certificate dated December 10, 1973, filed December 17, 1973, as Document No. 4059764. **Document provides for a street easement and slope easements over parts of the underlying Lot 26, Auditor's Subdivision No. 226. The street easement has been since dedicated per the plat of Kubinski and Palmer Addition and does not appear to affect the subject property. The slope easements lie over a portion of the southerly 3 feet and the southerly 4 feet of the subject property, as shown hereon.**
 - Drainage and Utility easements as shown on the recorded plats of Spilane Addition and Kubinski and Palmer Addition. **Easements are located along the east 5 feet of the subject property, as shown hereon.**

ALTA CERTIFICATION

To: Weinberg Family Limited Partnership, a Minnesota limited partnership; New Horizon Child Care, Inc., a Minnesota corporation; Commercial Partners Title, a division of Fidelity National Title Insurance Company; and Fidelity National Title Insurance Company;
This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 7(a), 8, 9, and 13 of Table A thereof.
The fieldwork was completed on 6-16-2023.
Dated this 26th day of July, 2023.

Rory L. Synsteliën
Minnesota License No. 44565
rory@civilsitegroup.com



Linetype & Symbol Legend

---	ELECTRIC LINE (RECORD)	⊠	AIR CONDITIONER	⊠	UTILITY VAULT
---	ELECTRIC LINE (RECORD)	⊠	CABLE TV BOX	⊠	ELECTRIC MANHOLE
---	FIBER/COMM. LINE (RECORD)	⊠	ELECTRIC MANHOLE	⊠	ELECTRICAL OUTLET
---	FIBER/COMM. LINE (RECORD)	⊠	FIBER/COMM. TRANSFORMER	⊠	HAND HOLE
---	GASMAIN (RECORD)	⊠	ELECTRICAL METER	⊠	BOLLARD
---	GASMAIN (RECORD)	⊠	FIBER/COMM. MANHOLE	⊠	FLAG POLE
---	OVERHEAD UTILITIES	⊠	POWER POLE	⊠	FUEL TANK
---	SANITARY SEWER	⊠	GUY WIRE	⊠	HANDICAP SYMBOL
---	SANITARY SEWER (RECORD)	⊠	GAS METER	⊠	LIGHT POLE
---	STORM SEWER	⊠	GAS MANHOLE	⊠	MAIL BOX
---	STORM SEWER (RECORD)	⊠	GAS VALVE	⊠	SIGN
---	TELEPHONE LINE	⊠	ROOF DRAIN	⊠	CONIFEROUS TREE
---	TELEPHONE LINE (RECORD)	⊠	SEWER CLEAN OUT	⊠	DECIDUOUS TREE
---	WATERMAIN	⊠	SANITARY MANHOLE	⊠	SOIL BORING
---	WATERMAIN (RECORD)	⊠	STORM MANHOLE	⊠	FOUND IRON MONUMENT
---	CHAINLINK FENCELINE	⊠	CATCH BASIN	⊠	SET IRON MONUMENT
---	WOODEN FENCELINE	⊠	FLARED END SECTION	⊠	CAST IRON MONUMENT
---	GUARDRAIL	⊠	TELEPHONE BOX		
---	ACCESS RESTRICTION	⊠	TELEPHONE MANHOLE		
---	CONCRETE SURFACE	⊠	TRAFFIC SIGNAL		
---	PAVER SURFACE	⊠	HYDRANT		
---	BITUMINOUS SURFACE	⊠	FIRE CONNECTION		
---	GRAVEL/LANDSCAPE SURFACE	⊠	POST INDICATOR VALVE		
---		⊠	WATER MANHOLE		
---		⊠	WATER VALVE		
---		⊠	WELL		

7000 57th Avenue North
Crystal, Hennepin County, Minnesota 55428
Rylaur, LLC
14 Pheasant Lane, North Oaks, Minnesota 55127

I HEREBY CERTIFY THAT THIS SURVEY, PLAN, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MINNESOTA.

RORY L. SYNSTELIËN
DATE 7-26-2023 LICENSE NO. 44565

QA/QC

FIELD CREW	DHHS
DRAWN BY	DS
REVIEWED BY	CJ
UPDATED BY	



REVISION SUMMARY

DATE	DESCRIPTION

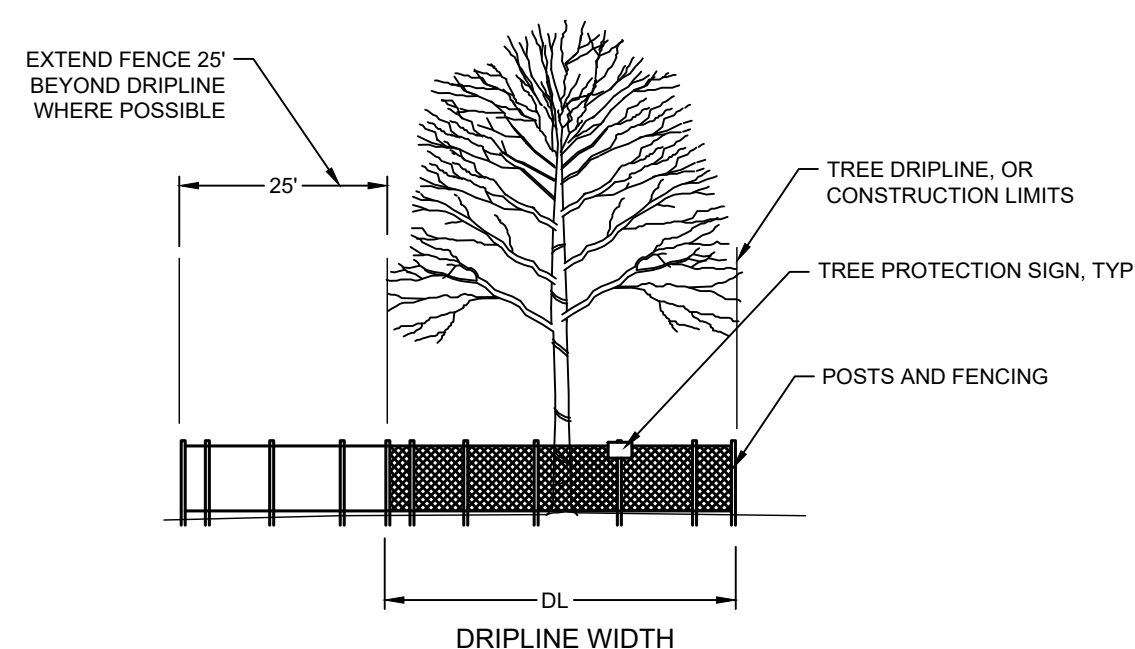
PROJECT NO.: 23128.00
ALTA/NSPS LAND TITLE SURVEY
V1.0
© COPYRIGHT 2023 CIVIL SITE GROUP INC.

REMOVAL NOTES:

- 1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
2. SEE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PLAN FOR CONSTRUCTION STORM WATER MANAGEMENT PLAN.
3. REMOVAL OF MATERIALS NOTED ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH MNDOT, STATE AND LOCAL REGULATIONS.
4. REMOVAL OF PRIVATE UTILITIES SHALL BE COORDINATED WITH UTILITY OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
5. EXISTING PAVEMENTS SHALL BE SAWCUT IN LOCATIONS AS SHOWN ON THE DRAWINGS OR THE NEAREST JOINT FOR PROPOSED PAVEMENT CONNECTIONS.
6. REMOVED MATERIALS SHALL BE DISPOSED OF TO A LEGAL OFF-SITE LOCATION AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
7. ABANDON, REMOVAL, CONNECTION, AND PROTECTION NOTES SHOWN ON THE DRAWINGS ARE APPROXIMATE. COORDINATE WITH PROPOSED PLANS.
8. EXISTING ON-SITE FEATURES NOT NOTED FOR REMOVAL SHALL BE PROTECTED THROUGHOUT THE DURATION OF THE CONTRACT.
9. PROPERTY LINES SHALL BE CONSIDERED GENERAL CONSTRUCTION LIMITS UNLESS OTHERWISE NOTED ON THE DRAWINGS. WORK WITHIN THE GENERAL CONSTRUCTION LIMITS SHALL INCLUDE STAGING, DEMOLITION AND CLEAN-UP OPERATIONS AS WELL AS CONSTRUCTION SHOWN ON THE DRAWINGS.
10. MINOR WORK OUTSIDE OF THE GENERAL CONSTRUCTION LIMITS SHALL BE ALLOWED AS SHOWN ON THE PLAN AND PER CITY REQUIREMENTS. FOR ANY WORK ON ADJACENT PRIVATE PROPERTY, THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNER PRIOR TO ANY WORK.
11. DAMAGE BEYOND THE PROPERTY LIMITS CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED IN A MANNER APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT OR IN ACCORDANCE WITH THE CITY.
12. PROPOSED WORK (BUILDING AND CIVIL) SHALL NOT DISTURB EXISTING UTILITIES UNLESS OTHERWISE SHOWN ON THE DRAWINGS AND APPROVED BY THE CITY PRIOR TO CONSTRUCTION.
13. SITE SECURITY MAY BE NECESSARY AND PROVIDED IN A MANNER TO PROHIBIT VANDALISM, AND THEFT, DURING AND AFTER NORMAL WORK HOURS, THROUGHOUT THE DURATION OF THE CONTRACT. SECURITY MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY.
14. VEHICULAR ACCESS TO THE SITE SHALL BE MAINTAINED FOR DELIVERY AND INSPECTION ACCESS DURING NORMAL OPERATING HOURS. AT NO POINT THROUGHOUT THE DURATION OF THE CONTRACT SHALL CIRCULATION OF ADJACENT STREETS BE BLOCKED WITHOUT APPROVAL BY THE CITY PRIOR TO CONSTRUCTION ACTIVITIES.
15. ALL TRAFFIC CONTROLS SHALL BE PROVIDED AND ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, SIGNAGE, BARRICADES, FLASHERS, AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT APPROVAL BY THE CITY.
16. SHORING FOR BUILDING EXCAVATION MAY BE USED AT THE DISCRETION OF THE CONTRACTOR AND AS APPROVED BY THE OWNERS REPRESENTATIVE AND THE CITY PRIOR TO CONSTRUCTION ACTIVITIES.
17. STAGING, DEMOLITION, AND CLEAN-UP AREAS SHALL BE WITHIN THE PROPERTY LIMITS AS SHOWN ON THE DRAWINGS AND MAINTAINED IN A MANNER AS REQUIRED BY THE CITY.
18. ALL EXISTING SITE TRAFFIC/REGULATORY SIGNAGE TO BE INVENTORIED AND IF REMOVED FOR CONSTRUCTION SHALL BE RETURNED TO LGU.
19. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CITY OF CRYSTAL REMOVAL NOTES:

- 1. RESERVED FOR CITY SPECIFIC REMOVAL NOTES.



FURNISH A AND INSTALL TEMPORARY FENCE AT THE TREE'S DRIP LINE OR CONSTRUCTION LIMITS AS SHOWN ON PLAN, PRIOR TO ANY CONSTRUCTION. WHERE POSSIBLE PLACE FENCE 25' BEYOND DRIP LINE. PLACE TREE PROTECTION SIGN ON POSTS, ONE PER INDIVIDUAL TREE (FACING CONSTRUCTION ACTIVITY), OR ONE EVERY 100' LF ALONG A GROVE OR MULTI-TREE PROTECTION AREA.

1 TREE PROTECTION NOTES

SITE AREA CALCULATIONS						
	EXISTING CONDITION			PROPOSED CONDITION		
IMPERVIOUS SURFACES						
BUILDING COVERAGE	15,948 SF	26.7%		16,129 SF	27.0%	
PAVEMENT	32,819 SF	54.9%		27,541 SF	46.1%	
TOTAL	48,767 SF	81.5%	1.1 AC	43,670 SF	73.0%	1.0 AC
PERVIOUS SURFACES						
TOTAL	11,037 SF	18.5%	0.3 AC	16,134 SF	27.0%	0.4 AC
TOTAL SITE AREA	59,804 SF	100.0%	1.4 AC	59,804 SF	100.0%	1.4 AC
DIFFERENCE (EX. VS PROP.)	-5,097 SF	-8.5%				
BITUMINOUS MILL & OVERLAY	14,431 SF		0.3 AC			
DISTURBED AREA	27,544 SF		0.6 AC			

SITE LAYOUT NOTES:

- 1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
2. CONTRACTOR SHALL VERIFY LOCATIONS AND LAYOUT OF ALL SITE ELEMENTS PRIOR TO BEGINNING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, LOCATIONS OF EXISTING AND PROPOSED PROPERTY LINES, EASEMENTS, SETBACKS, UTILITIES, BUILDINGS AND PAVEMENTS. CONTRACTOR IS RESPONSIBLE FOR FINAL LOCATIONS OF ALL ELEMENTS FOR THE SITE. ANY REVISIONS REQUIRED AFTER COMMENCEMENT OF CONSTRUCTION, DUE TO LOCAL ADJUSTMENTS SHALL BE CORRECTED AT NO ADDITIONAL COST TO OWNER. ADJUSTMENTS TO THE LAYOUT SHALL BE APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF MATERIALS. STAKE LAYOUT FOR APPROVAL.
3. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, INCLUDING A RIGHT-OF-WAY AND STREET OPENING PERMIT.
4. THE CONTRACTOR SHALL VERIFY RECOMMENDATIONS NOTED IN THE GEO TECHNICAL REPORT PRIOR TO INSTALLATION OF SITE IMPROVEMENT MATERIALS.
5. CONTRACTOR SHALL FIELD VERIFY COORDINATES AND LOCATION DIMENSIONS & ELEVATIONS OF THE BUILDING AND STAKE FOR REVIEW AND APPROVAL BY THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION OF FOOTING MATERIALS.
6. LOCATIONS OF STRUCTURES, ROADWAY PAVEMENTS, CURBS AND GUTTERS, BOLLARDS, AND WALKS ARE APPROXIMATE AND SHALL BE STAKED IN THE FIELD, PRIOR TO INSTALLATION, FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT.
7. CURB DIMENSIONS SHOWN ARE TO FACE OF CURB. BUILDING DIMENSIONS ARE TO FACE OF CONCRETE FOUNDATION. LOCATION OF BUILDING IS TO BUILDING FOUNDATION AND SHALL BE AS SHOWN ON THE DRAWINGS.
8. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR SAMPLES AS SPECIFIED FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO FABRICATION FOR ALL PREFABRICATED SITE IMPROVEMENT MATERIALS SUCH AS, BUT NOT LIMITED TO THE FOLLOWING, FURNISHINGS, PAVEMENTS, WALLS, RAILINGS, BENCHES, FLAGPOLES, LANDING PADS FOR CURB RAMPS, AND LIGHT AND POLES. THE OWNER RESERVES THE RIGHT TO REJECT INSTALLED MATERIALS NOT PREVIOUSLY APPROVED.
9. PEDESTRIAN CURB RAMPS SHALL BE CONSTRUCTED WITH TRUNCATED DOME LANDING AREAS IN ACCORDANCE WITH A.D.A. REQUIREMENTS-SEE DETAIL.
10. CROSSWALK STRIPING SHALL BE 24" WIDE WHITE PAINTED LINE, SPACED 48" ON CENTER PERPENDICULAR TO THE FLOW OF TRAFFIC. WIDTH OF CROSSWALK SHALL BE 5' WIDE. ALL OTHER PAVEMENT MARKINGS SHALL BE WHITE IN COLOR UNLESS OTHERWISE NOTED OR REQUIRED BY ADA OR LOCAL GOVERNING BODIES.
11. SEE SITE PLAN FOR CURB AND GUTTER TYPE, TAPER BETWEEN CURB TYPES-SEE DETAIL.
12. ALL CURB RADII ARE MINIMUM 3' UNLESS OTHERWISE NOTED.
13. CONTRACTOR SHALL REFER TO FINAL PLAT FOR LOT BOUNDARIES, NUMBERS, AREAS AND DIMENSIONS PRIOR TO SITE IMPROVEMENTS.
14. FIELD VERIFY ALL EXISTING SITE CONDITIONS, DIMENSIONS.
15. PARKING IS TO BE SET PARALLEL OR PERPENDICULAR TO EXISTING BUILDING UNLESS NOTED OTHERWISE.
16. ALL PARKING LOT PAINT STRIPING TO BE WHITE, 4" WIDE TYP.
17. BITUMINOUS PAVING TO BE "LIGHT DUTY" UNLESS OTHERWISE NOTED. SEE DETAIL SHEETS FOR PAVEMENT SECTIONS.
18. ALL TREES THAT ARE TO REMAIN ARE TO BE PROTECTED FROM DAMAGE WITH A CONSTRUCTION FENCE AT THE DRIP LINE. SEE LANDSCAPE DOCUMENTS.
19. CONTRACTOR IS RESPONSIBLE TO INSTALL ANY SIDEWALK AND CURBING PER DESIGN PLAN. CONTRACTOR TO VERIFY ALL CURBS AND SIDEWALKS WILL DRAIN PROPERLY IN FIELD CONDITIONS. CONTRACTOR MUST CONTACT THE CIVIL ENGINEER 24-HOURS PRIOR TO ANY CURB AND/OR SIDEWALK INSTALLATION TO REVIEW AND INSPECT CURB STAKES. CONTRACTOR IS RESPONSIBLE FOR ANY CURB OR SIDEWALK REPLACEMENT IF THIS PROCEDURE IS NOT FOLLOWED.

OPERATIONAL NOTES	
SNOW REMOVAL	ALL SNOW SHALL BE STORED ON-SITE OUTSIDE PARKING LOT. WHEN FULL, REMOVAL CO. SHALL REMOVE EXCESS OFF-SITE.
TRASH REMOVAL	TRASH SHALL BE PLACED IN EXTERIOR TRASH AREA AND REMOVED BY COMMERCIAL CO. WEEKLY.
DELIVERIES	DELIVERIES SHALL OCCUR AT THE FRONT DOOR VIA STANDARD COMMERCIAL DELIVERY VEHICLES (UPS, FED-EX, USPS).

GENERAL GRADING NOTES:

- 1. CONTRACTOR SHALL VERIFY ALL BUILDING ELEVATIONS, (FFE, LFE, GFE), PRIOR TO CONSTRUCTION BY CROSS CHECKING WITH ARCHITECTURAL, STRUCTURAL AND CIVIL ELEVATIONS FOR EQUIVALENT "100" ELEVATIONS. THIS MUST BE DONE PRIOR TO EXCAVATION AND INSTALLATION OF ANY FOOTING MATERIALS. VERIFICATION OF THIS COORDINATION SHALL BE CONFIRMED IN WRITING BY CIVIL, SURVEYOR, ARCHITECTURAL, STRUCTURAL AND CONTRACTOR PRIOR TO CONSTRUCTION.
2. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
3. SEE SITE PLAN FOR HORIZONTAL LAYOUT & GENERAL GRADING NOTES.
4. THE CONTRACTOR SHALL COMPLETE THE SITE GRADING CONSTRUCTION (INCLUDING BUT NOT LIMITED TO SITE PREPARATION, SOIL CORRECTION, EXCAVATION, EMBANKMENT, ETC.) IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER'S SOILS ENGINEER. ALL SOIL TESTING SHALL BE COMPLETED BY THE OWNER'S SOILS ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOIL TESTS AND INSPECTIONS WITH THE SOILS ENGINEER.
5. ANY ELEMENTS OF AN EARTH RETENTION SYSTEM AND RELATED EXCAVATIONS THAT FALL WITHIN THE PUBLIC RIGHT OF WAY WILL REQUIRE A "RIGHT OF WAY EXCAVATION PERMIT". CONTRACTOR IS RESPONSIBLE FOR ACQUIRING THIS PERMIT PRIOR TO CONSTRUCTION IF APPLICABLE.
6. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
7. GRADING AND EXCAVATION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS & PERMIT REQUIREMENTS OF THE CITY.
8. PROPOSED SPOT GRADES ARE FLOW-LINE FINISHED GRADE ELEVATIONS, UNLESS OTHERWISE NOTED.
9. GRADES OF WALKS SHALL BE INSTALLED WITH 5% MAX. LONGITUDINAL SLOPE AND 1% MIN. AND 2% MAX. CROSS SLOPE, UNLESS OTHERWISE NOTED.
10. PROPOSED SLOPES SHALL NOT EXCEED 3:1 UNLESS INDICATED OTHERWISE ON THE DRAWINGS. MAXIMUM SLOPES IN MAINTAINED AREAS IS 4:1.
11. PROPOSED RETAINING WALLS, FREESTANDING WALLS, OR COMBINATION OF WALL TYPES GREATER THAN 4' IN HEIGHT SHALL BE DESIGNED AND ENGINEERED BY A REGISTERED RETAINING WALL ENGINEER. DESIGN DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF GRADE STAKES THROUGHOUT THE DURATION OF CONSTRUCTION TO ESTABLISH PROPER GRADES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR A FINAL FIELD CHECK OF FINISHED GRADES ACCEPTABLE TO THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO TOPSOIL AND SODDING ACTIVITIES.
13. IF EXCESS OR SHORTAGE OF SOIL MATERIAL EXISTS, THE CONTRACTOR SHALL TRANSPORT ALL EXCESS SOIL MATERIAL OFF THE SITE TO AN AREA SELECTED BY THE CONTRACTOR, OR IMPORT SUITABLE MATERIAL TO THE SITE.
14. EXCAVATE TOPSOIL FROM AREAS TO BE FURTHER EXCAVATED OR REGRADED AND STOCKPILE IN AREAS DESIGNATED ON THE SITE. THE CONTRACTOR SHALL SALVAGE ENOUGH TOPSOIL FOR RESPREADING ON THE SITE AS SPECIFIED. EXCESS TOPSOIL SHALL BE PLACED IN EMBANKMENT AREAS, OUTSIDE OF BUILDING PADS, ROADWAYS AND PARKING AREAS. THE CONTRACTOR SHALL SUBCUT CUT AREAS, WHERE TURF IS TO BE ESTABLISHED, TO A DEPTH OF 6 INCHES. RESPREAD TOPSOIL IN AREAS WHERE TURF IS TO BE ESTABLISHED TO A MINIMUM DEPTH OF 6 INCHES.
15. FINISHED GRADING SHALL BE COMPLETED. THE CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING, INCLUDING ADJACENT TRANSITION AREAS. PROVIDE A SMOOTH FINISHED SURFACE WITHIN SPECIFIED TOLERANCES, WITH UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN, OR BETWEEN SUCH POINTS AND EXISTING GRADES. AREAS THAT HAVE BEEN FINISH GRADED SHALL BE PROTECTED FROM SUBSEQUENT CONSTRUCTION OPERATIONS, TRAFFIC AND EROSION. REPAIR ALL AREAS THAT HAVE BECOME RUTTED BY TRAFFIC OR ERODED BY WATER OR HAS SETTLED BELOW THE CORRECT GRADE. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO EQUAL OR BETTER THAN ORIGINAL CONDITION OR TO THE REQUIREMENTS OF THE NEW WORK.
16. PRIOR TO PLACEMENT OF THE AGGREGATE BASE, A TEST ROLL WILL BE REQUIRED ON THE STREET AND/OR PARKING AREA SUBGRADE. THE CONTRACTOR SHALL PROVIDE A LOADED TANDEM AXLE TRUCK WITH A GROSS WEIGHT OF 25 TONS. THE TEST ROLLING SHALL BE AT THE DIRECTION OF THE SOILS ENGINEER AND SHALL BE COMPLETED IN AREAS AS DIRECTED BY THE SOILS ENGINEER. THE SOILS ENGINEER SHALL DETERMINE WHICH SECTIONS OF THE STREET OR PARKING AREA ARE UNSTABLE. CORRECTION OF THE SUBGRADE SOILS SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS ENGINEER. NO TEST ROLL SHALL OCCUR WITHIN 10' OF ANY UNDERGROUND STORM RETENTION/DETENTION SYSTEMS.
17. TOLERANCES

 - 17.1. THE BUILDING SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.30 FOOT ABOVE, OR 0.30 FOOT BELOW, THE PRESCRIBED ELEVATION AT ANY POINT WHERE MEASUREMENT IS MADE.
 - 17.2. THE STREET OR PARKING AREA SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.05 FOOT ABOVE, OR 0.10 FOOT BELOW, THE PRESCRIBED ELEVATION OF ANY POINT WHERE MEASUREMENT IS MADE.
 - 17.3. AREAS WHICH ARE TO RECEIVE TOPSOIL SHALL BE GRADED TO WITHIN 0.30 FOOT ABOVE OR BELOW THE REQUIRED ELEVATION, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
 - 17.4. TOPSOIL SHALL BE GRADED TO PLUS OR MINUS 1/2 INCH OF THE SPECIFIED THICKNESS.

