

PLANNING BOARD MEETING
City Hall - 950 Locust St., Carter Lake, Iowa
Monday, January 10, 2022 7:00 P.M.

AGENDA

Roll Call

Approval of the Agenda

1. Consent Agenda
 - a. Building Permits listing
 - b. City Council Minutes
 - c. Planning Board Minutes
2. New Business
 - a. 2614 N. 5th Street – TSL location
 - i. Review of site plan
 - ii. Conditional use permit
 - b. Community Center permit
 - i. Stormwater Compliance
 - ii. Building Inspector recommendation
 - c. 2813 N. 9th Street
 - i. Building Inspector zoning recommendation
 - d. M-1 and M-2 Open Storage Requirements – height requirements
 - e. Equipment Rental / Sale – Remove Conditional Use Permit Requirements
 - f. Election of Chairperson and Vice Chairperson
3. Comments
4. Adjourn

01/07/22

jmc

PLANNING BOARD MEETING

Monday, December 13, 2021 7:00 P.M.

Board Chair Ed Palandri called the meeting to order at 7:00 p.m. Roll Call: Present: Jay Gundersen, Ed Palandri, Ray Pauly and Drew Evers; Robert Horan, Kathy Dueling, and Tim Podraza.

Pauly moved to approve of the agenda, seconded by Horan; unanimous approval; Podraza moved to approve the consent agenda with the planning board and city council minutes for November along with the building permit report for November, seconded by Gundersen; approved unanimously.

New Business:

City Clerk updated the board on the Council's decision to move forward with building inspection contract with JDW Midwest LLC. The plan is for our contact to handle calls, review and approve permits; schedule inspections and manage projects.

Community Center project: Palandri moved to approve the recommended changes, seconded by Dueling; unanimously approved.

2614 N 5th Street – TSL property is under a proposed lease agreement and new tenants business products are large equipment that is for lease or rent for commercial construction projects. Catalog photos of some of the rental equipment was part of the planning board packet. Equipment is to be hidden behind the fence, landscaping shall be on the outside of the fence. Concerns about some equipment being taller than the fence. Palandri has provided draft for the conditional use permit; and Mr. O'Bradovich prepared and shared with developer/tenants to review and provide comments; we will meet and discuss at the next meeting.

2813 N. 9th Street – Lakeside Auto Recycler scale house – new building inspector will provide zoning code review at the January meeting

902 Avenue R is requesting a parcel split for building new home. The current lot is 1.04 acres. There was a concern if the lot could be split again since it had already been split once. Clerk will follow up with the auditor to confirm.

Wynne Real Estate LLC is requesting address at the west end of Ave H at the IA/NE state line. Gundersen moved to approve 101 Avenue H seconded by Pauly;

Gundersen moved to adjourn at 8:45 p.m. seconded by Evers; unanimous approval.

CARTER LAKE CITY COUNCIL MEETING
MONDAY, DECEMBER 20, 2021

Mayor Ronald Cumberledge called the meeting to order at 7:00 p.m. Roll of the council, present: Jackie Wahl, Pat Paterson, Keebie Kessler, Jason Gundersen and Denise Teeple; and city clerk Jackie Carl and city attorney Mike O'Bradovich were also present.

The agenda was reviewed, upon motion duly made by Kessler, and seconded by Wahl, the agenda was approved unanimously. Upon motion of Gundersen seconded by Kessler, the consent agenda was approved that included minutes, department reports and overtime reports; receipts and financial reports for November unanimously approved.

New Business: Mayor Cumberledge swore in city councilmembers Victor Skinner for his first term and Jacleen Wahl for second term. City Clerk Jackie Carl swore in Mayor Ronald Cumberledge for a second term.

Parks and Rec Coordinator Kendra Hollenbach spoke about the first year of the Carter Lake cheer, flag and tackle football seasons. Combined nearly 150 kids participated. All three tackle football teams competed in the Iowa Westside Classic Tournament in Des Moines over the Halloween weekend. The 3/4 grade and 7/8 grade teams finished the weekend in 5th place. The 5/6 grade team not only won the tournament championship, they were the only recreational team invited to the All-Stars National Tournament. The team traveled to Kansas City, KS December 3rd-5th to compete for a National Title. Mayor Cumberledge assisted Kendra with the presentation of team rings to each player of the championship team.

Upon motion of Kessler seconded by Gundersen, to approve re-appointment of Tim Podraza; unanimously approved. Upon motion of Paterson, seconded by Kessler to approve liquor license for Casey's General Store; unanimously approved. Paterson moved to table the salvage yard permits until the inspector returns from personal leave, seconded by Kessler; unanimously approved. Gundersen moved to approve Emma Stenner, Nathaniel Lidgett and Dexter Johnson for fire department membership, seconded by Kessler; unanimously approved.

Mayor Cumberledge invited the project manager to speak, how does the council wish to process change orders for the Community Center? Dollar amount of Mayor approval? Paterson moved to allow up to \$5,000 per change order to be approved by the Mayor, seconded by Teeple; unanimously approved. The Council needs to decide on approving the naming of the community center. Gundersen moved to approve establishing the job description for the Community Center Director, with the employee answering to the Mayor; council will set policies and procedures; seconded by Paterson; Yes: Gundersen, Wahl, Paterson, Kessler No: Teeple.

Kessler moved to approve \$2.75 increase for Bob McCloud retroactive back to when he took over as interim supervisor in the maintenance department, seconded by Paterson; unanimously approved. Kessler moved to approve \$2.00 increase for the hourly employees in the following departments, Parks, Maintenance, Police and City Hall. Roll Call NO: Teeple Wahl YES: Kessler, Paterson, Gundersen.

Kessler moved to change the job description for the Parks Coordinator and Director to answer to the Mayor and not the City Council, seconded by Gundersen; Roll Call YES: Paterson, Kessler, Gundersen NO Teeple, Wahl.

Teeple presented an email from Deborah Peterson to review the golf course lease and prepare a memo to the City Council. Teeple moved to accept proposal for up to \$2,000, seconded by Gundersen; unanimously

approved. Teeple moved to approve posting for the maintenance job at \$50-70,000 seconded by Paterson; unanimously approved. Kessler moved to post job for Community Center director and have two council members assist with interviews and make recommendation to the council for hiring, position will report to Mayor, seconded by Paterson; unanimously approved.

Gundersen moved to table discussions on Parks and Rec coordinator and Senior center coordinator until the community center director has been hired, seconded by Paterson; unanimously approved.

VI. ORDINANCES AND RESOLUTIONS:

Kessler moved to approve first reading of amendment for warehousing, seconded by Gunderson; unanimously approved. Gundersen moved to approve first reading for amendment for large garages added to residential areas, seconded by Kessler; unanimously approved. Kessler moved to approve first reading of ordinance to adopt precincting maps and set public hearing, seconded by Gundersen; unanimously approved.

Gundersen moved to approve second reading of ordinance to amend golf cart ordinance, seconded by Kessler; unanimously approved. Gundersen moved to approve resolution to set Max Levy hearing for January 17th meeting, seconded by Kessler; unanimously approved. Gundersen moved to approve resolution for pay request #003 for community center project in amount of \$242,266.15, seconded by Kessler; unanimously approved. Kessler moved to approve resolution for pay request #004 for SJ LOUIS construction of sewer lining in amount of \$260,891.10, seconded by Gundersen; unanimously approved. Gundersen moved to approve pay request #005 for USDA reimbursement for sewer project, seconded by Kessler ; unanimously approved. Gundersen moved to table resolution accepting proposed sewer agreement with the City of Omaha until the USDA finishes it review process, seconded by Kessler; unanimously approved. Paterson moved to approve resolution regarding Iowa Public Information Board - open records request, seconded by Gunderson; unanimously approved.

Adjourn at 9:05 p.m.

Jackie Carl, City Clerk

Ronald Cumberledge, Mayor

PERMITS MASTER FILE LISTING

Permit #	Contractor	Description		Appl Date		Fee(s)
Status	Owner	Sub-Division	Lot	Issued Date	Paid	
App'l Type	Location	Type of Use		Expire Date	Cost of Work	Amount Due
CM07-21 Issued Contractor	XTREME HEATING & COOLING PRAXAIR DISTRIBUTION INC 1100 AVENUE H	Sheetmetal, exhaust fans		12-30-21 12-30-21	25,000.00	401.50 .00 401.50
		CM07-21			25,000.00	FEE PAID DUE 401.50 .00 401.50
CP08-21 Issued Contractor	A RAYMOND PLUMBING LA QUINTA INN & SUITES 1201 AVENUE H	GAS RESTORATION		12-22-21 12-22-21 12-22-23	1,000.00	25.00 .00 25.00
		CP08-21			1,000.00	FEE PAID DUE 25.00 .00 25.00
MR351-21 Issued Contractor	OWNER AS GEN CONTRACTOR NOLASCO, PAULO 1520 AVENUE P	ROOFING AND SIDING		12-14-21 12-14-21 6-12-22	3,000.00	32.00 .00 32.00
		MR351-21			3,000.00	FEE PAID DUE 32.00 .00 32.00
MR352-21 Issued Contractor	OWNER AS GEN CONTRACTOR PICKENS, JAMES 3510 230 N 9TH ST	WINDOWS & SIDING		12-22-21 12-22-21 6-20-22	30,000.00	27.00 .00 27.00
		MR352-21			30,000.00	FEE PAID DUE 27.00 .00 27.00
MR353-21 Issued Contractor	OWNER AS GEN CONTRACTOR PICKENS, JAMES 3510 259 N 9TH ST	REPLACE WINDOWS		12-22-21 12-22-21 6-20-22	60,000.00	13.50 .00 13.50
		MR353-21			60,000.00	FEE PAID DUE 13.50 .00 13.50
MR354-22 Issued Contractor	JAKE GRIFFEY MCWILLIAMS, JIMMY 4106 N 13TH ST	REMOVE EXISTING PRIVACY FENCE		12-12-21	1.00	15.00 .00 15.00
		MR354-22			1.00	FEE PAID DUE 15.00 .00 15.00
RM087-21 Issued Contractor	AIRESERV RYLAND, AARON 1502 AVENUE P	REPLACE 2 GAS FURNACES		12-14-21 12-14-21	6,727.90	54.00 .00 54.00

