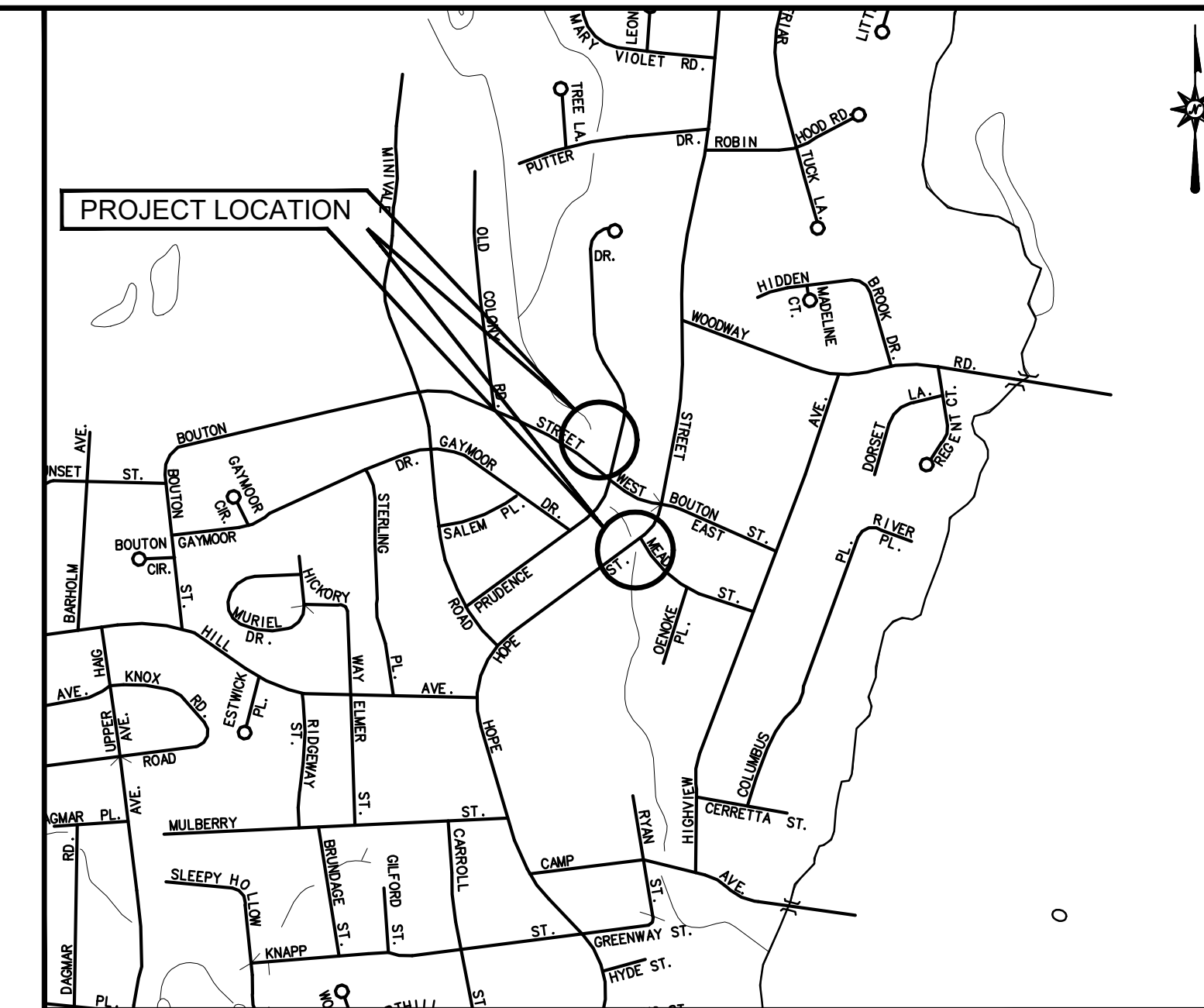


LOCATION MAP

N.T.S.

CONSTRUCTION PLANS FOR SPRINGDALE BROOK CHANNEL WALL STABILIZATION CITY OF STAMFORD, CT



VICINITY MAP

SCALE: 1"=800'

FINAL DESIGN SUBMISSION

PREPARED FOR:
CITY OF STAMFORD
ENGINEERING BUREAU
888 WASHINGTON BOULEVARD
STAMFORD, CONNECTICUT 06901

PREPARED BY:



ARCHITECTURE ENGINEERING ENVIRONMENTAL LAND SURVEYING

355 RESEARCH PARKWAY
MERIDEN, CONNECTICUT 06450
(203) 630-1406
(203) 630-2615 Fax

CONTENTS

	TITLE SHEET
	EXISTING CONDITIONS (SHEET NO. 1-3)
GPN-1	GENERAL PLAN
GDE-1	GRADING AND DRAINAGE PLAN
AW-1 & 2	APRON WALL DETAILS
GW-1 & 2	GABION WALL DETAILS
CD-1	CHANNEL DETAILS
RES-1	SITE RESTORATION PLAN
CS-1 & 2	CONSTRUCTION SEQUENCE PLAN
CS-3	CONSTRUCTION SEQUENCE DETAILS
EC-1	EROSION AND SEDIMENTATION CONTROL DETAILS
MDS-1 - 3	MISCELLANEOUS DETAIL SHEETS

CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD DETAILS

HW-822_01	TEMPORARY PRECAST CONCRETE BARRIER CURB
HW-913_01	CHAIN LINK FENCE

CAD FILE: TTSH14C520501

THESE DRAWINGS SHALL NOT BE UTILIZED BY ANY PERSON, FIRM OR CORPORATION WITHOUT THE SPECIFIC WRITTEN PERMISSION OF BL COMPANIES

2016 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION FORM 817, INCLUDING ALL SUPPLEMENTS THERETO DATED JANUARY 2018.

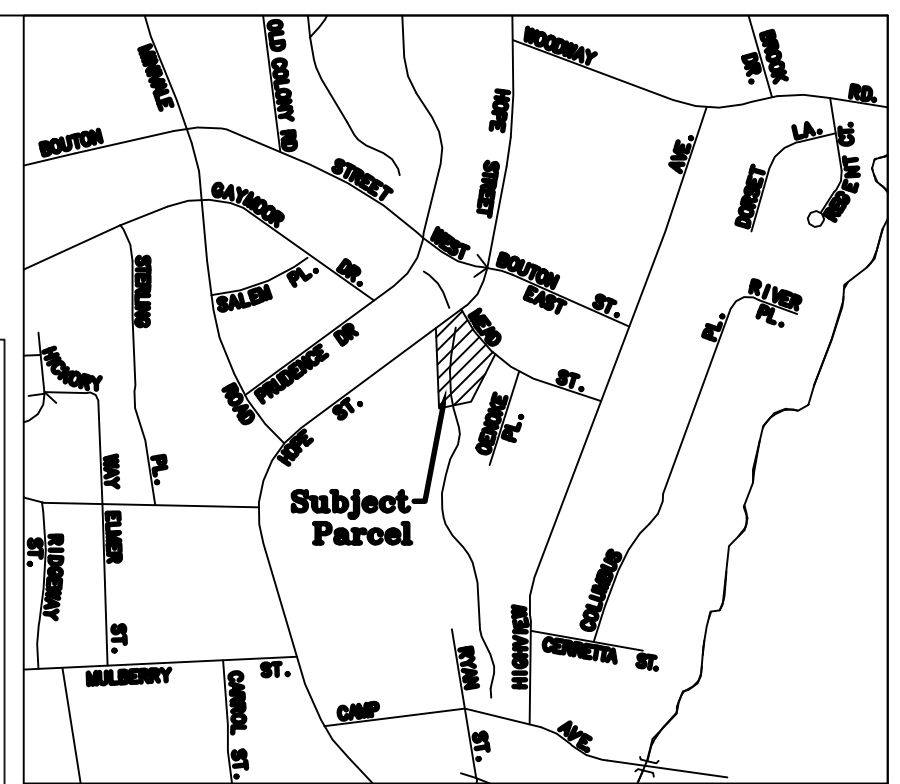
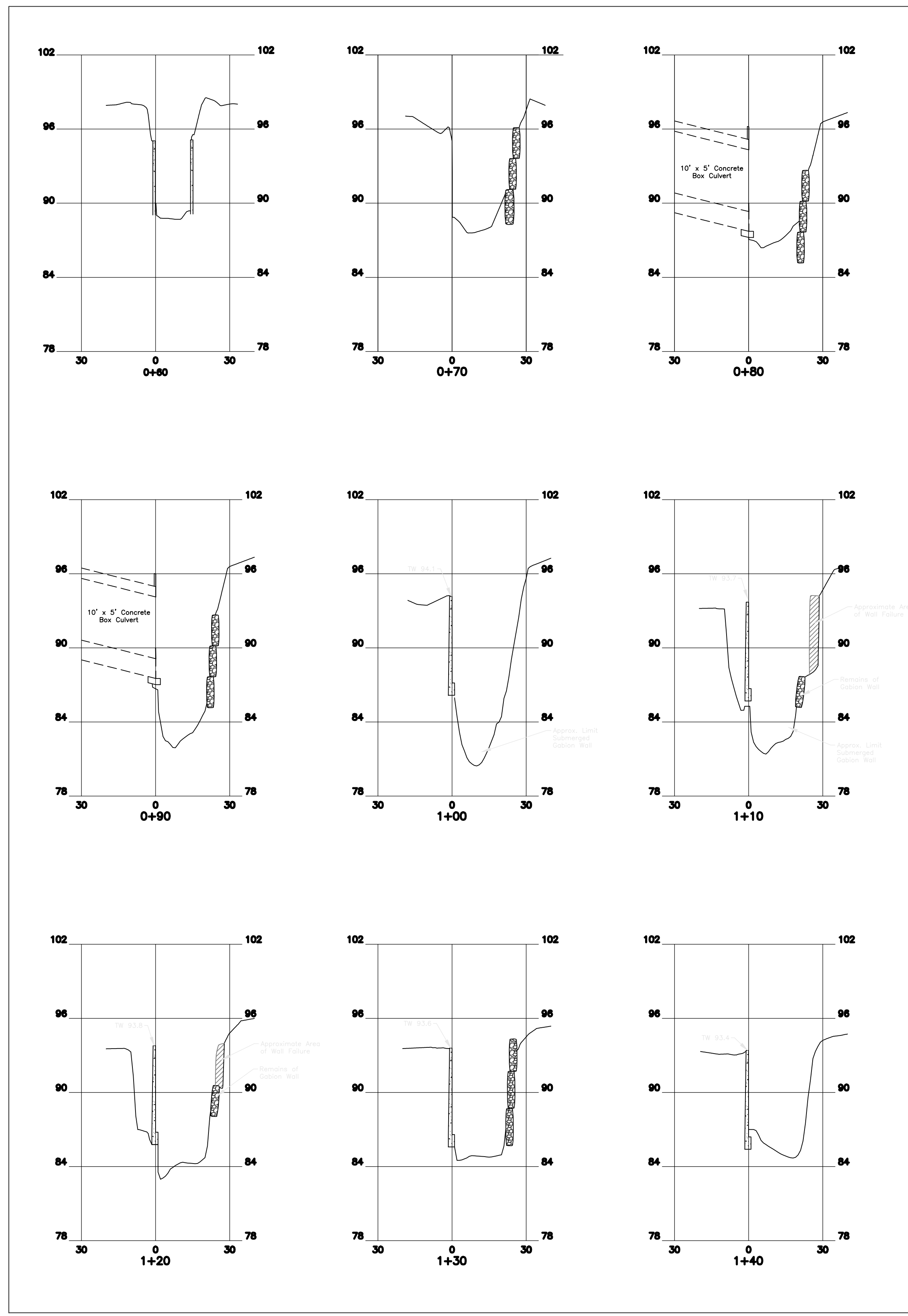
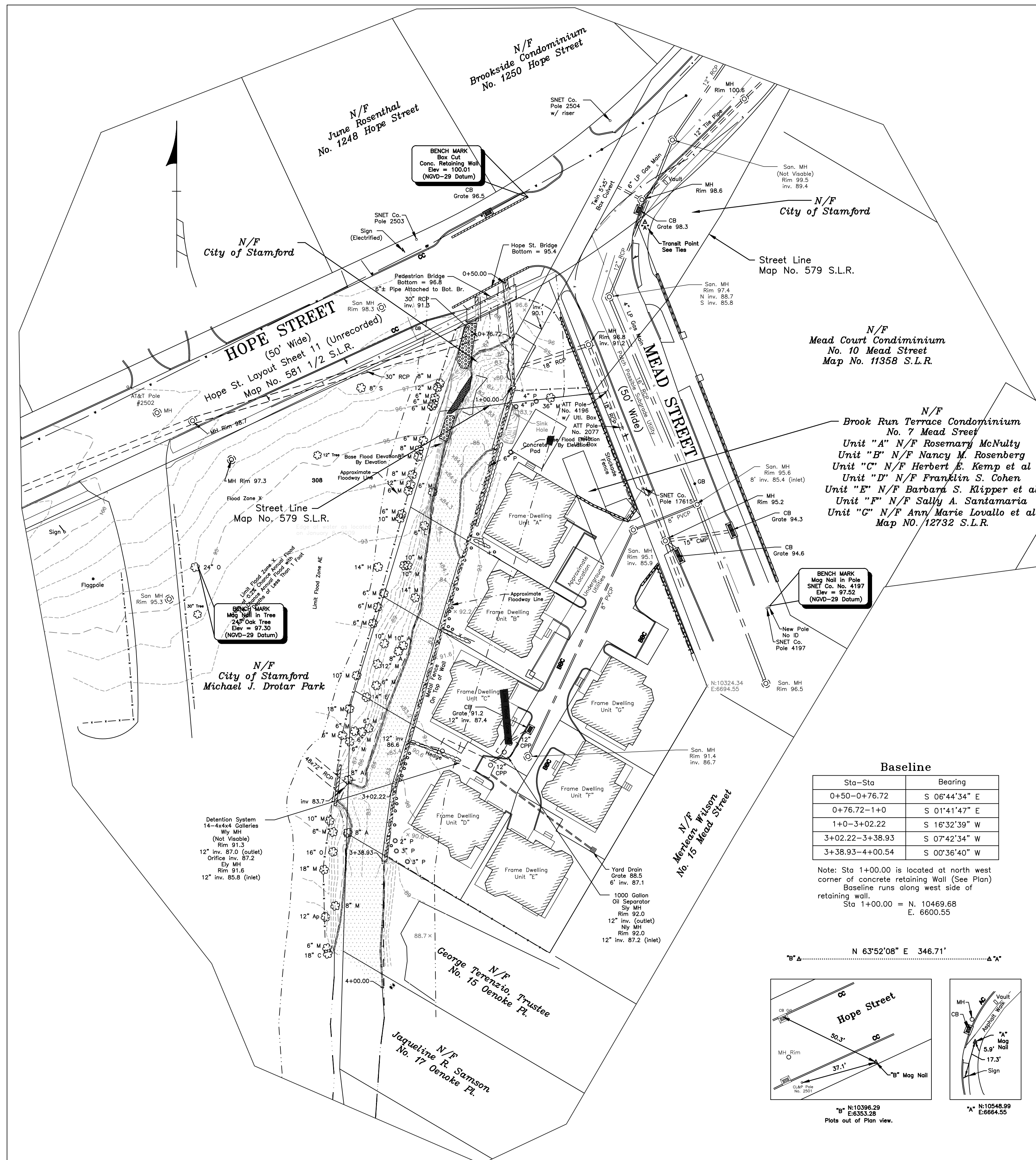
EXISTING CONDITIONS SURVEY, CROSS SECTIONS, AND PILE LOCATIONS FOR THE PROJECT WERE PROVIDED BY THE CITY OF STAMFORD'S CONSULTANT, EDWARD J. FRATTAROLI, INC. ALL HORIZONTAL AND VERTICAL GEOMETRY ON THIS PROJECT IS BASED ON THE SURVEY PERFORMED DATED 01/23/2009 AND 7/15/2016.

ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM (NAVD 1988).

BL PROJECT NO. 14C5205

DATES

ISSUE DATE: 02/03/2016 (PRELIMINARY DESIGN PLANS)
REVISION: 05/11/2016 (90% DESIGN PLANS)
REVISION: 12/22/2016 (90% DESIGN PLANS)
REVISION: 12/14/2017 (90% DESIGN PLANS)
REVISION: 2/9/2018 (90% DESIGN PLANS)
ISSUE DATE: 7/6/2018 (FINAL DESIGN PLANS)



- Legend:**
- Spot Elevation x 100.0
 - Contour --- x 100 ---
 - Storm Drain - - - - -
 - Sanitary Sewer - - - - -
 - Gas Main - - - - -
 - Water Main - - - - -
 - Electric - - - - -
 - Stone Wall - - - - -
 - Concrete Wall - - - - -
 - Fence - - - - -
 - Catch Basin (In Curb)
 - Catch Basin (Flush)
 - Manhole
 - Sign
 - Tree
 - Bush

Abbreviations

Gas Box	GB
Water Box	WB
Asphalt Curb	AC
Concrete Curb	CC
Belgian Block Curb	BBC
Catch Basin	CB
Man Hole	MH

- Tree Legend:**
- A = Ash
 - Ap = Apple
 - C = Cedar
 - E = Elm
 - H = Hickory
 - L = Locust
 - M = Maple
 - O = Oak
 - P = Pine
 - S = Spruce

RM-100 ZONE BUILDING SETBACK REQUIREMENTS

Front Street Line Setback	25'
Center Line Of Street Setback	50'
Rear Yard Setback	30'
Side Yard Setback	10' W/ Total Of 20'
Max. Building Coverage	25% Of Lot Area

Zoning information is Subject To The Review And Approval By The Appropriate Governing Authority

- Notes:**
- Elevations based on City of Stamford Datum (NAVD-88).
 - Underground utility, structure and facility locations depicted and noted hereon have been compiled, in part, from record mapping supplied by the respective utility companies or governmental agencies, from parcel testimony and from other sources. These locations must be considered as approximate in nature. Additionally, other such features may exist on the site, the existence of which are unknown to Edward J. Frattaroli, Inc. The size, location and existence of all such features must be field determined and verified by the appropriate authorities prior to construction.
 - The contractor shall notify all public utility companies by calling Call-Before-You-Dig at 1-800-922-4455 at least 72 hours prior to crossing their lines.

Soil Survey Conducted By "Pietras Environmental Group, LLC" On June 28, 2016

WETLAND SOILS

- 109 - Fluvaquents-Udfluvents

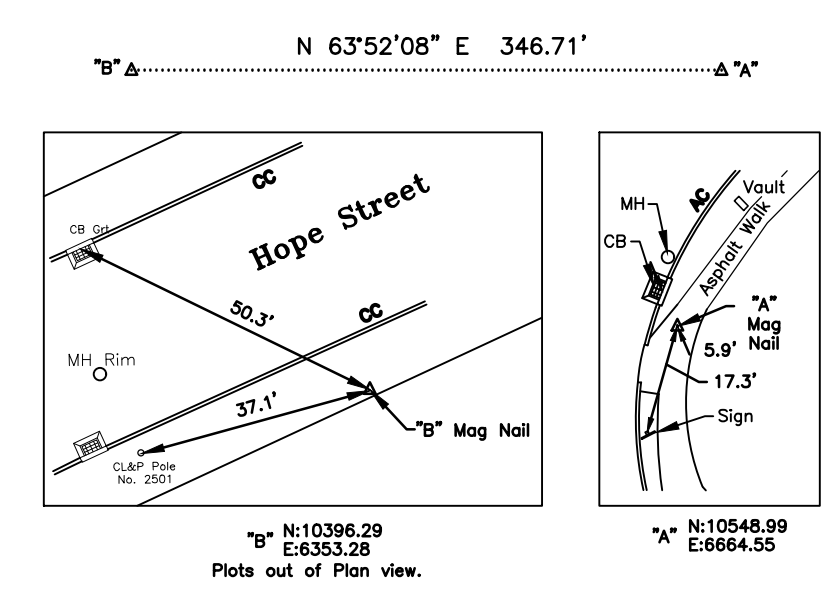
NONWETLAND SOILS

- 306 - Undorthents-Urban land complex
- 308 - Undorthents, Smoothed

Baseline

Sta-Station	Bearing
0+50-0+76.72	S 06°44'34" E
0+76.72-1+0	S 01°41'47" E
1+0-3+02.22	S 16°32'39" W
3+02.22-3+38.93	S 07°42'34" W
3+38.93-4+00.54	S 00°36'40" W

Note: Sta 1+00.00 is located at north west corner of concrete retaining wall (See Plan)
Baseline runs along west side of retaining wall.
Sta 1+00.00 = N. 10469.68 E. 6600.55



This survey and map has been prepared in accordance with Section 20-300b-1 thru 20-300b-20 of the Regulation of Connecticut State Agencies--Minimum Standards for Surveys and Maps in the State of Connecticut as endorsed by the Connecticut Association of Land Surveyors, Inc. It is a "LIMITED PROPERTY/BOUNDARY SURVEY", based on a "DEPENDENT RESURVEY" conforming to horizontal Accuracy Class "A-2" and intended to DEPICT EXISTING TOPOGRAPHY AND UTILITIES IN A LIMITED AREA.

Refer to: Maps No. 579, 581 1/2, 3613, 11358, 12732 S.L.R. and an unrecorded map entitled "Hope St. Layout".

To my knowledge and belief this plan is substantially correct as noted hereon.

BY: **EDWARD J. FRATTAROLI, INC.**
Land Surveyors • Engineers • Land Planners
62 Mill River Street
Stamford, Connecticut 203-359-2235

This Document and Copies Thereof are Valid only if they bear the signature and embossed seal of the designated licensed professional. Unauthorized alterations render any declaration hereon null and void.

NO.	DATE	REVISIONS	CK.
3	7/16	Revised Brook Contours/Changed Datum	
2	7/11	Added Sheet 3 - Pile Locations	
1	5/11	Revised Stream Bottom	
		Contours & Sections	

SEAL

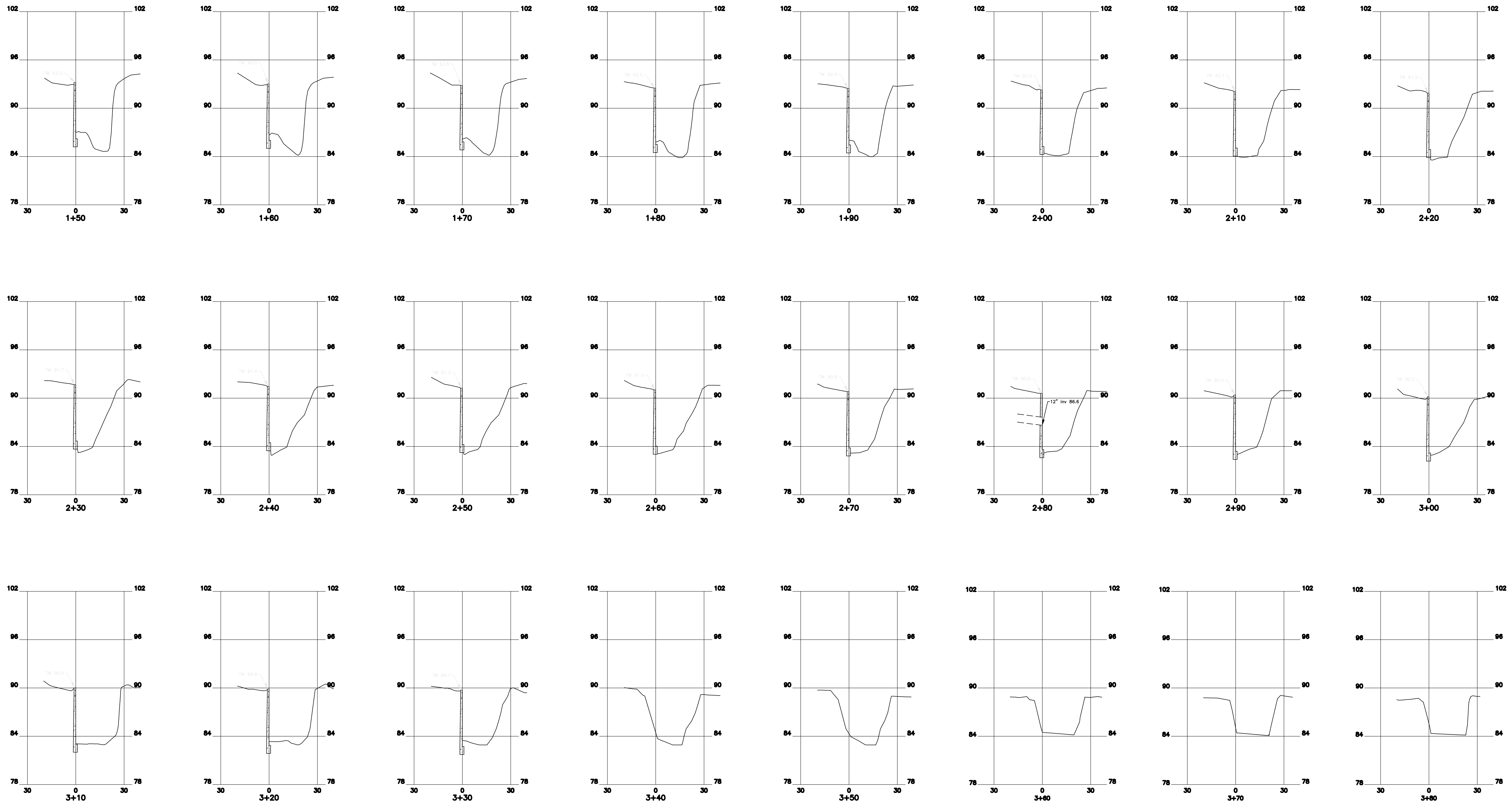
CITY OF STAMFORD, CONN.
BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS

SURVEYED BY	DATE	DRAWN BY	DATE	TITLE
Edward J. Frattaroli, Inc.	1-9-09	JRT	1-23-09	SPRINGDALE BROOK
DESIGNED BY	DATE	CHECKED BY	DATE	
DES. SUPV.	DATE	INSP. SUPV.	DATE	

SCALE: 1" = 30'

PROJECT NO.

SHEET NO. 1 OF 3



Horizontal Scale 30
Vertical Scale 6

This survey and map has been prepared in accordance with Section 20-300b-1 thru 20-300b-20 of the Regulation of Connecticut State Agencies—"Minimum Standards for Surveys and Maps in the State of Connecticut" as endorsed by the Connecticut Association of Land Surveyors, Inc. It is a "LIMITED PROPERTY/BOUNDARY SURVEY", based on a "DEPENDENT RESURVEY" conforming to horizontal Accuracy Class "A-2" and intended to DEPICT EXISTING TOPOGRAPHY AND UTILITIES IN A LIMITED AREA.

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62 Mill River Street
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Date Issued: January 23, 2009

NO.	DATE	REVISIONS	CK.
3	7/16	Revised X-Sec/Change Datum	
2	7/11	Added Sheet 3 - Pile Locations	
1	5/11	Revised Stream Bottom	
		Contours & Sections	
FILE NO.			

SEAL

CITY OF STAMFORD, CONN.
BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS

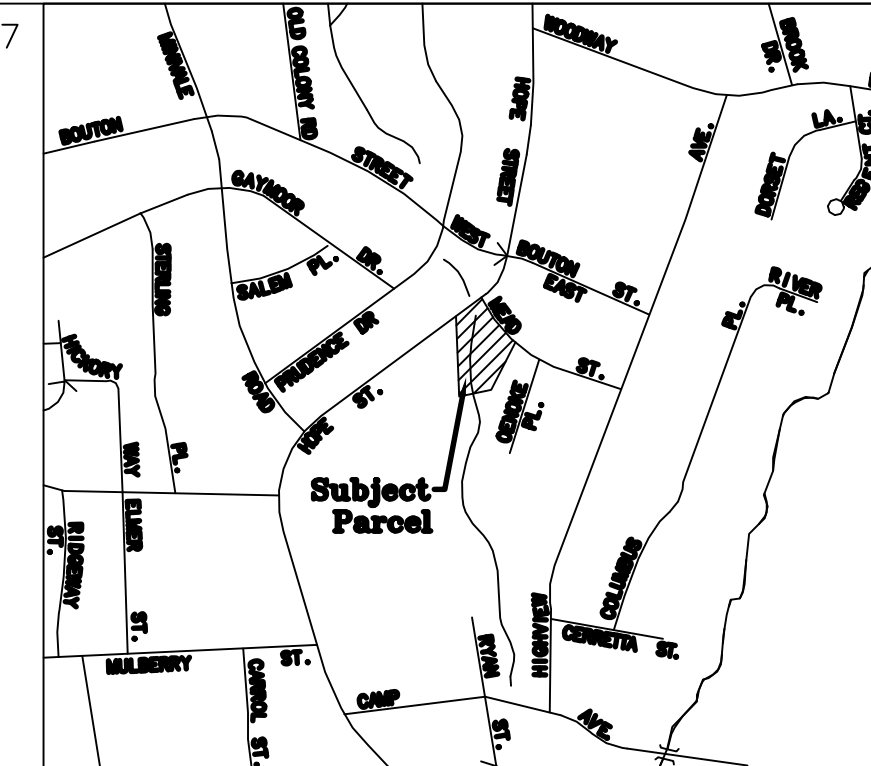
SURVEYED BY	DATE	DRAWN BY	DATE	TITLE
Edward J. Frattaroli, Inc.	1-9-09	JRT	1-23-09	SPRINGDALE BROOK
DESIGNED BY	DATE	CHECKED BY	DATE	
DES. SUPV.	DATE	INSP. SUPV.	DATE	DESCRIPTION
				CROSS-SECTIONS
				CITY ENGINEER

SCALE: 1" = 30'

PROJECT NO.

SHEET NO.

2 OF 3



ORIENTATION

Legend:

Spot Elevation	x 100.0	Sign	+
Contour	--- 100 ---	Tree	⊕
Storm Drain	=====	Bush	⊙
Sanitary Sewer	=====		
Gas Main	-----x-----		
Water Main	-----x-----		
Electric	-----x-----		
Stone Wall	-----o-----		
Concrete Wall	-----x-----		
Fence	-----x-----		
Catch Basin (In Curb)	⊕		
Catch Basin (Flush)	⊕		
Manhole	⊕		

Abbreviations

Gas Box	GB
Water Box	WB
Asphalt Curb	AC
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- H = Hickory
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- O = Oak
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RM-109 ZONE BUILDING SETBACK REQUIREMENTS

- Front Street Line Setback..... 25'
- Center Line Of Street Setback..... 50'
- Rear Yard Setback..... 30'
- Side Yard Setback..... 10' W/ Total Of.... 20'
- Max. Building Coverage.....25% Of Lot Area

Zoning Information Is Subject To The Review And Approval By The Appropriate Governing Authority

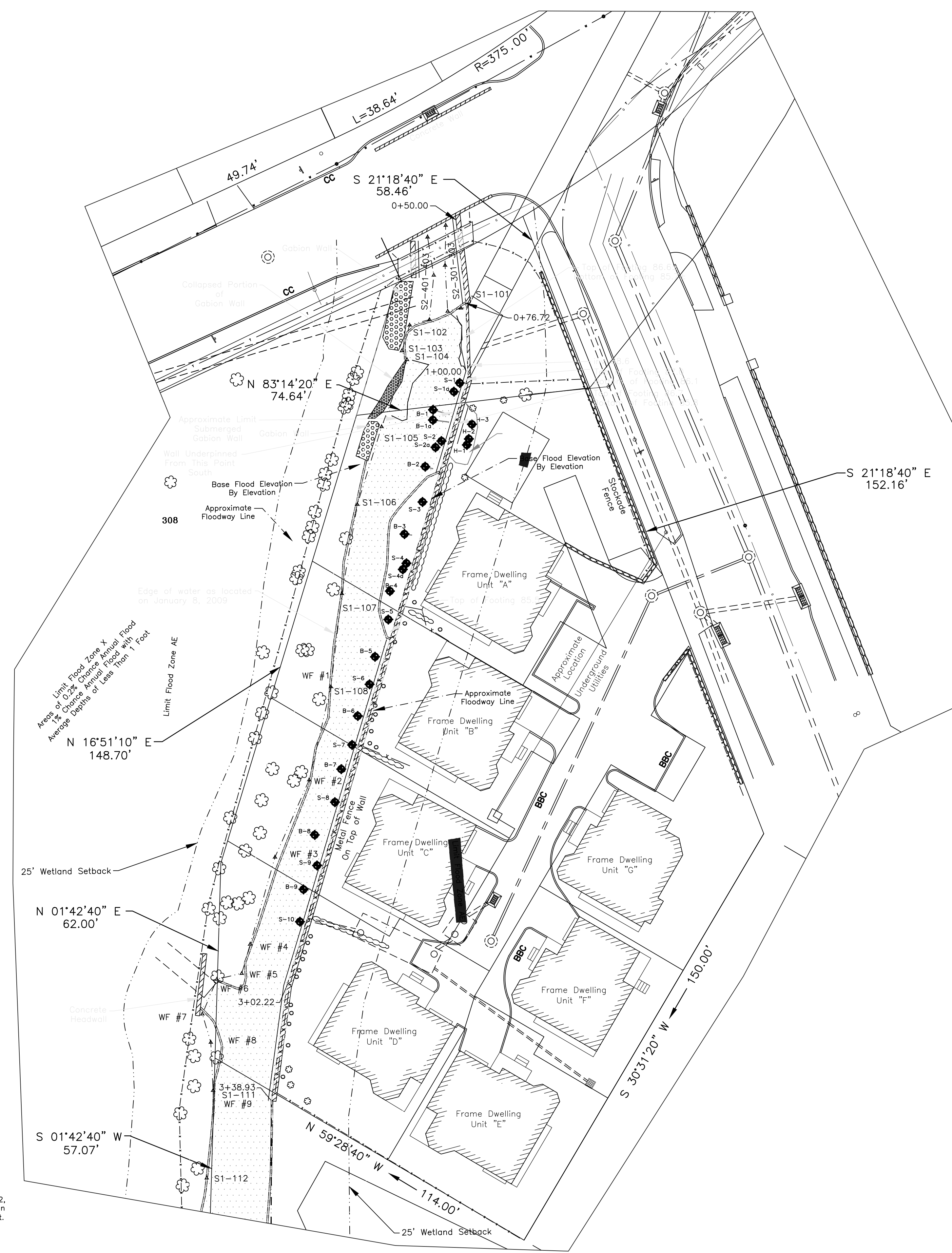
Notes:

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SPRINGDALE BROOK - Pile Report

Northing(Y)	Easting(X)	Elev(Z)	Description
10447.94	6600.20	94.14	H-1
10449.83	6600.83	94.04	H-2
10454.49	6601.81	93.72	H-3
10467.62	6597.94	90.05	S-1
10464.86	6596.09	88.23	S-1a
10459.08	6589.46	87.77	B-1
10455.85	6589.41	86.60	B-1a
10449.16	6592.13	90.40	S-2
10447.16	6590.24	89.94	S-2a
10441.02	6586.97	86.74	B-2
10429.80	6586.12	88.21	S-3
10419.60	6580.38	90.06	B-3
10410.30	6581.02	91.77	S-4
10408.35	6579.84	90.28	S-4a
10401.46	6575.75	86.71	B-4
10392.43	6575.24	89.24	S-5
10380.57	6571.01	85.21	B-5
10371.83	6569.30	86.14	S-6
10361.77	6565.53	84.99	B-6
10352.57	6563.74	84.43	S-7
10344.87	6560.29	84.01	B-7
10334.37	6558.28	84.19	S-8
10323.96	6551.86	83.88	B-8
10314.23	6552.61	83.92	S-9
10306.63	6548.27	85.08	B-9
10296.36	6547.17	83.87	S-10

Elevations and locations taken at centerline top of pile.



