

TENMILE CREEK (NS070317S)  
BANK STABILIZATION / GRADE CONTROL  
CITY OF MEMPHIS  
SEWER ASSESSMENT AND REHABILITATION PROGRAM (SARP10)  
MEMPHIS, TENNESSEE

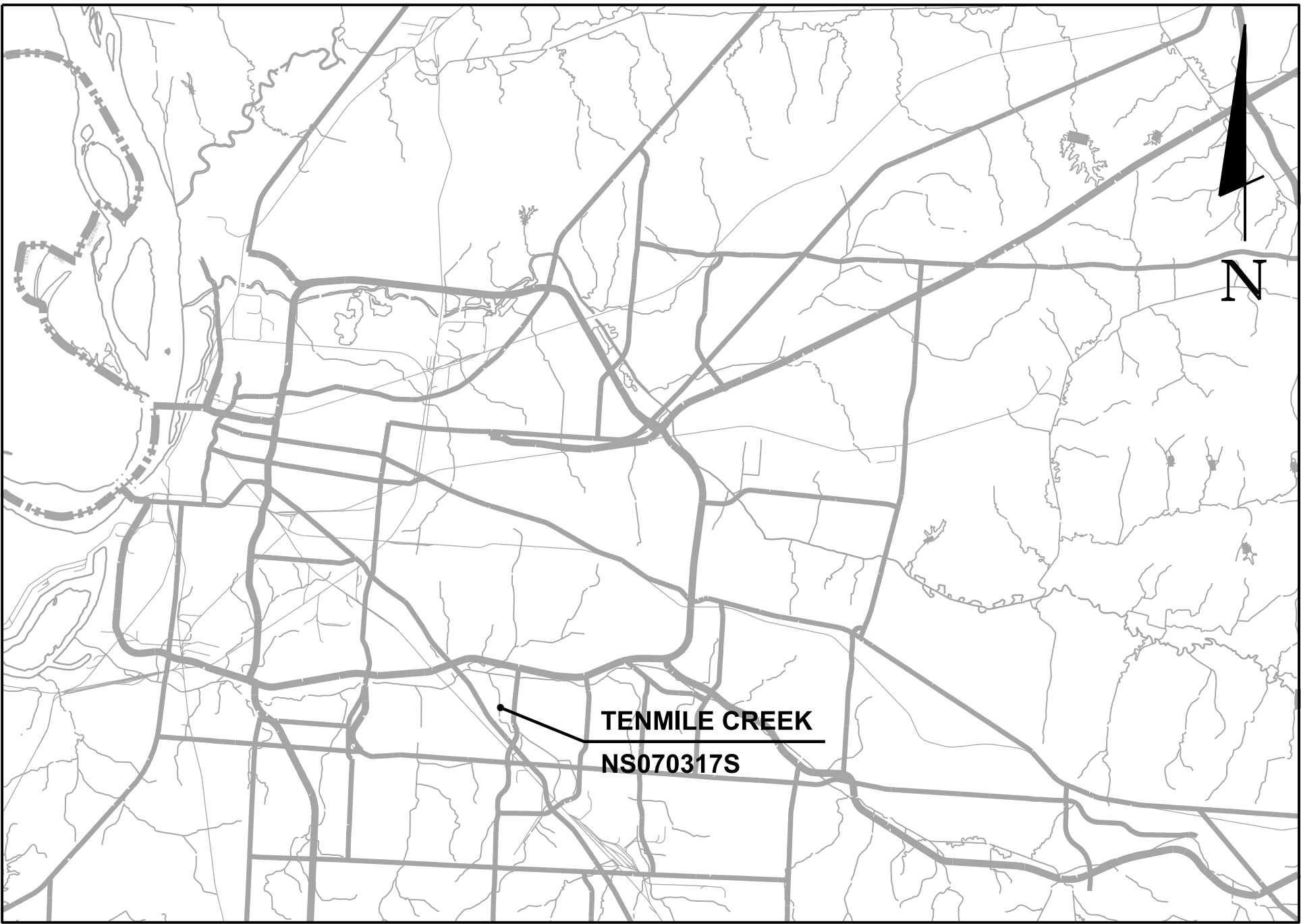
CITY COUNCIL

JB SMILEY JR, CHAIRMAN  
J FORD CANALE, VICE CHAIRMAN  
RHONDA LOGAN, COUNCILWOMAN  
JERRI GREEN, COUNCILWOMAN  
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CHASE CARLISLE, COUNCILMAN  
DR JEFF WARREN, COUNCILMAN

CITY ENGINEER

MANNY BELEN, P.E.

PAUL YOUNG, MAYOR



LOCATION MAP

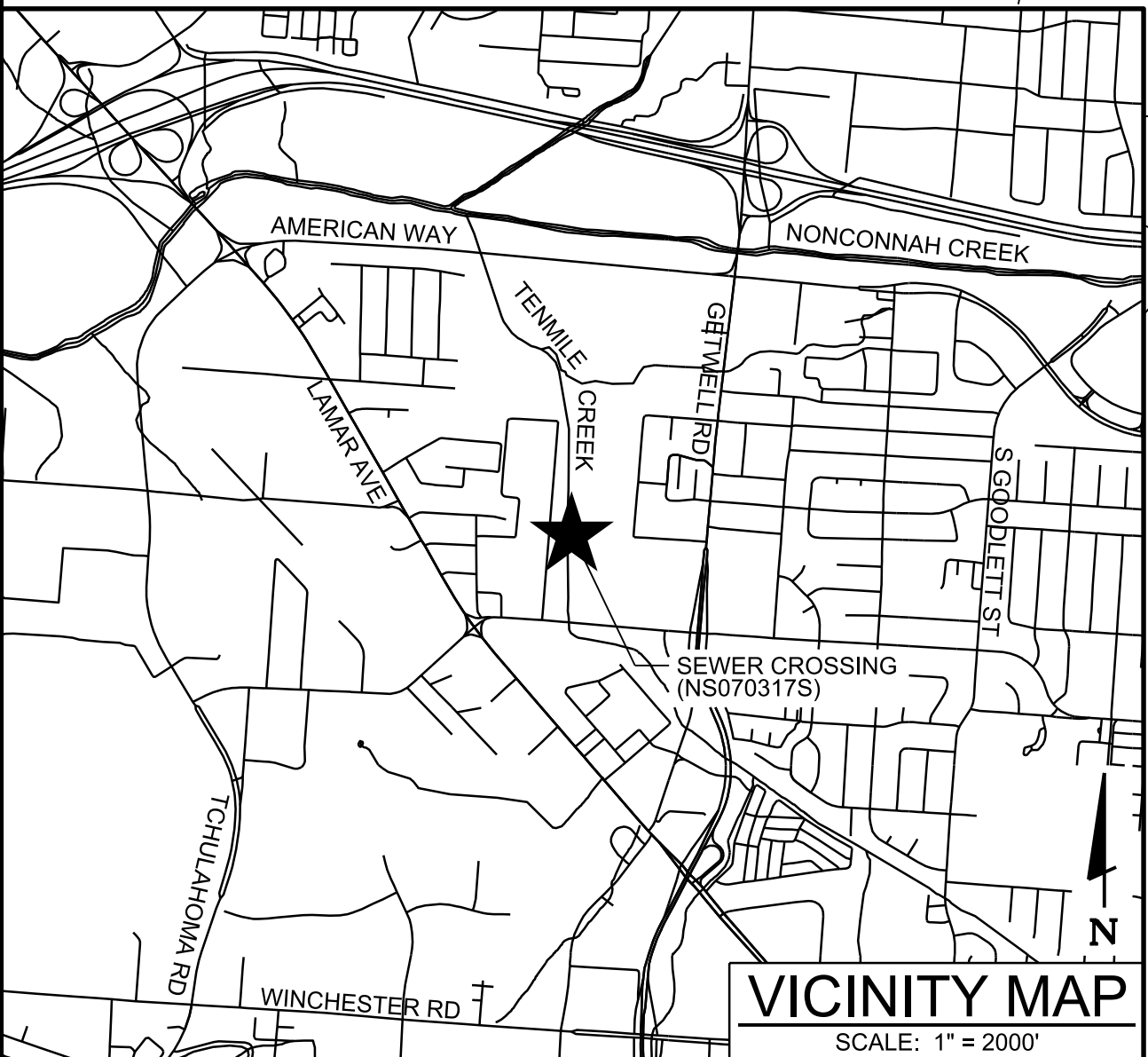
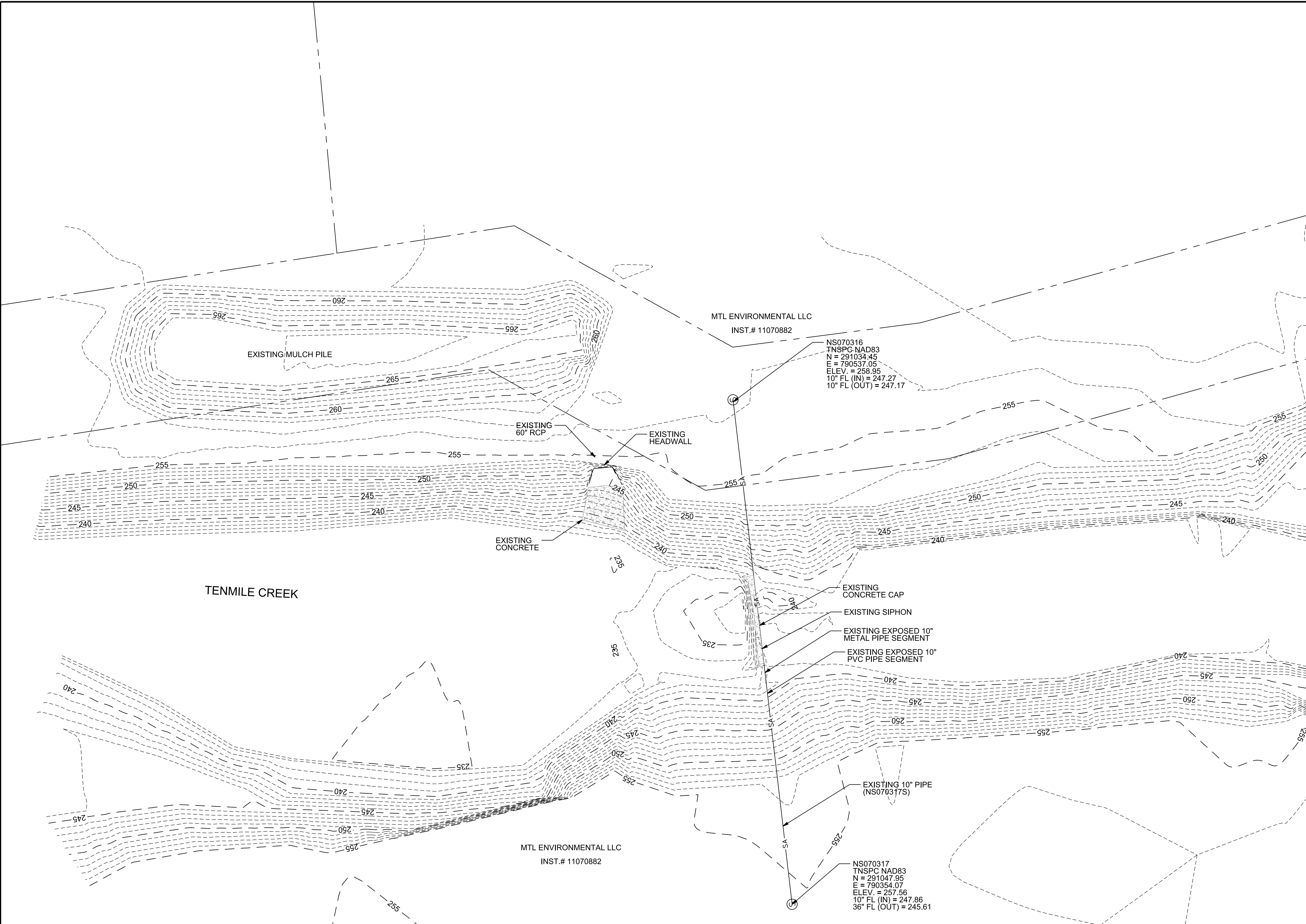
NOT TO SCALE

