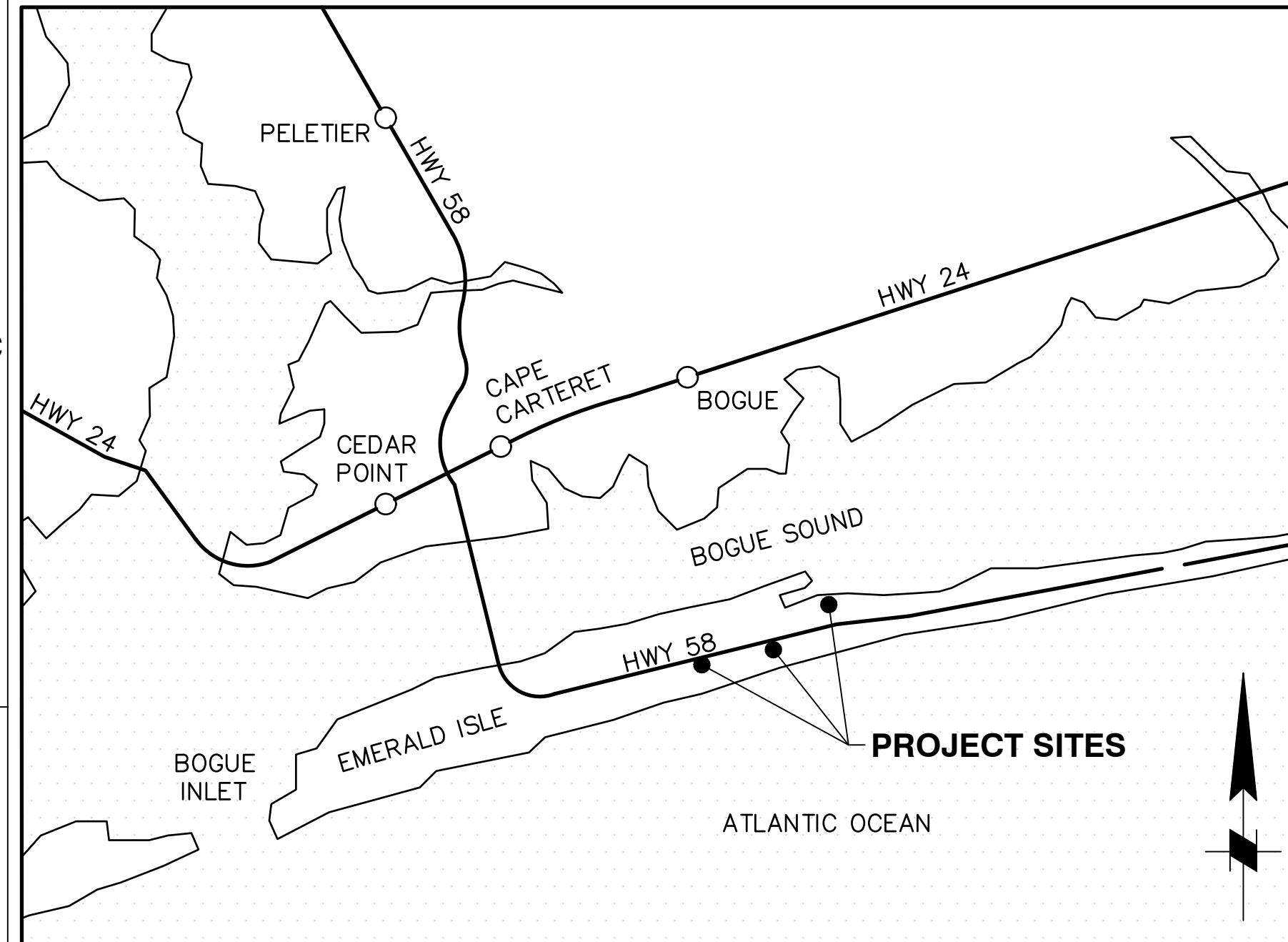


TOWN OF EMERALD ISLE

CARTERET COUNTY, NORTH CAROLINA

LOCAL DRAINAGE IMPROVEMENTS: LEE AVENUE, REED DRIVE, & CEDAR STREET



VICINITY MAP
NTS



LOCATION MAP
NTS

DRAWING INDEX	
Sheet Number	Sheet Title
G-001	TITLE SHEET
G-002	NOTES AND ABBREVIATIONS
C-101	LEE AVENUE CULVERT REPLACEMENT PLAN AND PROFILE
C-102	REED DRIVE PLAN AND PROFILE SHEET 1 OF 5
C-103	REED DRIVE PLAN AND PROFILE SHEET 2 OF 5
C-104	REED DRIVE PLAN AND PROFILE SHEET 3 OF 5
C-105	REED DRIVE PLAN AND PROFILE SHEET 4 OF 5
C-106	REED DRIVE PLAN AND PROFILE SHEET 5 OF 5
C-107	SEAVIEW DRIVE PLAN AND PROFILE
C-108	CEDAR PHASE A & B
C-109	CEDAR STREET PHASE C PLAN AND PROFILE
C-501	LEE AVENUE DETAILS
C-502	REED DRIVE DETAILS 1 OF 2
C-503	REED DRIVE DETAILS 2 OF 2
C-504	CEDAR STREET DETAILS

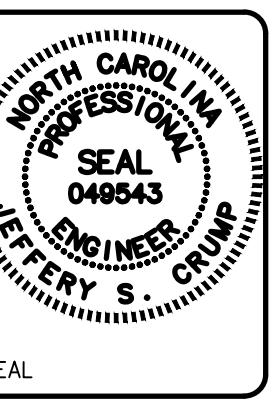


Mark	Description	Date	Appr.
0	FOR BID PURPOSES ONLY	09/22/24	JT

TOWN OF EMERALD ISLE
DRAINAGE IMPROVEMENTS
TITLE SHEET

Date: 2022	Rev.:	M&N Project No. 220479	Drawing code:
Designed by: JT	Drawn by: JT	Reviewed by: JC	Submitted by: MOFFATT & NICHOL
Drawing Scale: NOTED		Plot scale: 1:1 (D SHEET)	

moffatt & nichol
 4700 FALLS OF NEUSE RD, SUITE 300
 RALEIGH, NC 27609
 919-233-4424



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SEPTEMBER 2022

Sheet Reference Number:
G-001
 INDEX: 1 OF 15

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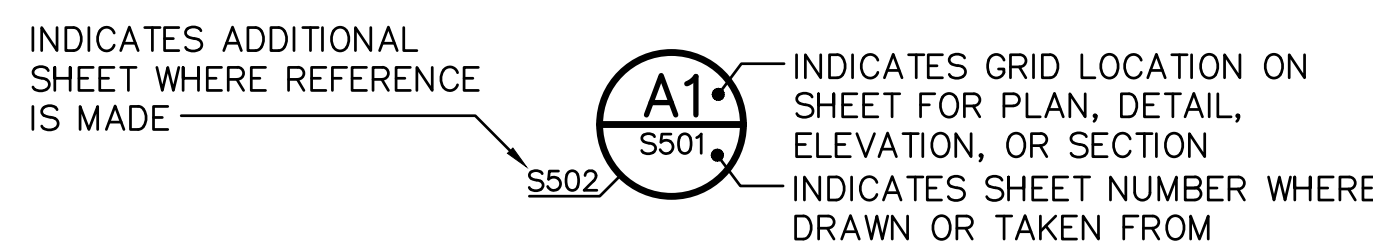
PROJECT GENERAL NOTES:

- GENERAL NOTES ARE NOT INTENDED TO REPLACE THE CONTRACT DOCUMENTS. SEE CONTRACT DOCUMENTS FOR REQUIREMENTS IN ADDITION TO THESE GENERAL NOTES. THE CONTRACT DOCUMENTS SHALL CONSIST OF THE COMPLETE PROJECT MANUAL (SPECIFICATIONS) AND WORKING DRAWINGS INCLUDING BUT NOT LIMITED TO: ADVERTISEMENT FOR BIDS; NOTICE TO BIDDERS; INSTRUCTIONS TO BIDDERS AND GENERAL CONDITIONS OF THE CONTRACT; SUPPLEMENTARY GENERAL CONDITIONS; DIVISION 1 REQUIREMENTS; TECHNICAL SPECIFICATIONS; AND ANY RELEVANT ADDENDA ITEMS. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THESE DRAWINGS AND SPECIFICATIONS.
- THE WORKING DRAWINGS ARE NOT NECESSARILY COMPLETE IN EVERY DETAIL. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, MATERIAL, SERVICES, LABOR, ETC, FOR A COMPLETE INSTALLATION; INCLUDING WORK REASONABLY INFERRED FROM THE CONTRACT DOCUMENTS AS BEING NECESSARY TO PRODUCE THE INTENDED RESULTS, WHETHER SHOWN OR NOT ON THE DRAWINGS.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE STARTING WORK. DO NOT SCALE PROJECT DRAWINGS. REPORT ANY DISCREPANCIES IN THE DRAWINGS AND/OR SPECIFICATIONS TO THE OWNER'S REPRESENTATIVE FOR CLARIFICATIONS OR ADJUSTMENTS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL NOT BEGIN DEMOLITION/CONSTRUCTION IN ANY SUCH AFFECTED AREA UNTIL THE DISCREPANCY HAS BEEN RESOLVED.
- SHOULD THERE BE A CONFLICT BETWEEN THESE GENERAL NOTES, WORKING DRAWINGS, AND/OR SPECIFICATIONS, THE MOST RESTRICTIVE INTERPRETATION SHALL PREVAIL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING FROM THE OWNER'S REPRESENTATIVE ANY CLARIFICATION OR INTERPRETATION OF THE GENERAL NOTES, WORKING DRAWINGS, AND/OR SPECIFICATIONS IN WRITING AND IN ADVANCE OF THE BEGINNING OF DEMOLITION/CONSTRUCTION.
- ALL FEDERAL, STATE, AND LOCAL SAFETY REGULATIONS ARE TO BE STRICTLY FOLLOWED. METHODS OF DEMOLITION/CONSTRUCTION AND INSTALLATION OF MATERIAL IS THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL PROTECTION STANDARDS, LAWS, AND REGULATIONS.
- THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORK PROVIDED UNDER THIS CONTRACT FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF WRITTEN ACCEPTANCE BY THE OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL KEEP ACCURATE RECORDS OF ANY CHANGES MADE TO THE DRAWINGS ON A SEPARATE WHITE SET OF PLANS PROVIDED BY THE DESIGNER. THESE ANNOTATED DRAWINGS SHALL BE RETURNED TO THE DESIGNER PRIOR TO APPROVAL OF THE FINAL PAYMENT APPLICATION.
- UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL, ON A DAILY BASIS, REMOVE FROM THE SITE ANY DEBRIS RESULTING FROM DEMOLITION/CONSTRUCTION. DISPOSAL OF MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL MATERIALS TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED, AND SHALL BE DISPOSED OF AS SPECIFIED. ALL DEBRIS SHALL BE PROPERLY DISPOSED OF IN A PERMITTED LANDFILL.
- EXISTING CONSTRUCTION, INCLUDING UTILITIES AND OTHER MISCELLANEOUS ITEMS WHICH ARE TO REMAIN, SHALL REMAIN UNDISTURBED AND BE PROTECTED, UNLESS OTHERWISE NOTED.
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING, AT HIS OWN EXPENSE, ANY AND ALL DAMAGES THAT MAY OCCUR OUTSIDE THE LIMITS OF THIS PROJECT AS A RESULT OF DEMOLITION/CONSTRUCTION.
- ALL AREAS DISTURBED DURING DEMOLITION/CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION, AT NO EXPENSE TO THE OWNER, UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROTECT ADJACENT STRUCTURES, UTILITIES, PEDESTRIANS, AND VEHICULAR TRAFFIC FROM POTENTIAL DAMAGE DUE TO CONTRACTOR'S OPERATIONS.
- THE CONTRACTOR SHALL PLACE CONSTRUCTION DEBRIS CONTROL DEVICES, TURBIDITY CURTAINS, BOOMS, TARPULINS, FLOATS, STAGING, AND OTHER DEVICES AS NECESSARY TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING THE WATER AND AIRBORNE MATERIALS FROM LEAVING THE IMMEDIATE VICINITY OF THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF ANY MATERIALS DEPOSITED OUTSIDE THE WORK AREA.
- ALL CONSTRUCTION, EXCEPT THAT WHICH CAN BE PERFORMED FROM SHORE, SHALL BE CONDUCTED FROM BARGES, WORK BOATS, OR OTHER TEMPORARY PLATFORMS PROVIDED BY THE CONTRACTOR, AS APPLICABLE.
- ALL BUILDINGS, SURFACE, AND SUBSURFACE IMPROVEMENTS ON AND ADJACENT TO THE PROJECT SITE ARE NOT NECESSARILY SHOWN HEREON.
- LOCATIONS OF EXISTING UTILITIES AND STRUCTURES SHOWN ON THE DRAWINGS ARE APPROXIMATE. UTILITIES SHOWN ARE LIMITED TO FIELD LOCATION OF VISIBLE APPURTENANCES AND DO NOT NECESSARILY DEPICT ALL UTILITY LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO BEGINNING WORK. VERIFY DISCREPANCIES WITH THE OWNER'S REPRESENTATIVE.
- THE OWNER SHALL HAVE THE AUTHORITY TO DESIGNATE AND/OR LIMIT AREAS OF CONSTRUCTION.
- LIMITED STAGING AREAS WILL BE PROVIDED ON SITE FOR CONTRACTOR'S USE. THE CONTRACTOR SHALL CONFIRM THE EXTENTS OF STAGING AREAS WITH THE OWNER'S REPRESENTATIVE.

- WHEN SPECIFIC GRADING REQUIREMENTS ARE NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL GRADE TO DRAIN ALL AREAS WITHIN THE LIMITS OF CONSTRUCTION, OR OTHERWISE DISTURBED BY CONSTRUCTION, AND ALSO TO MATCH THE ADJACENT GROUND.
- SAFETY OF PERSONNEL, REQUIRED EQUIPMENT, AND CONDITION AND SUITABILITY OF TEMPORARY WORK PLATFORMS TO SUPPORT MATERIAL AND EQUIPMENT LOADS IS THE CONTRACTOR'S RESPONSIBILITY.
- CONSTRUCTION LOADS FOR ANY NEW PORTION OF ANY STRUCTURE SHALL NOT BE IMPOSED UNTIL THE CONCRETE CYLINDER STRENGTH FOR THOSE MEMBERS AND CONNECTING POURS HAS REACHED 80% OF THE 28 DAY CONCRETE STRENGTH.
- WHERE PEDESTRIAN AND DRIVER SAFETY IS ENDANGERED IN THE AREA OF DEMOLITION/CONSTRUCTION WORK, USE TRAFFIC BARRICADES ("JERSEY" TYPE BARRIERS) WITH FLASHING LIGHTS.
- THE OWNER MAKES NO REPRESENTATIONS ABOUT SUBSURFACE CONDITIONS THAT MAY BE ENCOUNTERED WITHIN THE LIMITS OF THE PROJECT.
- ALL ELEVATIONS PROVIDED ON THE DRAWINGS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD 1988).
- PROJECT SITE SURVEY WAS PERFORMED IN NOVEMBER, 2009 BY THE FOLLOWING. THE PROFESSIONAL LAND SURVEYOR OF RECORD IS STEPHEN R. WOLFE, NORTH CAROLINA LICENSE NO. L-3259.

