



COMMUNITY DEVELOPMENT DEPARTMENT

45175 Ten Mile Road
Novi, MI 48375
(248) 347-0415 Phone
(248) 735-5600 Facsimile
www.cityofnovi.org

ZONING BOARD OF APPEALS STAFF REPORT

FOR: City of Novi Zoning Board of Appeals

ZONING BOARD APPEALS DATE: September 12, 2017

REGARDING: 48150 Grand River, Parcel #50-22-17-226-003 (PZ17-0041)

BY: Larry Butler, Deputy Director Community Development

I. GENERAL INFORMATION:

Applicant

Giffles Webster

Variance Type

Dimensional Variance

Property Characteristics

Zoning District:	Office Service Commercial
Location:	East of Wixom and North of Grand River
Parcel #:	50-22-17-226-003

Request

The applicant is requesting a variance from the City of Novi Ordinance Sections 5.3.2 for 1 foot reduce parking length, Section 5.11.2 to extend fence into front yard, Section 3.1.22.D 15 foot reduction in rear parking setback, 20 foot minimum required. This property is zoned Office Service Commercial (OSC).

II. STAFF COMMENTS:

III. RECOMMENDATION:

The Zoning Board of Appeals may take one of the following actions:

1. I move that we **grant** the variance in Case No. **PZ17-0041**, sought by _____, for _____ because Petitioner has shown practical difficulty requiring _____.
- (a) Without the variance Petitioner will be unreasonably prevented or limited with respect to use of the property because _____.
- (b) The property is unique because _____.
- (c) Petitioner did not create the condition because _____.

_____.

(d) The relief granted will not unreasonably interfere with adjacent or surrounding properties because_____.

_____.

(e) The relief if consistent with the spirit and intent of the ordinance because

_____.

_____.

(f) The variance granted is subject to:

1. _____.

2. _____.

3. _____.

4. _____.

2. I move that we **deny** the variance in Case No. **PZ17-0041**, sought by _____, for _____ because Petitioner has not shown practical difficulty requiring _____.

(a) The circumstances and features of the property including _____ are not unique because they exist generally throughout the City.

(b) The circumstances and features of the property relating to the variance request are self-created because _____.

(c) The failure to grant relief will result in mere inconvenience or inability to attain higher economic or financial return based on Petitioners statements that _____.

(d) The variance would result in interference with the adjacent and surrounding properties by _____.

(e) Granting the variance would be inconsistent with the spirit and intent of the ordinance to _____.

Should you have any further questions with regards to the matter please feel free to contact me at (248) 347-0417.

Larry Butler
Deputy Director Community Development
City of Novi



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ZONING BOARD OF APPEALS APPLICATION

APPLICATION MUST BE FILLED OUT COMPLETELY

I. PROPERTY INFORMATION (Address of subject ZBA Case)				Application Fee: <u>\$300</u>	
PROJECT NAME / SUBDIVISION Oakland County Security Upgrades				Meeting Date: <u>September 12</u>	
ADDRESS 48150 Grand River Avenue		LOT/SUITE/SPACE # N/A		ZBA Case #: <u>PZ 17-0041</u>	
SIDWELL # 50-22-17 - 226 - 003		May be obtain from Assessing Department (248) 347-0485			
CROSS ROADS OF PROPERTY <small>North of Grand River, West of Beck Rd.</small>					
IS THE PROPERTY WITHIN A HOMEOWNER'S ASSOCIATION JURISDICTION? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			REQUEST IS FOR: <input type="checkbox"/> RESIDENTIAL <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> VACANT PROPERTY <input type="checkbox"/> SIGNAGE		
DOES YOUR APPEAL RESULT FROM A NOTICE OF VIOLATION OR CITATION ISSUED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					
II. APPLICANT INFORMATION					
A. APPLICANT		EMAIL ADDRESS apontone@giffelswebster.com		CELL PHONE NO. N/A	
NAME Anthony Pontone				TELEPHONE NO. (313) 962-4442	
ORGANIZATION/COMPANY Giffels Webster				FAX NO. (313) 962-5068	
ADDRESS 28 W. Adams Street, Suite 1200		CITY Detroit		STATE MI	ZIP CODE 48226
B. PROPERTY OWNER <input type="checkbox"/> CHECK HERE IF APPLICANT IS ALSO THE PROPERTY OWNER					
Identify the person or organization that owns the subject property:		EMAIL ADDRESS jbridges@thomasduke.com		CELL PHONE NO. 313-433-2611	
NAME Thomas Duke Company, <i>As Mgmt Agents</i>				TELEPHONE NO. 248-476-3700	
ORGANIZATION/COMPANY Novi Investment Partners, LLC				FAX NO.	
ADDRESS 232 Summit Avenue, Suite 103		CITY Brookline		STATE MA	ZIP CODE 02446
III. ZONING INFORMATION					
A. ZONING DISTRICT					
<input type="checkbox"/> R-A <input type="checkbox"/> R-1 <input type="checkbox"/> R-2 <input type="checkbox"/> R-3 <input type="checkbox"/> R-4 <input type="checkbox"/> RM-1 <input type="checkbox"/> RM-2 <input type="checkbox"/> MH <input type="checkbox"/> I-1 <input type="checkbox"/> I-2 <input type="checkbox"/> RC <input type="checkbox"/> TC <input type="checkbox"/> TC-1 <input checked="" type="checkbox"/> OTHER <u>OSC</u>					
B. VARIANCE REQUESTED					
INDICATE ORDINANCE SECTION (S) AND VARIANCE REQUESTED:					
1. Section <u>5.3.2</u>		Variance requested		<u>Reduce parking space length from 19' to 18' and reduce maneuvering lane from 24' to 22'</u>	
2. Section <u>5.11.2.a</u>		Variance requested		<u>Extend fence into front and exterior side yard</u>	
3. Section <u>3.1.23.D</u>		Variance requested		<u>15' reduction in rear parking setback</u>	
4. Section <u>Sec 11-143(c)</u>		Variance requested		<u>Increase maximum slope to 1:1/ Boulder retaining wall</u> <i>← this is not through our dept.</i>	
IV. FEES AND DRAWINGS					
A. FEES					
<input type="checkbox"/> Single Family Residential (Existing) \$200 <input type="checkbox"/> (With Violation) \$250 <input type="checkbox"/> Single Family Residential (New) \$250 <input checked="" type="checkbox"/> Multiple/Commercial/Industrial \$300 <input type="checkbox"/> (With Violation) \$400 <input type="checkbox"/> Signs \$300 <input type="checkbox"/> (With Violation) \$400 <input type="checkbox"/> House Moves \$300 <input type="checkbox"/> Special Meetings (At discretion of Board) \$600					
B. DRAWINGS 1-COPY & 1 DIGITAL COPY SUBMITTED AS A PDF					
<ul style="list-style-type: none"> Dimensioned Drawings and Plans Site/Plot Plan Existing or proposed buildings or addition on the property Number & location of all on-site parking, if applicable 			<ul style="list-style-type: none"> Existing & proposed distance to adjacent property lines Location of existing & proposed signs, if applicable Floor plans & elevations Any other information relevant to the Variance application 		



ZONING BOARD OF APPEALS APPLICATION

V. VARIANCE

A. VARIANCE (S) REQUESTED

DIMENSIONAL USE SIGN

There is a five-(5) hold period before work/action can be taken on variance approvals.

B. SIGN CASES (ONLY)

Your signature on this application indicates that you agree to install a **Mock-Up Sign ten-(10) days** before the schedule ZBA meeting. Failure to install a mock-up sign may result in your case not being heard by the Board, postponed to the next schedule ZBA meeting, or cancelled. A mock-up sign is **NOT** to be actual sign. Upon approval, the mock-up sign must be removed within five-(5) days of the meeting. If the case is denied, the applicant is responsible for all costs involved in the removal of the mock-up or actual sign (if erected under violation) within five-(5) days of the meeting.

C. ORDINANCE

City of Novi Ordinance, Section 3107 – Miscellaneous

No order of the Board permitting the erection of a building shall be valid for a period longer than one-(1) year, unless a building permit for such erection or alteration is obtained within such period and such erection or alteration is started and proceeds to completion in accordance with the terms of such permit.

No order of the Board permitting a use of a building or premises shall be valid for a period longer than one-hundred and eighty-(180) days unless such use is establish within such a period; provided, however, where such use permitted is dependent upon the erection or alteration or a building such order shall continue in force and effect if a building permit for such erection or alteration is obtained within one-(1) year and such erection or alteration is started and proceeds to completion in accordance with the terms of such permit.

D. APPEAL THE DETERMINATION OF THE BUILDING OFFICIAL

PLEASE TAKE NOTICE:

The undersigned hereby appeals the determination of the Building Official / Inspector or Ordinance made

CONSTRUCT NEW HOME/BUILDING ADDITION TO EXISTING HOME/BUILDING SIGNAGE
 ACCESSORY BUILDING USE OTHER Dimensional Variance (Planning) - Zoning Ordinance

VI. APPLICANT & PROPERTY SIGNATURES

A. APPLICANT

[Handwritten Signature]
Applicant Signature

8/7/17
Date

B. PROPERTY OWNER

If the applicant is not the owner, the property owner must read and sign below:

The undersigned affirms and acknowledges that he, she or they are the owner(s) of the property described in this application and is/are aware of the contents of this application and related enclosures.

[Handwritten Signature]
Property Owner Signature

8/7/17
Date

VII. FOR OFFICIAL USE ONLY

DECISION ON APPEAL:

GRANTED

DENIED

The Building Inspector is hereby directed to issue a permit to the Applicant upon the following and conditions:

Chairperson, Zoning Board of Appeals

Date



Community Development Department

45175 Ten Mile Road
Novi, MI 48375
(248) 347-0415 Phone
(248) 735-5600 Facsimile
www.cityofnovi.org

REVIEW STANDARDS DIMENSIONAL VARIANCE

The Zoning Board of Appeals (ZBA) will review the application package and determine if the proposed Dimensional Variance meets the required standards for approval. In the space below, and on additional paper if necessary, explain how the proposed project meets each of the following standards. (Increased costs associated with complying with the Zoning Ordinance will not be considered a basis for granting a Dimensional Variance.)

Standard #1. Circumstances or Physical Conditions.

Explain the circumstances or physical conditions that apply to the property that do not apply generally to other properties in the same zoning district or in the general vicinity. Circumstances or physical conditions may include:

- a. Shape of Lot.** Exceptional narrowness, shallowness or shape of a specific property in existence on the effective date of the Zoning Ordinance or amendment.

Not Applicable Applicable If applicable, describe below:

(1-4) The parcel is currently developed and offers few other options to provide needed improvement due to the shape and shallow nature of the parcel. The plans were developed to provide safe, secure, gated parking for employees while offering improved traffic circulation on-site. The most practical and cost effective way to install the fence, improve traffic flow and add needed parking requires a dimensional variance on the size of parking spaces (which are designed to match the size of the current spaces) and maneuvering lane, which are designed to match exiting conditions, as well as the location of the fence.

and/or

- b. Environmental Conditions.** Exceptional topographic or environmental conditions or other extraordinary situations on the land, building or structure.

Not Applicable Applicable If applicable, describe below:

The embankment along the proposed north parking spaces is currently sloped to a 1:1 ratio. Upon suggestion of the City reviewer, a boulder retaining wall may be placed rather than the sloped embankment. The embankment is needed the drop in elevation from the building to the property line is five (5) feet. To accommodate parking to an ADA standard, this area was raised and has created the steep slope beyond the proposed spaces. To avoid the elimination of trees on a neighboring property, it was proposed to have the steep embankment or a boulder retaining wall.

and/or

- c. Abutting Property.** The use or development of the property immediately adjacent to the subject property would prohibit the literal enforcement of the requirements of the Zoning Ordinance or would involve significant practical difficulties.

Not Applicable Applicable If applicable, describe below:

The adjacent parcel, which borders the subject property to both the north and east, is already fully developed. The area directly to the north (on the abutting parcel) of the proposed project site has a retention pond. The presence of this feature makes it extremely unlikely that any more development is possible on the abutting portion adjacent parcel.

Standard #2. Not Self-Created.

Describe the immediate practical difficulty causing the need for the Dimensional Variance, that the need for the requested variance is not the result of actions of the property owner or previous property owners (i.e., is not self-created).

(ALL) The practical difficulty arises out of the need to provide secure employee parking that is separate from a large visitor parking lot. This is not a common design standard needed for Office Service Commercial type uses, and is typically provided for on an as-needed basis. The developer built in accordance with the OSC zoning guidelines at the the time (1990's) and even included extra parking. Because the site and building were not originally designed to be a courthouse (though its is a by right use in the OSC district), the realization for this need came after the building was occupied by the tenant for several years. Additionally, the previous owners and developers did not create the topographic conditions that now require a retaining wall design variance.

Standard #3. Strict Compliance.

Explain how the Dimensional Variance in strict compliance with regulations governing area, setback, frontage, height, bulk, density or other dimensional requirements will unreasonably prevent the property owner from using the property for a permitted purpose, or will render conformity with those regulations unnecessarily burdensome.

Strict compliance with the zoning ordinance for the proposed project would severely impact its functionality by failing to provide a safe work environment for the employees working there. The court has been a tenant at this location for several years, and over time it has been determined that this modification is essential to site security. Strict compliance with the dimensional standards in the zoning ordinance may prevent the property from being used for a permitted purpose, and conformity with the ordinance would be impractical and unnecessarily burdensome.

Standard #4. Minimum Variance Necessary.

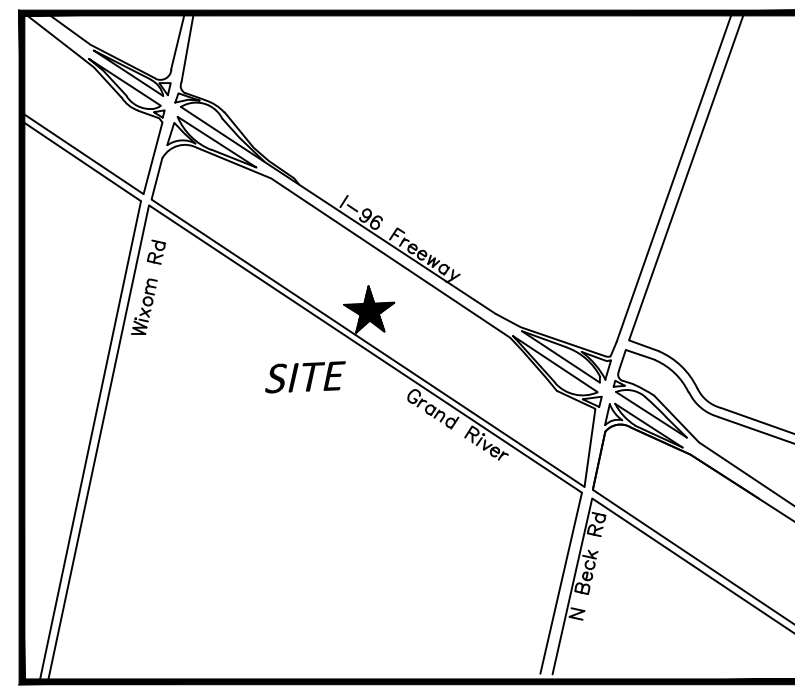
Explain how the Dimensional Variance requested is the minimum variance necessary to do substantial justice to the applicant as well as to other property owners in the district.

(1-3) The parking space dimensions and maneuvering lane size would match existing conditions that have proven sufficient over time. These variance requests are consistent with the minimum amount necessary to fit harmoniously into the current development and cause the least impact to the adjacent parcel.

Standard #5. Adverse Impact on Surrounding Area.

Explain how the Dimensional Variance will not cause an adverse impact on surrounding property, property values, or the use and enjoyment of property in the neighborhood or zoning district.

(1) As mentioned in 1.c., the area directly to the north of the project site on the abutting parcel is unlikely to be developed. There is a drainage/retention pond located there and is needed to service storm water runoff from the eastern portion of the adjacent parcel, as well as the project site via a drainage easement. Adding this drive extension and additional parking spaces will have no long-term adverse impact on the surrounding area, as any trees damaged or removed will be compensated for via an agreement with the property owner prior to construction, and the drainage easement will be updated to accommodate any additional runoff generated by the project.



LOCATION MAP
(NOT TO SCALE)



52-1 DISTRICT COURT

48150 GRAND RIVER AVEUNE
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

ZONING BOARD OF APPEALS PLAN

PROPERTY OWNER

NOVI INVESTMENT PARTNERS, LLC
232 SUMMIT AVENUE, SUITE 103
BROOKLINE, MA 02446

CLIENT

OAKLAND COUNTY FACILITIES MANAGEMENT
PLANNING & ENGINEERING
ONE PUBLIC WORKS DRIVE - 95 WEST
WATERFORD, MI 48328-0409
(248) 585-0144

ENGINEER/LANDSCAPE ARCHITECT

GIFFELS WEBSTER
28 W. ADAMS ST., SUITE 1200
DETROIT, MI 48226
(313) 962-4442

SHEET INDEX

C000.0	COVER SHEET
C100.1	NOTES & LEGEND
C250.1	EXISTING CONDITIONS
C350.1	DEMOLITION PLAN
C550.1	SITE PLAN
C551.1	GRADING PLAN
C650.1	UTILITY PLAN
C651.1	STORM WATER MANAGEMENT PLAN
C800.7	DETAILS
C800.8	DETAILS
C800.9	DETAILS
C800.10	DETAILS
SD-5	CITY OF NOVI STORM DETAILS
L550.1	LANDSCAPE PLAN

*FOR LEGEND, PLEASE SEE SHEET C100.1

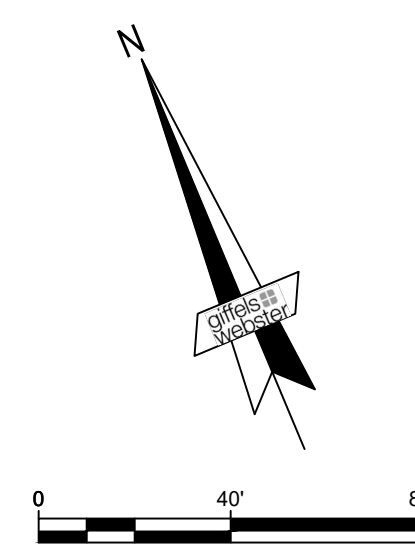
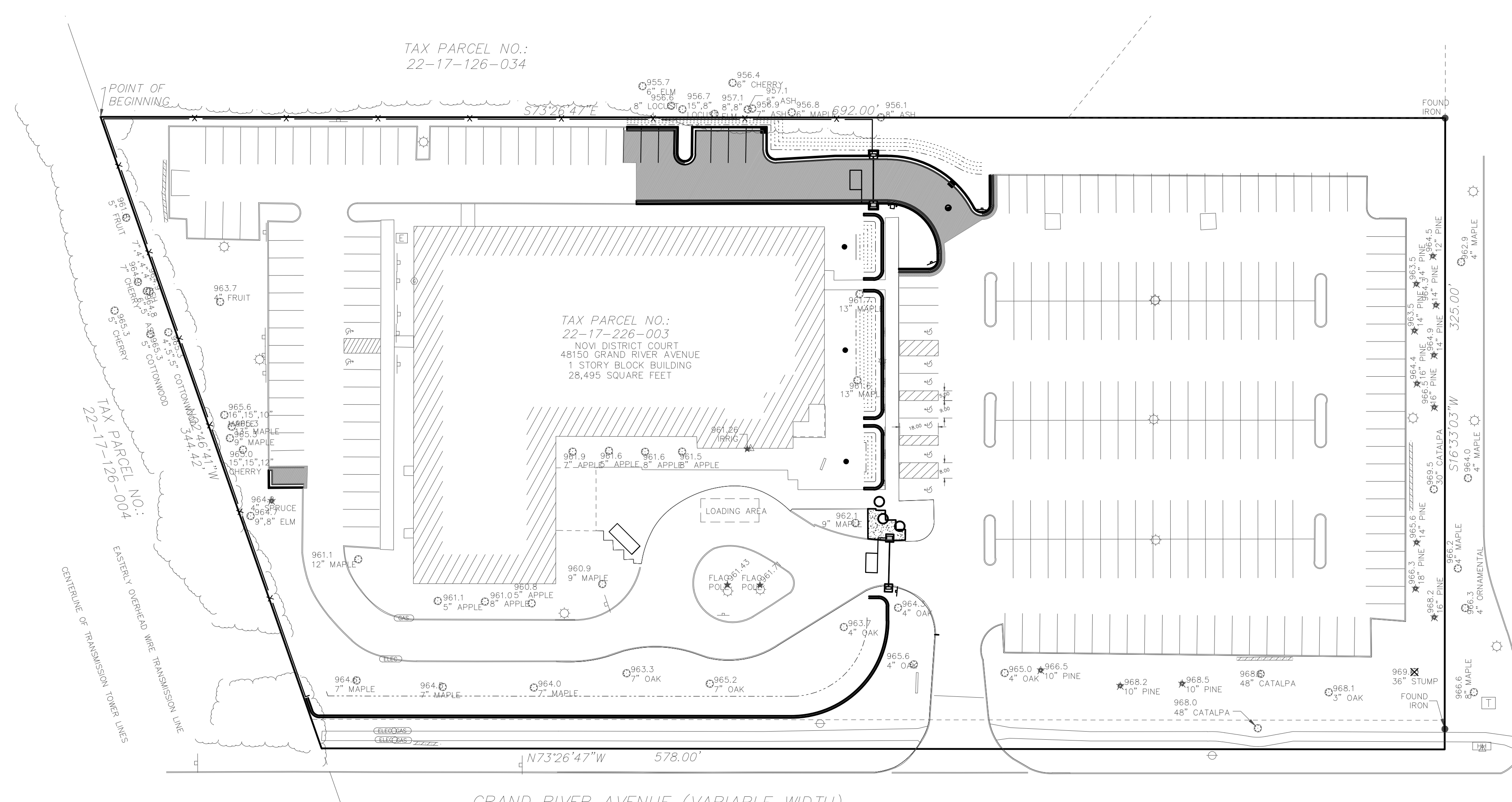
PROPERTY DESCRIPTION

(PER WARRANTY DEED AS RECORDED IN LIBER 36599, PAGE 217, OAKLAND COUNTY RECORDS.)