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C0.01



- GENERAL NOTES:**
1. THE CONTRACTOR SHALL NOT ENTER UPON, WORK UPON NOR CAUSE DAMAGE TO ANY ADJACENT PROPERTIES WITHOUT PRIOR PERMISSION FROM SAID PROPERTY OWNER.
  2. GRADING AND DRAINAGE: FINISH GRADE SHALL BE SLOPED FOR POSITIVE DRAINAGE.
  3. ALL RIP RAP TO EXTEND TO BOTTOM OF DITCH AND FULLY PROTECT THE BANK AND EDGES OF OTHER EROSION CONTROL DEVICES.
  4. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING CLEARING AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
  5. NEWLY CUT OR FILLED EMBANKMENTS SHALL BE SODDED OR SEEDED AND MULCHED TO ADEQUATELY PREVENT SOIL EROSION. STAKE SOD SLOPES 3:1 OR GREATER.
  6. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
  7. THE LOCATION OF ALL EXISTING UTILITIES SHALL BE PROPERLY VERIFIED PRIOR TO CONSTRUCTION. ALL WORK SHALL BE PERFORMED IN A MANNER TO ENSURE THAT EXISTING UTILITIES ARE NOT INTERFERED WITH OR DISRUPTED.
  8. ALL FILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY WITHIN 3% OPTIMUM MOISTURE CONTENT IN 6" LIFTS UNLESS OTHERWISE SPECIFIED (TYP). SUBMIT TEST RESULTS TO SARP10.
  9. ALL AREAS TO BE FILLED SHALL BE PROPERLY CLEARED AND STRIPPED PRIOR TO BEGINNING THE FILLING OPERATION.
  10. THE CONTRACTOR IS TO INSTALL EROSION AND SEDIMENT CONTROL SYSTEMS AND STRUCTURES AS NECESSARY TO PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE.
  11. ALL RIP-RAP SHALL BE PLACED ON NON-WOVEN GEOTEXTILE, OR APPROVED EQUAL.
  12. ALL WORK SHALL BE DONE IN DRY CONDITIONS. CONTRACTOR SHALL MAKE PROVISIONS TO KEEP STORM WATER, LATERAL WATER AND GROUND WATER OUT OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL DEWATER THE SITE AS NECESSARY SO THAT PLACEMENT OF ALL RIP-RAP, OR GROUTING OF ANY RIP-RAP WILL BE IN DRY CONDITIONS.
  13. CONTRACTOR IS RESPONSIBLE FOR AND SHALL PAY FOR ALL PROJECT TESTING. SOIL AND OTHER MATERIAL TESTING SHALL BE PERFORMED BY A LICENSED GEOTECHNICAL FIRM.
  14. CONTRACTOR IS RESPONSIBLE FOR AND SHALL PAY FOR ALL SURVEY LAYOUT AND STAKING. SURVEY DATA SHALL BE PROVIDED BY A REGISTERED LAND SURVEYOR

- TYPICAL CONSTRUCTION NOTES:**
1. ALL DESIGN, CONSTRUCTION AND MATERIAL SHALL BE IN COMPLIANCE WITH THE SEWER ASSESSMENT AND REHABILITATION PROGRAM (SARP10) AND CITY OF MEMPHIS CONSTRUCTION SPECIFICATIONS AND STANDARDS.
  2. LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND ARE NOT NECESSARILY ALL THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY COMPANY TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND/OR UNDERGROUND STRUCTURES PRIOR TO THE INITIATION OF ANY CONSTRUCTION. CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS. FOR SITE LOCATIONS OF EXISTING UTILITIES INVOLVING M.L.G.&W., SOUTH CENTRAL BELL, AND/OR TVA, CALL 1-800-351-1111. FOR SEWER AND/OR WATER SERVICE LOCATIONS, CALL 901-529-8025.
  3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
  4. CONTRACTOR SHALL NOTIFY THE CITY OF MEMPHIS CONSTRUCTION INSPECTION OFFICE AT 901-636-2462 A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION.
  5. ALL AREAS IN CUT OR FILL WHERE VEGETATION HAS BEEN REMOVED SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO PREVENT EROSION, UNLESS OTHERWISE NOTED ON PLANS. SOD SLOPES AND MULCH ALL OTHER AREAS.
  6. THE CONTRACTOR SHALL VERIFY EXISTING DATA AND REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ENGINEER.
  7. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SEDIMENT RELEASE INTO EXISTING DRAINAGE SYSTEM AND/OR ONTO ADJACENT PROPERTIES.
  8. THE CONTRACTOR SHALL MAINTAIN BARRICADES, FENCES, GUARDS, AND FLAGMEN AS REASONABLY NECESSARY TO ENSURE THE SAFETY OF ALL PERSONS AT OR NEAR THE PROJECT SITE DURING CONSTRUCTION. ALL CONSTRUCTION MATERIAL, INCLUDING WITHOUT LIMITATION, MUD, SILT, DIRT, AND GRAVEL SHALL BE KEPT OFF EXISTING STREETS AT ALL TIMES. IN THE EVENT SUCH MUD, SILT, DIRT, GRAVEL, OR OTHER CONSTRUCTION MATERIAL IS WASHED, BLOWN, OR CARRIED INTO AN EXISTING STREET, THE DEVELOPER SHALL TAKE IMMEDIATE STEPS TO REMOVE SUCH MATERIALS. IF THE DEVELOPER DOES NOT REMOVE SUCH MATERIALS AFTER NOTIFICATION BY THE CITY, AND THE CITY DEEMS IT NECESSARY TO CLEAN THE AFFECTED STREETS, THE DEVELOPER AGREES TO REIMBURSE THE CITY FOR ALL SUCH EXPENSES.
  9. ALL STREETS SHALL BE KEPT CLEAR AND FREE OF DIRT AND DEBRIS.
  10. ALL CONSTRUCTION ACTIVITY SHALL BEGIN NO EARLIER THAN 7:00 A.M. AND END NO LATER THAN 6:00 P.M., MONDAY THRU SATURDAY, AND NO CONSTRUCTION ACTIVITY SHALL BE PERMITTED ON SUNDAYS.
  11. CONTRACTOR SHALL RESTORE OFF-SITE ACCESS ROUTES AND ALL DISTURBED AREAS TO ORIGINAL BEFORE-START-OF-WORK CONDITION.

**FLOOD HAZARD NOTE:**

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "AE" (AREAS SUBJECT TO INUNDATION BY THE 1-PERCENT ANNUAL CHANCE FLOOD EVENT DETERMINED BY DETAILED METHODS) & "FLOODWAY" AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0430F & 47157C0435F, DATED SEPTEMBER 28, 2007. THE NEAREST BFE IS 259.3.

STREAM WATER FLOW WILL BE 3670 CFS IN THE EVENT OF A 100-YEAR STORM EVENT.

**BENCHMARK NOTE:**

CITY OF MEMPHIS BENCHMARK #414 - KNIGHT ARNOLD RD. & LAMAR AVE: CITY MONUMENT IS LOCATED ON THE NW COR., AT B/CURB ER ON LAMAR SIDE. ELEV. 270.99

- LEGEND:**
- EXISTING PROPERTY BOUNDARY
  - EXISTING MINOR CONTOUR
  - 250--- EXISTING MAJOR CONTOUR
  - SA— EXISTING SANITARY SEWER LINE
  - ⊙ EXISTING MANHOLE

20' 10' 0' 20' 40'

SCALE: 1" = 20 FEET

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REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
1	REVISION 1	8/19/2020



TENMILE CREEK  
BANK STABILIZATION/GRADE CONTROL  
MEMPHIS, TENNESSEE  
DEVELOPER: SARP10  
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER-BASIN: NS-07  
DRAIN-BASIN: TENMILE-BAYOU  
C0.31

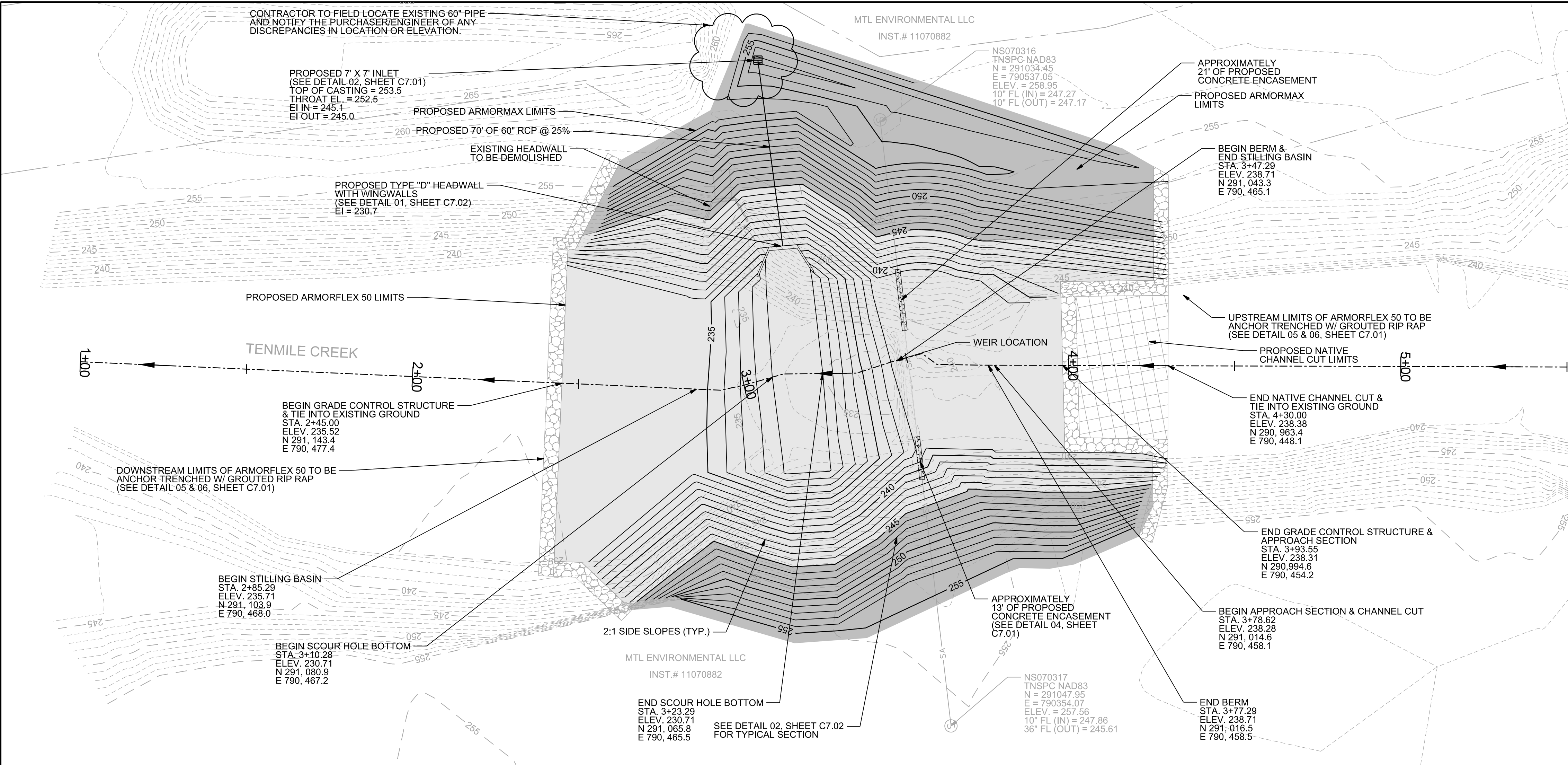
SHEET 2 OF 10

EXISTING-CONDITIONS  
TENMILE-CREEK  
BANK-STABILIZATION/GRADE-CONTROL  
MEMPHIS, TENNESSEE

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02  
DESIGN BY: BARGE DATE: 11/24 SCALE: 1" = 20'  
REVIEWED

