COBBOSSEE CORRIDOR MULTI-USE TRAIL REGULATORY SUBMISSION CITY OF GARDINER

MAINE

JUNE 26, 2012

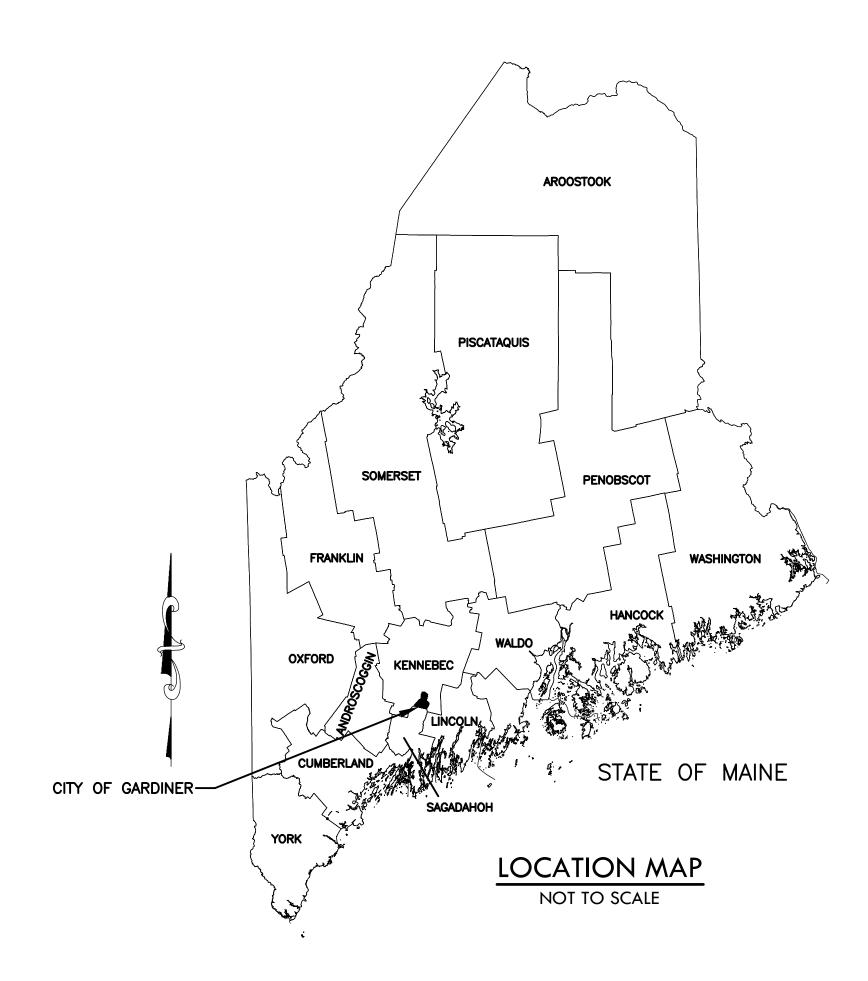
NOT FOR CONSTRUCTION

LIST OF DRAWINGS

STRUCTURAL PLANS & DETAILS

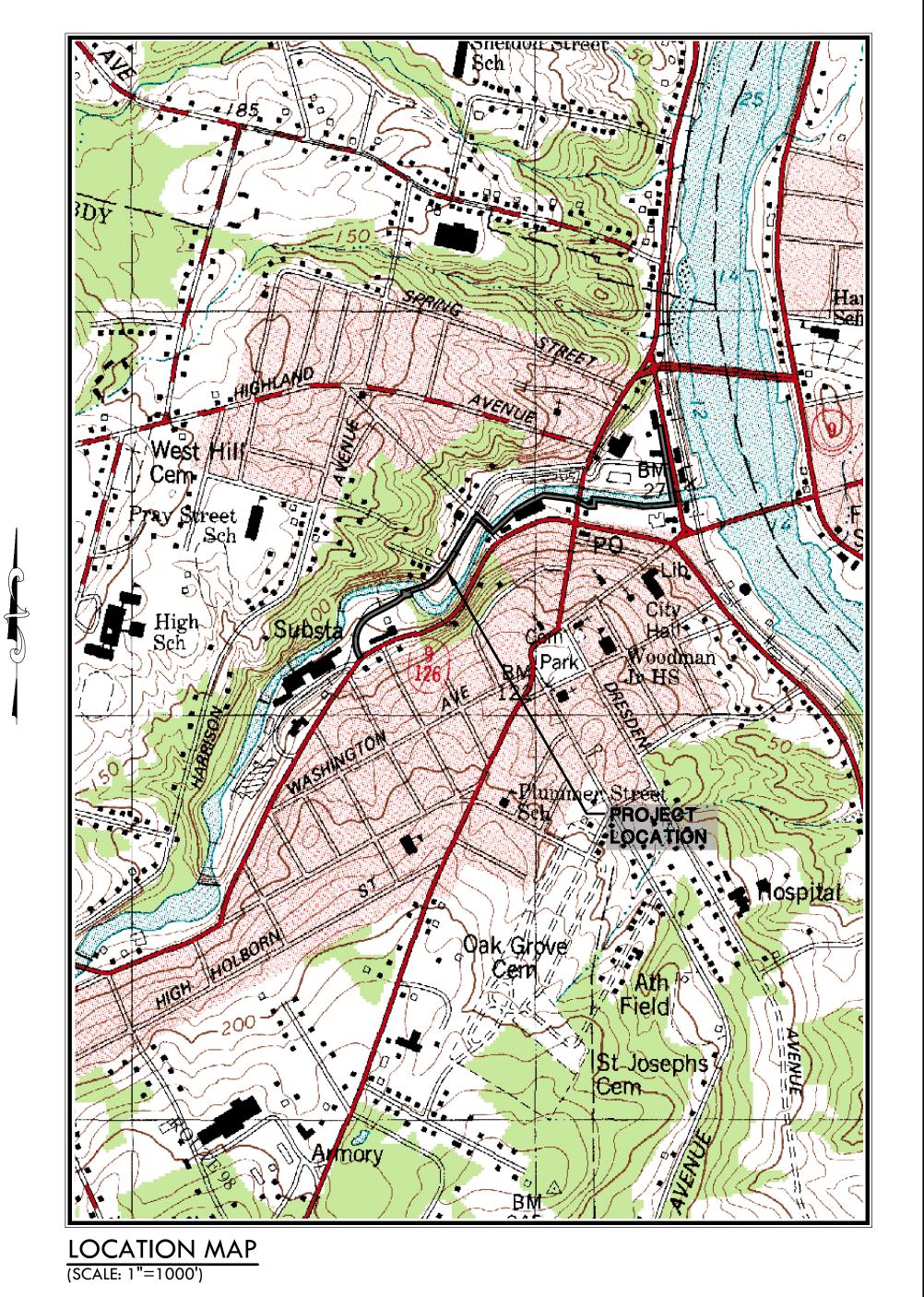
DRAWING	SHEET NO.
TITLE SHEET	
INDEX - NOTES & LEGEND	IN
LAYOUT AND GEOMETRY PLAN	GEO
SITE PLAN - LAYOUT, LANDCAPING, AND GRADING	SP-1 - SP-7
SEDIMENT AND EROSION CONTROL DETAILS	SD-1
SITE DETAILS	SD-2 - SD-4
CROSS SECTIONS	XSC-1 - XSC-11

S-1 - S-16



• DEVELOPED FOR:

City of Gardiner 6 Church Street Gardiner, ME 03904



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APPROVED:

DATE:

SUBMITTED:

DATE:

MILONE & MACBROOM, INC.

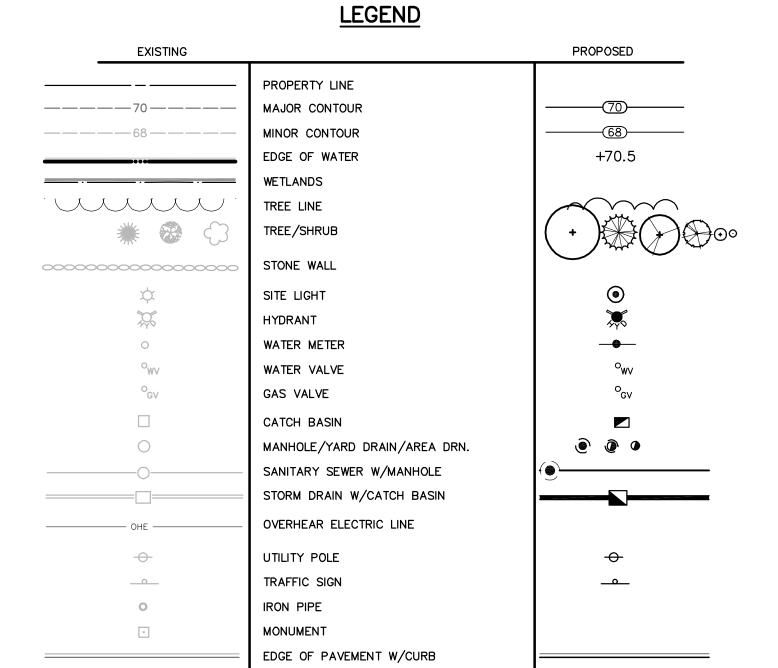
GENERAL NOTES

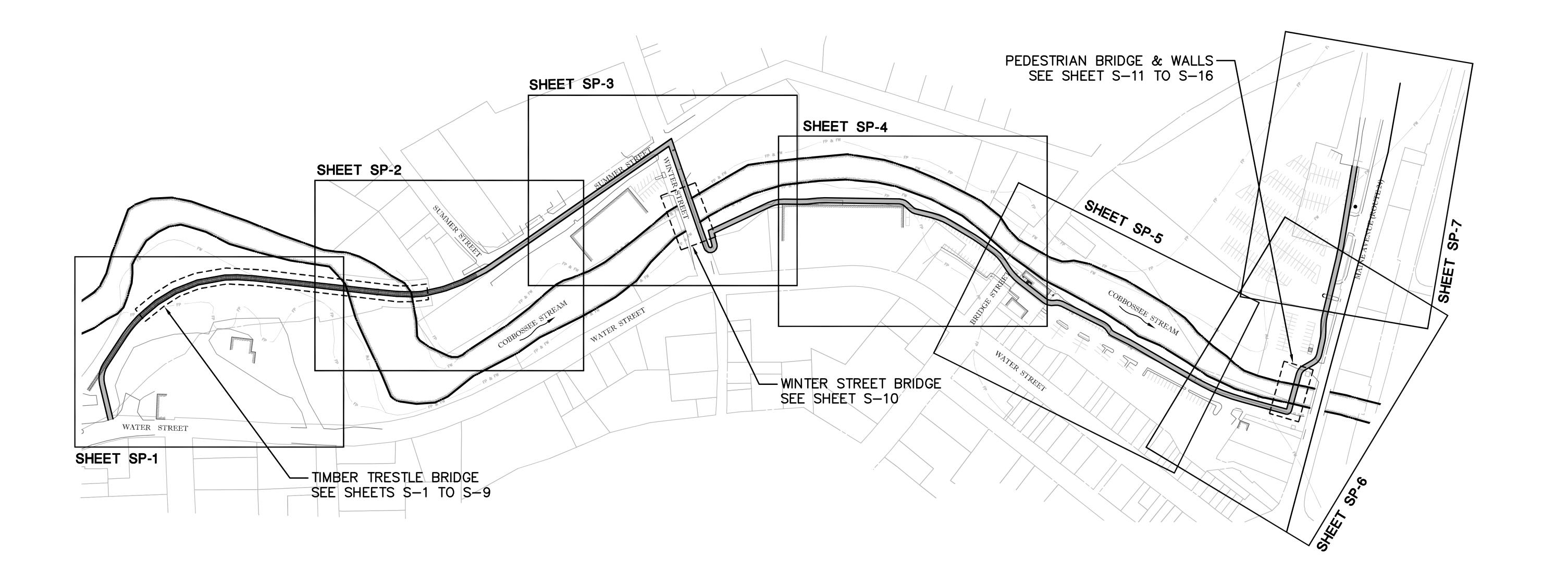
ALL WORK TO BE DONE UNDER THIS CONTRACT SHALL BE GOVERNED BY THE "STATE OF MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS", REVISION OF DECEMBER 2002, UPDATED JANUARY 20, 2004 AND "STATE OF MAINE DEPARTMENT OF TRANSPORTATION STANDARD DETAILS", REVISION OF DECEMBER 2002, UPDATED DECEMBER 10, 2003 EXCEPT AS MODIFIED BY THE CONTRACT DOCUMENTS.

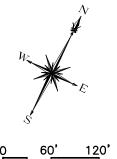
- 1. ALL TREES, BRUSH, VEGETATION, STUMPS, AND OTHER ITEMS SHALL BE REMOVED FROM THE AREA. ALL DEBRIS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS AND CODES.
- 2. TOPOGRAPHIC INFORMATION IS BASED UPON FIELD SURVEY CONDUCTED BY: GOOD DEEDS INC. 109 MAIN STREET P.O. BOX 587 BELFAST, ME 04915 1"=100" DATED JUNE 20, 2008.
- 3. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. PRIOR TO ANY DIGGING, THE CONTRACTOR SHALL CONTACT "DIG SAFE" AT 1—888—344—7233 TO DETERMINE LOCATIONS OF EXISTING UNDERGROUND UTILITIES. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
- 4. MILONE & MACBROOM INC. ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.
- 5. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE
- 6. SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE MAINE DEPARTMENT OF TRANSPORTATION BEST MANAGEMENT PRACTICES FOR EROSION & SEDIMENT CONTROL MANUAL DATED JANUARY 2000.
- 7. ALL DISTURBED AREAS NOT BEING PLANTED WITH TREES OR SHRUBS, SHALL RECEIVE A MINIMUM OF 6" TOPSOIL, AND BE SEEDED WITH GRASS OR SODDED, AS SHOWN ON THE PLANS.
- 8. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS INDICATE FINISHED GRADE.

ATTENTION OF THE PROJECT MANAGER AND ENGINEER.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT AND STAKING.





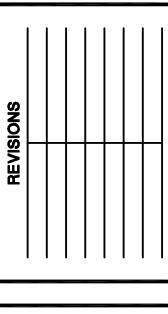


60' 120'

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COBBOSSEE CORRIDOR MULTI-USE TRAIL

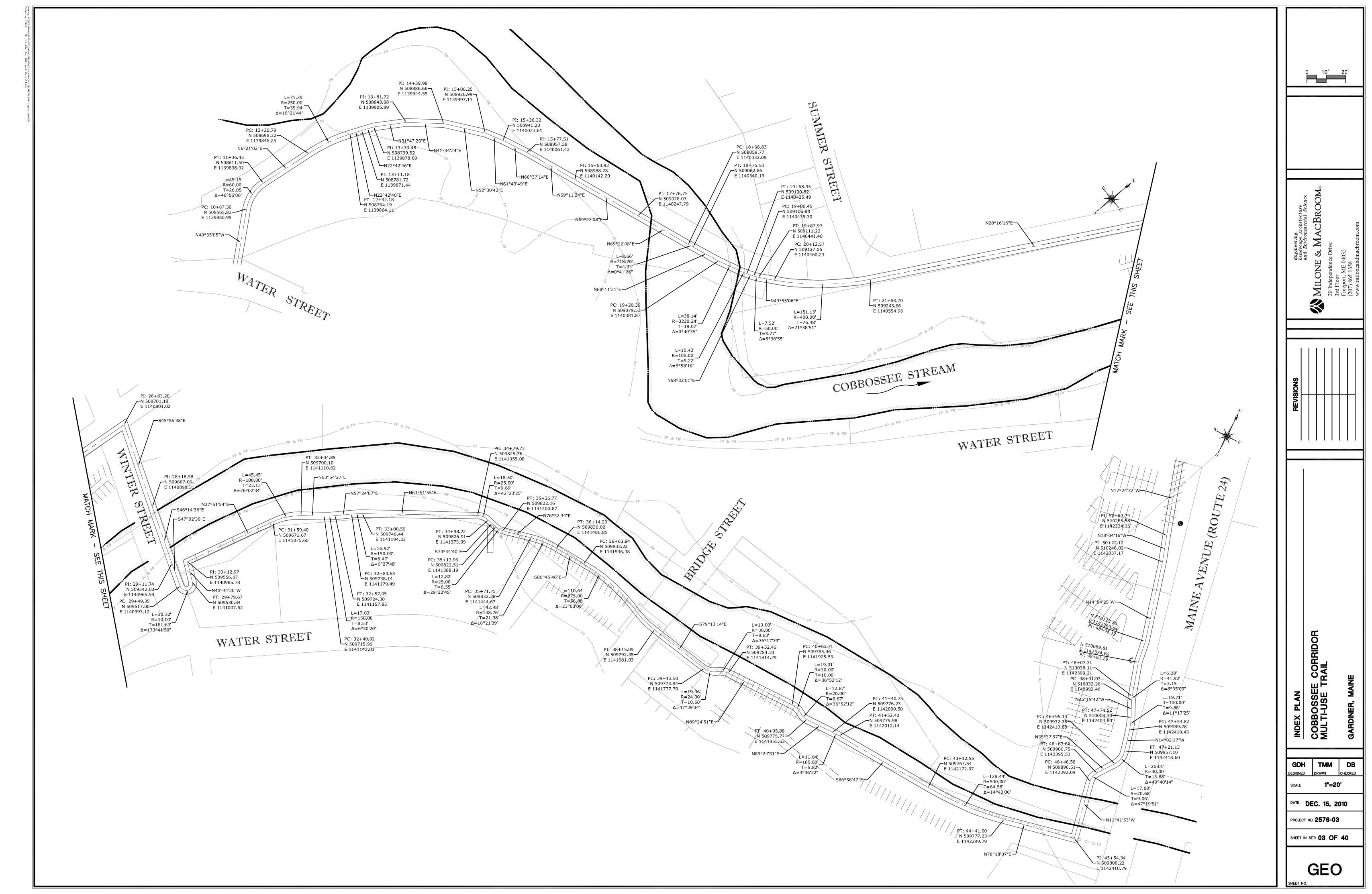
GDH TMM DB
DESIGNED DRAWN CHECKED

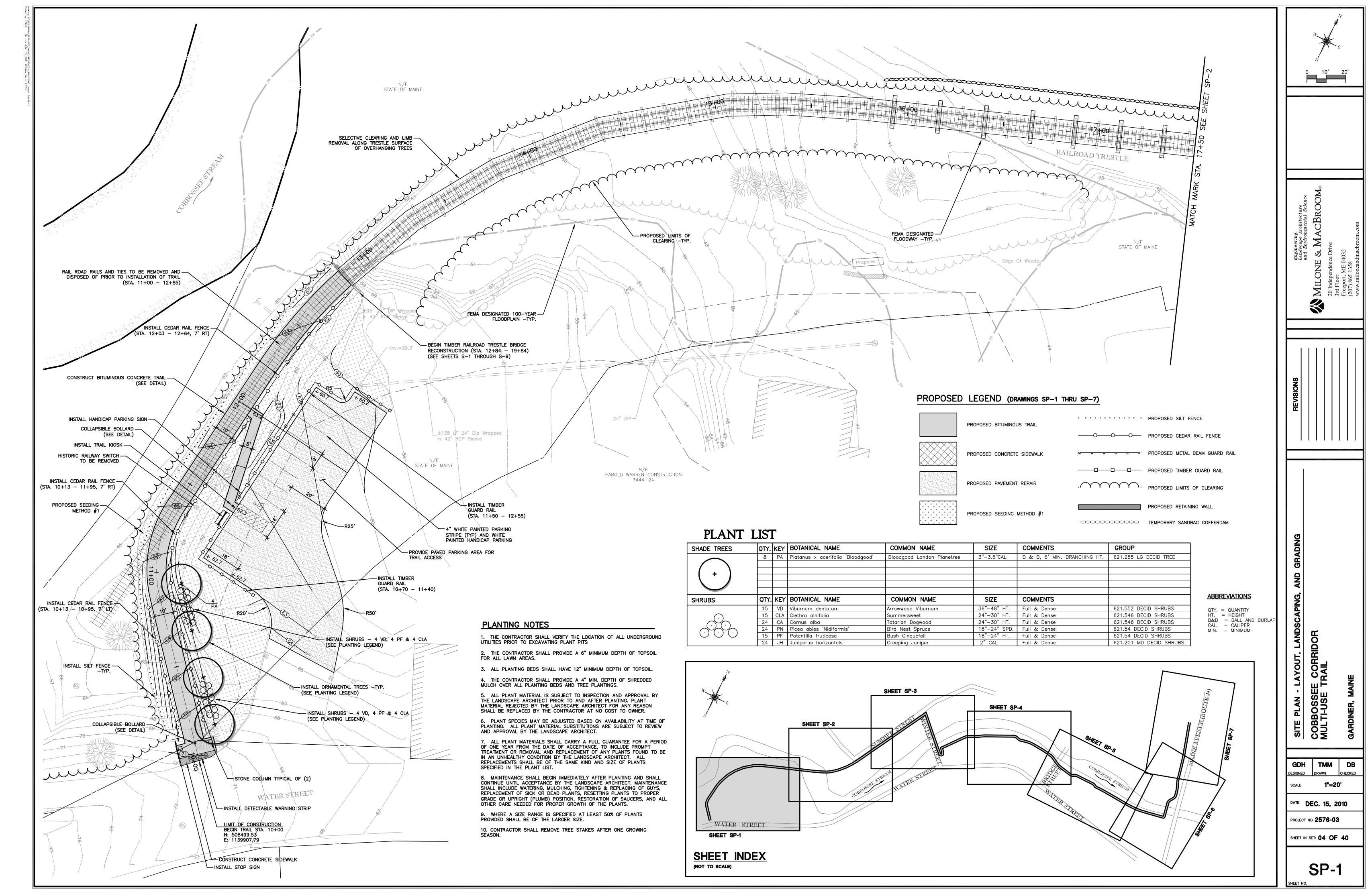
SCALE 1"=120'