Permit #	Contractor	Description	Appl Date	Fee(s)		
Status Appl Type	Owner Location	Sub-Division Type of Use	Lot	Issued Date Expire Date	Cost of Work	Paid Amount Due
		RM087-21			6,727.90	FEE PAID DUE 54.00 .00 54.00
RM088-21 Issued Contractor	AIRESERV RYLAND, AARON 1502 AVENUE P	Replace 2 gas furnaces		12-22-21 12-22-21		55.50 .00 55.50
		RM088-21				FEE PAID DUE 55.50 .00 55.50
RM089-21 Issued Contractor	BURTON PLUMBING GUZMAN, MICHAEL 101 SHORELINE DR	REPLACE FURNACE AND REPAIRS		12-30-21 12-30-21	7,000.00	52.00 .00 52.00
		RM089-21			7,000.00	FEE PAID DUE 52.00 .00 52.00
ROW051-21 Issued Contractor	ROTO ROOTER DAVID GIBBONS 1526 AVENUE N	Excavation in street		12-22-21 12-22-21 6-20-22	1,000.00	100.00 .00 100.00
		ROW051-21			1,000.00	FEE PAID DUE 100.00 .00 100.00
ROW052-22 Issued Contractor	ALFASDRILLING JOSE PEREZ 1214 AVENUE P			1-05-22 1-05-22 7-04-22	2,000.00	100.00 .00 100.00
		ROW052-22			2,000.00	FEE PAID DUE 100.00 .00 100.00
RP112-21 Issued Contractor	ROTO ROOTER DAVID GIBBONS 1526 AVENUE N	Sewer Repair		12-22-21 12-22-21 3-22-22	1,000.00	15.00 .00 15.00
		RP112-21			1,000.00	FEE PAID DUE 15.00 .00 15.00
RP113-21 Issued Contractor	BURTON PLUMBING LIVINGSTON, ELLEN 1536 AVENUE P	REPLACE WATER HEATER		12-30-21 12-30-21 3-30-22	3,500.00	25.00 .00 25.00
		RP113-21			3,500.00	FEE PAID DUE 25.00 .00 25.00

PERMITS MASTER FILE LISTING

Permit #	Contractor	Description			Appl Date	Fee(s)	
Status	Owner	Sub-Division	Lot	Issued Date	Expire Date	Cost of Work	Paid
Appl Type	Location	Type of Use					Amount Due
				=====	=====	=====	
GRAND TOTAL				13	140,228.90	FEE	915.50
						PAID	.00
						DUE	915.50

September 20, 2021

Lem Sheard, Public Works Director
City of Carter Lake, Iowa
City Hall
950 East Locust Street.
Carter Lake, Iowa 51510

Re: TSL Carter Lake Storm Study
2614 N. 5th Street
Carter Lake, Iowa 51510

Mr. Sheard:

The following is our storm drainage analysis for the above referenced project.

PROJECT OVERVIEW

The TSL Carter Lake Property is located at the Northwest corner of the intersection of North 5th Street and H Avenue (See Figure 1). The property is located in Section 20, Township 75 North, and Range 44 West. The property is approximately 4.05 acres. According to the FEMA Flood Insurance Rate Map (FIRM) number 19155C0395E, effective February 4, 2005 (See Figure 2), no portion of the property lies within a designated floodplain zone or floodway.

The site currently supports an office for a freight service and a cell tower. Stormwater runoff from the site sheet flows south to an existing low, grassy area on the property.

The property owner wishes to expand the paved parking area at the facility. To alleviate the effects of stormwater runoff, the owner is proposing to construct a stormwater detention basin along the south and west portions of this property which will be sufficiently sized to store the stormwater runoff generated by this property in a 100-Year, 24-Hour Duration storm event without any outflow from the basin. Stormwater collected in the basin will be dispersed through the natural means of ground infiltration and evapotranspiration.

HYDROLOGIC ANALYSIS

The TSL Carter lake property covers approximately 4.05 acres. With the proposed site improvements, impervious surface and stormwater detention will cover over 85% of the property. The NOAA Atlas lists the precipitation the expected precipitation for this location during a 100-Year, 24-Hour Duration storm event to be 7.29 inches (See Figure 3). Ignoring the volume of stormwater that will be infiltrated yields the conservative value of storm runoff generated on the site during this storm event to be 107,396 cubic feet of water.

STORAGE CAPACITY

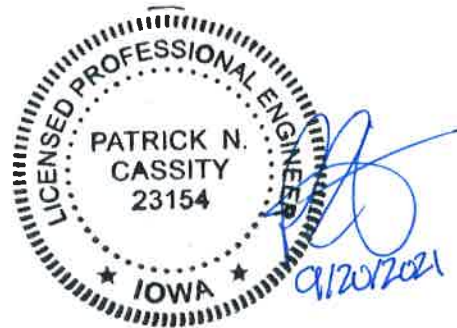
The owner is proposing to construct a stormwater detention basin on the west side of this property with a narrow extension running the entirety of the southern boundary along H Avenue and turning north and running along the eastern property line up to the entrance to the property on 5th Street (See Figure 4). The basin is to have a floor

elevation of 973.00 and a berm elevation of 976.00 for a total depth of 3.00 feet and 3:1 sideslopes on the banks. Storage volume for the basin was calculated to be 127,686 cubic feet (See Figure 5).

SUMMARY

The proposed detention basin as shown in Figure 4 will contain the 100-Year, 24-Hour Duration storm runoff of 107,396 cubic feet generated by the site with 20,290 cubic feet of storage capacity to spare, providing approximately 6.5 inches of freeboard in the design storm event.

Patrick Cassity, PE
RENAISSANCE INFRASTRUCTURE CONSULTING



Re : Attachments

- Figure 1 Aerial Photograph showing location of site
- Figure 2 FEMA Firmette of site
- Figure 3 NOAA Atlas table for Carter Lake, Iowa
- Figure 4 Site plan sheet depicting detention basin
- Figure 5 AutoCad Civil 3D Storage Curve for detention basin



Figure 1

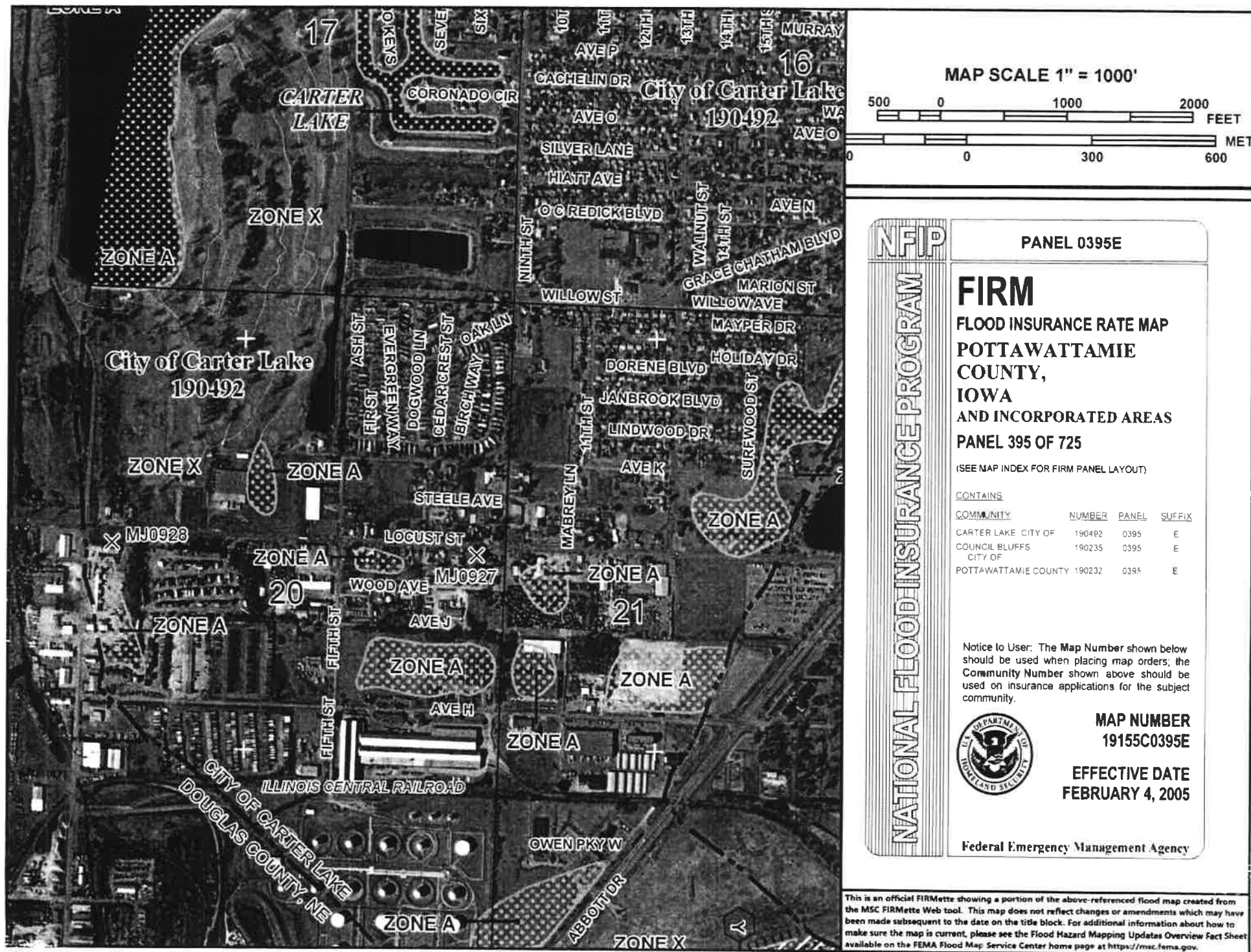
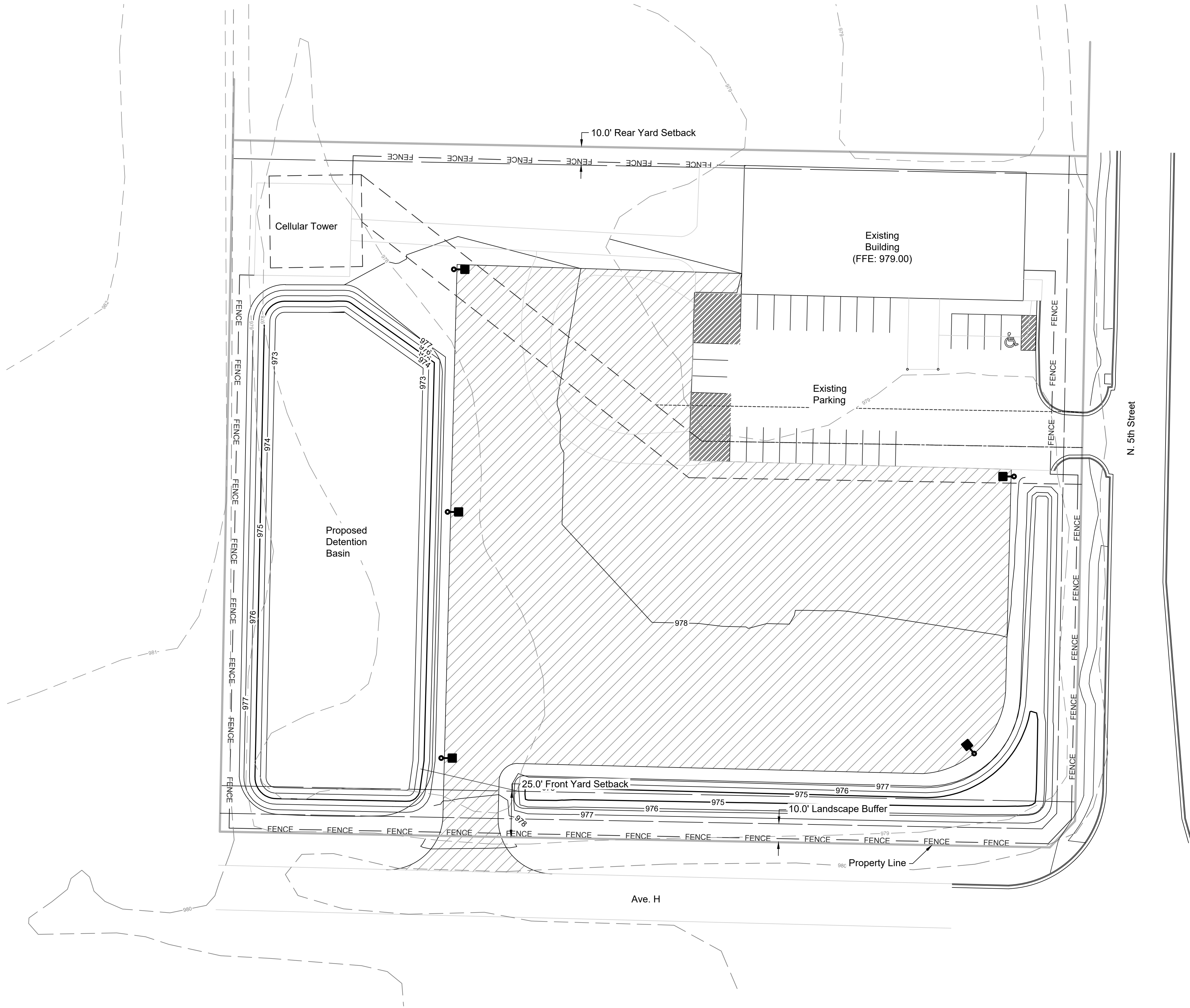