18. MAINTENANCE

 - 18.1. THE CONTRACTOR SHALL PROTECT NEWLY GRADED AREAS FROM TRAFFIC AND EROSION, AND KEEP AREA FREE OF TRASH AND DEBRIS.
 - 18.2. CONTRACTOR SHALL REPAIR AND REESTABLISH GRADES IN SETTLED, ERODED AND RUTTED AREAS TO SPECIFIED TOLERANCES. DURING THE CONSTRUCTION, IF REQUIRED, AND DURING THE WARRANTY PERIOD, ERODED AREAS WHERE TURF IS TO BE ESTABLISHED SHALL BE RESEEDD AND MULCHED.
 - 18.3. WHERE COMPLETED COMPACTED AREAS ARE DISTURBED BY SUBSEQUENT CONSTRUCTION OPERATIONS OR ADVERSE WEATHER, CONTRACTOR SHALL SCARIFY, SURFACE, RESHAPE, AND COMPACT TO REQUIRED DENSITY PRIOR TO FURTHER CONSTRUCTION.

CITY OF CRYSTAL SITE SPECIFIC NOTES:

- 1. RESERVED FOR CITY SPECIFIC SITE NOTES.

CITY OF CRYSTAL GRADING NOTES:

- 1. RESERVED FOR CITY SPECIFIC GRADING NOTES.

GENERAL UTILITY NOTES:

- 1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
2. SEE SITE PLAN FOR HORIZONTAL DIMENSIONS AND LAYOUT.
3. CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF DISCREPANCIES OR VARIATIONS FROM THE PLANS.
4. UTILITY INSTALLATION SHALL CONFORM TO THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR WATER MAIN AND SERVICE LINE INSTALLATION" AND "SANITARY SEWER AND STORM SEWER INSTALLATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM), AND SHALL CONFORM WITH THE REQUIREMENTS OF THE CITY AND THE PROJECT SPECIFICATIONS.
5. CASTINGS SHALL BE SALVAGED FROM STRUCTURE REMOVALS AND RE-USED OR PLACED AT THE DIRECTION OF THE OWNER.
6. ALL WATER PIPE SHALL BE CLASS 52 DUCTILE IRON PIPE (DIP) AWWA C151, ASME B16.4, AWWA C110, AWWA C153 UNLESS OTHERWISE NOTED.
7. ALL SANITARY SEWER SHALL BE SDR 26 POLYVINYL CHLORIDE (PVC) ASTM D3034 & F679, OR SCH 40 ASTM D1785, 2665, ASTM F794, 1866) UNLESS OTHERWISE NOTED.
8. ALL STORM SEWER PIPE SHALL BE HDPE ASTM F714 & F2306 WITH ASTM D3212 SPEC FITTINGS UNLESS OTHERWISE NOTED.
9. PIPE LENGTHS SHOWN ARE FROM CENTER TO CENTER OF STRUCTURE OR TO END OF FLARED END SECTION.
10. UTILITIES ON THE PLAN ARE SHOWN TO WITHIN 5' OF THE BUILDING FOOTPRINT. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR THE FINAL CONNECTION TO BUILDING LINES. COORDINATE WITH ARCHITECTURAL AND MECHANICAL PLANS.
11. CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE SUMPED 0.15 FEET PER DETAILS. RIM ELEVATIONS SHOWN ON THIS PLAN DO NOT REFLECT SUMPED ELEVATIONS.
12. A MINIMUM OF 8 FEET OF COVER IS REQUIRED OVER ALL WATERMAIN, UNLESS OTHERWISE NOTED. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION TO SANITARY OR STORM SEWER LINES. EXTRA DEPTH WATERMAIN IS INCIDENTAL.
13. A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION AND 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FOR ALL UTILITIES, UNLESS OTHERWISE NOTED.
14. ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE IN ACCORDANCE WITH CITY STANDARDS AND COORDINATED WITH THE CITY PRIOR TO CONSTRUCTION.
15. CONNECTIONS TO EXISTING STRUCTURES SHALL BE CORE-DRILLED.
16. COORDINATE LOCATIONS AND SIZES OF SERVICE CONNECTIONS WITH THE MECHANICAL DRAWINGS.
17. COORDINATE INSTALLATION AND SCHEDULING OF THE INSTALLATION OF UTILITIES WITH ADJACENT CONTRACTORS AND CITY STAFF.
18. ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL PAVEMENT CONNECTIONS SHALL BE SAWCUT. ALL TRAFFIC CONTROLS SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE BUT NOT BE LIMITED TO SIGNAGE, BARRICADES, FLASHERS, AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT APPROVAL BY THE CITY.
19. ALL STRUCTURES, PUBLIC AND PRIVATE, SHALL BE ADJUSTED TO PROPOSED GRADES WHERE REQUIRED. THE REQUIREMENTS OF ALL OWNERS MUST BE COMPLIED WITH. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC LOADING.
20. CONTRACTOR SHALL COORDINATE ALL WORK WITH PRIVATE UTILITY COMPANIES.
21. CONTRACTOR SHALL MAINTAIN AS-BUILT PLANS THROUGHOUT CONSTRUCTION AND SUBMIT THESE PLANS TO ENGINEER UPON COMPLETION OF WORK.
22. ALL JOINTS AND CONNECTIONS IN STORM SEWER SYSTEM SHALL BE GASTIGHT OR WATERTIGHT. APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCHBASINS, OR OTHER STRUCTURES.
23. ALL PORTIONS OF THE STORM SEWER SYSTEM LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED IN ACCORDANCE WITH MN RULES, CHAPTER 4714, SECTION 1109.0.

CITY OF CRYSTAL UTILITY NOTES:

- 1. RESERVED FOR CITY SPECIFIC UTILITY NOTES.



PRELIMINARY: NOT FOR CONSTRUCTION

PROJECT NEW HORIZON ACADEMY

7000 57TH AVENUE N, CRYSTAL, MN 55428

NEW HORIZON ACADEMY 3405 ANNAPOLIS LANE N, PLYMOUTH, MN 55447

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

David J. Knaeble License No. 48776

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
9/12/2023	CITY SUBMITTAL
9/26/2023	CITY REVIEW COMMENTS

REVISION SUMMARY

DATE	DESCRIPTION
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PROJECT NOTES



Know what's below. Call before you dig.

C0.1

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David J. Knaeble
David J. Knaeble
DATE 09/26/2023 LICENSE NO. 48776

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DATE	DESCRIPTION

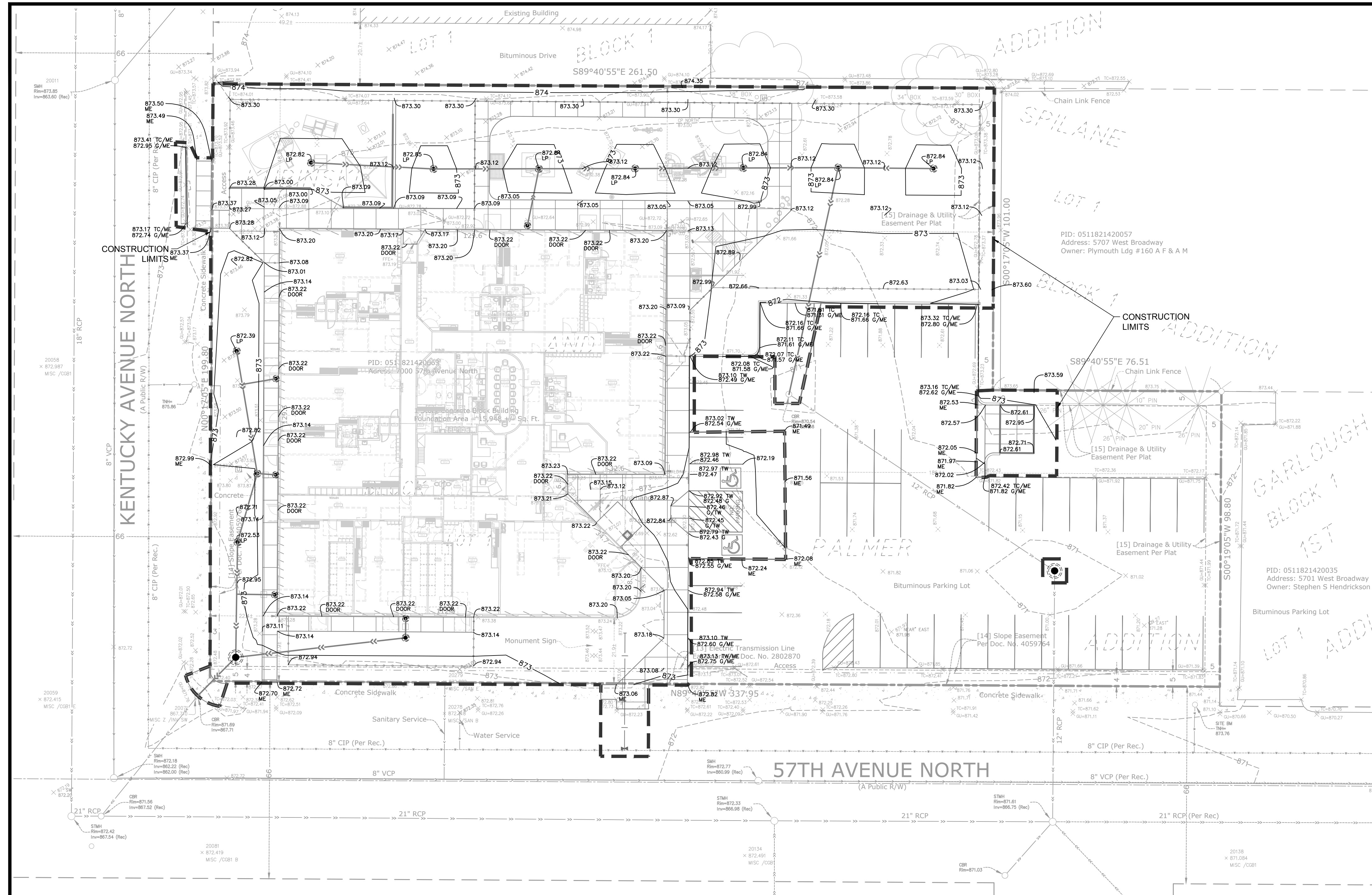
REVISION SUMMARY

DATE	DESCRIPTION

GRADING PLAN

C3.0

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GRADING PLAN LEGEND:

- 1125 ----- EX. 1' CONTOUR ELEVATION INTERVAL
- 1137 ----- 1.0' CONTOUR ELEVATION INTERVAL
- 41.26 SPOT GRADE ELEVATION (GUTTER/FLOW LINE UNLESS OTHERWISE NOTED)
- 891.00 G SPOT GRADE ELEVATION GUTTER
- 891.00 TC SPOT GRADE ELEVATION TOP OF CURB
- 891.00 BS/TS SPOT GRADE ELEVATION BOTTOM OF STAIRS/TOP OF STAIRS
- 891.00 ME SPOT GRADE ELEVATION MATCH EXISTING
- ⊕ GRADE BREAK - HIGH POINTS
- TO CURB AND GUTTER (T.O = TIP OUT)
- EMERGENCY OVERFLOW
- EOE=1135.52
- CONSTRUCTION LIMITS

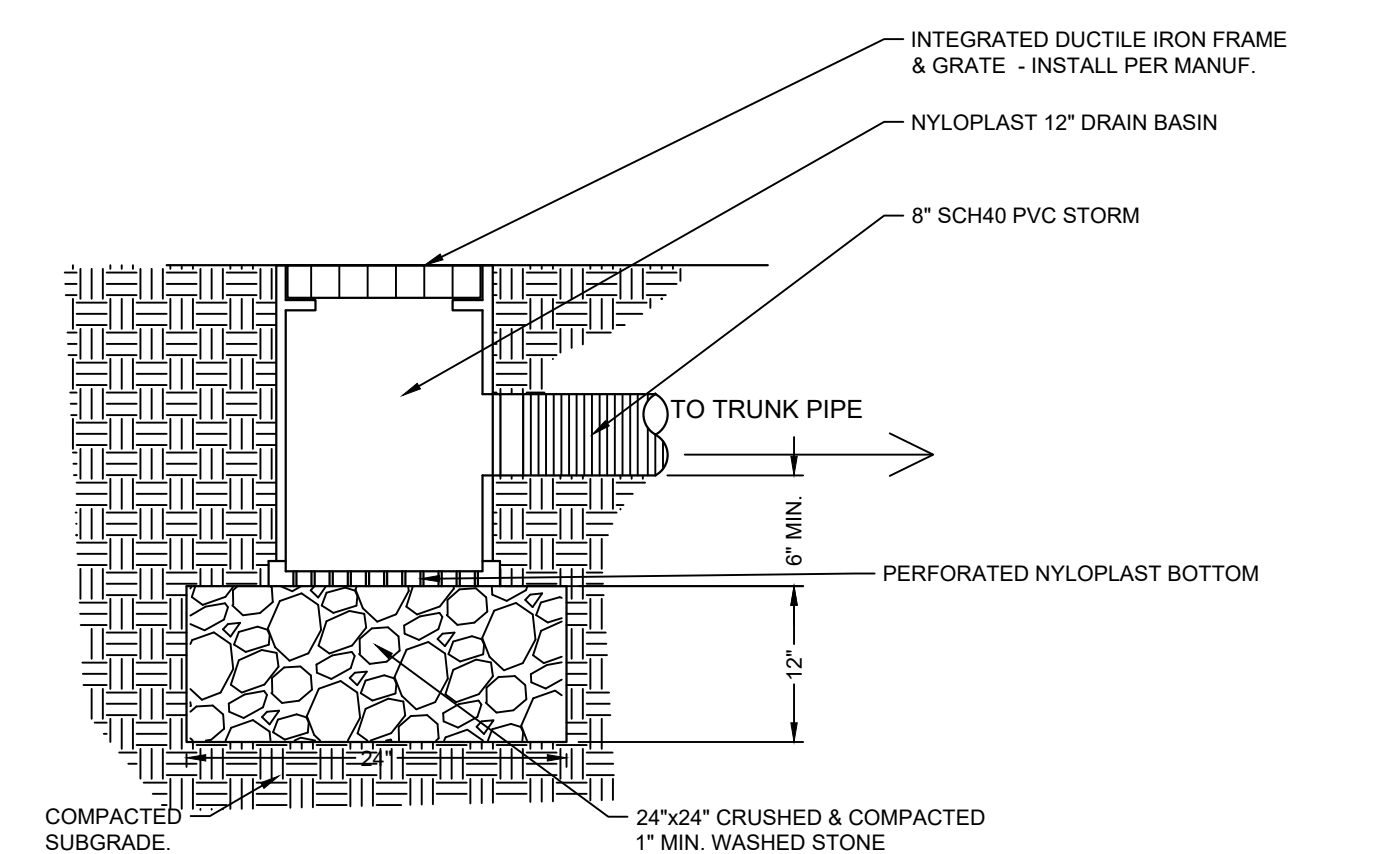
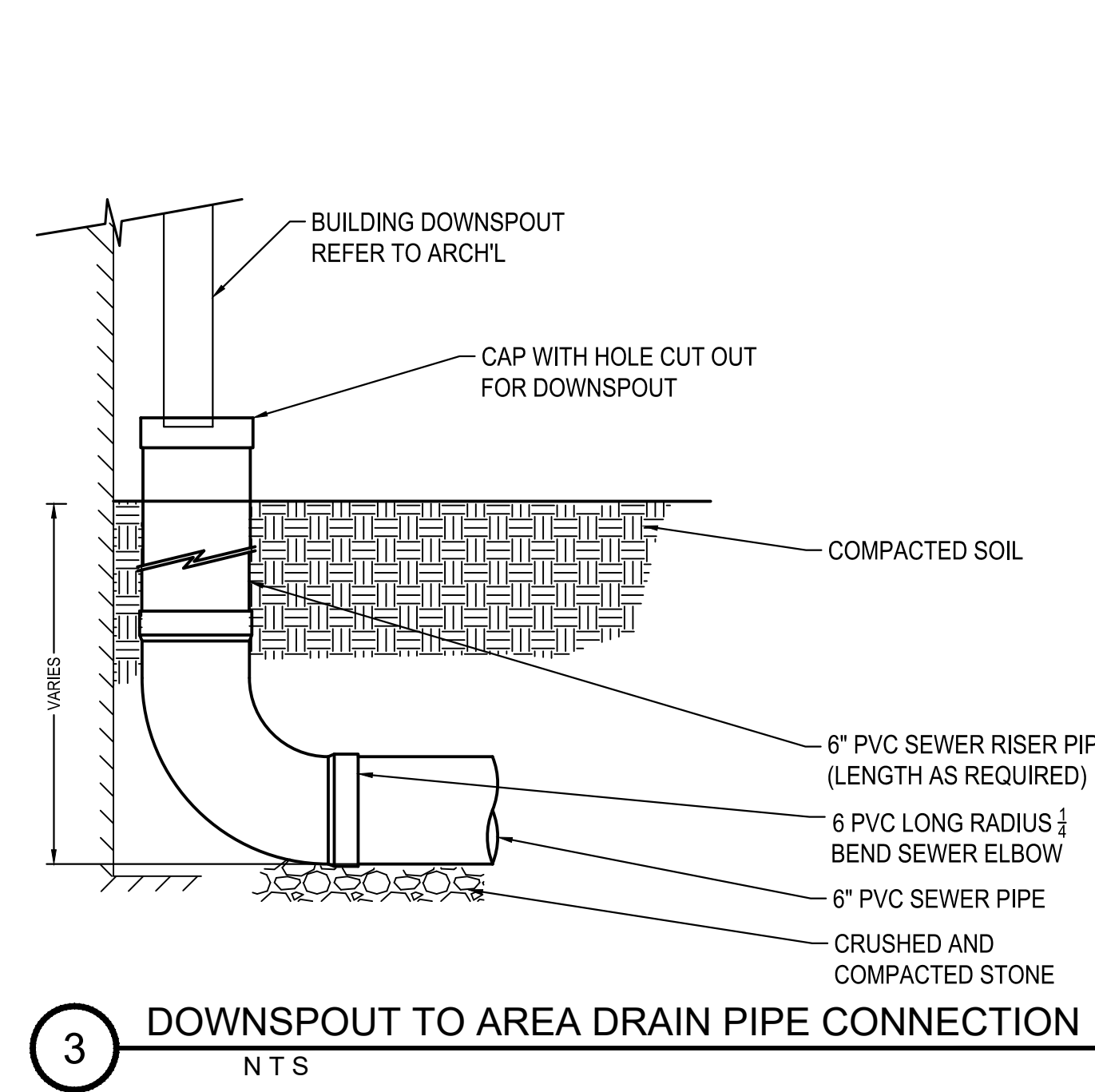
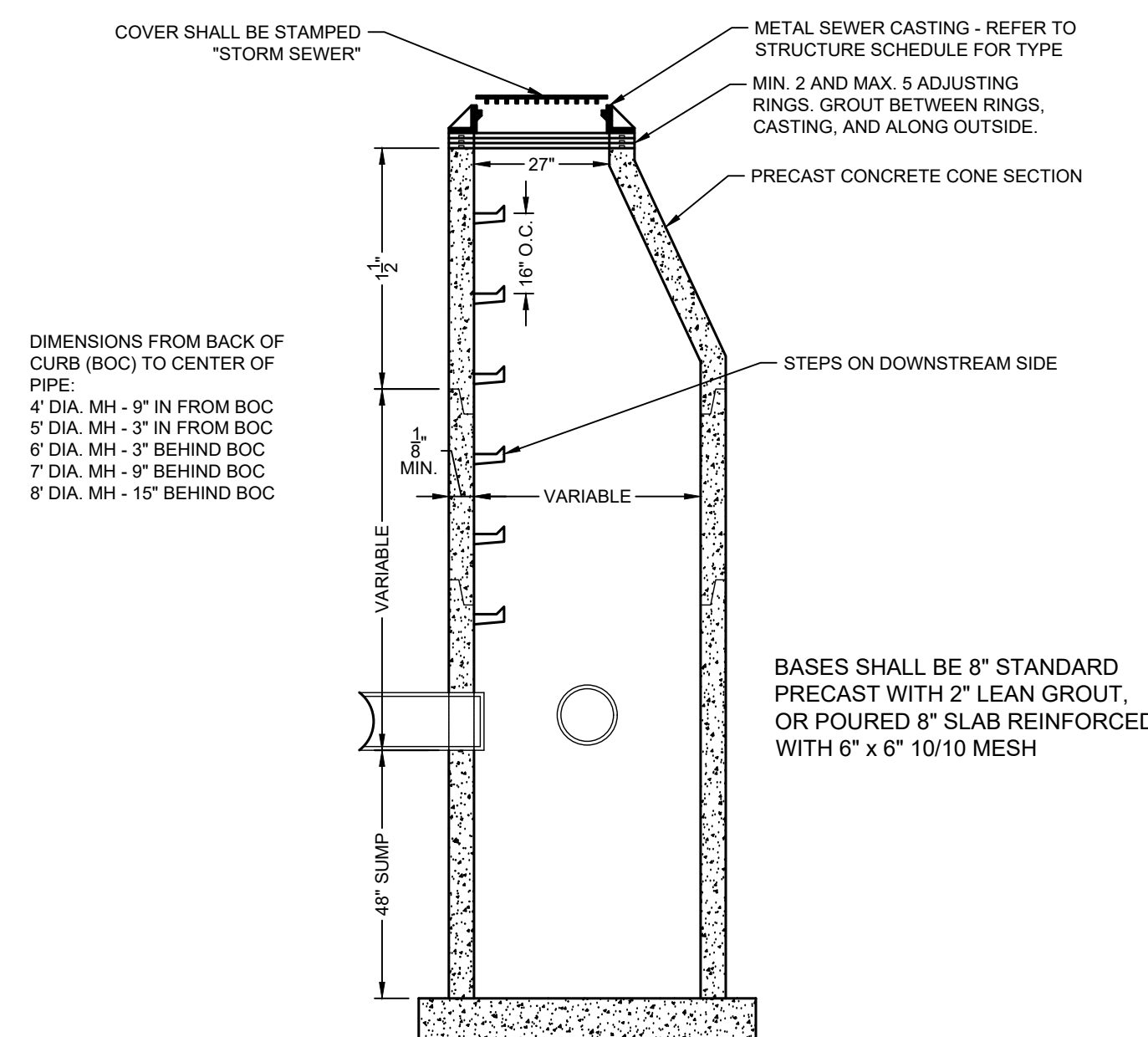
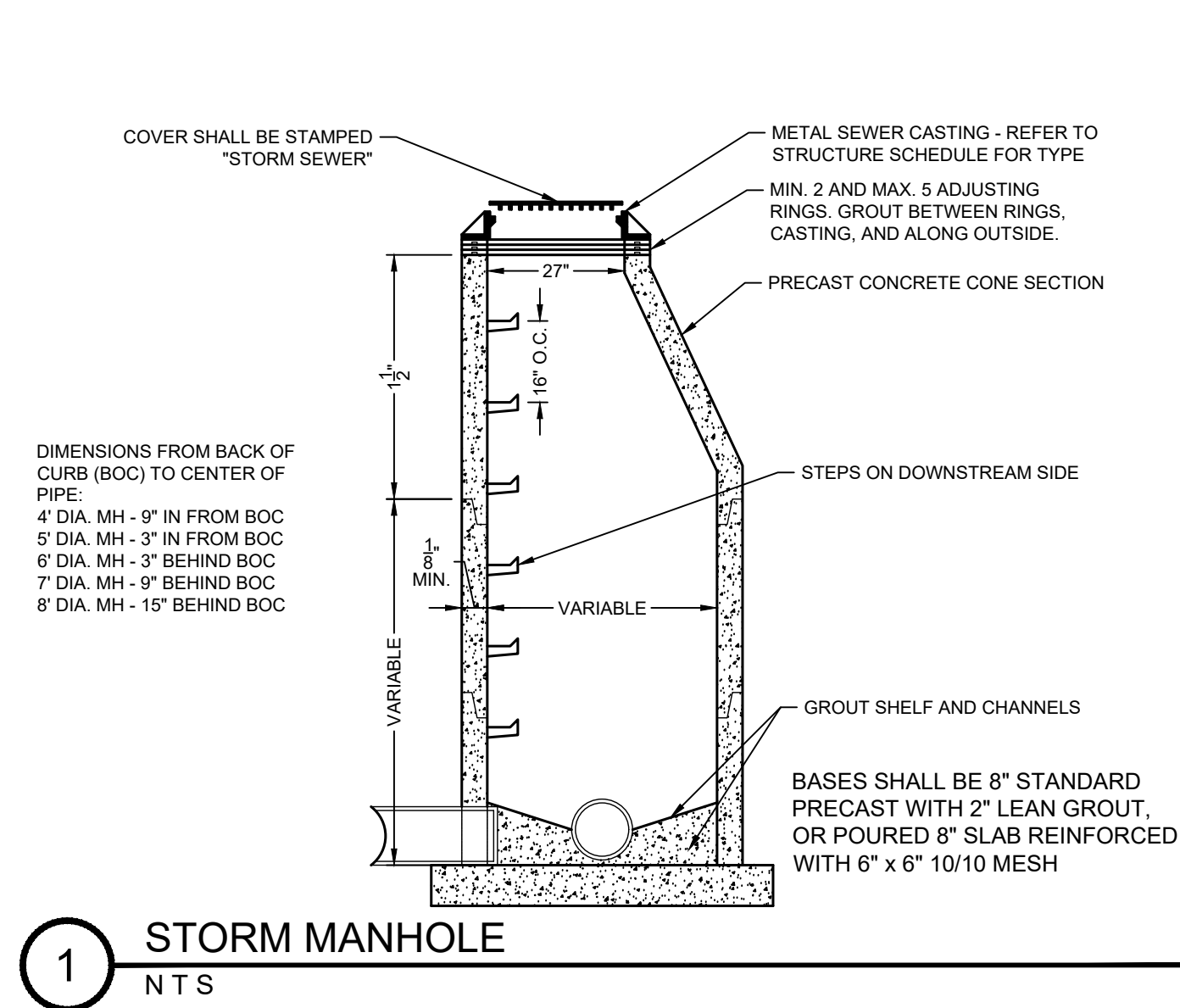
SEE SHEET C0.1 FOR GENERAL GRADING NOTES