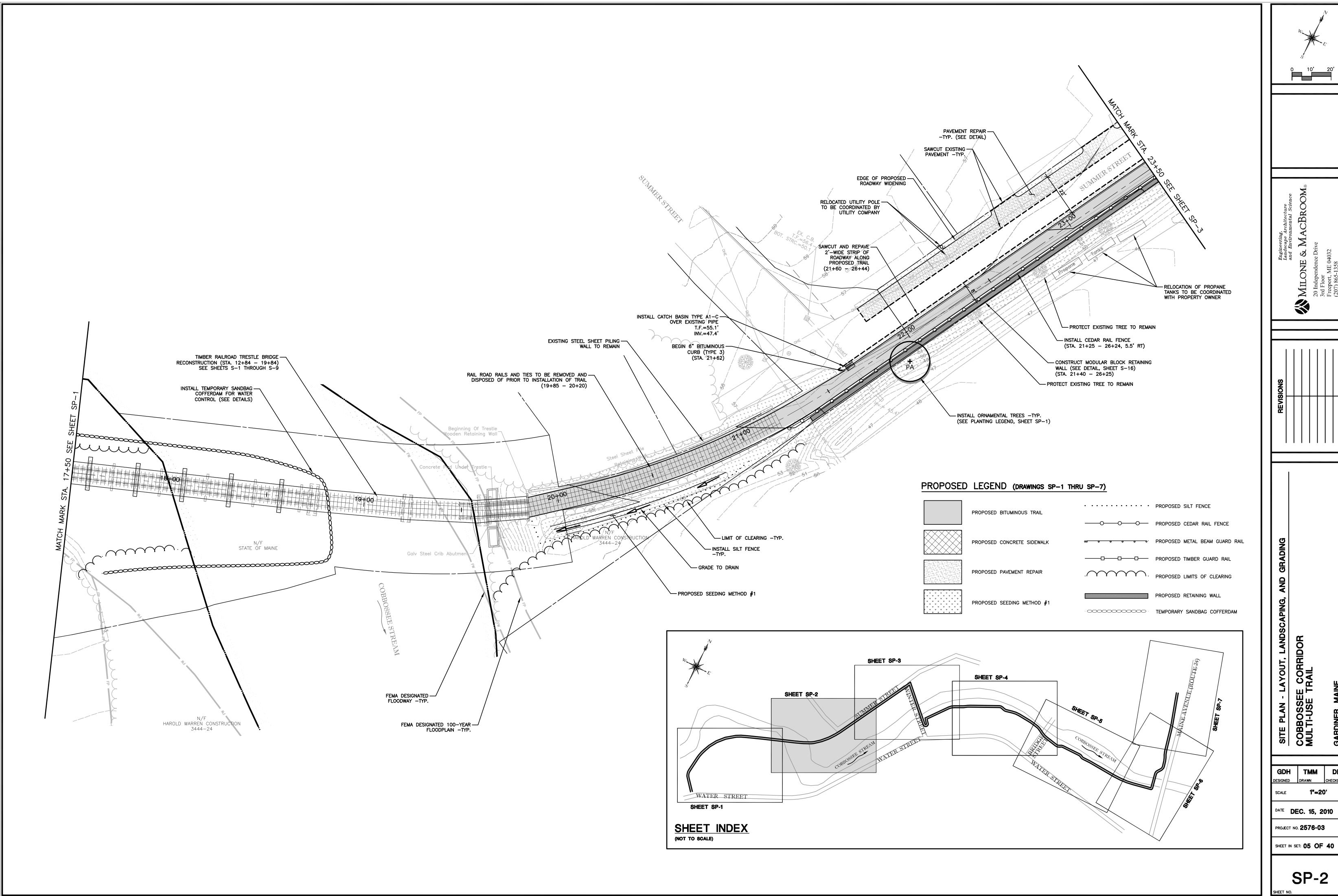
DEC. 15, 2010

PROJECT NO. **2576-03**SHEET IN SET: **02 OF 40**

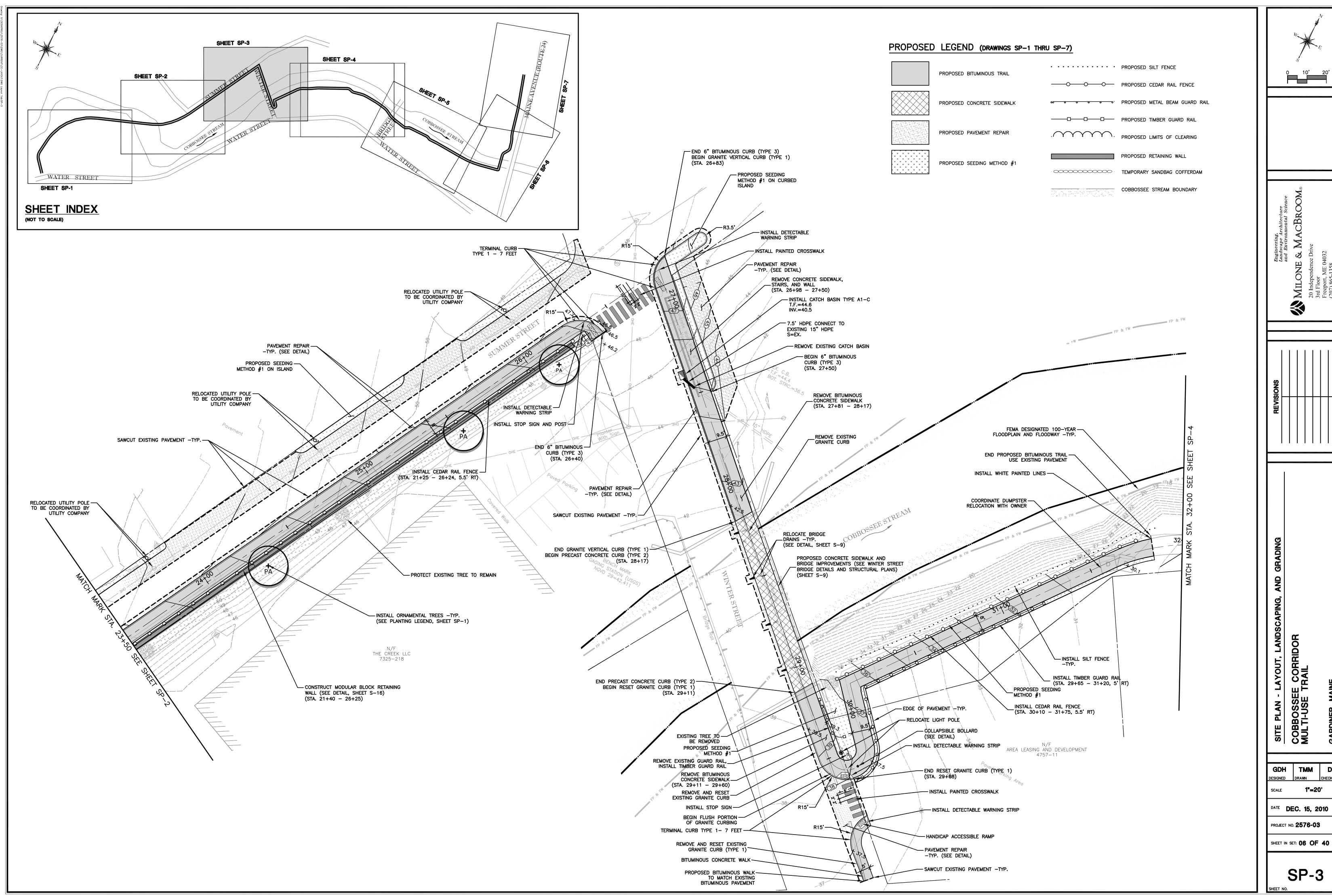
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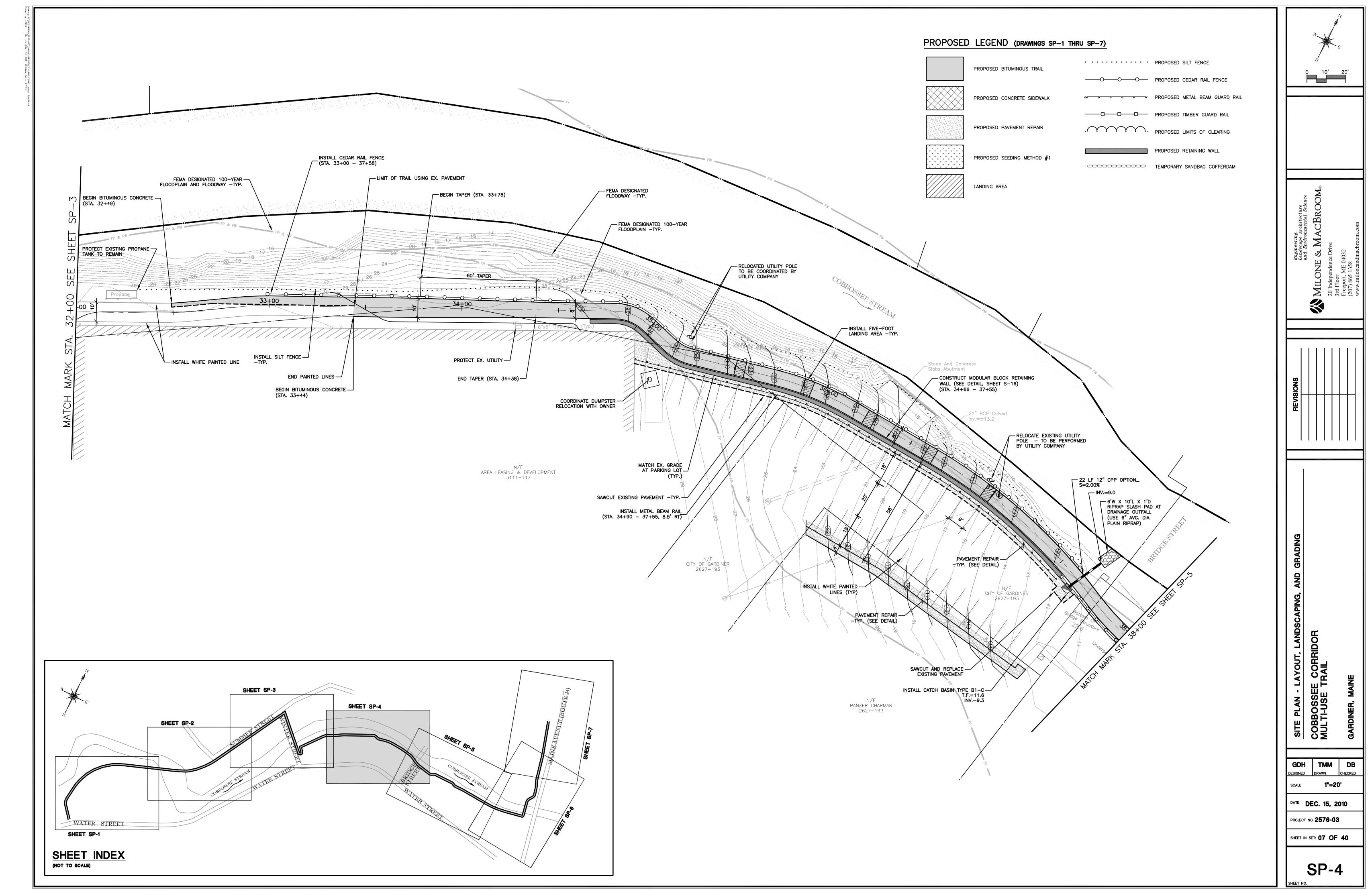
GDH TMM DB DEC. 15, 2010 PROJECT NO. **2576-03**

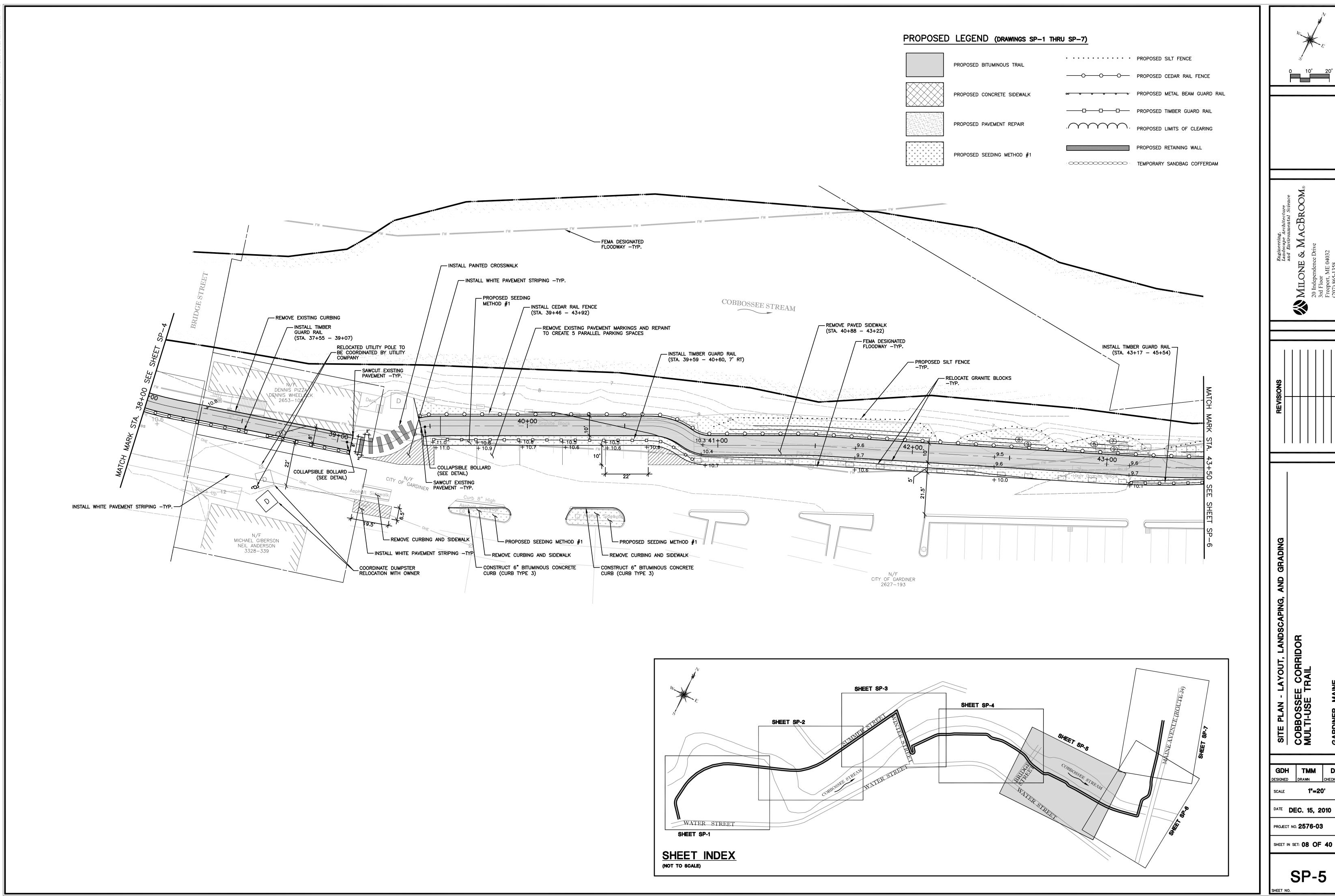


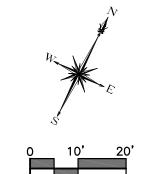
COBBOSSEE CORRI MULTI-USE TRAIL

GDH | TMM | DB 1"=20' DATE DEC. 15, 2010

PROJECT NO. **2576-03**



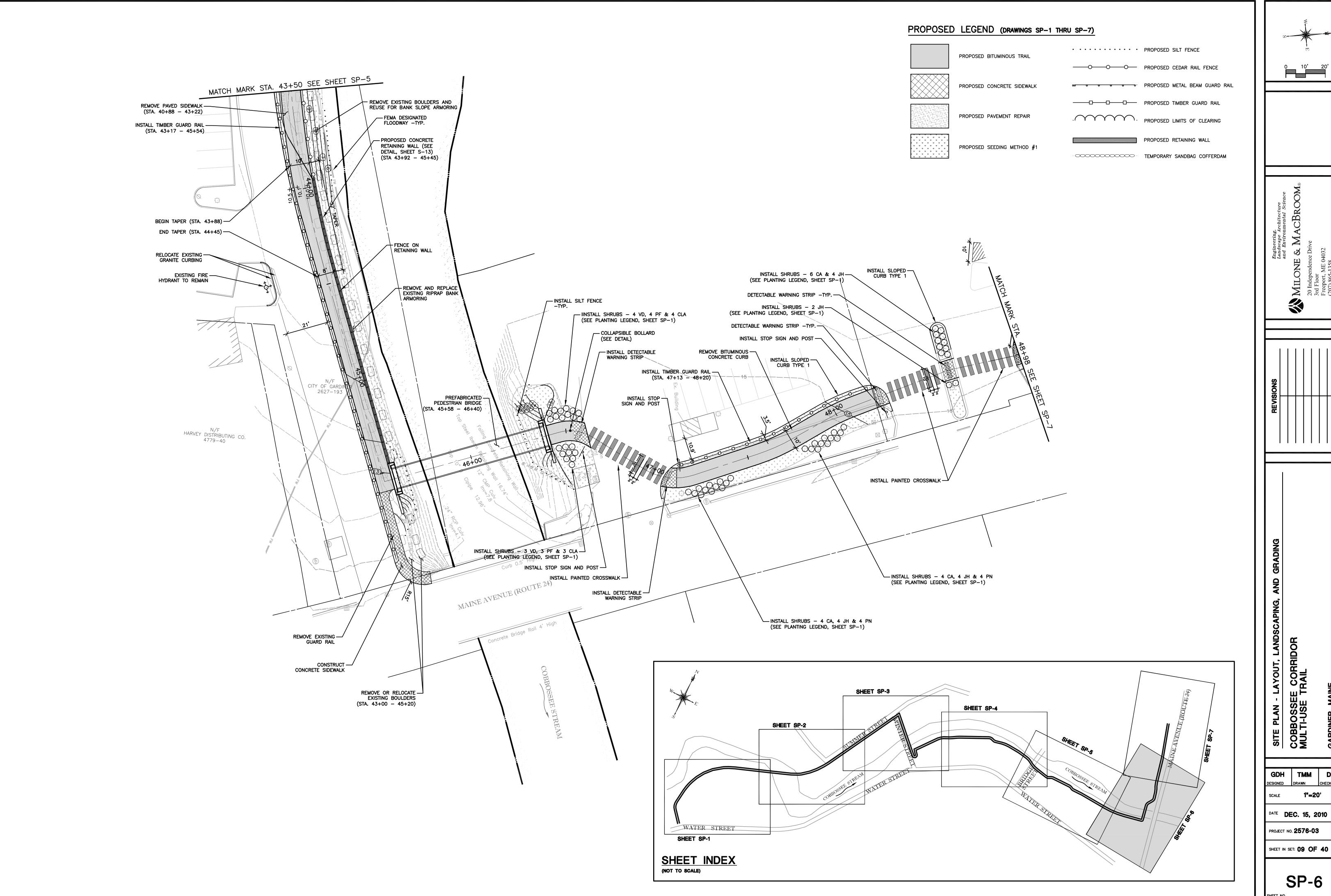




GDH TMM DB 1"=20'

DEC. 15, 2010

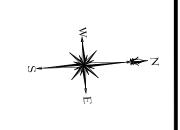
PROJECT NO. **2576-03**



GDH TMM DB

DEC. 15, 2010

PROJECT NO. **2576-03**



COBBOSSEE CORRIDOR MULTI-USE TRAIL

GDH TMM DB 1"=20' DEC. 15, 2010

PROJECT NO. **2576-03**

SHEET IN SET: 10 OF 40

GENERAL:

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION, AS MAY BE REQUIRED, DURING THE CONSTRUCTION OF THE PROJECT.

IN GENERAL, ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSE, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT, INSOFAR AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES, AND WATERBODIES, AND TO PREVENT, INSOFAR AS POSSIBLE, EROSION ON THE SITE.

LAND GRADING

GENERAL:

- THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES, SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
- a. THE CUT FACE OF EARTH EXCAVATION SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
- THE PERMANENT EXPOSED FACES OF FILLS SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
- THE CUT FACE OF ROCK EXCAVATION SHALL NOT BE STEEPER THAN ONE
- HORIZONTAL TO FOUR VERTICAL (1:4).
- PROVISION SHOULD BE MADE TO CONDUCT SURFACE WATER SAFELY TO STORM DRAINS TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FILL SLOPES.
- EXCAVATIONS SHOULD NOT BE MADE SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTY WITHOUT PROTECTING SUCH PROPERTY FROM EROSION, SLIDING, SETTLING, OR CRACKING.
- NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE OR WASH UPON THE PREMISES OF ANOTHER OWNER OR UPON ADJACENT WETLANDS, WATERCOURSES, OR
- PRIOR TO ANY REGRADING, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE ENTRANCE TO THE WORK AREA IN ORDER TO REDUCE MUD AND OTHER SEDIMENTS FROM LEAVING THE SITE.

TOPSOILING

- TOPSOIL SHALL BE SPREAD OVER ALL EXPOSED AREAS IN ORDER TO PROVIDE A SOIL MEDIUM HAVING FAVORABLE CHARACTERISTICS FOR THE ESTABLISHMENT, GROWTH, AND MAINTENANCE OF VEGETATION.
- UPON ATTAINING FINAL SUBGRADES, SCARIFY SURFACE TO PROVIDE A GOOD BOND WITH TOPSOIL.
- . REMOVE ALL LARGE STONES, TREE LIMBS, ROOTS AND CONSTRUCTION DEBRIS. 4. APPLY LIME ACCORDING TO SOIL TEST OR AT THE RATE OF TWO (2) TONS PER ACRE.

MATERIAL:

- TOPSOIL SHOULD HAVE PHYSICAL, CHEMICAL, AND BIOLOGICAL CHARACTERISTICS FAVORABLE TO THE GROWTH OF PLANTS.
- TOPSOIL SHOULD HAVE A SANDY OR LOAMY TEXTURE.
- TOPSOIL SHOULD BE RELATIVELY FREE OF SUBSOIL MATERIAL AND MUST BE FREE OF STONES (OVER 1" IN DIAMETER), LUMPS OF SOIL, ROOTS, TREE LIMBS, TRASH, OR CONSTRUCTION DEBRIS. IT SHOULD BE FREE OF ROOTS OR RHIZOMES SUCH AS THISTLE, NUTGRASS, AND QUACKGRASS.
- AN ORGANIC MATTER CONTENT OF SIX PERCENT (6%) IS REQUIRED. AVOID LIGHT COLORED SUBSOIL MATERIAL.
- SOLUBLE SALT CONTENT OF OVER 500 PARTS PER MILLION (PPM) IS LESS SUITABLE. AVOID TIDAL MARSH SOILS BECAUSE OF HIGH SALT CONTENT AND SULFUR ACIDITY.
- 5. THE pH SHOULD BE MORE THAN 6.0. IF LESS, ADD LIME TO INCREASE pH TO AN ACCEPTABLE LEVEL

- . AVOID SPREADING WHEN TOPSOIL IS WET OR FROZEN.
- SPREAD TOPSOIL UNIFORMLY TO A DEPTH OF AT LEAST SIX INCHES (6"), OR TO THE DEPTH SHOWN ON THE LANDSCAPING PLANS.

TEMPORARY VEGETATIVE COVER

TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL UNPROTECTED AREAS THAT PRODUCE SEDIMENT, AREAS WHERE FINAL GRADING HAS BEEN COMPLETED, AND AREAS WHERE THE ESTIMATED PERIOD OF BARE SOIL EXPOSURE IS LESS THAN 12 MONTHS. TEMPORARY VEGETATIVE COVER SHALL BE APPLIED IF AREAS WILL NOT BE PERMANENTLY SEEDED BY SEPTEMBER 1.

