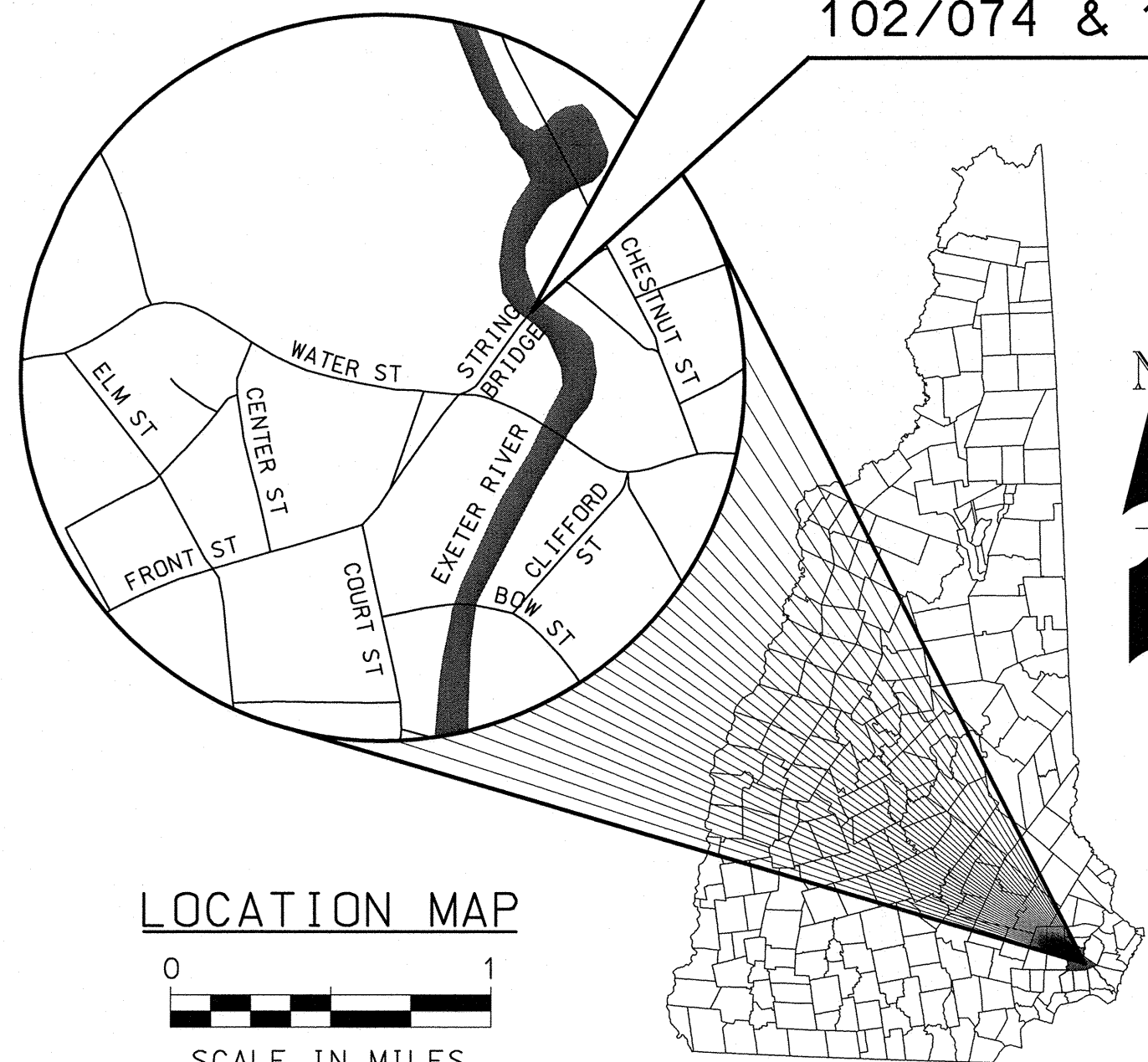
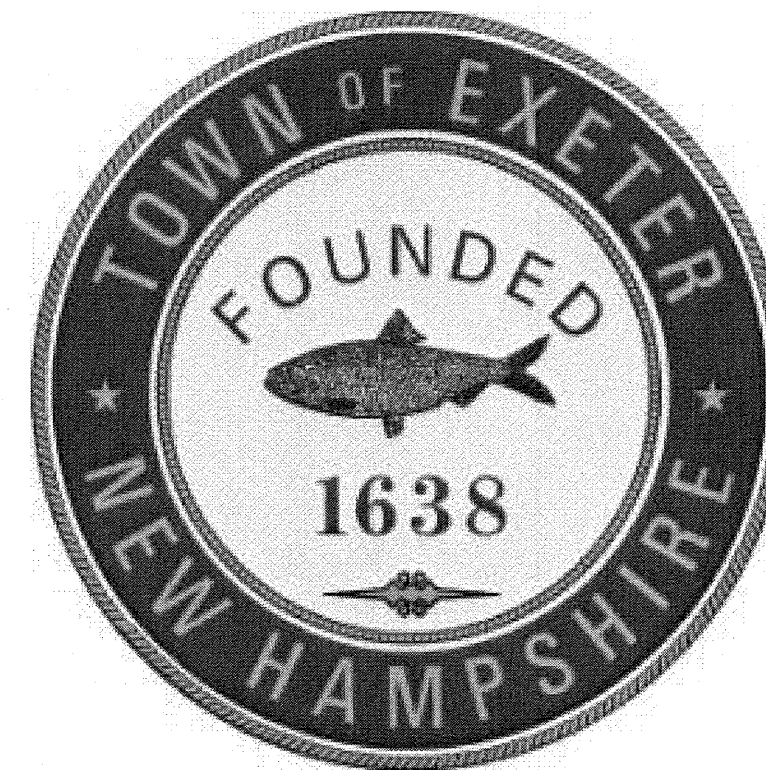


PROJECT LOCATION
NHDOT BR. NOS.
102/074 & 103/074

TOWN OF EXETER
ROCKINGHAM COUNTY
NEW HAMPSHIRE

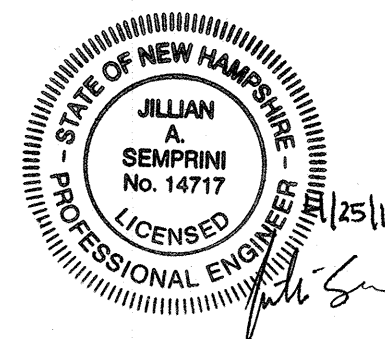


LOCATION MAP
SCALE IN MILES

PLANS OF THE PROPOSED REHABILITATION OF THE
STRING BRIDGE OVER EXETER RIVER
(NHDOT BR. NOS. 102 /074 & 103 /074)
NHDOT PROJECT NO. 15399
APRIL 25, 2016

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35 OF 42	BRIDGE REHABILITATION PLAN (6 OF 7)
36 OF 42	BRIDGE REHABILITATION PLAN (7 OF 7)
37 OF 42	BRIDGE REHABILITATION DETAILS (1 OF 2)
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41 OF 42	BRIDGE RAIL DETAILS (2 OF 2)
42 OF 42	BRIDGE LIGHTING



GENERAL NOTES

- GENERAL NOTES SHALL APPLY TO ALL DRAWINGS PREPARED BY HOYLE, TANNER & ASSOCIATES (HOYLE, TANNER) AND THE PROPOSED WORK THEY CONVEY.
- ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE AND LOCAL CODES, REGULATIONS AND STANDARDS. THE MORE STRINGENT SHALL GOVERN.
- THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS AND COORDINATION OF OTHER TRADES.
- THESE DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY, CARE OF ADJACENT PROPERTIES DURING CONSTRUCTION AND COMPLIANCE WITH STATE AND FEDERAL REGULATIONS REGARDING SITE SAFETY SHALL SOLELY BE THE CONTRACTORS RESPONSIBILITY.
- ALL DIMENSIONS, ELEVATIONS AND CONDITIONS MUST BE VERIFIED BY THE GENERAL CONTRACTOR OR RESPONSIBLE TRADES PRIOR TO COMMENCING WITH THE WORK, FABRICATION OR ORDERING MATERIALS. DO NOT SCALE DRAWINGS. USE DIMENSIONS SHOWN.
- ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND AS-BUILT CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY, BEFORE PROCEEDING WITH THE WORK.
- IN THE PREPARATION OF THESE DRAWINGS, HOYLE, TANNER HAS RELIED UPON INFORMATION OBTAINED FROM THE FOLLOWING REPORTS, DRAWINGS, TEST DATA/RESULTS OR OTHER DOCUMENTATION AS FOLLOWS:
 - EXISTING DRAWINGS, FILE NO. T16, DATED 1935
 - REPORT BY S.W. COLE ENGINEERING INC., DATED JANUARY 13, 2015, ENTITLED "IN-PLACE CONCRETE SAMPLING AND TESTING SERVICES"
 - REPORT BY S.W. COLE ENGINEERING, INC., DATED NOVEMBER 20, 2015, ENTITLED "IN-PLACE WINGWALL CONCRETE SAMPLING AND TESTING SERVICES"
 - REPORT BY RPF ENVIRONMENTAL, DATED NOVEMBER 13, 2015, ENTITLED "LABORATORY ANALYTICAL RESULTS"

THIS INFORMATION IS AVAILABLE FOR REVIEW DURING NORMAL BUSINESS HOURS AT THE OFFICE OF HOYLE, TANNER AND ASSOCIATES, INC., 150 DOW STREET, MANCHESTER, NH 03101.
- THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. ALL COSTS FOR DETERMINING UNDERGROUND UTILITY TYPES AND LOCATIONS SHALL BE SUBSIDIARY TO THE CONTRACT.
- ALL APPLICABLE UTILITY DEPARTMENTS AND COMPANIES SHALL BE NOTIFIED BEFORE EXCAVATION IS STARTED. UTILITIES WITHIN 50 FEET OF AN EXCAVATION SHALL BE MARKED IN THE FIELD.
- HOYLE, TANNER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT ARISE DUE TO THE FAILURE OF THE CONTRACTOR:
 - TO FOLLOW THESE DRAWINGS AND SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY.
 - TO NOTIFY HOYLE, TANNER OF ANY DISCREPANCIES, ERRORS, OMISSIONS OR CONFLICTS AND OBTAIN THEIR GUIDANCE TO RESOLVE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED DURING CONSTRUCTION.
- THE CONTRACTOR SHOULD NOTE THAT THE NHDOT "STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION" ARE MADE A PART OF THIS PROJECT AND ALL APPLICABLE DETAILS, STANDARDS AND SPECIFICATIONS SHALL APPLY. THIS PROJECT SHALL INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING STANDARD PLANS:
 - CR-1 -GRANITE CURB DETAILS
 - DR-1 -GRATE AND FRAME DETAILS
 - DR-2 -D.I., MANHOLE COVER AND PAVEMENT DEPRESSION DETAILS
 - DR-4 -POLYETHYLENE LINER DETAILS
 - DR-5 -PRECAST REINFORCED CONCRETE C.B., D.I. AND M.H.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3 EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" BY THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES.

ENGINEER

REV	DESCRIPTION	DATE

APRIL 25, 2016	JAS	TAG	STJ	AS SHOWN
DESIGN BY:		DRAWN BY:	CHKD. BY:	SCALE:

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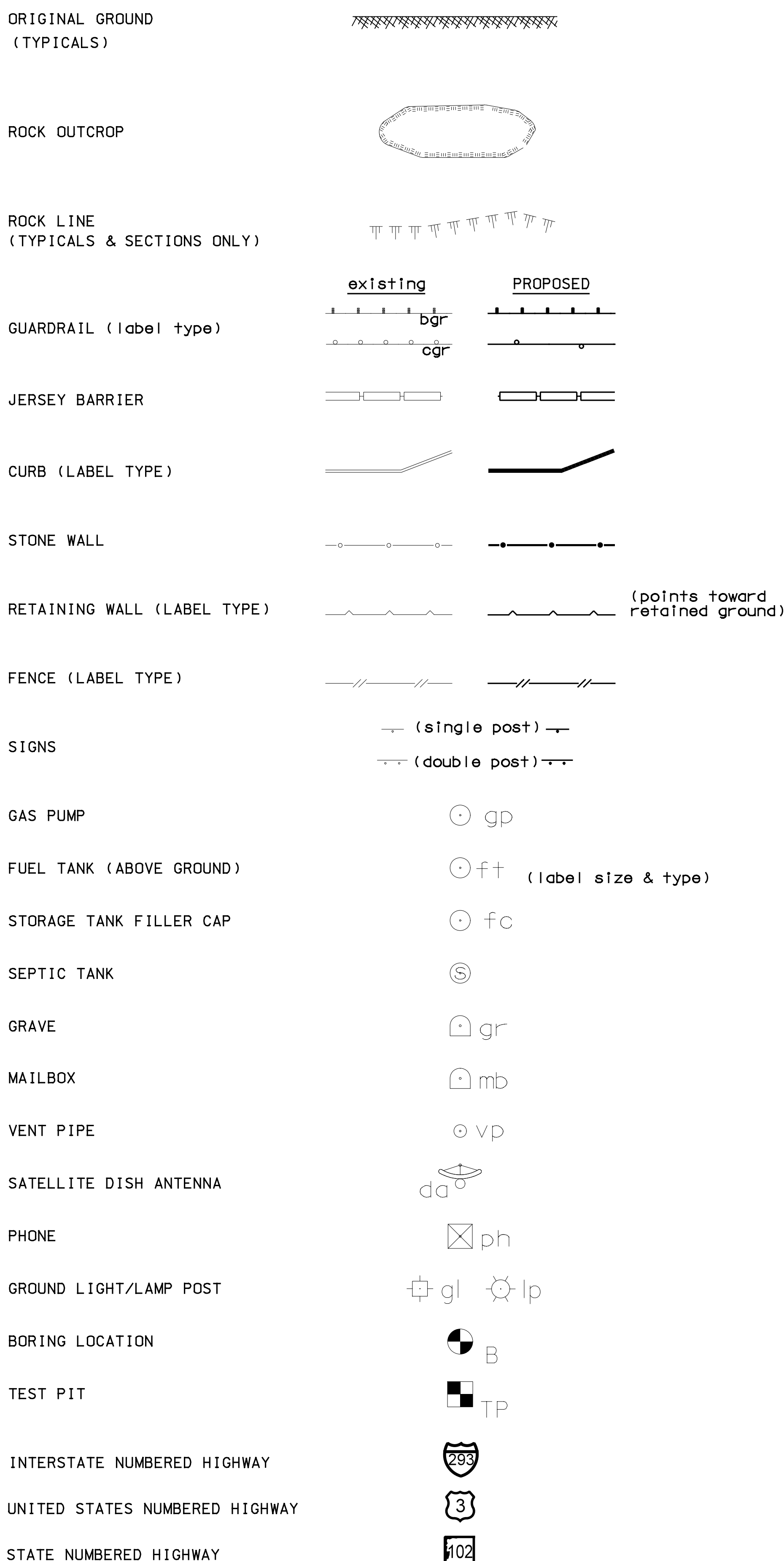
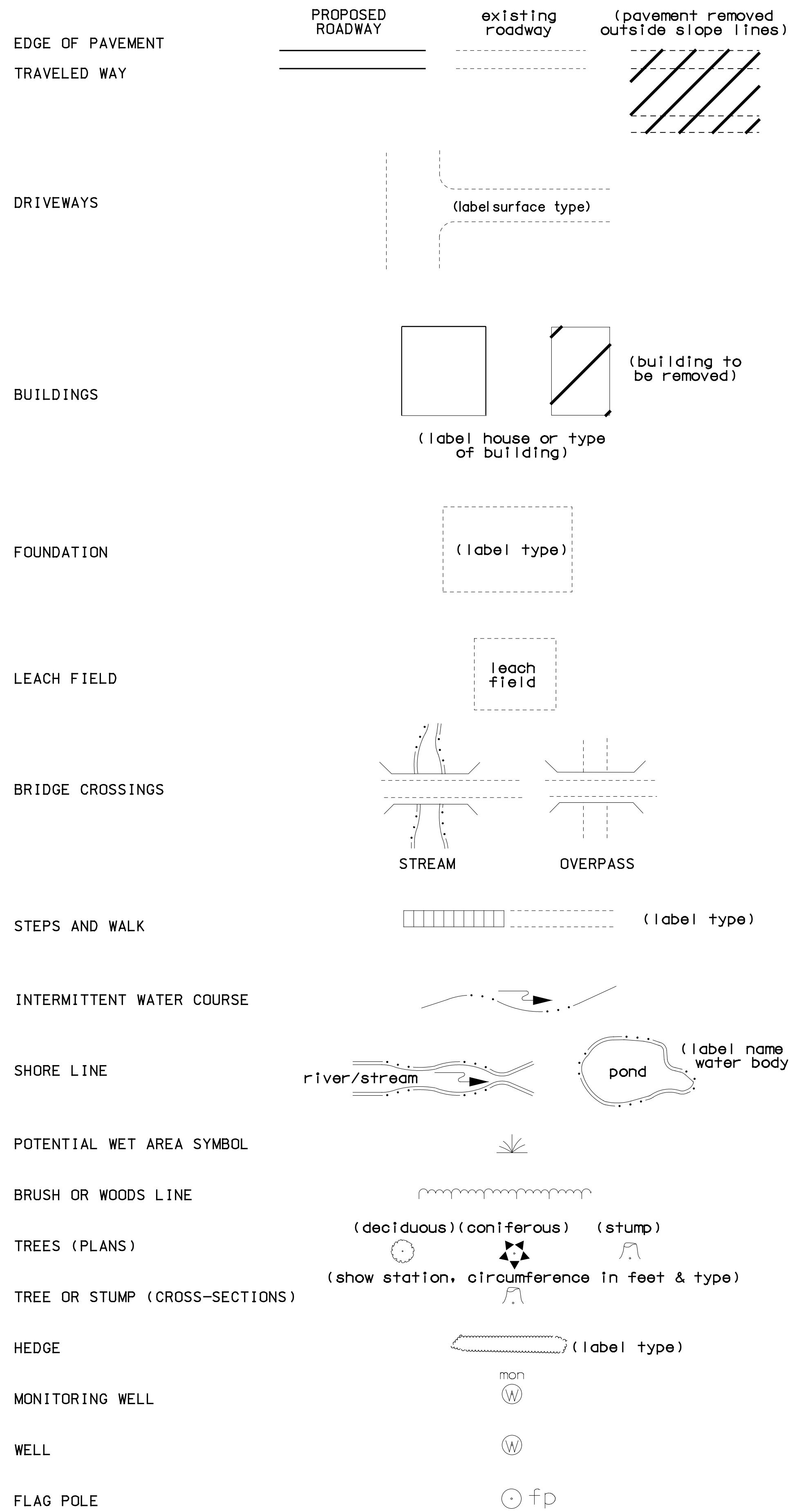
TOWN OF EXETER
EXETER, NEW HAMPSHIRE
STRING BRIDGE OVER EXETER RIVER
TITLE SHEET

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FILE NAME:	095222FSC
MODEL NAME:	TITLE SHEET

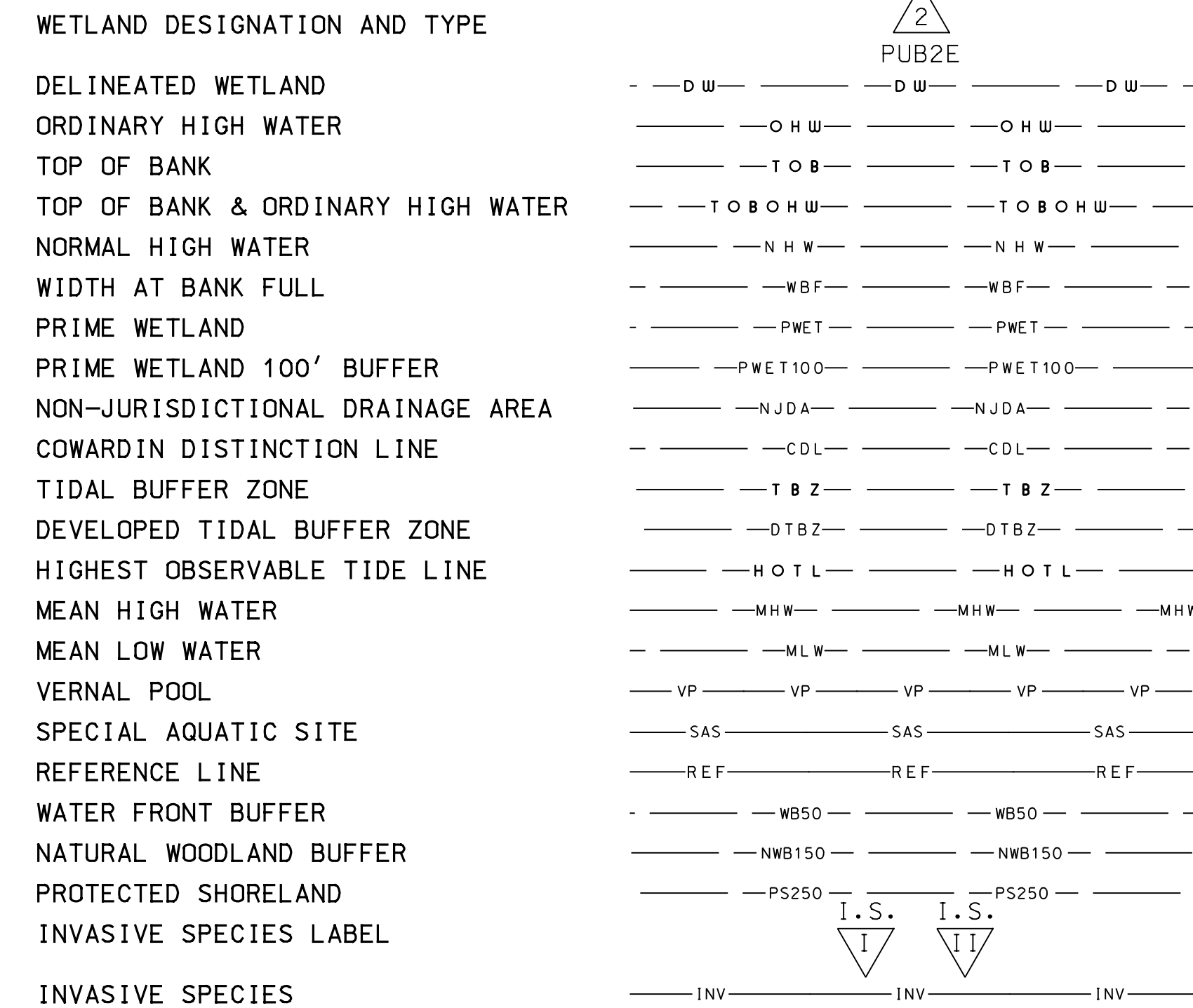
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SHEET 1 OF 42

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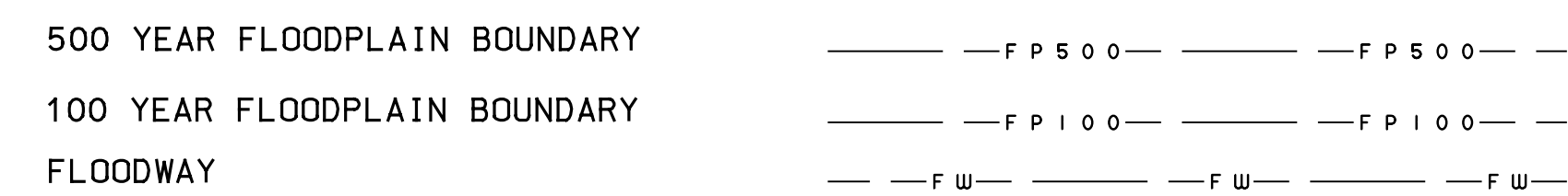
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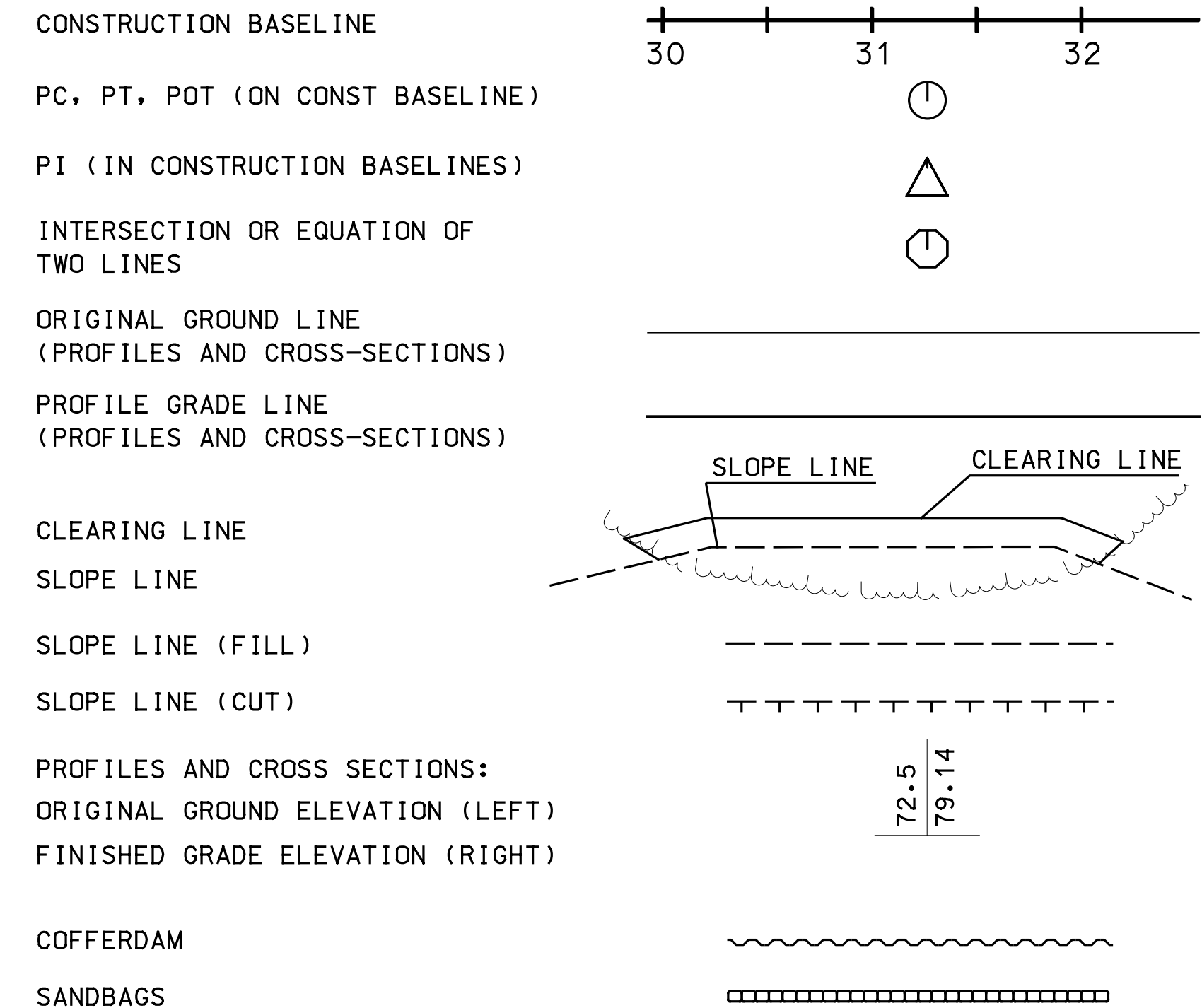
SHORELAND - WETLAND