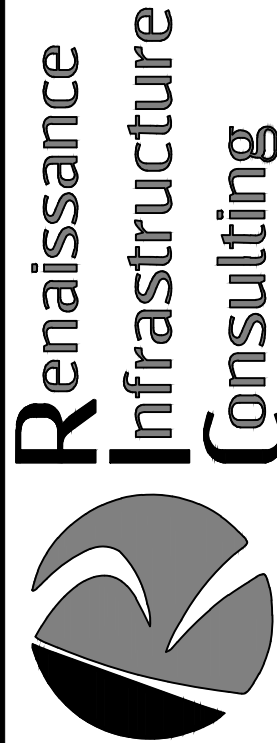
Figure 2

sbaddger
Oct 21, 2021 9:52am
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GRADING LEGEND

TC:	Top of Curb Elevation	---	Existing Minor Contour
P:	Pavement Elevation	---	Existing Major Contour
TS:	Top of Structure Elevation	---	Proposed Minor Contour
FL:	Invert Elevation of Pipe	---	Proposed Major Contour
G:	Ground Elevation		
(HP)	High Point		
(LP)	Low Point		
TW:	Top of Wall Elevation		
BW:	Bottom of Wall Elevation		
R:	ADA Ramp		
L:	ADA Landing		



1815 MCCREE STREET, SUITE 200
KANSAS CITY, MISSOURI 64108
816.800.0950
WWW.RIC-CONSULT.COM

MO Certificate of Authority: E-2010033630

Sheet
C04

Grading Plan

Final Development Plans

21-0127

TSL Carter Lake
Carter Lake, Pottawattamie County, Iowa



NOAA Atlas 14, Volume 8, Version 2
Location name: Carter Lake, Iowa, USA*
Latitude: 41.2849°, Longitude: -95.9166°
Elevation: 981.39 ft**

* source: ESRI Maps

** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffrey Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aerals](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in Inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.358 (0.305-0.422)	0.424 (0.361-0.500)	0.536 (0.454-0.634)	0.632 (0.532-0.750)	0.768 (0.627-0.943)	0.877 (0.698-1.09)	0.990 (0.760-1.25)	1.11 (0.814-1.44)	1.27 (0.894-1.69)	1.39 (0.955-1.87)
10-min	0.524 (0.446-0.617)	0.621 (0.528-0.732)	0.785 (0.665-0.928)	0.925 (0.780-1.10)	1.13 (0.918-1.38)	1.29 (1.02-1.59)	1.45 (1.11-1.84)	1.62 (1.19-2.10)	1.86 (1.31-2.47)	2.04 (1.40-2.74)
15-min	0.638 (0.544-0.753)	0.757 (0.644-0.893)	0.957 (0.811-1.13)	1.13 (0.951-1.34)	1.37 (1.12-1.68)	1.57 (1.25-1.94)	1.77 (1.36-2.24)	1.98 (1.45-2.57)	2.26 (1.60-3.01)	2.48 (1.71-3.34)
30-min	0.940 (0.801-1.11)	1.12 (0.953-1.32)	1.42 (1.21-1.68)	1.68 (1.42-2.00)	2.05 (1.67-2.51)	2.34 (1.86-2.90)	2.63 (2.02-3.34)	2.94 (2.16-3.82)	3.36 (2.37-4.47)	3.69 (2.53-4.96)
60-min	1.23 (1.05-1.45)	1.48 (1.26-1.75)	1.91 (1.62-2.26)	2.29 (1.93-2.72)	2.83 (2.32-3.49)	3.28 (2.61-4.08)	3.74 (2.87-4.75)	4.22 (3.11-5.49)	4.89 (3.46-6.52)	5.43 (3.72-7.30)
2-hr	1.52 (1.30-1.78)	1.84 (1.58-2.16)	2.40 (2.05-2.82)	2.90 (2.46-3.41)	3.62 (2.98-4.44)	4.21 (3.38-5.22)	4.84 (3.75-6.12)	5.50 (4.08-7.12)	6.43 (4.58-8.52)	7.17 (4.95-9.58)
3-hr	1.68 (1.45-1.96)	2.04 (1.76-2.38)	2.68 (2.30-3.14)	3.25 (2.77-3.82)	4.11 (3.41-5.04)	4.82 (3.89-5.96)	5.58 (4.34-7.05)	6.39 (4.77-8.27)	7.54 (5.40-9.98)	8.47 (5.88-11.3)
6-hr	1.98 (1.72-2.29)	2.37 (2.05-2.74)	3.08 (2.66-3.57)	3.73 (3.20-4.35)	4.74 (3.98-5.81)	5.60 (4.57-6.91)	6.54 (5.14-8.23)	7.56 (5.68-9.73)	9.01 (6.51-11.9)	10.2 (7.13-13.5)
12-hr	2.29 (2.00-2.63)	2.66 (2.32-3.06)	3.36 (2.92-3.87)	4.02 (3.47-4.65)	5.05 (4.28-6.15)	5.94 (4.89-7.29)	6.92 (5.48-8.67)	8.00 (6.07-10.3)	9.56 (6.96-12.5)	10.8 (7.63-14.3)
24-hr	2.62 (2.31-2.99)	2.98 (2.62-3.40)	3.65 (3.20-4.18)	4.31 (3.75-4.95)	5.36 (4.58-6.49)	6.27 (5.20-7.65)	7.29 (5.82-9.07)	8.41 (6.43-10.7)	10.1 (7.37-13.1)	11.4 (8.09-14.9)
2-day	2.96 (2.62-3.35)	3.37 (2.98-3.82)	4.13 (3.65-4.70)	4.85 (4.25-5.53)	5.96 (5.12-7.14)	6.92 (5.77-8.35)	7.97 (6.40-9.82)	9.12 (7.01-11.5)	10.8 (7.94-13.9)	12.1 (8.65-15.7)
3-day	3.22 (2.87-3.64)	3.69 (3.28-4.16)	4.52 (4.01-5.12)	5.29 (4.66-6.01)	6.47 (5.55-7.68)	7.46 (6.23-8.93)	8.53 (6.87-10.4)	9.69 (7.47-12.1)	11.3 (8.39-14.6)	12.7 (9.09-16.4)
4-day	3.47 (3.09-3.90)	3.96 (3.53-4.46)	4.84 (4.30-5.46)	5.64 (4.98-6.39)	6.85 (5.89-8.08)	7.85 (6.57-9.36)	8.93 (7.21-10.9)	10.1 (7.80-12.6)	11.7 (8.71-15.0)	13.1 (9.39-16.8)

Figure 3

General

Curve ID: Storage-01

Description:

Underground storage calculator

Underground Pipes Underground Arch Pipes Storage Chambers

Barrels: 1
 Diameter: 36 in
 Length: 300 ft
 Depth increment: 0.10 ft
 Include headers

Stone base: 6.00 in
 Additional width: 12.00 in
☐ Stone fill
 Stone voids: 40 %

Compute

Storage curve data

Storage data type: Depth vs. Area

	Depth (ft)	Area (ft ²)	Volume (ft ³)
1	0	35179.90	0.000
2	1	40069.93	37624.92
3	2	45016.50	80168.14
4	3	50019.62	127686.20
5			
6			