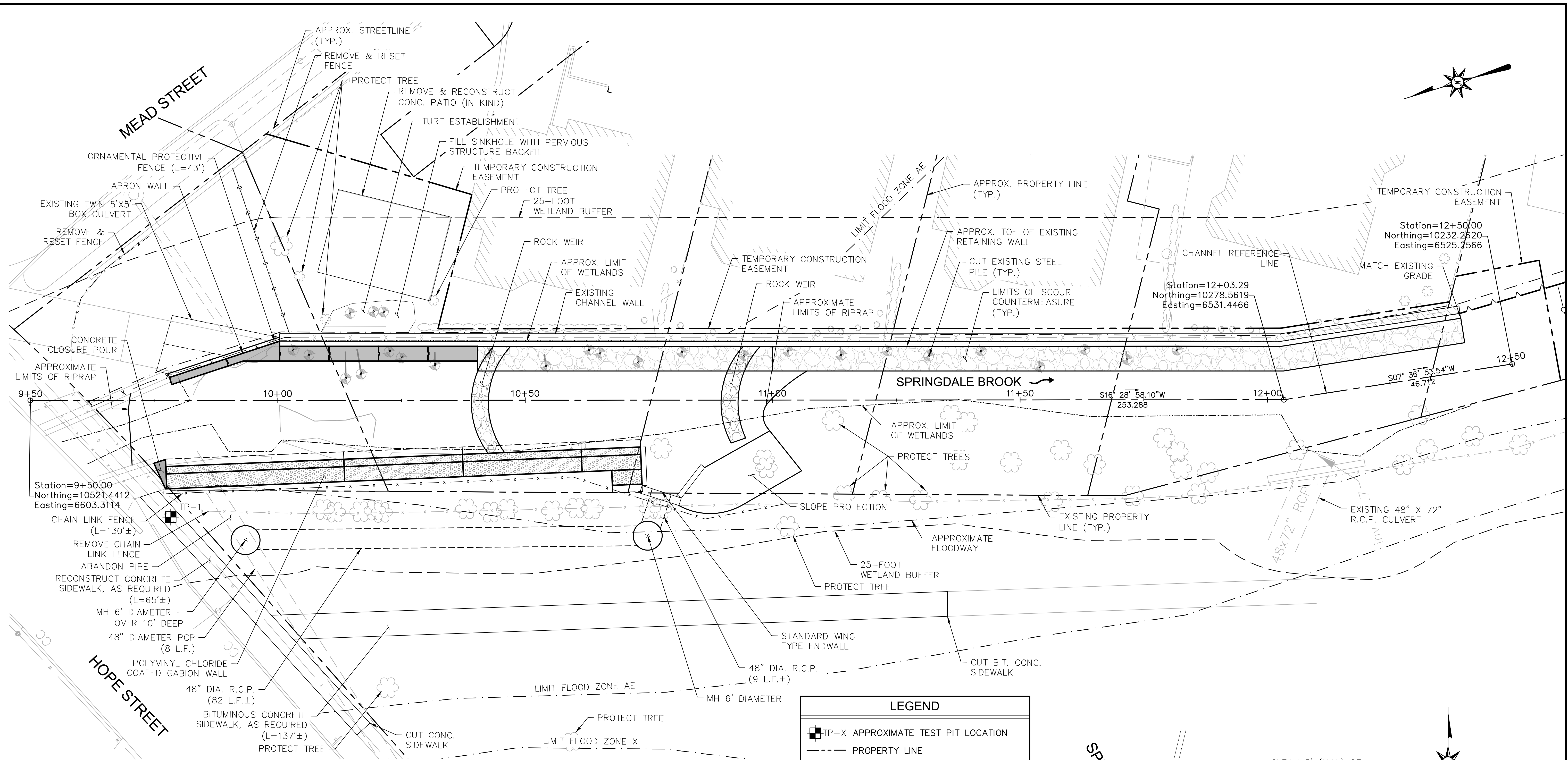
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BY: EDWARD J. FRATTAROLI, INC. <i>Land Surveyors • Engineers • Land Planners</i> 62 Mill River Street Stamford, Connecticut 203-359-2235	This Document and Copies Thereof are Valid only if they bear the signature and embossed seal of the designated licensed professional. Unauthorized alterations render any declaration hereon null and void.	SEAL	CITY OF STAMFORD, CONN. BUREAU OF ENGINEERING DEPARTMENT OF PUBLIC WORKS	SURVEYED BY _____ DATE _____ Edward J. Frattaroli, Inc. 1-9-09 JRF DESIGNED BY _____ DATE _____ DES. SUPV. _____ DATE _____ _____ CITY ENGINEER	DRAWN BY _____ DATE _____ CHECKED BY _____ DATE _____ INSP. SUPV. _____ DATE _____	TITLE SPRINGDALE BROOK PILE LOCATIONS	SCALE: 1" = 30' PROJECT NO. SHEET NO. 3 OF 3	
		3 7/16 Added Wetlands/Flood Info/Wall Elev. 2 7/11 Added Sheet 3 - Pile Locations						
		REVISIONS						
		FILE NO.						

**SPRINGDALE BROOK
CHANNEL WALL STABILIZATION
STAMFORD, CONNECTICUT**



LEGEND

- TP-X APPROXIMATE TEST PIT LOCATION
- PROPERTY LINE
- EASEMENT LINE

GENERAL NOTES

ALLOWABLE DESIGN STRESSES:
CLASS "A" CONCRETE: $f'_c = 3,000$ psi
REINFORCEMENT (ASTM A615 GRADE 60) $f_y = 60,000$ psi

UTILITIES: THE CONTRACTOR SHALL PROTECT ALL AERIAL UTILITY WIRES IF AND AS NECESSARY ON MEAD STREET, HOPE STREET AND REMAINING FACILITIES WITHIN THE PROJECT LIMITS DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT UTILITY PROTECTION PLANS IF THEY ARE REQUIRED FOR THE CONTRACTOR TO PERFORM THEIR WORK. THE UTILITY PROTECTION PLAN SHALL BE APPROVED BY THE APPROPRIATE UTILITY COMPANY. COST OF UTILITY PROTECTION SHALL BE INCLUDED IN THE GENERAL COST OF THE PROJECT.

DIMENSIONS AND ELEVATIONS: WHEN DECIMAL DIMENSIONS AND ELEVATIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZERO. ALL ELEVATIONS ARE GIVEN IN DECIMAL FEET AND ARE BASED ON NAVD 88.

EXISTING DIMENSIONS: DIMENSIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. THE CONTRACTOR SHALL SUBMIT THE FIELD MEASUREMENTS WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR APPROVAL.

TIME OF YEAR RESTRICTIONS: THE CONTRACTOR SHALL COMPLETE WORK DURING LOW FLOW MONTHS (MAY 15 TO SEPTEMBER 15).

CONCRETE NOTES

CLASS "A" CONCRETE: CLASS "A" CONCRETE SHALL BE USED FOR THE APRON WALLS, STANDARD WING TYPE ENDWALL OUTLET, AND CONCRETE CLOSURE POUR.

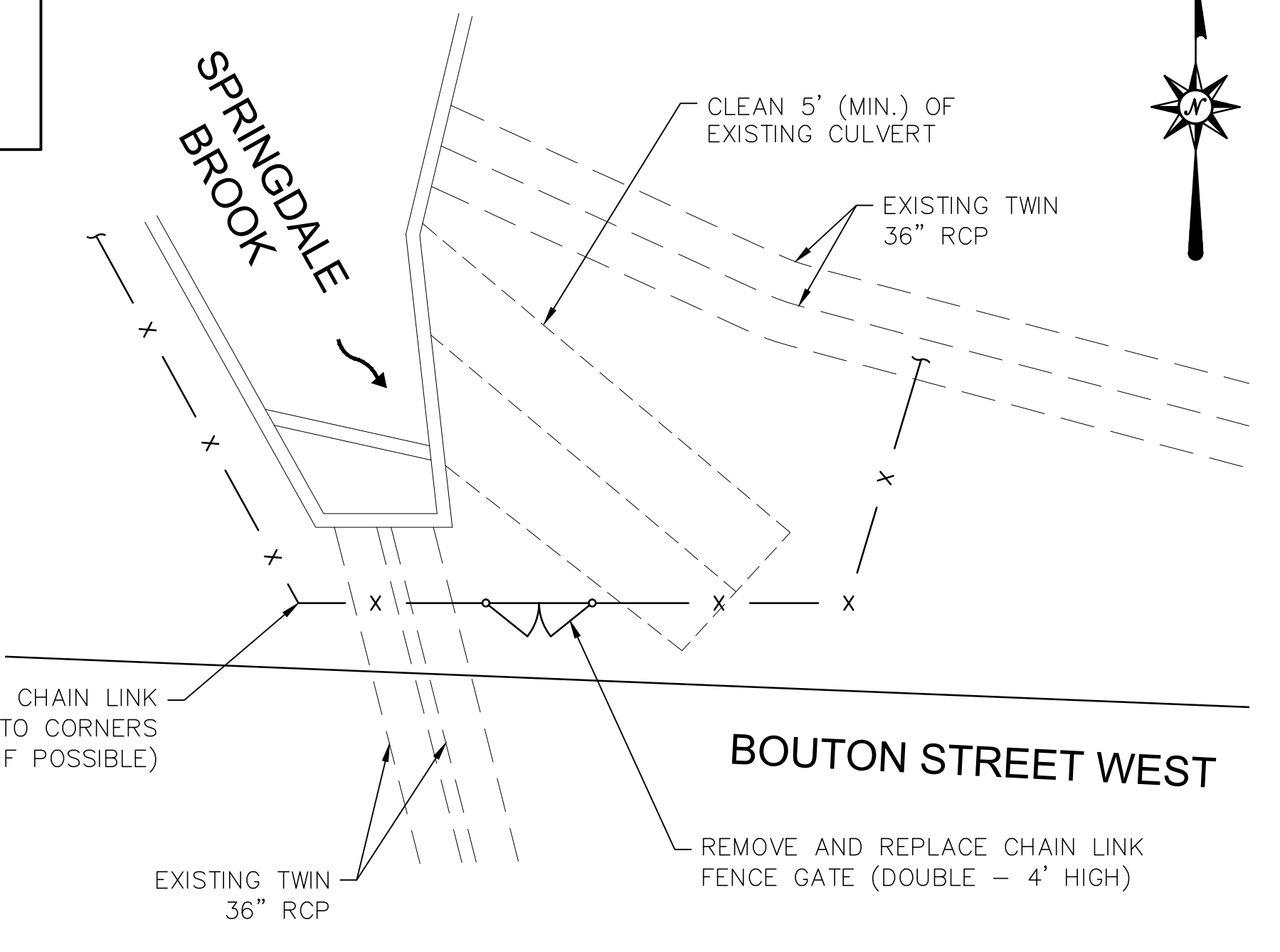
REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1" X 1", UNLESS DIMENSIONED OTHERWISE.

EPOXY COATED REINFORCEMENT BARS: ALL REINFORCEMENT SHALL BE EPOXY COATED AND SHALL BE PAID FOR IN THE PAY ITEM "DEFORMED STEEL BARS-EPOXY COATED".

CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ENGINEER.

HYDRAULIC DATA SPRINGDALE BROOK	
DRAINAGE AREA	1.7 SQ. MI.
AVERAGE SPRING FLOW	5.4 cfs
2-YEAR STORM	150 cfs



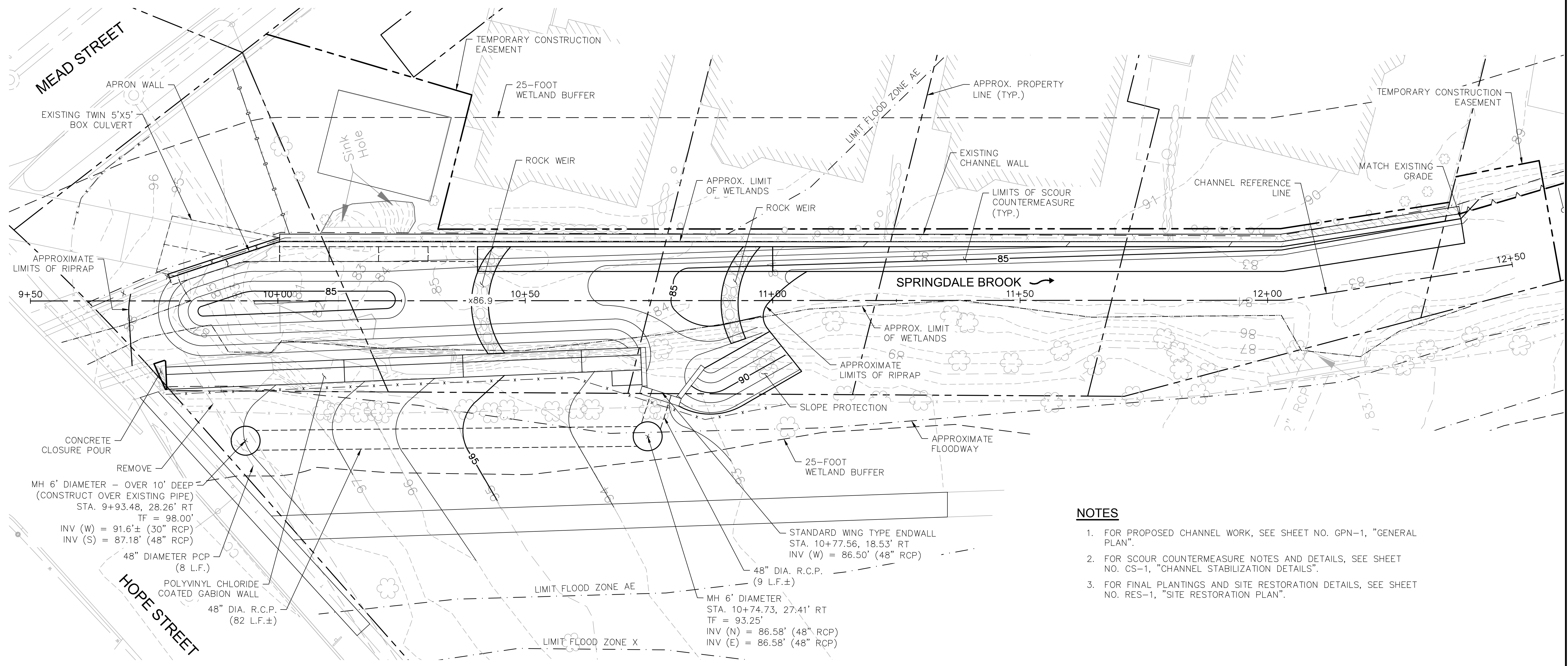
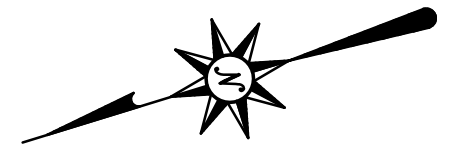
UPSTREAM CULVERT PLAN

NOTE: CLEANING OF THE EXISTING CULVERT TO THE LIMITS SHOWN SHALL BE INCLUDED FOR PAYMENT UNDER THE ITEM "CLEARING AND GRUBBING".

DESIGNED: A.J.F.
DRAWN: J.M.O.
CHECKED: D.Q.
APPROVED: 1"=10'
SCALE: 14C5205
DATE: 7/6/18
CAD FILE: TGNP14C520501

GENERAL PLAN

Sheet No. **GPN-1**



NOTES

1. FOR PROPOSED CHANNEL WORK, SEE SHEET NO. GPN-1, "GENERAL PLAN".
2. FOR SCOUR COUNTERMEASURE NOTES AND DETAILS, SEE SHEET NO. CS-1, "CHANNEL STABILIZATION DETAILS".
3. FOR FINAL PLANTINGS AND SITE RESTORATION DETAILS, SEE SHEET NO. RES-1, "SITE RESTORATION PLAN".

**SPRINGDALE BROOK
CHANNEL WALL STABILIZATION
STAMFORD, CONNECTICUT**

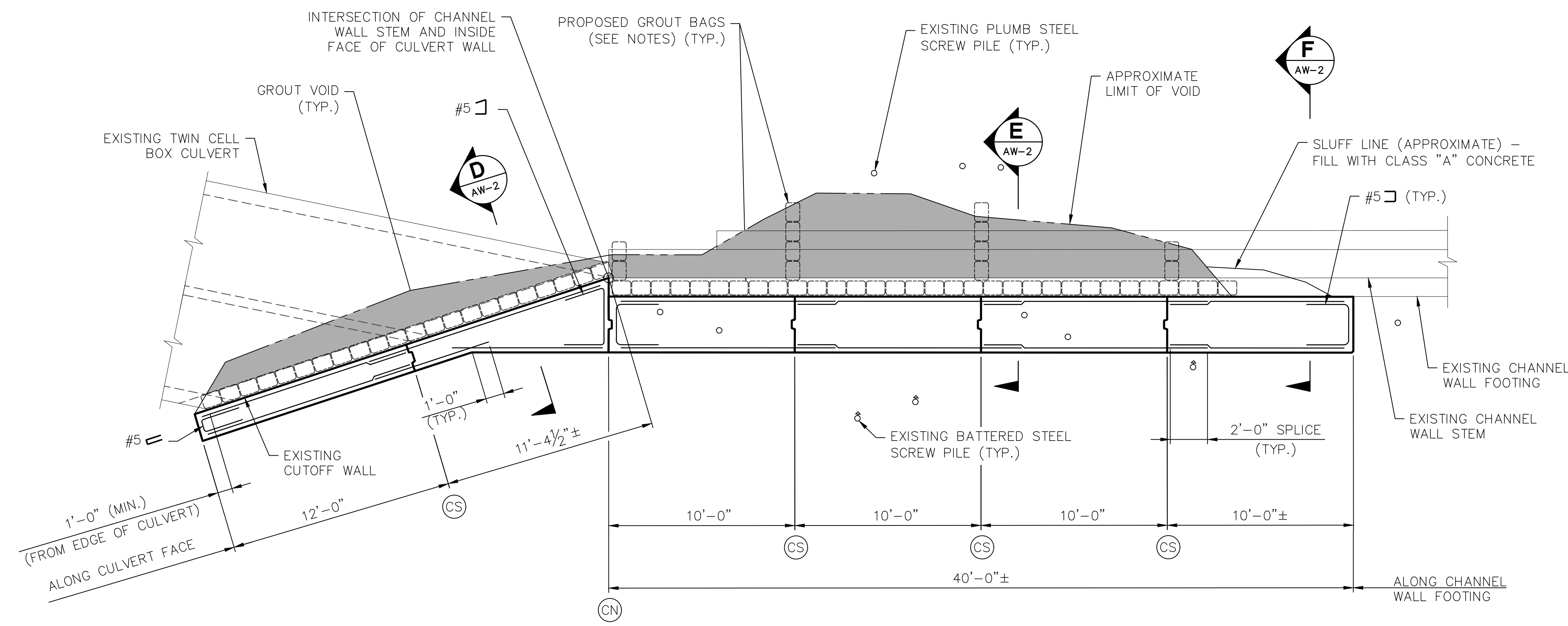
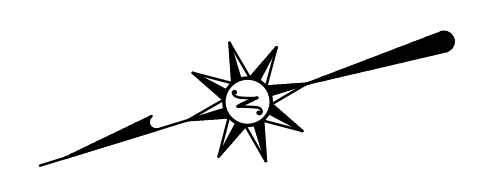
REVISIONS	No.	Date	Desc.
Designed			A.J.F.
Drawn			J.M.O.
Checked			D.Q.
Approved			
Scale			1"=10'
Project No.			14C5205
Date			7/6/18
CAD File:			TGDE14C520501
Title			GRADING AND DRAINAGE PLAN
Sheet No.			

GDE-1

**SPRINGDALE BROOK
CHANNEL WALL STABILIZATION
STAMFORD, CONNECTICUT**

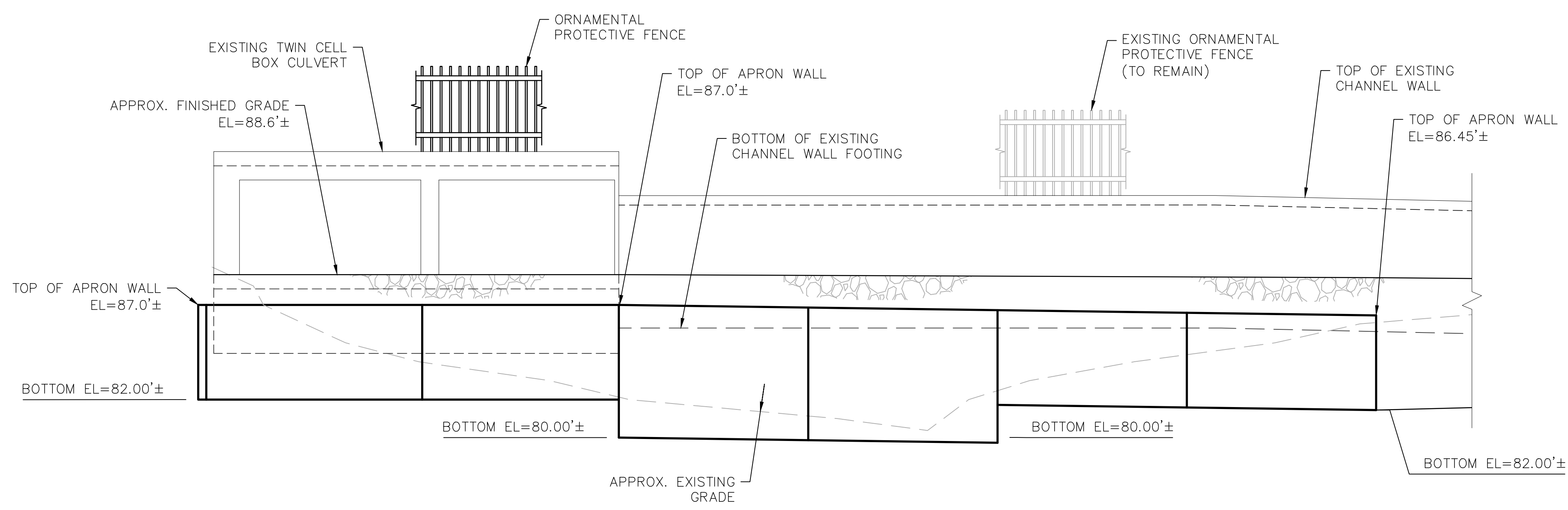
APRON WALL NOTES

1. THE DIMENSIONS SHOWN FOR THE CONCRETE APRON WALL WERE DEFINED BY THE LIMITS OF SCOUR/UNDERMINING OF THE CHANNEL WALL OBSERVED IN JULY 2016. CONTRACTOR SHALL FIELD VERIFY AND ADJUST THE APPLICABLE DETAILS, AS REQUIRED, FOR APPROVAL BY THE ENGINEER.
2. FOR APRON WALL SECTIONS AND ADDITIONAL REINFORCEMENT DETAILS, SEE SHEET NO. AW-2, "APRON WALL DETAILS-2".
3. FOR PROPOSED CHANNEL WORK AND LIMITS OF THE ORNAMENTAL PROTECTIVE FENCE, SEE SHEET NO. GPN-1, "GENERAL PLAN".
4. FOR FINISHED GRADE, SEE SHEET NO. GDE-1, "GRADING PLAN".



LAYOUT AND REINFORCING PLAN

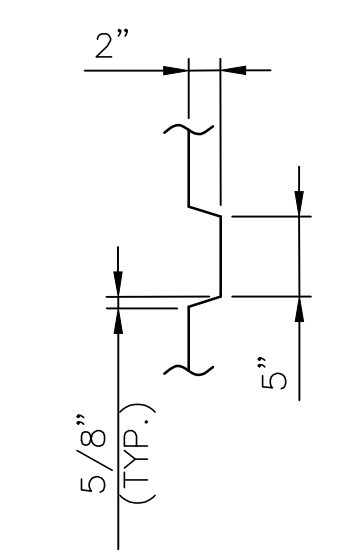
⊖ - CONTRACTION JOINT
⊕ - CONSTRUCTION JOINT



ELEVATION

APRON WALL

SCALE: 1/4" = 1'-0"



SHEAR KEY DETAIL

SCALE: 1" = 1'-0"

REVISIONS	
No.	Date

Designed	D.M.Q.
Drawn	J.M.O.
Checked	D.Q.
Approved	
Scale	AS NOTED
Project No.	14CS205
Date	7/6/18
CAD File:	TAW14CS20501

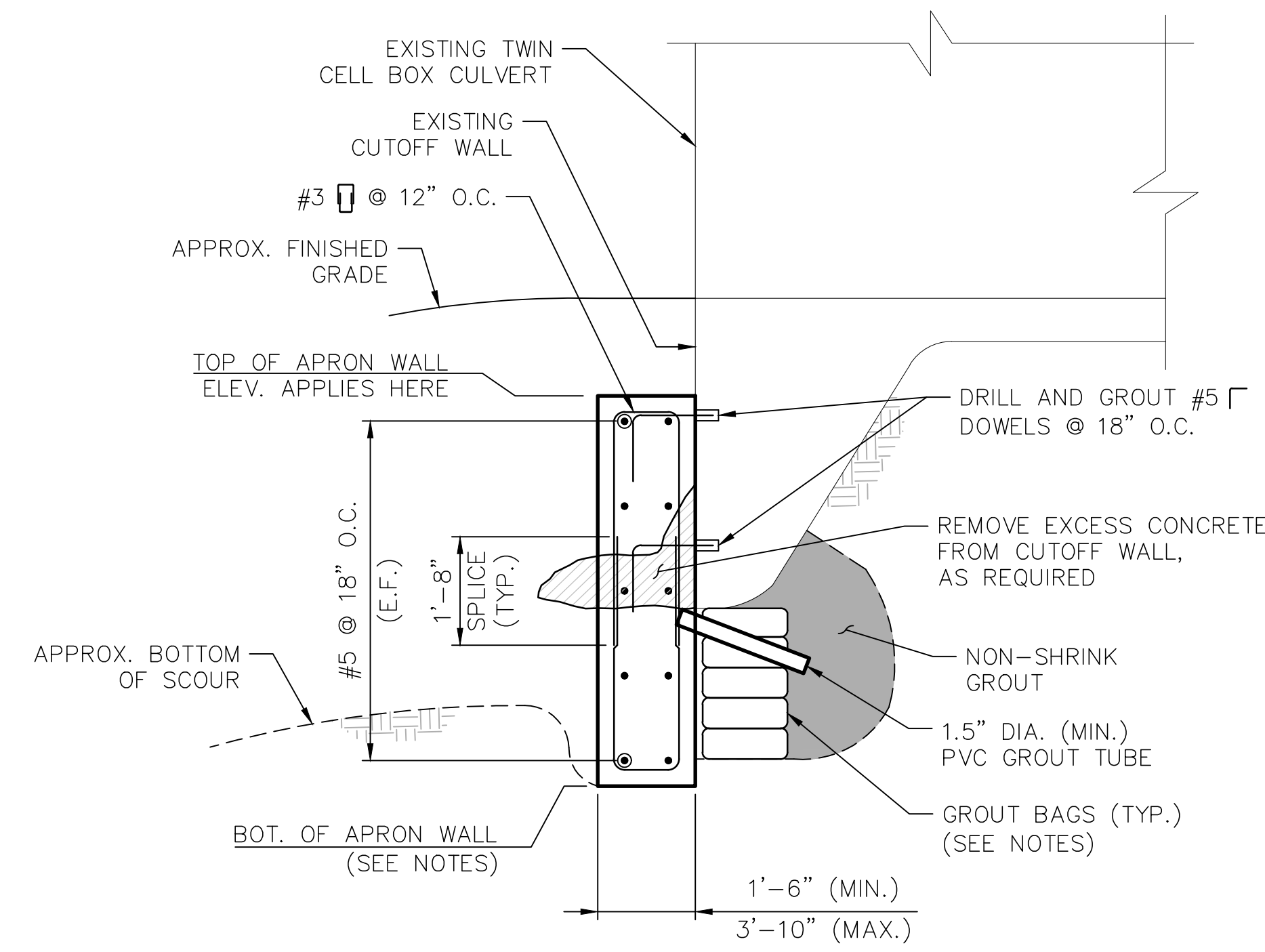
Title
**APRON WALL
DETAILS**

Sheet No.