FLOODPLAIN / FLOODWAY



ENGINEERING



ENGINEER

REV	DESCRIPTION	DATE

APRIL 25, 2016

DESIGN BY: JAS

DRAWN BY: TAG

CHKD. BY: STU

SCALE: AS SHOWN

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TOWN OF EXETER
EXETER, NEW HAMPSHIRE
STRING BRIDGE OVER EXETER RIVER

STANDARD SYMBOLS (1 OF 2)

PROJECT NO.: 095222

FILE NAME: 907402ISS

MODEL NAME: SYM01

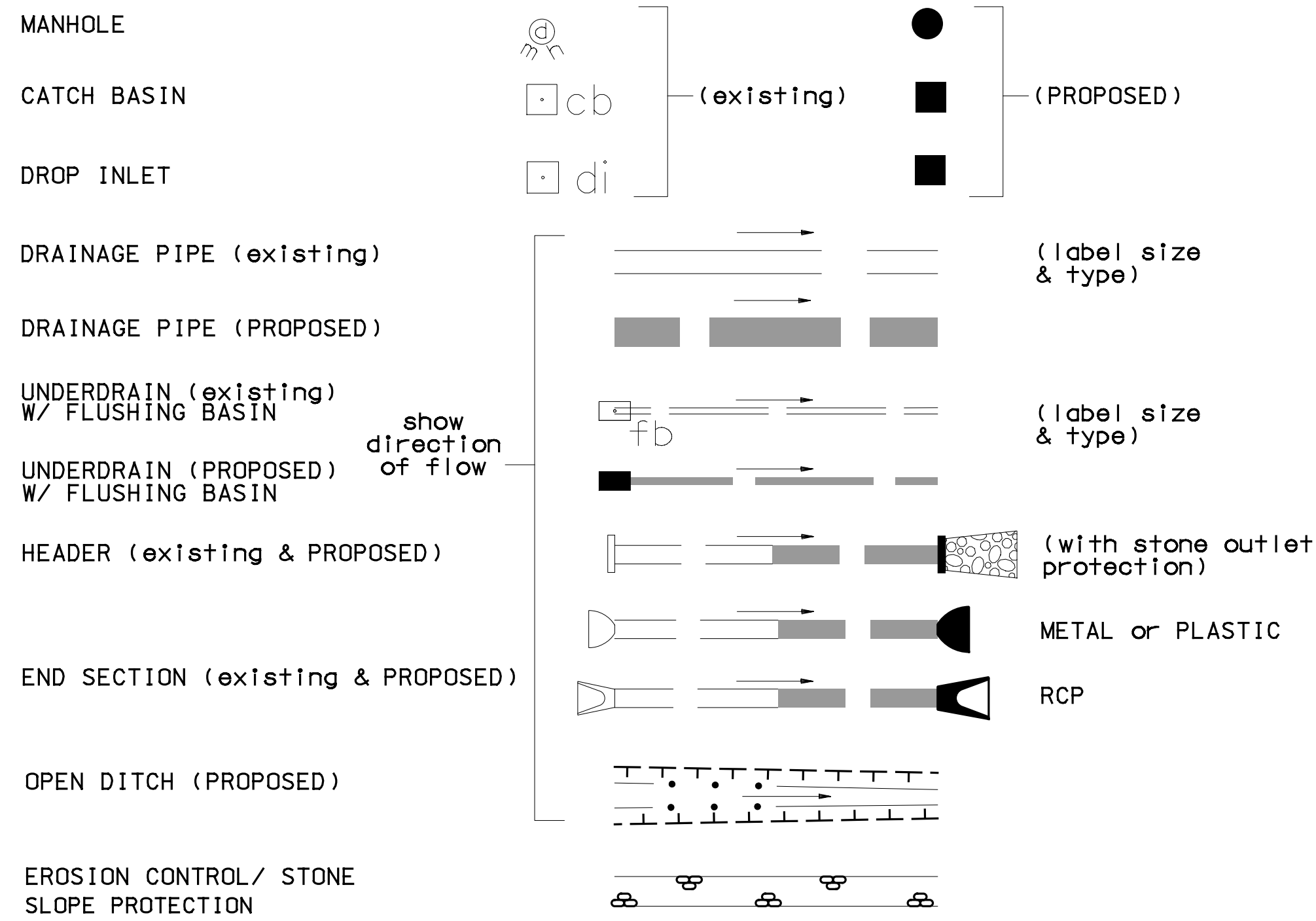
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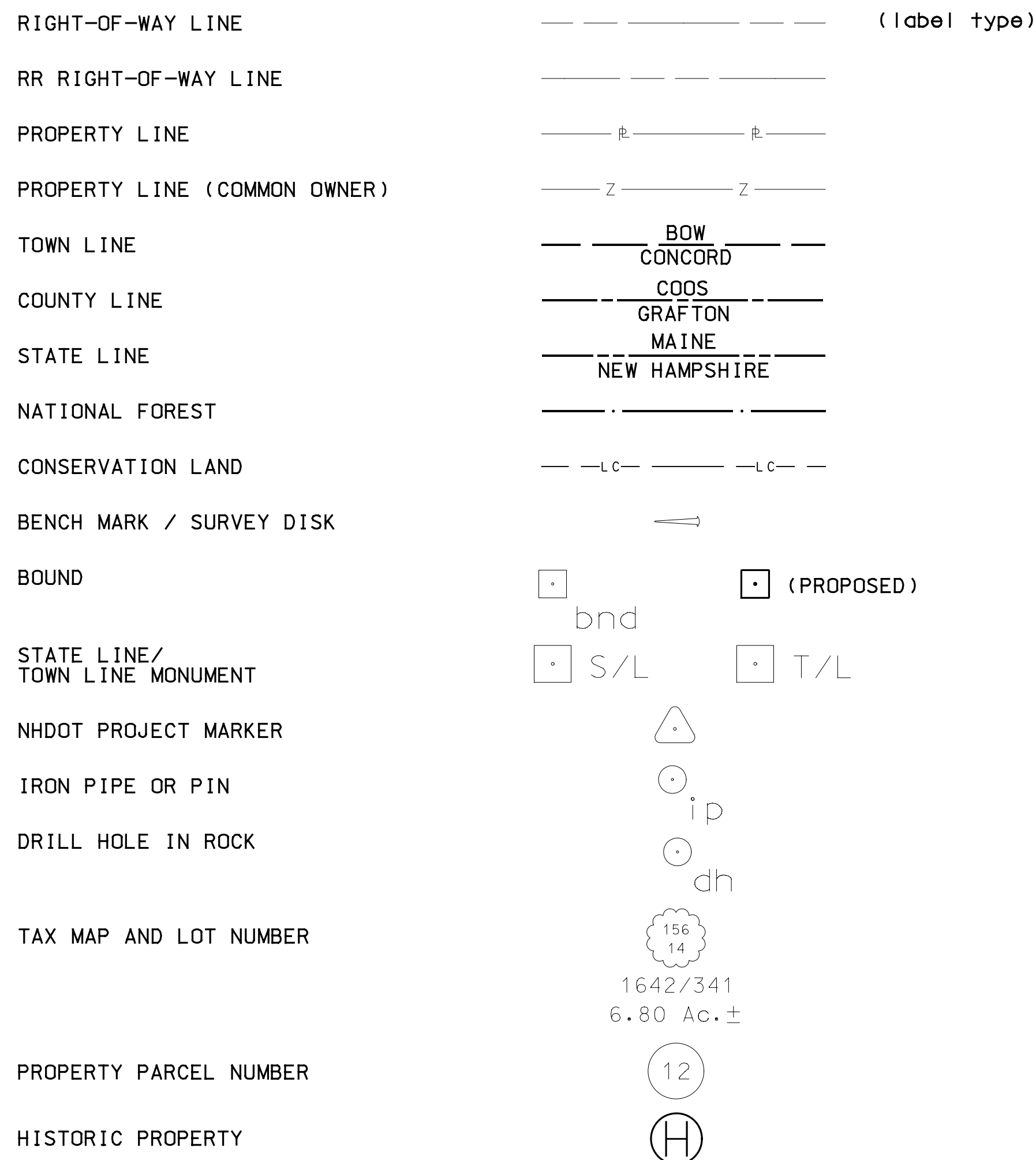
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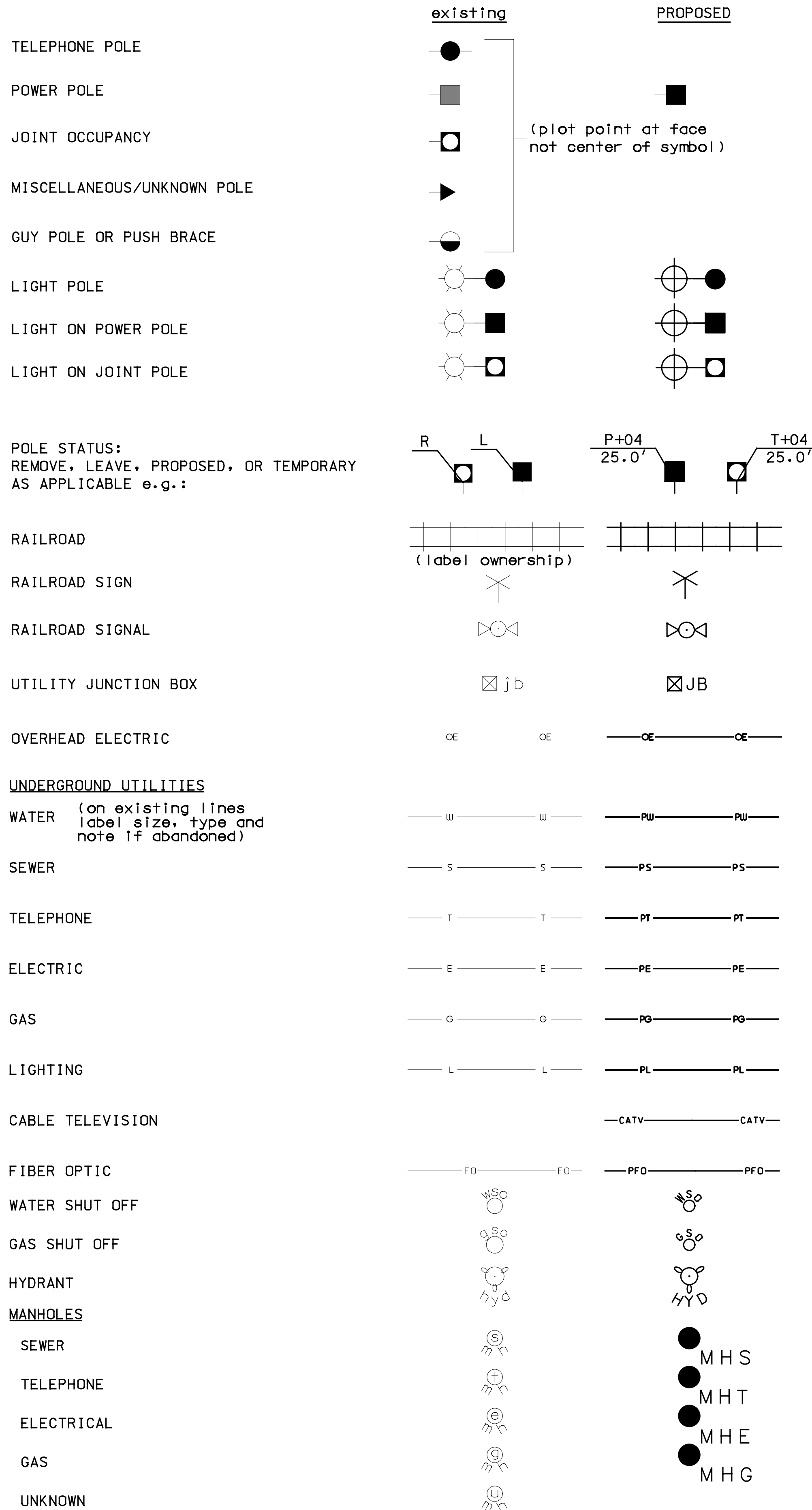
DRAINAGE



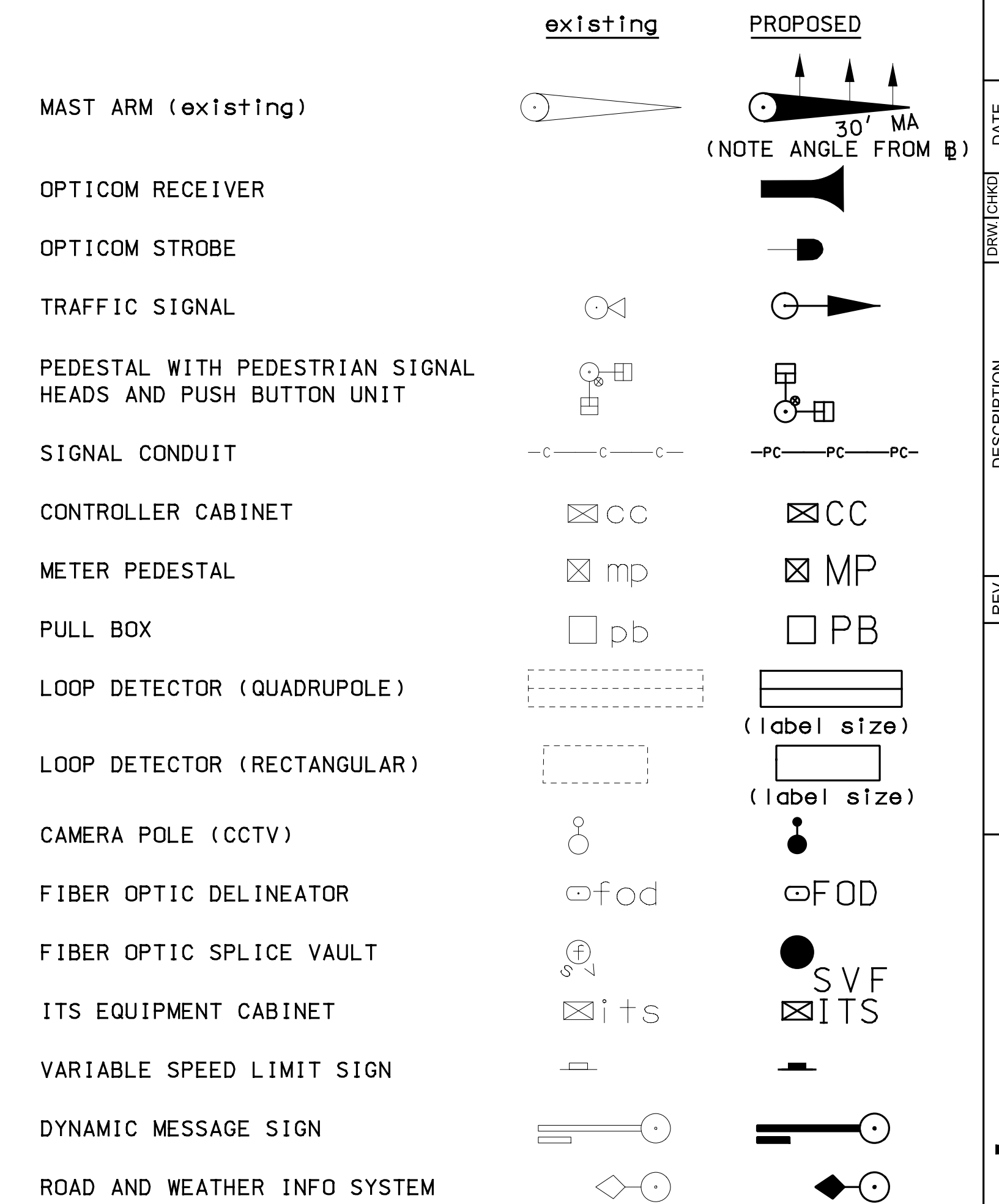
BOUNDARIES / RIGHT-OF-WAY



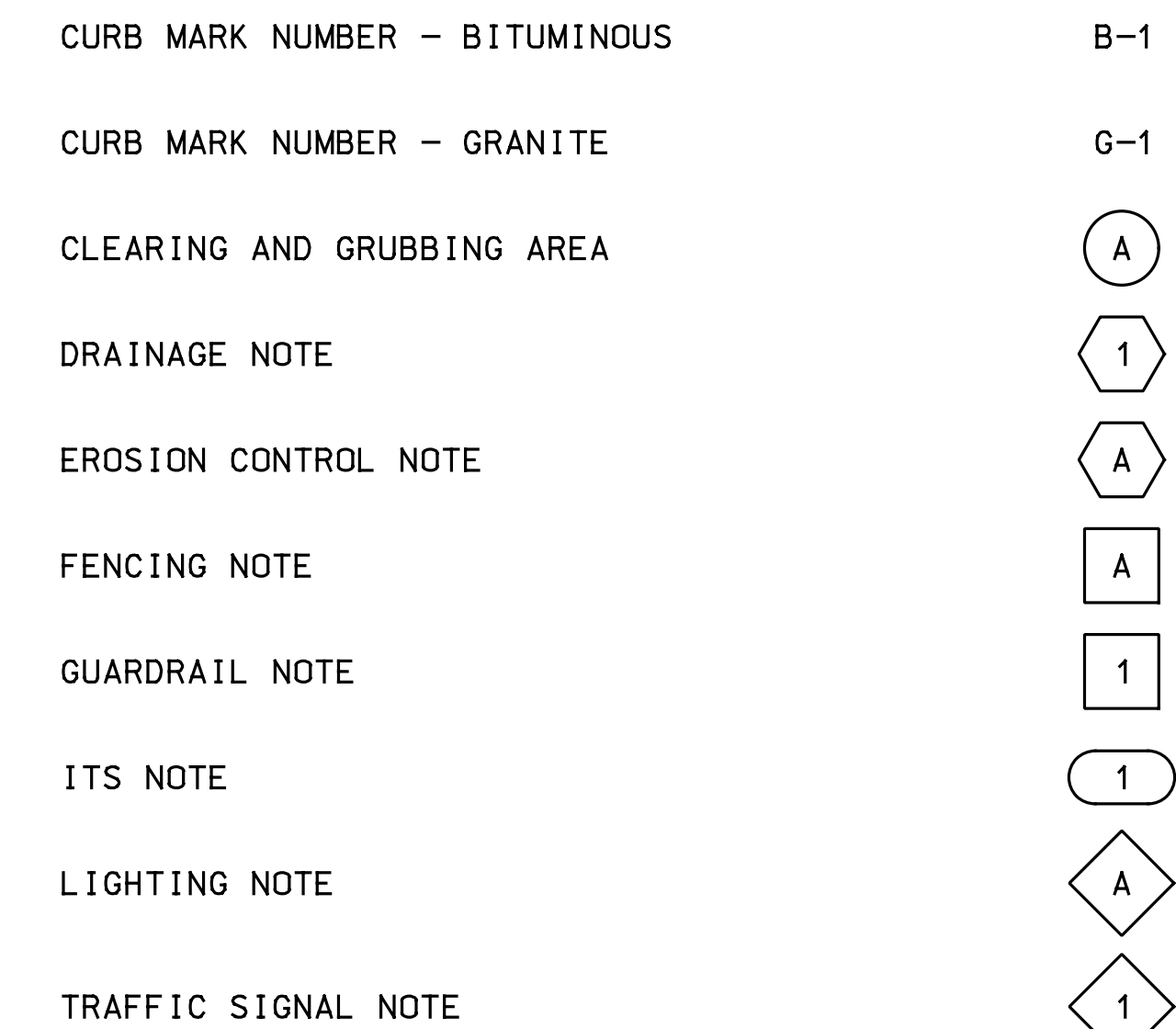
UTILITIES



TRAFFIC SIGNALS / ITS



CONSTRUCTION NOTES



ENGINEER

REV	DESCRIPTION	DATE	DRW	CHKD	BY
APRIL 25, 2016	DESIGN BY: JAS				
	DRAWN BY: TAG				
	CHKD. BY: STJ				
	SCALE: AS SHOWN				

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TOWN OF EXETER
EXETER, NEW HAMPSHIRE
STRING BRIDGE OVER EXETER RIVER

STANDARD SYMBOLS (2 OF 2)