A PARCEL OF LAND SITUATED IN THE NORTHEAST 1/4 OF SECTION 17, TOWN 1 NORTH, RANGE 8 EAST, OAKLAND COUNTY, MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTH 1/4 CORNER OF SECTION 17 AND PROCEEDING ALONG THE NORTH AND SOUTH 1/4 LINE OF SAID SECTION 17, SOUTH 02 DEGREES 46 MINUTES 41 SECONDS EAST 382.13 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 73 DEGREES 26 MINUTES 47 SECONDS EAST 692.00 FEET; THENCE SOUTH 16 DEGREES 33 MINUTES 03 SECONDS WEST 325.00 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY LINE OF GRAND RIVER AVENUE (100 FEET WIDE); THENCE ALONG SAID NORTHERLY RIGHT OF WAY LINE NORTH 73 DEGREES 26 MINUTES 47 SECONDS WEST 578.00 FEET TO A POINT ON THE NORTH AND SOUTH 1/4 LINE OF SAID SECTION 17; THENCE ALONG THE NORTH AND SOUTH 1/4 LINE OF SAID SECTION 17, NORTH 02 DEGREES 46 MINUTES 41 SECONDS WEST 344.42 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH A WATER RETENTION EASEMENT MORE PARTICULARLY DESCRIBED IN A WATER RETENTION AGREEMENT RECORDED IN LIBER 14917, PAGE 754, OAKLAND COUNTY RECORDS.

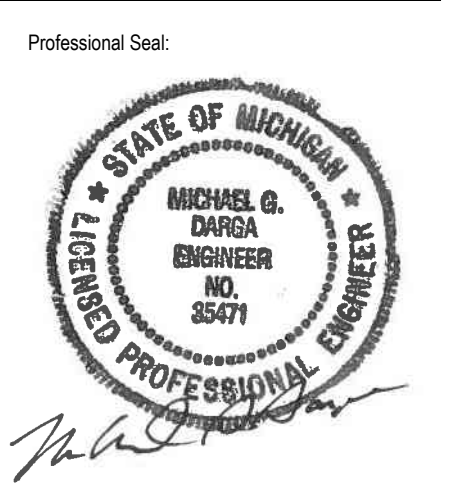
TAX PARCEL NO.: 22-17-226-003
COMMON ADDRESS: 48150 GRAND RIVER AVENUE, NOVI, MI 48374



Engineers
Surveyors
Planners
Landscape Architects

28 West Adams Road
Suite 1200
Detroit, MI 48226
p (313) 962-4442
f (313) 962-5068
www.giffelswebster.com

Executive:	STC
Manager:	MGD
Designer:	AFP
Quality Control:	STC
Section:	17
T-01-N R-08-E	



PRELIMINARY



DATE	ISSUE
05.12.2017	Owner Review
05.18.2017	Permits
07.07.2017	Site Plan Review
08.04.2017	ZBA Submittal

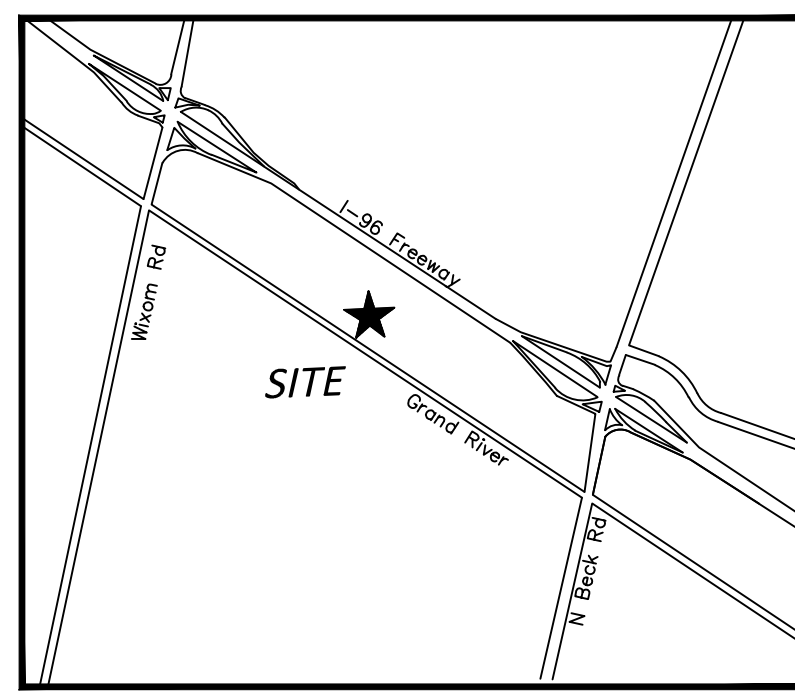
Developed For:
Oakland County Facilities Management
Planning & Engineering
One Public Works Drive - 95 West
Public Works Building
Waterford, MI 48328-0409
P 248.585.0144

Phase IV
Novi District Court
Cover
Oakland County Security Study

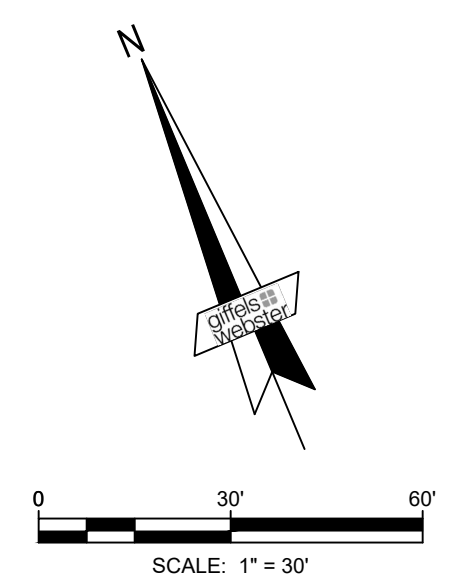
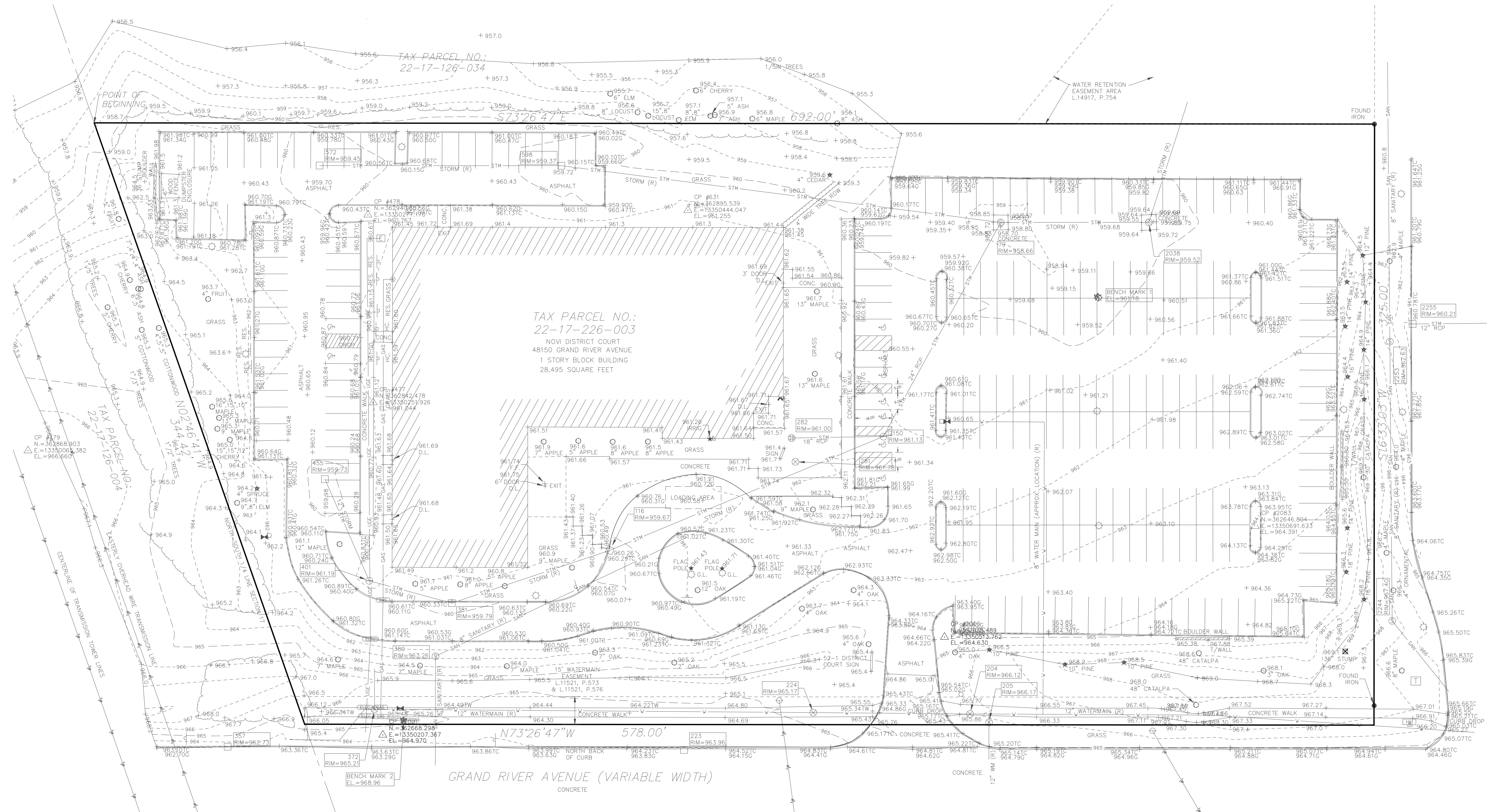
City of Novi
Oakland County
Michigan

Date:	05.08.2017
Scale:	1"=40'
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Project:	18833.60

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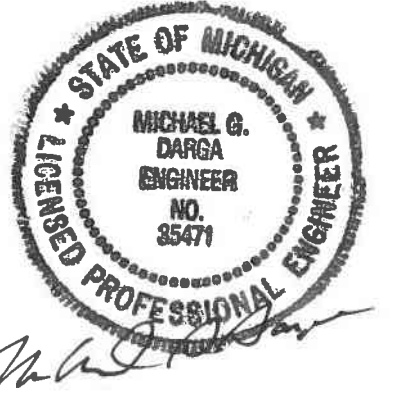


LOCATION MAP
(NOT TO SCALE)



Executive:	STC
Manager:	MGD
Designer:	AFP
Quality Control:	STC
Section:	17
T-01-N R-08-E	

Professional Seal:



PRELIMINARY



Know what's below.
Call before you dig.

DATE	ISSUE
05.12.2017	Owner Review
05.18.2017	Permits
07.07.2017	Site Plan Review
08.04.2017	ZBA Submittal

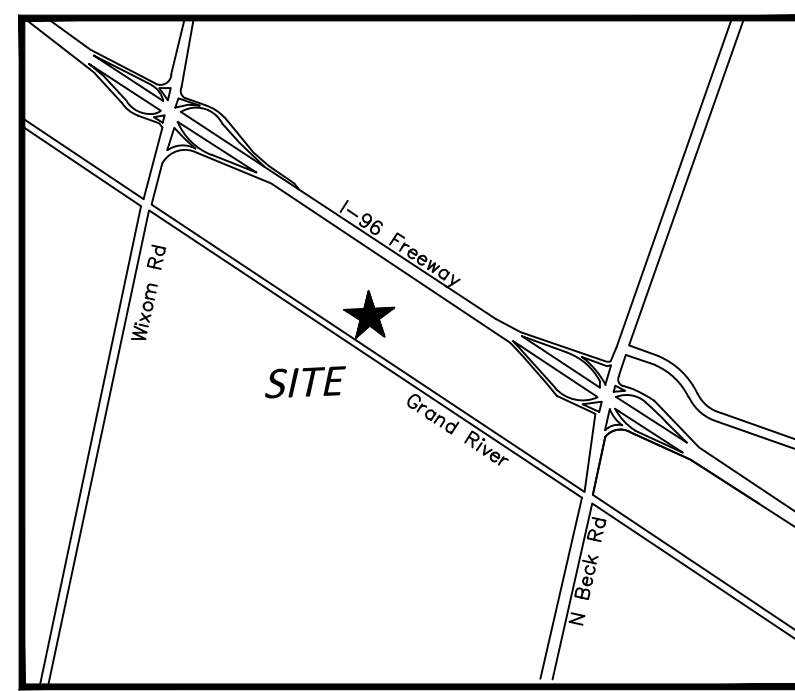
Developed For:
Oakland County Facilities Management
Planning & Engineering
One Public Works Drive - 95 West
Waterford, MI 48328-0409
P 248.585.0144

Phase IV
Novi District Court
Existing Conditions
Oakland County Security Study

City of Novi
Oakland County
Michigan

Date:	05.08.2017
Scale:	1"=30'
Sheet:	C250.1
Project:	18833.60

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LOCATION MAP
(NOT TO SCALE)

DEMOLITION KEY NOTES

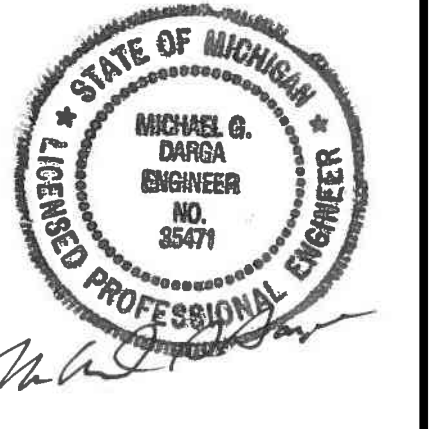
- 1 REMOVE EXISTING CURB AND GUTTER
- 2 REMOVE EXISTING TREE
- 3 SAWCUT FULL DEPTH AND REMOVE EXISTING ASPHALT PAVEMENT
- 4 REMOVE AND SALVAGE LIGHT POLE FOR REINSTALLATION. REMOVE LIGHT POLE BASE FOUNDATION. ELECTRICAL TO BE RELOCATED TO NEW LOCATION.
- 5 STRIP EXISTING GRASS AND TOP SOIL FOR PARKING, DRIVEWAY, AND EMBANKMENT

Engineers
Surveyors
Planners
Landscape Architects

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Suite 1200
Detroit, MI 48226
p (313) 962-4442
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Executive: STC
Manager: MGD
Designer: AFP
Quality Control: STC
Section: 17
T-01-N R-80-E

Professional Seal:



Know what's below.
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DATE	ISSUE
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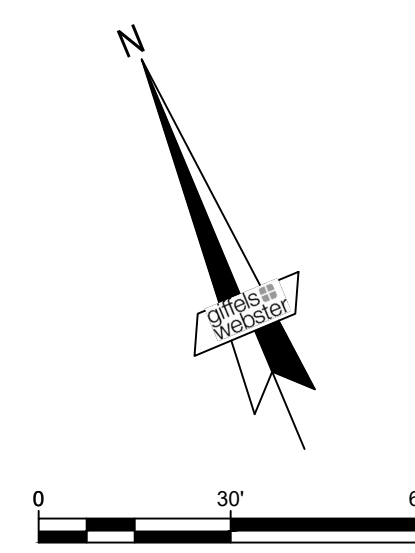
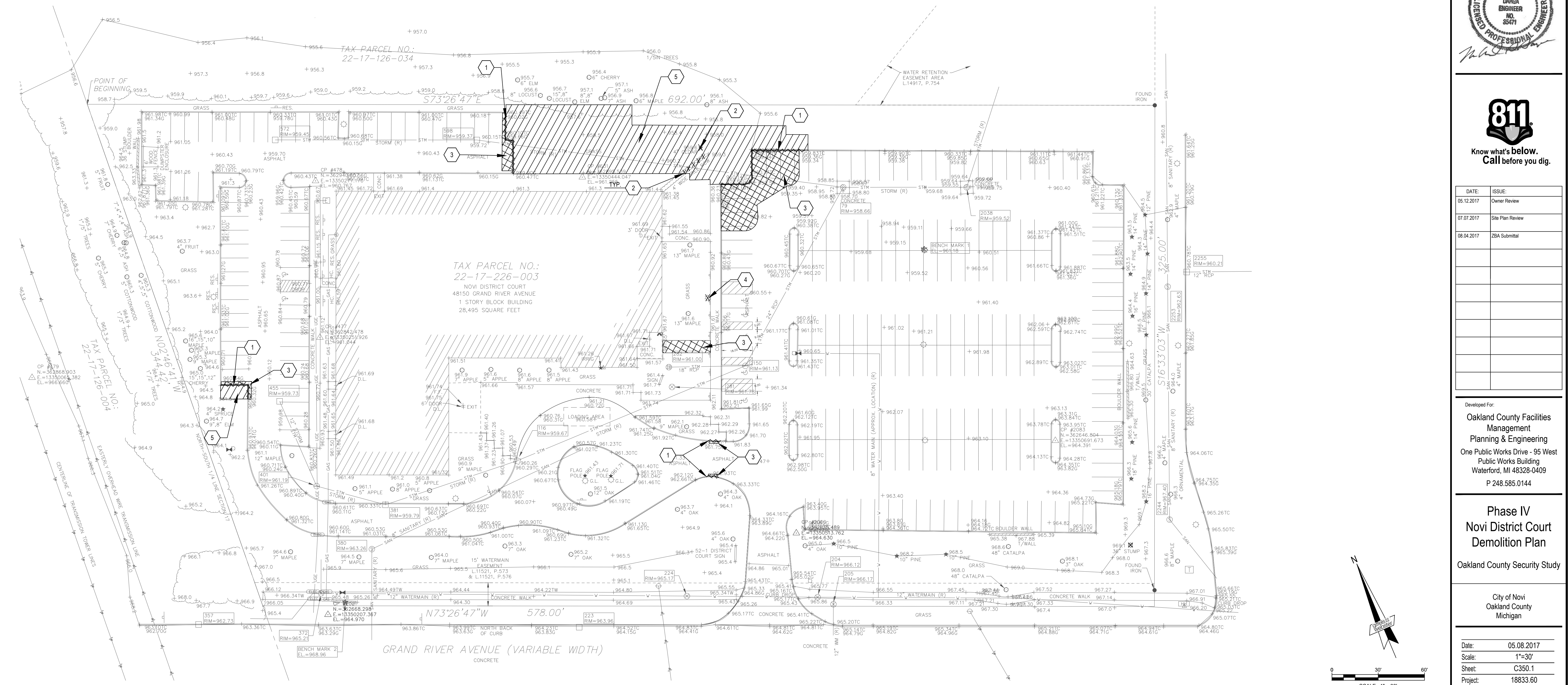
Developed For:
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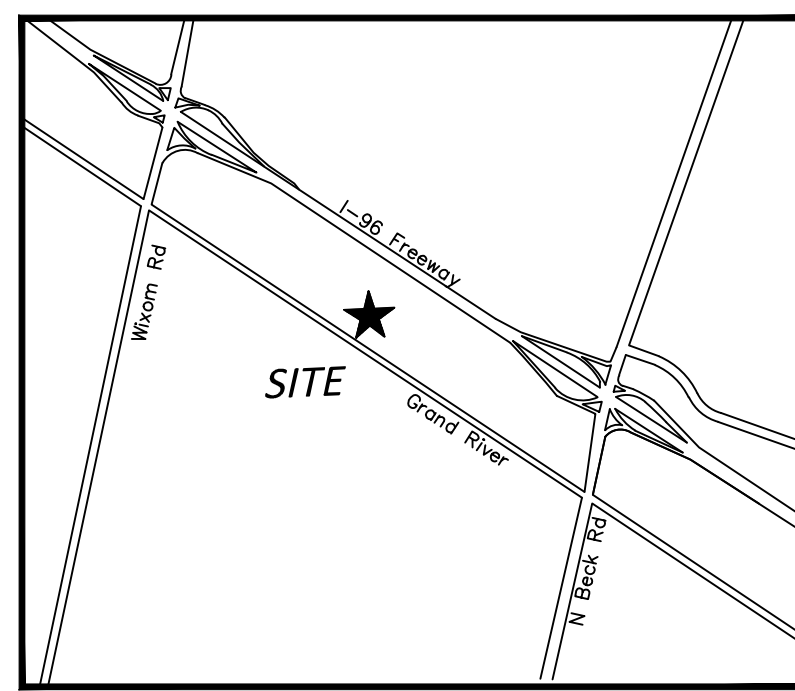
Phase IV
Novi District Court
Demolition Plan
Oakland County Security Study