DEPUTY-CITY-ENGINEER DATE CITY-ENGINEER DATE





**GRADING AND DRAINAGE NOTES:**

1. A MINIMUM OF 24-HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF MEMPHIS CONSTRUCTION INSPECTION OFFICE AT (901) 636-2462.
2. ALL NEWLY CUT OR FILLED AREAS, LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED, FERTILIZED AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ALL THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY COMPANIES WHICH MAINTAIN A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE INITIATION OF ANY CONSTRUCTION ON THE PROJECT OR IN THE STREETS BORDERING THE PROJECT. THE CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS, WHETHER SHOWN ON THE CONSTRUCTION PLANS OR NOT, DURING THE WORK ON THE PROJECT. FOR SITE LOCATION OF EXISTING UTILITIES INVOLVING MLG&W, SOUTH CENTRAL BELL, AND/OR TEXAS GAS COMPANY, CALL 1-800-351-1111. FOR SEWER LOCATIONS CALL 529-8025.
4. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
5. ALL FILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY WITHIN 3% OPTIMUM MOISTURE CONTENT IN 6" LIFTS UNLESS OTHERWISE SPECIFIED BY THE SOILS REPORT. SUBMIT TEST RESULTS TO SARP10.
6. ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE CITY OF MEMPHIS STANDARD CONSTRUCTION SPECIFICATIONS.
7. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING, CLEARING AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
8. VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE CITY OF MEMPHIS CONSTRUCTION INSPECTION OFFICE ENGINEER OF ANY VARIATIONS PRIOR TO COMMENCEMENT OF WORK.
9. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
10. CONCRETE ENCASEMENT TO BE EXTENDED 3' MINIMUM INTO SLOPE.

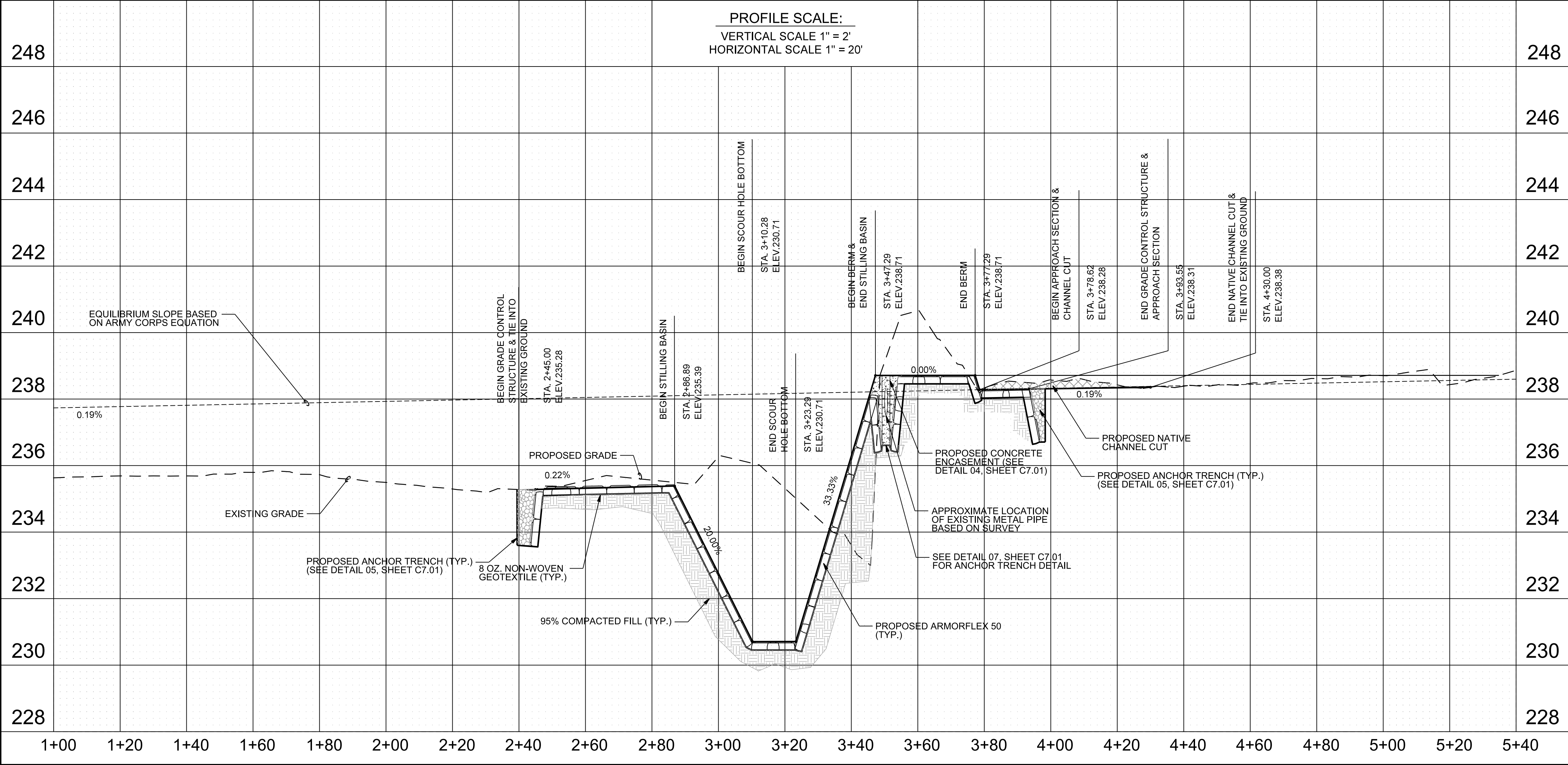
**FLOOD HAZARD NOTE:**

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STREAM WATER FLOW WILL BE 3670 CFS IN THE EVENT OF A 100-YEAR STORM EVENT.

**BENCHMARK NOTE:**

CITY OF MEMPHIS BENCHMARK #414 - KNIGHT ARNOLD RD. & LAMAR AVE: CITY MONUMENT IS LOCATED ON THE NW COR., AT B/CURB ER ON LAMAR SIDE. ELEV. 270.99



**LEGEND:**

- EXISTING MINOR CONTOUR
- 250- EXISTING MAJOR CONTOUR
- SA EXISTING SANITARY SEWER LINE
- ⊙ EXISTING MANHOLE
- PROPOSED MINOR CONTOUR
- 250- PROPOSED MAJOR CONTOUR
- - - PROPOSED STREAM CENTERLINE
- N E COORDINATE
- [Grid] PROPOSED NATIVE CHANNEL CUT LIMITS
- [Hatched] PROPOSED NATIVE CHANNEL FILL LIMITS
- [Stippled] PROPOSED ARMORFLEX 50 LIMITS
- [Dotted] PROPOSED ARMORMAX LIMITS
- [Patterned] PROPOSED GROUTED CLASS A-1 RIP RAP LIMITS



20' 10' 0' 20' 40'  
SCALE: 1 INCH = 20 FEET

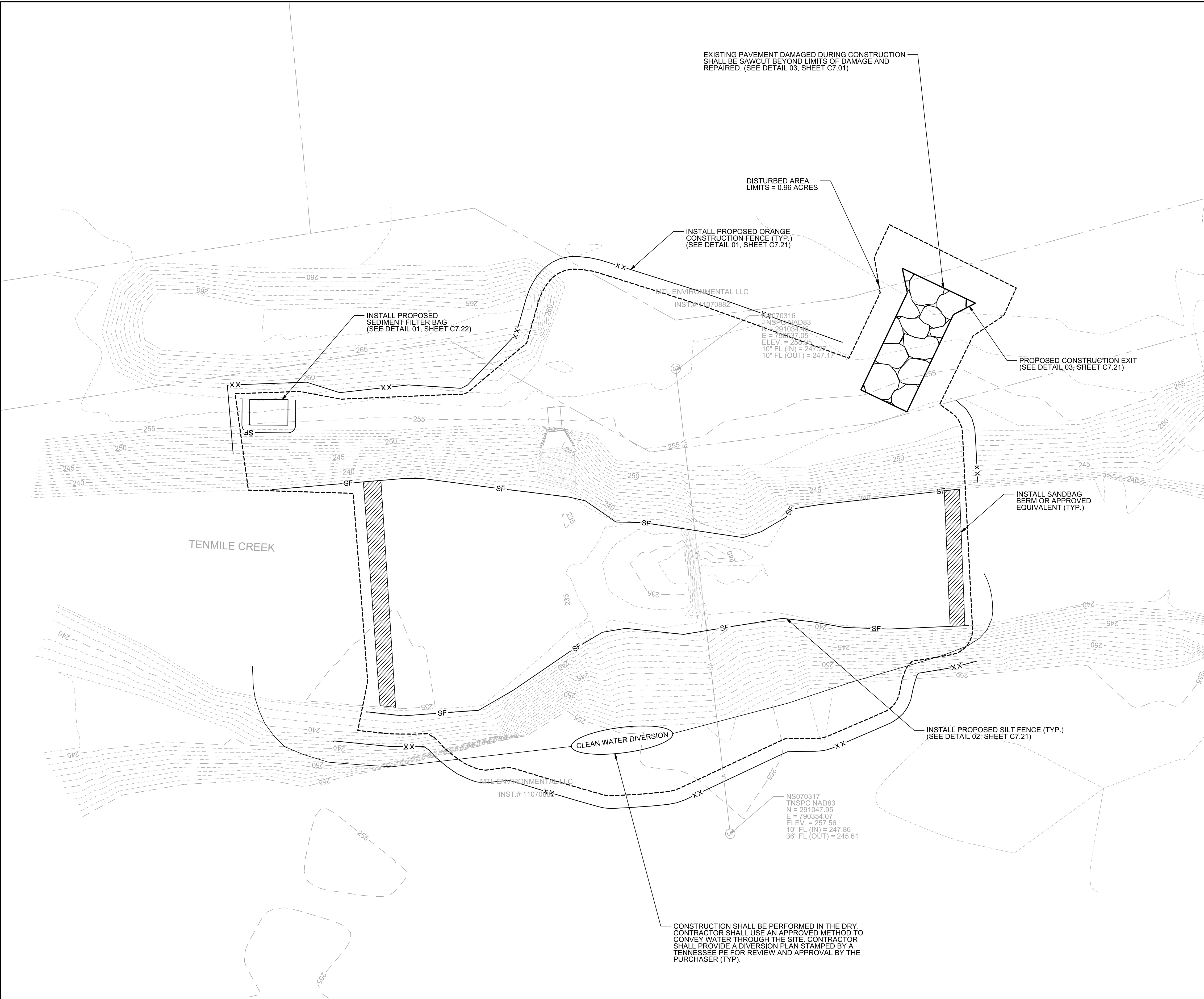


REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
1	REVISION 1	8/19/2020



TENMILE CREEK  
BANK STABILIZATION/GRADE CONTROL  
MEMPHIS, TENNESSEE  
DEVELOPER: SARP10  
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER-BASIN: NS-07 DRAIN-BASIN: TENMILE-BAYOU		C1.01
SHEET 3 OF 10		
SITE-PLAN-AND-PROFILE TENMILE-CREEK BANK-STABILIZATION/GRADE-CONTROL MEMPHIS, TENNESSEE		
SURVEY: GEODESY DESIGN BY: BARGE	DATE: 05/19 DATE: 11/24 REVIEWED	PROJECT NO.: 36592-02 SCALE: 1" = 20'
DEPUTY-CITY-ENGINEER	DATE	CITY-ENGINEER DATE