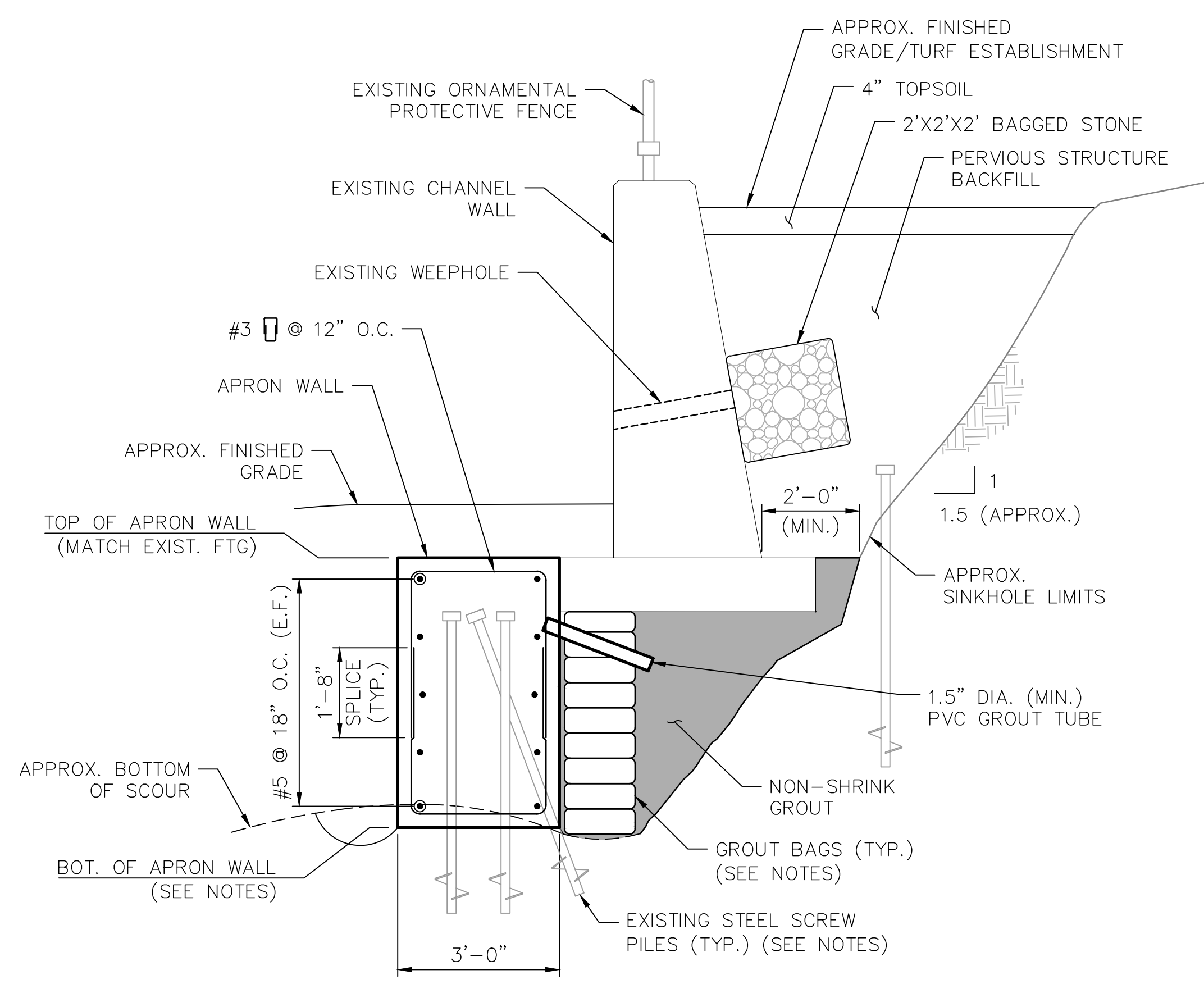
AW-1

APRON WALL NOTES

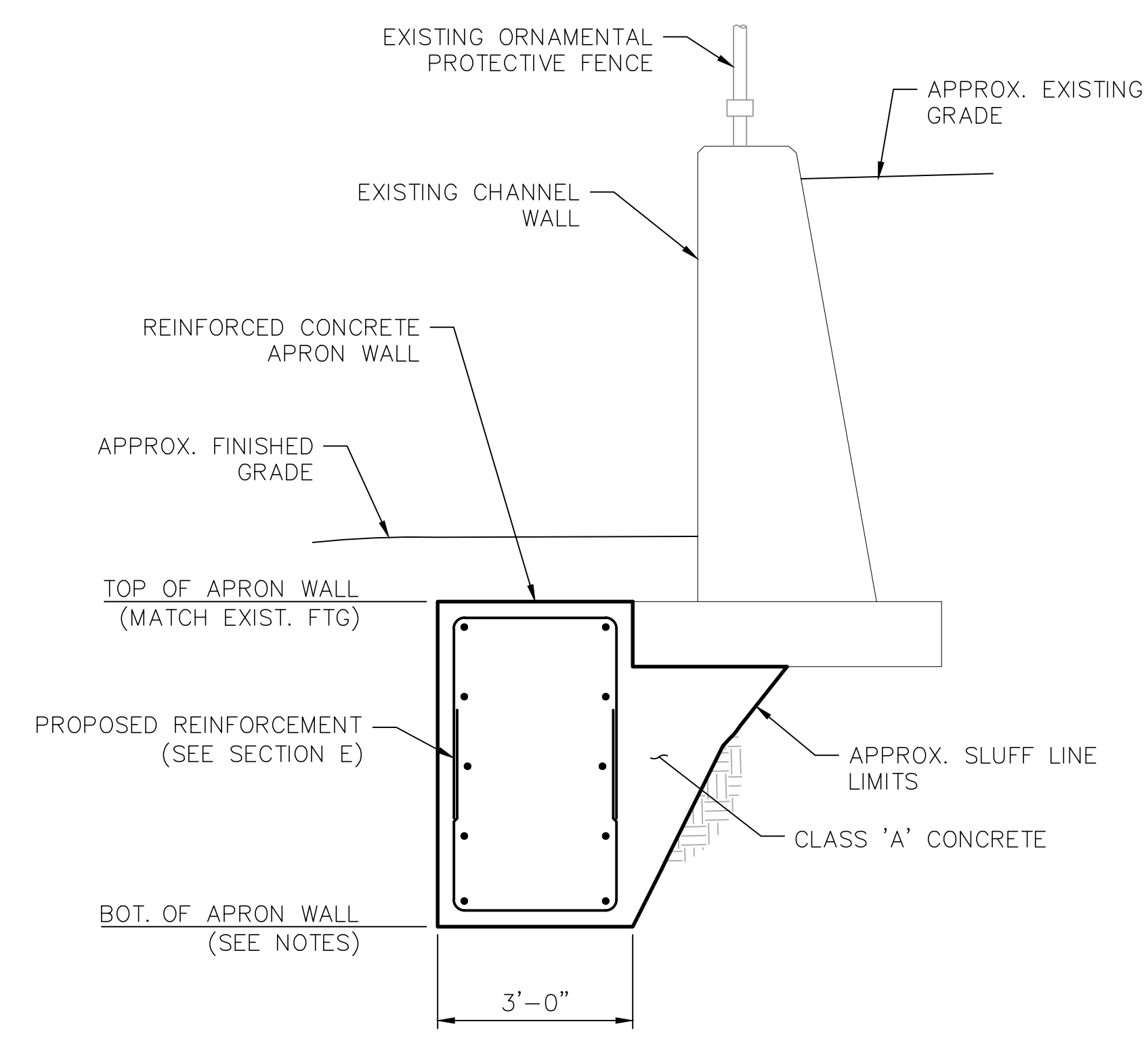
- FOR PROPOSED FINISHED GRADING, SEE SHEET NO. GDE-1, "GRADING AND DRAINAGE PLAN".
- FOR TOP OF APRON WALL ELEVATION, SEE SHEET NO. AW-1, "APRON WALL DETAILS - 1".
- BOTTOM OF EACH APRON WALL SEGMENT, AS DEFINED BY THE LIMITS OF THE CONSTRUCTION JOINT, SHALL EXTEND TO THE GREATEST SCOUR DEPTH OBSERVED FOR THAT SEGMENT.
- GROUT BAGS SHALL BE PLACED SNUG TIGHT BETWEEN THE BOTTOM OF THE FOOTING/CUTOFF WALL AND THE LIMIT OF SCOUR/UNDERMINING. PAYMENT FOR THIS WORK SHALL BE PAID FOR IN THE ITEM "FLOWABLE FILL".
- EXISTING STEEL SCREW PILES WITHIN THE CHANNEL SHALL BE CUT 1-FOOT BELOW THE TOP OF THE EXISTING CHANNEL WALL FOOTING. STEEL SCREW PILES WITHIN THE PERVIOUS STRUCTURE BACKFILL LIMITS SHALL BE CUT TO ELEVATION OF 89.5±.
- BAGGED STONE SHALL CONSIST OF FURNISHING AND PLACING CRUSHED STONE OR GRAVEL IN BURLAP BAGS AT THE INLET ENDS OF WEEP HOLES TO THE DIMENSIONS INDICATED ON THE PLANS OR AS INDICATED BY THE ENGINEER. THE CRUSHED STONE OR GRAVEL SHALL CONFORM TO THE GRADING REQUIREMENTS ESTABLISHED IN THE FORM 817, ARTICLE M.01.01 FOR 2-INCH OR 1½-INCH COARSE AGGREGATE OR A MIXTURE OF BOTH. ALL WORK ASSOCIATED WITH THE BAGGED STONE SHALL BE PAID FOR IN THE ITEM "PERVIOUS STRUCTURE BACKFILL".
- REMOVAL OF EXCESS CONCRETE FROM THE CUTOFF WALL TO ALLOW FOR THE APRON WALL CONSTRUCTION SHALL BE PAID FOR UNDER THE ITEM "REMOVAL OF EXISTING MASONRY".



SECTION D
AW-1
SCALE: ½" = 1'-0"



SECTION E
AW-1
SCALE: ½" = 1'-0"



SECTION F
AW-1
SCALE: ½" = 1'-0"

7/5/2018, ALVING0001, C:\JOB\14\14C52050\DWG\14C52050.DWG,AW-2 24X36 AS NOTED.

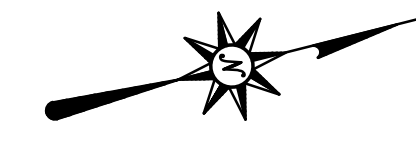
REVISIONS	
No.	Date

Designed	D.M.Q.
Drawn	J.M.O.
Checked	D.Q.
Approved	
Scale	AS NOTED
Project No.	14C5205
Date	7/6/18
CAD File:	TAW14C520502

Title
APRON WALL DETAILS

Sheet No.
AW-2

Xref (s) : BDI4C520501 : BDI4C5205-01 : BDI4C5205-311



GABION WALL & CLOSURE POUR NOTES

- SEE SHEET NO. GPN-1, "GENERAL PLAN", FOR CHANNEL REFERENCE LINE GEOMETRY.
- SEE SHEET NO. GW-2, "GABION WALL DETAILS-2", FOR ADDITIONAL NOTES AND DETAILS FOR THE GABION WALL AND CONCRETE CLOSURE POUR.
- MATERIALS AND CONSTRUCTION METHODS FOR STONE FILL FOR GABIONS SHALL BE IN STRICT CONFORMANCE WITH THE SPECIFICATIONS. MINIMUM STONE SIZE SHALL BE 4" WITH NO STONE LARGER THAN 8". STONES PLACED AGAINST THE BASKET FABRIC SHALL BE DONE BY HAND WITH THE FLAT FACE AGAINST THE FABRIC.
- THE GABION LENGTHS NOTED IN TABLE 1 SHALL BE ADJUSTED TO OBTAIN THE DESIRED WALL LENGTH.
- THE SIDES OF THE BASKETS THAT ARE ADJACENT TO THE STANDARD WING TYPE ENDWALL SHALL BE ADJUSTED TO FOLLOW THE BATTER OF THE WINGWALL.
- CONTRACTOR TO SUBMIT TO THE ENGINEER WORKING DRAWINGS OF THE PROPOSED GABIONS, INCLUDING ALL MATERIAL TO BE UTILIZED, WITH STABILITY CALCULATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT.
- THE TOP ELEVATION OF THE CLOSURE POUR SHALL MATCH THE EXISTING PEDESTRIAN BRIDGE ABUTMENT BRIDGE SEAT AND BACKWALL ELEVATIONS.
- THE DEPTH OF THE EXISTING ABUTMENT IS UNKNOWN. THE BOTTOM ELEVATION OF THE CONCRETE CLOSURE POUR SHALL MATCH THE BOTTOM ELEVATION OF THE GABION WALL.

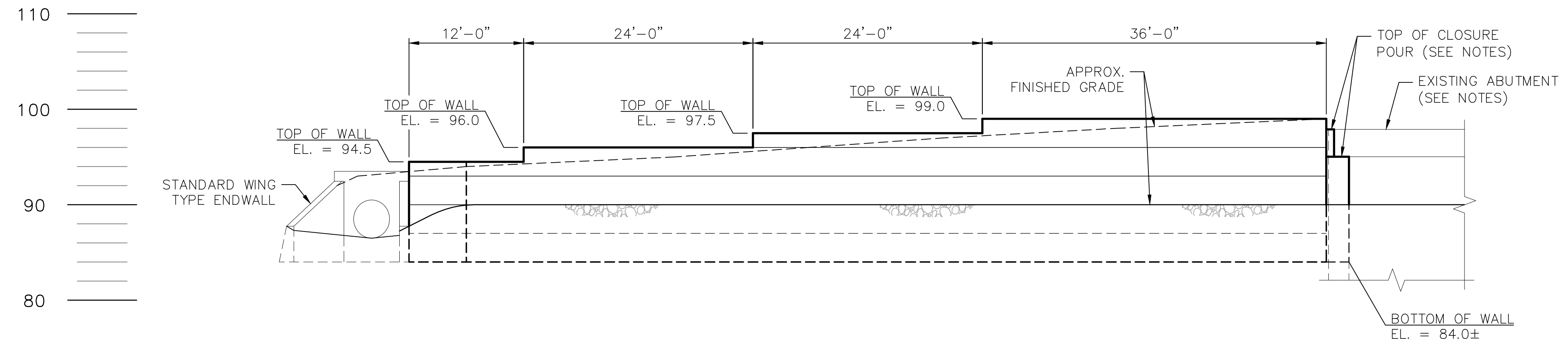
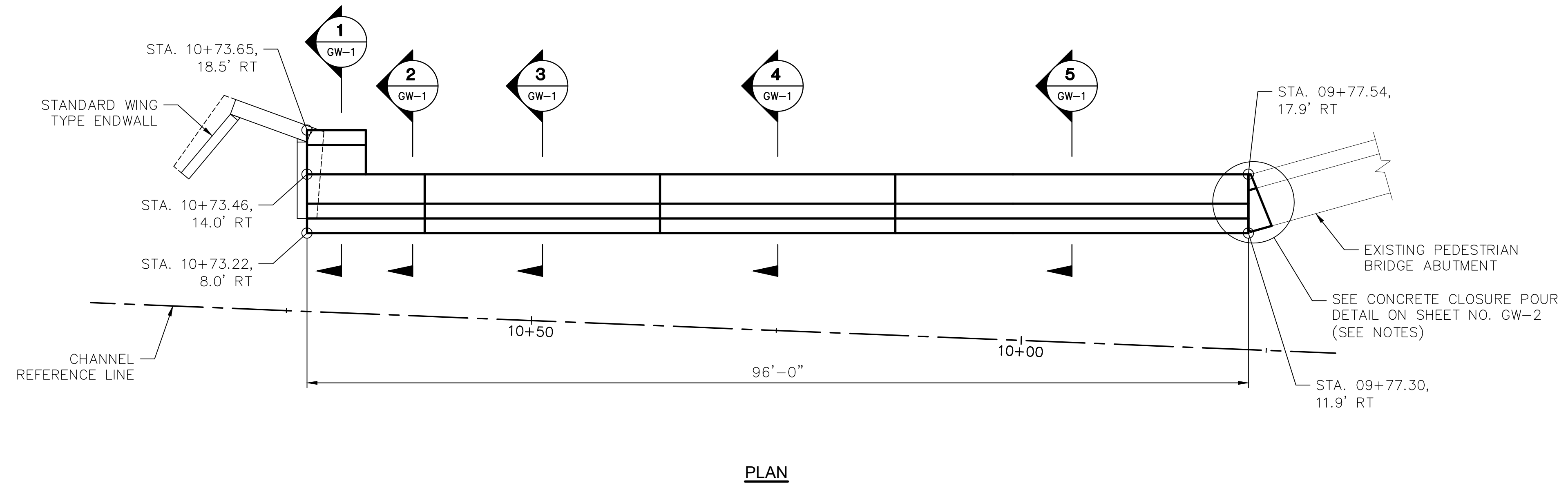
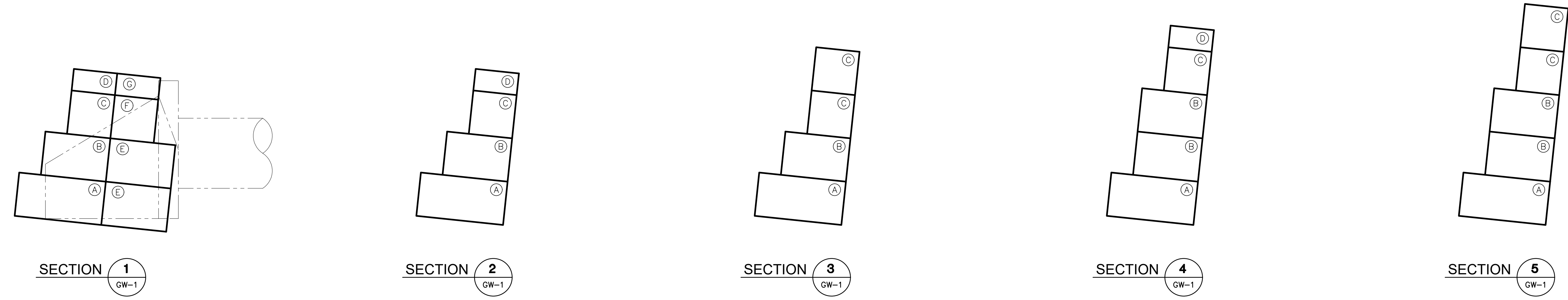


TABLE 1

LETTER CODE OF SIZE	SIZE		
	LENGTH	WIDTH	HEIGHT
A	12'	6'	3'
B	12'	4.5'	3'
C	12'	3'	3'
D	12'	3'	1.5'
E	6'	4.5'	3'
F	6'	3'	3'
G	6'	3'	1.5'



REVISIONS

No.	Date	Desc.

Designed: A.J.F.
 Drawn: J.M.O.
 Checked: D.Q.
 Approved: D.Q.
 Scale: SCALE AS NOTED
 Project No.: 14CS205
 Date: 7/6/18
 CAD File: TGW14CS20501

Title: **GABION WALL DETAILS**

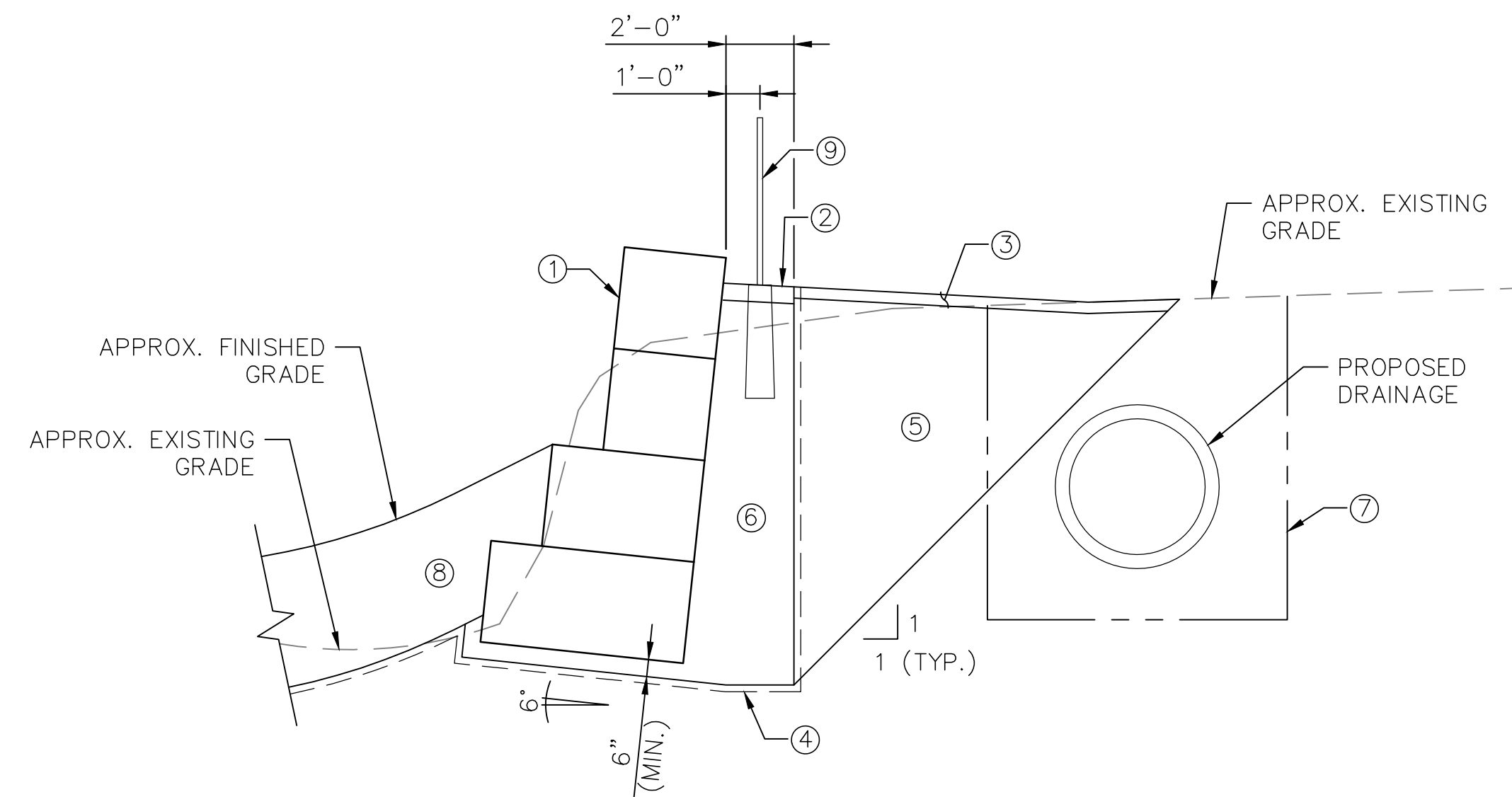
Sheet No. **GW-1**

GENERAL NOTES

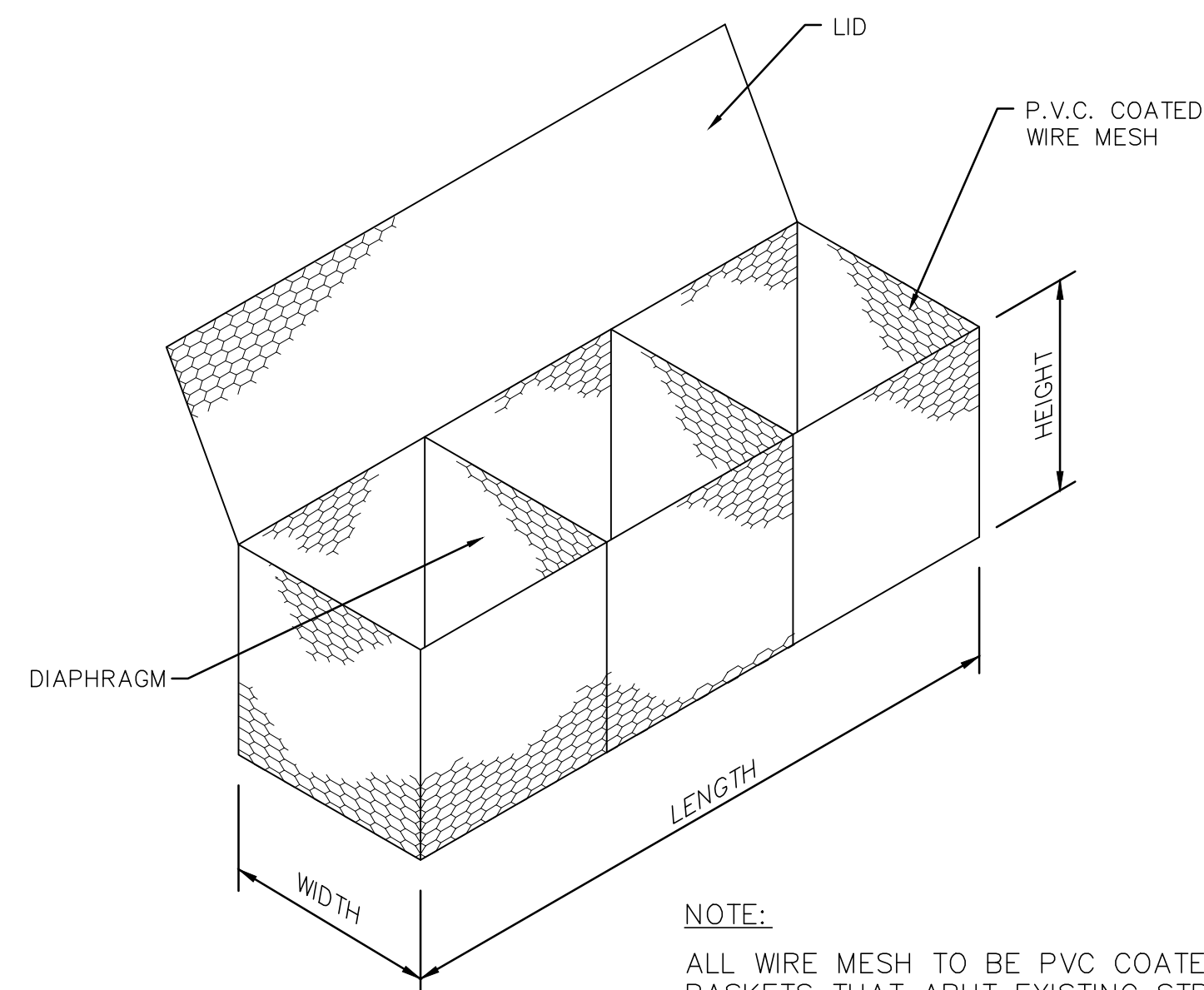
- SEE SHEET NO. GPN-1, "GENERAL PLAN", FOR FINAL GRADING.
- SEE SHEET NO. CD-1, "CHANNEL DETAILS", FOR NOTES AND DETAILS FOR THE HEAVY RIPRAP MIXTURE.
- SEE SHEET NO. GW-1, "GABION WALL DETAILS-1", FOR NOTES AND GEOMETRY FOR THE PROPOSED GABION WALL.
- EXCAVATION FOR THE GABION WALL AND GRANULAR FILL SHALL BE PAID FOR UNDER THE CONTRACT ITEM "STRUCTURE EXCAVATION".

GABION WALL PAY LIMIT NOTES

- PVC COATED (GRAY) GABION BASKET (TYP.)
- 3" CRUSHED STONE (6" DEPTH) ON FILTER FABRIC. THE CONTRACTOR MAY SUBSTITUTE NO. 3 CRUSHED STONE WITH THE STONE REMOVED FROM THE TEMPORARY CONSTRUCTION ACCESS ROAD.
- 4" TOPSOIL MINIMUM WITH CITY OF STAMFORD APPROVED SEED MIX.
- FILTER FABRIC - TENCATE MIRAFI 140N, TERRATEX HD OR APPROVED EQUAL.
- PERVIOUS STRUCTURE BACKFILL
- GRANULAR FILL - SHALL BE PLACED AND MANUALLY COMPACTED IN LIFTS OF EQUAL ELEVATION TO THE TOP OF THE GABION BASKET LAYER.
- PAY LIMITS FOR PROPOSED DRAINAGE
- HEAVY RIPRAP MIXTURE
- 5' HIGH BLACK PVC CHAINLINK FENCE

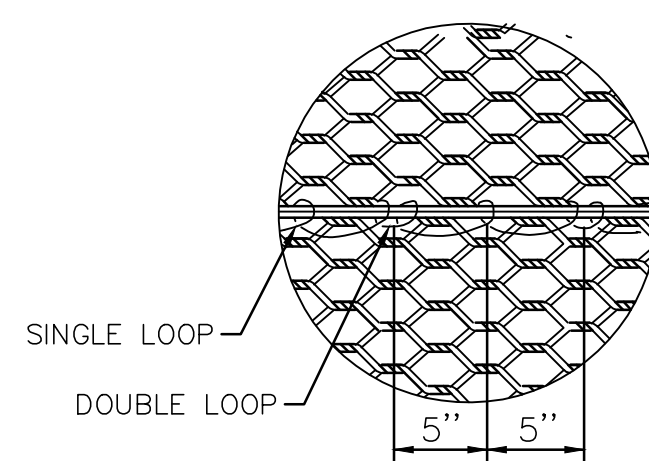


GABION WALL PAY-LIMITS
N.T.S.



NOTE:
ALL WIRE MESH TO BE PVC COATED (GRAY).
BASKETS THAT ABUT EXISTING STRUCTURES SHALL BE MODIFIED AS REQUIRED TO PROVIDE CLOSE FIT.
ADJACENT BASKETS TO BE LACED TOGETHER TIGHTLY.

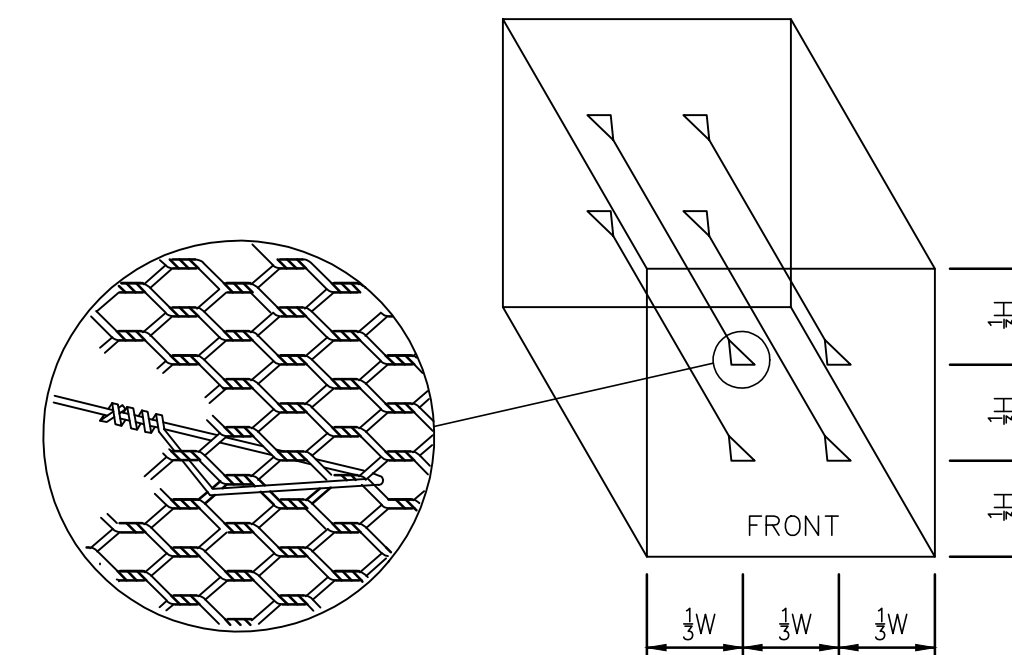
GABION BASKETS



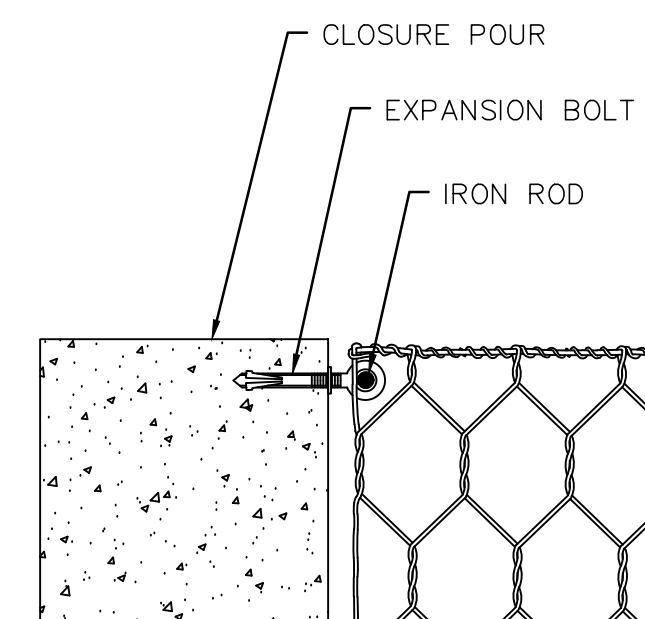
ALL LACING WIRE SHALL BE PVC COATED.
ALL SELVAGE WIRES AT END OR ADJACENT BASKETS SHALL BE LACED TOGETHER TIGHTLY.

GABION LACING DETAILS

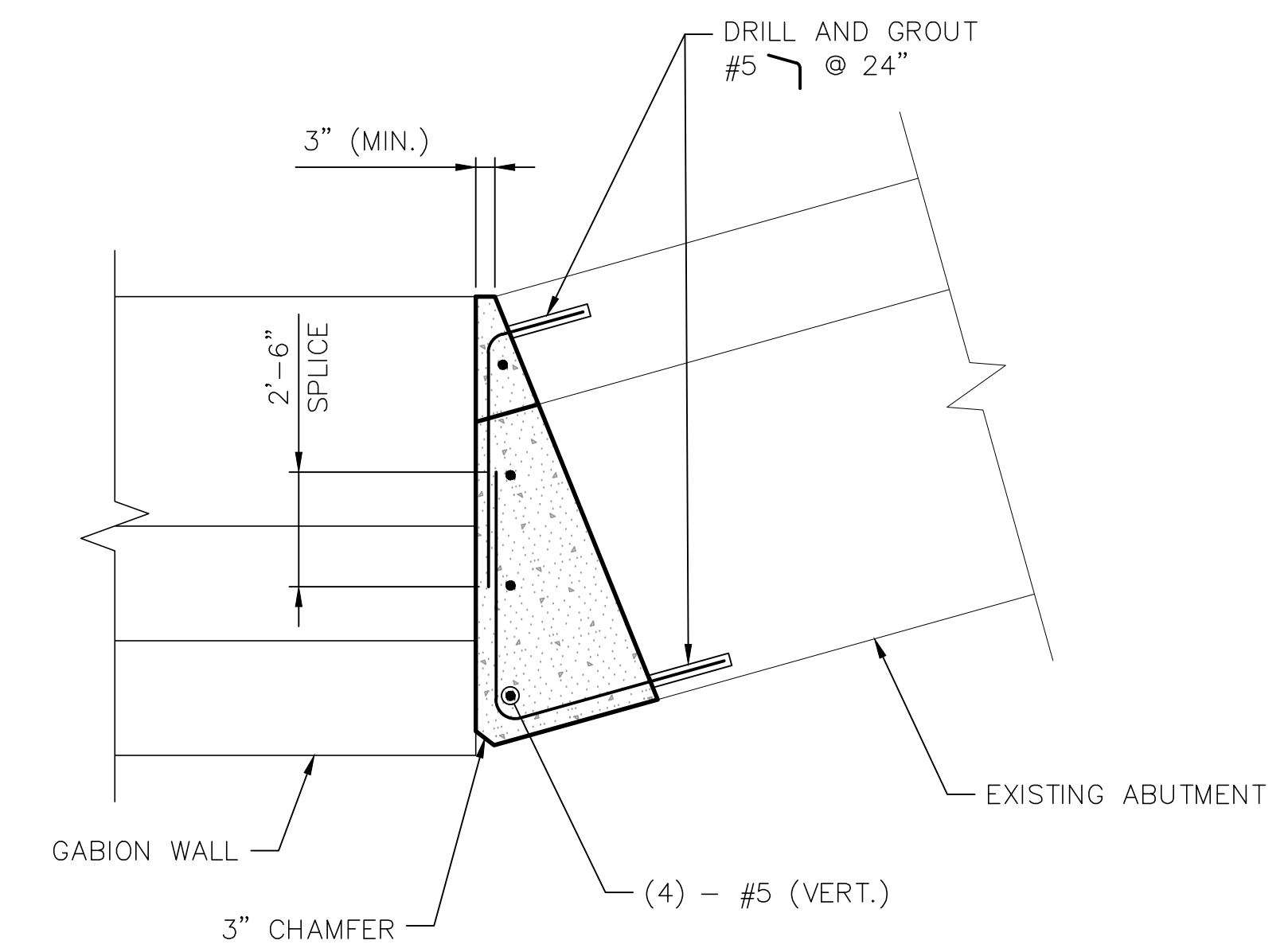
TYPICAL GABION DETAILS
N.T.S.



INTERIOR GABION TIE DETAIL
N.T.S.



GABION TO CONCRETE CONNECTION DETAIL
N.T.S.



