

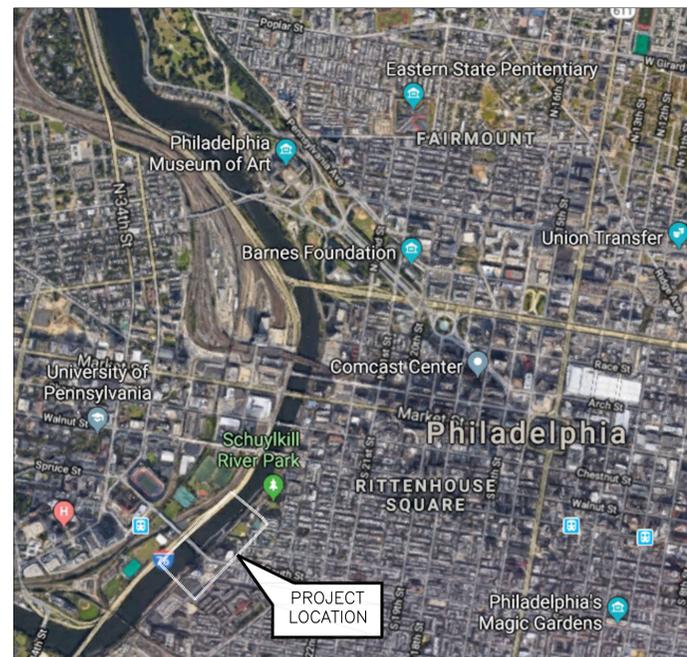
SCHUYLKILL BANKS SOUTH STREET SHORELINE RESTORATION

FOR

SCHUYLKILL RIVER DEVELOPMENT CORPORATION

2401 WALNUT ST., SUITE 603,
PHILADELPHIA, PA 19103

SRDC PROJECT NO.: SSSR-001



LOCATION MAP

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CLIENT NAME:
SCHUYLKILL RIVER DEVELOPMENT CORP.
CLIENT LOCATION:
2401 WALNUT ST., SUITE 603, PHILADELPHIA, PA 19103
PROJECT LOCATION
SOUTH STREET BRIDGE

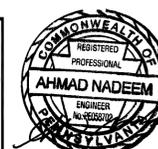
SCHUYLKILL BANKS SOUTH STREET SHORELINE REHABILITATION

COVER SHEET

SHEET: 1 OF 19 DRAWING NO.: CS-1

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FILE PATH: Q:\PA-Chadds Ford\Anchor\Anchor-Data\Projects\2023\23-74-1032 - 270081 SRDC Shoreline Stabilization Design\Anchor Work\Drawings\CAD\Working\270081 - SCHUYLKILL BANKS SOUTH STREET SHORELINE REHAB - IFB (03-20-25).dwg

GENERAL NOTES

- CONTRACT DRAWINGS AND ASSOCIATED PROJECT TECHNICAL SPECIFICATIONS REPRESENT THE DESIGN PROPOSED BY BOWMAN CONSULTING GROUP LLC. (BOWMAN) FOR THIS PROJECT. ANY DEVIATION FROM THESE DRAWINGS AND PROJECT TECHNICAL SPECIFICATIONS WITHOUT A WRITTEN ACCEPTANCE OF THE PROPOSED DEVIATION FROM BOWMAN WILL RELIEVE BOWMAN OF ALL LIABILITIES ASSOCIATED WITH THE DESIGN OF THIS PROJECT.
- DO NOT SCALE 11x17 SIZE DRAWINGS. DRAWINGS PLOTTED TO 22x34 SIZE MAY BE SCALED, U.N.O.
- DESIGN AND CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND STANDARDS, THE PROJECT SPECIFICATIONS AND THESE NOTES. IN CASE OF CONFLICTS, THESE NOTES SHALL TAKE PRECEDENCE OVER PROJECT SPECIFICATIONS. SPECIFIC INSTRUCTIONS AND NOTES ON DESIGN DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES DRAWINGS. FEDERAL, STATE AND LOCAL CODES AND STANDARDS SHALL TAKE PRECEDENCE OVER PROJECT SPECIFICATIONS AND NOTES.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, EXISTING MEMBER SIZES, AND EXISTING CONDITIONS PRIOR TO MOBILIZING. IF INCLUDES IN SCOPE, THE CONTRACTOR SHALL PERFORM SITE SURVEY USING A LAND SURVEYOR REGISTERED IN THE STATE OF PROJECT LOCATION. SUBMIT SURVEY RESULTS TO THE ENGINEER FOR REVIEW AND TO ALLOW MODIFICATIONS MINIMUM 3 WEEKS PRIOR TO THE PROCUREMENT OF ANY MATERIALS AND MOBILIZATION. ALL EXISTING & PROPOSED DIMENSIONS AND ELEVATIONS OF EXIST./NEW STRUCTURES AND GRADE SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
- ELEVATIONS SHOWN ON DRAWINGS ARE REFERENCED TO LOCAL MLW, U.N.O
- ALL STRUCTURES ARE DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE CONSTRUCTION WORK IS FULLY COMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ERECTION PROCEDURES AND SEQUENCE AND TO ENSURE THE SAFETY OF THE STRUCTURE, ITS COMPONENTS AND PARTS DURING CONSTRUCTION. THIS INCLUDES THE PROCUREMENT, FABRICATION AND ERECTION OF ALL NECESSARY TEMPORARY SUPPORTS INCLUDING SHORING, SHEETING, TEMPORARY PILES, TEMPORARY BRACING, GUYS OR TIE DOWNS WHICH MAY BE NECESSARY. SUCH MATERIAL SHALL REMAIN CONTRACTORS PROPERTY AFTER COMPLETION OF PROJECT, U.N.O.
- THE CONTRACTOR SHALL CONDUCT THEIR OPERATIONS SO AS TO NOT INTERFERE WITH OR BE DETRIMENTAL TO DAILY OPERATIONS INCLUDING BUT NOT LIMITED TO PEDESTRIAN ACCESS TO RIVER TRAIL AND BOARDWALK DURING THE COURSE OF THE CONSTRUCTION WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH DAILY OPERATIONS PRIOR TO AWARD AND PERFORM ALL CONSTRUCTION WORK AROUND TRAIL ACTIVITIES. CONTRACTOR SHALL COORDINATE IN ADVANCE, THE STAGING OF ALL MATERIALS AND WEEKLY CONSTRUCTION WORK SCHEDULE WITH THE OWNER TO ALLOW CONTINUED PEDESTRIAN AND BICYCLE ACCESS.
- THE CONTRACTOR SHALL PERFORM ALL WORK SO AS TO CAUSE NO DAMAGE TO EXISTING AND NEW STRUCTURES, UTILITIES, PIPING, EQUIPMENT AND INSTRUMENTATION. ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL REMOVE FROM THE SITE, ALL WASTE MATERIAL AND DEBRIS GENERATED DURING THE COURSE OF CONSTRUCTION WORK, UNLESS SPECIFICALLY DIRECTED OTHERWISE BY THE OWNER. DISPOSAL OF ALL GENERATED WASTE MATERIAL AND DEBRIS IS THE RESPONSIBILITY OF CONTRACTOR.
- ALL DEMOLISHED & EXCAVATED MATERIAL SHALL BE TESTED & DISPOSED OF, OFFSITE BY THE CONTRACTOR, IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE & LOCAL ENVIRONMENTAL REGULATIONS & STANDARDS.
- NO CONSTRUCTION WORK SHALL BE INITIATED PRIOR TO THE RECEIPT OF ALL PERMITS BY THE OWNER. THE CONTRACTOR SHALL ABIDE BY ALL PERMIT REQUIREMENTS, APPLICABLE ENVIRONMENTAL PROTECTION STANDARDS, CODES, LAWS, AND REGULATIONS. CONTRACTOR SHALL OBTAIN ALL NECESSARY LOCAL PERMITS.
- THE CONTRACTOR SHALL INSTALL SEDIMENT CONTROL DEVICES, BOOMS, TARPAULINS, FLOATS, STAGING, AND OTHER DEVICES AS NECESSARY TO PREVENT CONSTRUCTION MATERIALS AND CONSTRUCTION DEBRIS FROM ENTERING THE WATERWAY AND LEAVING THE IMMEDIATE VICINITY OF THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF ALL WATERBORNE MATERIALS.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OWNER STANDARDS AND PROCEDURES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND FOLLOW OWNER STANDARDS AND PROCEDURES.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A CLEAN SITE DURING CONSTRUCTION AND AT DEMOBILIZATION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING CONSTRUCTION.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF ALL PERSONNEL IN THE WORK AREA. INSTALL AND MAINTAIN WARNING SIGNS, FENCING, BARRIERS AND LIGHTING IN AND AROUND THE WORK AREA, AS REQUIRED, FOR THE SAFETY OF THEIR EMPLOYEES AND OTHER FACILITY PERSONNEL AND THEIR REPRESENTATIVES ACCESSING THE WORK AREA.
- CONTRACTOR SHALL ESTABLISH ADEQUATE DRAINAGE SYSTEM TO PREVENT PONDING OF WATER & ENSURE IMMEDIATE RUNOFF OF RAINFALL. NO WATER SHALL BE ALLOWED TO ACCUMULATE NEAR THE WORK AREA & EXISTING BUILDINGS/STRUCTURES. THIS MAY BE ACHIEVED BY INSTALLING DITCHES, SWALES, SUMPS WITH PUMP & BY SETTING GRADES TO ENSURE POSITIVE DRAINAGE.

GENERAL NOTES (CONTINUED)

- STRUCTURAL MEMBERS, NON-STRUCTURAL MEMBERS, PIPING AND UTILITIES EXIST. AT THE SITE. ALL OF THESE ELEMENTS ARE NOT SHOWN ON DESIGN DRAWINGS. CONTRACTOR SHALL PERFORM SITE VISIT(S) DURING THE BID PHASE OF THIS PROJECT, AS REQ.'D, TO IDENTIFY ALL ABOVE AND BELOW GRADE KNOWN ELEMENTS INTERFERING WITH CONSTRUCTION WORK. INTERFERING ELEMENTS SHALL BE CLEARLY IDENTIFIED IN THE BID. COSTS OF TEMP. SUPPORTING/REMOVAL AND RENEWAL/AVOIDANCE OF THESE ELEMENTS TO ALLOW THE CONSTRUCTION WORK TO BE COMPLETED, AS SPECIFIED IN THE CONTRACT DOCUMENTS, SHALL BE INCLUDED IN THE BID PRICE. COSTS OF OVERCOMING INTERFERENCES, NOT INCLUDED IN THE BID PRICE SHALL BE CLEARLY IDENTIFIED IN THE BID.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, INSTALLATION AND REMOVAL OF ALL REQUIRED NEEDLING, UNDERPINNING, SHEETING AND SHORING, BRACING, FALSEWORK, FORMWORK AND TEMPORARY SUPPORT OF EXISTING STRUCTURES
- TEMPORARY STRUCTURES, FORMWORK, FALSEWORK AND PILES WHICH BECOME DAMAGED OR FOR OTHER REASONS DO NOT BECOME A PERMANENT PART OF THE STRUCTURE SHALL BE EXTRACTED, REMOVED AND DISPOSED OF OFF SITE, AT NO ADDITIONAL COST TO THE OWNER.
- ALL MATERIALS UTILIZED ON THIS PROJECT SHALL BE NEW, AND SUPPLIED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL FOLLOW ALL APPLICABLE CODES AND STANDARDS REFERENCED IN THE CONTRACT DOCUMENTS. CONTRACTOR SHALL PURCHASE AND MAINTAIN A COPY OF ALL APPLICABLE CODES AND STANDARDS ON SITE, IN ADDITION TO THE CONTRACT DRAWINGS AND SPECIFICATIONS FOR REFERENCE.
- IF DURING THE PERFORMANCE OF WORK THE CONTRACTOR FINDS CONFLICT, ERROR, OR DISCREPANCY IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPORT IT TO THE OWNER AND ENGINEER OF RECORD IN WRITING AT ONCE, BEFORE PROCEEDING WITH THE WORK EFFECTED THEREBY. THE CONTRACTOR SHALL OBTAIN A WRITTEN INTERPRETATION OR CLARIFICATION FROM THE ENGINEER OF RECORD. WORK PERFORMED PRIOR TO WRITTEN DIRECTION FROM THE ENGINEER OF RECORD SHALL BE AT THE CONTRACTORS SOLE RISK.

RIP-RAP REVETMENT NOTES:

- ALL NCSA STONE MATERIAL SHALL BE GRADED AS SPECIFIED BY THE NATIONAL CRUSH STONE ASSOCIATION (NCSA).
- ALL RIP-RAP MATERIALS PLACED OUTSIDE THE INDICATED RIP-RAP FOOTPRINT SHALL BE REMOVED AT NO COST TO THE OWNER.
- THE SOLID DENSITY OF STONE SHALL NOT BE LESS THAN 155 PCF (SATURATED SURFACE DRY). ALL STONE SHALL HAVE AN ABSORPTION OF LESS THAN 2%.
- INSTALL GEOTEXTILE MATERIAL ALONG ALL INTERFACE AREAS WITH GROUND CONTACT.