PROJECT NO.:	095222
FILE NAME:	907402ISS
MODEL NAME:	SYM02
SHEET NO.	3
SHEET 3 OF 42	

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SUMMARY OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	QUANTITY	
		UNIT	AMOUNT
202.6	CURB REMOVAL FOR STORAGE	LF	502
203.1	COMMON EXCAVATION	CY	500
203.6	EMBANKMENT-IN-PLACE (F)	CY	8
206.1	COMMON STRUCTURE EXCAVATION	CY	17
206.19	COMMON STRUCTURE EXCAVATION EXPLORATORY	CY	15
211.2	CRACK MONITORING	U	1
214.	FINE GRADING	U	1
304.201	GRAVEL	CY	375
304.3	CRUSHED GRAVEL (F)	CY	250
304.35	CRUSHED GRAVEL FOR DRIVES	CY	24
403.11	HOT BITUMINOUS PAVEMENT, MACHINE METHOD	TON	280
403.12	HOT BITUMINOUS PAVEMENT, HAND METHOD	TON	49
403.6	PAVEMENT JOINT ADHESIVE	LF	2450
417.	COLD PLANING BITUMINOUS SURFACES	SY	130
502.99	MISCELLANEOUS REMOVAL ITEMS	U	1
503.101	WATER DIVERSION STRUCTURES	U	1
503.102	WATER DIVERSION STRUCTURES	U	1
504.1	COMMON BRIDGE EXCAVATION (F)	CY	360
512.0201	PREPARATION FOR CONCRETE REPAIRS, CLASS II	SY	75
512.0202	PREPARATION FOR CONCRETE REPAIRS, CLASS II	SY	60
512.0203	PREPARATION FOR OVERHEAD CONCRETE REPAIRS, CLASS II	SY	30
512.0204	PREPARATION FOR OVERHEAD CONCRETE REPAIRS, CLASS II	SY	50
520.01	CONCRETE CLASS AA	CY	15
520.021	CONCRETE BRIDGE RAIL	LF	50
534.3	WATER REPELLENT (SILANE/ SILOXANE)	GAL	50
535.1	CONCRETE STAINING AND SEALING	GAL	40
538.2	BARRIER MEMBRANE, PEEL AND STICK - VERTICAL SURFACES (F)	SY	52
538.5	BARRIER MEMBRANE, HEAT WELDED (F)	SY	330
562.1	SILICONE JOINT SEALANT (F)	LF	147
564.1	BRIDGE LIGHTING SYSTEM	U	1
603.82206	6" PE PIPE (TYPE S)	LF	15
603.82208	8" PE PIPE (TYPE S)	LF	18
603.82210	10" PE PIPE (TYPE S)	LF	23
603.82212	12" PE PIPE (TYPE S)	LF	100
603.99	SCUPPER REPLACEMENT	U	1
604.0007	POLYETHYLENE LINER	EA	6
604.0008	OUTLET PIPE HOOD	EA	6
604.12	CATCH BASINS TYPE B	U	4.1
604.125	CATCH BASINS TYPE B, 5-FOOT DIAMETER	U	2.6
604.4	RECONSTRUCTING/ADJUSTING CATCH BASIN & DROP INLET	LF	1
604.51	RECONSTRUCTING/ADJUSTING SEWER MANHOLES	LF	6
604.52	RECONSTRUCTING/ADJUSTING DRAINAGE MANHOLES	LF	3
606.417	PORTABLE CONCRETE BARRIER FOR TRAFFIC CONTROL	LF	80
608.24	4" CONCRETE SIDEWALK (F)	SY	285
608.54	DETECTABLE WARNING DEVICES, CAST IRON	SY	2.5
609.01	STRAIGHT GRANITE CURB	LF	120
609.02	CURVED GRANITE CURB	LF	30
609.5	RESET GRANITE CURB	LF	379
611.90001	ADJUSTING WATER GATES AND SHUTOFFS SET BY OTHERS	EA	6
611.99	TEMPORARY WATER & APPURTENANCES	U	1
612.99	TEMPORARY SEWER & APPURTENANCES	U	1
615.03	TRAFFIC SIGN TYPE C (F)	SF	22.75
615.06	TRAFFIC SIGN TYPE CC (F)	SF	4
615.063	REMOVING TRAFFIC SIGN TYPE CC	U	2
615.064	RELOCATING TRAFFIC SIGN TYPE CC	U	1
618.61	UNIFORMED OFFICERS WITH VEHICLE	\$	3000
618.7	FLAGGERS	HR	1400
619.1	MAINTENANCE OF TRAFFIC	U	1
619.25	PORTABLE CHANGEABLE MESSAGE SIGN	U	3
628.2	SAWED BITUMINOUS PAVEMENT	LF	275
632.0104	RETROREFLECTIVE PAINT PAVE. MARKING, 4" LINE	LF	100
632.0112	RETROREFLECTIVE PAINT PAVE. MARKING, 12" LINE	LF	53
632.0118	RETROREFLECTIVE PAINT PAVE. MARKING, 18" LINE	LF	99
632.02	RETROREFLECTIVE PAINT PAVEMENT MARKING, SYMBOL OR WORD	SF	17
645.3	EROSION STONE	TON	1
645.44	TEMPORARY SLOPE STABILIZATION TYPE D (WILDLIFE FRIENDLY)	SY	70
645.51	HAY BALES FOR TEMPORARY EROSION CONTROL	EA	20
645.512	COMPOST SOCK FOR PERIMETER BERM	LF	160
645.52	RYEGRASS FOR TEMPORARY EROSION CONTROL	LB	1
645.531	SILT FENCE	LF	160
645.7	STORM WATER POLLUTION PREVENTION PLAN	U	1
645.71	MONITORING SWPPP AND EROSION AND SEDIMENT CONTROLS	EA	40
645.99	TURBIDITY BARRIER	EA	1
646.51	TURF ESTABLISHMENT WITH MULCH, TACKIFIERS AND LOAM	SY	70
692	MOBILIZATION	U	1
699	MISCELLANEOUS TEMPORARY EROSION AND SEDIMENT CONTROL	\$	1
900.1	REMOVE AND RESET PAVERS	U	1
1002.1	REPAIRS OR REPLACEMENTS AS NEEDED - BRIDGE STRUCTURES	\$	1
1008.41	ALTERATIONS AND ADDITIONS AS NEEDED - UTILITY ADJUSTMENTS (POWER)	U	1
1008.411	ALTERATIONS AND ADDITIONS AS NEEDED - UTILITY ADJUSTMENTS (POWER)	\$	1
1008.42	ALTERATIONS AND ADDITIONS AS NEEDED - UTILITY ADJUSTMENTS (TELEPHONE)	U	1
1008.421	ALTERATIONS AND ADDITIONS AS NEEDED - UTILITY ADJUSTMENTS (TELEPHONE)	\$	1
1008.43	ALTERATIONS AND ADDITIONS AS NEEDED - UTILITY ADJUSTMENTS (KIMBALL ISLAND)	\$	1
1008.9	ALTERATIONS AND ADDITIONS AS NEEDED - TESTING OF MATERIALS	\$	1

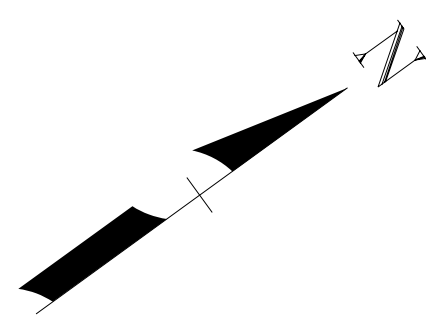
ENGINEER	
REV.	DESCRIPTION
APRIL 25, 2016	
DESIGN BY: JAS	
DRAWN BY: TAG	
CHKD. BY: STJ	
SCALE: AS SHOWN	

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TOWN OF EXETER	PROJECT NO.: 095222
EXETER, NEW HAMPSHIRE	FILE NAME: 095222BrNotes
STRING BRIDGE OVER EXETER RIVER	MODEL NAME: 095222BrNotes2
SUMMARY OF QUANTITIES	SHEET NO.

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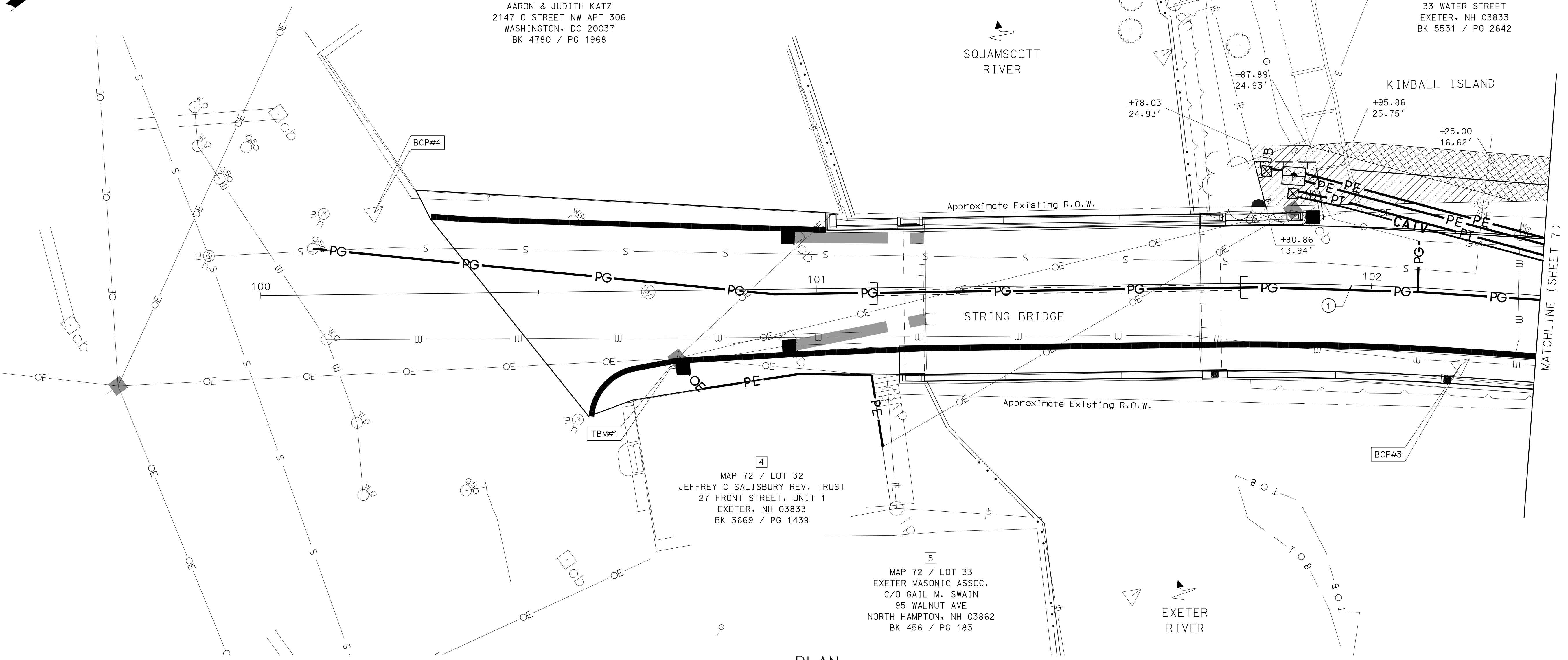


1
MAP 72 / LOT 30
PEG SHAW & RONNEY NADILE
AARON & JUDITH KATZ
2147 O STREET NW APT 306
WASHINGTON, DC 20037
BK 4780 / PG 1968

2
MAP 72 / LOT 31
KIMBALL ISLAND, LLC
33 WATER STREET
EXETER, NH 03833
BK 5531 / PG 2642

4
MAP 72 / LOT 32
JEFFREY C SALISBURY REV. TRUST
27 FRONT STREET, UNIT 1
EXETER, NH 03833
BK 3669 / PG 1439

5
MAP 72 / LOT 33
EXETER MASONIC ASSOC.
C/O GAIL M. SWAIN
95 WALNUT AVE
NORTH HAMPTON, NH 03862
BK 456 / PG 183



VERTICAL CONTROL			
NUMBER	ELEVATION	STATION & OFFSET	DESCRIPTION
TBM#1	25.38	100+75.36 RT 12.95'	SPIKE IN POLE
TBM#2	22.86	103+64.90 LT 20.84'	NAIL IN POLE

HORIZONTAL CONTROL					
NUMBER	NORTHING	EASTING	ELEVATION	STATION & OFFSET*	DESCRIPTION
BCP#1	176739.5470	1177464.4900	40.96	105+94.13, LT 45.70'	IRON ROD SET 1
BCP#2	176463.0053	1177252.9174	22.91	102+51.37, RT 14.04'	MAGNAIL SET 4
BCP#3	176437.0629	1177230.3961	23.11	102+16.88, RT 13.52'	MAGNAIL SET 100
BCP#4	176294.9380	1177093.2662	27.66	100+20.61, LT 14.70'	MAGNAIL SET 101

* INFORMATION PROVIDED FOR GENERAL LOCATION ONLY

TABLE OF PROPERTY ACQUISITION																
PARCEL NUMBER	PROPERTY OWNER	TOTAL AREA OF PARCEL (ACRES)	AREA OF TAKE (ACRES)	REMAINDER		EASEMENT								C.A.R.O.W. POINTS OF ACCESS LT RT	REV. NO.	
				LT	RT	PERMANENT				TEMPORARY						
						SF	TYPE	SF	TYPE	SF	TYPE	DESCRIPTION	EXPIRES (DURATION)			
1	PEG SHAW & RODNEY NADILE AARON & JUDITH KATZ	0.08														
2	KIMBALL ISLAND, LLC	0.35														
3	EXETER MILLS, LLC				298		UTILITY		382							
4	JEFFREY C SALISBURY REV. TRUST	0.02														
5	EXETER MASONIC ASSOC.	0.11														
6	TOWN OF EXETER	1.14				82		SIDEWALK		1369						

CURVE NO. ①
PI = 101+96.64
N = 176430.19812
E = 1177206.87590
DELTA = 4°53'54.93"
T = 26.73'
R = 625.00'
L = 53.44'
E = 0.57'

CURVE NO. ②
PI = 103+77.58
N = 176568.52303
E = 1177323.57559
DELTA = 11°14'04.20"
T = 44.26'
R = 450.00'
L = 88.24'
E = 2.17'

LEGEND
 TEMPORARY EASEMENT
 PERMANENT EASEMENT

ENGINEER

REV	DESCRIPTION	DATE	DRW	CHKD	BY

APRIL 25, 2016
 DESIGN BY: JAS
 DRAWN BY: TAG
 CHKD. BY: STJ
 SCALE: AS SHOWN

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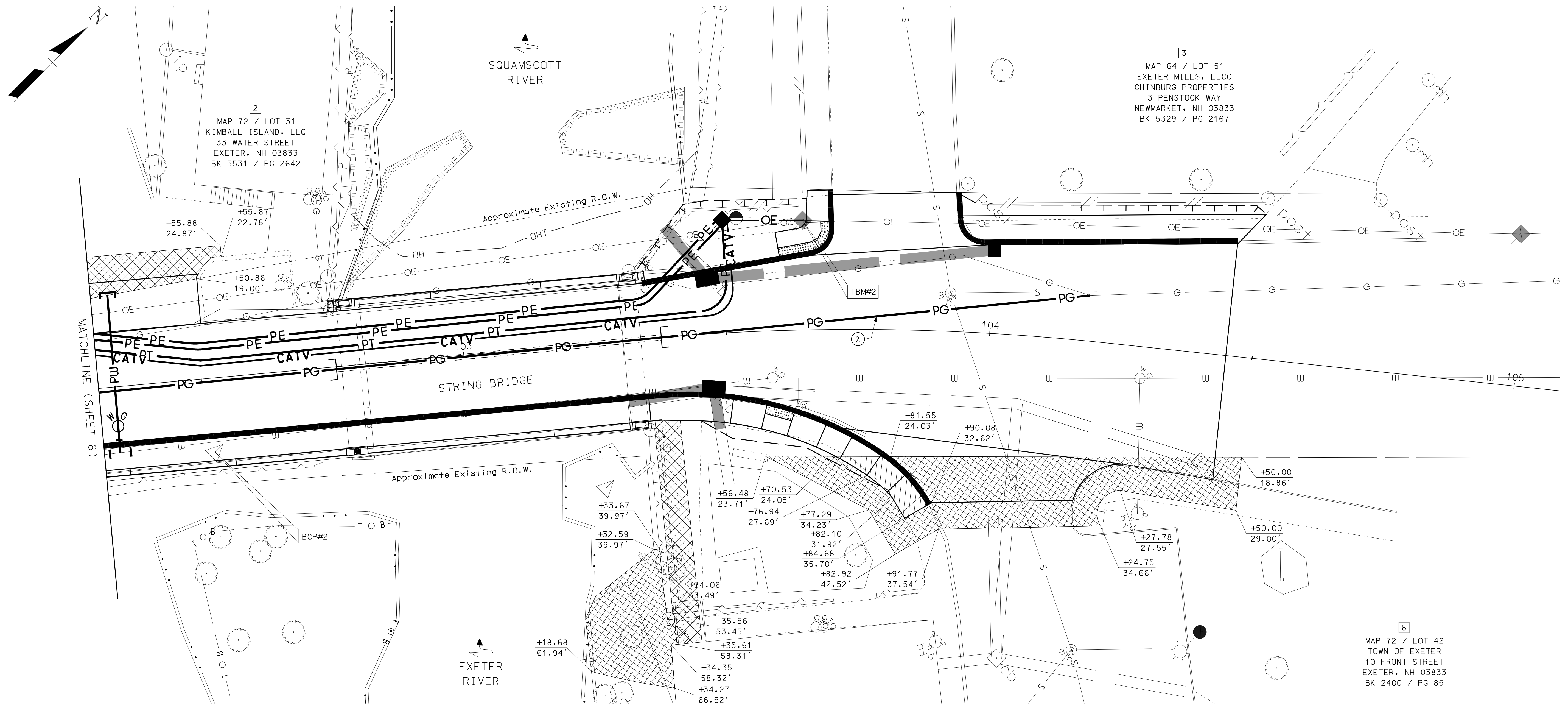
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TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 EASEMENT PLAN (1 OF 2)

PROJECT NO.: 095222
 FILE NAME: 095222Ease
 MODEL NAME: 095222EasePlan1

SHEET NO.
6
 SHEET 6 OF 42

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MAP 72 / LOT 31
KIMBALL ISLAND, LLC
33 WATER STREET
EXETER, NH 03833
BK 5531 / PG 2642

MAP 64 / LOT 51
EXETER MILLS, LLC
CHINBURG PROPERTIES
3 PENSTOCK WAY
NEWMARKET, NH 03833
BK 5329 / PG 2167

MAP 72 / LOT 42
TOWN OF EXETER
10 FRONT STREET
EXETER, NH 03833
BK 2400 / PG 85

VERTICAL CONTROL			
NUMBER	ELEVATION	STATION & OFFSET	DESCRIPTION
TBM#1	25.38	100+75.36 RT 12.95'	SPIKE IN POLE
TBM#2	22.86	103+64.90 LT 20.84'	NAIL IN POLE

HORIZONTAL CONTROL					
NUMBER	NORTHING	EASTING	ELEVATION	STATION & OFFSET*	DESCRIPTION
BCP#1	176739.5470	1177464.4900	40.96	105+94.13, LT 45.70'	IRON ROD SET 1
BCP#2	176463.0053	1177252.9174	22.91	102+51.37, RT 14.04'	MAGNAIL SET 4
BCP#3	176437.0629	1177230.3961	23.11	102+16.88, RT 13.52'	MAGNAIL SET 100
BCP#4	176294.9380	1177093.2662	27.66	100+20.61, LT 14.70'	MAGNAIL SET 101

* INFORMATION PROVIDED FOR GENERAL LOCATION ONLY

TABLE OF PROPERTY ACQUISITION																
PARCEL NUMBER	PROPERTY OWNER	TOTAL AREA OF PARCEL (ACRES)	AREA OF TAKE (ACRES)	REMAINDER		EASEMENT								C.A.R.O.W. POINTS OF ACCESS LT RT	REV. NO.	
				LT AC	RT AC	PERMANENT				TEMPORARY						
						SF	TYPE	SF	TYPE	SF	TYPE	DESCRIPTION	EXPIRES (DURATION)			
1	PEG SHAW & RODNEY NADILE	0.08														
2	AARON & JUDITH KATZ	0.35														
3	KIMBALL ISLAND, LLC	0.35			298		UTILITY		382			CONSTRUCTION	COMPLETION OF PROJECT			
4	EXETER MILLS, LLC	0.35														
5	JEFFREY C SALISBURY REV. TRUST	0.02														
6	EXETER MASONIC ASSOC.	0.11														
6	TOWN OF EXETER	1.14			82		SIDEWALK		1369			CONSTRUCTION	COMPLETION OF PROJECT			

PLAN
SCALE: 1" = 10'

CURVE NO. ①
PI = 101+96.64
N = 176430.19812
E = 1177206.87590
DELTA = 4°53'54.93"
T = 26.73'
R = 625.00'
L = 53.44'
E = 0.57'

CURVE NO. ②
PI = 103+77.58
N = 176568.52303
E = 1177323.57559
DELTA = 11°14'04.20"
T = 44.26'
R = 450.00'
L = 88.24'
E = 2.17'

LEGEND
 TEMPORARY EASEMENT
 PERMANENT EASEMENT

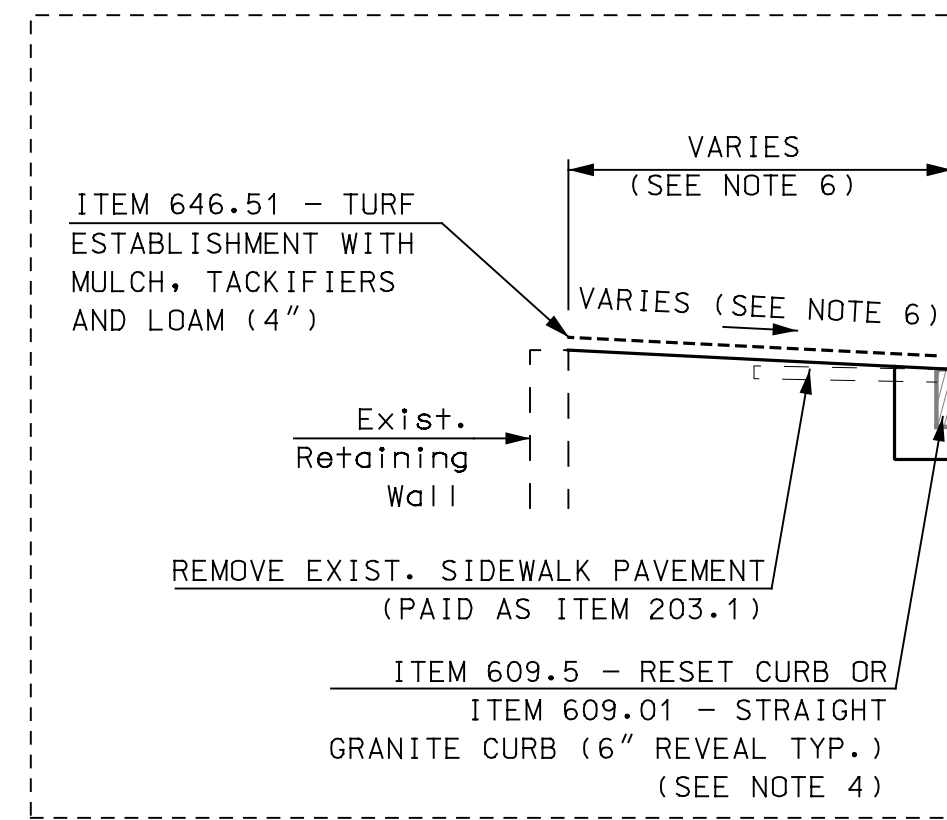
REV	DESCRIPTION	DATE
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	DRAWN BY: TAG <td></td>	
	CHKD. BY: STU <td></td>	
	SCALE: AS SHOWN <td></td>	

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TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 EASEMENT PLAN (2 OF 2)