PHASE I SEQUENCING NOTES:

1. INSTALL CONSTRUCTION EXIT AND HAUL ROAD AS SHOWN. THIS WILL BE THE FIRST BMP INSTALLED ON SITE.
2. INSTALL ORANGE CONSTRUCTION FENCE
3. SILT FENCE TO BE INSTALLED ALONG TOE OF SLOPE AS SHOWN.
4. PERFORM REQUIRED EXCAVATION AND UTILITY WORK.
5. FILL EXISTING CHANNEL VALLEY TO INVERT SHOWN. IF WATER ACCUMULATES BEHIND THE GRADE CONTROL STRUCTURE DURING FILLING OPERATIONS, THE TRAPPED WATER WILL BE PUMPED THROUGH A SEDIMENT FILTER BAG BEFORE IT LEAVES THE SITE.

EROSION CONTROL NOTES:

1. ALL EROSION CONTROL STRUCTURES SHALL BE IN PLACE AND FUNCTIONAL PRIOR TO GRADING, EXCAVATION, TOP SOIL REMOVAL, TREE REMOVAL, OR PIPE-LAYING OPERATIONS.
2. ALL EROSION CONTROL STRUCTURES SHALL BE MAINTAINED AND MONITORED THROUGHOUT THE ENTIRE TIME OF CONSTRUCTION OPERATIONS AND UNTIL VEGETATION IS ESTABLISHED ON ALL BARE, DISTURBED AREAS.
3. KEEP CONSTRUCTION DEBRIS, MUD AND SILT FROM ENTERING DITCH CHANNELS OR LEAVING THE JOB SITE AT ALL TIMES UNTIL SITE IS COMPLETELY STABILIZED.
4. UNLESS OTHERWISE NOTED, TURF REINFORCED MATTING SHOULD BE USED ON SLOPES GREATER THAN 3:1 TO PREVENT EROSION RILLS FROM FORMING.
5. EROSION CONTROLS ARE NOT LIMITED TO WHAT IS SHOWN ON APPROVED EROSION CONTROL PLANS. ADDITIONAL EROSION CONTROL STRUCTURES OR MEASURES MAY BE NEEDED AS CONDITIONS WARRANT OR AS DIRECTED BY THE PROJECT ENGINEER, CITY ENGINEER OR CITY INSPECTOR.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED PRIOR TO BEGINNING ANY CONSTRUCTION OR OTHER ACTIVITY ON THE SITE AND FOR SATISFYING THE REQUIREMENTS OF THE STATE OF TENNESSEE DEPARTMENT OF WATER POLLUTION CONTROL AS SET FORTH IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
7. ALL NEWLY CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED, MULCHED, SEEDED, AND/OR SODDED TO EFFECTIVELY CONTROL SOIL EROSION. THE SEED AND FERTILIZER WILL BE COVERED WITH TURF REINFORCED MATTING ON SLOPES GREATER THAN 3:1.
8. PROVIDE THE NAME AND PHONE NUMBER OF THE PERSON OR PERSONS RESPONSIBLE FOR EROSION CONTROL AND/OR MUD/DIRT IN THE STREET REMOVAL TO THE CITY INSPECTOR PRIOR TO THE START OF CONSTRUCTION.
9. ALL CONTROL MEASURES SHALL BE CHECKED TWICE A WEEK AND AT LEAST 72 HOURS APART. DURING PROLONGED RAINFALL, DAILY CHECKING AND REPAIRING IS NECESSARY. THE CONTRACTOR SHALL MAINTAIN RECORDS OF CHECKS AND REPAIRS.
10. TOTAL DISTURBED AREA IS 1.0 ACRES.
11. GRADING AND UTILITY WORK IS TO BE PERFORMED IN THE DRY. CONTRACTOR TO USE CLEAN WATER DIVERSION. SAND BAG BERM SHALL BE INCLUDED IN THE COST OF THE "CLEAN WATER DIVERSION". CONTRACTOR SHALL SUBMIT A PLAN STAMPED BY A TENNESSEE PE FOR REVIEW AND APPROVAL BY THE PURCHASER/ENGINEER.

FLOOD HAZARD NOTE:

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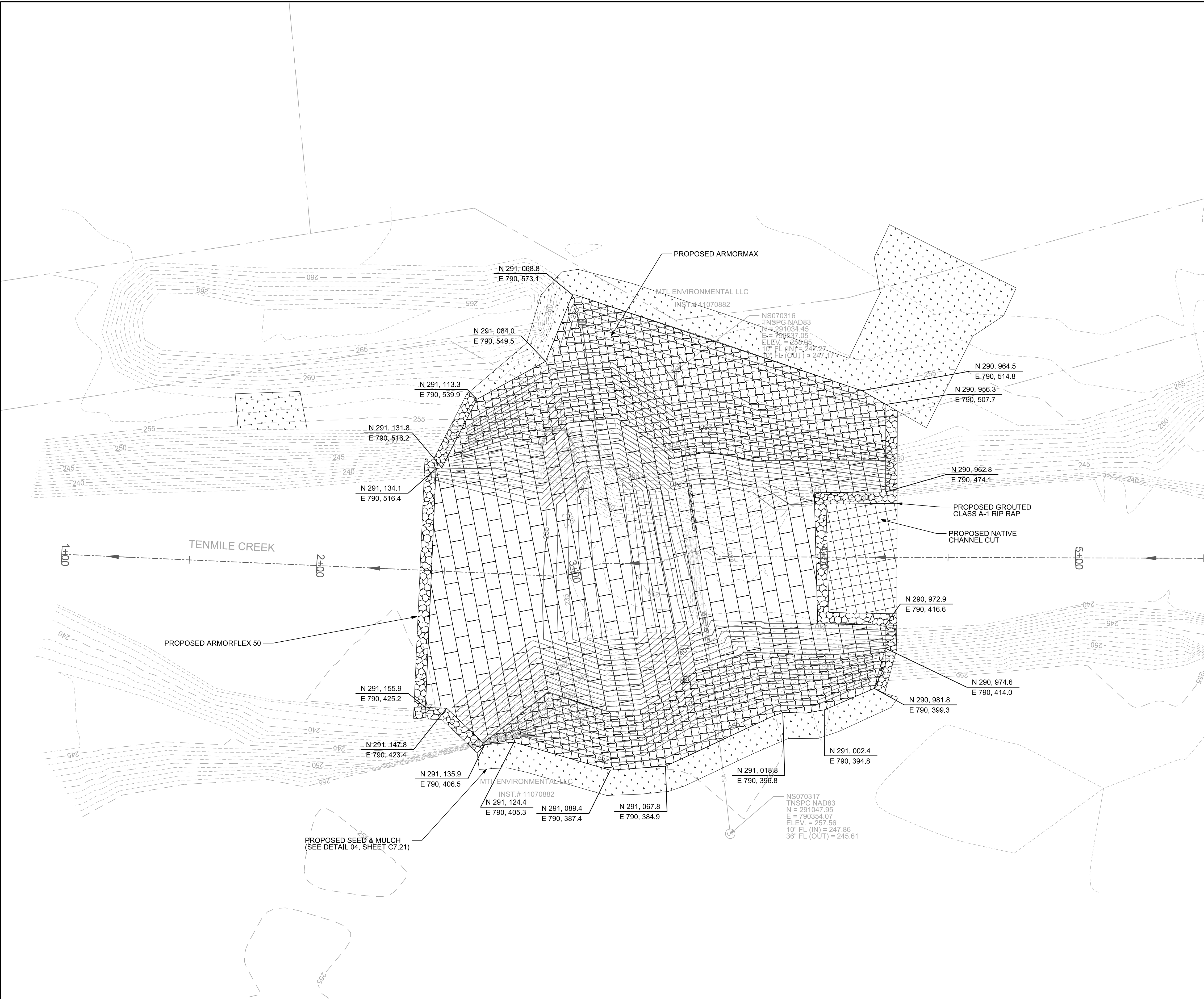
CITY OF MEMPHIS BENCHMARK #414 - KNIGHT ARNOLD RD. & LAMAR AVE. CITY MONUMENT IS LOCATED ON THE NW COR., AT B/CURB ER ON LAMAR SIDE. ELEV. 270.99

LEGEND:

- EXISTING MINOR CONTOUR
- - - - - EXISTING MAJOR CONTOUR
- XX- ORANGE CONSTRUCTION FENCE
- SF - SILT FENCE
- DISTURBED AREA LIMITS
- [Hatched Box] SANDBAG BERM
- [Stippled Box] CONSTRUCTION EXIT

<table><tr><th colspan="3">REVISION</th></tr><tr><th>ITEM NO.</th><th>DESCRIPTION OF CHANGE</th><th>APPROVAL DATE</th></tr><tr><td>1</td><td>REVISION 1</td><td>8/19/2020</td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></table>			REVISION			ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE	1	REVISION 1	8/19/2020																													SEWER-BASIN: NS-07 DRAIN-BASIN: TENMILE-BAYOU	C2.41
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<table><tr><td colspan="3">TENMILE CREEK BANK STABILIZATION/GRADE CONTROL MEMPHIS, TENNESSEE DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.</td></tr></table>			TENMILE CREEK BANK STABILIZATION/GRADE CONTROL MEMPHIS, TENNESSEE DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.			SHEET 4 OF 10 <b>EROSION-CONTROL-PLAN-PHASE-I TENMILE-CREEK BANK-STABILIZATION/GRADE-CONTROL MEMPHIS, TENNESSEE</b>																																			
TENMILE CREEK BANK STABILIZATION/GRADE CONTROL MEMPHIS, TENNESSEE DEVELOPER: SARP10 ENGINEER: BARGE DESIGN SOLUTIONS, INC.																																									
DESIGN BY: BARGE		DATE: 05/19 DATE: 11/24 REVIEWED	PROJECT NO.: 36592-02 SCALE: 1" = 20'	DEPUTY-CITY-ENGINEER	DATE	CITY-ENGINEER	DATE																																		





PHASE II SEQUENCING NOTES:

1. MAINTAIN BMPS INSTALLED DURING PHASE I.
2. STABILIZE SITE AS SHOWN. ALL OTHER DISTURBED AREAS NOT RECEIVING GROUTED CLASS A-1 RIP-RAP OR NATIVE MATERIAL WILL BE SEEDED AND MULCHED.
3. REMOVE BMPS WHEN SITE IS STABLE.