CONCRETE MATS

- CONCRETE MATS ARE TO BE FILLED WITH CONCRETE TO CREATE AN ARTICULATED BLOCK REVETMENT IN THE AREAS IDENTIFIED FOR PROTECTION. THEY ARE TO ALLOW FOR THE INSTALLATION AND PERMANENT ENCASMENT OF REINFORCING CABLES INTERCONNECTING AND ANCHORING FABRIC FORM PANELS.
- CONCRETE MATS MUST BE ABLE TO BE PLACED IN BOTH UNDERWATER AND DRY CONDITIONS.
- CONCRETE MAT SHALL BE FREE OF DEFECTS OR FLAWS WHICH SIGNIFICANTLY AFFECT THEIR PHYSICAL, MECHANICAL, OR HYDRAULIC PROPERTIES.
- CONCRETE MATS ARE TO BE FACTORY FABRICATED AND SEWN IN PREDETERMINED CUSTOM SIZED PANELS.
- CONCRETE MAT CONNECTIONS SHALL NOT LEAVE ANY GAP BETWEEN THE FILLED BLOCK REVETMENTS.
- CONCRETE MATS SHALL BE KEPT DRY AND WRAPPED SUCH THAT THEY ARE PROTECTED FROM ELEMENTS DURING SHIPPING AND STORAGE. IF STORED OUTDOORS, THEY SHALL BE ELEVATED AND PROTECTED WITH A WATERPROOF COVER THAT IS OPAQUE TO ULTRAVIOLET LIGHT.
- CONCRETE MATS SHALL BE LABELED AS PER ASTM D 4873, "GUIDE FOR IDENTIFICATION, STORAGE, AND HANDLING OF GEOSYNTHETIC ROLLS".
- FABRICATION AND ENGINEERING OF THE CONCRETE MAT IS TO BE PERFORMED BY A MANUFACTURER WITH SPECIFIC EXPERIENCE IN THEIR USE FOR THE CREATION OF AN ANCHORED, ARTICULATING, ARMOR BLOCK REVETMENT IN A SIMILAR APPLICATION. SIGNED AND SEALED CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED FOR ENGINEER'S REVIEW.

ARTICULATED CONCRETE BLOCK – TENSILE REINFORCING MEMBERS

- LONGITUDINAL CABLES (FROM TOP OF SLOPE TO TOE) IN MATTRESS SHALL BE NYLON, POLYESTER, OR STEEL REVETMENT CABLES WITH A MINIMUM OF 3/16" DIAMETER AND 10,000 LB BREAKING STRENGTH.
- TRANSVERSE CABLES (ALONG THE LENGTH OF THE SLOPE) IN MATTRESS SHALL BE NYLON, POLYESTER, OR STEEL REVETMENT CABLES WITH MINIMUM 1/4" DIAMETER AND 3,700 LB. BREAKING STRENGTH.

COATING NOTES

- ALL NEW STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE SHOP COATED, U.N.O. DAMAGED COATINGS SHALL BE TOUCHED UP IN THE FIELD.
- ALL CONNECTING HARDWARE INCLUDING BOLTS, NUTS AND WASHERS SHALL BE HOT DIP GALVANIZED, U.N.O. IN ACCORDANCE WITH ASTM A153 AND PROJECT SPECIFICATIONS.
- FIELD TREAT DAMAGED GALVANIZED FINISH WITH TWO COATS OF HIGH ZINC DUST OXIDE PAINT, COLD GALVANIZED COMPOUNDS OR APPROVED EQUAL. IN ADDITION, ALL EXPOSED THREADED SURFACES SHALL BE CLEANED AND PAINTED WITH TWO COATS OF HIGH ZINC DUST OXIDE PAINT AFTER INSTALLATION OF THE NUT. OBTAIN ENGINEERS WRITTEN APPROVAL PRIOR TO THE PROCUREMENT OF MATERIAL.
- ALL STEEL TO BE SHOP OR FIELD COATED SHALL BE CLEANED, PREPARED AND APPLIED IN STRICT ACCORDANCE WITH THE COATING MANUFACTURER RECOMMENDATIONS. TEMPERATURE LIMITATIONS AND SUBMERGENCE OF STEEL SHALL BE CONSIDERED DURING FIELD COATING.

LOAD AND USE RESTRICTIONS

- NO CONTRACTOR VEHICLES, EQUIPMENT, OR MATERIALS SHALL BE PLACED ON SCHUYLKILL RIVER BOARDWALK.
- THE BOARDWALK SHALL BE KEPT OPEN TO TRAIL USERS DURING CONSTRUCTION.

**ISSUED FOR
BID
DATE: 03-20-25**



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CLIENT NAME:
SCHUYLKILL RIVER DEVELOPMENT CORP.

CLIENT LOCATION:
2401 WALNUT ST., SUITE 603, PHILADELPHIA, PA 19103

PROJECT LOCATION
SOUTH STREET BRIDGE

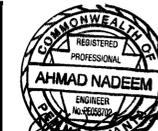
SCHUYLKILL BANKS SOUTH STREET SHORELINE REHABILITATION

GENERAL NOTES (SHEET 1 OF 2)

SHEET: 2 OF 19 DRAWING NO.: **GN-1**

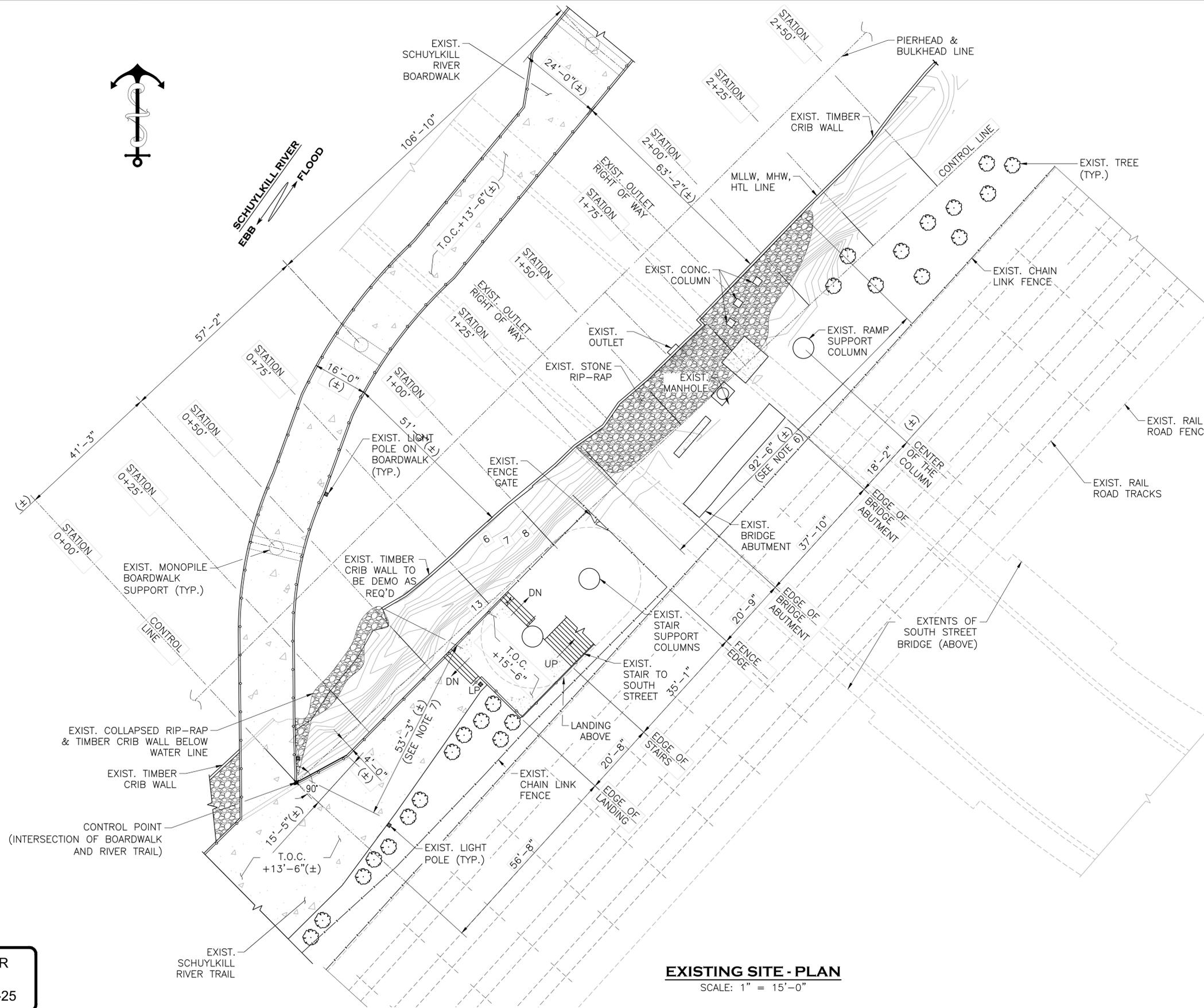
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EXISTING SITE - PLAN
SCALE: 1" = 15'-0"

LEGEND

- MLLW MEAN LOW LOW WATER
- MHW MEAN HIGH WATER
- HTL HIGH TIDE LINE
- LIGHT POLE

NOTES:

1. FOR GENERAL NOTES, SEE DRAWING GN-1 AND GN-2.
2. CONTRACTOR TO PERFORM SURVEY W/ LAND SURVEYOR REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA TO LOCATE ALL EXISTING FEATURES FOR THE PURPOSE OF DEVELOPING REVETMENT CUT AND FILL DRAWINGS.
3. CONTRACTOR SHALL PERFORM SOUNDING FOR THE PURPOSE OF DETERMINING QUANTITIES OF FILL.
4. THERE IS NO ACCESS TO THE SITE VIA LAND. ALL SUPPLIES, MATERIAL, AND EQUIPMENT SHALL BE BROUGHT TO SITE VIA WATER.
5. NO CONTRACTOR VEHICLES, EQUIPMENT, OR MATERIALS SHALL BE PLACED ON SCHUYLKILL RIVER BOARDWALK.
6. DIMENSION INDICATES APPROXIMATE EXTENT OF RIP RAP TO BE REMOVED AS REQUIRED.
7. DIMENSION INDICATES EXISTING STONE REVETMENT COLLAPSED INTO RIVER.

ISSUED FOR BID
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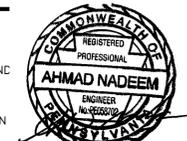


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CLIENT LOCATION:
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PROJECT LOCATION
SOUTH STREET BRIDGE

SCHUYLKILL BANKS SOUTH STREET SHORELINE REHABILITATION
EXISTING SITE PLAN
SHEET: 4 OF 19 DRAWING NO.: GA-1

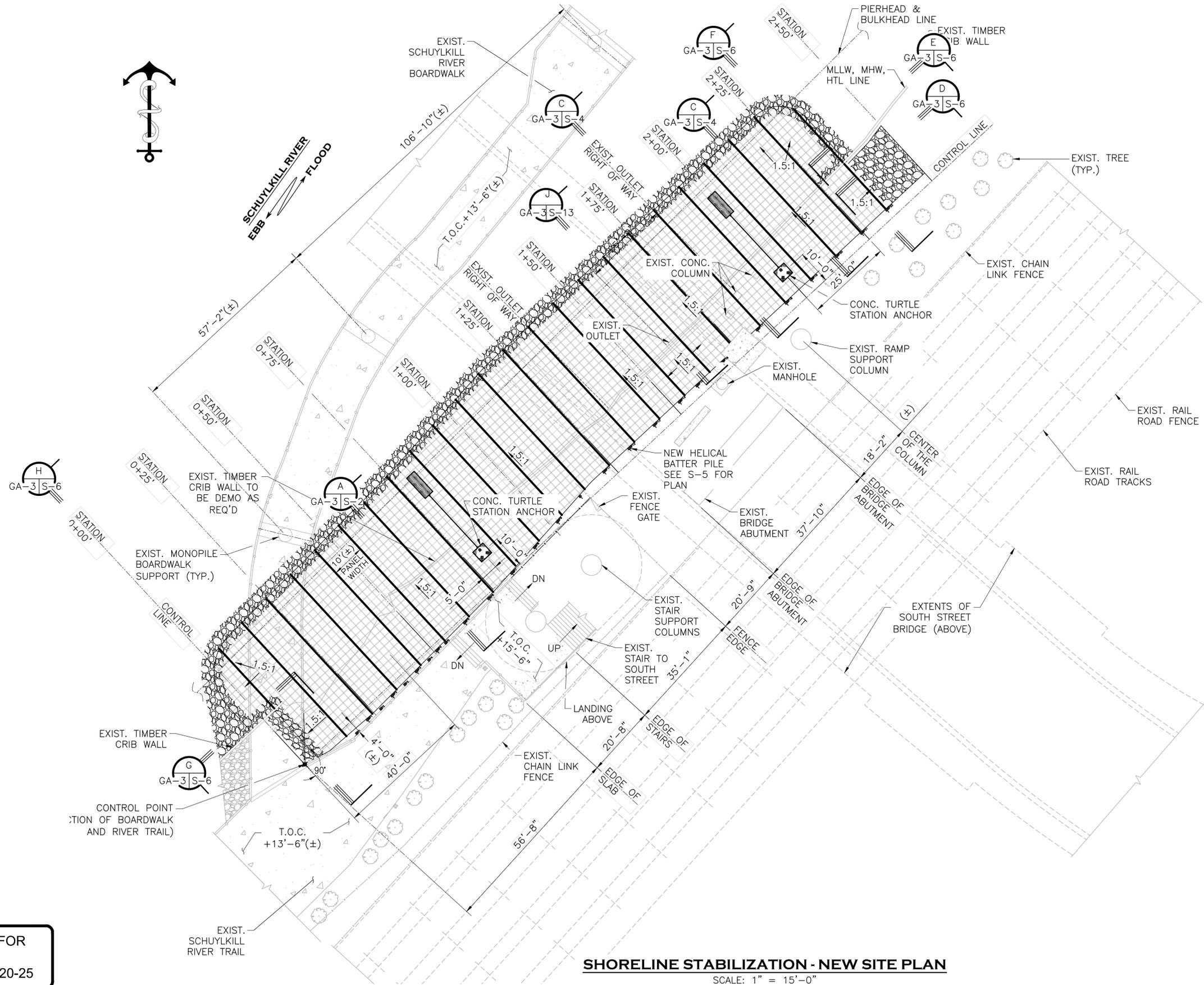
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LEGEND:

- EXIST. ELEMENTS
- NEW ELEMENTS
- MLW MEAN LOW WATER
- MHW MEAN HIGH WATER
- HTL HIGH TIDE LINE
- ▣ NEW PLUMB HELICAL PILE
- ▣ NEW BATTER HELICAL PILE

NOTES:

1. FOR GENERAL NOTES, SEE DRAWING GN-1 AND GN-2. FOR ADDITIONAL NOTES SEE DRAWINGS GA-1 AND GA-2.
2. EXISTING BANK TO BE STABILIZED MAY BE OVERGROWN WITH VEGETATION. CONTRACTOR SHALL VISIT THE SITE DURING THE BID PHASE TO DETERMINE COST FOR REMOVAL OF VEGETATION TO COMPLETE THE PROJECT.
3. DESIGN OF ARTICULATING BLOCK CONCRETE MATTRESS IS TO BE PERFORMED BY A MANUFACTURER W/ MINIMUM FIVE (5) YEARS EXPERIENCE IN THE DESIGN AND INSTALLATION OF ARTICULATING BLOCK CONCRETE MATTRESSES. MANUFACTURER SHALL PROVIDE CALCULATIONS AND SHOP DRAWINGS SIGNED & SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA. ALTERNATE SLOPES WILL BE ENTERTAINED AS PART OF MANUFACTURER'S DESIGN.