PROJECT NO.: 095222
 FILE NAME: 095222Ease
 MODEL NAME: 095222EasePlan2

SHEET NO.
7
 SHEET 7 OF 42

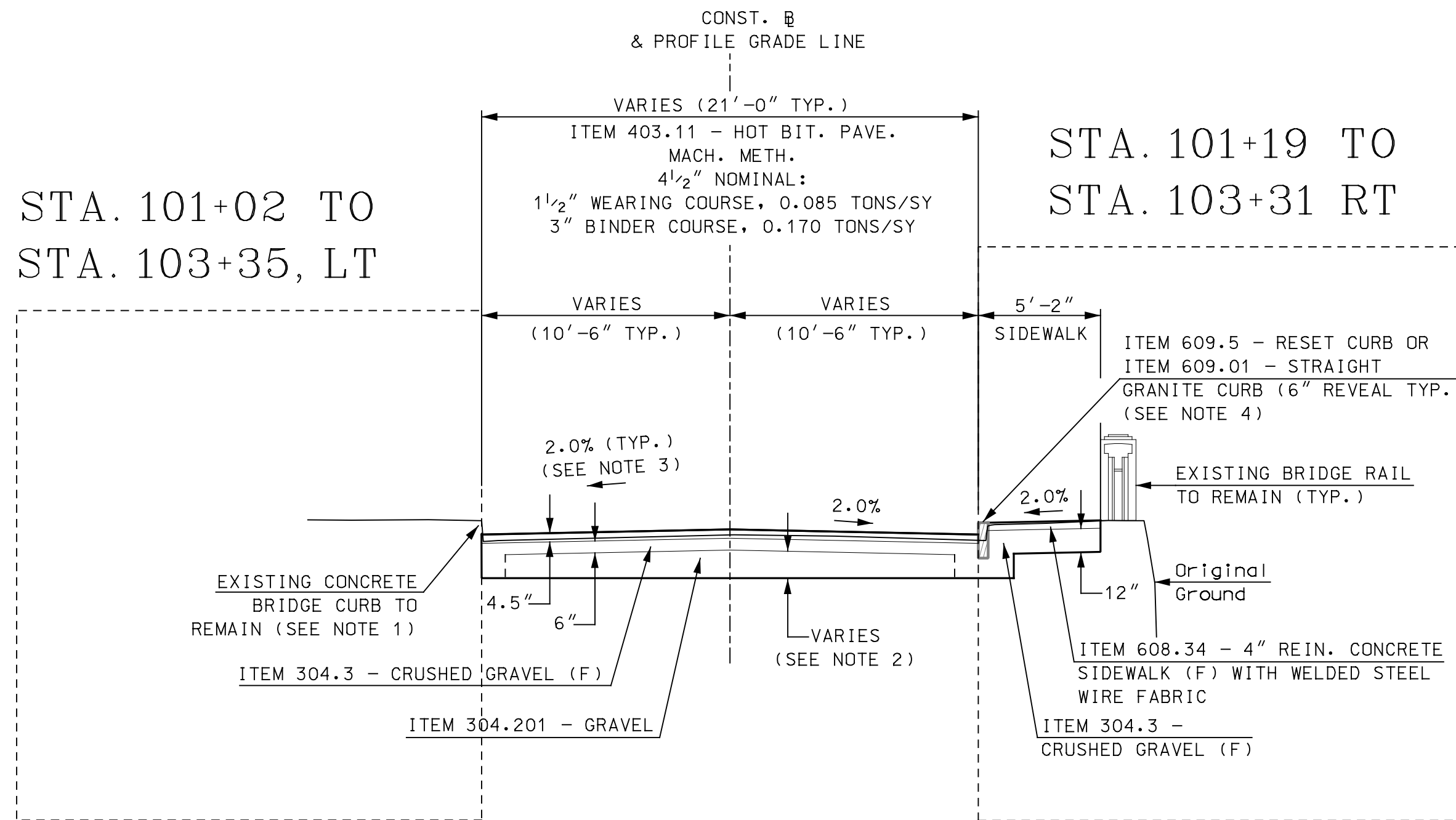


GRASS PANEL DETAIL

STA. 103+35 TO STA. 103+55, LT

NOT TO SCALE

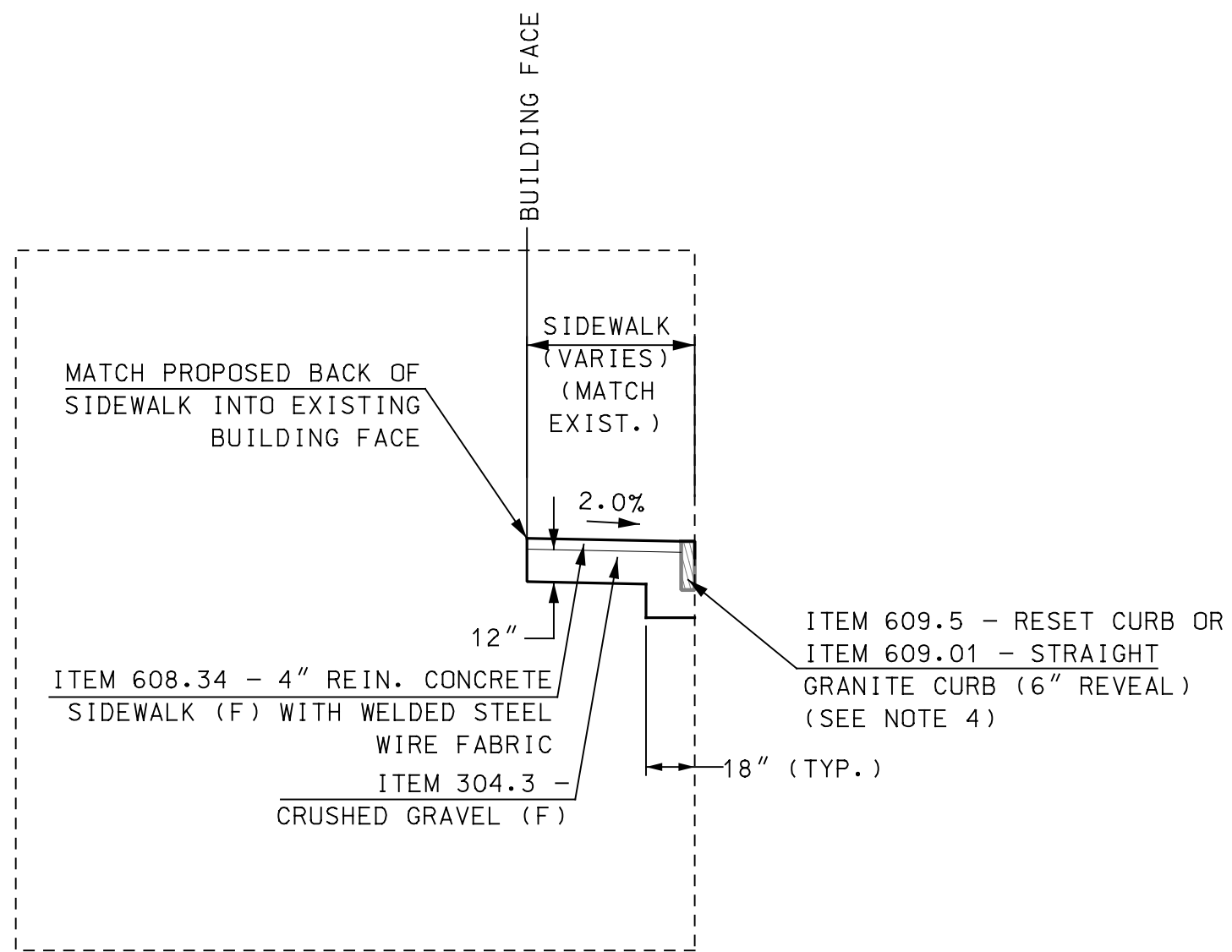
STA. 101+02 TO STA. 103+35, LT



STRING BRIDGE

STA. 100+76 TO STA. 104+25

NOT TO SCALE

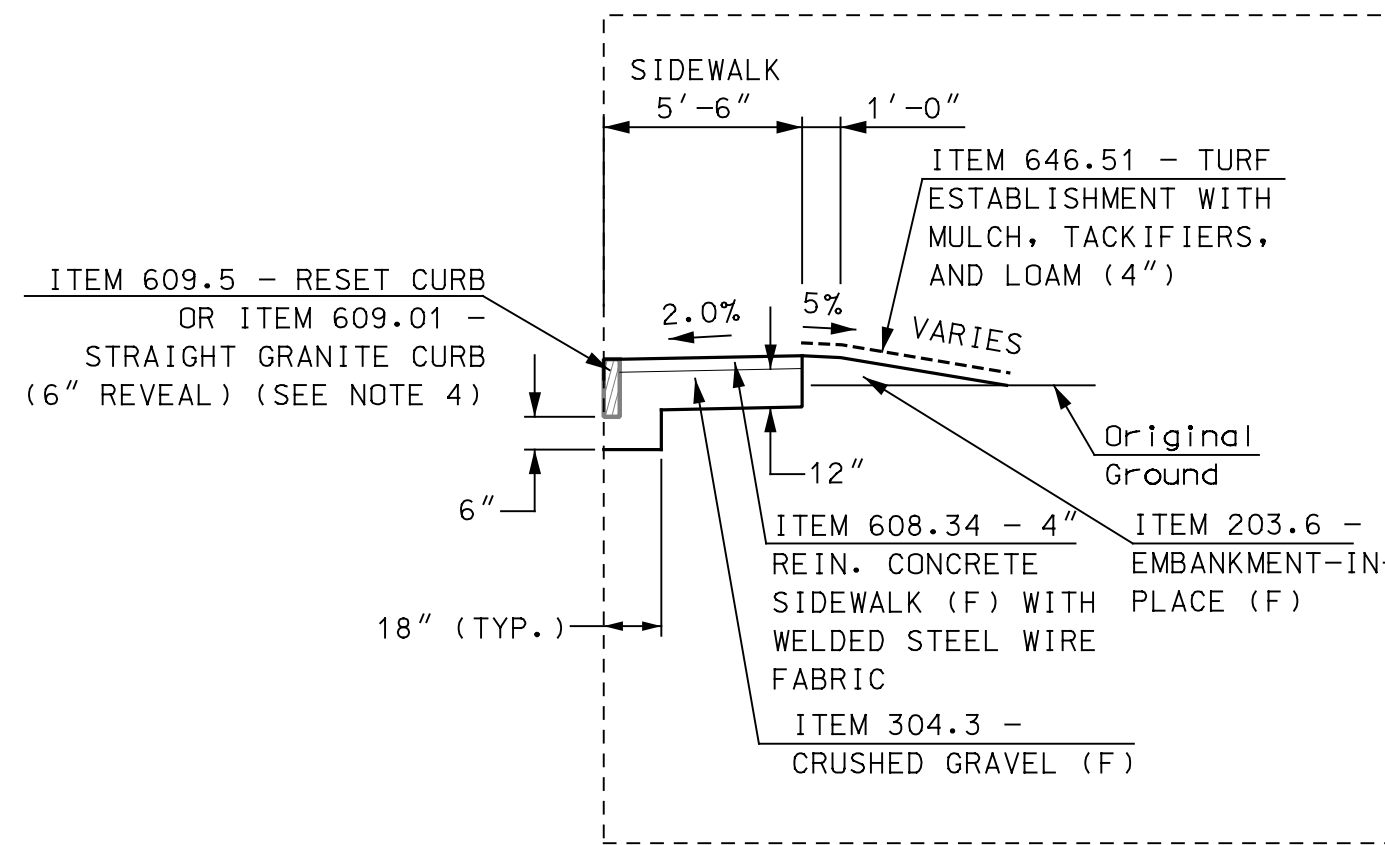


NOTE: SEE CURB SET DETAIL FOR CURB CONSTRUCTION OUTSIDE OF FULL DEPTH CONSTRUCTION LIMITS.

SIDEWALK TO BUILDING DETAIL

STA. 100+31 TO STA. 101+02, LT
STA. 100+59 TO STA. 101+19, RT

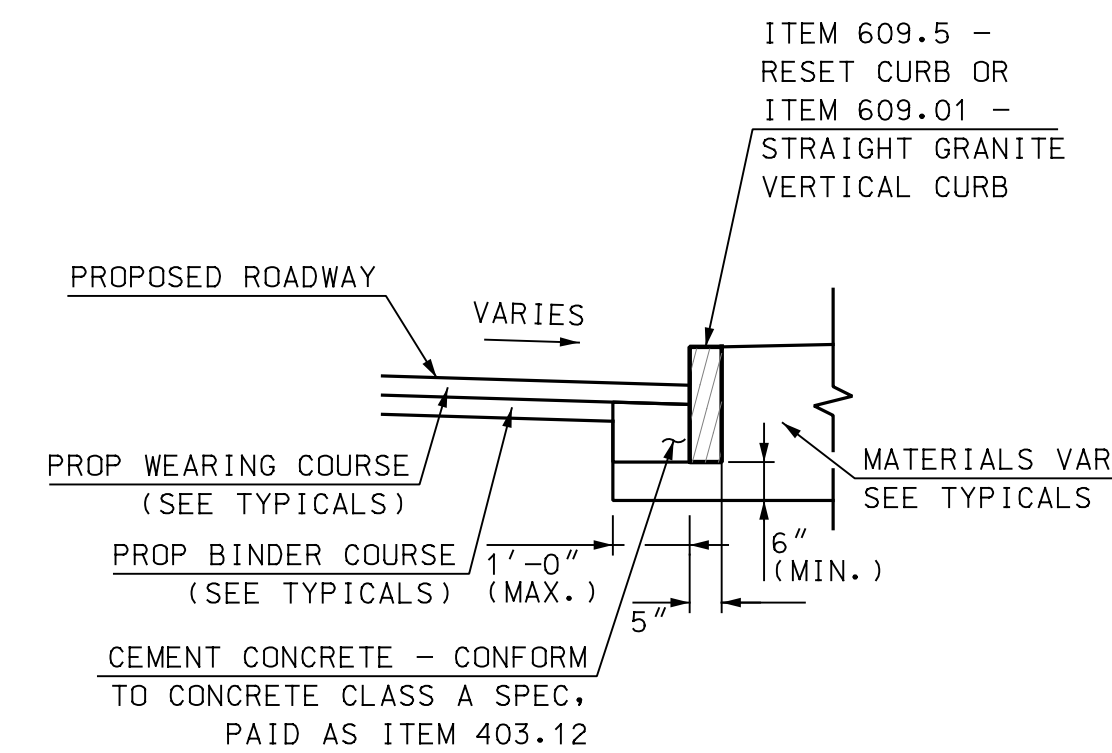
NOT TO SCALE



SIDEWALK DETAIL

STA. 103+31 TO STA. 104+25, RT
STA. 103+55 TO STA. 104+25, LT

NOT TO SCALE



CONCRETE FOR CURB SET DETAIL

NOT TO SCALE

NOTES:

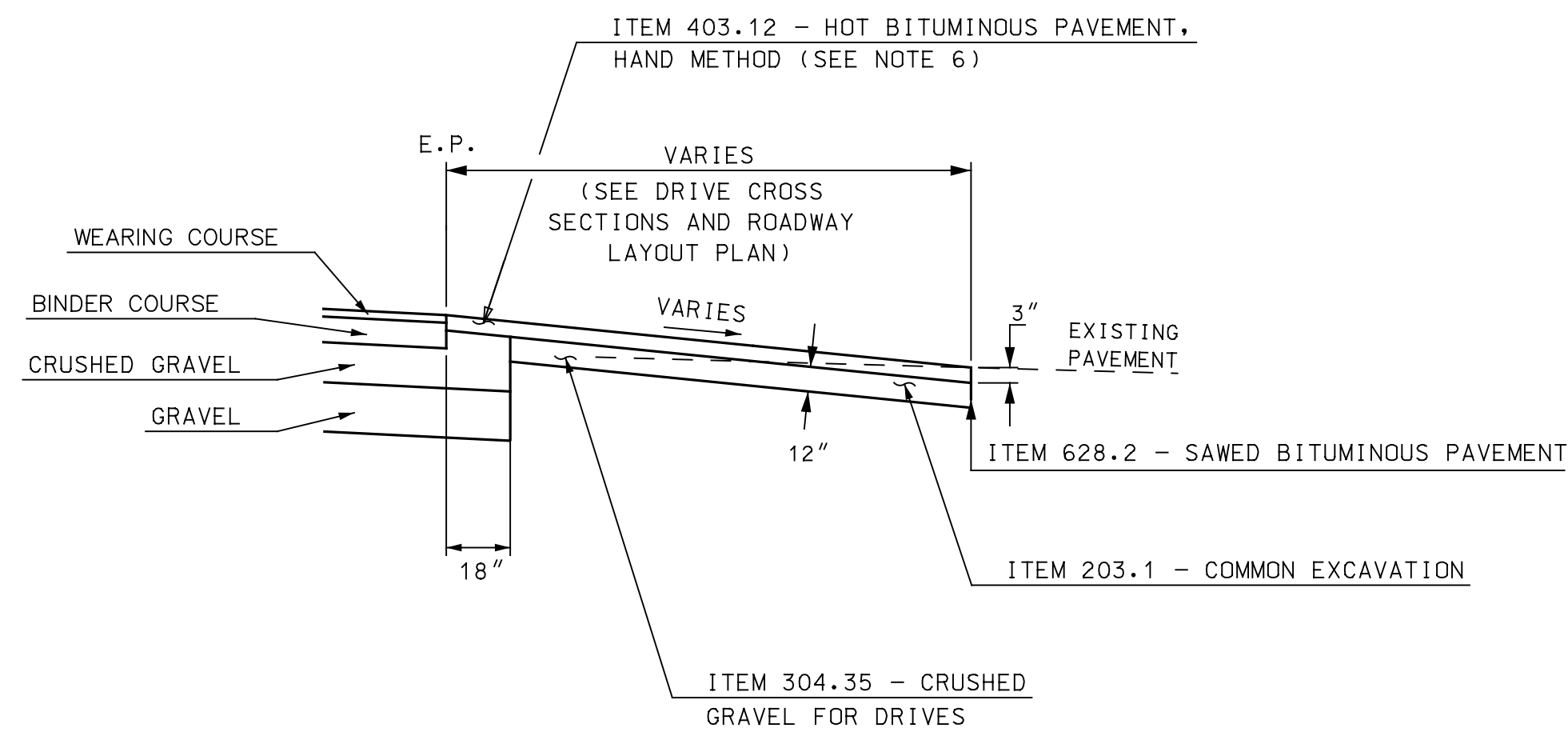
1. MATCH INTO EXISTING BRIDGE CONCRETE CURB IF PRESENT. SEE TYPICAL DECK SECTION FOR ADDITIONAL INFORMATION.
2. GRAVEL DEPTH VARIES. GRAVEL DEPTH SHALL BE 12" OUTSIDE OF BRIDGE STRUCTURES AND VARY OVER BRIDGE STRUCTURES. SEE BRIDGE TYPICAL DECK SECTION FOR ADDITIONAL INFORMATION.
3. TRANSITION FROM 2% TO 4% CROSS SLOPE BETWEEN STATIONS 101+70 AND 102+02, LT. MAINTAIN 4% CROSS SLOPE TO STATION 102+48, LT. TRANSITION FROM 4% TO 2% CROSS SLOPE BETWEEN STATIONS 102+48 TO 102+80, LT. SEE ROADWAY PROFILE FOR ADDITIONAL SUPERELEVATION INFORMATION.
4. GRANITE CURB REVEAL SHOULD BE 6" TYPICAL. EXISTING CONCRETE BRIDGE CURB REVEAL ALONG THE NORTH SIDE OF STRING BRIDGE SHOULD BE 7" TYPICAL. SEE ROADWAY LAYOUT, CURBING, SIGNING, & MARKING PLAN FOR ADDITIONAL CURB STATIONING AND REVEALS.
5. ITEM 403.6 - PAVEMENT JOINT ADHESIVE SHALL BE APPLIED TO ALL LONGITUDINAL JOINTS ON ALL PAVEMENT COURSES, INCLUDING ADJACENT TO CURBING.
6. CONSTRUCT GRASS PANEL FROM EXISTING RETAINING WALL TO TOP OF CURB AT A CONSTANT SLOPE TOWARD THE ROADWAY.

REV.	DESCRIPTION	DATE	CHKD BY	BY
APRIL 25, 2016	DESIGN BY: AGB			
	DRAWN BY: AGB			
	CHKD BY: SBH			
	SCALE: AS SHOWN			

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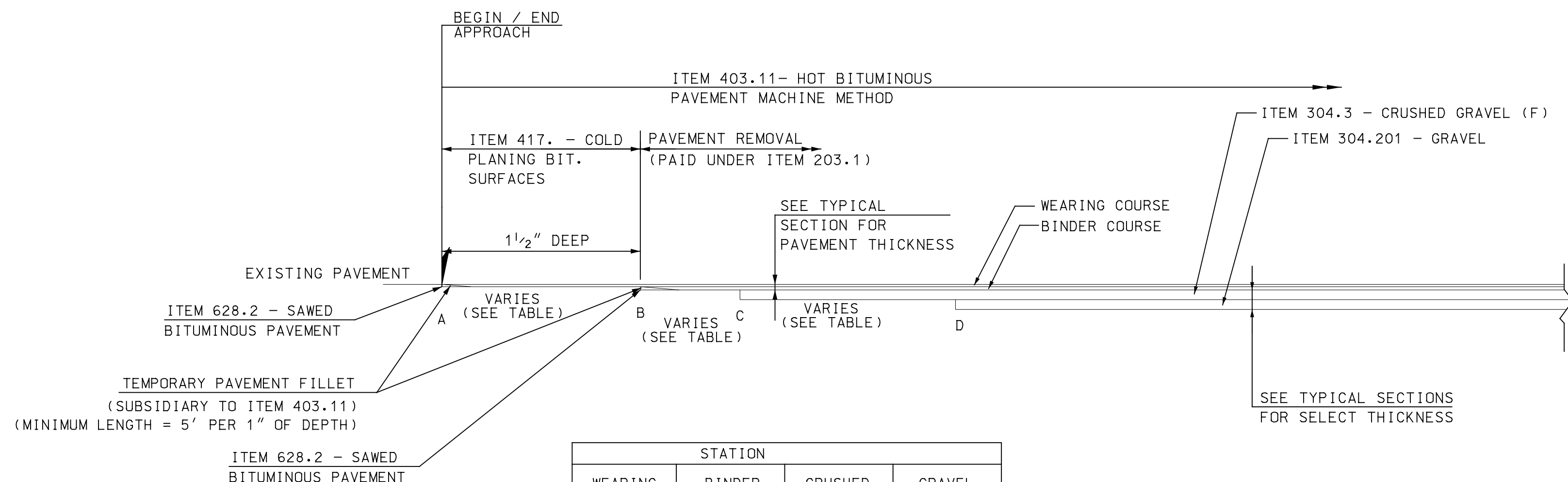
TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 ROADWAY TYPICAL SECTIONS

PROJECT NO.:	095222
FILE NAME:	095222TYP00
MODEL NAME:	095222TY01



DRIVEWAY MATCH DETAIL

NOT TO SCALE



PAVEMENT MATCH DETAIL

NOT TO SCALE

LOCATION	MARK	STATION			
		WEARING COURSE	BINDER COURSE	CRUSHED GRAVEL	GRAVEL
BEGIN PROJECT	A	100+41	100+66	100+76	100+86
END PROJECT		104+45	104+35	104+25	104+15

- GRADES OF MAJOR ENTRANCES BEYOND THE PLATFORM SHOULD NOT EXCEED 8% UNLESS OTHERWISE NOTED.
- GRADES OF OTHER DRIVES BEYOND THE PLATFORM SHOULD NOT EXCEED 15% UNLESS OTHERWISE NOTED.
- THE ALGEBRAIC DIFFERENCE BETWEEN TWO ADJACENT GRADES SHOULD NOT EXCEED 10%.
- PAVEMENT AND BASE COURSE DEPTHS ARE 12" CRUSHED GRAVEL WITH 3" HBP (HAND METHOD, PLACED IN 2 COURSES) FOR COMMERCIAL DRIVES WITH FREQUENT HEAVY TRUCK TRAFFIC THAT ARE ADJACENT TO ROADWAYS WITH CONVENTIONAL CRUSHED GRAVEL, GRAVEL, AND SAND STRUCTURAL BOX. IF THE DRIVE IS ADJACENT TO A ROADWAY WITH A CRUSHED STONE STRUCTURAL BOX, 9" OF CRUSHED STONE FINE GRADATION MAY BE SUBSTITUTED FOR THE 12" OF CRUSHED GRAVEL NOTED ABOVE.
- FOR DESIGN CRITERIA AND OTHER ADDITIONAL INFORMATION, REFER TO THE NHDOT DRIVEWAY MANUAL.
- FOR KIMBALL ISLAND DRIVE (STA. 102+25, LT.), REMOVE EXISTING PAVERS WITHIN THE DRIVEWAY RECONSTRUCTION LIMITS AND SAVE. ADD ADDITIONAL BASE MATERIAL AS NEEDED (MATCH GRADATION OF EXISTING MATERIAL), FINE GRADE DRIVE (SUBSIDIARY), AND RESET PAVERS. (PAID AS ITEM 900.1 - REMOVE AND RESET PAVERS).

PAVEMENT NOTES

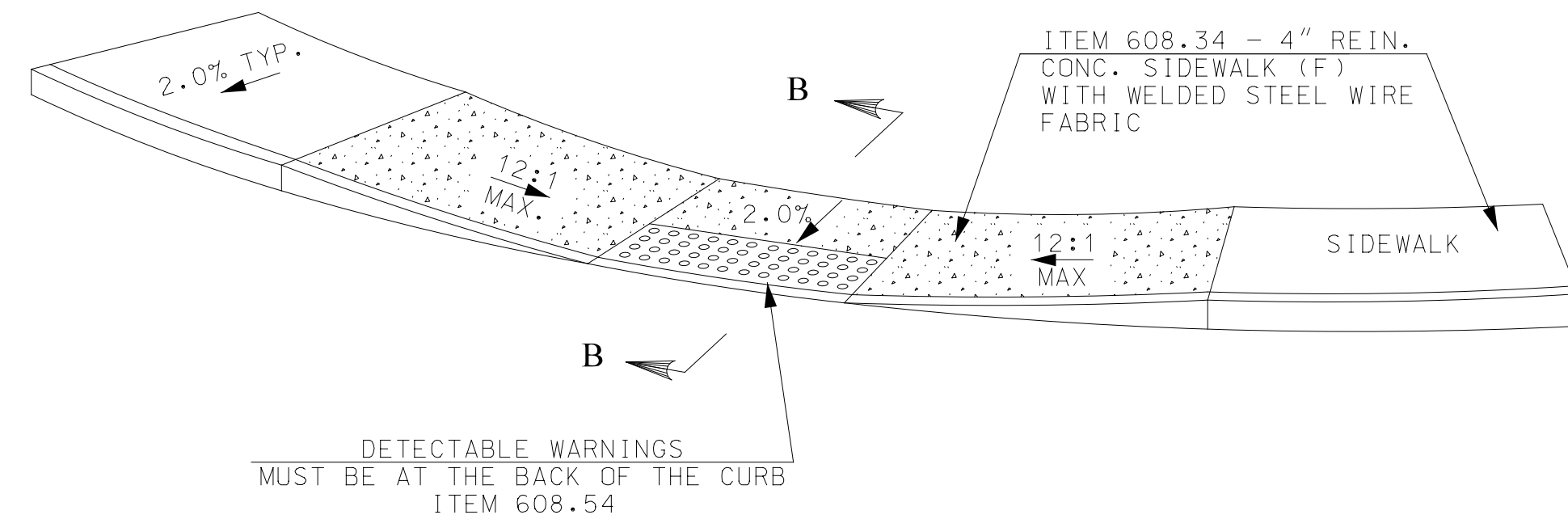
- ALL PAVING OPERATING SHALL BE PERFORMED BY A SUBCONTRACTOR THAT IS LISTED ON THE NHDOT PREQUALIFIED CONTRACTORS LIST IN THE CATEGORY OF PAVING.
- THE BITUMINOUS MIXTURE SHALL BE THOROUGHLY UNIFORMLY COMPACTED BY ROLLING. THE INITIAL ROLLING SHALL BE DONE WITH A STATIC STEEL-DRUM ROLLER. INTERMEDIATE ROLLING SHALL BE DONE BY A PNEUMATIC-TIRED ROLLER. FINAL ROLLING SHALL BE DONE WITH A STATIC-DRUM ROLLER. THE MINIMUM WEIGHT OF STATIC ROLLER SHALL BE 8 TONS.
- SUBMIT PAVEMENT MIX DESIGN TO ENGINEER FOR APPROVAL PRIOR TO PAVING. SEE SECTION 401 OF THE NHDOT STANDARD SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- THE GRADE OF ASPHALT CEMENT SHALL BE PG 64-28.
- THE FINAL PAVING OF THE BITUMINOUS WEARING SURFACE SHALL BE PLACED ALONG THE ENTIRE PROJECT LIMITS FOLLOWING THE COMPLETION OF PHASE 2.

