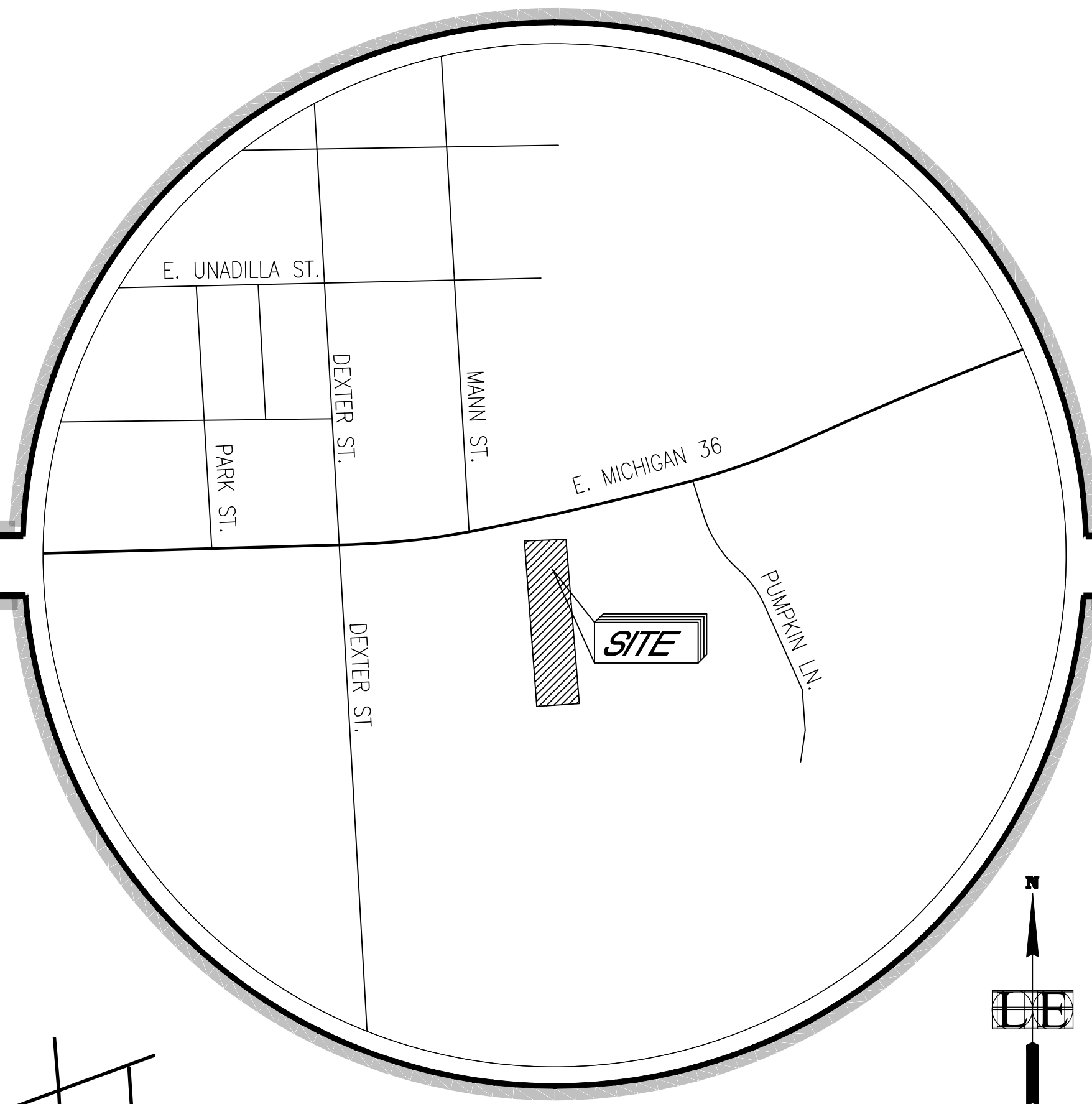
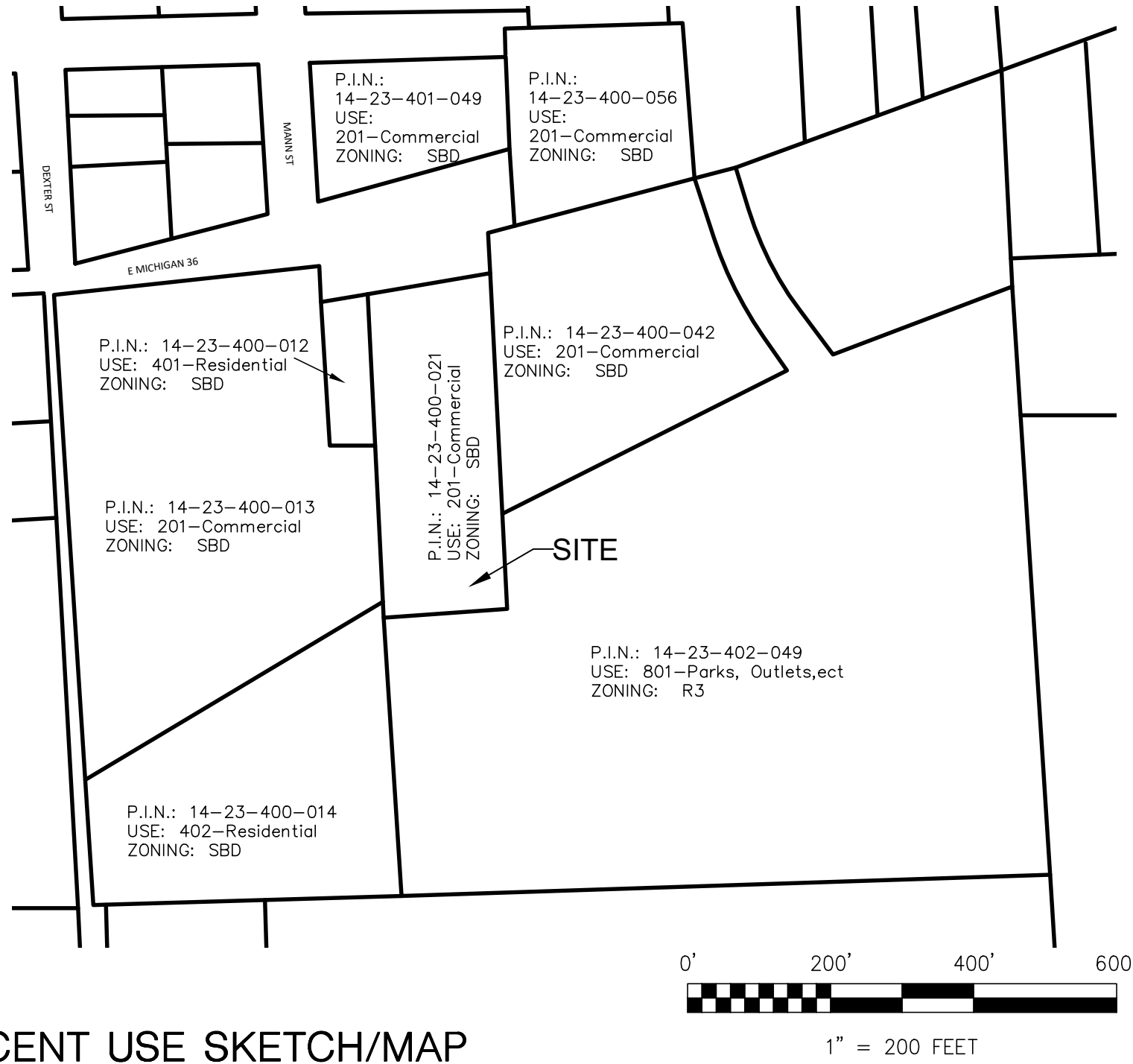


SITE PLAN FOR
C3 PROVISIONING
1066 E M36
VILLAGE OF PINCKNEY, LIVINGSTON COUNTY, MICHIGAN



LOCATION MAP
1" = 300 FEET



ADJACENT USE SKETCH/MAP
SCALE: 1"=200'

UTILITY DISCLAIMER

811 Know what's below.
Call before you dig.

Utilities as shown indicate approximate location of facilities only, as described by the various companies and no guarantee is given either as to the completeness or accuracy thereof. Contractor shall call "MISS DIG" 1-800-482-7171 prior to the start of construction. Electric, gas, phone and television companies should be contacted prior to the commencement of field activities.

SITE DATA & GENERAL NOTES

- Property is zoned: SBD, Secondary Business District
- Contractor is responsible for protecting all existing and proposed utilities from damage during all stages of construction.
- The engineer and applicable agency must approve, prior to construction, any alteration, or variance from these plans.
- Property to be serviced by connection to public sanitary and water.
- Underground dry utilities shall be extended from existing locations to service this site as required by utility companies.
- Existing building is connected to public sewer.
- All construction shall be performed in accordance with the current standards and specifications of Village of Pinckney Township and Livingston County.
- Three working days prior to any excavation, the Contractor shall telephone MISS DIG (800-482-7171) for the location of underground utilities and shall also notify representatives of other utilities located in the vicinity of the work. It shall be the Contractor's responsibility to verify and/or obtain any information necessary regarding the presence of underground utilities which might affect this job.
- Site plan use: Retail
- Site storm drainage will be serviced by proposed onsite detention pond.