Know what's below.
Call before you dig.



1" = 20'-0"
10'-0" 0 20'-0"



NYLOPLAST 12" DRAIN BASIN: 2812AG __ X

GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
PEDESTRIAN	MEETS H-10	1299GGP	7001-110-202
STANDARD	MEETS H-20	1299GGS	7001-110-203
SOLID COVER	MEETS H-20	1299GGC	7001-110-204
PEDESTRIAN BRONZE	N/A	1299GGB	7001-110-205
DOME	N/A	1299GSD	7001-110-206
DROP IN GRATE	LIGHT DUTY	1201DI	7001-110-021

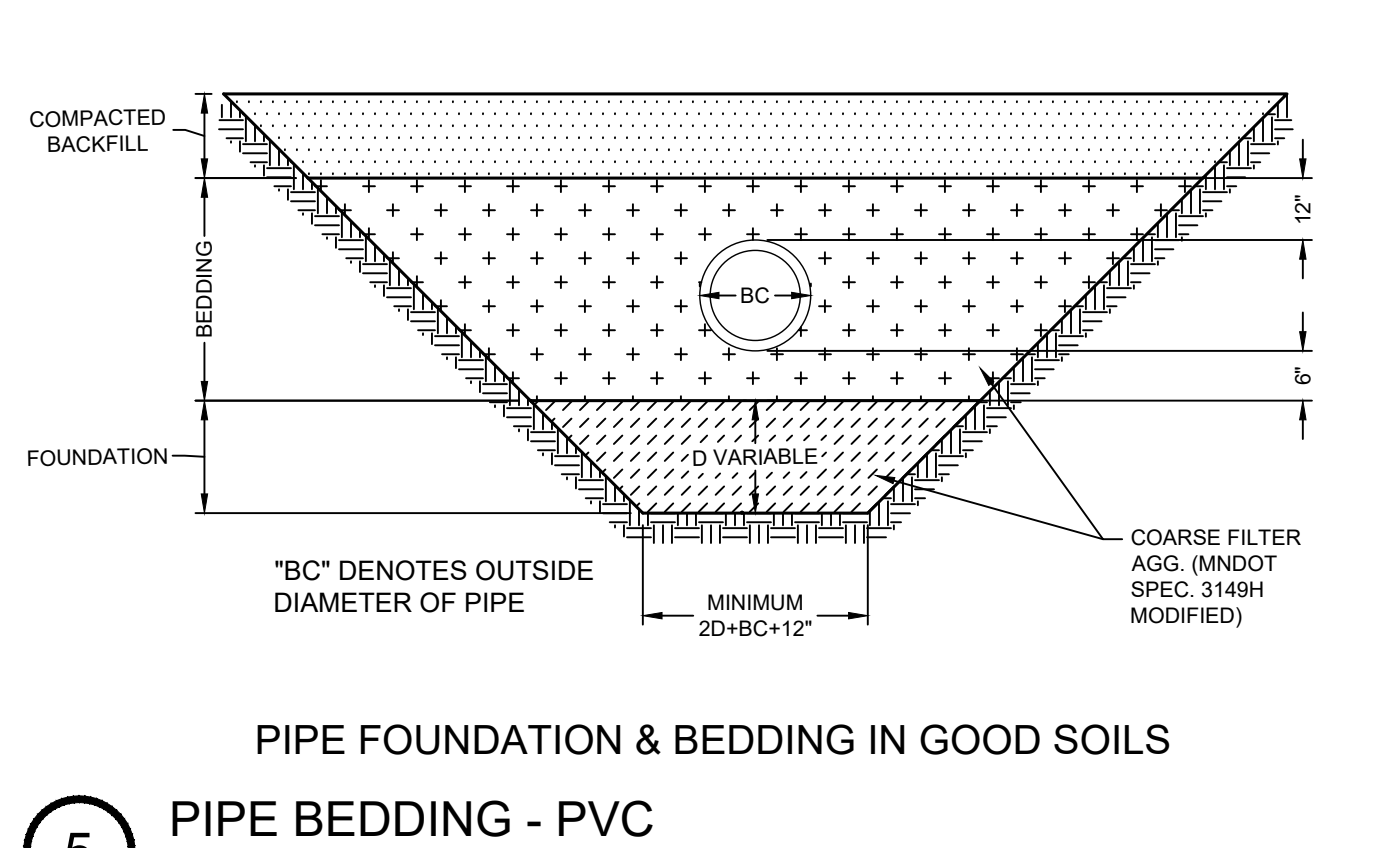
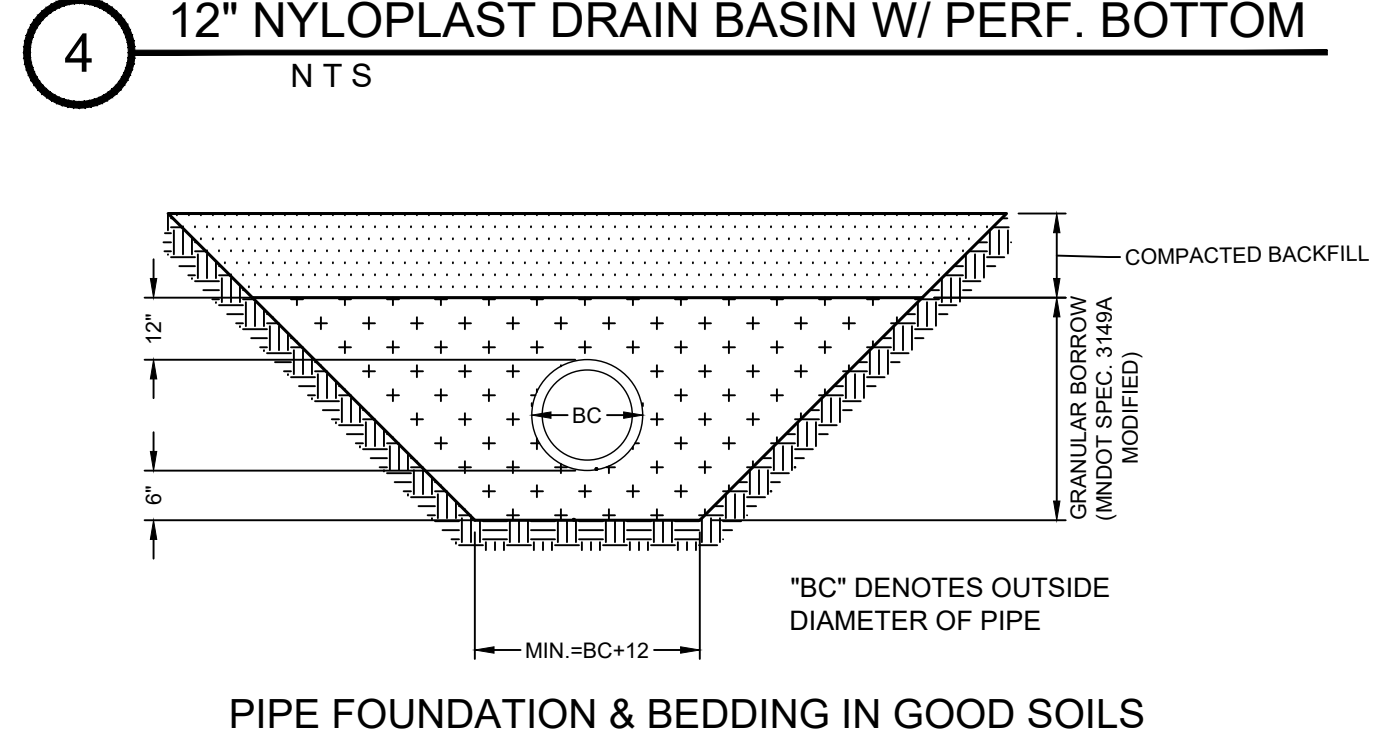
THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I, CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

- 1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-60-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
- 2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-60-05
- 3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065
- 4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
- 5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

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DRAWN BY	EBC	MATERIAL	
DATE	03-29-06		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	03-11-16		
DWG SIZE	A	SCALE	1:20 SHEET 1 OF 1

3130 VERONA AVE
BURLINGAME, CA 94518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com



REVISION SUMMARY	
DATE	DESCRIPTION

CIVIL DETAILS

C5.1

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David J. Knaeble
DATE 09/26/2023 LICENSE NO. 48776

ISSUE/SUBMITTAL SUMMARY

Table with 2 columns: DATE, DESCRIPTION

REVISION SUMMARY

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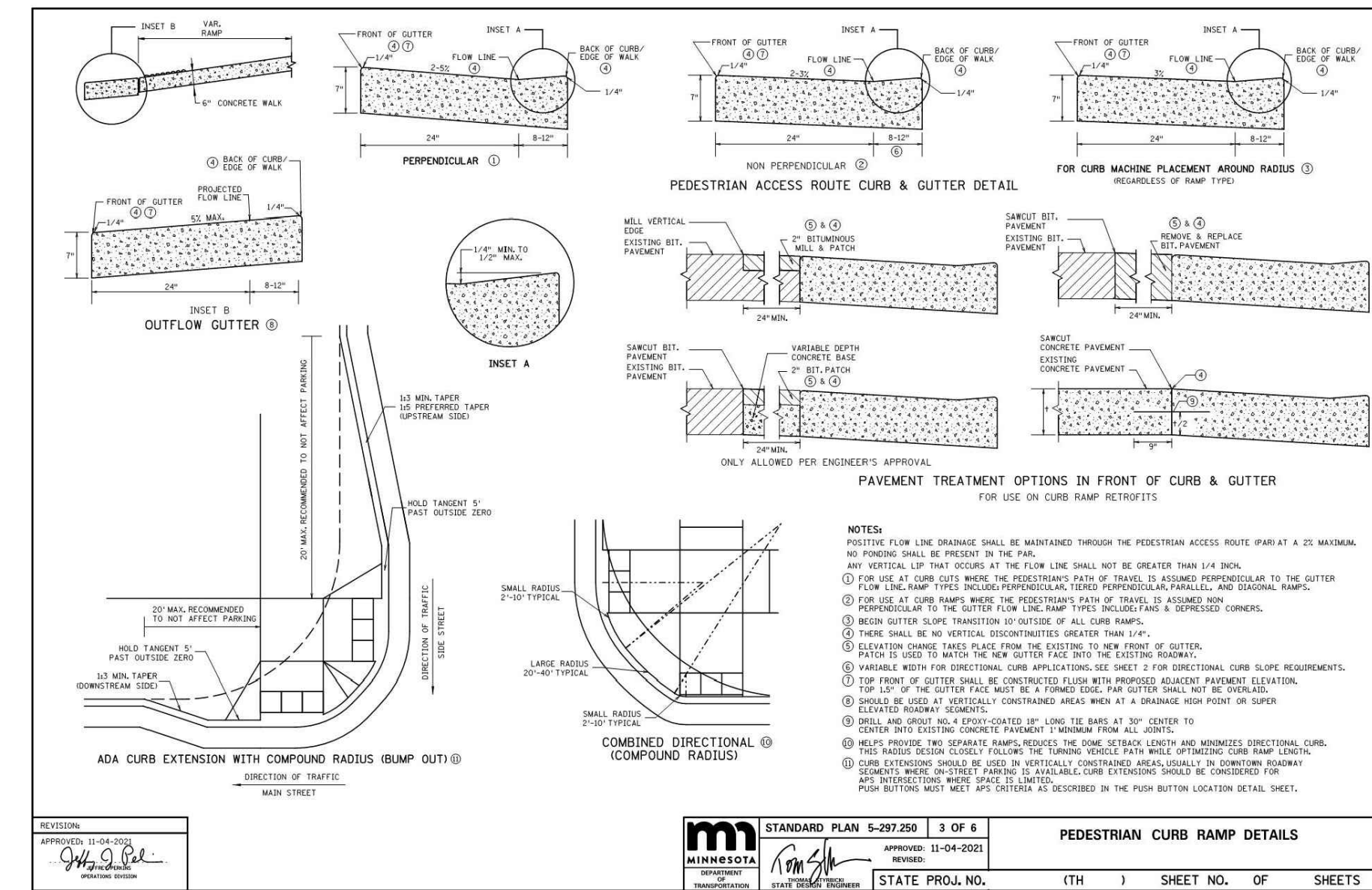
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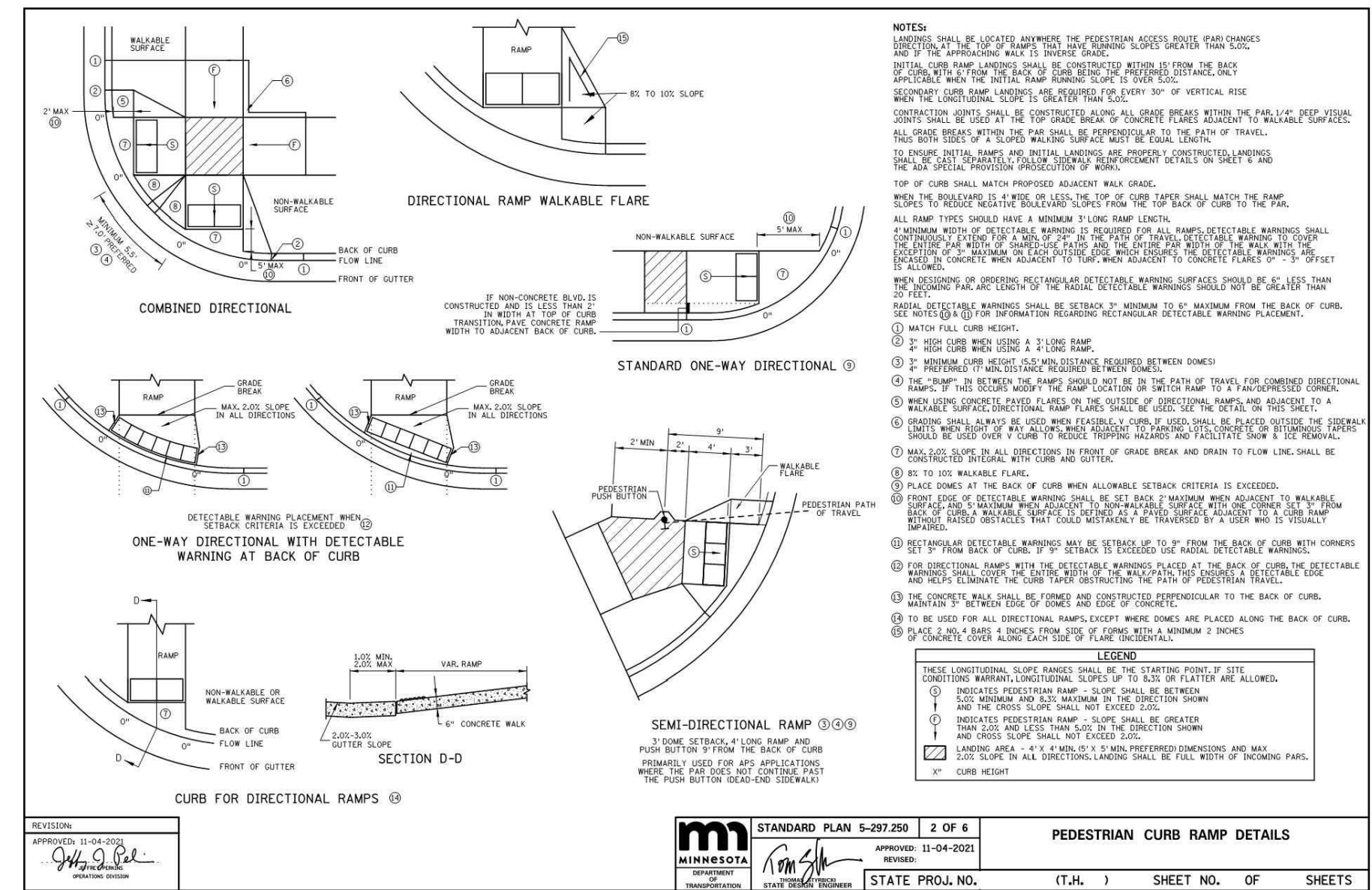
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CIVIL DETAILS