Storage curves

ID /	Number of Points	Description
1 Storage-01	4	

Storage Curve

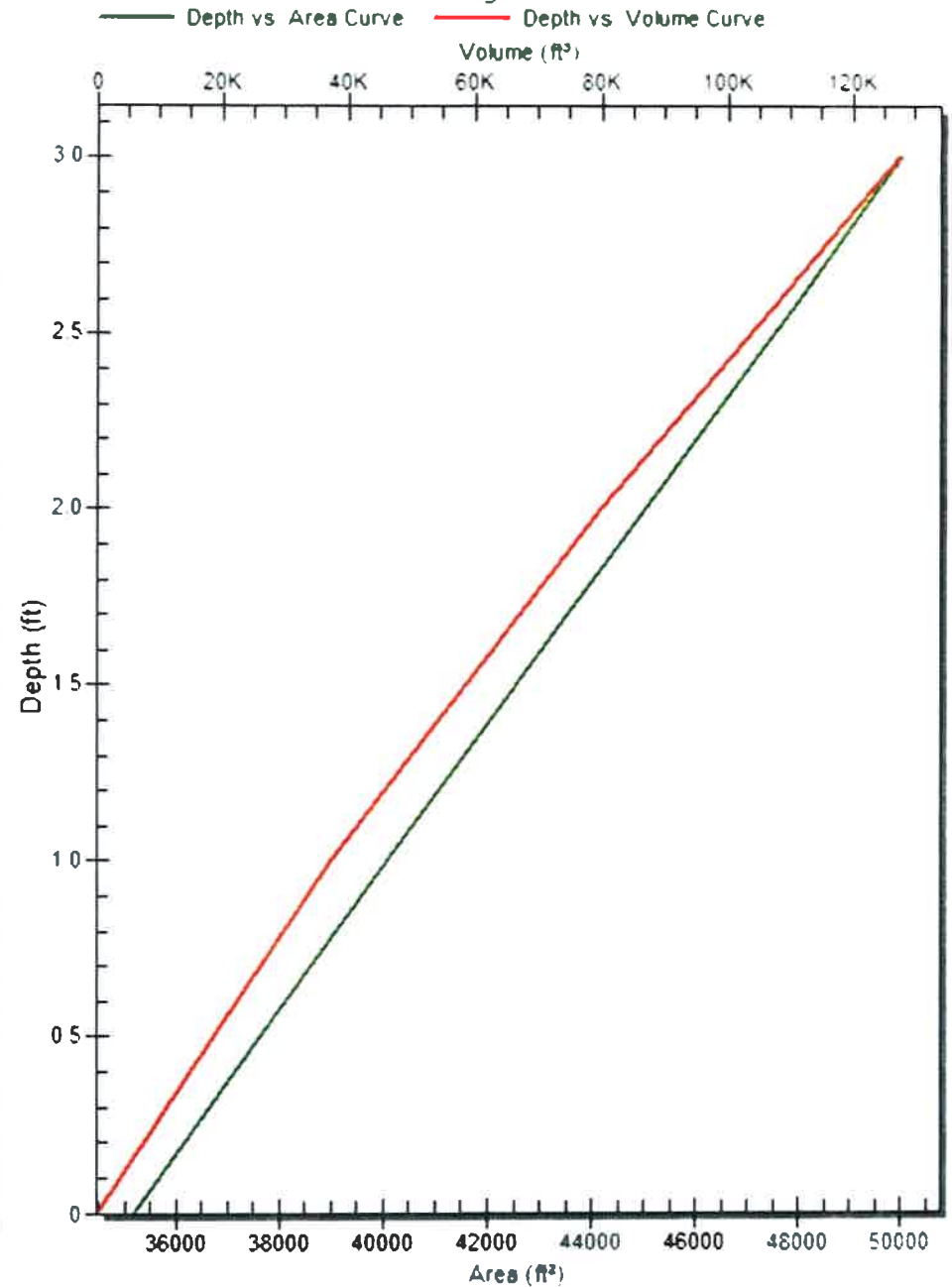


Figure 5

TSL Carter Lake

2614 N. 5th Street
Carter Lake, Pottawattamie County, Iowa
Section 20, Township 75 N, Range 44 W
Final Development Plans

Sheet List Table	
Sheet Number	Sheet Title
C01	Title Sheet
C02	General Layout
C03	Dimension Plan
C04	Grading Plan
C05	Section View
L01	Landscape Plan
E01	Lighting Plan

Description:

That part of Lot 16, in Auditor's Subdivision of Section 20, Township 75, Range 44 West of the 5th P.M. in Pottawattamie County, Iowa, described as follows: Beginning at the Northwest Corner of the intersection of Fifth Street and Avenue H in said section, thence North 376 feet; thence West 464 feet, thence South 376 feet, thence East along the North line of Avenue H to the point of beginning, except that part acquired by City of Carter Lake, for right of way purposes.

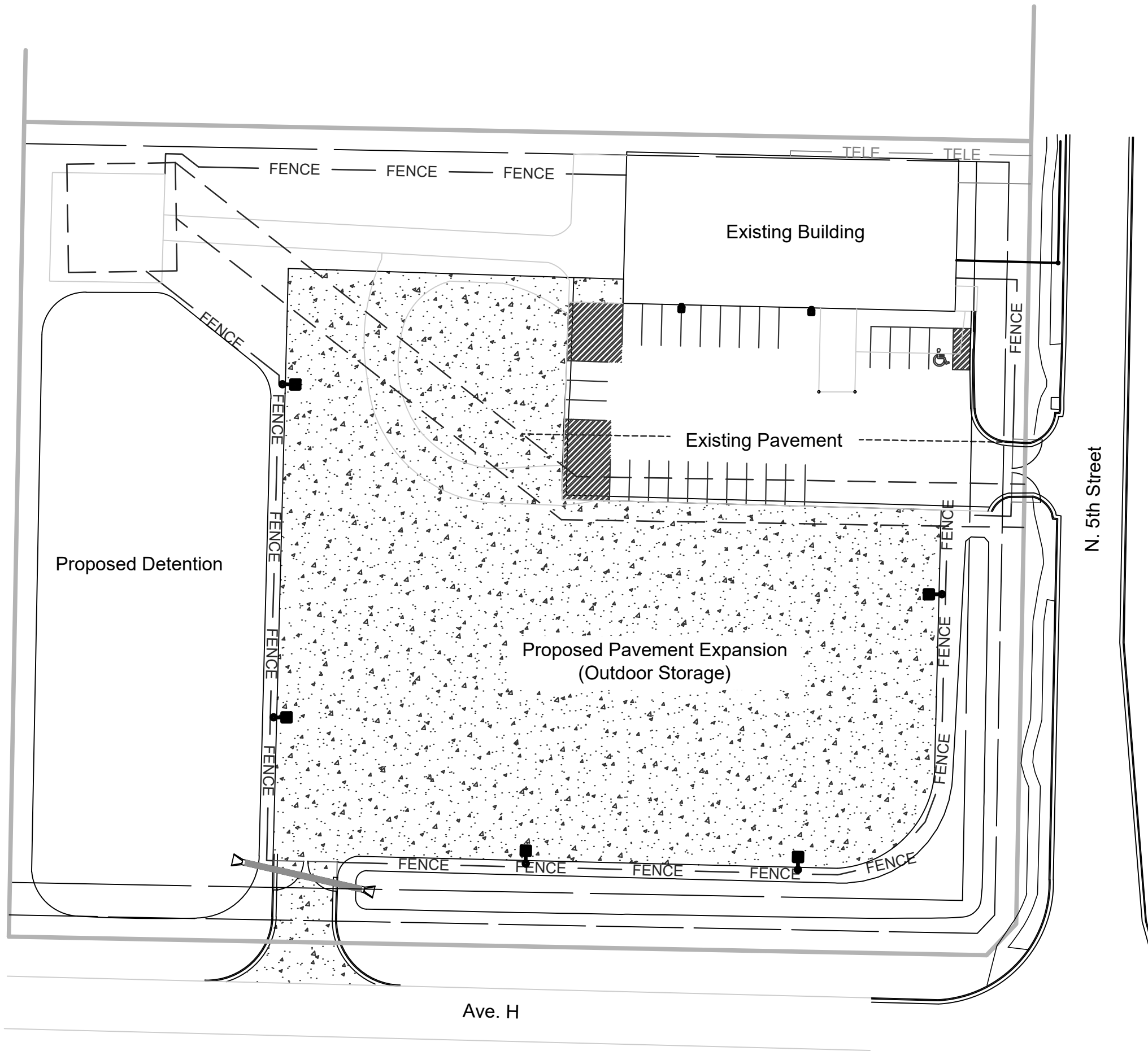
Performance Points:

Per Section 1403 of the Zoning District Regulations, this property is subject to the Performance Points System. This property achieves the 30 points required as follows:

15 Points-Reduces impervious coverage by 30% below district requirements (51% Site Total)
15 Points-1 point per foot of landscaping provided back from the street property line (190 LF Total)

Site Development Regulations:

Zoning: M1
Minimum District Size: 10,000 SF
Minimum Lot Area: 10,000 SF
Minimum Lot Width: 100 Ft.
Minimum Yards:
 Front: 25 Ft.
 Side: 0 Ft.
 Street Side Yard: 25 Ft.
 Rear Yard: 10 Ft.
Maximum Height: 75 Ft.
Maximum Building Coverage: 70%
Maximum Impervious Coverage: 90%
Floor Area Ratio: 1.0
Maximum Amount of Total Parking Located in Street Yard: 100%
Minimum Depth of Landscaping Adjacent to Street ROW: 10 Ft.

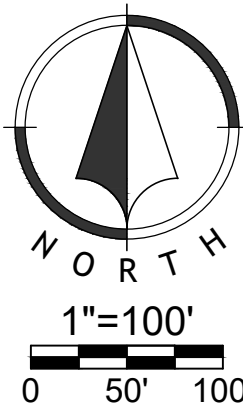


LEGEND

Existing Section Line	Proposed Right-of-Way
Existing Right-of-Way Line	Proposed Property Line
Existing Lot Line	Proposed Lot Line
Existing Easement Line	Proposed Easement
Existing Curb & Gutter	Proposed Curb & Gutter
Existing Sidewalk	Proposed Sidewalk
Existing Storm Sewer	Proposed Storm Sewer
Existing Storm Structure	Proposed Storm Structure
Existing Waterline	Proposed Fire Hydrant
Existing Gas Main	Proposed Waterline
Existing Sanitary Sewer	Proposed Sanitary Sewer
Existing Sanitary Manhole	Proposed Sanitary Manhole
Existing Contour Major	Proposed Contour Major
Existing Contour Minor	Proposed Contour Minor
	Future Curb and Gutter
U/E Utility Easement	
SS/E Sanitary Sewer Easement	A/E Access Easement
D/E Drainage Easement	T/E Temporary Easement