SITE DATA TABLE

LOT AREA (GROSS)	REQUIRED 5,000 SF. (min)	PROVIDED 71,768 SF (1.65 AC)
LOT WIDTH	66 FT (min)	163 FT
LOT COVERAGE	50% MAX	4,196 SF/71,768 SF = 5.8%
BUILDING SETBACKS:	REQUIRED	PROVIDED
FRONT	25 FT	4.75 FT
SIDE (E)	15 FT	17.22 FT
SIDE (W)	20 FT	48.83 FT
REAR	20 FT	372.41 FT
BUILDING DATA:	REQUIRED	PROVIDED
TOTAL BUILDING ENVELOPE	4,196 SF	2
FLOORS	2.5 MAX	25'5" FT FRONT
BUILDING HEIGHT	35 FT MAX	38'3" FT REAR

PARKING CALCULATIONS

PARKING SPACE REQUIREMENTS PER ZONING ORDINANCE SEC. 152.283
RETAIL STORE
1.0 SPACES FOR EVERY 300SF OF GROSS FLOOR AREA
PROPOSED BUILDING GROSS FLOOR AREA: 6,948 SF
REQUIRED PARKING SPACES = 1.0 x 4,000/300 = 24 SPACES
PROPOSED PARKING SPACES = 34 SPACES INCLUDING 2 ADA COMPLIANT SPACES

SHEET INDEX

- COVER SHEET
- EXISTING CONDITIONS & REMOVALS PLAN
- SITE LAYOUT PLAN
- SITE GRADING AND STORM WATER MGMT PLAN
- LANDSCAPE PLAN

ARCHITECTURAL
A1. FLOOR PLAN
A2. BUILDING ELEVATIONS

LEGAL DESCRIPTION

LEGAL DESCRIPTION (Westcor Land Title Insurance Company, Commitment No. UB153579, Commitment Date: March 19, 2021)
Part of the West 1/2 of the Southeast 1/4 of Section 23, Town 1 North, Range 4 East, Village of Pinckney, Livingston County, Michigan, described as: Beginning at a point on the Southerly right of way line of M-36 Highway (100 feet wide) distant North 1 degree 12 minutes West along the North and South 1/4 line 1268.01 feet North 86 degrees 33 minutes East 178.97 feet and Easterly 250.33 feet along the arc of a curve concave to North, radius 3631.10 feet, central angle 3 degrees 57 minutes, chord bearing North 84 degrees 34 minutes 30 seconds East 250.20 feet from the South 1/4 corner of said Section 23, thence Easterly on the Southerly right of way of M-36, 163.19 feet along the arc of a curve concave to the North, central angle of 2 degrees 34 minutes 30 seconds, chord bearing North 81 degrees 18 minutes 45 seconds East 163.18 feet; thence South 1 degree 22 minutes East 453.42 feet; thence South 88 degrees 38 minutes West 162.15 feet; thence North 1 degree 22 minutes West 432.58 feet to Point of Beginning.

LEGEND

	EXISTING	PROPOSED
SPOT GRADE	x 000.00	x 000.00
CONTOUR	000	000
SANITARY SEWER	Co. SAN	Co. SAN
STORM SEWER	ST	ST
WATER	W	W
OVERHEAD	X	X
FENCE	X	X
GAS	GAS	GAS
ELECTRIC	E	E
DRAINAGE AREA BOUNDARY		
LIMITS OF DISTURBANCE		
SILT FENCE		SF
SIGN		
LIGHT POLE	*	*
UTILITY POLE	o	o
DECIDUOUS TREE	o	o
GATE VALVE IN WELL	o	o

OWNER/DEVELOPER

C3 INDUSTRIES
4420 Varsity Drive
Ann Arbor, MI 48108
PHONE: (734) 412-4800

ENGINEER

LE LIVINGSTON ENGINEERING
CIVIL ENGINEERING SURVEYING PLANNING
3300 S. OLD U.S. 23, BRIGHTON, MI 48114
www.livingstoneng.com PHONE: (810) 225-7100 FAX: (810) 225-7699

C3 PROVISIONING

1066 E M36
VILLAGE OF PINCKNEY
LIVINGSTON COUNTY, MICHIGAN
SITE PLAN

REVISIONS	DATE	PROJECT No. 21128
		SHEET 1 OF 7
		DATE: MAY 21, 2025

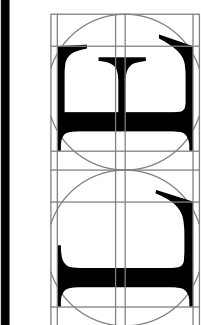
ENGINEER'S SEAL



EXISTING CONDITIONS & REMOVALS PLAN

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LIVINGSTON ENGINEERING
CIVIL ENGINEERING
3300 S. OLD US. 23, BRIGHTON, MI 48114
PHONE: (810) 225-7100
FAX: (810) 225-7699
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C3 PROVISIONING

1066 E M36
VILLAGE OF PINCKNEY, LIVINGSTON COUNTY, MICHIGAN
EXISTING CONDITIONS & REMOVALS

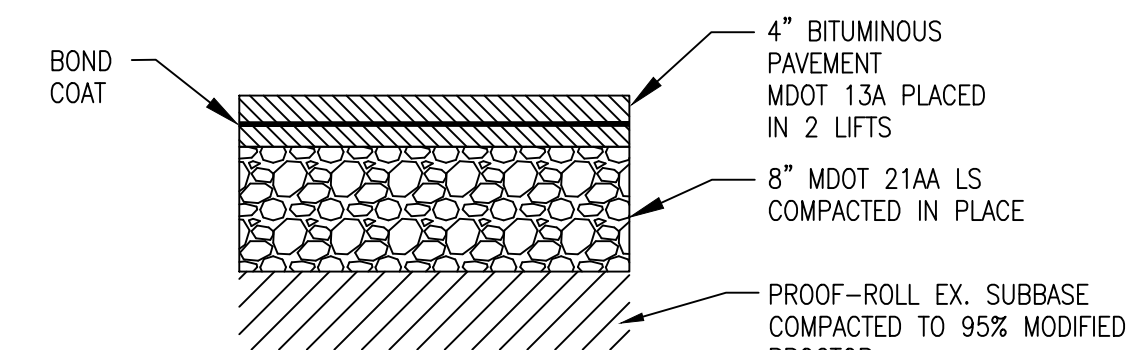
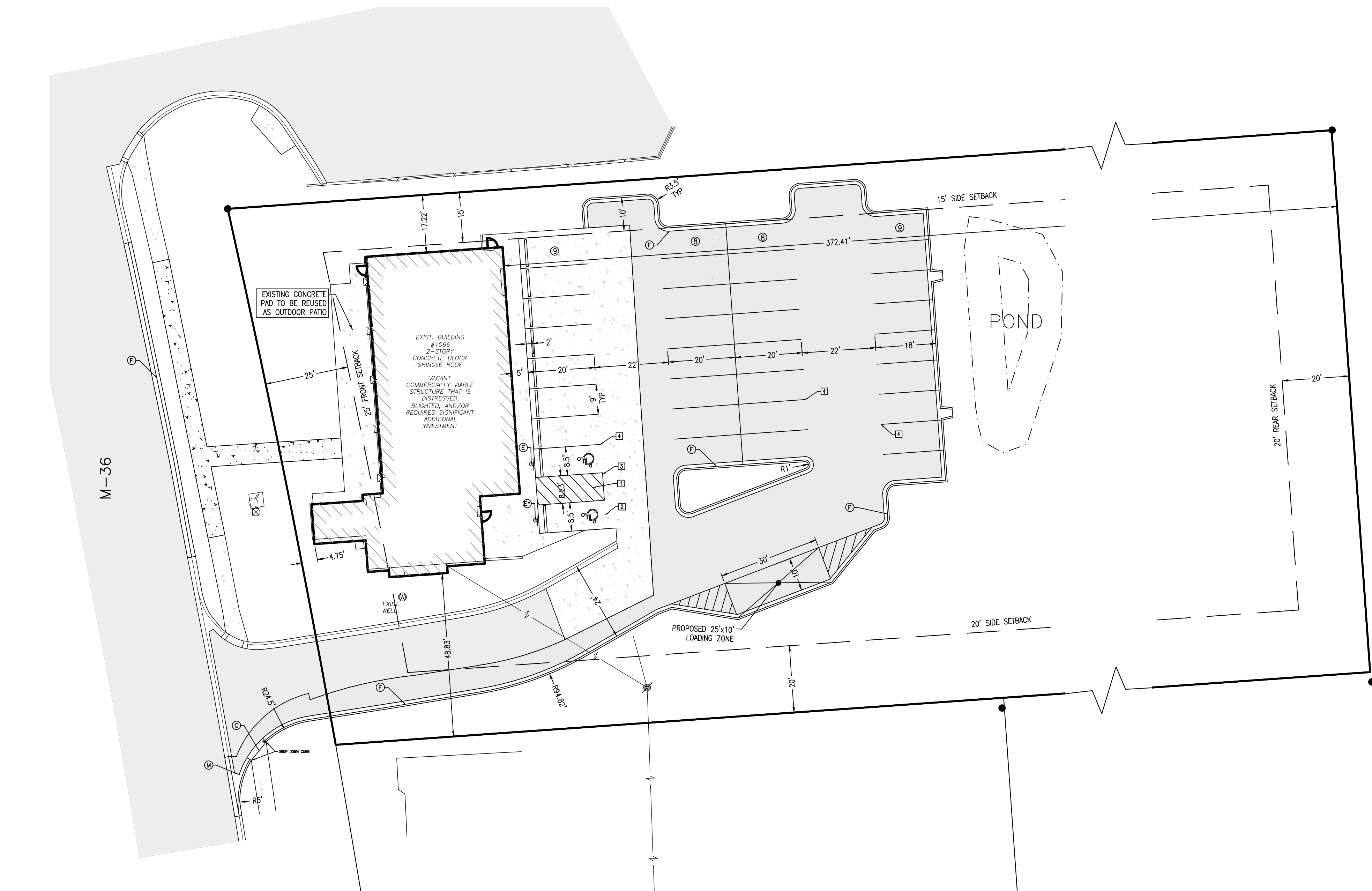
DATE	REVISIONS