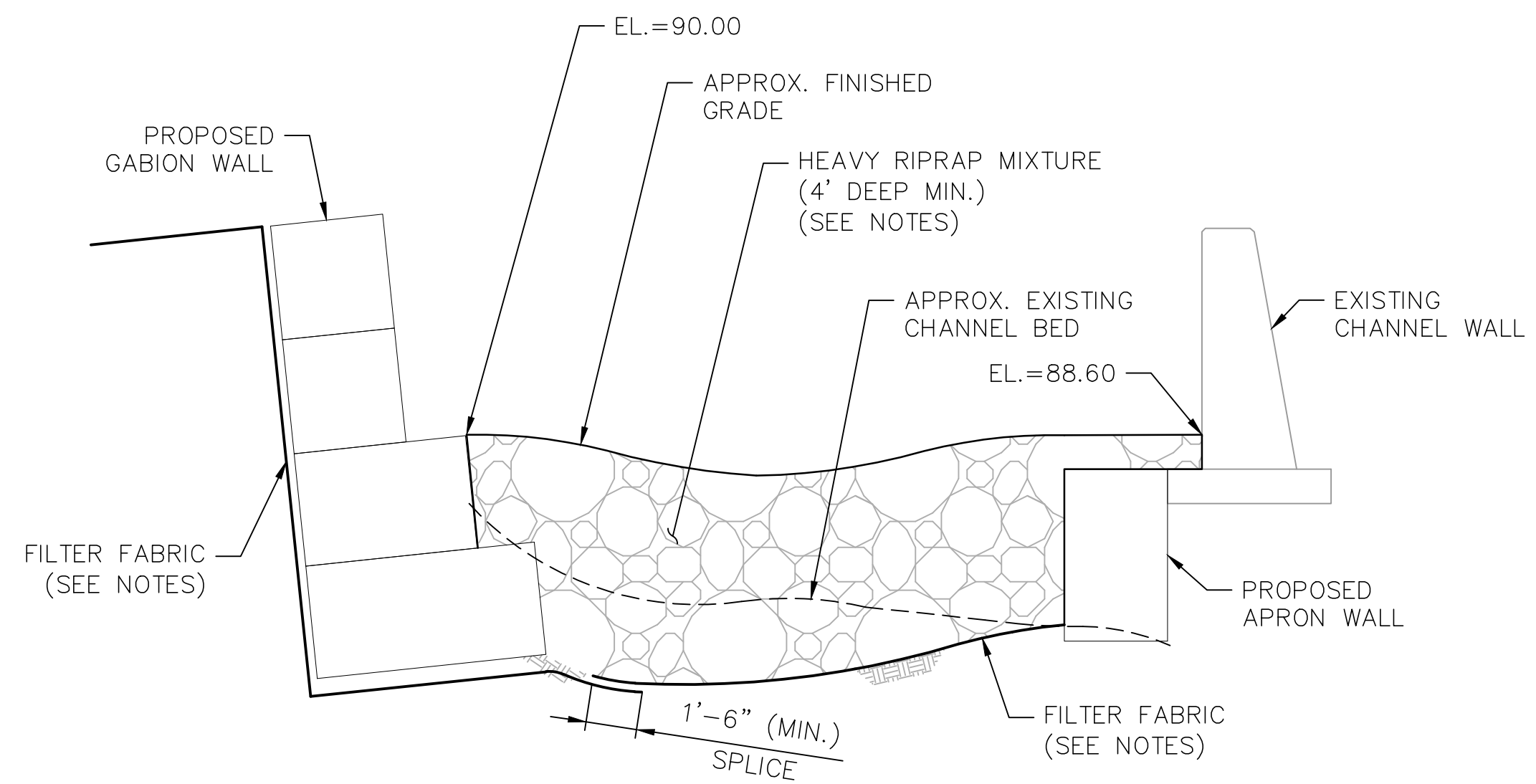
CONCRETE CLOSURE POUR DETAIL
N.T.S.

REVISIONS		Desc.
No.	Date	

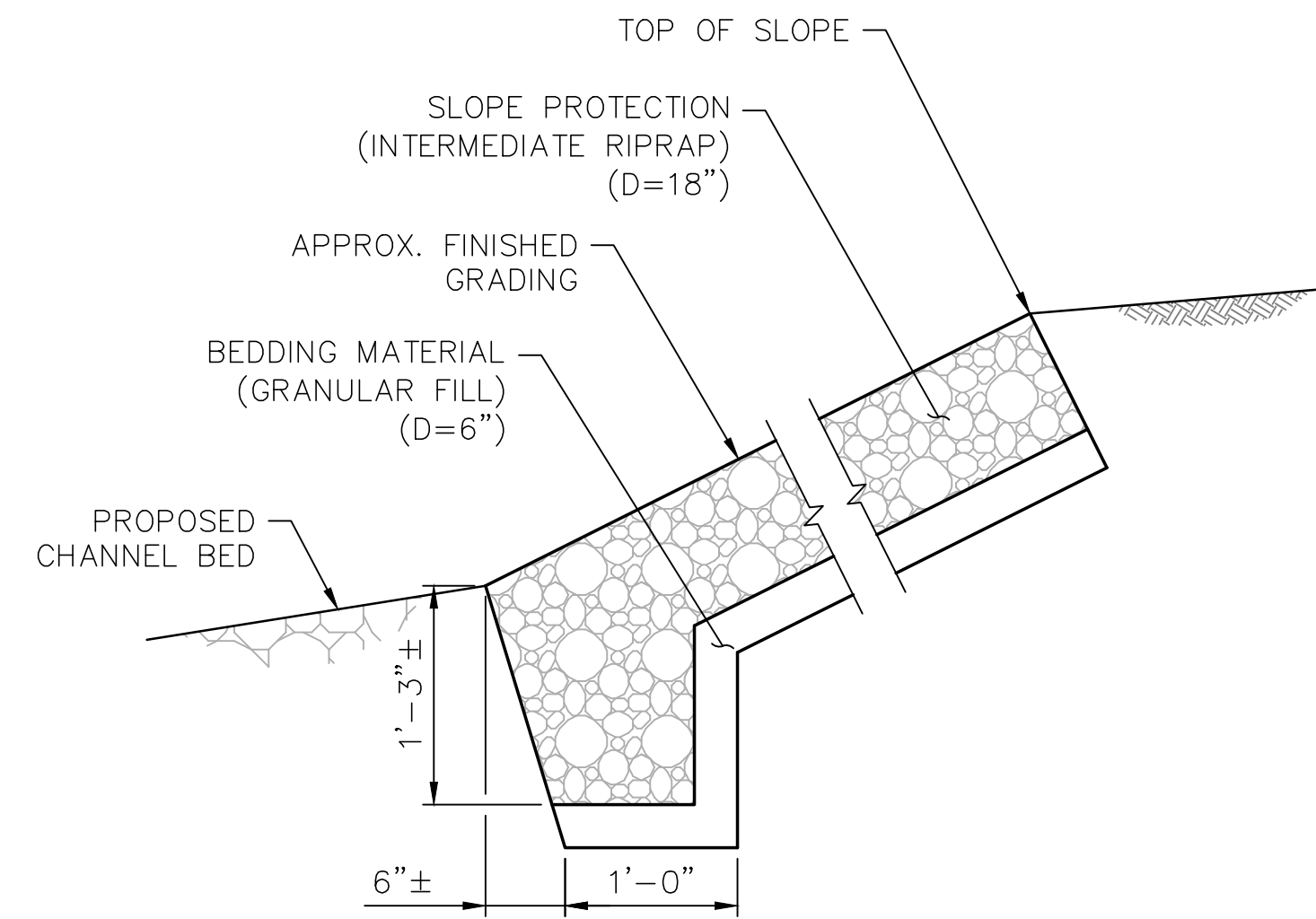
Designed	A.J.F.
Drawn	J.M.O.
Checked	D.Q.
Approved	D.Q.
Scale	SCALE AS NOTED
Project No.	14C5205
Date	7/6/18
CAD File:	TGW14C520502
Title	GABION WALL DETAILS
Sheet No.	GW-2

NOTES

- SEE SHEET NO. GPN-1 "GENERAL PLAN" FOR CHANNEL BASELINE GEOMETRY.
- SEE SHEET NO. GDE-1, "GRADING AND DRAINAGE PLAN", FOR FINISHED GRADE.
- FILTER FABRIC SHALL BE TENCATE MIRAFI HP370, ERRATEX HD, OR AN APPROVED EQUAL.
- HEAVY RIPRAP MIXTURE PLACED ABOVE THE APRON AND CHANNEL WALLS SHALL CONTAIN STONES THAT ARE 12" DIA. MAX.

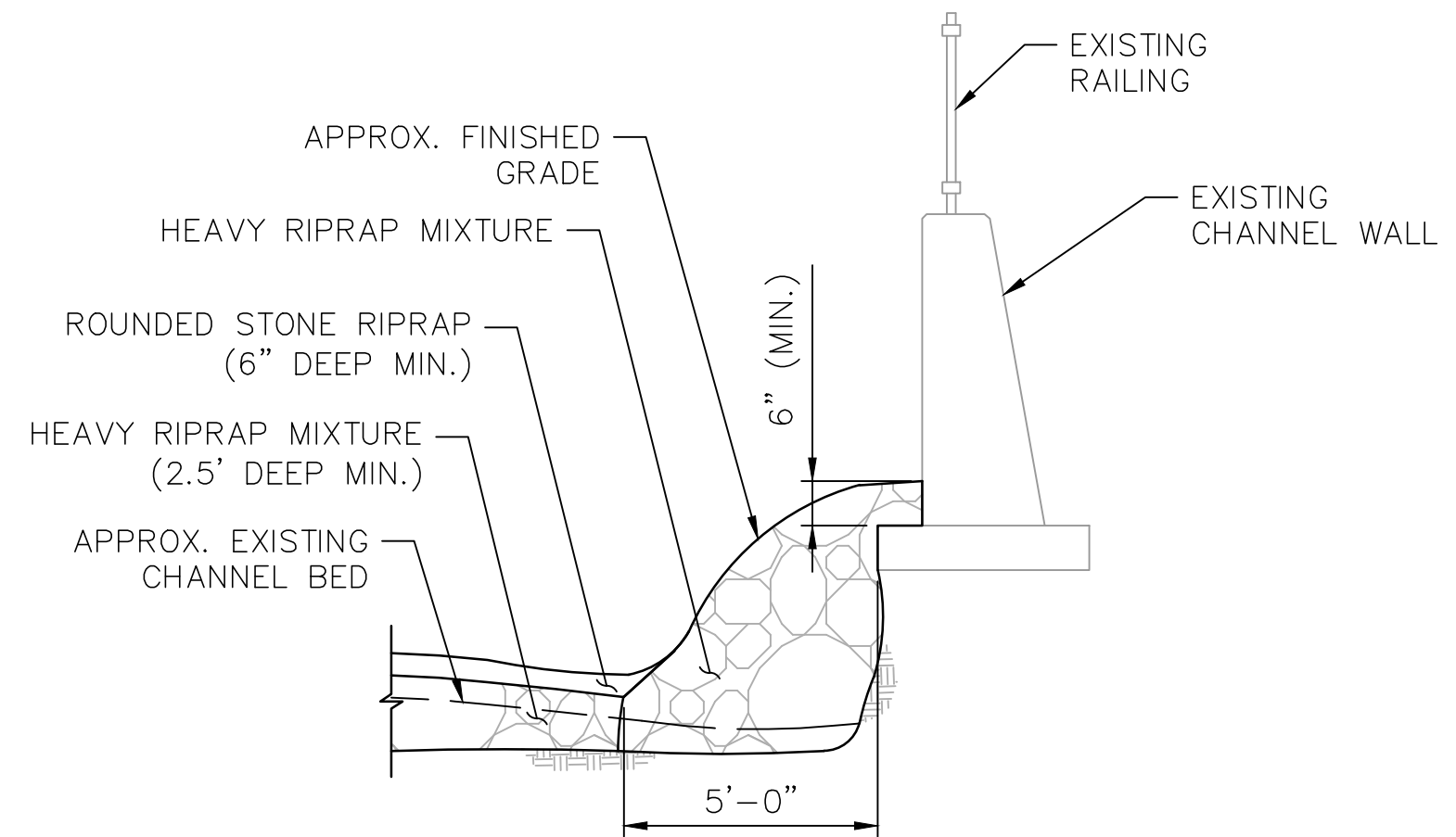


STA. 9+70 TO STA. 10+40

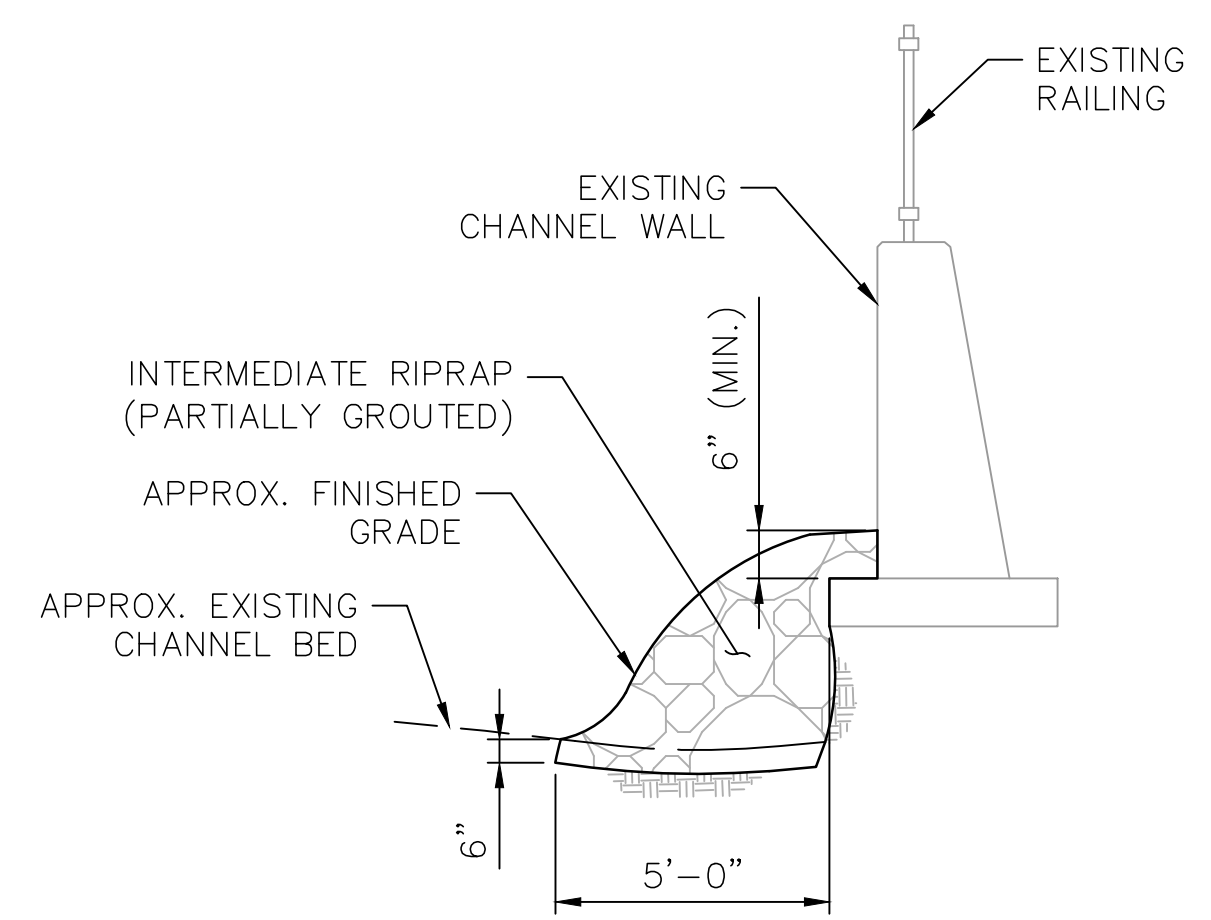


SLOPE PROTECTION

SCALE: 1/4" = 1'-0"



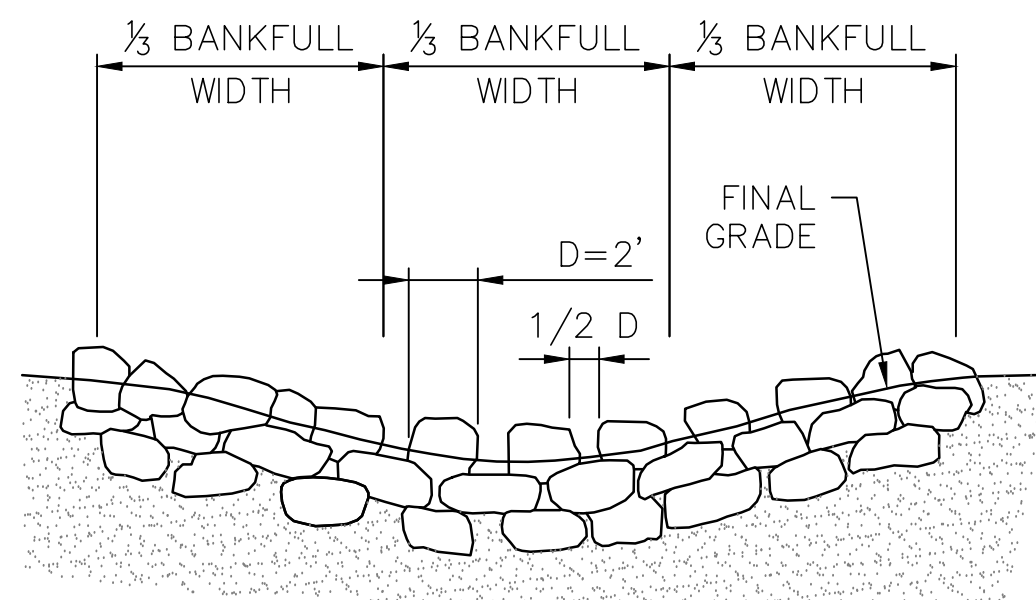
STA. 10+40 TO STA. 11+00



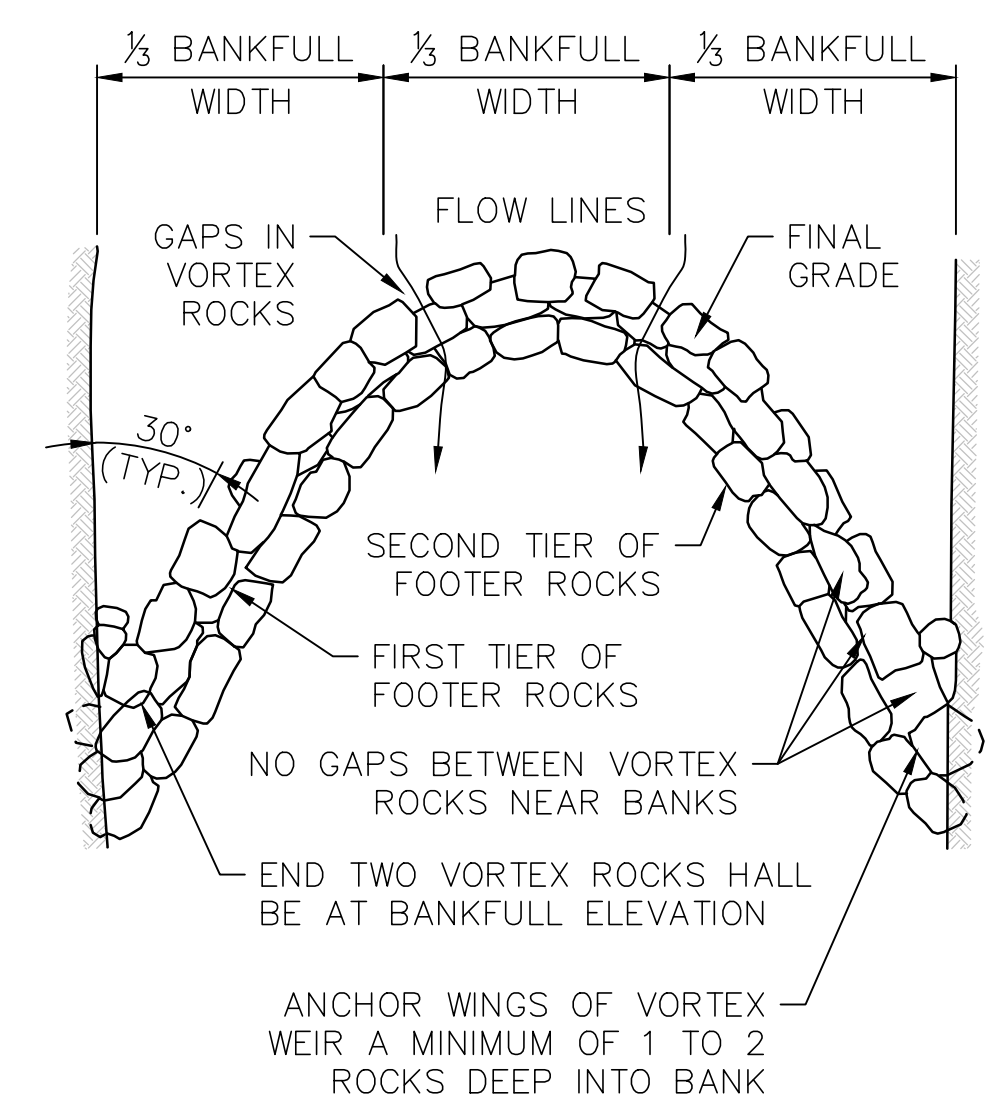
STA. 11+00 TO STA. 12+42

TYPICAL SCOUR COUNTERMEASURE SECTIONS

SCALE: 1/4" = 1'-0"



SECTION

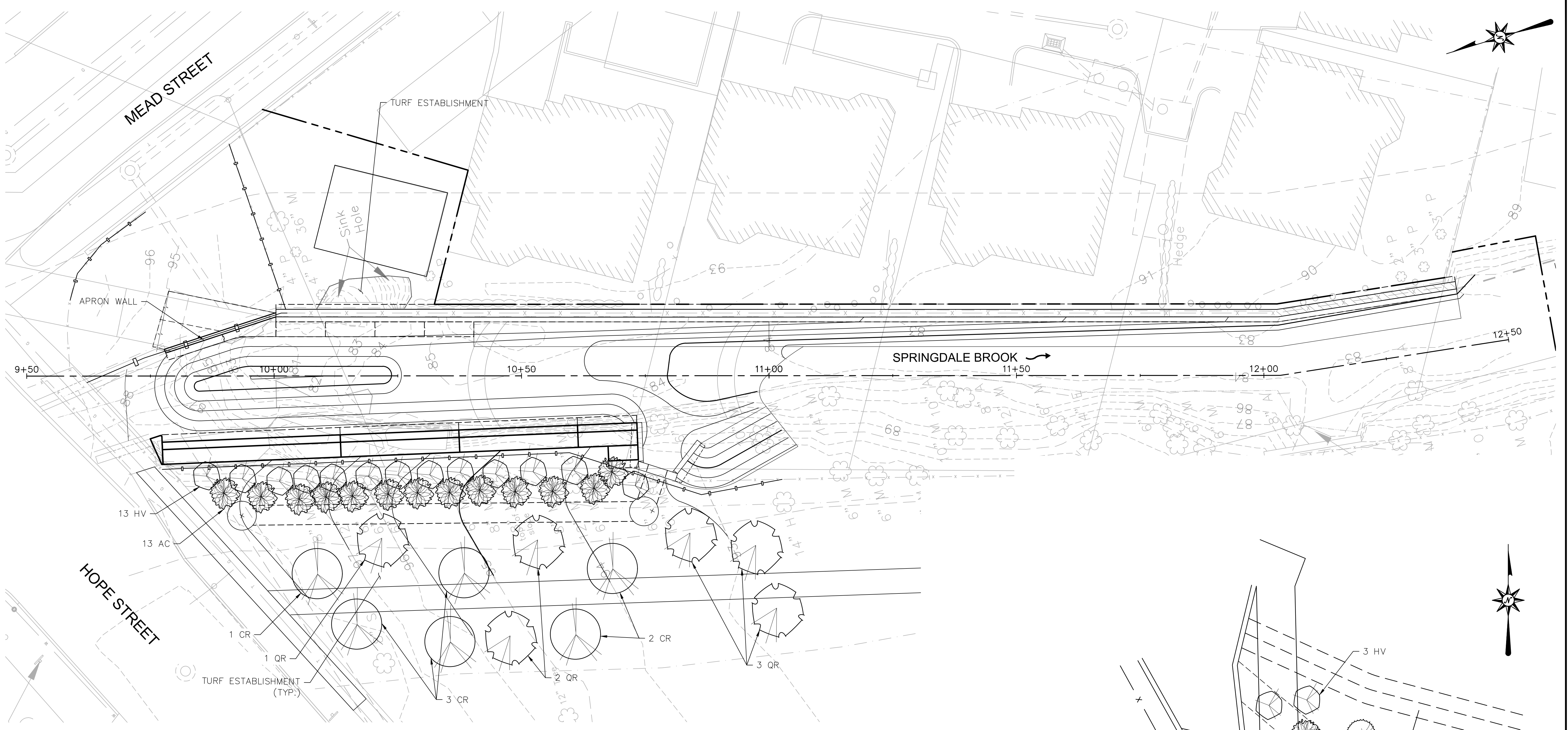


PLAN

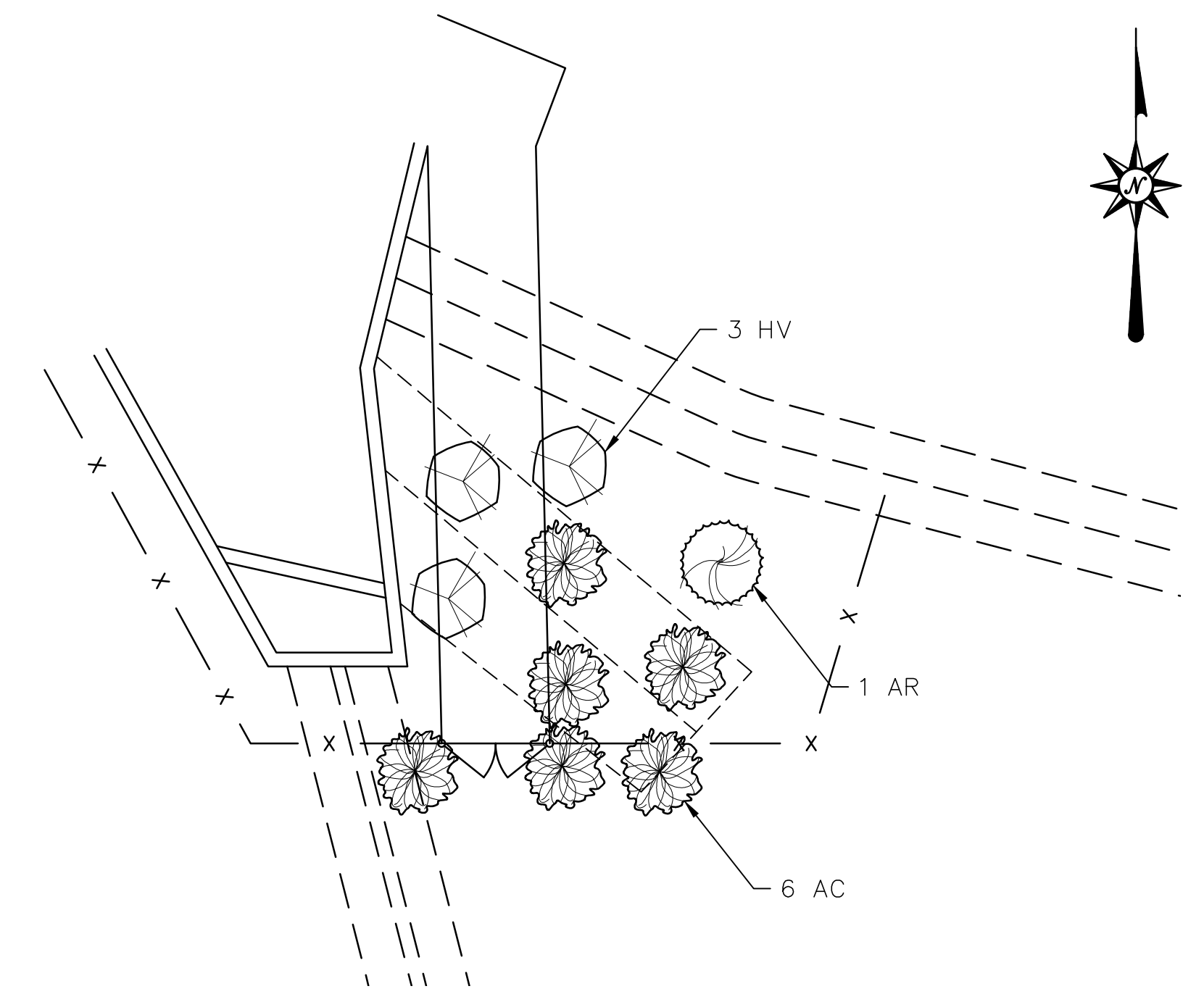
ROCK WEIR

N.T.S.

**SPRINGDALE BROOK
CHANNEL WALL STABILIZATION
STAMFORD, CONNECTICUT**

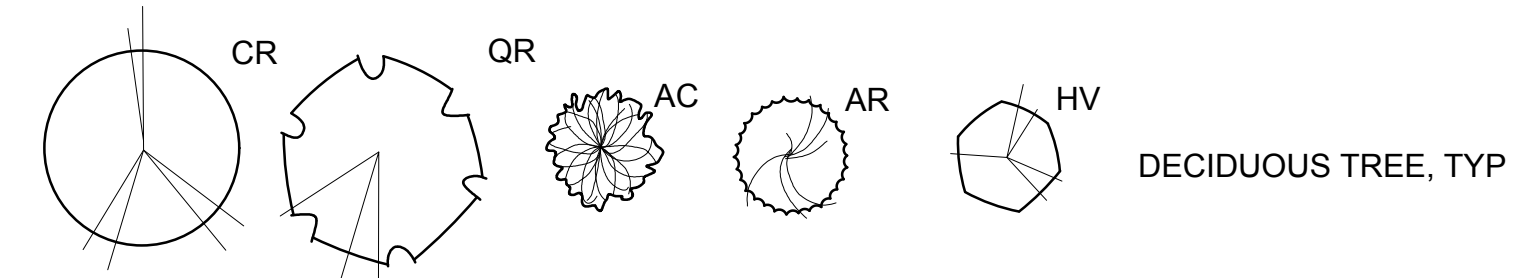


PLAN
SCALE: 1" = 10'-0"



UPSTREAM CULVERT PLAN
SCALE: N.T.S.

PLANTING LEGEND:



PLANT SCHEDULE:

KEY	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	COMMENTS
QR	6	Quercus Rubra	NORTHERN RED OAK	-	-	-
AC	19	Amelanchier Canadensis	SHADBLOW SERVICEBERRY	-	-	-
HV	16	Hamamelis Viriniana	WITCH HAZEL	-	-	-
CR	6	Cornus Racemosa	GRAY DOGWOOD	-	-	-
AR	1	Acer Rubrum	RED MAPLE	-	-	-

7/6/2018, QMASTRANO, G., VASIS, V., 14C52050, DWG, RES-1, 24X36, AS NOTED. Xref (s) : BD14C52050-101 ; XBR14C5205-01 ; XBR14C5205-311 ; XBR14C5205-211 ; X214C520502 ; XBR14C5205-501 ; XBR14C5205-901

REVISIONS	No.	Date	Desc.
Designed			K.L.
Drawn			J.M.O.
Checked			D.Q.
Approved			
Scale			AS NOTED
Project No.			14C5205
Date			7/6/18
CAD File:			TRES14C520501

SITE RESTORATION PLAN

Sheet No.

RES-1

Revisions	No.	Date	Desc.

Designed	A.J.F.
Drawn	J.M.O.
Checked	D.Q.
Approved	
Scale	N.T.S.
Project No.	14C5205
Date	7/6/18
CAD File:	TCS14C520501

Title
CONSTRUCTION SEQUENCE PLAN - 1

Sheet No.

CS-1

GENERAL NOTES

- SEE SHEET NO. GPN-1, "GENERAL PLAN", FOR CHANNEL REFERENCE LINE GEOMETRY.
- SEE SHEET NO. CS-3, "CONSTRUCTION SEQUENCE DETAILS", FOR TEMPORARY BYPASS PIPE SUPPORT SYSTEM" DETAIL.
- TEMPORARY ACCESS PATH AND ANTI-TRACKING PAD IN THE "UPSTREAM CULVERT PLAN" DETAIL SHALL BE INCLUDED IN THE PAY ITEM "TEMPORARY CONSTRUCTION ACCESS ROAD".
- CLEANING OF THE EXISTING CULVERT TO THE LIMITS SHOWN ON THE "UPSTREAM CULVERT PLAN" DETAIL SHALL BE INCLUDED FOR PAYMENT UNDER THE ITEM "CLEARING AND GRUBBING".
- REMOVAL OF CHAIN LINK FENCE GATE SHALL BE INCLUDED FOR PAYMENT UNDER THE ITEM "REMOVE CHAIN LINK FENCE".
- CONTRACTOR SHALL DETERMINE THE SIZE AND NUMBER OF BYPASS HOSES TO BE UTILIZED TO CONVEY THE TEMPORARY HYDRAULIC FLOWS.