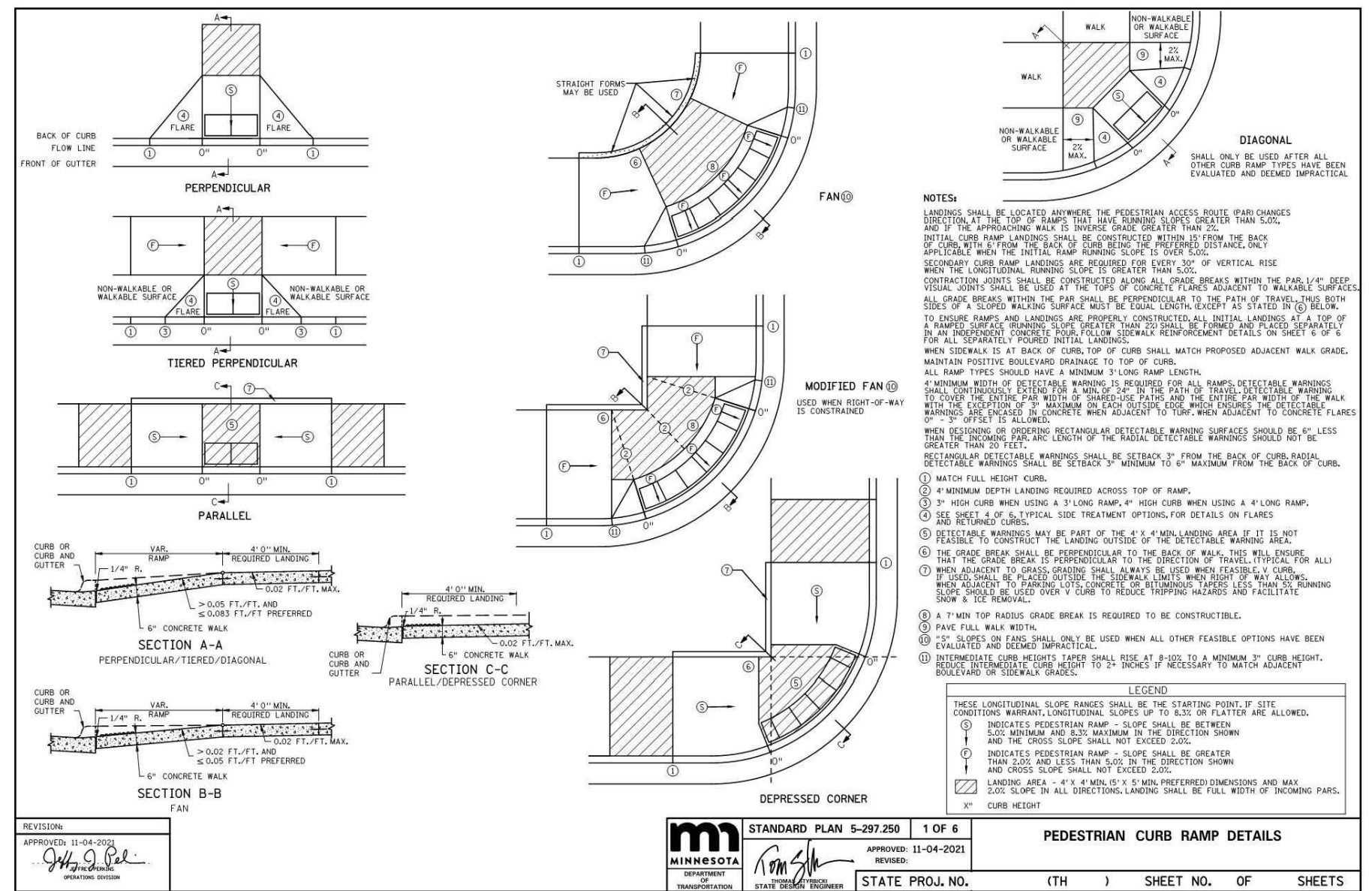
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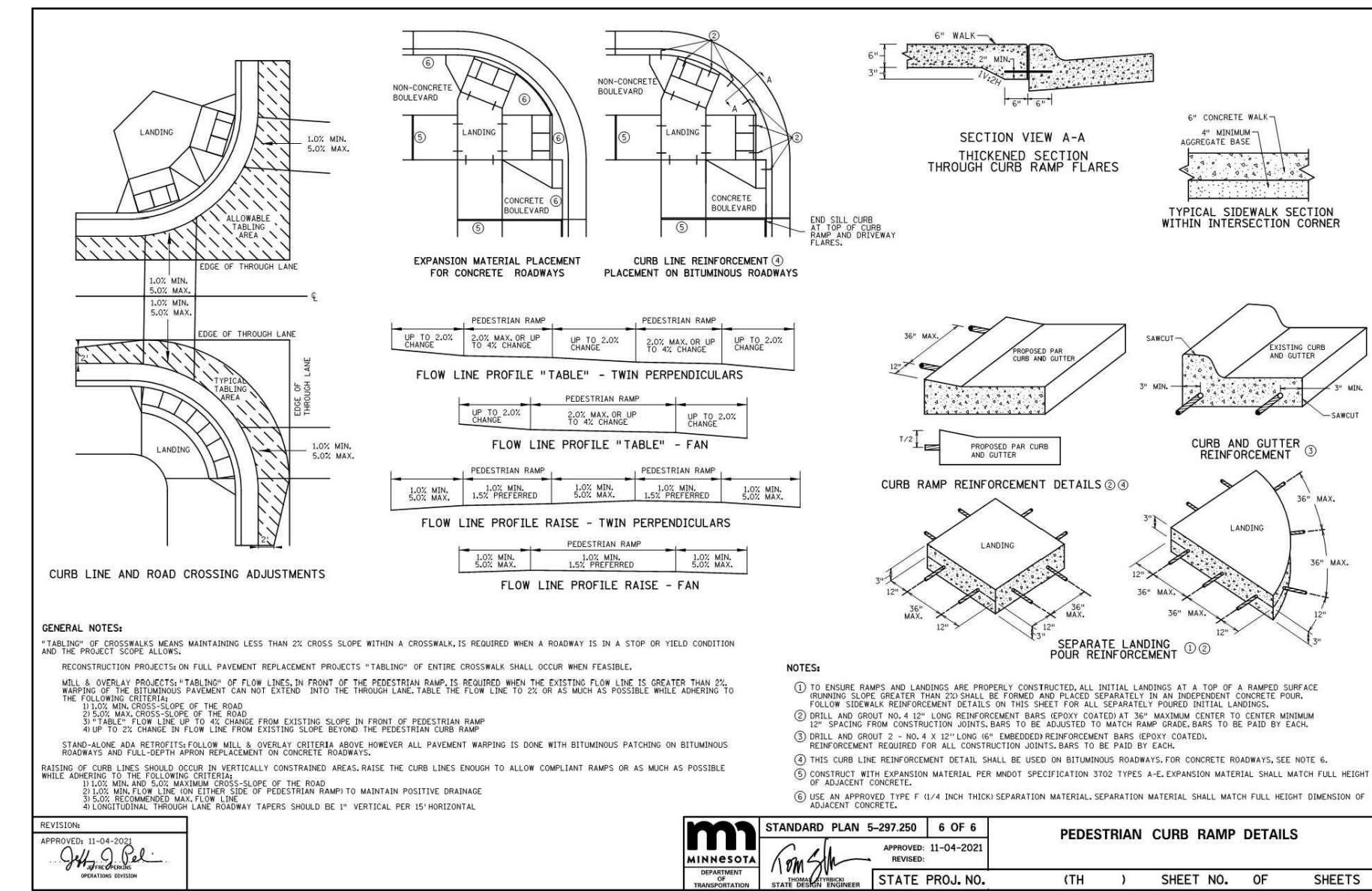
STANDARD PLAN 5-297.250 3 OF 6 PEDESTRIAN CURB RAMP DETAILS



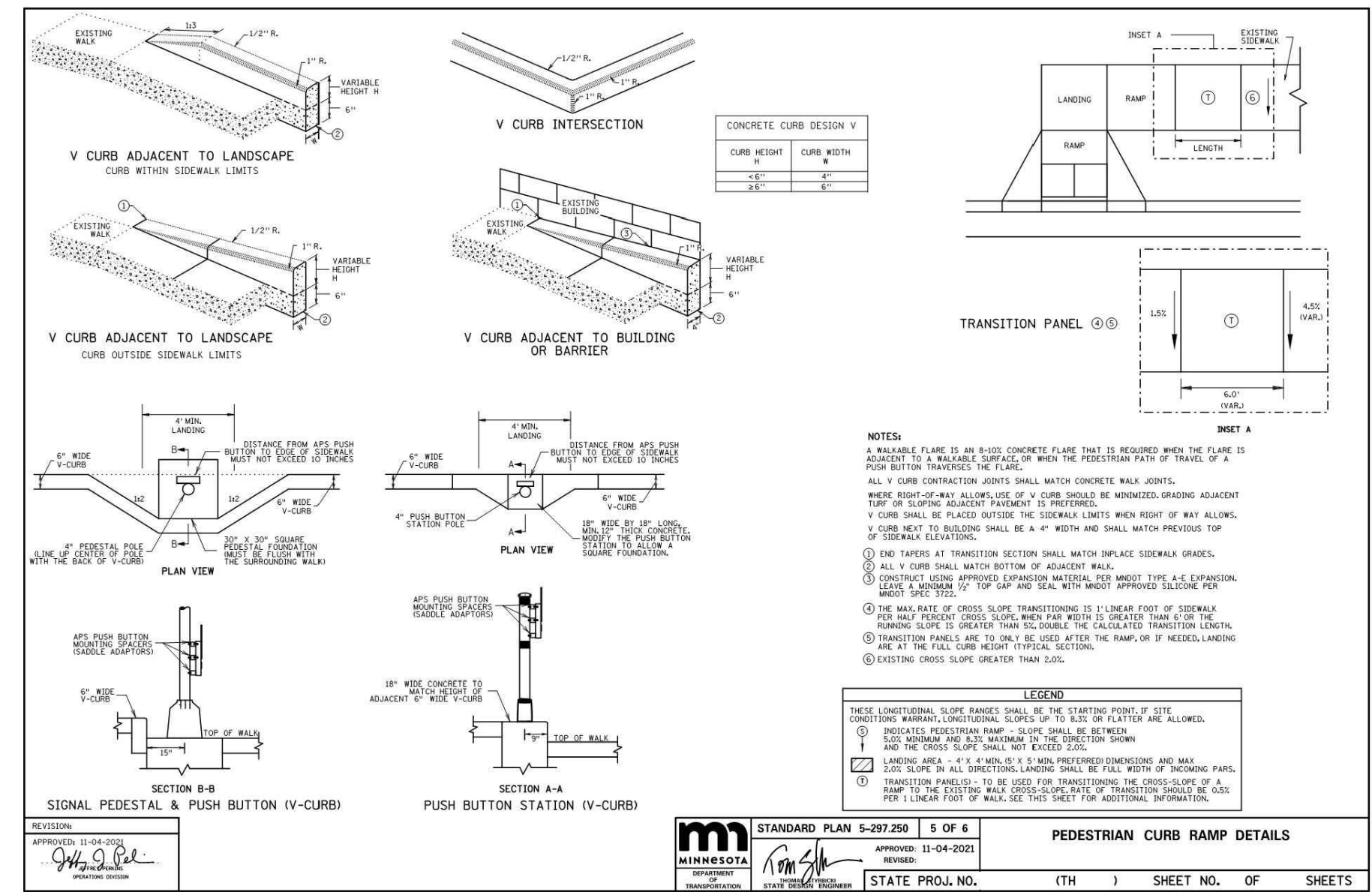
STANDARD PLAN 5-297.250 2 OF 6 PEDESTRIAN CURB RAMP DETAILS



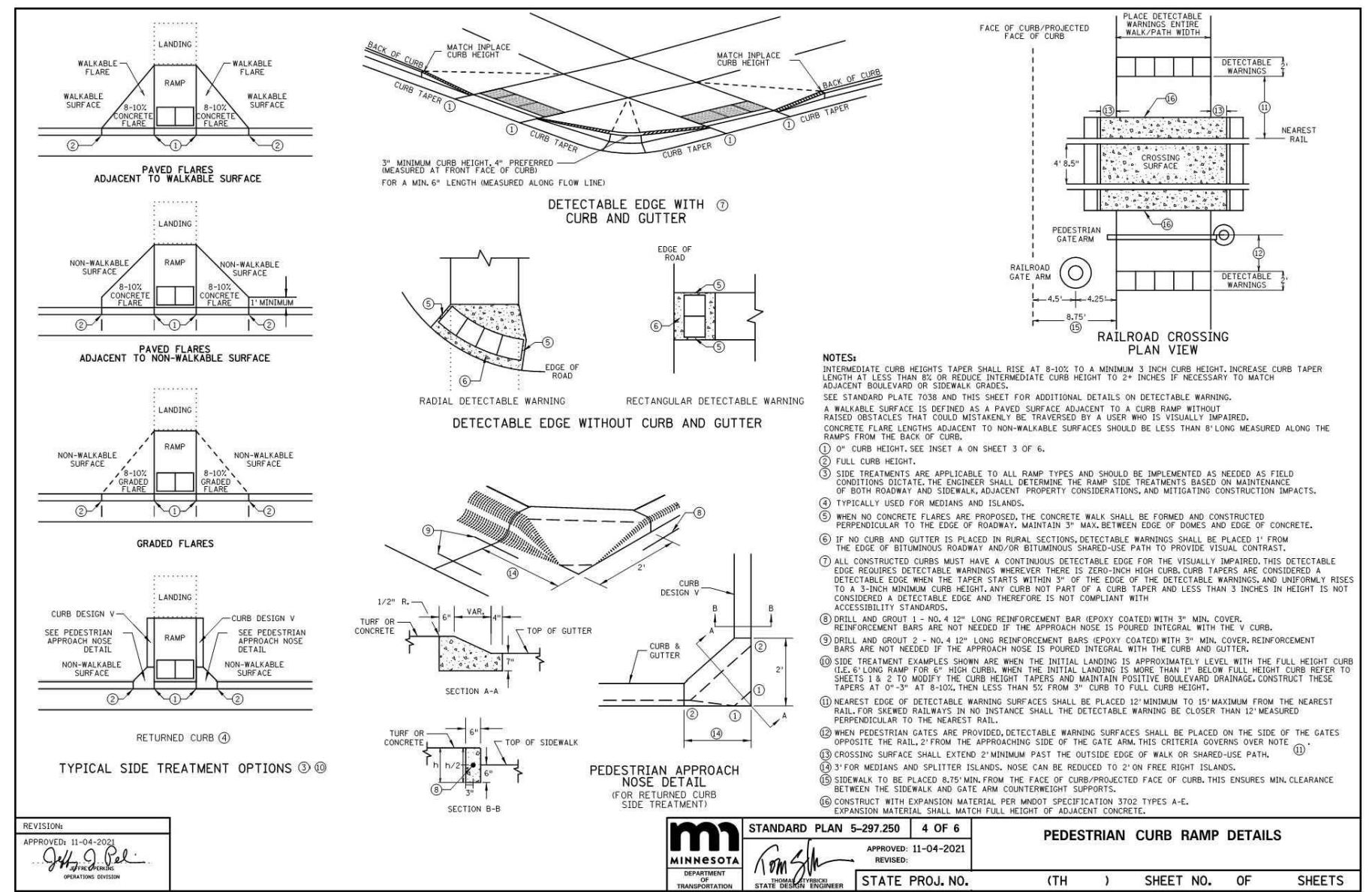
STANDARD PLAN 5-297.250 1 OF 6 PEDESTRIAN CURB RAMP DETAILS



STANDARD PLAN 5-297.250 6 OF 6 PEDESTRIAN CURB RAMP DETAILS



STANDARD PLAN 5-297.250 5 OF 6 PEDESTRIAN CURB RAMP DETAILS



STANDARD PLAN 5-297.250 4 OF 6 PEDESTRIAN CURB RAMP DETAILS

BB1 & BB2



Catalog #: _____ Project: _____ Type: _____
Prepared By: _____ Date: _____

Slice Medium (SLM)
Outdoor LED Area Light



OVERVIEW	
Lumen Package	9,000 - 55,000
Wattage Range	62 - 436
Efficacy Range (LPW)	114 - 162
Weight lbs/pkg	27 (12.2)
Control Options	IMSBT, ALB, ALS, 7-Phi, PCI



QUICK LINKS

- Ordering Guide
- Performance
- Photometrics
- Dimensions

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: 33 lbs in carton.

Optical System

- State-of-the-Art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated seal.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in distribution types 2, 3, 4, 5W, FT, FTA, AM, and LC/RC.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93-95%.
- Zero uplight.
- Available in 5000K, 4000K, and 3000K color temperatures per ANSI C78.377. Also available in phosphor converted amber with peak intensity at 610nm.
- Minimum CRI of 70
- Integral louver (L) and integral half louver (H) options available for enhanced backlight control.

Electrical

- High-performance driver features overvoltage, under-voltage, short-circuit and over temperature protection.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 VAC) input 50/60 Hz or optional High Voltage (347-480 VAC).
- L80 Calculated Life: >100k Hours (See Lumen Maintenance chart)
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F). 42L and 48L lumen packages rated to +40°C. 55L lumen package rate to +35°C.
- Power factor: >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficiency LEDs mounted to metal-core circuit board to maximize heat dissipation
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls

- Optional integral passive infrared Bluetooth™ motion sensor. Fixtures operate independently and can be commissioned via iOS or Android configuration app.
- LSI's AirLink™ wireless control system options reduce energy and maintenance costs while optimizing light quality 24/7.

Installation

- A single fastener secures the hinged door, underneath the housing and provides quick & easy access to the electrical compartment.
- Included terminal block accepts up to 12 ga. wire.
- Utilizes LSI's traditional B3 drill pattern. (See drawing in poles section)

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to <https://www.lsicorp.com/resources/terms-conditions-warranty/> for more information.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- IDA compliant; with 3000K color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP66 rated Luminaires per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications.
- IK08 rated luminaire per IEC 66262 mechanical impact code.
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/GPL to confirm which versions are qualified.
- Patented Silicone Optics (US Patent NO. 10,816,165 B2)

DD

Project	Catalog #	Type
Prepared by	Notes	Date



McGraw-Edison
Impact Elite LED

Wall Mount Luminaire

Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Energy and Performance Data page 3
- Control Options page 4

Product Certifications



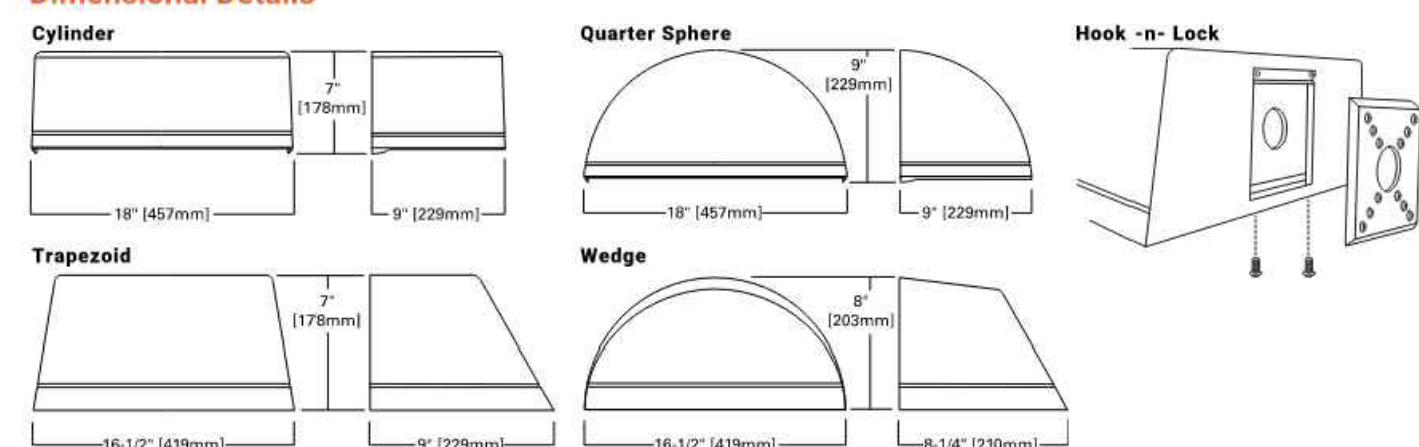
Quick Facts

- 15 Optical Distributions
- Lumen packages range from 2,459 to 11,480 (20W - 95W)
- Efficacy up to 149 lumens per watt

Connected Systems

- WaveLinx
- Enlighted

Dimensional Details



NOTE:
1. USA Certified for 3000K CCT and warmer only.