21163	Drawn: JLM	Checked: DL	Approved:	Date: 05-21-2025
Scale:				
Vertical:				
Horizontal:				

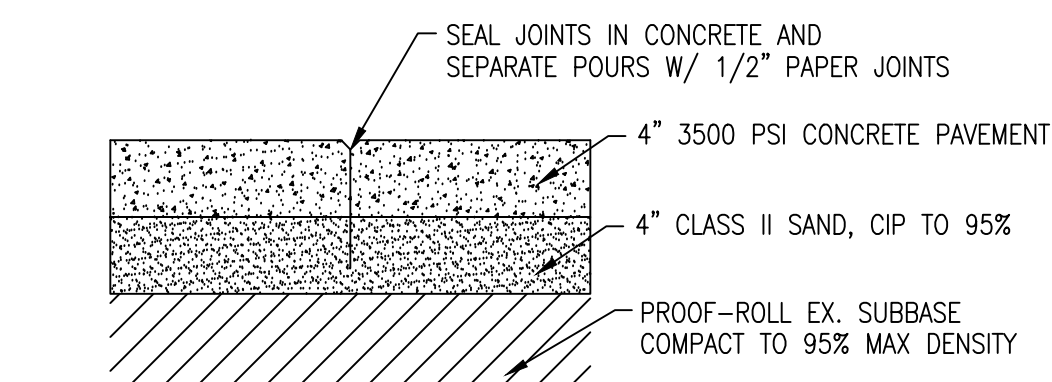


FILE:C:\Users\User\Living\Dropbox\Projects\2021\21163 OPS 1066 E M36 Pinckney\03 DWG\ Prelim Site Plan\21163_02 Exist & Removals.dwg