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SHORELINE STABILIZATION - NEW SITE PLAN

SCALE: 1" = 15'-0"



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PROJECT LOCATION:
SOUTH STREET BRIDGE

SCHUYLKILL BANKS SOUTH STREET SHORELINE REHABILITATION
SHORELINE STABILIZATION - NEW SITE PLAN
SHEET: 6 OF 19
DRAWING NO.: GA-3

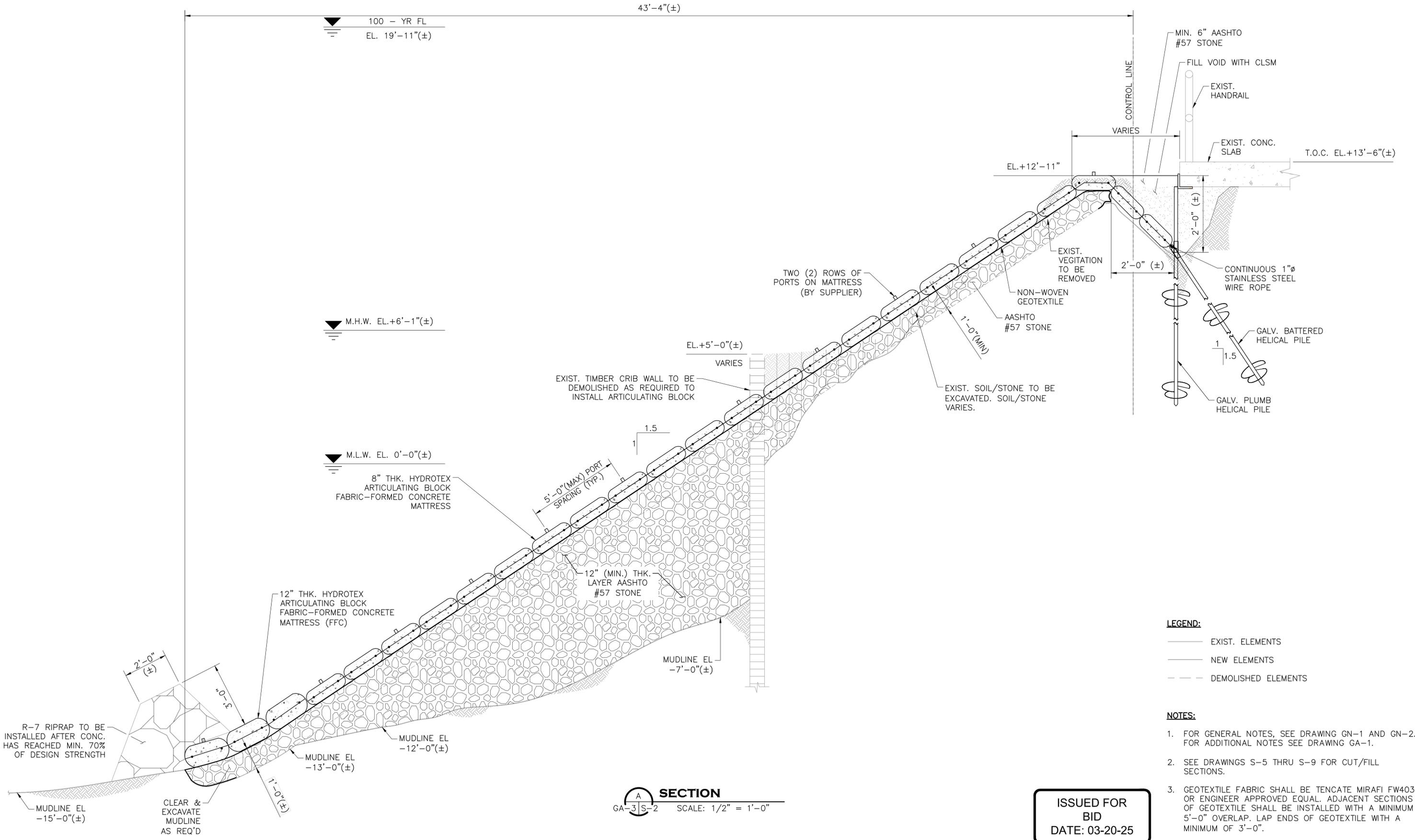
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SECTION
GA-3 | S-2 SCALE: 1/2" = 1'-0"

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- LEGEND:**
- EXIST. ELEMENTS
 - NEW ELEMENTS
 - - - DEMOLISHED ELEMENTS

- NOTES:**
1. FOR GENERAL NOTES, SEE DRAWING GN-1 AND GN-2. FOR ADDITIONAL NOTES SEE DRAWING GA-1.
 2. SEE DRAWINGS S-5 THRU S-9 FOR CUT/FILL SECTIONS.
 3. GEOTEXTILE FABRIC SHALL BE TENCATE MIRAFI FW403 OR ENGINEER APPROVED EQUAL. ADJACENT SECTIONS OF GEOTEXTILE SHALL BE INSTALLED WITH A MINIMUM 5'-0" OVERLAP. LAP ENDS OF GEOTEXTILE WITH A MINIMUM OF 3'-0".

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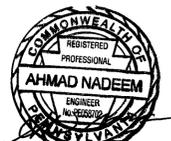


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SCHUYLKILL BANKS SOUTH STREET SHORELINE REHABILITATION
SHORELINE STABILIZATION - SECTION A
SHEET: 8 OF 19 DRAWING NO.: S-2

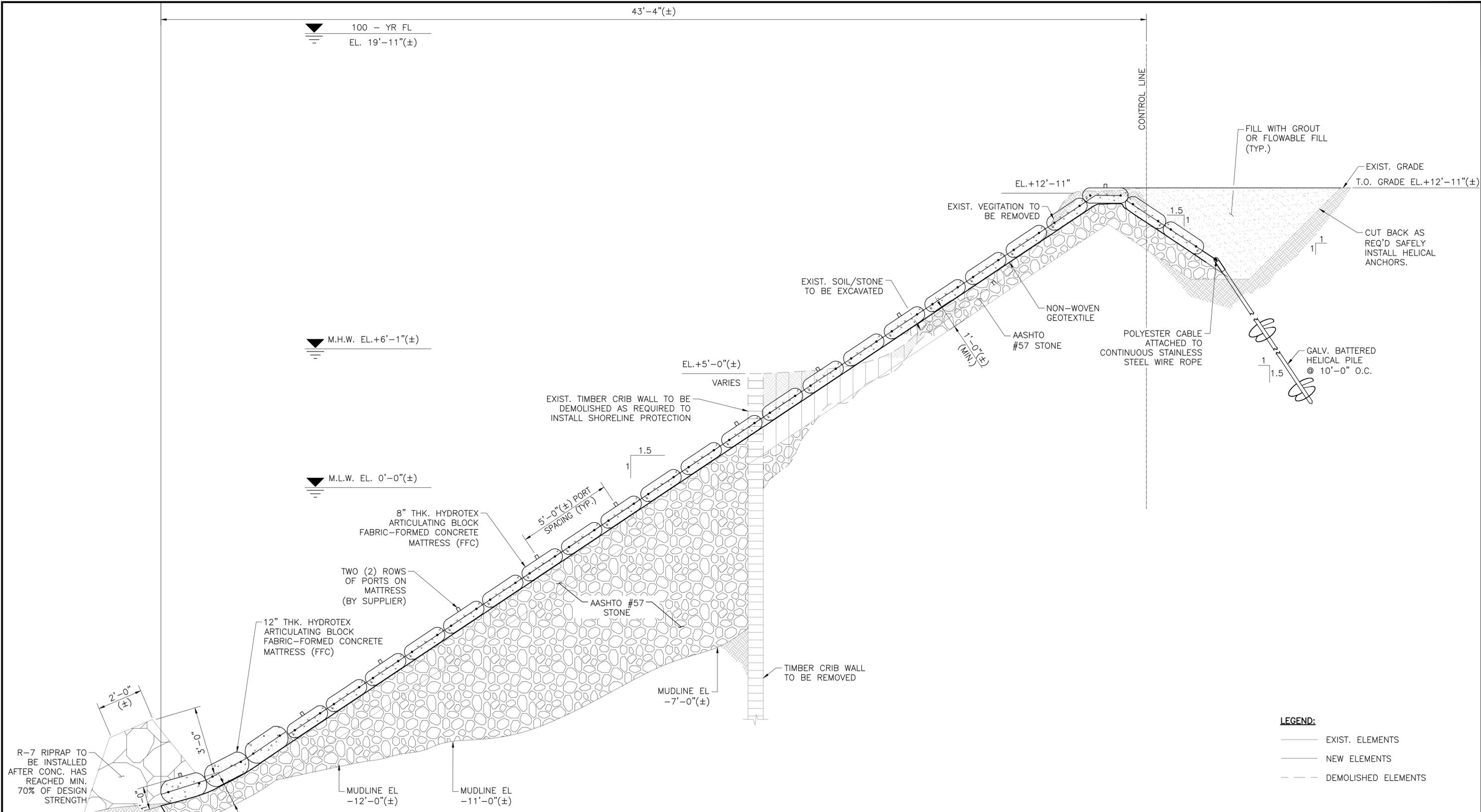
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SECTION
G-3 | S-4 SCALE: 1/2" = 1'-0"

- LEGEND:**
- EXIST. ELEMENTS
 - NEW ELEMENTS
 - - - DEMOLISHED ELEMENTS

- NOTES:**
1. FOR GENERAL NOTES, SEE DRAWING GN-1 AND GN-2.
 2. SEE DRAWINGS S-1 THRU S-5 FOR CUT/FILL SECTIONS.

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DATE: 03-20-25



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CLIENT NAME:
SCHUYLKILL RIVER DEVELOPMENT CORP.
CLIENT LOCATION:
2401 WALNUT ST., SUITE 603, PHILADELPHIA, PA 19103
PROJECT LOCATION:
SOUTH STREET BRIDGE

SCHUYLKILL BANKS SOUTH STREET SHORELINE REHABILITATION
SHORELINE STABILIZATION - SECTION C
SHEET: 10 OF 19 DRAWING NO.: S-4

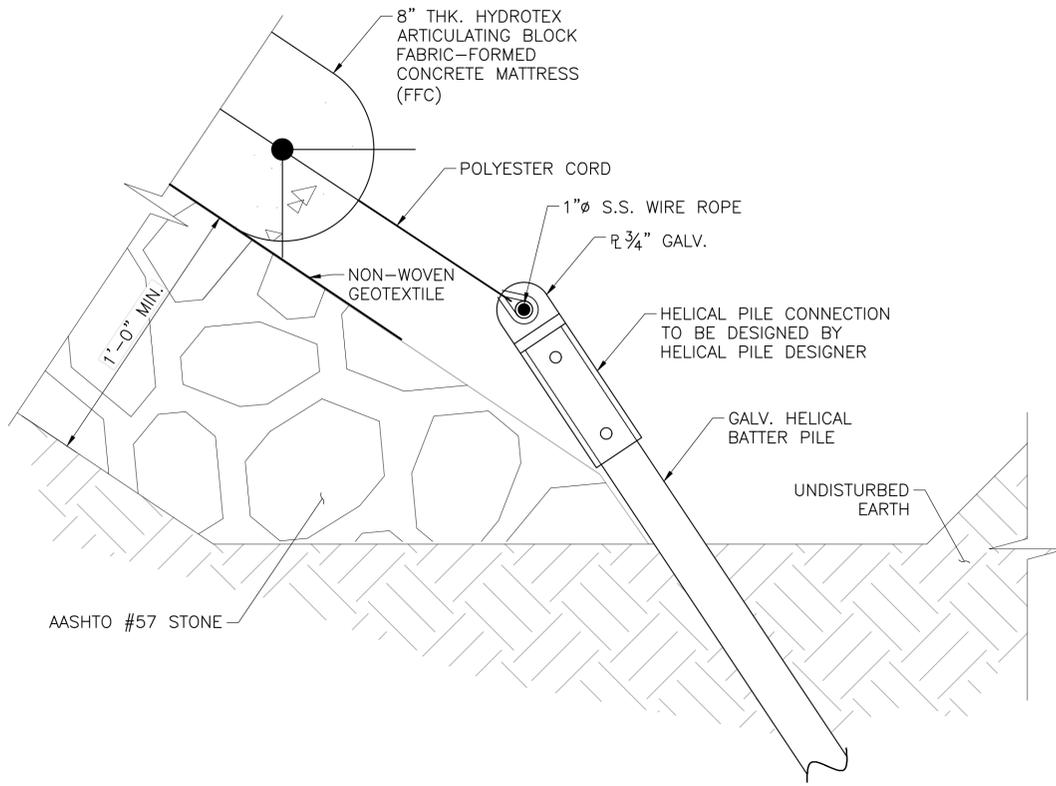
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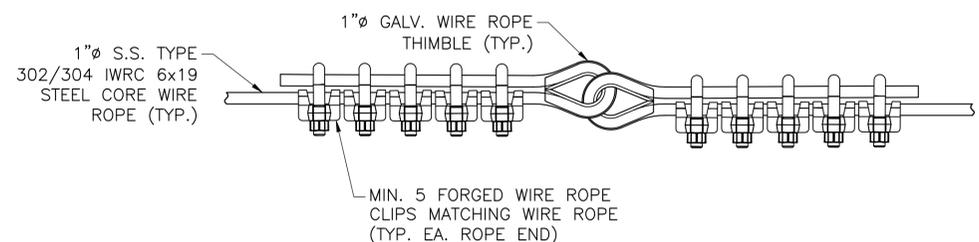