OWNER/DEVELOPER
Hastings Family Holdings, LLC
10001 S. 152nd St.
Omaha, NE 68138

CONSULTANT
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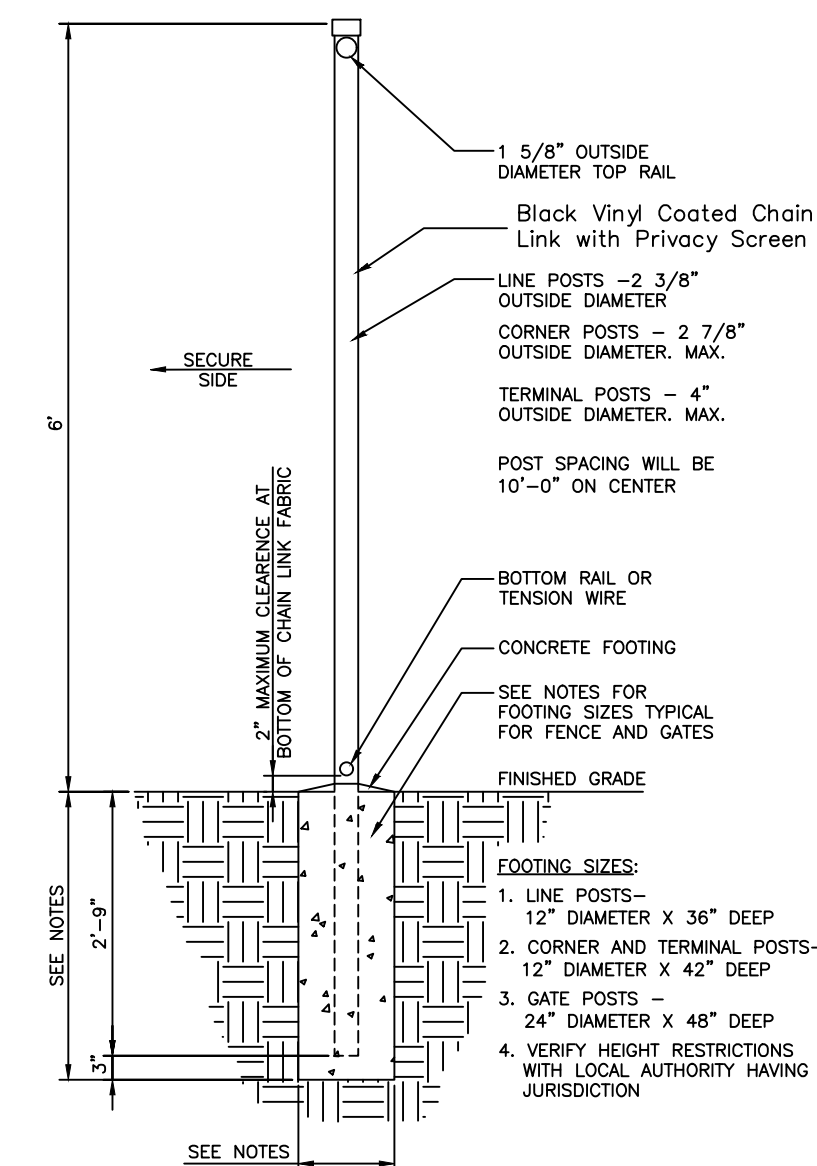
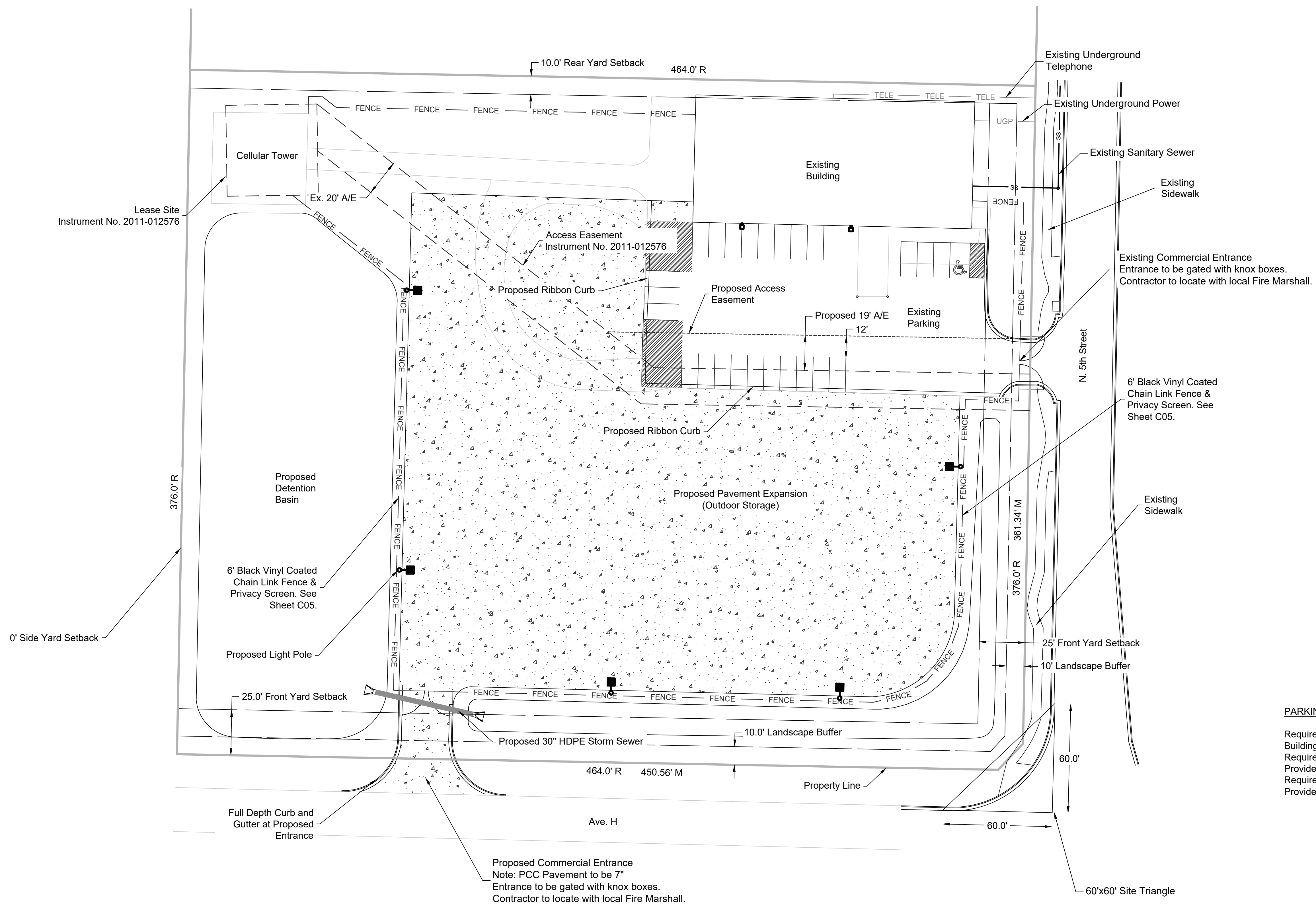
Final Development Plans
21-0127
TSL Carter Lake
Carter Lake, Pottawattamie County, Iowa

Renaissance
Infrastructure
Consulting

1815 MCCOE STREET, SUITE 200
KANSAS CITY, MISSOURI 64108
www.RIC-CONSULT.COM

816.800.0950

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Final Development Plans
21-0127
TSL Carter Lake
Carter Lake, Pottawattamie County, Iowa

General Layout

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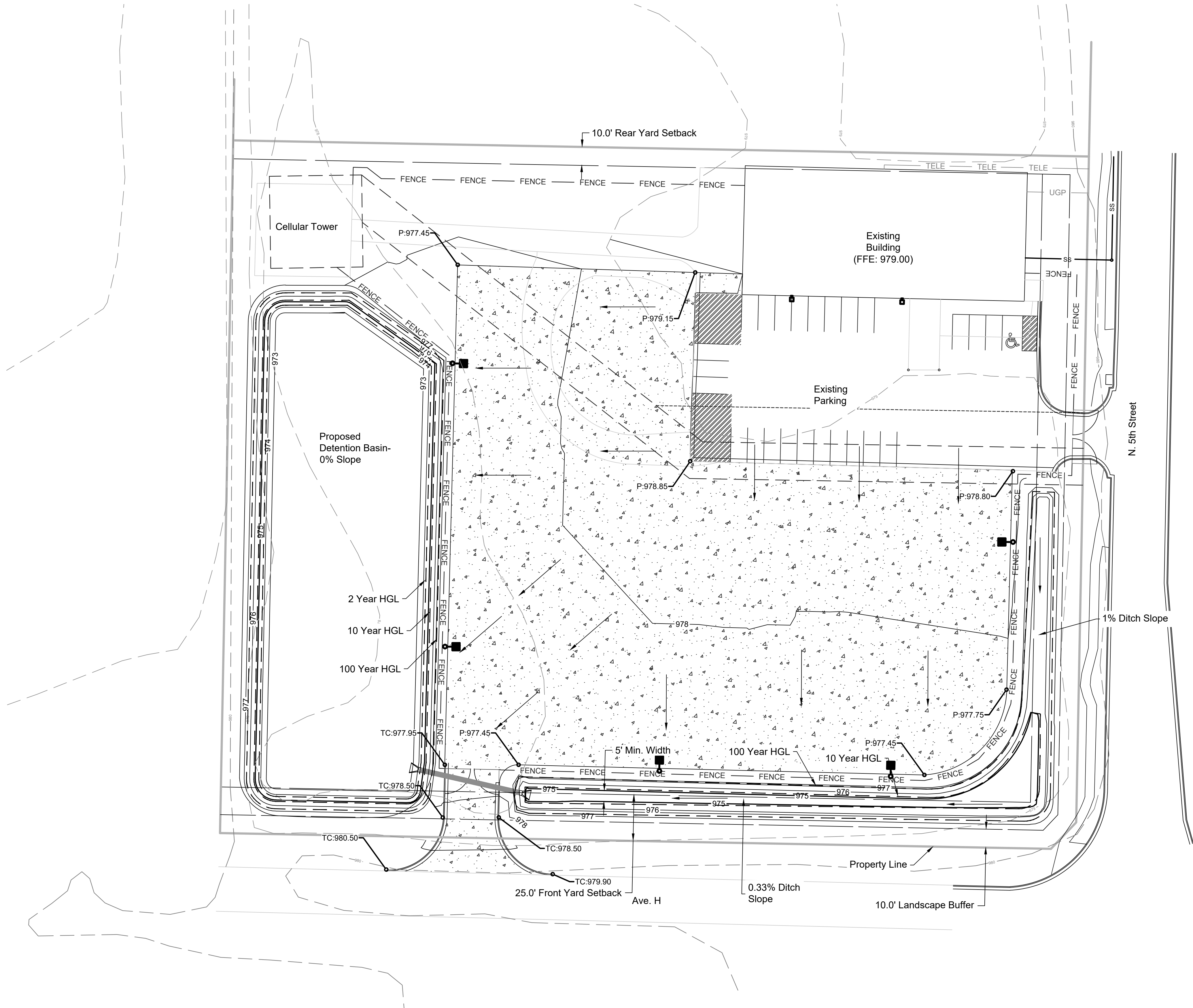
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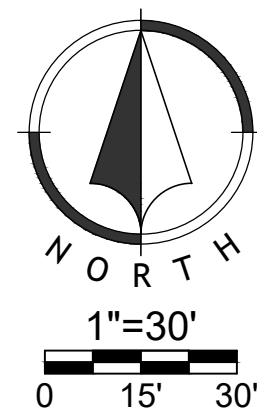
(818) 1815 MCCREE STREET, SUITE 200
KANSAS CITY, MISSOURI 64108

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GRADING LEGEND		
TC:	Top of Curb Elevation	— — — Existing Minor Contour
P:	Pavement Elevation	— — — Existing Major Contour
TS:	Top of Structure Elevation	— — — Proposed Minor Contour
FL:	Invert Elevation of Pipe	— — — Proposed Major Contour
G:	Ground Elevation	→ Drainage Arrow
(HP)	High Point	
(LP)	Low Point	
TW:	Top of Wall Elevation	
BW:	Bottom of Wall Elevation	
R:	ADA Ramp	
L:	ADA Landing	



NO.	DATE	REVISION
2	12/3/2021	Per City Comments
1	10/21/2021	Initial Submittal

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PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	MAT. HT.	QTY
	Acer truncatum 'Warren Red' / Pacific Sunset Maple	B&B		2" Cal.		5
	Gleditsia triacanthos inermis 'Shademaster' / Shademaster Honey Locust	B&B		2" Cal.	50' - 60' Ht.	7
	Nyssa sylvatica 'Wildfire' / Black Gum	B&B		2" Cal.		5
	Ulmus americana 'Princeton' / Princeton American Elm	B&B		2" Cal.		4
EVERGREEN TREES	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	MAT. HT.	QTY
	Pinus flexilis 'Vanderwolf's Pyramid' / Vanderwolf's Pyramid Pine	B&B		6" Ht. Min.		7
SHRUBS	BOTANICAL / COMMON NAME	CONT			MAT. HT.	QTY
	Clethra alnifolia 'Ruby Spice' / Ruby Spice Clethra	5 Gal.		18"-24" Ht. Min.		3
	Cornus stolonifera 'Arctic Fire' / Arctic Fire Dogwood	5 Gal.		18"-24" Ht. Min.		3
	Juniperus chinensis 'Sea Green' / Sea Green Juniper	5 Gal.		18"-24" Ht. Min.		25
GROUND COVERS	BOTANICAL / COMMON NAME	CONT				QTY
	Turfgrass Sod Fescue Mix; RE: Notes / Fescue Sod	SEED				77,788 sf

NOTES:

- TREES THAT DO NOT MEET THE SIZE REQUIREMENT WILL BE REJECTED
- TREES SHALL BE INSPECTED BY OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.

LANDSCAPE CALCULATIONS

Zoning: M-1

Required Landscape Depth Adj. to Street PL

Required:

- 10' Min. Width (ROW Yard)
- 100% Landscaped
- 15% of First 80' Landscaped (Street Yard)

Provided:

- 10' ROW Yard
- 100% Landscaped
- 12' Street Yard (15% First 80' Landscaped)

General Landscape

Required:

- 1 Deciduous Shade Tree / 35' Street Frontage
- Min. 10% of Gross Site SF to be Landscaped

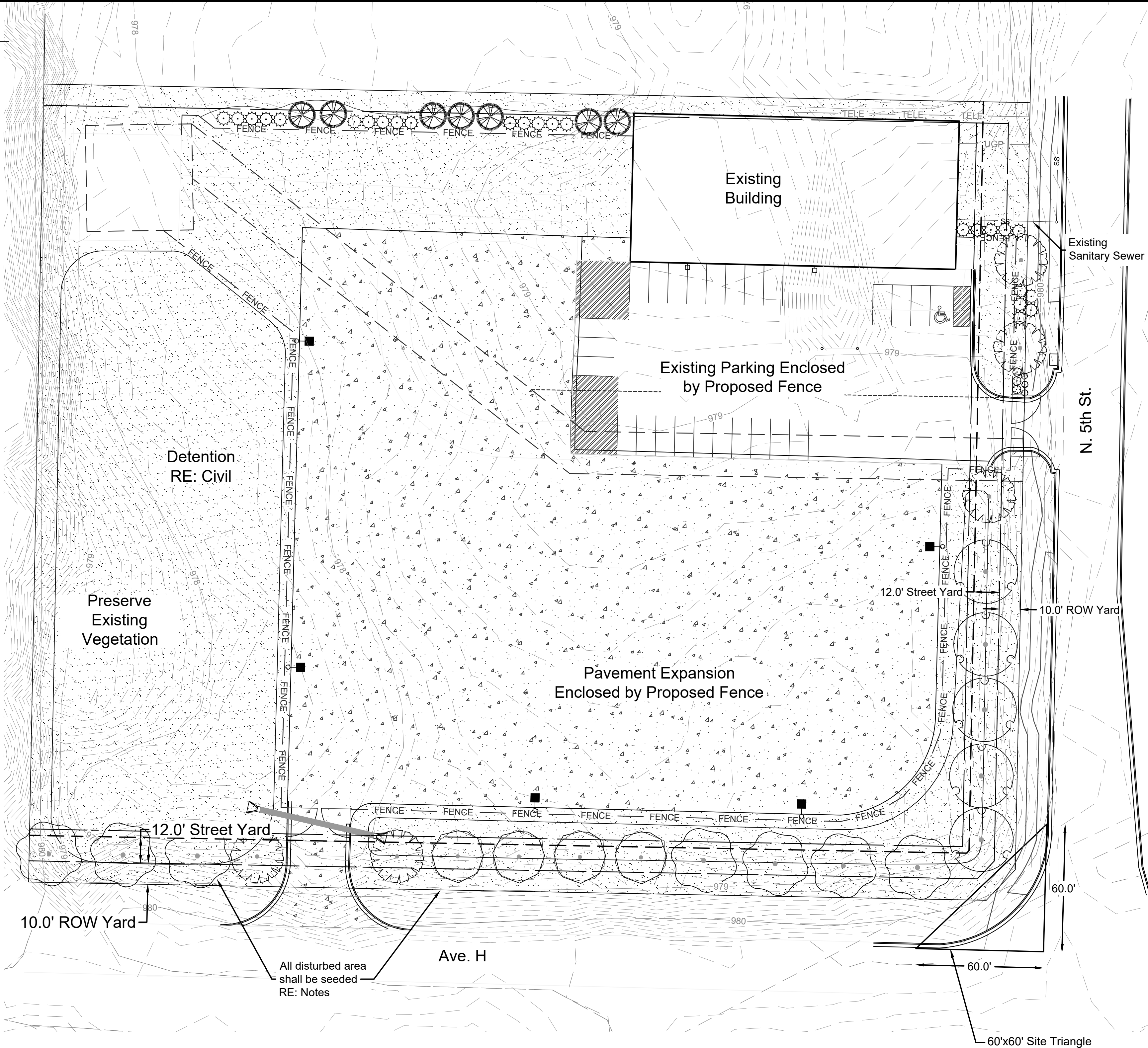
Provided:

- 5th Street: 360' = 8 Trees + 3 Existing Trees
- Ave H: 450' = 13 Trees

Provided:

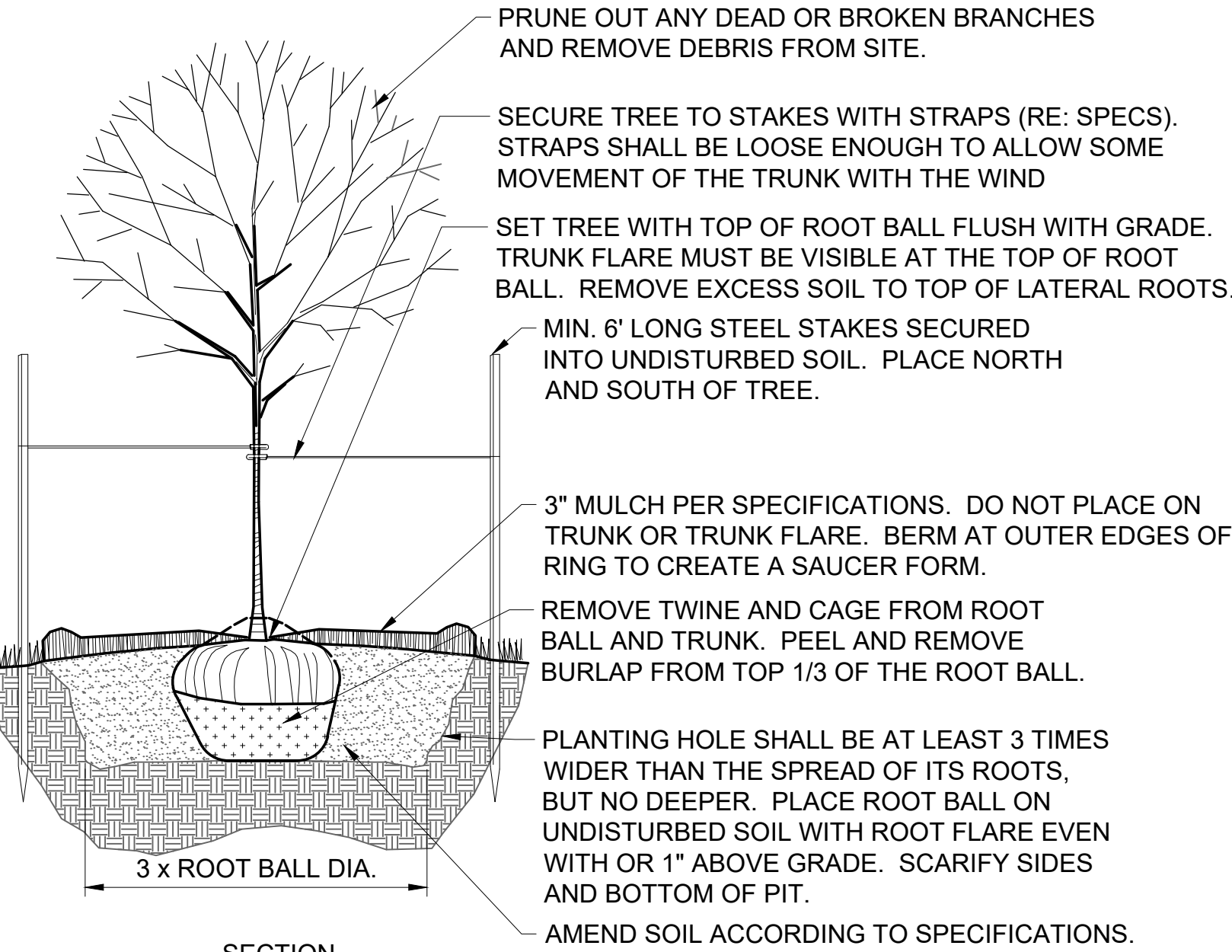
- 10% of Site Landscaped

**At least one third (1/3) of the plants should be coniferous or evergreen species.*



LANDSCAPE NOTES

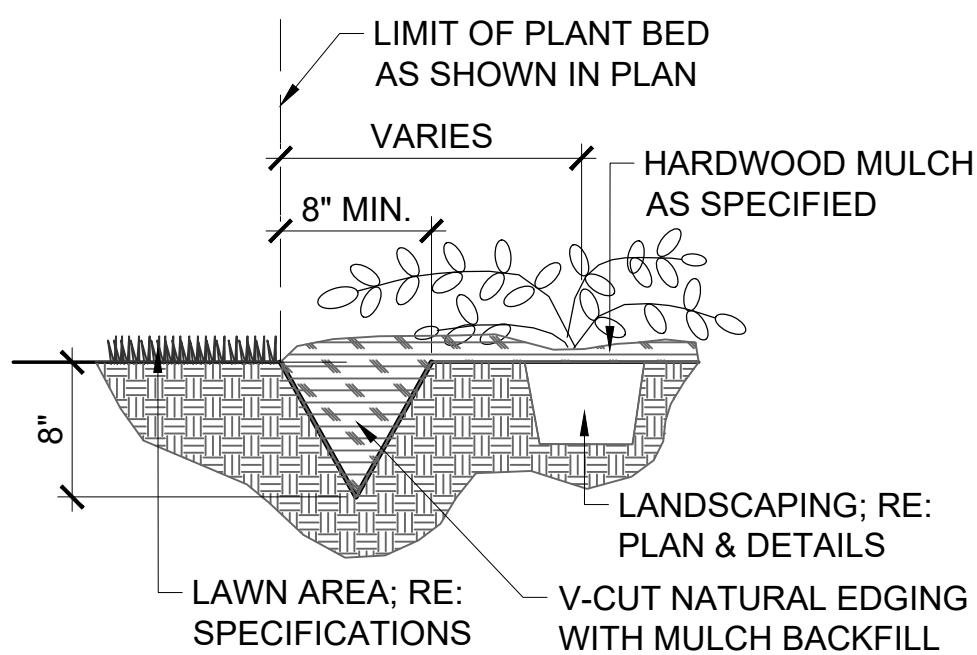
- LOCATE UTILITIES PRIOR TO COMMENCING LANDSCAPE OPERATIONS. ALL TREES SHALL BE FIELD POSITIONED AS TO AVOID CONFLICTS WITH EXISTING AND PROPOSED UTILITIES. NOTIFY LANDSCAPE DESIGNER OF ANY CONFLICTS OR OBSTRUCTIONS.
- CONTRACTOR SHALL STAKE ALL PLANTING AREAS IN THE FIELD PRIOR TO PLANTING FOR APPROVAL OF THE OWNER OR THEIR REPRESENTATIVE.
- QUANTITIES SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES PRIOR TO BIDDING AND SHALL BE RESPONSIBLE FOR ALL QUANTITIES FOR THEIR BID. ANY DISCREPANCIES WITH THE PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE DESIGNER. THE PLAN QUANTITIES SHALL SUPERCEDE SCHEDULED QUANTITIES.
- ALL PLANT MATERIAL SHALL BE SPECIMEN QUALITY AND SHALL COMPLY WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 THE 'AMERICAN STANDARD FOR NURSERY STOCK'.
- ALL PLANTING BEDS & NATIVE GRASS STANDS SHALL BE EDGED AS SHOWN IN PLAN.
- PREPARE PLANTING BEDS AND INCORPORATE AMENDMENTS ACCORDING TO PLANS.
- SHREDDED HARDWOOD MULCH, PER SPECIFICATIONS SHALL BE USED AS A THREE INCH (3") TOP DRESSING IN ALL PLANTING BEDS AND AROUND ALL TREES. SINGLE TREES AND SHRUBS SHALL BE MULCHED TO THE OUTSIDE EDGE OF THE SAUCER OR LANDSCAPE ISLAND.
- ALL TREES SHALL BE STAKED PER DETAIL.
- ALL PLANT MATERIAL SHALL BE INSTALLED TO ALLOW A ONE FOOT (1') CLEARANCE BETWEEN PLANT AND ADJACENT PAVEMENT.
- THE LANDSCAPE CONTRACTOR SHALL NOT COMMENCE WORK UNTIL THE SITE IS FREE OF DEBRIS CAUSED BY ON-GOING CONSTRUCTION OPERATIONS. REMOVAL OF DEBRIS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. LANDSCAPE WORK SHALL NOT BEGIN UNTIL THE OWNER HAVE GIVEN WRITTEN APPROVAL FOR SUCH. THERE SHALL BE NO DELAYS DUE TO LACK OF COORDINATION FOR THIS ACTIVITY.
- THE OWNER SHALL APPROVE GRADES AND CONDITION OF SITE PRIOR TO SODDING/SEEDING OPERATIONS.
- ALL AREAS DISTURBED DURING CONSTRUCTION AND NOT DESIGNATED FOR OTHER PLANTINGS OR HARDSCAPE SHALL BE SEEDDED WITH TURF TYPE FESCUE.
- IRRIGATION SHALL BE PROVIDED ALONG THE EAST PROPERTY LINE ADJACENT TO THE BUILDING, AND ALONG THE NORTH PROPERTY LINE WHERE LANDSCAPING IS PROPOSED.



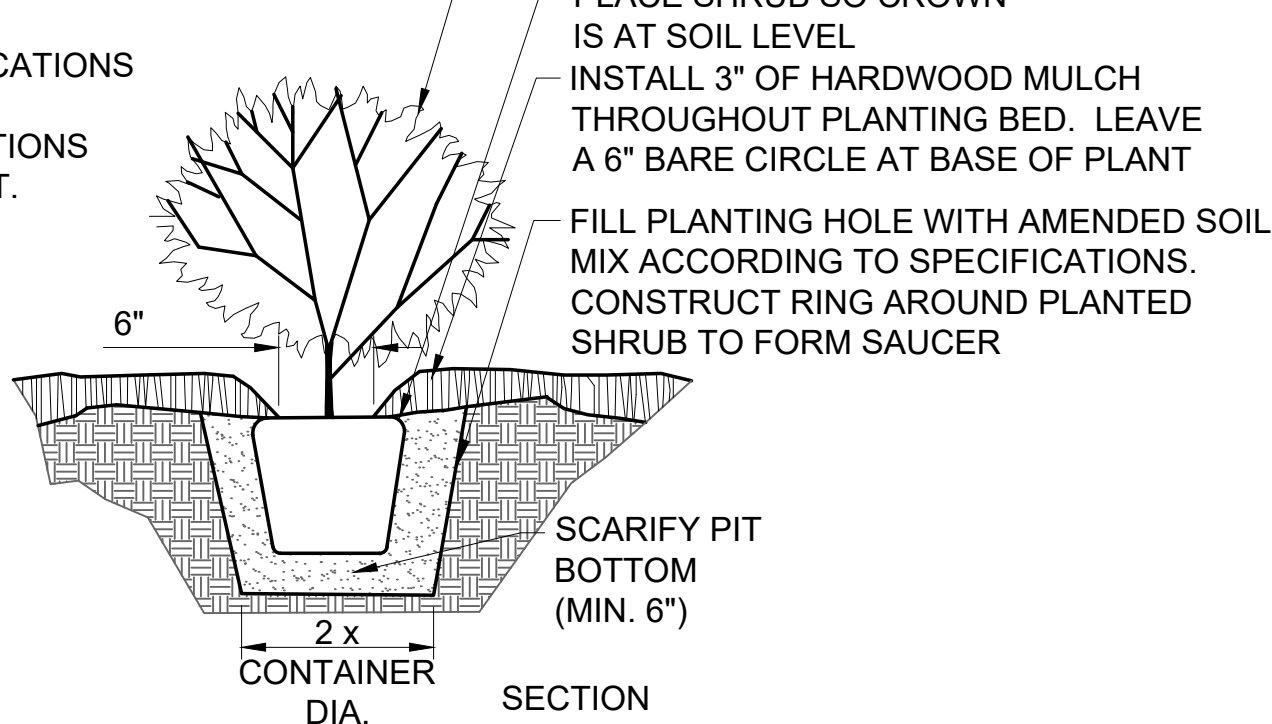
DECIDUOUS TREE PLANTING DETAIL - NTS

NOTES:

- CONTRACTOR SHALL LOCATE AND MARK ALL PLANTBED LOCATIONS PRIOR TO EXCAVATING FOR FINAL APPROVAL BY OWNER.
- TRANSITION TO MULCH CONTAINMENT DETAIL AT ALL LOCATIONS ADJACENT TO CURBS & SIDEWALKS. RE: DETAIL, THIS SHEET.
- CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO TRENCHING OR LANDSCAPE INSTALLATION.



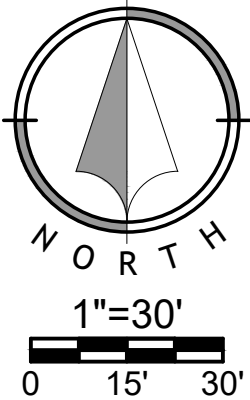
V-CUT NATURAL EDGE DETAIL - NTS



SHRUB PLANTING DETAIL - NTS

NOTES:

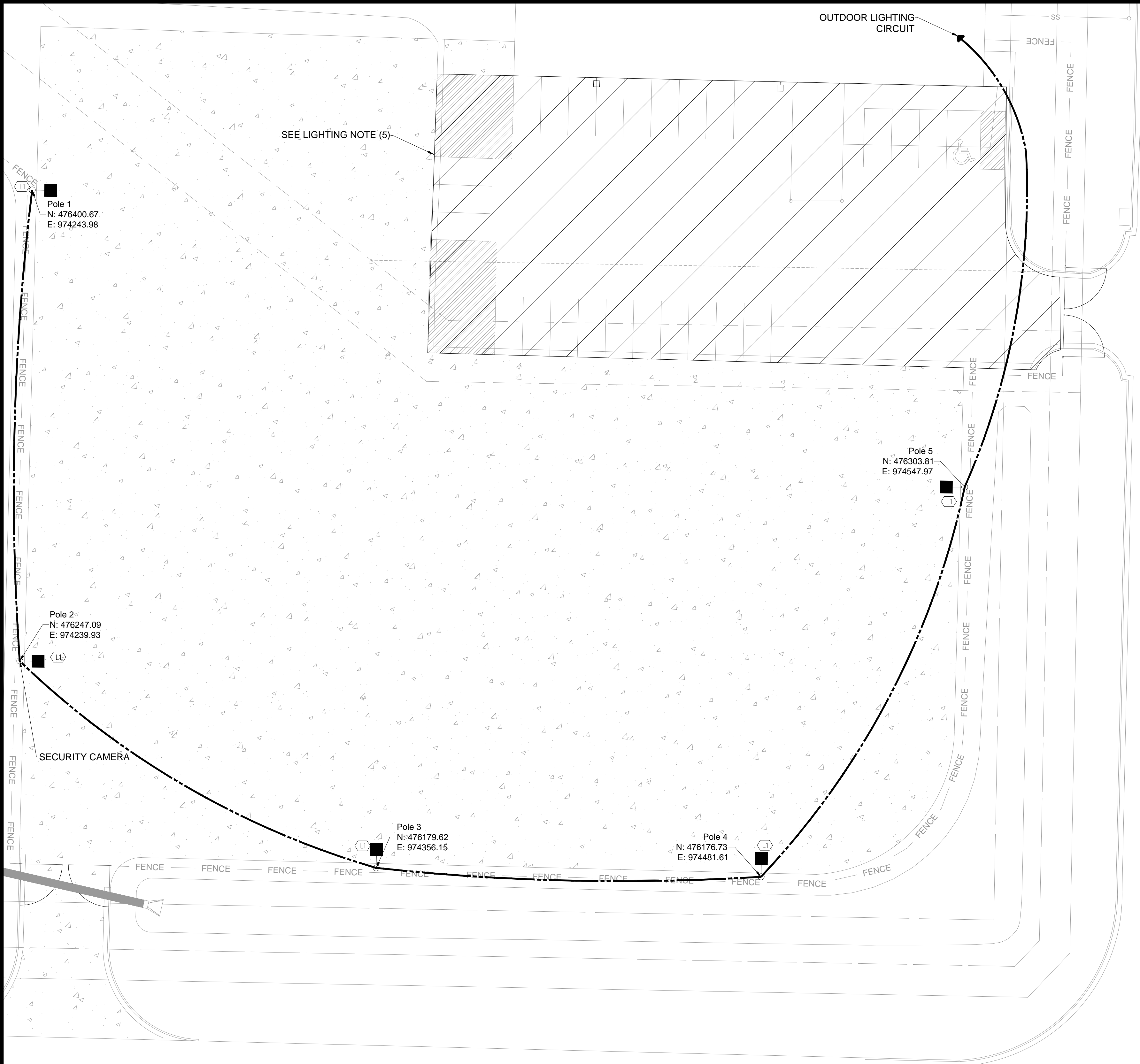
- REFER TO SPECIFICATIONS FOR TOPSOIL BACKFILL MIX.
- CONTRACTOR TO WATER THOROUGHLY AFTER PLANTING
- INSTALLATION TO BE IN ACCORDANCE WITH PLANTING SPECIFICATIONS