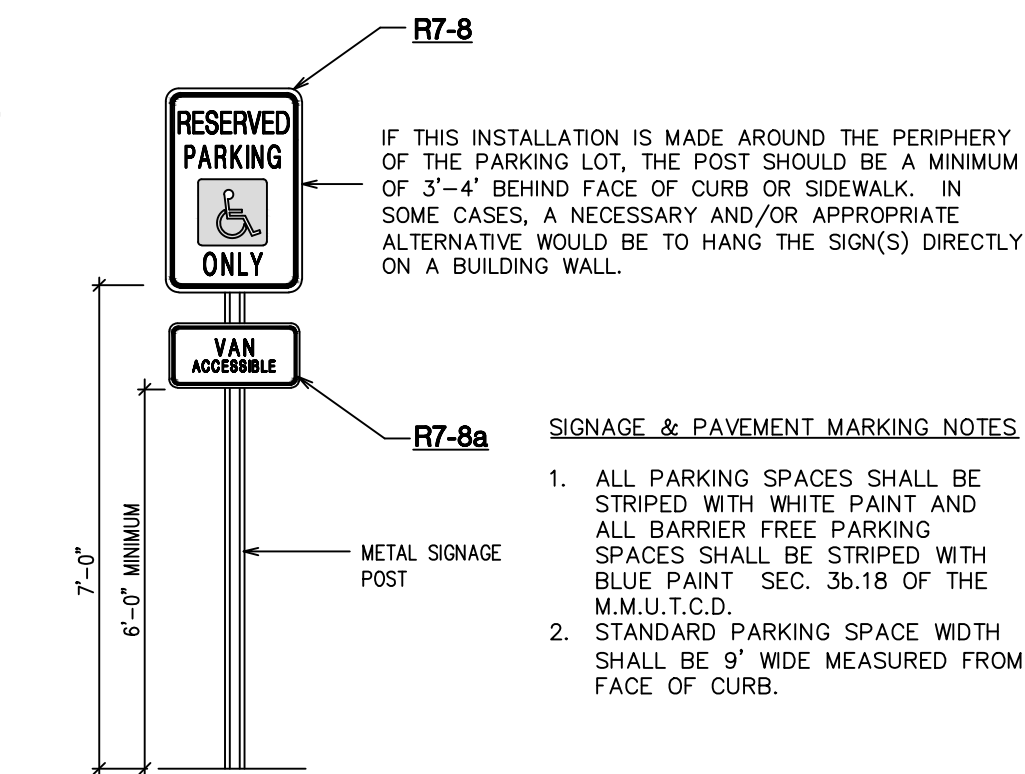
SITE LAYOUT PLAN



B ASPHALT PAVEMENT SECTION
NOT TO SCALE

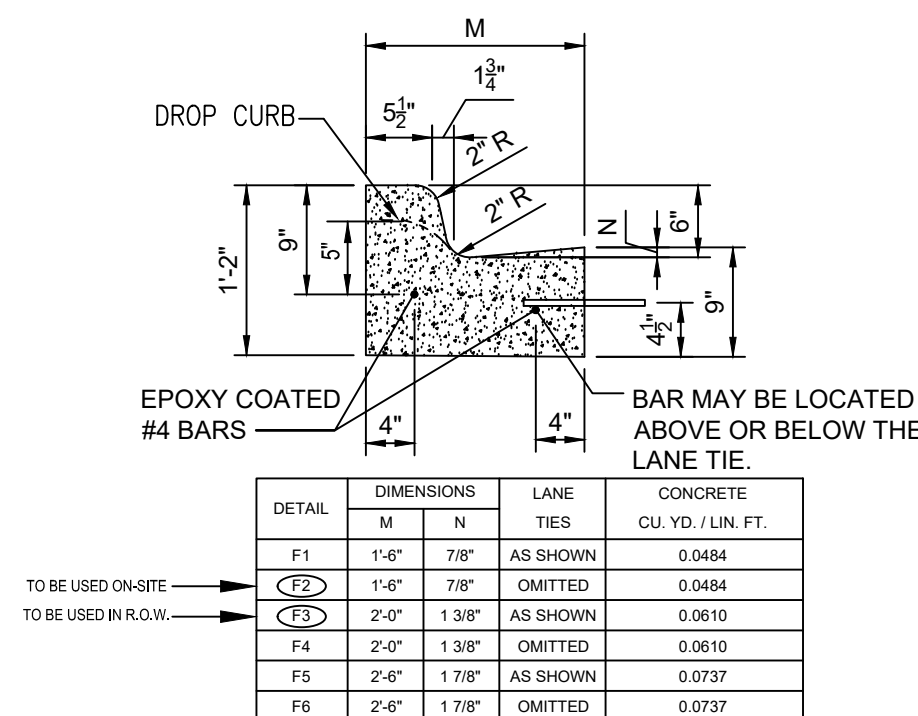


C CONCRETE SIDEWALK SECTION
** FOR USE IN SIDEWALK AREAS THAT DO NOT ABUT PAVEMENT**
NOT TO SCALE

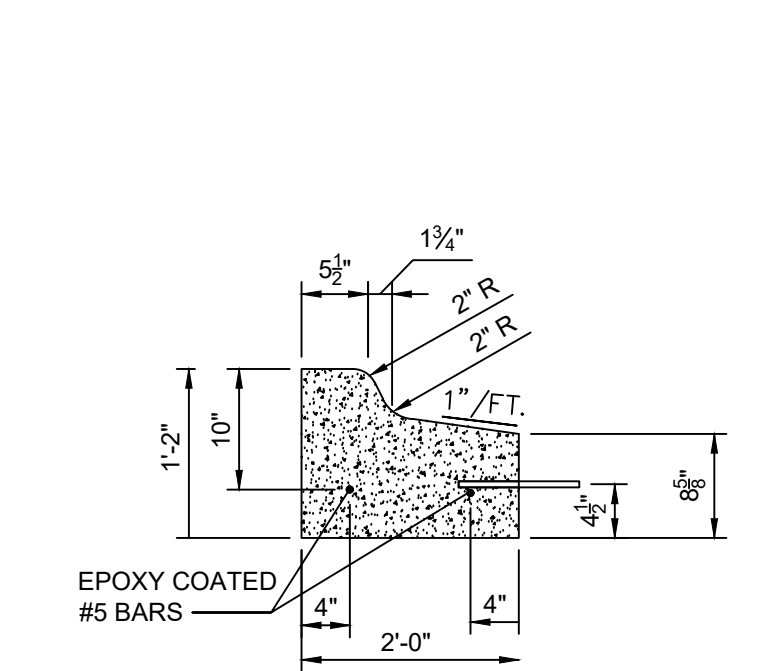


E BARRIER FREE SIGN
NOT TO SCALE

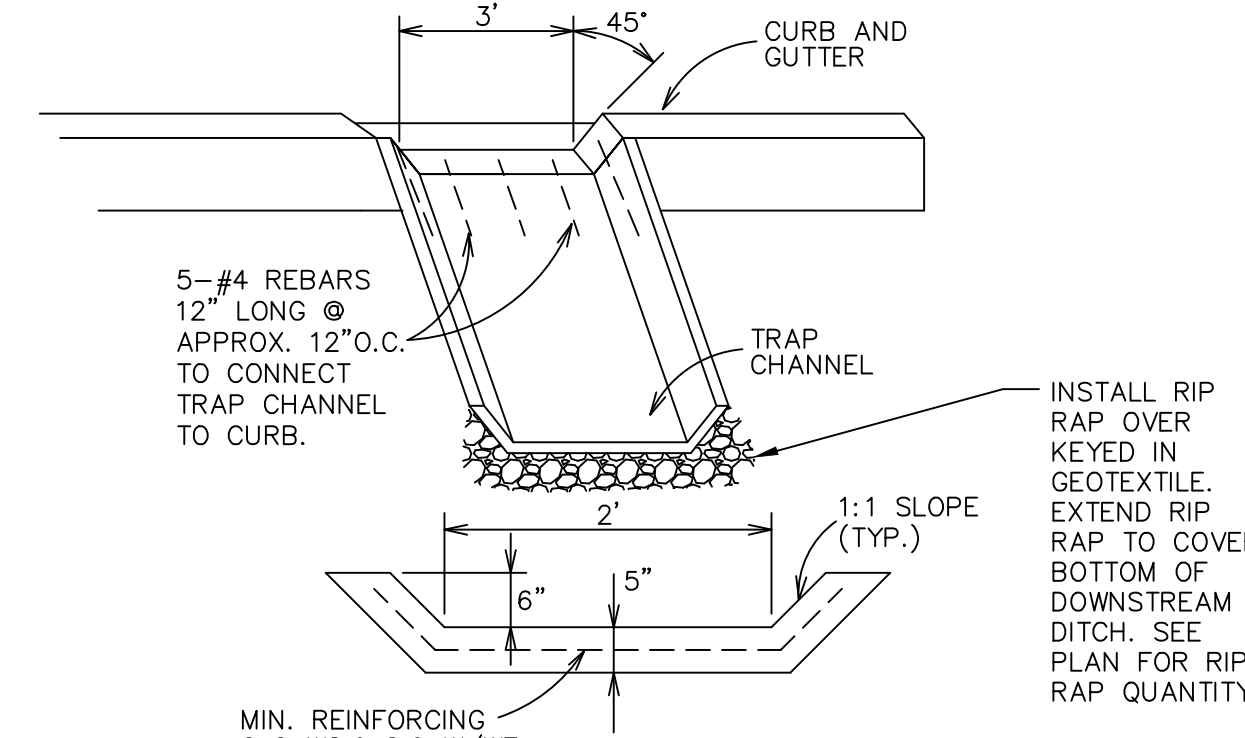
- SIGNAGE & PAVEMENT MARKING NOTES**
- ALL PARKING SPACES SHALL BE STRIPED WITH WHITE PAINT AND ALL BARRIER FREE PARKING SPACES SHALL BE STRIPED WITH BLUE PAINT SEC. 3b.18 OF THE M.M.U.T.C.D.
 - STANDARD PARKING SPACE WIDTH SHALL BE 9' WIDE MEASURED FROM FACE OF CURB.



F MDOT "F" CONCRETE CURB
NOT TO SCALE



MDOT "F" CONCRETE CURB REVERSE GUTTER DETAIL

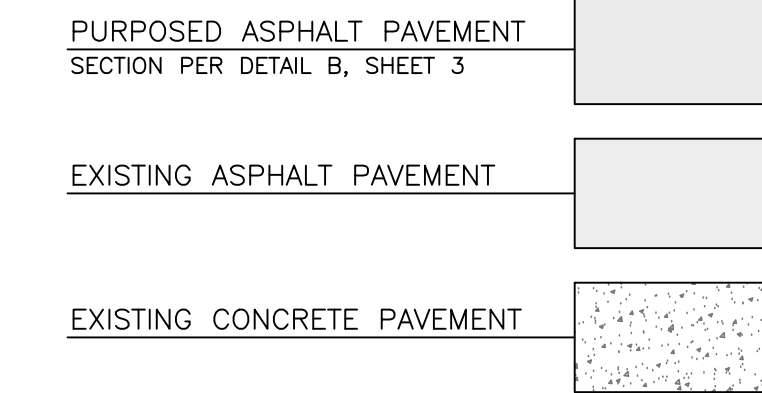


H CURB AND GUTTER SPILLWAY
NOT TO SCALE

KEYED NOTES:

- (E) BARRIER FREE SIGN WITH R7-8a INCLUDED, SEE DETAIL E ON SHEET 3
- (F) MDOT "F" CONCRETE CURB, SEE DETAIL G ON SHEET 3
- (H) CURB & GUTTER SPILLWAY, SEE DETAIL G ON SHEET 3
- (M) MDOT TYPE M CURB, SEE DETAIL M ON SHEET 3

PAVEMENT LEGEND



KEYED PAVEMENT MARKING NOTES:

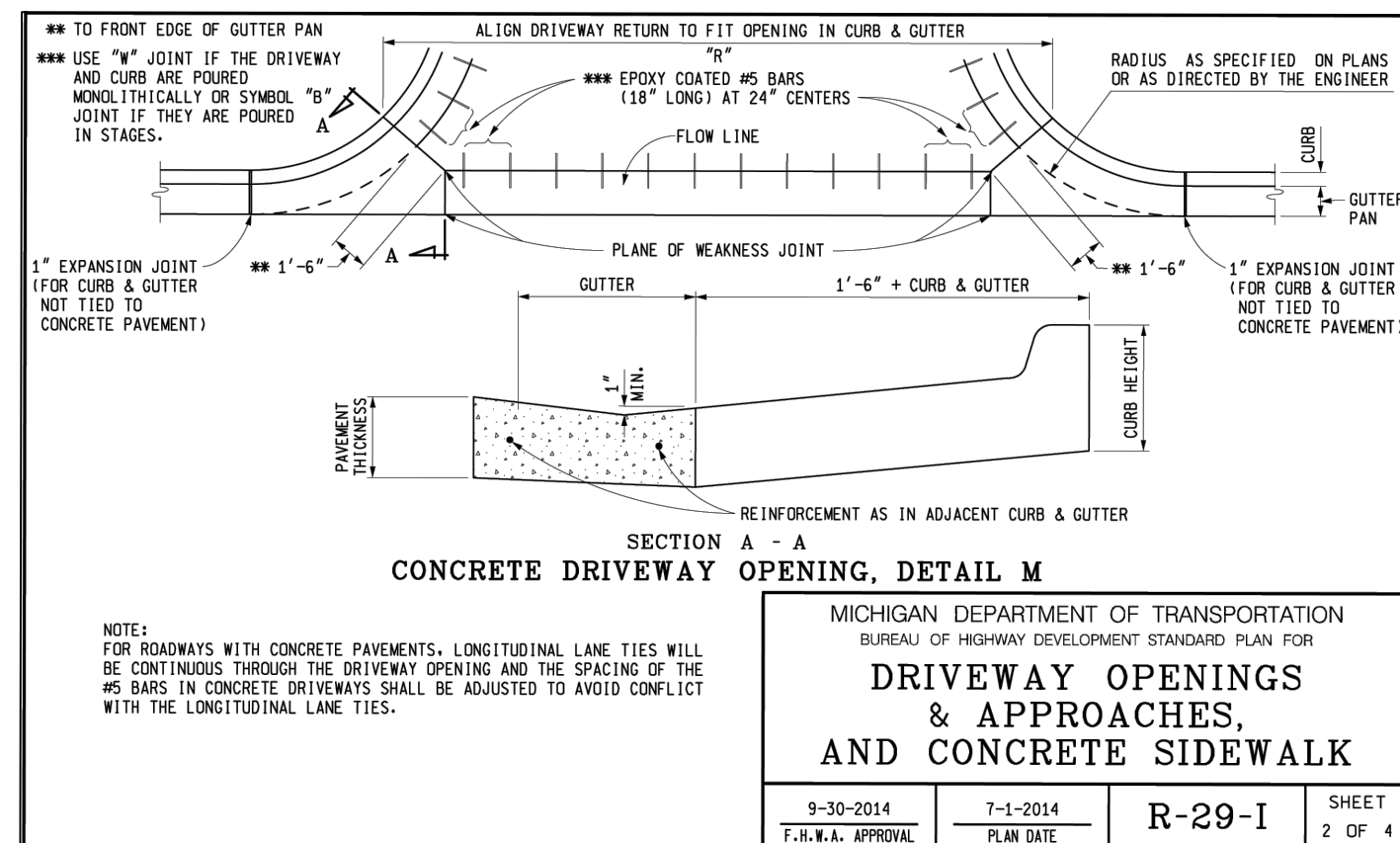
- PAINTED INTERNATIONAL SYMBOL OF ACCESSIBILITY, BLUE ADA COMPLIANT
- 4" SINGLE SOLID LINES, BLUE, 45° CROSS HATCH PATTERN (2' O.C.) WITH BORDER, ADA COMPLIANT
- 4" SINGLE SOLID LINE, BLUE
- 4" SINGLE SOLID LINES, WHITE
- 4" SINGLE SOLID LINES, WHITE, 45° CROSS HATCH PATTERN (2' O.C.) WITH BORDER