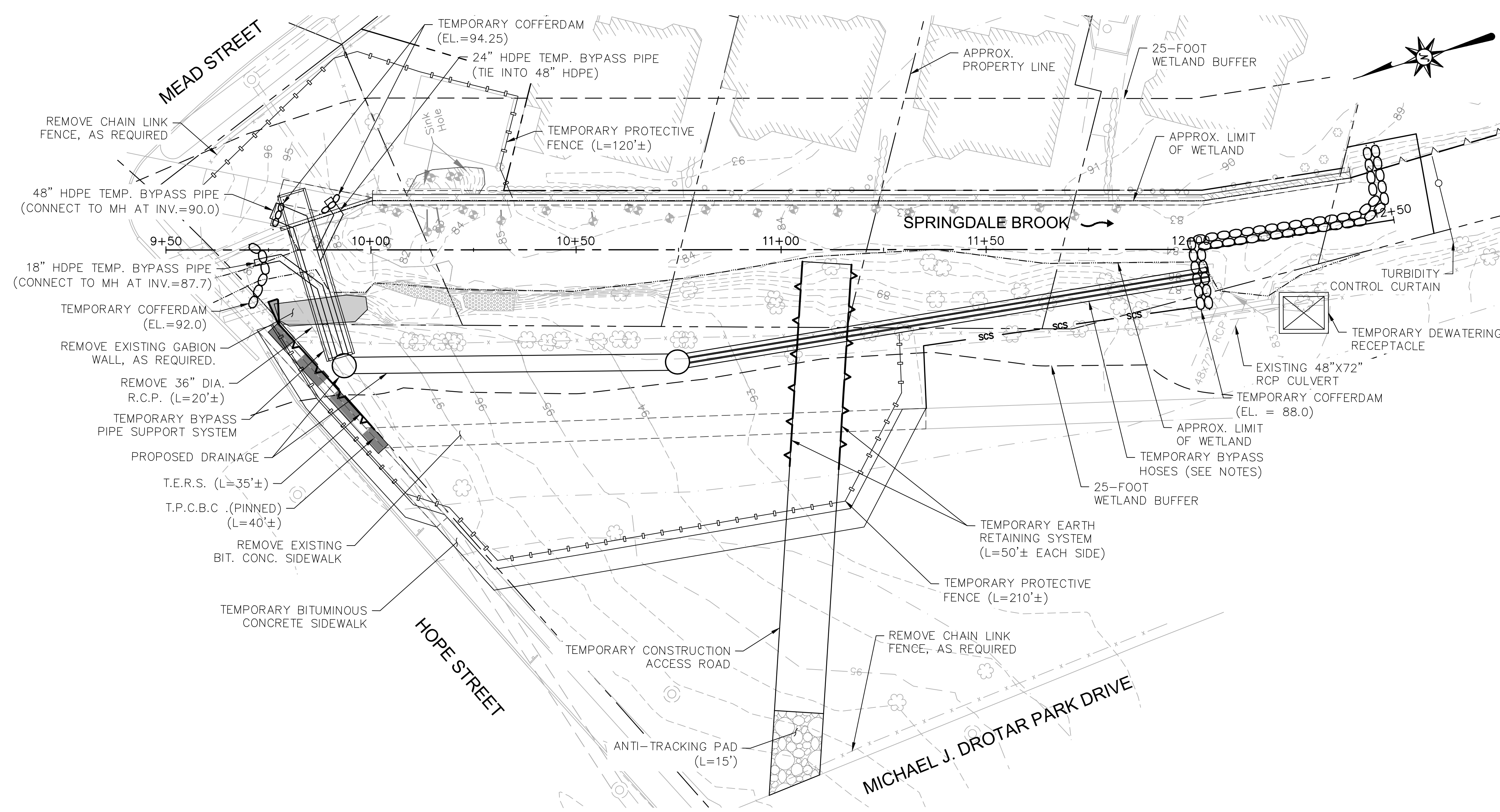
CONSTRUCTION STAGING & WATER HANDLING NOTES

- THE FOLLOWING CONSTRUCTION SEQUENCE IS A SUGGESTED PROCEDURE. THE METHODS AND SEQUENCE OF CONSTRUCTION IS BASED ON MINIMIZING IMPACTS TO THE BROOK AND TO ADJACENT PROPERTIES. IT IS ASSUMED THAT EQUIPMENT ON CRAWLERS WILL BE USED AND WILL BE INITIALLY STAGED AT THE NORTHEAST SECTION OF THE MICHAEL J. DROTAR PARK. ANY PROPOSED CHANGES TO THE SUGGESTED CONSTRUCTION SEQUENCE AND CONSTRUCTION SCHEME BY THE CONTRACTOR SHALL BE REVIEWED BY THE ENGINEER FOR REGULATORY PERMIT COMPLIANCE, REQUIREMENTS, AND RESTRICTIONS.
- THE CONTRACTOR SHALL SUBMIT DETAILED WORKING DRAWINGS FOR ITS PROPOSED CONSTRUCTION SEQUENCE. THE WORKING DRAWINGS SHALL BE PREPARED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CONNECTICUT. THE CONTRACTOR'S CONSTRUCTION SEQUENCE PLANS SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING DETAILS: BYPASS PIPE LAYOUT AND SUPPORT, TEMPORARY COFFERDAM AND DEWATERING, TEMPORARY ACCESS RAMP, AND ANTI-TRACKING PADS.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY GRADING FOR THE TEMPORARY ACCESS RAMP AS REQUIRED BY ITS EQUIPMENT THAT NEEDS TO BE STAGED WITHIN THE BROOK. NO ADDITIONAL PAYMENT SHALL BE MADE FOR TEMPORARY WORK REQUIRED FOR THE CONTRACTOR'S MEANS AND METHODS AND PROPOSED CONSTRUCTION SEQUENCE. COST OF TEMPORARY WORK, INCLUDING FURNISHING, INSTALLING COMPACTED GRAVEL WORKING MAT AND INSTALLING TEMPORARY ANTI-TRACKING PADS AND TEMPORARY GRADING, IF ANY, SHALL BE CONSIDERED INCIDENTAL TO THE ITEM "TEMPORARY CONSTRUCTION ACCESS ROAD".
- CONTRACTOR'S PROPOSED CONSTRUCTION SEQUENCE AND EQUIPMENT STAGING PLAN SHALL ENSURE THAT THE DRIVEWAY AND SIDEWALK LEADING TO THE MICHAEL J. DROTAR PARK SHALL REMAIN OPEN AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
- BEST MANAGEMENT PRACTICES (BMP) SHALL BE UTILIZED AS APPROPRIATE AND SHALL BE CONSISTENT WITH THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
- CONSTRUCTION ACTIVITIES SHALL CONFORM TO SECTION 1.10 ENVIRONMENTAL COMPLIANCE, OF THE FORM 817.

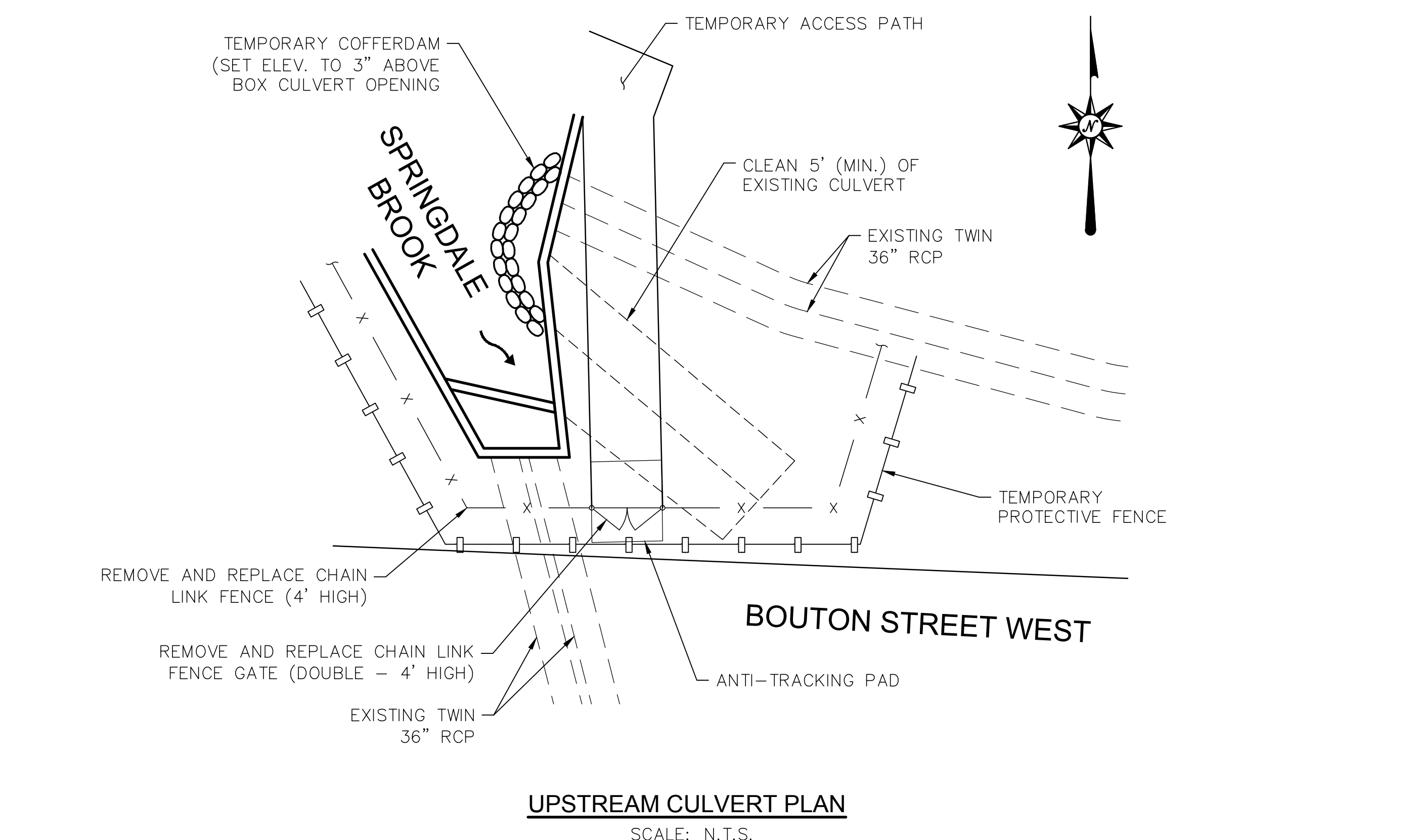
SUGGESTED SEQUENCE OF CONSTRUCTION

STAGE I:

- INSTALL SEDIMENTATION AND EROSION CONTROL MEASURES, AS SHOWN.
- PERFORM CLEARING AND GRUBBING AND INSTALL PROTECTIVE FENCE AND TEMPORARY SIDEWALK, AS SHOWN.
- TRENCH EXCAVATE AND INSTALL XX-XX" DIAMETER TEMPORARY BYPASS HOSES, THE PROPOSED 48" STORM DRAINAGE PIPE, AND THE PROPOSED MANHOLES. REMOVE THE 36" DIAMETER R.C.P. DRAINAGE PIPE AS REQUIRED FOR THE INSTALLATION OF THE MANHOLE.
- INSTALL TEMPORARY CONSTRUCTION ACCESS ROAD AND TEMPORARY EARTH RETAINING SYSTEM, AS SHOWN.
- INSTALL TEMPORARY BYPASS PIPES AND SUPPORT SYSTEM, AS SHOWN. REMOVE GABION WALL, AS REQUIRED, AND THE REMAINING 36" DIAMETER R.C.P. TO PERFORM THIS WORK.
- INSTALL COFFERDAM AT THE INLET AND OUTLET OF THE TWIN CELL BOX CULVERT, BENEATH THE HOPE BRIDGE, AND AT THE DOWNSTREAM END OF THE PROJECT SITE, AS SHOWN.



STAGE I
SCALE: N.T.S.



UPSTREAM CULVERT PLAN
SCALE: N.T.S.

LEGEND	
	— SCS — SEDIMENTATION CONTROL SYSTEM
	— TEMPORARY EARTH RETAINING SYSTEM (T.E.R.S.)
	— TEMPORARY COFFERDAM
	— TEMPORARY PRECAST CONCRETE BARRIER CURB (T.P.C.B.C.) (PINNED)
	— TEMPORARY DEWATERING RECEPTACLE

TEMPORARY HYDRAULIC DATA SPRINGDALE BROOK	
TEMPORARY DESIGN FREQUENCY	2 year
TEMPORARY DESIGN DISCHARGE	150 cfs

REVISIONS	No.	Date	Desc.

Designed	A.J.F.
Drawn	J.M.O.
Checked	D.Q.
Approved	
Scale	N.T.S.
Project No.	14C5205
Date	7/6/18
CAD File:	TCS14C520502

Title
**CONSTRUCTION
SEQUENCE
PLAN - 2**

Sheet No.

CS-2

GENERAL NOTES

- SEE SHEET NO. CS-1, "CONSTRUCTION SEQUENCE PLAN-1", FOR CONSTRUCTION STAGING AND WATER HANDLING NOTES.

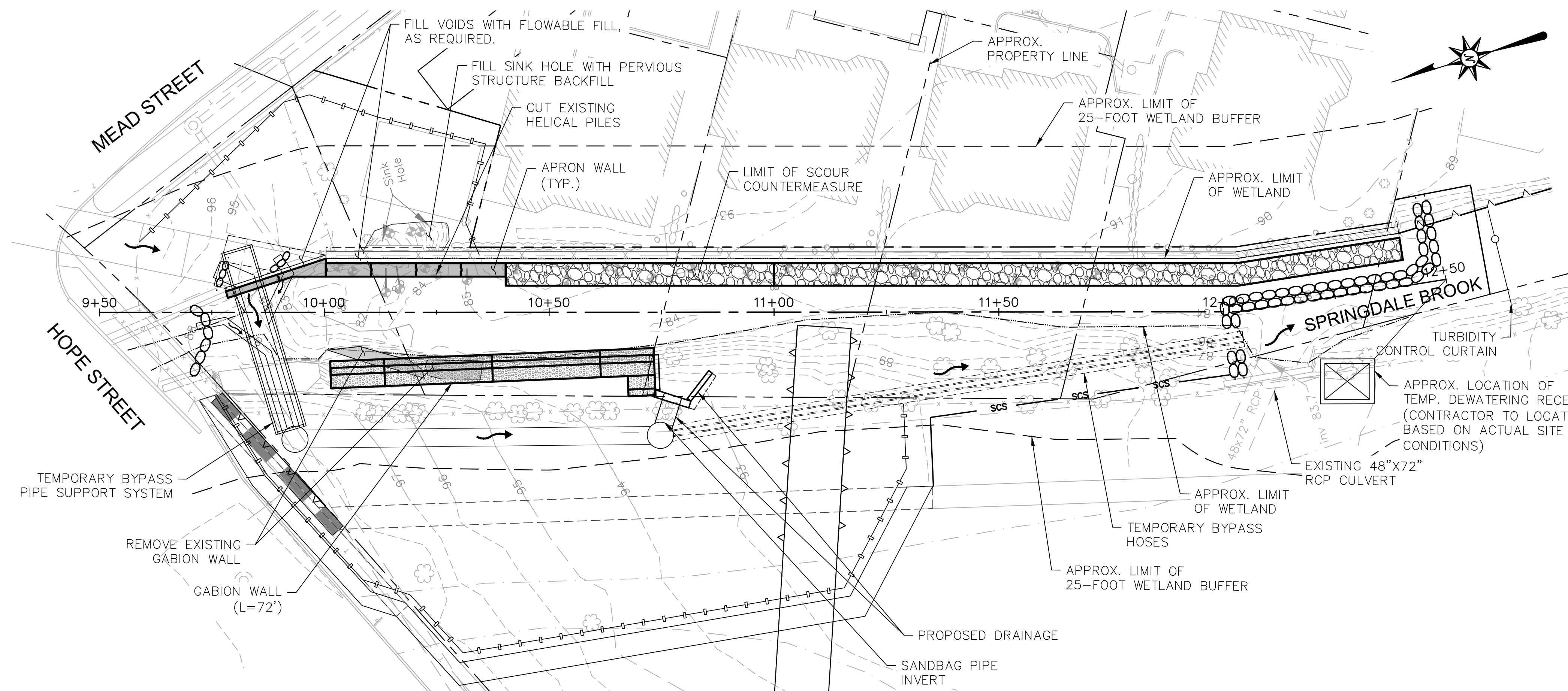
SUGGESTED SEQUENCE OF CONSTRUCTION

STAGE II:

- INSTALL GROUT BAGS AND FILL VOIDS BENEATH THE CHANNEL WALL AND TWIN-CELL BOX CULVERT.
- CUT HELICAL PILES AND CONSTRUCT CONCRETE APRON WALL, AS SHOWN.
- FILL EXISTING SINK HOLE.
- INSTALL PROPOSED DRAINAGE INCLUDING THE 48" DIAMETER R.C.P. AND STANDARD WING TYPE ENDWALL. PLACE SANDBAGS WITHIN THE ENDWALL AND/OR R.C.P. TO ELIMINATE OUTLET FLOW DURING CONSTRUCTION.
- REMOVE REMAINING EXISTING GABION WALL AND CONSTRUCT PROPOSED GABION WALL TO THE LIMITS SHOWN. BASKETS ADJACENT TO THE ENDWALL SHALL BE MODIFIED TO FOLLOW THE BATTER OF THE WINGWALLS.
- INSTALL SCOUR COUNTERMEASURE ALONG THE CHANNEL WALL AND APRON WALL.

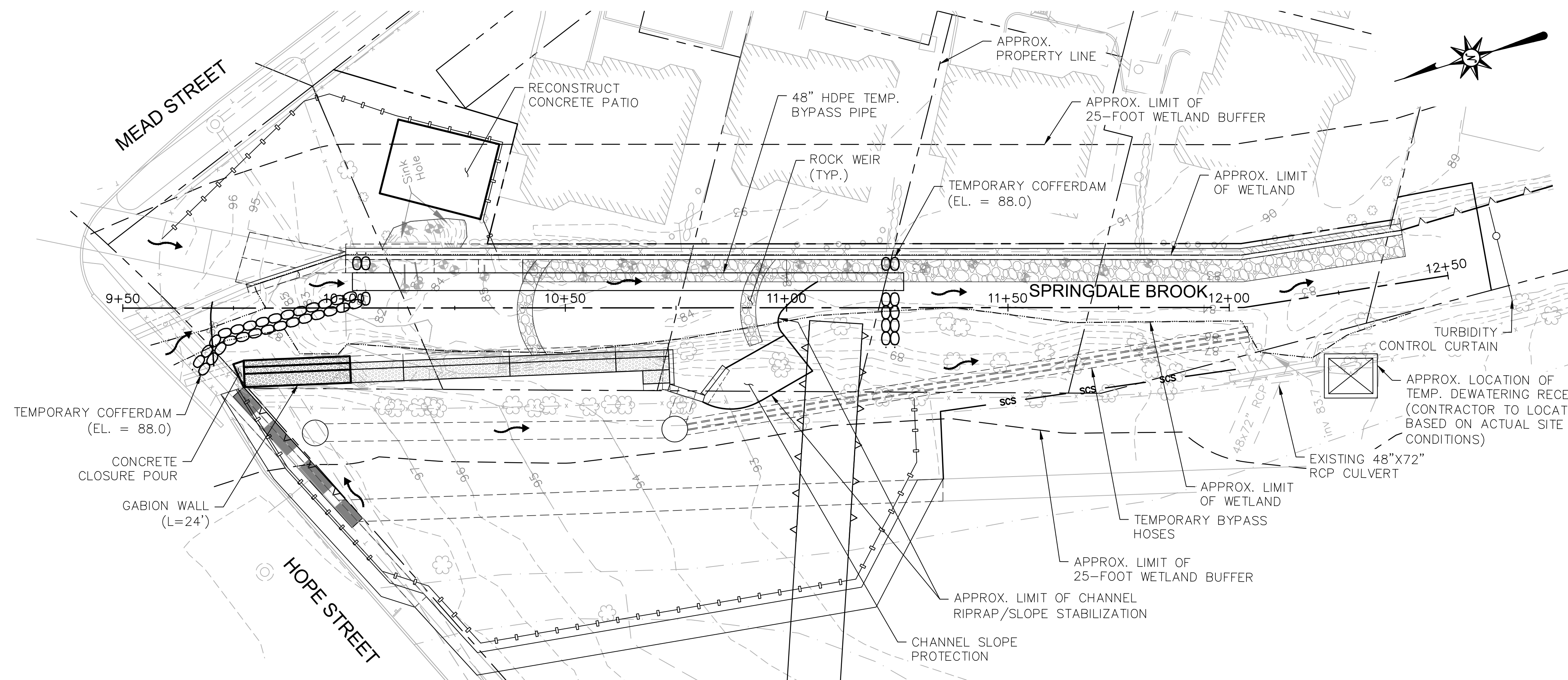
STAGE III:

- RELOCATE THE TEMPORARY COFFERDAMS AND INSTALL THE 48" DIAMETER HDPE BYPASS PIPE, AS SHOWN. REMOVE THE TEMPORARY BYPASS PIPE SUPPORT SYSTEM AND PIPES.
- CONSTRUCT REMAINING GABION WALL.
- DRILL AND GROUT DOWELS INTO THE EXISTING PEDESTRIAN BRIDGE ABUTMENT AND CONSTRUCT THE CONCRETE CLOSURE POUR.
- PERFORM FINAL CHANNEL BED GRADING. INSTALL RIPRAP MIXTURE, ROCK WEIRS, AND CHANNEL SLOPE STABILIZATION.
- REMOVE TEMPORARY COFFERDAMS AND BYPASS PIPES.
- REMOVE TEMPORARY EARTH RETAINING SYSTEM.
- REMOVE TEMPORARY CONSTRUCTION ACCESS ROADS, SIDEWALKS, AND PROTECTIVE FENCING.
- RECONSTRUCT SIDEWALKS AND CONCRETE PATIO.
- BEGIN SITE RESTORATION: PERFORM FINAL GRADING, INSTALL TURF ESTABLISHMENT, SEEDING, PLANTINGS, ETC., AND INSTALL/RESET FENCING.
- REMOVE SEDIMENTATION AND EROSION CONTROL MEASURES.
- PERFORM FINAL SITE CLEAN-UP.



STAGE II

N.T.S.

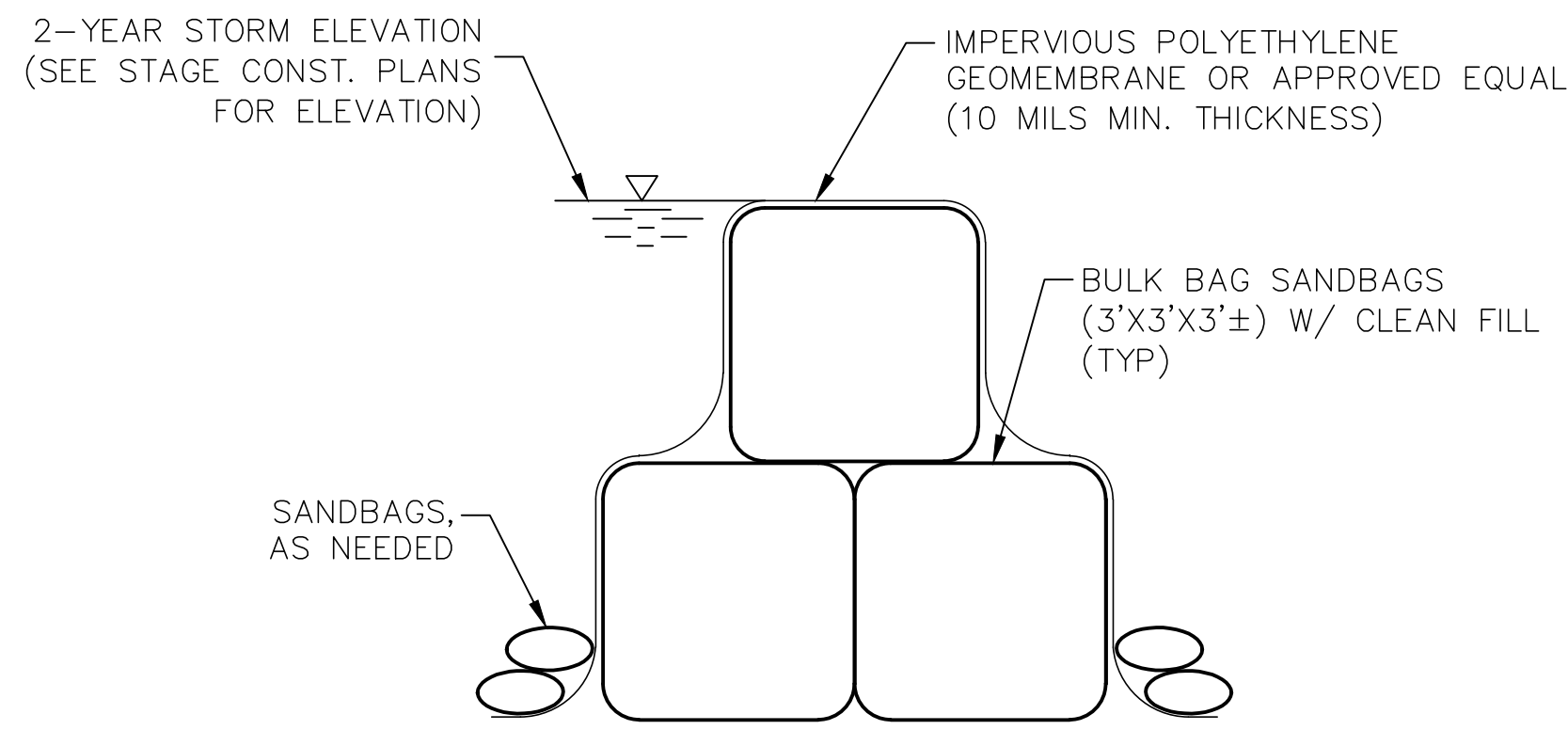


STAGE III

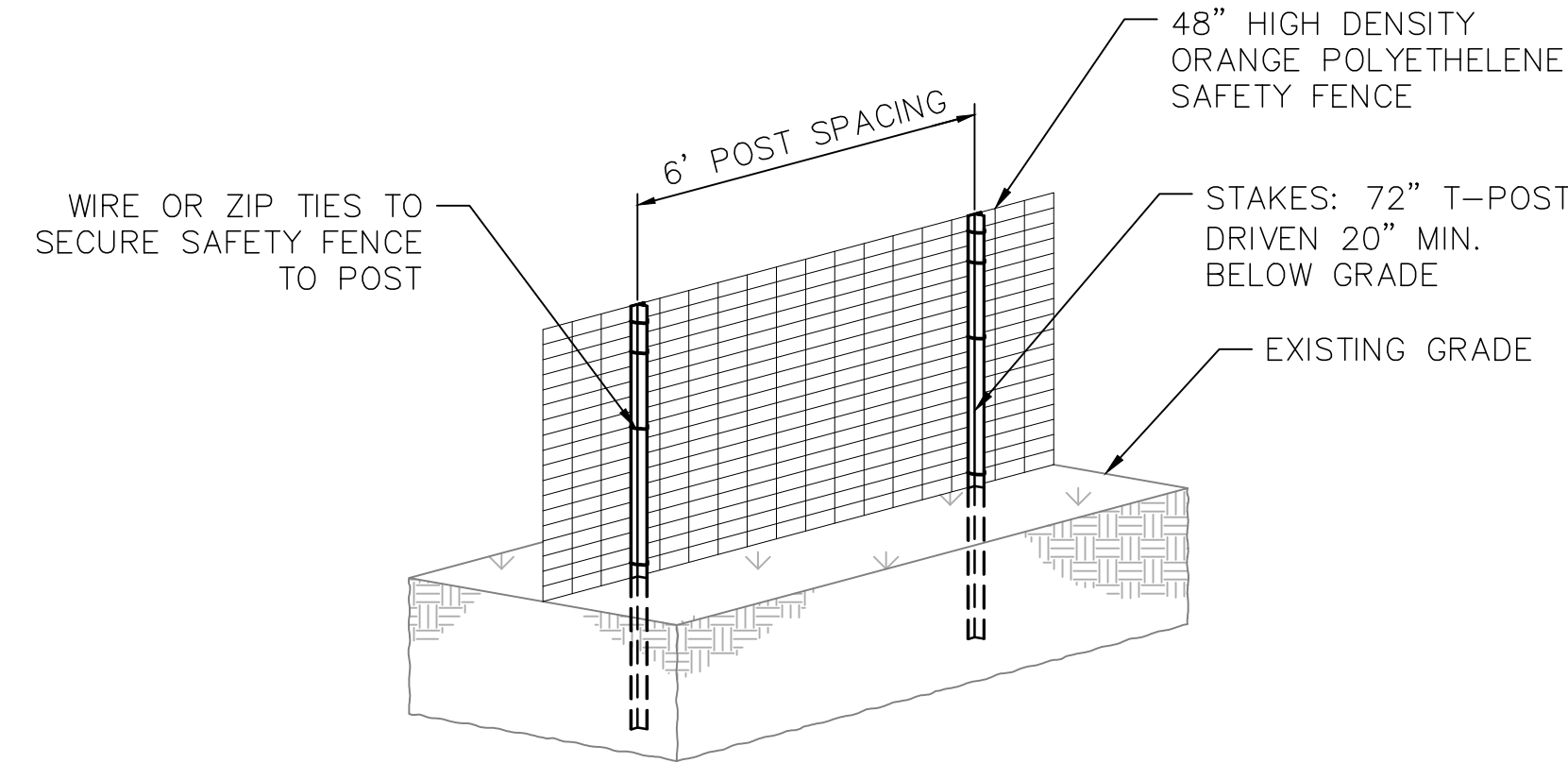
N.T.S.

CONSTRUCTION NOTES

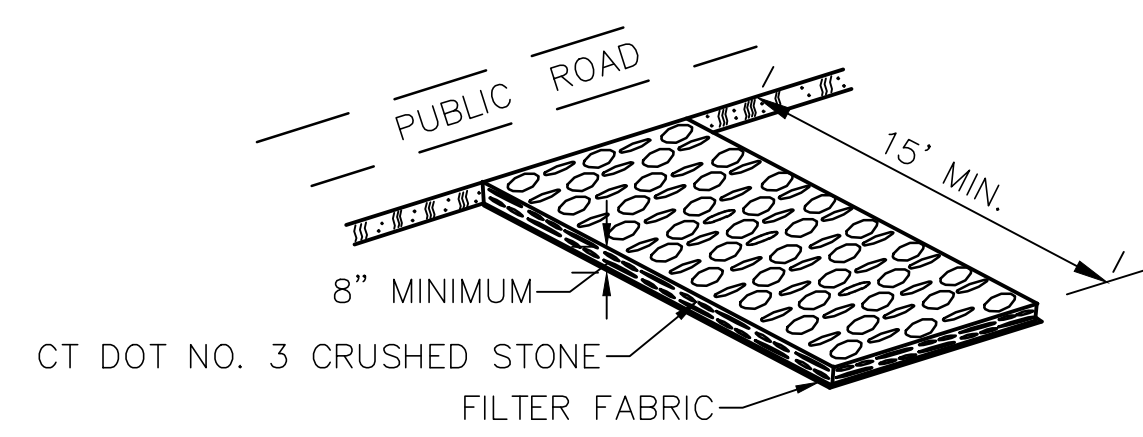
1. ANTI-TRACKING PAD SHALL BE PAID FOR UNDER THE PAY ITEM "TEMPORARY CONSTRUCTION ACCESS ROAD".
2. TEMPORARY BYPASS PIPE SUPPORT SYSTEM SHALL BE INCLUDED IN THE COST OF THE ITEM "HANDLING WATER".



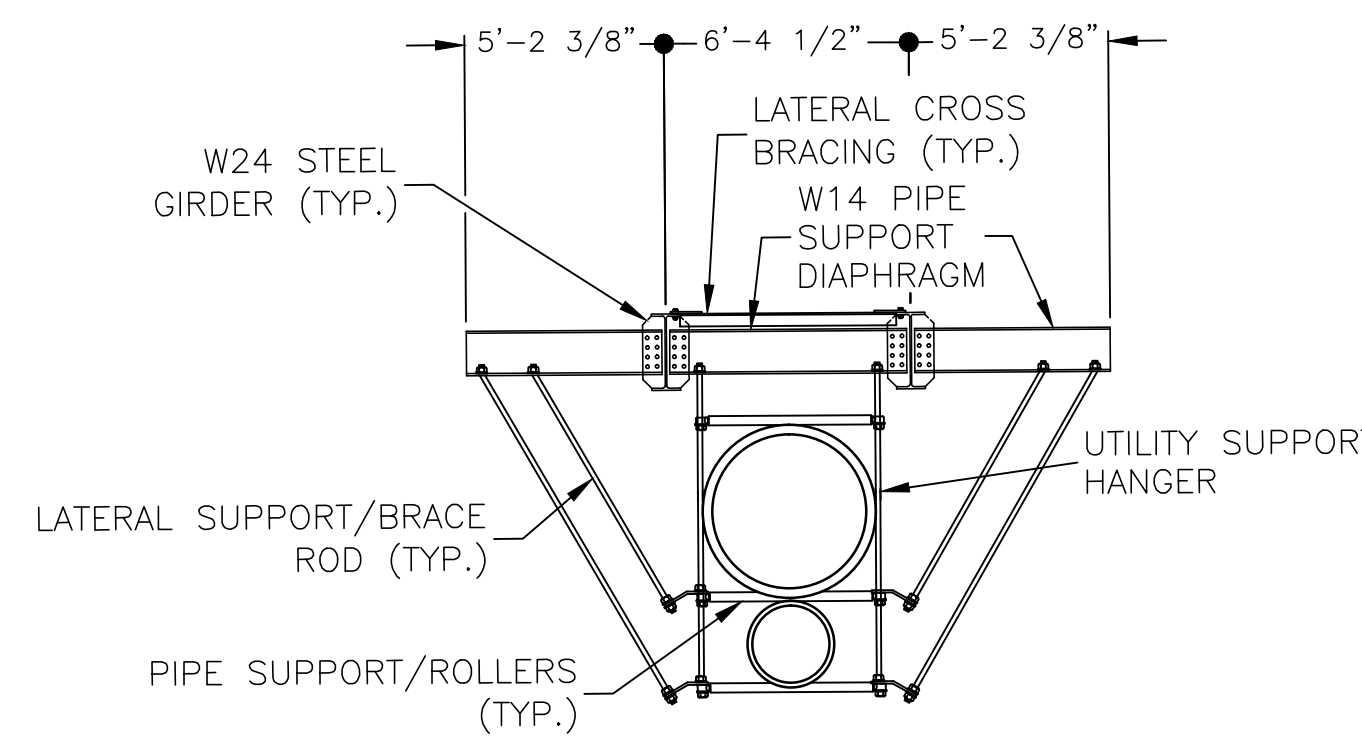
TEMPORARY COFFERDAM
SCALE: N.T.S.