SITE PREPARATION:

- INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
- REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA. APPLY LIME ACCORDING TO SOIL TEST OR AT A RATE OF ONE (1) TON OF GROUND
- DOLOMITIC LIMESTONE PER ACRE (5 LBS. PER 100 SQ. FT.).
- APPLY FERTILIZER ACCORDING TO SOIL TEST OR AT THE RATE OF 300 LBS, OF 21-10-21 PER ACRE (7 LBS, PER 1,000 SO, FT.) AND SECOND APPLICATION OF 200 LBS, OF 10-10-10 (5 LBS. PER 1,000 SQ. FT.) WHEN GRASS IS FOUR INCHES (4") TO SIX INCHES (6") HIGH. APPLY ONLY WHEN GRASS IS DRY.
- UNLESS HYDROSEEDED, WORK IN LIME AND FERTILIZER TO A DEPTH OF FOUR (4") INCHES USING A DISK OR ANY SUITABLE EQUIPMENT.
- TILLAGE SHOULD ACHIEVE A REASONABLY UNIFORM LOOSE SEEDBED. WORK ON CONTOUR IF SITE IS SLOPING.

ESTABLISHMENT:

- SELECT APPROPRIATE SPECIES FOR THE SITUATION. NOTE RATES AND SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW).
- APPLY SEED UNIFORMLY ACCORDING TO THE RATE INDICATED BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
- UNLESS HYDROSEEDED, COVER RYEGRASS SEEDS WITH NOT MORE THAN 1/4 INCH OF SOIL USING SUITABLE EQUIPMENT.
- MULCH IMMEDIATELY AFTER SEEDING IF REQUIRED. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW.) APPLY STRAW OR HAY MULCH AND ANCHOR TO SLOPES GREATER THAN 3% OR WHERE CONCENTRATED FLOW WILL OCCUR.

PERMANENT VEGETATIVE COVER

GENERAL:

PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED AS VARIOUS SECTIONS OF THE PROJECT ARE COMPLETED IN ORDER TO STABILIZE THE SOIL, REDUCE DOWNSTREAM DAMAGE FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE AESTHETIC NATURE OF THE SITE. IT WILL BE APPLIED TO ALL CONSTRUCTION AREAS SUBJECT TO EROSION WHERE FINAL GRADING HAS BEEN COMPLETED AND A PERMANENT COVER IS NEEDED.

SITE PREPARATION:

- 1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
- 2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
- 3. PERFORM ALL PLANTING OPERATIONS PARALLEL TO THE CONTOURS OF THE SLOPE.
- 4. APPLY TOPSOIL AS INDICATED ELSEWHERE HEREIN.
- 5. APPLY FERTILIZER ACCORDING TO SOIL TEST OR:
- SPREAD SEEDING: WORK DEEPLY IN SOIL, BEFORE SEEDING, 300 LBS. OF 10-10-10 FERTILIZER PER ACRE (9 LBS, PER 1,000 SO, FT.); THEN SIX (6) TO EIGHT (8) WEEKS LATER, APPLY ON THE SURFACE AN ADDITIONAL 300 LBS. OF 21-10-21 FERTILIZER PER ACRE. AFTER SEPTEMBER 1, TEMPORARY VEGETATIVE COVER SHALL BE
- FALL SEEDING: WORK DEEPLY IN SOIL, BEFORE SEEDING, 600 LBS. OF 21-10-21 FERTILIZER PER ACRE (14 LBS. PER 1,000 SQ. FT.).

VEGETATIVE COVER SELECTION & MULCHING

TEMPORARY VEGETATIVE COVER:

PERENNIAL RYEGRASS 3 LBS./1,000 SQ.FT. (IOLUIUM PERENNE)

- * PERMANENT VEGETATIVE COVER:
- BARON KENTUCKY BLUEGRASS JAMESTOWN II CHEWINGS FESCUE 20% PALMER PERENNIAL RYEGRASS
- * LOFTS "TRIPLEX GENERAL" MIX OR APPROVED EQUAL, RECOMMENDED RATE/TIME SEEDING.

SPRING SEEDING: 4/1 to 5/31 FALL SEEDING: 8/16 to 10/15

TEMPORARY MULCHING:

STRAW OR HAY 70-90 LBS /1,000 SQ FT. (TEMPORARY VEGETATIVE AREAS)

WOOD FIBER IN HYDROMULCH SLURRY 25-50 LBS./1,000 SQ. FT.

ESTABLISHMENT:

- 1. SMOOTH AND FIRM SEEDBED WITH CULTIPACKER OR OTHER SIMILAR EQUIPMENT PRIOR TO SEEDING (EXCEPT WHEN HYDROSEEDING).
- 2. SELECT ADAPTED SEED MIXTURE FOR THE SPECIFIC SITUATION. NOTE RATES AND THE SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING SPEC. BELOW).
- 3. APPLY SEED UNIFORMLY ACCORDING TO RATE INDICATED BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
- 4. COVER GRASS AND LEGUME SEED WITH NOT MORE THAN 1/4 INCH OF SOIL WITH
- SUITABLE EQUIPMENT (EXCEPT WHEN HYDROSEEDING) 5. MULCH IMMEDIATELY AFTER SEEDING, IF REQUIRED, ACCORDING TO TEMPORARY MULCHING SPECIFICATIONS. (SEE VEGETATIVE COVER SELECTION & MULCHING
- SPECIFICATION BELOW). 6. USE PROPER INOCULANT ON ALL LEGUME SEEDINGS, USE FOUR (4) TIMES NORMAL
- 7. USE SOD WHERE THERE IS A HEAVY CONCENTRATION OF WATER AND IN CRITICAL AREAS WHERE IT IS IMPORTANT TO GET A QUICK VEGETATIVE COVER TO PREVENT

MAINTENANCE:

RATES WHEN HYDROSEEDING.

- 1. TEST FOR SOIL ACIDITY EVERY THREE (3) YEARS AND LIME AS REQUIRED.
- 2. ON SITES WHERE GRASSES PREDOMINATE, BROADCAST ANNUALLY 500 POUNDS OF 10-10-10 FERTILIZER PER ACRE (12 LBS. PER 1,000 SQ. FT.) OR AS NEEDED ACCORDING
- 3. ON SITES WHERE LEGUMES PREDOMINATE, BROADCAST EVERY THREE (3) YEARS OR AS INDICATED BY SOIL TEST 300 POUNDS OF 0-20-20 OR EQUIVALENT PER ACRE (8 LBS PER

EROSION CHECKS

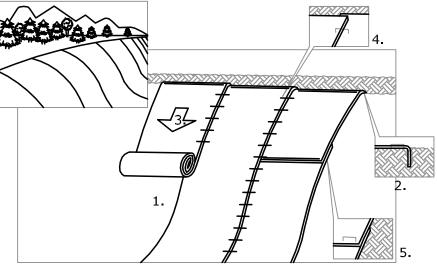
1. TEMPORARY PERVIOUS BARRIERS USING BALES OF HAY OR STRAW, HELD IN PLACE WITH STAKES DRIVEN THROUGH THE BALES AND INTO THE GROUND OR GEOTEXTILE FABRIC FASTENED TO A FENCE POST AND BURIED INTO THE GROUND, SHALL BE INSTALLED AND MAINTAINED AS REQUIRED TO CHECK EROSION AND REDUCE SEDIMENTATION.

CONSTRUCTION:

- 1. BALES SHOULD BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT
- 2. EACH BALE SHALL BE EMBEDDED INTO THE SOIL A MINIMUM OF FOUR (4") INCHES.
- 3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY WOOD STAKES OR REINFORCEMENT BARS DRIVEN THROUGH THE BALES AND INTO THE GROUND. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE TO FORCE BALES
- 4. GEOTEXTILE FABRIC SHALL BE SECURELY ANCHORED AT THE TOP OF A THREE FOOT (3') HIGH FENCE AND BURIED A MINIMUM OF FOUR INCHES (4") TO THE SOIL. SEAMS BETWEEN SECTIONS OF FILTER FABRIC SHALL OVERLAP A MINIMUM OF TWO FEET (2'). INSTALLATION AND

MAINTENANCE:

- 1. BALED HAY EROSION BARRIERS SHALL BE INSTALLED AT ALL STORM SEWER INLETS.
- 2. BALED HAY EROSION BARRIERS AND GEOTEXTILE FENCE SHALL BE INSTALLED AT THE LOCATION INDICATED ON THE PLAN AND IN ADDITIONAL AREAS AS MAY BE DEEMED APPROPRIATE DURING CONSTRUCTION.
- 3. ALL EROSION CHECKS SHALL BE MAINTAINED UNTIL ADJACENT AREAS ARE STABILIZED.
- 4. INSPECTION SHALL BE FREQUENT (AT MINIMUM WEEKLY AND BEFORE AND AFTER HEAVY RAIN) AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- 5. EROSION CHECKS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORMWATER FLOW OR DRAINAGE.



PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING SCC225, DO NOT SEED PREPARED AREA. SCC225 MUST BE INSTALLED WITH PAPER SIDE DOWN. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET

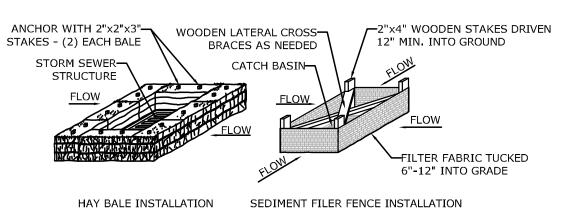
IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. 3. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP. 5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAP AREA, APPROXIMATELY 12"

REFER TO GENERAL STAPLE PATTERN GUIDE IN NORTH AMERICAN GREEN CATALOG FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

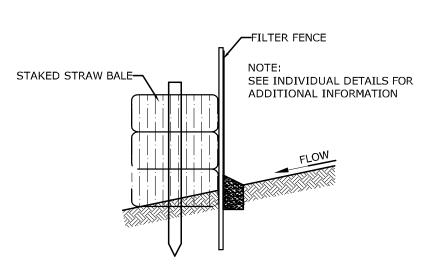
APPLICATION OF EROSION CONTROL BLANKET ON SLOPES

NOT TO SCALE



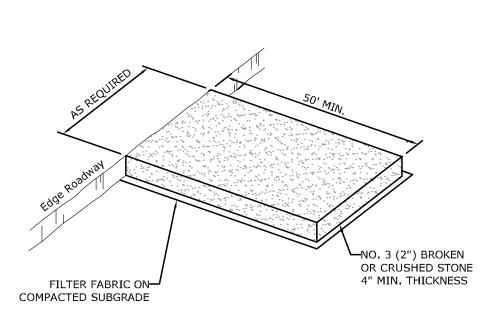
CATCH BASIN IN A DEPRESSION

SEDIMENTATION CONTROL **SYSTEM FOR CATCH BASIN**



SEDIMENT FILTER FENCE

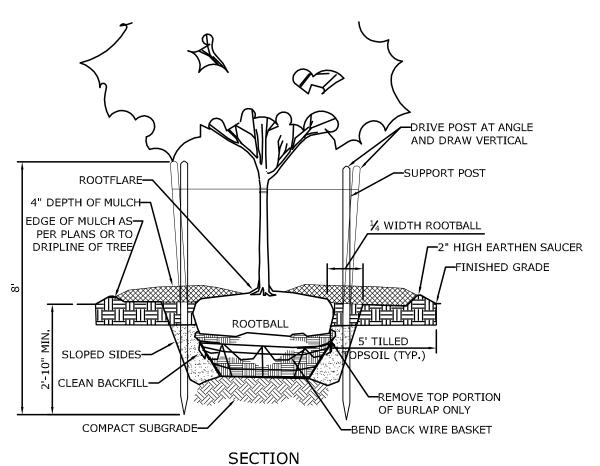
AND HAYBALE

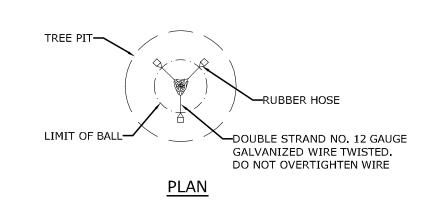


NOTE: CONSTRUCTION ENTRANCE PAD SHALL BE INSTALLED AND MAINTAINED DURING OPERATIONS WHICH PROMOTE VEHICULAR TRACKING OF MUD

CONSTRUCTION ENTRANCE PAD

NOT TO SCALE



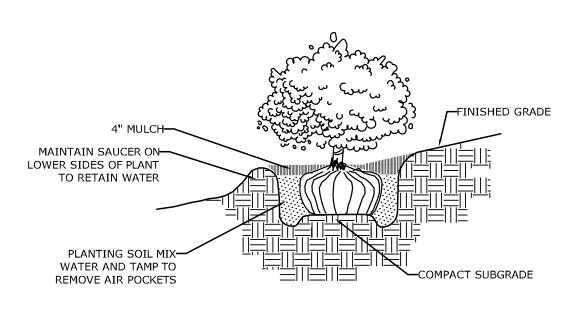


TREE DETAIL

REMOVED BY THE CONTRACTOR ONE

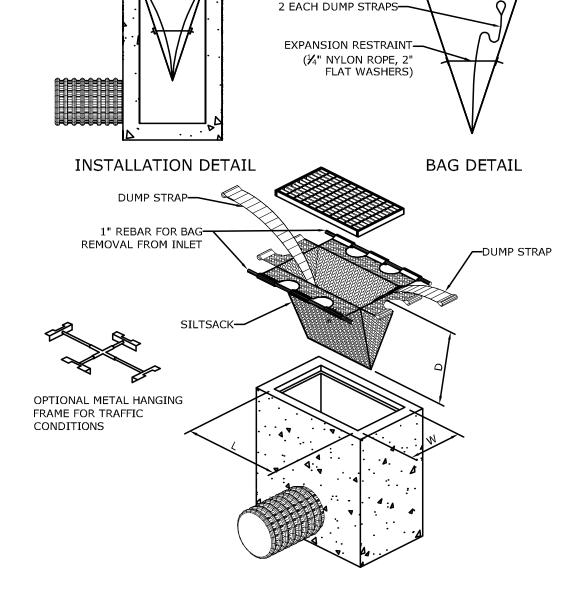
1. SUPPORT STAKES SHALL BE

YEAR AFTER INSTALLATION

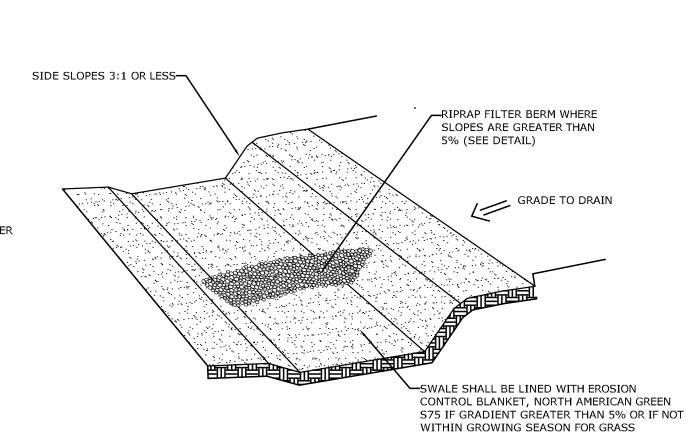


MULCHING OF PLANT BEDS: UNLESS OTHERWISE DIRECTED SHREDDED MULCH SHALL BE PLACED TO A LIMIT OF ONE FOOT BEYOND THE CENTER OF THE OUTERMOST SHRUBS IN SHRUB BED.

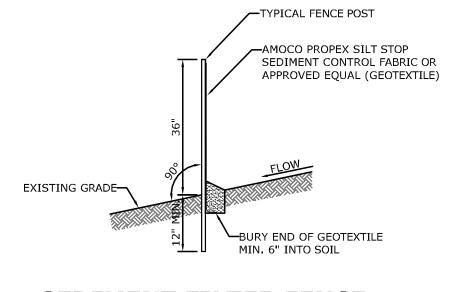
SHRUB DETAIL NOT TO SCALE



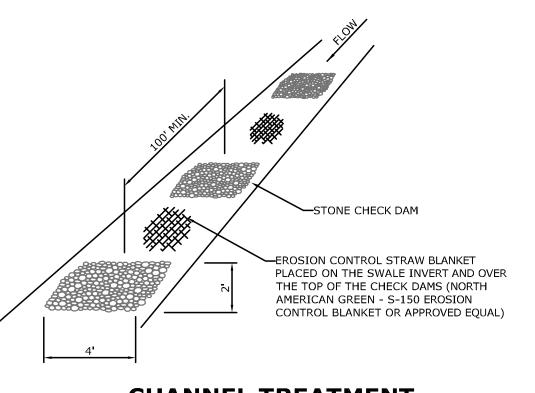
INLET PROTECTION DETAIL NOT TO SCALE



GRASSED SWALE DETAIL

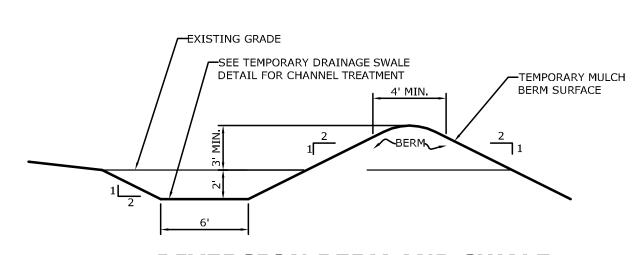


SEDIMENT FILTER FENCE NOT TO SCALE



CHANNEL TREATMENT NOT TO SCALE

(SEE DIVERSION BERM AND SWALE DETAIL)



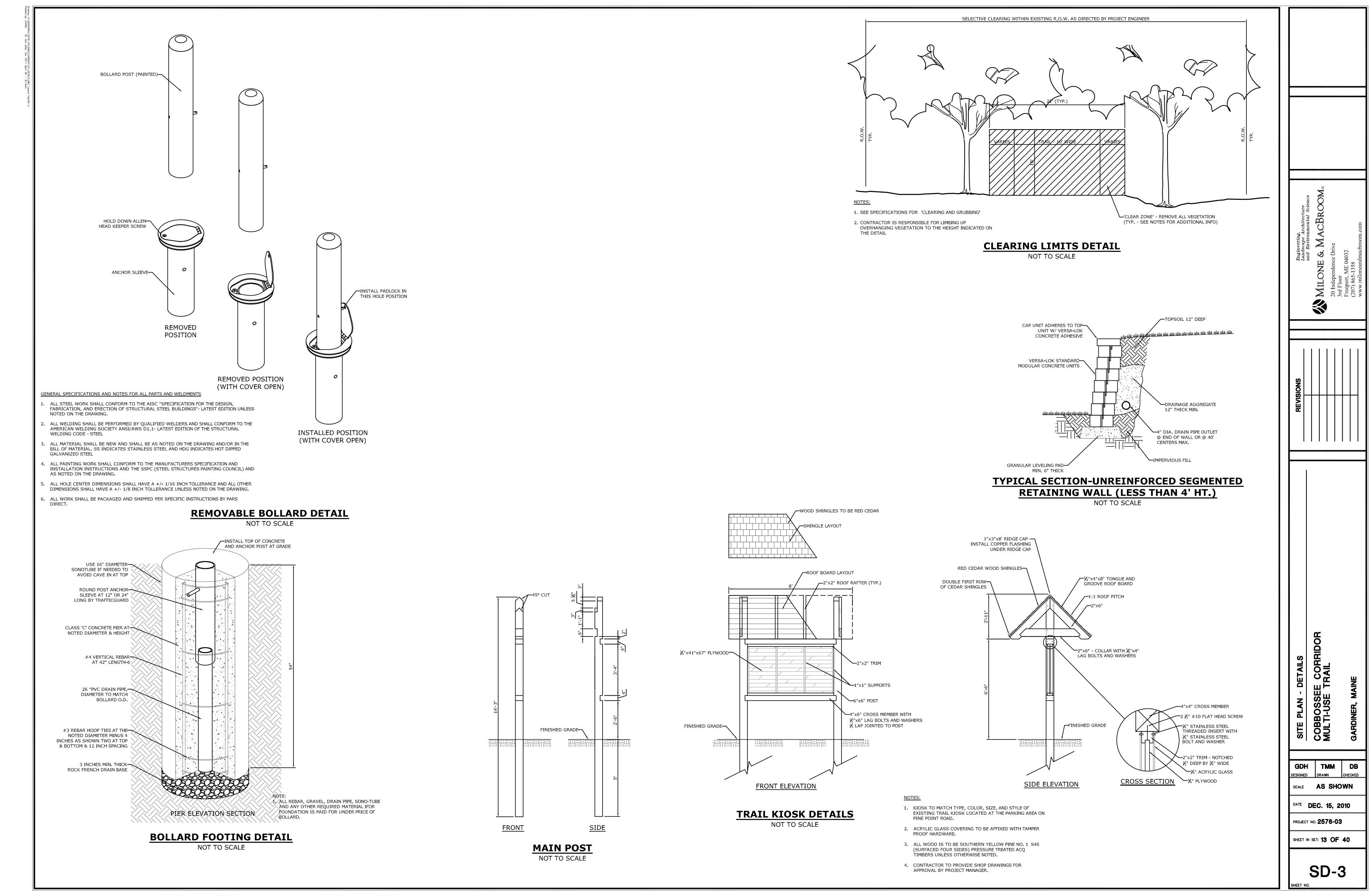
DIVERSION BERM AND SWALE NOT TO SCALE

GDH | TMM | DB SCALE AS SHOWN

PROJECT NO. **2576-03**

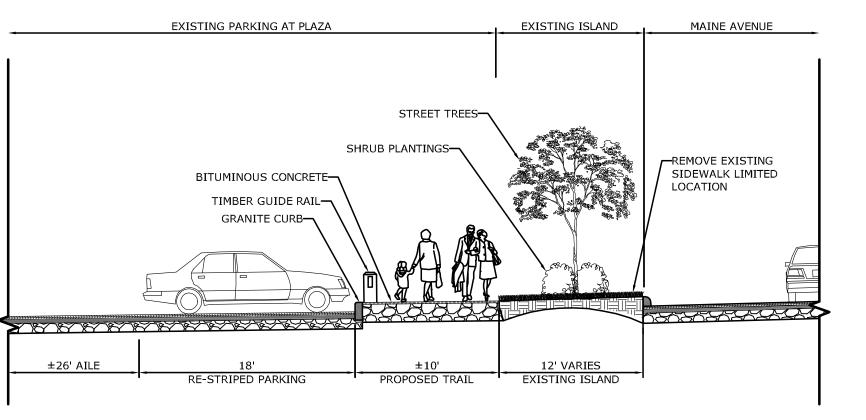
SD-1

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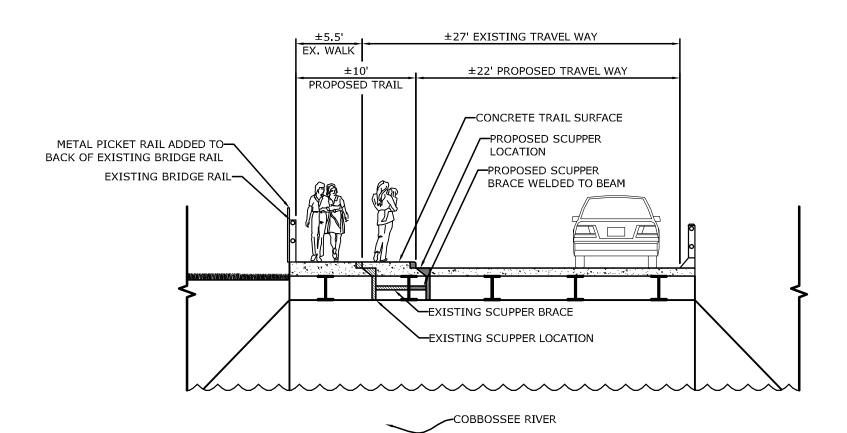