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FILE NO:
DESIGNED BY: DM APPROVED BY: AN
DRAWN BY: RA SCALE: AS NOTED
DATE DRAWN: 11-14-23 REVISION: A

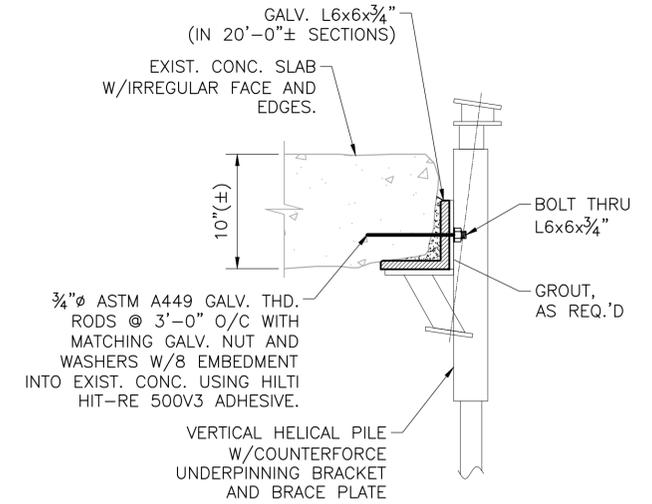
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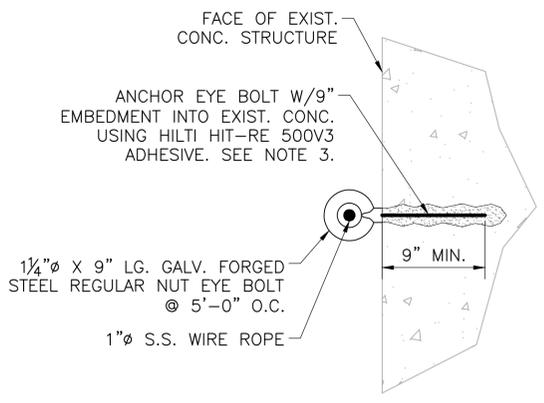
TYP. WIRE ROPE MOUNTING DETAIL
SCALE: 3" = 1'-0"



TYP. WIRE ROPE SPLICE - DETAIL
SCALE: 1 1/2" = 1'-0"



SECTION
SCALE: 1-1/2" = 1'-0"
(HELICAL PILE CONNECTION GENERAL ARRANGEMENT @ EXIST. SLAB)



TYP. SECTION @ ANCHORING TO EXIST. CONC.
SCALE: 1 1/2" = 1'-0"

LEGEND:

- EXIST. ELEMENTS
- NEW ELEMENTS
- ⊠ NEW PLUMB HELICAL PILE
- ⊠ NEW BATTER HELICAL PILE

NOTES:

1. FOR GENERAL NOTES, SEE DRAWING GN-1 AND GN-2. FOR ADDITIONAL NOTES SEE DRAWING S-1.

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CLIENT NAME:
SCHUYKILL RIVER DEVELOPMENT CORP.
CLIENT LOCATION:
2401 WALNUT ST., SUITE 603, PHILADELPHIA, PA 19103
PROJECT LOCATION
SOUTH STREET BRIDGE

SCHUYKILL BANKS SOUTH STREET SHORELINE REHABILITATION
SHORELINE STABILIZATION - MISCELLANEOUS DETAILS
SHEET: 11 OF 19 DRAWING NO.: S-5

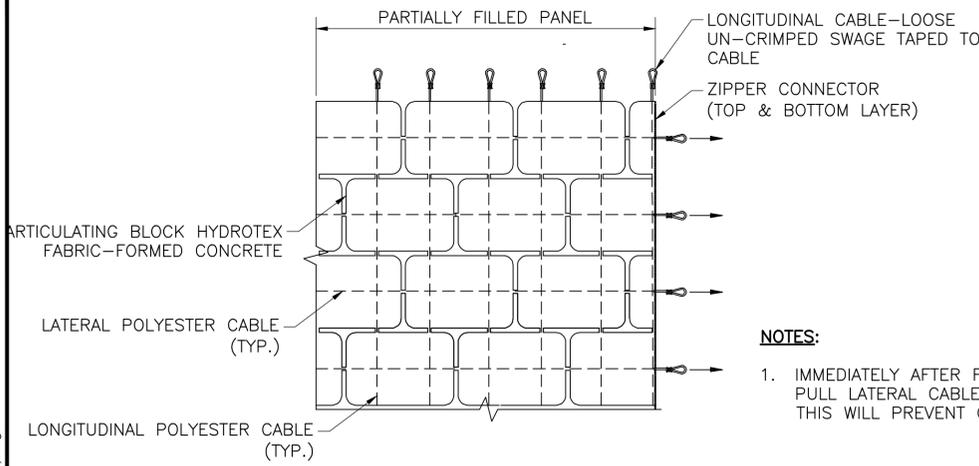
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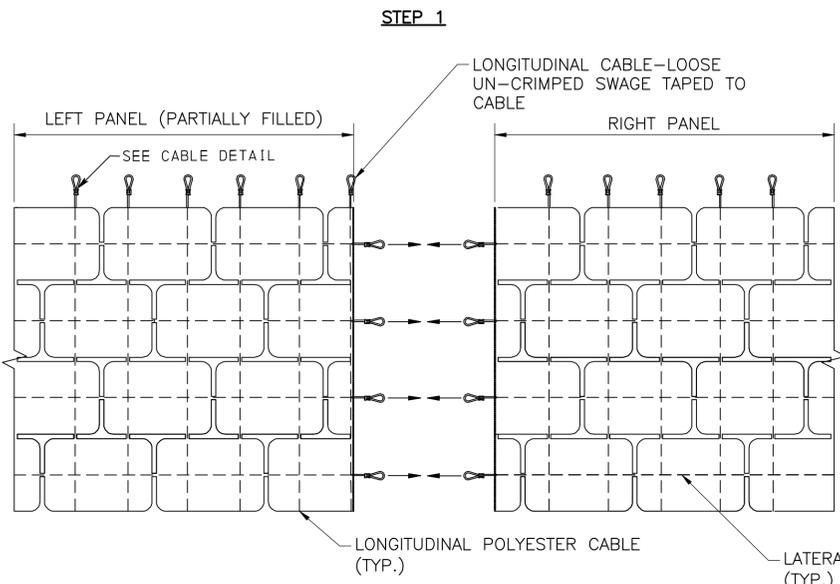
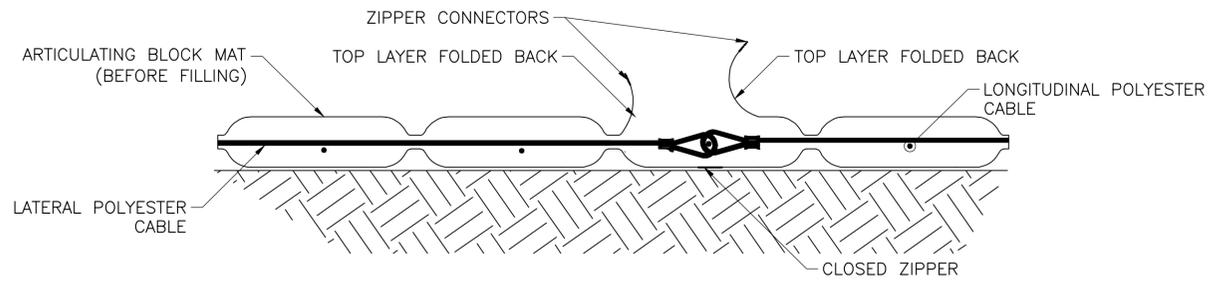
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FILE NO.:	
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DRAWN BY: RA	SCALE: AS NOTED
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NOTES:

1. IMMEDIATELY AFTER FILLING EACH SECTION OF THE PANEL, PULL LATERAL CABLES IN THE DIRECTION OF THE ARROWS. THIS WILL PREVENT CABLE BUNCHING WITHIN THE MAT.

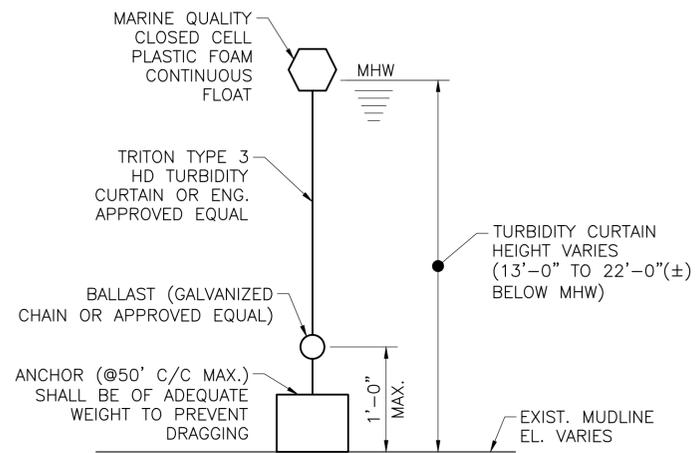


NOTES:

1. ALIGN RIGHT PANEL WITH LEFT PANEL, SO THAT ADJACENT BLOCK AND CORRESPONDING CABLE MATCH.

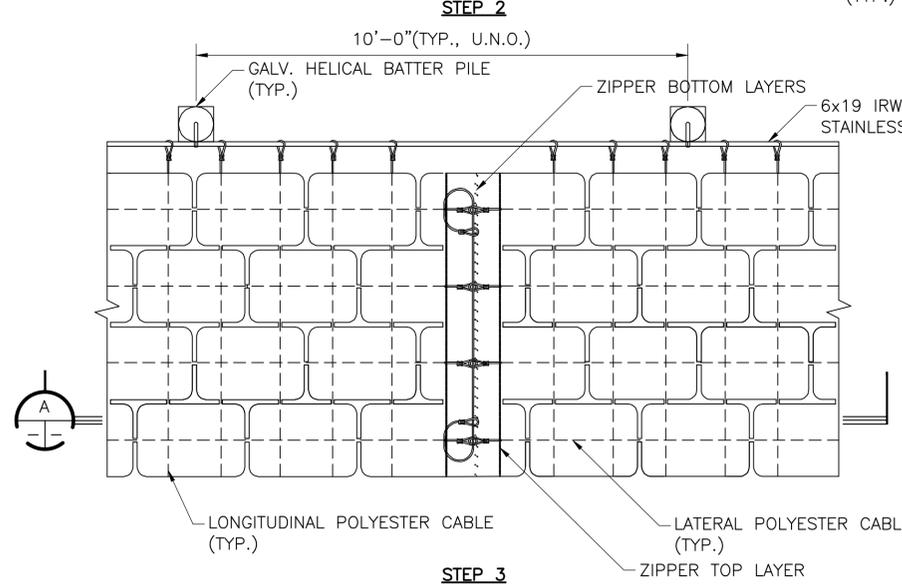
ARTICULATING BLOCKS ZIPPER AND CABLE DETAIL - PRIOR TO CLOSURE

SCALE: NOT TO SCALE



TURBIDITY CURTAIN SPECIFICATIONS

1. FLOATING TURBIDITY CURTAIN SHALL BE TRITON TYPE 3 HD TURBIDITY BARRIER OR ENG. APPROVED EQUAL.
2. A 3/8" POLY CORD SHALL BE USED FOR TYING GROMMETS BETWEEN SECTIONS OF THE CURTAINS.



- NOTES:**
1. JOIN LEFT AND RIGHT PANEL BOTTOM LAYERS TOGETHER USING ZIPPER PULLER.
 2. REMOVE TAPE FROM LONGTUDINAL CABLE AND SLIDE OFF SWAGE AND WASHER.
 3. PASS LONGITUDINAL CABLE THROUGH ADJACENT LATERAL CABLE LOOPS TO CONNECT LEFT AND RIGHT PANEL LATERAL CABLES.
 4. PASS CABLE THROUGH GROMMET, INSERT WASHER AND SWAGE. FORM A LOOP AND PASS BACK THROUGH SWAGE.
 5. TO CRIMP SWAGE, PLACE SWAGE CONNECTION ON A RIGID ITEM (ROCK) AND USE A HAMMER TO SECURE SWAGE AROUND CABLE.
 6. CRIMP SWAGE ON OPPOSITE END OF LONGITUDINAL CABLE.

LEGEND:

- EXIST. ELEMENTS
- NEW ELEMENTS
- - - DEMOLISHED ELEMENTS

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DATE: 03-20-25

- NOTES:**
1. FOR GENERAL NOTES, SEE DRAWING GN-1 AND GN-2.