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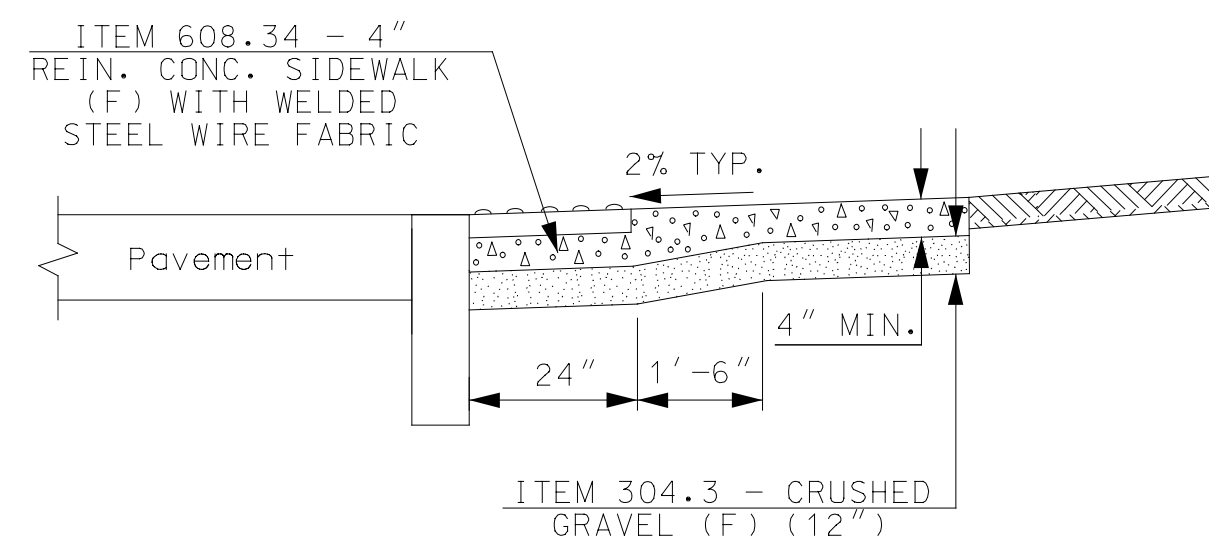
ENGINEER	
	DATE
	REV. DESCRIPTION
	APRIL 25, 2016
	DESIGN BY: AGB
	DRAWN BY: AGB
	CHKD. BY: SBH
	SCALE: AS SHOWN
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TOWN OF EXETER EXETER, NEW HAMPSHIRE	STRING BRIDGE OVER EXETER RIVER
MISCELLANEOUS DETAILS	
PROJECT NO.: 095222	
FILE NAME: 095222DTL00	
MODEL NAME: 095222DTL01	
SHEET NO.	
9	
SHEET 9 OF 42	

GENERAL NOTES FOR SIDEWALK RAMPS

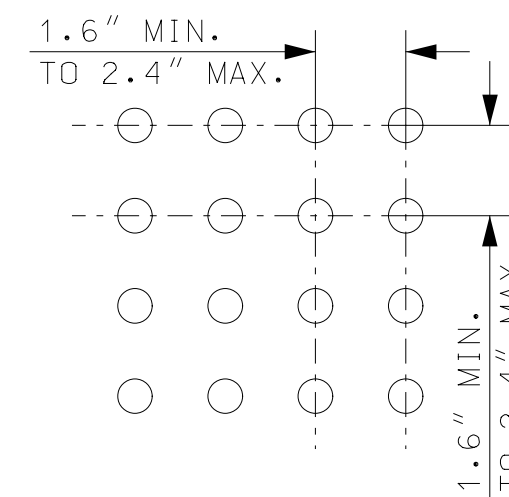
1. THE MAXIMUM RUNNING SLOPE OF ANY SIDEWALK CURB RAMP IS 12:1, THE MAXIMUM CROSS-SLOPE IS 2.0%. THE SLOPE OF THE LANDING SHALL NOT EXCEED 2.0% IN ANY DIRECTION.
2. TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. ROADWAY SHOULDER SLOPES ADJOINING SIDEWALK CURB RAMPS SHALL BE A MAXIMUM OF 3.8% WITHIN 2' OF THE ROADWAY CURBLINE.
3. INTERCEPT DRAINAGE ALONG THE CURB IN ADVANCE OF SIDEWALK CURB RAMPS OR LANDINGS, CATCH BASINS, MANHOLES, ETC. SHALL NOT BE LOCATED IN, OR AT THE BASE OF, SIDEWALK CURB RAMPS OR LANDINGS.
4. THE BOTTOM OF THE SIDEWALK CURB RAMP OR LANDING, EXCLUSIVE OF THE FLARED SIDES, SHALL BE WHOLLY CONTAINED WITHIN THE CROSSWALK MARKINGS.
5. PORTLAND CEMENT CONCRETE (EXPOSED AGGREGATE FINISH) RAMPS SHALL BE CONSTRUCTED AT THE CROSSWALK BETWEEN THE EAST BRIDGE AND THE LIBRARY DRIVE.
6. ITEM 608.54 - DETECTABLE WARNING DEVICES, CAST IRON, SHALL BE USED ON CONCRETE RAMPS WITH CROSSWALK MARKINGS OR AT STREET INTERSECTIONS, UNLESS OTHERWISE DIRECTED BY ENGINEER. EACH TACTILE WARNING STRIP PANEL SHALL HAVE A TRUNCATED DOMED SURFACE AT LEAST 2 FT IN WIDTH, MEASURED FROM THE BACK OF CURB TIP DOWN, AND 4 FT IN LENGTH MEASURED PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.
7. WELDED WIRE FABRIC SHALL CONFORM TO NHDOT SPECIFICATION 544.2 AND BE SUBSIDIARY TO ITEM 608.3 - 4" REINFORCED CONCRETE SIDEWALK (F).



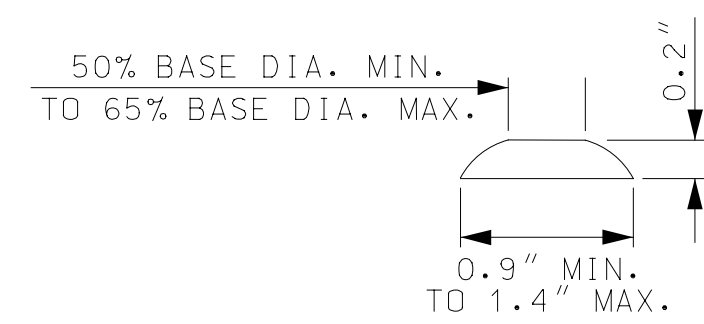
PARALLEL CURB RAMP DETAIL
NOT TO SCALE



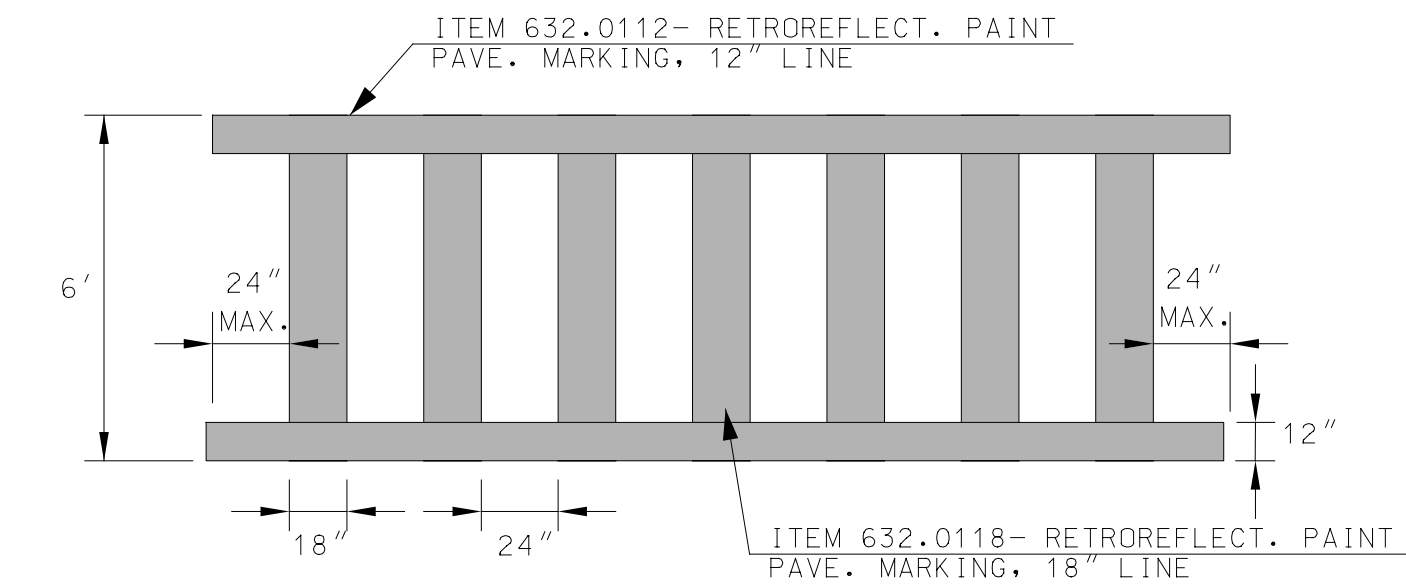
SECTION B-B
NOT TO SCALE



DOMES SPACING
NOT TO SCALE

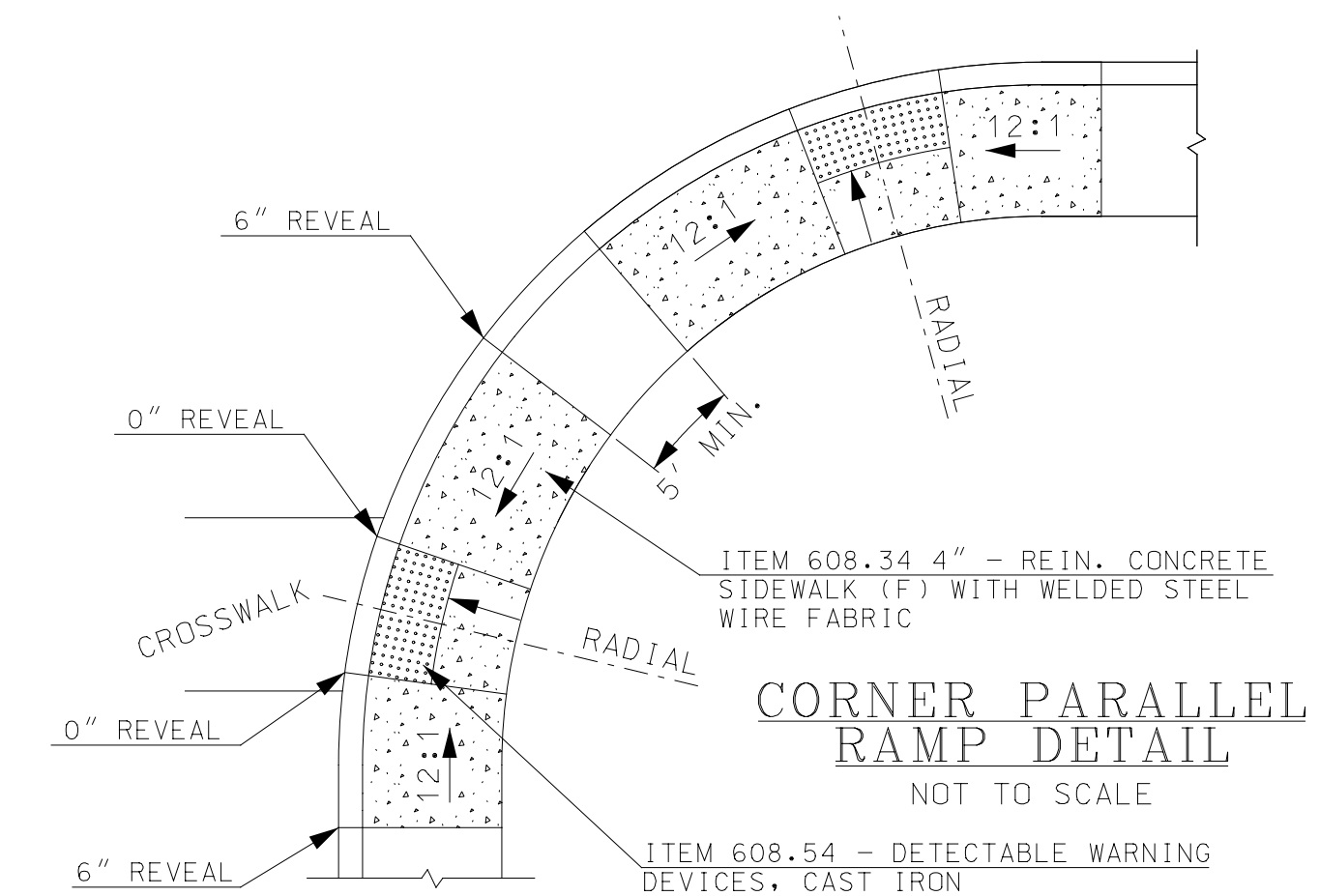


DOMES SECTION
NOT TO SCALE



NOTE: CONTRACTOR SHALL CONFIRM CROSSWALK PATTERN WITH THE TOWN PRIOR TO INSTALLATION.

CROSSWALK MARKINGS
NOT TO SCALE



CORNER PARALLEL RAMP DETAIL
NOT TO SCALE

REV.	DESCRIPTION	DATE	DRW CHG BY
APRIL 25, 2016	DESIGN BY: AGB		
	DRAWN BY: AGB		
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TOWN OF EXETER
EXETER, NEW HAMPSHIRE
STRING BRIDGE OVER EXETER RIVER
SIDEWALK DETAILS

PROJECT NO.: 095222
FILE NAME: 095222DTL00
MODEL NAME: 095222DTL02
SHEET NO.
10
SHEET 10 OF 42

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EROSION CONTROL STRATEGIES

1. STANDARD EROSION CONTROL SEQUENCING APPLICABLE TO ALL CONSTRUCTION PROJECTS:
 - 1.1. PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH DISTURBING ACTIVITIES. PERIMETER CONTROLS AND STABILIZED CONSTRUCTION EXITS SHALL BE INSTALLED AS SHOWN IN THE BMP MANUAL AND AS DIRECTED BY THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARER.
 - 1.2. EROSION, SEDIMENTATION CONTROL MEASURES AND INFILTRATION BASINS SHALL BE CLEANED, REPLACED AND AUGMENTED AS NECESSARY TO PREVENT SEDIMENTATION BEYOND PROJECT LIMITS THROUGHOUT THE PROJECT DURATION.
 - 1.3. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT (IF APPLICABLE) AND SECTION 645 OF THE NHDOT SPECIFICATIONS FOR ROAD AND BRIDGES CONSTRUCTION.
 - 1.4. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - (A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - (B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - (C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED;
 - (D) TEMPORARY SLOPE STABILIZATION CONFORMING TO TABLE 1 HAS BEEN PROPERLY INSTALLED
 - 1.5. ALL STOCKPILES SHALL BE CONTAINED WITH A PERIMETER CONTROL. IF THE STOCKPILE IS TO REMAIN UNDISTURBED FOR MORE THAN 14 DAYS, MULCHING WILL BE REQUIRED.
 - 1.6. A WATER TRUCK SHALL BE AVAILABLE TO CONTROL EXCESSIVE DUST AT THE DIRECTION OF THE ENGINEER.
 - 1.7. TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL REMAIN UNTIL THE AREA HAS BEEN PERMANENTLY STABILIZED.
 - 1.8. CONSTRUCTION PERFORMED ANY TIME BETWEEN NOVEMBER 30th AND MAY 1st OF ANY YEAR SHALL BE CONSIDERED WINTER CONSTRUCTION AND SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.
 - (A) ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15th, OR WHICH ARE DISTURBED AFTER OCTOBER 15th, SHALL BE STABILIZED IN ACCORDANCE WITH TABLE 1.
 - (B) ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15th, OR WHICH ARE DISTURBED AFTER OCTOBER 15th, SHALL BE STABILIZED TEMPORARILY WITH STONE OR IN ACCORDANCE WITH TABLE 1.
 - (C) AFTER NOVEMBER 30th INCOMPLETE ROAD SURFACES, WHERE WORK HAS STOPPED FOR THE SEASON, SHALL BE PROTECTED IN ACCORDANCE WITH TABLE 1.
 - (D) WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE PROJECT IS WITHOUT STABILIZATION AT ONE TIME, UNLESS A WINTER STABILIZATION PLAN HAS BEEN APPROVED BY THE ENGINEER.
 - (E) A SWPPP AMENDMENT SHALL BE SUBMITTED TO THE ENGINEER, FOR APPROVAL, ADDRESSING COLD WEATHER STABILIZATION (ENV-WQ 1505.05) NO LESS THAN 30 DAYS PRIOR TO THE COMMENCEMENT OF WORK SCHEDULED AFTER NOVEMBER 30th.

GENERAL CONSTRUCTION PLANNING AND SELECTION OF STRATEGIES TO CONTROL EROSION AND SEDIMENT ON CONSTRUCTION PROJECTS

2. PLAN ACTIVITIES TO ACCOUNT FOR SENSITIVE SITE CONDITIONS:
 - 2.1. CLEARLY FLAG AREAS TO BE PROTECTED IN THE FIELD AND PROVIDE CONSTRUCTION BARRIERS TO PREVENT TRAFFICKING OUTSIDE OF WORK AREAS.
 - 2.2. CONSTRUCTION SHALL BE SEQUENCED TO LIMIT THE DURATION AND AREA OF EXPOSED SOILS.
 - 2.3. PROTECT AND MAXIMIZE EXISTING NATIVE VEGETATION AND NATURAL FOREST BUFFERS BETWEEN CONSTRUCTION ACTIVITY AND SENSITIVE AREAS.
 - 2.4. WHEN WORK IS PERFORMED IN AND NEAR WATER COURSES, STREAM FLOW DIVERSION METHODS SHALL BE IMPLEMENTED PRIOR TO ANY EXCAVATION OR FILLING.
 - 2.5. WHEN WORK IS PERFORMED WITHIN 50 FEET OF SURFACE WATERS (WETLAND, OPEN WATER OR FLOWING WATER), PERIMETER CONTROL SHALL BE ENHANCED CONSISTENT WITH SECTION 2.1.2.1. OF THE 2012 NPDES CONSTRUCTION GENERAL PERMIT.
3. MINIMIZE THE AMOUNT OF EXPOSED SOIL:
 - 3.1. CONSTRUCTION SHALL BE SEQUENCED TO LIMIT THE DURATION AND AREA OF EXPOSED SOILS. MINIMIZE THE AREA OF EXPOSED SOIL AT ANY ONE TIME. PHASING SHALL BE USED TO REDUCE THE AMOUNT AND DURATION OF SOIL EXPOSED TO THE ELEMENTS AND VEHICLE TRACKING.
 - 3.2. UTILIZE TEMPORARY MULCHING OR PROVIDE ALTERNATE TEMPORARY STABILIZATION ON EXPOSED SOILS IN ACCORDANCE WITH TABLE 1.
 - 3.3. THE MAXIMUM AMOUNT OF DISTURBED EARTH SHALL NOT EXCEED A TOTAL OF 5 ACRES FROM MAY 1st THROUGH NOVEMBER 30th, OR EXCEED ONE ACRE DURING WINTER MONTHS, UNLESS THE CONTRACTOR DEMONSTRATES TO THE ENGINEER THAT THE ADDITIONAL AREA OF DISTURBANCE IS NECESSARY TO MEET THE CONTRACTORS CRITICAL PATH METHOD SCHEDULE (CPM), AND THE CONTRACTOR HAS ADEQUATE RESOURCES AVAILABLE TO ENSURE THAT ENVIRONMENTAL COMMITMENTS WILL BE MET.
4. CONTROL STORMWATER FLOWING ONTO AND THROUGH THE PROJECT:
 - 4.1. DIVERT OFF SITE RUNOFF OR CLEAN WATER AWAY FROM THE CONSTRUCTION ACTIVITY TO REDUCE THE VOLUME THAT NEEDS TO BE TREATED ON SITE.
 - 4.2. DIVERT STORM RUNOFF FROM UPSLOPE DRAINAGE AREAS AWAY FROM DISTURBED AREAS, SLOPES, AND AROUND ACTIVE WORK AREAS AND TO A STABILIZED OUTLET LOCATION.
 - 4.3. CONSTRUCT IMPERMEABLE BARRIERS AS NECESSARY TO COLLECT OR DIVERT CONCENTRATED FLOWS FROM WORK OR DISTURBED AREAS.
 - 4.4. STABILIZE, TO APPROPRIATE ANTICIPATED VELOCITIES, CONVEYANCE CHANNELS OR PUMPING SYSTEMS NEEDED TO CONVEY CONSTRUCTION STORMWATER TO BASINS AND DISCHARGE LOCATIONS PRIOR TO USE.
 - 4.5. DIVERT OFF-SITE WATER THROUGH THE PROJECT IN AN APPROPRIATE MANNER SO NOT TO DISTURB THE UPSTREAM OR DOWNSTREAM SOILS, VEGETATION OR HYDROLOGY BEYOND THE PERMITTED AREA.
5. PROTECT SLOPES:
 - 5.1. INTERCEPT AND DIVERT STORM RUNOFF FROM UPSLOPE DRAINAGE AREAS AWAY FROM UNPROTECTED AND NEWLY ESTABLISHED AREAS AND SLOPES TO A STABILIZED OUTLET OR CONVEYANCE.
 - 5.2. CONSIDER HOW GROUNDWATER SEEPAGE ON CUT SLOPES MAY IMPACT SLOPE STABILITY AND INCORPORATE APPROPRIATE MEASURES TO MINIMIZE EROSION.
 - 5.3. CONVEY STORMWATER DOWN THE SLOPE IN A STABILIZED CHANNEL OR SLOPE DRAIN.
 - 5.4. THE OUTER FACE OF THE FILL SLOPE SHOULD BE IN A LOOSE RUFFLED CONDITION PRIOR TO TURF ESTABLISHMENT. TOPSOIL OR HUMUS LAYERS SHALL BE TRACKED UP AND DOWN THE SLOPE, DISKED, HARROWED, DRAGGED WITH A CHAIN OR MAT, MACHINE-RAKED, OR HAND-WORKED TO PRODUCE A RUFFLED SURFACE.
6. ESTABLISH STABILIZED CONSTRUCTION EXITS:
 - 6.1. INSTALL AND MAINTAIN CONSTRUCTION EXITS, ANYWHERE TRAFFIC LEAVES A CONSTRUCTION SITE ONTO A PUBLIC RIGHT-OF-WAY.
 - 6.2. SWEEP ALL CONSTRUCTION RELATED DEBRIS AND SOIL FROM THE ADJACENT PAVED ROADWAYS AS NECESSARY.
7. PROTECT STORM DRAIN INLETS:
 - 7.1. DIVERT SEDIMENT LADEN WATER AWAY FROM INLET STRUCTURES TO THE EXTENT POSSIBLE.
 - 7.2. INSTALL SEDIMENT BARRIERS AND SEDIMENT TRAPS AT INLETS TO PREVENT SEDIMENT FROM ENTERING THE DRAINAGE SYSTEM.
 - 7.3. CLEAN CATCH BASINS, DRAINAGE PIPES, AND CULVERTS IF SIGNIFICANT SEDIMENT IS DEPOSITED.
 - 7.4. DROP INLET SEDIMENT BARRIERS SHOULD NEVER BE USED AS THE PRIMARY MEANS OF SEDIMENT CONTROL AND SHOULD ONLY BE USED TO PROVIDE AN ADDITIONAL LEVEL OF PROTECTION TO STRUCTURES AND DOWN-GRADIENT SENSITIVE RECEPTORS.
8. SOIL STABILIZATION:
 - 8.1. WITHIN THREE DAYS OF THE LAST ACTIVITY IN AN AREA, ALL EXPOSED SOIL AREAS, WHERE CONSTRUCTION ACTIVITIES ARE COMPLETE, SHALL BE STABILIZED.
 - 8.2. IN ALL AREAS, TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED IN ACCORDANCE WITH THE STABILIZATION REQUIREMENTS (SECTION 2.2) OF THE 2012 CGP. (SEE TABLE 1 FOR GUIDANCE ON THE SELECTION OF TEMPORARY SOIL STABILIZATION MEASURES.)
 - 8.3. EROSION CONTROL SEED MIX SHALL BE SOWN IN ALL INACTIVE CONSTRUCTION AREAS THAT WILL NOT BE PERMANENTLY SEEDED WITHIN TWO WEEKS OF DISTURBANCE AND PRIOR TO SEPTEMBER 15, OF ANY GIVEN YEAR, IN ORDER TO ACHIEVE VEGETATIVE STABILIZATION PRIOR TO THE END OF THE GROWING SEASON.
 - 8.4. SOIL TACKIFIERS MAY BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND REAPPLIED AS NECESSARY TO MINIMIZE SOIL AND MULCH LOSS UNTIL PERMANENT VEGETATION IS ESTABLISHED.
9. RETAIN SEDIMENT ON-SITE AND CONTROL DEWATERING PRACTICES:
 - 9.1. TEMPORARY SEDIMENT BASINS (CGP-SECTION 2.1.3.2) OR SEDIMENT TRAPS (ENV-WQ 1506.10) SHALL BE SIZED TO RETAIN, ON SITE, THE VOLUME OF A 2-YEAR 24-HOUR STORM EVENT FOR ANY AREA OF DISTURBANCE OR 3,600 CUBIC FEET OF STORMWATER RUNOFF PER ACRE OF DISTURBANCE, WHICHEVER IS GREATER. TEMPORARY SEDIMENT BASINS USED TO TREAT STORMWATER RUNOFF FROM AREAS GREATER THAN 5-ACRES OF DISTURBANCE SHALL BE SIZED TO ALSO CONTROL STORMWATER RUNOFF FROM A 10-YEAR 24 HOUR STORM EVENT. ON-SITE RETENTION OF THE 10-YEAR 24-HOUR EVENT IS NOT REQUIRED.
 - 9.2. CONSTRUCT AND STABILIZE DEWATERING INFILTRATION BASINS PRIOR TO ANY EXCAVATION THAT MAY REQUIRE DEWATERING.
 - 9.3. TEMPORARY SEDIMENT BASINS OR TRAPS SHALL BE PLACED AND STABILIZED AT LOCATIONS WHERE CONCENTRATED FLOW (CHANNELS AND PIPES) DISCHARGE TO THE SURROUNDING ENVIRONMENT FROM AREAS OF UNSTABILIZED EARTH DISTURBING ACTIVITIES.