TYPICAL TRAIL SECTION 1

SCALE: ½" = 1'



TYPICAL TRAIL SECTION 2 SCALE: ½" = 1'



TRAIL SECTION AT WINTER STREET BRIDGE

SCALE: $\frac{1}{8}$ " = 1'

Engineering,
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and Environmental Science
MILONE & MACBROON
20 Independence Drive

REVISIONS

COBBOSSEE CORRIDOR
MULTI-USE TRAIL

GDH TMM DB
DESIGNED DRAWN CHECKED

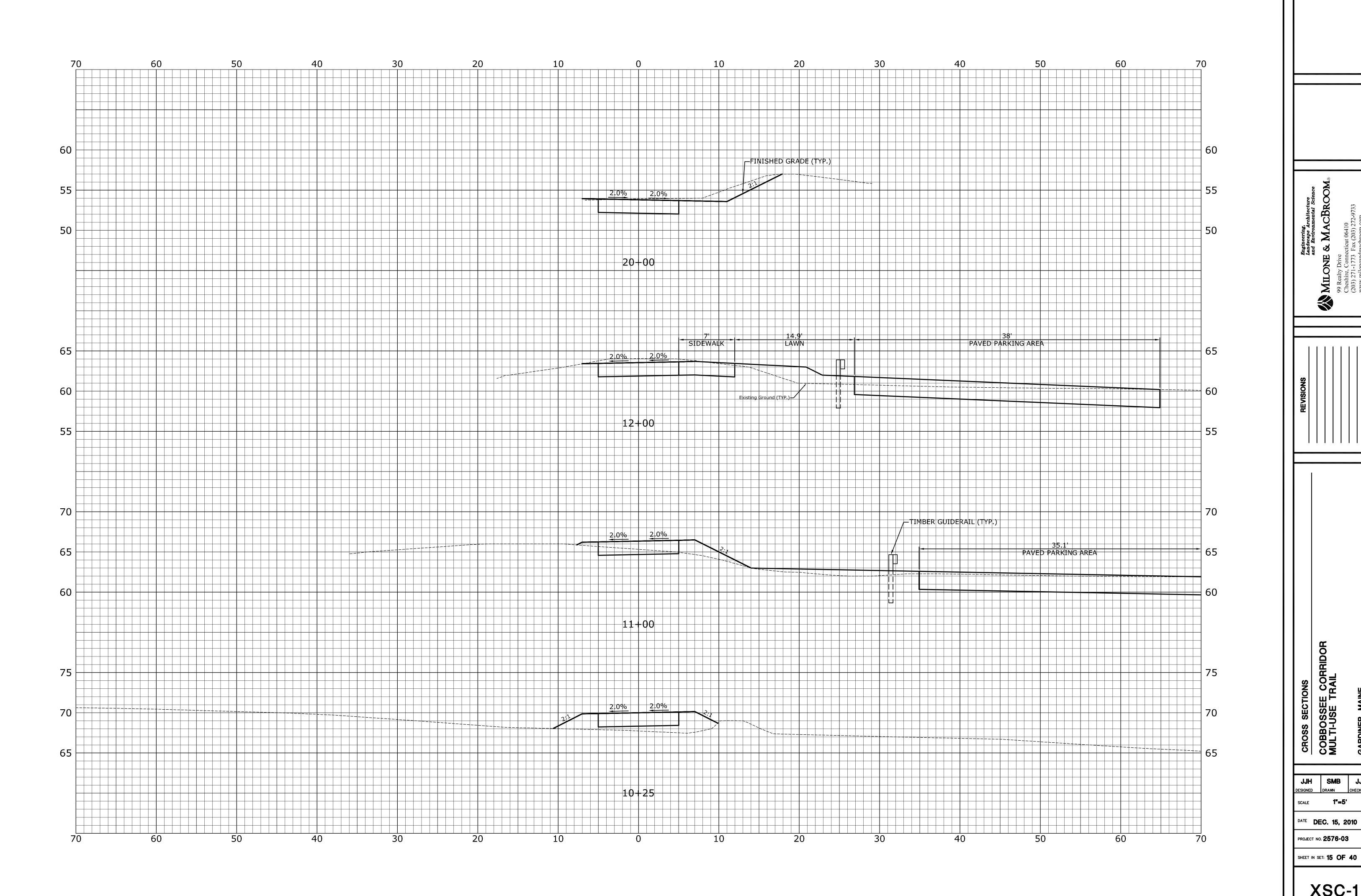
SCALE AS SHOWN

DEC. 15, 2010

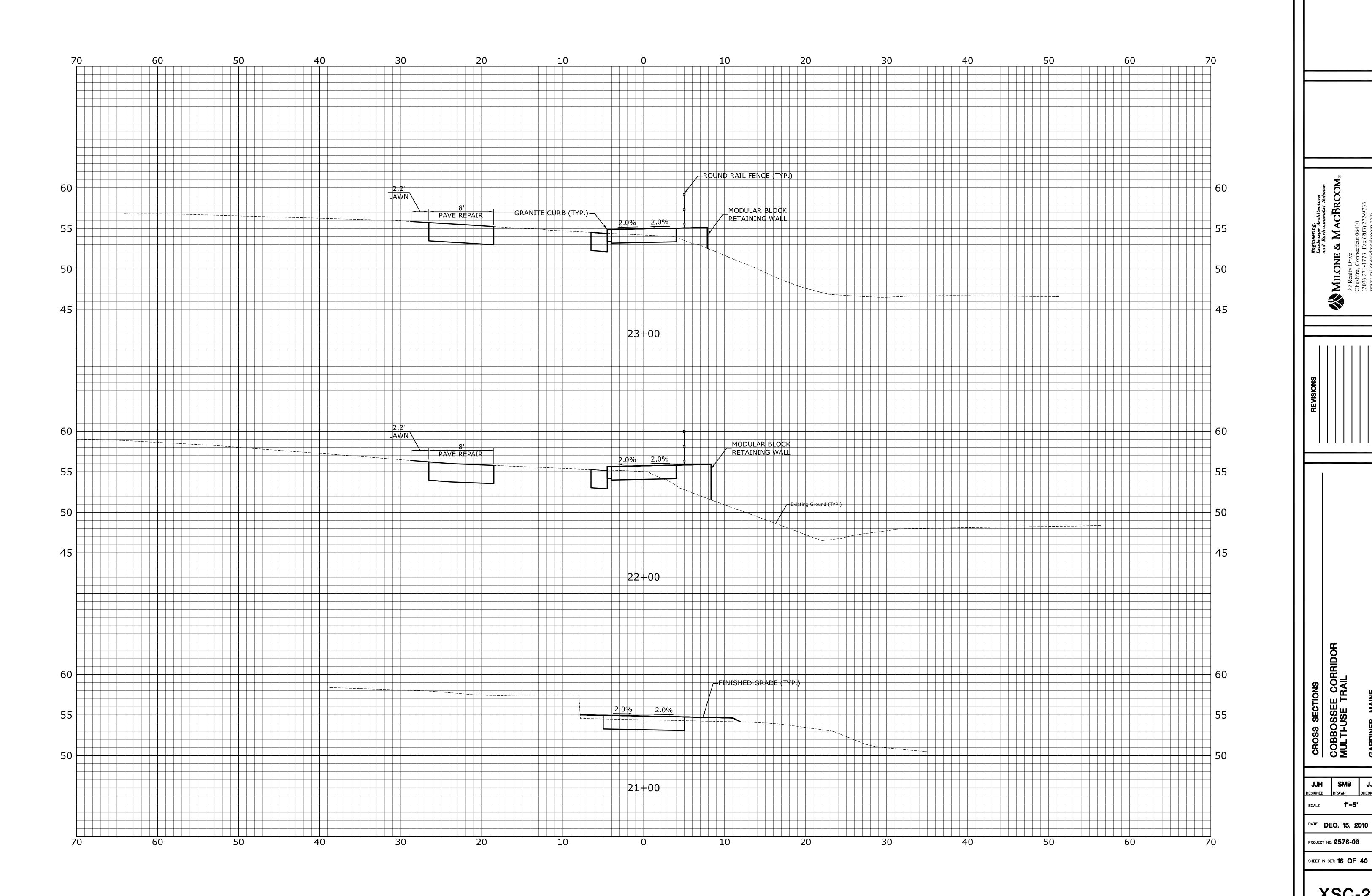
PROJECT NO. 2576-03

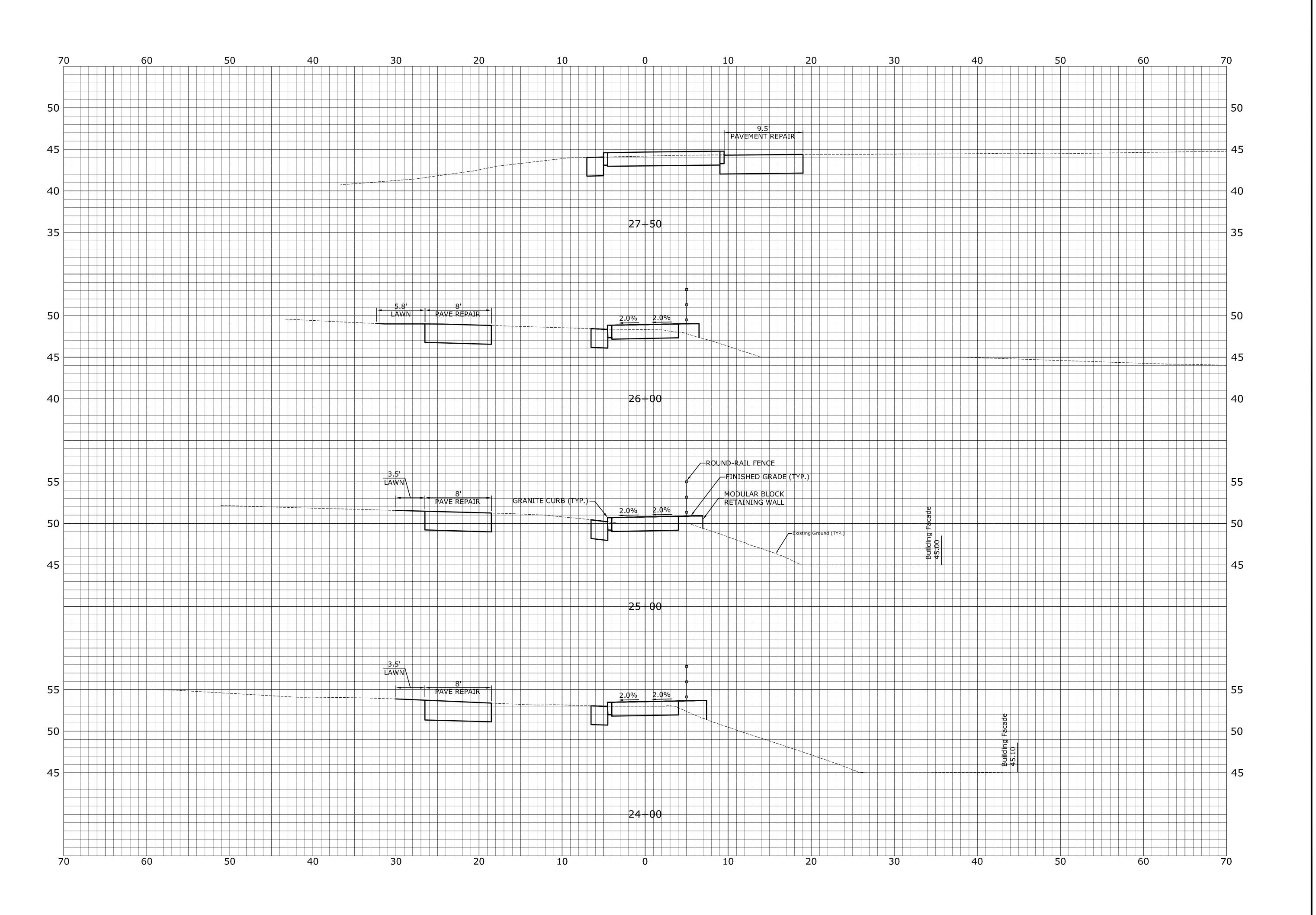
SHEET IN SET: 14 OF 40

SD-4

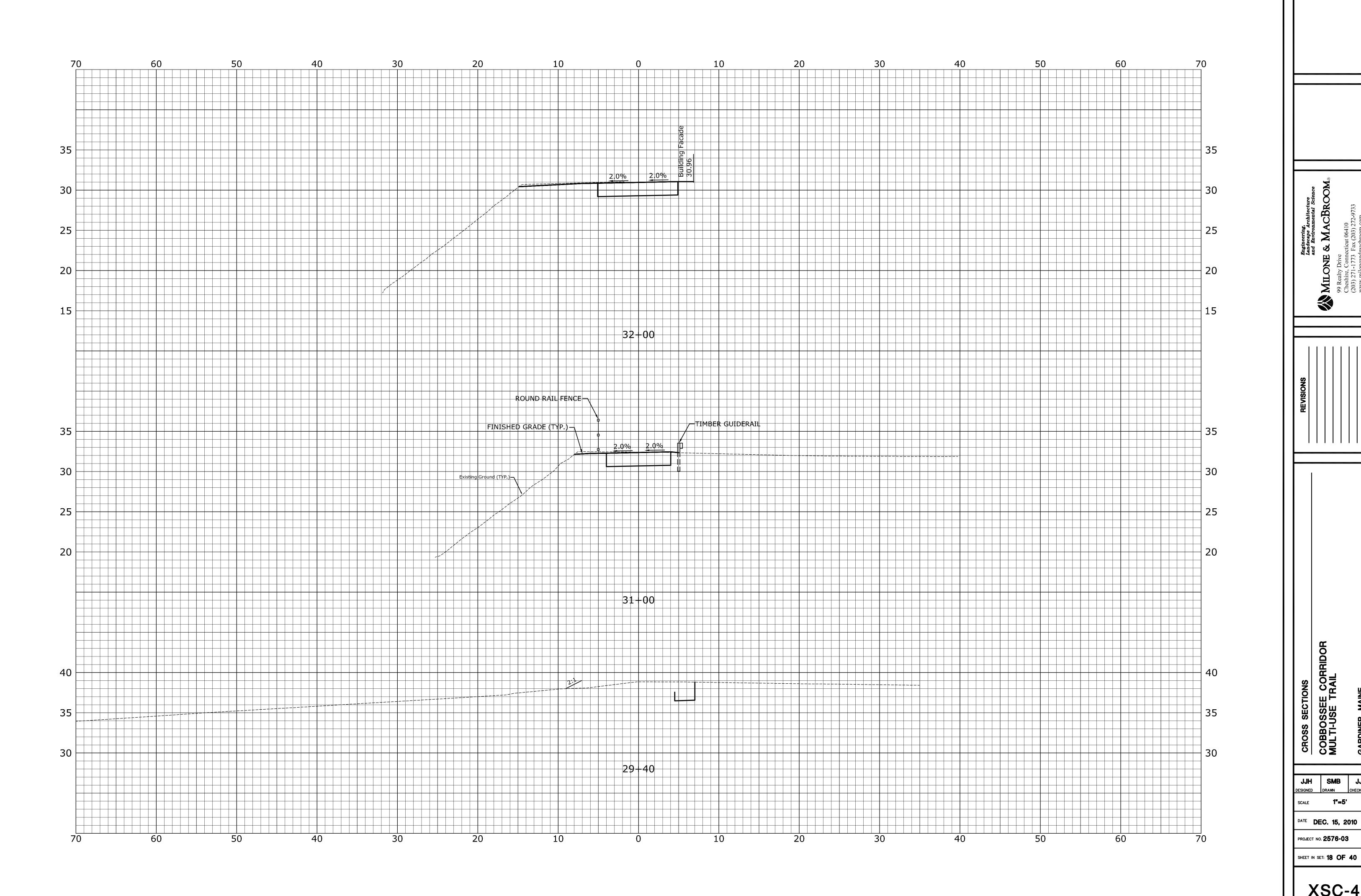


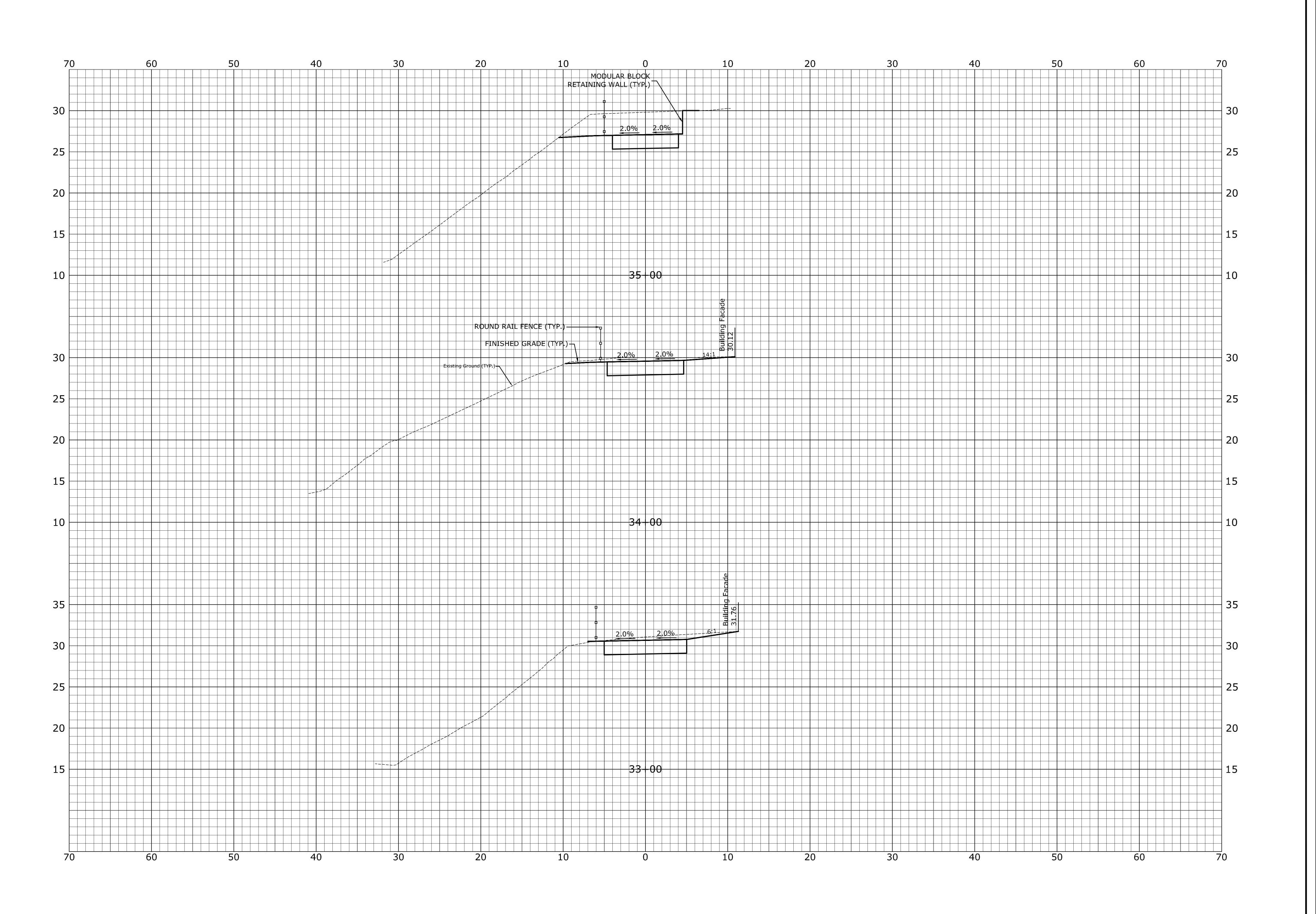
COBBOSSEE CORRIDOR MULTI-USE TRAIL JJH SMB JJH SCALE 1"=5' DEC. 15, 2010 PROJECT NO. **2576-03**





COBBOSSEE CORRIDOR MULTI-USE TRAIL JJH SMB JJH SCALE 1"=5' DEC. 15, 2010 PROJECT NO. **2576-03** SHEET IN SET: 17 OF 40



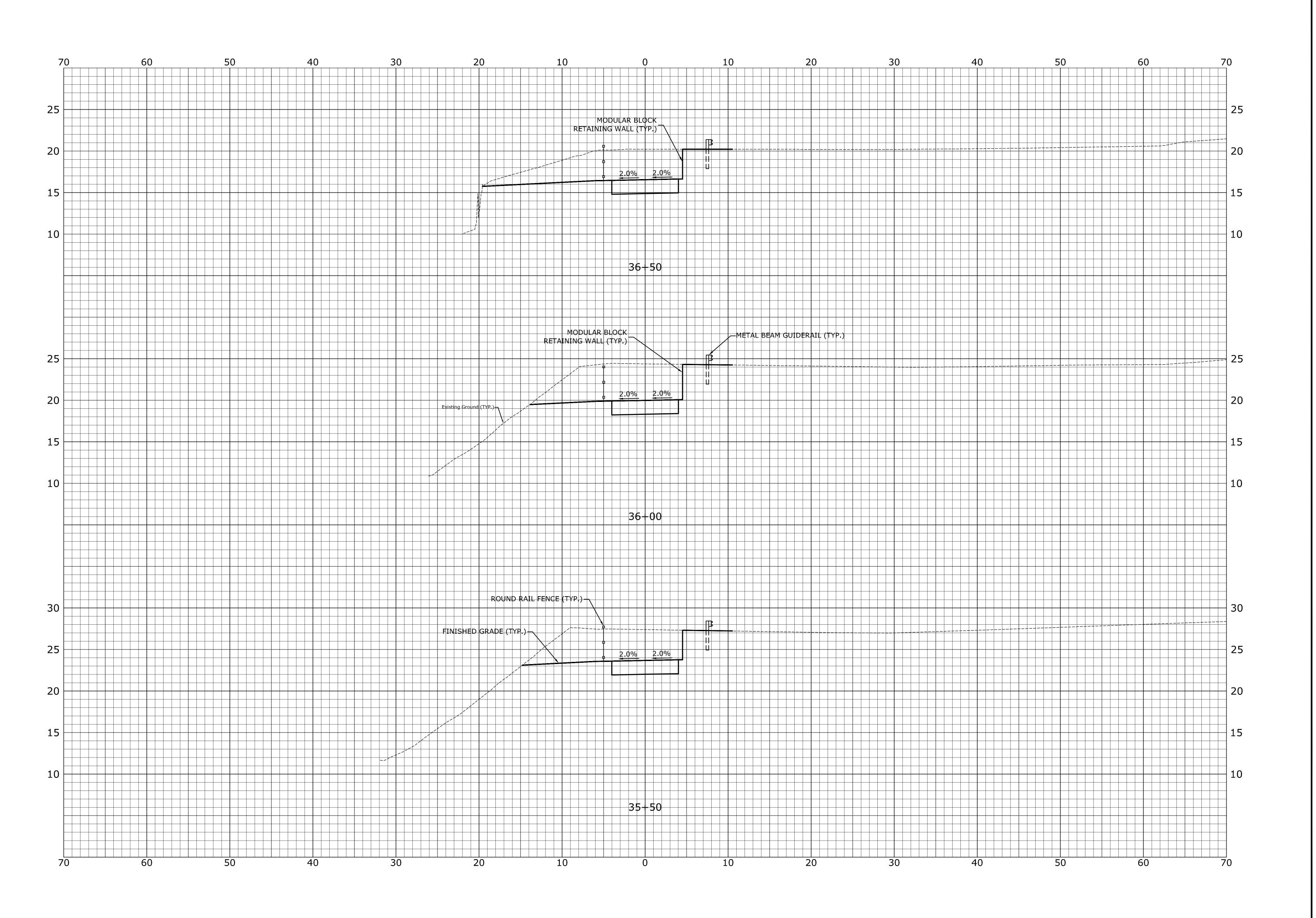


SCALE 1"=5'