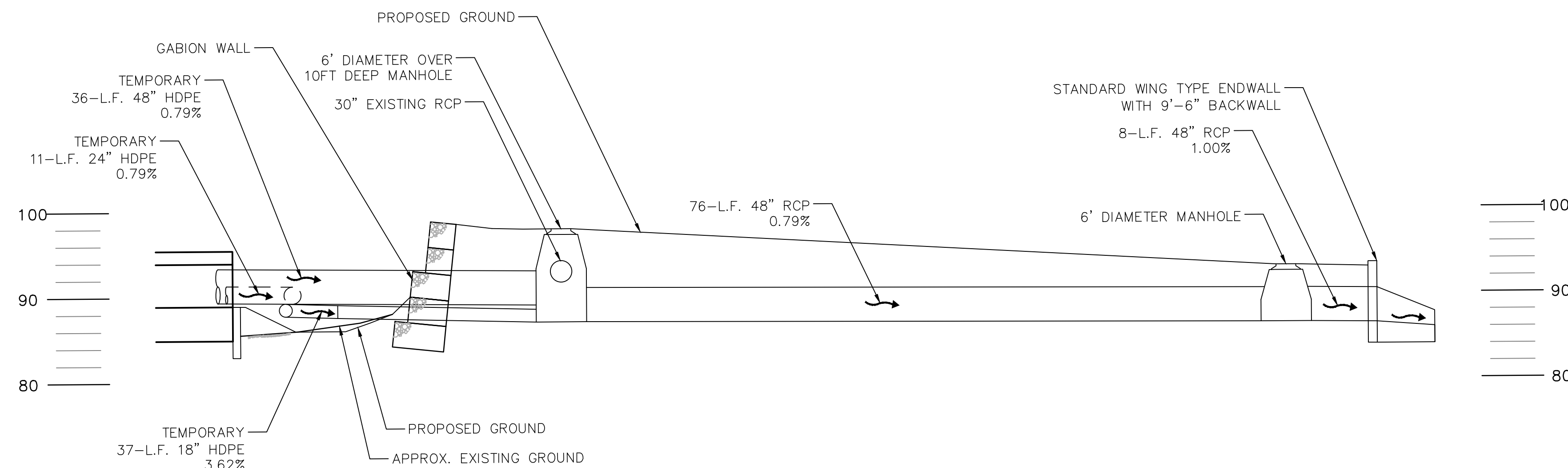
TEMPORARY PROTECTIVE FENCE
SCALE: N.T.S.



CONSTRUCTION ENTRANCE (ANTI-TRACKING PAD)
SCALE: N.T.S.



TEMPORARY BYPASS PIPE SUPPORT SYSTEM
SCALE: N.T.S.



TEMPORARY DRAINAGE PROFILE
SCALE: 1" = 10'-0"

REVISIONS	
No.	Date

Designed	A.J.F.
Drawn	J.M.O.
Checked	D.Q.
Approved	
Scale	AS NOTED
Project No.	14C5205
Date	7/6/18
CAD File:	TCS14C520503

7/5/2018, 14:59:00, G:\JOB\SH\14C5205\DWG\TCS14C520503.DWG, CS-3 24X36, AS NOTED.

EROSION AND SEDIMENT CONTROL PLAN

EROSION AND SEDIMENT CONTROL REFERENCE

1. THE FOLLOWING SEQUENCE REFERENCES THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL", DEP BULLETIN 34, EFFECTIVE MAY 2002. THE CONTRACTOR SHALL REFER TO THIS DOCUMENT AS NECESSARY TO MEET ANY UNFORESEEN SITE CONDITIONS DURING CONSTRUCTION.

2. DESIGN DETAILS FOR THE CONTROL MEASURES ARE INDICATED ON THE CONSTRUCTION PLANS.

PROJECT DESCRIPTION

THE PROJECT INVOLVES STABILIZING AN UNDERMINED SECTION OF CHANNEL WALL ALONG SPRINGDALE BROOK BY CONSTRUCTING A REINFORCED CONCRETE APRON WALL ALONG THE FOOTING AS WELL AS ALONG THE CUTOFF WALL OF THE ADJACENT TWIN-CELL CONCRETE BOX CULVERT. THE PROJECT ALSO INVOLVES CONSTRUCTION OF A GABION WALL, INSTALLATION OF A PARTIALLY GROUTED RIPRAP MIXTURE, CONSTRUCTION OF ROCK WEIRS, AND DRAINAGE IMPROVEMENTS.

MONITORING AND MAINTENANCE REQUIREMENTS

SILT FENCE AND HAYBALES: INSPECT FENCE AND HAYBALES AT LEAST ONCE/WEEK AND WITHIN 24 HOURS OF THE END OF A 0.5 INCH OR GREATER STORM EVENT. REMOVE SEDIMENT DEPOSITS OF 6 INCHES OR MORE. MAINTAIN FENCE INTEGRITY WITH REPAIRS OR REPLACEMENT WITHIN 24 HOURS OF DISCOVERED FAILURE; (2002 CT GUIDELINES, SECTION 5-II-35 FOR SUPPLEMENTAL INFO.)

DEWATERING RECEPTACLES: INSPECT AT LEAST ONCE EVERY TWO HOURS DURING USE. CLEAN RECEPTACLE OF ACCUMULATED SEDIMENT AS NEEDED. DISPOSE OF SEDIMENT OFF-SITE.

REMOVAL OF TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES: CONTROL MEASURES WILL CONTINUE TO BE MAINTAINED UNTIL THE SITE HAS STABILIZED. STABILIZATION IS UNDERSTOOD TO MEAN THAT ALL STORMWATER RUNOFF IS OCCURRING ON SURFACES THAT ARE PERMANENTLY PROTECTED FROM EROSION AND THE PRODUCTION OF SEDIMENT AND THAT THE STORM DRAINAGE SYSTEM IS FUNCTIONING AS DESIGNED.

THE CONTRACTOR SHALL BE RESPONSIBLE TO IMPLEMENT, OPERATE, MONITOR AND PERFORM REQUIRED MAINTENANCE FOR THE E&S CONTROL MEASURES DESCRIBED, SHOWN AND DETAILED ON THE PROJECT CONSTRUCTION DOCUMENTS. FURTHER, THE CONTRACTOR SHALL BE FAMILIAR WITH ALL ASPECTS OF THE NAMED CONTROL MEASURES AND BE RESPONSIBLE FOR THE CORRECTION OF ANY FAILURES BY REPAIR OR MODIFICATION AS MAY BE RECOMMENDED BY AN E&S PROFESSIONAL AND IN COORDINATION WITH ANY APPROVING AGENCIES. SAID CONTRACTOR SHALL HAVE THE ADDITIONAL RESPONSIBILITY OF ENSURING THAT ALL CONTROL MEASURES ARE PROPERLY INSTALLED AND ADEQUATELY MAINTAINED IN ADVANCE OF ANY NOAA WEATHER SERVICE PREDICTION OF IMPENDING SEVERE WEATHER THAT MAY INCLUDE WIND, RAIN AND/OR FLOOD WARNINGS.

THE CITY OF STAMFORD RESERVES THE RIGHT TO REVISE THE EROSION CONTROL PLAN AS CONDITIONS WARRANT. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AT THE DIRECTION OF THE CITY OF NEW HAVEN ZONING ENFORCEMENT OFFICER.

THE FOLLOWING NAMED AGENT SHALL ENSURE THAT THE CONTRACTOR MEETS THESE MONITORING AND MAINTENANCE REQUIREMENTS.

AGENT OF RECORD:

LOUIS CASOLO JR., PE
CITY ENGINEER
ENGINEERING BUREAU
888 WASHINGTON BOULEVARD
STAMFORD, CONNECTICUT 06901

REQUIRED PERMITS

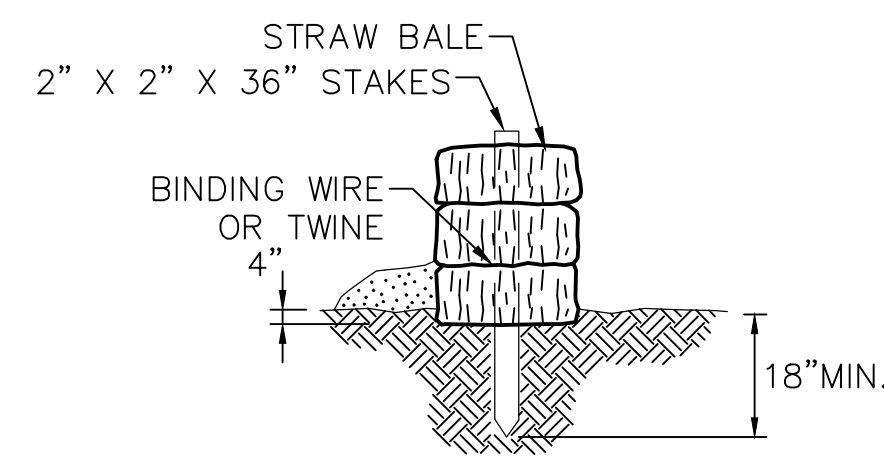
- CITY OF STAMFORD ENVIRONMENTAL PROTECTION BOARD PERMIT TO CONDUCT REGULATED ACTIVITIES
- CTDEEP 401 WATER QUALITY CERTIFICATE
- ACOE SECTION 404 GENERAL PERMIT 19 PRE-CONSTRUCTION NOTIFICATION

EROSION AND SEDIMENT CONTROL

- SURVEY AND FLAG THE LIMITS OF CONSTRUCTION.
- CONDUCT A PRECONSTRUCTION MEETING TO REVIEW THE CONSTRUCTION SCHEDULE AND EROSION & SEDIMENT CONTROL PROCEDURES. THE "CALL BEFORE YOU DIG" NUMBER (1-800-922-4455) SHALL BE NOTIFIED.
- INSTALL PERIMETER SILT FENCE AND OTHER MEASURES IN ACCORDANCE WITH CONSTRUCTION PLANS. ADDITIONAL FENCE WILL BE INSTALLED AS SITE CONDITIONS MAY DICTATE.
- REMOVE AND PROPERLY DISPOSE OF ALL VEGETATION, EXISTING PAVEMENTS AND SITE APPURTENANCES WITHIN THE CONSTRUCTION AREA.

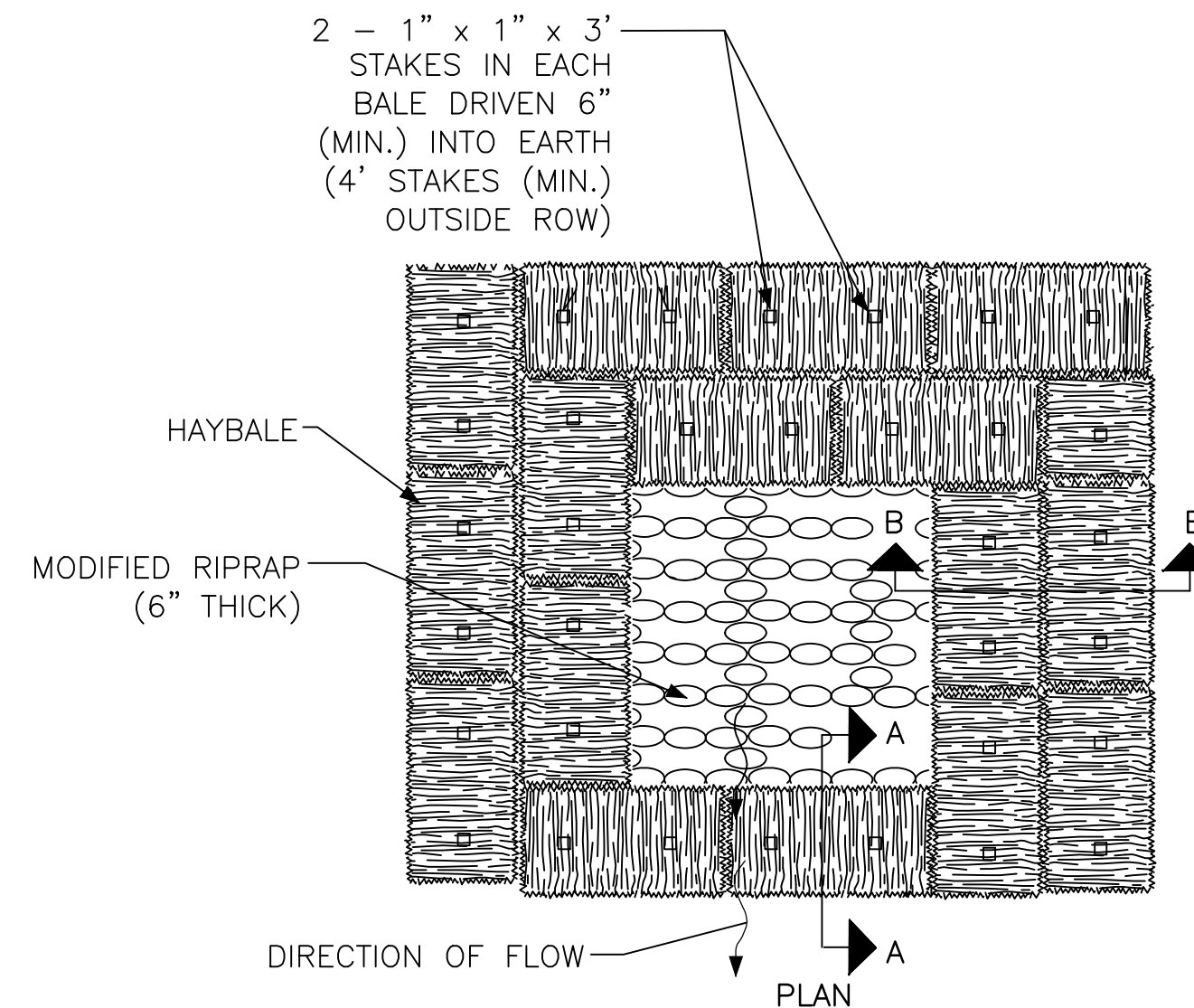
NOTES:

- STRAW BALE BARRIERS SHOULD NOT BE USED FOR MORE THAN 3 MONTHS.
- SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE ABOVE GROUND HEIGHT OF THE BARRIER.
- ANY SECTION OF STRAW BALE BARRIER WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED OR REPAIRED.
- PLACE AND STAKE STRAW BALES, TWO STAKES FOR BALES.
- HAY OR STRAW BALE SHALL BE PAID FOR UNDER THE ITEM "SEDIMENTATION CONTROL SYSTEM".



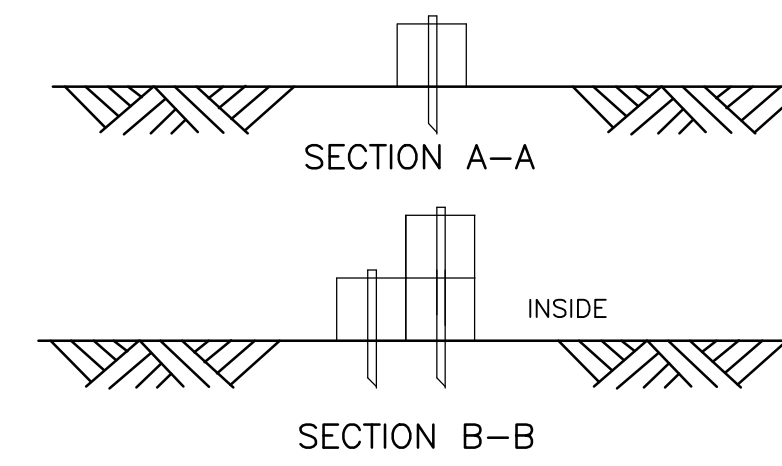
HAY OR STRAW BALE

N.T.S.



TEMPORARY DEWATERING DISCHARGE RECEPTACLE

N.T.S.



NOTES:

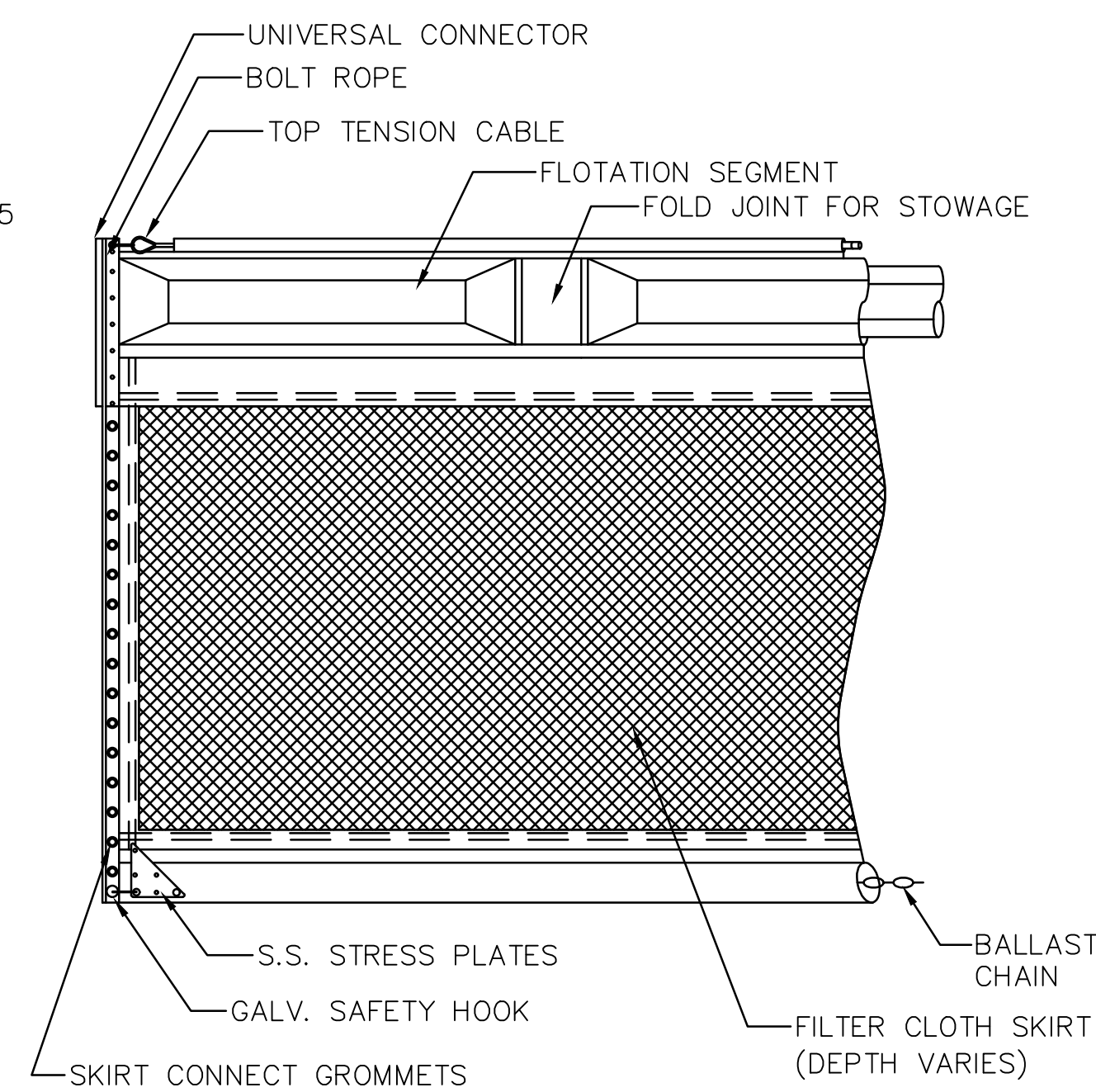
- THE CONTRACTOR SHALL DESIGN THE DEWATERING MEANS AND METHODS. THE CONTRACTOR SHALL PROVIDE A WRITTEN PROPOSAL FOR SPECIFIC METHODS AND DEVICES, INCLUDING DETAILS FOR PUMPS, DISCHARGE RECEPTACLE AND OTHER ASSOCIATED WORK AS REQUIRED BY BEST MANAGEMENT PRACTICES.
- DEWATERING RECEPTACLE SHALL BE PAID FOR UNDER THE ITEM "COFFERDAM AND DEWATERING".
- THE SIZE AND NUMBER OF RECEPTACLES SHALL BE MODIFIED AS REQUIRED BY THE FLOW RATES.
- DEWATERING RECEPTACLE TO BE INSTALLED IN ACCORDANCE WITH THE CT DEEP SOIL EROSION AND SEDIMENT (E&S) GUIDELINES.

NOTES:

- THE CURTAIN SHALL BE DESIGNED FOR A RIVER FLOW VELOCITY OF 5 FT/SEC.
- SEE DRAWING NO. S-4 & S-5 (STAGE CONSTRUCTION PLAN) FOR LAYOUT OF CURTAINS.



SECTION



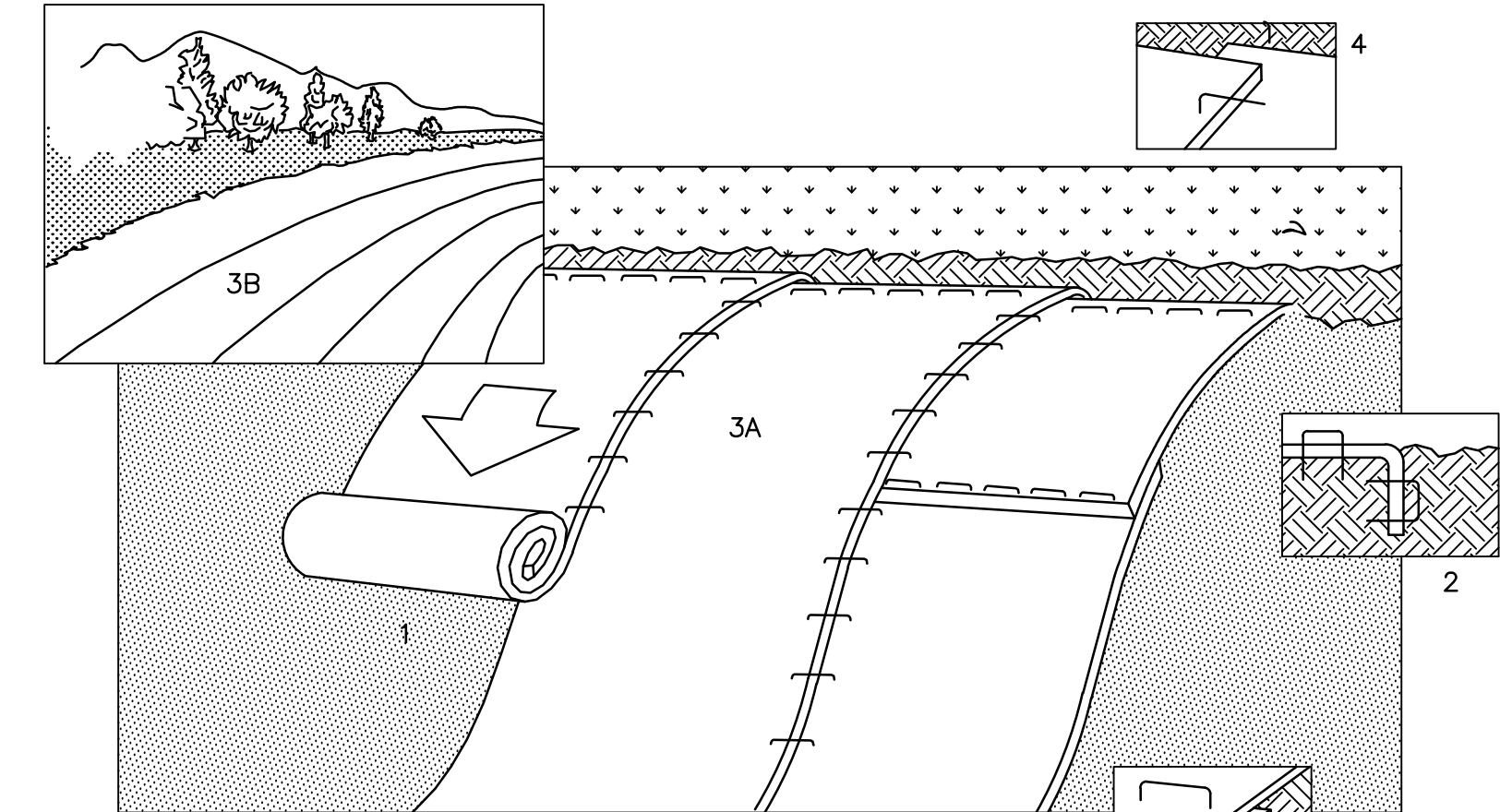
ELEVATION

TURBIDITY CONTROL CURTAIN

N.T.S.

PRODUCT INFORMATION

- MATting MATERIAL: BIODEGRADABLE JUTE FIBER.
- FIBER MATRIX: STRAW.
- BOTTOM NET: JUTE FIBER.
- LONGEVITY: 12 MONTHS.

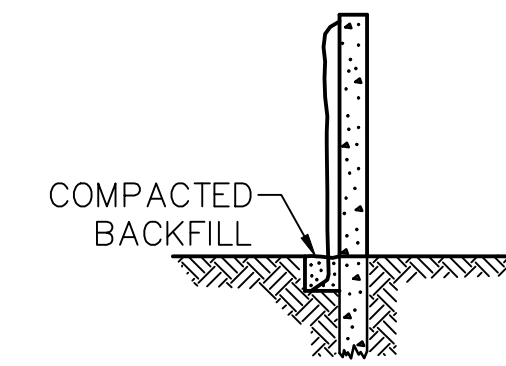
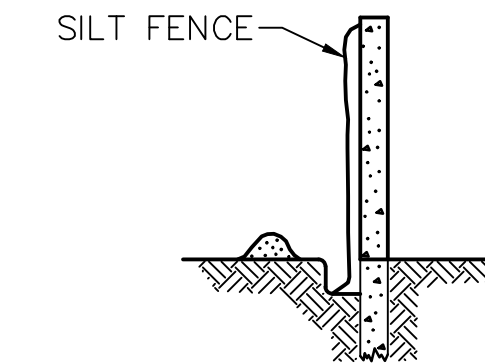
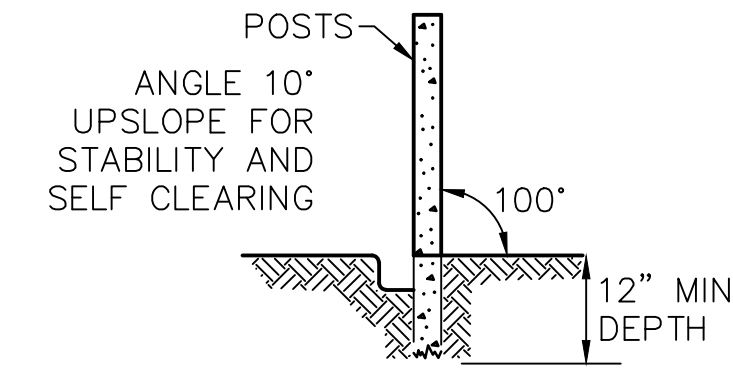


NOTES:

- INSTALL AT SLOPES STEEPER THAN 3:1.
- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
- WHEN BLANKETS MUST BE SPICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.
- EROSION CONTROL BLANKET SHALL BE PAID FOR UNDER THE ITEM "TEMPORARY SLOPE PROTECTION".

EROSION CONTROL BLANKET

N.T.S.



SILT FENCE

N.T.S.

NOTES:

- SET POSTS AND EXCAVATE A 6"X6" TRENCH, SET POST DOWNSLOPE.
- ATTACH FILTER FABRIC TO THE POSTS AND EXTEND IT TO THE TRENCH.
- BACKFILL THE TRENCH AND COMPACT THE EXCAVATED SOIL.
- SILT FENCE SHALL BE PAID FOR UNDER THE ITEM "SEDIMENTATION CONTROL SYSTEM".



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SPRINGDALE BROOK
CHANNEL WALL STABILIZATION
STAMFORD, CONNECTICUT

REVISIONS
No. Date Desc.

Designed A.J.F.
Drawn J.M.O.
Checked D.Q.
Approved
Scale AS NOTED
Project No. 14C5205
Date 7/6/18
CAD File: TEC14C520501

Title
EROSION & SEDIMENTATION CONTROL DETAILS

Sheet No.

EC-1

REVISIONS	No.	Date	Desc.

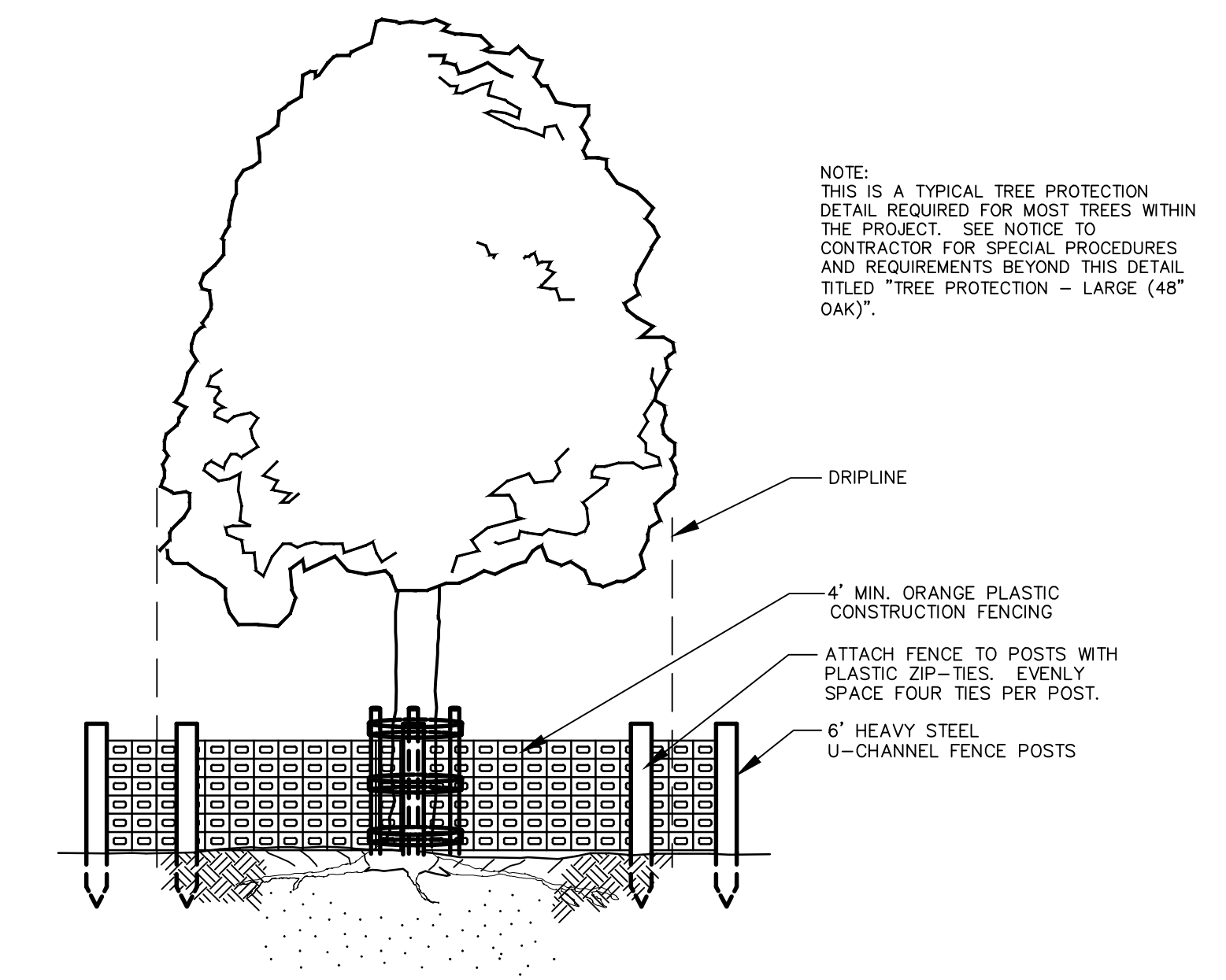
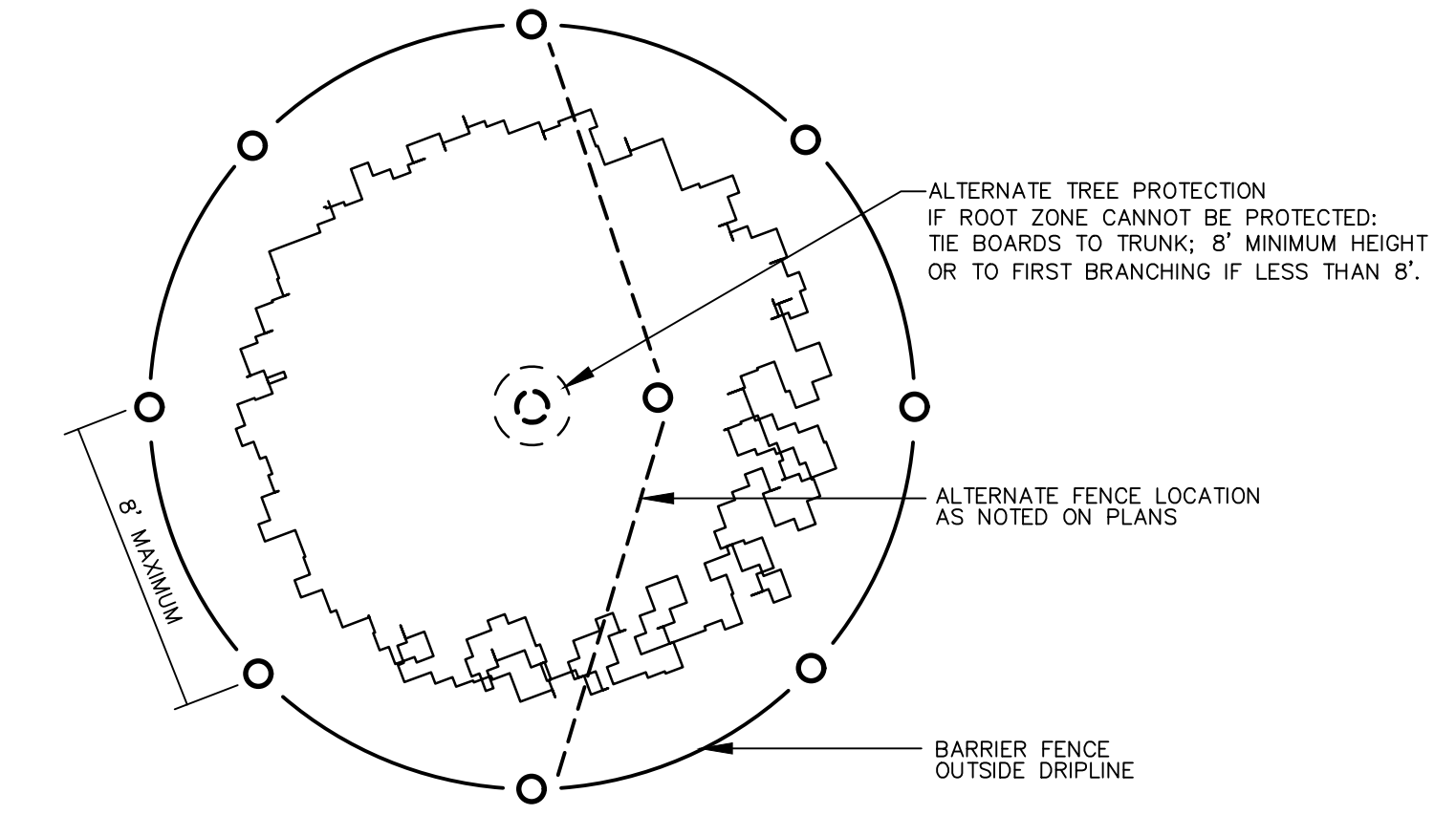
Designed	A.J.F.
Drawn	J.M.O.
Checked	D.Q.
Approved	
Scale	AS NOTED
Project No.	14C5205
Date	7/6/18
CAD File:	TMS14C520501

Title
**MISCELLANEOUS
DETAIL SHEET**

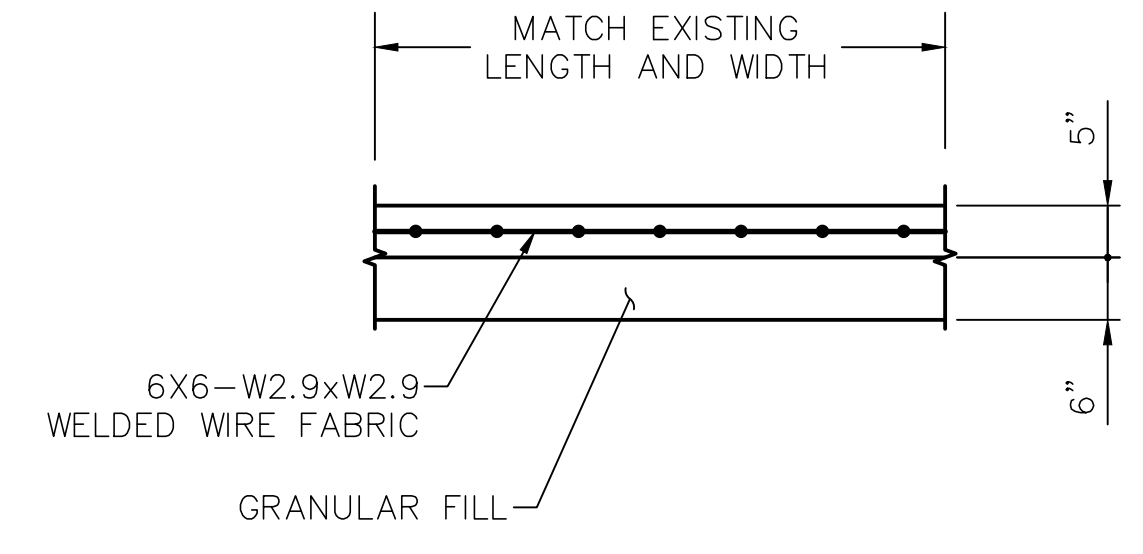
Sheet No.