UTILITY SERVICES

THE PROPOSED DEVELOPMENT SHALL UTILIZE THE EXISTING UTILITIES WITHIN THE E MICHIGAN 36 STREET RIGHT-OF-WAY TO SERVICE THE SITE.

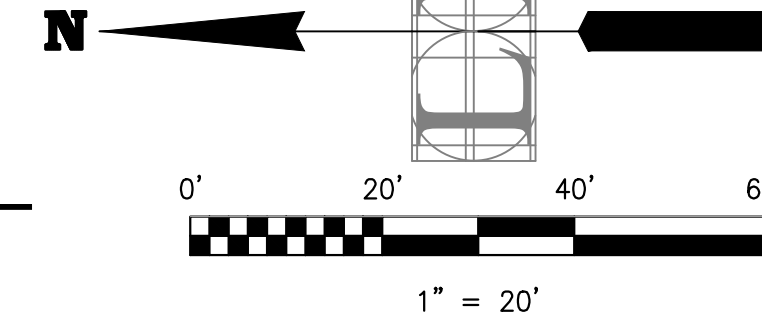
GARBAGE/REFUSE COLLECTION

CURB SIDE TRASH COLLECTION SHALL BE USED FOR THE PROPOSED DEVELOPMENT. GARBAGE/REFUSE SHALL BE STORED IN WHEELED TRASH CANS THAT SHALL BE PLACED OUT FOR PICKUP ON THE DAY OF TRASH COLLECTION.



M TYPE M CURB DETAIL
NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK			
9-30-2014 F.H.N.A. APPROVAL	7-1-2014 PLAN DATE	R-29-I	SHEET 2 OF 4



SITE GRADING AND STORM WATER MGMT PLAN

POND CALCULATIONS

Required Detention Volume - Pre-Development
Livingston County Drain Commissioner's Office Detention Methodology
Project: QPS PINCKNEY
LE Job No. = 21163

Area A = 0.81 Ac.
C = 0.64 Ave. Runoff Coefficient
K = 0.5155993
Allowable Q = 0.16 cfs (0.2 cfs per acre)

DURATION MINUTES	DURATION SECONDS	INTENSITY (in/hr)	INCHES	INFLOW VOLUME IN RUNOFF X AC	OUTFLOW DURATION X Q _o	STORAGE VOLUME INFLOW - OUTFLOW
5	300	9.17	2751	1751	48.33746556	1303
10	600	7.86	4716	3001	96.67493113	2335
15	900	6.88	6192	3941	145.0123967	3048
20	1200	6.11	7332	4696	193.3498623	3587
30	1800	5.00	9000	5728	290.0247934	4350
60	3600	3.24	11664	8214	580.0495868	5434
90	5400	2.39	12906	8707	870.0743802	5784
120	7200	1.90	13680	9211	1160.099174	5893
180	10800	1.34	14472	9211	1740.14876	5722

Required Pre-Dev Volume, V_p = 5893 cf

Required Detention Volume - Post-Development
Livingston County Drain Commissioner's Office Detention Methodology
Project: QPS PINCKNEY
LE Job No. = 21163

Area A = 0.81 Ac.
C = 0.79 Ave. Runoff Coefficient
K = 0.6364433
Allowable Q = 0.16 cfs (0.2 cfs per acre)

DURATION MINUTES	DURATION SECONDS	INTENSITY (in/hr)	INCHES	INFLOW VOLUME IN RUNOFF X AC	OUTFLOW DURATION X Q _o	STORAGE VOLUME INFLOW - OUTFLOW
5	300	9.17	2751	1751	48.33746556	1303
10	600	7.86	4716	3001	96.67493113	2305
15	900	6.88	6192	3941	145.0123967	3796
20	1200	6.11	7332	4696	193.3498623	4473
30	1800	5.00	9000	5728	290.0247934	5438
60	3600	3.24	11664	8214	580.0495868	6843
90	5400	2.39	12906	8707	870.0743802	7344
120	7200	1.90	13680	9211	1160.099174	7540
180	10800	1.34	14472	9211	1740.14876	7470

Required Post-Dev Volume, V_{post} = 7546 cf

Required Net Volume, V_{post}-V_{pre} = 1653 cf

STORM WATER
DETENTION POND CALCULATIONS
Project: QPS 1066 E M36 PINCKNEY
Livingston Engineering Project No. 21163
Livingston County Drain Commission Method

I. Common Items and Assumptions:

- A. First Flush = $(0.5/12) \times 43,560 \times \text{area} \times \text{developed C}$
- B. Bankfull Flood = $8,160 \times \text{area} \times \text{developed C}$
- C. Detention Volume Equation
- $V = (A_1 + A_2) / 2 \times H$
where, A_1 = Area at top of storage elevation
 A_2 = Area at bottom of storage elevation
H = Depth of analysis

II. Detention Pond Volumes:

- A. First Flush, Bankfull Flood and 100-year Storm Event

1. Contributing Area = 0.81 Ac.

2. Runoff Coefficient for Pre and Post Development conditions:

	Area (A) Ac.	Coefficient (C)	A x C
Rooftop / Asphalt Area	0.35	0.90	0.32
Gravel Area	0.13	0.70	0.09
Lawn/Landscaped Area	0.32	0.20	0.06
Totals:	0.81		0.47

Pre-Developed C_{pre} = 0.47 / 0.81 = 0.59

	Area (A) Ac.	Coefficient (C)	A x C
Rooftop / Asphalt Area	0.59	0.90	0.53
Gravel Area	0.00	0.70	0.00
Lawn/Landscaped Area	0.21	0.20	0.04
Totals:	0.81		0.58

Post-Developed C_{post} = 0.58 / 0.81 = 0.71

3. First Flush Volume:

$V = (0.5/12) \times 43,560 \times 0.71 \times 0.81 = 1038 \text{ CF}$

4. Bankfull Flood Volume:

Bankfull Flood Volume is not applicable to this analysis

5. 100-Year Flood Volume:

See preceding net detention volume calculation

$V_f = V_{post} - V_{pre} = 1653 \text{ CF}$

B. Detention Volume Proposed

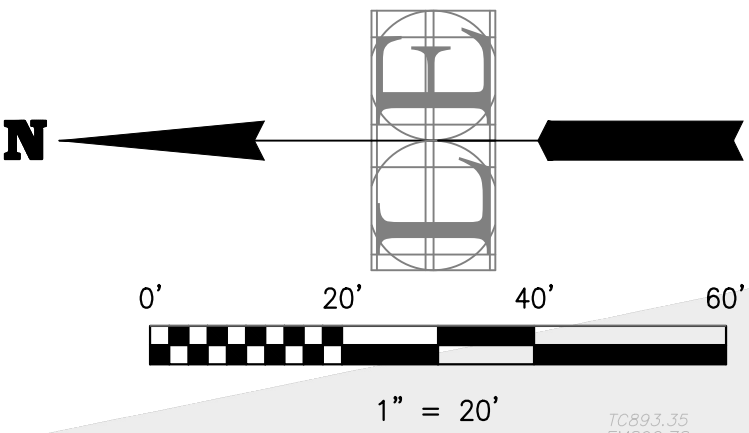
Elev.	Area(s)	Vol (cf)	Acc. Vol (cf)
872.0	231	521	521
873.0	810	1714	2235
874.0	1578	3408	5643
875.0	2515	5526	11169
Total:		3759	11169

The following interpolations determine the pond water elevations for the three different storm events:

First Flush: $\frac{874.0 - 873.0}{1714 - 521} = \frac{x - 873.0}{1038 - 521}$
 $x = \text{Elev}_{ff} = 873.43$