DEC. 15, 2010

PROJECT NO. **2576-03**

SHEET IN SET: 19 OF 40



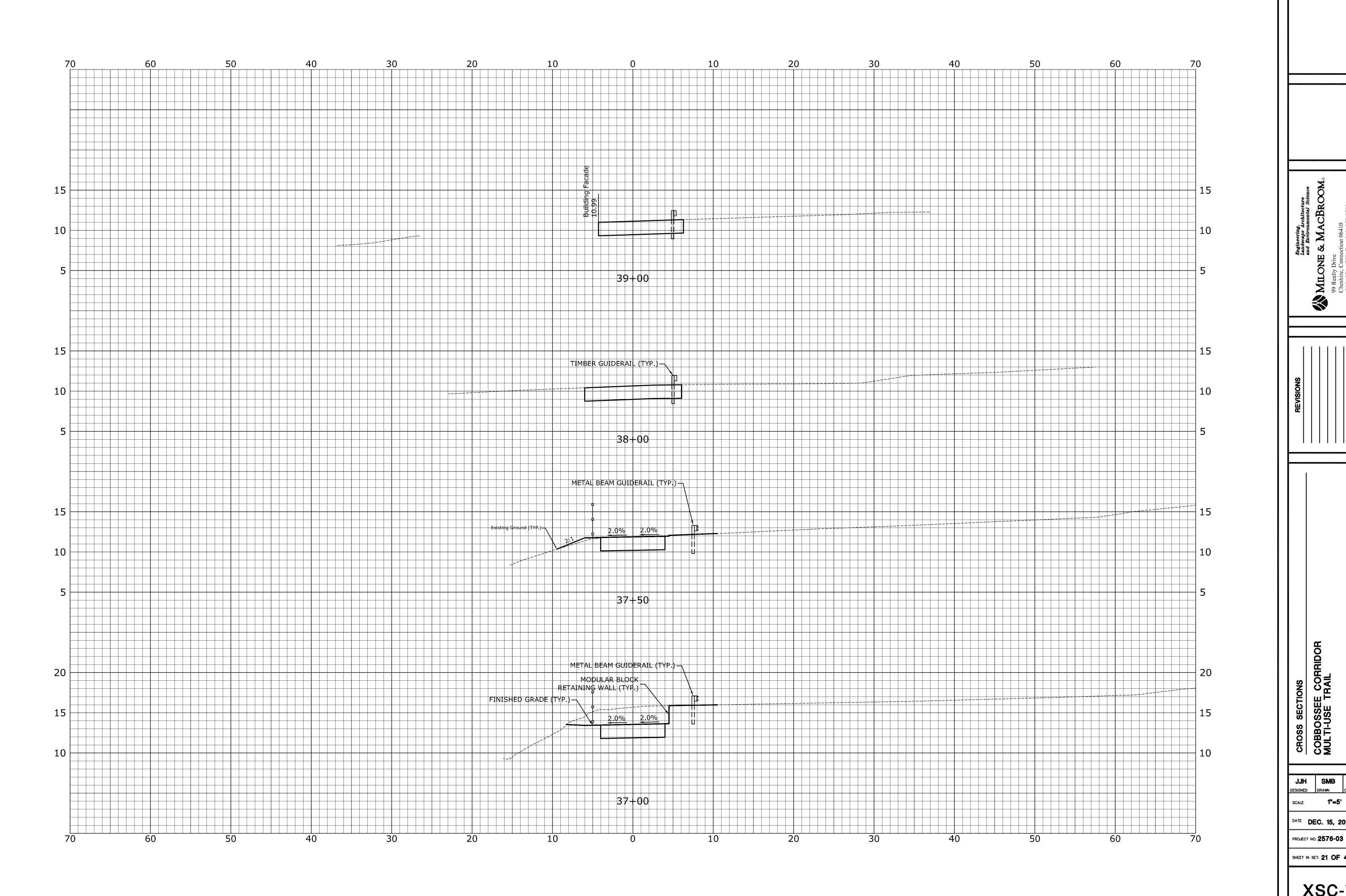
SCALE 1"=5'

DEC. 15, 2010

SHEET IN SET: 20 OF 40

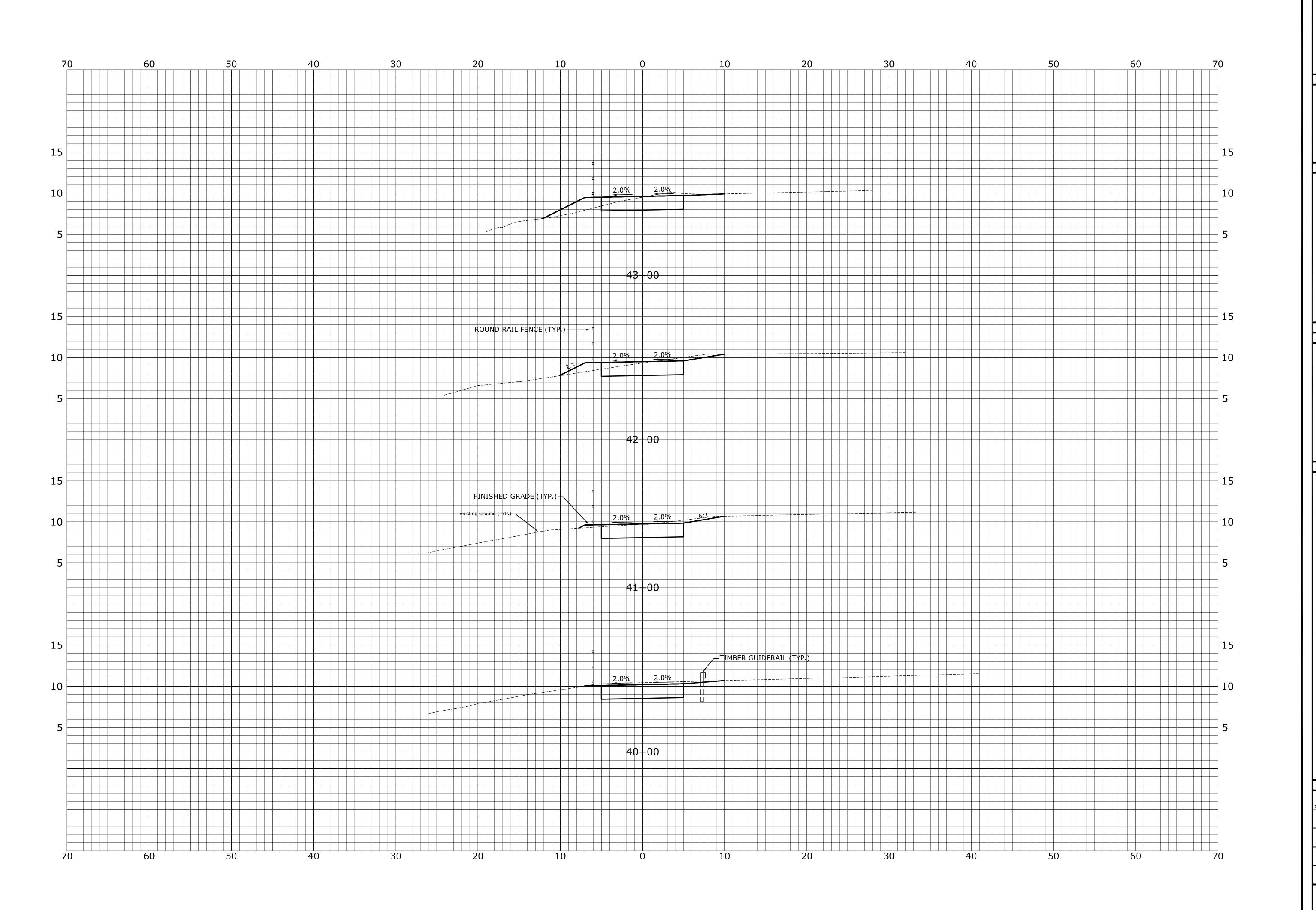
XSC-6

PROJECT NO. **2576-03**



COBBOSSEE CORRIDOR MULTI-USE TRAIL JJH SMB JJH 1"=5' DEC. 15, 2010

SHEET IN SET: 21 OF 40



COBBOSSEE CORRIDOR MULTI-USE TRAIL

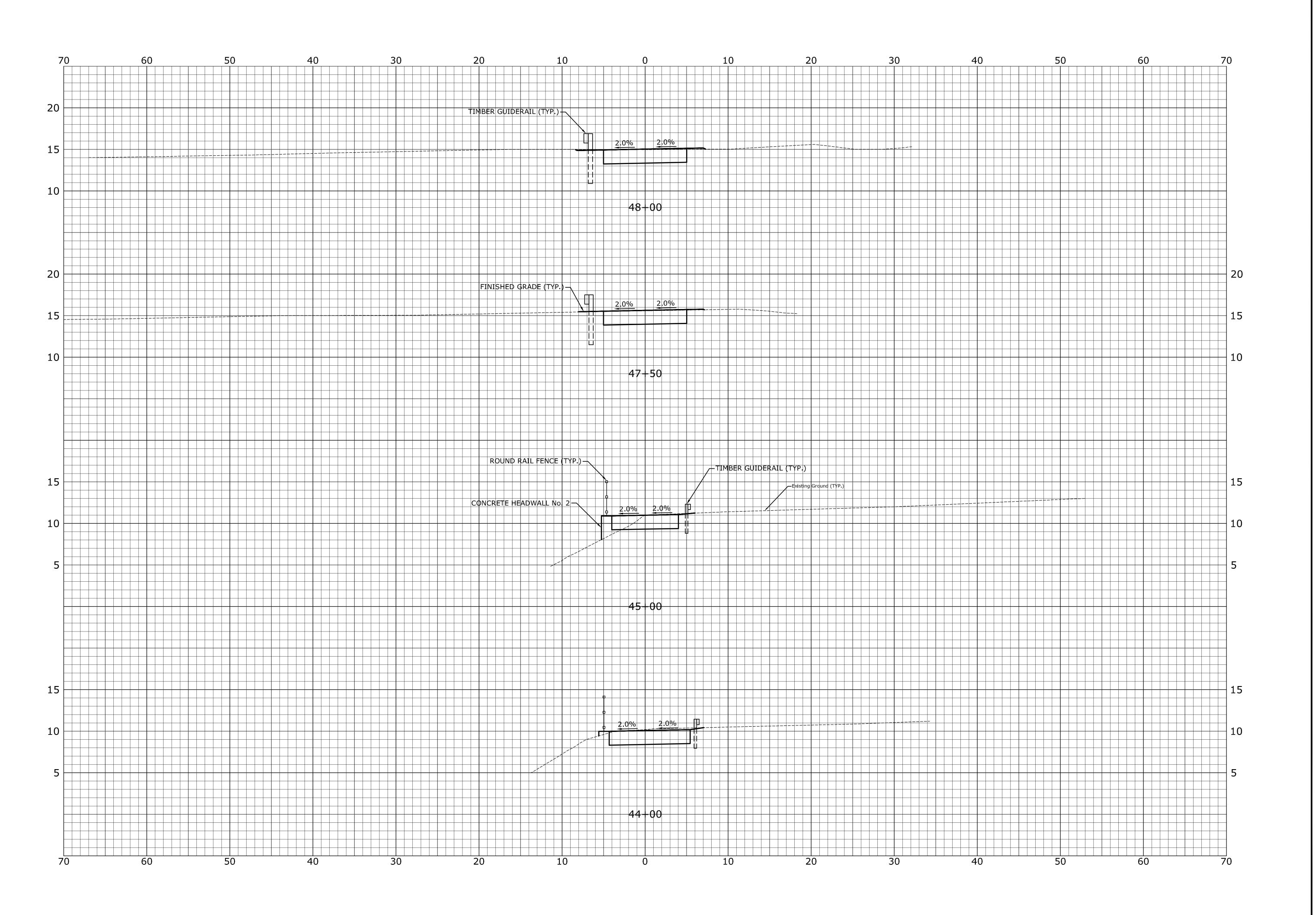
JJH SMB JJH CHECKED

SCALE 1"=5'

DATE DEC. 15, 2010

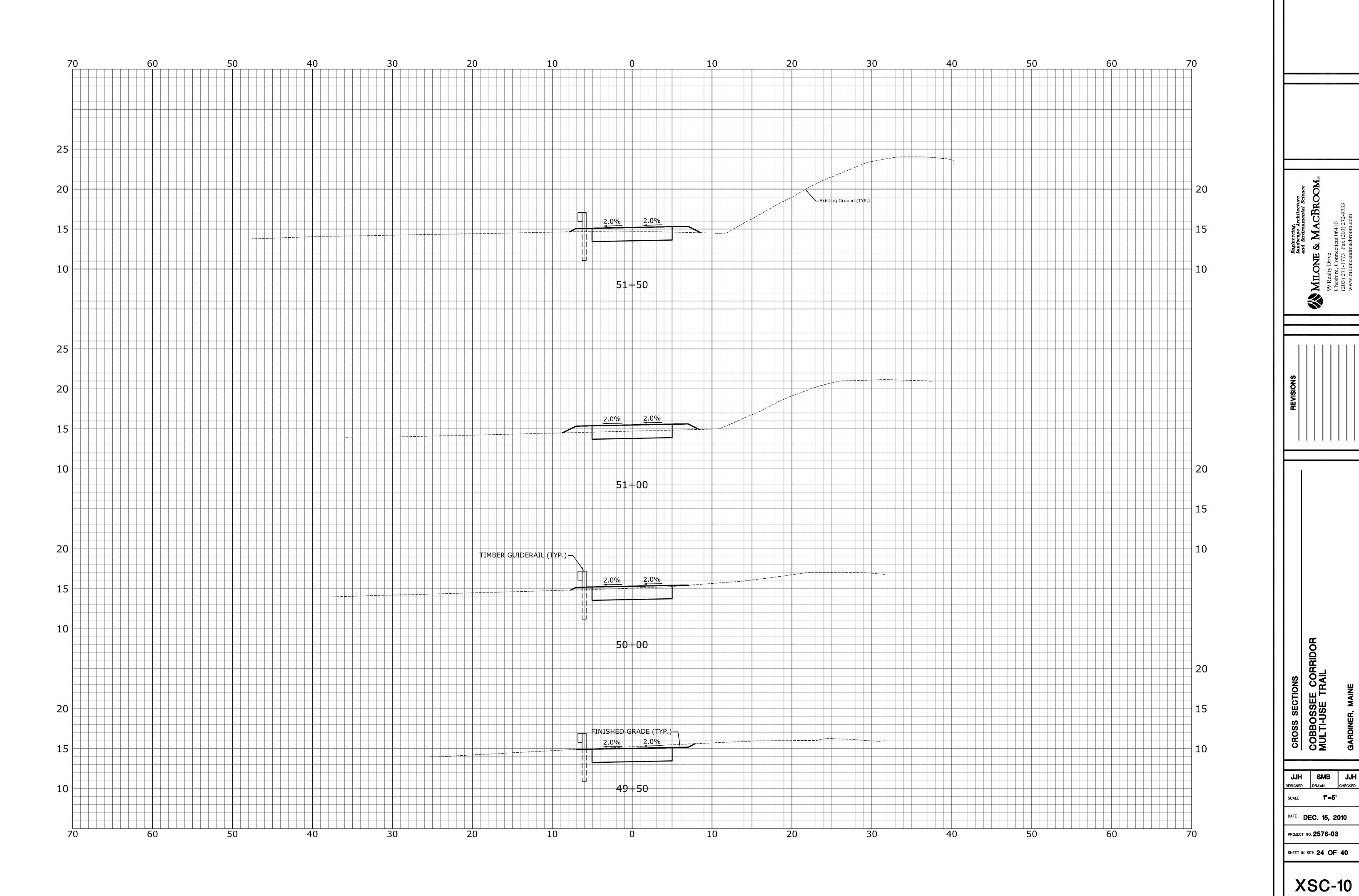
PROJECT NO. 2576-03

SHEET IN SET: 22 OF 40

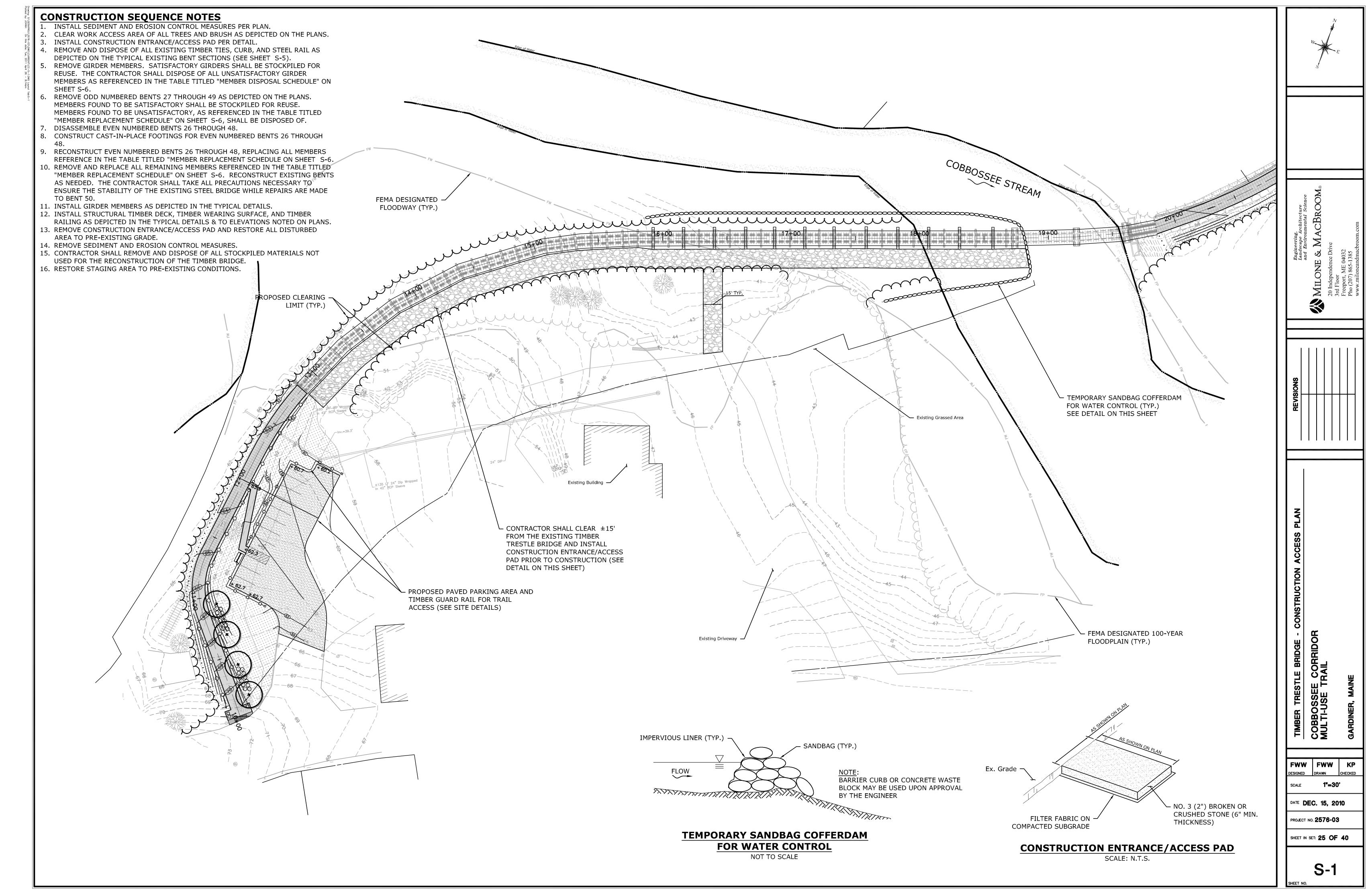


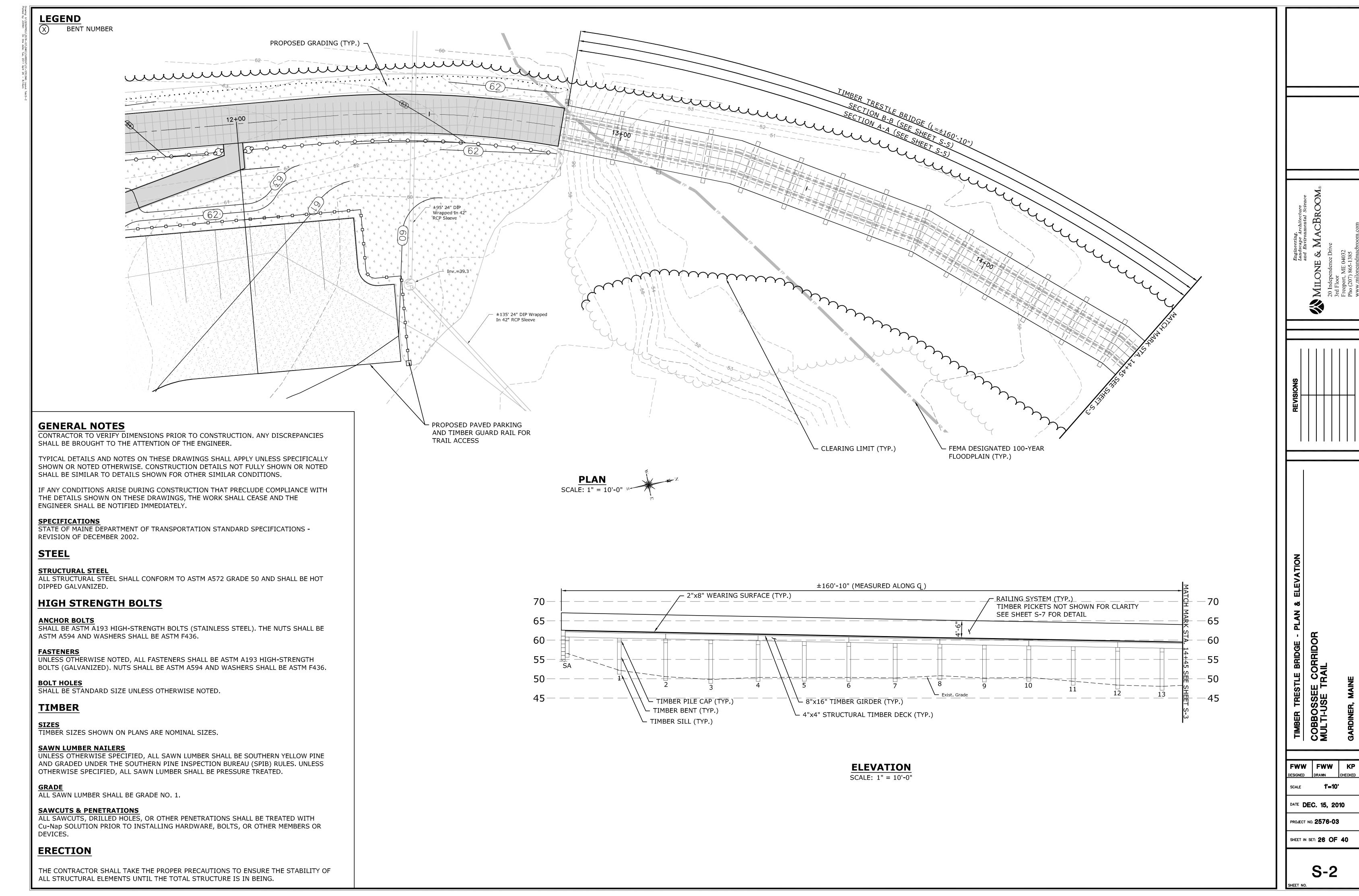
COBBOSSEE CORRIDOR MULTI-USE TRAIL JJH SMB JJH SCALE 1"=5' DEC. 15, 2010 PROJECT NO. **2576-03**