JOYNER KEENEY, PLLC
1051 NORTH WINSTEAD AVENUE
P.O. BOX 7533
ROCKY MOUNT, NORTH CAROLINA 27804

M&N REFERENCE BUBBLE DESIGNATION:



M&N DRAWING ABBREVIATIONS:

- AASHTO = AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
- ACI = AMERICAN CONCRETE INSTITUTE
- ADA = AMERICANS WITH DISABILITIES ACT
- AISC = AMERICAN INSTITUTE OF STEEL CONSTRUCTION
- AISI = AMERICAN IRON AND STEEL INSTITUTE
- ALT = ALTERNATE
- ALUM = ALUMINUM
- ANSI = AMERICAN NATIONAL STANDARDS INSTITUTE
- APPROX = APPROXIMATE
- ASCE = AMERICAN SOCIETY OF CIVIL ENGINEERS
- ASTM = AMERICAN SOCIETY FOR TESTING AND MATERIALS
- AWG = AMERICAN WIRE GAUGE
- AWS = AMERICAN WELDING SOCIETY
- BOTT = BOTTOM
- BTW = BETWEEN
- CD = CONSTRUCTION DOCUMENTS
- CF = CUBIC FEET
- CKD = CHECKED
- CIP = CAST-IN-PLACE
- CJ = CONSTRUCTION JOINT
- CLR = CLEAR
- CONC = CONCRETE
- CONN = CONNECTION
- CONSTR = CONSTRUCTION
- CONT = CONTINUOUS
- CY = CUBIC YARD
- DBL = DOUBLE
- DIA = DIAMETER
- DIM = DIMENSION
- DISCONT = DISCONTINUOUS
- DR = DRIVE
- DWN = DRAWN
- E = EAST
- EA = EACH
- EL = ELEVATION
- ELEV = ELEVATION
- EMBED = EMBEDMENT
- EQ = EQUAL
- ETC = ET CETERA
- EW = EACH WAY
- EXIST. = EXISTING
- EXP = EXPANSION
- EXT = EXTENSION
- F = FAHRENHEIT
- FPS = FEET PER SECOND
- FT = FEET
- GALV = GALVANIZED
- GR = GRADE
- HORIZ = HORIZONTAL
- HWY = HIGHWAY
- ICC = INTERNATIONAL CODE COUNCIL
- ID = IDENTIFICATION
- IN = INCHES
- INC = INCORPORATED
- INFO = INFORMATION
- INT = INTERMEDIATE
- JT = JOINT
- K = KIPS OR 1000 POUNDS
- KLF = KIPS PER LINEAR FOOT
- KSI = KIPS PER SQUARE INCH
- L = ANGLE OR LENGTH
- LB = POUND
- LF = LINEAR FEET
- LG = LONG
- LONG. = LONGITUDINAL
- LT = LEFT
- M&N = MOFFATT & NICHOL
- MAX = MAXIMUM
- MHHW = MEAN HIGHER HIGH WATER
- MHW = MEAN HIGH WATER
- MIN = MINIMUM
- MISC = MISCELLANEOUS
- MLLW = MEAN LOWER LOW WATER
- MLW = MEAN LOW WATER
- MPH = MILES PER HOUR
- MSL = MEAN SEA LEVEL
- N = NORTH
- N/A = NOT APPLICABLE
- NCDENR = NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
- NAD = NORTH AMERICAN DATUM
- NAVD = NORTH AMERICAN VERTICAL DATUM
- NC = NORTH CAROLINA
- NCDOT = NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
- NIC = NOT IN CONTRACT
- NO. = NUMBER
- NOAA = NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
- NOS = NATIONAL OCEAN SERVICE
- NTS = NOT TO SCALE
- O.C. = ON CENTER
- OSHA = OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
- OZ. = OUNCE
- P/C = PRECAST
- P/S = PRESTRESSED
- PCF = POUNDS PER CUBIC FOOT
- PDA = PILE DYNAMIC ANALYZER
- PEN = PENETRATION
- PSF = POUNDS PER SQUARE FOOT
- PSI = POUNDS PER SQUARE INCH
- PVC = POLYVINYL CHLORIDE
- QTY = QUANTITY
- R = RADIUS
- RD = ROAD
- REINF = REINFORCEMENT OR REINFORCED
- REQ'D = REQUIRED
- R/F = REINFORCEMENT OR REINFORCED
- RT = RIGHT
- S = SOUTH
- SCH = SCHEDULE
- SCO = STATE CONSTRUCTION OFFICE
- SF = SQUARE FOOT
- SHT = SHEET
- SPA = SPACES
- SQ = SQUARE
- SS = STAINLESS STEEL
- ST = STREET
- STA = STATION
- STD = STANDARD
- STE = SUITE
- STL = STEEL
- SY = SQUARE YARD
- T = TON
- TEMP = TEMPORARY OR TEMPERATURE
- TYP = TYPICAL
- UDLL = UNIFORMLY DISTRIBUTE LIVE LOAD
- UON = UNLESS OTHERWISE NOTED
- U.S. = UNITED STATES
- VERT = VERTICAL
- VLF = VERTICAL LINEAR FEET
- W = WEST, WATER, OR WIDTH
- W/ = WITH
- WOR = WEIGHT OF ROD
- " = SECONDS OR INCHES
- ' = MINUTES OR FEET
- * = ASTERISK
- # = NUMBER OR POUND
- & = AND
- @ = AT
- ⊕ = CENTERLINE
- Ⓟ = PLATE
- ∅ = DIAMETER
- ° = DEGREES
- ± = PLUS OR MINUS
- % = PERCENT

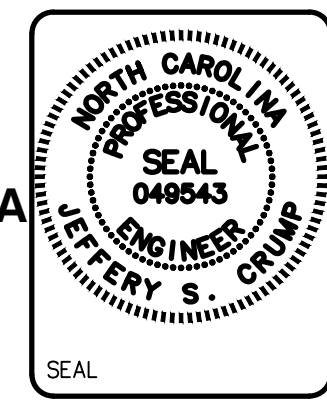


Rev.	Date	Description
0	09/22/24	JT
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TOWN OF EMERALD ISLE
DRAINAGE IMPROVEMENTS

NOTES AND ABBREVIATIONS

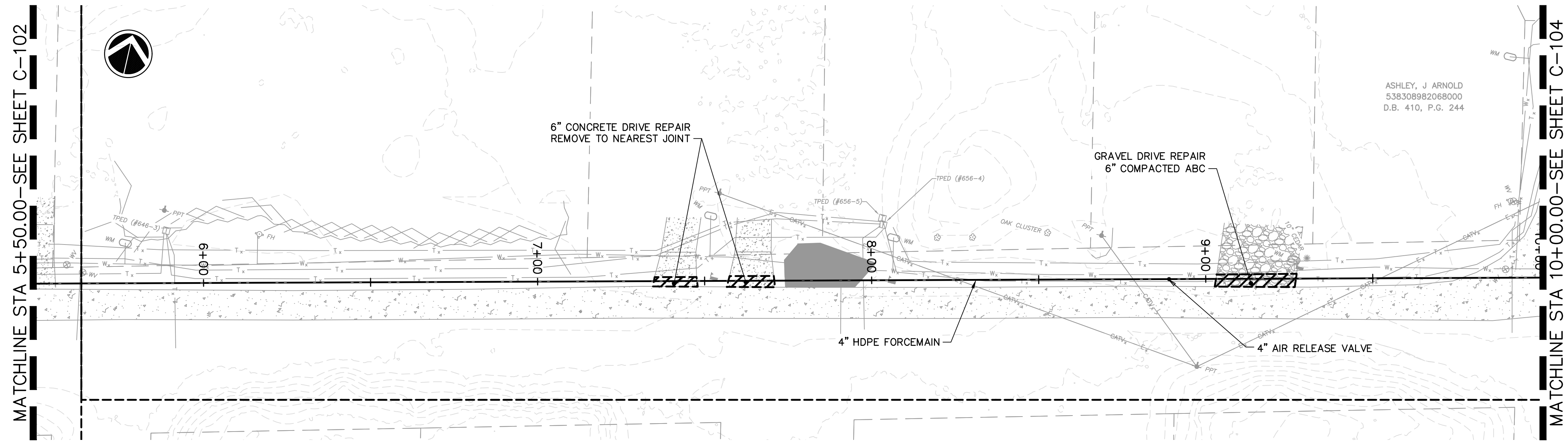
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Dwn by:	JT	Reviewed by:	JC
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Rev.:	0	Drawing code:	
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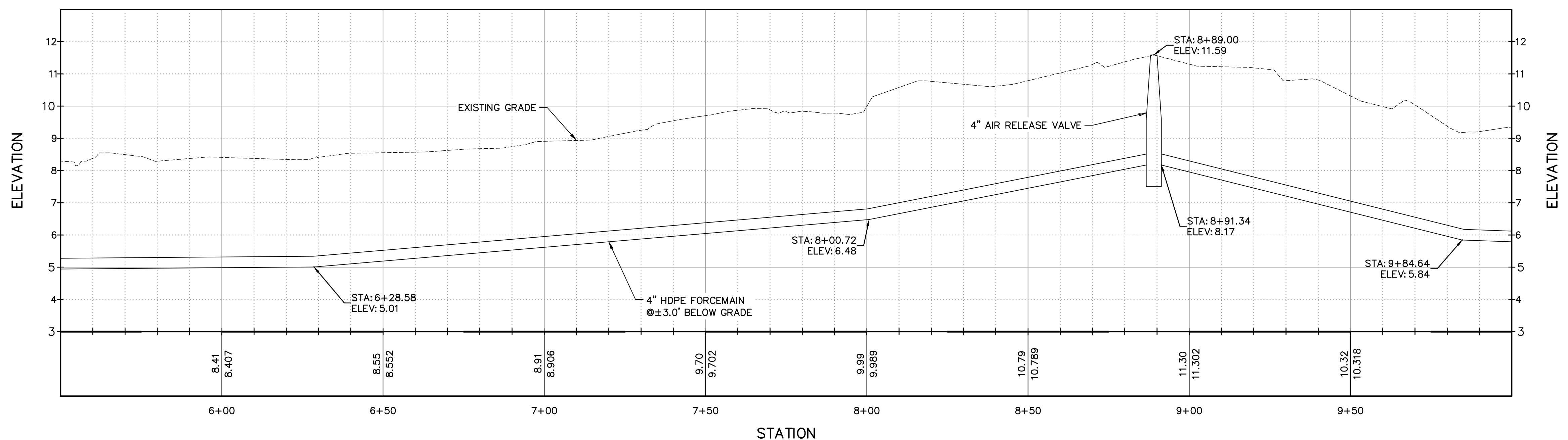
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Sheet Reference Number:
G-002

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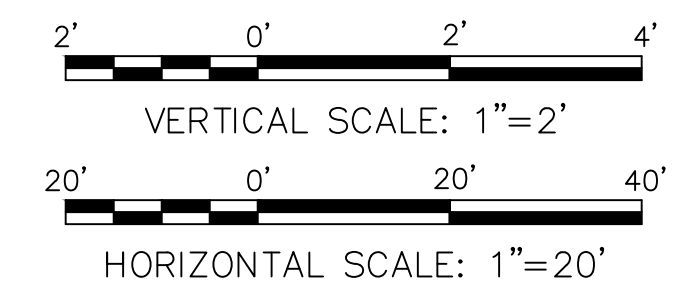
REED DRIVE PLAN
SCALE: 1"=20'



REED DRIVE PROFILE

LEGEND:

- W_x — EXISTING WATER LINE
- T_x — EXISTING UG TELEPHONE LINE
- E_x — EXISTING OH POWER LINE
- CATV_x — EXISTING OH CABLE TV LINE
- — — — — EXISTING FENCE
- — — — — EXISTING STORM DRAIN
- - - - - APPROX EXISTING PROPERTY LINE



REED DRIVE PROJECT SITE 2

FOR BID PURPOSES ONLY
SEPTEMBER 2022



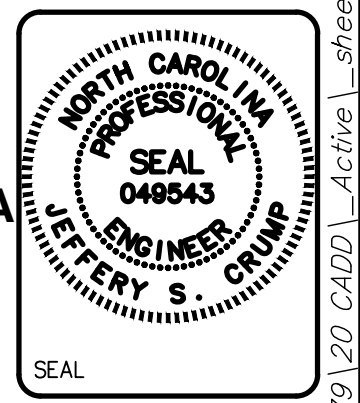
Mark	Description	Date	Appr.
0	FOR BID PURPOSES ONLY	09/22/22	JT

TOWN OF EMERALD ISLE
DRAINAGE IMPROVEMENTS

REED DRIVE PLAN AND PROFILE
SHEET 2 OF 5

Designed by:	JT	Date:	2022	Rev.:	0-
Dwn by:	JT	M&N Project No.:	220479		
Reviewed by:	JC	Drawing code:			
Submitted by:	JC	Drawing Scale:	NOTED		
Moffatt & Nichol		Plot scale:	1:1 (D SHEET)		

moffatt & nichol
4700 FALLS OF NEUSE RD, SUITE 300
RALEIGH, NC 27609
919-231-4242



Sheet Reference Number:
C-103
INDEX: 5 OF 15

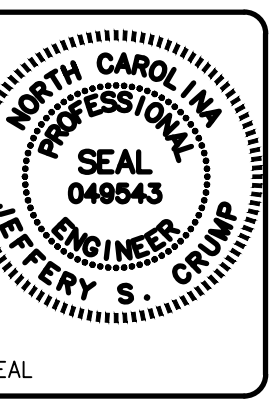


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		Date
		Appr.

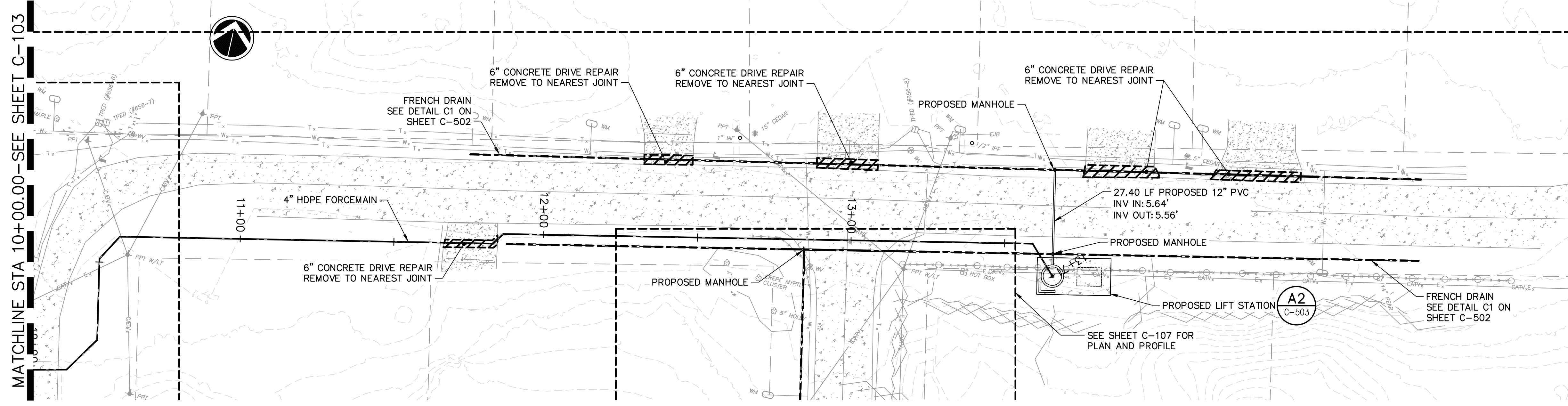
TOWN OF EMERALD ISLE
DRAINAGE IMPROVEMENTS
REED DRIVE PLAN AND PROFILE
SHEET 3 OF 5

Designed by:	JT
Dwn by:	JT
Reviewed by:	JC
Submitted by:	MCFATT & NICHOL
Date:	2022
M&N Project No.:	220479
Drawing code:	
Drawing Scale:	NOTED
Plot scale:	1:1 (0 SHEET)