10. ADDITIONAL EROSION AND SEDIMENT CONTROL GENERAL PRACTICES:
 - 10.1. USE TEMPORARY MULCHING, PERMANENT MULCHING, TEMPORARY VEGETATIVE COVER, AND PERMANENT VEGETATIVE COVER TO REDUCE THE NEED FOR DUST CONTROL. USE MECHANICAL SWEEPERS ON PAVED SURFACES WHERE NECESSARY TO PREVENT DUST BUILDUP. APPLY WATER, OR OTHER DUST INHIBITING AGENTS OR TACKIFIERS, AS APPROVED BY THE ENGINEER.
 - 10.2. ALL STOCKPILES SHALL BE CONTAINED WITH TEMPORARY PERIMETER CONTROLS. INACTIVE SOIL STOCKPILES SHOULD BE PROTECTED WITH SOIL STABILIZATION MEASURES (TEMPORARY EROSION CONTROL SEED MIX AND MULCH, SOIL BINDER) OR COVERED WITH ANCHORED TARPS.
 - 10.3. EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSPECTED IN ACCORDANCE WITH SECTION 645 OF NHDOT SPECIFICATIONS, WEEKLY AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.25 IN. OF RAIN PER 24-HOUR PERIOD. EROSION AND SEDIMENT CONTROL MEASURES WILL ALSO BE INSPECTED IN ACCORDANCE WITH THE EPA CONSTRUCTION GENERAL PERMIT.
 - 10.4. THE CONTRACTOR SHOULD UTILIZE STORM DRAIN INLET PROTECTION TO PREVENT SEDIMENT FROM ENTERING A STORM DRAINAGE SYSTEM PRIOR TO THE PERMANENT STABILIZATION OF THE CONTRIBUTING DISTURBED AREA.
 - 10.5. PERMANENT STABILIZATION MEASURES WILL BE CONSTRUCTED AND MAINTAINED IN LOCATIONS AS SHOWN ON THE CONSTRUCTION PLANS TO STABILIZE AREAS. VEGETATIVE STABILIZATION SHALL NOT BE CONSIDERED PERMANENTLY STABILIZED UNTIL VEGETATIVE GROWTH COVERS AT LEAST 85% OF THE DISTURBED AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROL FOR ONE YEAR AFTER PROJECT COMPLETION.
 - 10.6. CATCH BASINS: CARE SHALL BE TAKEN TO ENSURE THAT SEDIMENTS DO NOT ENTER ANY EXISTING CATCH BASINS DURING CONSTRUCTION. THE CONTRACTOR SHALL PLACE TEMPORARY STONE INLET PROTECTION OVER INLETS IN AREAS OF SOIL DISTURBANCE THAT ARE SUBJECT TO SEDIMENT CONTAMINATION.
 - 10.7. TEMPORARY AND PERMANENT DITCHES SHALL BE CONSTRUCTED, STABILIZED AND MAINTAINED IN A MANNER THAT WILL MINIMIZE SCOUR. TEMPORARY AND PERMANENT DITCHES SHALL BE DIRECTED TO DRAIN TO SEDIMENT BASINS OR STORM WATER COLLECTION AREAS.
 - 10.8. WINTER EXCAVATION AND EARTHWORK ACTIVITIES NEED TO BE LIMITED IN EXTENT AND DURATION, TO MINIMIZE POTENTIAL EROSION AND SEDIMENTATION IMPACTS. THE AREA OF EXPOSED SOIL SHALL BE LIMITED TO ONE ACRE, OR THAT WHICH CAN BE STABILIZED AT THE END OF EACH DAY UNLESS A WINTER CONSTRUCTION PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, IS REVIEWED AND APPROVED BY THE ENGINEER.
 - 10.9. CHANNEL PROTECTION MEASURES SHALL BE SUPPLEMENTED WITH PERIMETER CONTROL MEASURES WHEN THE DITCH LINES OCCUR AT THE BOTTOM OF LONG FILL SLOPES. THE PERIMETER CONTROLS SHALL BE INSTALLED ON THE FILL SLOPE TO MINIMIZE THE POTENTIAL FOR FILL SLOPE SEDIMENT DEPOSITS IN THE DITCH LINE.

BEST MANAGEMENT PRACTICES (BMP) BASED ON AMOUNT OF OPEN CONSTRUCTION AREA

11. THE CONTRACTOR SHALL COMPLY WITH RSA 485-A:17 AND ENV-WQ 1500; ALTERATION OF TERRAIN FOR CONSTRUCTION AND USE ALL CONVENTIONAL BMP STRATEGIES.
12. THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROLS AND BMPs PER PLANS AND SPECIFICATIONS.

TABLE 1
GUIDANCE ON SELECTING TEMPORARY SOIL STABILIZATION MEASURES

APPLICATION AREAS	DRY MULCH METHODS				HYDRAULICALLY APPLIED MULCHES ²				ROLLED EROSION CONTROL BLANKETS ³			
	HMT	WC	SG	CB	HM	SMM	BFM	FRM	SNSB	DNSB	DNSCB	DNCB
SLOPES ¹												
STEEPER THAN 2:1	NO	NO	YES	NO	NO	NO	NO	YES	NO	NO	NO	YES
2:1 SLOPE	YES ¹	YES ¹	YES	YES	NO	NO	YES	YES	NO	YES	YES	YES
3:1 SLOPE	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES	YES	NO
4:1 SLOPE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO
WINTER STABILIZATION	4T/AC	YES	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES
CHANNELS												
LOW FLOW CHANNELS	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES
HIGH FLOW CHANNELS	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES

ABBREV.	STABILIZATION MEASURE	ABBREV.	STABILIZATION MEASURE	ABBREV.	STABILIZATION MEASURE
HMT	HAY MULCH & TACK	HM	HYDRAULIC MULCH	SNSB	SINGLE NET STRAW BLANKET
WC	WOOD CHIPS	SMM	STABILIZED MULCH MATRIX	DNSB	DOUBLE NET STRAW BLANKET
SG	STUMP GRINDINGS	BFM	BONDED FIBER MATRIX	DNSCB	2 NET STRAW-COCONUT BLANKET
CB	COMPOST BLANKET	FRM	FIBER REINFORCED MEDIUM	DNCB	2 NET COCONUT BLANKET

- NOTES:
1. ALL SLOPE STABILIZATION OPTIONS ASSUME A SLOPE LENGTH ≤ 10 TIMES THE HORIZONTAL DISTANCE COMPONENT OF THE SLOPE, IN FEET.
 2. PRODUCTS CONTAINING POLYACRYLAMIDE (PAM) SHALL NOT BE APPLIED DIRECTLY TO OR WITHIN 100 FEET OF ANY SURFACE WATER WITHOUT PRIOR WRITTEN APPROVAL FROM THE NH DEPARTMENT OF ENVIRONMENTAL SERVICES.
 3. ALL EROSION CONTROL BLANKETS SHALL BE MADE WITH WILDLIFE FRIENDLY BIODEGRADABLE NETTING.

ENGINEER

REV.	DESCRIPTION	DRW	CHKD	DATE

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TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 EROSION CONTROL STRATEGIES

PROJECT NO.:	095222
FILE NAME:	095222DTL00
MODEL NAME:	095222DTL03

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EROSION CONTROL MIX AND COMPOST SOCK GENERAL NOTES

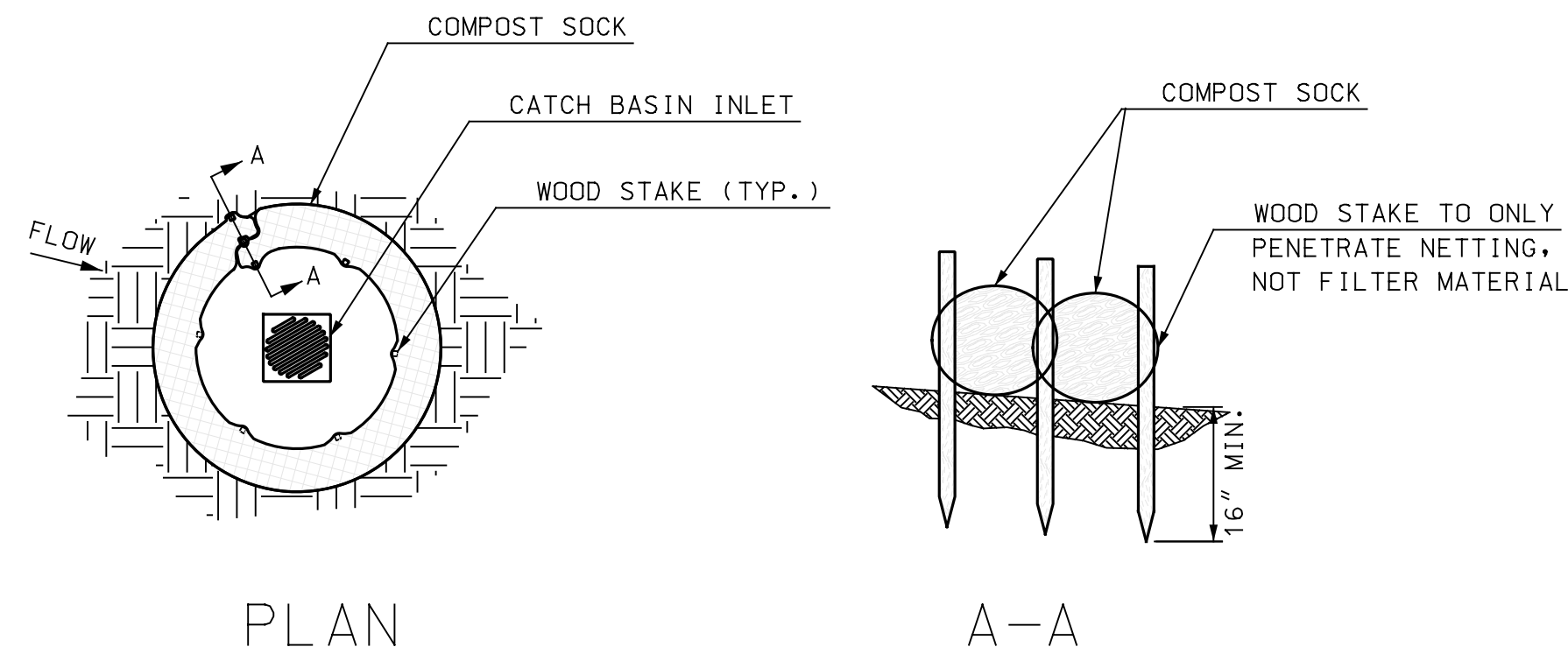
1. EROSION CONTROL MIX CAN BE MANUFACTURED ON OR OFF THE PROJECT SITE. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

COMPOSITION

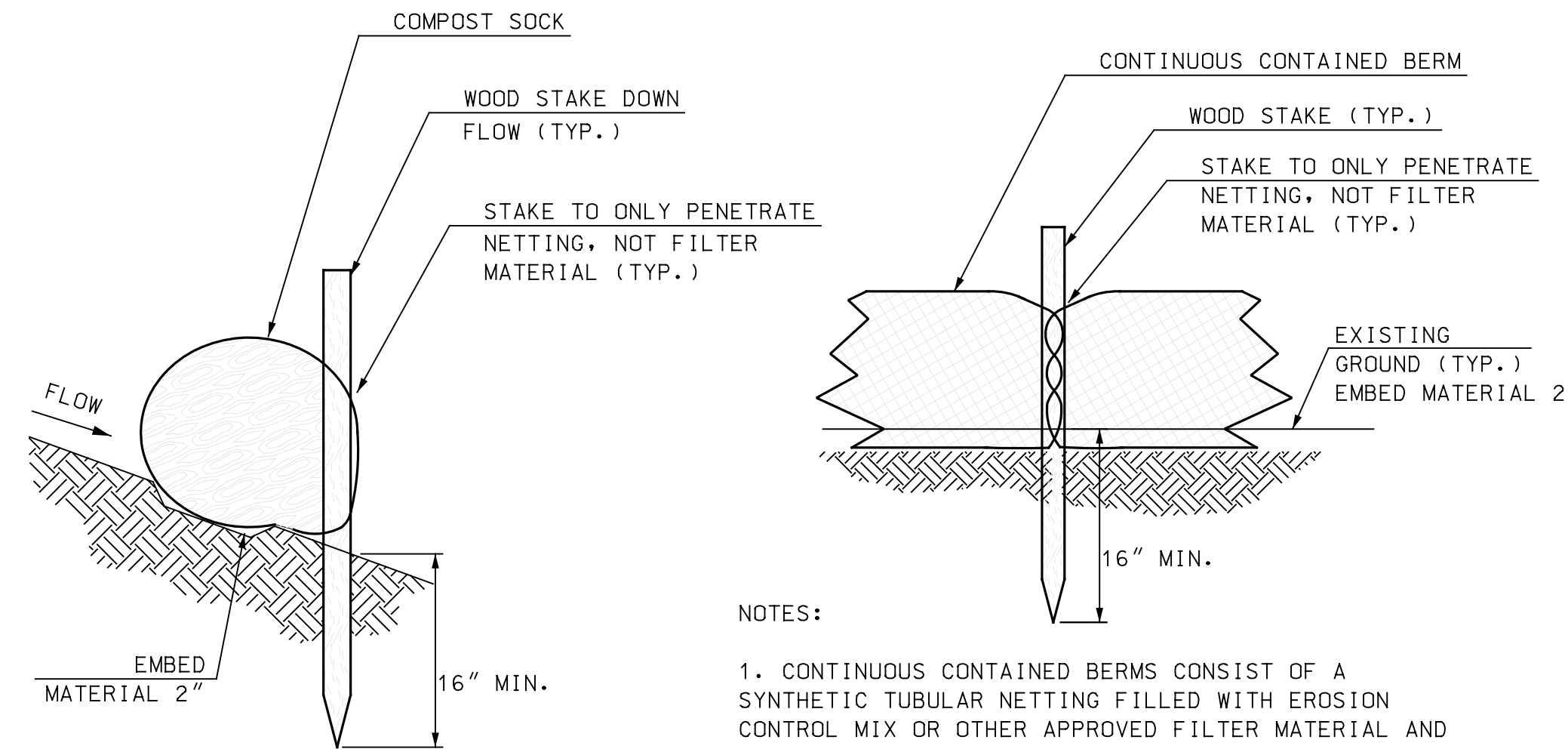
2. EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS:
 - THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80 AND 100%, DRY WEIGHT BASIS.
 - PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70%, MAXIMUM OF 85%, PASSING A 0.75" SCREEN.
 - THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
 - LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.
 - SOLUBLE SALTS CONTENT SHALL BE * 4.0 MMHOS/CM.
 - THE PH SHOULD FALL BETWEEN 5.0 AND 8.0.

INSTALLATION

3. THE BARRIER MUST BE PLACED ALONG A RELATIVELY LEVEL CONTOUR. IT MAY BE NECESSARY TO CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES THAT WOULD ENABLE FINES TO WASH UNDER THE BARRIER THROUGH THE GRASS BLADES OR PLANT STEMS.
4. ON SLOPES LESS THAN 5% OR AT THE BOTTOM OF STEEPER SLOPES (2:1) UP TO 20 FEET LONG, THE BARRIER MUST BE A MINIMUM OF 12" HIGH, AS MEASURED ON THE UPHILL SIDE OF THE BARRIER, AND A MINIMUM OF TWO FEET WIDE (FOR EROSION CONTROL MIX BERMS). ON LONGER OR STEEPER SLOPES, THE EROSION CONTROL MIX BERMS SHOULD BE WIDER TO ACCOMMODATE THE ADDITIONAL RUNOFF.
5. FROZEN GROUND, OUTCROPS OF BEDROCK AND VERY ROOTED FORESTED AREAS ARE LOCATIONS WHERE BERMS OF EROSION CONTROL MIX ARE MOST PRACTICAL AND EFFECTIVE. OTHER BMPs SHOULD BE USED AT LOW POINTS OF CONCENTRATED RUNOFF, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS, AND AT THE BOTTOM OF STEEP PERIMETER SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM (I.E., A LARGE UP GRADIENT CONTRIBUTING WATERSHED).



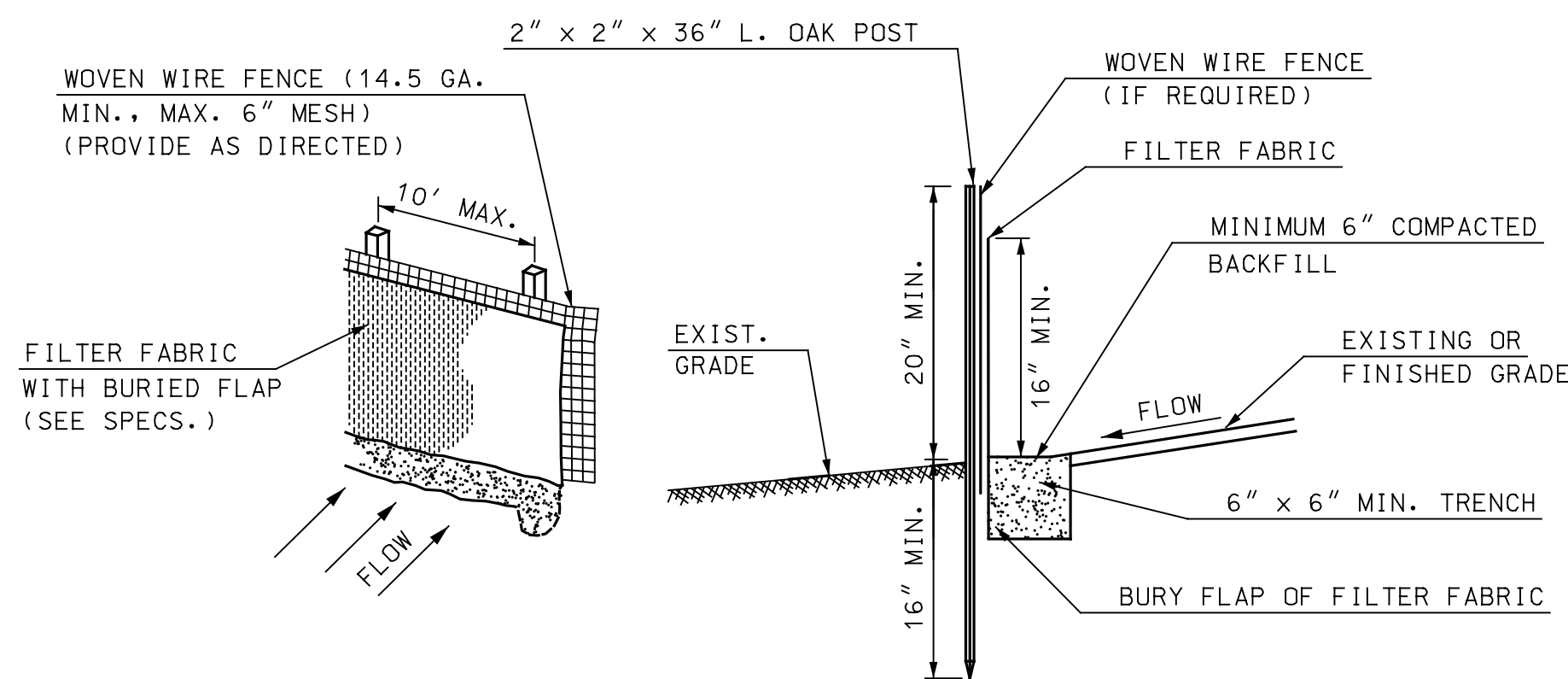
PLAN
INLET PROTECTION AT
CATCH BASIN



PLACED ON THE CONTOUR

COMPOST SOCK FOR PERIMETER BERM ITEM 645.512

NOT TO SCALE

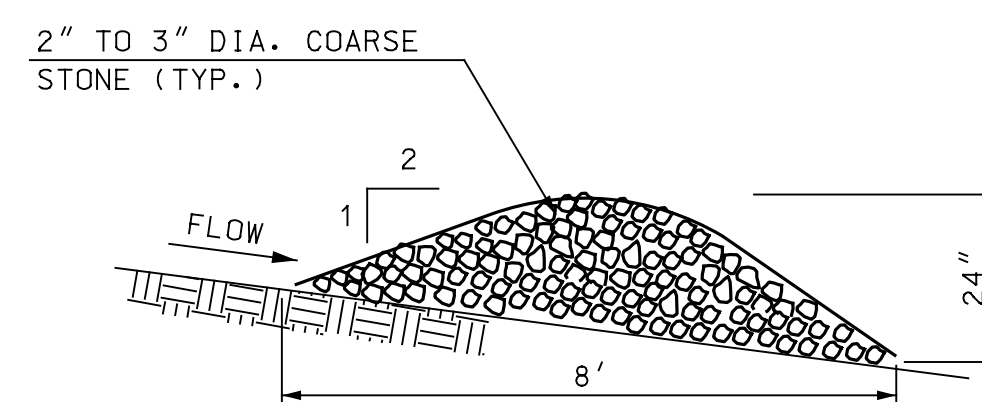


NOTES:

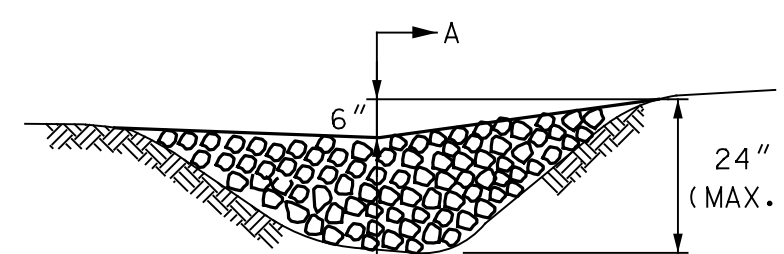
1. SPACING OF WOOD FENCE POSTS NOT TO EXCEED 10'-0".
2. SILT FENCE SHALL BE INSTALLED BEFORE ANY EARTH REMOVAL OR EXCAVATION TAKES PLACE.
3. WOVEN WIRE FENCE (IF REQUIRED) TO BE FASTENED SECURELY TO POSTS WITH WIRE TIES OR STAPLES AT TOP, MIDPOINT AND BOTTOM.
4. FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE.
5. OVERLAP BY 6", FOLD AND STAPLE ADJOINING SECTIONS OF FILTER FABRIC.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND THE MATERIAL REMOVED WHEN "BULGES" DEVELOP. DO NOT DEPOSIT MATERIAL NEAR WETLANDS OR WATERCOURSES.
7. FILTER FABRIC SHALL BE ENTRENCHED 6" MIN. BELOW EXISTING OR FINISHED GRADE.