HYDROTEX ARTICULATING BLOCK PANEL - TRANSVERSE CABLE CONNECTION DETAIL

SCALE: NOT TO SCALE

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			CLIENT LOCATION: 2401 WALNUT ST., SUITE 603, PHILADELPHIA, PA 19103	SHORELINE STABILIZATION - MISCELLANEOUS DETAILS					FILE NO.:	
PROJECT LOCATION SOUTH STREET BRIDGE			SHEET: 13 OF 19	DRAWING NO.: S-7	REV. A	ISSUED FOR BID	BY: BJS, DM	DATE: 03-20-25	DESIGNED BY: DM	APPROVED BY: AN
						REVISION DESCRIPTION	BY	CHKD	DATE	SCALE: AS NOTED
									DATE DRAWN: 10-23-24	REVISION: A

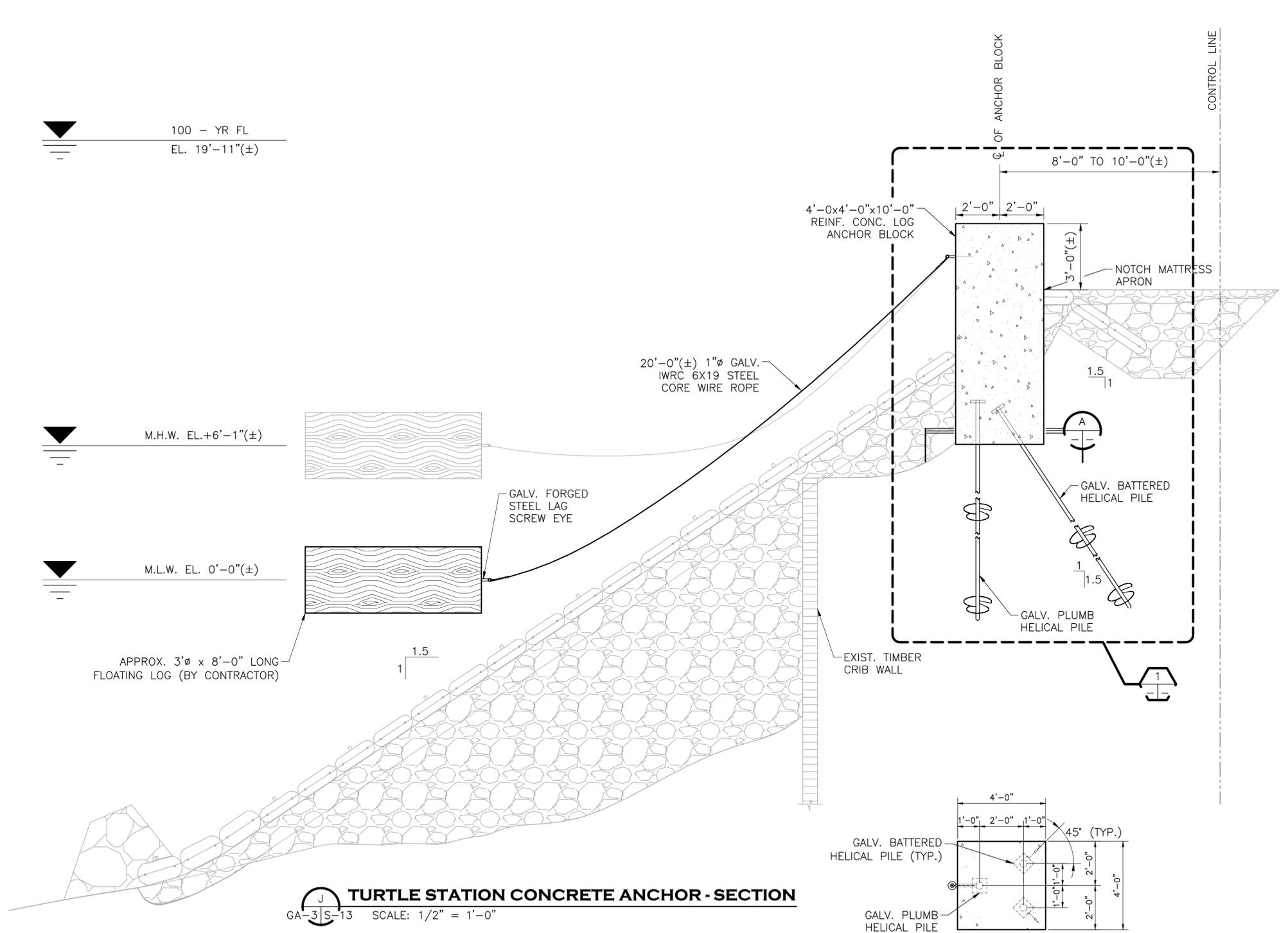
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100 - YR FL
EL. 19'-11" (±)

M.H.W. EL. +6'-1" (±)

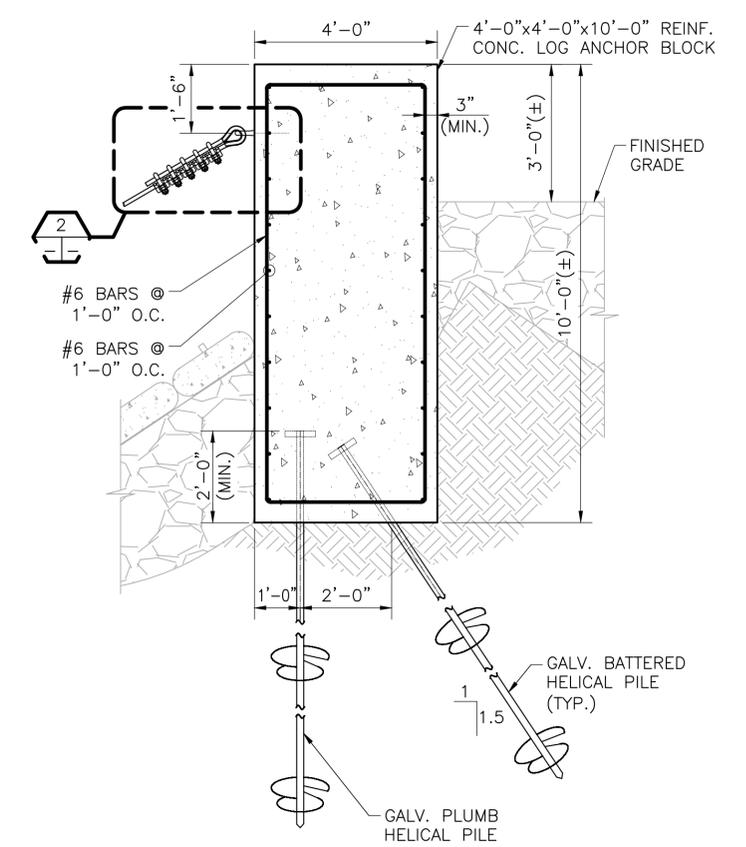
M.L.W. EL. 0'-0" (±)

APPROX. 3'Ø x 8'-0" LONG
FLOATING LOG (BY CONTRACTOR)

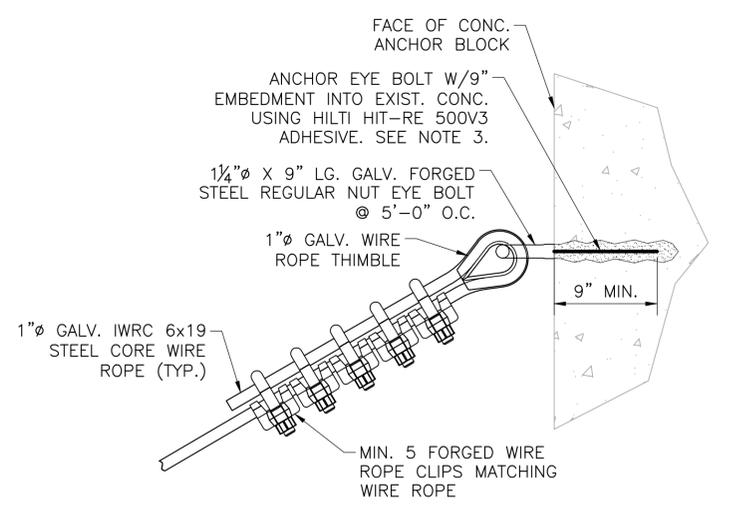


TURTLE STATION CONCRETE ANCHOR - SECTION
GA-3 | S-13 SCALE: 1/2" = 1'-0"

TURTLE STATION CONCRETE ANCHOR - PLAN
SCALE: 1/2" = 1'-0"



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



DETAIL 2
SCALE: 3" = 1'-0"

- LEGEND:**
- EXIST. ELEMENTS
 - NEW ELEMENTS
 - - - DEMOLISHED ELEMENTS

- NOTES:**
- FOR GENERAL NOTES, SEE DRAWING GN-1 AND GN-2. FOR ADDITIONAL NOTES SEE DRAWING S-1.
 - ALL NEW PLUMB HELICAL PILES SHALL BE HOT DIP GALVANIZED AND SHALL BE INSTALLED TO AN ALLOWABLE BEARING CAPACITY OF 5 TONS IN COMPRESSION.
 - ALL NEW BATTER HELICAL PILES SHALL BE HOT DIP GALVANIZED AND SHALL BE INSTALLED TO AN ALLOWABLE BEARING CAPACITY OF 2 TONS IN COMPRESSION.

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CLIENT LOCATION:
2401 WALNUT ST., SUITE 603, PHILADELPHIA, PA 19103
PROJECT LOCATION:
SOUTH STREET BRIDGE

SCHUYKILL BANKS SOUTH STREET SHORELINE REHABILITATION
TURTLE STATION CONCRETE ANCHOR - DETAILS
SHEET: 14 OF 19 DRAWING NO.: S-8

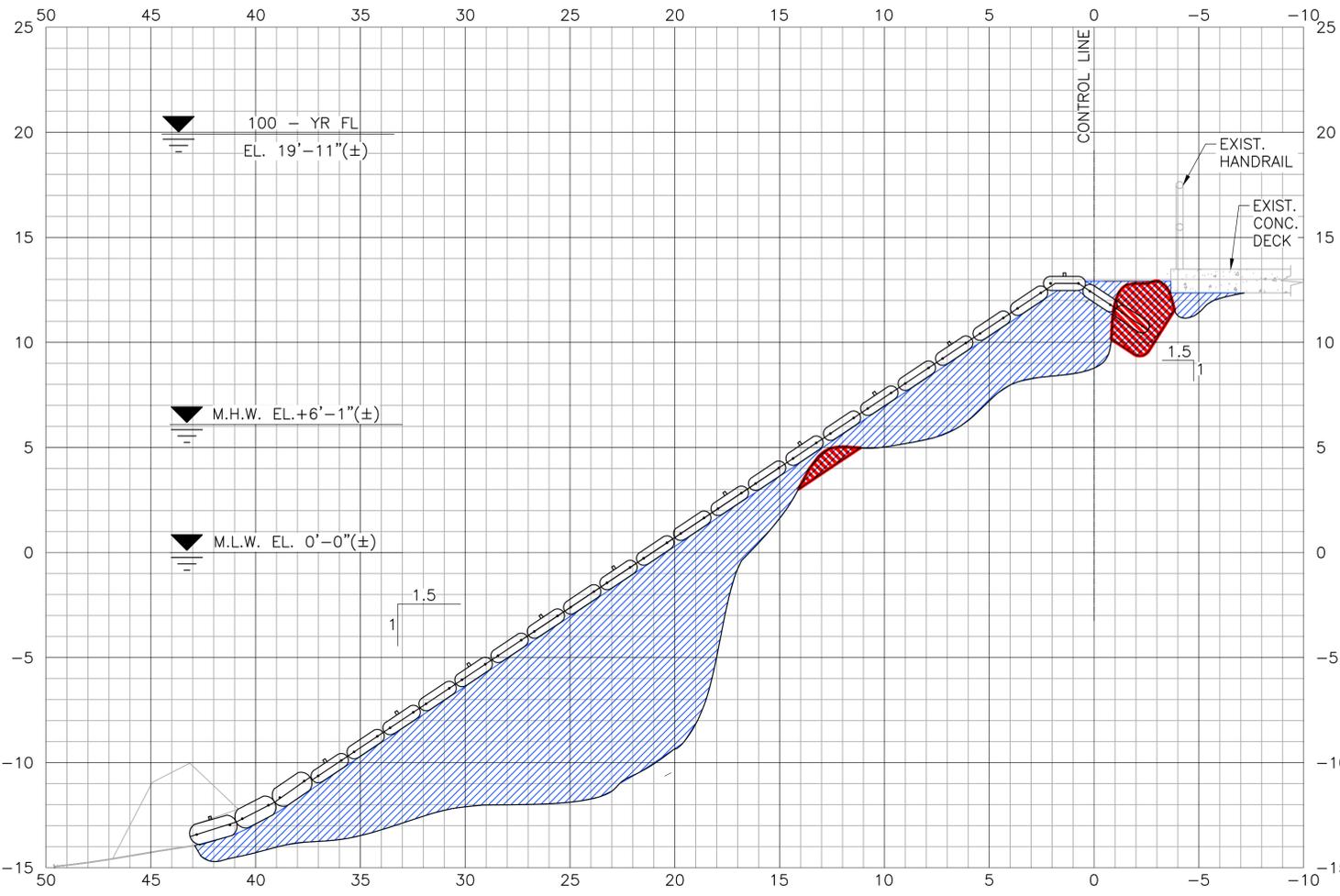
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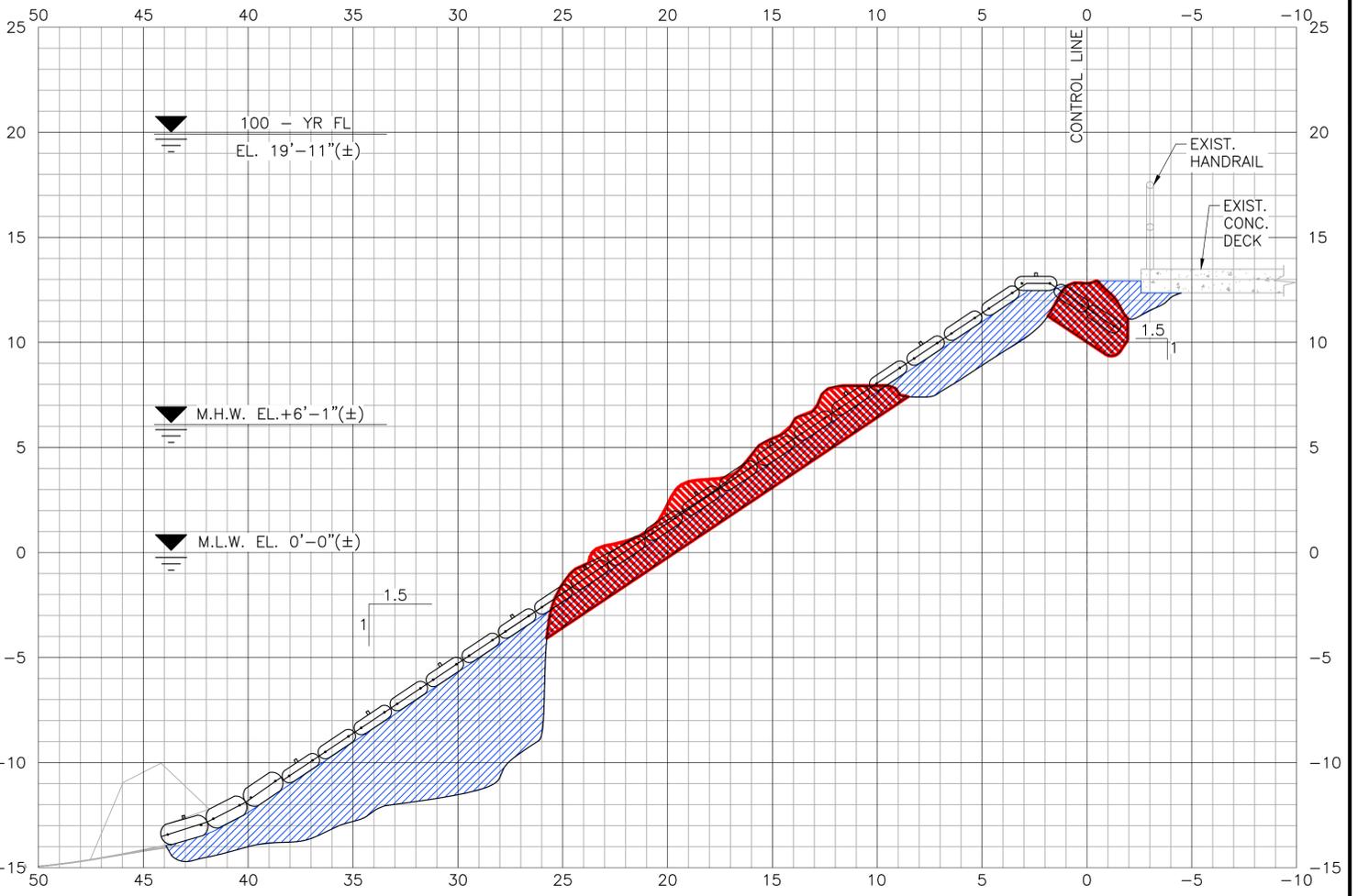
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**CROSS SECTION @
STATION 0+25'**
SCALE: 1/4" = 1'-0"

CUT VOLUME = 9 CY
 FILL VOLUME = 186 CY
 MATT (FILL) VOLUME = 36 CY
 R7 RIP RAP (FILL) VOLUME = 12 CY



**CROSS SECTION @
STATION 0+50'**
SCALE: 1/4" = 1'-0"

CUT VOLUME = 42.4 CY
 FILL VOLUME = 104.6 CY
 MATT (FILL) VOLUME = 36 CY
 R7 RIP RAP (FILL) VOLUME = 12 CY

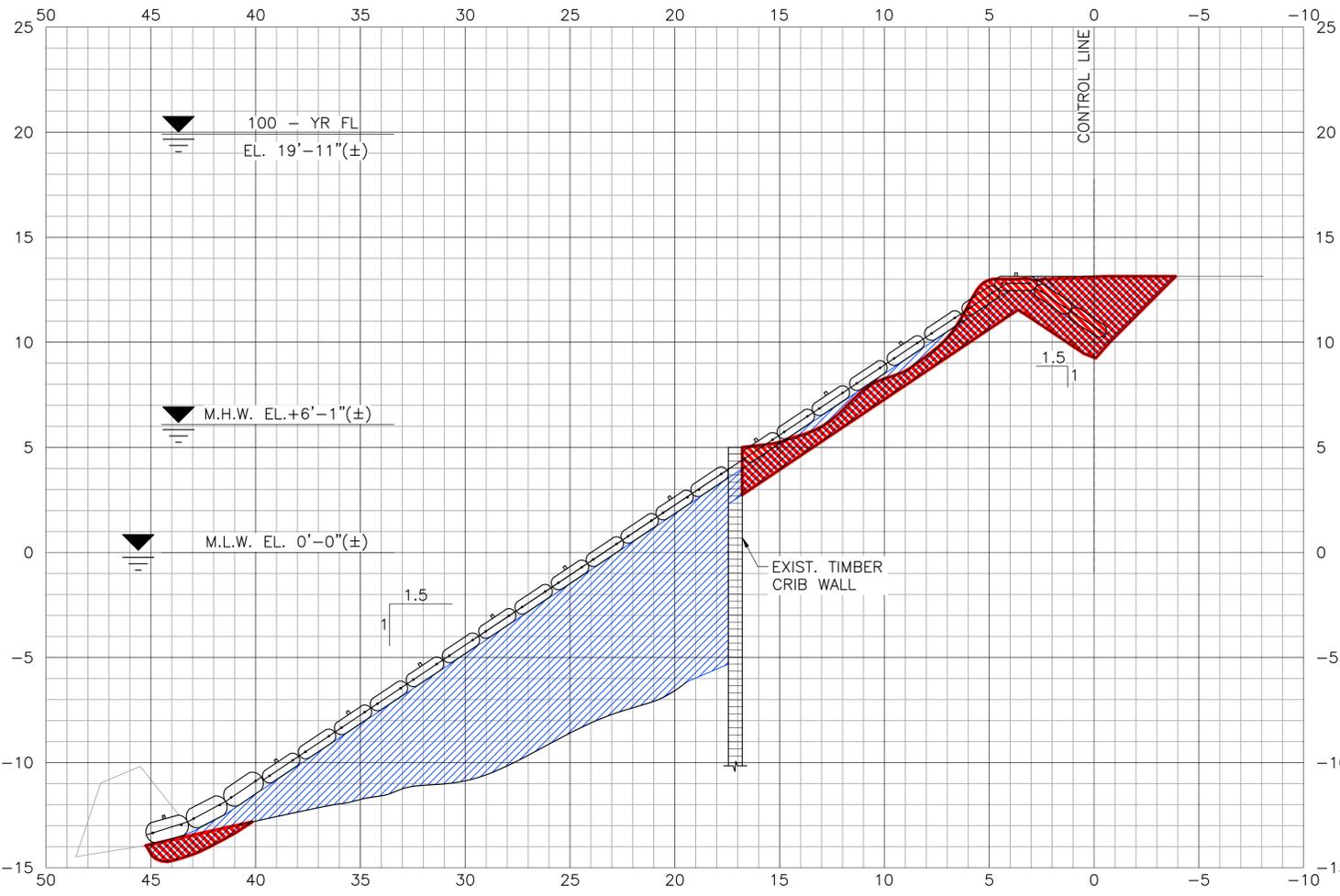
- LEGEND:**
- EXIST. ELEMENTS
 - NEW ELEMENTS
 - - - DEMOLISHED ELEMENTS
 - CUT AREA
 - FILL AREA
 - R7 RIP RAP AREA

- NOTES:**
1. FOR GENERAL NOTES, SEE DRAWING GN-1 AND GN-2. FOR ADDITIONAL NOTES SEE DRAWING GA-1.
 2. SHOWN CUT & FILL VOLUMES ARE BASED ON 25' FROM PRIOR STATION.
 3. CONTRACTOR TO PERFORM SURVEY USING LAND SURVEYOR REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA TO DETERMINE ACTUAL CUT & FILL VOLUMES PRIOR TO PROCUREMENT.

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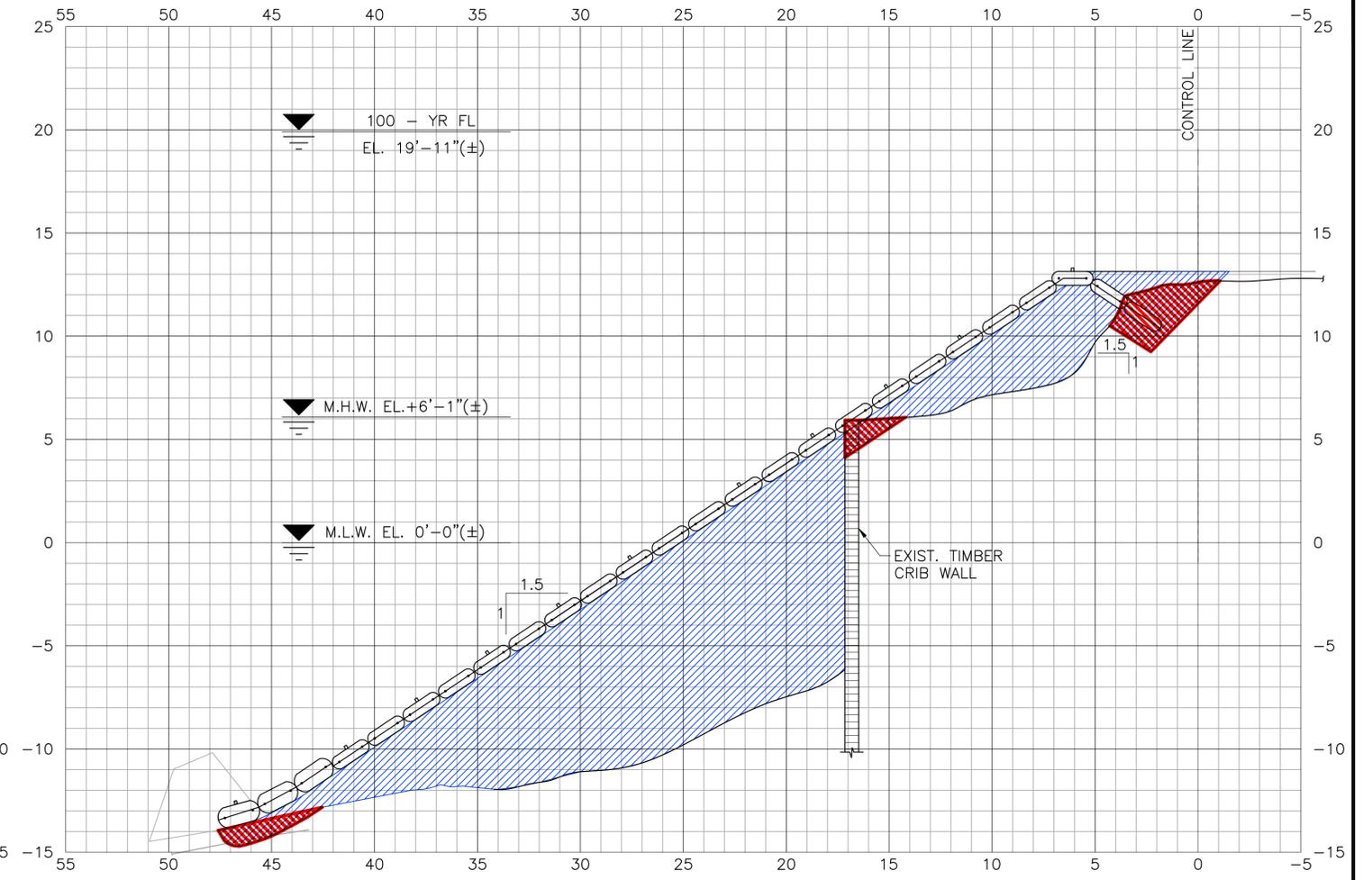
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**CROSS SECTION @
STATION 0+75'**
SCALE: 1/4" = 1'-0"

CUT VOLUME = 34 CY
 FILL VOLUME = 154.4 CY
 MATT (FILL) VOLUME = 36 CY
 R7 RIP RAP (FILL) VOLUME = 12 CY



**CROSS SECTION @
STATION 1+00'**
SCALE: 1/4" = 1'-0"

CUT VOLUME = 13 CY
 FILL VOLUME = 219 CY
 MATT (FILL) VOLUME = 36 CY
 R7 RIP RAP (FILL) VOLUME = 12 CY

- LEGEND:**
- EXIST. ELEMENTS
 - NEW ELEMENTS
 - - - DEMOLISHED ELEMENTS
 - CUT AREA
 - FILL AREA
 - R7 RIP RAP AREA

- NOTES:**
1. FOR GENERAL NOTES, SEE DRAWING GN-1 AND GN-2. FOR ADDITIONAL NOTES SEE DRAWING GA-1.
 2. SHOWN CUT & FILL VOLUMES ARE BASED ON 25' FROM PRIOR STATION.
 3. CONTRACTOR TO PERFORM SURVEY USING LAND SURVEYOR REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA TO DETERMINE ACTUAL CUT & FILL VOLUMES PRIOR TO PROCUREMENT.