EROSION CONTROL NOTES:

1. ALL EROSION CONTROL STRUCTURES SHALL BE IN PLACE AND FUNCTIONAL PRIOR TO GRADING, EXCAVATION, TOP SOIL REMOVAL, TREE REMOVAL, OR PIPE-LAYING OPERATIONS.
2. ALL EROSION CONTROL STRUCTURES SHALL BE MAINTAINED AND MONITORED THROUGHOUT THE ENTIRE TIME OF CONSTRUCTION OPERATIONS AND UNTIL VEGETATION IS ESTABLISHED ON ALL BARE, DISTURBED AREAS.
3. KEEP CONSTRUCTION DEBRIS, MUD AND SILT FROM ENTERING DITCH CHANNELS OR LEAVING THE JOB SITE AT ALL TIMES UNTIL SITE IS COMPLETELY STABILIZED.
4. UNLESS OTHERWISE NOTED, TURF REINFORCED MATTING SHOULD BE USED ON SLOPES GREATER THAN 3:1 TO PREVENT EROSION RILLS FROM FORMING.
5. EROSION CONTROLS ARE NOT LIMITED TO WHAT IS SHOWN ON APPROVED EROSION CONTROL PLANS. ADDITIONAL EROSION CONTROL STRUCTURES OR MEASURES MAY BE NEEDED AS CONDITIONS WARRANT OR AS DIRECTED BY THE PROJECT ENGINEER, CITY ENGINEER OR CITY INSPECTOR.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED PRIOR TO BEGINNING ANY CONSTRUCTION OR OTHER ACTIVITY ON THE SITE AND FOR SATISFYING THE REQUIREMENTS OF THE STATE OF TENNESSEE DEPARTMENT OF WATER POLLUTION CONTROL AS SET FORTH IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
7. ALL NEWLY CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED, MULCHED, SEEDED, AND/OR SODDED TO EFFECTIVELY CONTROL SOIL EROSION. THE SEED AND FERTILIZER WILL BE COVERED WITH TURF REINFORCED MATTING ON SLOPES GREATER THAN 3:1.
8. PROVIDE THE NAME AND PHONE NUMBER OF THE PERSON OR PERSONS RESPONSIBLE FOR EROSION CONTROL AND/OR MUD/DIRT IN THE STREET REMOVAL TO THE CITY INSPECTOR PRIOR TO THE START OF CONSTRUCTION.
9. ALL CONTROL MEASURES SHALL BE CHECKED TWICE A WEEK AND AT LEAST 72 HOURS APART. DURING PROLONGED RAINFALL, DAILY CHECKING AND REPAIRING IS NECESSARY. THE CONTRACTOR SHALL MAINTAIN RECORDS OF CHECKS AND REPAIRS.
10. TOTAL DISTURBED AREA IS 1.1 ACRES.

FLOOD HAZARD NOTE:

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ZONE "AE" (AREAS SUBJECT TO INUNDATION BY THE 1-PERCENT ANNUAL CHANCE FLOOD EVENT DETERMINED BY DETAILED METHODS) & "FLOODWAY" AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 47157C0430F & 47157C0435F, DATED SEPTEMBER 28, 2007. THE NEAREST BFE IS 259.3.

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BENCHMARK NOTE:

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LEGEND:

- EXISTING MINOR CONTOUR
- - - - - EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- - - - - PROPOSED MAJOR CONTOUR
- [Pattern] PROPOSED GROUTED CLASS A-1 RIP RAP
- [Pattern] PROPOSED NATIVE CHANNEL CUT
- [Pattern] PROPOSED ARMORFLEX 50
- [Pattern] PROPOSED ARMORMAX
- [Pattern] PROPOSED SEED & MULCH

SCALE: 1 INCH = 20 FEET

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
1	REVISION 1	8/19/2020



TENMILE CREEK  
BANK STABILIZATION/GRADE CONTROL  
MEMPHIS, TENNESSEE  
DEVELOPER: SARP10  
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER-BASIN: NS-07  
DRAIN-BASIN: TENMILE-BAYOU

C2.51

SHEET 5 OF 10

EROSION-CONTROL-PLAN-PHASE-II  
TENMILE-CREEK  
BANK-STABILIZATION/GRADE-CONTROL  
MEMPHIS, TENNESSEE

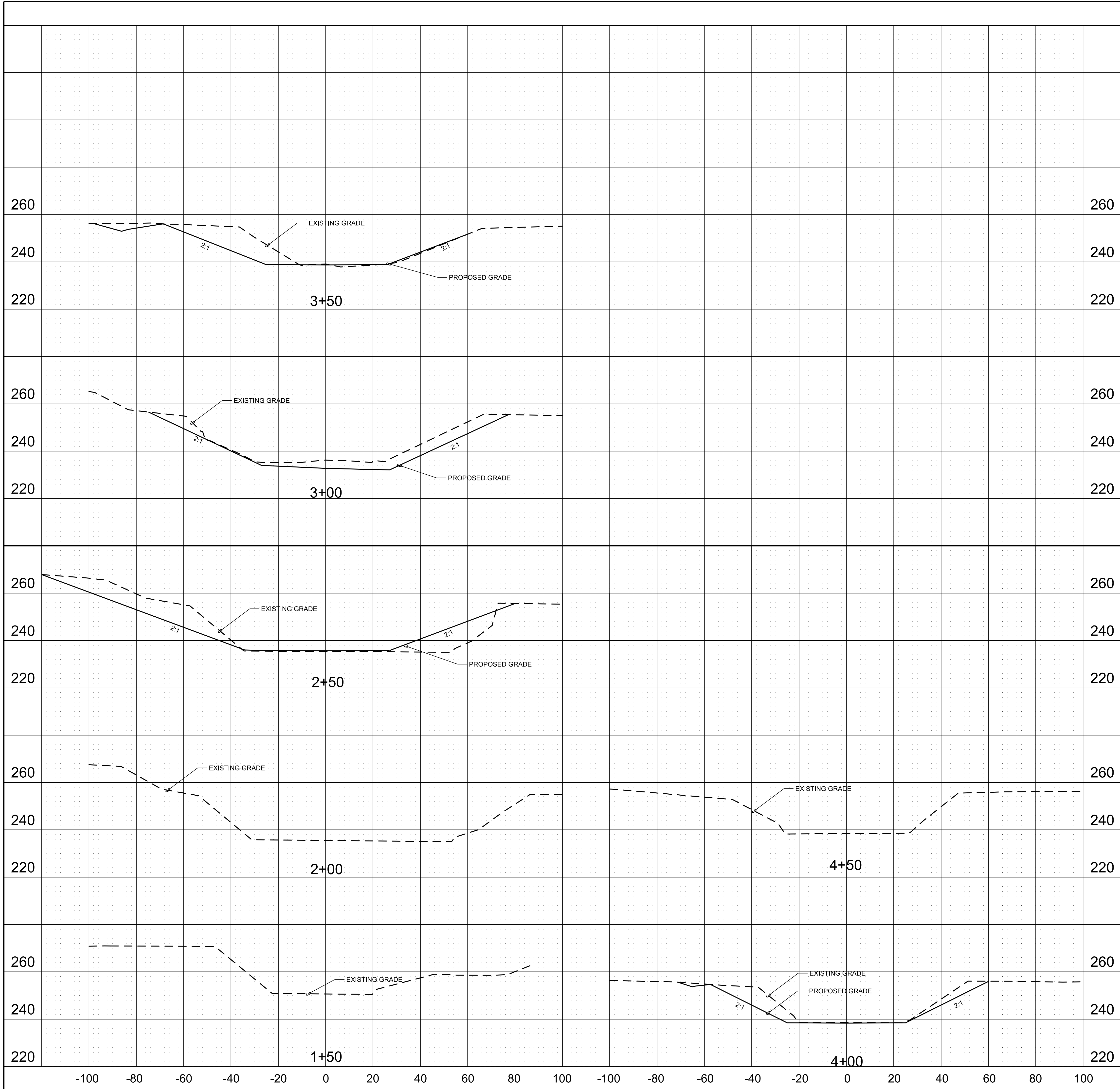
SURVEY: GEODESY  
DESIGN BY: BARGE

DATE: 05/19  
DATE: 11/24  
REVIEWED

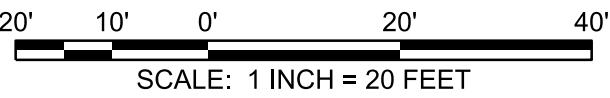
PROJECT NO.: 36592-02  
SCALE: 1" = 20'

DEPUTY-CITY-ENGINEER    DATE    CITY-ENGINEER    DATE

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<table><tr><th colspan="3">REVISION</th></tr><tr><th>ITEM NO.</th><th>DESCRIPTION OF CHANGE</th><th>APPROVAL DATE</th></tr><tr><td>1</td><td>REVISION 1</td><td>8/19/2020</td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></table>			REVISION			ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE	1	REVISION 1	8/19/2020																				SEWER-BASIN: NS-07 DRAIN-BASIN: TENMILE-BAYOU	C6.01
REVISION																																
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1	REVISION 1	8/19/2020																														
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TENMILE CREEK BANK STABILIZATION/GRADE CONTROL MEMPHIS, TENNESSEE DEVELOPER: SARPIO ENGINEER: BARGE DESIGN SOLUTIONS, INC.																																
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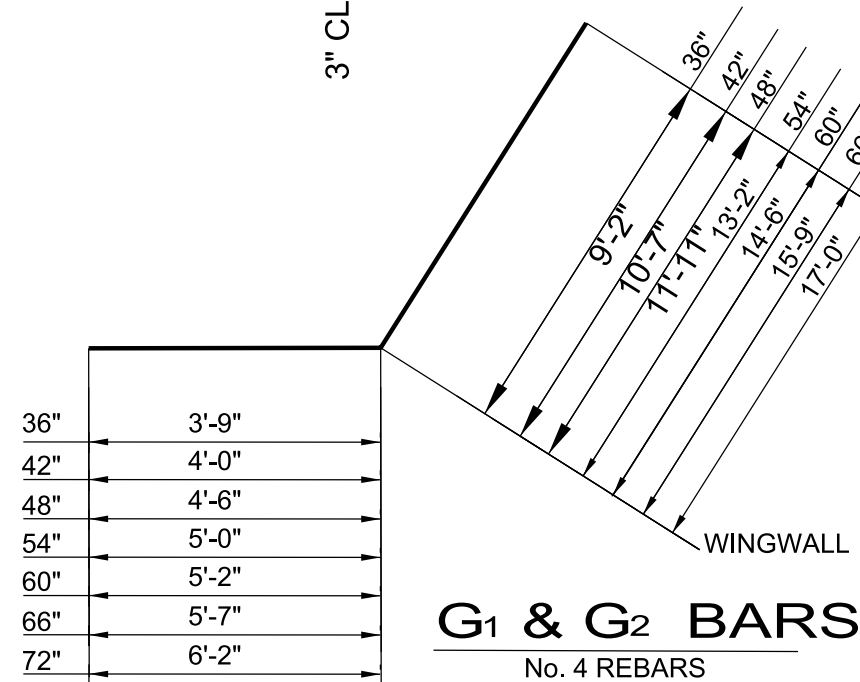
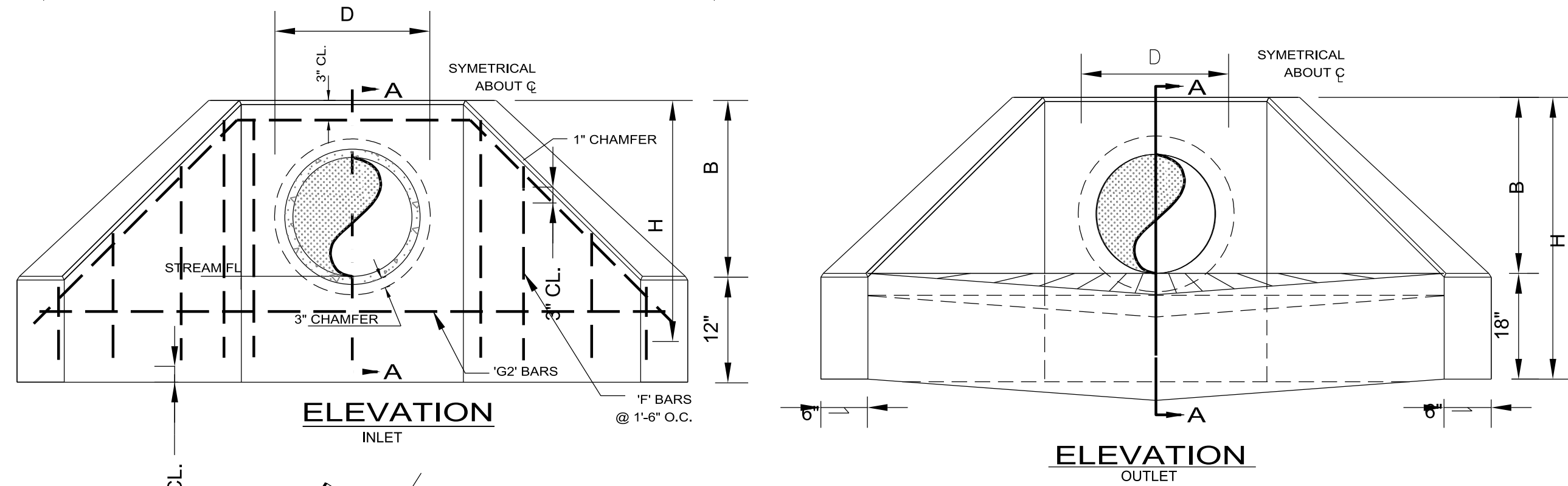
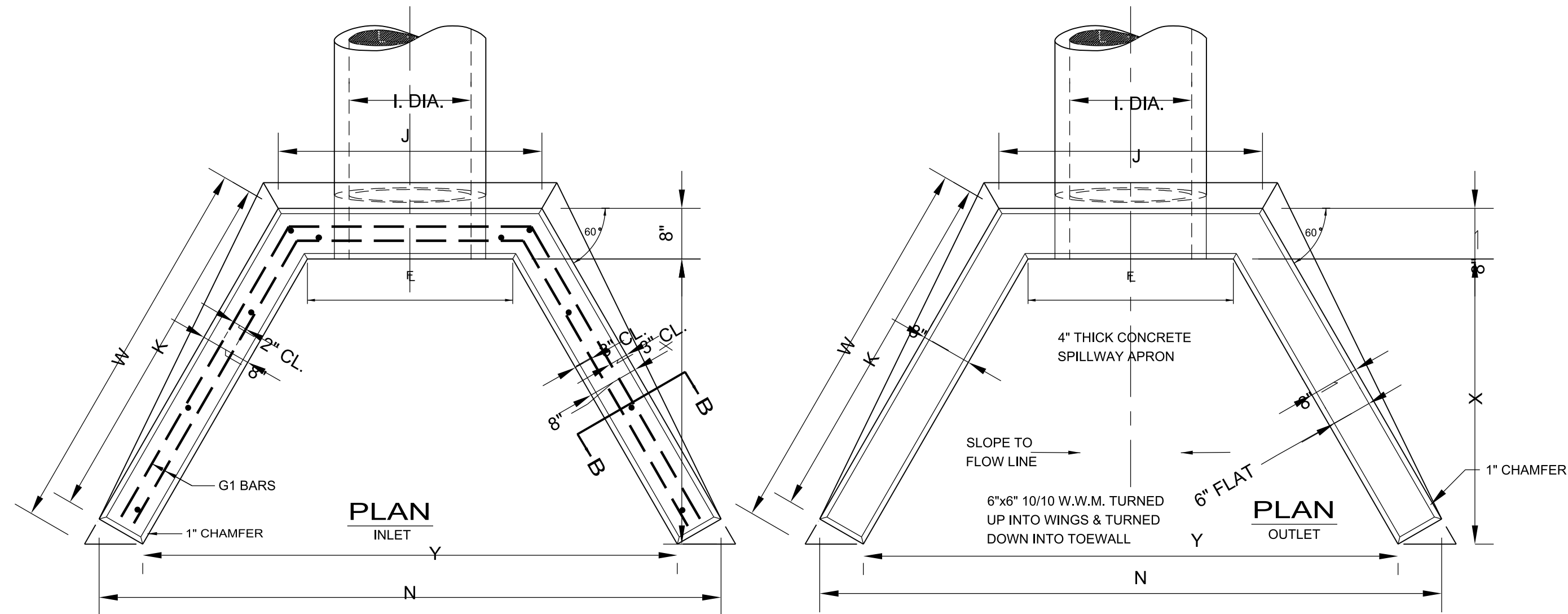




(4) INSTALL SELECT EARTH MATERIAL FOR PHASE III, IV, & V BACKFILL UNDER UNIMPROVED AREAS PER CITY OF MEMPHIS SPECIFICATIONS

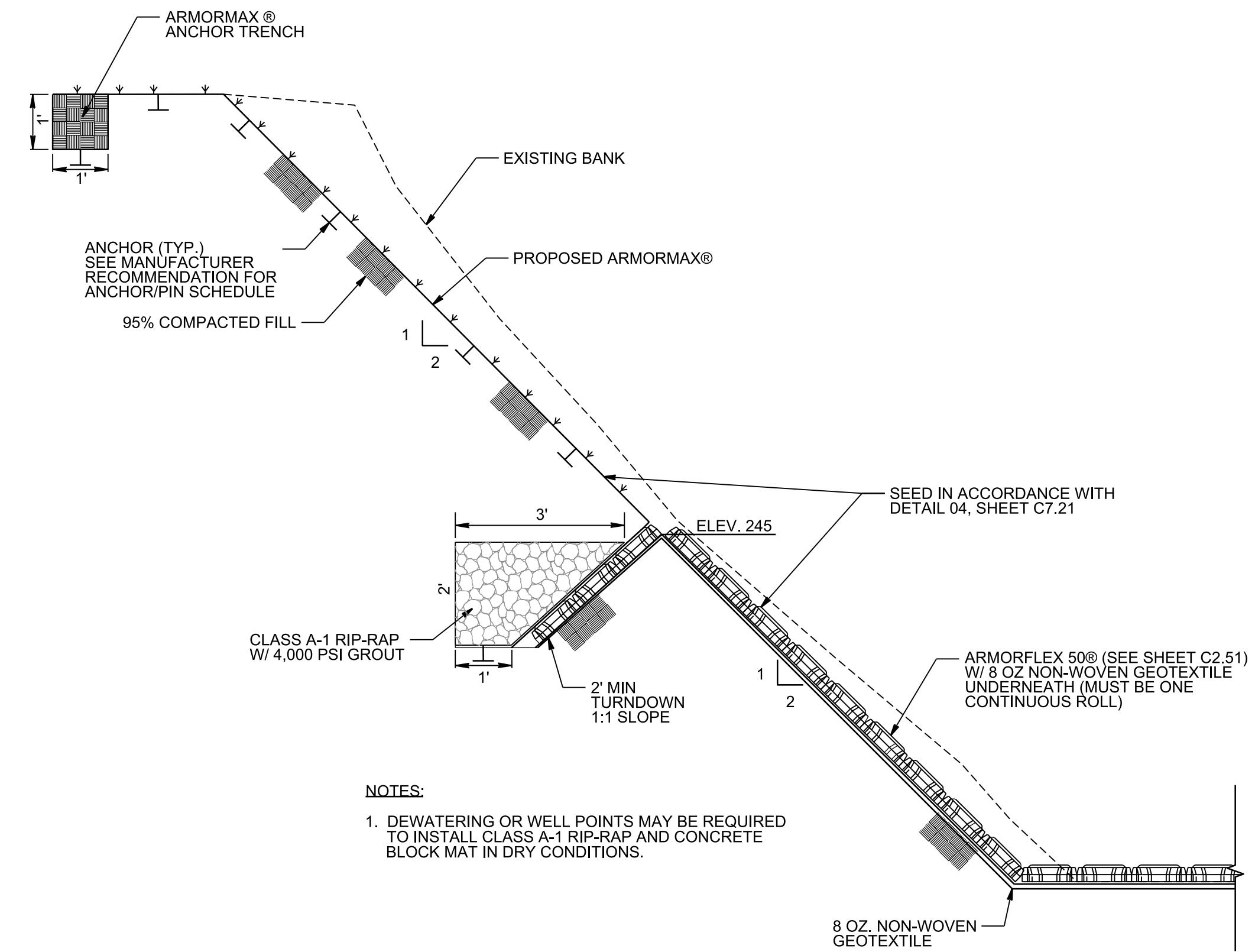
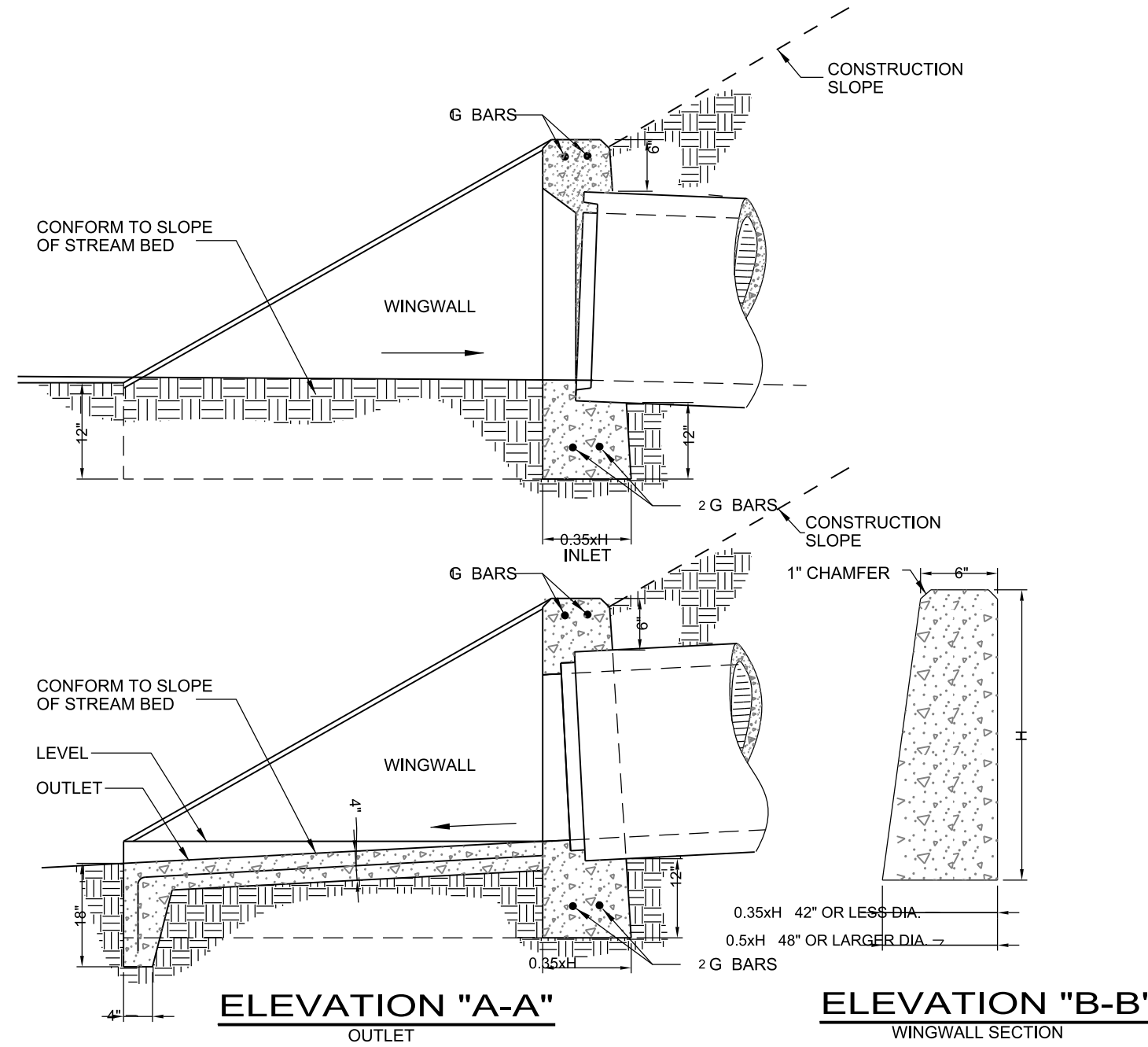