SILT FENCE DETAIL ITEM 645.531

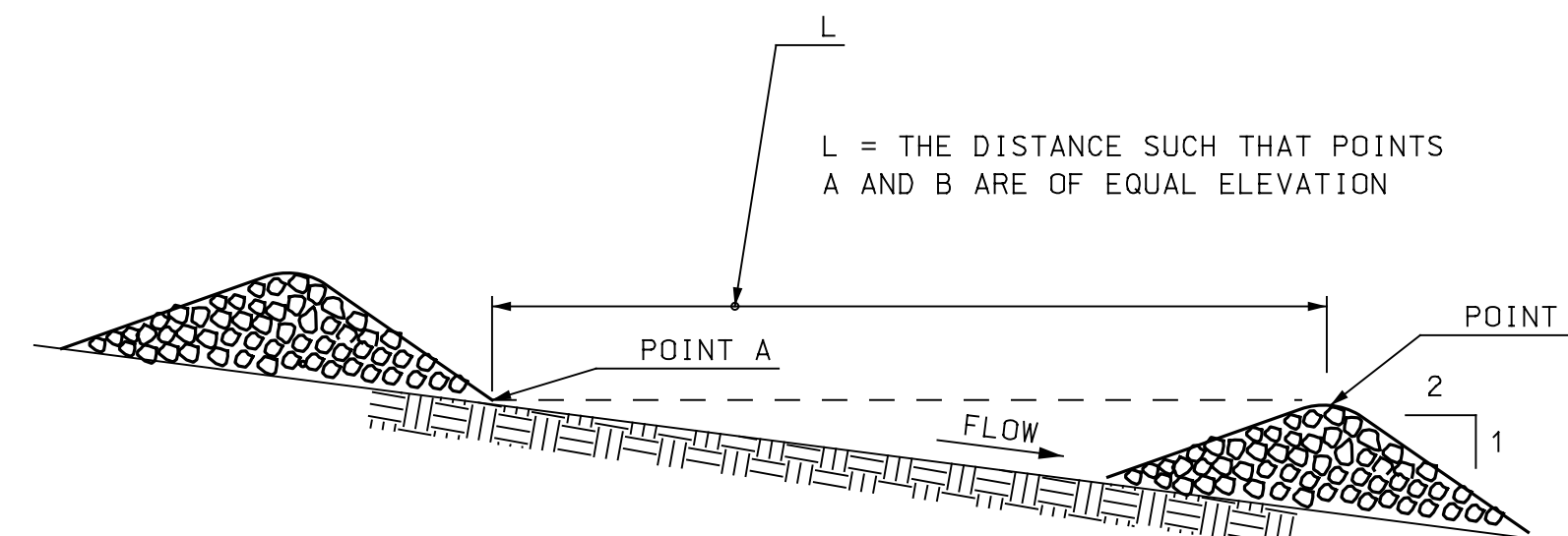
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SECTION A-A

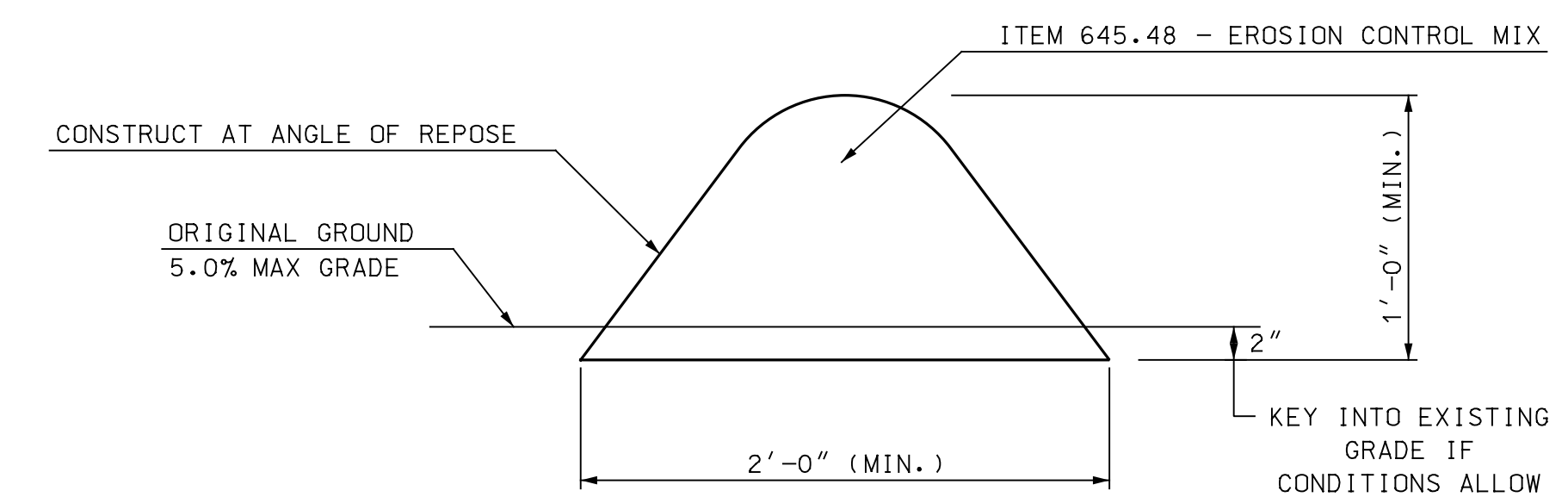


CROSS SECTION



SPACING BETWEEN CHECK DAMS STONE CHECK DAM DETAIL ITEM 645.3

NOT TO SCALE



EROSION CONTROL MIX BERM DETAIL

NOT TO SCALE

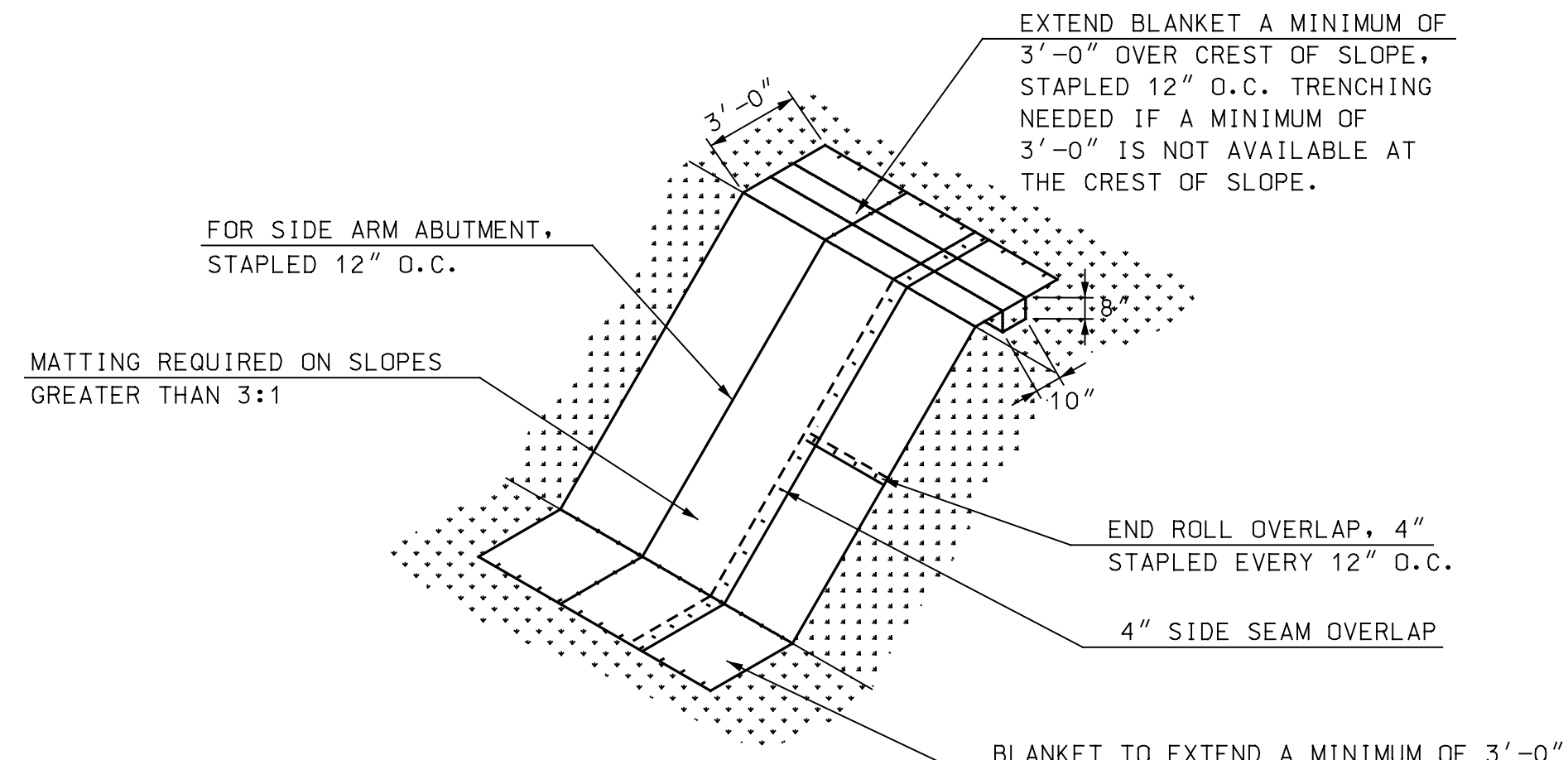
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APRIL 25, 2016	AGB				
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TOWN OF EXETER
EXETER, NEW HAMPSHIRE
STRING BRIDGE OVER EXETER RIVER
EROSION CONTROL DETAILS (1 OF 2)

PROJECT NO.:	095222
FILE NAME:	095222DTL00
MODEL NAME:	095222DTL04
SHEET NO.	12
	SHEET 12 OF 42



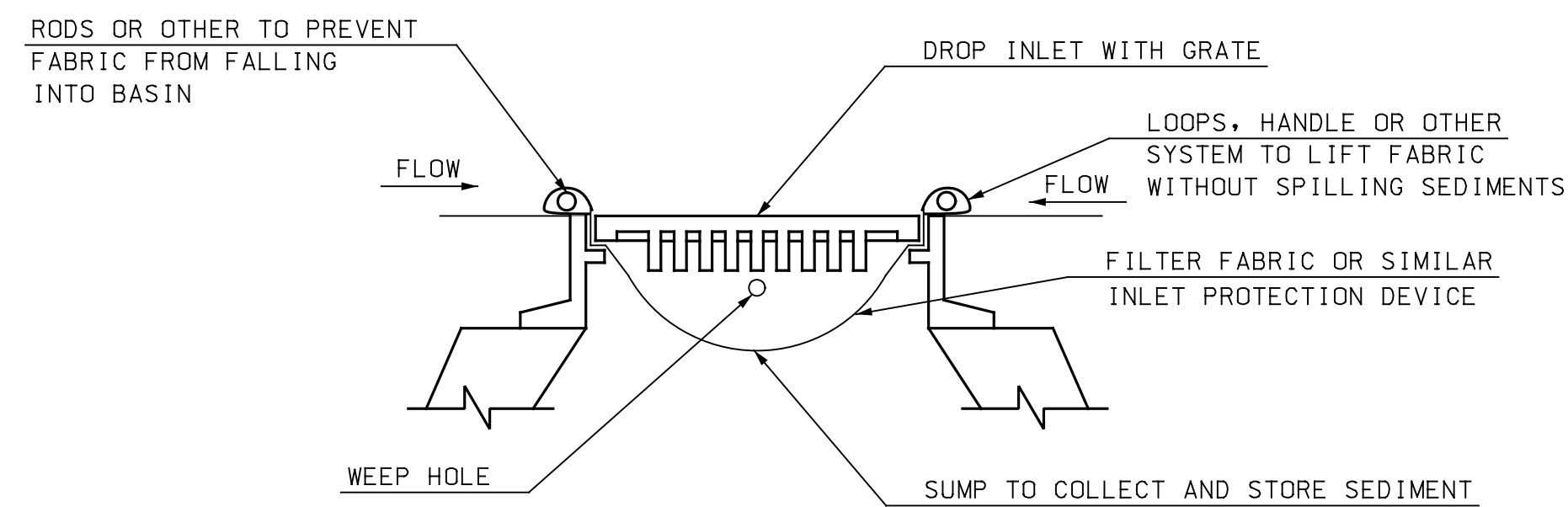
NOTES:

1. BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE.
2. DIMENSIONS GIVEN IN THE DRAWINGS ARE EXAMPLES; DEVICE SHOULD BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
3. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
4. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
5. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH.

EROSION CONTROL BLANKET DETAIL

ITEM 645.44

NOT TO SCALE

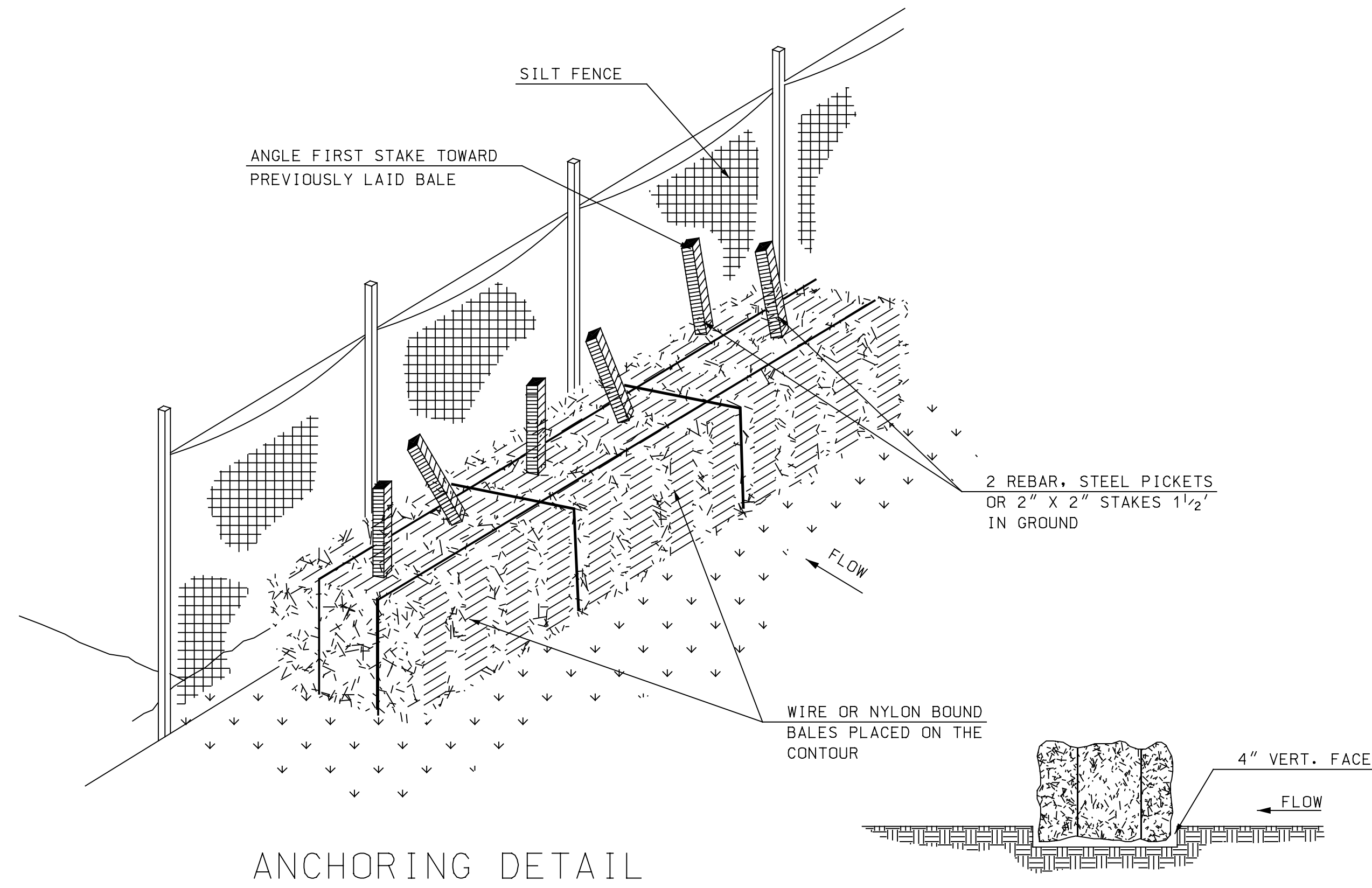


NOTES:

1. CONTRACTOR TO CLEAN AFTER EVERY STORM. IF THE BARRIER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PASSES FILTERED WATER, THE SEDIMENT SHALL BE REMOVED AND THE BARRIER SHALL BE REPLACED. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
2. THE DEVICE SHALL BE REMOVED WHEN THE DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED.

FILTER FABRIC INLET PROTECTION AT CATCH BASIN

NOT TO SCALE



ANCHORING DETAIL

EMBEDDING DETAIL

CONSTRUCTION SPECIFICATIONS:

1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR REBAR DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARDS PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE, AND AFTER APPROVAL OF THE ENGINEER.

HAY BALE DETAIL

NOT TO SCALE

ENGINEER

REV.	DESCRIPTION	DRW. CHKD. BY	DATE
APRIL 25, 2016	DESIGN BY: AGB		
	DRAWN BY: AGB		
	CHKD. BY: SBH		
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TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 EROSION CONTROL DETAILS (2 OF 2)

PROJECT NO.:	095222
FILE NAME:	095222DTL00
MODEL NAME:	095222DTL06

SHEET NO.
13
 SHEET 13 OF 42

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DRAINAGE NOTES:

1 STA. 101+19.50, LT. 8.90' TO STA. 100+95.00, LT. 9.30'
 REMOVE 22 LF x 12" CMP (SUBSID.)
 REMOVE CB (SUBSID.)
 CONST. 22 LF x 12" PE PIPE (TYPE S) (ITEM 603.82212)
 12" OUTLET ELEV. = FIELD VERIFY (MATCH EXISTING)
 CONST. CB-B w/4' SUMP @ +95.00, LT. 9.30'
 12" INV. OUT = FIELD VERIFY (MATCH EXISTING)
 CONST. OUTLET PIPE HOOD
 GRATE ELEV. = 23.48

2 STA. 101+19.70, RT. 5.70' TO STA. 100+95.00, RT. 10.30'
 REMOVE 24 LF x 10" CLAY (SUBSID.)
 REMOVE CB (SUBSID.)
 CONST. 23 LF x 10" PE PIPE (TYPE S) (ITEM 603.82210)
 10" OUTLET ELEV. = FIELD VERIFY (MATCH EXISTING)
 CONST. CB-B w/ECCENTRIC CONE & 4' SUMP @ +95.00, RT. 10.30'
 12" INV. IN = 19.24 (MATCH EXISTING)
 10" INV. OUT = 19.24 (MATCH EXISTING)
 CONST. OUTLET PIPE HOOD
 GRATE ELEV. = 23.55

3 STA. 101+89.20, LT. 12.00'
 EXISTING PIPE OUTLET UNKNOWN
 REMOVE EXISTING PIPE (SUBSID.)
 REMOVE CB (SUBSID.)
 CONST. NEW PLASTIC PIPE (MATCH SIZE, LENGTH, & LOCATION OF EXISTING)
 OUTLET ELEV. = FIELD VERIFY (MATCH EXISTING)
 CONST. CB-B w/4' SUMP @ +89.20, LT. 12.00'
 INV. OUT = 19.16 (MATCH EXISTING)
 CONST. OUTLET PIPE HOOD
 GRATE ELEV. = 22.66

103+30.40, RT. 11.70' TO STA. 103+47.00, RT. 10.15'
 OVE 16 LF x 6" CIP (SUBSID.)
 OVE CB (SUBSID.)
 ST. 8 LF x 8" PE PIPE (TYPE S) (ITEM 603.82208) (CONN. TO EXIST. PIPE IS SUBSID.)
 ST. 15 LF x 6" PE PIPE (TYPE S) (ITEM 603.82206) (CONFIRM & MATCH EXISTING)
 6" OUTLET ELEV. = FIELD VERIFY (MATCH EXISTING)
 ST. 5' DIA. CB-B w/4' SUMP (DOUBLE GRATE) @ +47.00, RT. 10.15'
 8" INV. IN (NE) = 18.09 (MATCH EXISTING)
 8" INV. IN (SE) = 17.09 (MATCH EXISTING) (CONN. TO STRUCTURE SUBSID.)
 6" INV. OUT = 16.89 (MATCH EXISTING)
 CONST. OUTLET PIPE HOOD
 GRATE ELEV. = 21.60
 DE ROADWAY LOW POINT TO CATCH BASIN

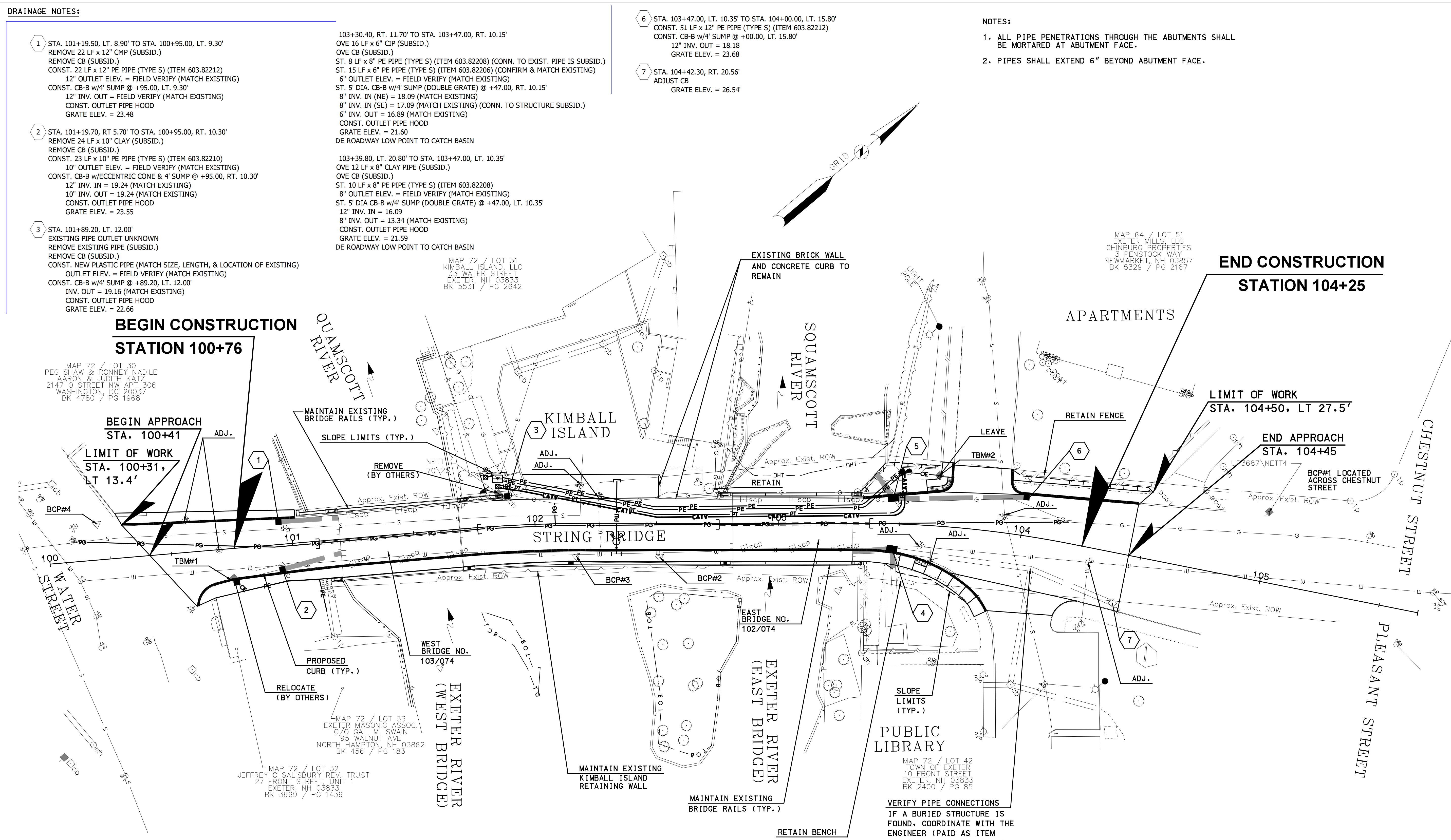
103+39.80, LT. 20.80' TO STA. 103+47.00, LT. 10.35'
 OVE 12 LF x 8" CLAY PIPE (SUBSID.)
 OVE CB (SUBSID.)
 ST. 10 LF x 8" PE PIPE (TYPE S) (ITEM 603.82208)
 8" OUTLET ELEV. = FIELD VERIFY (MATCH EXISTING)
 ST. 5' DIA. CB-B w/4' SUMP (DOUBLE GRATE) @ +47.00, LT. 10.35'
 12" INV. IN = 16.09
 8" INV. OUT = 13.34 (MATCH EXISTING)
 CONST. OUTLET PIPE HOOD
 GRATE ELEV. = 21.59
 DE ROADWAY LOW POINT TO CATCH BASIN

6 STA. 103+47.00, LT. 10.35' TO STA. 104+00.00, LT. 15.80'
 CONST. 51 LF x 12" PE PIPE (TYPE S) (ITEM 603.82212)
 CONST. CB-B w/4' SUMP @ +00.00, LT. 15.80'
 12" INV. OUT = 18.18
 GRATE ELEV. = 23.68

7 STA. 104+42.30, RT. 20.56'
 ADJUST CB
 GRATE ELEV. = 26.54'

NOTES:

- ALL PIPE PENETRATIONS THROUGH THE ABUTMENTS SHALL BE MORTARED AT ABUTMENT FACE.
- PIPES SHALL EXTEND 6" BEYOND ABUTMENT FACE.



MAP 72 / LOT 30
 PEG SHAW & RONNEY NADILE
 AARON & JUDITH KATZ
 2147 O STREET NW APT 306
 WASHINGTON, DC 20037
 BK 4780 / PG 1968

MAP 72 / LOT 31
 KIMBALL ISLAND, LLC
 33 WATER STREET
 EXETER, NH 03833
 BK 5531 / PG 2642

MAP 64 / LOT 51
 EXETER MILLS, LLC
 CHINBURG PROPERTIES
 3 PENSTOCK WAY
 NEWMARKET, NH 03857
 BK 5329 / PG 2167

MAP 72 / LOT 33
 EXETER MASONIC ASSOC.
 C/O GAIL M. SWAIN
 95 WALNUT AVE
 NORTH HAMPTON, NH 03862
 BK 456 / PG 183

MAP 72 / LOT 32
 JEFFREY C SALISBURY REV. TRUST
 27 FRONT STREET, UNIT 1
 EXETER, NH 03833
 BK 3669 / PG 1439

MAP 72 / LOT 42
 TOWN OF EXETER
 10 FRONT STREET
 EXETER, NH 03833
 BK 2400 / PG 85

VERTICAL CONTROL			
NUMBER	ELEVATION	STATION & OFFSET	DESCRIPTION
TBM#1	25.38	100+75.36 RT 12.95'	SPIKE IN POLE
TBM#2	22.86	103+64.90 LT 20.84'	NAIL IN POLE

HORIZONTAL CONTROL					
NUMBER	NORTHING	EASTING	ELEVATION	STATION & OFFSET*	DESCRIPTION
BCP#1	176739.5470	1177464.4900	40.96	105+94.13, LT 45.70'	IRON ROD SET 1
BCP#2	176463.0053	1177252.9174	22.91	102+51.37, RT 14.04'	MAGNAIL SET 4
BCP#3	176437.0629	1177230.3961	23.11	102+16.88, RT 13.52'	MAGNAIL SET 100
BCP#4	176294.9380	1177093.2662	27.66	100+20.61, LT 14.70'	MAGNAIL SET 101

* INFORMATION PROVIDED FOR GENERAL LOCATION ONLY

NOTES:

- SEE ROADWAY LAYOUT, CURBING, SIGNING, & MARKING PLAN FOR ALIGNMENT AND PAVEMENT LAYOUT INFORMATION.
- SEE UTILITY PLANS FOR ADDITIONAL UTILITY INFORMATION.