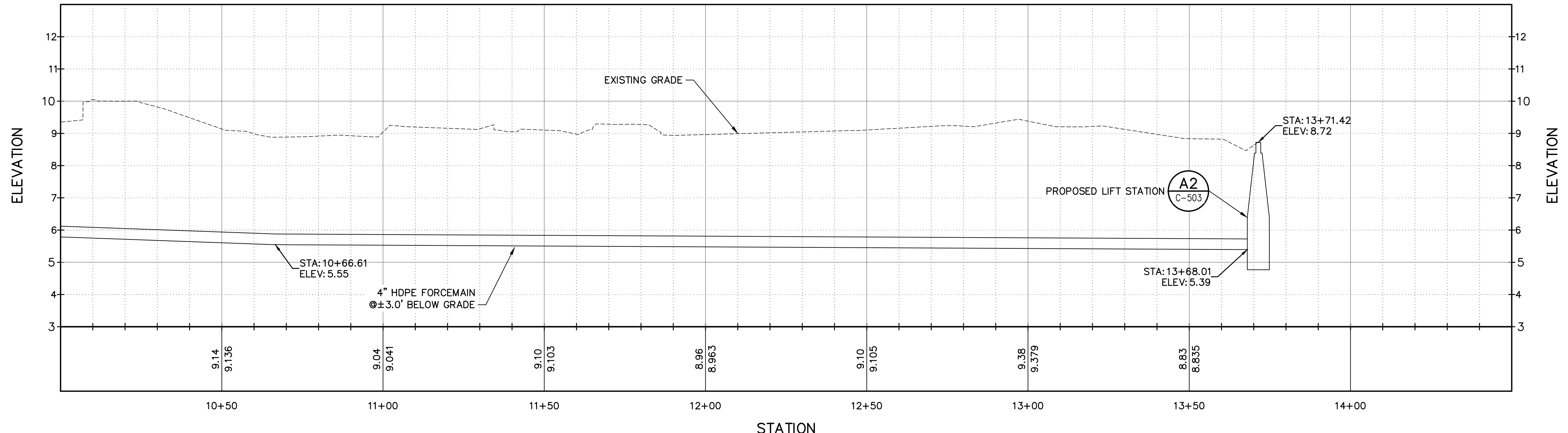
moffatt & nichol
4700 FALLS OF NEUSE RD, SUITE 300
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919-876-4624



Sheet Reference Number:
C-104
INDEX: 6 OF 15



REED DRIVE PLAN
SCALE: 1"=20'



REED DRIVE PROFILE

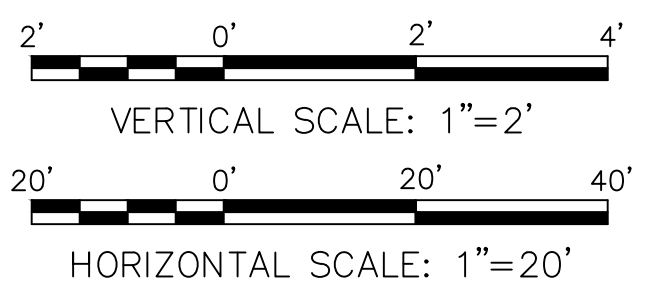
REED DRIVE PROJECT SITE 2

LEGEND:

- EXISTING WATER LINE
- EXISTING UG TELEPHONE LINE
- EXISTING OH POWER LINE
- EXISTING OH CABLE TV LINE
- EXISTING FENCE
- EXISTING STORM DRAIN
- APPROX EXISTING PROPERTY LINE

NOTES

1. SEE SHEET C-504 FOR PERFORATED PIPE.
2. PROPOSED LIFT STATION MAY BE CONSTRUCTED USING THE DETAILS ON C-503 OR AN APPROVED PREPACKAGED LIFT STATION MAY BE PURCHASED FROM HERITAGE WATER SYSTEMS OR APPROVED EQUAL.



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SEPTEMBER 2022

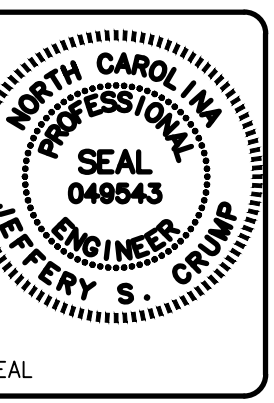


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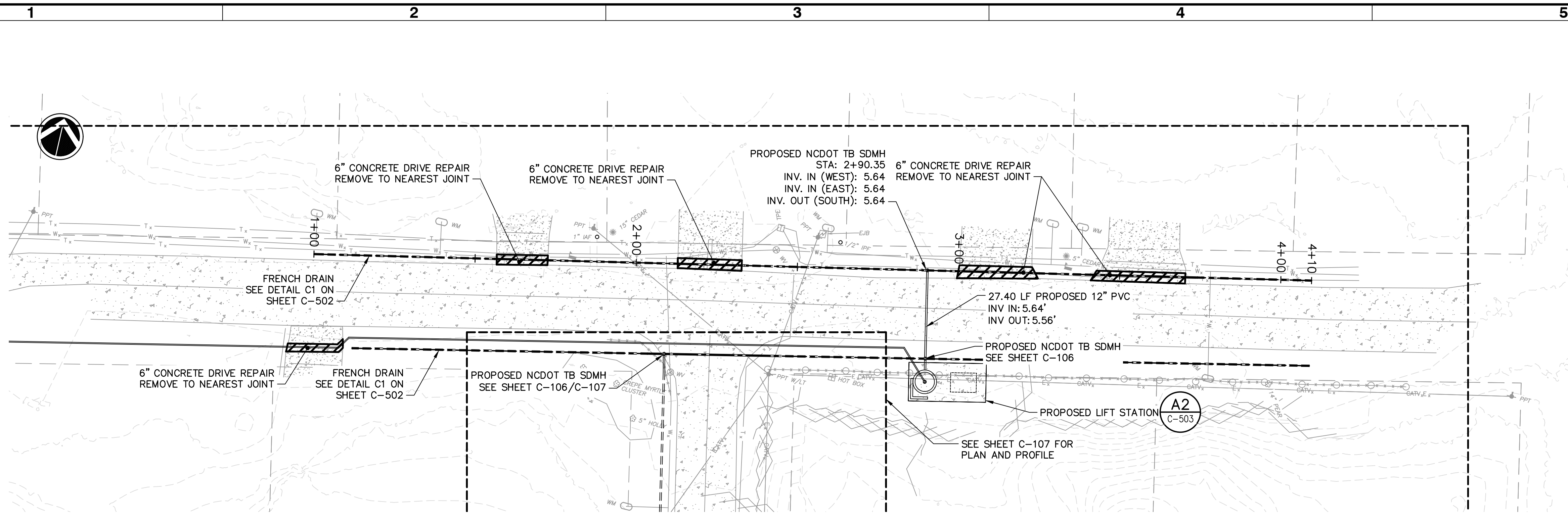
TOWN OF EMERALD ISLE
DRAINAGE IMPROVEMENTS
REED DRIVE PLAN AND PROFILE
SHEET 4 OF 5

Designed by:	JT	Date:	2022
Dwn by:	JT	M&N Project No.:	220479
Reviewed by:	JC	Drawing code:	
Submitted by:	JC	Drawing Scale:	NOTED
Moffatt & Nichol		Plot scale:	1:1 (D SHEET)

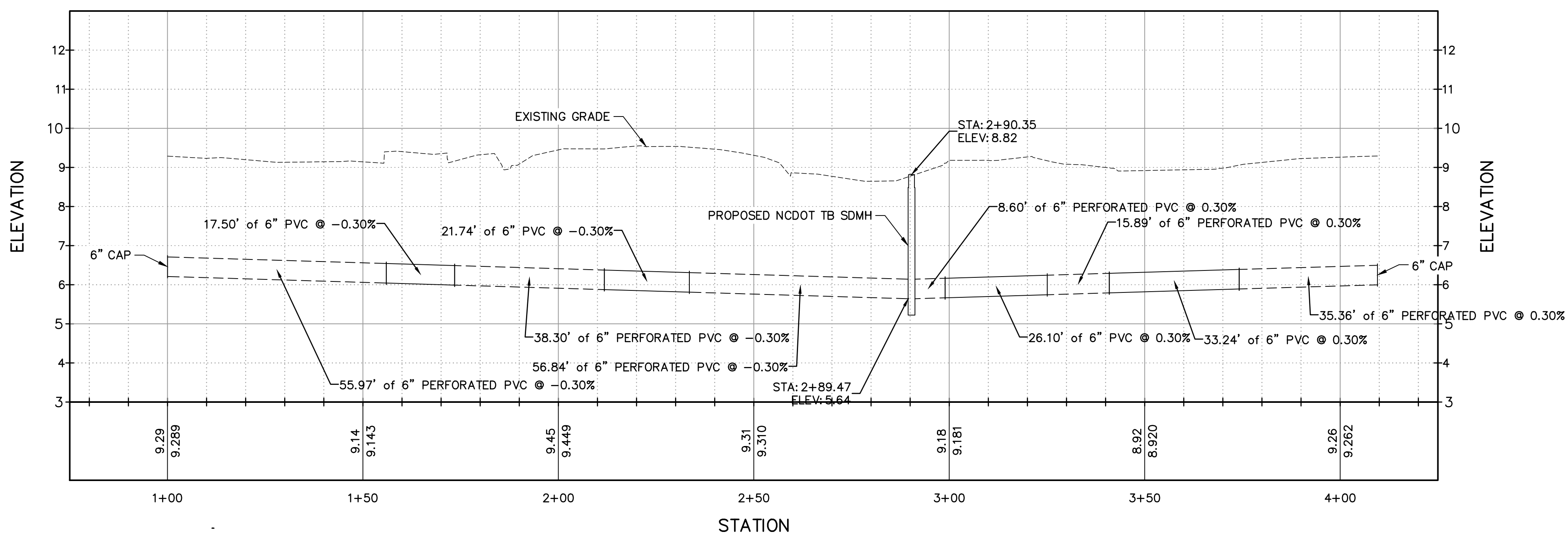
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Sheet Reference Number:
C-105
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REED DRIVE PLAN
SCALE: 1"=20'



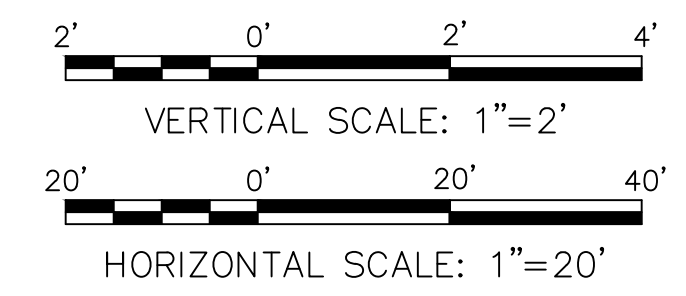
NORTH REED DRIVE FRENCH DRAIN PROFILE

REED DRIVE PROJECT SITE 2

- LEGEND:**
- W_x — EXISTING WATER LINE
 - T_x — EXISTING UG TELEPHONE LINE
 - E_x — EXISTING OH POWER LINE
 - CATV_x — EXISTING OH CABLE TV LINE
 - - - - - EXISTING FENCE
 - ▬▬▬▬▬ EXISTING STORM DRAIN
 - - - - - APPROX EXISTING PROPERTY LINE

NOTES

- ALL PERFORATED PIPE SHALL BE INSTALLED IN ACCORDANCE WITH DETAIL C1 ON SHEET C-502.
- PROPOSED LIFT STATION MAY BE CONSTRUCTED USING THE DETAILS ON C-503 OR AN APPROVED PREPACKAGED LIFT STATION MAY BE PURCHASED FROM HERITAGE WATER SYSTEMS OR APPROVED EQUAL.



**FOR BID PURPOSES ONLY
SEPTEMBER 2022**

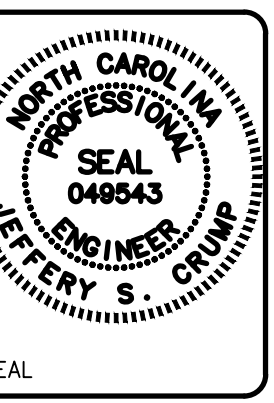


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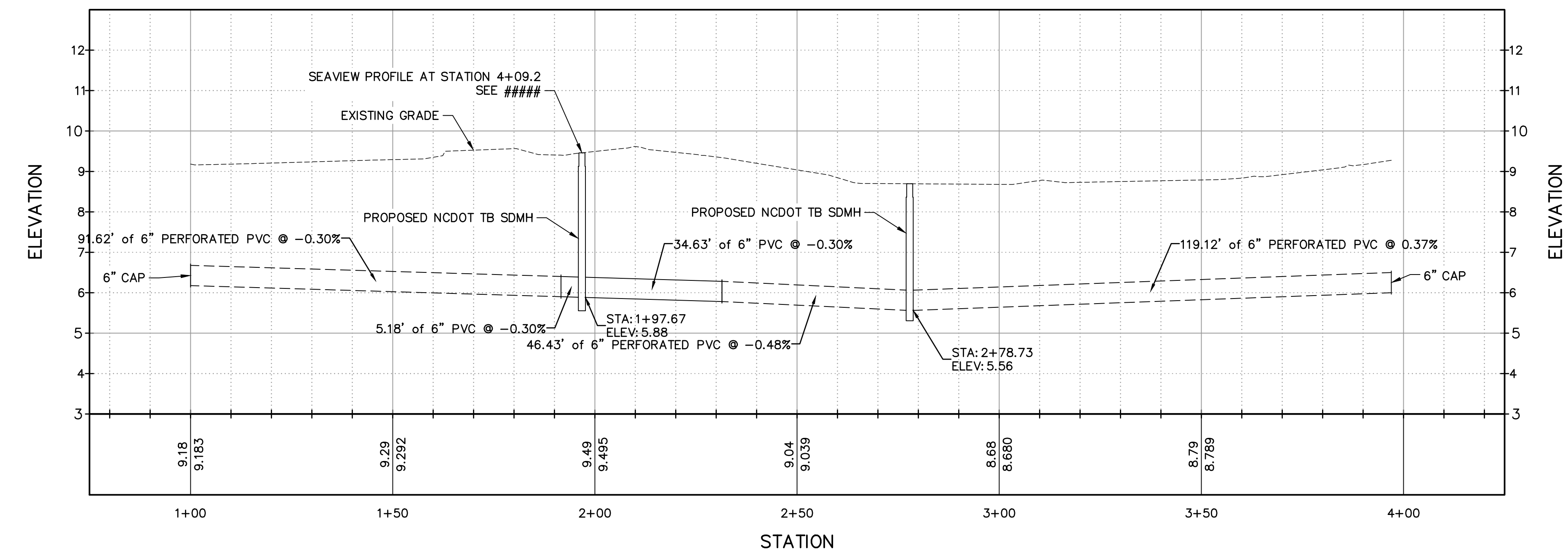
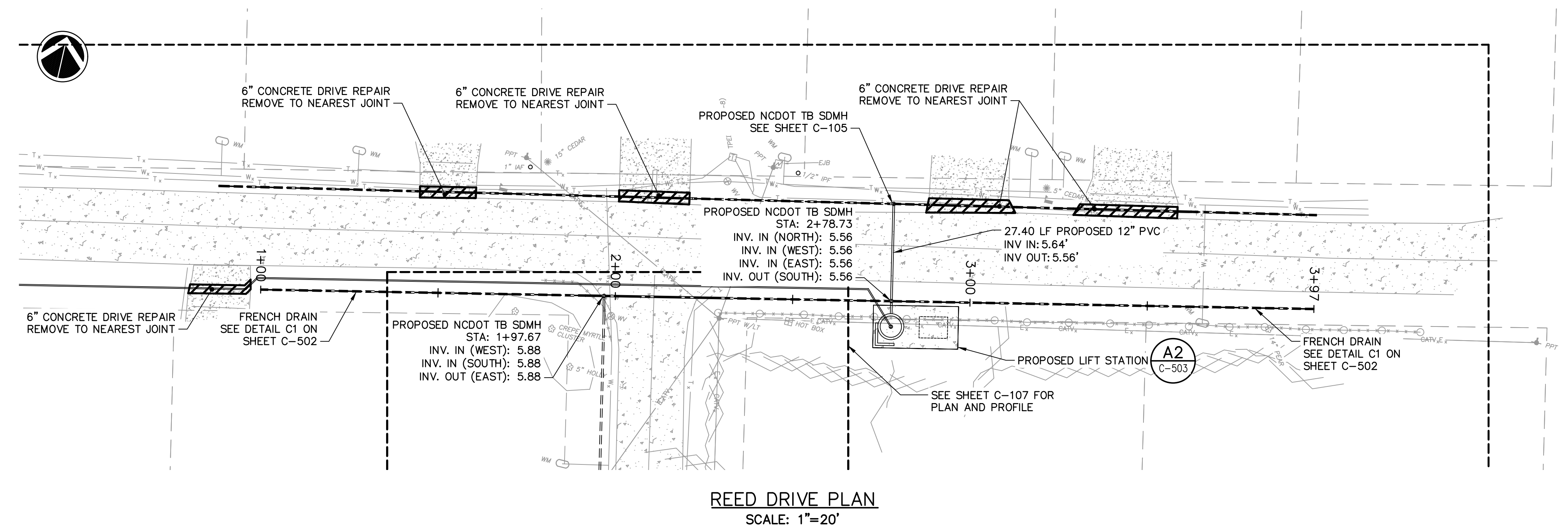
TOWN OF EMERALD ISLE
DRAINAGE IMPROVEMENTS
REED DRIVE PLAN AND PROFILE
SHEET 5 OF 5

Designed by:	JT	Date:	2022
Dwn by:	JT	M&N Project No.:	220479
Reviewed by:	JC	Drawing code:	
Submitted by:	JC	Drawing Scale:	NOTED
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4700 FALLS OF NEUSE RD, SUITE 300
RALEIGH, NC 27609
919-851-4242

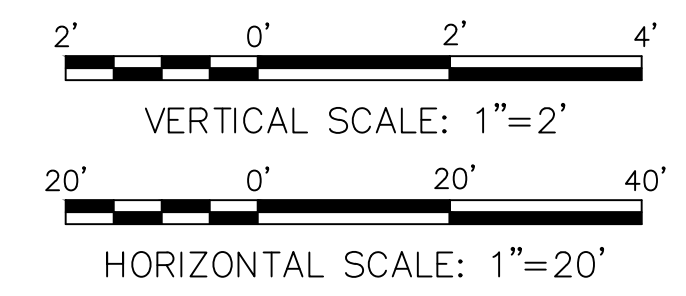


Sheet Reference Number:
C-106
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NOTES

- ALL PERFORATED PIPE SHALL BE INSTALLED IN ACCORDANCE WITH DETAIL C1 ON SHEET C-502.
- PROPOSED LIFT STATION MAY BE CONSTRUCTED USING THE DETAILS ON C-503 OR AN APPROVED PREPACKAGED LIFT STATION MAY BE PURCHASED FROM HERITAGE WATER SYSTEMS OR APPROVED EQUAL.



FOR BID PURPOSES ONLY
SEPTEMBER 2022

LEGEND:

	EXISTING WATER LINE
	EXISTING UG TELEPHONE LINE
	EXISTING OH POWER LINE
	EXISTING OH CABLE TV LINE
	EXISTING FENCE
	EXISTING STORM DRAIN
	APPROX EXISTING PROPERTY LINE

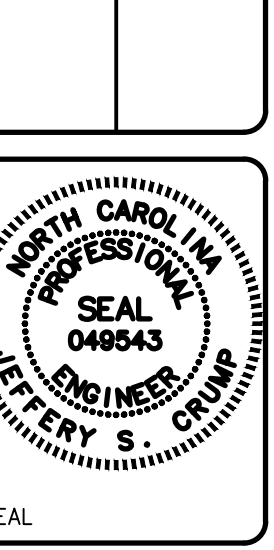


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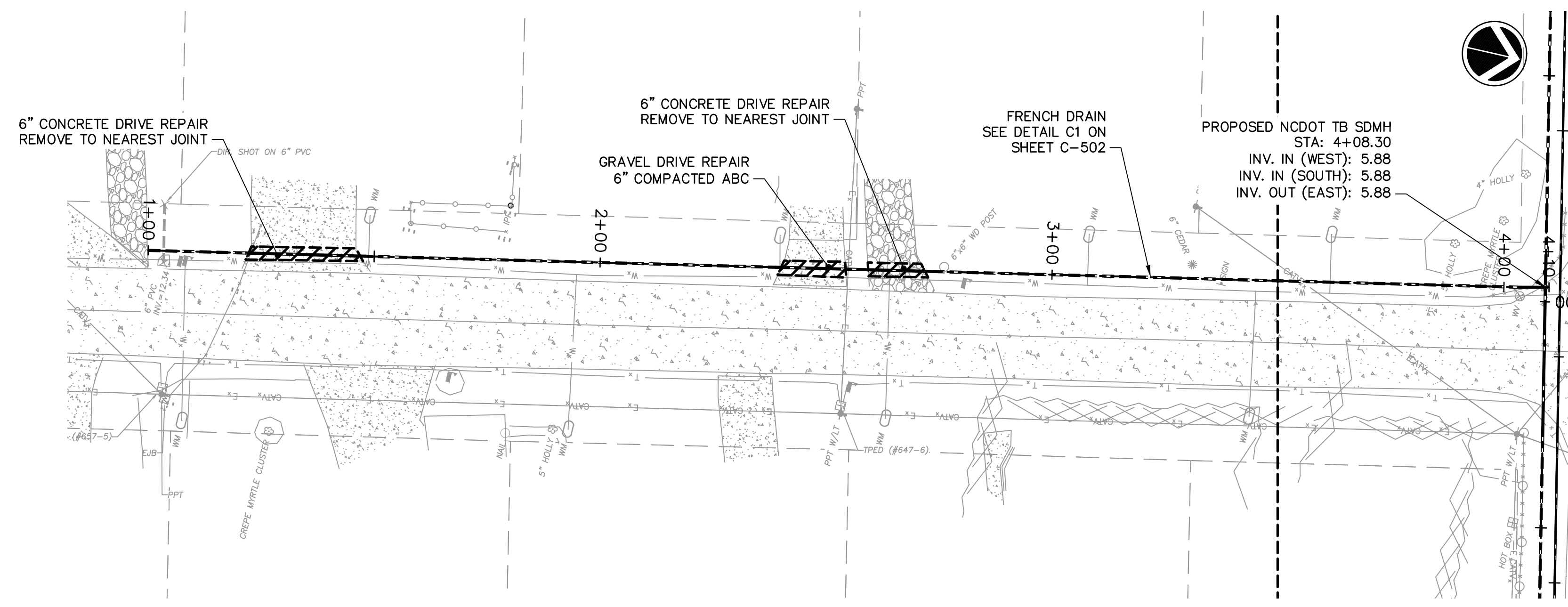
TOWN OF EMERALD ISLE
DRAINAGE IMPROVEMENTS
SEAVIEW DRIVE PLAN AND PROFILE

Designed by:	JT	Date:	2022	Rev.:	0
Dwn by:	JT	M&N Project No.:	220479		
Reviewed by:	JC	Drawing code:			
Submitted by:	MCFATT & NICHOL	Drawing Scale:	NOTED		
		Plot scale:	1:1 (D SHEET)		

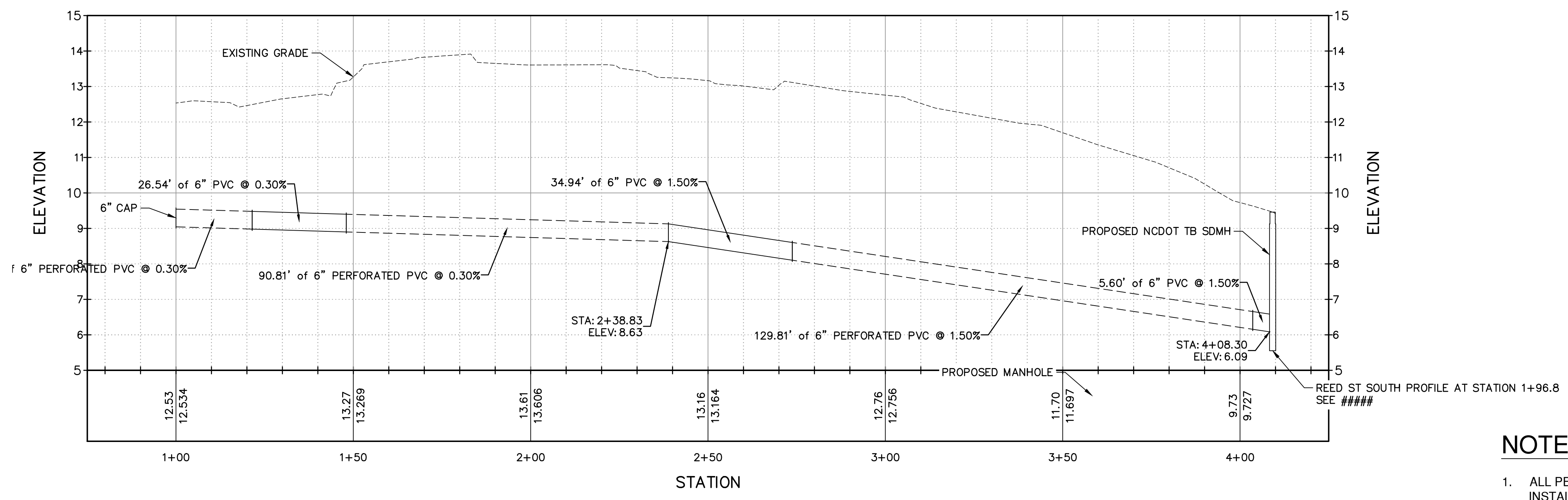
moffatt & nichol
4700 FALLS OF NEUSE RD, SUITE 300
RALEIGH, NC 27609
919-233-4424



Sheet Reference Number:
C-107
INDEX: 9 OF 15



SEAVIEW DRIVE PLAN
SCALE: 1"=20'



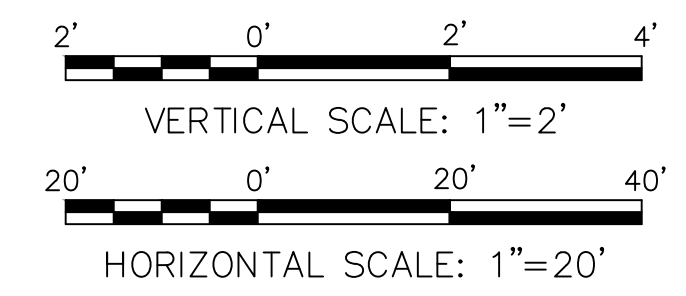
SEAVIEW DRIVE FRENCH DRAIN PROFILE

LEGEND:

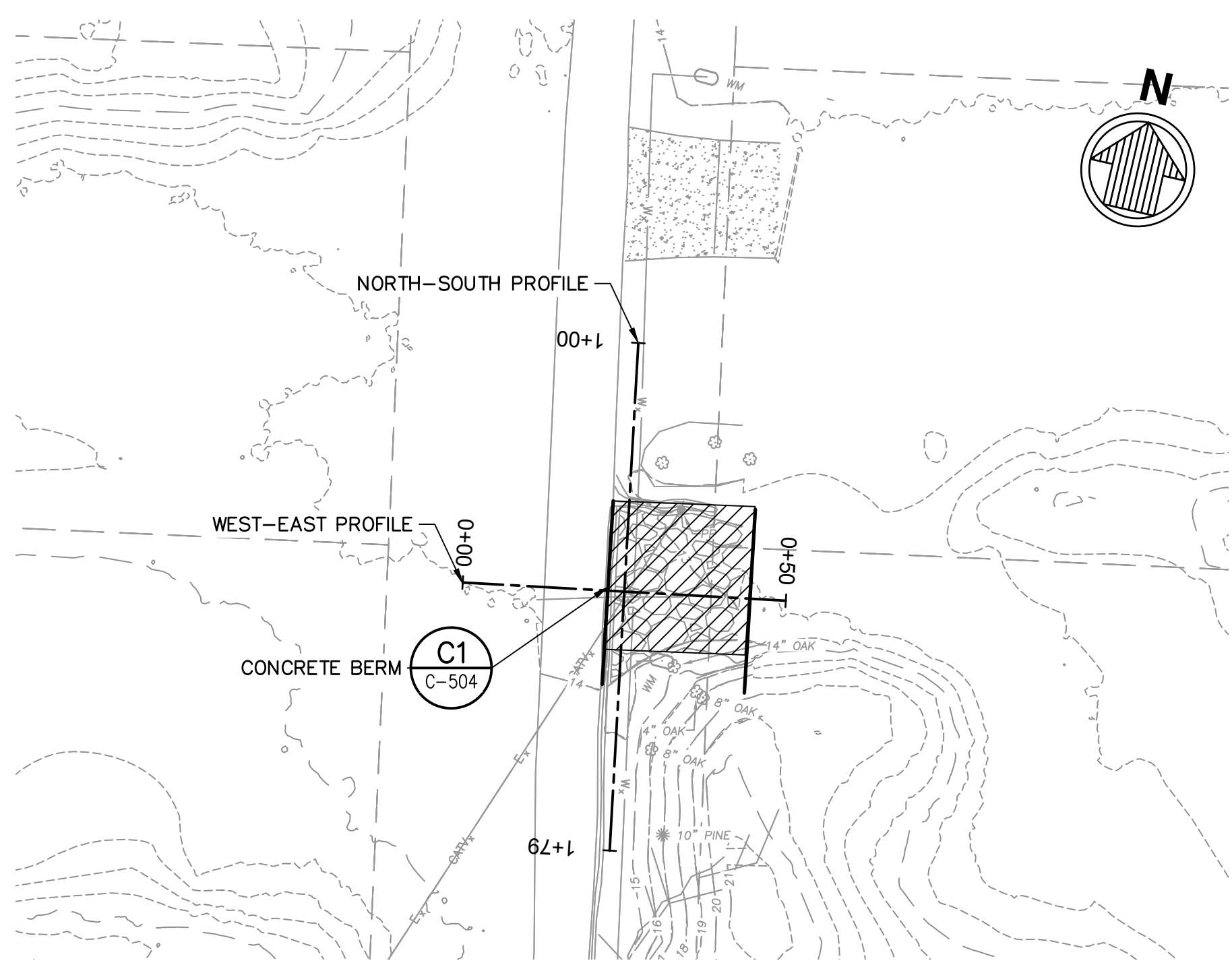
- W_x EXISTING WATER LINE
- T_x EXISTING UG TELEPHONE LINE
- E_x EXISTING OH POWER LINE
- $CATV_x$ EXISTING OH CABLE TV LINE
- EXISTING FENCE
- EXISTING STORM DRAIN
- APPROX EXISTING PROPERTY LINE

NOTES

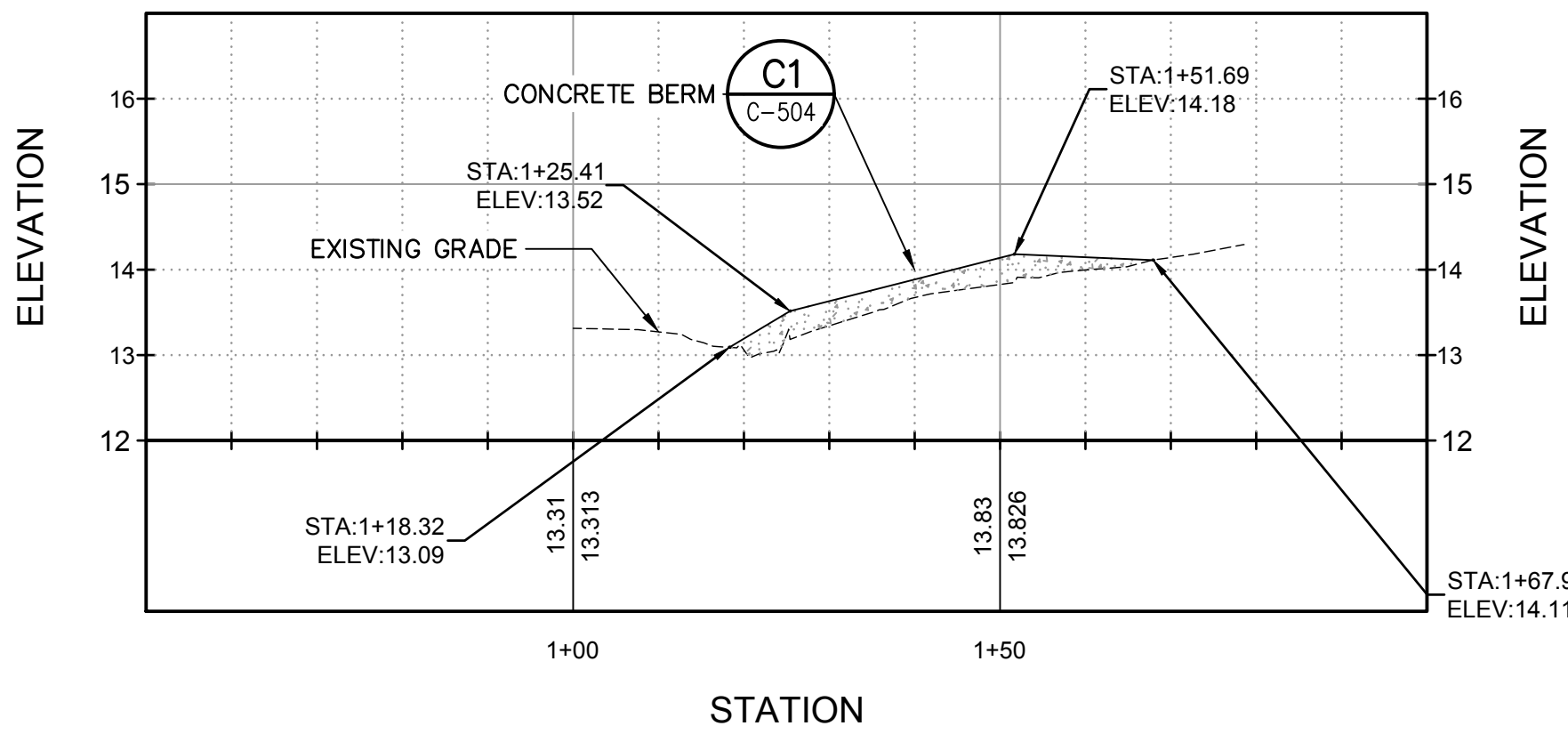
- ALL PERFORATED PIPE SHALL BE INSTALLED IN ACCORDANCE WITH DETAIL C1 ON SHEET C-502.



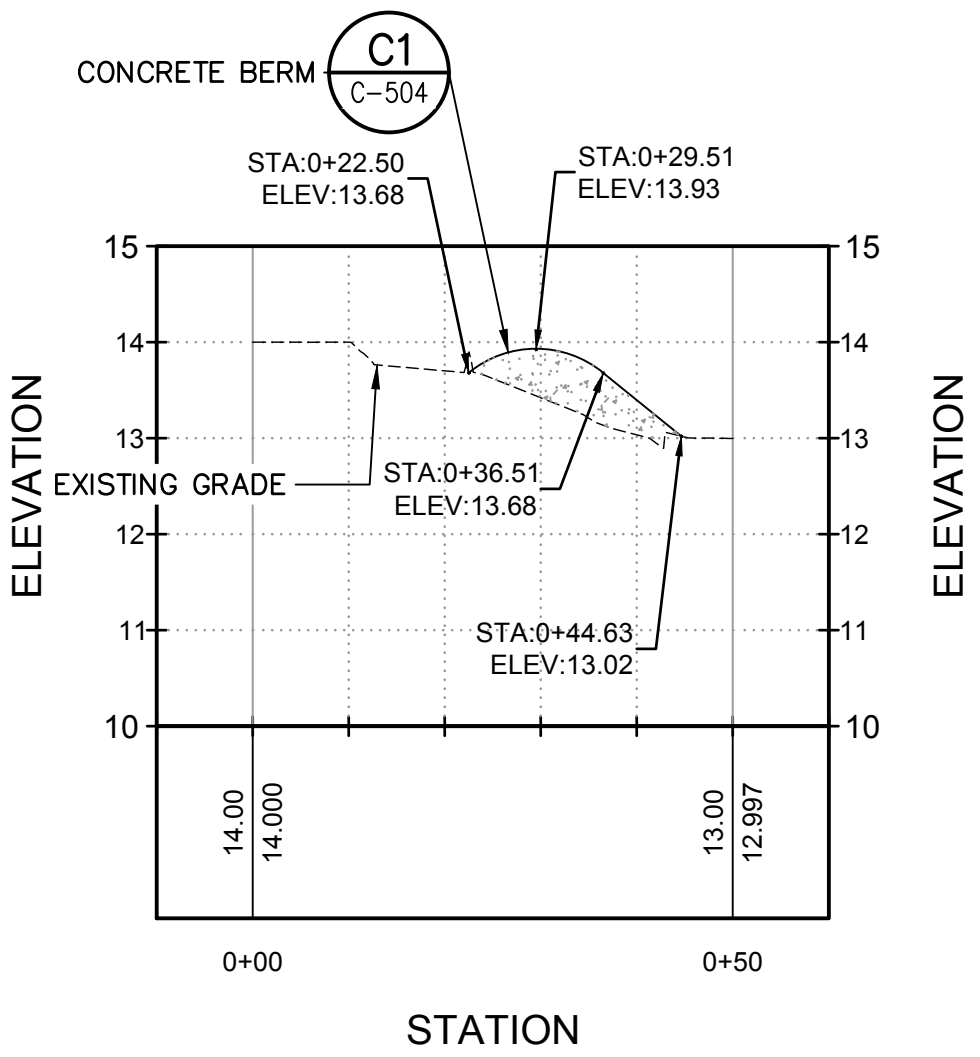
FOR BID PURPOSES ONLY
SEPTEMBER 2022



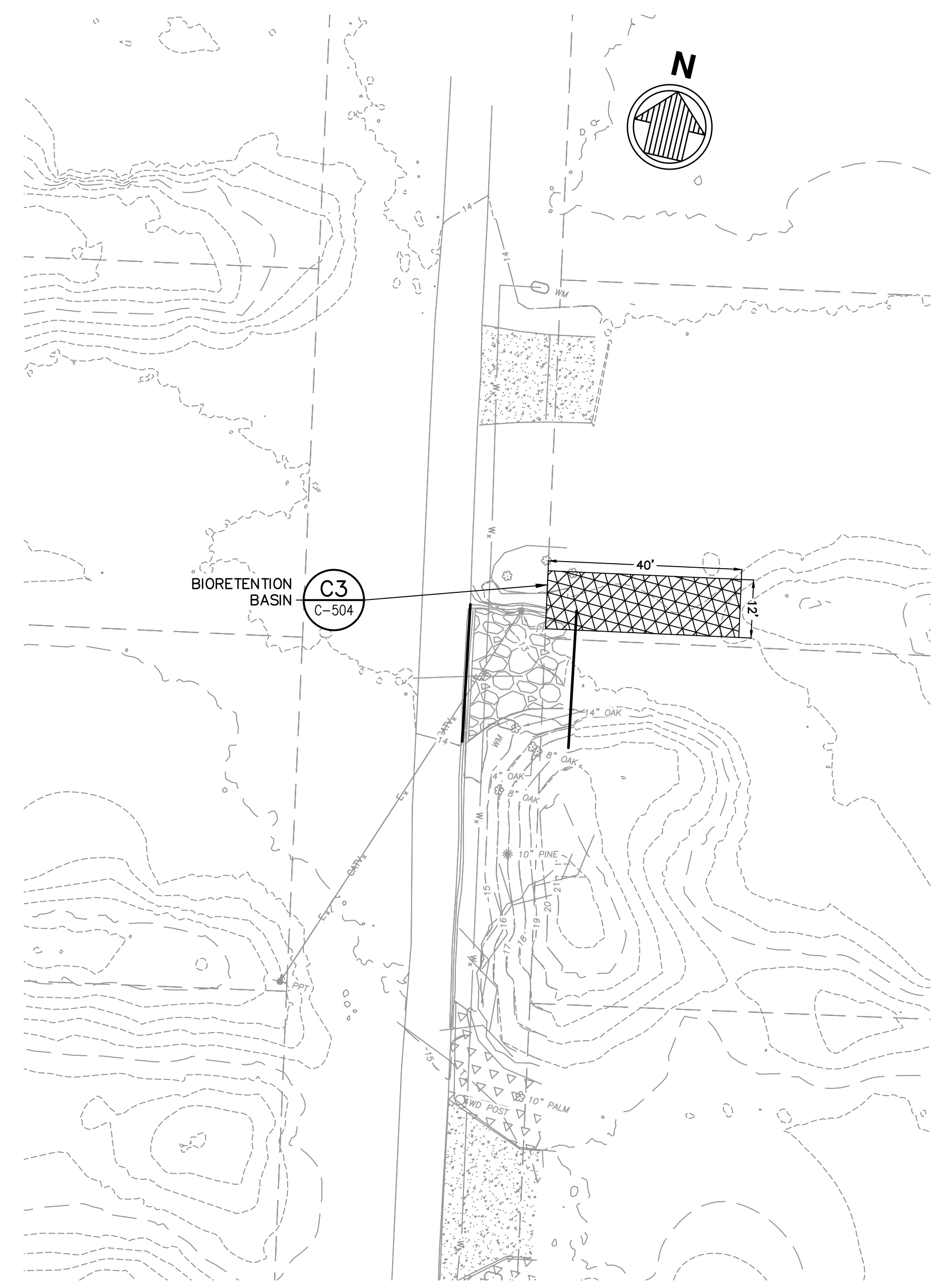
CEDAR STREET PHASE A



CEDAR STREET PHASE A NORTH-SOUTH PROFILE



CEDAR STREET PHASE A WEST-EAST PROFILE



CEDAR STREET PHASE B

- PHASE B NOTES:**
1. FINAL SURFACE GRADE OF EDGE OF BIORETENTION AREA TO MATCH EXISTING GRADE.
 2. INSTALL 48 EVENLY SPACED PLANTS, SELECTED FROM THE FOLLOWING SPECIES, INCLUDING 4 PLANTS FROM THE SPECIES IN LIST A.

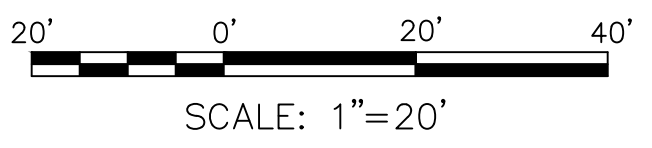
LIST A
 INKBERRY -- ILEX GLABRA
 YAUPON HOLLY-- ILEX VOMITORIA

LIST B
 SWITCHGRASS - PANICUM IRGATUM
 LITTLE BLUESTEM - SCHIZACHYRIUM SCOPARIUM
 BLUE WILD INDIGO - BAPTISIA AUSTRALIS
 SAND COREOPSIS - COREOPSIS LANCEOLATA
 BLACK-EYED SUSAN - RUDBECKIA HIRTA
 CALICO ASTER - SYMPHYOTRICHUM LATERIFLORUM

LEGEND:

	EXISTING WATER LINE
	EXISTING UG TELEPHONE LINE
	EXISTING OH POWER LINE
	EXISTING OH CABLE TV LINE
	EXISTING FENCE
	EXISTING STORM DRAIN
	APPROX EXISTING PROPERTY LINE

CEDAR STREET PROJECT SITE 3



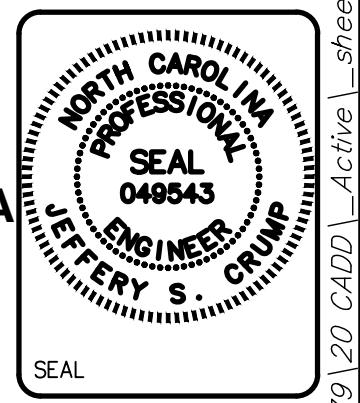
**FOR BID PURPOSES ONLY
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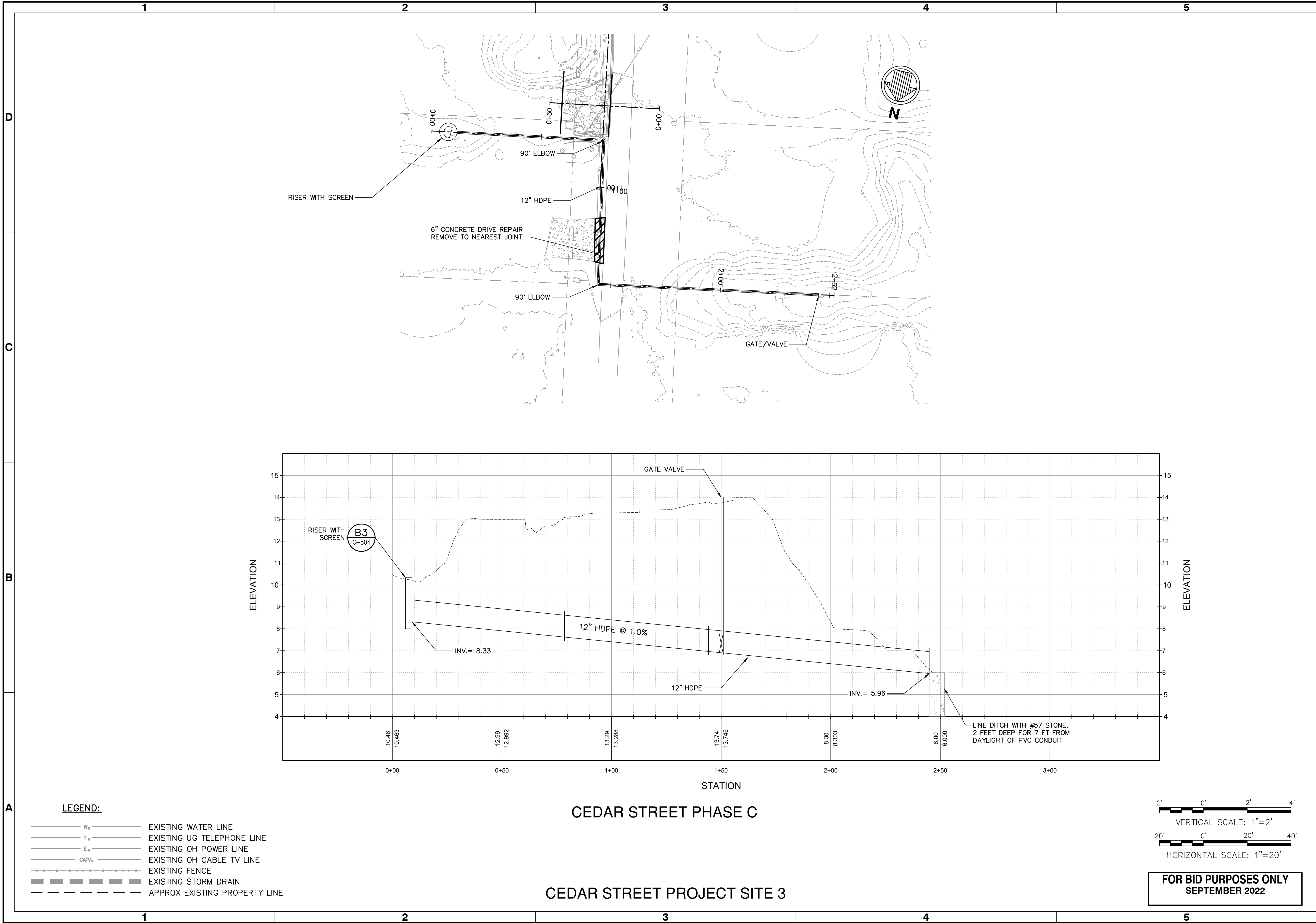
Mark	Description	Date	Appr.
0	FOR BID PURPOSES ONLY	09/22/22	JT

**TOWN OF EMERALD ISLE
 DRAINAGE IMPROVEMENTS
 CEDAR PHASE A & B**

Designed by:	JT	Date:	2022
Dwn by:	JT	M&N Project No.:	220479
Reviewed by:	JC	Drawing code:	
Submitted by:	MOFFATT & NICHOL	Drawing Scale:	NOTED
		Plot scale:	1:1 (D SHEET)

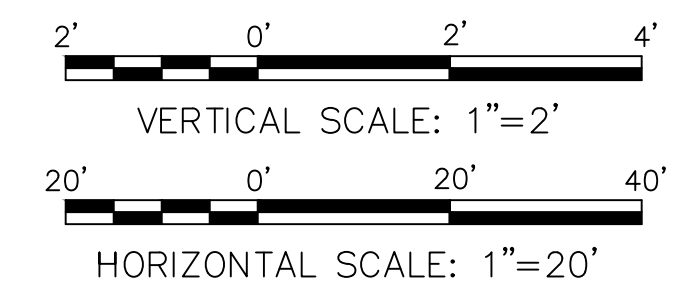


Sheet Reference Number: **C-108**
 INDEX: 10 OF 15




- LEGEND:**
- W_x — EXISTING WATER LINE
 - T_x — EXISTING UG TELEPHONE LINE
 - E_x — EXISTING OH POWER LINE
 - CATV_x — EXISTING OH CABLE TV LINE
 - — — — — EXISTING FENCE
 - — — — — EXISTING STORM DRAIN
 - - - - - APPROX EXISTING PROPERTY LINE

CEDAR STREET PHASE C
CEDAR STREET PROJECT SITE 3



FOR BID PURPOSES ONLY
SEPTEMBER 2022




EMERALD ISLE
NICE MATTERS!


Mark	Description	Date	Appr.
0	FOR BID PURPOSES ONLY	09/22/22	JT

TOWN OF EMERALD ISLE
DRAINAGE IMPROVEMENTS
CEDAR STREET PHASE C PLAN AND PROFILE

Designed by: JT	Date: 2022	Rev.:
Dwn by: JT	M&N Project No. 220479	0-
Reviewed by: JC	Drawing code:	
Submitted by: MOFFATT & NICHOL	Drawing Scale: NOTED	Plot scale: 1" (D SHEET)



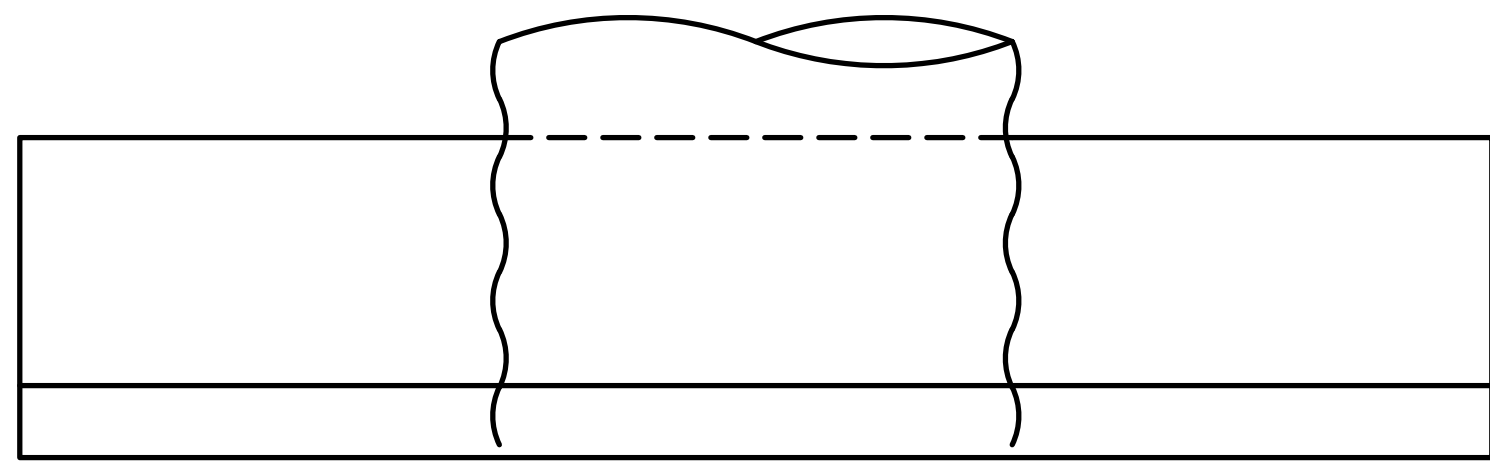
moffatt & nichol
4700 FALLS OF NEUSE RD, SUITE 300
RALEIGH, NC 27609
919-333-4624



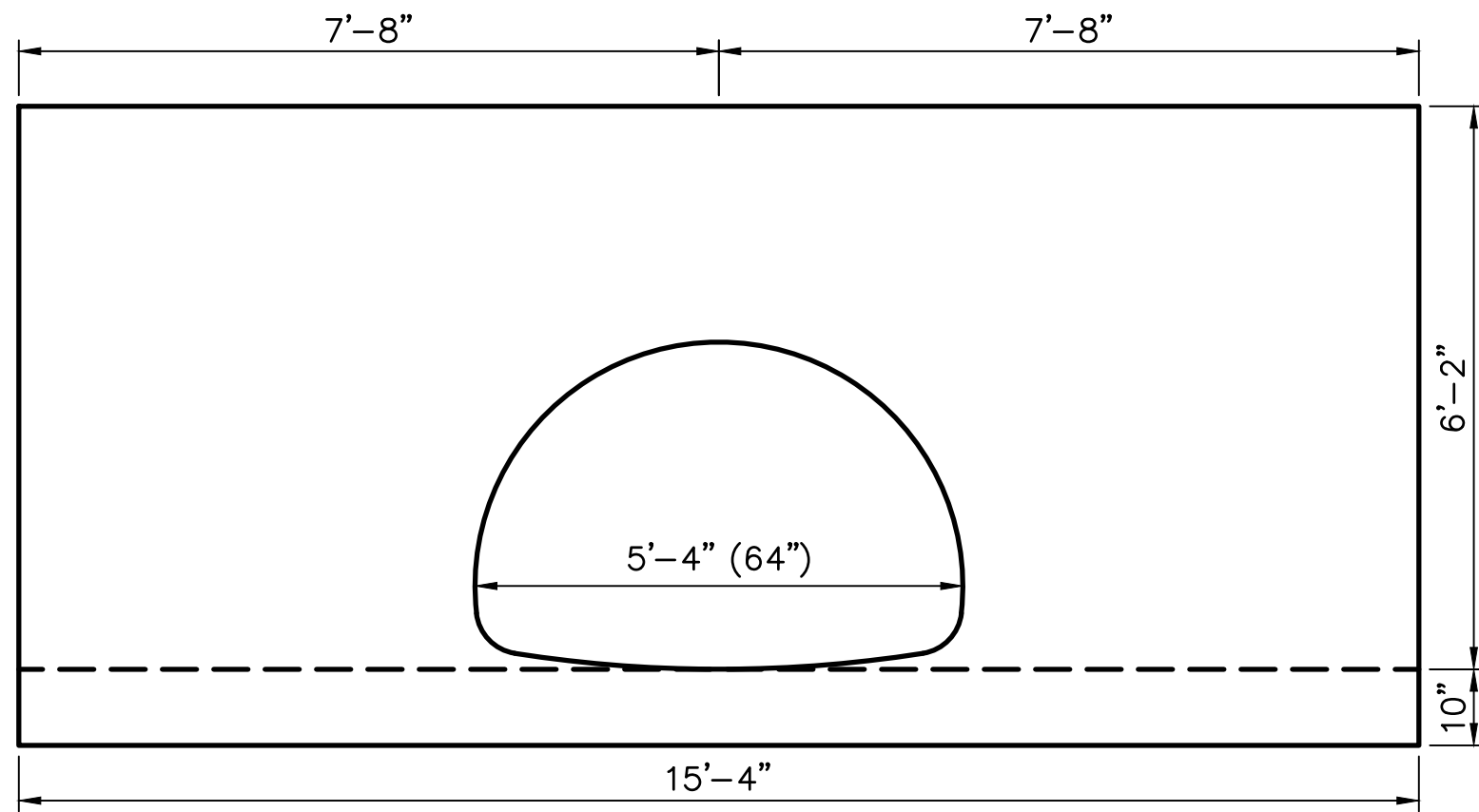
JEFFERY S. CRUMP
PROFESSIONAL ENGINEER
SEAL 048543
NORTH CAROLINA

Sheet Reference Number: C-109
INDEX: 11 OF 15

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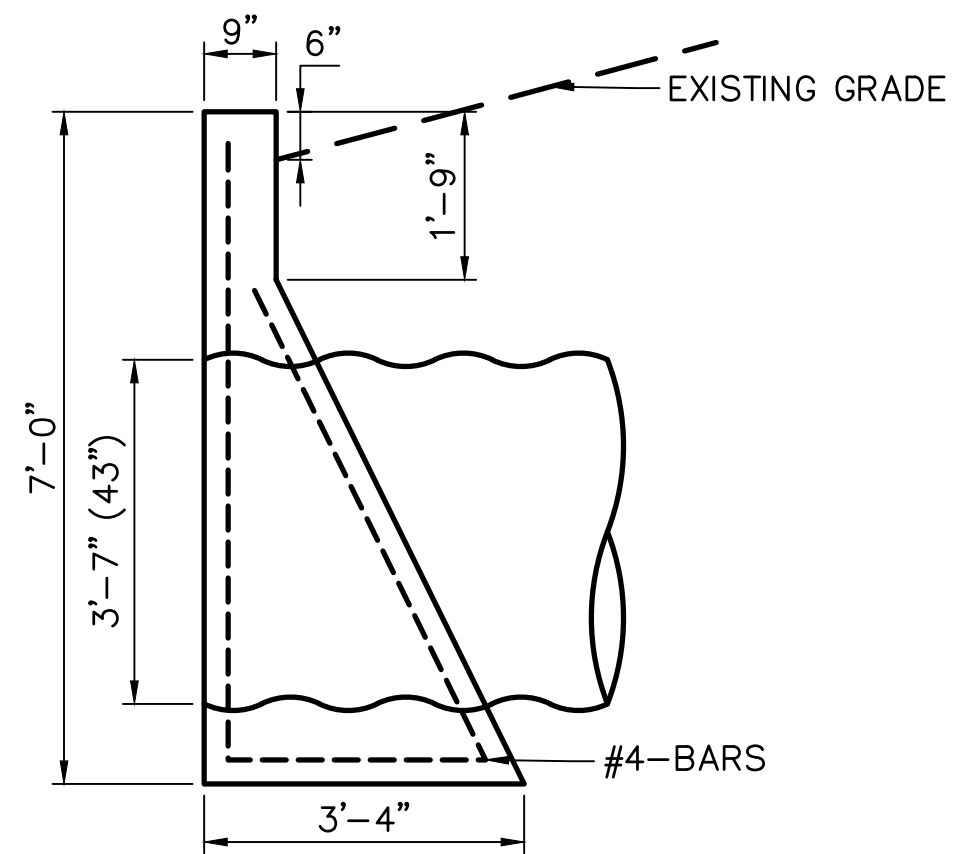
PLAN



ELEVATION

NOTES:

1. CHAMFER ALL CORNERS 1". USE CLASS "B" CONCRETE.
2. PLACE 2 #6 "Y" BARS IN THE TOP OF ALL ENDWALL FOR PIPE CULVERTS 42" AND OVER WITH A MINIMUM OF 3" COVER AND A LENGTH OF 6" LESS THAN ENDWALL LENGTH.
3. WHEN THE CONTRACTOR ELECTS TO USE A CONSTRUCTION JOINT AT THE BOTTOM OF THE PIPE, PLACE BAR "X" DOWELS IN THE BASE AS SHOWN IN THE PLANS. SPACE BARS APPROXIMATELY ON 12" CENTERS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
4. WHEN THE CONTRACTOR ELECTS TO USE A CONSTRUCTION JOINT AT THE BOTTOM OF THE PIPE AND POUR THE BASE SEPARATELY LEAVE THE POUR ROUGH.



END ELEVATION

B2 END WALL DETAIL
C-101 NOT TO SCALE

LEE AVENUE PROJECT SITE 1

FOR BID PURPOSES ONLY
SEPTEMBER 2022

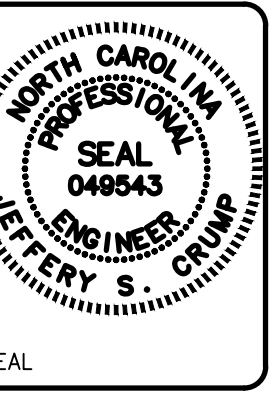


Mark	Description	Date	Appr.
0	FOR BID PURPOSES ONLY	09/22/22	JT

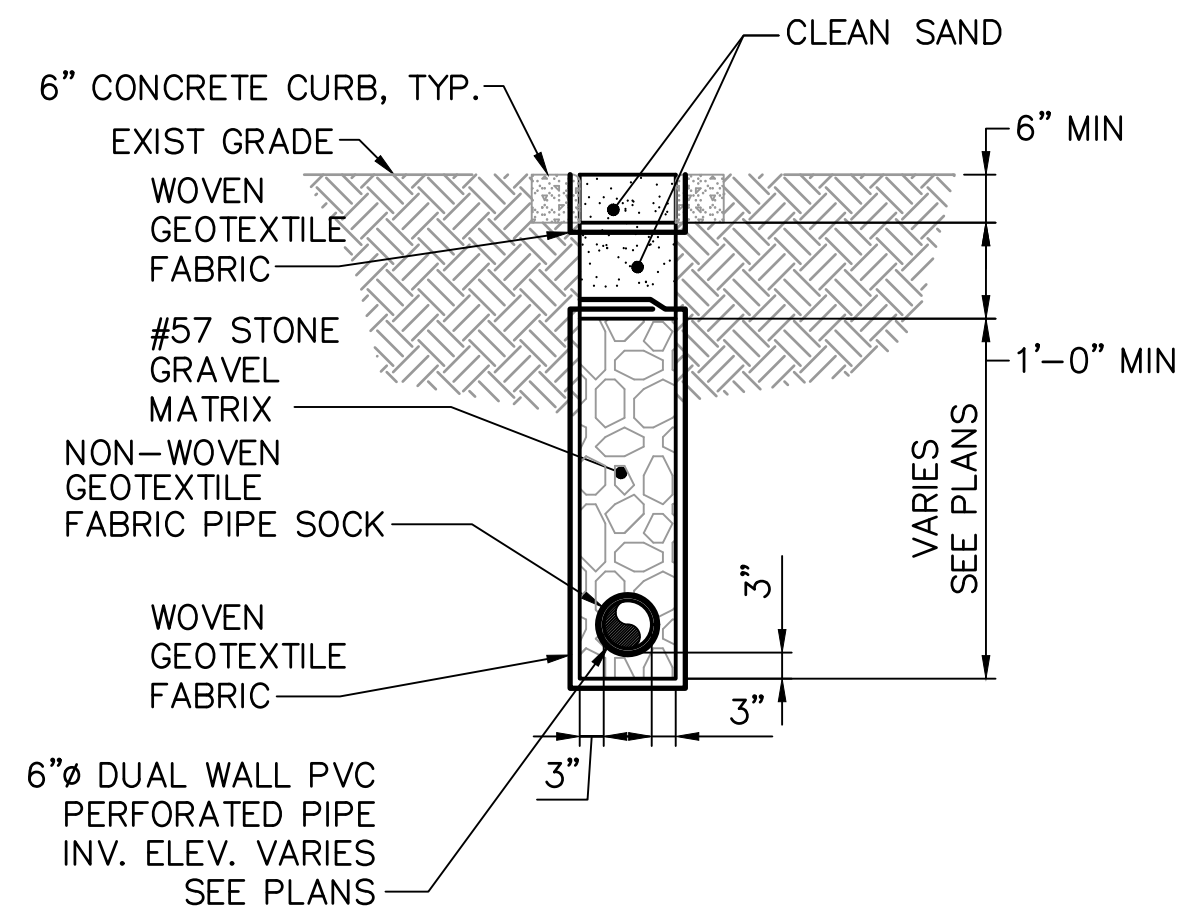
TOWN OF EMERALD ISLE
DRAINAGE IMPROVEMENTS
LEE AVENUE DETAILS

Designed by: JT	Checked by: JC	Date: 2022	Rev.:
Dwn by: JT	Proj. No.: 220479	M&N Project No.:	0-
Reviewed by: JC	Drawing code:	Drawing Scale:	NOTED
Submitted by: MOFFATT & NICHOL	Plot scale:	Plot scale:	1:1 (D SHEET)

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RALEIGH, NC 27609
919-231-4424

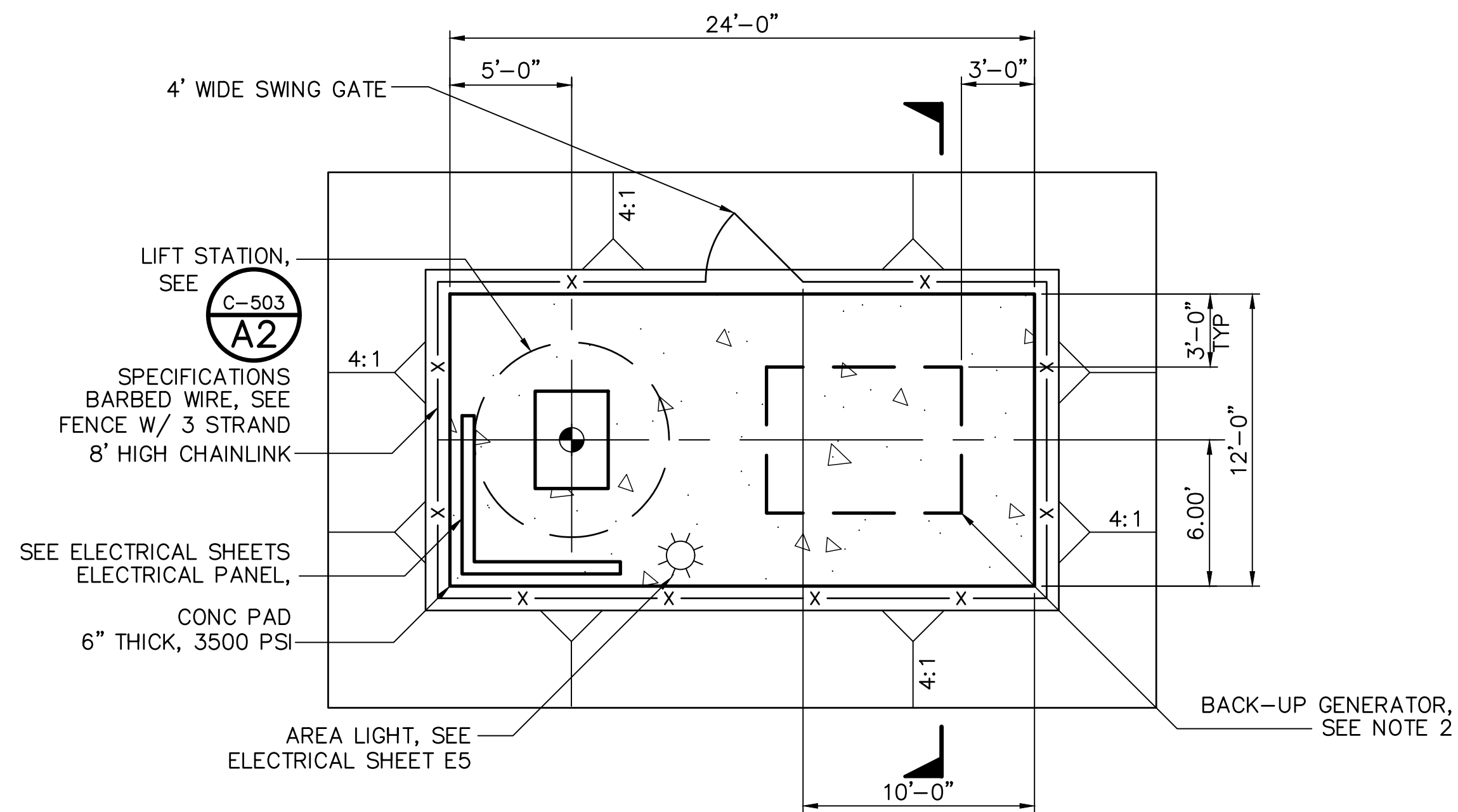


Sheet Reference Number:
C-501
INDEX: 12 OF 15

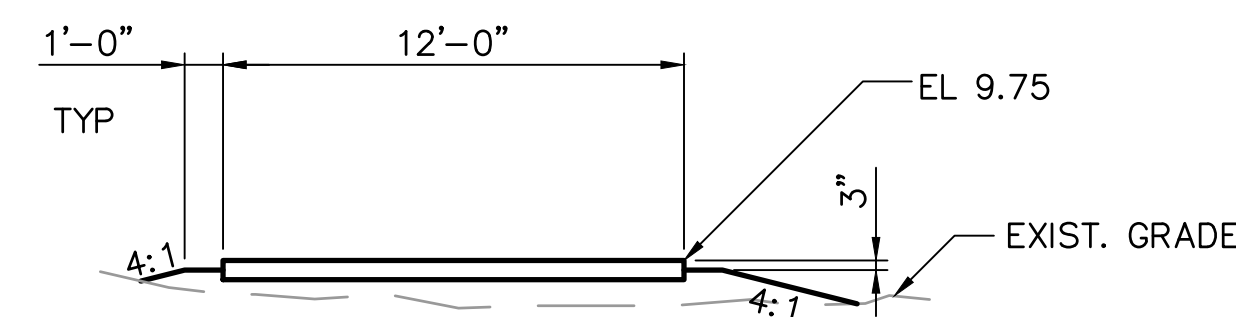


NOTES:

1. PIPE SHALL HAVE 5/16 INCH PERFORATIONS > OR = TO 2.7 SQ. INCHES OF OPEN AREA PER LINEAR FOOT OF PIPE AND A 4-INCH DIAMETER HOLE EVERY TWO- FEET ALONG THE BOTTOM OF THE PIPE.
2. FOR PAVEMENT PATCH SEE PAVEMENT GENERAL NOTES ON SHEET G-002.



PLAN



SECTION

NOTES:

1. SLOPE CONCRETE PAD TO DRAIN.
2. CONTRACTOR TO PROVIDE THICKENED SLAB FOR GENERATOR ANCHORAGE.
3. SEE LANDSCAPING PLANS FOR PLANTING AT GENERATOR PADS
4. SEE CIVIL PLAN SHEETS FOR ORIENTATION.

LEGEND:

- LIFT STATION CONTROL POINT
- REED DRIVE
N 338204.64
E 2589716.04



REED STREET PROJECT SITE 2

**FOR BID PURPOSES ONLY
SEPTEMBER 2022**

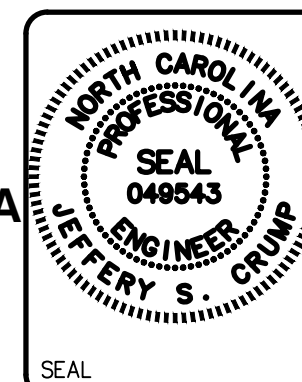


Mark	Description	Date	Appr.
0	FOR BID PURPOSES ONLY	09/22/22	JT

**TOWN OF EMERALD ISLE
DRAINAGE IMPROVEMENTS
REED DRIVE DETAILS 1 OF 2**

Designed by: JT	Checked by: JT	Reviewed by: JC	Submitted by: MOFFATT & NICHOL
Date: 2022	M&N Project No. 220479	Drawing code:	Drawing Scale: NOTED
Plot scale: 1:1 (D SHEET)			

moffatt & nichol
4700 FALLS OF NEUSE RD, SUITE 300
RALEIGH, NC 27609
919-883-4624

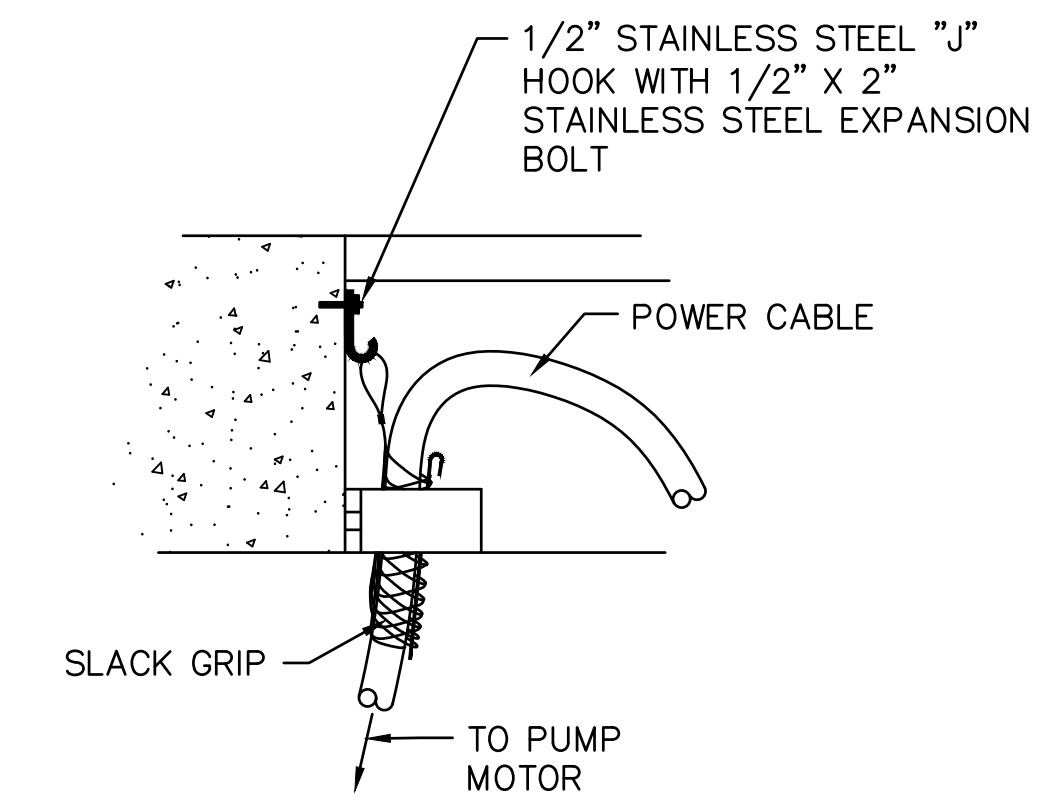


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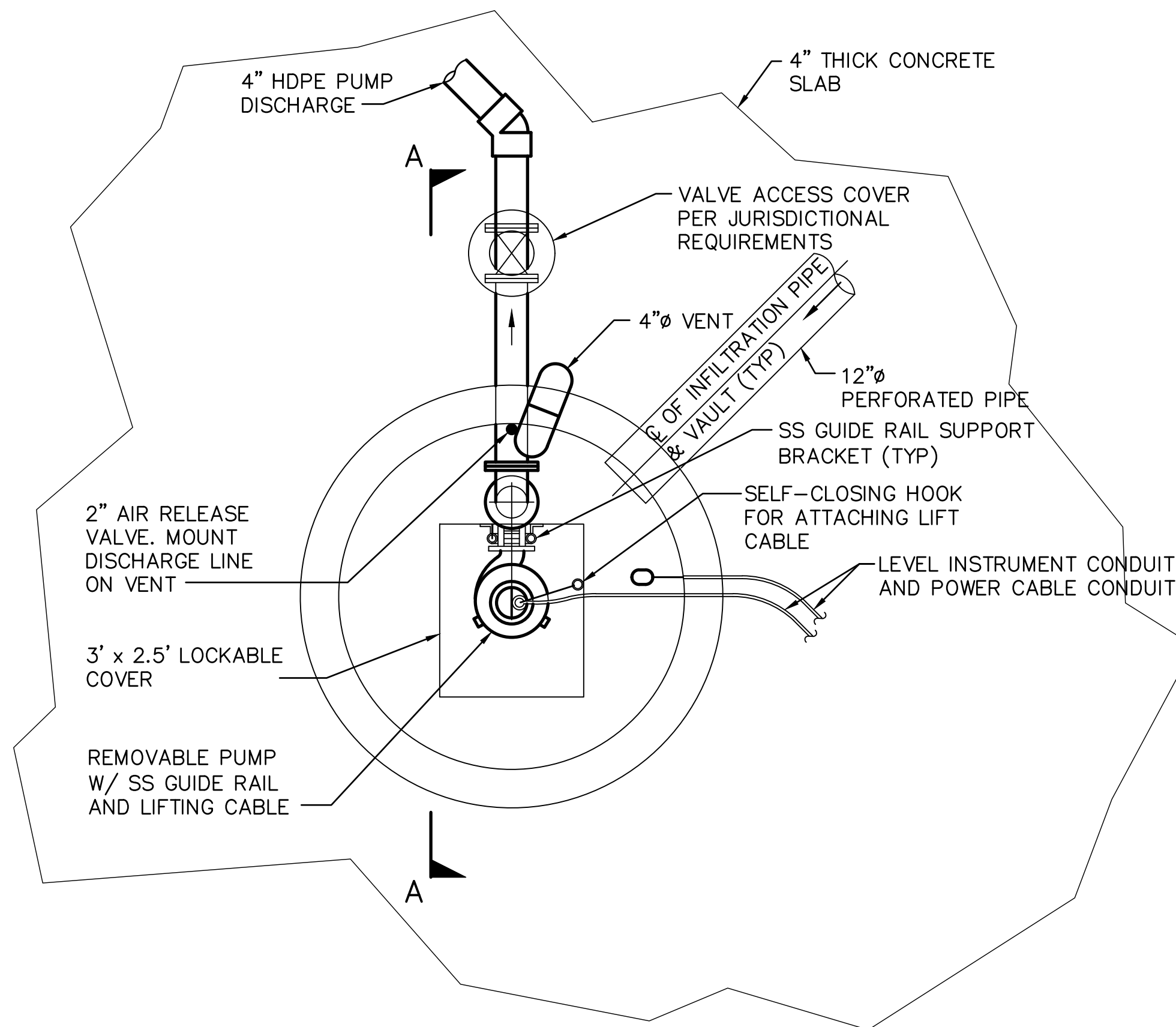
LIFT STATION GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
2. ALL ELECTRICAL WIRING AND EQUIPMENT INSTALLED IN THE "WET WELL" SECTION MUST COMPLY W/ARTICLE 22 OF THE ELECTRICAL SAFETY ORDERS FOR CLASS 1, DIVISION 2, HAZARDOUS LOCATION PROVISIONS OF THE "NATIONAL ELECTRICAL CODE" AND ALL OTHER APPLICABLE LOCAL CODES AND ORDINANCES.
3. ALL BURIED CONDUITS SHALL BE P.V.C. SCHEDULE 80, OR APPROVED EQUAL. WET WELL CONDUIT SHALL BE RIGID, GALVANIZED, PVC COATED STEEL.
4. ALL ELECTRICAL WIRE SHALL BE "RHW" OR "THW" COPPER CONDUCTOR, OR APPROVED EQUAL.
5. EQUIPMENT PAD SHALL SUPPORT THE WEIGHT OF THE EQUIPMENT AND BE DESIGNED PER ACI 318.
6. DISCHARGE PIPE TO BE INSTALLED BY THE HORIZONTAL DIRECTIONAL DRILLING METHOD BEYOND GATE VALVE.
7. CONTRACTOR SHALL VERIFY THAT DEPTH OF PIPE IS ADEQUATE TO NOT IMPACT EXISTING UTILITIES AT CROSSINGS. CONTRACTOR SHALL ADJUST PIPE ELEVATION AS REQUIRED TO ELIMINATE CONFLICTS. DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT CONTRACTORS EXPENSE.
8. AIR RELEASE VALVE SHALL BE CRISPIN MODEL USL-20-L OR APPROVED EQUAL.

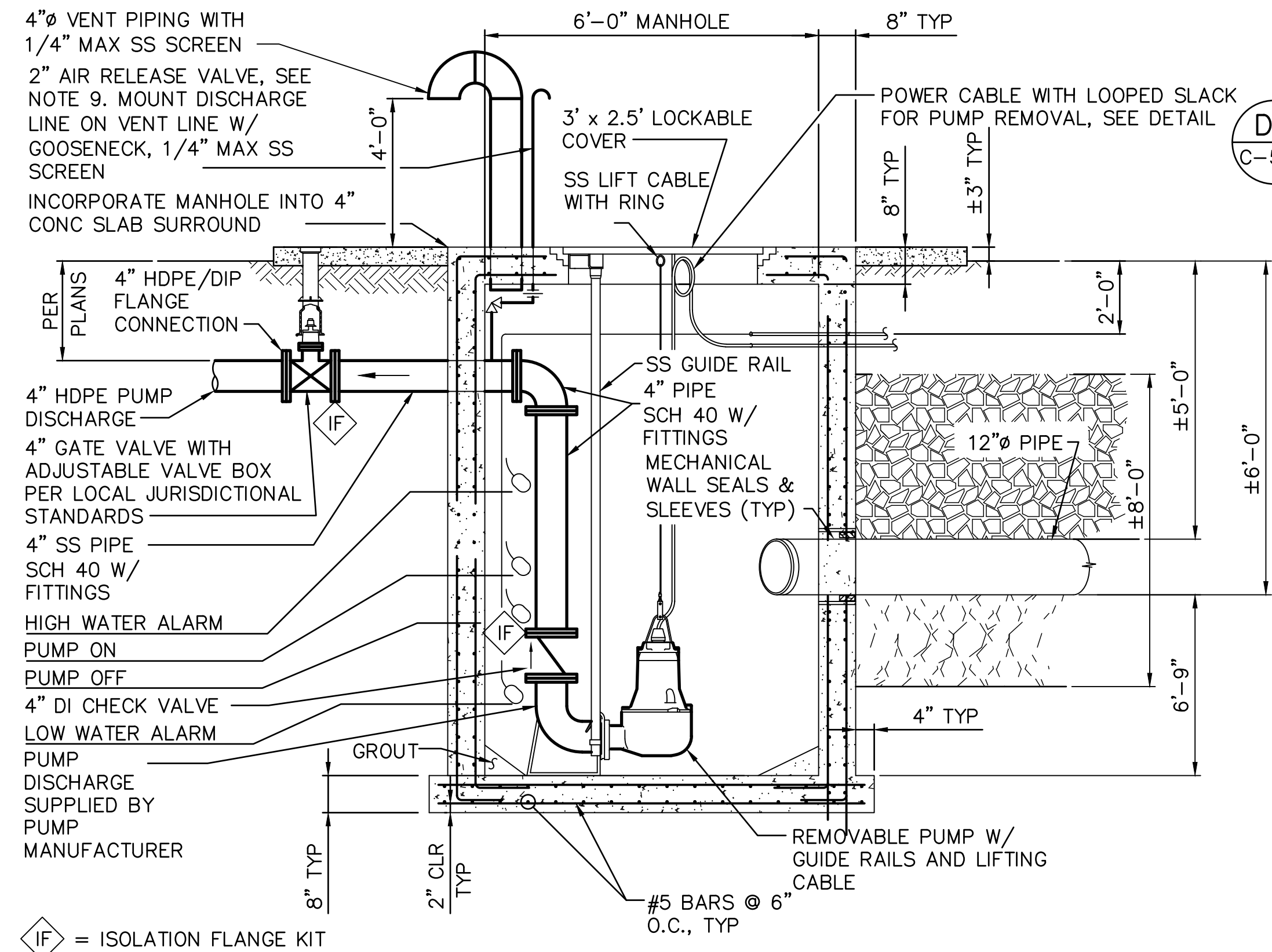
LIFT STATION LOCATION	PUMP No	FLOWRATE, GPM	HEAD, FT	PUMP ELEV (Q OF PUMP)	WATER TABLE ELEV	FINISHED GRADE	WET WELL FLOOR ELEV	HIGH LEVEL LIGHT ELEV	PUMP ON (RISING) ELEV	PUMP OFF (FALLING) ELEV	LOW WATER (CUTOFF) ELEV
REED DRIVE	P-1	150	18.7	-0.2	+5.5	+9.75	-1.2	+7.75	+5.55	+1.8	+0.8



D5
C-503 POWER CABLE/SLACK GRIP
NOT TO SCALE



PLAN



SECTION A-A

A2
C-503 LIFT STATION
NOT TO SCALE

REED STREET PROJECT SITE 2

**FOR BID PURPOSES ONLY
SEPTEMBER 2022**



Rev.	Date	Description
0	09/22/22	FOR BID PURPOSES ONLY

**TOWN OF EMERALD ISLE
DRAINAGE IMPROVEMENTS
REED DRIVE DETAILS 2 OF 2**

Designed by: JT	Checked by: JC	Reviewed by: JC	Submitted by: MOFFATT & NICHOL
Date: 2022	M&N Project No: 220479	Drawing code:	Drawing Scale: NOTED
Plot scale: 1:1 (D SHEET)			

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4700 FALLS OF NEUSE RD, SUITE 300
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919-883-4424



Sheet Reference Number: **C-503**
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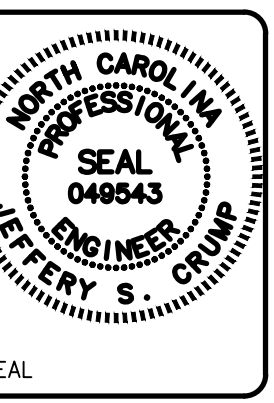


Rev.	Date	Description
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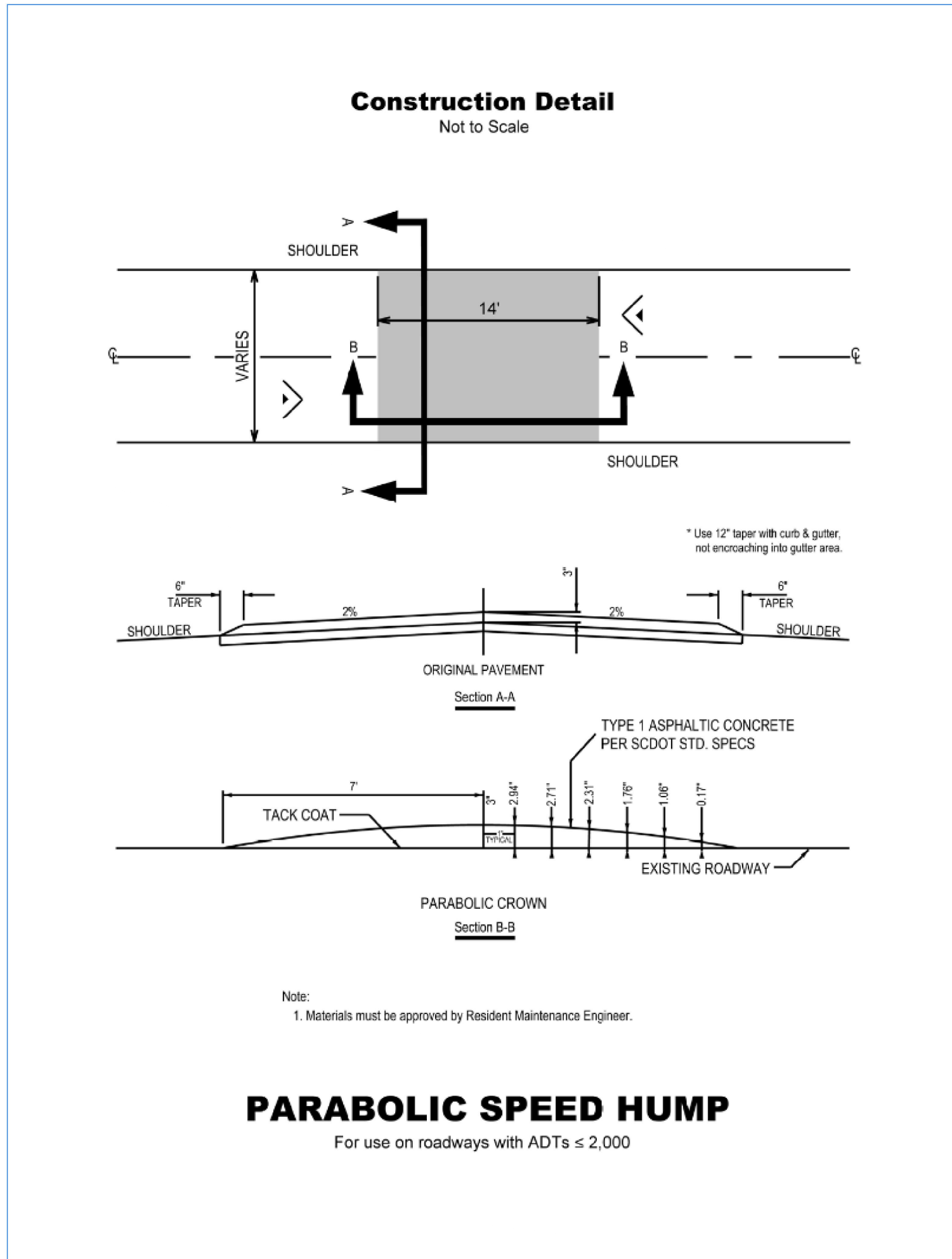
TOWN OF EMERALD ISLE
DRAINAGE IMPROVEMENTS
CEDAR STREET DETAILS

Designed by:	JT
Dwn by:	JT
Reviewed by:	JC
Submitted by:	MOFFATT & NICHOL
Date:	2022
M&N Project No.:	220479
Drawing code:	
Drawing Scale:	NOTED
Plot scale:	1:1 (D SHEET)

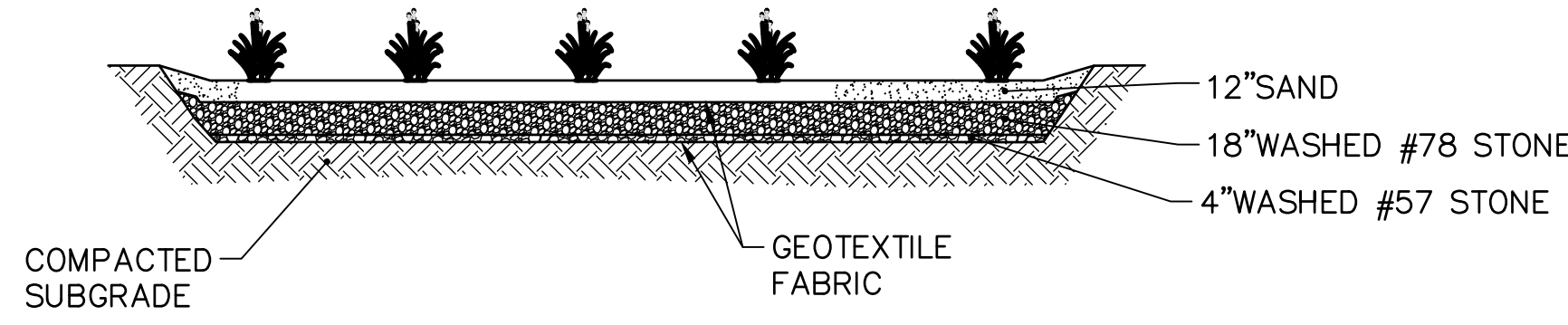
moffatt & nichol
4700 FALLS OF NEUSE RD, SUITE 300
RALEIGH, NC 27609
919-233-4224



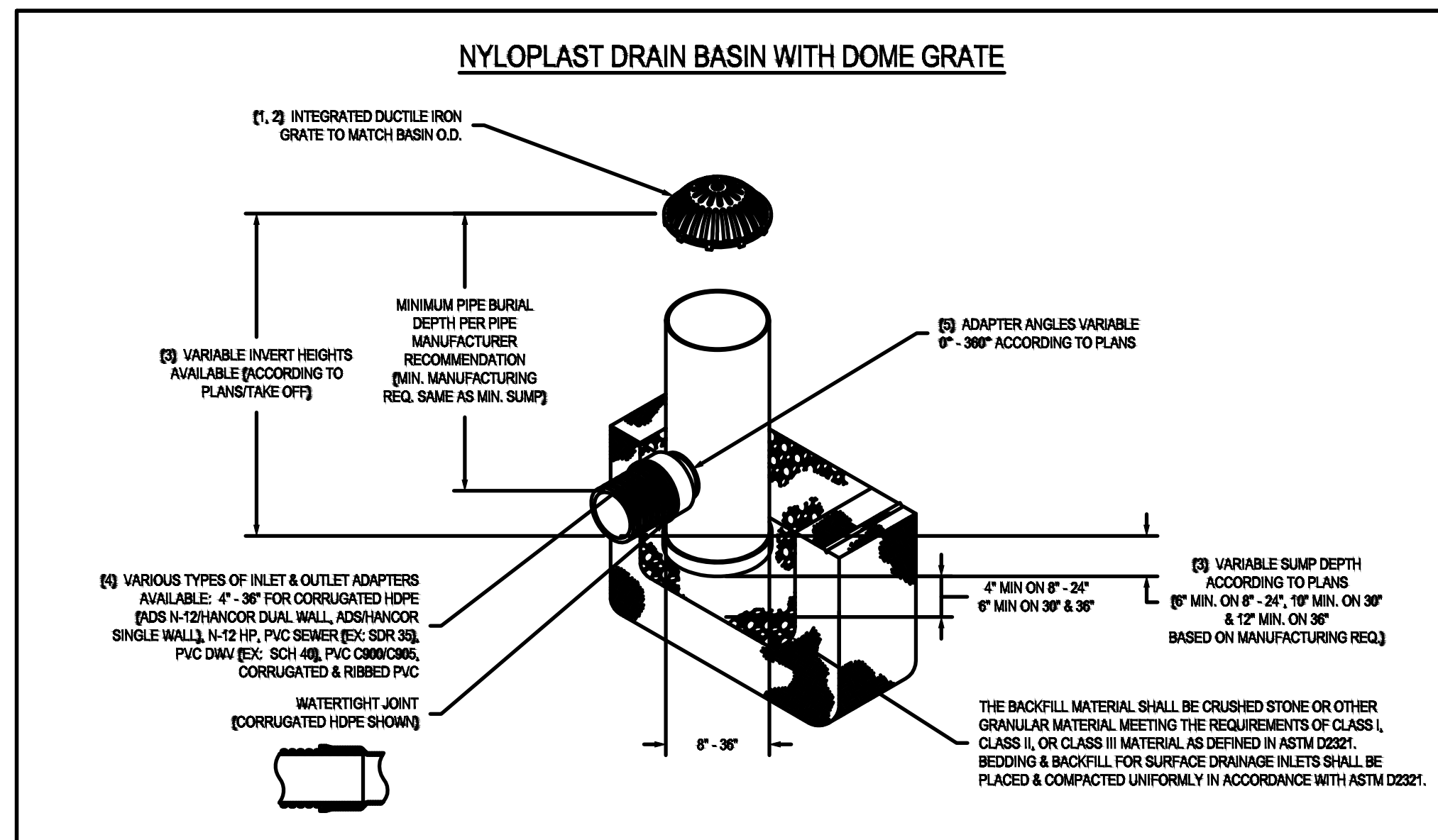
Sheet Reference Number:
C-504
INDEX: 15 OF 15



C1 PARABOLIC SPEED HUMP DETAIL
C-108 NOT TO SCALE



C3 BIORETENTION BASIN CROSS SECTION
C-108 NOT TO SCALE



- 4" - 36" DOME GRATES SHALL BE DUCTILE IRON PER ASTM A246 GRATE 20-20-04
- 4" & 6" DOME GRATES FIT ONTO THE DRAIN BASIN WITH THE USE OF A PVC BODY TOP. SEE DRAWING NO. 1006-110046.
- DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 8" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 1006-110046.
- DRAINING CONNECTION STUB JOINT THICKNESS SHALL CONFORM TO ASTM D2212 FOR CORRUGATED HDPE (ADS N-12 HANCOOR DUAL WALL, N-12 HP, & PVC SEWER) 0" - 36"
- ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 1006-110042.
- 4" - 36" DOME GRATES HAVE NO LOAD RATING.

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B3 RISER DETAIL
C-109 NOT TO SCALE

FOR BID PURPOSES ONLY
SEPTEMBER 2022