EE



D-Series Size 2
LED Wall Luminaire



dseries

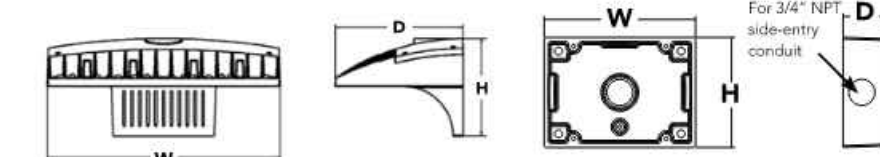
Specifications

Luminaire

Width: 18-1/2" (467.0mm)
Depth: 10" (25.4 cm)
Height: 7-5/8" (19.4 cm)

Back Box (BBW)

Width: 5-1/2" (140.0mm)
Depth: 1-1/2" (38.0 mm)
Height: 4" (102.0 mm)

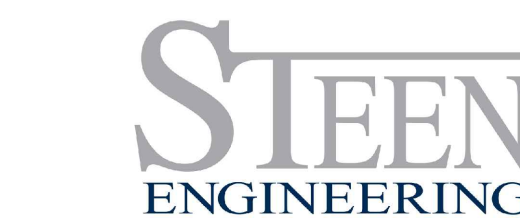


A+ Capable options indicated by this color background.

Ordering Information

Series	LEDs	Drive Current	Color temperature	Distribution	Voltage	Mounting	Control Options
DSXW2 LED	20C 20 LEDs (two engines)	350 350 mA	30K 3000 K	T25 Type II Short	MVOLT ¹ 120 V	Shipped included FE Surface mounting bracket	Shipped installed FE Photoelectric cell, button type ¹
		530 530 mA	40K 4000 K	T3M Type III Medium	208 V		
	30C 30 LEDs (three engines)	700 700 mA	50K 5000 K	T35 Type III Short	240 V	Shipped separately* BBW Surface-mounted back box for conduit entry	Shipped installed FER NEMA twist-lock receptacle only (control ordered separately) ¹ FES Fan wire receptacle only (control ordered separately) ¹ FEK Seven wire receptacle only (control ordered separately) ¹
		1000 1000 mA (1 A)	AMBC Amber phosphor converted	T4M Type III Medium	277 V		
	30C 30 LEDs (three engines)	1000 1000 mA (1 A)	AMBC Amber phosphor converted	T4M Triaxial/Triax Medium	347 V ¹	Shipped installed PMBTICV Motion/Ambient sensor, 8-15' mounting height, ambient sensor enabled at 16-15' ^{1,2} PMBTICV Motion/Ambient sensor, 15-30' mounting height, ambient sensor enabled at 16-15' ^{1,2}	
				T7M Triaxial/Triax Medium	480 V ¹		

Other Options	Finish required
Shipped installed SF Single face (100, 277, 347V) ¹ DF Double face (208, 240, 480V) ¹ HS House-side shield ¹ SP Separator surge protection ¹	Shipped separately ¹ BSW Bird-deterrent spikes VG Vandal guard
	Finish required: DDBK Dark bronze DLBK Black DNAL Natural aluminum DWBK White
	Shipped separately: DSSD Sandstone DDBTK Textured dark bronze DLBKD Textured black DNALD Textured natural aluminum



763-585-6742
763-585-6757 fax
Email: steen@steeneng.com
5430 Douglas Drive North
Minneapolis, MN 55429

I hereby certify that this document was prepared by me or under my direct supervision and that I am a duly licensed engineer under the laws of the State of Minnesota

Richard D. Becker
Signature

Richard D. Becker
Typed or Printed Name

53700 09/11/2023
License # Date
Electrical
Discipline
RYL202304
Job Number

Drawing Date:
09.11.2023

Drawing History/Revisions:
CITY REVIEW COMMENTS 9.26.23

Project Architect: A. PETER HILGER, AIA
Project No.: RYL202304
Drawn By: CS
Checked By: JA

SHEET TITLE:
SITE PHOTOMETRIC
LIGHTING CUT SHEETS

Sheet No. **E0.2**

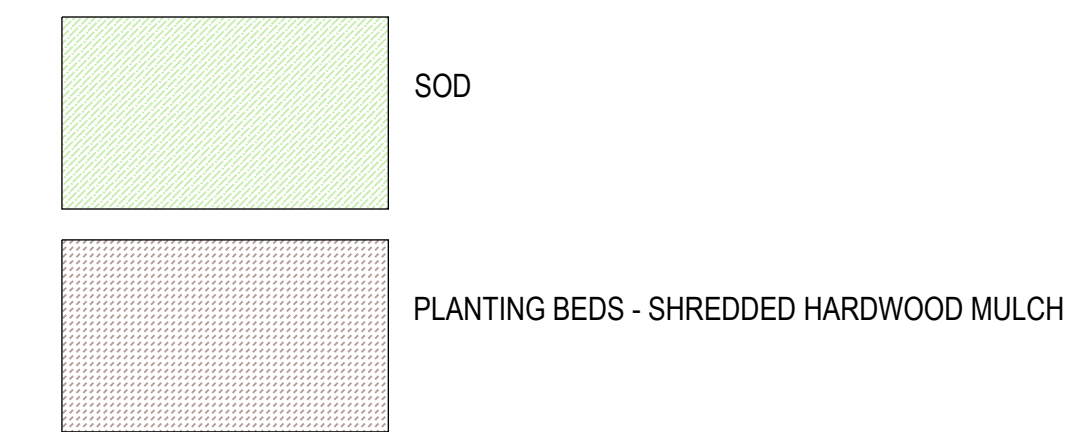
PLANT SCHEDULE

QTY	CODE	SCIENTIFIC NAME/Common Name	SIZE	ROOT	REMARKS
(NOTE: ALL TREES TO HAVE STRAIGHT TRUNK & SINGLE LEADER)					
SHADE TREES					
3	CO	CELTIS OCCIDENTALIS	2.5" cal.	BB	SPACE 30' O.C.
HACKBERRY					
6	GT	GLEDITSIA TRIACANTHOS 'DRAVES'	2" CAL	BB	SPACE 25' O.C.
STREET KEEPER HONEYLOCUST					
6	TA	TILIA AMERICANA 'MCKSENTRY'	2.5" cal.	BB	SPACE 20' O.C.
AMERICAN SENTRY LINDEN					
4	QM	QUERCUS MACROCARPA 'JFS-KW3'	2" CAL	BB	SPACE 25' O.C.
URBAN PINNACLE OAK					
UNDERSTORY TREES					
4	MA	MALUS 'ADIRONDACK'	2" CAL	BB	SPACE 15' O.C.
ADIRONDACK CRABAPPLE					
3	CC	CRATAEGUS CRUS-GALLI VAR. INERMIS	2" CAL	BB	SPACE 18' O.C.
THORNLESS HAWTHORN					
UPRIGHT EVERGREEN					
9	JS	JUNIPERUS SCOPULORUM 'MEDORA'	#7	CONT.	SPACE 4' O.C.
MEDORA JUNIPER					
SHRUBS [24" MIN. SHRUB SIZE AT TIME OF INSTALLATION]					
18	CS	CORNUS SERICEA 'BAILEY'	#5	CONT.	SPACE 6' O.C.
RED TWIG DOGWOOD					
17	CF	CORNUS SERICEA 'FIREDANCE'	#5	CONT.	SPACE 4' o.c.
FIREDANCE REDTWIG DOGWOOD					
25	JB	JUNIPERUS SABINA 'BROADMOOR'	#5	CONT.	SPACE 4' O.C.
BROADMOOR JUNIPER					
18	PF	POTENTILLA FRUTICOSA 'GOLDFINGER'	#5	CONT.	SPACE 4' O.C.
GOLDFINGER POTENTILLA					
28	SB	SPIREA BETULIFOLIA 'TOR'	#5	CONT.	SPACE 3.5' O.C.
TOR SPIREA					
10	SV	SYRINGA VULGARIS 'KRASAVITSA MOSKVY'	#5	CONT.	SPACE 6' O.C.
BEAUTY OF MOSCOW LILAC					
PERENNIALS					
37	AB	AMSONIA x 'BLUE ICE'	#1	CONT.	SPACE 2' O.C.
BLUE STAR AMSONIA					
44	HH	HEMEROCALLIS 'HAPPY RETURNS'	#1	CONT.	SPACE 2' O.C.
HAPPY RETURNS DAYLILY					
25	NF	NEPETA FAASSENII 'WALKER'S LOW'	#1	CONT.	SPACE 2.25' O.C.
WALKER'S LOW CATMINT					
36	SS	SCHIZACHRIUM SCOPARIUM 'MINNBLUE A'	#1	CONT.	SPACE 2.25' O.C.
BLUE HEAVEN LITTLE BLUESTEM					

NOTES:

- SEE SHEET L2 FOR PLANTING DETAILS & LANDSCAPE SPECIFICATIONS.
- ALL LANDSCAPING TO BE IRRIGATED. SEE SHEET L2 FOR IRRIGATION SPECS.
- CERTIFIED ARBORIST TO REVIEW AND REPORT ON HEALTH OF EX. TREES, AND PRUNE AS NEEDED TO MAINTAIN SITE SAFETY.
- PLANTING BEDS TO HAVE GOOD QUALITY LOOSE SOIL, SEE SHEET L2 FOR TREES, SHRUBS, & PERENNIALS SPECS.

KEY



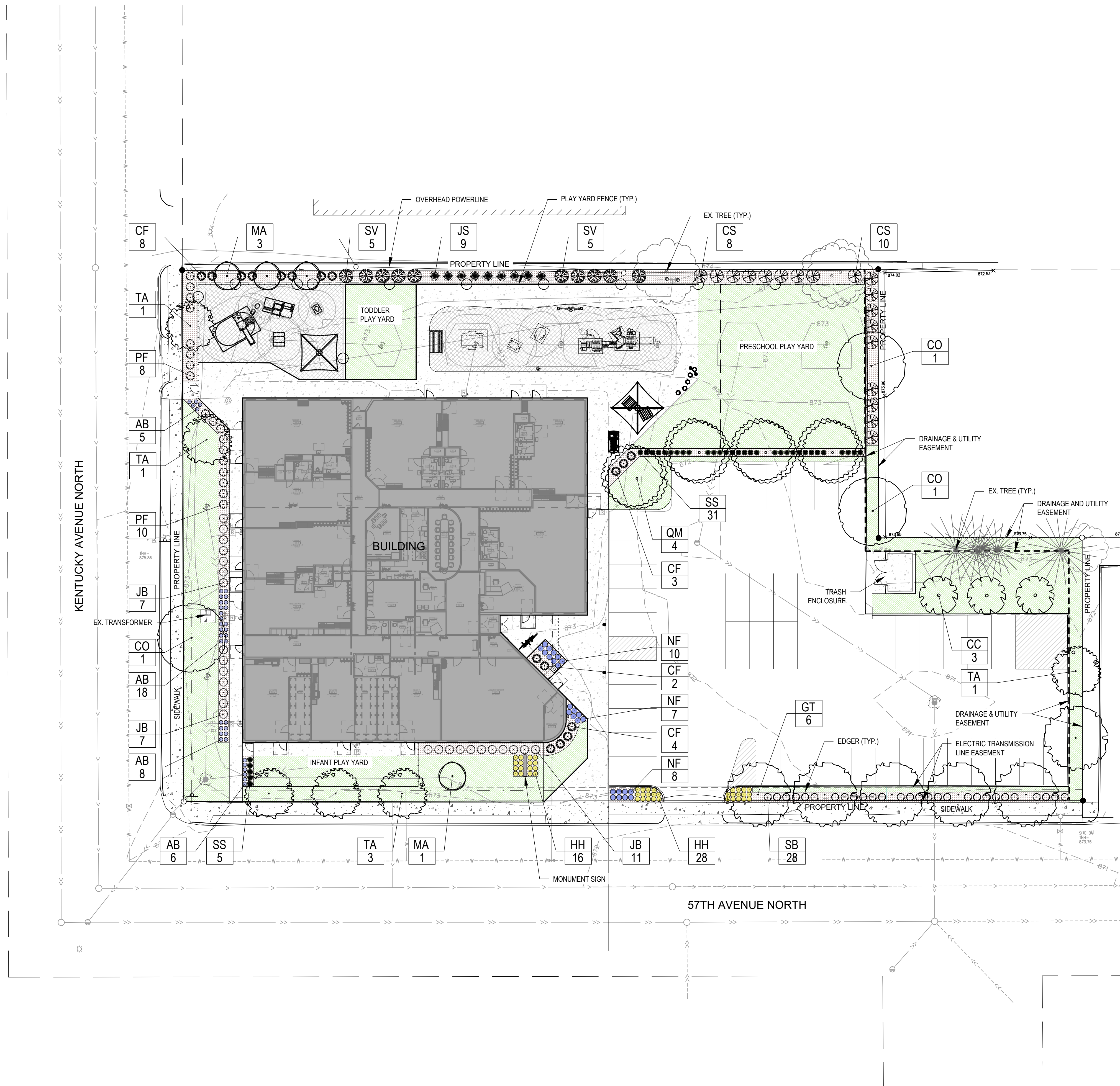
LANDSCAPE REQUIREMENTS

ZONING: C - COMMERCIAL DISTRICT
LOT FRONTAGE: 538 LF
PARKING LOT AREA: 16,381 SF

LANDSCAPING REQUIREMENTS	UNIT	REQUIRED	ON THIS PLAN
1 DECIDUOUS OVERSTORY TREE FOR EVERY 30 LF OF LOT FRONTAGE.	EA	18	22
UNDERSTORY TREES			7
EX. TREES TO REMAIN			3
PROVIDE SHRUBS ALONG BUILDING FOUNDATION VISIBLE FROM PUBLIC STREETS.			
PARKING LOT LANDSCAPING			
PROVIDE INTERIOR PARKING LOT LANDSCAPING EQUAL TO 10% OF PARKING LOT AREA. NOTE: THE GREENSPACE IN THE NE CORNER OF LOT, TO INSIDE EDGE OF DRAINAGE EASEMENT, IS INCLUDED IN THE CALC. OF WHAT IS PROVIDED.	SF	10%	11%
PROVIDE MIN. 36" HT. SHRUBS BETWEEN PARKING LOT AND STREET			
TREE SPECIES DIVERSITY			
MAX. % OF A SINGLE SPECIES OF TREES TO BE 35% OF 18	EA	6 OR LESS	6 OR LESS

NOTE:

- VERIFY THAT TREES AND SHRUBS CAN BE PLANTED IN THE DRAINAGE AND UTILITY EASEMENT, AND IN THE ELECTRIC TRANSMISSION LINE EASEMENT, NOTED ON SURVEY.



I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota.
Name: Carmen Simonet
License # 24236

Signature: *Carmen Simonet*
Date: September 12, 2023

Drawing Date:
09.12.2023

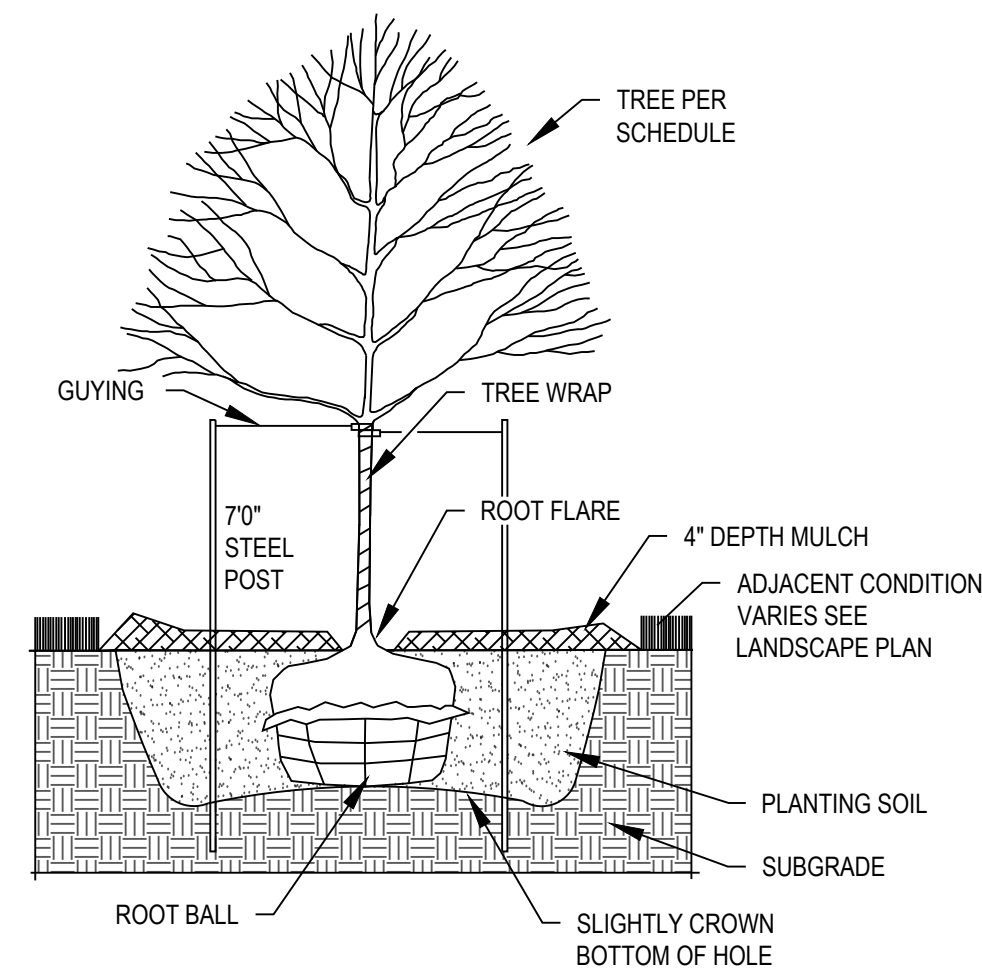
Drawing History/Revisions:
09.26.2023 - CITY REVIEW COMMENTS

Project Architect:
A. PETER HILGER, AIA

SHEET TITLE:
LANDSCAPE PLAN

Sheet No.: **L1**

PLANTING DETAILS

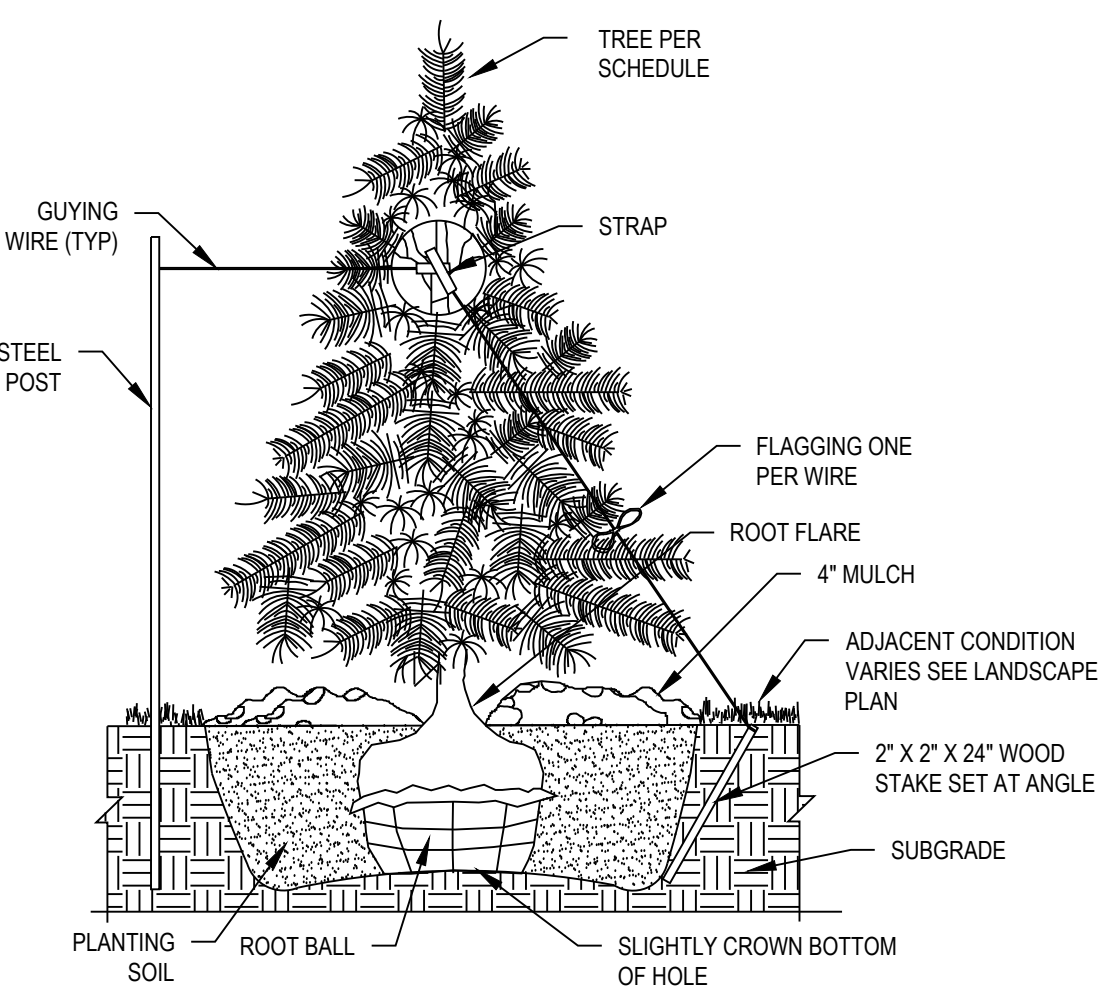


1 TREE PLANTING DETAIL

L2 NOT TO SCALE

NOTES:

1. REMOVE DEAD OR DAMAGED BRANCHES. RETAIN THE NATURAL FORM OF THE TREE. DO NOT CUT THE LEADER.
2. WIDTH OF PLANTING HOLES: 18" MIN. LARGER THAN ROOT BALL, ON ALL SIDES.
3. DEPTH OF HOLE: ROOT FLARE TO SIT AT, OR UP TO 2" ABOVE THE TOP OF THE FINISHED SOIL ELEVATION. LEAVE SOIL UNDISTURBED BENEATH THE ROOT BALL.
4. SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING.
5. SET PLANT ON UNDISTURBED SOIL OR THOROUGHLY COMPACTED PLANTING SOIL.
6. REMOVE TOP 1/3 OF THE BASKET OR THE TOP TWO HORIZONTAL RINGS WHICHEVER IS GREATER. REMOVE ALL BURLAP FROM TOP 1/3 OF ROOT BALL. REMOVE ALL TWINE.
7. REMOVE OR CORRECT STEM GIRDLING ROOTS.
8. SLIT REMAINING BURLAP AT 6" INTERVALS.
9. PLUMB & BACKFILL WITH PLANTING SOIL AMENDED WITH COMPOST. THOROUGHLY WATER IN TREE WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
10. BACKFILL VOIDS AND WATER A SECOND TIME.
11. PLACE 4" MULCH WITHIN 48 HOURS OF THE SECOND WATERING. NO MULCH TO BE IN CONTACT W/ TRUNK.
12. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TREES IN A PLUMB POSITION THROUGHOUT THE GUARANTEE PERIOD. IF NEEDED, STAKE TREES USING 16" LONG, 1.5" WIDE STRAPS, AND ATTACH TO POST WITH WIRE. INSTALL POST 3" INTO GROUND. REMOVE WITHIN ONE YEAR.
13. WRAP TRUNK IN FALL REMOVE IN SPRING.
14. REFER TO SPECS. FOR ADDITIONAL INFORMATION.