SHEET IN SET: 23 OF 40



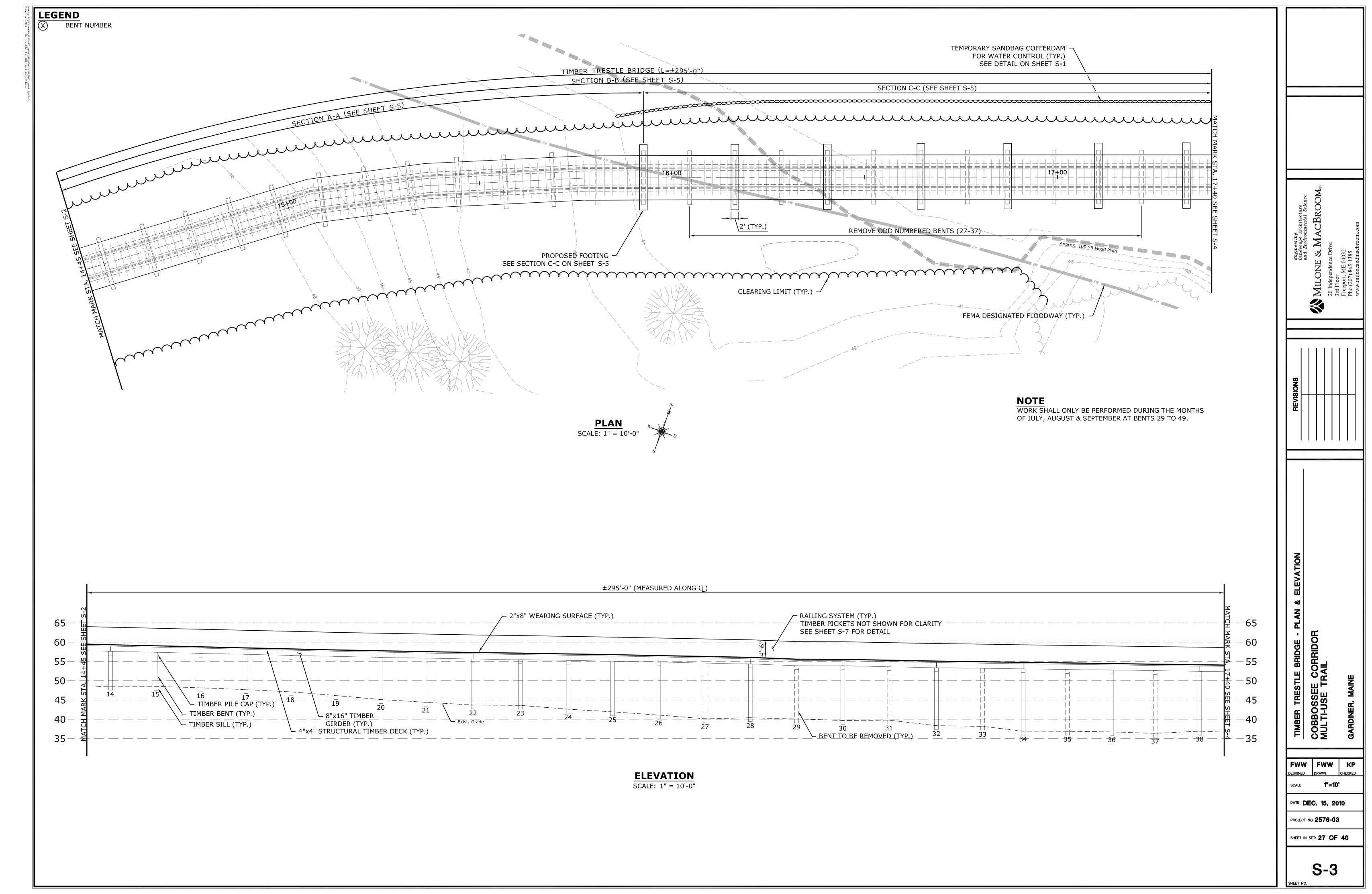
COBBOSSEE CORRIDOR MULTI-USE TRAIL JJH SMB JJH 1"=5' DEC. 15, 2010 PROJECT NO. **2576-03** SHEET IN SET: 24 OF 40

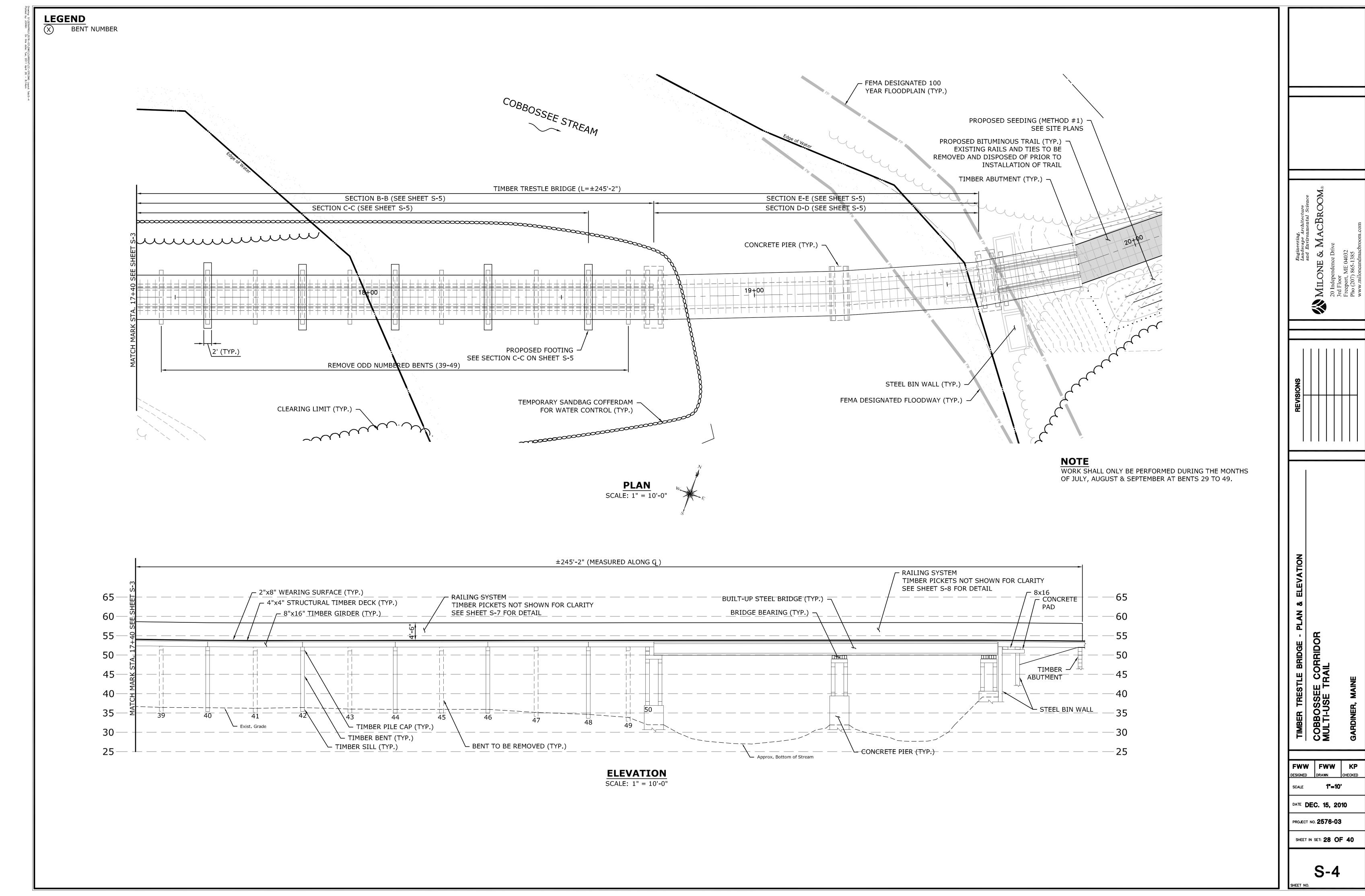


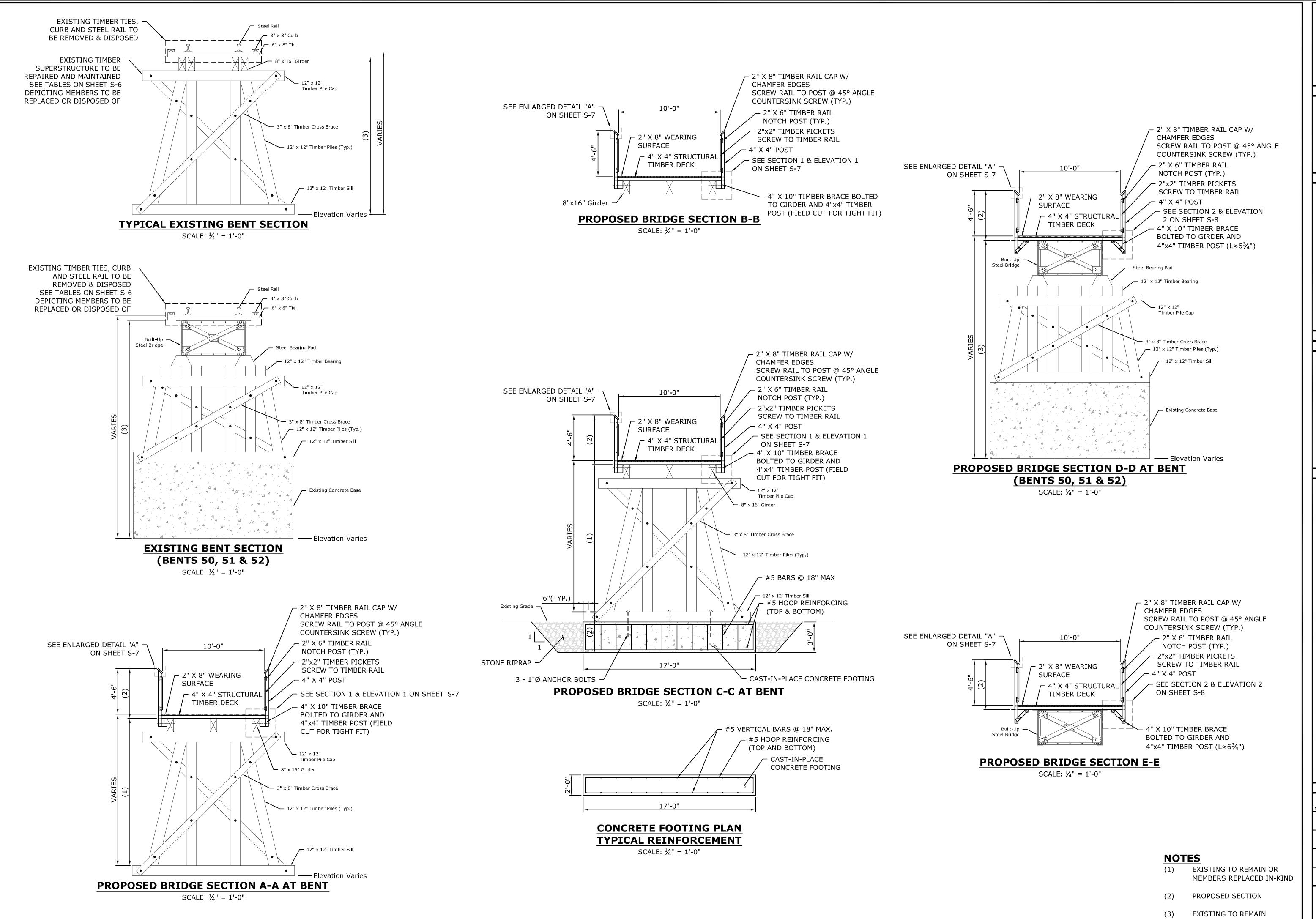


PROJECT NO. **2576-03** SHEET IN SET: 26 OF 40 **S-2**

1'=10'







Engineering,
Landscape Architecture
and Environmental Science
and Environmental Science
MILONE & MACBROOM
20 Independence Drive
3rd Floor
Freeport, ME 04032
Pho (207) 865-1385

REVISIONS

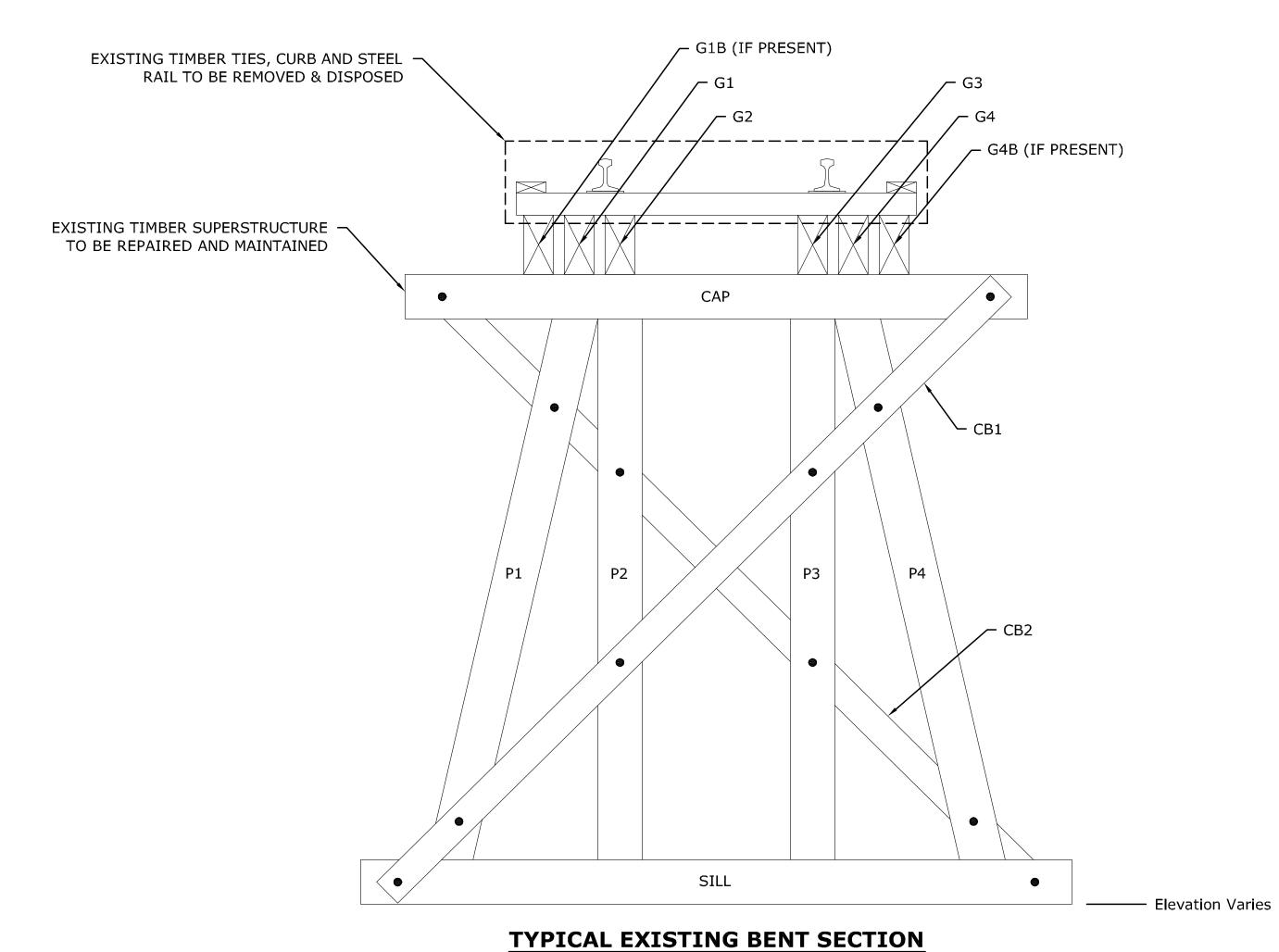
COBBOSSEE CORRIDOR
MULTI-USE TRAIL

FWW FWW KP
DESIGNED DRAWN CHECKED

DATE DEC. 15, 2010

PROJECT NO. **2576-03**

SHEET IN SET: 29 OF 40



(REPLACEMENT SCHEDULE) SCALE: ½" = 1'-0"

NOTES

- ODD NUMBERED BENTS 27-49 SHALL BE REMOVED.
 ANY MEMBER NOT CALLED OUT IN THE TABLES ON THIS SHEET MAY BE STOCKPILED AND REUSED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DISPOSE OF ALL UNSATISFACTORY MEMBERS.
- 2. REMOVAL OF SURPLUS MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PURCHASING ALL MATERIALS NOT SALVAGEABLE FROM THE EXISTING STRUCTURE.

ENT NUMBER	MEMBERS TO REPLACE
S. ABUTMENT	CB2
1	CB1
2	CAP / CB1
3	CAP / CB2
4	
5	
6	
7	
8	SILL / CB1 / CB2
9	P4 / CB1 /CB2
10	P4 / CB1 / CB2
11	P1 / P4
12	P4 / CB1 / CB2
13	P1 / P2 / CB1
14	CAP / SILL / P1 / P2
15	SILL / P4 / CB1 / CB2
16	CAP / SILL / P4
17	CAP / SILL / P1 / CB1
18	P1
19	CAD / STU / D1 / CB1 / CB2
20	CAP / SILL / P1 / CB1 / CB2 CAP / SILL / P1 / CB1 / CB2
22	CAF / SILL / FI / CBI / CB2
23	САР
24	SILL / P1 / P4
25	SILL
26	SILL / P1 / P4
27	SILL / P4
28	САР
29	CAP / P1
30	CAP
31	SILL
32	P1
33	SILL / P1 / P2 / P4 / CB2
34	SILL / CB2
35	CAP / P2 / CB1 - RESET P1
36	CAP / SILL / P1 / P4
37	CAP / SILL / P1
38	P1 / P4
39	SILL / D1 / D2 / D2 / D4
40	SILL / P1 / P2 / P3 / P4
41	CAP / SILL / P1 / P2 SILL / P1 / P2 / P4
42	CAP / SILL / P1
44	CAP / SILL / P1 / P4
45	SILL / P2
46	CAP / SILL / P1 / P4
47	SILL
48	SILL / P1 / P3 / P4
49	CAP / SILL / P1 / P3 / P4
50	CAP / SILL
51	•
52	

MEMBER DISPOSAL SCHEDULE			
SP	AN	GIRDER(S) TO DISPOSE	
FROM	то		
S. ABUTMENT	1	G1	
1	2		
2	3		
3	4		
4	5		
5	6		
6	7	G2	
7	8	G1	
8	9	G4	
9	10	G2	
10	11	G4	
11	12	G1 / G3	
12	13		
13	14	G3	
14	15	G4	
15	16	G4	
16	17	G3	
17	18	G2	
18	19	G4	
19	20	G4	
20	21		
21	22	G4	
22	23	G2	
23	24	G2 G1	
24	25	G1 / G4	
2 + 25	26	G1	
26	27	G4	
27	28	G1 / G4	
28	29	G1 / G4	
29	30	G2 / G3 / G4	
30	31	G3 / G4	
31	32	G4	
32	33	G1	
33	34		
34	35	G3	
35	36	G1	
36	37	G1 / G2	
37	38		
38	39		
39	40	G2 / G3	
40	41		
41	42	G1	
42	43		
43	44	G1 / G3 / G4	
44	45	G1 / G3 / G4	
45	46	G1 / G3 / G4	
46	47	G1 / G3	
47	48	G1B / G1 / G3 / G4	
48	49	G3	
49	50	G1 / G4	
50	51		
51	52		
52	BIN WALL		
BIN WALL	N. ABUTMENT		