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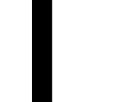
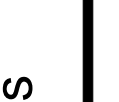
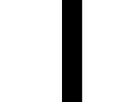
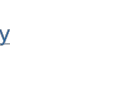
SITE LIGHTING NOTES:

- 1) All circuits indicated on drawings shall be 2-#8 G. wire in 2" schedule 40 PVC conduit U.O.N.
- 2) A ground conductor sized per N.E.C. article 250 is required in all power, receptacle, and lighting circuits. Ground conductors are not shown on drawings.
- 3) Wiring shall be in accordance with the National Electrical Code (NEC), 2011 Edition and/or applicable local, state, and utility company rules, laws, and accordances
- 4) Pole shall be Hubbell RTS-H-35-80-A-2-BLT or approved alternative.
- 5) Parking lot to be lit by existing building mounted lighting fixtures.

LUMINAIRE SCHEDULE							
CALLOUT	SYMBOL	QUANTITY	MODEL	WATTAGE	MOUNTING	MOUNTING HEIGHT	LAMP DEPRECIATION
L1		5	HUBBELL OUTDOOR, RAR-2-480L-210-4K7-4-BC	210 W	POLE	35 FT.	0.9

FEATURES

- Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as retail, commercial and campus parking lots
- Featuring Micro Strike Optics which maximizes target zone illumination with minimal losses at the house-side, reducing light trespass issues
- Visual comfort standard
- Compact and lightweight design with low EPA
- 3G rated for high vibration applications including bridges and overpasses
- Control options including photo control, occupancy sensing, NX Distributed Intelligence™ and 7-Pin with networked controls
- Best in class surge protection available



CONTROL TECHNOLOGY



RAR2 EPA

KEY DATA	
Lumen Range	3,000–48,000
Wattage Range	25–340
Efficacy Range (LPW)	118–155
Fixture Projected Life (Hours)	L70>60K
Weights lbs. (kg)	13.5–24 (6.1–10.9)

SPECIFICATIONS

CONSTRUCTION

- Rectilinear form mimics the traditional shoebox form factor keeping a similar but updated style and appearance, ideal for retrofit applications
- Die-cast housing with hidden vertical heat fins that are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with powder coat paint finish

OPTICS

- Entire optical aperture illuminates to create a larger luminous surface area resulting in a low glare appearance without sacrificing optical performance
- 80, 160, 320 or 480 midpower LEDs
- 3000K, 4000K or 5000K (70 CRI) CCT
- Zero uplight at 0 degrees of tilt
- Field rotatable optics

INSTALLATION

- Standard square arm mount, compatible with B3 drill pattern
- Optional universal mounting block for ease of installation during retrofit applications. Available as an option or accessory for square and round poles
- Knuckle arm fitter option available for 2-3/8" OD tenon. Max tilt of 60 degrees with 4 degree adjustable increments. (Restrictions apply for 7-pin options)

ELECTRICAL

- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz

ELECTRICAL (CONTINUED)

- Ambient operating temperature -40°C to 40°C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20kA protection meeting ANSI/IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is compromised

CONTROLS

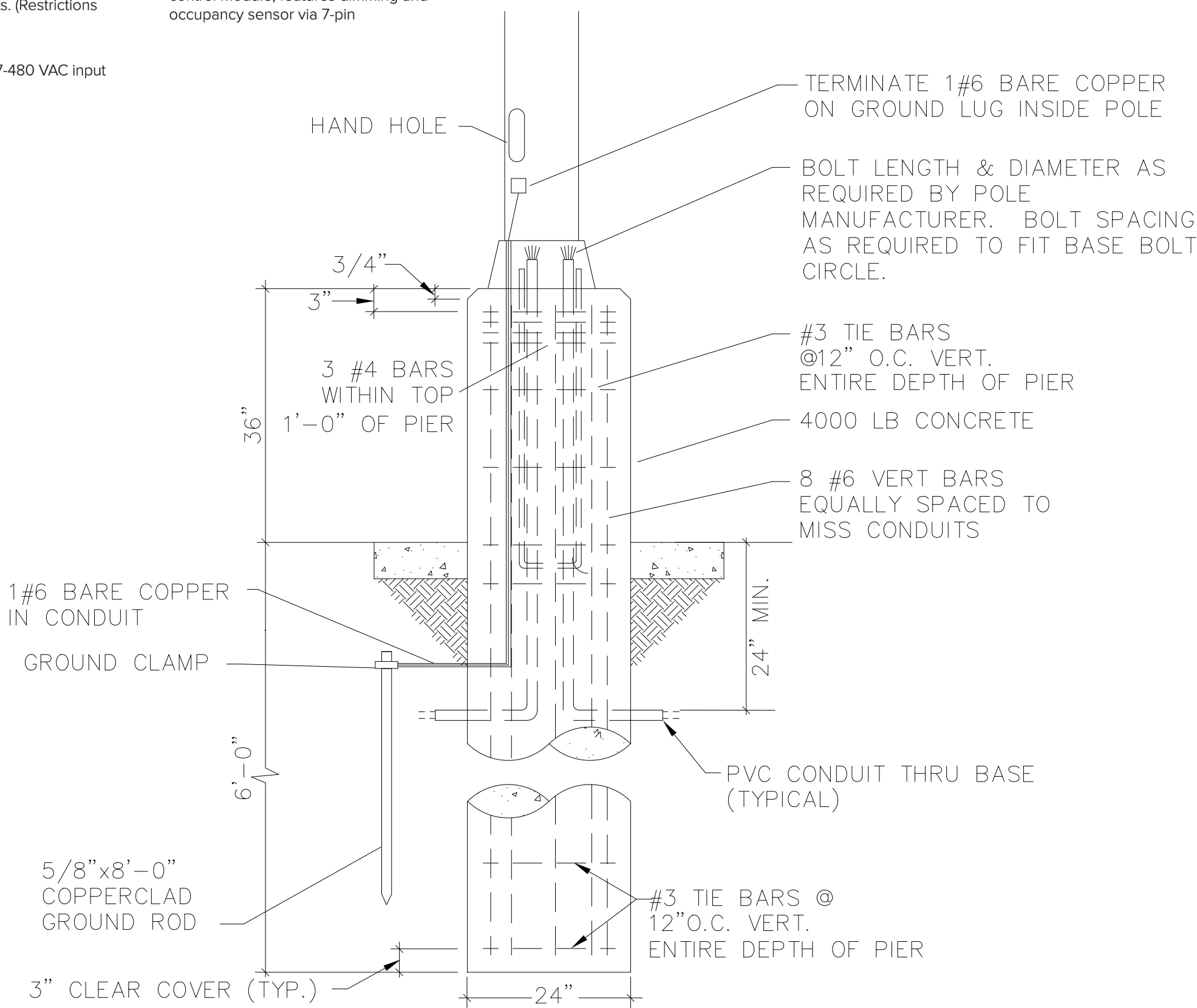
- Photo control, occupancy sensor and wireless available for complete on/off and dimming control
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)
- 0-10V dimming leads available for use with control devices (provided by others, must specify lead length)
- SiteSync™ wireless control system is available via 7-pin See ordering information and details at: www.hubbellighting.com/sitesync
- NX Distributed Intelligence™ available with in fixture wireless control module, features dimming and occupancy sensor
- wiSCAPE® available with in fixture wireless control module, features dimming and occupancy sensor via 7-pin

CERTIFICATIONS

- DLC® (DesignLights Consortium Qualified), with some Premium Qualified configurations. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Listed to UL1598 and CSA C22.2#250-24 for wet locations and 40°C ambient temperatures
- 3G rated for ANSI C136.31 high vibration applications
- Fixture is IP66 rated
- Meets IDA recommendations using 3K CCT configuration at 0 degrees of tilt
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See Buy American Solutions

WARRANTY

- 5 year limited warranty
- See HLL Standard Warranty for additional information



POLE FOUNDATION DETAIL

SCALE: NONE

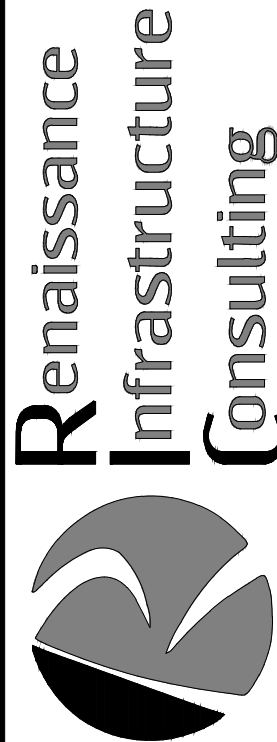
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Preliminary Plans

21-0127
Carter Lake, IA

Lighting Plan

NO.	BY	DATE	REVISION
2	A/J	GDN 12/03/2021	Per City Comments
1	A/J	GDN 03/23/2021	Original Submittal



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