MDS-1

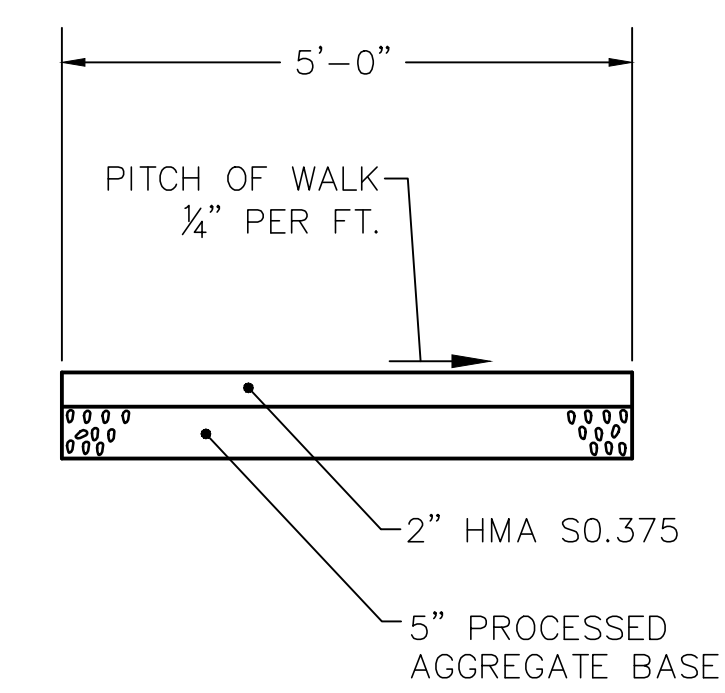
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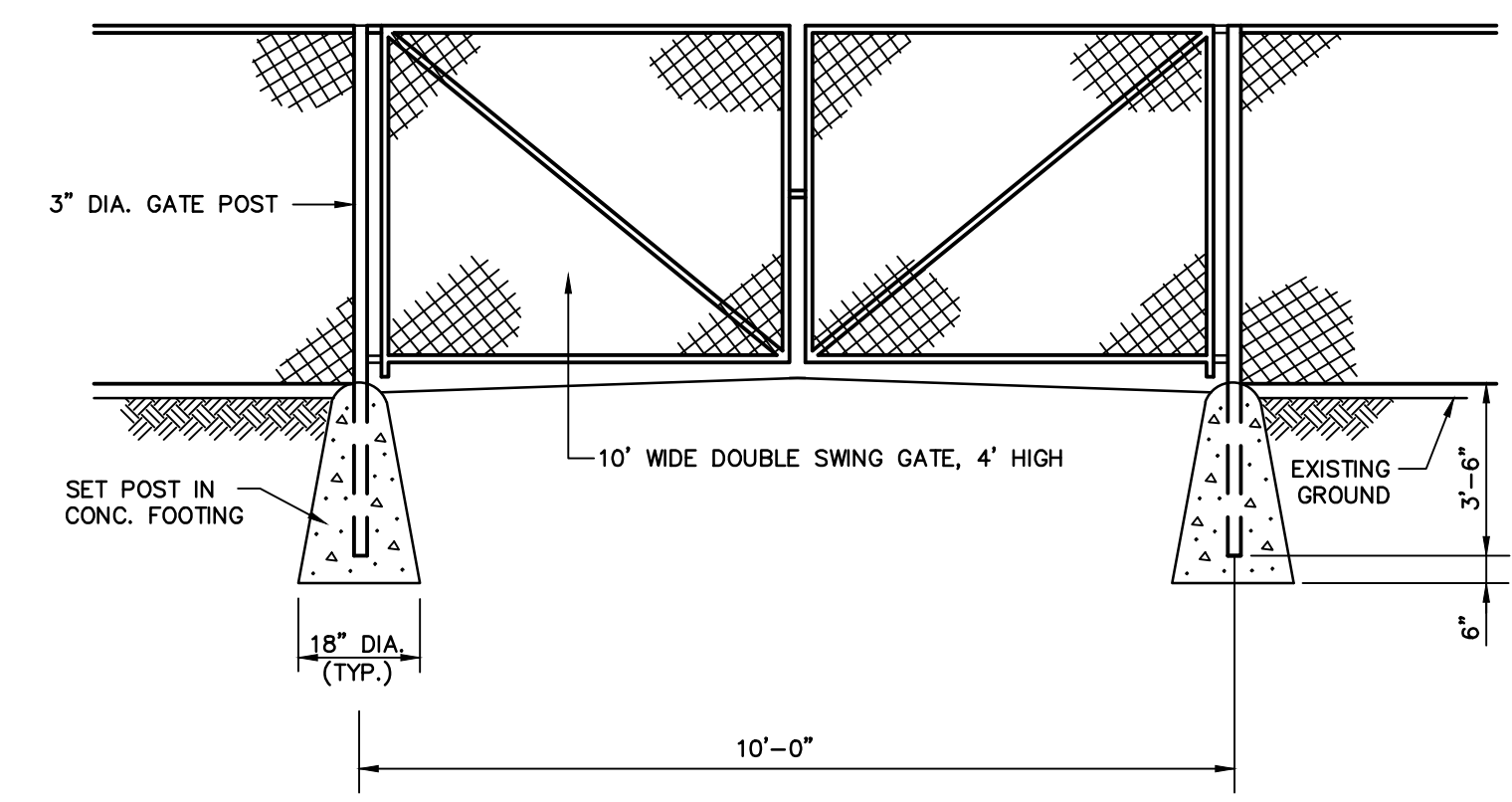
TREE PROTECTION
N.T.S.



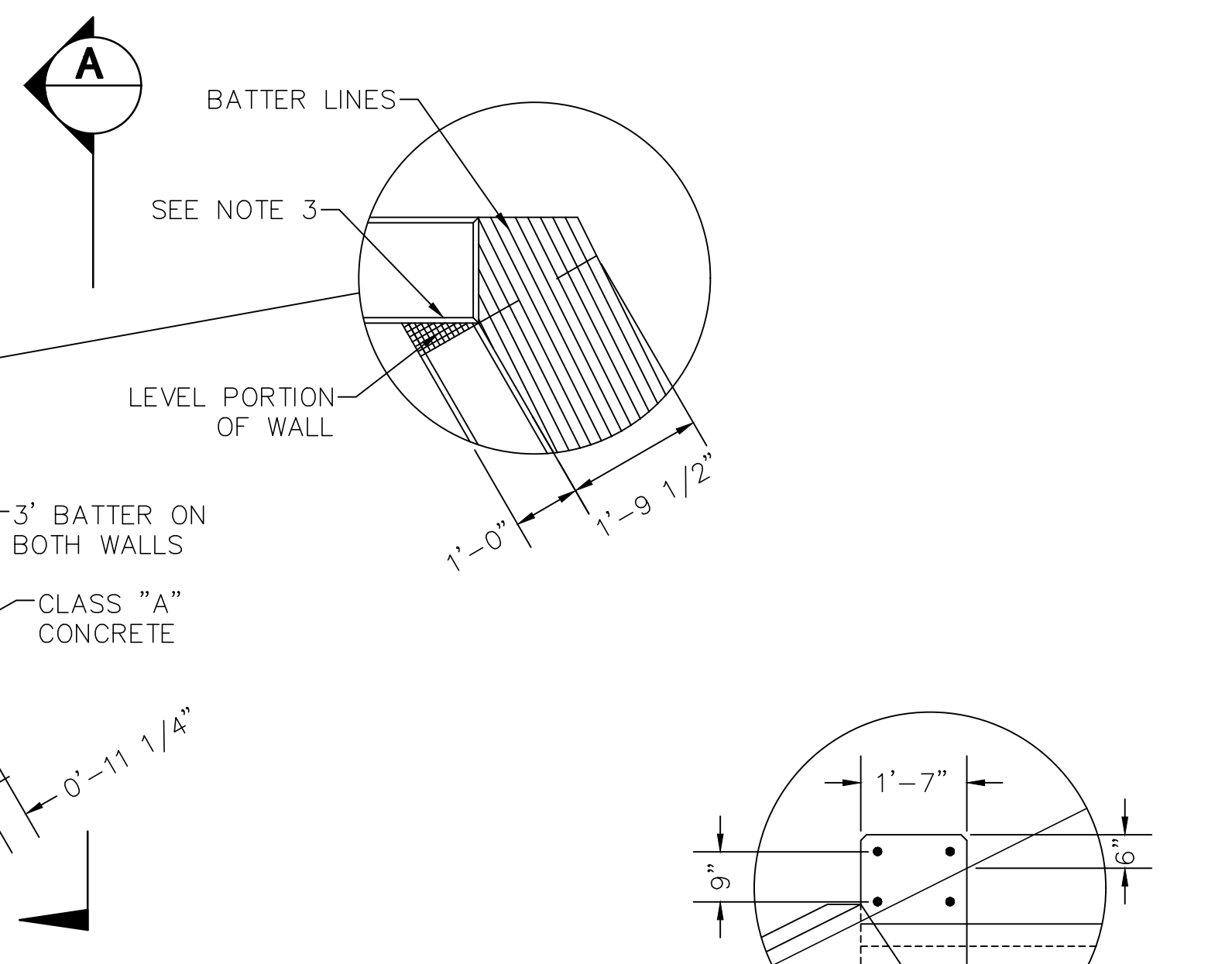
**CONCRETE PATIO
TYPICAL CROSS SECTION**
N.T.S.



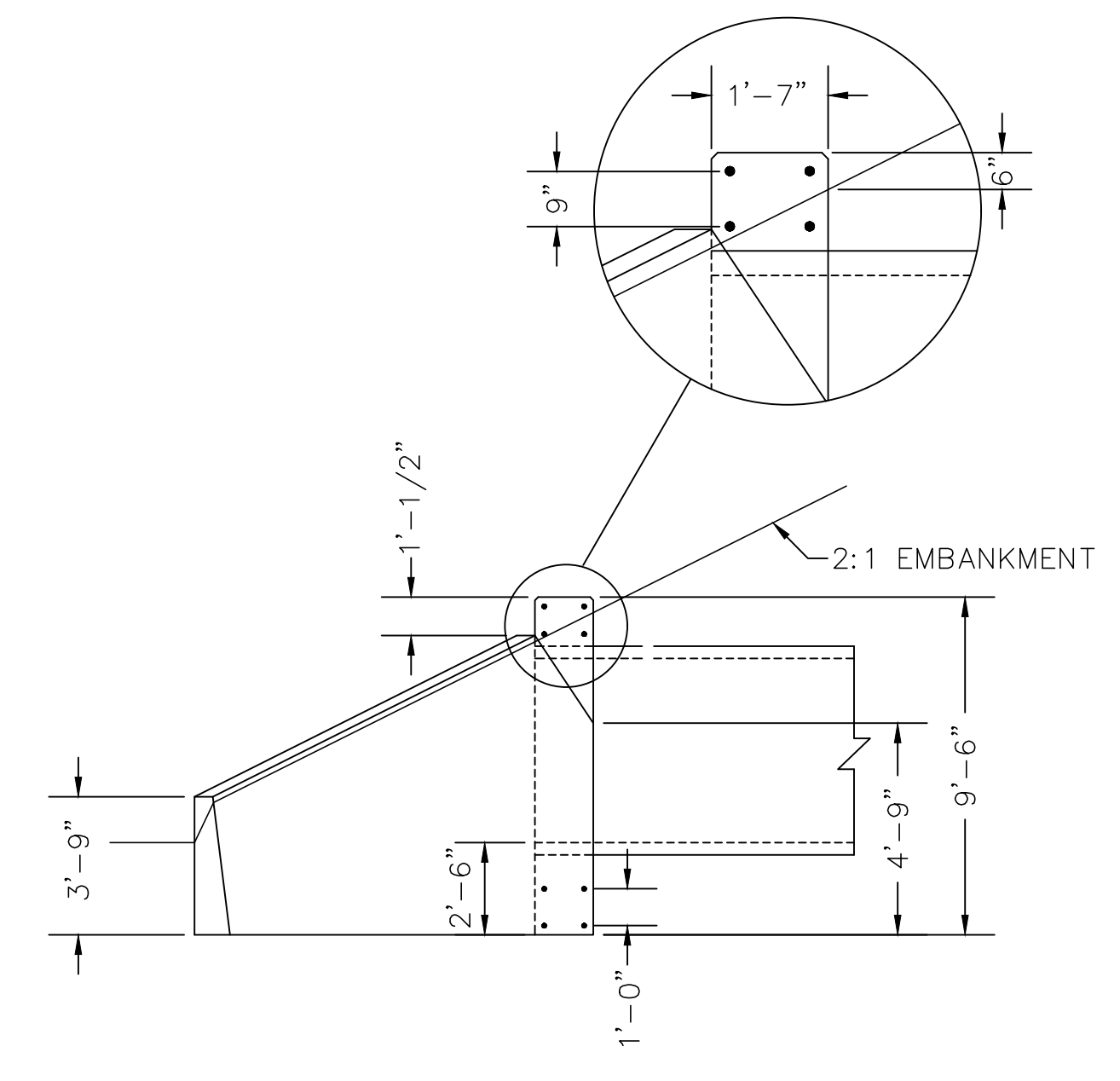
**BITUMINOUS CONCRETE
SIDEWALK SECTION**
N.T.S.



10' CHAIN LINK DOUBLE GATE 4' HIGH
N.T.S.



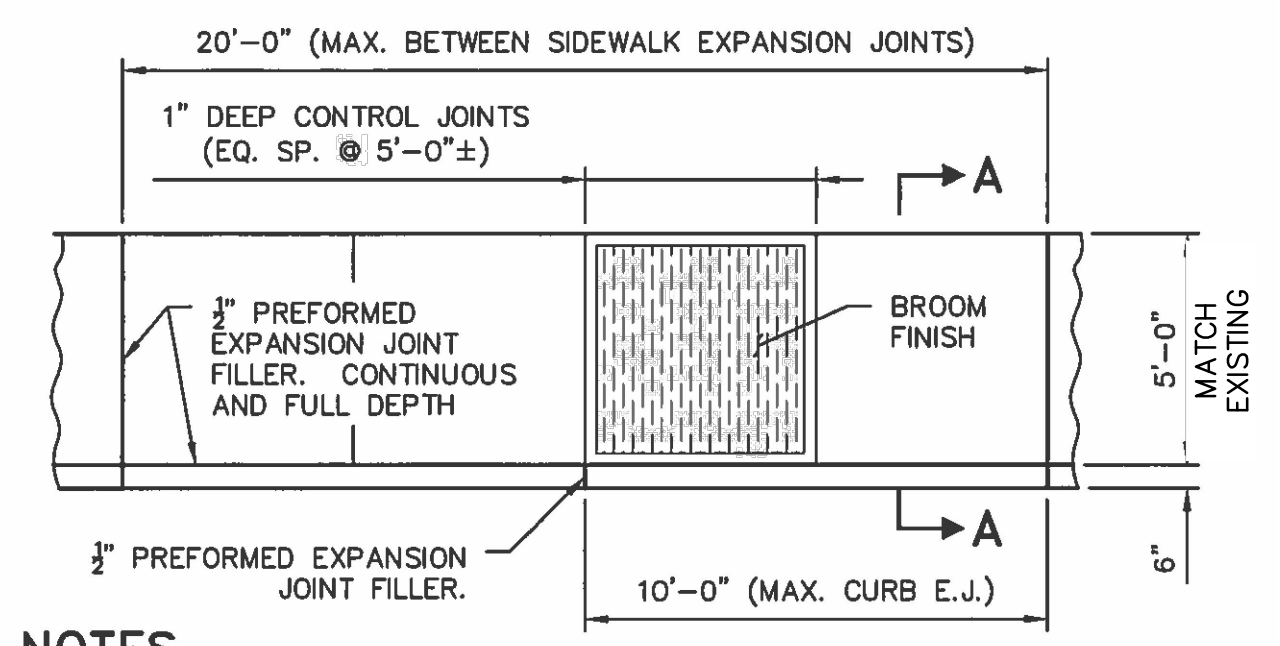
PLAN



SECTION A

STANDARD WING TYPE ENDWALL
N.T.S.

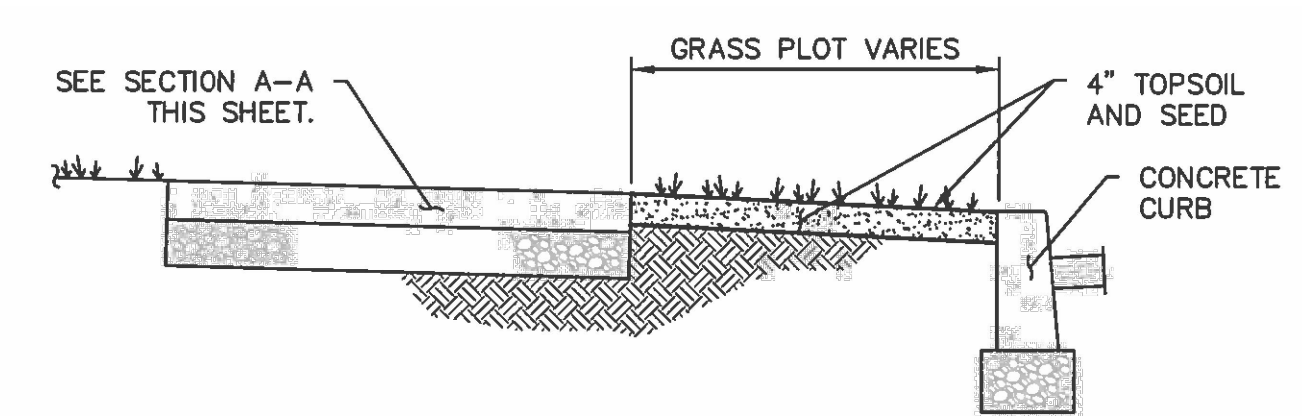
- NOTES:
1. REINFORCING BARS SHALL BE PAID FOR UNDER THE ITEM "ENDWALL CONCRETE".
 2. ALL REINFORCING BARS SHALL HAVE 3" COVER MIN.
 3. THE CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR STANDARD WING TYPE ENDWALL TO BE APPROVED BY THE ENGINEER.



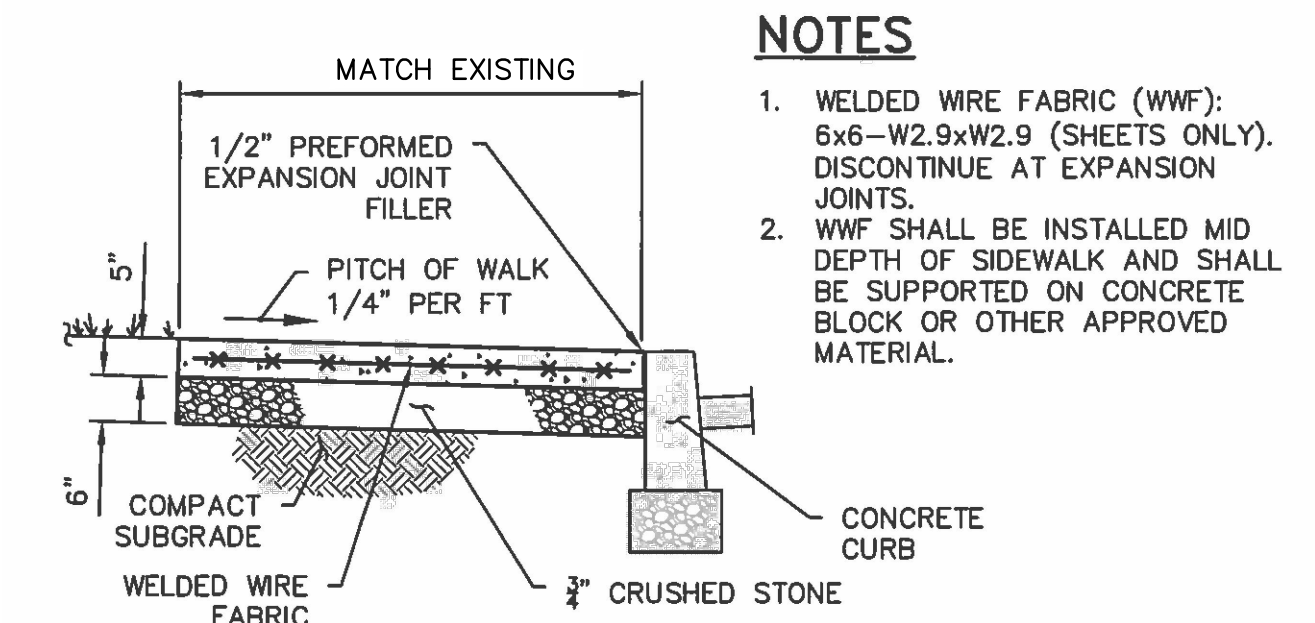
NOTES

1. SIDEWALK CONCRETE SHALL BE POURED TO A UNIFORM DEPTH ON APPROVED BASE.
2. CONCRETE SHALL BE CONNDOT CLASS "C" (3000 PSI MIN.) UTILIZING TYPE II CEMENT, AND SHALL HAVE BETWEEN 6-7% AIR ENTRAINMENT.
3. 3/8" PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED BETWEEN NEW SIDEWALK WORK AND ALL RIGID STRUCTURES SUCH AS SANITARY AND DRAINAGE STRUCTURES AND BUILDINGS AND STONE AND CONCRETE MASONRY WALLS.
4. EDGES SHALL BE ROUNDED TO A RADIUS OF 3".
5. ADDITIONAL CONTROL JOINTS SHALL BE PLACED AS REQUIRED TO ELIMINATE ANY CONDITION WHICH WILL CAUSE STRESS CONCENTRATIONS (EXAMPLE AT CORNERS OF STRUCTURES). JOINTS SHALL BE ORIENTED AS DIRECTED BY THE ENGINEER.
6. SURFACE SHALL BE GIVEN A BROOM FINISH ORIENTED PERPENDICULAR TO DIRECTION OF PEDESTRIAN TRAFFIC FLOW.

CONCRETE SIDEWALK - PLAN
SCALE: 1/4" = 1'-0"



SIDEWALK WITH GRASS PLOT



SECTION A-A

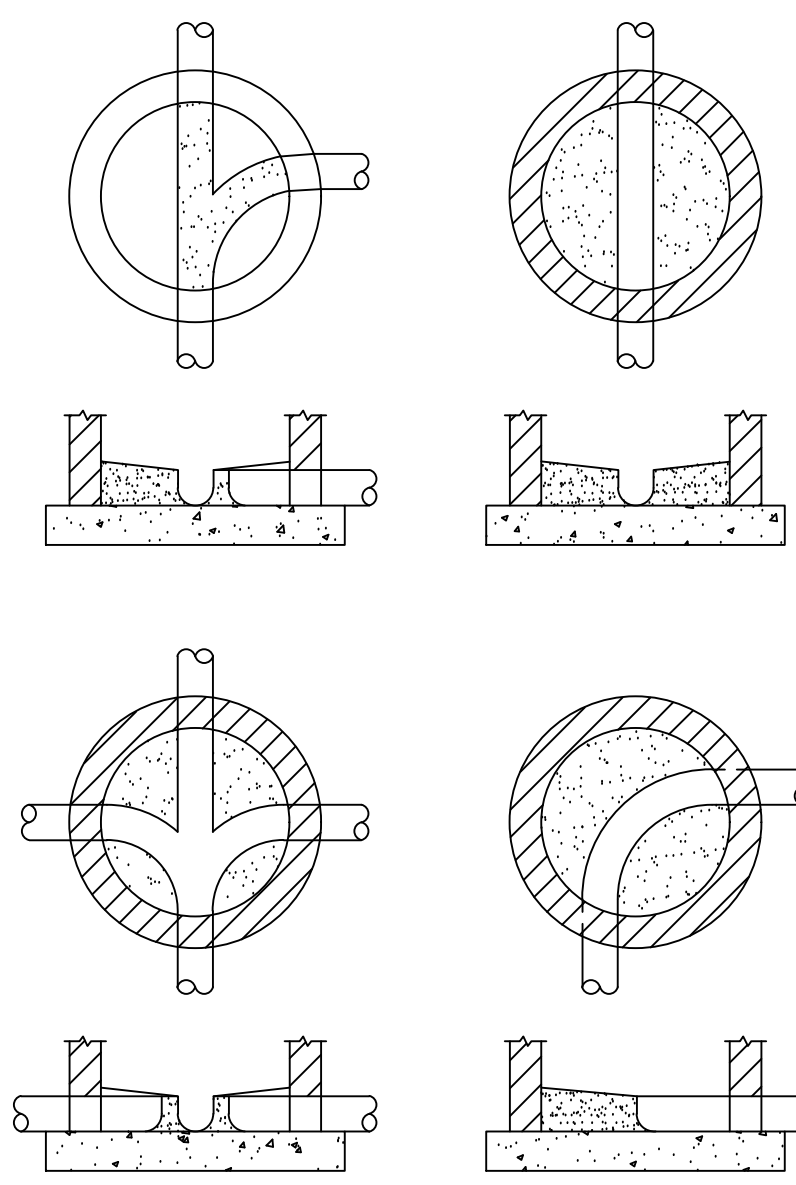
CONCRETE SIDEWALK - SECTION
SCALE: 1/2" = 1'-0"

NOTES

1. WELDED WIRE FABRIC (WWF): 6x6-W2.9xW2.9 (SHEETS ONLY). DISCONTINUE AT EXPANSION JOINTS.
2. WWF SHALL BE INSTALLED MID DEPTH OF SIDEWALK AND SHALL BE SUPPORTED ON CONCRETE BLOCK OR OTHER APPROVED MATERIAL.

NOTES

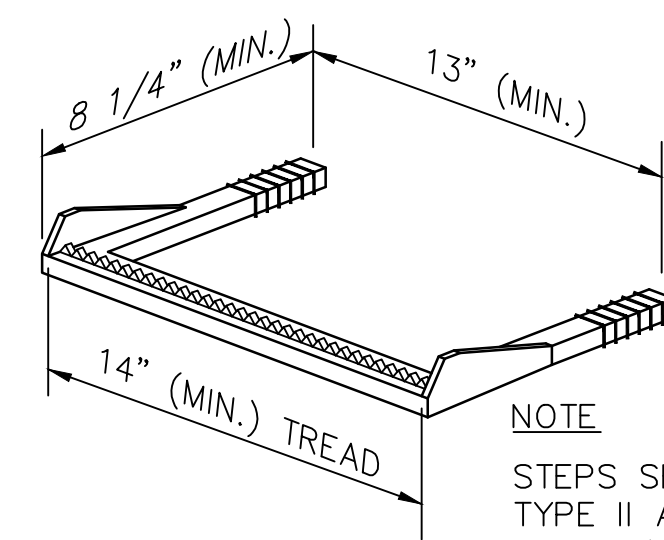
1. DETAILS ARE TAKEN FROM CITY OF STAMFORD STANDARD DETAILS, DRAWING NO. SD-1, "STORM DRAINAGE DETAILS".
2. CASTINGS DESIGNATED AS "HEAVY DUTY" SHALL SAFELY WITHSTAND AASHTO HS20 HIGHWAY LOADING.
3. ALL STEEL TO BE STRUCTURAL GRADE CONFORMING TO ASTM A36.
4. CAST IRON SHALL CONFORM TO ASTM A48 CLASS 30.
5. SEAT OF MANHOLE FRAMES, EDGES AND BOTTOM OF COVERS SHALL BE MACHINED TO A TRUE SURFACE SO COVERS WILL NOT BIND OR ROCK ON FRAMES.
6. FIRST STEP FROM TOP OF MANHOLE SHALL BE SHORTENED SO AS TO EXTEND NOT MORE THAN 4" FROM WALL OF MANHOLE. ALL OTHER STEPS SHALL EXTEND 6" FROM WALL.
7. APPROVED CONCRETE BLOCK MAY BE USED IN LIEU OF BRICK IN THE CONSTRUCTION OF CATCH BASINS AND STORM MANHOLES.
8. WHERE SHOWN, STEEL ITEMS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 FOR STEEL SHAPES AND PLATES, OR ASTM A153 FOR HARDWARE.
9. REINFORCING STEEL SHALL CONFORM TO THE FOLLOWING:
BAR REINFORCEMENT - ASTM A615 GRADE 60
WELDED WIRE FABRIC - ASTM A184
WELDED DEFORMED WIRE FABRIC - ASTM A497
10. UNREINFORCED PIPES SHALL BE CUT FLUSH WITH INSIDE FACE OF C.B. WALL. REINFORCED PIPES SHALL BE CUT TO PROVIDE 1" RECESS INTO FACE OF C.B. WALL. CUT END SHALL THEN BE PATCHED WITH MORTAR FLUSH WITH WALL.
11. ALL UNUSED KNOCK-OUTS SHALL BE BRICKED UP WHERE DIRECTED BY THE ENGINEER.