TIMBER TRESTLE BRI COBBOSSEE CORF MULTI-USE TRAIL

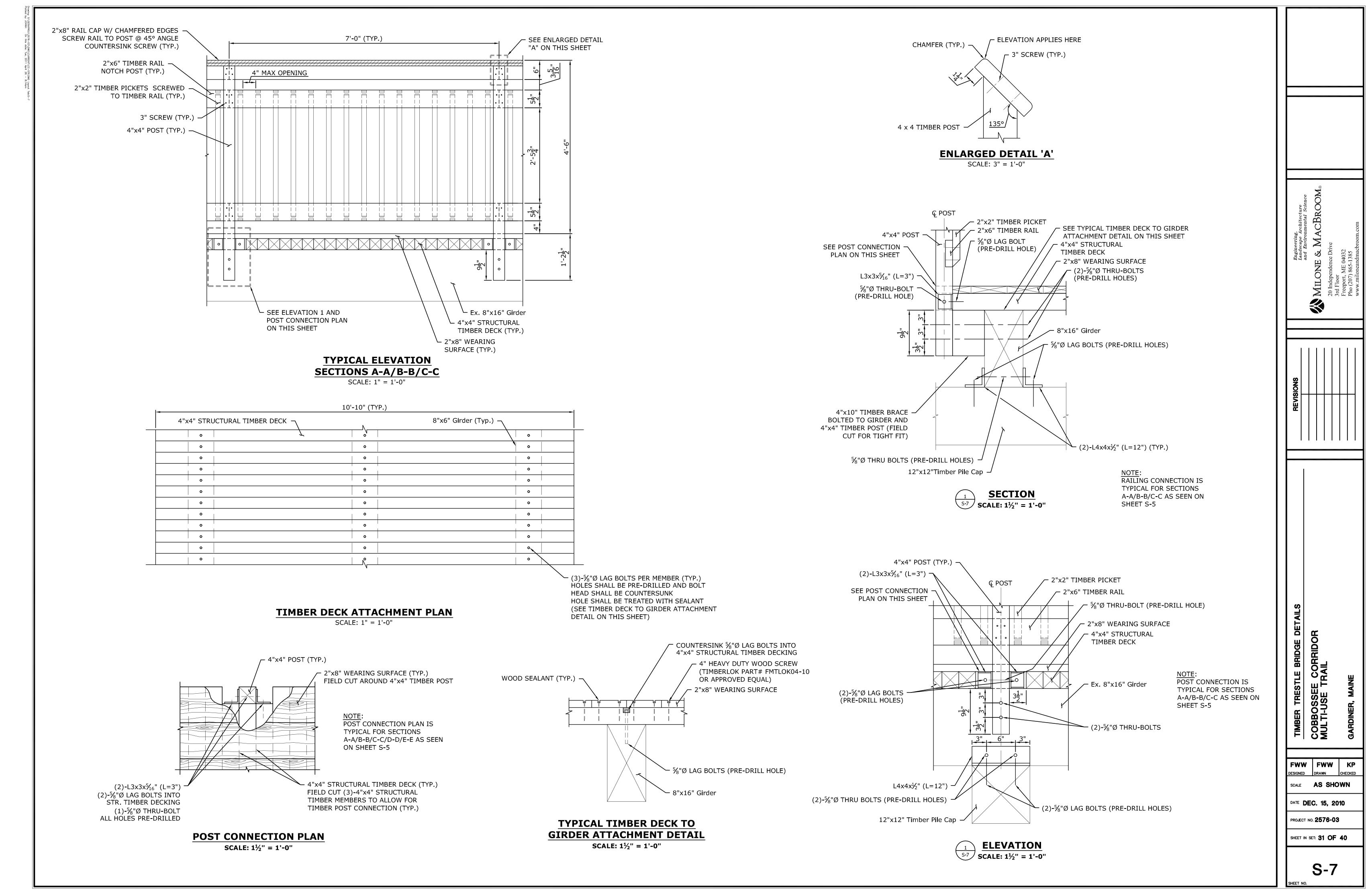
FWW FWW KP
DESIGNED DRAWN CHECKED

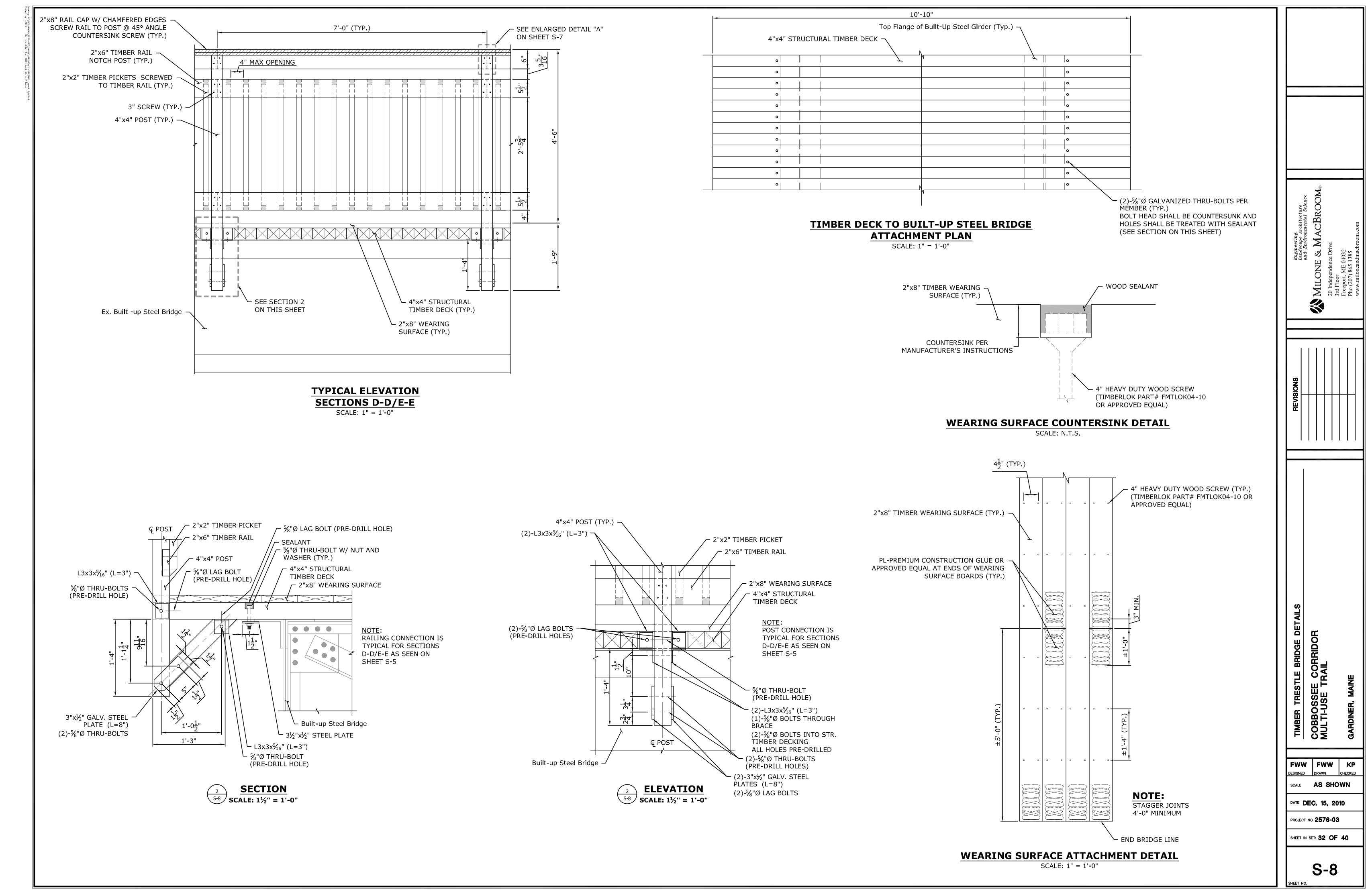
SCALE AS SHOWN

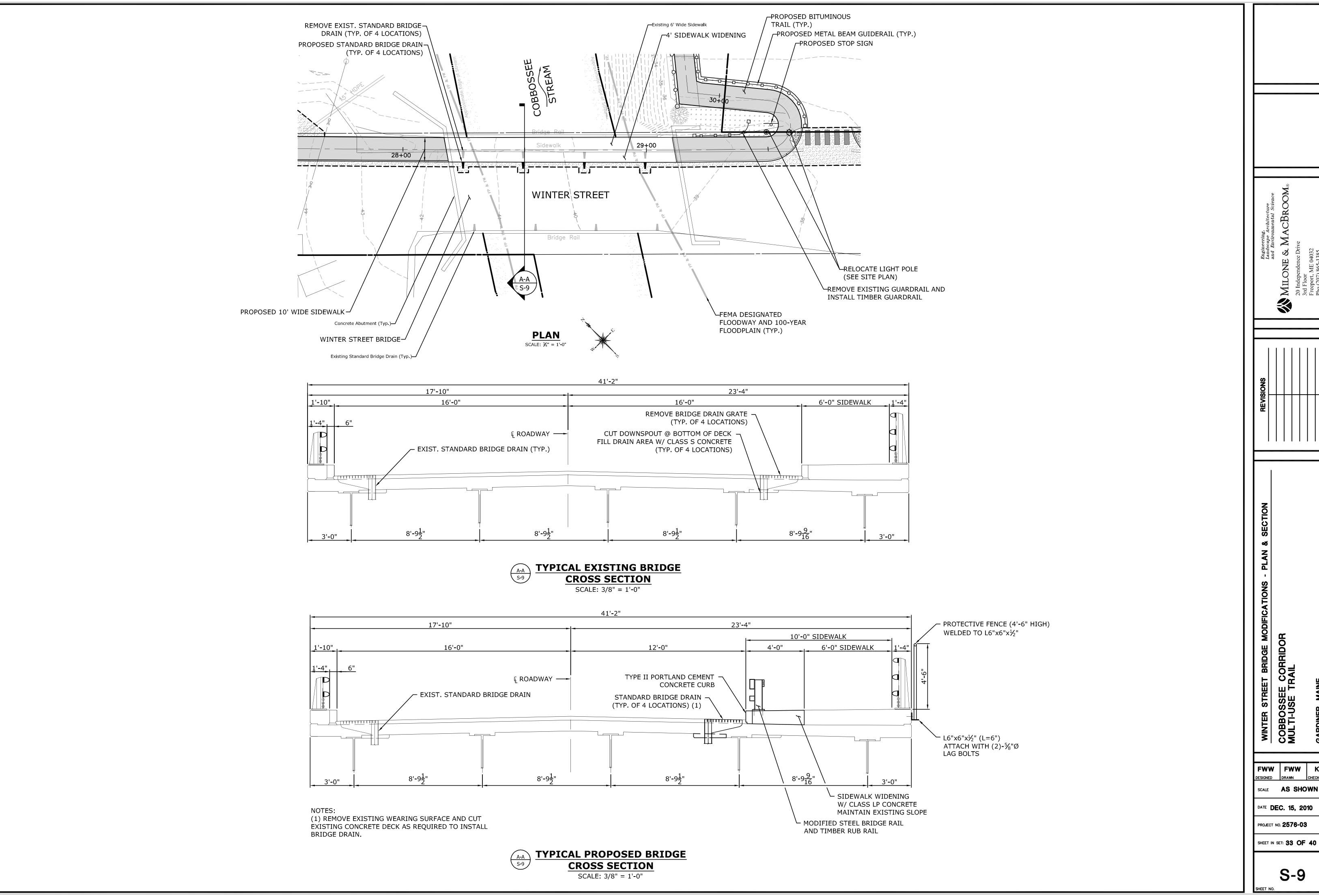
DATE DEC. 15, 2010

PROJECT NO. 2576-03

SHEET IN SET: 30 OF 40





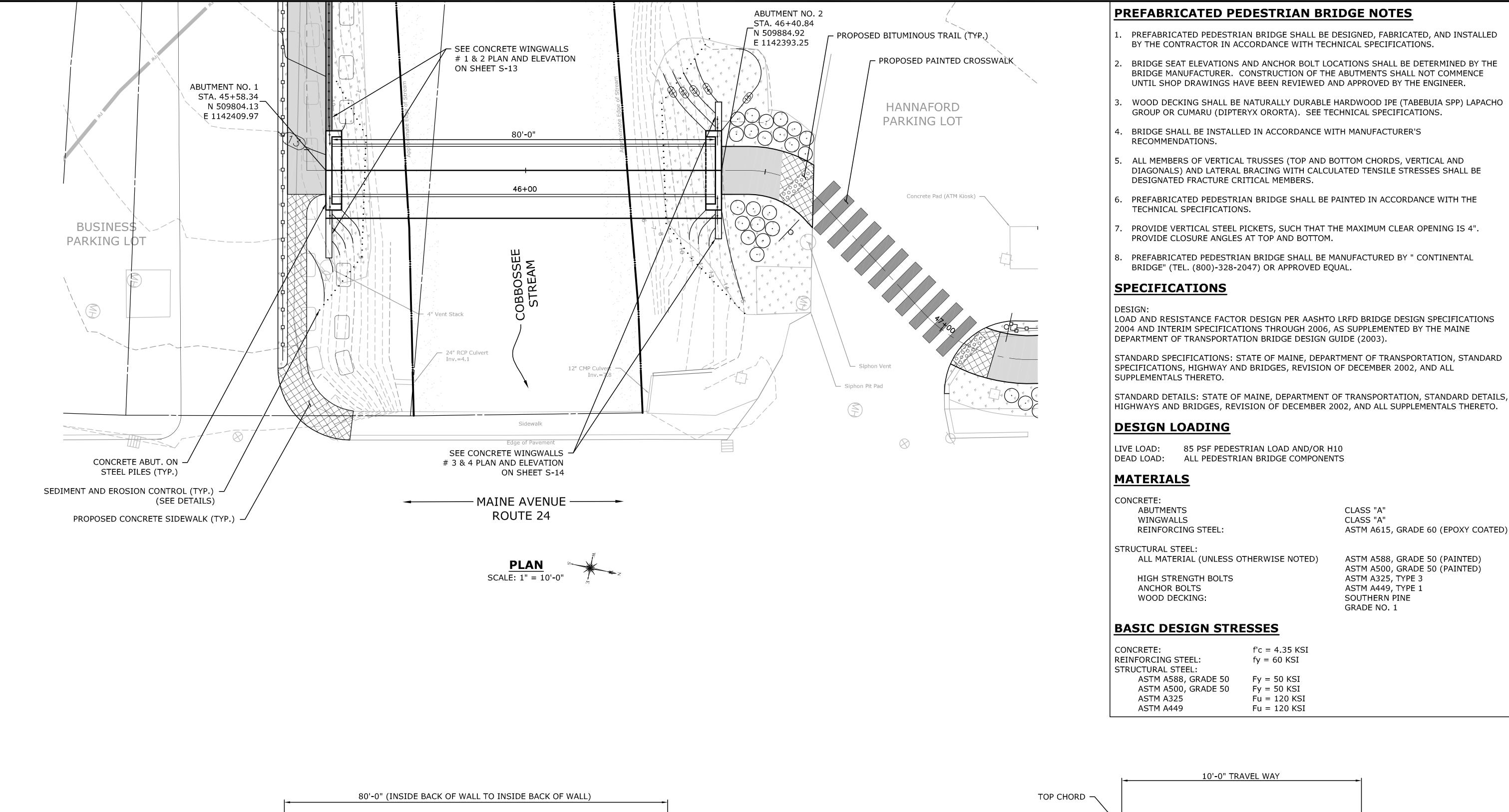


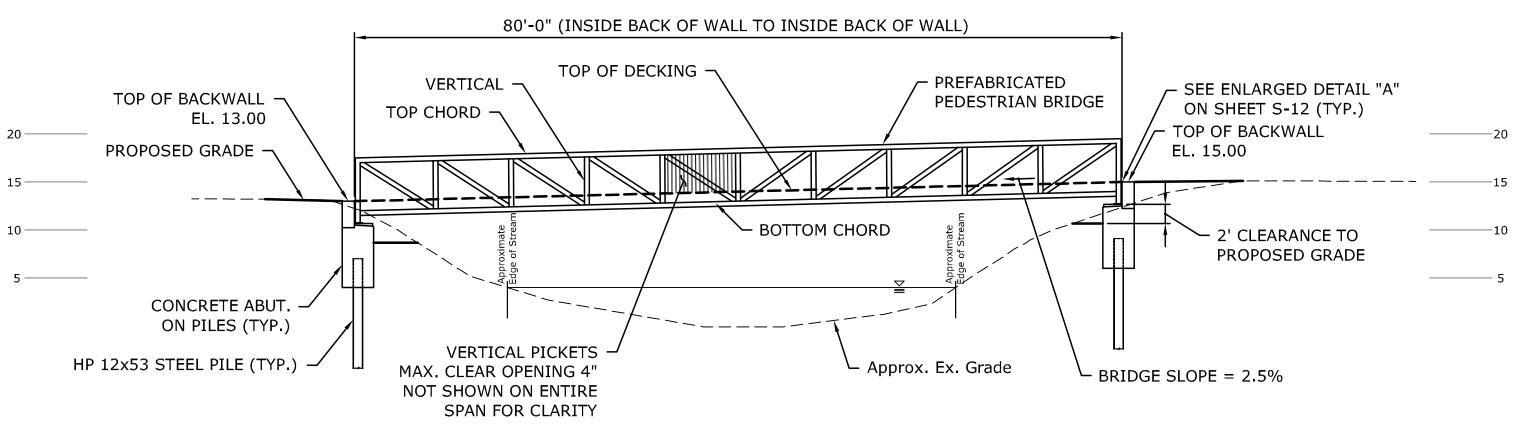
COBBOSSEE CORRIDOR MULTI-USE TRAIL

FWW FWW KP SCALE AS SHOWN

DATE DEC. 15, 2010

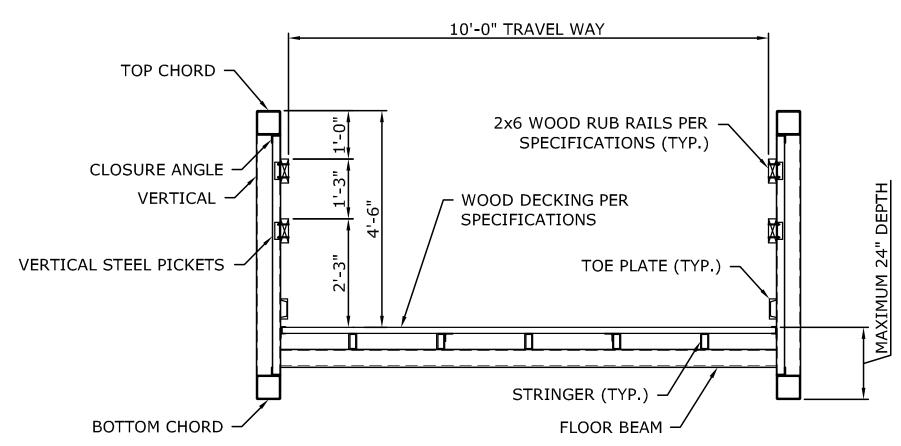
PROJECT NO. **2576-03**





ELEVATION @ Q BRIDGE

SCALE: 1" = 10'-0"



TYPICAL BRIDGE X-SECTION

SCALE: $\frac{1}{2}$ " = 1'-0"

PREFABRICATED PEDESTRIAN BI PLAN, ELEVATION, SECTION & N COBBOSSEE CORRIDOR MULTI-USE TRAIL

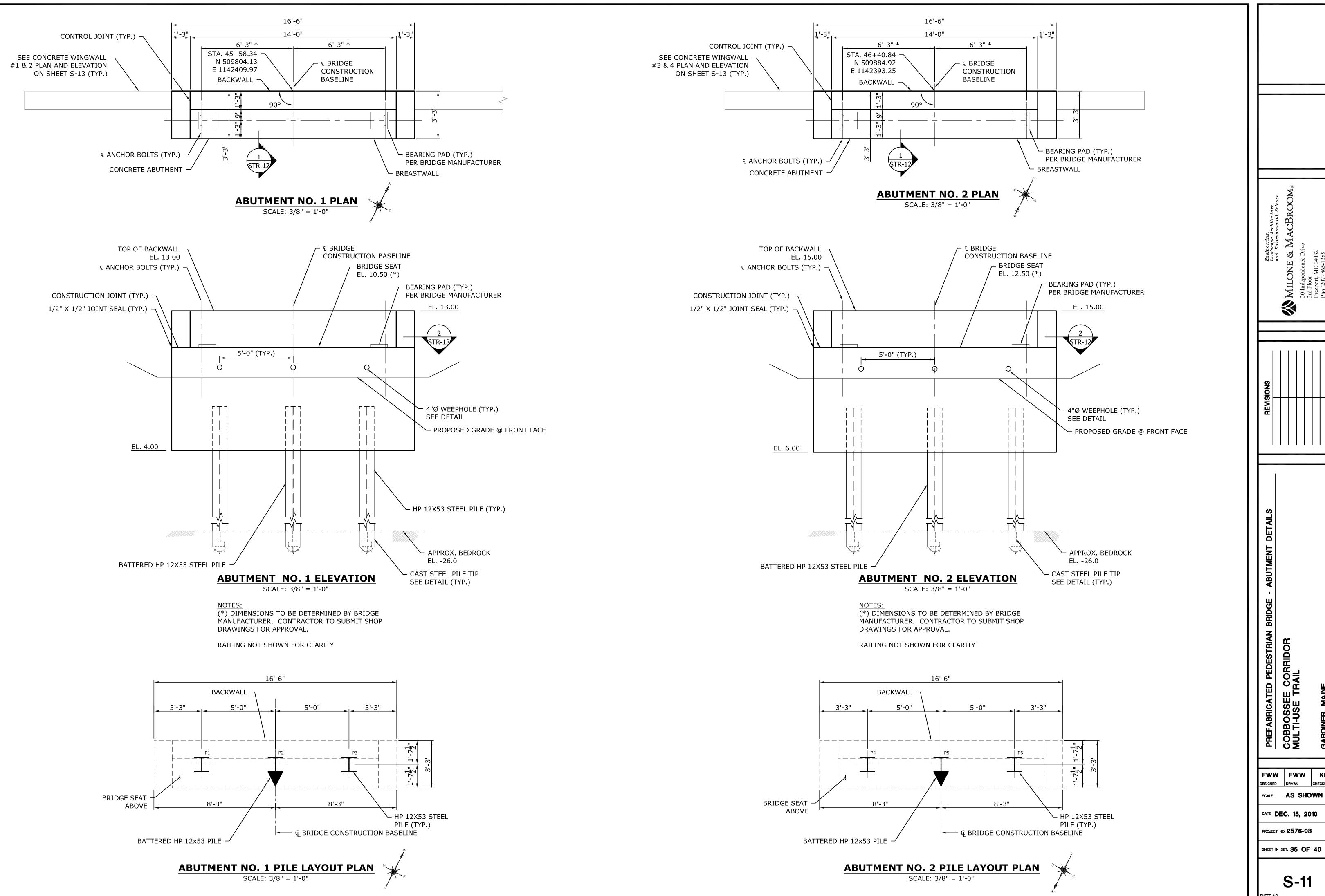
GARDINER, MAINE

ME 04032) 865-1385

DATE DEC. 15, 2010

PROJECT NO. **2576-03**

SHEET IN SET: 34 OF 40

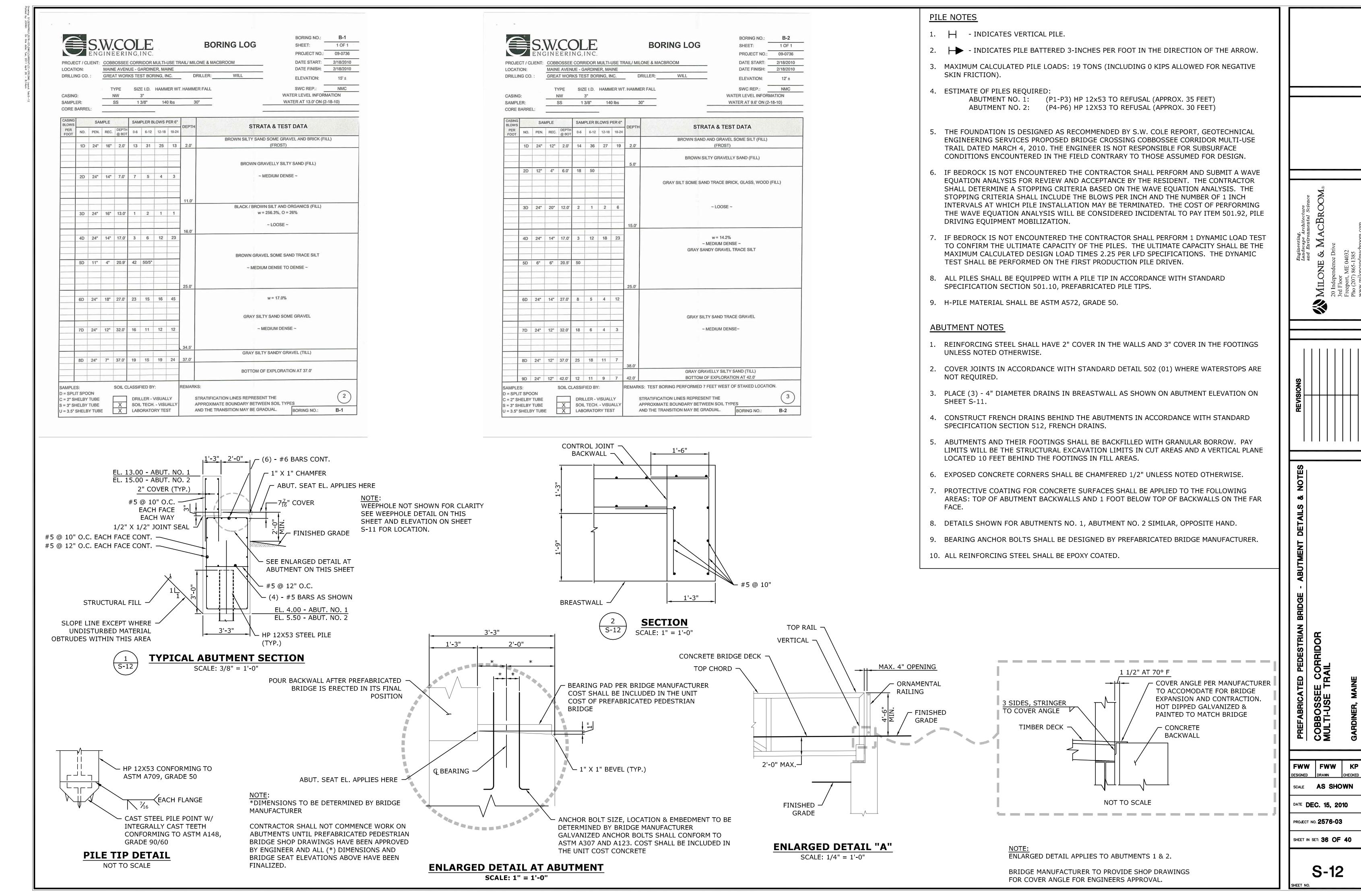


FWW FWW KP

DATE **DEC. 15, 2010**

PROJECT NO. **2576-03**

SHEET IN SET: 35 OF 40



ELEVATION SCALE: 1" = 10'-0"

STEEL PILES @ 6'-9" O.C **CONCRETE WINGWALLS NO. 1 & 2 ELEVATION**

SCALE: 1" = 20'-0"

POINT OF CURVATURE -

EL 10.40

E.J. →

PROPOSED GRADE TOP OF WALL

(FLUSH WITH WALK)

(2) BATTERED HP 12X53 -

EL 10.21

GENERAL NOTES:

E.J. - EXPANSION JOINT

C.J. - CONTRACTION JOINT

ALL CONCRETE SHALL BE NORMAL WEIGHT CLASS "A", WITH A MINIMUM 28 DAY COMPRESSIVE

(1'-0" TYP.)