City of Novi
Oakland County
Michigan

Date: 05.08.2017
Scale: 1"=30'
Sheet: C350.1
Project: 18833.60

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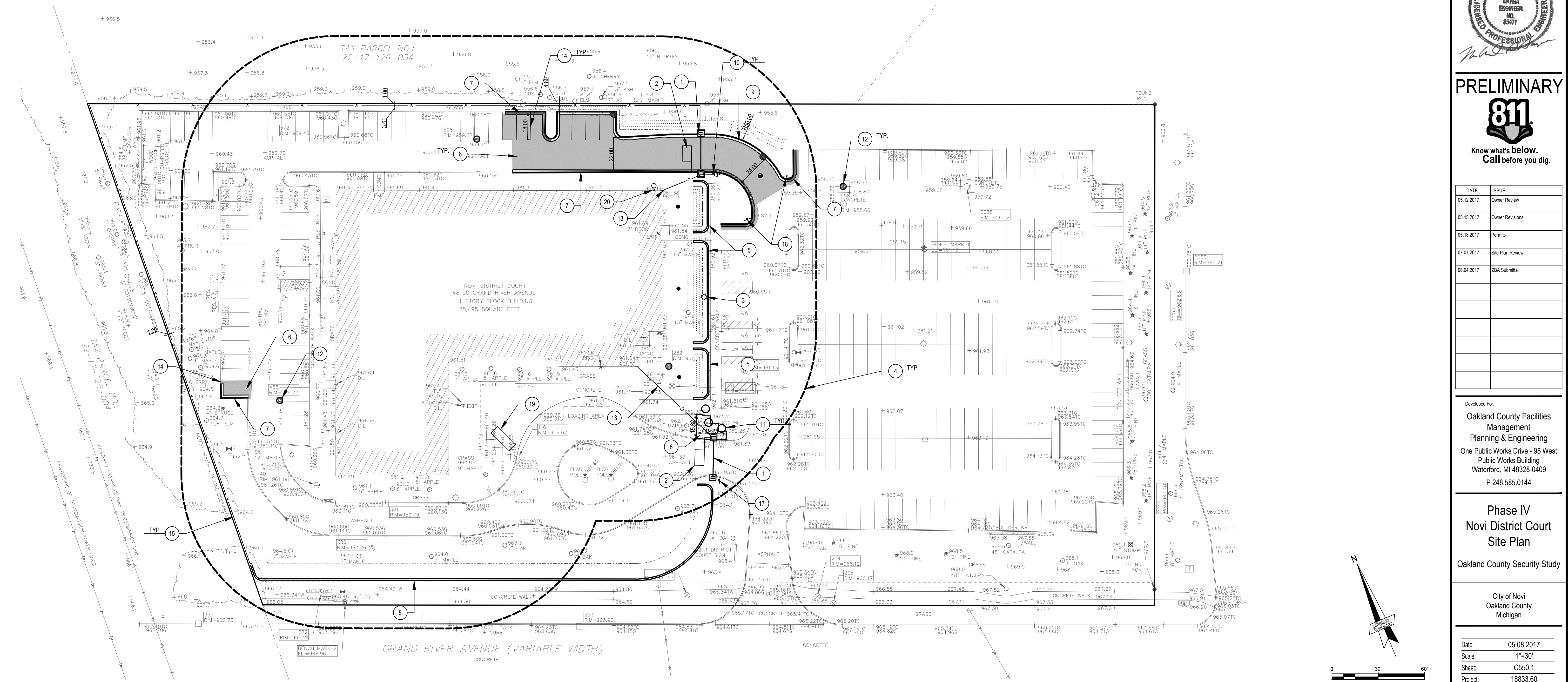
LOCATION MAP
(NOT TO SCALE)

PARKING ANALYSIS (PUBLIC)			PARKING ANALYSIS (EMPLOYEE)		
EXISTING		182	EXISTING		57
REMOVED		6	REMOVED		0
ADDED		0	ADDED		7
FINAL		176	FINAL		64

PARKING ANALYSIS (PUBLIC)			PARKING ANALYSIS (EMPLOYEE)		
EXISTING ADA		7	EXISTING ADA		2
REMOVED ADA		0	REMOVED ADA		0
ADDED ADA		0	ADDED ADA		0
FINAL ADA		7	FINAL ADA		2

SITE PLAN KEY NOTES

- 1 PROVIDE AND INSTALL STRONGARM M30 ANTI-RAM GATE AND FOUNDATIONS. SEE DETAIL ON SHEET C800.7.
- 2 PROVIDE AND INSTALL EXIT LOOP PER GATE MANUFACTURERS STANDARDS.
- 3 SALVAGED LIGHT POLE TO BE REINSTALLED. PROVIDE AND INSTALL FOUNDATION, CONDUIT AND WIRING FOR LIGHT. LIGHT POLE TO BE SAME HEIGHT AS REMAINING FIXTURES.
- 4 100 FOOT STANDOFF LINE.
- 5 PROVIDE AND INSTALL 3' HIGH RETAINING WALL. PRODUCT TO BE FIELDSTONE BY OAKS. COLOR SAMPLE REQUIRED FOR OWNER SELECTION. SEE DETAILS ON SHEET C800.8.
- 6 PROVIDE AND INSTALL STANDARD DUTY ASPHALT PAVEMENT. SEE DETAIL ON SHEET C800.7.
- 7 PROVIDE AND INSTALL REVERSE CONCRETE CURB AND GUTTER. SEE DETAIL ON SHEET C800.7.
- 8 PROVIDE AND INSTALL 4" CONCRETE WALK. SEE DETAIL ON SHEET C800.7.
- 9 PROVIDE AND INSTALL CONCRETE CURB AND GUTTER. SEE DETAIL ON SHEET C800.7.
- 10 PROVIDE AND INSTALL STANDARD 6" BOLLARD. SEE DETAIL ON SHEET C800.7.
- 11 PROVIDE AND INSTALL COUNTY STANDARD PLANTER. PLANTER TO BE INSTALLED BY COUNTY FACILITIES. NOT IN CONTRACT.
- 12 INSTALL AND MAINTAIN TEMPORARY SEDIMENT INLET FILTER. SEE DETAIL ON SHEET C800.7.
- 13 CONTRACTOR TO COORDINATE ELECTRICAL AND INTERCOM CONNECTION TO CONTROL ROOM.
- 14 PROVIDE AND INSTALL 9' BY 18' PARKING STALLS WITH 4" YELLOW WATERBORNE STRIPING
- 15 PROVIDE AND INSTALL ECHELON II MAJESTIC 3 RAIL FENCE. SEE DETAIL ON SHEET C800.8
- 16 PROVIDE AND INSTALL ANTI-RAM CABLE POST AND RAIL FENCE. SEE DETAILS ON SHEET C800.10.
- 17 PROVIDE AND INSTALL "DO NOT ENTER" SIGN R5-1 ON MDOT 3LB POST.
- 18 PROVIDE AND INSTALL "AUTHORIZED VEHICLES ONLY" SIGN R5-11 ON MDOT 3LB POST.
- 19 PROVIDE AND INSTALL 6 BIKE RACKS PER DETAIL ON SHEET C800.7
- 20 PROVIDE AND INSTALL WALL LIGHT FIXTURE TO MATCH EXISTING LIGHT FIXTURES ON BUILDING PERIMETER.



Executive:	STC
Manager:	MGD
Designer:	AFP
Quality Control:	STC
Section:	17
T-01-N R-08-E	

Professional Seal:



PRELIMINARY



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08.04.2017	ZBA Submittal

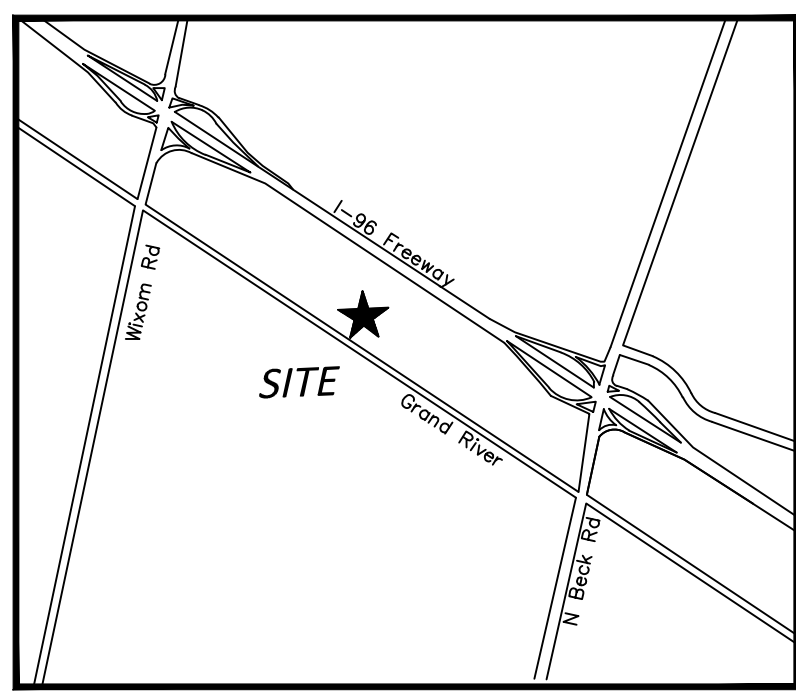
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**Phase IV
Novi District Court
Site Plan**
Oakland County Security Study

City of Novi
Oakland County
Michigan

Date:	05.08.2017
Scale:	1"=30'
Sheet:	C550.1
Project:	18833.60

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LOCATION MAP
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GRADING PLAN KEY NOTES

- 1 TOP OF PROPOSED RETAINING WALL TO BE NOMINALLY 3' ABOVE EXISTING GRADE. STEP WHERE NECESSARY.
- 2 SLOPE BACK OF BERM TO EXISTING GRADE PER DETAIL ON SHEET C800.8
- 3 SLOPE EMBANKMENT PER DETAIL ON C800.8. SLOPE NOT EXCEED 1:1 OR BE SLOPED ON TO OTHER PARCEL
- 4 GRADE SLOPED AREA FROM BEHIND GATE CONTROLLER TO EXISTING GRADE. SLOPE NOT TO EXCEED 1:2

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Designer: AFP
Quality Control: STC
Section: 17
T-01-N R-08-E

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Phase IV
Novi District Court
Grading Plan

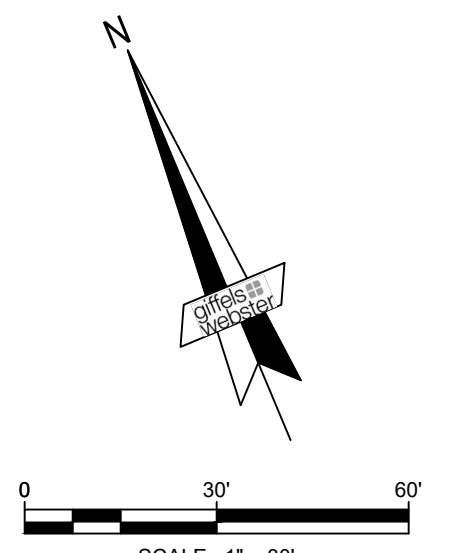
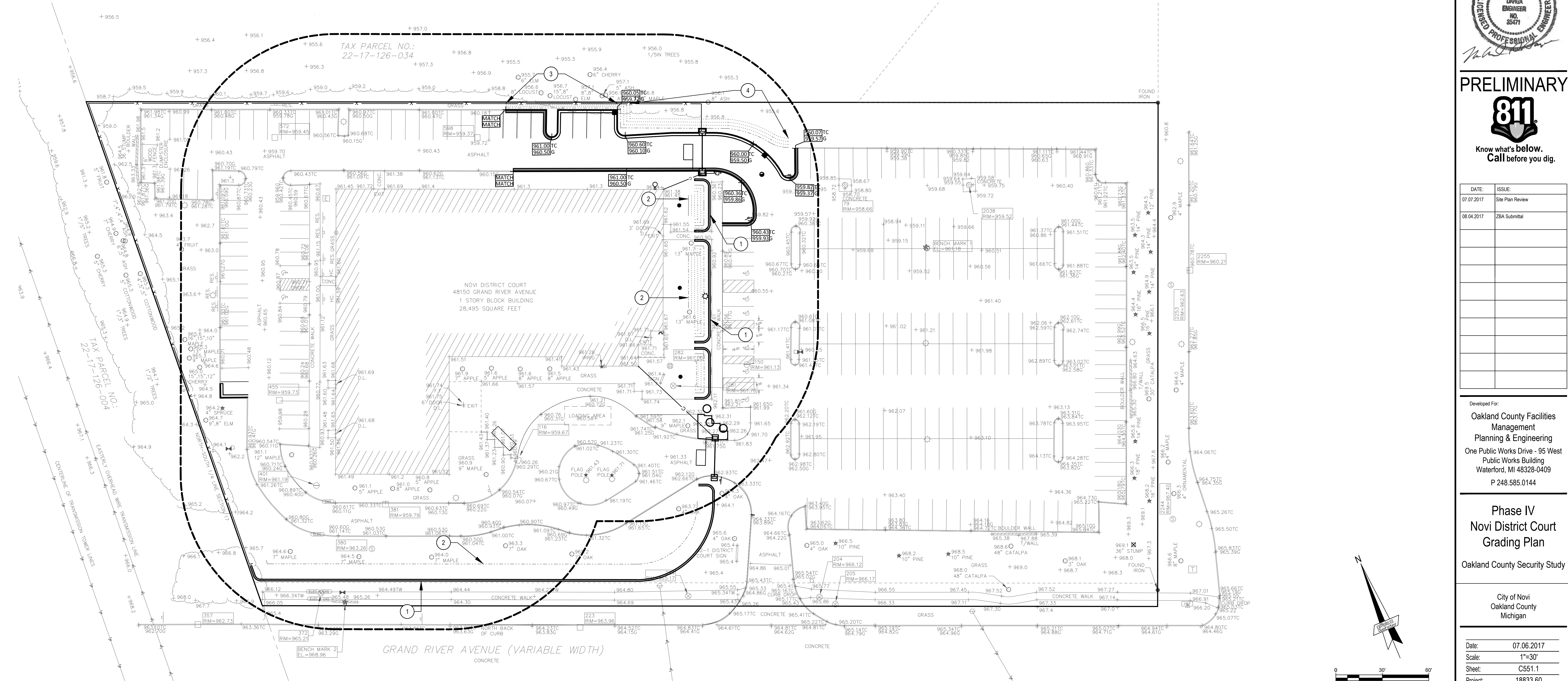
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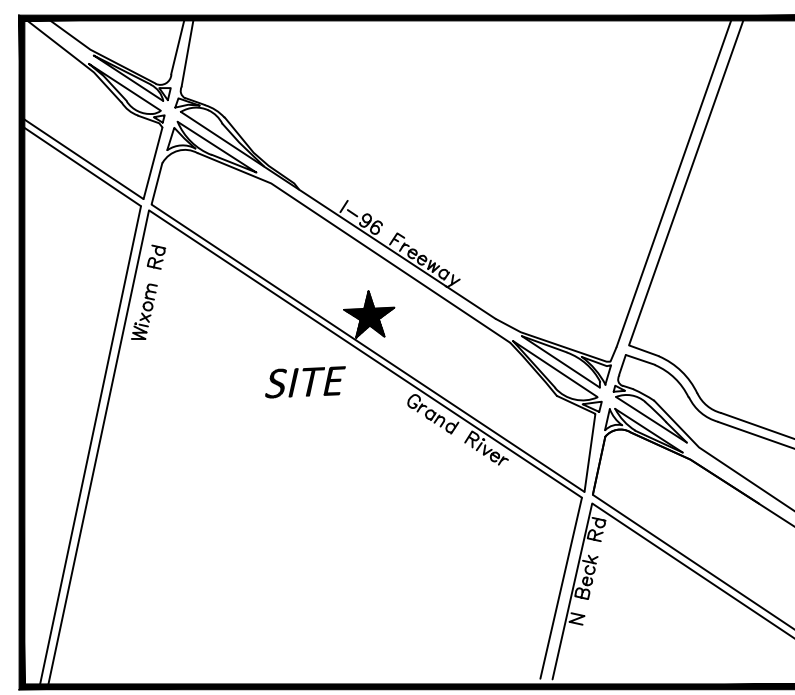
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V:\18833-60 Oakland County Security Design\Drawings\Phase IV\CS51.1 - NOVI DISTRICT COURT GRADING PLAN.dwg





LOCATION MAP
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UTILITY PLAN KEY NOTES

- 1 PROVIDE AND INSTALL 4" PERFORATED POLYETHYLENE EDGE DRAIN WITH FILTER SOCK. SEE DETAIL ON SHEET C800.9.
- 2 PROVIDE AND INSTALL 8" SDR 26 IN LANDSCAPED AREA.
- 3 PROVIDE AND INSTALL 12" CL IV RCP SEWER.
- 4 PROVIDE AND INSTALL 24" NYLOPLAST STRUCTURE. SEE DETAIL ON SHEET C800.9.
- 5 PROVIDE AND INSTALL MANHOLE OVER SEWER PER CITY OF NOVI STANDARDS.
- 6 TAP EXISTING MANHOLE PER CITY OF NOVI STANDARDS.
- 7 PROVIDE AND INSTALL 4" DIAMETER NOVI STANDARD CATCH BASIN. SEE DETAIL ON NOVI DETAIL SHEET
- 8 PROVIDE AND INSTALL 5' DIAMETER CONTROL CATCH BASIN. SEE DETAIL ON SHEET C800.9

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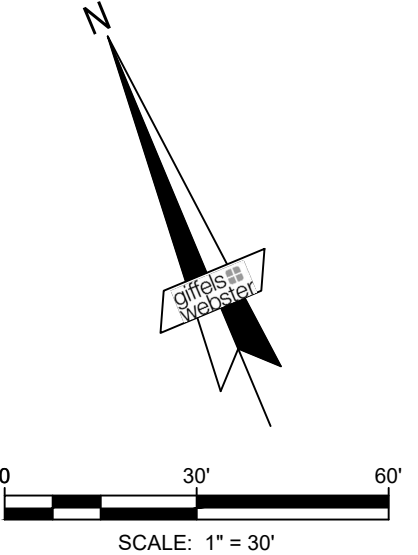
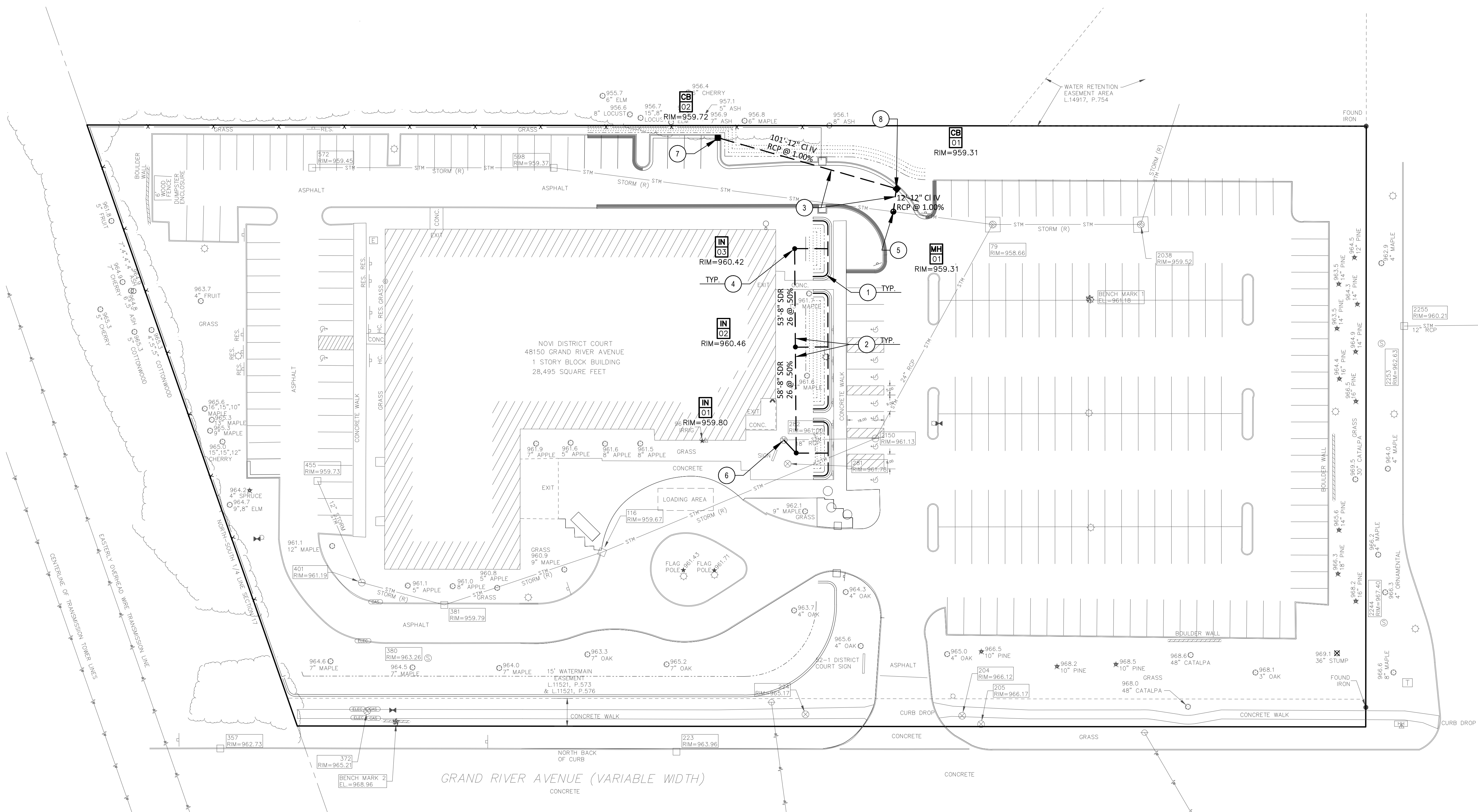
**Phase IV
Novi District Court
Utility Plan**

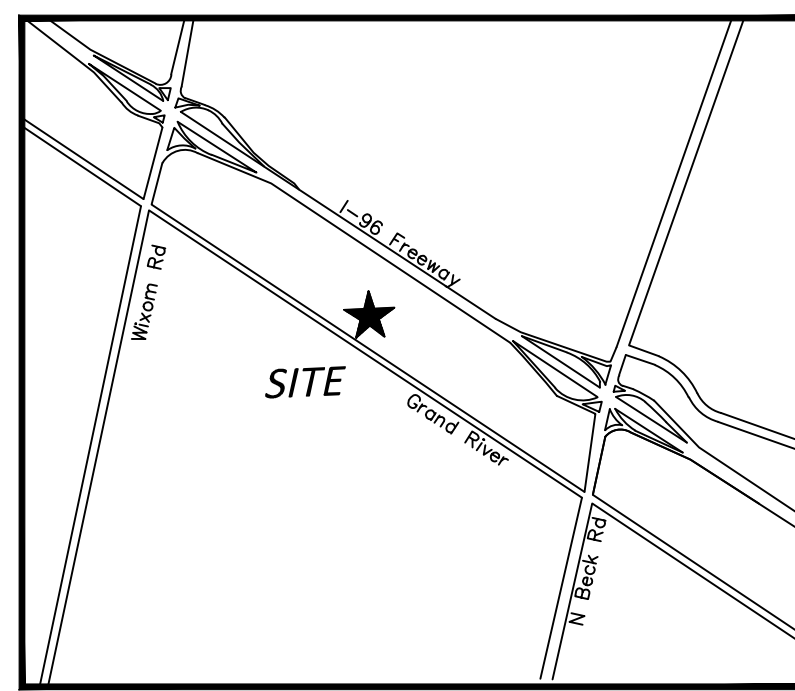
Oakland County Security Study

City of Novi
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Scale:	1"=30'
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LOCATION MAP
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COMPOSITE RUNOFF COEFFICIENT CALCULATIONS

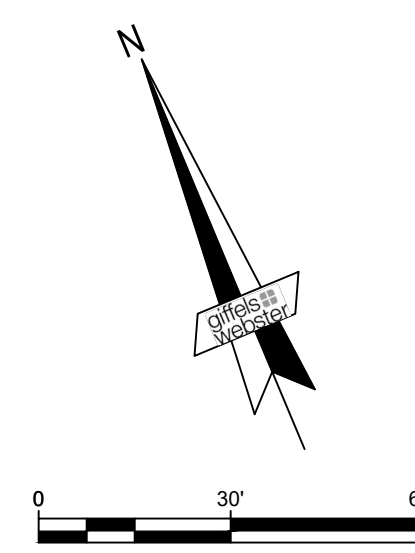
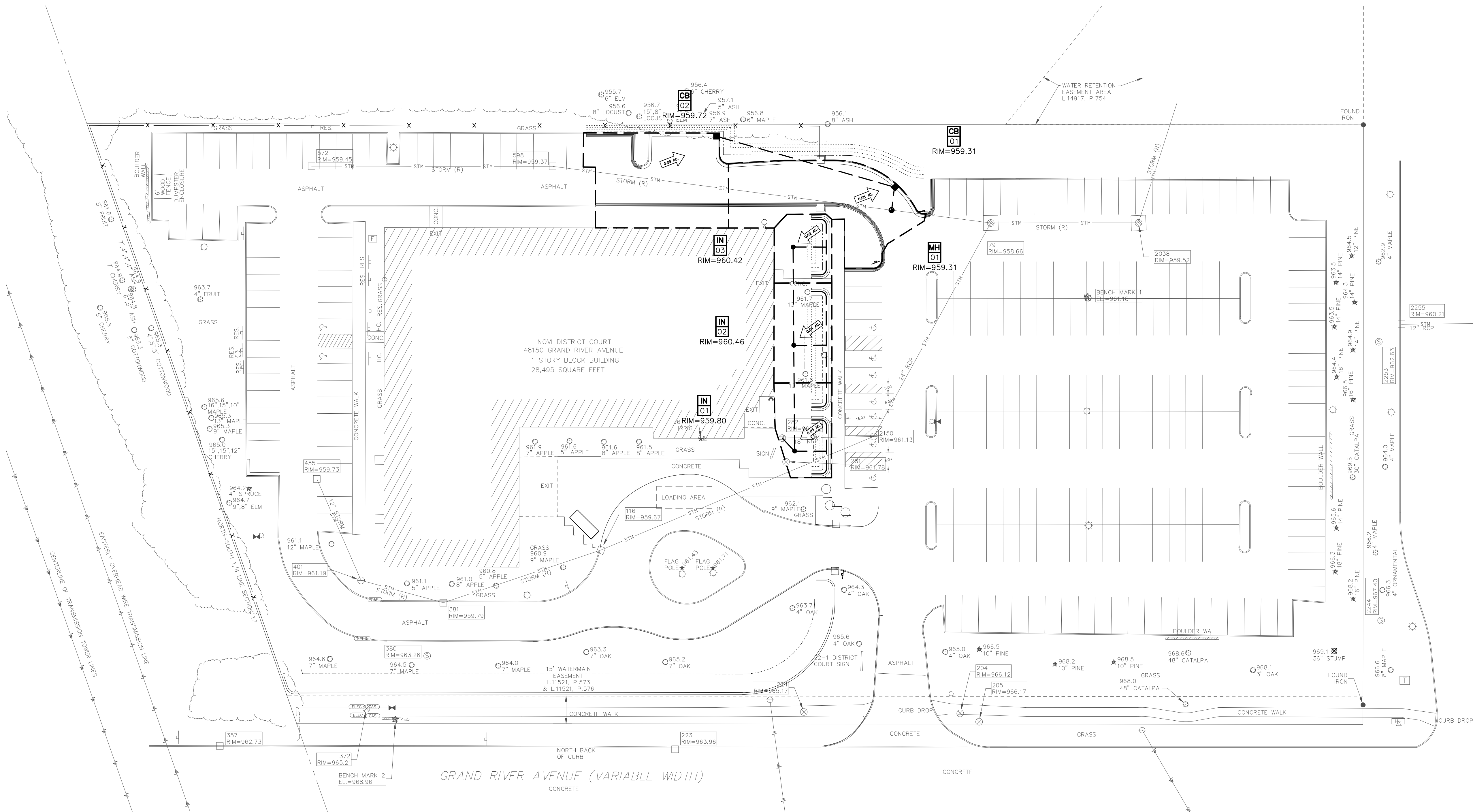
Catchment Identification	Total Area (Acres)	Landscape		C
		Area (Acres) C = 0.35	Paved/Roof Area (Acres) C = 0.95	
CB-01	0.08	0.02	0.06	0.80
CB-02	0.09	0.02	0.07	0.82
IN-01	0.03	0.03	0.00	0.35
IN-02	0.04	0.04	0.00	0.38
IN-03	0.02	0.02	0.00	0.40



Storm Sewer Design
Novi District Court
18833-60

Prepared By: AFP
Working Date: 7/15/2017
Design Storm Event: 10-year storm City of Novi

From	To	Catchment Area (acres)	Runoff C Factor	Total Area (acres)	Total Time of Concentration Tc (min)	Total Rainfall Intensity (in/hr)	Total Flow (cfs)	Pipe Capacity (cfs)	Pipe Diameter (inches)	Pipe Length (feet)	Pipe Slope	Pipe Velocity (fps)	Time of Flow (min)
CB 02	CB 01	0.09	0.82	0.09	20.00	3.89	0.29	3.56	12.00	101.00	1.00	4.55	0.37
CB 01	MH 01	0.08	0.80	0.17	20.37	3.86	0.52	3.56	12.00	12.00	1.00	4.55	0.04
IN 03	IN 02	0.02	0.40	0.02	20.00	3.89	0.03	0.85	8.00	53.00	0.50	2.45	0.36
IN 02	IN 01	0.04	0.38	0.06	20.36	3.86	0.09	0.85	8.00	58.00	0.50	2.45	0.39
IN 01	EXMH	0.03	0.35	0.09	20.75	3.82	0.12	0.85	8.00	10.00	0.50	2.45	0.07
Proposed Flow	Existing Outlet ²⁴	0.26		0.26	20.00	3.89	0.65	16.00	24.00	10.00	0.50	5.11	0.03

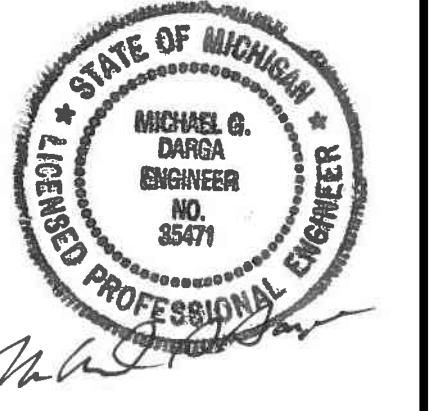


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Phase IV
Novi District Court
Storm Water
Management Plan
Oakland County Security Study

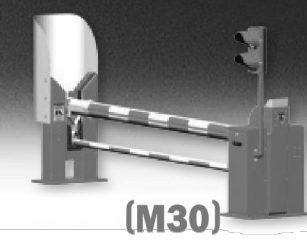
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Michigan

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Ultra Reliable High Security

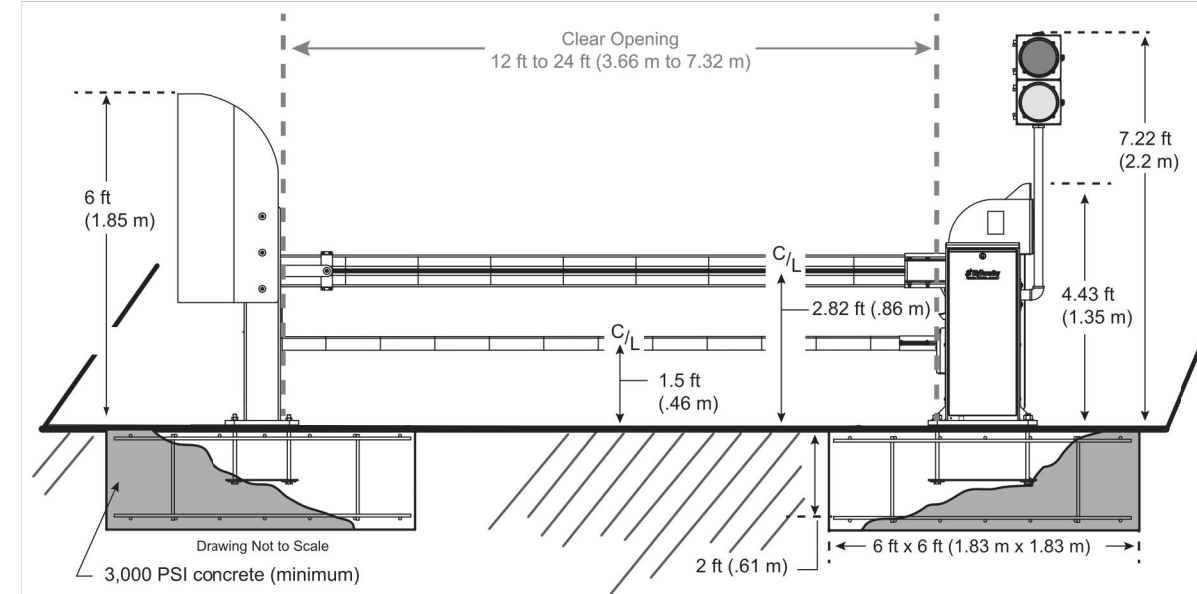
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Crash certified **StrongArm™ M30** barrier arm provides ultimate hardened security with unmatched user safety for the demanding reliability requirements of industrial, government and military users. HySecurity's unique dual arm design prevents a 15,000 lb (6.8 metric tons) truck or small passenger vehicle from penetrating a secure perimeter. Fast, continuous duty* arm speed minimizes gate open time, and reduces traffic backup by moving more vehicles per hour through the access point.

* 100 cycles/hour

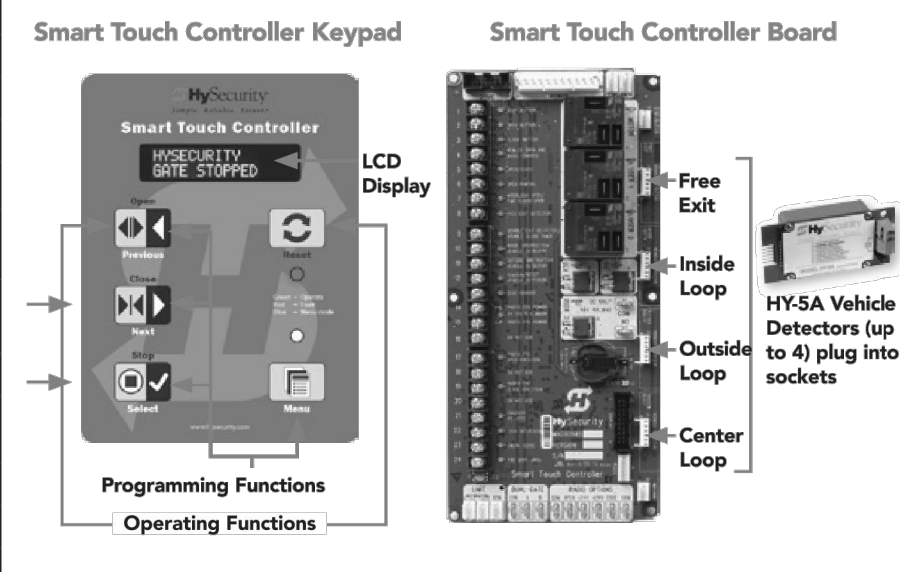


StrongArm M30 operator, barrier arm, and foundation dimensions

StrongArm (M30)™

Model	StrongArm M30
Crash Certified	ASTM F2656-07 M30-P1*
Duty Cycle	100 cycles/hr**, option for continuous duty
Horsepower	2 hp
Open/Close Time	6 to 8 seconds depending on arm length
Emergency Fast Close Time	5 to 7 seconds depending on arm length
Clear Opening	12 to 24 ft in 2 ft increments (366 to 732 cm in 61 cm increments) Call for custom arm length
Ingress Protection	IP56
Temperature Rating	-40° to 158° F (-40° to 70° C) or -10° to 158° F (-23° to 70° C) using biodegradable fluid.
1 Phase Power	208/230V, 60/50Hz
3 Phase Power	208/230V, 60/50Hz, 380/440V, 60/50Hz
Communication	RS-232, RS-485, Ethernet/fiber using optional HyNet™ Gateway accessory
User Controls	Smart Touch Controller with 70+ configurable options, Smart Touch keypad and display or a PC using S.T.A.R.T. software.
Relays	Three configurable user relays: one 30VDC, 3A solid state and two 250VAC, 10A electromechanical. Optional Hy8Relay™ for 8 additional relay outputs
Finish	Hot dipped galvanized standard. Optional textured yellow powder coat over zinc plating.
Foundation	6 x 6 x 2 ft (183 x 183 x 61 cm) or 4 ft ³ (122 cm ³) 3,000 psi concrete, #5 rebar, grade 60
Electrical Certification	Control panel certified to UL 508A by ETL
Warranty	5 year
UPS Backup Power	
AC Power Supply w/HyInverter AC**	StrongArm M30 w/HyInverter AC

*Contact HySecurity to receive a copy of the ASTM F2656-07 M30-P1 Test Certification.
**ExtremeCycle option available
***The operator's normal duty cycle and the actual number of gate cycles available from battery depends upon gate resistance to travel, cycle length, battery size, state of charge and health, ambient temperature, accessory power draw and frequency of gate cycles during power outage.



SMART TOUCH CONTROLLER

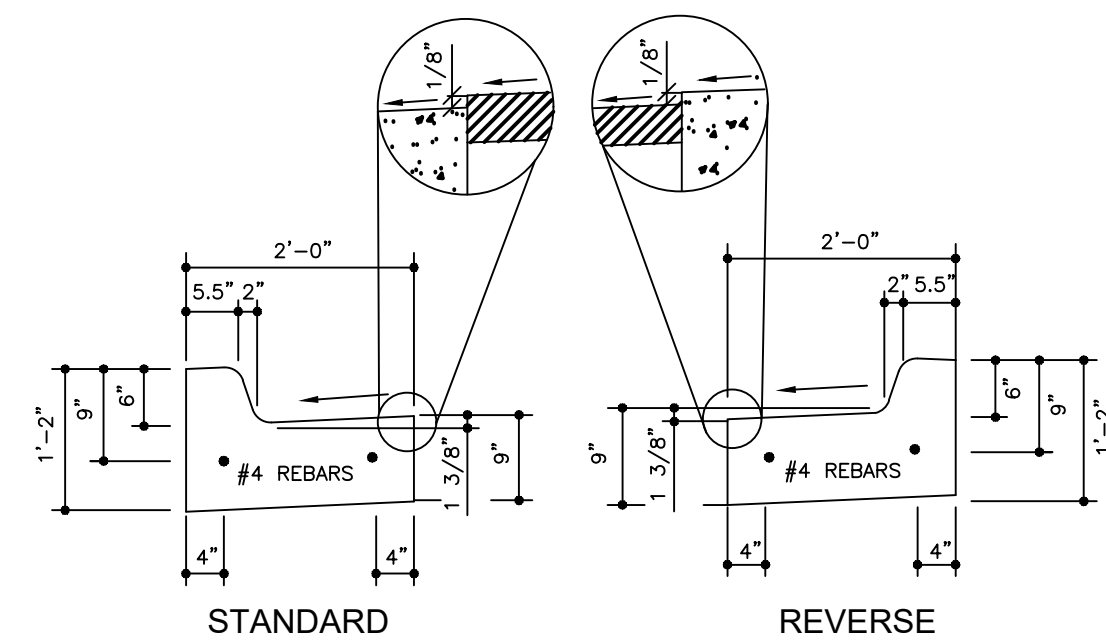
- Microprocessor-based (Non-PLC)
- 21 field configurable inputs
- 3 field configurable user relay outputs; Optional Hy8Relay™ provides eight additional programmable relay outputs
- 4 plug-in HY-5A vehicle detector sockets
- RS-232, RS-485 and HyNet™ Gateway
- Date & time stamped fault logs, errors and security alerts
- PC interface for easy configuration and quick troubleshooting using Smart Touch Analyze and Retrieve Tool (S.T.A.R.T.)

SYSTEM DESIGN SUPPORT: Contact HySecurity for CAD drawings, specifications, help with custom site requirements, installer referrals, and other technical support.



Contact HySecurity for an operator/parts distributor near you.
phone **800-321-9947** | **253-867-3700** fax **888-321-9946**
www.hysecurity.com • info@hysecurity.com

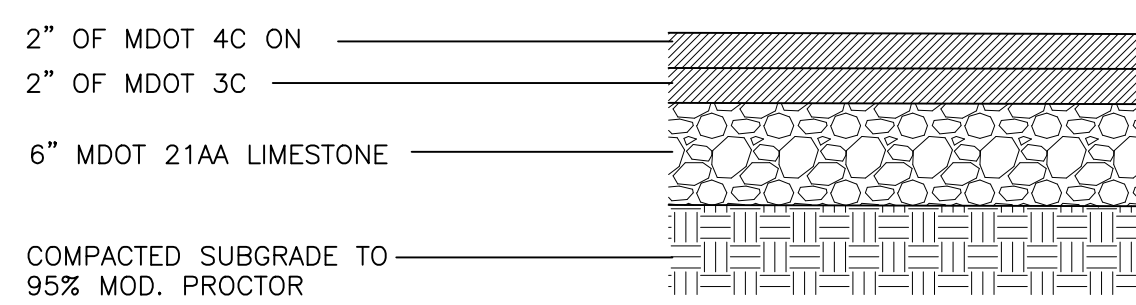
D0515 030716



NOTE:
USE MDOT 35P CONCRETE-TYPICAL ALL C&G.
REFERENCE MDOT DETAIL II-30D TYPE F4.

24" CONCRETE CURB AND GUTTER

N.T.S.



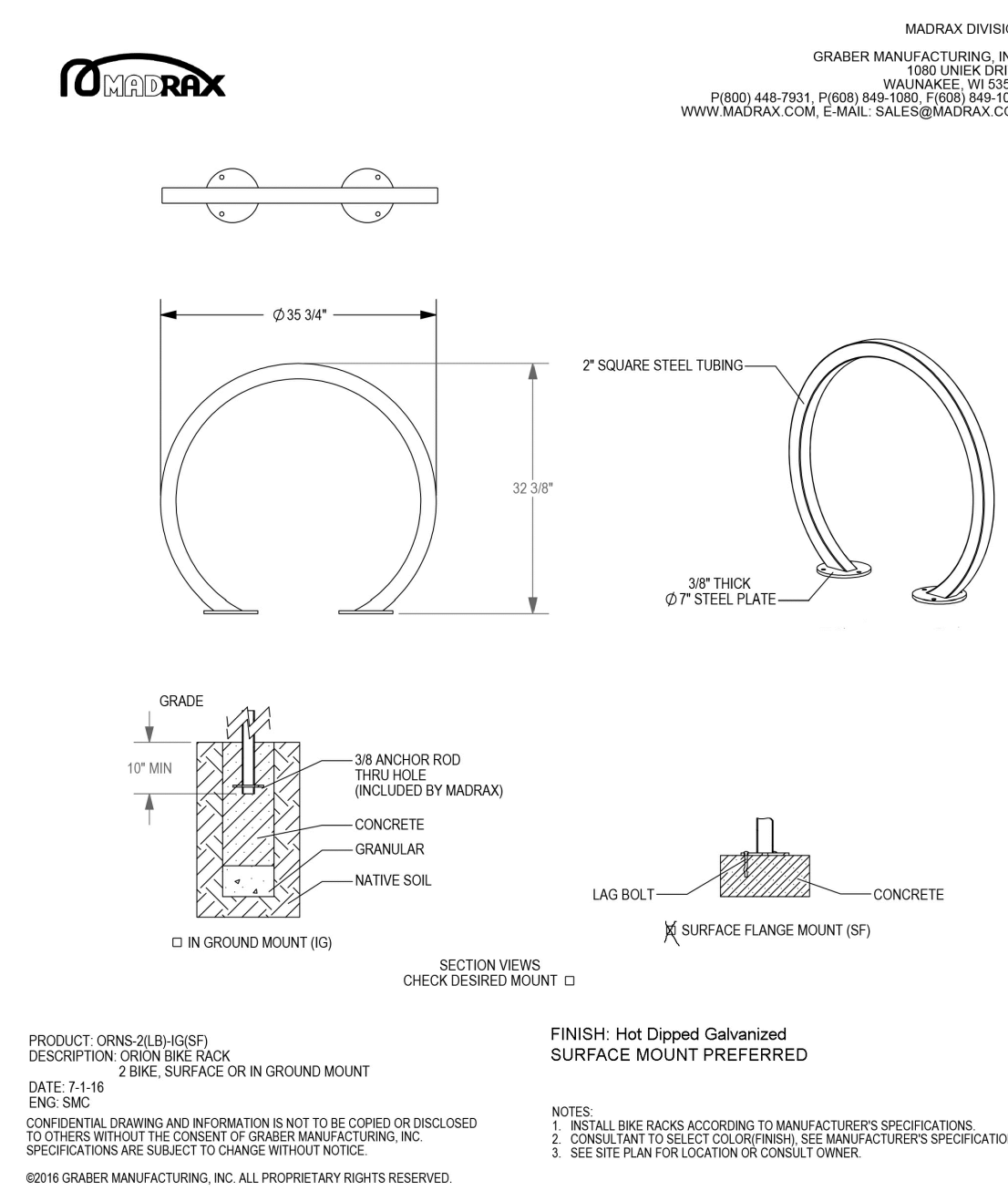
STANDARD DUTY PAVEMENT

N.T.S.

- NOTE:
- IF ANY OF THE EXISTING BASE CANNOT BE UTILIZED, IT SHALL BE REMOVED AND REPLACED WITH MDOT 21AA MATERIAL.
 - THE PLACEMENT OF THE FINAL LIFT OF ASPHALT SHALL BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION HAS BEEN COMPLETED, OR AS DIRECTED BY THE ENGINEER.
 - A BOND COAT OF SS-1H EMISSION SHALL BE APPLIED (AT A RATE OF 0.10 gal/syd) BETWEEN THE LEVELING AND WEARING COURSE WHEN 48 HOURS HAVE ELAPSED BETWEEN PLACEMENT.

STANDARD DUTY PAVEMENT

N.T.S.



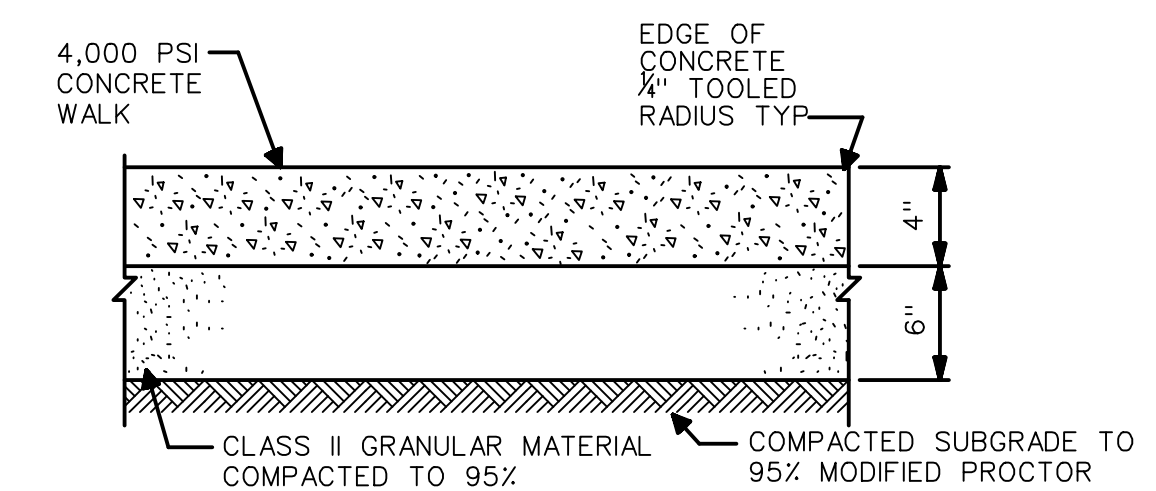
PRODUCT: DRMS-2(BL)-D(S)
DESCRIPTION: CHAIN BIKE RACK
DATE: 7.1.16
ENG: SMC
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©2016 GRABER MANUFACTURING, INC. ALL PROPRIETARY RIGHTS RESERVED.

FINISH: Hot Dipped Galvanized
SURFACE MOUNT PREFERRED

NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. CONSULT WITH LOCAL AGENCIES TO SELECT COLOR/PINNING. SEE MANUFACTURER'S SPECIFICATIONS.
3. SEE SITE PLAN FOR LOCATION OR CONSULT OWNER.

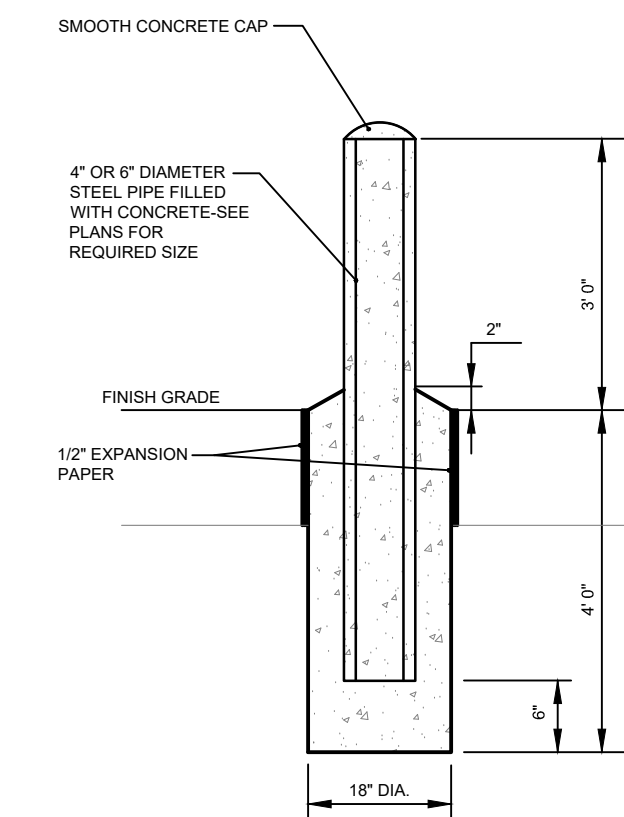
BIKE RACK - SURFACE MOUNTED

N.T.S.



CONCRETE WALK

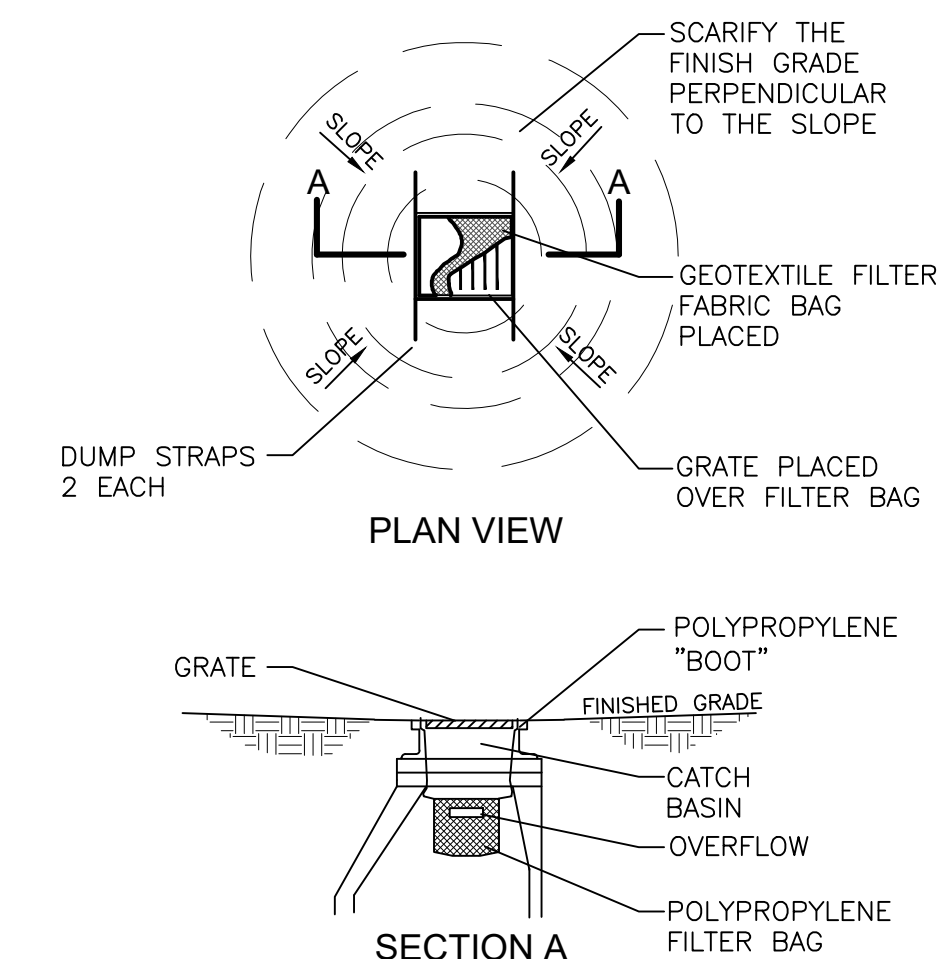
N.T.S.



NOTE:
1. USE GALVANIZED STEEL PIPE (2.0 oz ZINC per sq ft) WITH A MINIMUM 1/8" WALL THICKNESS.
2. USE MDOT 35P CONCRETE.

CONCRETE BOLLARD

N.T.S.



NOTE:
TEMPORARY SEDIMENT INLET FILTER TO BE INSTALLED ON ALL PAVED CATCH BASINS OR STORM INLETS, OR AS SPECIFIED ON THE SOIL EROSION CONTROL PLAN. INLET FILTER TO BE SIMILAR TO "STEAMGUARD" AS MANUFACTURED BY STORMWATER SERVICES CORPORATION (206-767-0441) OR "SILTSACK" AS MANUFACTURED BY ATLANTIC CONSTRUCTION FABRICS, INC., (800-448-3636). CLEAN FILTER AS NEEDED, OR AS REQUIRED BY THE SOIL EROSION CONTROL PLAN.

TEMPORARY SEDIMENT INLET FILTER

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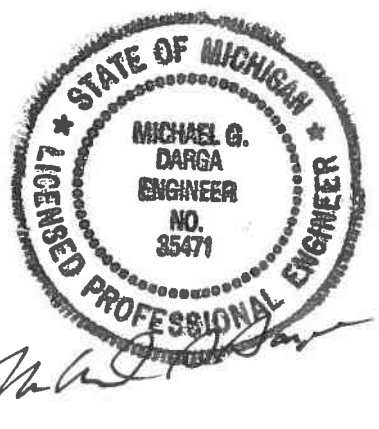
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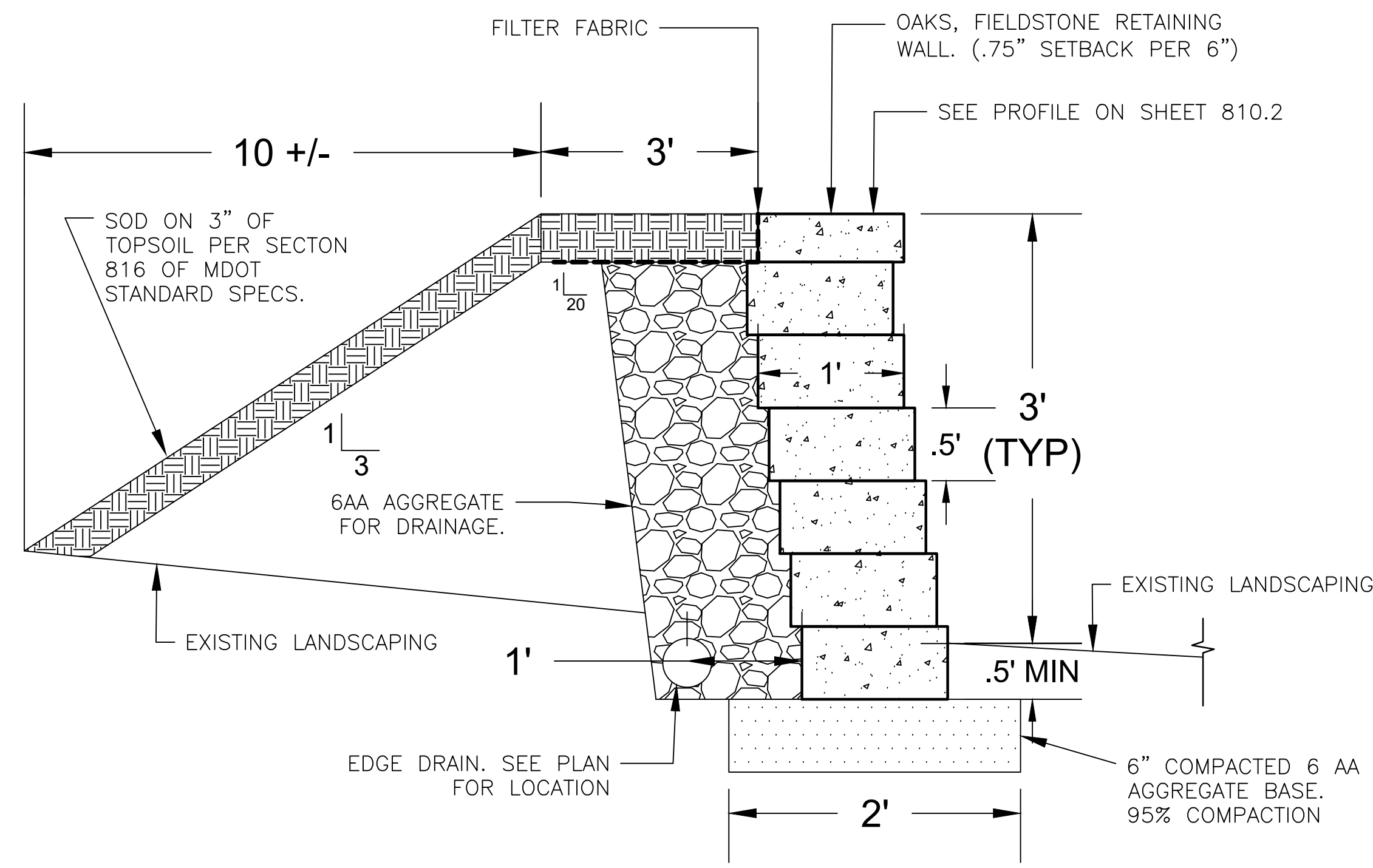
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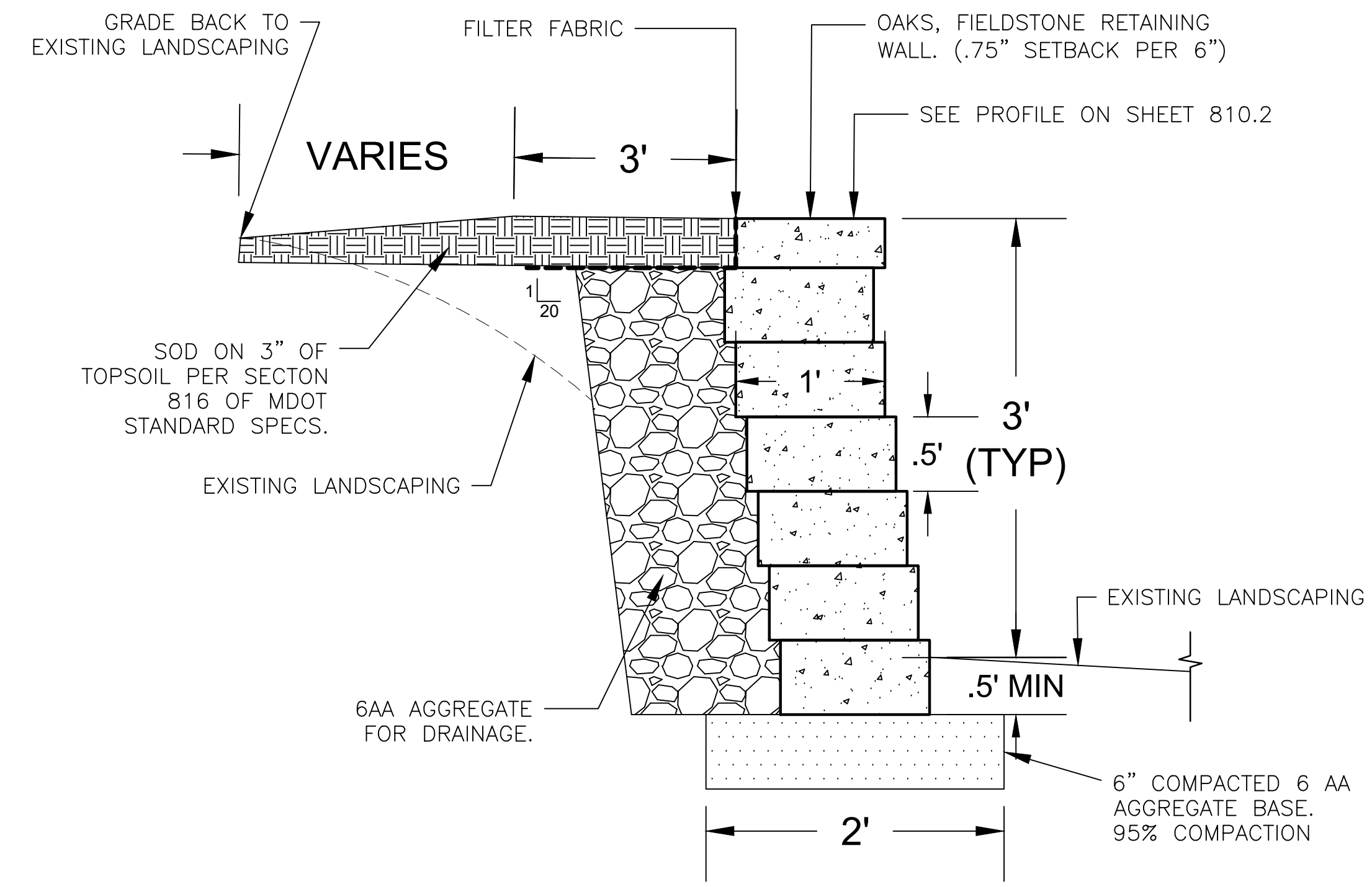
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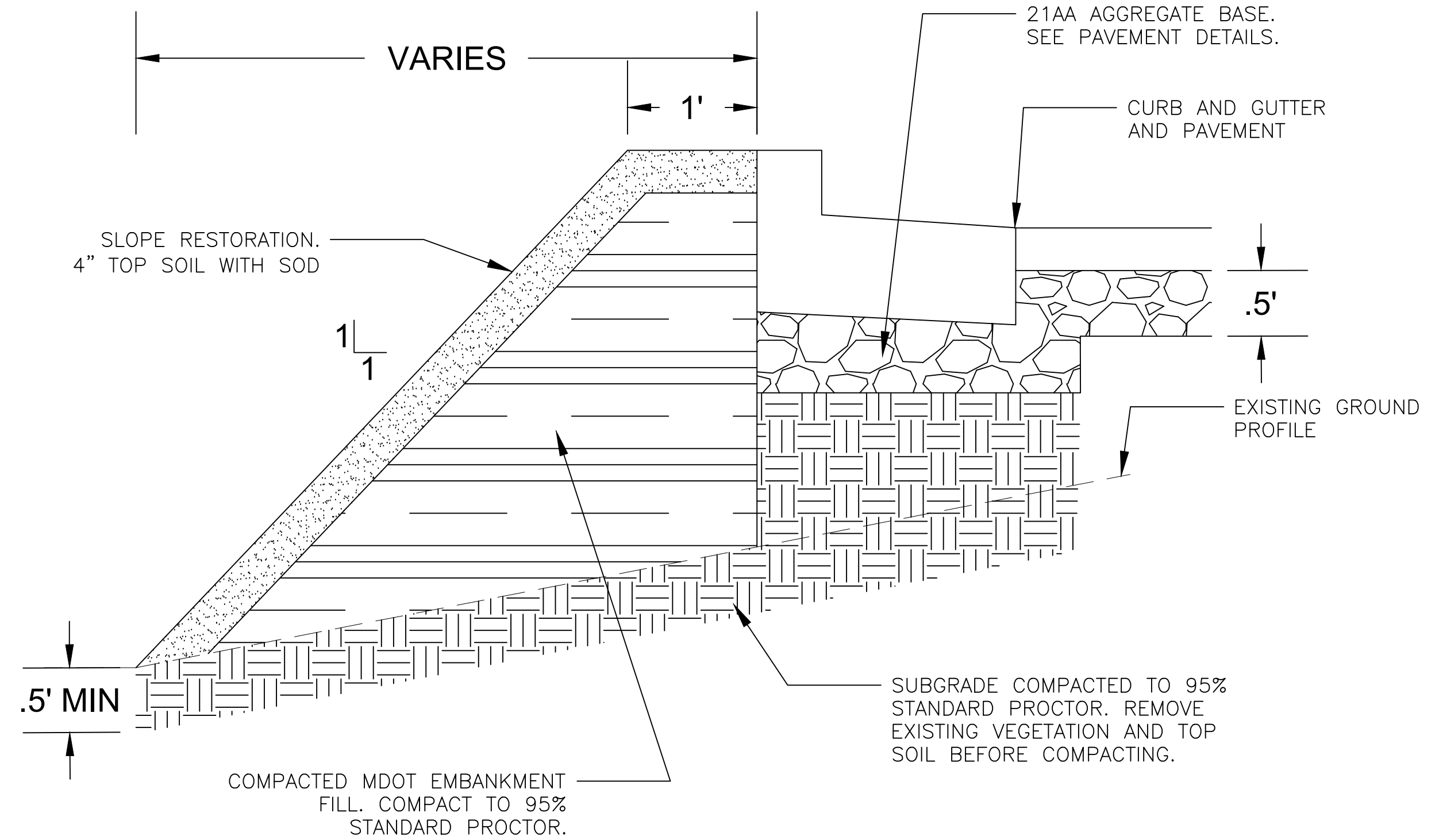
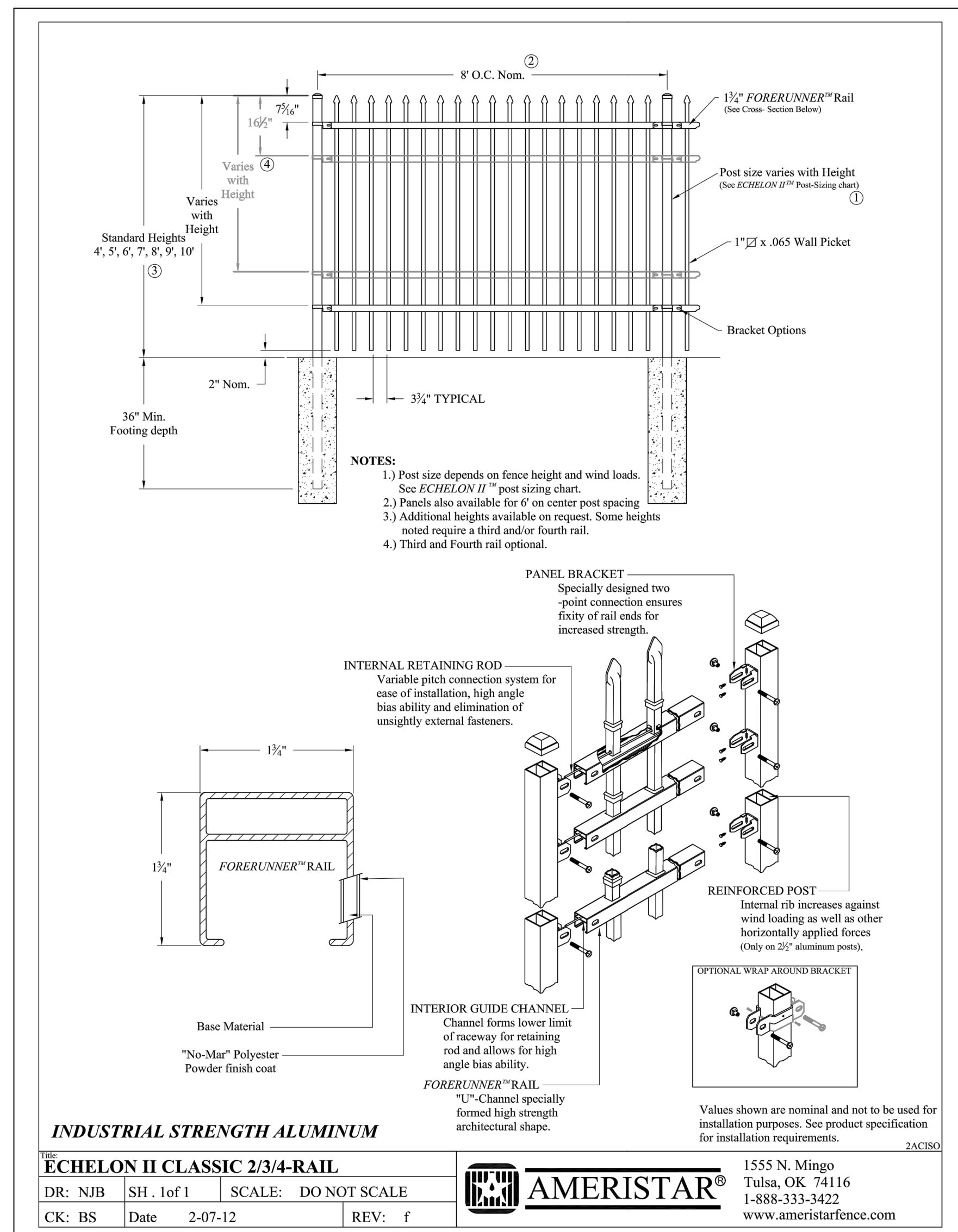
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RETAINING WALL - EAST ELEVATION
N.T.S.



RETAINING WALL - SOUTH ELEVATION
N.T.S.



PARKING LOT EMBANKMENT
N.T.S.

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Quality Control:	STC
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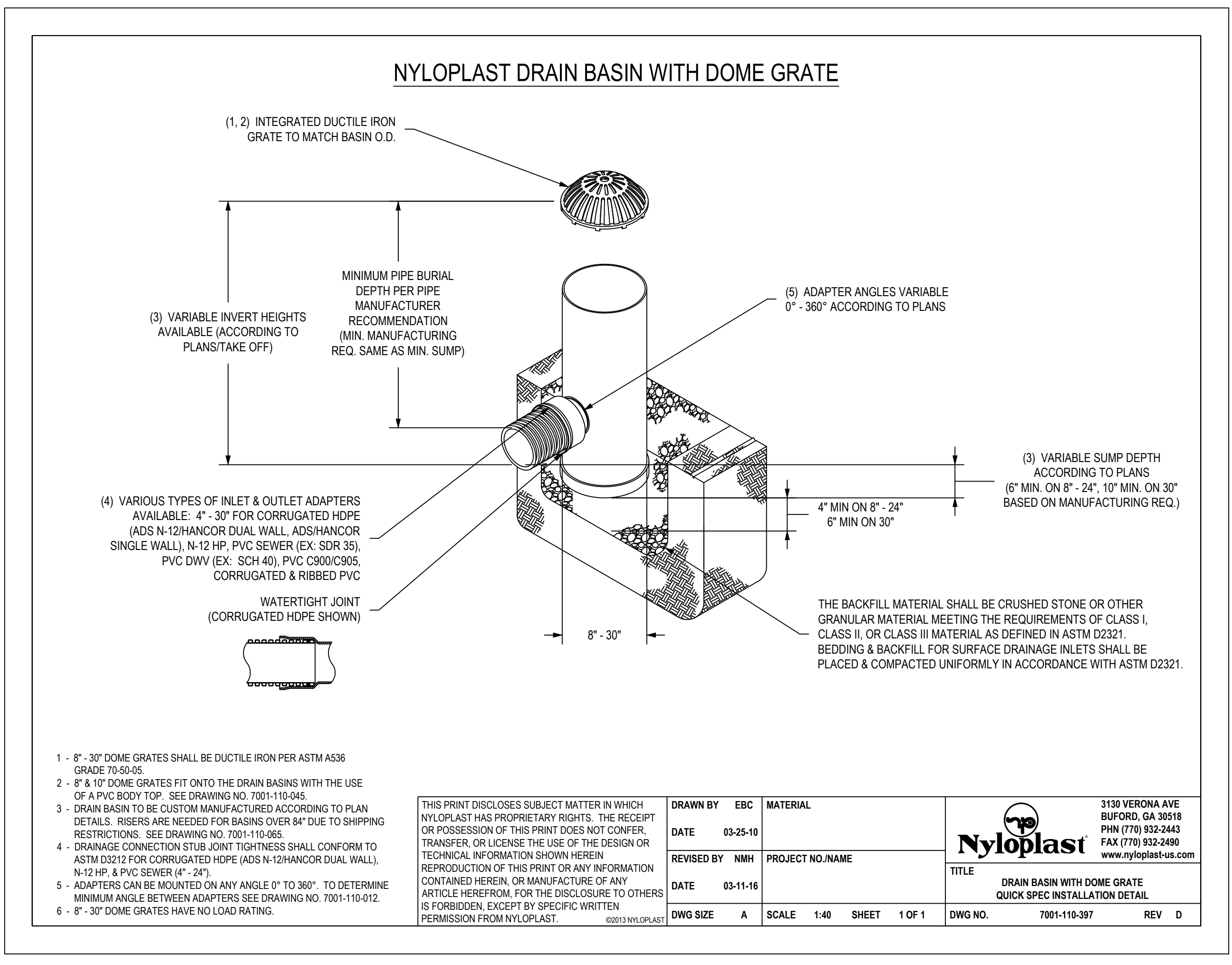
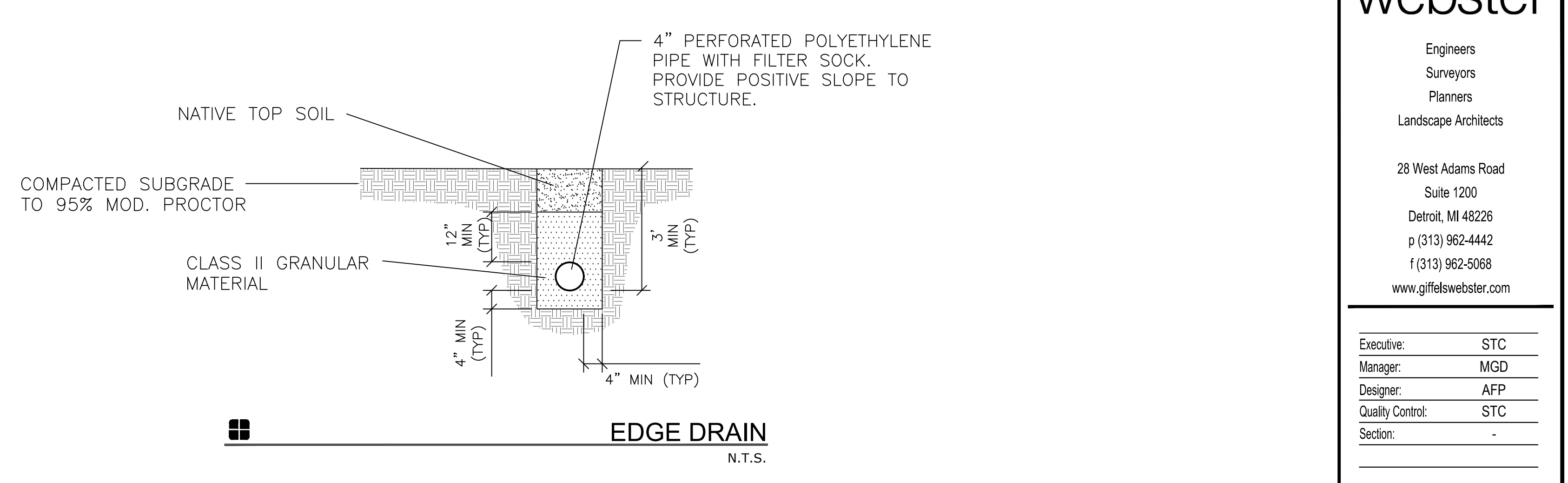
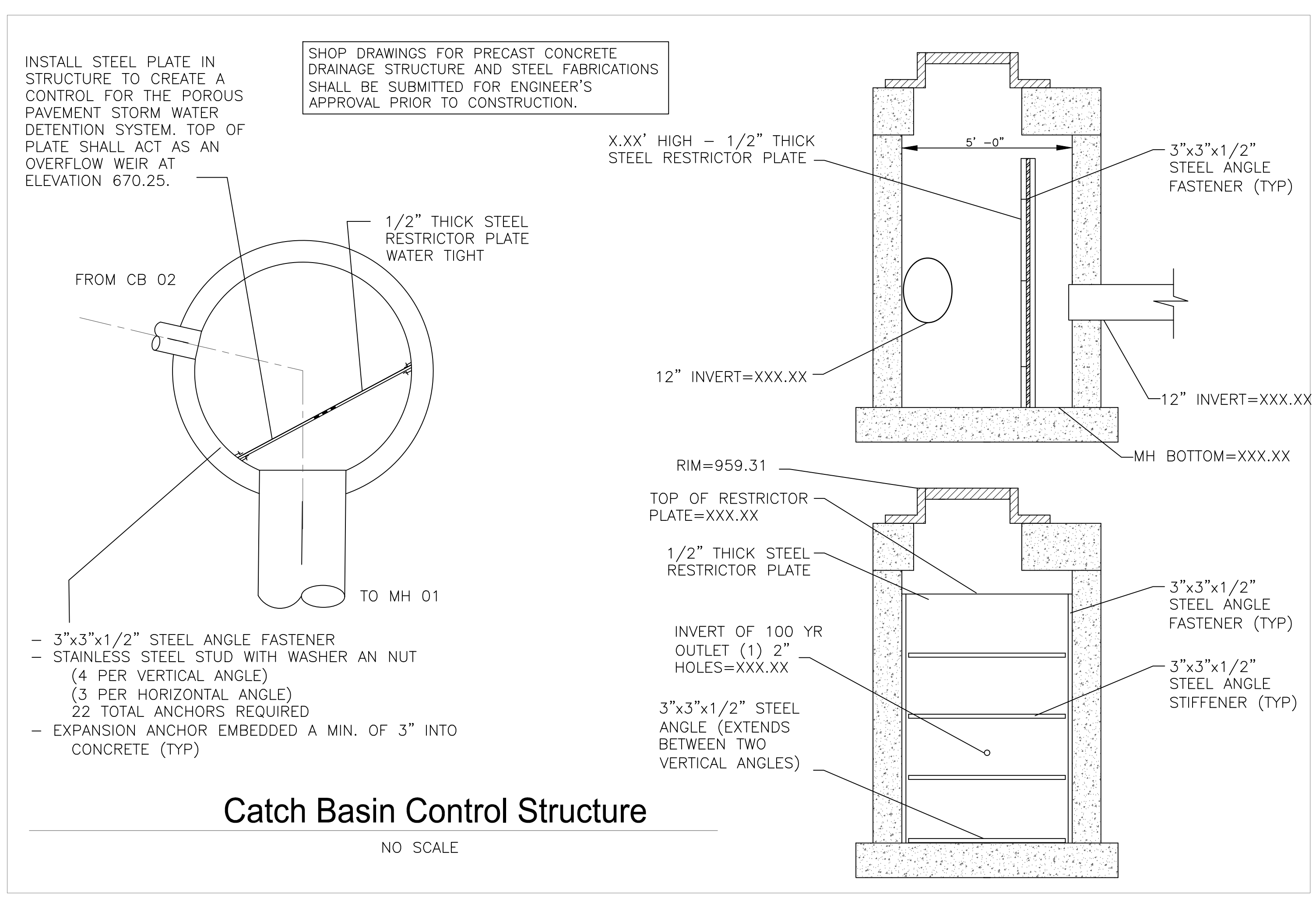
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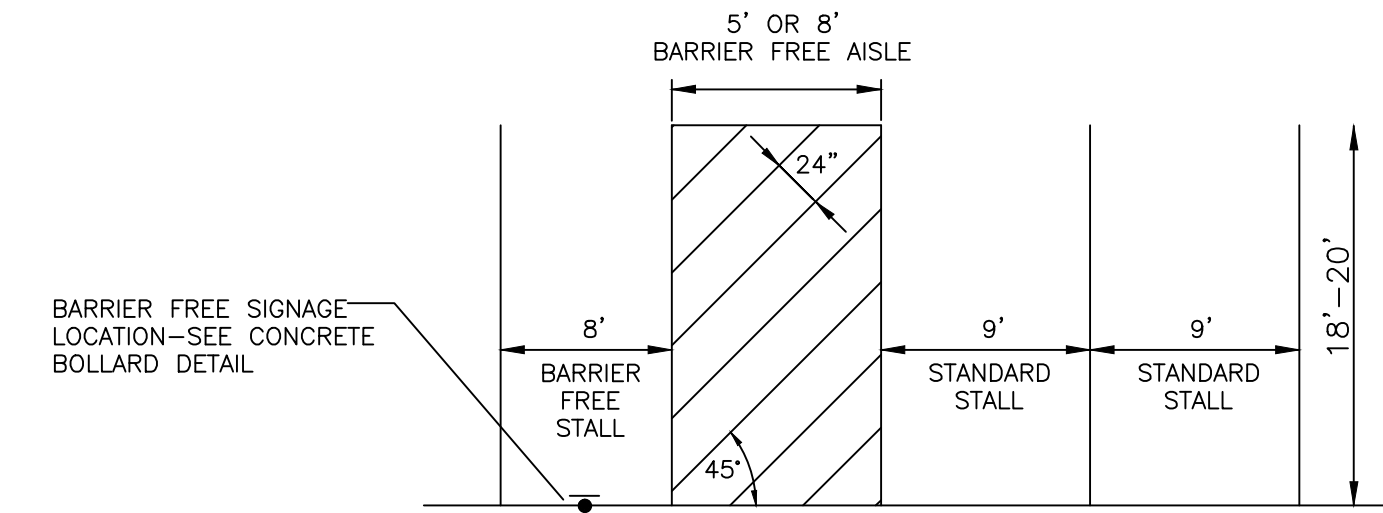
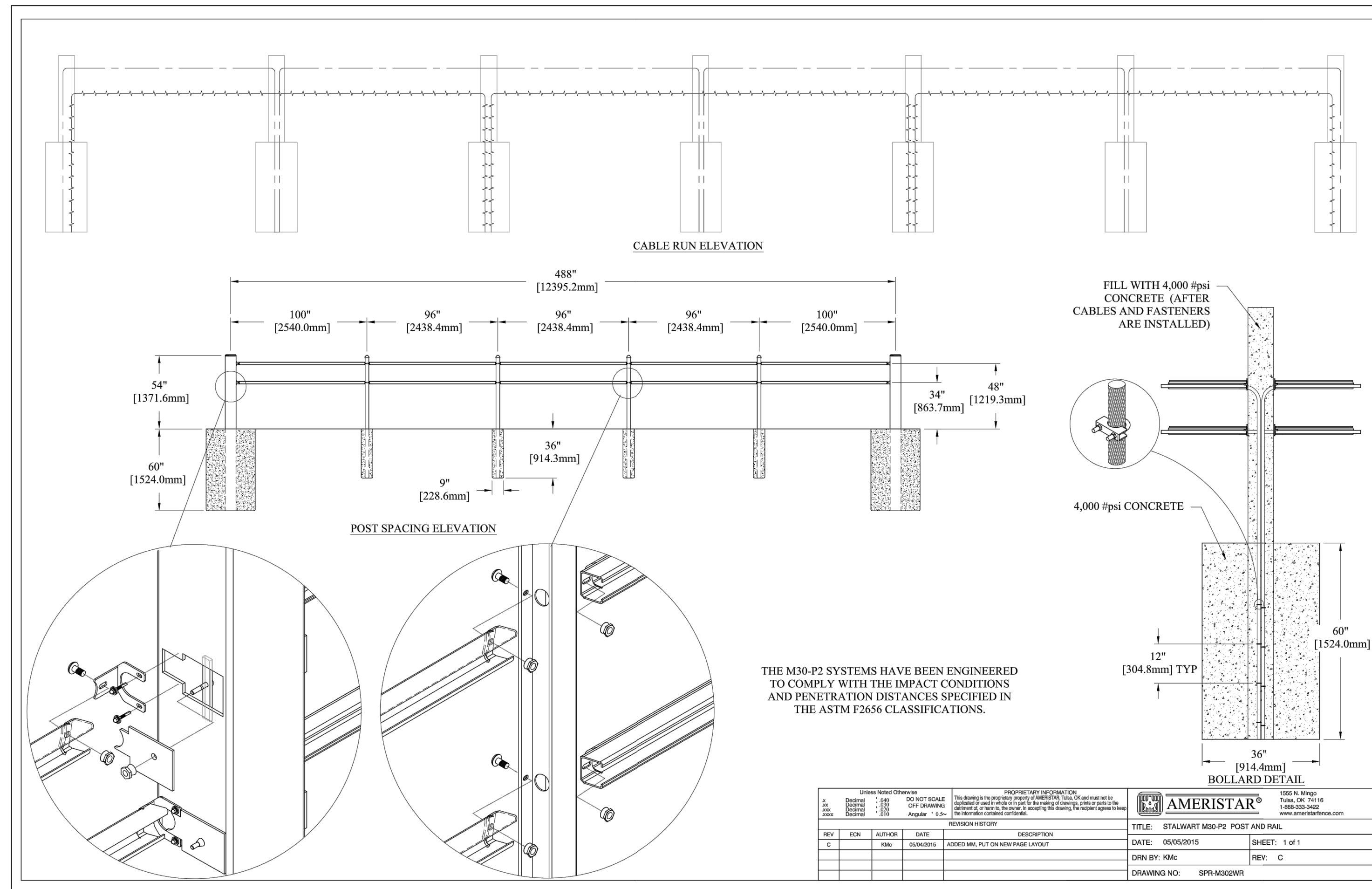
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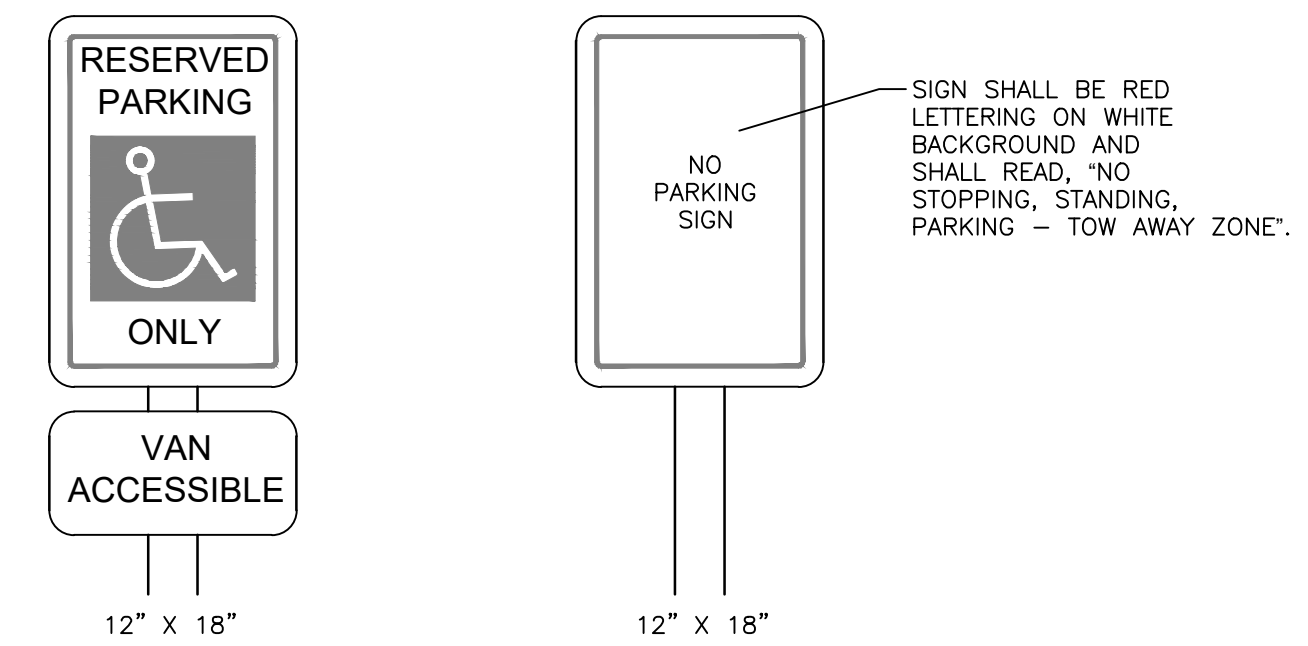
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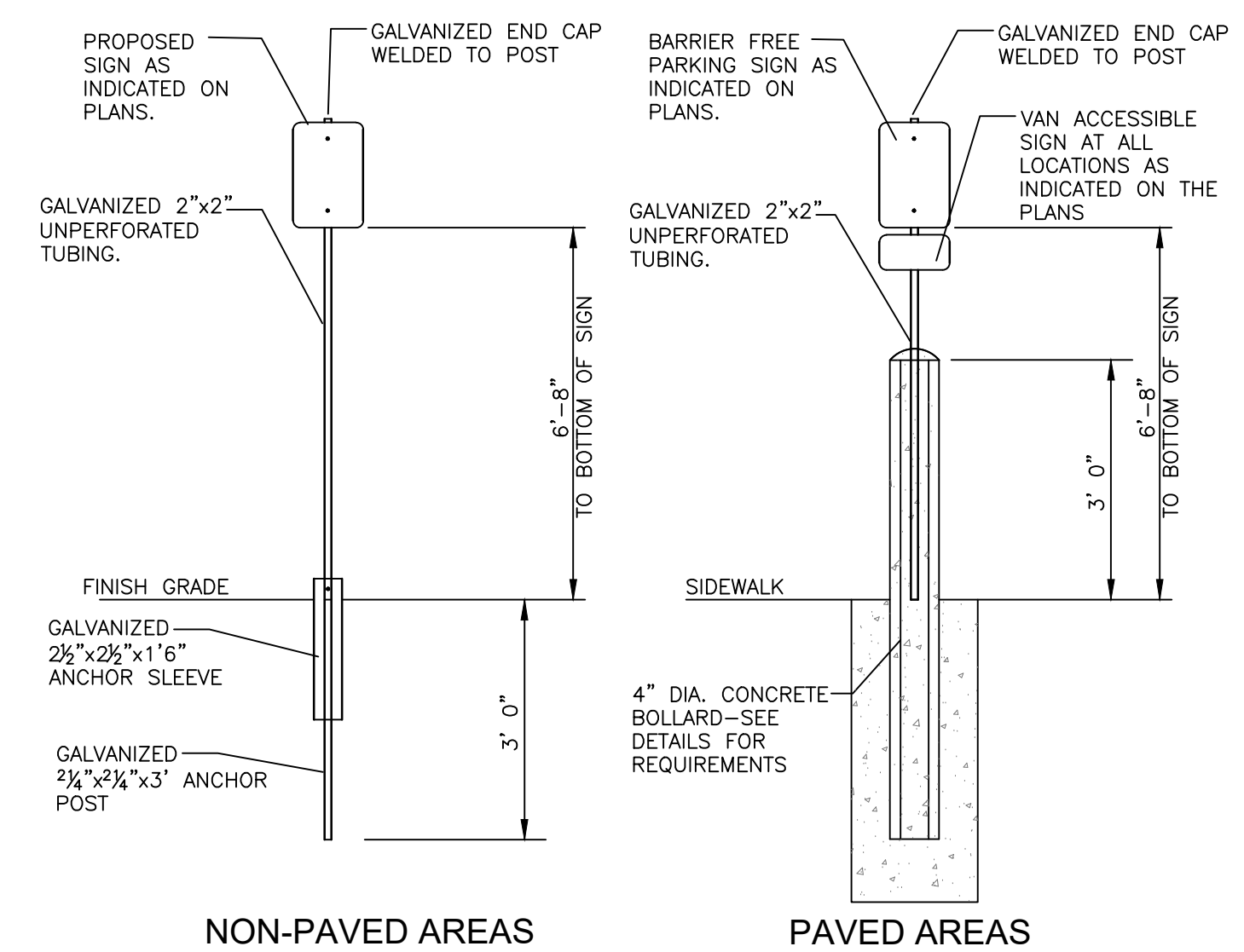
NOTE:
PAINT SHALL BE LIFE LINE YELLOW LY-1 OR B-1052, MANUFACTURED BY THE PRISMO SAFETY CORPORATION, SHERWIN-WILLIAMS, PRO-MAR 5494, OR APPROVED EQUAL. ALL STRIPING SHALL BE FOUR INCHES (4") IN WIDTH PAINTED HIGHWAY YELLOW OR BLUE AS SPECIFIED ON PLANS AND IN SUPPLEMENTAL SPECS. ALL STRIPING SHALL BE APPLIED IN TWO (2) COATS.

PAVEMENT MARKINGS
N.T.S.



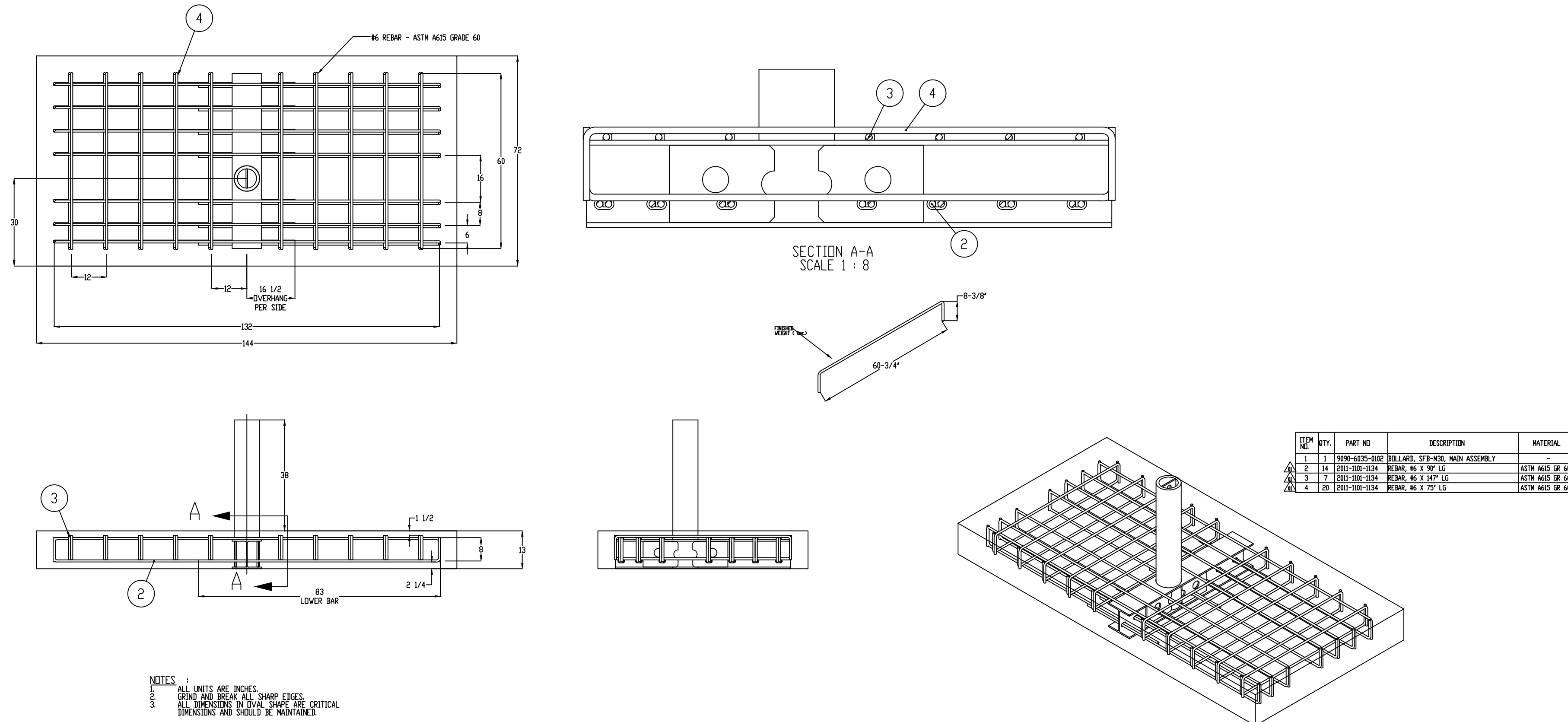
- NOTE:
- REFER TO THE MMUTCD FOR OTHER SIGN DIMENSIONS.
 - BARRIER FREE PARKING SIGN SHALL CONFORM WITH CURRENT STATE AND LOCAL CODES AND REGULATIONS.
 - ALL REGULATORY AND TRAFFIC CONTROL SIGN SHALL COMPLY WITH MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD), AND ANY OTHER APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS.
 - COORDINATE SIGN LOCATIONS WITH LANDSCAPING AS REQUIRED.
 - ALL REGULATORY SIGNS SHALL BE REFLECTORIZED OR ILLUSTRATED TO SHOW SAME SHAPE AND COLOR BOTH BY DAY AND BY NIGHT.
 - SIGN BACKING MATERIAL SHALL BE .080" ALUMINUM, UNLESS NOTED OR OTHERWISE REGULATED.
 - ILLUMINATED SIGNS SHALL BE U.L. LISTED OR APPROVED EQUIVALENT.
 - REGULATORY SIGN POSTS AND SIGN BACKS TO BE PAINTED WITH A SEMI-GLOSS ALIPHATIC ACRYLIC POLYURETHANE TO MATCH PMS BLACK 6C2X.
 - ALL SIGNS INSTALLATION SHALL FOLLOW THE MANUFACTURER'S INSTRUCTIONS AND AS INDICATED BY THESE PLANS.
 - DRIVE ANCHOR POST AND ANCHOR SLEEVE INTO THE GROUND TOGETHER, LEAVING A MAX. OF ONE HOLE EXPOSED FOR BOLT CONNECTION. FOR HAND INSTALLATION, DRIVE CAP OF PROPER SIZE SHALL BE USED TO PREVENT DAMAGE TO TUBING. SIDEWALK SHALL BE POURED AROUND ANCHOR SLEEVE OR EXISTING SIDEWALK SHALL BE CORE DRILLED AND SEALED AROUND THE SLEEVE.
 - INSERT SIGN POST INTO ANCHOR ASSEMBLY APPROXIMATELY 6" TO 8" AND BOLT IN PLACE.
 - INSTALLED SIGN AND POST SHALL BE PLUMB AND FREE OF VERTICAL AND LATERAL MOVEMENT.
 - ALL TUBING SHALL BE #12 U.S. STD. GAGE WALL THICKNESS.