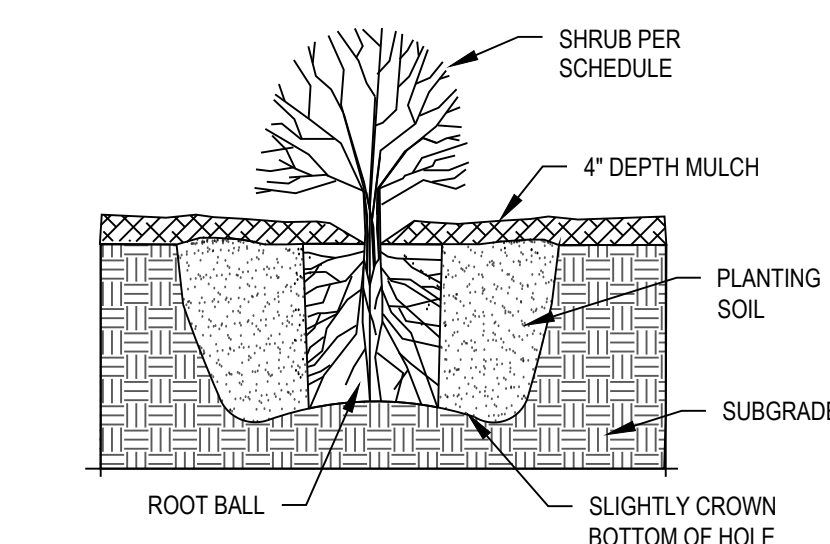


2 EVERGREEN TREE PLANTING DETAIL

L2 NOT TO SCALE

NOTES:

1. WIDTH OF PLANTING HOLE: 18" MIN. LARGER THAN ROOT BALL, ON ALL SIDES.
2. DEPTH OF HOLE: ROOT FLARE TO SIT AT OR UP TO 2" ABOVE THE TOP OF THE FINISHED SOIL ELEVATION. LEAVE SOIL UNDISTURBED BENEATH THE ROOT BALL.
3. SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING.
4. SET PLANT ON UNDISTURBED SOIL OR THOROUGHLY COMPACTED PLANTING SOIL.
6. REMOVE TOP 1/3 OF THE BASKET OR THE TOP TWO HORIZONTAL RINGS WHICHEVER IS GREATER. REMOVE ALL BURLAP FROM TOP 1/3 OF ROOT BALL. REMOVE ALL TWINE.
7. REMOVE OR CORRECT STEM GIRDLING ROOTS OR REJECT PLANT.
8. SLIT REMAINING BURLAP AT 6" INTERVALS.
9. PLUMB & BACKFILL WITH PLANTING SOIL. THOROUGHLY WATER IN TREE WITHIN 2 HOURS TO SETTLE PLANT AND FILL VOIDS.
10. BACKFILL VOIDS AND WATER A SECOND TIME.
11. PLACE DOUBLE SHREDDED HARDWOOD MULCH WITHIN 48 HOURS OF THE SECOND WATERING. NO MULCH TO BE IN CONTACT W/ TRUNK OR BRANCHES.
12. TWO ALTERNATE METHODS OF STAKING TREES ARE ILLUSTRATED IN DETAIL.
13. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TREES IN A PLUMB POSITION THROUGHOUT THE GUARANTEE PERIOD. STAKE TREES IF SITE CONDITIONS, SUCH AS SOIL AND WIND, PREVENT THE TREES FROM STAYING PLUMB. USE 16" X 1.5" POLYPROPYLENE OR POLYETHYLENE STRAPS, ATTACH TO POST OR STAKE WITH 10 GAUGE WIRE. REMOVE WITHIN ONE YEAR.
14. REFER TO PLAN AND SPECS. FOR ADDITIONAL INFORMATION.



3 SHRUB PLANTING DETAIL

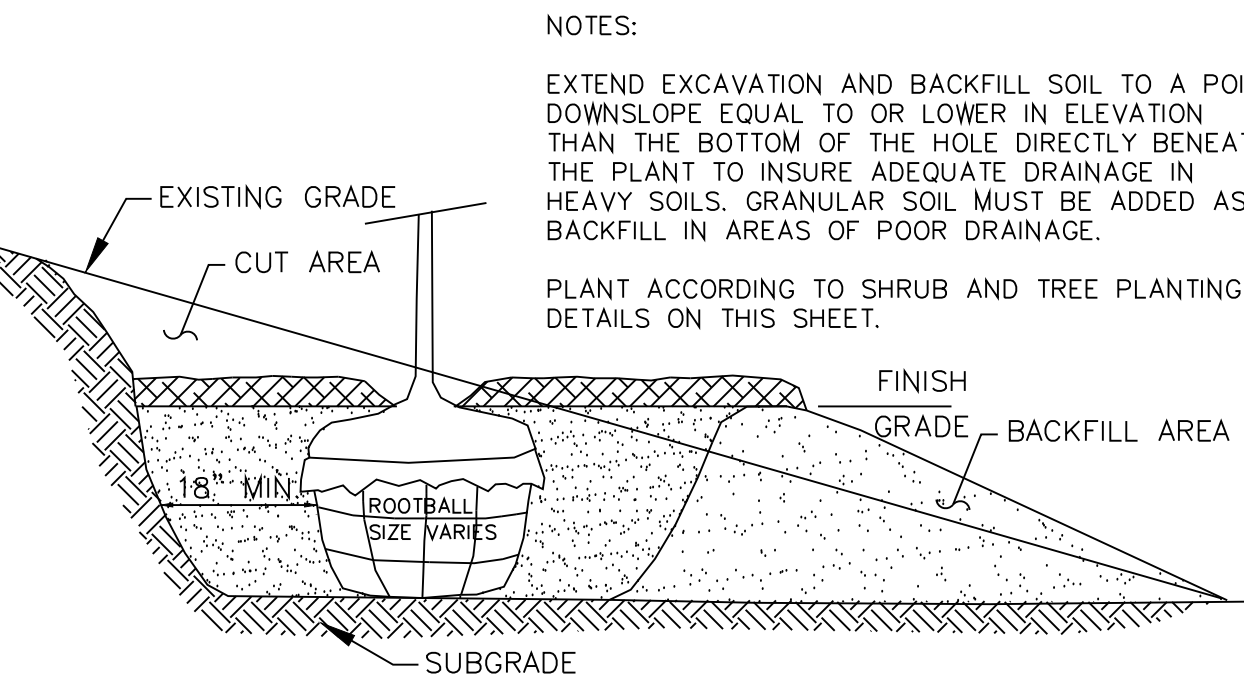
L2 NOT TO SCALE

NOTES:

1. DIG SHRUB HOLE 12" MIN. LARGER THAN CONTAINER SIZE, ALL SIDES.
2. SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING.
3. REMOVE DEAD OR DAMAGED BRANCHES. RETAIN THE NATURAL FORM OF THE SHRUB.
4. HAND LOOSEN ROOTS OF CONTAINERIZED MATERIAL. SCORE OUTSIDE OF SOIL MASS TO REDIRECT CIRCLING FIBROUS ROOTS.
5. SET SHRUB ON UNDISTURBED SOIL OR ON THOROUGHLY COMPACTED PLANTING SOIL. INSTALL PLANT SO THE TOP OF ROOT FLARE IS AT OR UP TO 2" ABOVE THE FINISHED GRADE.
6. PLUMB AND BACKFILL WITH PLANTING SOIL AMENDED WITH COMPOST. THOROUGHLY WATER IN SHRUB PRIOR TO PLACING MULCH.
7. ALL SHRUB PLANTINGS RECEIVE 4" DEPTH MULCH.
8. REFER TO SPECS. FOR ADDITIONAL INFORMATION.

4 PERENNIAL PLANTING DETAIL

L2 NOT TO SCALE



5 PLANTING ON A SLOPE DETAIL

L2 NOT TO SCALE

NOTES:

1. PLANT INTO PREPARED PLANTING BED. REMOVE WEEDS, LOOSEN COMPACTED SOILS TO A DEPTH OF 6", AND AMEND PLANTING SOIL WITH COMPOST.
2. PLANT AT SAME DEPTH AS IN CONTAINER.
3. PLACE DOUBLE SHREDDED HARDWOOD MULCH OVER PERENNIAL BED. DO NOT PLACE ANY MULCH ON VEGETATION.
4. THOROUGHLY WATER IN PLANTS.
5. REFER TO PLAN AND SPECS. FOR ADDITIONAL INFORMATION.

LANDSCAPE SPECIFICATIONS

TREES, SHRUBS, AND PERENNIALS

1. REFERENCES

- A. MnDOT - Minnesota Department of Transportation, Standard Specifications for Construction, 2020 Edition.
- B. American Standard for Nursery Stock, ANSI Z60.1-2014.
- C. ASTM, American Society for Testing and Materials.

2. QUALITY ASSURANCE

- A. Work shall be performed by a landscape contractor with extensive horticulture knowledge, and a min. of 3 years of experience.
- B. Handle plants in such a way as to protect from damage either physical or by exposure to sun and wind. Mishandled plants are subject to rejection by Landscape Architect.
- C. Plants used on this project shall meet the grading standards recommended by the ANSI Z60.1-2014.

3. PRODUCTS

- A. Plants: Provide as specified on Plant Schedule.
- B. Edging: Heavy duty poly edger: 5" depth w/ v-lip to prevent frost heave, and steel stakes, black color, Sure-loc Elite-Edge or equal.
- C. Mulch: Double shredded hardwood mulch.
- D. Water: Contractor to provide.
- E. Planting Soil: rich friable, loam topsoil, free of debris and seeds, conforming to MnDOT 3877.2, Loam Topsoil Borrow.
- F. Compost: Conforming to MnDOT 3890.2, Grade 2.
- G. Tree Wrap: Two-ply weather resistant paper product.

4. PLANTING DATES: Spring Planting: Apr. 1 - June 15. These dates may be extended if daytime temps. remain below 80 degrees. Fall: Sept. 30 - Oct. 30th. Daytime temps. need to drop below 80 degrees before planting begins, and may continue until freeze up. Coniferous trees Aug. 15 - Oct. 1st. Plant under favorable weather conditions, do not plant during days of extreme heat.

5. EXECUTION

- A. Prior to digging, Contractor to have utilities located.
- B. Contractor to notify Owner and Landscape Architect 3 days in advance of when planting work will occur.
- C. Plant into prepared planting beds.
- D. Install trees, shrubs, and perennials per planting details, adjust location if in conflict with utilities. Verify new location with Landscape Architect prior to planting.
- E. Separate all shrub and perennial beds from sod areas with edger.
- F. Clean-up entire site following planting operations.

6. ACCEPTANCE OF PLANTING WORK

- A. Contractor to notify Owner when planting work is complete for review and punch list.
- B. Contractor to water and maintain the trees, shrubs, and perennials until Owner Acceptance.
- C. Owner will give Acceptance of Work following satisfactory correction of punch list items.
- D. Watering and regular landscape maintenance of trees, shrubs, and perennials will be Owners responsibility following acceptance of work.

7. GUARANTEE PERIOD

- A. Contractor to warranty trees, shrubs and perennials for one year following acceptance of Work by Owner.
- B. Contractor to maintain the trees in a plumb position throughout the guarantee period.
- C. Contractor to remove all staking/wiring/ straps and plant tags from trees at the end of the guarantee period.
- D. Replacements: At the end of the guarantee period, all plants which are unhealthy, dead, not having a normal density, size, shape or color shall be replaced. Replacements shall match caliper and/or height of the other plants at time of replacement. Selection of replacement material and installation practices shall follow the requirements of the Drawings and Specifications.

SODDING

1. AREAS TO SOD

1. AREAS TO SOD
2. REFERENCES

- A. MnDOT - Minnesota Department of Transportation, Standard Specifications for Construction, 2020 Edition.

3. PRODUCTS

- A. Sod: Provide drought tolerant, strongly rooted sod, machine cut to pad thickness of 1", excluding top growth and thatch. Sod to be at least 2 years old, free of weeds, disease, or other material which might be detrimental to the development of the sod. Sod to be moist when cut and maintained in moist condition during transportation and storage at the site. Do not use sod that shows signs of visible heating on this project.
- B. Fertilizer: Slow release 5-10-5 starter fertilizer.
- C. Water: Contractor to provide.
- D. Topsoil: provide rich friable, sandy loam, free of debris and seeds, and conforming to MnDOT 3877.2 Common Topsoil Borrow.

4. SOIL PREPARATION

- A. Verify all sod areas have a minimum of 4" of topsoil.
- B. Immediately prior to sodding, loosen topsoil to minimum depth of 3".
- C. On slopes operate cultivating equipment at right angles to the direction of surface drainage.
- D. Contractor to work all areas to receive sod until the soil is smooth and an even grade is established. Fill all holes, depressions and rivulets to ensure an even grade and that proper elevation is established. Fill material shall be compacted sufficiently to provide uniform density and to resist erosion. Remove all rubble, sticks, branches, stones and other extraneous material over 1/2" in diameter on the surface prior to sodding.
- E. For all areas to be sodded work in dry, free flowing slow release starter fertilizer into the top 1 inch of soil.

5. EXECUTION

- A. Install sod during favorable weather, do not sod if ground is frozen or sod is dormant.
- B. Lay sod with tightly fitting joints, no overlapping joints, and stagger rows to offset joints. Anchor sod on slopes to prevent slippage.
- C. Thoroughly water sod immediately after installing. Continue watering at frequency necessary to initiate rooting, and until the work is accepted by Owner.
- D. Clean up and remove all debris resulting from sodding activity and dispose of properly. Restore all areas disturbed by sodding operation to their original condition.

6. ACCEPTANCE OF SOD WORK

- A. Contractor to notify Owner when sod work is complete for review and punch list.
- B. Owner to accept work following satisfactory correction of punch list items.
- C. Contractor will maintain all turf areas in a healthy, growing condition by watering, mowing, and any other maintenance necessary to establish the lawn, for a minimum of 30 days from time of acceptance.
- D. Any sod that does not show definite growth and establishment during the 30 days from time of acceptance, shall be replaced and established at the proper season by the Contractor at Contractor's expense.

IRRIGATION

1. DESCRIPTION

- A. Work includes: design, furnish, and install complete, fully automatic and programmable underground irrigation system, capable of alternate date watering for all landscape areas. The system shall provide full coverage with uniform levels of total precipitation throughout all irrigated areas.
- B. The system is to include a master valve and water efficient technologies including: a smart controller with a WaterSense label, a flow meter, soil moisture and/or evapotranspiration (ET) sensors, a rain sensor, and be calibrated to meet all applicable City Codes.
- C. Dripline to be used in perennial and shrub beds not covered by lawn sprinklers.
- D. The system is to meet state department of health standards and have a backflow preventer.
- E. Materials, equipment, and methods of design and installation shall comply with, but not be limited to, the following codes and standards:
 - All local and state laws and ordinances, and with all the established codes applicable thereto.
 - National Electrical Code.
 - American Society for Testing and Materials (ASTM).
 - National Sanitation Foundation (NSF).
 - The best management practices developed by the Irrigation Association.
- F. The designer shall provide balanced pressure and flow and optimum operating efficiency.
- G. The contractor is responsible for obtaining all permits and licenses required for installation of irrigation system.

2. QUALITY ASSURANCE

- A. The irrigation system shall be designed and installed by a contractor specializing in irrigation work, and will have a minimum of 5 years of experience designing and installing systems of similar scope and size.
- B. The contractor shall maintain a skilled foreman on site during the installation of all work and the foreman will have a Minnesota Power Limited Technician License.

3. SUBMITTALS

- A. Shop Drawings: submit irrigation plan, product schedule, and specifications for review and acceptance.
- B. Operation and Maintenance Manual: following completion of work, provide the Owner with an operation and maintenance manual of the complete system in a digital pdf file format and one hard copy.
- C. As-Built Plan: following completion of work, contractor to furnish Owner a scaled as-built irrigation map, with dimensions as needed, on durable paper or laminated to be mounted on wall with the main control panel and a digital file in pdf format. The map shall indicate the zones, location of all controls, piping and depths, heads (including type), drip-lines, valves, connection to water service, and other related components.

4. PRODUCTS

- A. Select products suitable to the landscape areas.
- B. All products and materials used in the system shall be new and professional grade.
- C. Provide sprinkler heads, driplines, electric valves, and automatic controller from one manufacturer: Toro, Rainbird, Hunter Industries, or equal.

5. EXECUTION

- A. Prior to digging, contractor to have utilities located.
- B. Water Coverage: Provide uniform water coverage over turf areas and planting beds.
- C. Turf: Turf areas to be irrigated with spray heads. Locate heads to avoid overspray onto sidewalks, parking areas, signs and buildings.
- D. Planting Beds: All continuous shrubs, trees, perennial beds to be irrigated with a drip system and spray heads where drip lines are impractical.
- E. Winterization: System to accommodate winterization by blowing system dry with compressed air.
- F. Install the irrigation system per contractor's plan and specifications.
- G. Instructions: Contractor to instruct the Owner in proper operation and maintenance of the system.
- H. Cleanup: Replace landscaping disturbed by operations. Cleanup all debris and restore site to original condition.

6. REVIEW AND ACCEPTANCE

- A. Contractor to test system to a hydrostatic pressure of not less than 100 psi. Remove and replace any components that do not pass test.
- B. Contractor to contact Owner and perform operational test after system is fully in place and demonstrate to the Owner that the irrigation system meets coverage requirements and that automatic controls function properly. Any corrective work identified shall be completed within two weeks of receipt of comments.
- C. Owner to accept work following: satisfactory completion of any corrective work, receiving hands-on instructions for operation, and receiving as-built plan and operation and maintenance manual submittals.

7. MAINTENANCE

- A. Contractor to drain and winterize irrigation system in the fall, following first year of operation, and shall put the system back in service the following spring as part of the work of this contract at no additional cost to the Owner.

8. GUARANTEE

- A. Warranty irrigation system materials and labor for one year following acceptance of work by Owner. Contractor to promptly furnish and install, at no cost to Owner, any parts that prove defective in material or workmanship.