BATTERED HP 12X53 STEEL -PILES @ 10'-0" O.C. (TYP.)

EL. 3.00 -

EL. 11.04

C.J.

STRENGTH OF: CONCRETE FOOTINGS:

4350 PSI

CONCRETE WALLS: 4350 PSI

FRONT OF WALL

PEDESTRIAN BRIDGE -

ABUTMENT

REINFORCING SHALL CONFORM TO ASTM A615 GRADE 60. REINFORCING STEEL SHALL BE CONTINUOUS AND SHALL BE FABRICATED AND PLACED IN ACCORDANCE WITH CRSI'S "MANUAL OF STANDARD PRACTICE".

PLAIN-STEEL WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A185.

ALL ITEMS TO BE CAST INTO THE CONCRETE SUCH AS REINFORCING, SLEEVES, DOWELS, ETC. SHALL BE SECURELY POSITIONED IN THE FORMS ACCORDING TO ACI 301, LATEST EDITION BEFORE PLACING CONCRETE.

REINFORCING COVER:

3" AT BOTTOMS OF FOOTINGS

2" ELSEWHERE UNLESS NOTED OTHERWISE

TABLE OF COORDINATES WINGWALL NO. 1		TA	BLE OF COO WINGWALL	-	
WP#	N-COORDINATE	E-COORDINATE	WP#	N-COORDINATE	E-COORDINAT
1	509809.06	1142427.59	3	509803.68	1142401.64
2	509807.03	1142417.80	4	509783.15	1142302.46
			5	509775.64	1142254.35

TABLE OF COORDINATES WINGWALL NO. 3			
WP#	N-COORDINATE	E-COORDINATE	
6	509880.81	1142379.55	
7	509882.02	1142385.42	

TABLE OF COORDINATES WINGWALL NO. 4				
NP#	N-COORDINATE	E-COORDINATE		
8	509885.37	1142401.58		
9	509886.58	1142407.45		

E-COORDINATE

PILE NOTES

- 1. - INDICATES PILE BATTERED 3-INCHES PER FOOT IN THE DIRECTION OF THE ARROW.
- 2. MAXIMUM CALCULATED PILE LOADS: 19 TONS (INCLUDING 0 KIPS ALLOWED FOR NEGATIVE SKIN FRICTION).
- 3. ESTIMATE OF PILES REQUIRED:

CONCRETE WINGWALL #1: (P7-P8) HP 12x53 TO REFUSAL (APPROX. 35 FEET) CONCRETE WINGWALL #2: (P9-P24) HP 12x53 TO REFUSAL (APPROX. 35 FEET) CONCRETE WINGWALL #3: (P25) HP 12x53 TO REFUSAL (APPROX. 30 FEET) CONCRETE WINGWALL #4: (P26) HP 12x53 TO REFUSAL (APPROX. 30 FEET)

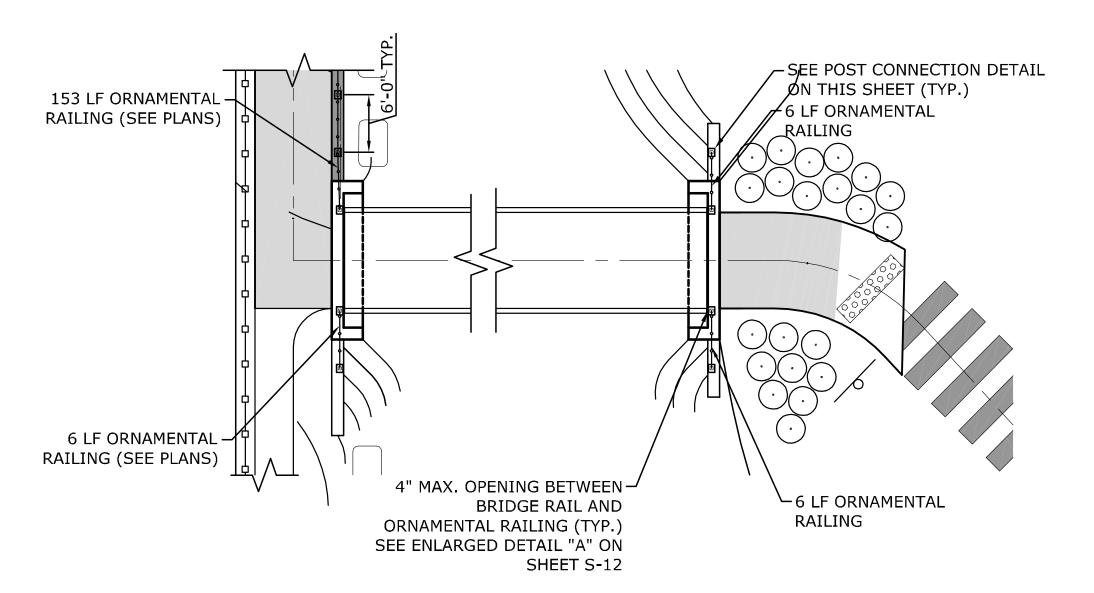
4. REFER TO SHEET S-12 FOR ADDITIONAL PILE NOTES.

FWW FWW KP SCALE AS SHOWN

DATE DEC. 15, 2010

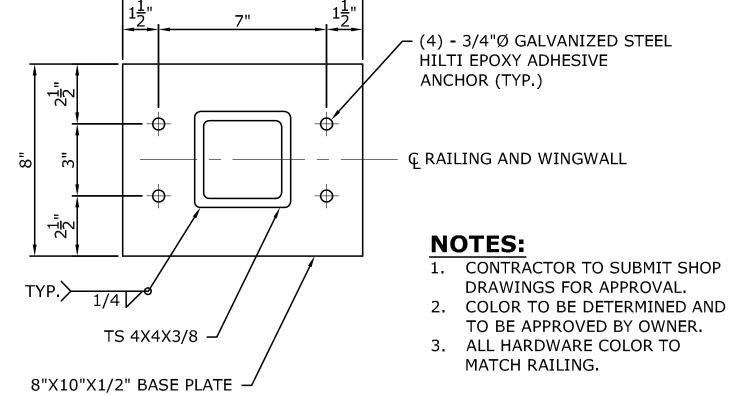
PROJECT NO. **2576-03**

SHEET IN SET: 37 OF 40

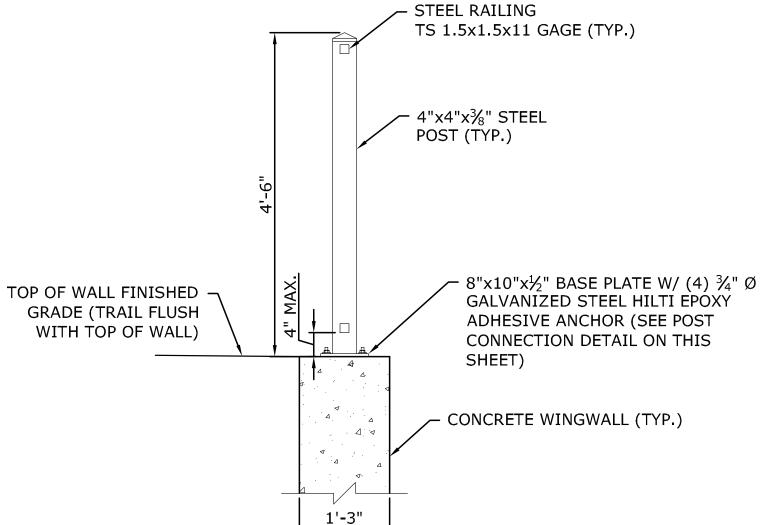


RAILING PLAN

SCALE: 1" = 10'-0"



TYPICAL ORNAMENTAL RAILING POST CONNECTION DETAIL SCALE: 3" = 1'-0"

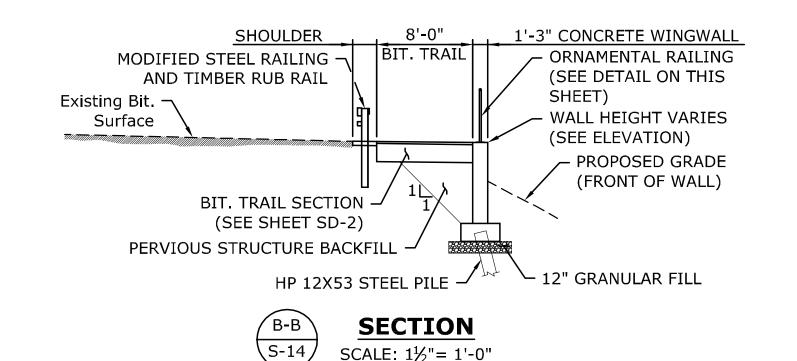


ORNAMENTAL FENCE ON CONCRETE **WINGWALL SECTION** SCALE: $\frac{3}{4}$ " = 1'-0"

STEEL POST CAP WELDED ALL AROUND TO POST (TYP.) MAXIMUM 6'-0" O.C. (TYP.) STEEL PICKETS STEEL POST TS 1X1X11 GA. (TYP.) TS 4"X4"X3/8" (TYP.) MAX. 4" GAP (TYP.)

- STEEL RAILING

TS 1.5X1.5X11 GA. (TYP.)



SCALE: 1½"= 1'-0"

ORNAMENTAL RAILING (SEE -CONNECTION DETAILS ON

#5 BARS @ 12"

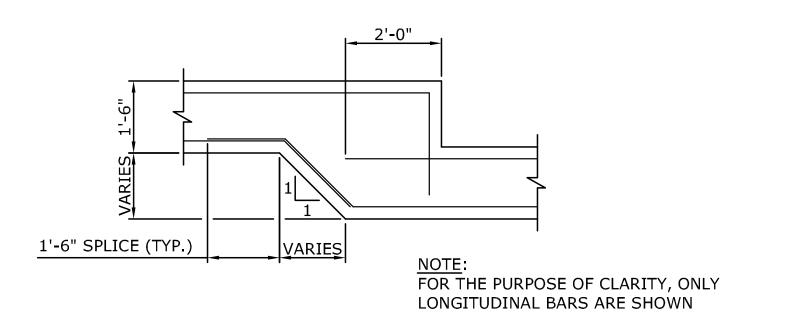
(2) #5 BARS IN HOOK —

BATTERED HP 12x53 -

STEEL PILE @ 10'-0" O.C.

TOP AND BOTTOM

THIS SHEET)



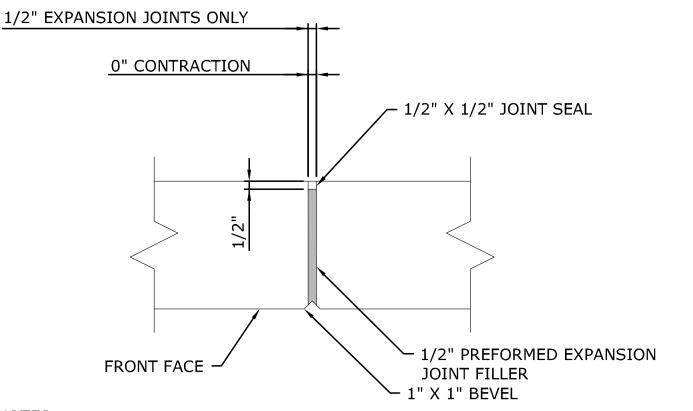
STEPPED FOOTING DETAIL SCALE: ½"=1'-0"

WALL SHALL BE FLUSH ¬ WITH ADJACENT WALK ←1"x1" BEVEL FINISHED GRADE -2" COVER REMOVE AND REPLACE EXISTING #5 BARS @ 12" 🦴 RIPRAP BANK ARMORING FINISHED GRADE SLOPE LINE EXCEPT WHERE UNDISTURBED MATERIAL OBTRUDES INTO AREA 3'-3" PERVIOUS STRUCTURE -**BACKFILL** — EL. VARIES 12" GRANULAR — (4) #5 BARS

TYPICAL CONCRETE WINGWALL SECTION

SCALE: ½"=1'-0"

TOP AND BOTTOM



JOINT SEAL TO EXTEND FROM TOP OF FOOTING TO TOP OF WALL.

2. NO REINFORCEMENT SHALL PASS THROUGH EXPANSION OR CONTRACTION JOINT.

3. REINFORCEMENT SHALL PASS THROUGH CONSTRUCTION JOINTS.

CONTRACTION & EXPANSION JOINT DETAIL NOT TO SCALE

 $8"x10"x\frac{1}{2}"$ BASE PLATE W/ (4) $\frac{3}{4}$ "Ø - GALVANIZED STEEL HILTI EPOXY - TOP OF CONCRETE WINGWALL (TYP.)

> TYPICAL ORNAMENTAL RAILING SCALE: 1/2" = 1'-0"

ADHESIVE ANCHORS (SEE POST

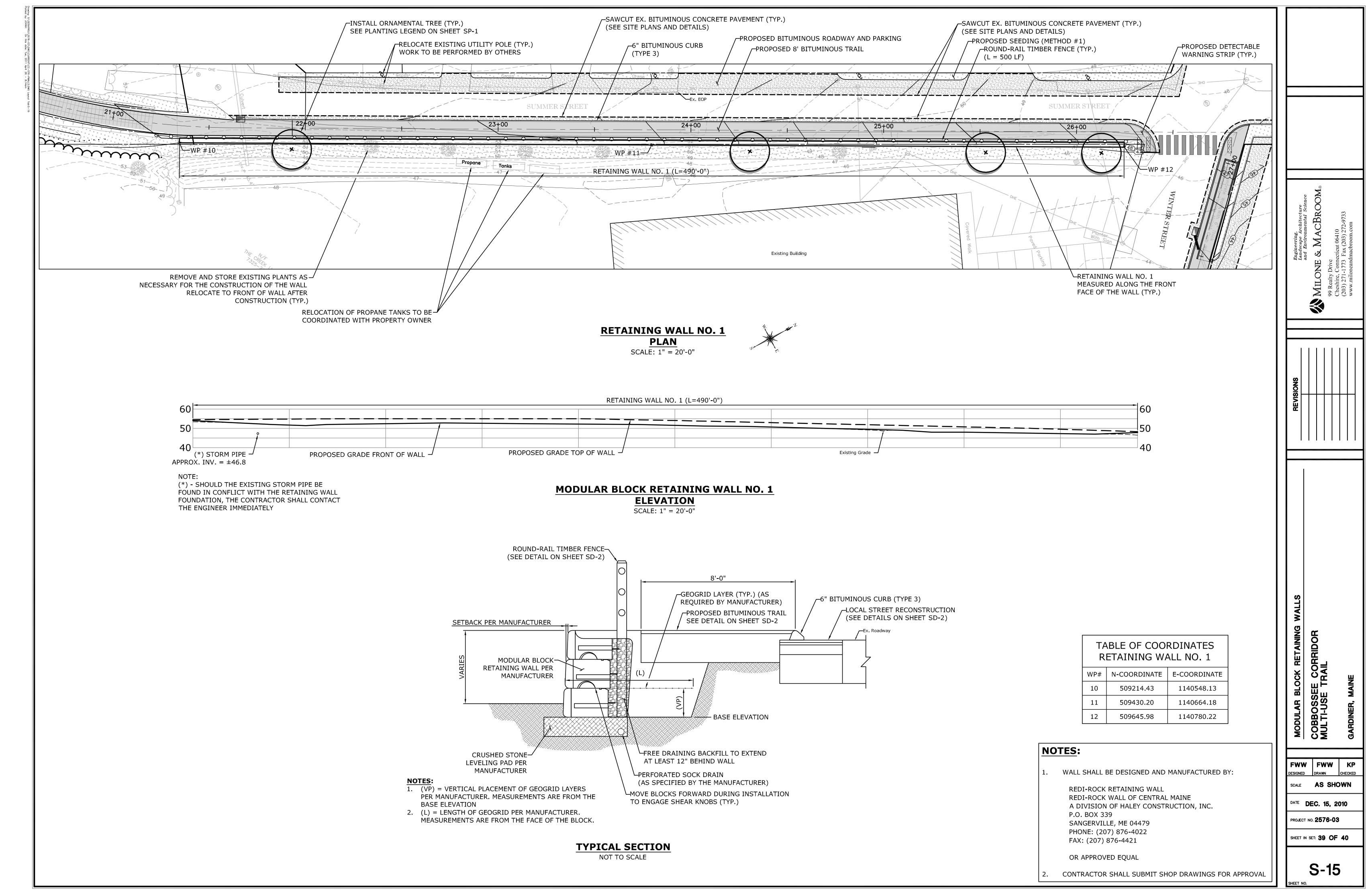
CONNECTION DETAIL ON THIS SHEET)

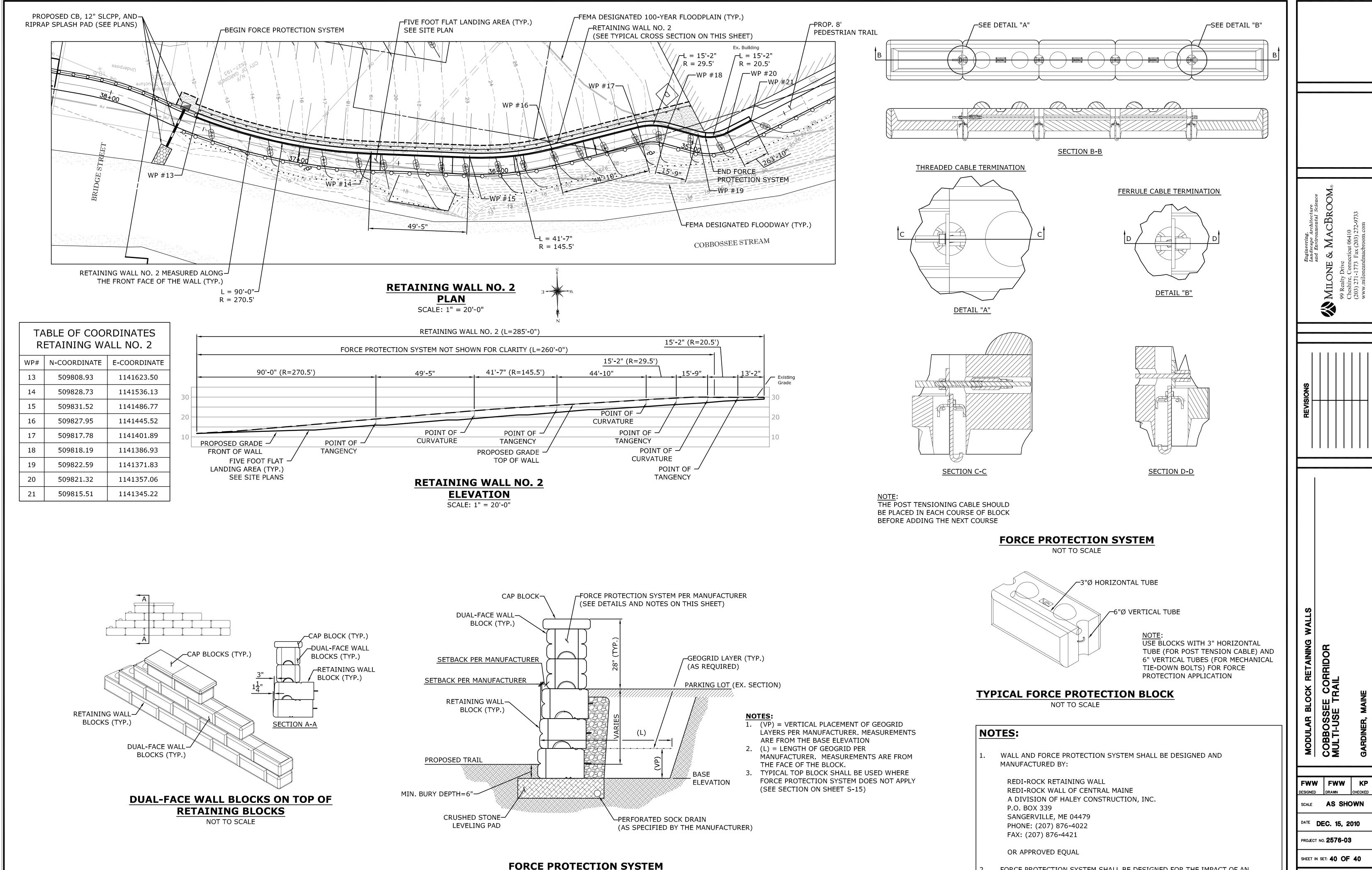
WALL

FWW FWW KP SCALE AS SHOWN DATE DEC. 15, 2010

PROJECT NO. **2576-03**

SHEET IN SET: 38 OF 40





TYPICAL CROSS SECTION

NOT TO SCALE

S-16

FORCE PROTECTION SYSTEM SHALL BE DESIGNED FOR THE IMPACT OF AN

8000 LB VEHICLE TRAVELING AT 15 MPH AT AN IMPACT ANGLE OF 90°

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL