

SITE DEVELOPMENT PLAN FOR COLLIER COUNTY MARINE STATION

PART OF SECTION 8, TOWNSHIP 52 SOUTH, RANGE 26 EAST,
COLLIER COUNTY, FLORIDA



• CIVIL ENGINEERING • LANDSCAPE ARCHITECTURE
• PLANNING AND ZONING • SURVEYING
• ENVIRONMENTAL SERVICES • LAND DEVELOPMENT

2600 Golden Gate Pkwy Naples, FL 34105 239.403.6700 Pen-Eng.com

PROJECT:
COLLIER COUNTY MARINE STATION

PLAN TITLE:
PERMIT PLANS

SHEET TITLE:
COVER SHEET

SHEET INDEX:

SHEET NO.	SHEET ID	SHEET TITLE	SHEET REV
01	C-001	COVER SHEET	0
02	C-002	NOTE SHEET	0
03	C-003	AERIAL IMAGE AND DEMOLITION PLAN	0
04	C-004	MASTER SITE PLAN	0
05	C-111	MASTER PAVING AND DRAINAGE PLAN	0
06	C-112	MASTER UTILITY PLAN	0
07	C-113	FIRE DEPARTMENT PLAN	0
08	C-201	PLAN AND PROFILE	0
09	C-301	CROSS SECTIONS, DRAINAGE, AND PAVING DETAILS	0
10	C-502	RTANK DETAILS	0
11	C-511	STANDARD CITY OF MARCO GENERAL DETAILS	0
12	C-521	STANDARD CITY OF MARCO WATER MAIN AND SANITARY SEWER DETAILS	0
13	C-701	NPDES DISCHARGE CONTROL PLAN AND DETAILS	0

MARCO ISLAND FIRE RESCUE

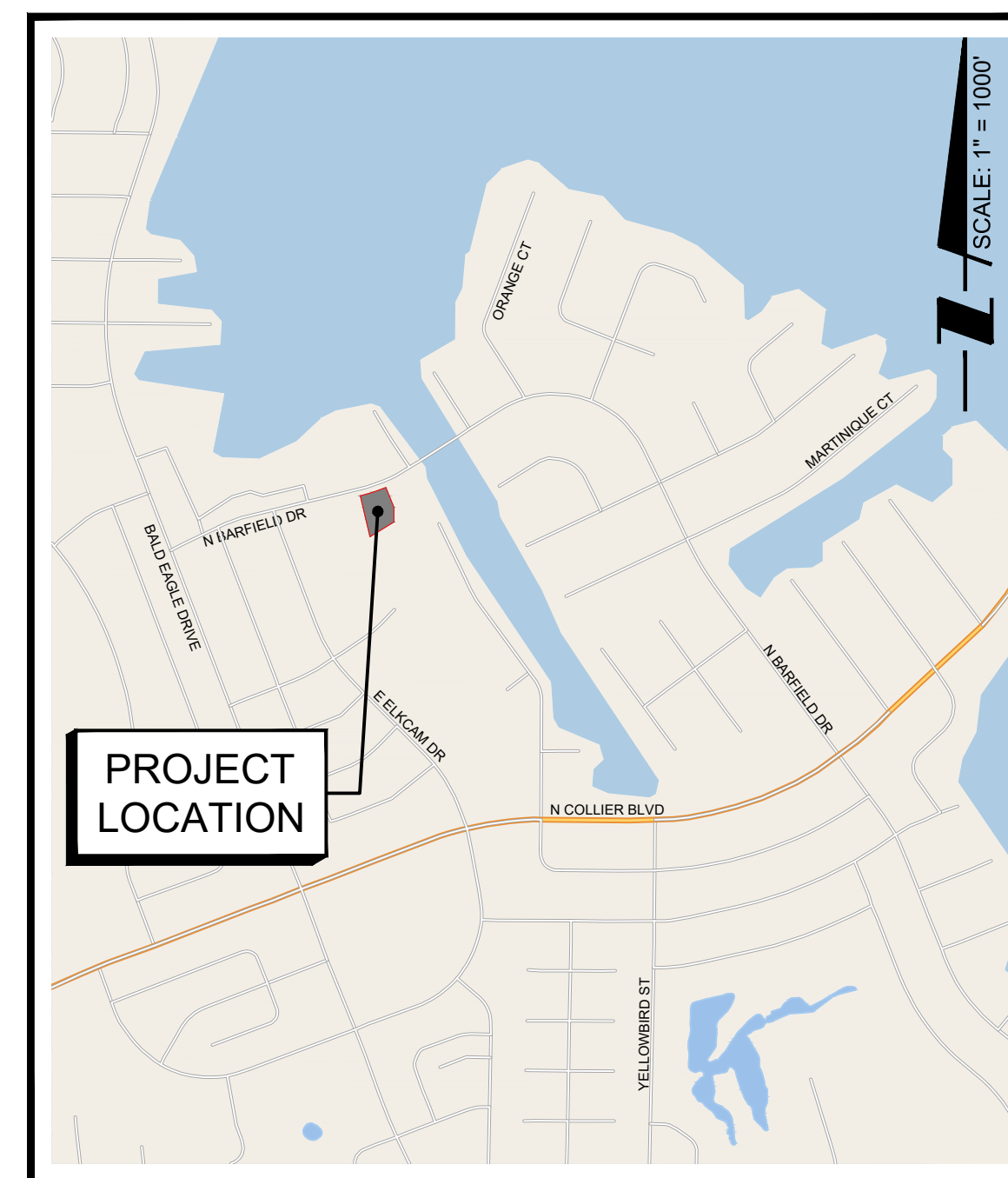


Reviewed and approved for Fire Code Compliance pursuant to FFPC 1-1.14

Plans must be on the job site at the time of inspection. Any errors or omissions in these plans shall be made to conform with applicable code requirements.

Daniel Zunzunegui, Fire Marshal
09/23/2024

Reviewed for code compliance
M Holden
09/17/2024 11:16:59 AM



VICINITY MAP



LOCATION MAP

OWNER/DEVELOPER
COLLIER COUNTY FACILITIES MANAGEMENT
3335 TAMIAMI TRAIL EAST
NAPLES, FL 34112
(239) 252-8380

Always call 811 two full business days before you dig to have underground utilities located and marked.

REVISIONS:

REV. NO.	DESCRIPTION	SHEETS AFFECTED	DATE
1	REVISED PER CITY OF MARCO ISLAND COMMENTS, DATED AUGUST 22, 2024	07, 09	09/05/24

LEGAL DESCRIPTION:
PER ORB 1166, PAGE 583
LOT 1, BLOCK 781, OF A REPLAT OF A PORTION OF MARCO BEACH UNIT FOUR, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 12, PAGES 19 THROUGH 21 INCLUSIVE, OF THE PUBLIC RECORDS OF COLLIER COUNTY

CONSULTANTS:
SURVEY JOHNSON ENGINEERING
LIGHTING ENERGY CONCEPTS
LANDSCAPE PENINSULA ENGINEERING
TRAFFIC ENGINEER TREBILCOCK CONSULTING SOLUTIONS
ARCHITECT STUDIO +

PROJECT INFORMATION:
PL Number:
FOLIO Number: 57140040009
DRI Name: N/A
SFWMD ERP Number: N/A
PUD Ordinances Number: N/A
Zoning: C-5 (DISTRICT 1 / ELCAM CIRCLE OVERLAY)
Zoning (North): ROW / C-5
Zoning (South): C-5
Zoning (East): RSF-4
Zoning (West): C-5

DATUM NOTE:
ALL INVERTS AND ELEVATIONS ARE BASED ON NAVD 88 (NORTH AMERICAN VERTICAL DATUM OF 1988).

DESIGN TEAM:
PROJECT MANAGER: J. WOODWARD
PROJECT ENGINEER: J. WOODWARD
PROJECT DESIGNER: DAVID J. STIVERS
DRAWING BY: DAVID J. STIVERS
PROJECT SURVEYOR:
PROFESSIONAL SEALS:
PROFESSIONAL ENGINEER: J. WOODWARD
FLORIDA LICENSE NUMBER: 84212
No. 84212
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Digitally signed by Jenna A Woodward
Reason: This item has been digitally signed and sealed by Jenna Woodward on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
Date: 2024.09.11 11:17:48 -0400
Florida Engineering Certificate of Authorization #28275
Florida Landscape Certificate of Authorization #LC2000032
PROJECT NUMBER: P-CCMS-001-001-001CV.dwg
PROJECT FILE INFORMATION:
FILE DATE: JULY 2024
PROJECT NUMBER: P-CCMS-001-001-001CV.dwg
SET NUMBER: SHEET ID:
P-CCMS-001 001 C-001



CLEARING NOTES

1. REFERENCE COLLIER COUNTY LAND DEVELOPMENT CODE FOR NATIVE VEGETATION REQUIREMENTS.
2. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE APPLICANT SHALL INSTALL TEMPORARY CONSTRUCTION FENCING (ENFORCEANCE) BEYOND THE EDGES OF RETAINED VEGETATION ALONG THE LIMITS OF CLEARING. THIS FENCE SHALL REMAIN ERECTED AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.
3. CONTRACTOR SHALL EMPLOY METHODS IN ACCORDANCE WITH "BEST MANAGEMENT PRACTICES" AND REFERENCE NORS DISCHARGE CONTROL PLAN AND DETAILS TO PREVENT EROSION.
4. ALL PROHIBITED EXOTIC VEGETATION (CATEGORY I AND II EXOTICS AS DEFINED BY THE FLORIDA EXOTIC PEST PLANT COUNCIL (FEPCC)) SHALL BE REMOVED FROM THE SITE AND ALL NATIVE PRESERVATION AREAS SHALL BE MAINTAINED FREE OF PROHIBITED EXOTICS IN PERPETUITY. (LDC 155.09)
5. WHERE HEAVY CONSTRUCTION ACTIVITIES ARE ADJACENT TO EXISTING NATIVE VEGETATION TO BE RETAINED, THE LIMITS OF CLEARING WILL BE CLEARLY MARKED AND BARRICADED PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL COMPLETION OF CONSTRUCTION.
6. STANDARD STRUCTURAL BUFFERS WILL BE PLACED ADJACENT TO ALL REMAINING CONSERVATION AREAS WHERE A 15' WIDE VEGETATED BUFFER BETWEEN THE WETLAND JURISDICTION LINE AND ADJACENT DEVELOPMENT CANNOT BE MAINTAINED. THE "STANDARD STRUCTURAL BUFFER" WILL BE A HEDGE OF NATIVE VEGETATION, A FENCE, A SMALL WALL OR BULKHEAD OR A COMBINATION OF THESE. A HEDGE OF NATIVE VEGETATION (SHRUBS) WILL TYPICALLY BE UTILIZED. IF A FENCE OR WALL IS USED, IT WILL BE CONSTRUCTED ALONG THE CONSERVATION AREA BOUNDARY BUT WILL NOT INTRUDE INTO THE CONSERVATION AREA IF A HEDGE IS USED. PLANTS WILL BE INSTALLED IN A ZONE BEGINNING AT THE CONSERVATION AREA BOUNDARY AND EXTENDING INTO THE CONSERVATION AREA NOT MORE THAN 3 FEET.

LEGEND

- AREA TO BE RAZED TO GROUND LEVEL UNLESS OTHERWISE NOTED WITHIN PLAN
- RIGHT-OF-WAY SIDEWALK REMOVAL (±520 SF)
- RIGHT-OF-WAY ASPHALT DRIVE REMOVAL (FULL DEPTH AND RESTORATION AT EXISTING EDGE OF PAVEMENT)
- RIGHT-OF-WAY ASPHALT RESTORATION (UTILITY INSTALL IMPACTS)

PENINSULA ENGINEERING

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COLLIER COUNTY MARINE STATION

AERIAL IMAGE AND DEMOLITION PLAN

CLIENT: COLLIER COUNTY FACILITIES MANAGEMENT

REVISIONS:

No.	Revision	Date
1	REVISED PER CITY OF MARCO ISLAND COMMENTS. DATED AUGUST 22, 2024.	08/05/24

NOTES:

PROFESSIONAL SEALS:

PROFESSIONAL ENGINEER: J. WOODWARD
 FLORIDA LICENSE NUMBER: 84212

Florida Engineering Certificate of Authorization #60275
 Florida Landscape Certificate of Authorization #LCS26009832

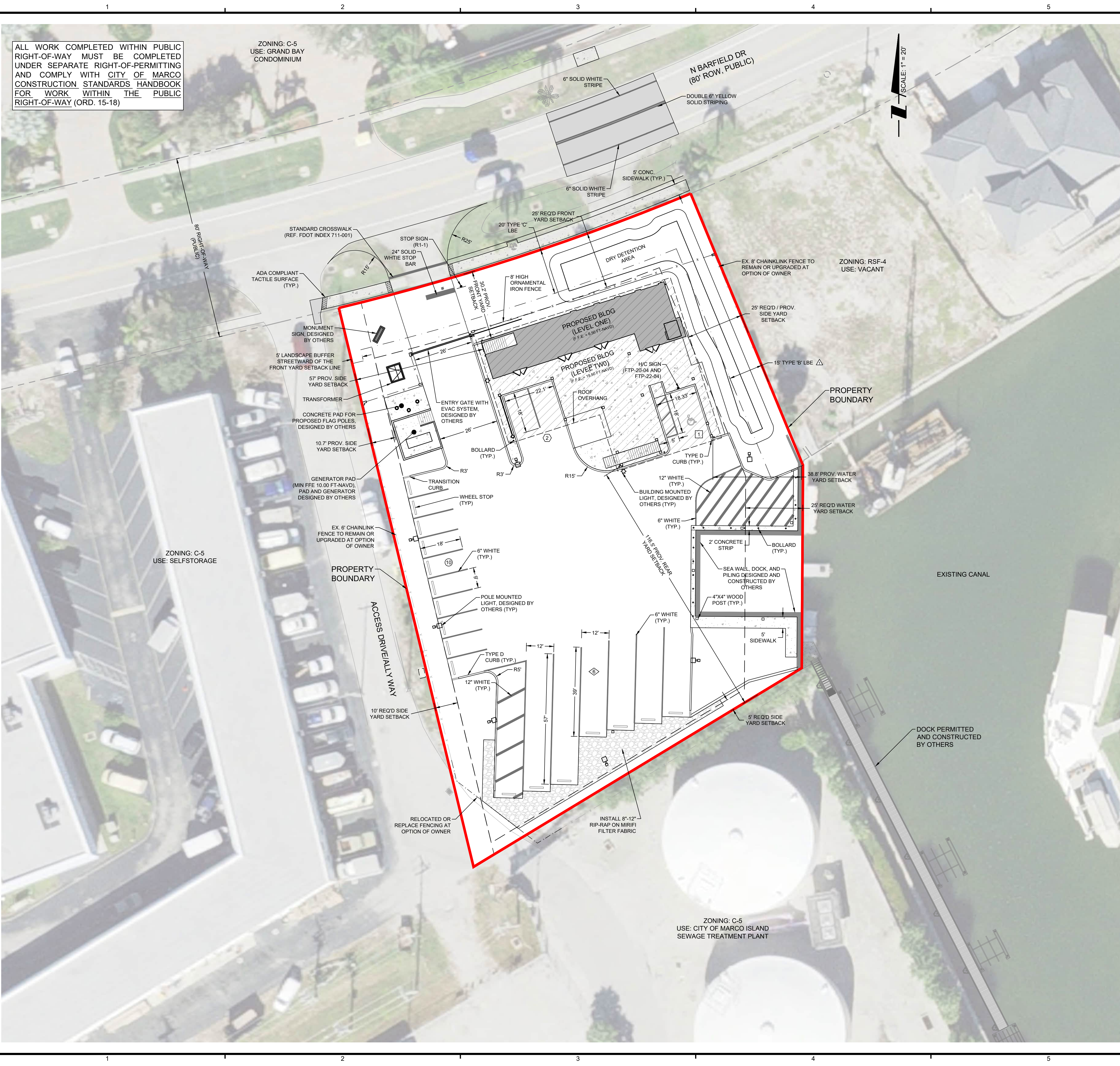
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SEC. 8	TWP. 52	RGE. 26
City: MARCO ISLAND	County: COLLIER	
Designed by: J. WOODWARD		
Drawn by: DAVID J. STIVERS		
Date: JULY 2024		
Horizontal Scale: 1" = 20'		
Vertical Scale: N.T.S.		
Project Number: P-CCMS-001		
File Name: P-CCMS-001-001-003PL.dwg		
Sheet ID: C-003		
Sheet Number: 03 of 13		

ALL WORK COMPLETED WITHIN PUBLIC RIGHT-OF-WAY MUST BE COMPLETED UNDER SEPARATE RIGHT-OF-PERMITTING AND COMPLY WITH CITY OF MARCO CONSTRUCTION STANDARDS HANDBOOK FOR WORK WITHIN THE PUBLIC RIGHT-OF-WAY (ORD. 15-18)

ZONING: C-5
USE: GRAND BAY CONDOMINIUM



SCALE: 1" = 20'

TABLES

DEVELOPMENT STANDARDS TABLE		
DEVELOPMENT STANDARDS	REQUIRED	PROVIDED
PRINCIPLES / ACCESSORY STRUCTURES		
MIN. LOT AREA	10,000 SF	39,204 SF
MIN. LOT WIDTH	100 LF	161 LF
MIN. FLOOR AREA	700 SF	5,911 SF
MAXIMUM LOT COVERAGE	76%	64.6%
MAX. BUILDING HEIGHT ⁽¹⁾	35'	27'-1"

(1) MEASURED FROM BASE FLOOR ELEVATION TO THE MIDPOINT OF THE ROOF

SETBACK TABLE		
DESCRIPTION	REQUIRED	PROVIDED
FRONT YARD (NORTH)	25.0'	30.2'
SIDE YARD (EAST)	25.0'	25.0'
SIDE YARD (WEST)	10.0'	10.7'
REAR YARD (EAST)	5.0'	116.5'
WATER YARDS	25.0'	38.8'

PARKING SUMMARY							
BLDG	TYPE OF USE	USE	REQUIRED PARKING		PARKING PROVIDED		
			RATIO	TOTAL	REGULAR	ACCESSIBLE	TOTAL
PUBLIC BUILDINGS	OFFICE	1,090 SF	1 PER 200 SF	5	2	0	2
	EMPLOYEE	6 EMP	2 PER 1 EMP	12	16	1	17
TOTAL				17			19

PARKING LEGEND		BUILDING BREAKDOWN		
	STANDARD PARKING	USE	SQUARE FOOTAGE	PERCENTAGE
	ACCESSIBLE PARKING (COVERED)	OFFICE	1,090 SF	18.4%
	COVERED PARKING	STORAGE	1,072 SF	18.1%
	OVERSIZED PARKING	SUPPORT AREA (CIRCULATIONS, UTILITY ROOMS, WALLS)	3,749 SF	63.4%
		TOTAL	5,911 SF	100.0%

SITE AREA SUMMARY				
TYPE	DESCRIPTION	SQUARE FOOTAGE	ACREAGE	PERCENTAGE OF TOTAL
IMPERVIOUS	BUILDING	4,116	0.09	10.4%
	PAVEMENT / PATHWAYS	19,166	0.44	48.6%
	BOAT BASIN	2,178	0.05	5.5%
IMPERVIOUS (SUB-TOTAL)		25,460	0.58	64.5%
PERVIOUS	OPEN SPACE	11,326	0.26	28.7%
	DETENTION AREA	2,613	0.06	6.6%
		13,939	0.32	35.4%
PERVIOUS (SUB-TOTAL)		13,939	0.32	35.4%
TOTAL		39,399	0.90	100.0%

WASTE MANAGEMENT FACILITIES

- 96 GALLON ROLL-OUTS WILL BE UTILIZED FOR TRASH COLLECTION AT THIS SITE.

ROADWAY AND PARKING LOT SIGNING AND MARKING NOTES

- ROADWAY SIGNAGE AND PAVEMENT MARKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND FOOT DESIGN STANDARDS.
- ALL STRIPING ON THE SECOND LIFT OF ASPHALT SHALL BE THERMOPLASTIC OR PAINT AT OWNER'S DISCRETION. THE FIRST LIFT OF ASPHALT MAY BE STRIPED WITH PAINT.
- ALL SIGNING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE F.D.O.T. STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION. THE F.D.O.T. DESIGN STANDARDS INDEX, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AND ALL APPLICABLE LOCAL STANDARDS. UTILIZATION OF THE 2018 M.U.T.C.D. SHALL BE IN ACCORDANCE WITH F.D.O.T. POLICY.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL COMPLY WITH THE LATEST EDITIONS OF THE "STATE OF FLORIDA MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS" AND WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND WITH ALL OTHER GOVERNING SAFETY REGULATIONS.
- PAVEMENT MARKINGS USING PAINT SHALL BE PERMANENT REFLECTIVE TRAFFIC PAINT WITH GLASS BEADS IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS SECTION 710 UNLESS NOTED OTHERWISE.
- MATCH EXISTING PAVEMENT MARKINGS AT EXISTING ROADS. ALL EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH PROPOSED MARKINGS SHALL BE REMOVED BY HYDRO-BLASTING. EXISTING SIGNS SHALL REMAIN UNLESS NOTED OTHERWISE.
- ALL STOP SIGN LOCATIONS SHALL INCLUDE A 24" PAINTED WHITE STOP BAR. AS AN ALTERNATIVE, ROADS WITH PAVER BRICK SURFACES MAY UTILIZE CONTRASTING COLOR PAVERS IN LIEU OF PAINT.
- THE CONTRACTOR SHALL FURNISH AND INSTALL STREET NAME SIGNS IN ACCORDANCE WITH LOCAL DEVELOPMENT STANDARDS ATOP ALL STOP SIGNS INDICATED ON THIS PLAN.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL BLUE / BLUE REFLECTIVE PAVEMENT MARKERS AT THE CENTER OF THE TRAFFIC LANE NEAREST ALL PROPOSED FIRE HYDRANTS.
- ALL ROADWAY SIGNING AND PAVEMENT MARKINGS, STREET NAME SIGNS, ETC. (EXCLUDING PROJECT IDENTIFICATION SIGNING) ARE TO BE INCLUDED IN THE LUMP SUM PRICE FOR SIGNING AND MARKING UNLESS A DETAILED BID QUANTITY BREAKDOWN IS PROVIDED.
- ANY EXISTING SIGN TO REMAIN THAT IS RELOCATED OR DISTURBED DURING CONSTRUCTION SHALL BE RESET TO CURRENT F.D.O.T. STANDARD SIZES 700-10 AND 700-11 FOR HEIGHT, OFFSET AND METHOD OF INSTALLATION. ANY SIGNS DAMAGED BY CONTRACTOR SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- ALL SIGNS THAT ARE EMBEDDED IN CONCRETE OR ASPHALT SHALL BE INSTALLED IN A F.D.O.T. APPROVED PIPE SLEEVE.

SIGN LEGEND

PENINSULA ENGINEERING

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Naples, FL 34105

239.403.6700
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COLLIER COUNTY MARINE STATION

MASTER SITE PLAN

COLLIER COUNTY FACILITIES MANAGEMENT

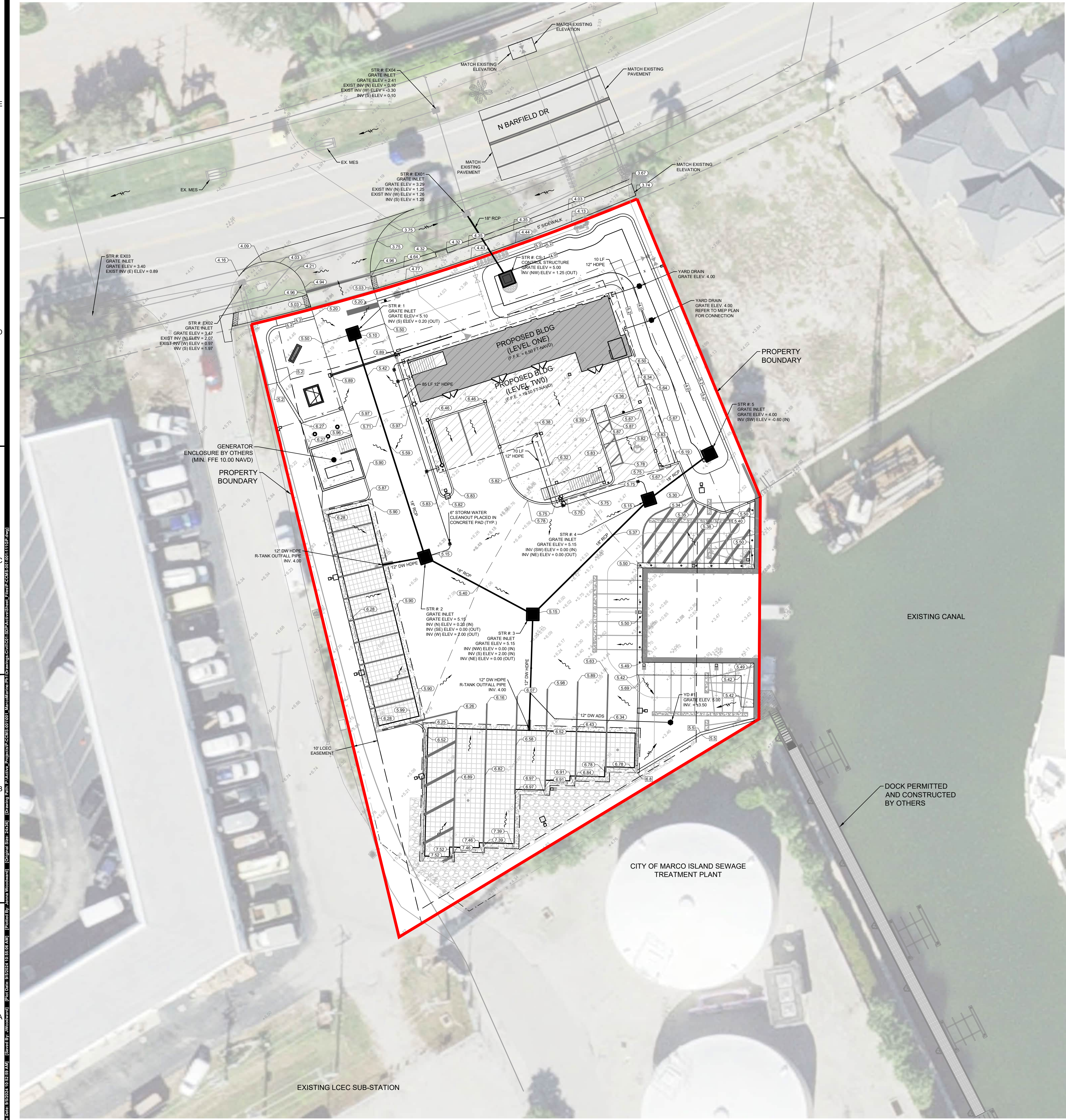
REVISIONS:

No.	Revision	Date
1	REVISED PER CITY OF MARCO ISLAND COMMENTS. DATED AUGUST 22, 2024.	08/22/24

PROFESSIONAL SEALS:
PROFESSIONAL ENGINEER: J. WOODWARD
FLORIDA LICENSE NUMBER: 84212

DATUM NOTE:
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Bar Scale: 1" = 20'

SEC. 8 TWP. 52 RGE. 26
City: MARCO ISLAND County: COLLIER
Designed by: J. WOODWARD
Drawn by: DAVID J. STIVERS
Date: JULY 2024
Horizontal Scale: 1" = 20'
Vertical Scale: N.T.S.
Project Number: P-CCMS-001
File Name: P-CCMS-001-001-004LP.dwg
Sheet ID: C-004
Sheet Number: 04 of 13



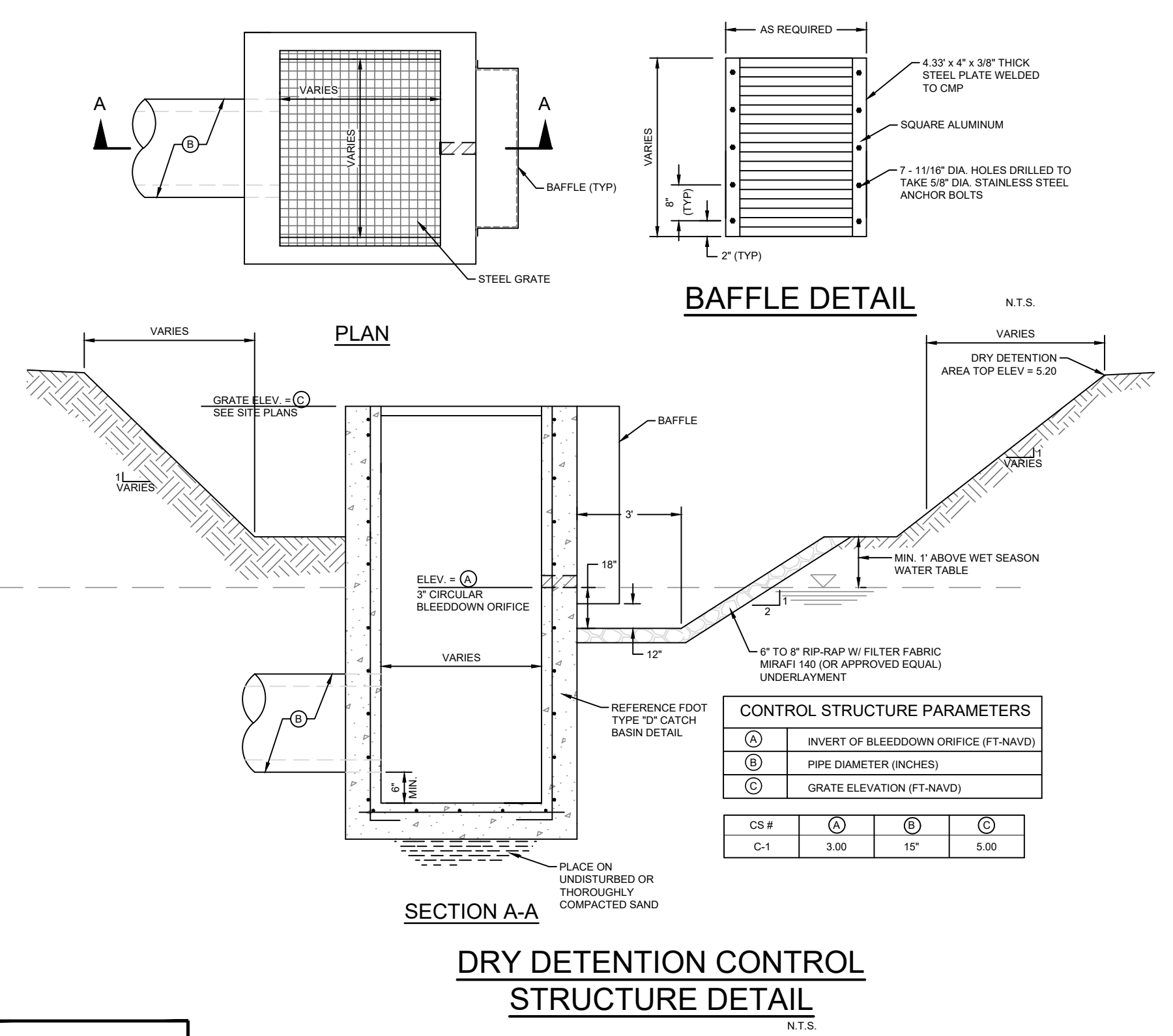
TABLES

SITE AREA SUMMARY				
TYPE	DESCRIPTION	SQUARE FOOTAGE	ACREAGE	PERCENTAGE OF TOTAL
IMPERVIOUS	ROOF	4,116	0.09	10.4%
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PERVIOUS (SUB-TOTAL)		13,939	0.32	35.4%
TOTAL		39,399	0.90	100.0%

WATER MANAGEMENT SUMMARY	
MODELING PARAMETERS	
CONTROL ELEVATION (FT-NAVD)	3.0
10-YEAR, 1-DAY RAINFALL (INCHES)	7.0
25-YEAR, 3-DAY RAINFALL (INCHES)	12.7
100-YEAR, 3-DAY RAINFALL (INCHES)	16.0
10-YEAR, 1-DAY STORM STAGE (FT-NAVD)	5.06
25-YEAR, 3-DAY STORM STAGE (FT-NAVD)	5.18
100-YEAR, 3-DAY STORM STAGE (FT-NAVD), ZERO DISCHARGE	6.78
MINIMUM SITE DESIGN ELEVATION	
MINIMUM PARKING LOT ELEVATION (FT-NAVD)	5.1
MINIMUM ROAD CROWN ELEVATION (FT-NAVD)	5.2
MINIMUM PERIMETER BERM ELEVATION (FT-NAVD)	5.2
FEMA ZONE (FT-NAVD)	AEB
MINIMUM FINISHED FLOOR ELEVATION (FT-NAVD)	10.0

ALLOWABLE DISCHARGE RATE (25 YR - 72 HR)	
PRE-DEVELOPMENT (CFS)	4.26
POST DEVELOPMENT (CFS)	2.74

WATER QUALITY VOLUME	
REQUIRED	0.10 AC/FT
PROVIDED	0.12 AC/FT



FEMA ZONE MAP (FIRM PANEL NO. 12021 C0828J)



COLLIER COUNTY MARINE STATION

MASTER PAVING AND DRAINAGE PLAN

CLIENT: COLLIER COUNTY FACILITIES MANAGEMENT

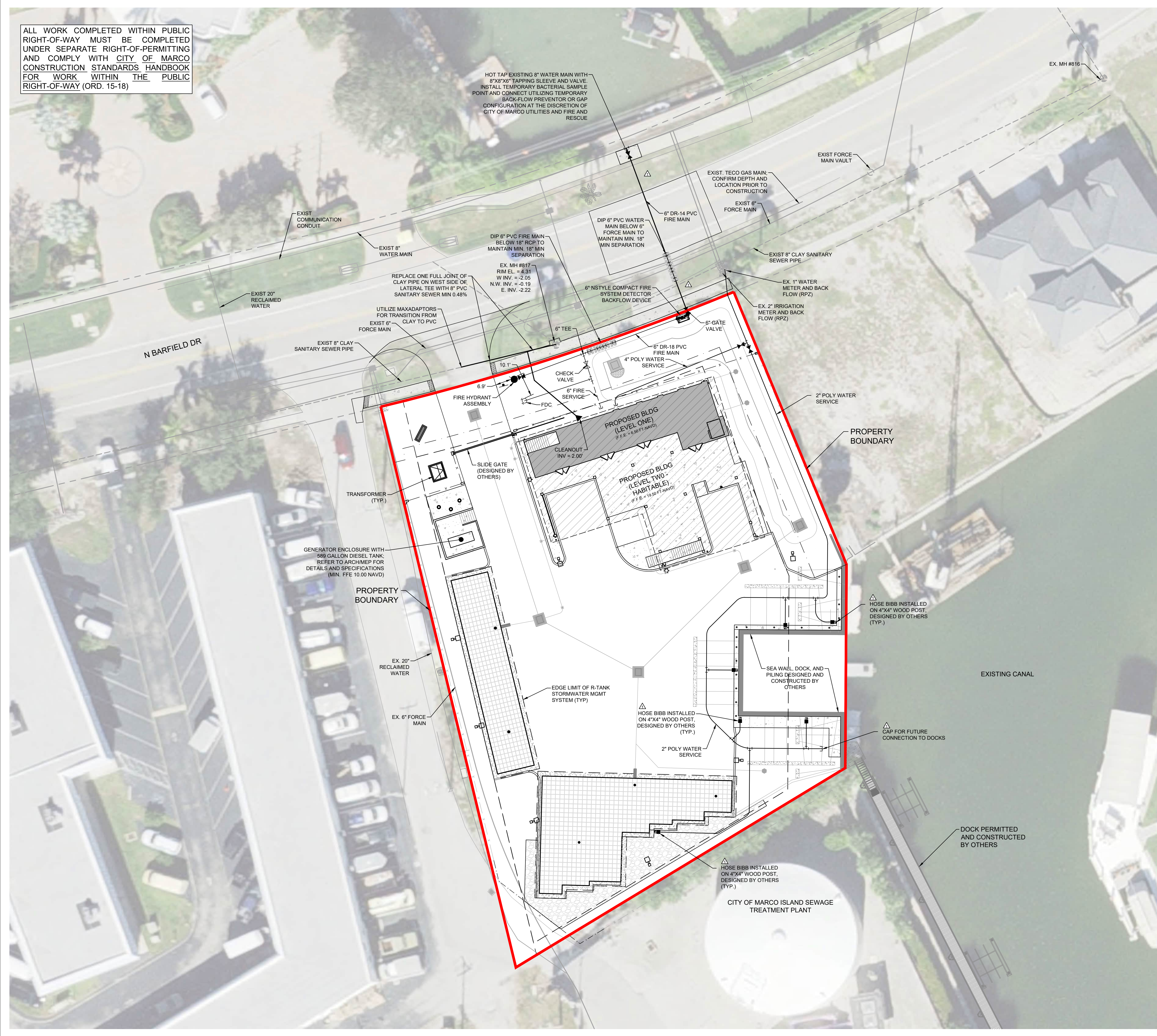
REVISIONS:

No.	Revision	Date

PROFESSIONAL SEALS:
 PROFESSIONAL ENGINEER: J. WOODWARD
 FLORIDA LICENSE NUMBER: 84212

Florida Engineering Certificate of Authorization #06273
 Florida Landscape Certificate of Authorization #L20000932
 DATUM NOTE:
 ALL ELEVATIONS ARE BASED ON NAVD 88 (NORTH AMERICAN VERTICAL DATUM OF 1988).
 Bar Scale: 1" = 20'
 0 10' 20' 40' 60'
 SCALE: 1" = 400'
 SEC. 8 TWP. 52 RGE. 26
 City: MARCO ISLAND County: COLLIER
 Designed by: J. WOODWARD
 Drawn by: DAVID J. STIVERS
 Date: JULY 2024
 Horizontal Scale: 1" = 20'
 Vertical Scale: N.T.S.
 Project Number: P-CCMS-001
 File Name: P-CCMS-001-001-111GP.dwg
 Sheet ID: C-111
 Sheet Number: 05 of 13

ALL WORK COMPLETED WITHIN PUBLIC RIGHT-OF-WAY MUST BE COMPLETED UNDER SEPARATE RIGHT-OF-PERMITTING AND COMPLY WITH CITY OF MARCO CONSTRUCTION STANDARDS HANDBOOK FOR WORK WITHIN THE PUBLIC RIGHT-OF-WAY (ORD. 15-18)



TABLES

WATER MAIN TABLE			
SIZE (IN)	LENGTH (LF)		TOTAL
	C900 DR18	C900 DR14	
6	80	75	155 LF
TOTAL			155 LF

SANITARY SEWER MAIN SUMMARY TABLE	
SIZE (IN)	LENGTH (LF)
6	40

FIRE HYDRANT FLOW TEST

Marco Island Fire Rescue
 Department of Fire Prevention
 (239) 394-8405
 danish@cityofmarcoisland.com

Company/Firm Requesting Test: Peninsula Engineering
 Project Name: Collier County Marine Station
 Contact Person & Email: Audrey Hancock ahancock@pen-eng.com
 Date Requested: 06/20/2024
 Amount Due and Payable to The Marco Island Fire Department \$ 113.00
 *Note: Charges for flow testing will be \$77.00 for the first hydrant and \$36.00 for each additional hydrant tested at the same date and time as the first hydrant.
 Remit payment with invoice # to the link below:
<https://marcoislandfl.marcofire.com/citizens/GeneralBilling/Default.aspx>

Date Tested: 6/20/24
 Location:
 Time of Test: 9:15
 Pitot: 26 x 2 Static: 81 Residual: 72
 Flow: 1711 gpm
 Flow @ 20psi: 4809 gpm

1280 San Marco Road, Marco Island, FL 34145

GENERAL UTILITY NOTES

1. LOCATIONS CITY OWNED UTILITIES ARE BASED ON CITY OF MARCO UTILITY GIS AND LIMITED SURVEY.
2. LOCATION OF PUBLIC FACILITIES (I.E. TECO, LCEC, TELECOM, ETC) ARE APPROXIMATE IN LOCATION BASED ON LIMITED SURVEY AND HISTORICAL PERMITTING.
3. CONTRACTOR TO FIELD VERIFY ALL UTILITY LOCATIONS AND INVERTS PRIOR ANY CONSTRUCTION.

PENINSULA ENGINEERING
 CIVIL ENGINEERING PLANNING AND ZONING SURVEYING LANDSCAPE ARCHITECTURE
 ENVIRONMENTAL SERVICES LAND DEVELOPMENT

2600 Golden Gate Pkwy 239.403.6700
 Naples, FL 34105 Pen-Eng.com

COLLIER COUNTY MARINE STATION

MASTER UTILITY PLAN

COLLIER COUNTY FACILITIES MANAGEMENT

REVISIONS:

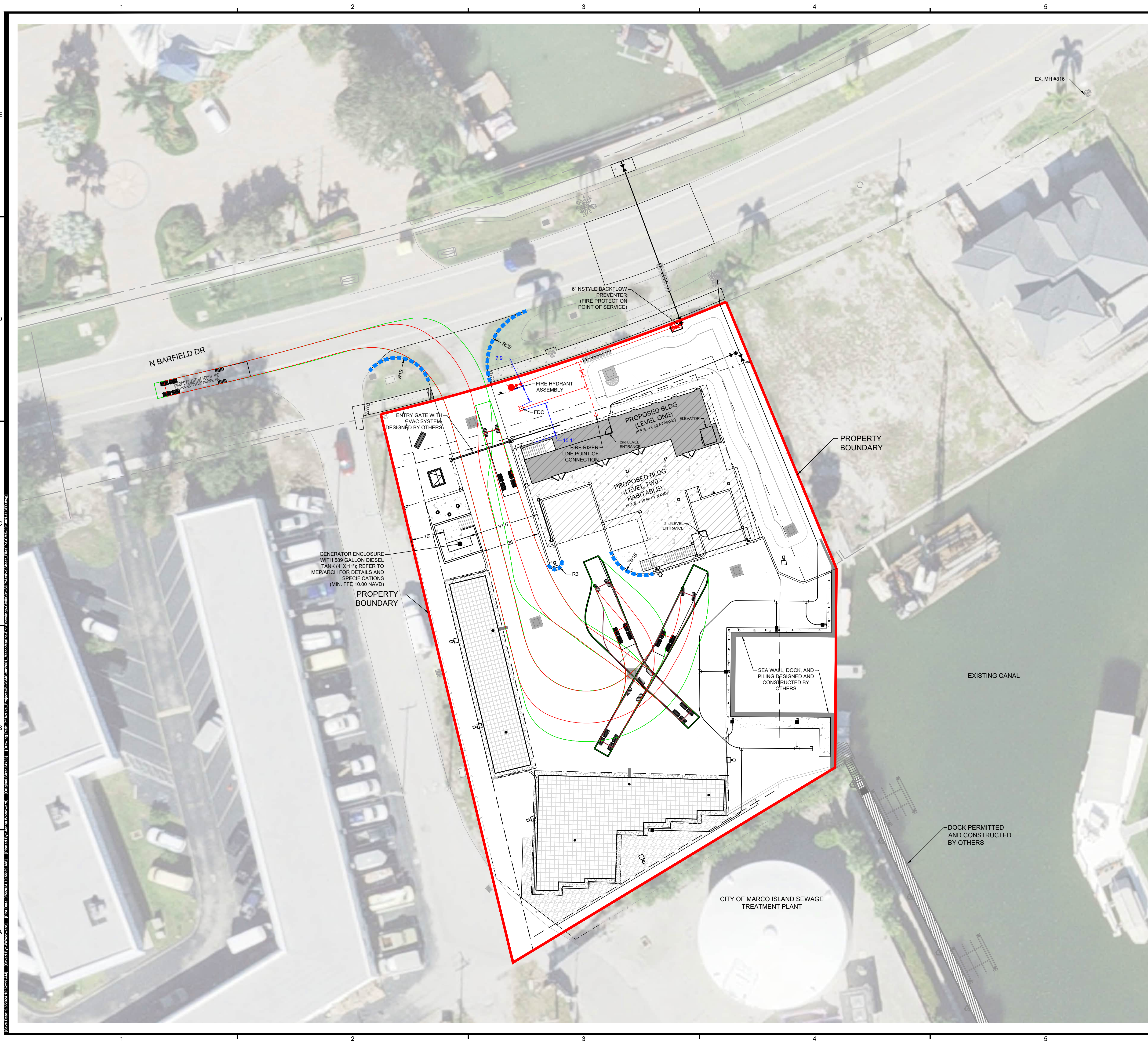
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PROFESSIONAL SEALS:
 PROFESSIONAL ENGINEER: J. WOODWARD
 FLORIDA LICENSE NUMBER: 84212

Florida Engineering Certificate of Authorization #00273
 Florida Landscape Certificate of Authorization #LCS20000532
DATUM NOTE:
 ALL ELEVATIONS ARE BASED ON NAVD 88 (NORTH AMERICAN VERTICAL DATUM OF 1988)
 Bar Scale: 1" = 20'
 0 10' 20' 40' 60'

SEC. 8 TWP. 52 RGE. 26
 City: MARCO ISLAND County: COLLIER
 Designed by: J. WOODWARD
 Drawn by: DAVID J. STIVERS
 Date: JULY 2024
 Horizontal Scale: 1" = 20'
 Vertical Scale: N.T.S.
 Project Number: P-CCMS-001
 File Name: P-CCMS-001-001-112UP.dwg

Sheet ID: **C-112**
 Sheet Number: 06 of 13



FIRE TRUCK INFORMATION

Overall Length	42.500ft
Overall Width	6.920ft
Overall Body Height	7.849ft
Min Body Ground Clearance	1.099ft
Track Width	6.910ft
Lock-to-lock time	6.00s
Max Wheel Angle	40.00°

FIRE HYDRANT FLOW TEST

Marco Island Fire Rescue
 Department of Fire Prevention
 (239)394-8405
 danie@cityofmarcoisland.com

Company/Firm Requesting Test: Peninsula Engineering
 Project Name: Collier County Marine Station
 Contact Person & Email: Audrey Hancock ahancock@pen-eng.com
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COLLIER COUNTY MARINE STATION

FIRE DEPARTMENT PLAN

COLLIER COUNTY FACILITIES MANAGEMENT

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NOTES:

PROFESSIONAL SEALS:

PROFESSIONAL ENGINEER:	J. WOODWARD
FLORIDA LICENSE NUMBER:	84212

Florida Engineering Certificate of Authorization #00273
 Florida Landscape Certificate of Authorization #L200000332
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Project Number:	P-CCMS-001	
File Name:	P-CCMS-001-001-113FD.dwg	

Sheet ID: **C-113**
 Sheet Number: 07 of 13

PROJECT:

COLLIER COUNTY MARINE STATION

TITLE:

PLAN AND PROFILE

CLIENT:

COLLIER COUNTY FACILITIES MANAGEMENT

REVISIONS:

No.	Revision	Date

NOTES:

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PROFESSIONAL ENGINEER: J. WOODWARD
FLORIDA LICENSE NUMBER: 84212

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Date: JULY 2024

Horizontal Scale: 1" = 20'

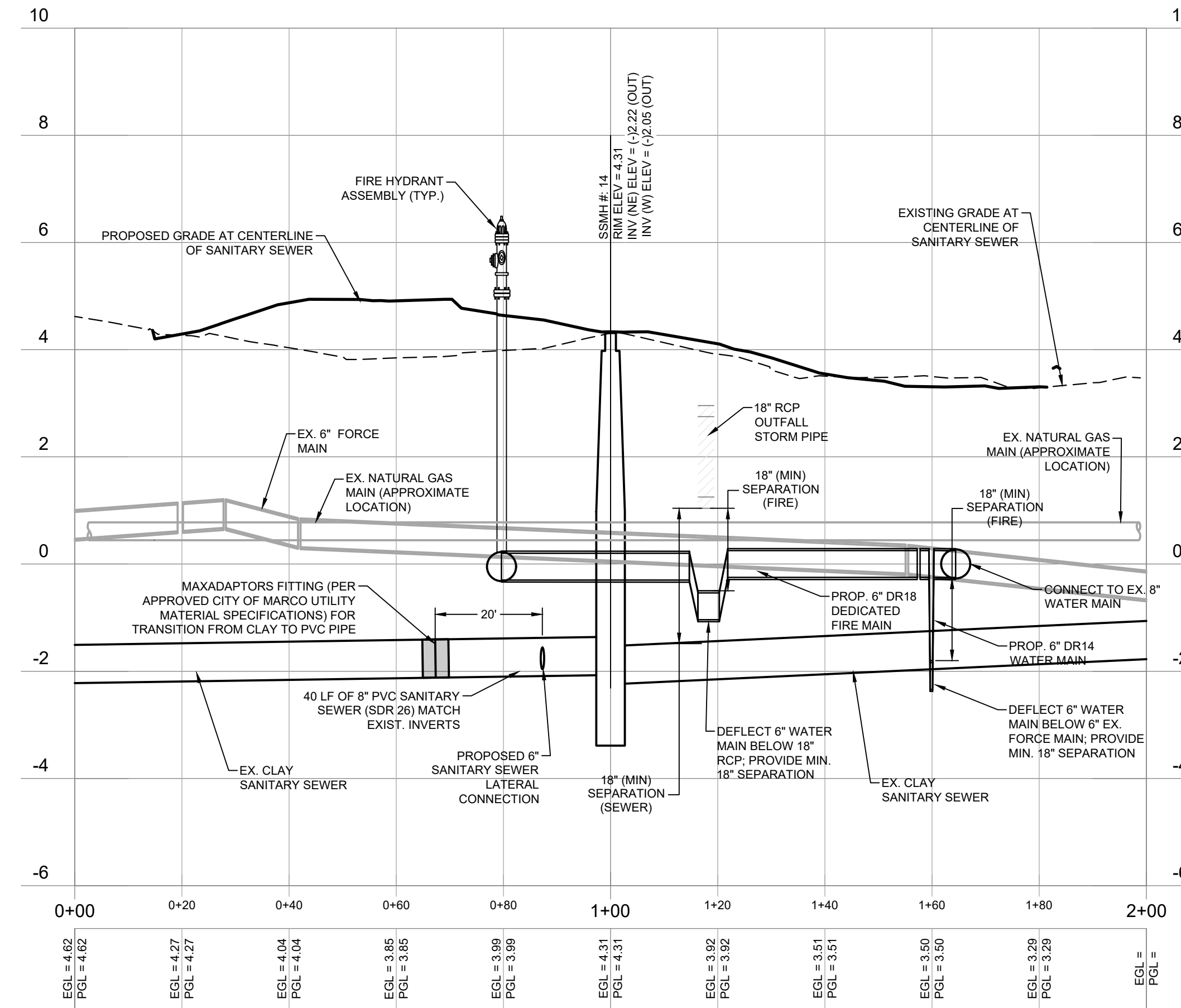
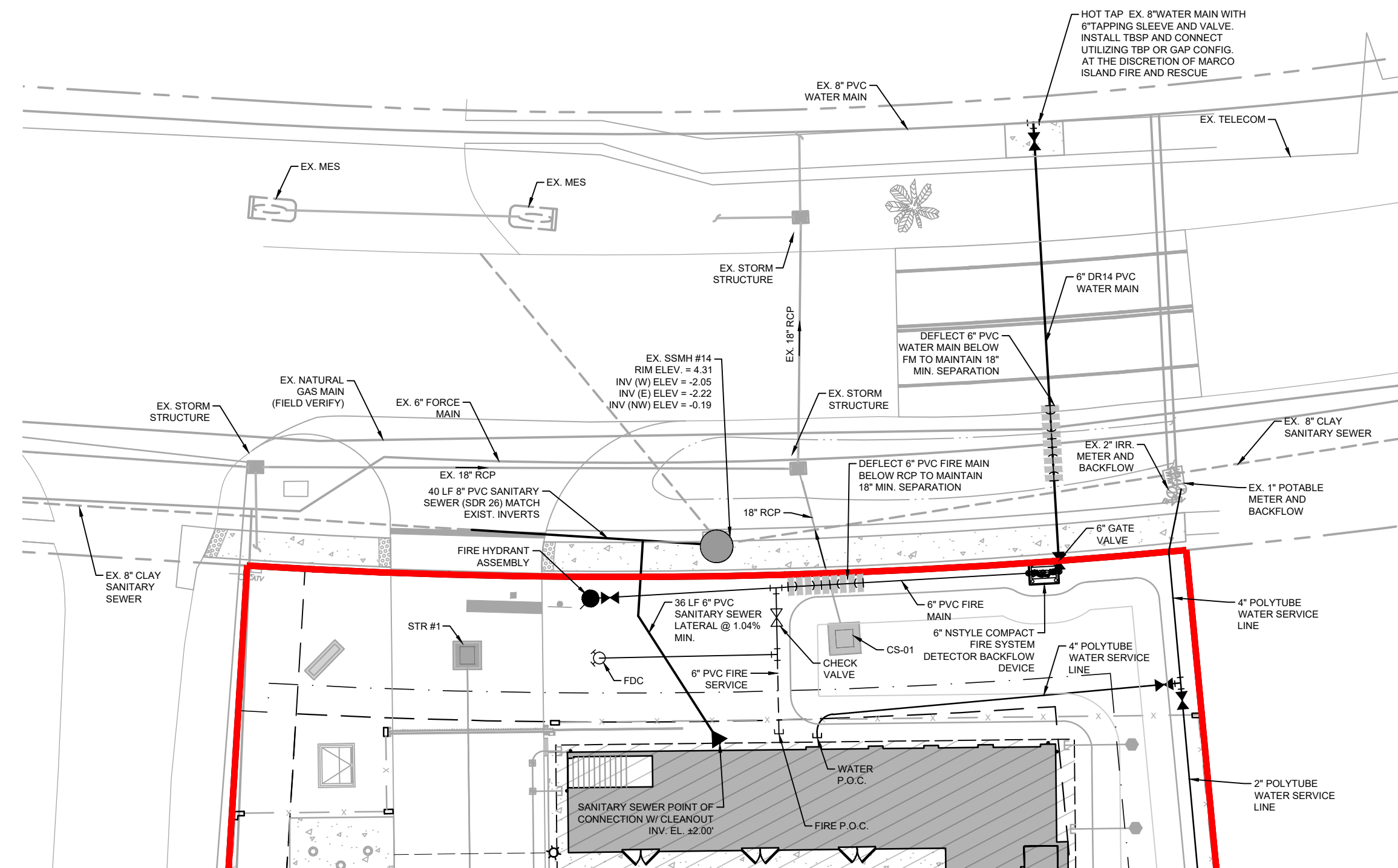
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Project Number: P-CCMS-001

File Name: P-CCMS-001-001-201ST.dwg

Sheet ID: C-201

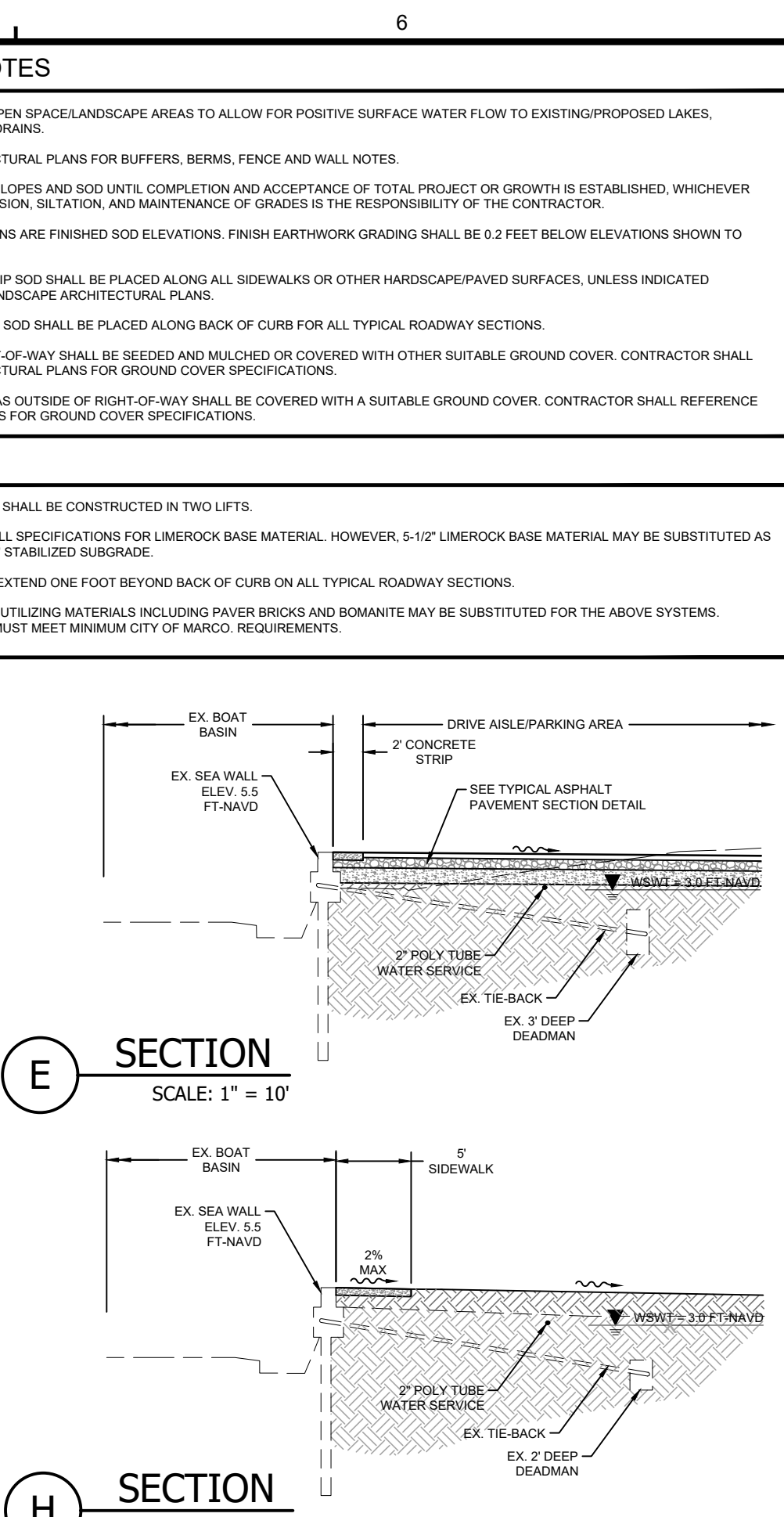
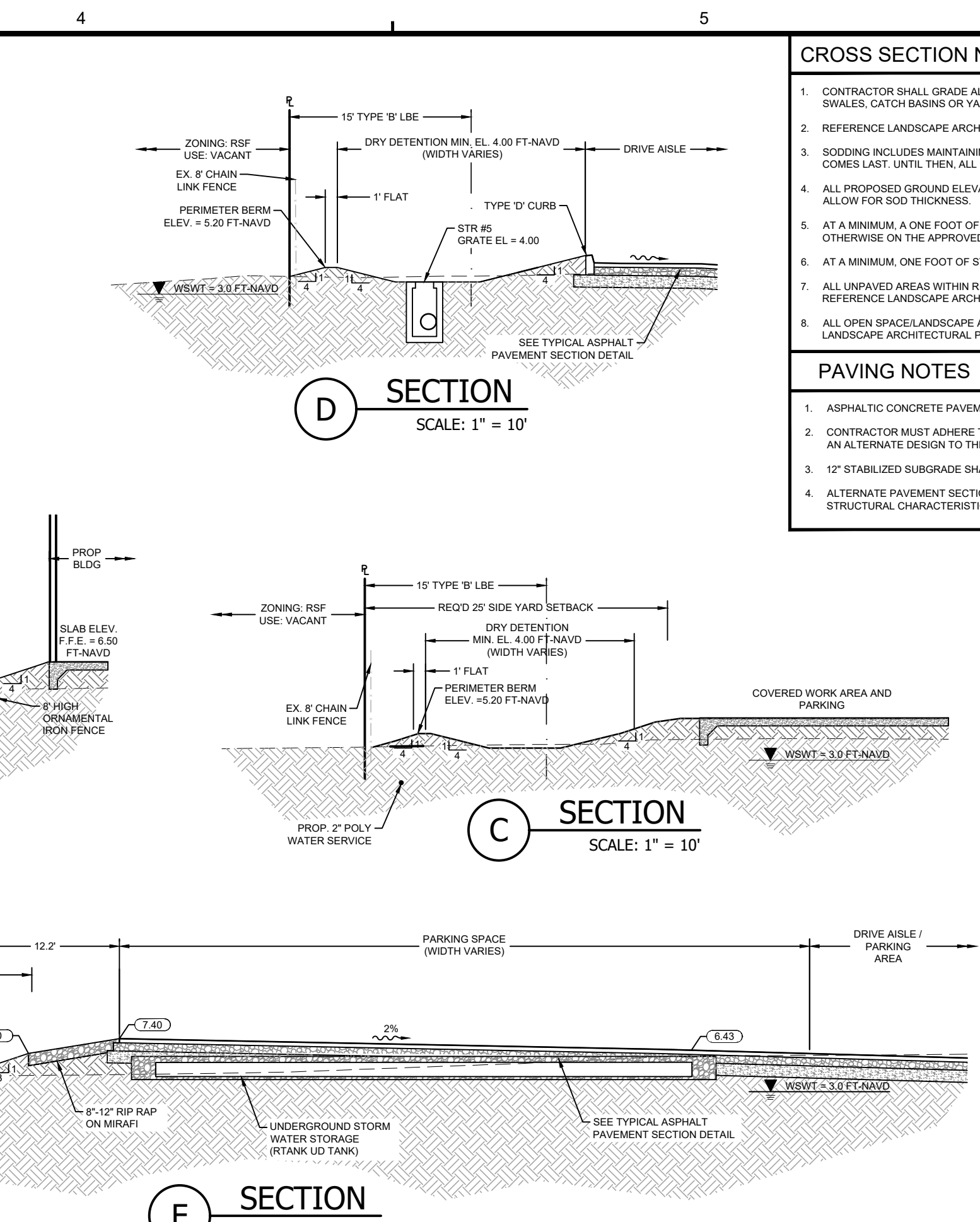
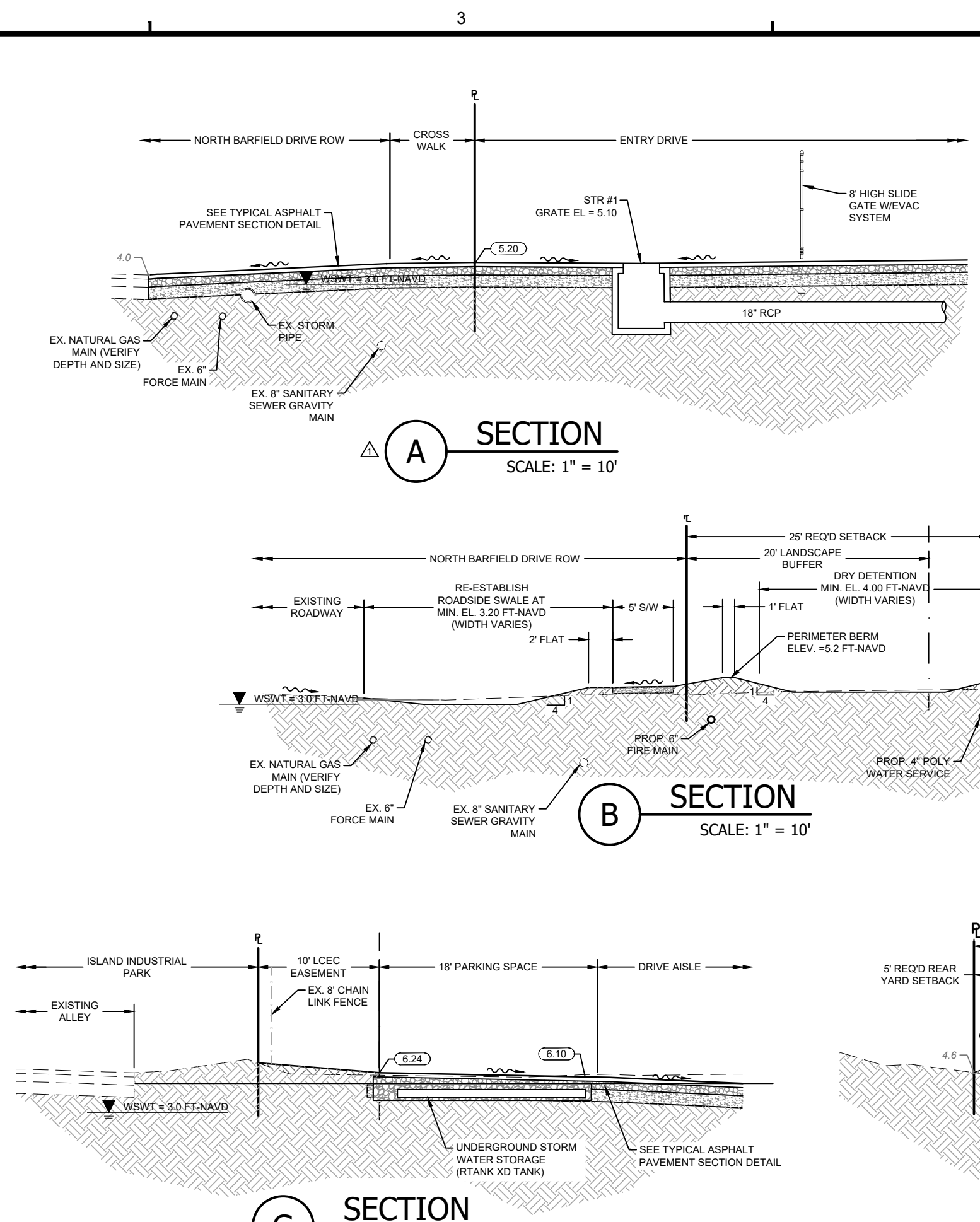
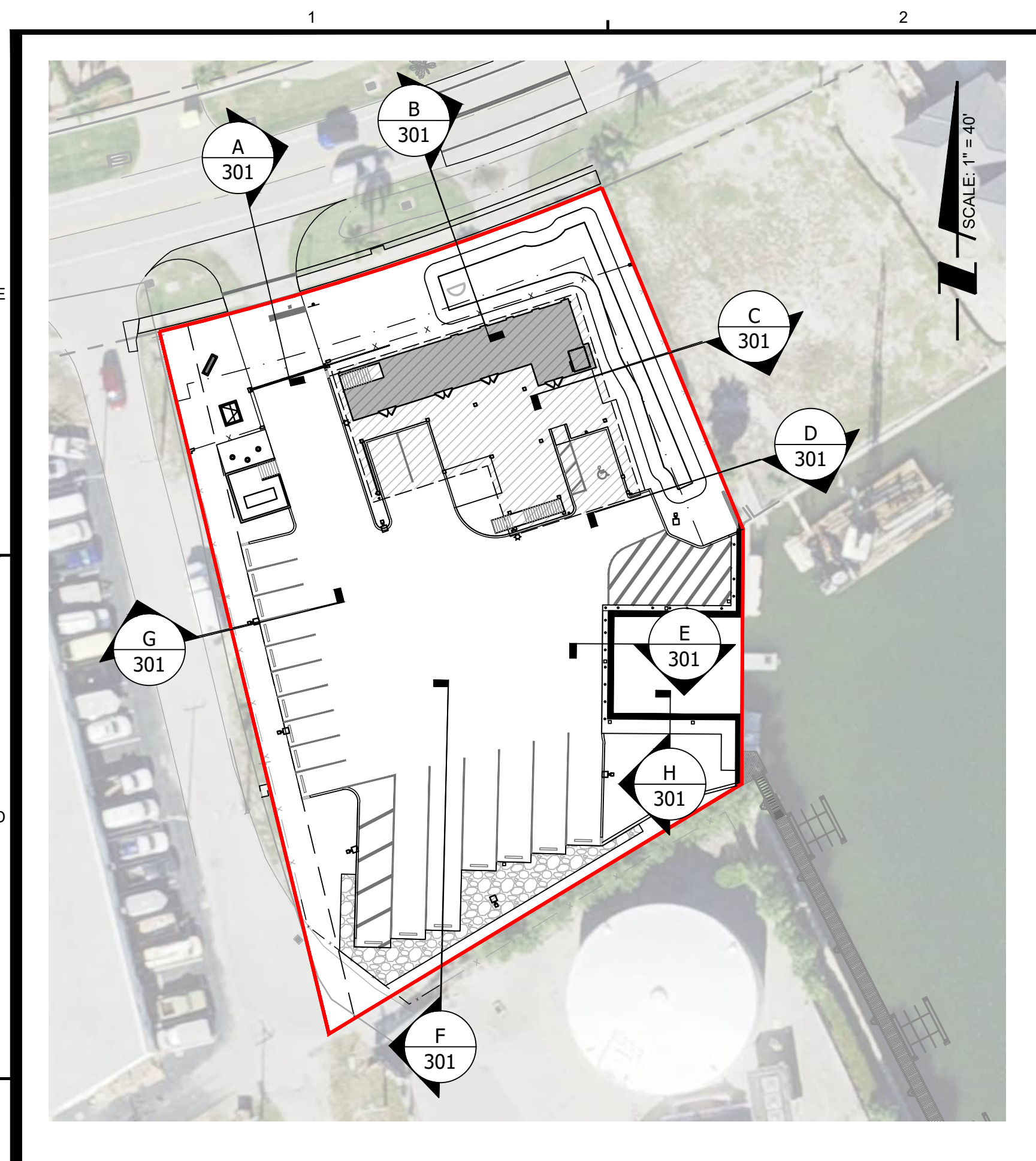
Sheet Number: 08 of 13



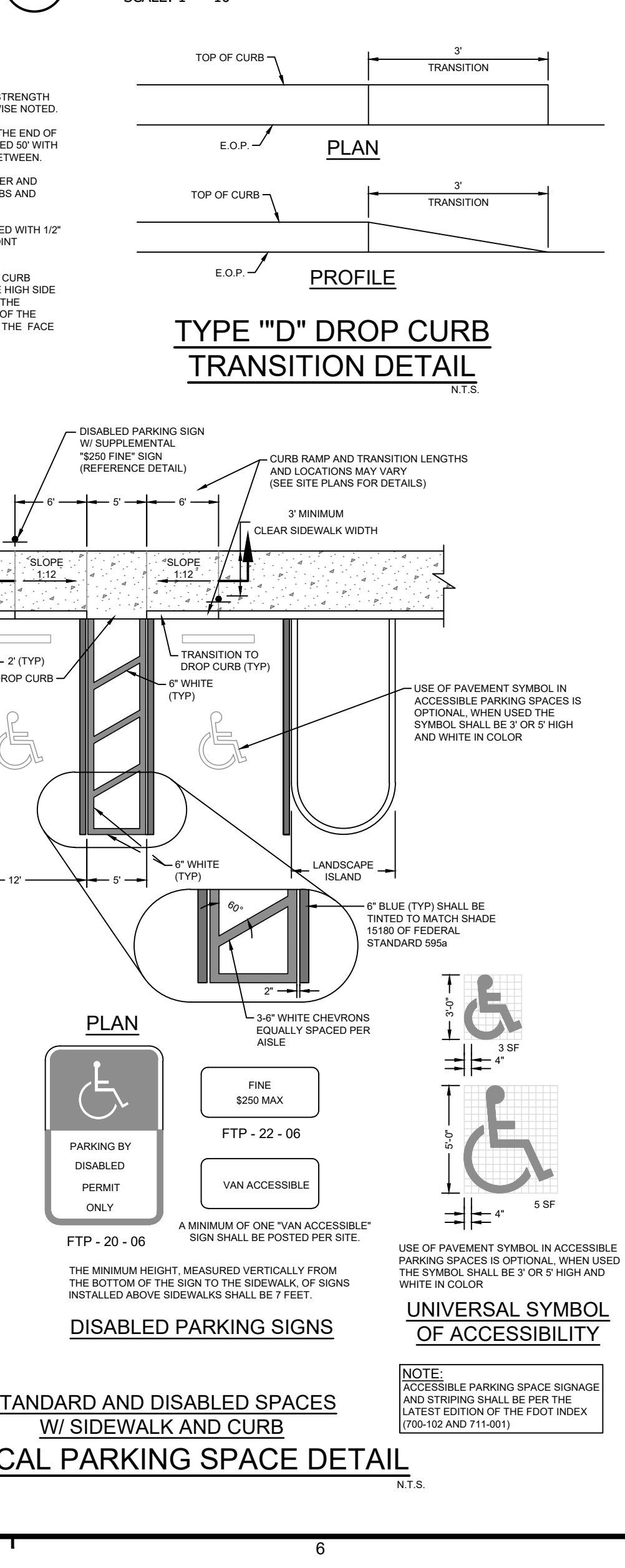
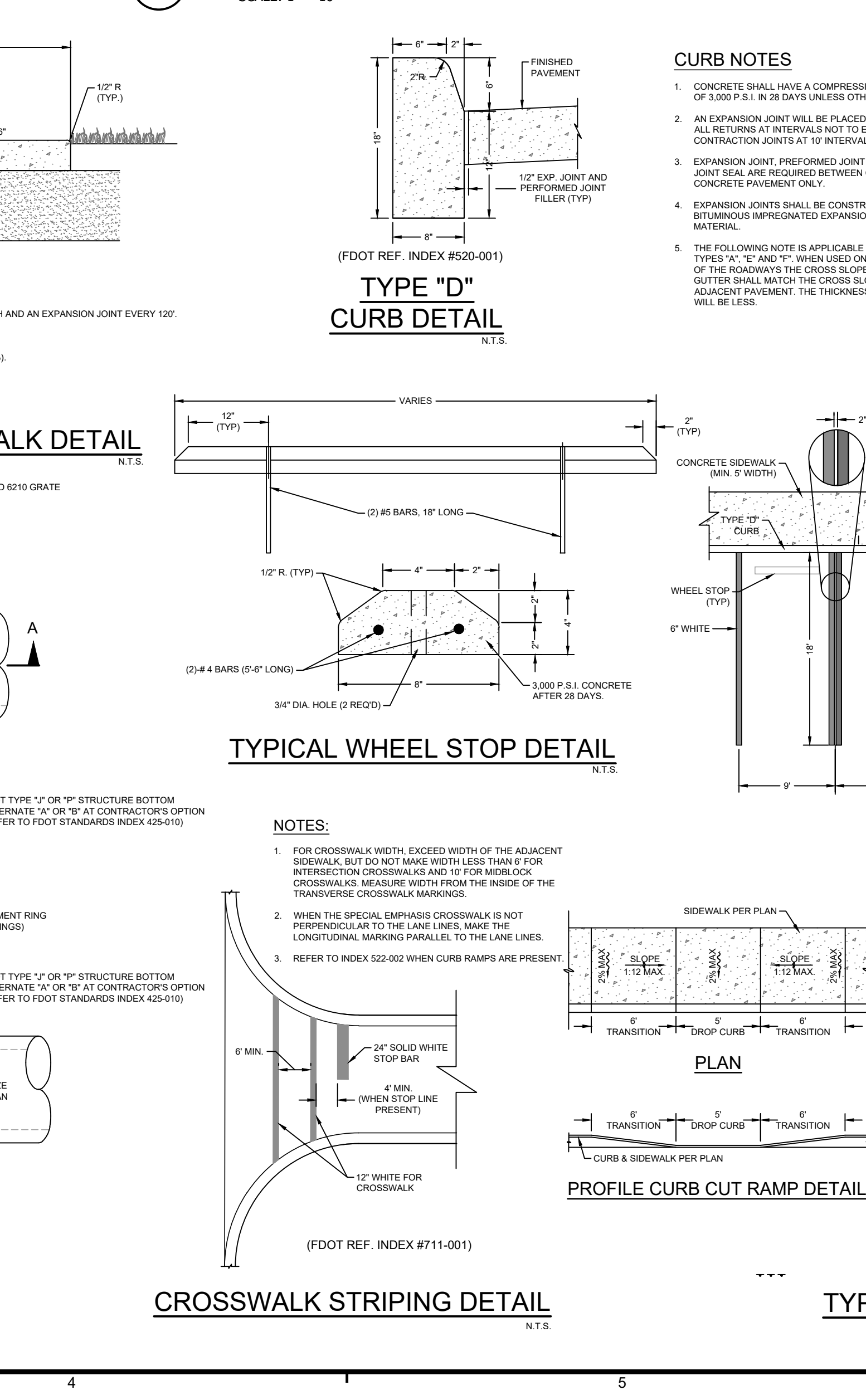
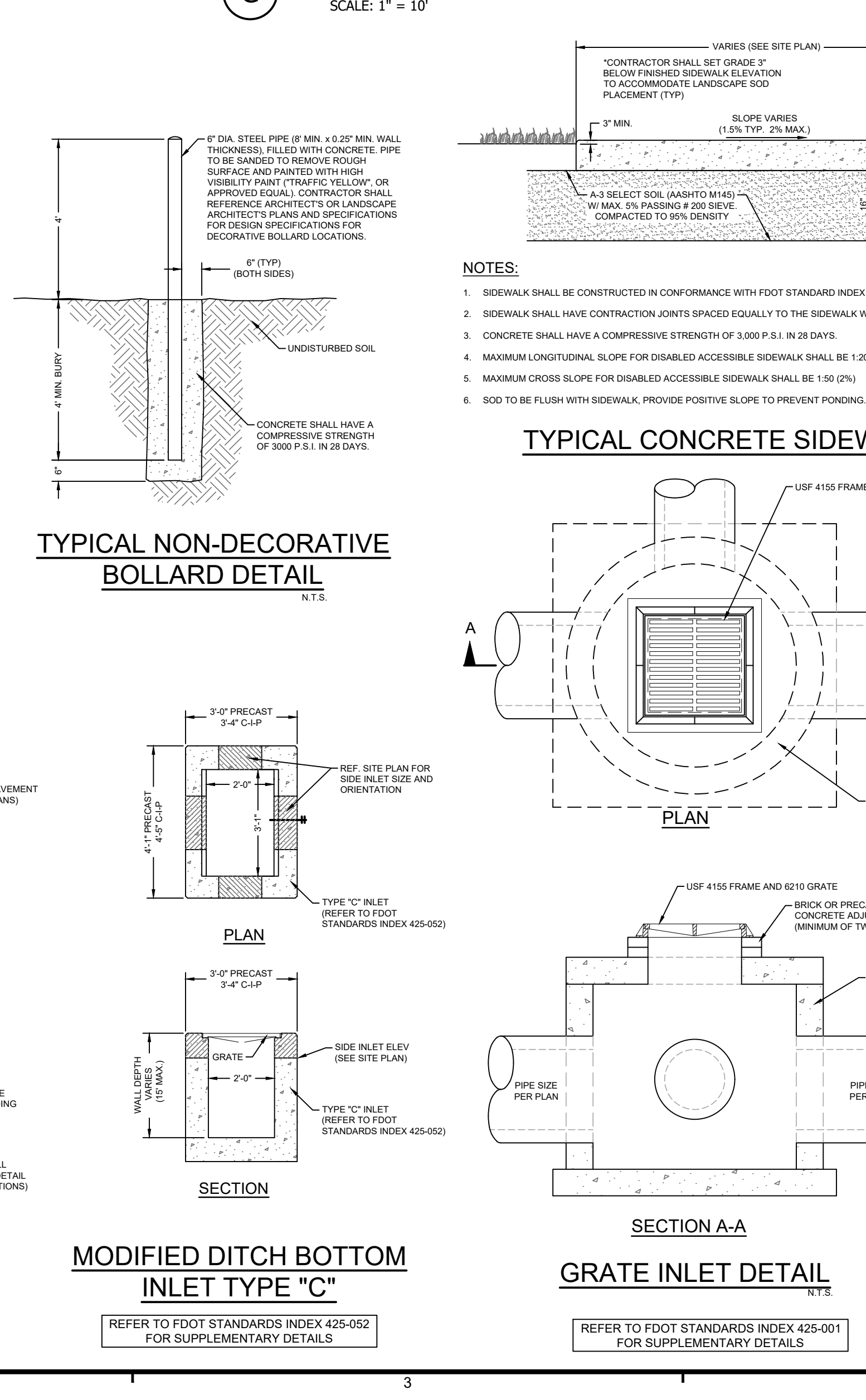
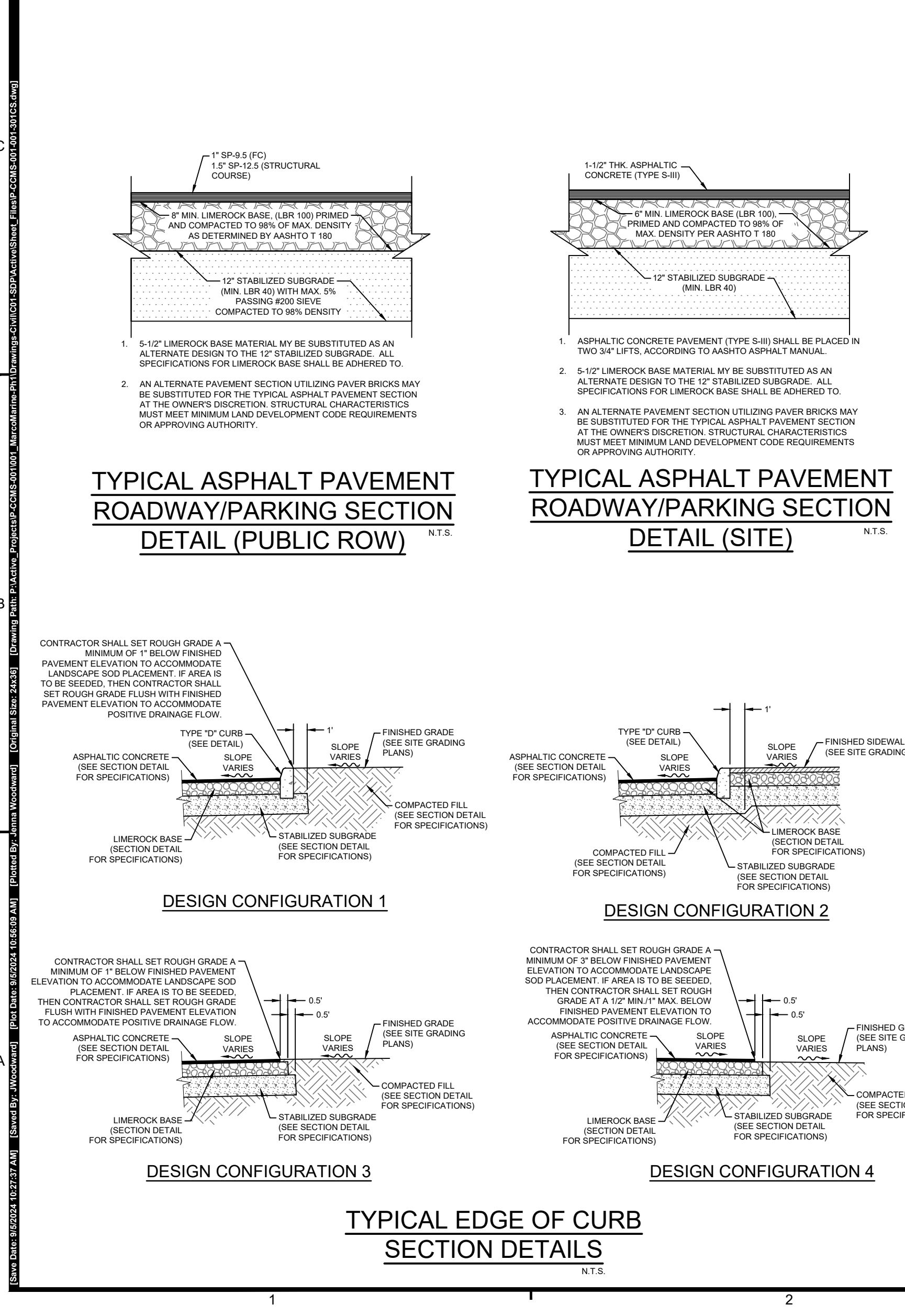
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10
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Law: John H. Woodard 10/23/24 10:33:29 PM [Plot Date: 8/2/2024 10:33:29 AM] [Plot Time: 8:22:24 AM] [Plot Path: P:\Projects\CCMS-001\201ST.dwg] [Plot Scale: 1"=20'] [Plot Orientation: Landscape] [Plot Units: Feet] [Plot Color: Black] [Plot Font: Arial] [Plot Line Weight: 0.5] [Plot Text Size: 10] [Plot Title: PLAN AND PROFILE] [Plot Client: COLLIER COUNTY FACILITIES MANAGEMENT] [Plot Project: COLlier COUNTY MARINE STATION] [Plot Sheet: C-201] [Plot Total: 13]



- CROSS SECTION NOTES**
- CONTRACTOR SHALL GRADE ALL OPEN SPACELANDSCAPE AREAS TO ALLOW FOR POSITIVE SURFACE WATER FLOW TO EXISTING/PROPOSED DRAINS, SWALES, CATCH BASINS OR YARD DRAINS.
 - REFERENCE LANDSCAPE ARCHITECTURAL PLANS FOR BUFFERS, BERMS, FENCE AND WALL NOTES.
 - SODDING INCLUDES MAINTAINING SLOPES AND SOIL UNIT, COMPLETION AND ACCEPTANCE OF TOTAL PROJECT OR GROWTH IS ESTABLISHED, WHOEVER COMES LAST. UNTIL THEN, ALL EROSION, SILTATION, AND MAINTENANCE OF GRADES IS THE RESPONSIBILITY OF THE CONTRACTOR.
 - ALL PROPOSED GROUND ELEVATIONS ARE FINISHED SOD ELEVATIONS. FINISH EARTHWORK GRADING SHALL BE 0.2 FEET BELOW ELEVATIONS SHOWN TO ALLOW FOR SOD THICKNESS.
 - AT A MINIMUM, A ONE FOOT OF STRIP SOD SHALL BE PLACED ALONG ALL SIDEWALKS OR OTHER HARDSCAPE/PAVED SURFACES, UNLESS INDICATED OTHERWISE ON THE APPROVED LANDSCAPE ARCHITECTURAL PLANS.
 - AT A MINIMUM, ONE FOOT OF STRIP SOD SHALL BE PLACED ALONG BACK OF CURB FOR ALL TYPICAL ROADWAY SECTIONS.
 - ALL UNPAVED AREAS WITHIN RIGHT-OF-WAY SHALL BE SEEDED AND MULCHED OR COVERED WITH OTHER SUITABLE GROUND COVER. CONTRACTOR SHALL REFERENCE LANDSCAPE ARCHITECTURAL PLANS FOR GROUND COVER SPECIFICATIONS.
 - ALL OPEN SPACELANDSCAPE AREAS OUTSIDE OF RIGHT-OF-WAY SHALL BE COVERED WITH A SUITABLE GROUND COVER. CONTRACTOR SHALL REFERENCE LANDSCAPE ARCHITECTURAL PLANS FOR GROUND COVER SPECIFICATIONS.
- PAVING NOTES**
- ASPHALTIC CONCRETE PAVEMENT SHALL BE CONSTRUCTED IN TWO LIFTS.
 - CONTRACTOR MUST ADHERE TO ALL SPECIFICATIONS FOR LIMEROCK BASE MATERIAL. HOWEVER, 5-1/2" LIMEROCK BASE MATERIAL MAY BE SUBSTITUTED AS AN ALTERNATE DESIGN TO THE 12" STABILIZED SUBGRADE.
 - 12" STABILIZED SUBGRADE SHALL EXTEND ONE FOOT BEYOND BACK OF CURB ON ALL TYPICAL ROADWAY SECTIONS.
 - ALTERNATE PAVEMENT SECTIONS UTILIZING MATERIALS INCLUDING PAVER BRICKS AND BOMANITE MAY BE SUBSTITUTED FOR THE ABOVE SYSTEMS. STRUCTURAL CHARACTERISTICS MUST MEET MINIMUM CITY OF MARCO REQUIREMENTS.



COLLIER COUNTY MARINE STATION

CROSS SECTIONS, DRAINAGE, AND PAVING DETAILS

COLLIER COUNTY FACILITIES MANAGEMENT

REVISIONS:

No.	Revision	Date
1	REVISED PER CITY OF MARCO ISLAND COMMENTS.	08/05/24
	REVISED AUGUST 22, 2024.	

PROFESSIONAL SEALS:
 PROFESSIONAL ENGINEER: J. WOODWARD
 FLORIDA LICENSE NUMBER: 84212

Florida Engineering Certificate of Authorization #02673
 Florida Landscape Certificate of Authorization #LC20000332

DATUM NOTE:
 ALL ELEVATIONS ARE BASED ON NAVD 88 (NORTH AMERICAN VERTICAL DATUM OF 1988).

Bar Scale: 1" = 10'
 0 2.5 5 10 20 30'

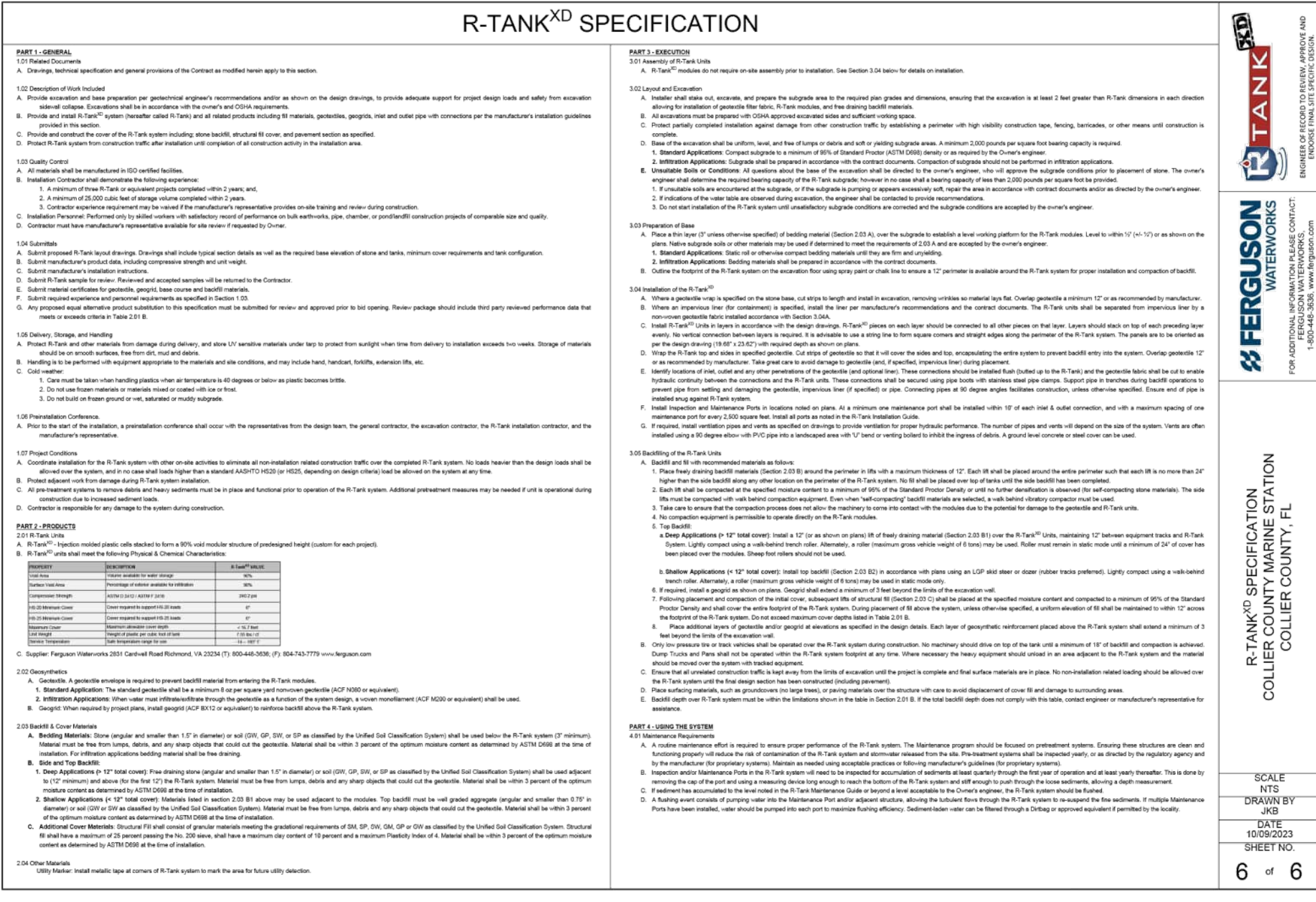
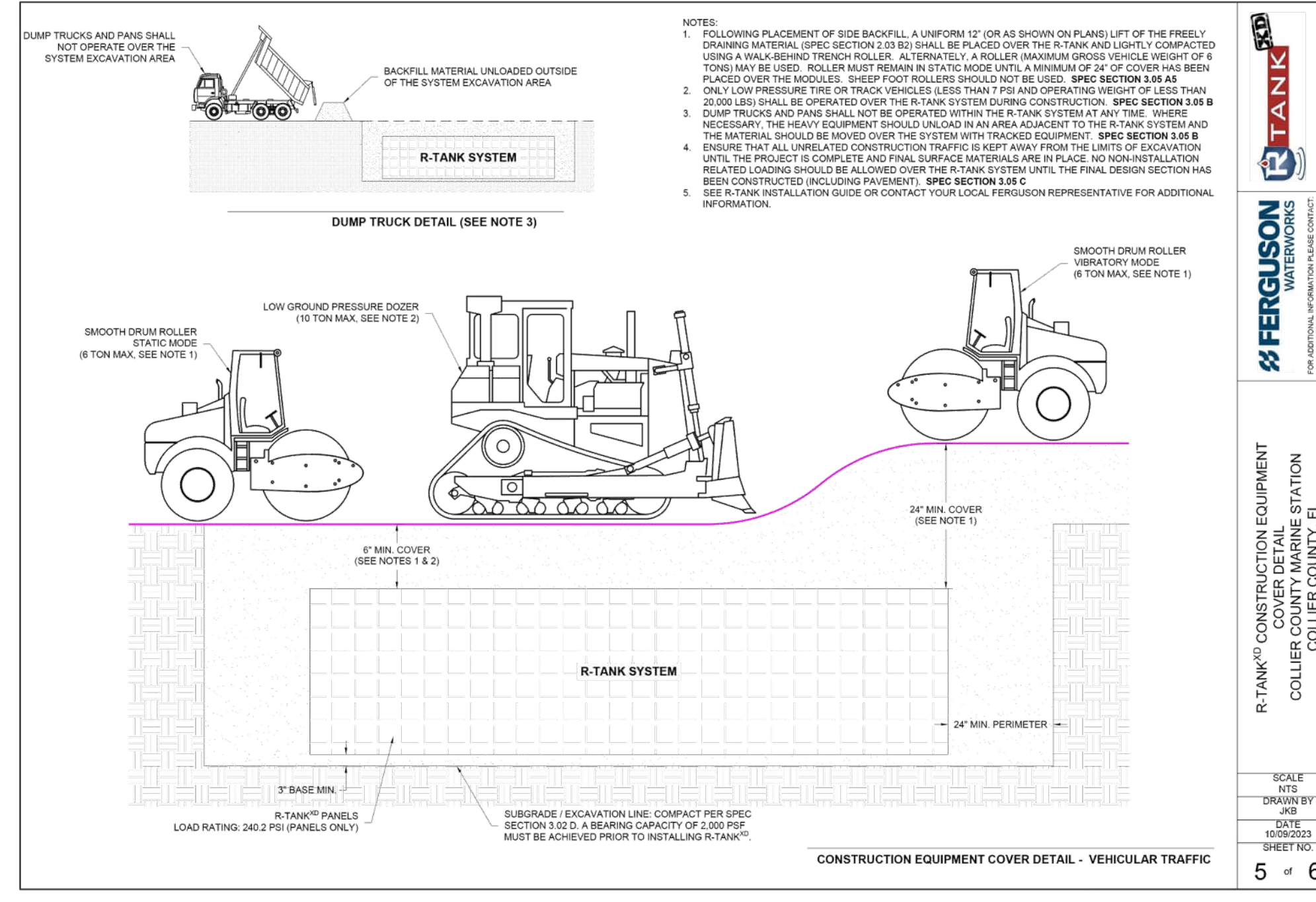
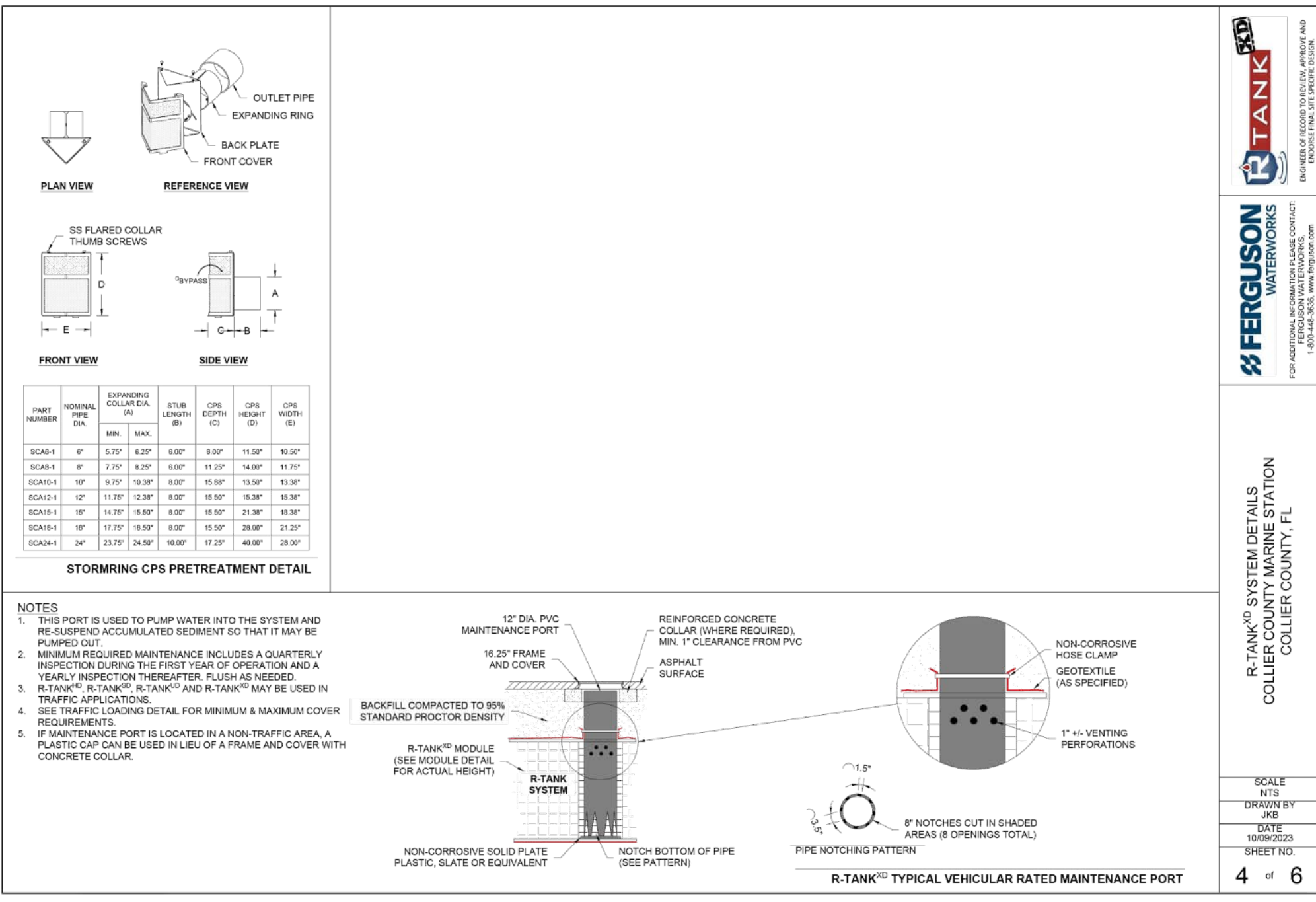
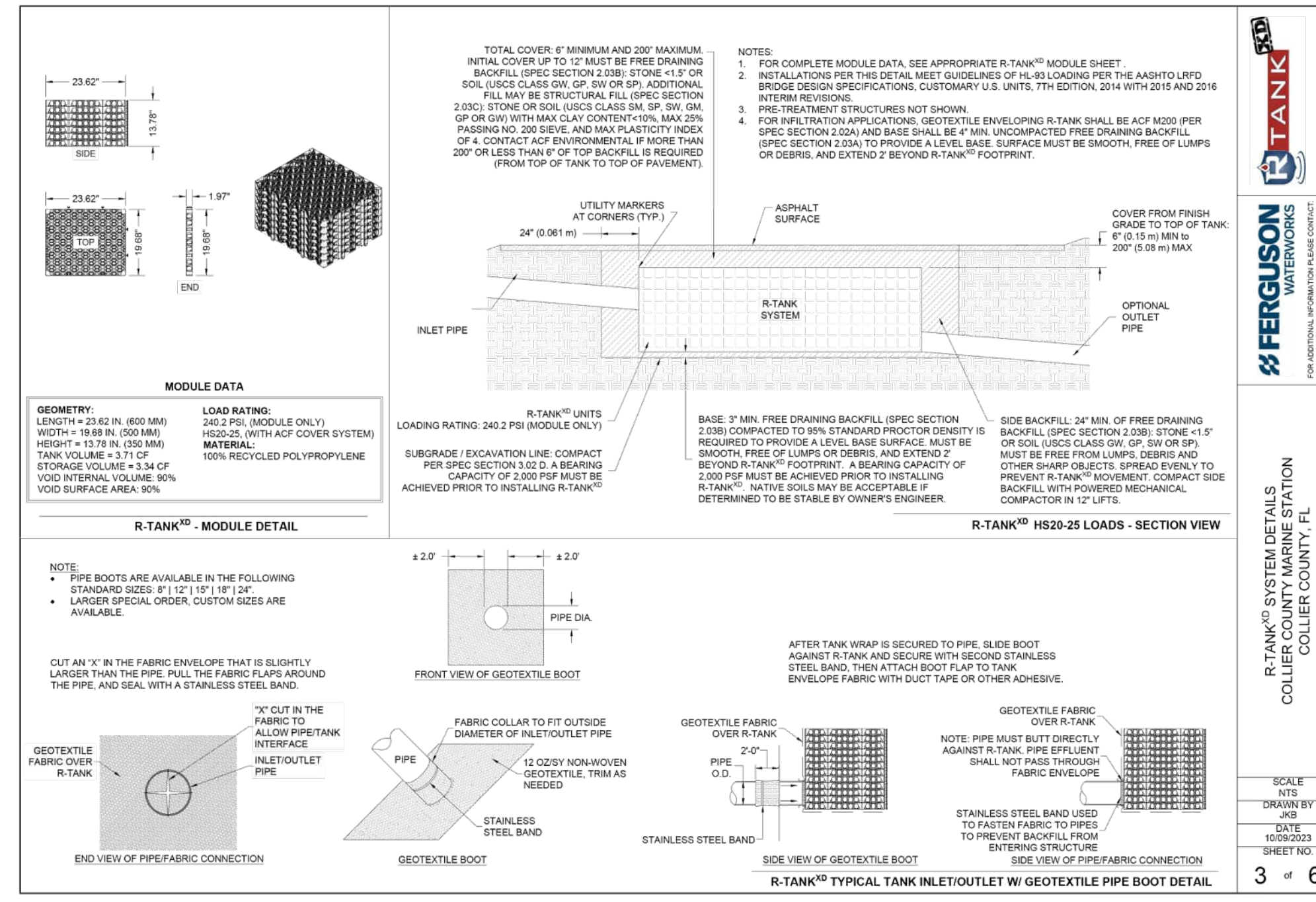
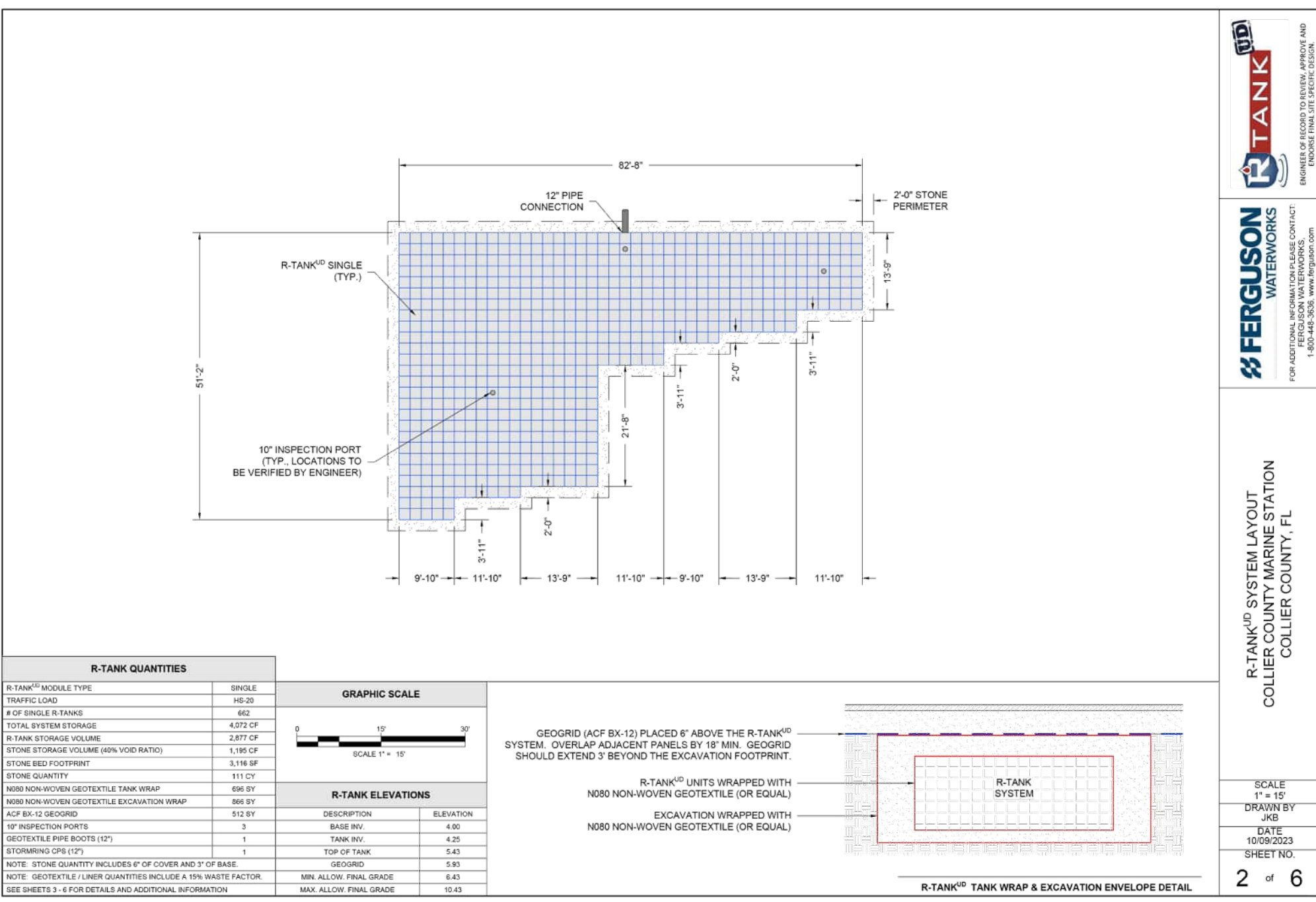
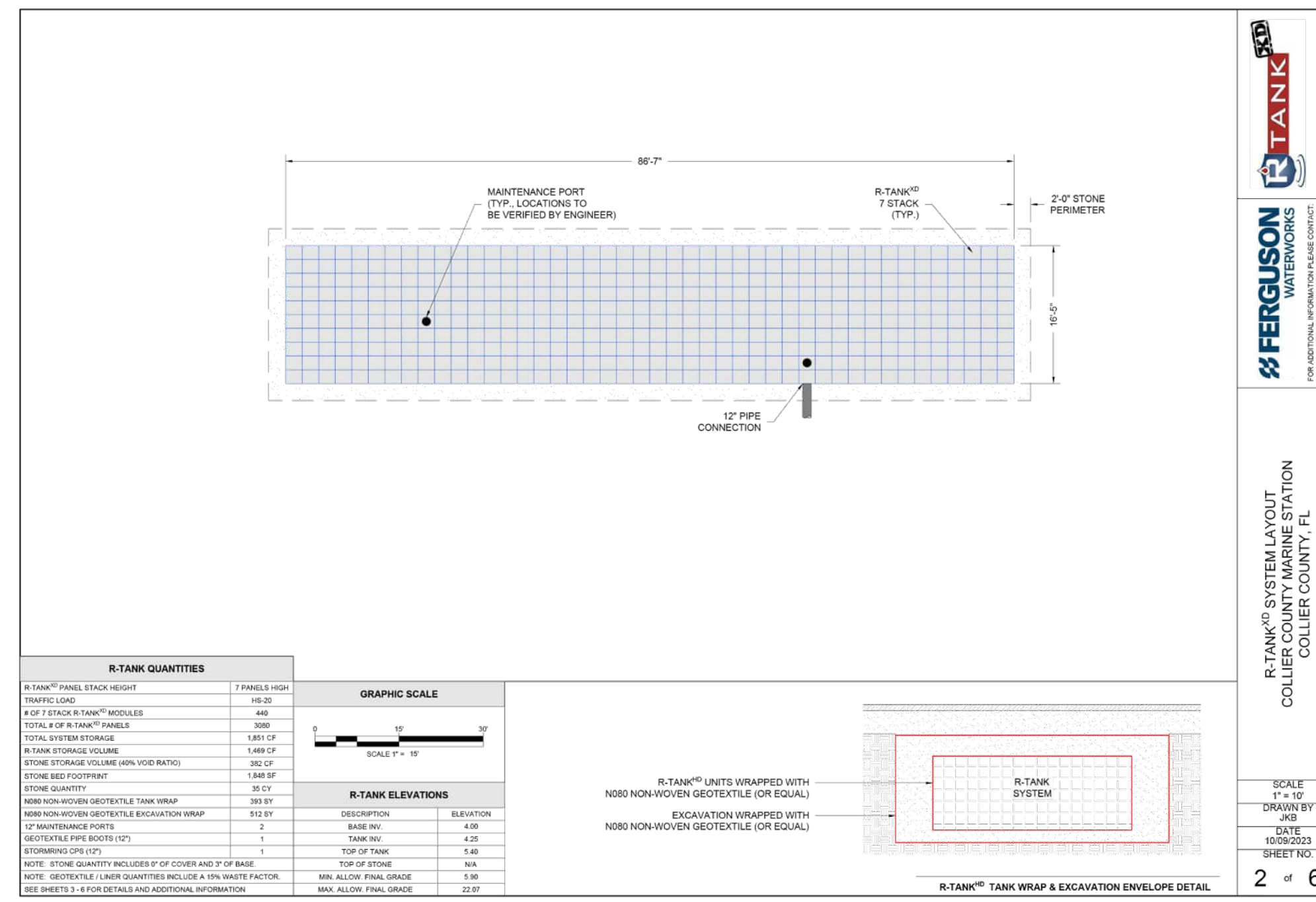
SEC. 8 TWP. 52 RGE. 26
 City: MARCO ISLAND County: COLLIER

Designed by: J. WOODWARD
 Drawn by: DAVID J. STIVERS

Date: JULY 2024
 Horizontal Scale: 1" = 10'
 Vertical Scale: N.T.S.

Project Number: P-CCMS-001
 File Name: P-CCMS-001-001-301CS.dwg

Sheet ID: C-301
 Sheet Number: 09 of 13



COLLIER COUNTY MARINE STATION

RTANK DETAILS

COLLIER COUNTY FACILITIES MANAGEMENT

REVISIONS:

No.	Revision	Date

PROFESSIONAL SEALS:

PROFESSIONAL ENGINEER: J. WOODWARD
FLORIDA LICENSE NUMBER: 84212

Florida Engineering Certificate of Authorization #066273
Florida Landscape Certificate of Authorization #LC2000932

DATUM NOTE:
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(NORTH AMERICAN VERTICAL DATUM OF 1988).

Bar Scale: 1" = 1'

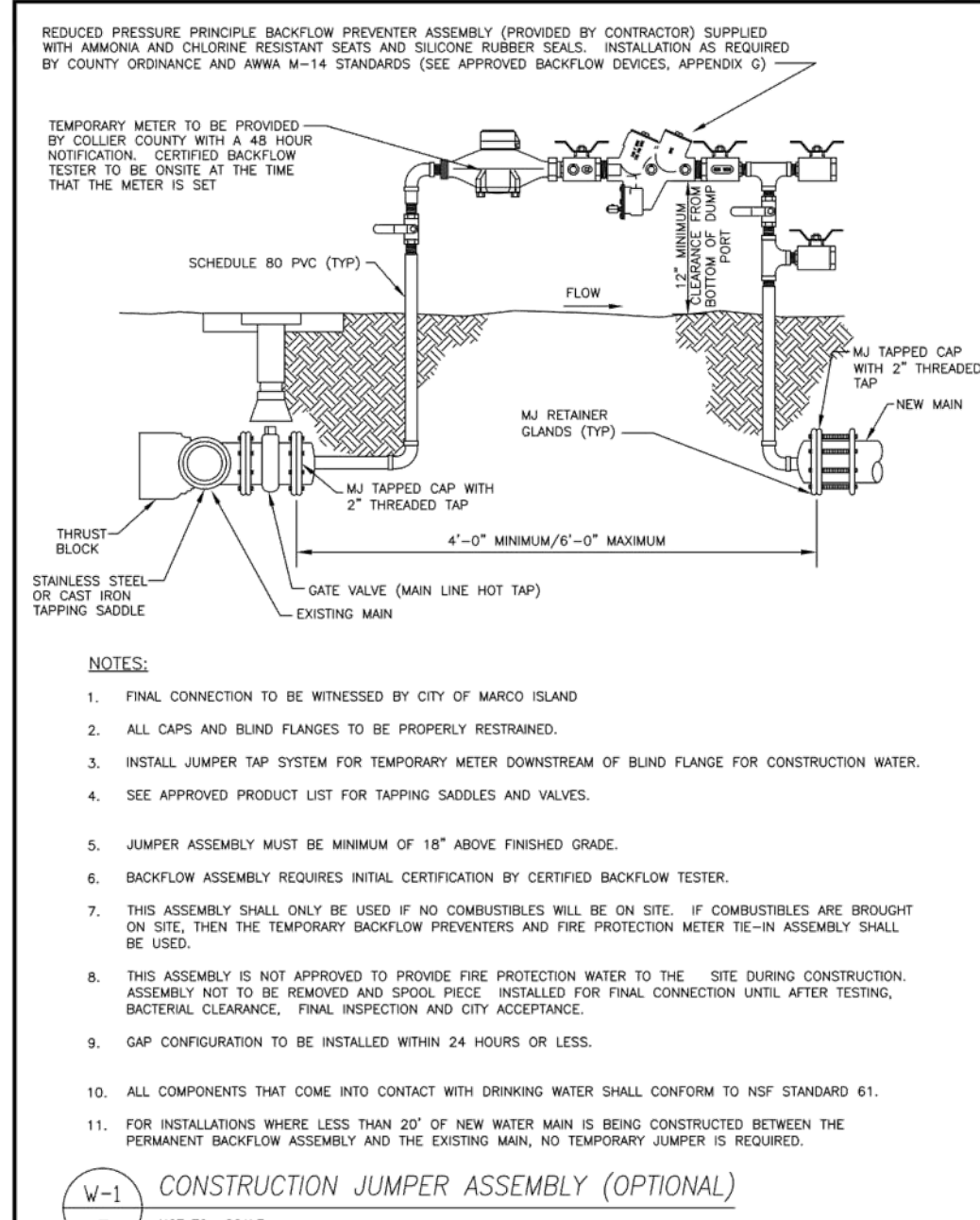
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SEC 8 TWP: 52 RGE: 26
City: MARCO ISLAND County: COLLIER

Designed by: J. WOODWARD
Drawn by: DAVID J. STIVERS

Date: JULY 2024
Horizontal Scale: 1:1
Vertical Scale: N.T.S.

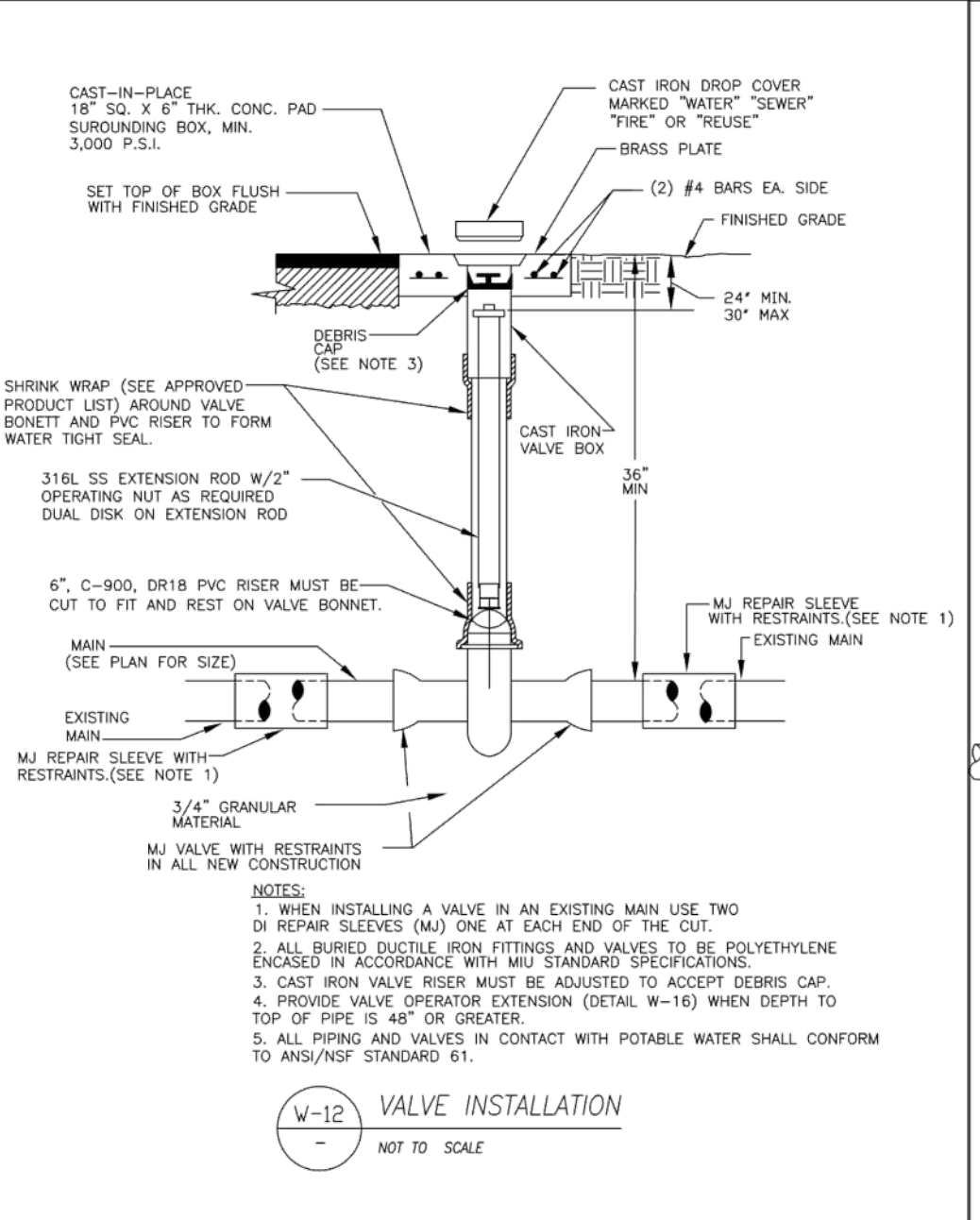
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Project Number: P-CCMS-001
Sheet ID: C-502
Sheet Number: 10 of 13



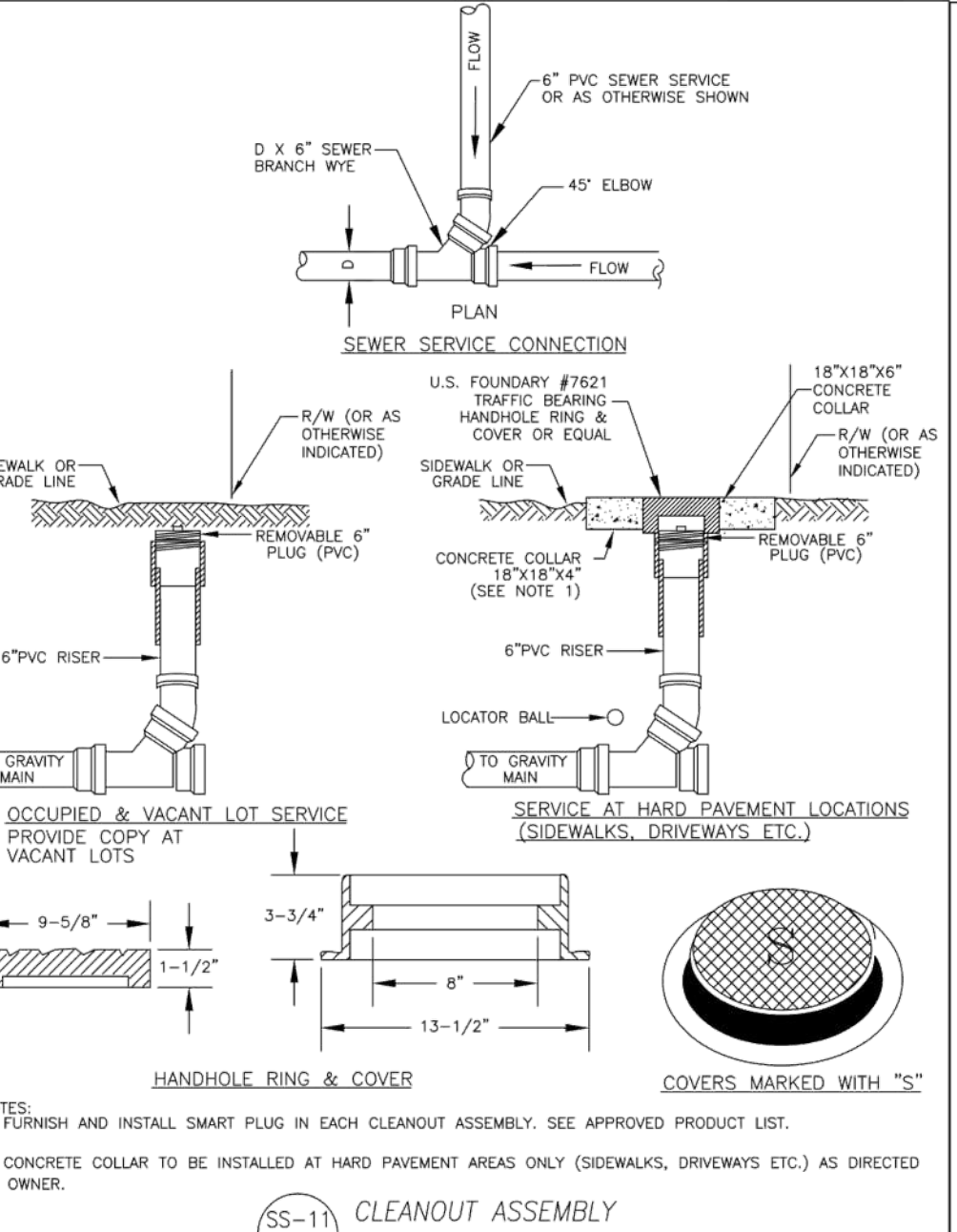
NOTES:

- FINAL CONNECTION TO BE WITNESSED BY CITY OF MARCO ISLAND
- ALL CAPS AND BLIND FLANGES TO BE PROPERLY RESTRAINED.
- INSTALL JUMPER TAP SYSTEM FOR TEMPORARY METER DOWNSTREAM OF BLIND FLANGE FOR CONSTRUCTION WATER.
- USE APPROVED PRODUCT LIST FOR TAPPING SADDLES AND VALVES.
- JUMPER ASSEMBLY MUST BE MINIMUM OF 18" ABOVE FINISHED GRADE.
- BACKFLOW ASSEMBLY REQUIRES INITIAL CERTIFICATION BY CERTIFIED BACKFLOW TESTER.
- THIS ASSEMBLY SHALL ONLY BE USED IF NO COMBUSTIBLES WILL BE ON SITE. IF COMBUSTIBLES ARE BROUGHT ON SITE, THEN THE TEMPORARY BACKFLOW PREVENTERS AND FIRE PROTECTION METER TIE-IN ASSEMBLY SHALL BE USED.
- THIS ASSEMBLY IS NOT APPROVED TO PROVIDE FIRE PROTECTION WATER TO THE SITE DURING CONSTRUCTION. ASSEMBLY NOT TO BE REMOVED AND SPOOL PIPED. INSTALLED FOR FINAL CONNECTION UNITS AFTER TESTING, BACTERIAL CLEARANCE, FINAL INSPECTION AND CITY ACCEPTANCE.
- GAP CONFIGURATION TO BE INSTALLED WITHIN 24 HOURS OF LEISS.
- ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.
- FOR INSTALLATIONS WHERE LESS THAN 20" OF NEW WATER MAIN IS BEING CONSTRUCTED BETWEEN THE PERMANENT BACKFLOW ASSEMBLY AND THE EXISTING MAIN, NO TEMPORARY JUMPER IS REQUIRED.

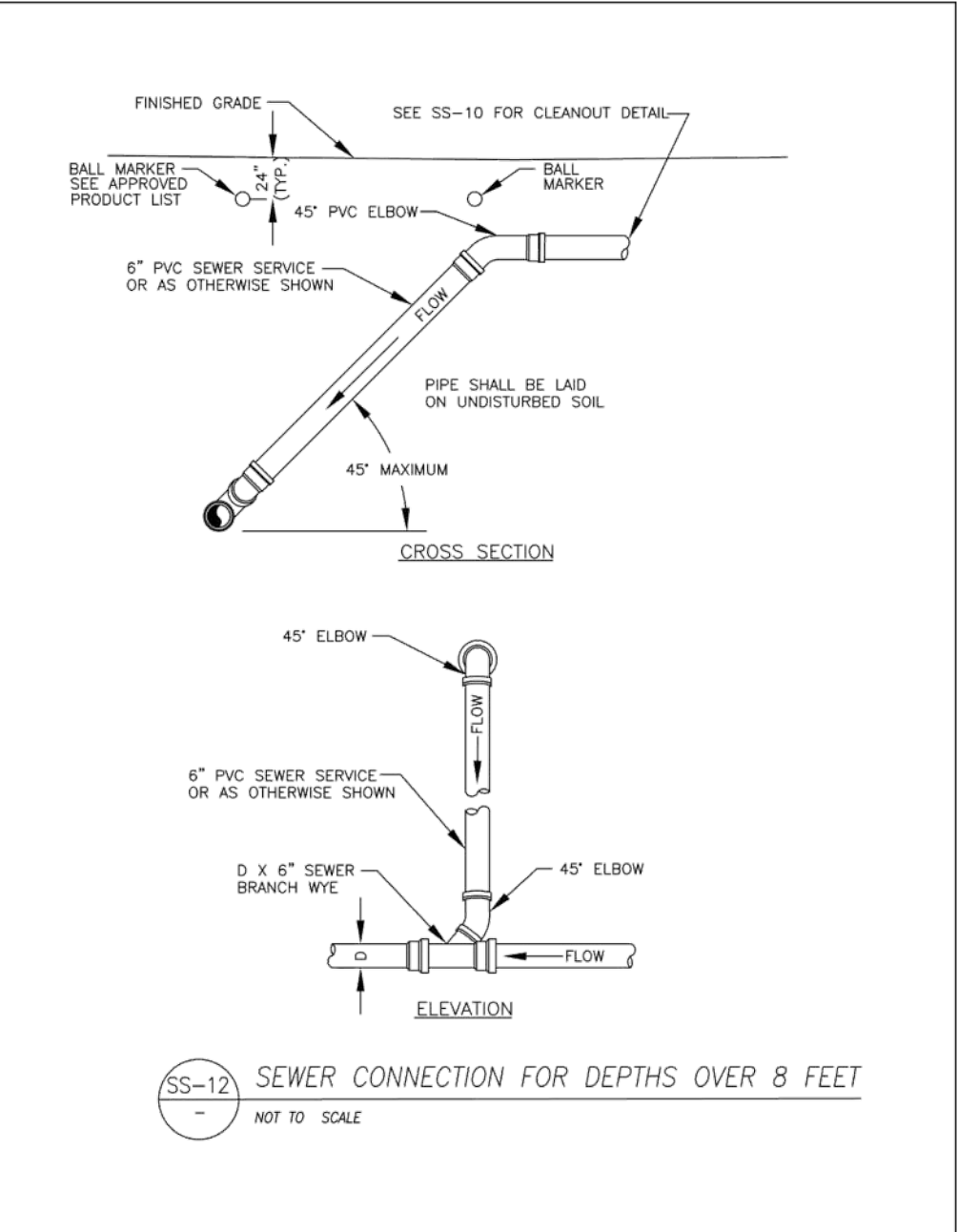
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SCALE: NOT TO SCALE
DATE: MAY 2023
DWG #: W-1.DWG



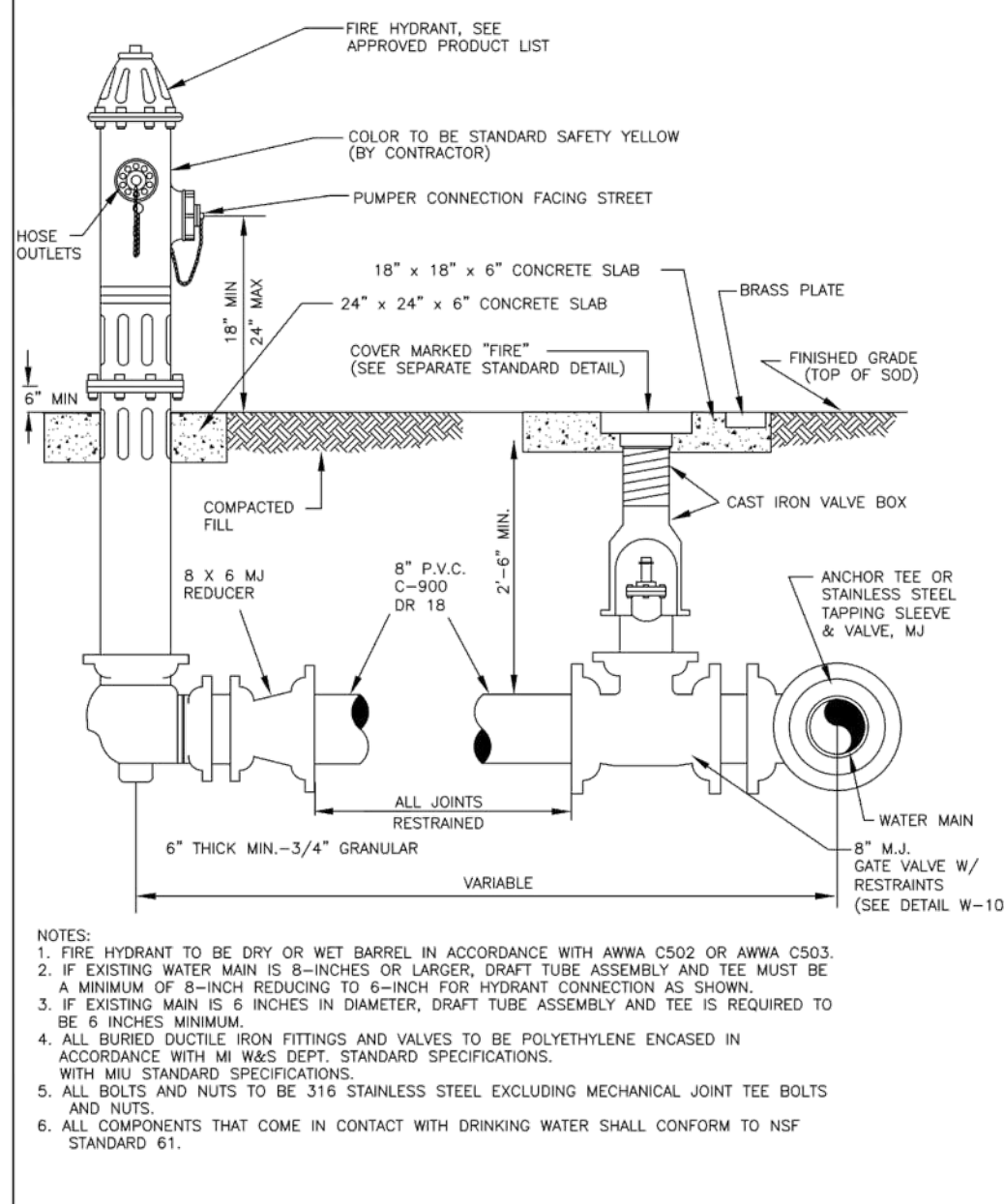
W-12 VALVE INSTALLATION
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DATE: MAY 2023
DWG #: W-12.DWG



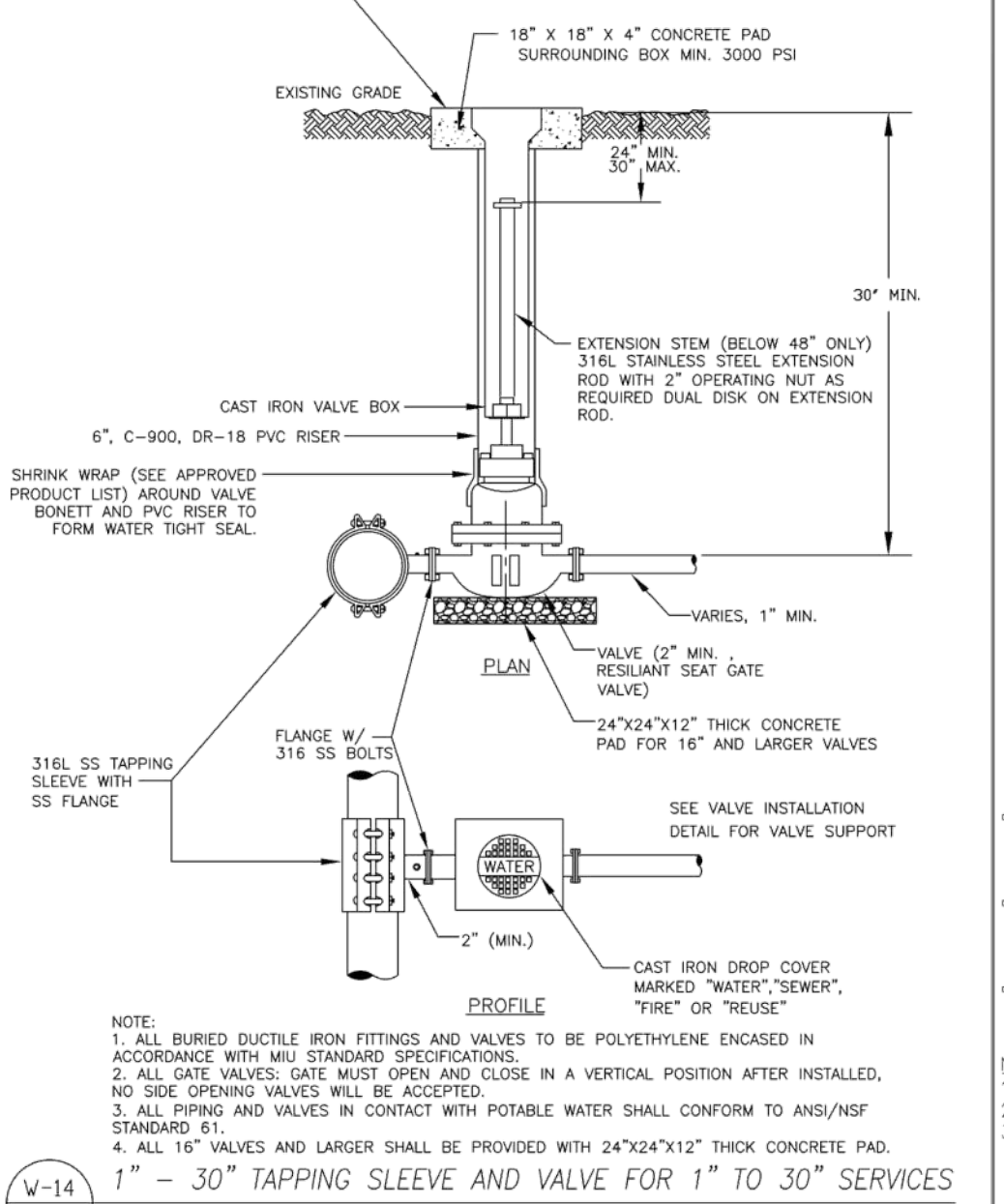
SS-11 CLEANOUT ASSEMBLY
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DWG #: SS-11.DWG



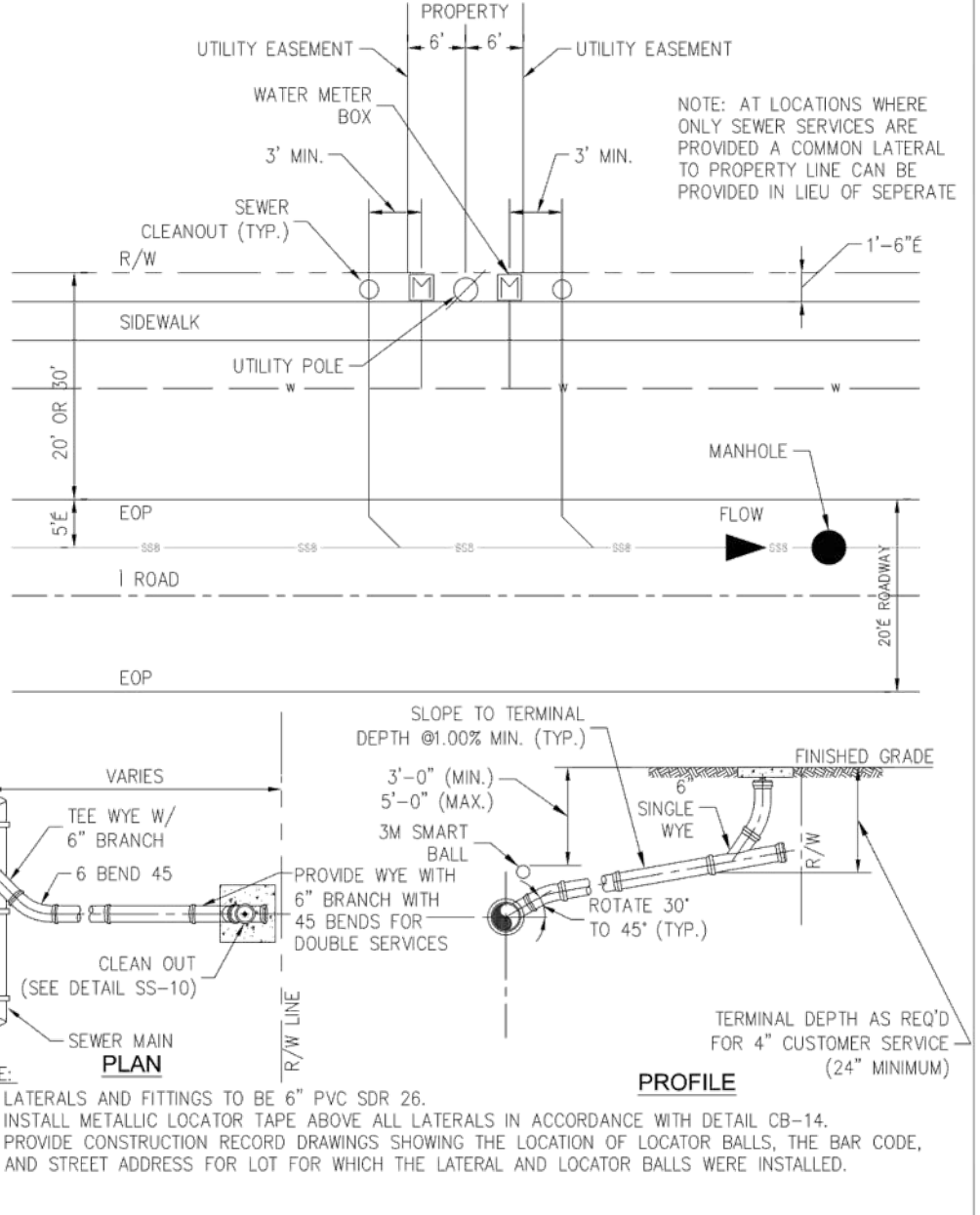
SS-12 SEWER CONNECTION FOR DEPTHS OVER 8 FEET
SCALE: NOT TO SCALE
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DWG #: SS-12.DWG



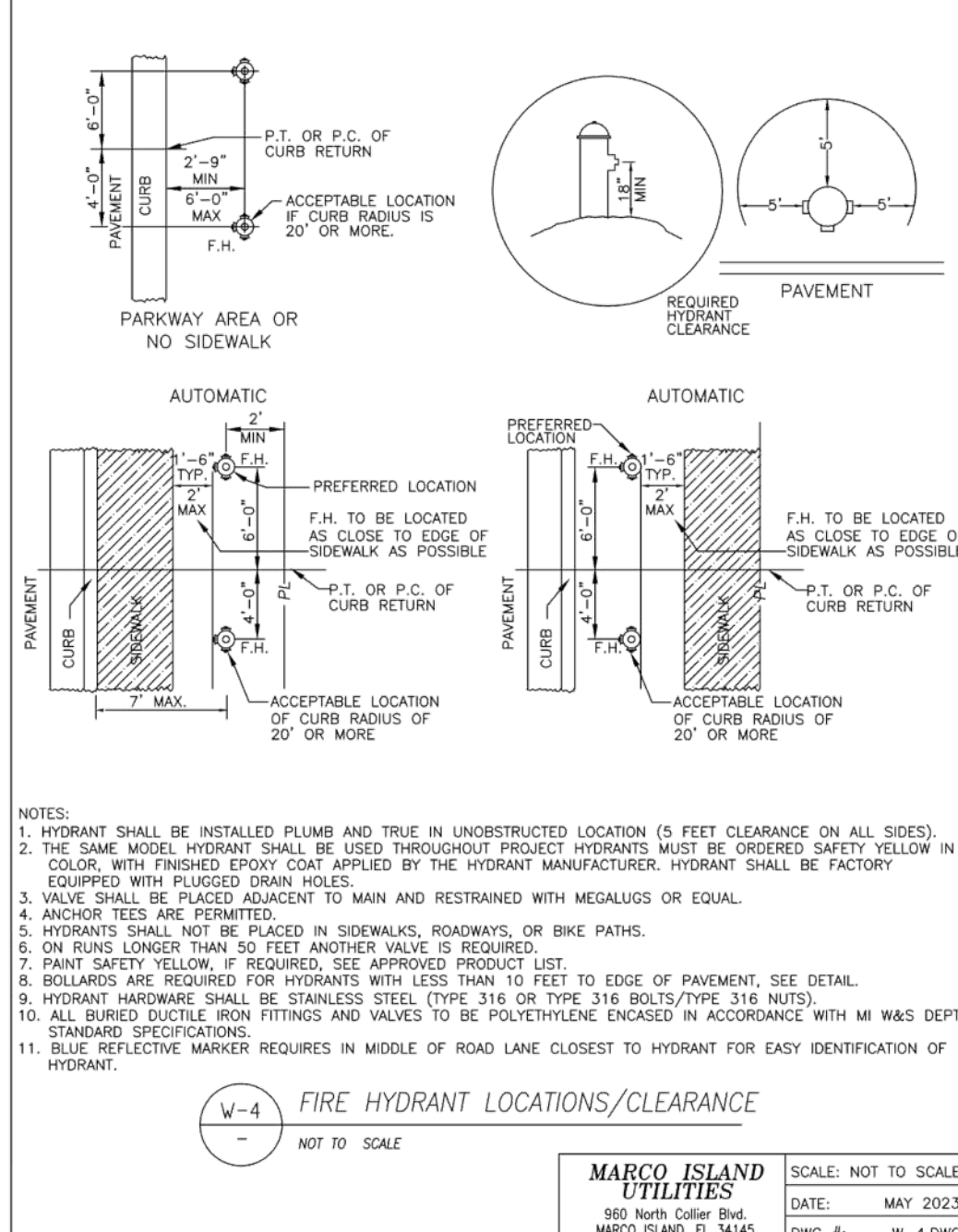
W-2 FIRE HYDRANT ASSEMBLY
SCALE: NOT TO SCALE
DATE: MAY 2023
DWG #: W-2.DWG



W-14 1\"/>



SS-10 SINGLE SEWER SERVICE CONNECTION
SCALE: NOT TO SCALE
DATE: MAY 2023
DWG #: SS-10.DWG



W-4 FIRE HYDRANT LOCATIONS/CLEARANCE
SCALE: NOT TO SCALE
DATE: MAY 2023
DWG #: W-4.DWG



W-14 316L SS TAPPING SLEEVE AND VALVE FOR 1\"/>



SS-10 SINGLE SEWER SERVICE CONNECTION
SCALE: NOT TO SCALE
DATE: MAY 2023
DWG #: SS-10.DWG

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COLLIER COUNTY MARINE STATION

STANDARD CITY OF MARCO WATER MAIN AND SANITARY SEWER DETAILS

COLLIER COUNTY FACILITIES MANAGEMENT

REVISIONS:

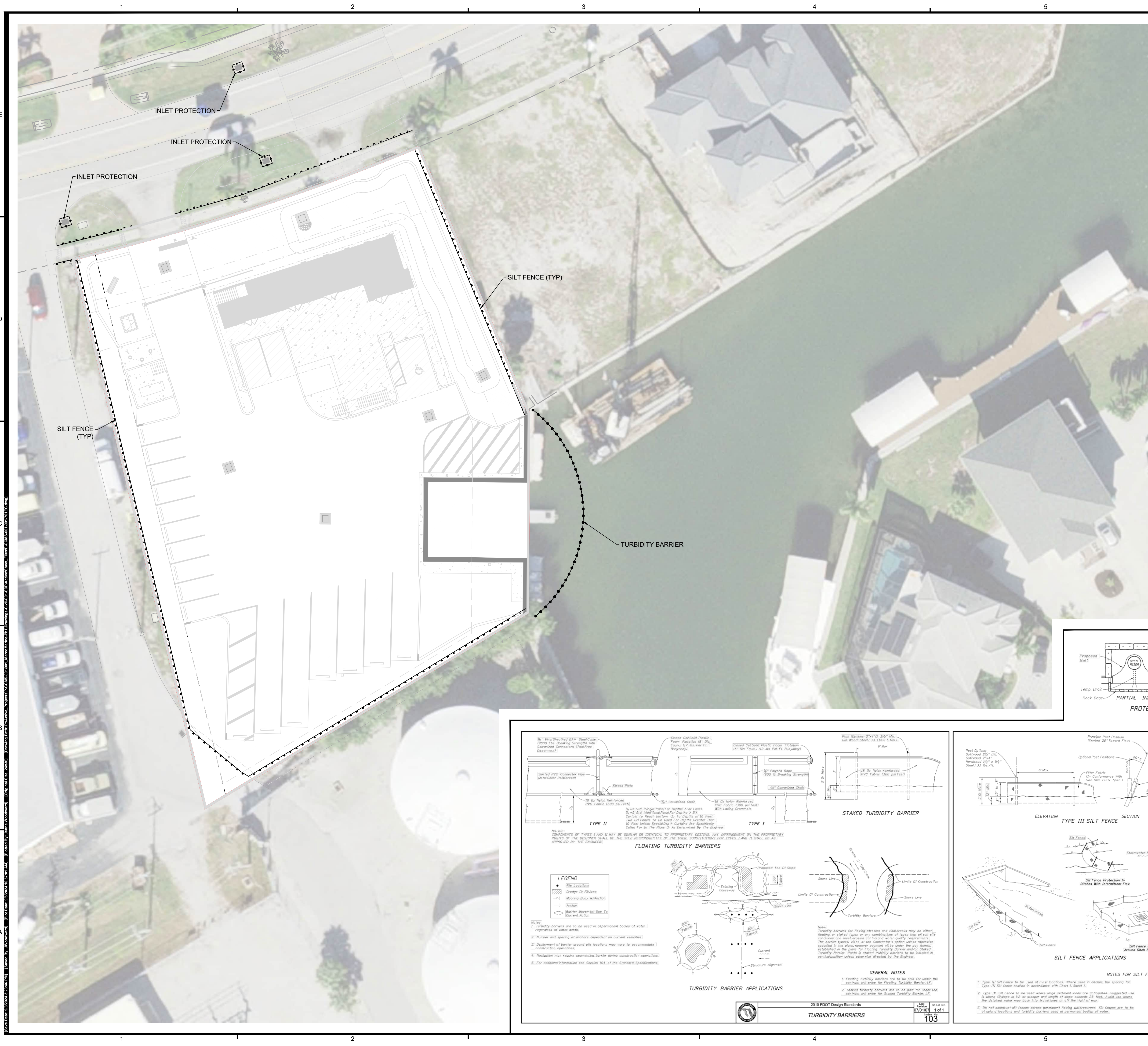
No.	Revision	Date

PROFESSIONAL SEALS:

PROFESSIONAL ENGINEER: J. WOODWARD
FLORIDA LICENSE NUMBER: 84212

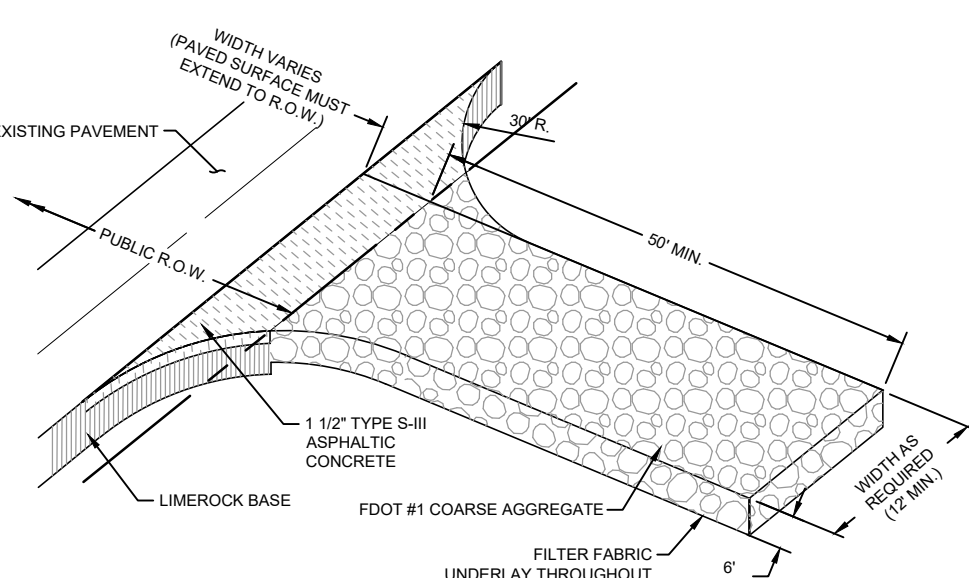
DATUM NOTE:
ALL ELEVATIONS ARE BASED ON NAVD 88 (NORTH AMERICAN VERTICAL DATUM OF 1988)

SEC: 8 TWP: 52 RGE: 26
City: MARCO ISLAND County: COLLIER
Designed by: J. WOODWARD
Drawn by: DAVID J. STIVERS
Date: JULY 2024
Horizontal Scale: N.T.S.
Vertical Scale: N.T.S.
Project Number: P-CCMS-001
File Name: P-CCMS-001-001-521WM.dwg
Sheet ID: C-521
Sheet Number: 12 of 13

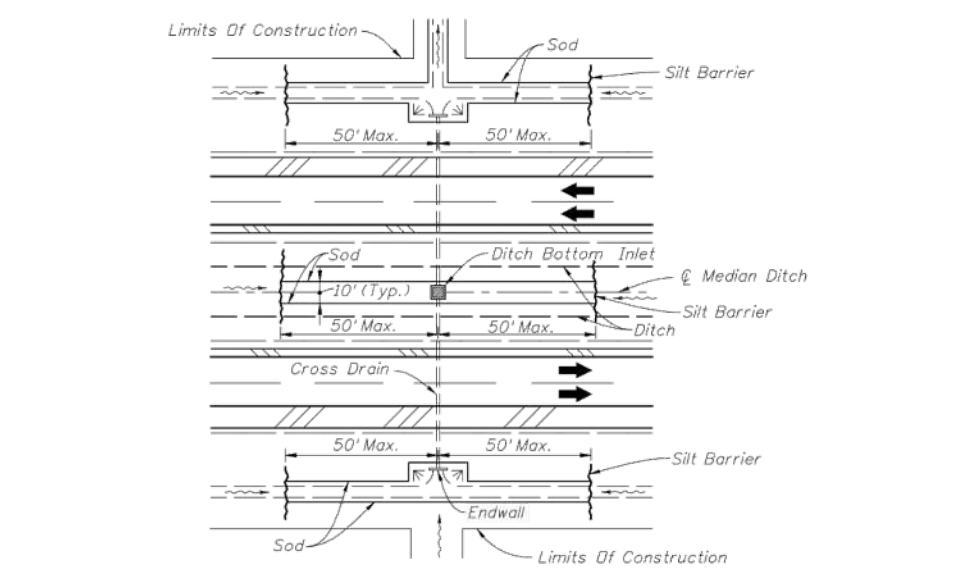


GENERAL SHEET NOTES

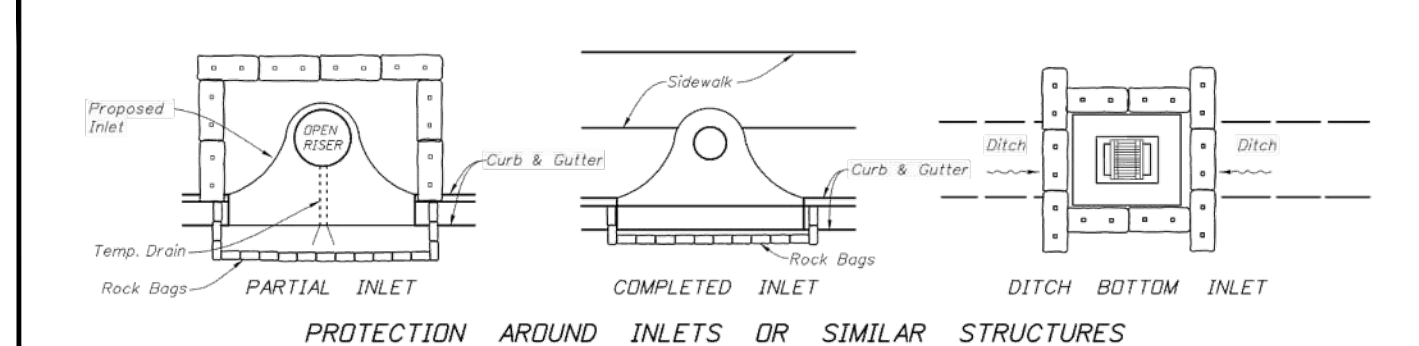
- PRIOR TO COMMENCEMENT OF CONSTRUCTION APPROPRIATE EROSION CONTROL DEVICES SHALL BE INSTALLED TO CONTROL AND REDUCE SOIL EROSION AND SEDIMENT TRANSPORT TO OFF-SITE AREAS. THE CONTRACTOR SHALL MAINTAIN THESE DEVICES THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEVICES SHALL REMAIN IN PLACE UNTIL THE SURROUNDING AREAS ARE ESTABLISHED.
- THE FOLLOWING MINIMUM REQUIREMENTS ARE RECOMMENDED: REFERENCE FLORIDA DEVELOPMENT MANUAL (FDM) PFD-601 TO (6-500).
 - A) BMP 1.01 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
 - B) BMP 1.05 STRAW BALE BARRIER
 - C) BMP 1.06 SILT FENCE
 - D) BMP 1.08 STORM INLET DRAIN PROTECTION
- THESE BEST MANAGEMENT PRACTICES (BMP) ARE TYPICAL OF REQUIREMENTS FOR SOIL EROSION CONTROL. PER DIVISION 27 OF THE COLLIER COUNTY LAND DEVELOPMENT CODE, THEY MAY NOT CONSTITUTE COMPLETE REQUIREMENTS FOR COMPLIANCE WITH REGULATORY AGENCIES AND SPECIFIC PERMIT CONDITIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FROM THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. ACCORDINGLY, THE CONTRACTOR IS ALSO RESPONSIBLE FOR CREATING, IMPLEMENTING AND MAINTAINING A STORM WATER POLLUTION PREVENTION PLAN AS PER THE REQUIREMENTS OF THE NPDES GENERAL PERMIT.
- THIS PLAN IS A CONCEPT PREPARED TO DEMONSTRATE ONE APPROACH TO PROVIDING EROSION CONTROL FOR THE PROJECT, AS REQUIRED BY COLLIER COUNTY FOR PERMITTING PURPOSES. SITE GENERAL CONTRACTOR MAY PROVIDE AN ALTERNATIVE PLAN AT THE TIME OF NPDES PERMITTING, AND PRIOR TO CONSTRUCTION.



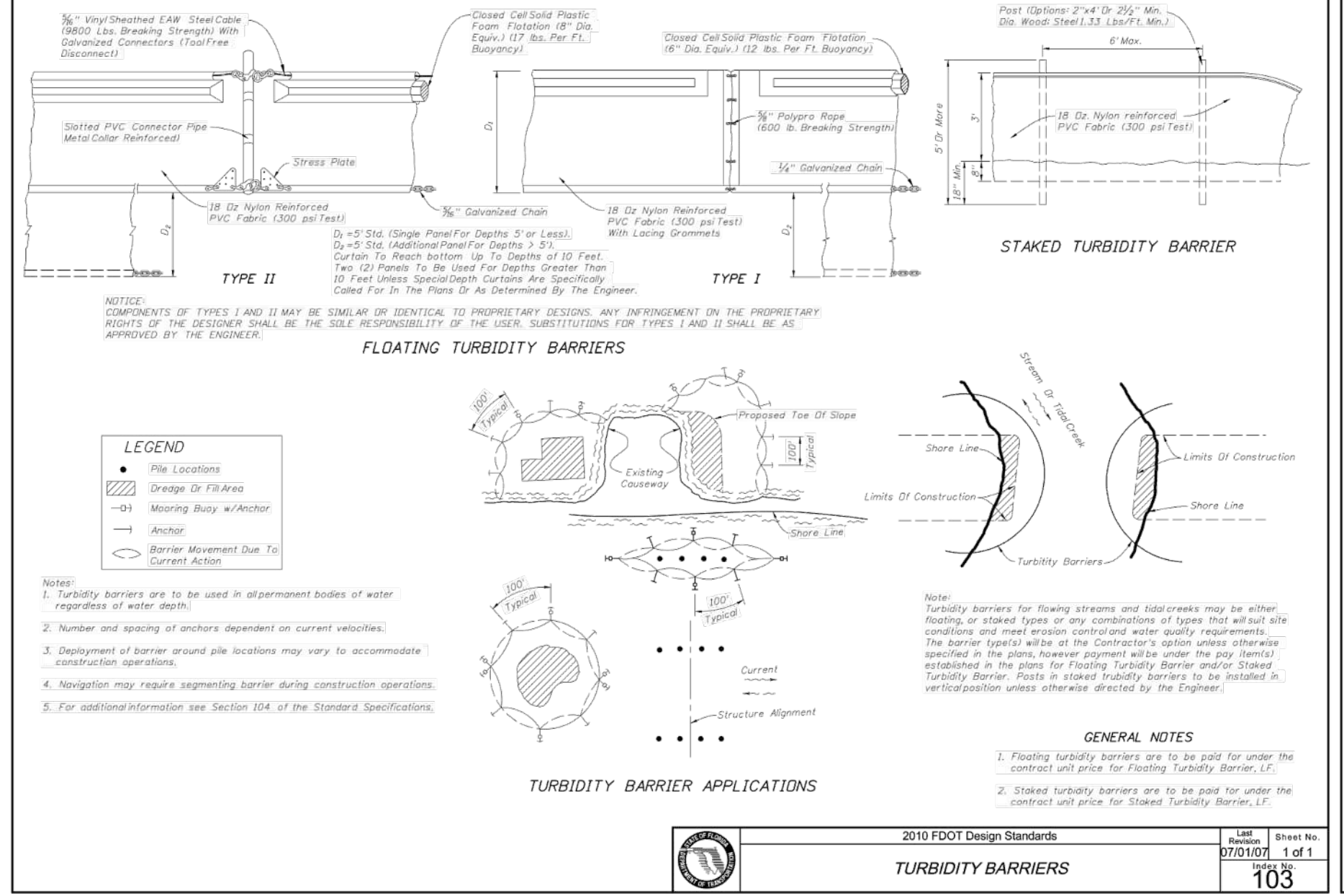
GRAVEL CONSTRUCTION ENTRANCE
N.T.S.



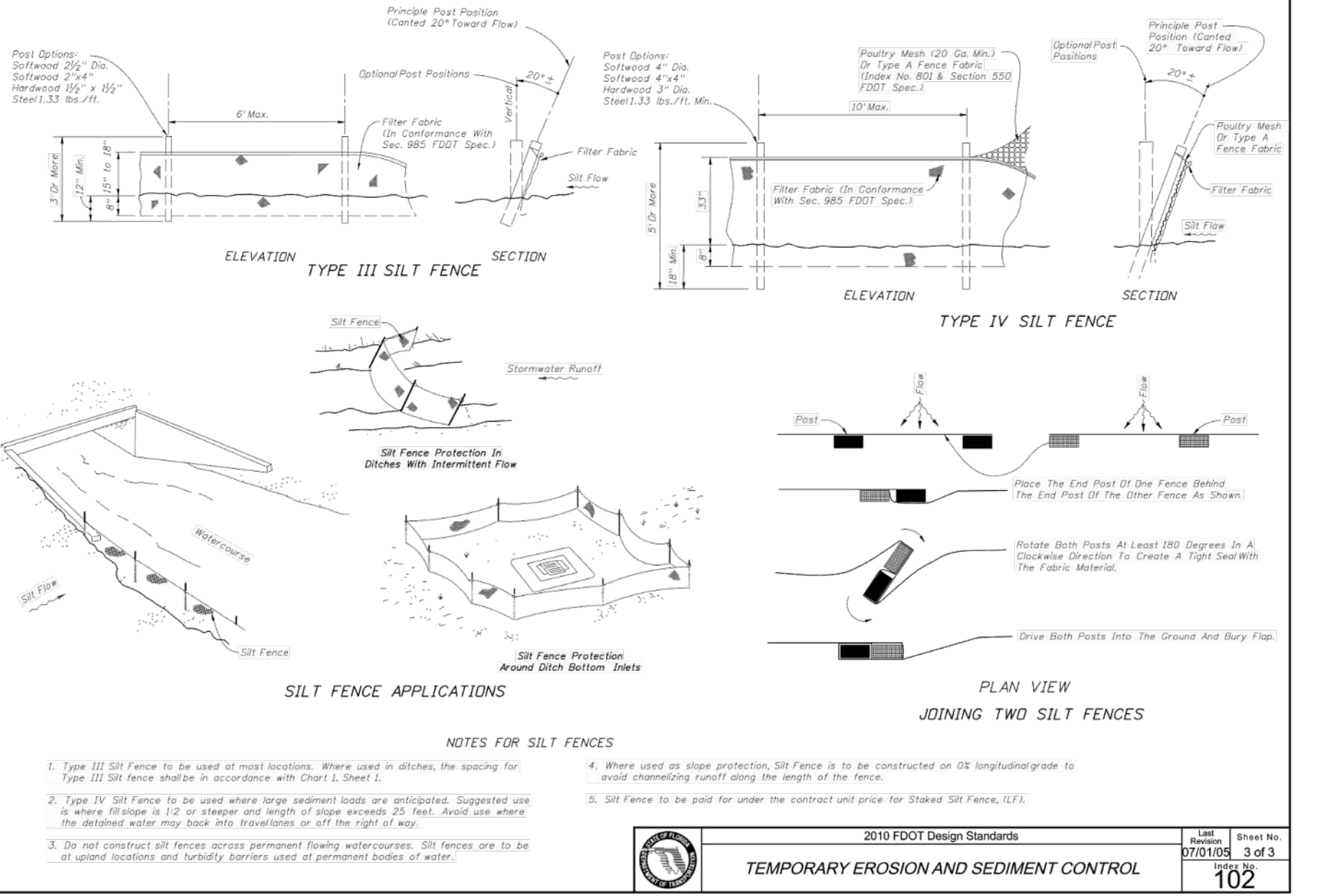
DITCH INSTALLATIONS AT DRAINAGE STRUCTURES



PROTECTION AROUND INLETS OR SIMILAR STRUCTURES



TURBIDITY BARRIERS
2010 FDOT Design Standards
Sheet No. 0701009 1 of 3
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TEMPORARY EROSION AND SEDIMENT CONTROL
2010 FDOT Design Standards
Sheet No. 0701008 3 of 3
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COLLIER COUNTY MARINE STATION

NPDES DISCHARGE CONTROL PLAN AND DETAILS

CLIENT: **COLLIER COUNTY FACILITIES MANAGEMENT**

REVISIONS:

No.	Revision	Date

LEGEND

	SILT FENCE
	DOUBLE SILT FENCE
	TURBIDITY BARRIER
	INLET PROTECTION
	HAY BALES

PROFESSIONAL SEALS:
 PROFESSIONAL ENGINEER: **J. WOODWARD**
 FLORIDA LICENSE NUMBER: **84212**

DATUM NOTE:
 ALL ELEVATIONS ARE BASED ON NAVD 88 (NORTH AMERICAN VERTICAL DATUM OF 1988).
 Bar Scale: 1" = 20'
 0 10' 20' 40' 60'

SEC. 8 TWP. 52 RGE. 26
 City: MARCO ISLAND County: COLLIER
 Designed by: J. WOODWARD
 Drawn by: DAVID J. STIVERS
 Date: JULY 2024
 Horizontal Scale: 1" = 20'
 Vertical Scale: N.T.S.
 Project Number: P-CCMS-001
 File Name: P-CCMS-001-001-701EC.dwg
 Sheet ID: **C-701**
 Sheet Number: 13 of 13