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 2401 WALNUT ST., SUITE 603, PHILADELPHIA, PA 19103
 PROJECT LOCATION
 SOUTH STREET BRIDGE

SCHUYLKILL BANKS SOUTH STREET SHORELINE REHABILITATION
 SHORELINE STABILIZATION - SECTIONS @ STA. 0+75' & 1+00'
 SHEET: 16 OF 19 DRAWING NO.: S-10

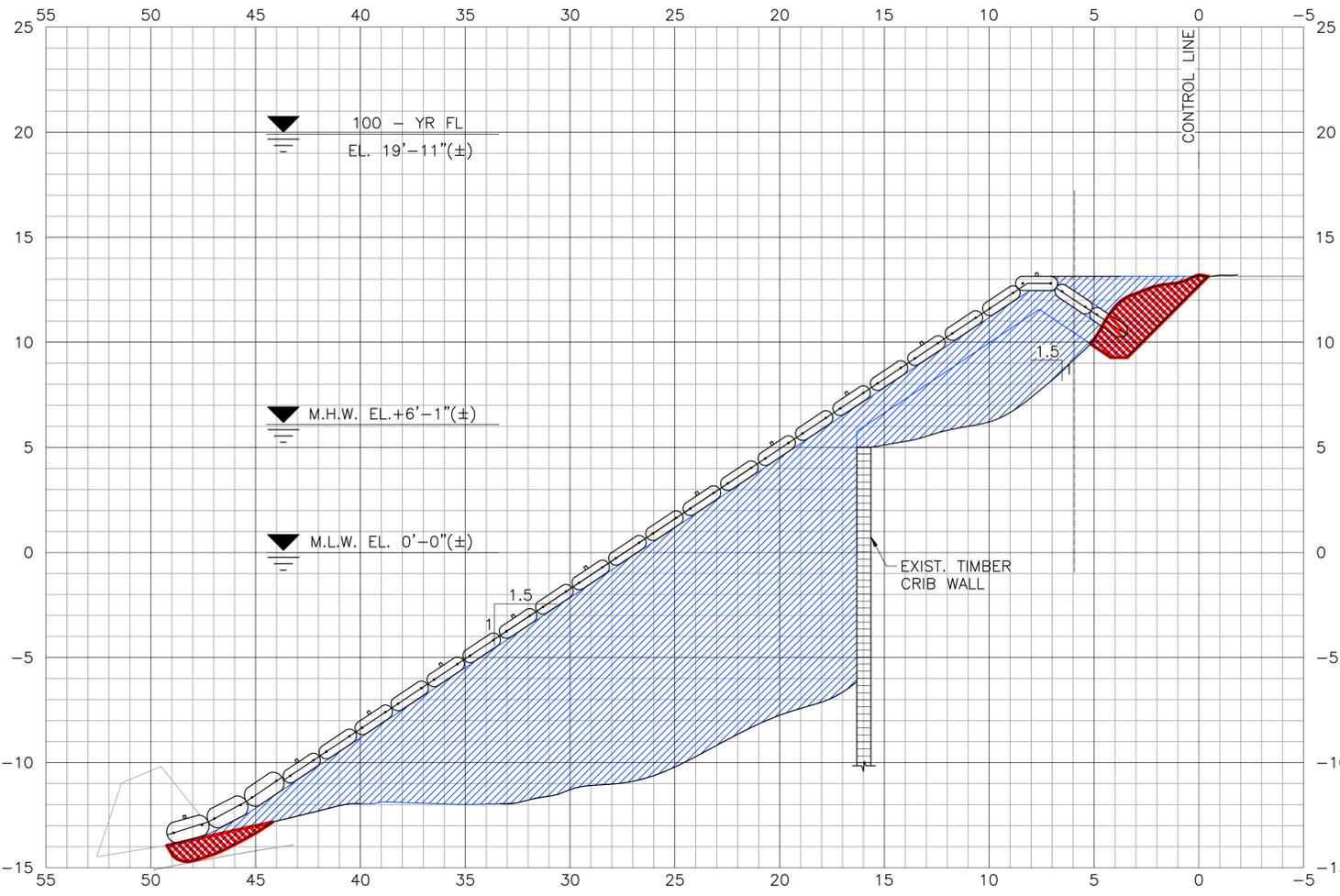
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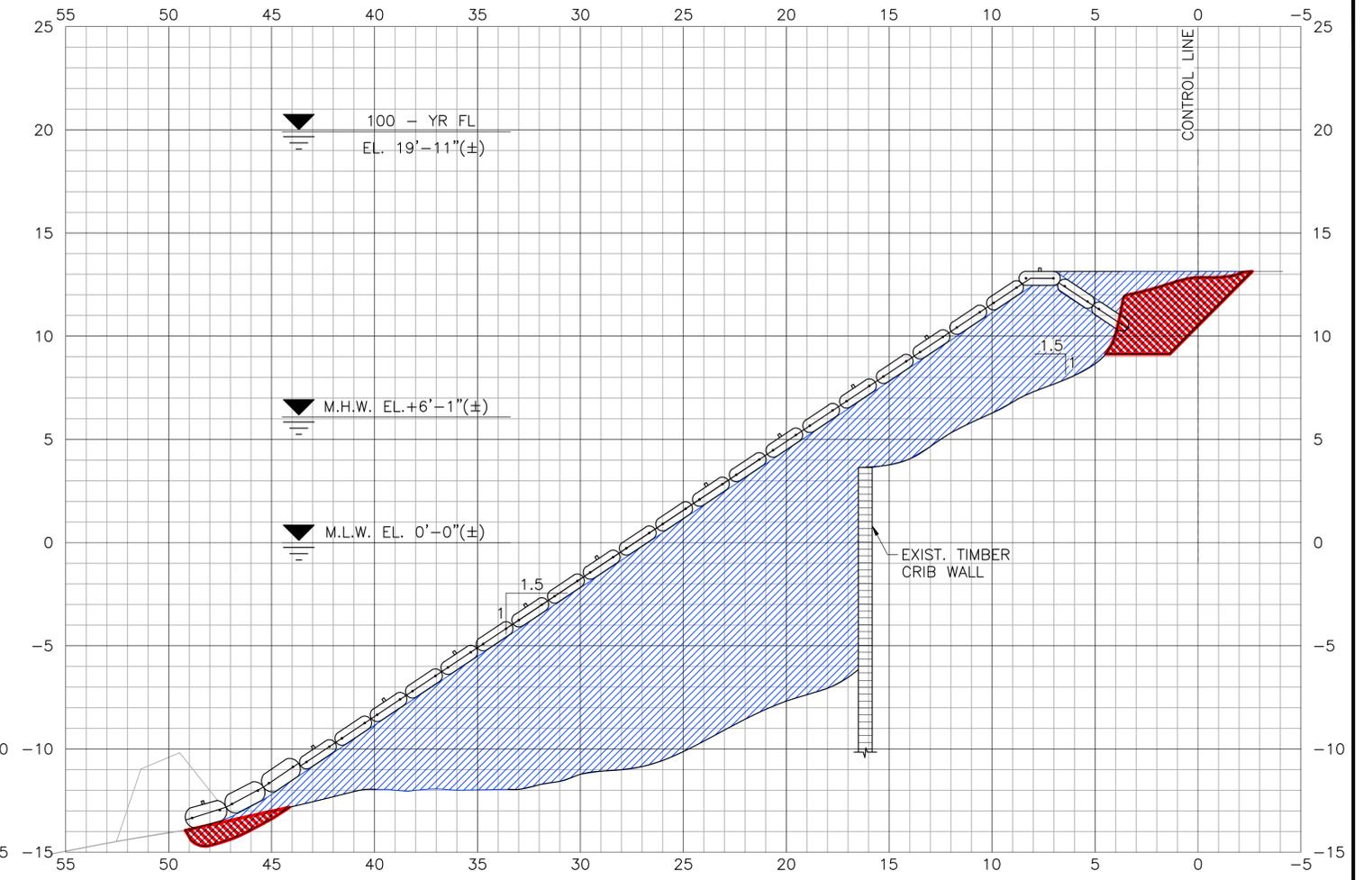
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**CROSS SECTION @
STATION 1+25'**
SCALE: 1/4" = 1'-0"

CUT VOLUME = 12 CY
 FILL VOLUME = 270 CY
 MATT (FILL) VOLUME = 36 CY
 R7 RIP RAP (FILL) VOLUME = 12 CY



**CROSS SECTION @
STATION 1+50'**
SCALE: 1/4" = 1'-0"

CUT VOLUME = 17 CY
 FILL VOLUME = 282 CY
 MATT (FILL) VOLUME = 36 CY
 R7 RIP RAP (FILL) VOLUME = 12 CY

- LEGEND:**
- EXIST. ELEMENTS
 - NEW ELEMENTS
 - - - DEMOLISHED ELEMENTS
 - CUT AREA
 - FILL AREA
 - R7 RIP RAP AREA

- NOTES:**
1. FOR GENERAL NOTES, SEE DRAWING GN-1 AND GN-2. FOR ADDITIONAL NOTES SEE DRAWING GA-1.
 2. SHOWN CUT & FILL VOLUMES ARE BASED ON 25' FROM PRIOR STATION.
 3. CONTRACTOR TO PERFORM SURVEY USING LAND SURVEYOR REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA TO DETERMINE ACTUAL CUT & FILL VOLUMES PRIOR TO PROCUREMENT.

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 2401 WALNUT ST., SUITE 603, PHILADELPHIA, PA 19103
 PROJECT LOCATION:
 SOUTH STREET BRIDGE

SCHUYLKILL BANKS SOUTH STREET SHORELINE REHABILITATION
 SHORELINE STABILIZATION - SECTIONS @ STA. 1+25' & 1+50'
 SHEET: 17 OF 19 DRAWING NO.: S-11

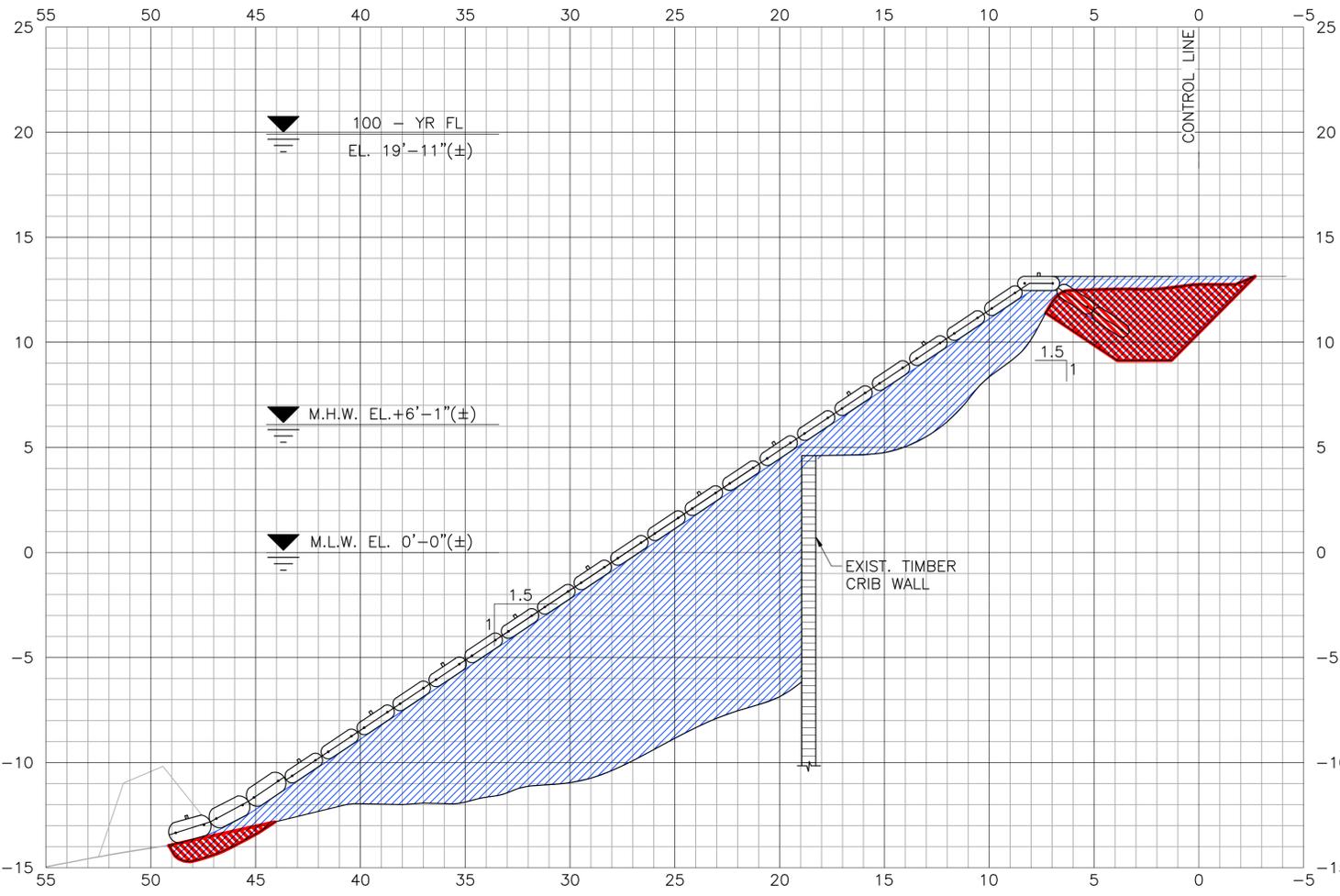
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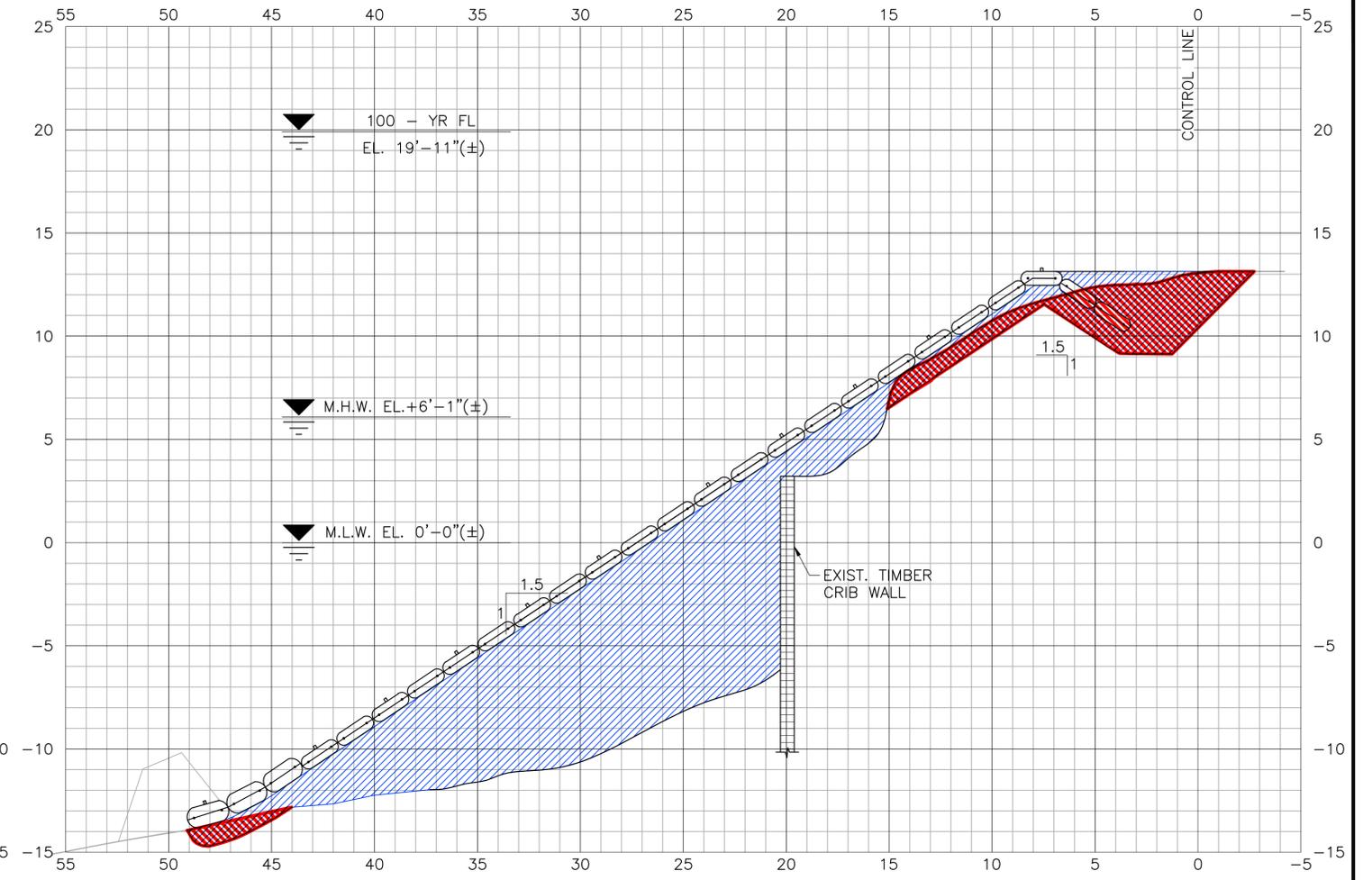
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**CROSS SECTION @
STATION 1+75'**
SCALE: 1/4" = 1'-0"

CUT VOLUME = 24 CY
 FILL VOLUME = 225 CY
 MATT (FILL) VOLUME = 36 CY
 R7 RIP RAP (FILL) VOLUME = 12 CY



**CROSS SECTION @
STATION 2+00'**
SCALE: 1/4" = 1'-0"

CUT VOLUME = 30.5 CY
 FILL VOLUME = 195 CY
 MATT (FILL) VOLUME = 36 CY
 R7 RIP RAP (FILL) AREA = 12 CY

- LEGEND:**
- EXIST. ELEMENTS
 - NEW ELEMENTS
 - - - DEMOLISHED ELEMENTS
 - CUT AREA
 - FILL AREA
 - R7 RIP RAP AREA

- NOTES:**
1. FOR GENERAL NOTES, SEE DRAWING GN-1 AND GN-2. FOR ADDITIONAL NOTES SEE DRAWING GA-1.
 2. SHOWN CUT & FILL VOLUMES ARE BASED ON 25' FROM PRIOR STATION.
 3. CONTRACTOR TO PERFORM SURVEY USING LAND SURVEYOR REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA TO DETERMINE ACTUAL CUT & FILL VOLUMES PRIOR TO PROCUREMENT.

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 PROJECT LOCATION:
 SOUTH STREET BRIDGE

SCHUYLKILL BANKS SOUTH STREET SHORELINE REHABILITATION
 SHORELINE STABILIZATION - SECTIONS @ STA. 1+75' & 2+00'
 SHEET: 18 OF 19 DRAWING NO.: S-12

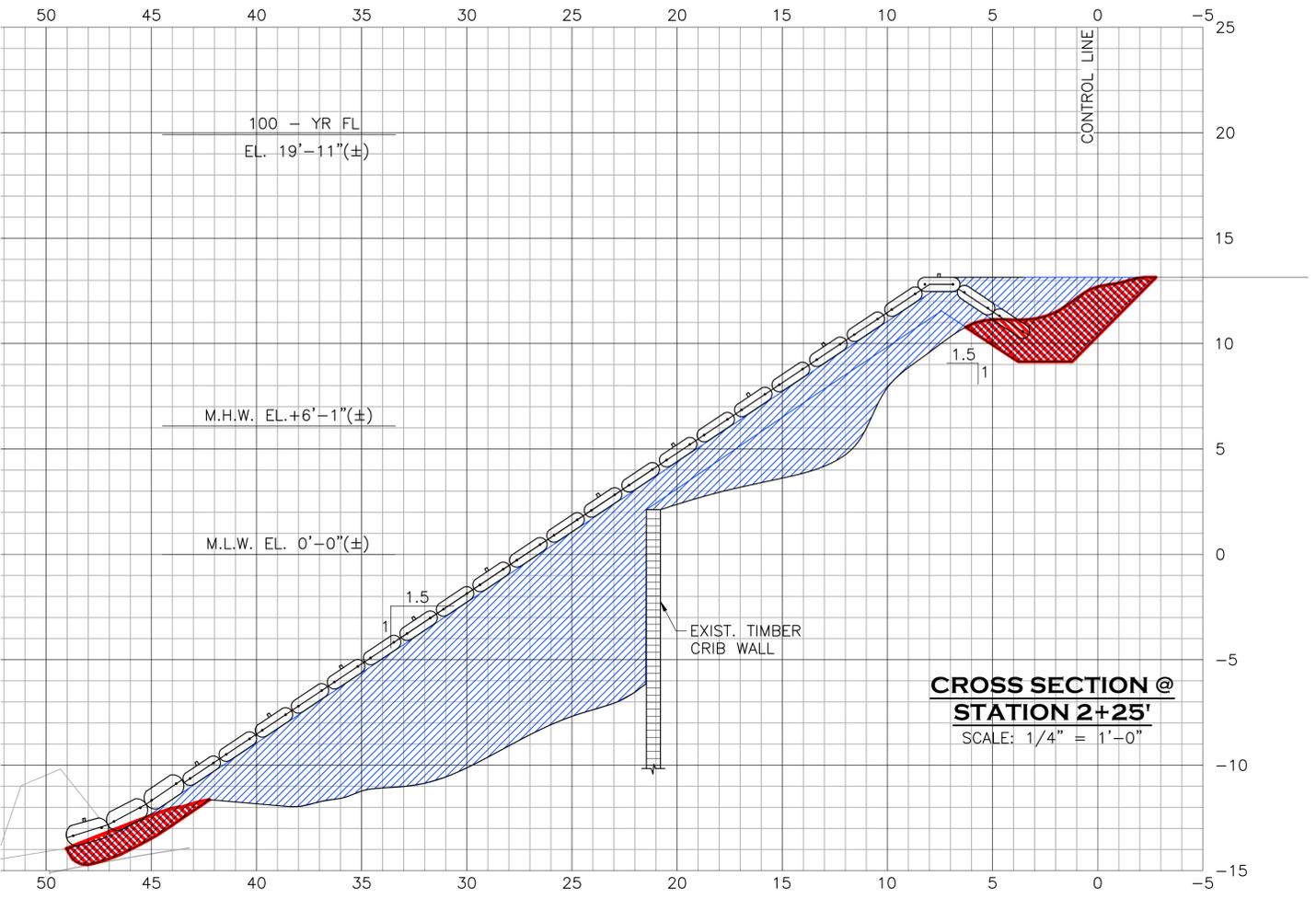
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A	ISSUED FOR BID	BJS	DM	03-20-25
	REVISION DESCRIPTION			

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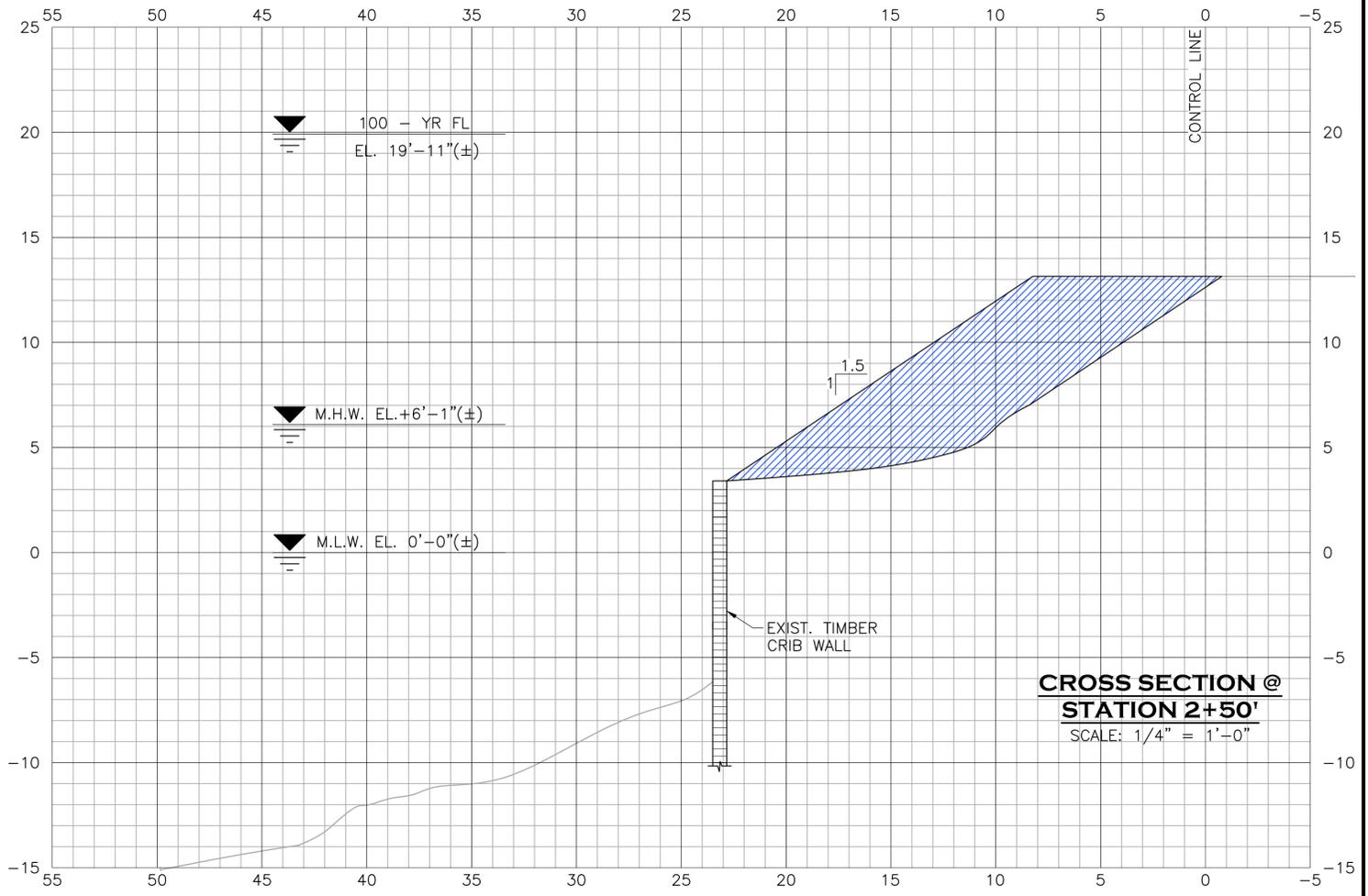
PROJECT NO.: **270081**
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 DESIGNED BY: DM APPROVED BY: AN
 DRAWN BY: RA SCALE: AS NOTED
 DATE DRAWN: 11-14-23 REVISION: A

FILE PATH: Q:\PA-Chaddis Ford-Anchor\Anchor-Data\Projects\2023\23-74-0032 - 270081 SRDC Shoreline Stabilization Design\Anchor Work\Drawings\CAD\Working\270081 - SCHUYKILL BANKS SOUTH STREET SHORELINE REHAB S-8 THRU S-12 - IFB (05-20-25).dwg



**CROSS SECTION @
STATION 2+25'**
SCALE: 1/4" = 1'-0"

CUT VOLUME = 17 CY
 FILL VOLUME = 200 CY
 MATT (FILL) VOLUME = 36 CY
 R7 RIP RAP (FILL) VOLUME = 12 CY



**CROSS SECTION @
STATION 2+50'**
SCALE: 1/4" = 1'-0"

CUT VOLUME = 0 CY
 FILL VOLUME = 77 CY
 MATT (FILL) AREA = 0 CY
 R7 RIP RAP (FILL) AREA = 0 CY

- LEGEND:**
- EXIST. ELEMENTS
 - NEW ELEMENTS
 - - - DEMOLISHED ELEMENTS
 - CUT AREA
 - FILL AREA
 - R7 RIP RAP AREA

- NOTES:**
1. FOR GENERAL NOTES, SEE DRAWING GN-1 AND GN-2. FOR ADDITIONAL NOTES SEE DRAWING GA-1.
 2. SHOWN CUT & FILL VOLUMES ARE BASED ON 25' FROM PRIOR STATION.
 3. CONTRACTOR TO PERFORM SURVEY USING LAND SURVEYOR REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA TO DETERMINE ACTUAL CUT & FILL VOLUMES PRIOR TO PROCUREMENT.

**ISSUED FOR
BID
DATE: 03-20-25**

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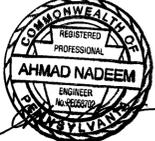


CLIENT NAME:
SCHUYKILL RIVER DEVELOPMENT CORP.
 CLIENT LOCATION:
 2401 WALNUT ST., SUITE 603, PHILADELPHIA, PA 19103
 PROJECT LOCATION:
 SOUTH STREET BRIDGE

SCHUYKILL BANKS SOUTH STREET SHORELINE REHABILITATION
SHORELINE STABILIZATION - CUT/FILL SECTIONS
 SHEET: 19 OF 19 DRAWING NO.: S-13

REV.	DESCRIPTION	BY	CHKD	DATE
A	ISSUED FOR BID	BJS	DM	03-20-25

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