PROJECT INFORMATION:

NEW HORIZON ACADEMY
7000 57th AVENUE NORTH
CRYSTAL, MN 55428

CLIENT INFORMATION:

NEW HORIZON ACADEMY
3405 ANNAPOLIS LANE N.
PLYMOUTH, MN 55447

LANDSCAPE ARCHITECT:

Carmen Simonet Design LLC
354 Stonebridge Blvd.
St. Paul, MN 55105
(651) 695-0273
carmen@simonetdesign.com

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota.
Name: Carmen Simonet

License # 24236

Signature: *Carmen Simonet*

Date September 12, 2023

Drawing Date:

09.12.2023

Drawing History/Revisions:

09.26.2023 - CITY REVIEW COMMENTS

Project Architect:

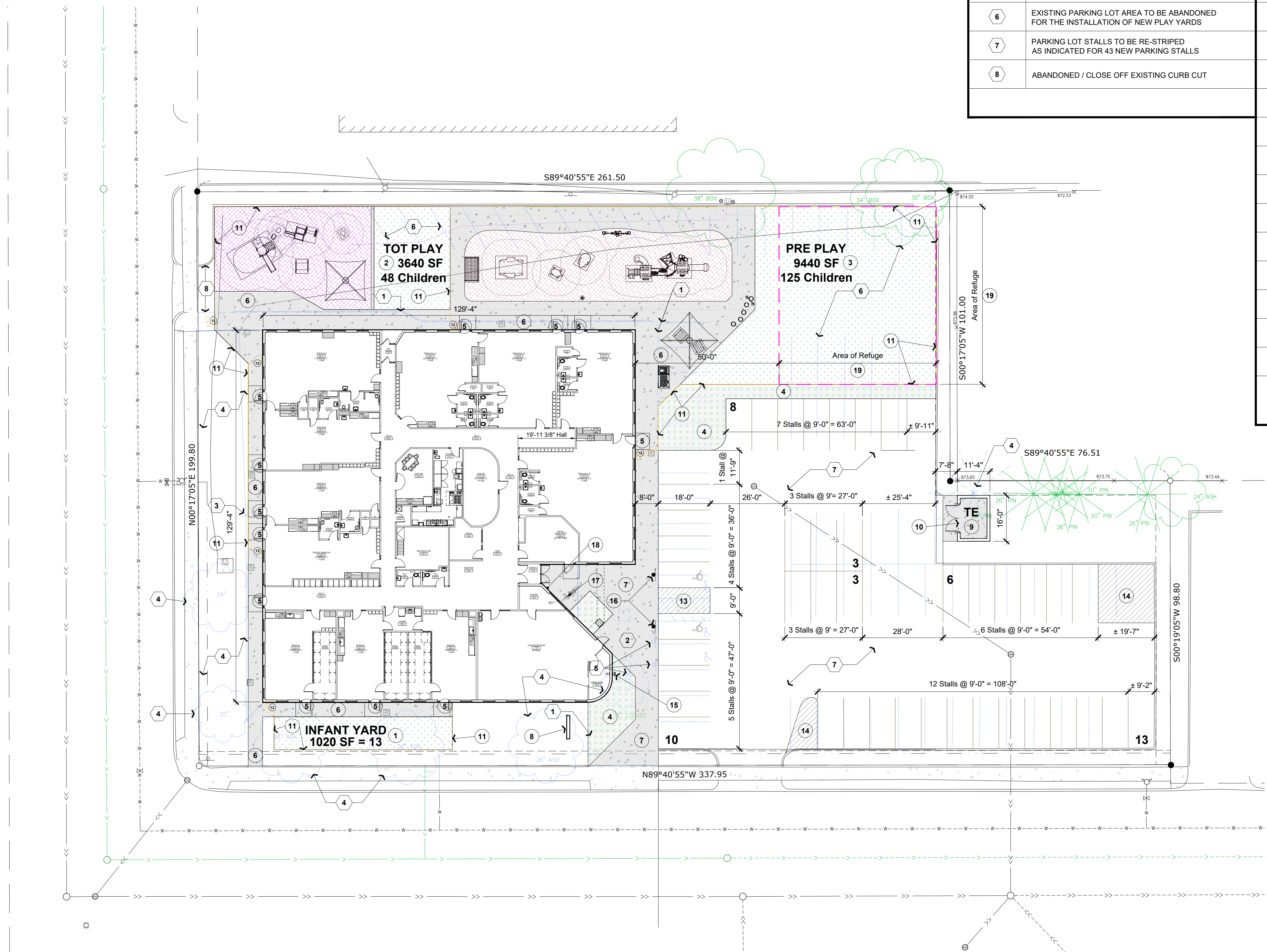
A. PETER HILGER, AIA

SHEET TITLE:
LANDSCAPE
DETAILS & NOTES

Sheet No.:

L2

#	SITE DEMO KEYNOTES	#	SITE PLAN KEYNOTES
1	DEMOLISH ALL EXISTING PERIMETER CONC. SIDEWALKS	1	INFANT PLAY YARD w/NATURAL GRASS Entire Yard = 1020 sf @ 75 per child = 13 kids
2	DEMOLISH EXISTING FRONT ENTRY CONC.	2	TODDLER PLAY YARD w/FALLZONE MATERIAL Entire Yard = 3640 @ 75 sf per child = 48 kids
3	REMOVE EXISTING FENCE	3	PRESCHOOL PLAY YARD w/FALLZONE MATERIAL Entire Yard = 9440 sf @ 75 sf per child = 125 kids
4	REMOVE LANDSCAPING AS NEEDED	4	LANDSCAPE AREA
5	REMOVE DROP BOX & HC PARKING SIGNS	5	NEW EXIT DOOR & STOOP
6	EXISTING PARKING LOT AREA TO BE ABANDONED FOR THE INSTALLATION OF NEW PLAY YARDS	6	NEW CONC. SIDEWALK
7	PARKING LOT STALLS TO BE RE-STRIPED AS INDICATED FOR 43 NEW PARKING STALLS	7	NEW CONC. PLAZA
8	ABANDONED / CLOSE OFF EXISTING CURB CUT	8	EXISTING MONUMENT SIGN TO BE REFURISHED REPLACE ILLUMINATE SIGN BOX
		9	NEW OPEN AIR TRASH ENCLOSURE
		10	CONCRETE APRON & ENCLOSURE PAVEMENT PAD
		11	NEW YARD YARD FENCE
		12	NEW PLAY YARD GATE w/POOL ALARM
		13	HANDICAP ACCESS ISLE
		14	STRIP OFF PAVEMENT TO INDICATE NO PARKING ZONE
		15	NEW FIRE DEPARTMENT CONNECTION - INSTALL NEW FIRE LINE INTO BUILDING FOR NEW FIRE SPRINKLER SYSTEM
		16	HANDICAP PARKING SIGN
		17	BICYCLE RACK
		18	FIRE DEPARTMENT LOCK BOX (at front entry door) CITY TO PROVIDED SPECIFIC LOCK BOX ORDER FORM
		19	AREA OF REFUGE WITHIN PLAY YARD CAN ACCOMMODATE 675 OCCUPANTS. 3379 SF / 5 sf per Occ = 675 AREA OUTLINED IN PINK DASHED LINE



A. PETER HILGER #15862

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Architect under the laws of the State of Minnesota



Drawing Date: 09.12.2023

Drawing History/Revisions:

City Review Comments 09.26.23

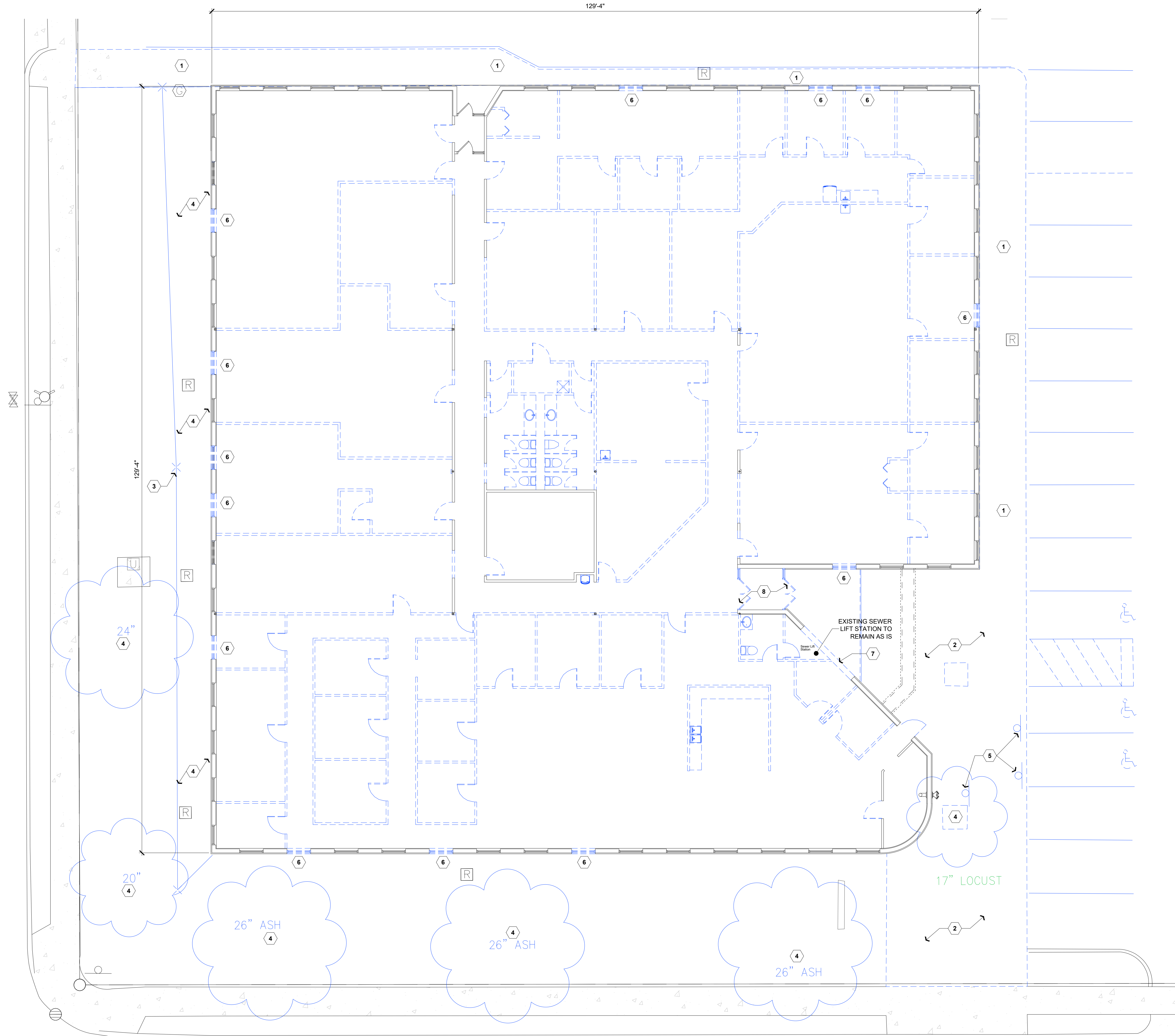
Project Architect:
A. PETER HILGER, AIA

Drawn By: VJH Checked By: APH

SHEET TITLE:
SITE PLAN

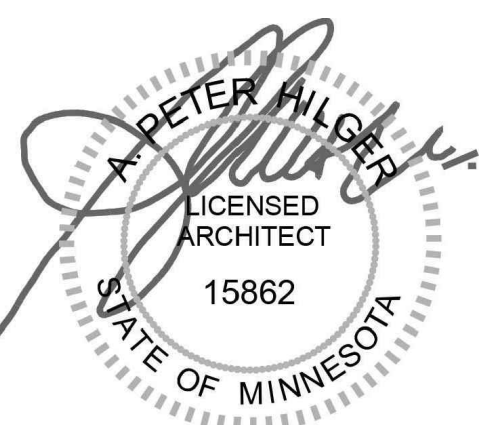


# DEMO PLAN KEYNOTES	
1	DEMOLISH ALL EXISTING PERIMETER CONC. SIDEWALKS
2	DEMOLISH EXISTING FRONT ENTRY CONC.
3	REMOVE EXISTING FENCE
4	REMOVE LANDSCAPING AS NEEDED
5	REMOVE DROP BOX & HC PARKING SIGNS
6	REMOVE WINDOW AND WALL BELOW SILL FOR THE INSTALLATION OF NEW EXIT DOOR
7	REMOVE EXISTING MASONRY KNOCK OUT WALL FOR THE INSTALLATION OF NEW STOREFRONT
8	REMOVE EXISTING ENTRY VESTIBULE DOORS FOR THE INSTALLATION OF NEW STOREFRONT



A. PETER HILGER #15862

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Architect under the laws of the State of Minnesota



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A. PETER HILGER, AIA

Drawn By: VJH Checked By: APH

SHEET TITLE:
DEMO PLAN

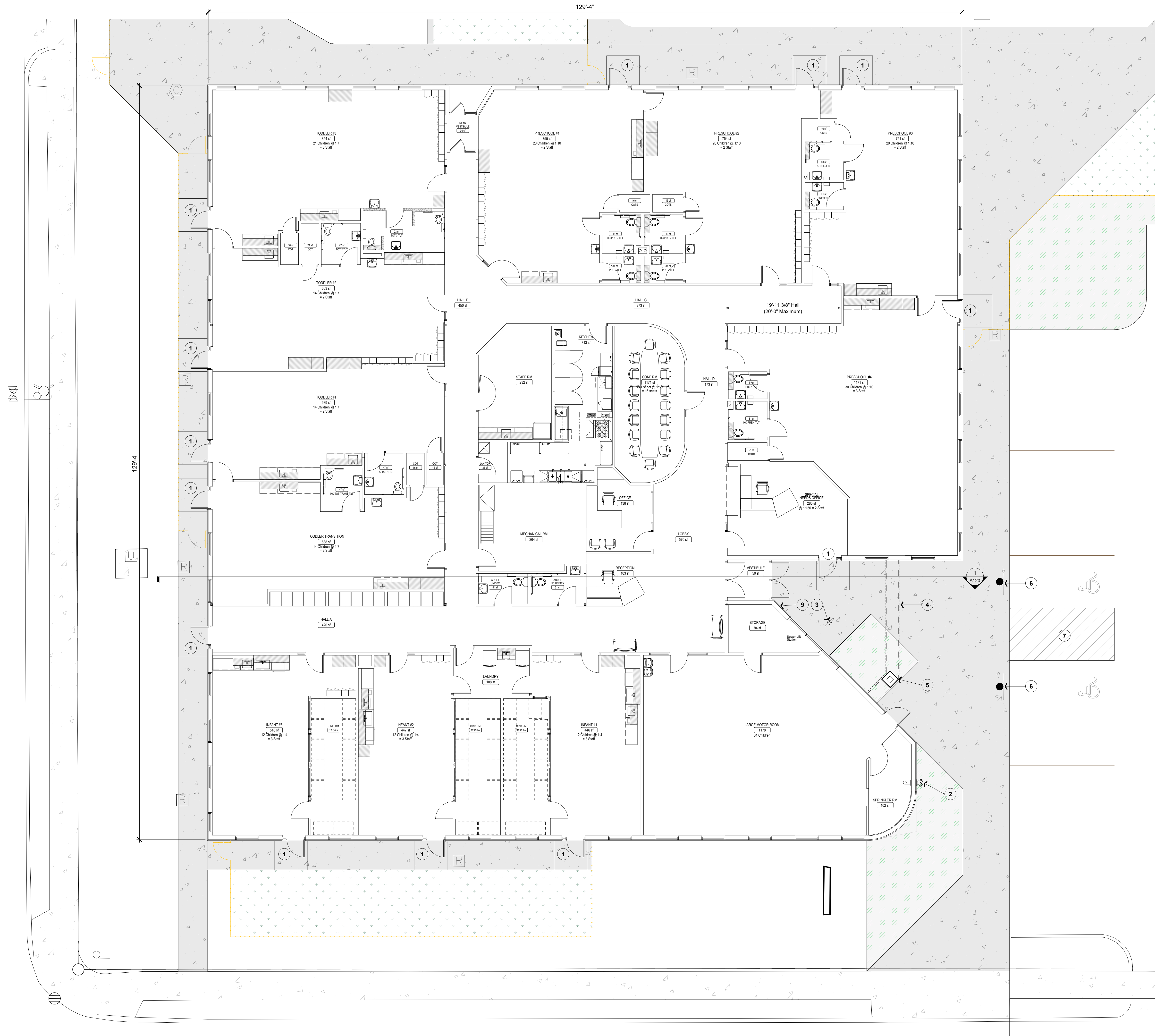


GENERAL NOTES

A. NEW FIRE LINE SERVICE TO BE BROUGHT INTO BUILDING FOR THE INSTALLATION OF FIRE SPRINKLER SYSTEM

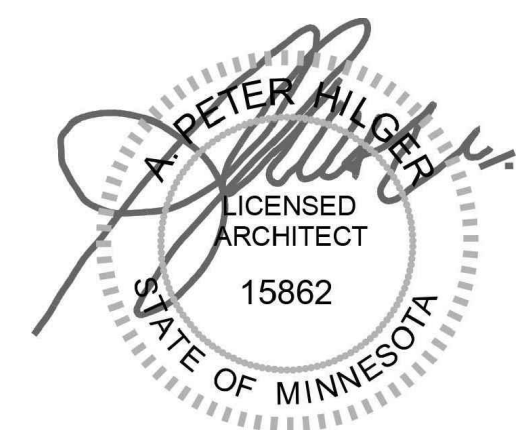
FLOOR PLAN KEYNOTES

1	MODIFY EXISTING OPENING FOR THE INSTALLATION OF NEW EXIT DOOR & INSTALL CONC. STOOP
2	NEW FIRE DEPARTMENT CONNECTION. INSTALL NEW FIRE LINE INTO BUILDING FOR NEW FIRE SPRINKLER SYSTEM
3	BIKE RACK
4	NEW CANOPY FACADE ABOVE
5	NEW CANOPY COLUMN
6	NEW HANDICAP PARKING SIGN Btm/Sign between 60" to 66" Above Pavement
7	NEW HANDICAP ACCESS AISLE
8	NEW HANDICAP ACCESS AISLE
9	FIRE DEPARTMENT LOCK BOX - CITY TO PROVIDE SPECIFIC LOCK BOX ORDER FORM. PROVIDE KEYS FOR THE LOCK BOX



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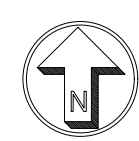
Drawing Date:
09.12.2023

Drawing History/Revisions:

City Review Comments 09.26.23

Project Architect:
A. PETER HILGER, AIA
Drawn By: VJH Checked By: APH

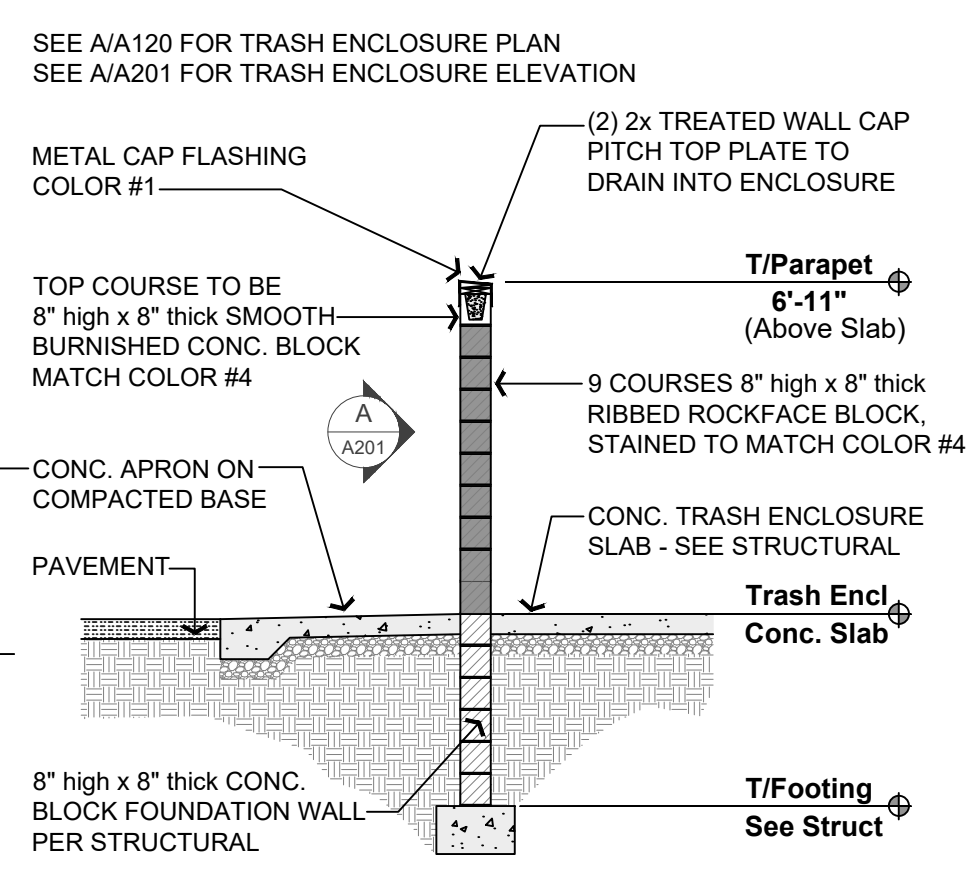
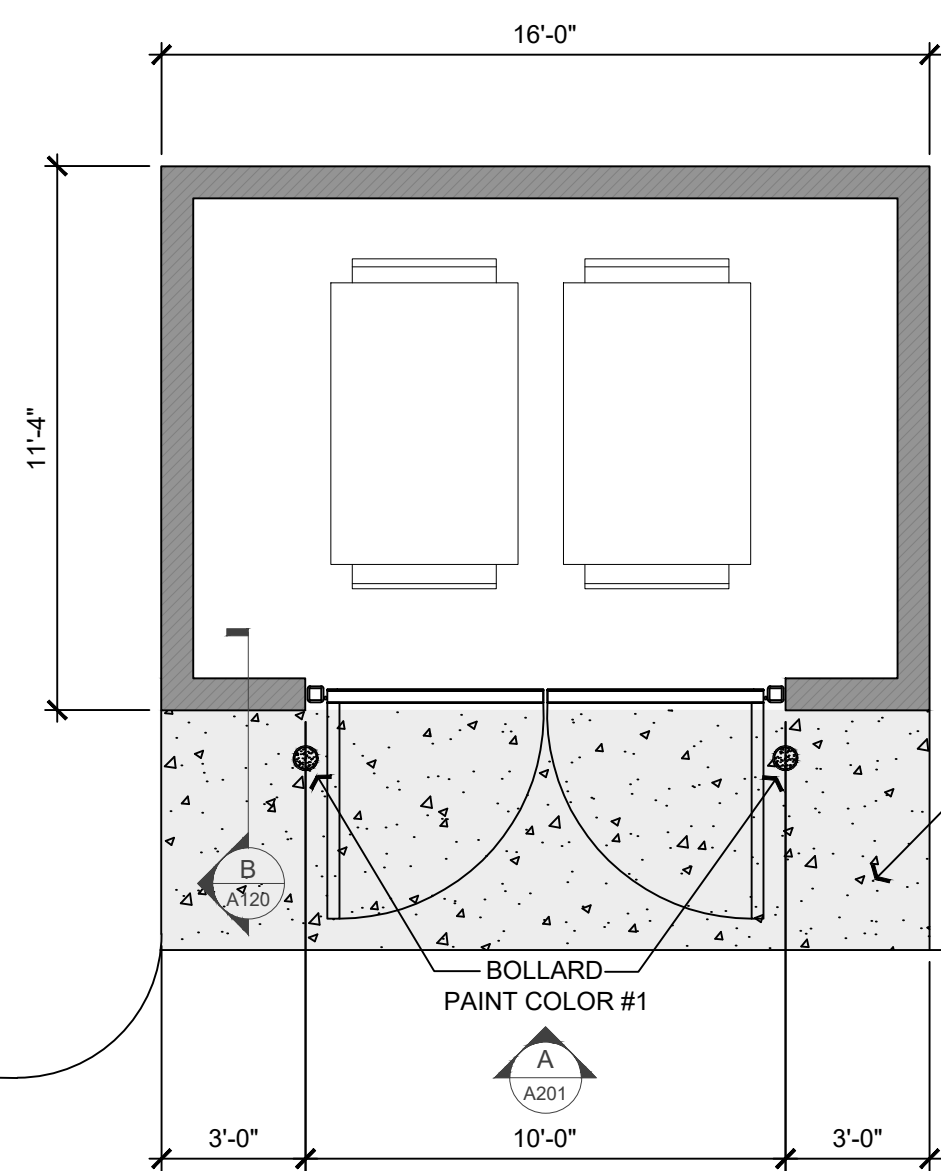
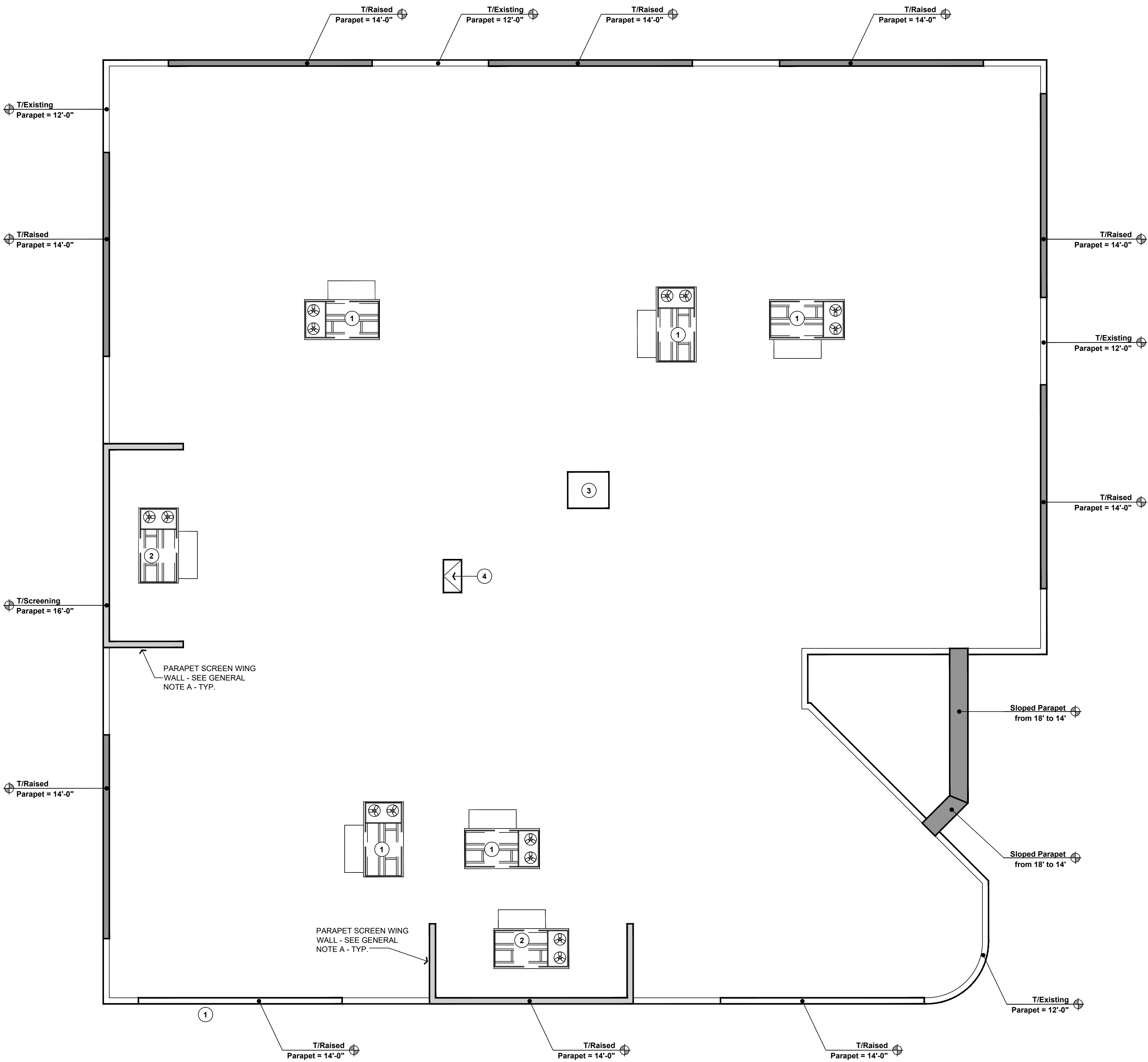
SHEET TITLE:
FLOOR PLAN