DEPUTY-CITY-ENGINEER      DATE      CITY-ENGINEER      DATE



DIA.	15"	18"	21"	24"	30"	36"	42"	48"	54"	60"	66"	72"
B	1'-11 1/2"	2'-2 1/4"	2'-5 1/4"	2'-8 1/2"	3'-3"	2'-9 1/2"	4'-4 "	4'-10 1/2"	5'-5"	6'-0"	6'-6 1/2"	7'-1 "
D	1'-7 1/4"	1'-10 1/2"	2'-1 1/2"	2'-5 "	3'-0"	3'-7 "	4'-2 "	4'-9 "	5'-4"	6'-0"	6'-7 "	7'-2 "
E	1'-9 1/4"	2'-0 1/2"	2'-3 1/2"	2'-7 "	3'-2"	3'-9 "	4'-4 "	4'-10 "	5'-6"	6'-2"	6'-9 "	7'-4 "
H	3'-1 1/4"	3'-4 1/2"	3'-7 1/2"	3'-11 "	4'-6"	5'-1 "	5'-8 "	6'-3 "	6'-10"	7'-6"	8'-1 "	8'-8 "
J	2'-7 5/8"	2'-10 7/8"	3'-1 7/8"	3'-5 3/8"	4'-0 " 3/8"	4'-10 5/8"	5'-2 3/8"	5'-9 3/8"	6'-4 " 3/8"	7'-0 " 3/8"	7'-7 3/8"	8'-2 3/8"
K	4'-10 5/8"	5'-5 3/4"	6'-0 5/8"	6'-8 1/4"	7'-11 1/4"	9'-2 1/4"	10'-5 1/4"	11'-8 1/4"	12'-11 1/4"	14'-3 1/2"	15'-6 1/2"	16'-9 1/2"
N	7'-11 " 1/2"	8'-9 7/8"	9'-7 7/8"	10'-6 7/8"	12'-4 " 7/8"	14'-2 1/8"	16'-0 7/8"	17'-10 7/8"	19'-8 " 7/8"	21'-9 " 7/8"	23'-7 7/8"	25'-5 7/8"
W	5'-3 " 3/4"	5'-11 "	6'-5 7/8"	7'-1 1/2"	8'-4 1/2"	9'-7 1/2"	10'-10 1/2"	12'-1 1/2"	13'-4 " 1/2"	14'-8 " 1/2"	15'-11 1/8"	17'-2 3/8"
X	3'-10 " 1/4"	4'-4 1/2"	4'-10 1/2"	5'-5 "	6'-6"	7'-7"	8'-8"	9'-9"	10'-10"	12'-0"	13'-1 "	14'-2 "
Y	3'-2 " 5/8"	7'-1 1/8"	7'-11"	8'-10 1/8"	10'-8 1/8"	12'-6 " 1/8"	14'-4 " 1/8"	16'-2 " 1/8"	18'-0 " 1/8"	20'-0 " 1/8"	21'-10 1/4"	23'-8 1/4"

**01 TYPE "D" HEADWALL WITH WINGWALLS**  
C7.02 SCALE: N.T.S.



**02 TYPICAL SECTION - ARMORMAX & ARMORFLEX 50**  
C7.02 SCALE: N.T.S.

REVISION	DESCRIPTION OF CHANGE	APPROVAL DATE
1	REVISION 1	8/19/2020



TENMILE CREEK  
BANK STABILIZATION/GRADE CONTROL  
MEMPHIS, TENNESSEE  
DEVELOPER: SARP10  
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER-BASIN: NS-07  
DRAIN-BASIN: TENMILE BAYOU

C7.02

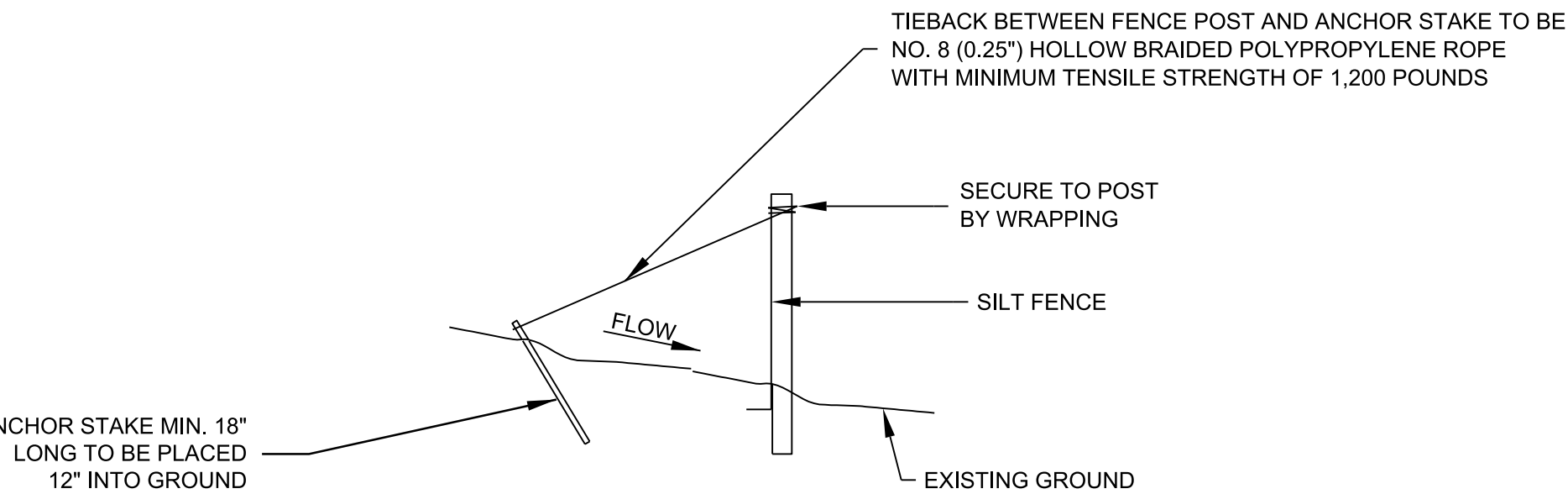
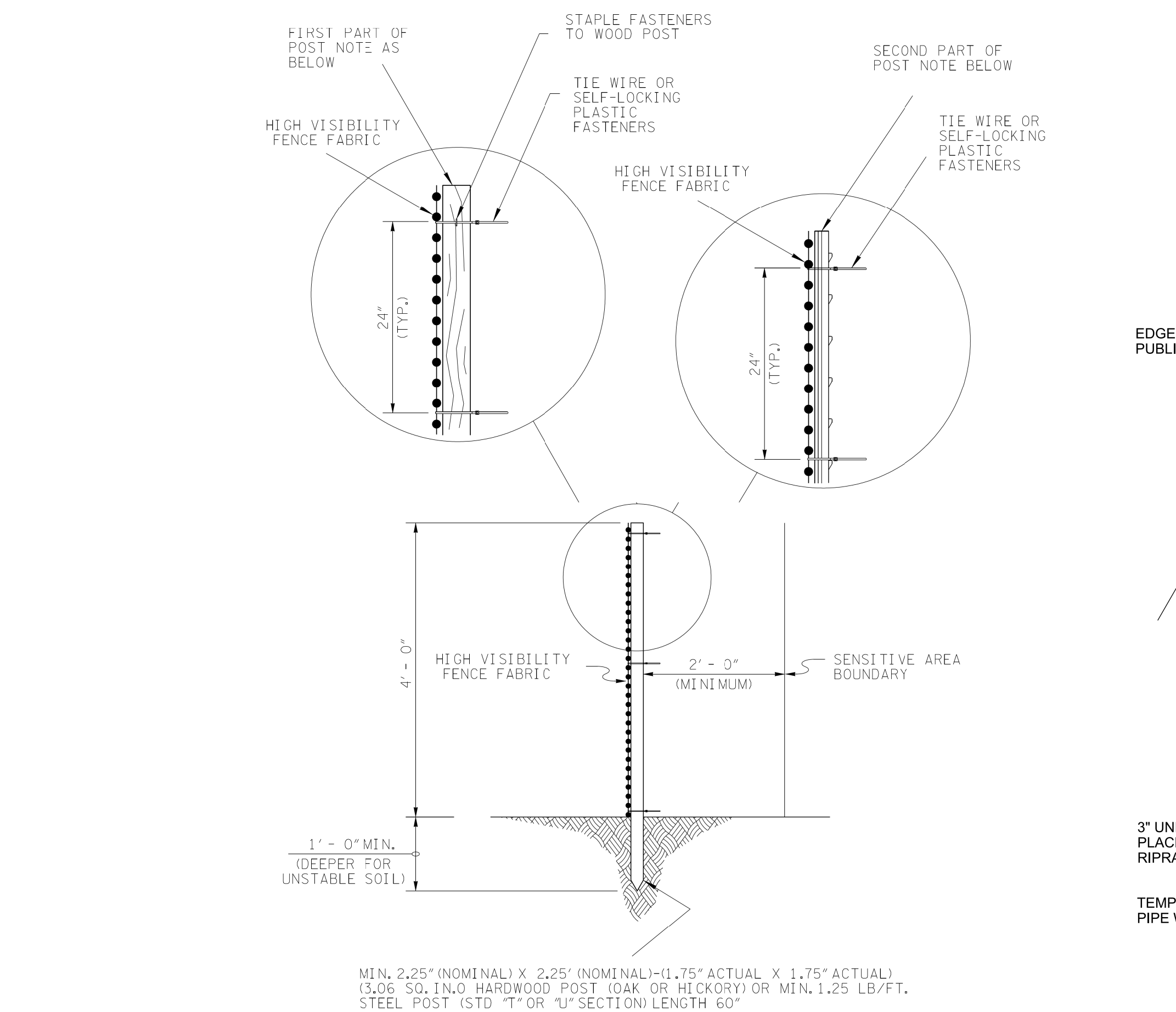
SHEET 8 OF 10