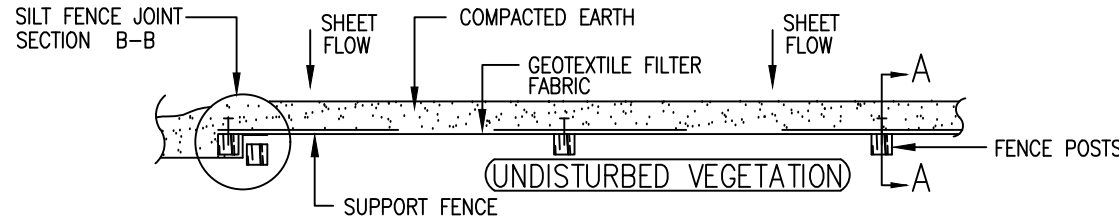
Net 100 Yr. Vol: $\frac{874.0 - 873.0}{1714 - 521} = \frac{x - 873.0}{1653 - 521}$
 $x = \text{Elev}_{100} = 873.95$

These yield pond water elevations of 873.43 and 873.95 for the First Flush and the Net 100 Yr. Storm Vol

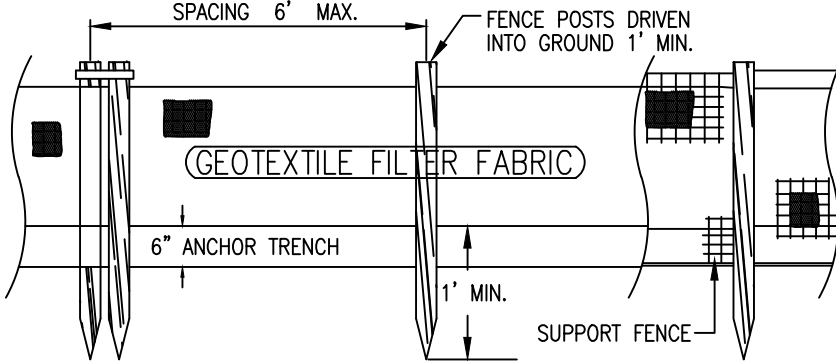


GRADING PLAN LEGEND

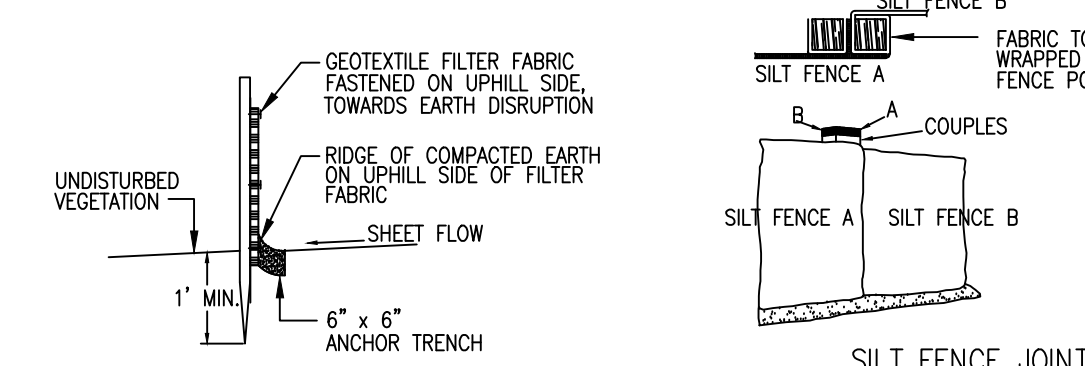
- LIMITS OF GRADING
- PR. SWALE
- PR. SPOT GRADE
- PR. TOP OF WALK ELEV
- PR. TOP OF PAVEMENT ELEV
- PR. BACK OF CURB ELEV
- PR. EDGE OF GUTTER ELEV
- PR. EDGE OF METAL ELEV
- PR. MATCH EX. GRADE
- PR. CONTOUR
- DRAINAGE ARROW



PLAN VIEW



FRONT VIEW



SECTION A-A

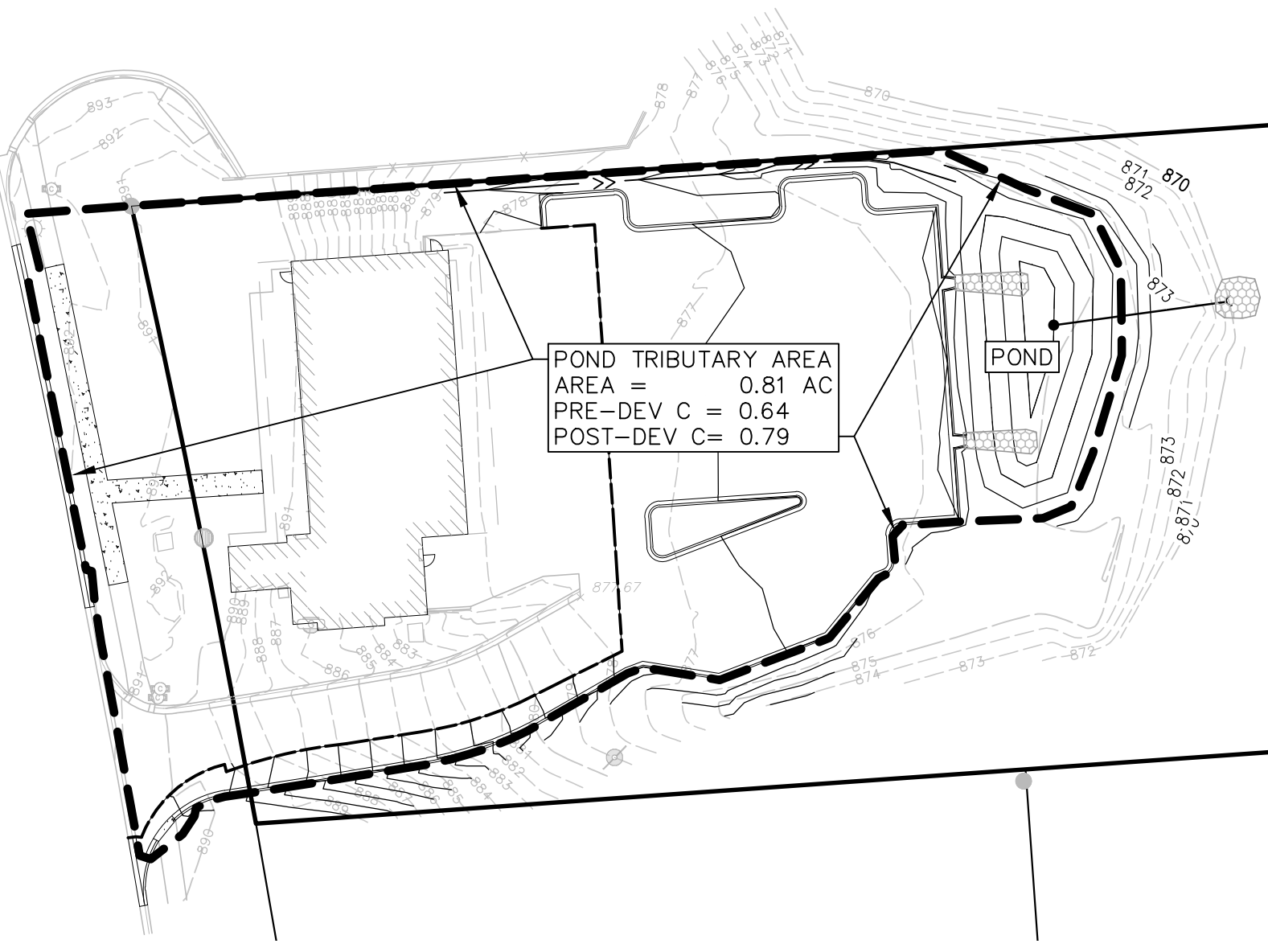
SECTION B-B

36" SILT FENCE

SITE GRADING PLAN

SCALE: 1" = 20 FEET

TOTAL DISTURBED AREA
18,320 S.F. (0.42 AC.)