GENERAL NOTES	
A.	PARAPET SCREEN WING WALL LENGTH TO BE COORDINATED w/ACTUAL RTU SIZE

# FLOOR PLAN KEYNOTES	
1	EXISTING RTU TO BE REPLACED
2	NEW RTU LOCATION SEE GENERAL NOTE A
3	NEW MAKE UP AIR UNIT
4	EXISTING ROOF HATCH

EXTERIOR MATERIAL LEGEND	
Refer to Exterior Elevations on Sht A201	
1	ALUMINUM & METAL FINISH Mnfr: Rollex or Equal Color: DARK BRONZE
2	EXTERIOR INSULATION FINISH SYSTEM (EIFS) Mnfr: Sto or Equal Manufacturer Color: WINTER WALK By Sherwin Williams SW
3	ACCENT BAND & ACCENT SQUARES Type: Metal Accent Band & Glazed Conc. Block Color: Pantone 301
4	STAINED RIBBED WALL PANEL Mnfr: T.B.D. Color: OAK LEAF BROWN By Sherwin Williams SW 7084 Or Similar. Color to be shade darker than Adaptive Shade by Sherwin Williams due to fade
5	STONE VENEER Mnfr: Cultured Stone Color: CHARDONNAY Type: Southern LedgeStone
6	TRASH ENCLOSURE GATE Mnfr: Trex Fencing Color: WOODLAND BROWN



A TRASH ENCLOSURE PLAN
SCALE: 1/4" = 1'-0"

B TRASH ENCLOSURE SECTION
SCALE: 1/4" = 1'-0"

1 ROOF PLAN
SCALE: 1/8" = 1'-0"

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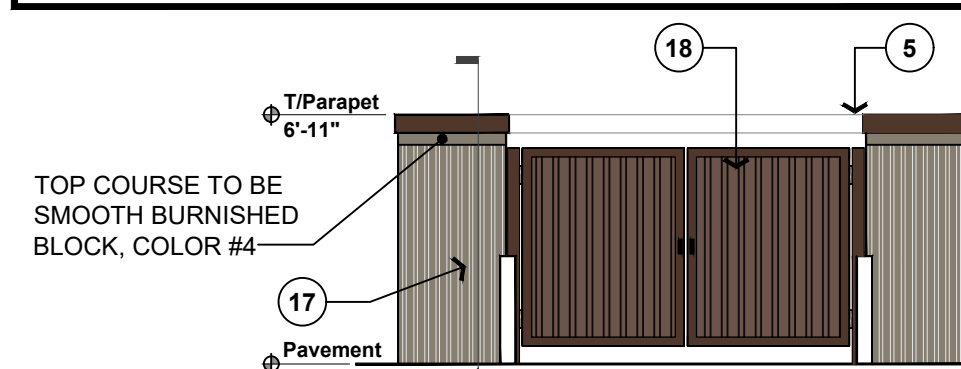


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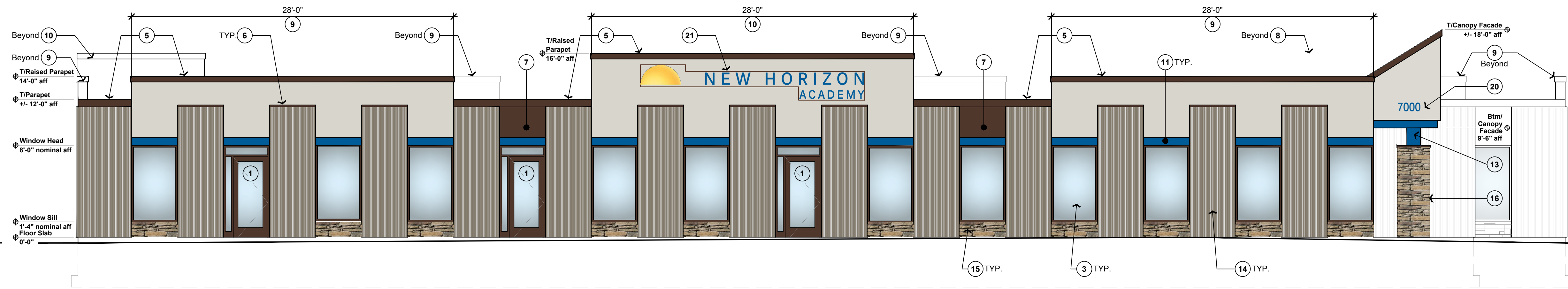
Project Architect:
A. PETER HILGER, AIA
Drawn By: VJH
Checked By: APH

SHEET TITLE:
ROOF PLAN

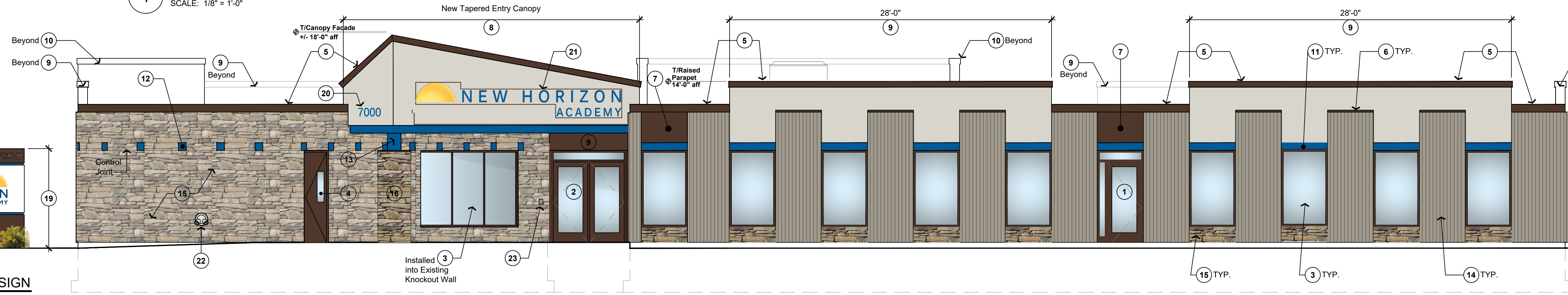
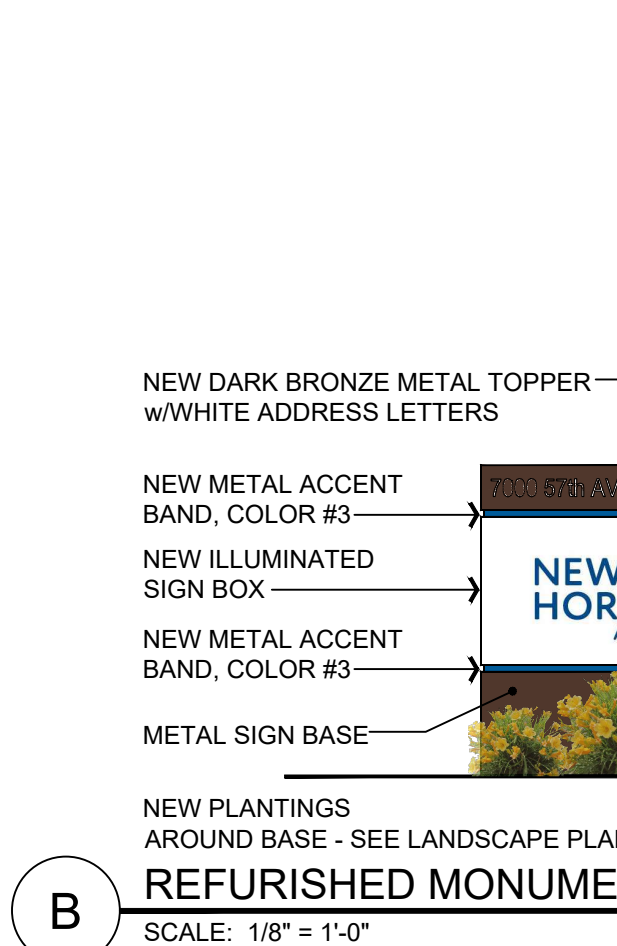
GENERAL NOTES	
A.	REPLACE ALL EXISTING WINDOWS w/NEW ALUMINUM STOREFRONT, COLOR #1
B.	SEE PHOTOMETRIC DRAWING FOR EXTERIOR LIGHTING
C.	SEE SHEET A120 FOR EXTERIOR MATERIAL FINISH LEGEND
D.	SEE 1/A301 FOR RTU SIGHTLINE STUDY BUILDING SECTION



SEE A/A120 FOR PLAN
TRASH ENCLOSURE ELEVATION
SCALE: 1/8" = 1'-0"

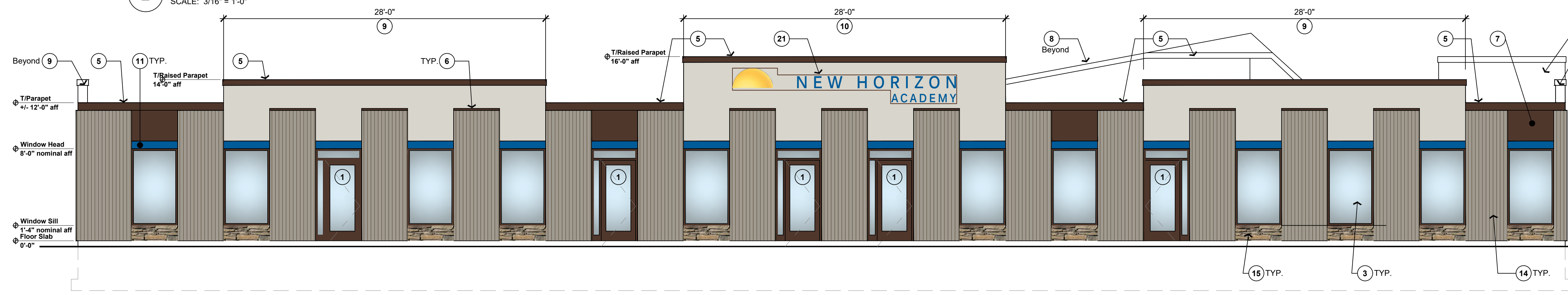


1 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

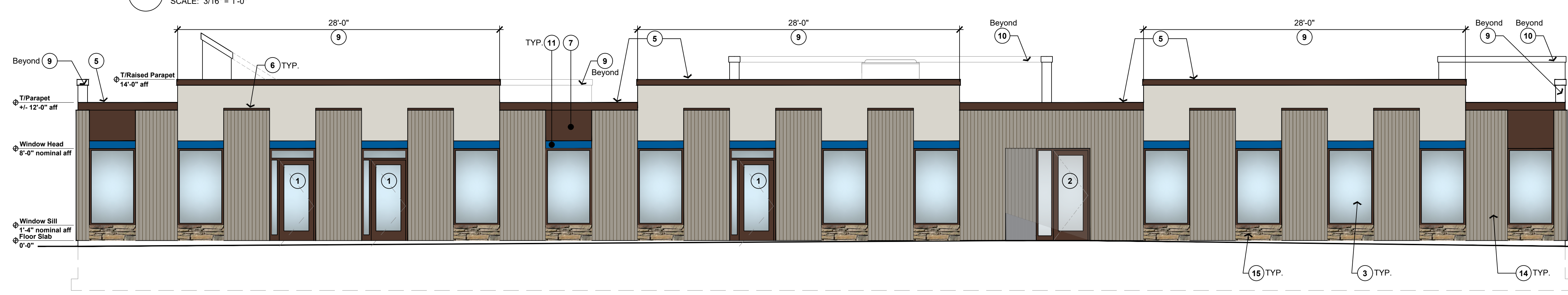


2 EAST ENTRANCE ELEVATION
SCALE: 3/16" = 1'-0"

#	ELEVATION KEYNOTES
1	NEW EXIT DOOR & STOOP w/NEW SURROUNDING CONC. SIDEWALK AT EXIT ELEVATION COLOR #1
2	NEW ALUMINUM STOREFRONT ENTRANCE DOORS COLOR #1
3	NEW ALUMINUM STOREFRONT WINDOW COLOR #1
4	NEW HOLLOW METAL SERVICE DOOR COLOR #1
5	NEW METAL PARAPET CAP FLASHING COLOR #1
6	NEW METAL CAP FLASHING OVER RIBBED PANEL COLOR #1
7	NEW METAL PANEL WALL FACADE COLOR #1
8	NEW EIFS CANOPY FACADE REMOVE EXISTING CANOPY STRUCTURE AS NEEDED COLOR #2
9	EXTENDED PARAPET w/NEW EIFS FACADE COLOR #2
10	EXTENDED PARAPET RTU SCREEN WALL w/NEW EIFS FACADE COLOR #2
11	NEW FURRED OUT METAL ACCENT BAND w/INTEGRAL FLASHING WINDOW HEAD FLASHING COLOR #3
12	NEW GLAZED ACCENT BLOCKS COLOR #3
13	NEW TUBE STEEL SUPPORT COLUMN COLOR #3
14	STAIN EXISTING RIBBED WALL PANELS COLOR #4
15	NEW MANUFACTURED STONE VENEER COLOR #5
16	NEW STONE PILLAR w/DARK BRONZE METAL CAP COLOR #5
17	NEW CMU TRASH ENCLOSURE w/STAINED RIBBED ROCKFACE BLOCK FACADE COLOR #4
18	TRASH ENCLOSURE COMPOSITE GATE DOORS COLOR #6
19	REFURBISH EXISTING MONUMENT SIGN w/NEW ILLUMINATED SIGN BOX
20	ADDRESS NUMBERS APPROX 9" tall (l.b.d.) BLUE NUMBERS AGAINST COLOR 2. WINTER WALK. REFERENCE EXTERIOR MATERIAL LEGEND ON A120
21	EXTERIOR SIGN AT EAST MAIN BUILDING ENTRANCE 100 SF ALLOWED 35 SF SHOWN
22	NEW FIRE DEPARTMENT CONNECTION
23	FIRE DEPARTMENT LOCK BOX - CITY TO PROVIDE SPECIFIC LOCK BOX ORDER FORM. PROVIDE KEYS FOR THE LOCK BOX



3 WEST ELEVATION
SCALE: 3/16" = 1'-0"



4 NORTH ELEVATION
SCALE: 1/8" = 1'-0"

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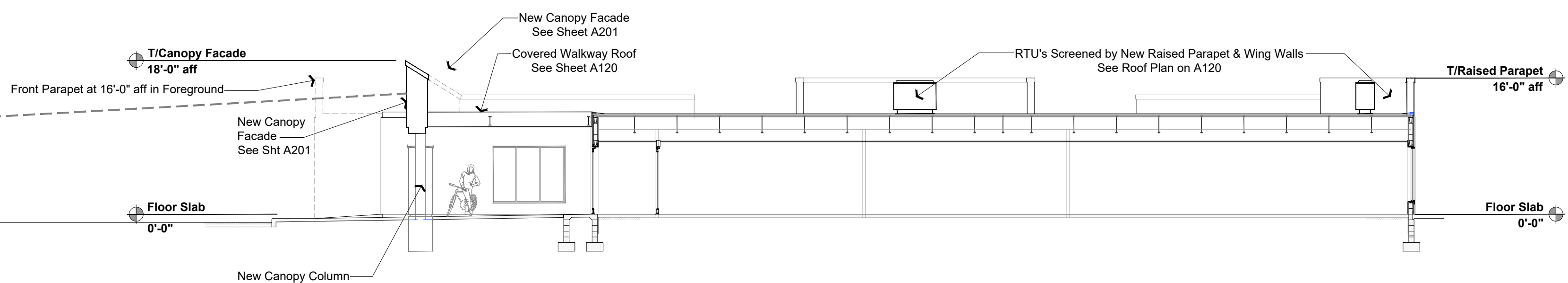


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Project Architect:	A. PETER HILGER, AIA
Drawn By:	VJH
Checked By:	APH
SHEET TITLE:	EXTERIOR ELEVATIONS

PROPERTY LINE



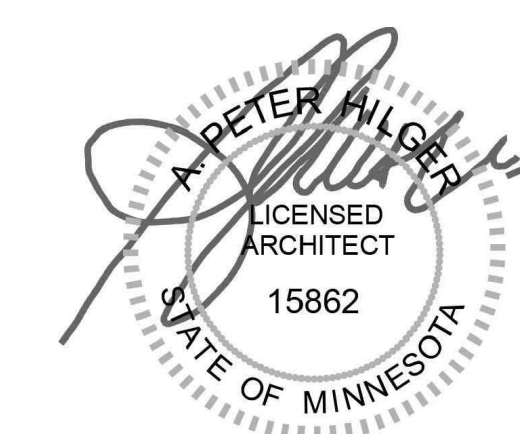
LINE SIGHT FROM PROPERTY LINE



1 BUILDING SECTION WITH SIGHTLINE STUDY
SCALE: 3/32" = 1'-0"

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Drawn By:
VJH

Checked By:
APH

SHEET TITLE:
BUILDING SECTION
w/SIGHTLINE STUDY

Sheet No

A301