PARKING SIGNAGE
N.T.S.



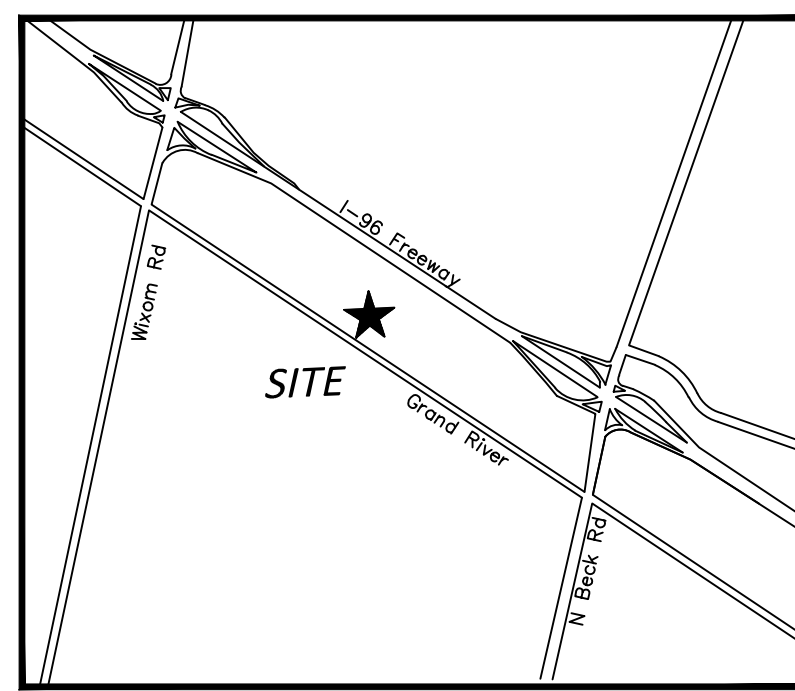
- NOTE:
- SEE PARKING SIGNAGE DETAIL FOR ADDITIONAL REQUIREMENTS.
 - BARRIER FREE SIGNS SHALL BE MOUNTED IN BOTH DIRECTIONS ON ONE POST WHERE BARRIER FREE SPACES FACE EACH OTHER.
 - SIGNS SHALL BE MOUNTED TO POST WITH UNIVERSAL DRIVE RIVETS THROUGH PRE-DRILLED 3/16" DIAMETER HOLES IN THE SIGN FACE AND POST.
 - SIGN POST, ANCHOR POST AND ANCHOR SLEEVE SHALL BE SECURED WITH 3/8" DIAMETER GALVANIZED BOLTS, WITH LOCK-WASHERS AND NUTS, THROUGH PRE-DRILLED 1/2" HOLES.

SIGNAGE INSTALLATION
N.T.S.



NOTES:
1. ALL UNITS ARE INCHES.
2. GROUND BREAK ALL SHARP EDGES.
3. ALL DIMENSIONS IN OVAL SHAPE ARE CRITICAL.
4. DIMENSIONS AND SHALL BE MAINTAINABLE.

SFB-M30 ANTI-RAM BOLLARD
N.T.S.



LOCATION MAP
(NOT TO SCALE)

**LANDSCAPE CONTRACTOR'S
"TWO-YEAR IRRIGATION REQUIREMENT PERIOD"**

It shall be the responsibility of the landscape contractor to program and periodically adjust the irrigation system (provided by others) as required to ensure delivery of proper and adequate water supply to all plant material, and seeded lawn areas serviced by the same irrigation system, to ensure the establishment of healthy plant material and lawn for their first year of growth. Following the landscape contractor's two-year irrigation requirement period, the contractor shall provide the owner with suggested irrigation maintenance schedule for their use.

Landscape Contractor will sufficiently water all plant material located in the Detention Basin that is not irrigated through an automatic system to establish healthy root systems of the shrubs, plugs, and seedlings under this two-year Irrigation Requirement Period.

PROJECTED LANDSCAPE COST

WORK ACTIVITY	QUANTITY	UNIT	UNIT PRICE	TOTAL
LANDSCAPING				
Seed, MDOT Class 'A'	510	SY	\$3.00	\$1,530.00
Seed, Steep Slopes	213	SY	\$8.00	\$1,704.00
Deciduous Trees, 3" cal	6	EA	\$400.00	\$2,400.00
Mulch	2	CY	\$35.00	\$70.00
TOTAL				\$5,704.00

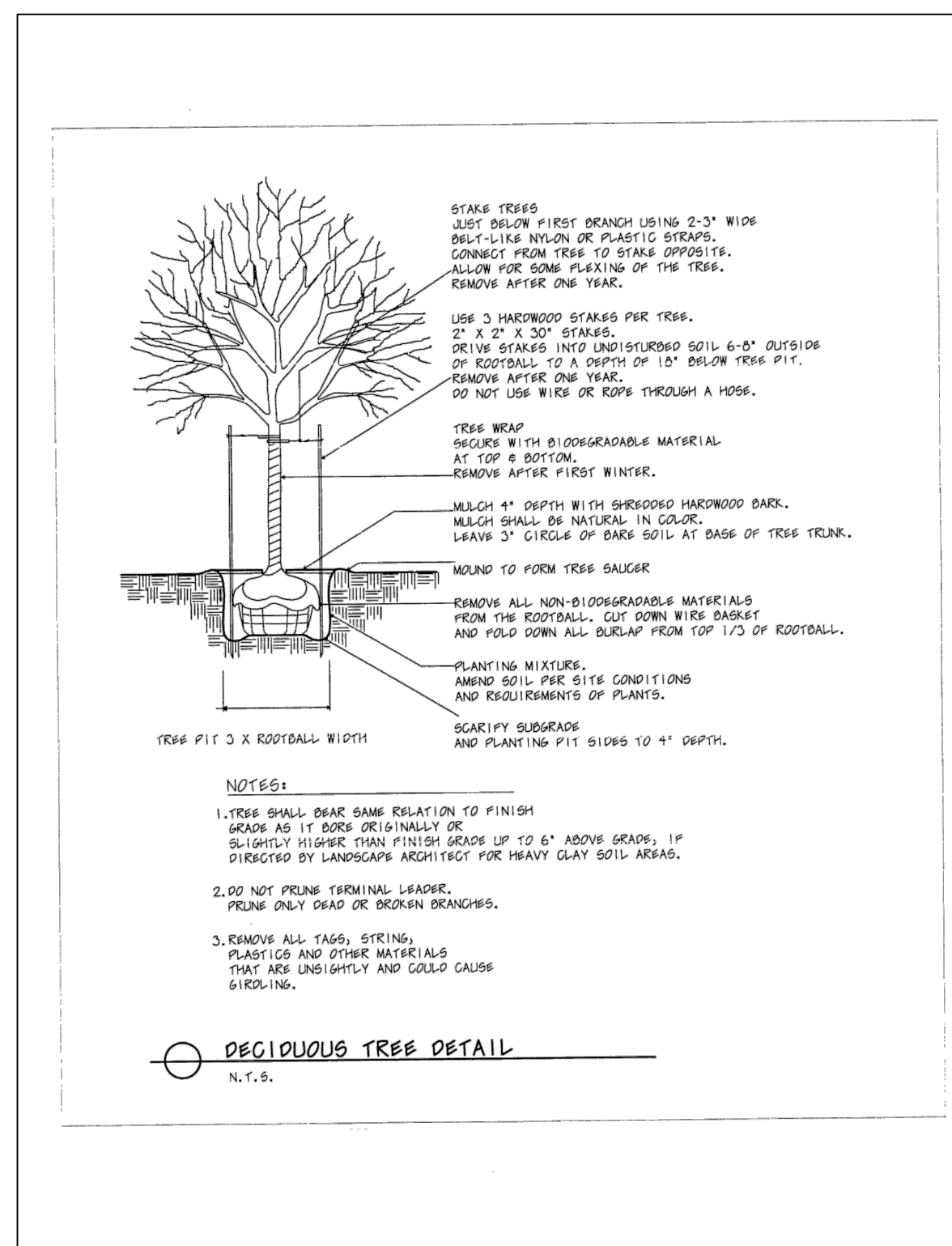
PERIMETER & INTERIOR LANDSCAPE PLANT LIST:

NO.	SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE
6	RB	Heritage River Birch	BETULA NIGRA 'HERITAGE'	1 1/2" CAL., 3-5 Multi-stem, B&B

• No berm is provided along the R.O.W. sidewalk because the site is generally at least 2 feet below the sidewalk. A hedge is provided as screening of the parking lot. A waiver of this requirement is requested of the Planning Commission.
• No existing trees on site will be saved.
• There are no regulated woodlands on site.

LANDSCAPE CALCULATIONS

- 1) Perimeter Parking Landscape Requirements
One Canopy Tree per 35 lf
Parking Lot perimeter = 195 lf
195 lf / 35 = 6 trees (6 trees provided)



PLANT NOTES:

- Plant materials shall be sound, hearty vigorous, free from plant diseases and insects or their eggs, and shall have normal, healthy root systems. Caliper measurements shall be taken 6" above the ground level. All other measurements shall be in accordance with the latest edition of "American Standard for Nursery Stock" (ANSI Z-60.1 + A3002004)
- Planting bed soil for annuals shall be screened topsoil. To deter weed growth during the establishment of annual, & perennial bed, apply a pre-emergent ("Prent" or equal) after planting 2-3 times per growing season, at a rate per recommendation of product manufacturer.
- Planting pockets shall be no deeper than the height of the root ball, saucer shall be made on the edges of the plant pocket.
- All tree wrap shall be removed upon planting.
- Mulch shall be shredded hardwood bark natural in color, free from deleterious materials and suitable as a top dressing of planting beds and individual tree plantings.
- Trees shall be mulched with minimum of 4" deep hardwood bark mulch.
- Grass seed shall be certified turf grass seed complying with A.S.P.A. specifications, and free of weed seeds and undesirable native grasses. Seeded areas shall not be permitted to dry out. All lawn areas shall be fertilized and watered as required during the first growing season to maintain a dense and vigorous growing lawn.
- Plants shall be guaranteed for two complete growing seasons (24 months). Dead material shall be replaced as needed prior to the expiration of the guarantee period, in accordance with the local ordinance requirements.
- Contractor shall provide in writing a list of recommended maintenance procedures for the first two (2) growing seasons.
- Remove top 1/3 of burlap on root ball or all if wrapped in plastic covering and/or nylon cord.
- Plant materials shall be used in compliance with the provisions of the local ordinance and shall be nursery grown, free of pests and diseases, hardy in this county, in conformance with the standards of the American Association of Nurserymen, and shall have passed inspections required under state regulations. In addition, plant materials shall be northern grown, No. 1 grade.
- Plant materials shall be planted within the annual planting window of March 15-Nov 15.
- Any plant substitutions must be approved in writing by the City prior to installation.

STEEP SLOPES MIX:

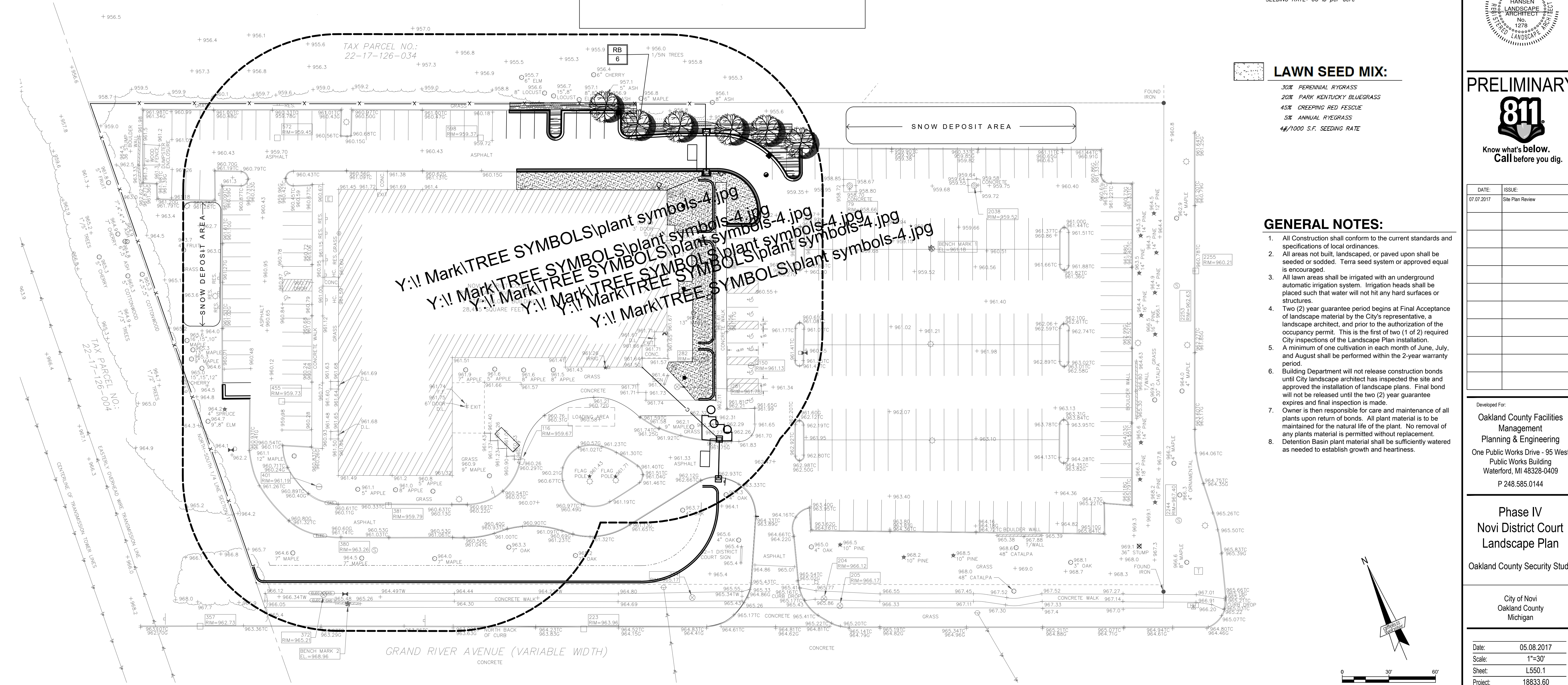
- 30% Lolium multiflorum (Annual Ryegrass)
 - 25% Lotus corniculatus, 'Empire' (Bird's Foot Trefoil, 'Empire')
 - 25% Trifolium hybridum (Alsike Clover)
 - 10% Chamaecrista fasciculata (Partridge Pea)
 - 10% Desmodium paniculatum (Panicledale Ticktrefoil)
- SEEDING RATE: 60 lb per acre

LAWN SEED MIX:

- 30% PERENNIAL RYGRASS
 - 20% PARK KENTUCKY BLUEGRASS
 - 45% CREEPING RED FESCUE
 - 5% ANNUAL RYGRASS
- 4#/1000 S.F. SEEDING RATE

GENERAL NOTES:

- All Construction shall conform to the current standards and specifications of local ordinances.
- All areas not built, landscaped, or paved upon shall be seeded or sodded. Terra seed system or approved equal is encouraged.
- All lawn areas shall be irrigated with an underground automatic irrigation system. Irrigation heads shall be placed such that water will not hit any hard surfaces or structures.
- Two (2) year guarantee period begins at Final Acceptance of landscape material by the City's representative, a landscape architect, and prior to the authorization of the occupancy permit. This is the first of two (1 of 2) required City inspections of the Landscape Plan installation. A minimum of one cultivation in each month of June, July, and August shall be performed within the two-year warranty period.
- Building Department will not release construction bonds until City landscape architect has inspected the site and approved the installation of landscape plans. Final bond will not be released until the two (2) year guarantee expires and final inspection is made.
- Owner is then responsible for care and maintenance of all plants upon return of bonds. All plant material is to be maintained for the natural life of the plant. No removal of any plants material is permitted without replacement.
- Detention Basin plant material shall be sufficiently watered as needed to establish growth and heartiness.

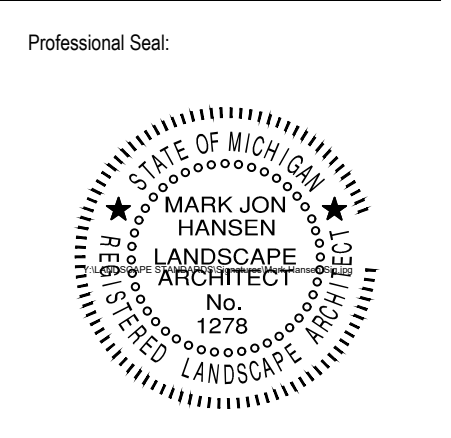


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Manager:	MGD
Designer:	AFP
Quality Control:	STC
Section:	17
	T-01-N R-08-E



PRELIMINARY

811

Know what's below.
Call before you dig.

DATE	ISSUE:
07.07.2017	Site Plan Review

Developed For:
Oakland County Facilities Management
Planning & Engineering
One Public Works Drive - 95 West
Public Works Building
Waterford, MI 48328-0409
P 248.585.0144

**Phase IV
Novi District Court
Landscape Plan**
Oakland County Security Study

City of Novi
Oakland County
Michigan

Date:	05.08.2017
Scale:	1"=30'
Sheet:	L550.1
Project:	18833.60