POND DRAINAGE AREA MAP

SCALE: 1" = 40 FEET

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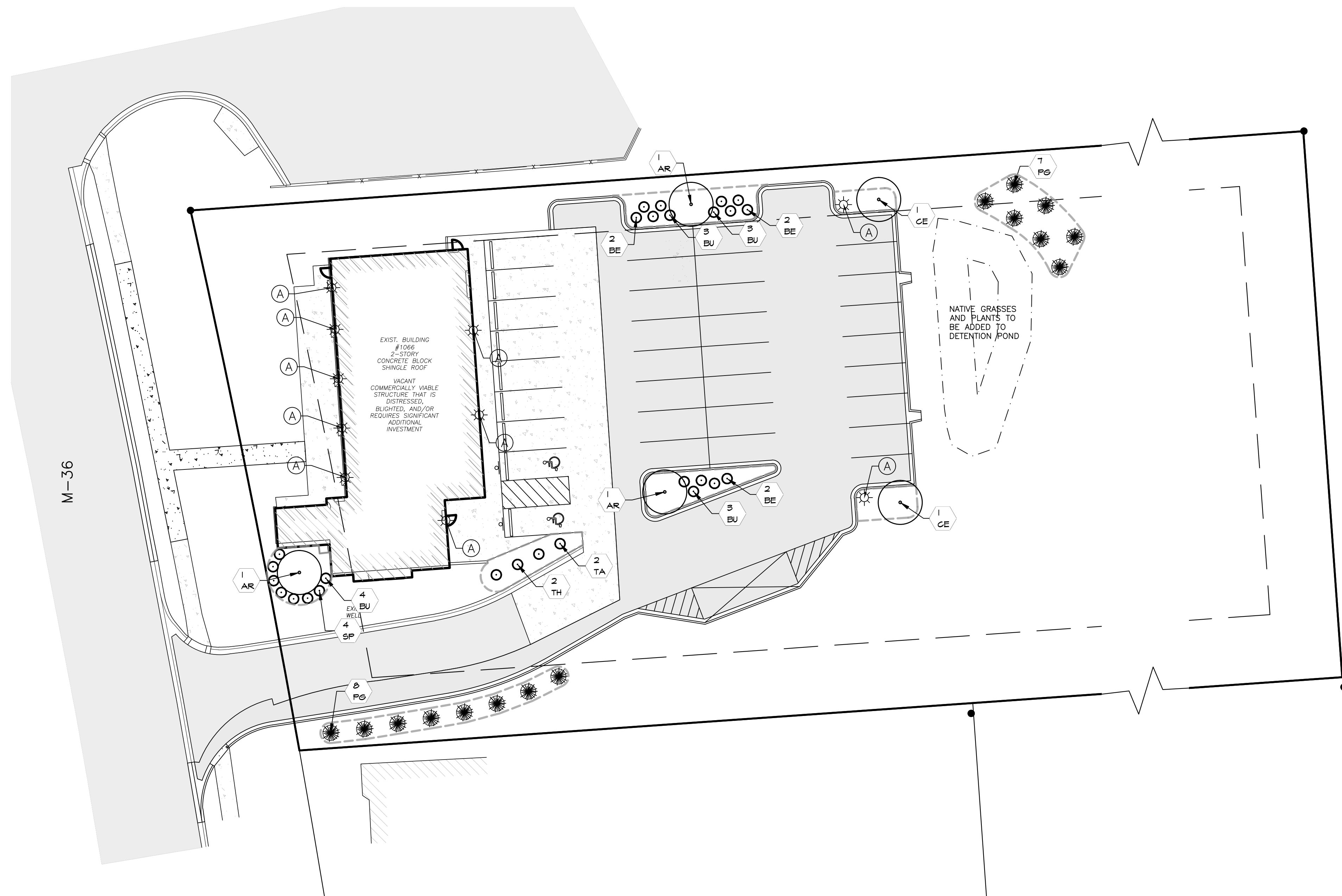
1066 E. M36
VILLAGE OF PINCKNEY, LIVINGSTON COUNTY, MICHIGAN
SITE GRADING AND STORM WATER MANAGEMENT PLAN

DATE	REVISIONS

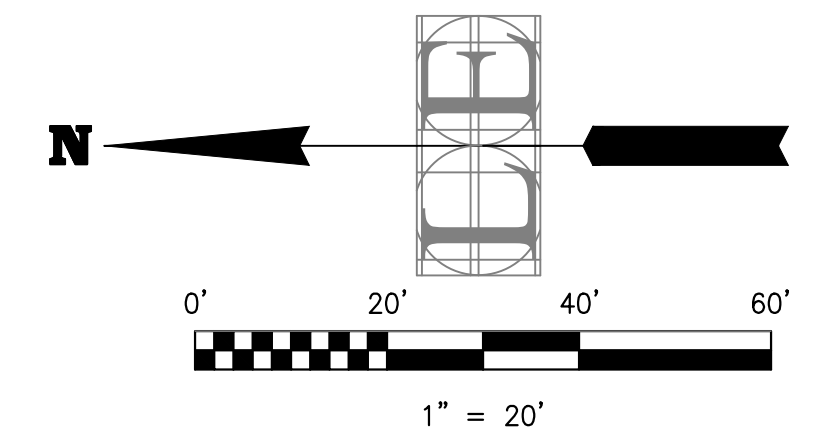
Drawn: JHM	Checked: DL	Approved:	Date: 05-21-2025
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Job No. 21163	Scale:	Vertical:	Horizontal:
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LANDSCAPE PLAN



LANDSCAPE LEGEND



KEYED NOTES:

- (A) PROPOSED LIGHT LOCATIONS, LIGHTS TO BE MOUNTED ATOP A POLL AND/OR BUILDING WALL AT OR BELOW 15 FT, WITH SHIELDING AROUND THE FULL FIXTURE