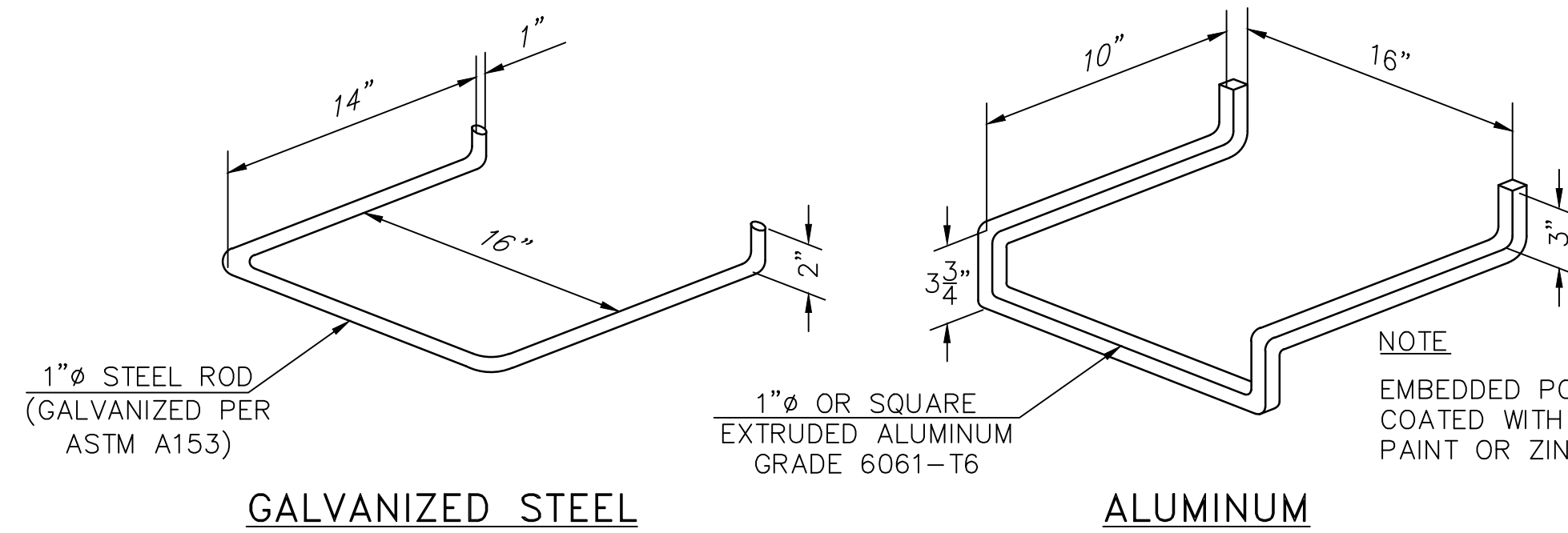
TYPICAL INVERTS

SCALE: 1/4" = 1'-0"

COPOLYMER POLYPROPYLENE PLASTIC



NOTE
STEPS SHALL MEET ASTM D-4101 TYPE II AND SHALL BE REINFORCED WITH 1/2"Ø DEFORMED STEEL BAR ASTM A-615 GR. 60.

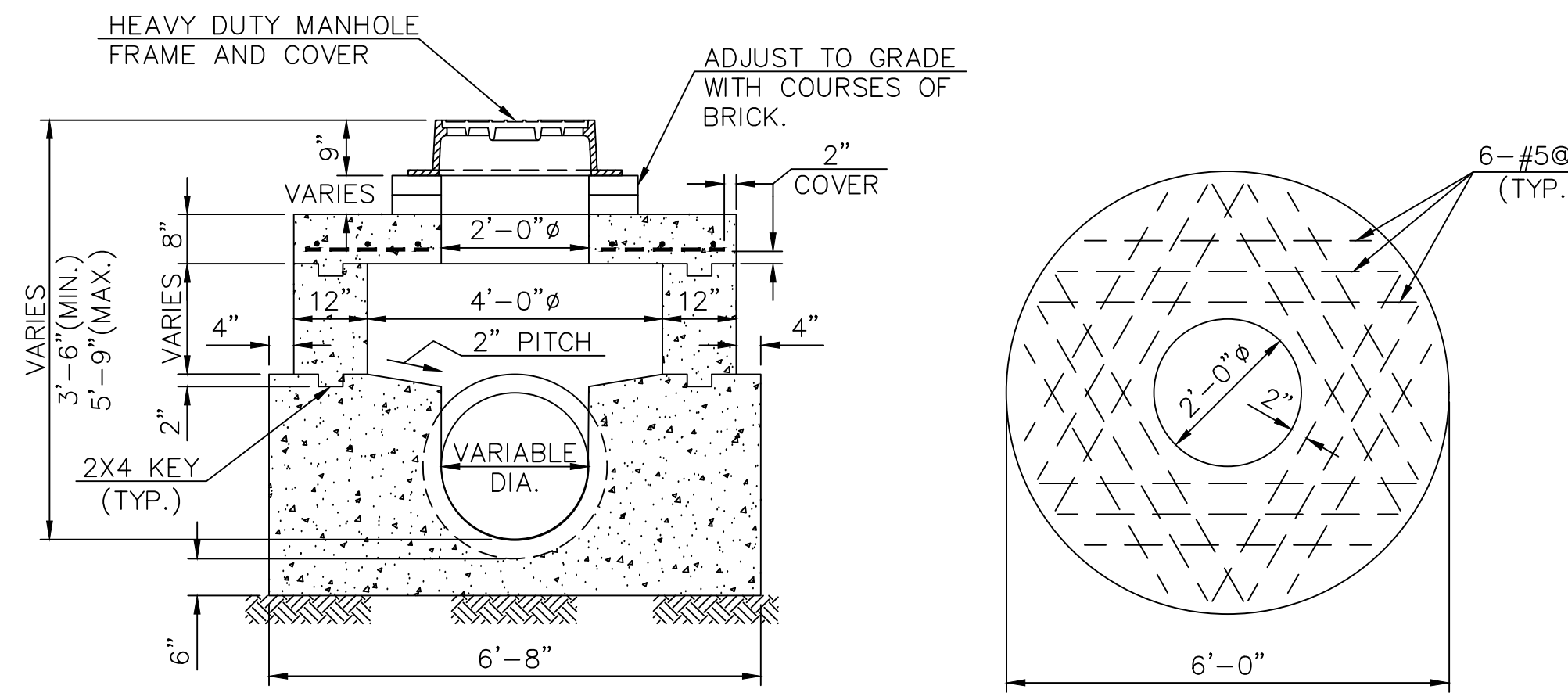


GALVANIZED STEEL

ALUMINUM

MANHOLE STEPS

NOT TO SCALE



SECTION

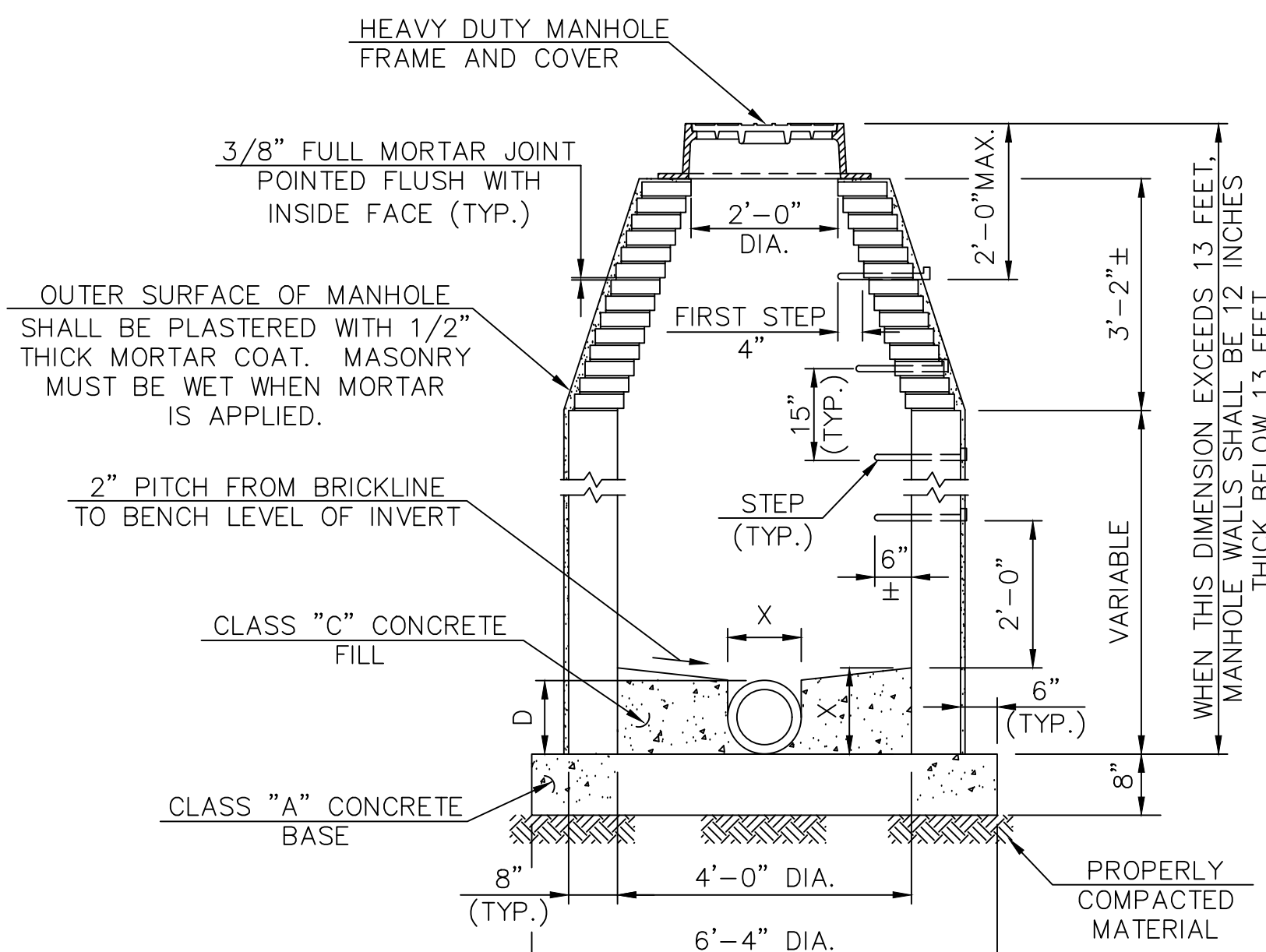
PLAN-TOP SLAB

NOTES

1. ALL CONCRETE TO BE CLASS "A" CONCRETE.

SHALLOW MANHOLE (SW-2)

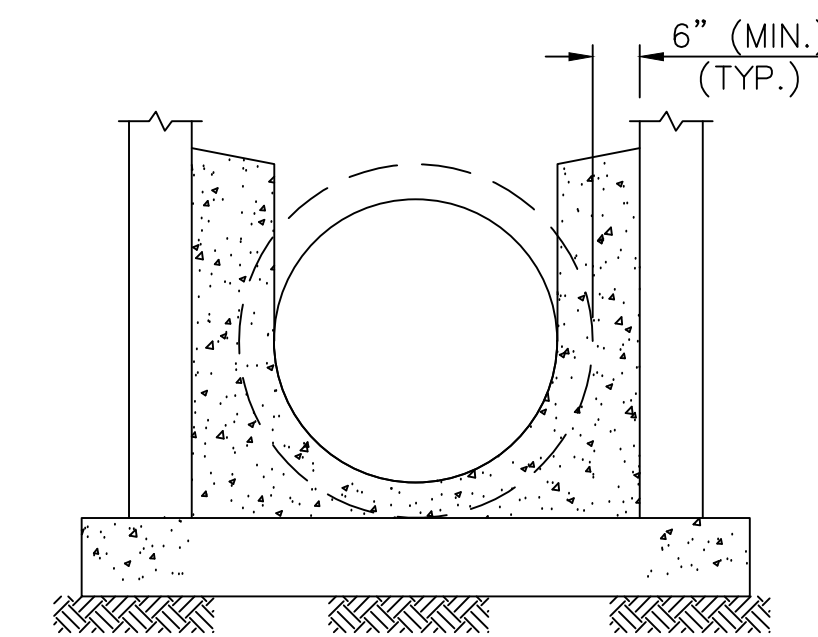
SCALE: 1/2" = 1'-0"



NOTES

1. DIMENSIONS "X" VARY ACCORDING TO SIZE OF PIPE.
2. "D" DENOTES OUTSIDE DIAMETER OF PIPE.
3. WHERE 5 FT. & 6 FT. DIA. MANHOLES ARE SHOWN ON THE PLANS, THEY SHALL BE CONSTRUCTED USING PRECAST CONCRETE UNITS.

**STANDARD MANHOLE
(LESS THAN 36" PIPE)
(MASONRY CONSTRUCTION)**

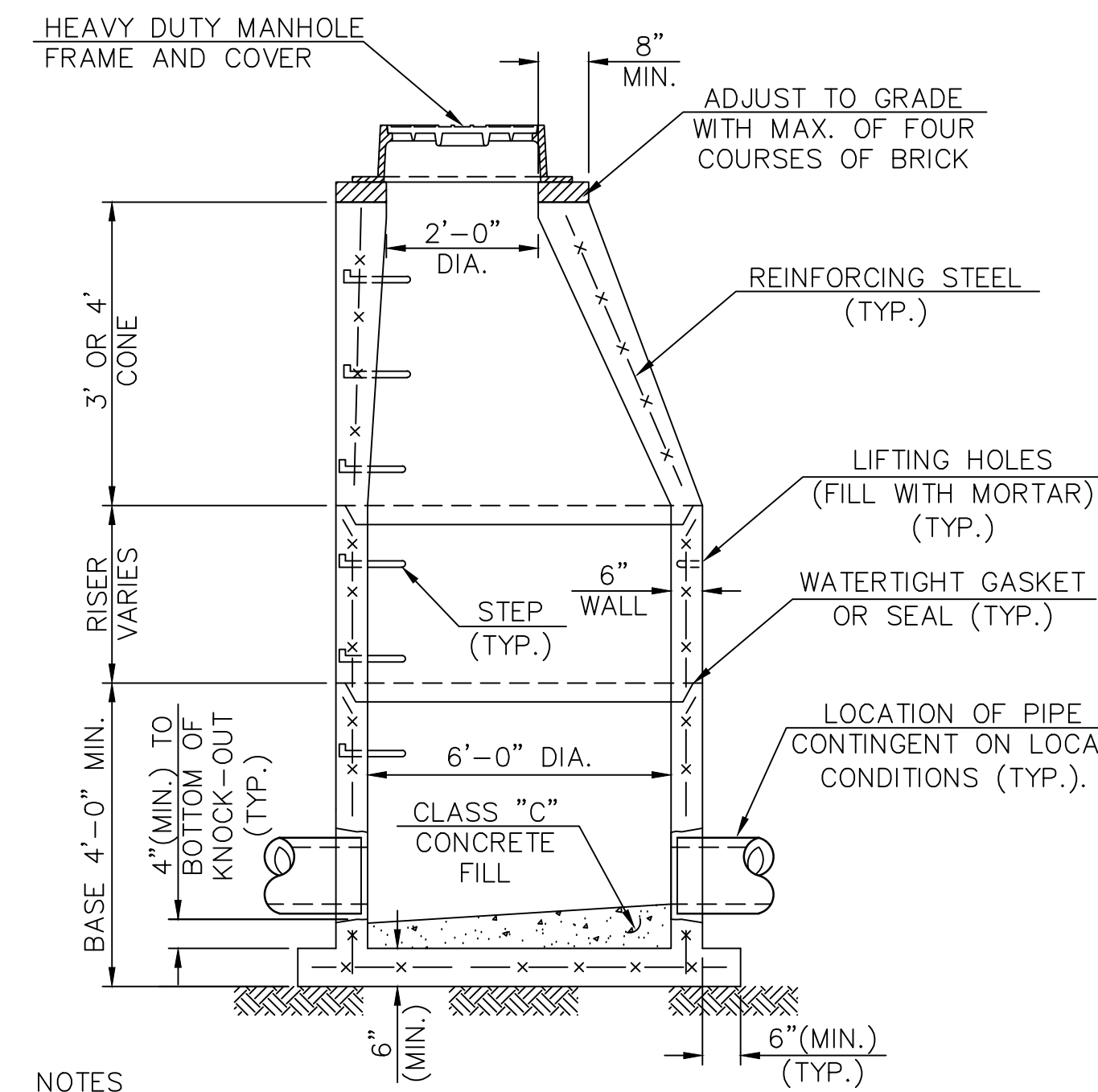


NOTE: FOR ADDITIONAL INFORMATION, SEE "STANDARD MANHOLE (LESS THAN 36" PIPE)" DETAIL, THIS SHEET.

**STANDARD MANHOLE
(FOR 36" AND LARGER PIPES)**

STANDARD MANHOLE (SW-1)

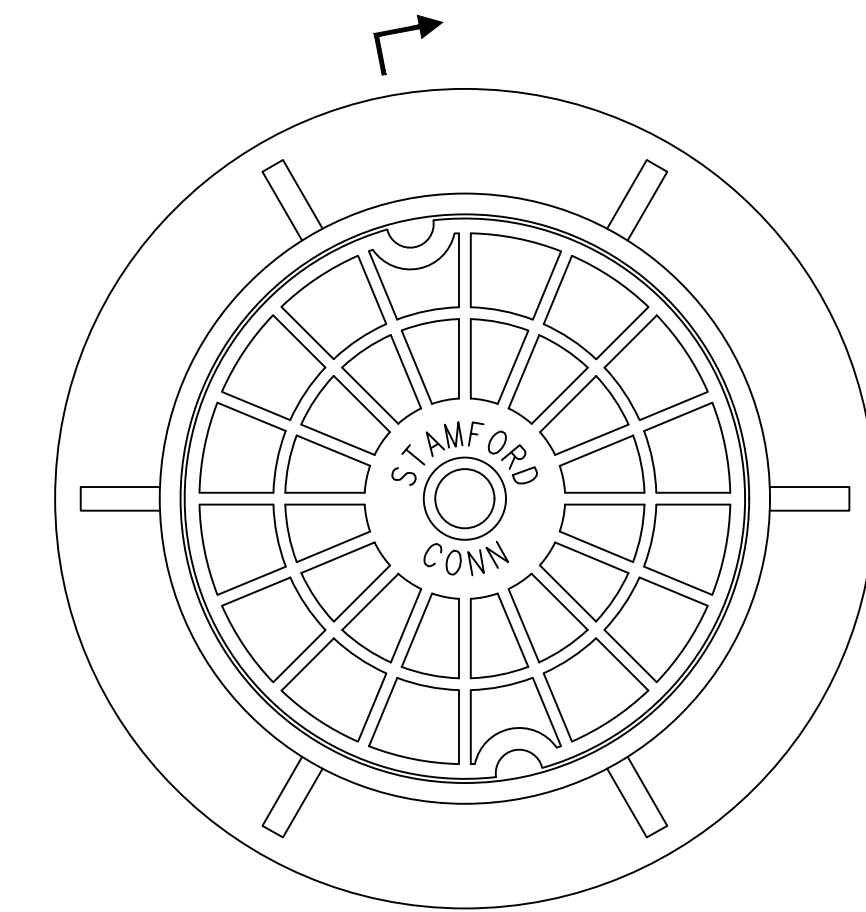
SCALE: 1/2" = 1'-0"



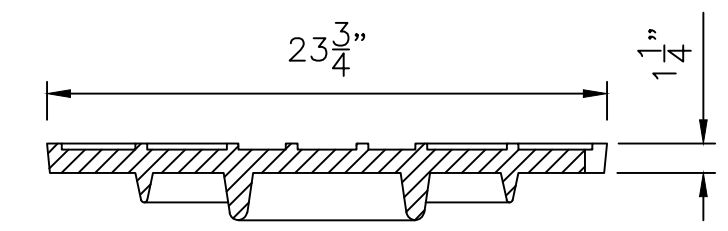
NOTES

1. FOR ADDITIONAL INFORMATION, SEE "STANDARD MANHOLE (LESS THAN 36" PIPE)" DETAIL, THIS SHEET.

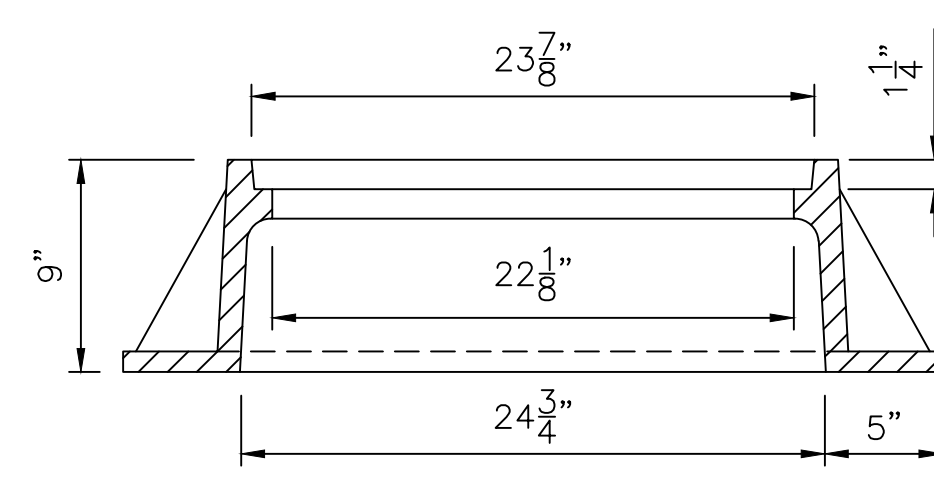
**STANDARD MANHOLE
(PRECAST CONCRETE UNITS)**



PLAN



COVER - SECTION



FRAME - SECTION

**HEAVY DUTY HIGHWAY
MANHOLE FRAME & COVER**

SCALE: 1 1/2" = 1'-0"

NOTE: MANHOLE FRAME AND COVER TO SHALL BE CAMPBELL FOUNDRY PATTERN NO. 1027 (STAMFORD) OR ENGINEER APPROVED EQUAL.

Revisions	No.	Date	Desc.

Designed	K.C.L.
Drawn	K.C.L.
Checked	D.Q.
Approved	
Scale	AS NOTED
Project No.	14C5205
Date	7/6/18
CAD File:	TMS14C520502

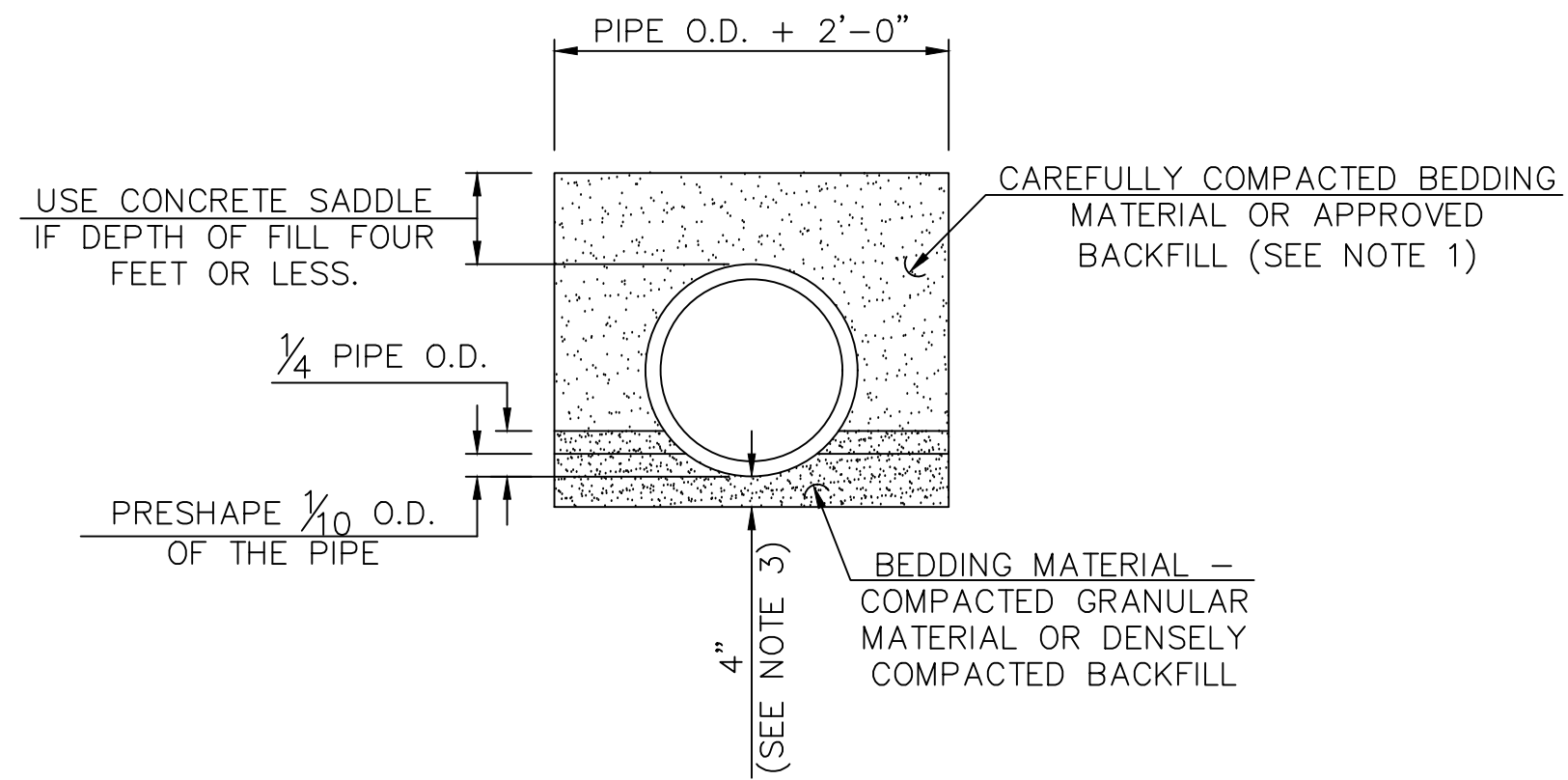
Title
**MISCELLANEOUS
DETAIL SHEET**

Sheet No.

MDS-2

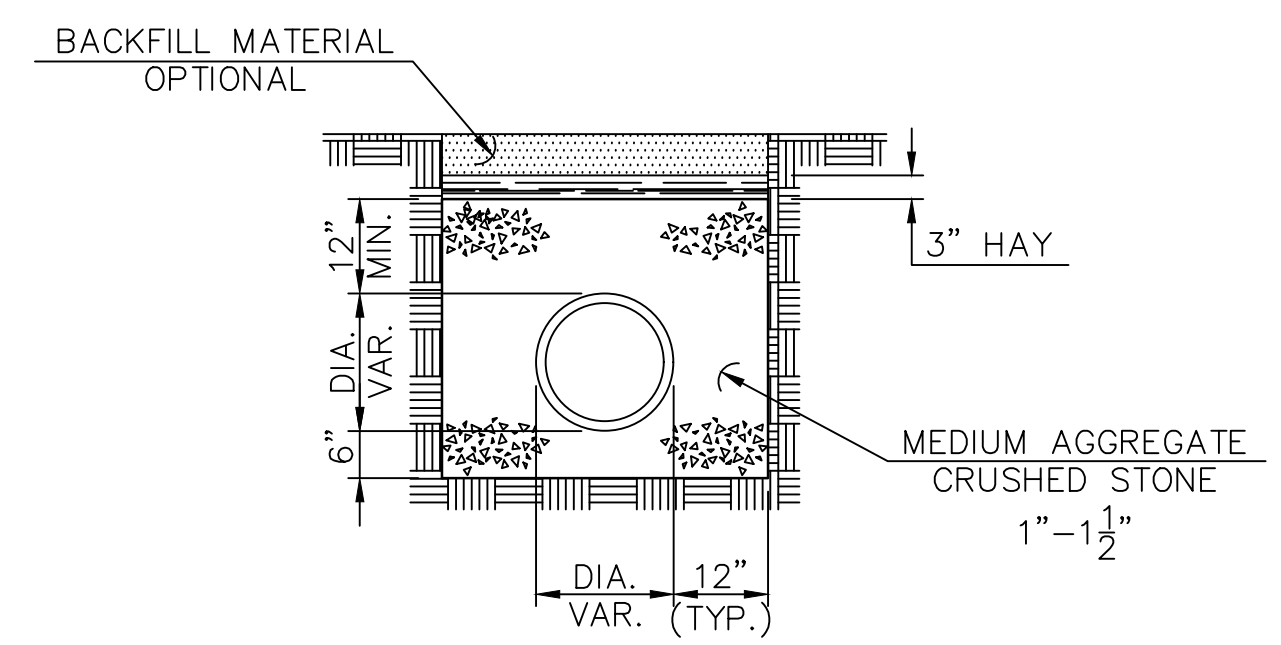
NOTES

1. DETAILS ARE TAKEN FROM CITY OF STAMFORD STANDARD DETAILS, DRAWING NO. SD-2, "STORM DRAINAGE DETAILS".
2. COMPACTION AROUND ALL STRUCTURES TO BE HAND TAMPED IN ACCORDANCE WITH SECTION 2.05 OF CONNDOT STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION, LATEST EDITION.



- NOTES**
1. PIPES HAVING AN INSIDE DIAMETER UP TO AND INCLUDING 48 INCHES SHALL BE BACKFILLED WITH APPROVED BACKFILL MATERIAL. PIPES HAVING AN INSIDE DIAMETER GREATER THAN 48 INCHES SHALL HAVE BEDDING MATERIAL EXTEND 12 INCHES ABOVE THE PIPE. ABOVE THAT LEVEL APPROVED BACKFILL MAY BE USED.
 2. PVC PLASTIC PIPE CONFORMING TO ASTM D-3034 SDR 35 CAN BE SUBSTITUTED FOR RCP AND BACKFILLED ENTIRELY WITH BEDDING MATERIAL PER NOTE 2 ABOVE AT NO ADDITIONAL COST TO THE CITY.
 3. BEDDING UNDER PIPE SHALL BE INCREASED TO 12 INCHES MIN. IN ROCK.

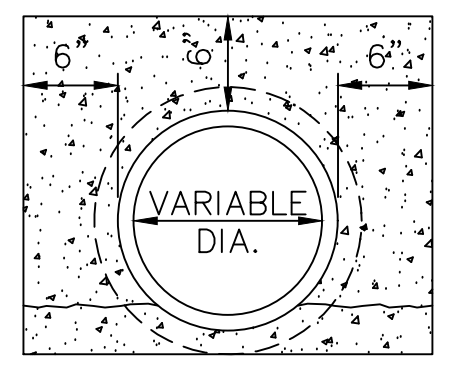
REINFORCED CONCRETE PIPES



POROUS PIPE - SECTION

PIPE IN TRENCH DETAILS

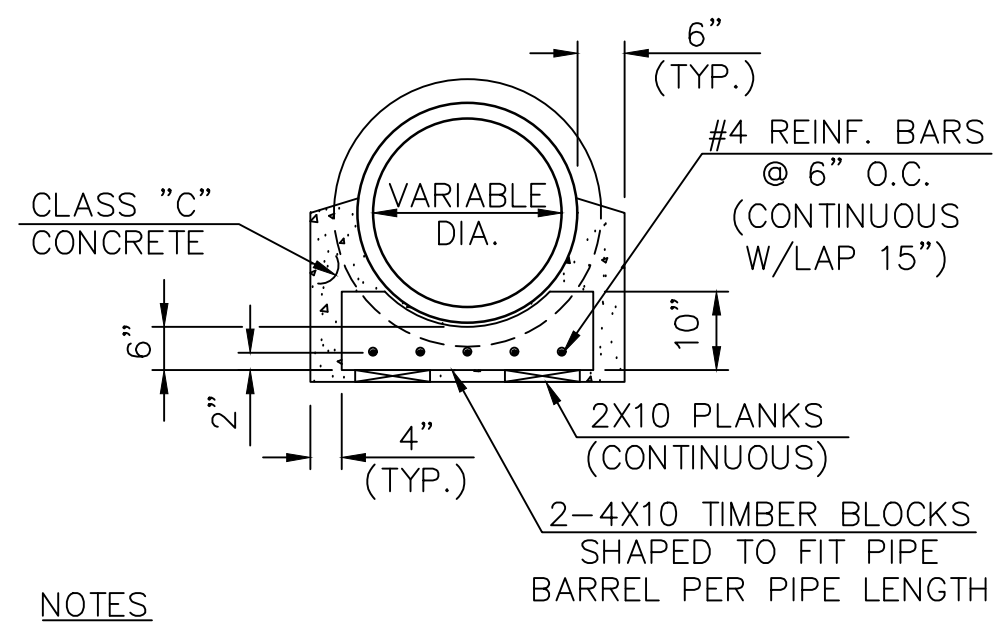
NOT TO SCALE



- NOTES**
1. ALL LATERALS HAVING LESS THAN THREE FEET OF FILL OVER PIPE SHALL BE SADDLED USING CLASS "C" CONCRETE AS SHOWN.
 2. LATERALS SHALL BE LAYED TO LINE AND GRADE IN A BED OF CONCRETE AND IMMEDIATELY ENCASED AS SHOWN.

CONCRETE SADDLE FOR LATERALS

SCALE: 1" = 1'-0"



- NOTES**
1. REINFORCED CONCRETE CRADLE SHALL BE USED ONLY IF ORDERED BY THE ENGINEER.
 2. REINFORCING BARS SHALL PASS THROUGH HOLES DRILLED IN 4"x10" TIMBER BLOCKS.

REINFORCED CONCRETE CRADLE

SCALE: 1/2" = 1'-0"

REVISIONS	No.	Date	Desc.

Designed	K.C.L.
Drawn	K.C.L.
Checked	D.Q.
Approved	
Scale	AS NOTED
Project No.	14C5205
Date	7/6/18
CAD File:	TMD514C520503

Title
**MISCELLANEOUS
DETAIL SHEET**

Sheet No.
MDS-3