CIVIL-DETAILS  
TENMILE CREEK  
BANK-STABILIZATION/GRADE-CONTROL  
MEMPHIS, TENNESSEE

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02  
DESIGN BY: BARGE DATE: 11/24 SCALE: 1" = 20'  
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1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 2 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 20 FEET, WHICH EVER IS GREATER.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FABRIC SHALL BE 12 OZ./S.Y. NON-WOVEN.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES DESIGNED TO TRAP SEDIMENT, ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

1. FILTER CLOTH SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATION FOR GEOTEXTILES AASHTO DESIGNATION: M288, SEDIMENT CONTROL, SELF SUPPORTED.
2. THE FILTER MATERIAL SHALL BE STAPLED TO THE STAKES. HEAVY DUTY WIRE STAPLES WITH 1/2 INCH WIDTH SHALL BE USED AND EVENLY SPACED WITH AT LEAST FOUR PER POST FOR SILT FENCES AND THREE (3) PER POST FOR FILTER BARRIERS. FILTER MATERIAL SHALL NOT BE STAPLED TO EXISTING TREES.
3. MINIMUM (2" NOMINAL X 2" NOMINAL) - (1.5" ACTUAL X 1.5" ACTUAL) (22.5 SQ. IN.) HARDWOOD POST (OAK OR HICKORY) - LENGTH 48" OR MINIMUM 1.35 LB./FT. STEEL POST (STD. OR U SECTION).
4. WHEN STEEL POSTS ARE USED THEY SHALL HAVE A PROTECTION FOR FASTENING WIRE TO THEM. THE WIRE FASTENERS SHOULD BE EVENLY SPACED WITH AT LEAST FIVE PER POST.
5. BINDING WIRE OR TWINE SHALL REMAIN ON STRAW BALES.
6. PLACE STRAW BALES ON ALL DOWN STREAM SIDES OF ALL SILT FENCES.
7. STRAW BALES TO BE PLACED END TO END UP AGAINST THE SILT FENCE.
8. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN 12" DEEP.
9. INSTALL FENCE ALONG CONTOUR (NEVER UP AND DOWN SLOPE).
10. SILT FENCE SHALL BE MAINTAINED UNTIL CONTRIBUTING AREA IS STABILIZED WITH PAVEMENT OR VEGETATION. ALL FENCING SHALL BE REMOVED AFTER STABILIZATION AND DISPOSED OF IN AN APPROVED LANDFILL.

PERMANENT COVER SEEDING MIXTURES			
KIND	GROUP A % BY WEIGHT	GROUP B % BY WEIGHT	GROUP C % BY WEIGHT
LESPEDEZA (COMMON OR KOREAN)	20	-	-
SERICEA LESPEDEZA	15	-	50
KY. 31 FESCUE	40	55	30
ENGLISH RYE	15	20	15
WHITE DUTCH CLOVER	5	5	5
WEEPING LOVE GRASS	5	5	-
REDTOP	-	15	-
<b>TOTAL</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>TIME OF SOWING &amp; SEEDING MIXTURE REQUIRED</b>			
FEBRUARY 1 TO AUGUST 1	USE GROUP A ONLY		
MONTH OF AUGUST ONLY	USE EITHER GROUP A OR GROUP B		
SEPTEMBER 1 TO DECEMBER 1	USE GROUP B ONLY		
DECEMBER 1 TO FEBRUARY 1	DO NOT SOW ANY SEED		
FEBRUARY 1 TO DECEMBER 1	USE GROUP C ONLY WHEN SPECIFIED ON PLANS OR CONTRACT DOCUMENTS		

## 04 COVER SEEDING MIXTURES

[illegible]

TENMILE CREEK  
BANK STABILIZATION/GRADE CONTROL  
MEMPHIS, TENNESSEE  
DEVELOPER: SARPIO  
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER-BASIN: NS-07  
DRAIN-BASIN: TENMILE-BAYOU

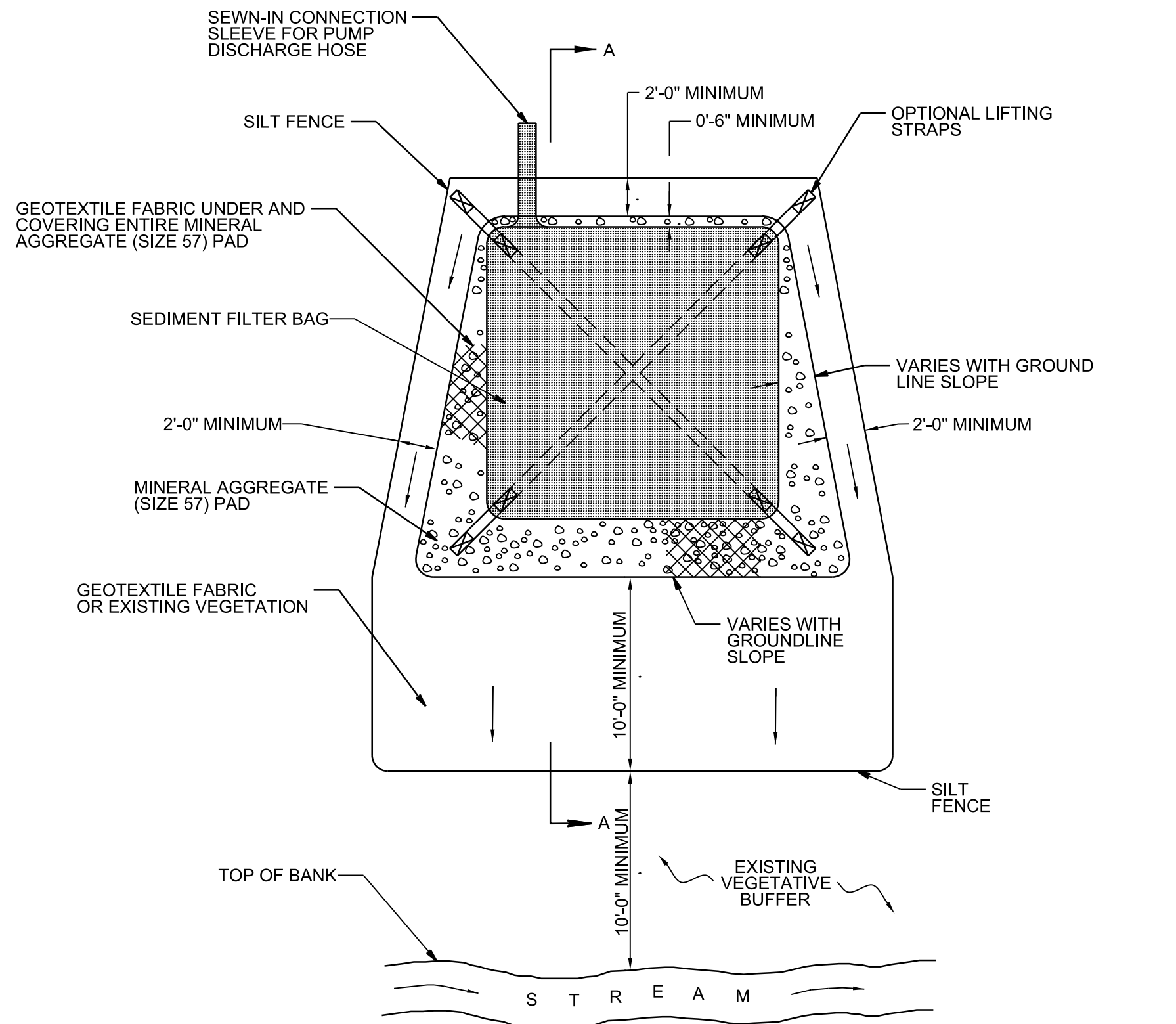
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SHEET 9 OF 10

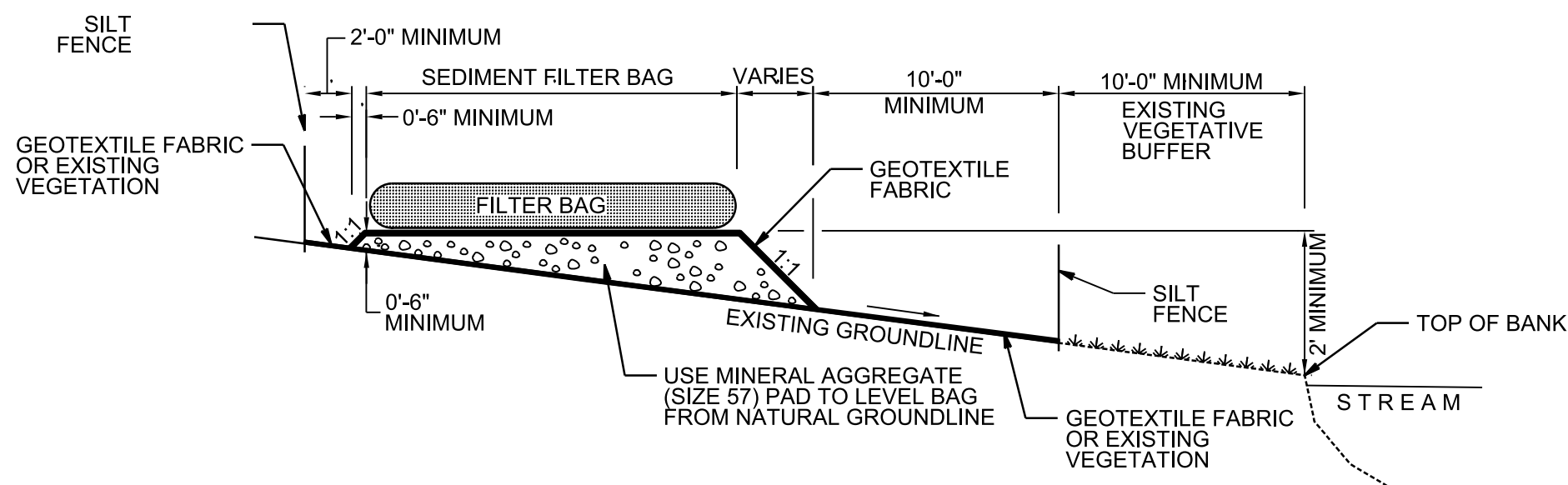
EROSION-CONTROL-DETAILS  
TENMILE-CREEK  
BANK-STABILIZATION/GRADE-CONTROL  
MEMPHIS, TENNESSEE

SURVEY: GEODESY      DATE: 05/19      PROJECT NO.: 36592-02  
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PLAN VIEW



SECTION A-A

**01 SEDIMENT FILTER BAG DETAIL**  
C7.22 SCALE: N.T.S.

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
1	REVISION 1	8/19/2020



TENMILE CREEK  
BANK STABILIZATION/GRADE CONTROL  
MEMPHIS, TENNESSEE  
DEVELOPER: SARP10  
ENGINEER: BARGE DESIGN SOLUTIONS, INC.

SEWER-BASIN: NS-07  
DRAIN-BASIN: TENMILE-BAYOU

C7.22

SHEET 10 OF 10

**EROSION-CONTROL-DETAILS**  
**TENMILE-CREEK**  
**BANK-STABILIZATION/GRADE-CONTROL**  
MEMPHIS, TENNESSEE

SURVEY: GEODESY DATE: 05/19 PROJECT NO.: 36592-02  
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