LANDSCAPE CALCULATIONS

SECTION 4.304 STREET FRONTAGE LANDSCAPING STANDARDS: STREET TREES

1 TREE PER 30FT OF TOTAL ROAD FRONTAGE
TOTAL ROAD FRONTAGE = 163.2 FT

REQUIRED STREET TREES = $1 \times 163.2/30 = (5.44)$ 5 TREES
PROPOSED STREET TREES = 5 DECIDUOUS TREES

STREET SHRUBS

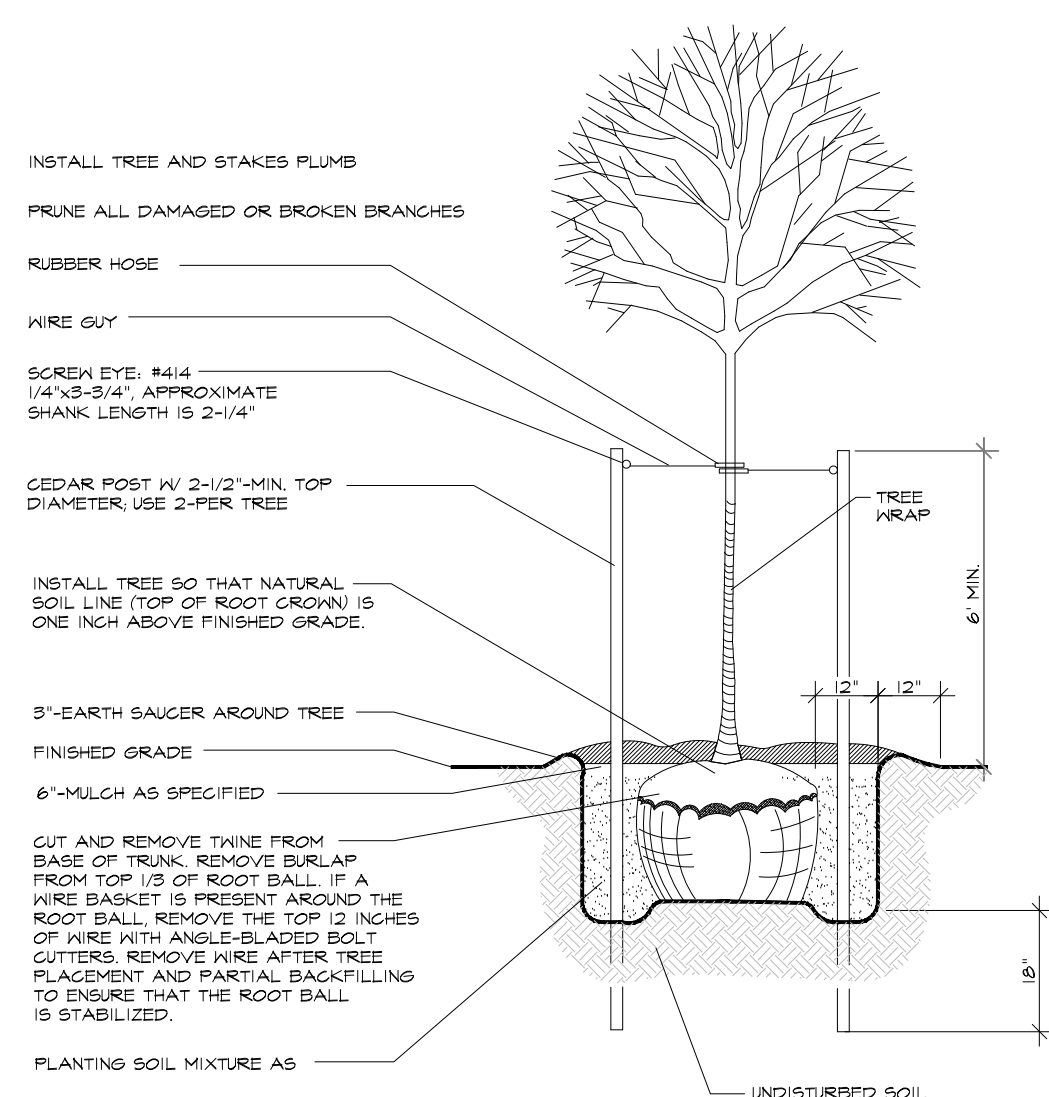
5 SHRUBS PER 30FT OF TOTAL ROAD FRONTAGE
TOTAL ROAD FRONTAGE = 163.2 FT

REQUIRED STREET SHRUBS = $5 \times 163.2/30 = (27.2)$ 27 SHRUBS
PROPOSED STREET SHRUBS = 27 SHRUBS

LANDSCAPE NOTE

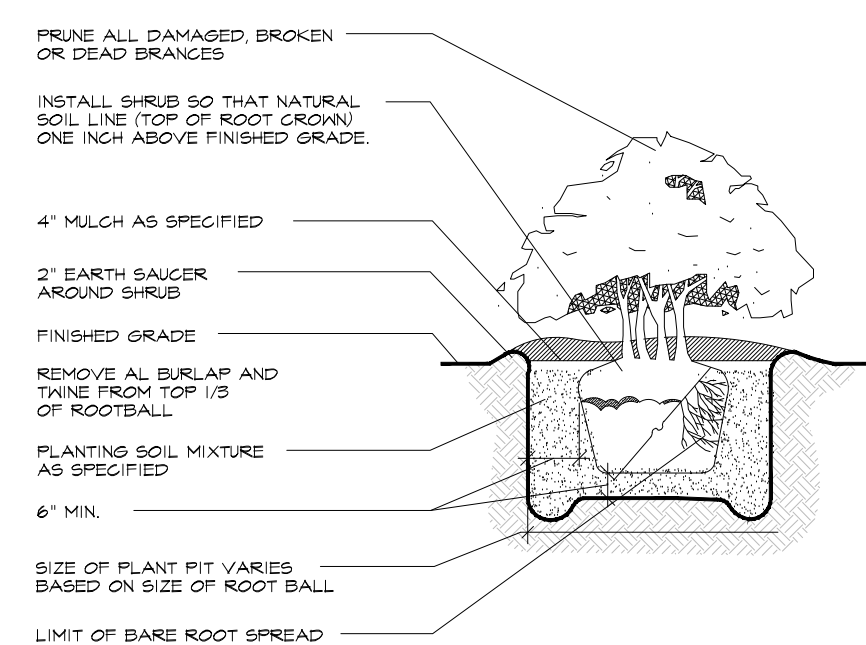
THE AREAS ON THE SITE WHICH ARE NOT BEING PAVED SHALL BE SEEDED AND MULCHED AS NEEDED TO ESTABLISH LUSH GRASSED LAWN AREAS. THESE GRASSED LAWN AREAS SHALL RECEIVE REGULAR LAWN SERVICE IN ORDER TO MAINTAIN THE APPEARANCE OF THE SITE AND TO PRESERVE THESE LAWN AREAS.

Deciduous Trees				Caliper	Qty	Height	Root
Key	Qty	Genus	Common Name				
AR	3	Acer rubrum	Red Maple	2.5"			B & B
CE	2	Celtis occidentalis	Common Hackberry	2.5"			B & B
Evergreen Trees							
Key	Qty	Genus	Common Name				
PG	15	Picea glauca	Norway Spruce			8'	B & B
Large Shrubs							
Key	Qty	Genus	Common Name				
TA	2	Taxus x media 'Densiformis'	Dense Yew			24"	B & B
TH	2	Thuja occidentalis 'Techny'	Techny Arborvitae			24"	B & B
Medium Shrubs							
Key	Qty	Genus	Common Name				
BE	6	Berberis thunbergii 'Aurea'	Admiration Japanese Barberry			18"	B & B
BU	13	Buxus 'Green Velvet'	Green Velvet Boxwood			18"	B & B
SP	4	Rosa 'Carefree Beauty'	Carefree Beauty Rose			18"	B & B



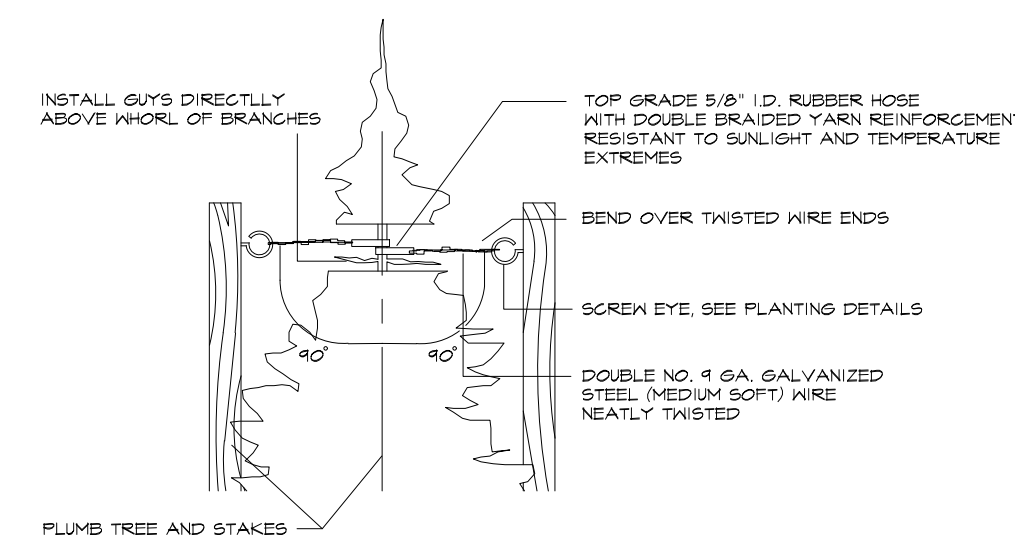
Deciduous Tree Planting/ Staking Detail

UNDER 3" IN CALIPER

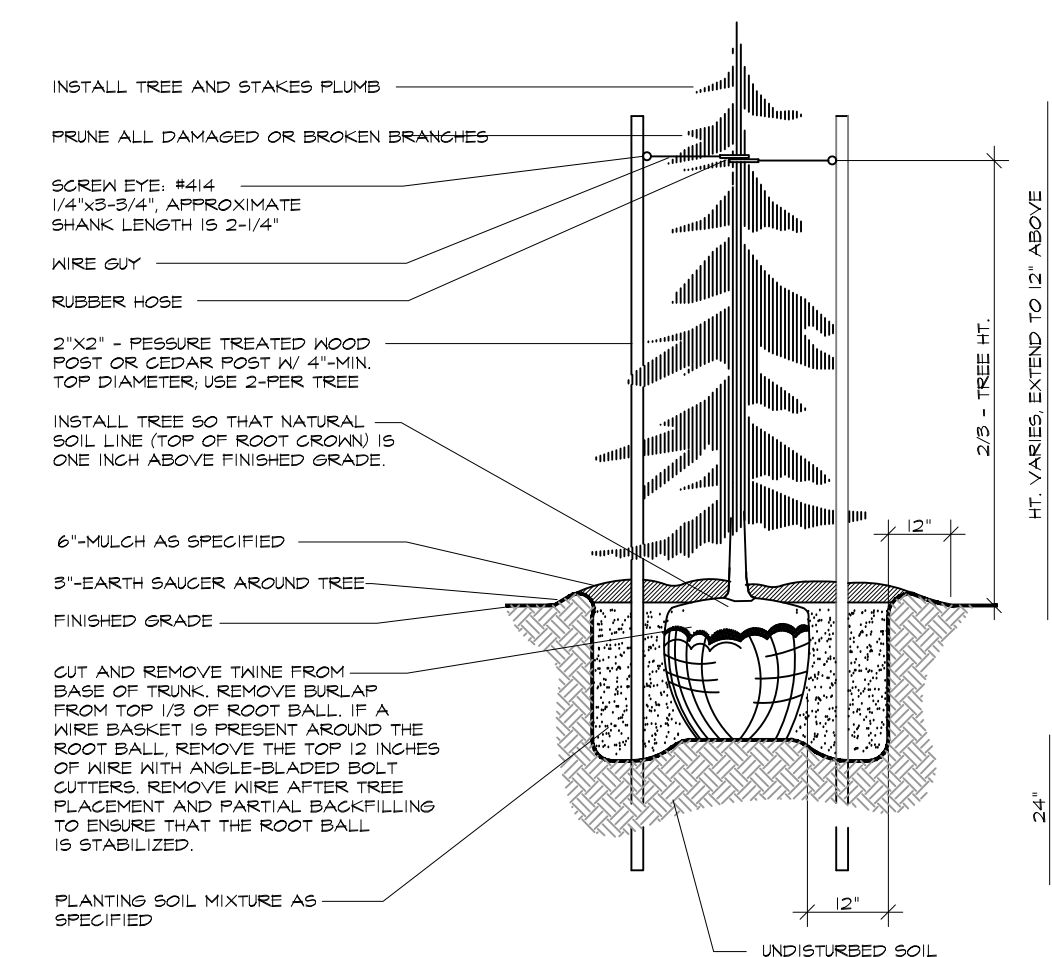


Shrub Planting Detail

SCALE: NO SCALE



Guy Installation Detail



Evergreen Tree Planting/ Staking Detail

6' IN HEIGHT AND ABOVE