ENGINEER	
REV.	DESCRIPTION
APRIL 25, 2016	AGB
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DRAWN BY:	SBH
CHKD. BY:	AS SHOWN
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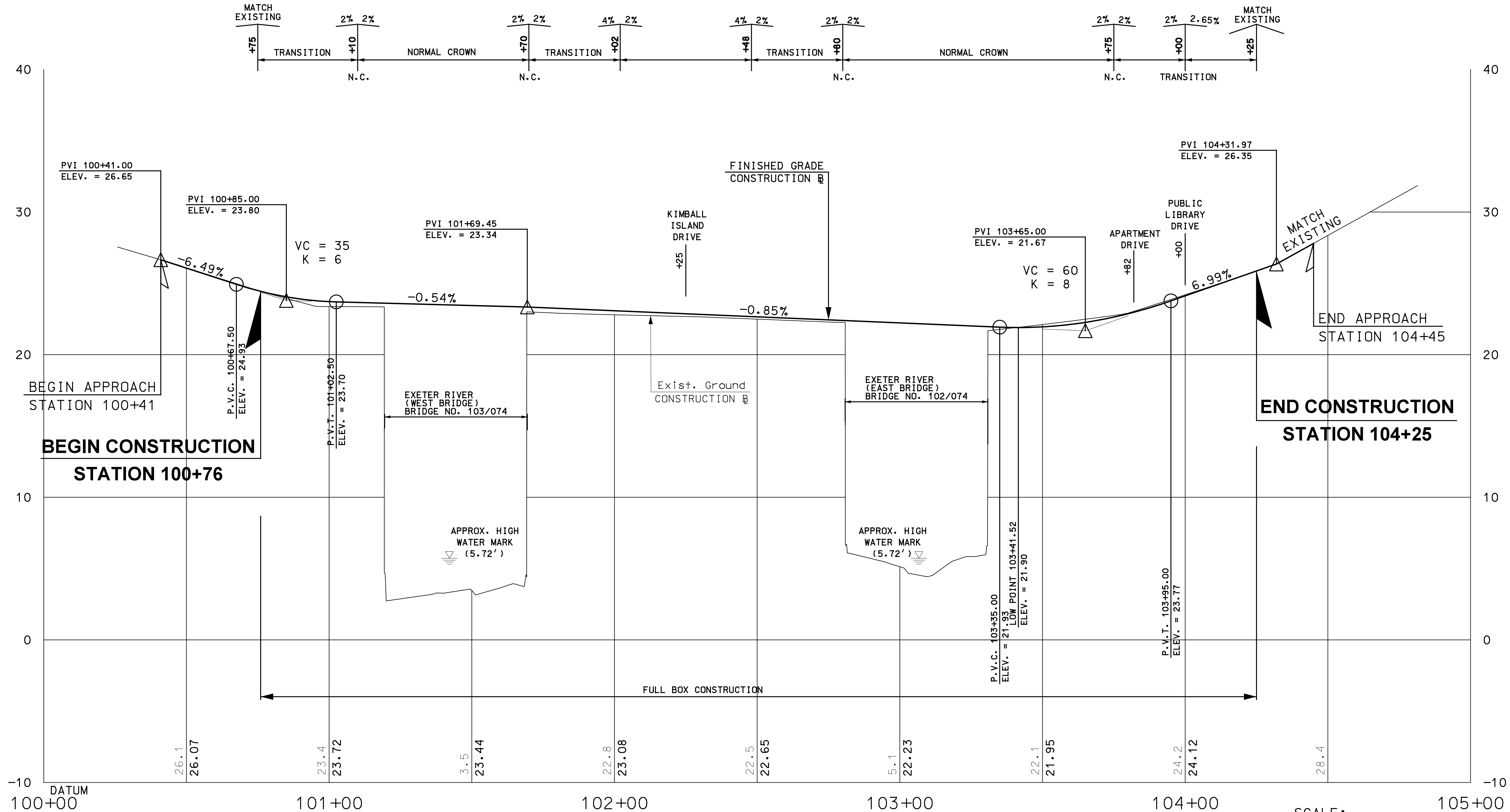
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TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 ROADWAY GENERAL PLAN

PROJECT NO.: 095222
 FILE NAME: 095222genplans
 MODEL NAME: GEN01
 SHEET NO.
14
 SHEET 14 OF 42

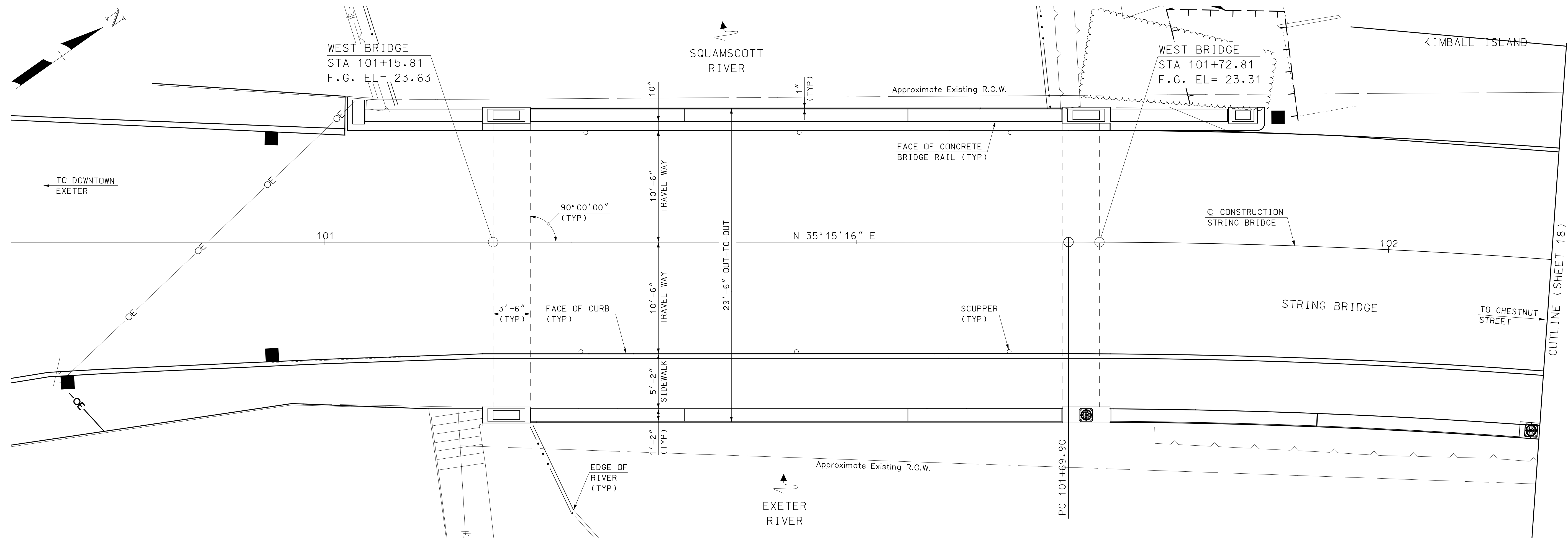
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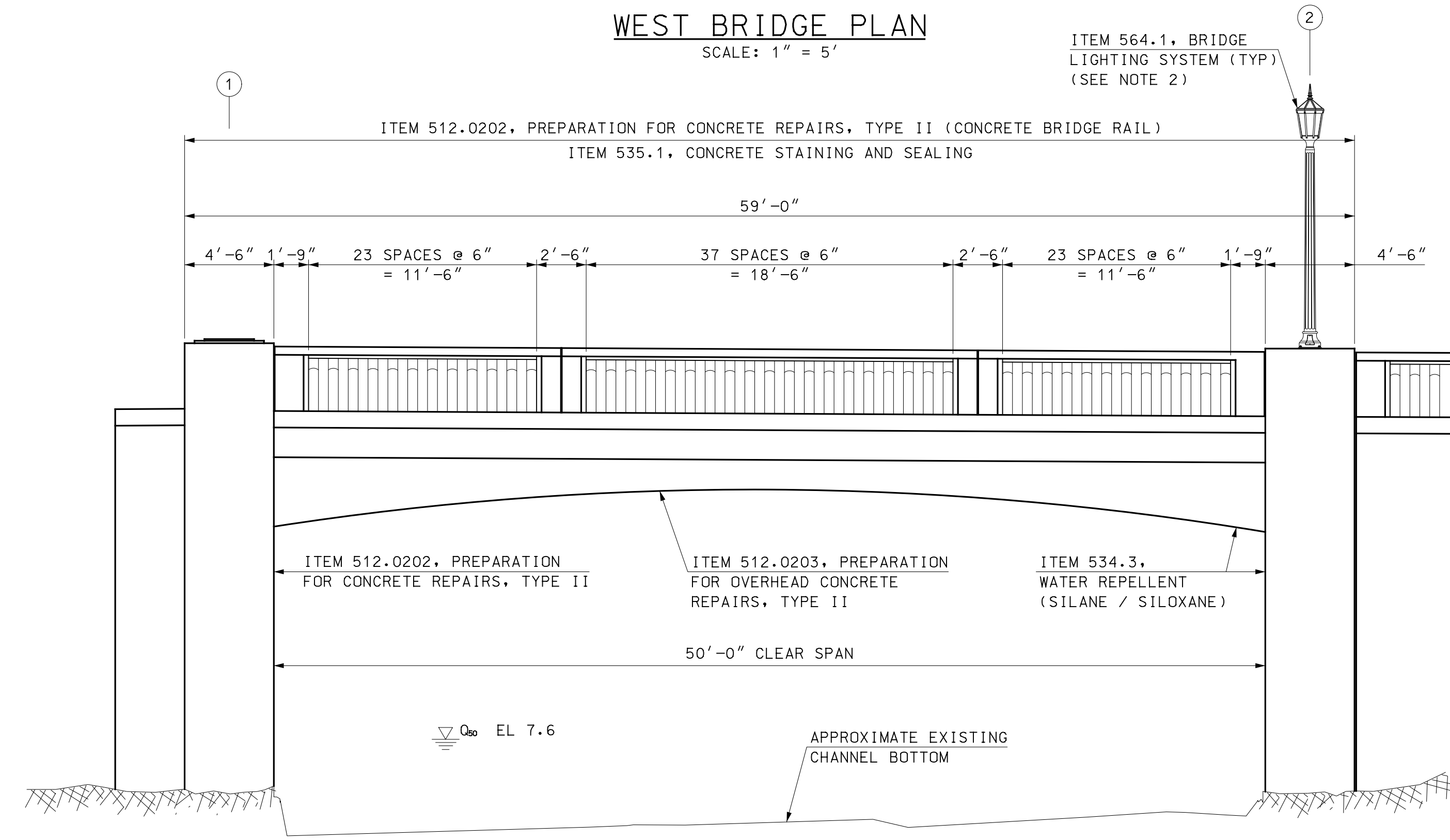


SCALE:
1" = 20' HORIZ.
1" = 4' VERT.

ENGINEER	
REV.	DESCRIPTION
APRIL 25, 2016	DESIGN BY: AGB
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<p>TOWN OF EXETER EXETER, NEW HAMPSHIRE STRING BRIDGE OVER EXETER RIVER ROADWAY PROFILE</p>	
PROJECT NO.:	095222
FILE NAME:	095222proplans
MODEL NAME:	095222PRO01
SHEET NO.	
15	
SHEET 15 OF 42	



WEST BRIDGE PLAN
SCALE: 1" = 5'



WEST BRIDGE ELEVATION
SCALE: 1" = 5'

- NOTE**
1. PROPOSED OVERHEAD UTILITIES ARE SHOWN.
 2. BRIDGE LIGHTING SYSTEM SHOWN IS FOR REFERENCE ONLY. LIGHT POLES AND LIGHT FIXTURES SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS.

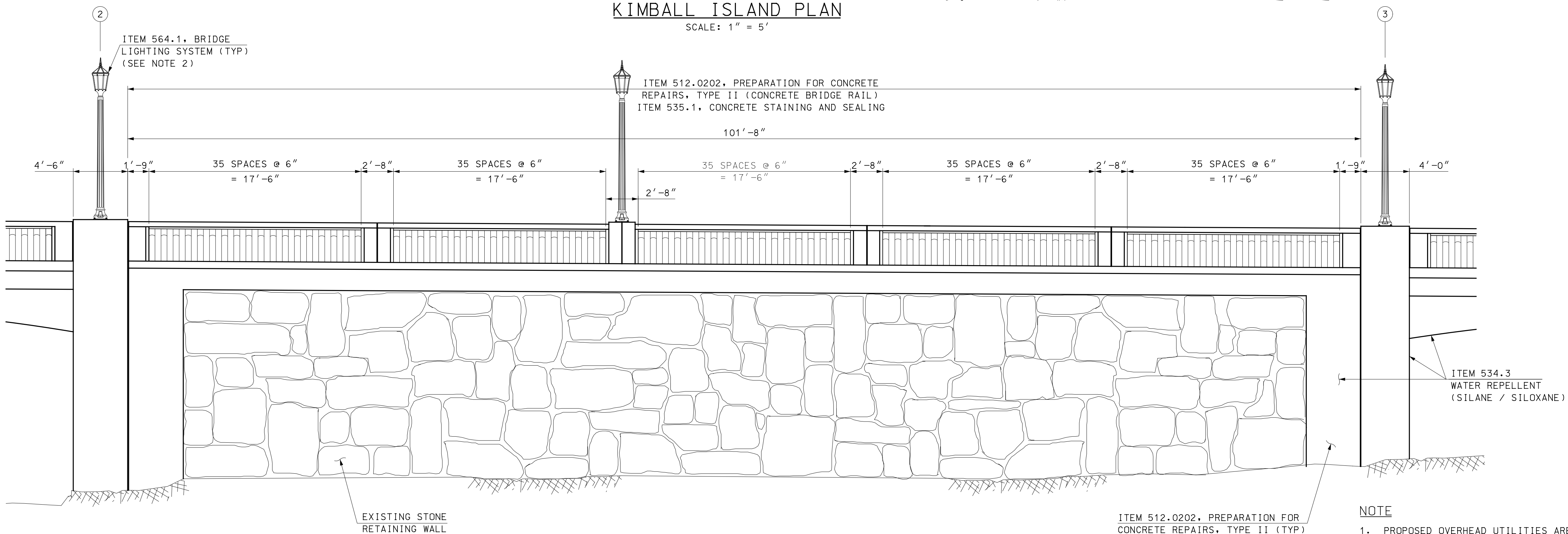
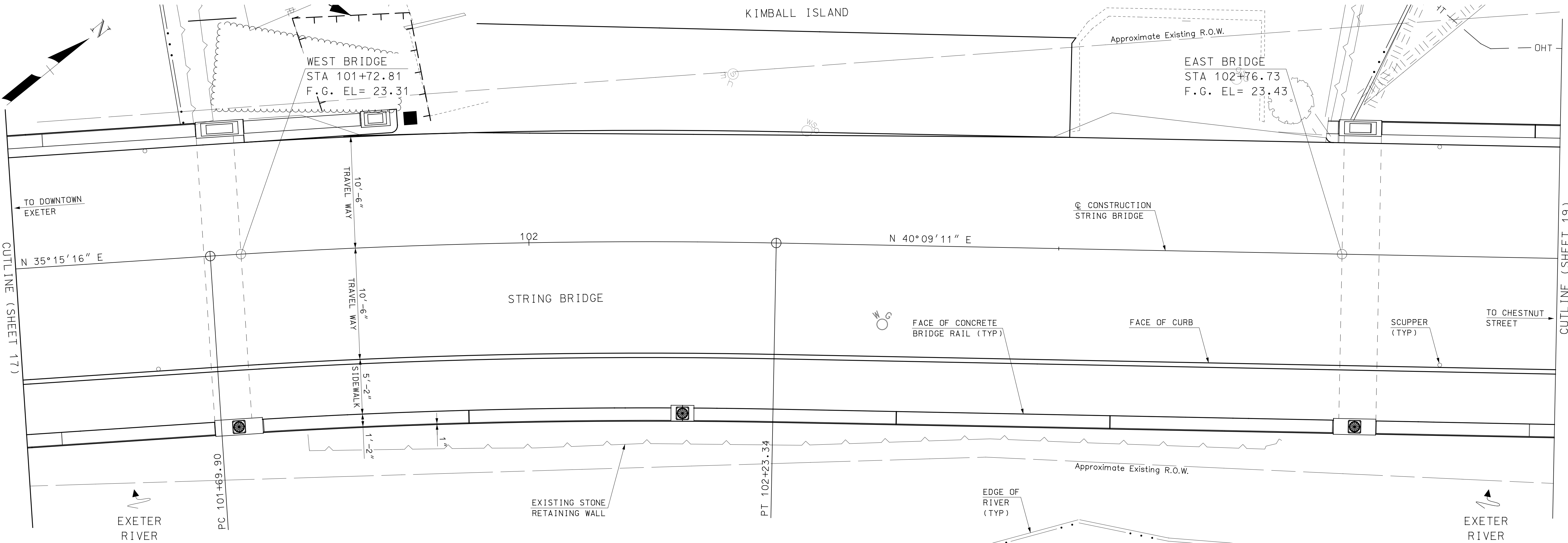
REV	DESCRIPTION	DATE
APRIL 25, 2016	DESIGN BY: JAS	
	DRAWN BY: TAG	
	CHKD. BY: STJ	
	SCALE: AS SHOWN	

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TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 GENERAL PLAN AND ELEVATION (WEST BRIDGE) (BR. NO. 103/074)

PROJECT NO.:	095222
FILE NAME:	095222Gen
MODEL NAME:	095222GenplanW

4/25/2016 3:40:14 PM K:\095222\2-CADD\BRC\B\Site\095222Gen.dgn



- NOTE**
1. PROPOSED OVERHEAD UTILITIES ARE SHOWN.
 2. BRIDGE LIGHTING SYSTEM SHOWN IS FOR REFERENCE ONLY. LIGHT POLES AND LIGHT FIXTURES SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS.

REV	DESCRIPTION	DATE

APRIL 25, 2016

DESIGN BY: JAS

DRAWN BY: TAG

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SCALE: AS SHOWN

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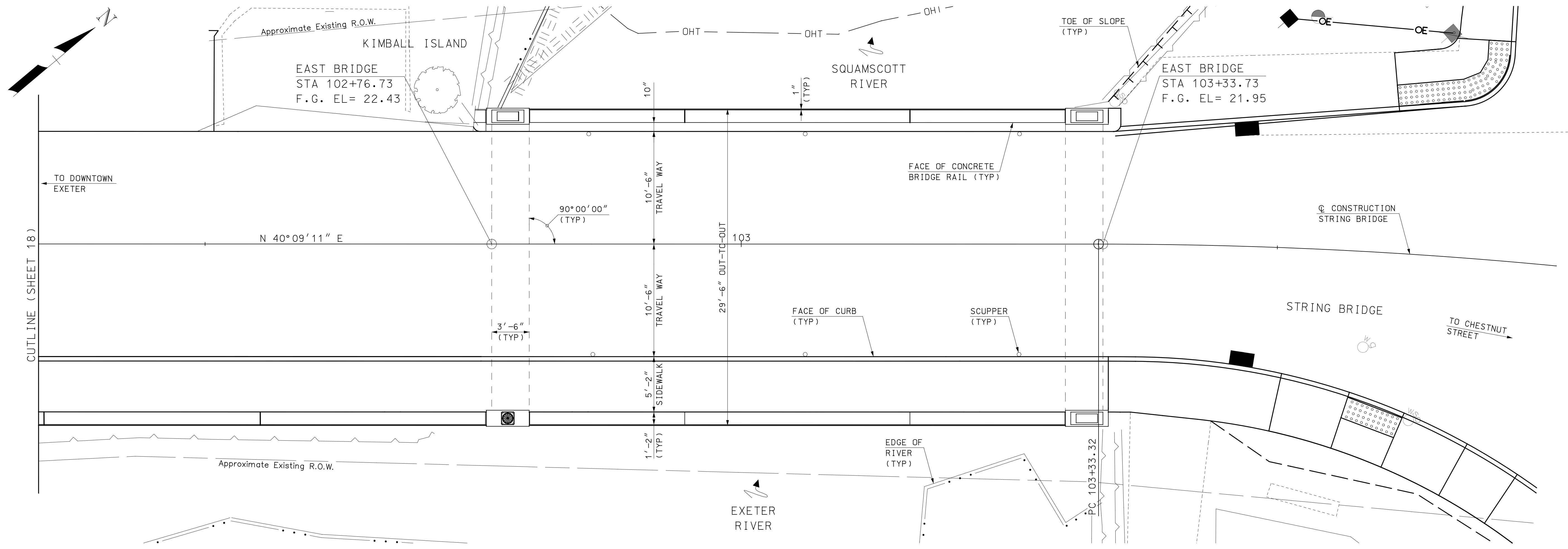
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TOWN OF EXETER
EXETER, NEW HAMPSHIRE
STRING BRIDGE OVER EXETER RIVER

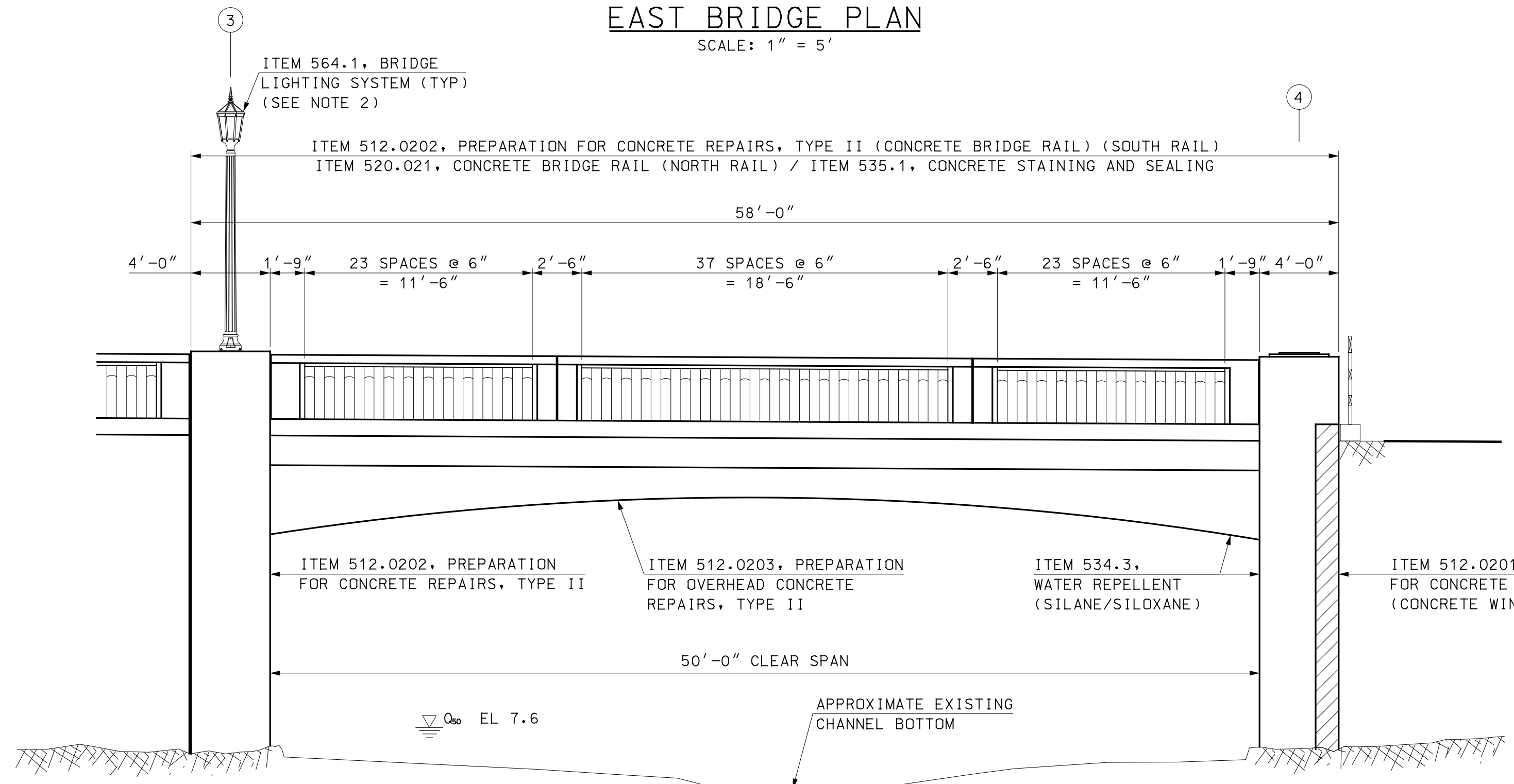
GENERAL PLAN AND ELEVATION (KIMBALL ISLAND)

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EAST BRIDGE PLAN

SCALE: 1" = 5'



EAST BRIDGE ELEVATION

SCALE: 1" = 5'-0"

- NOTE**
1. PROPOSED OVERHEAD UTILITIES ARE SHOWN.
 2. BRIDGE LIGHTING SYSTEM SHOWN IS FOR REFERENCE ONLY. LIGHT POLES AND LIGHT FIXTURES SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS.

REV	DESCRIPTION	DATE

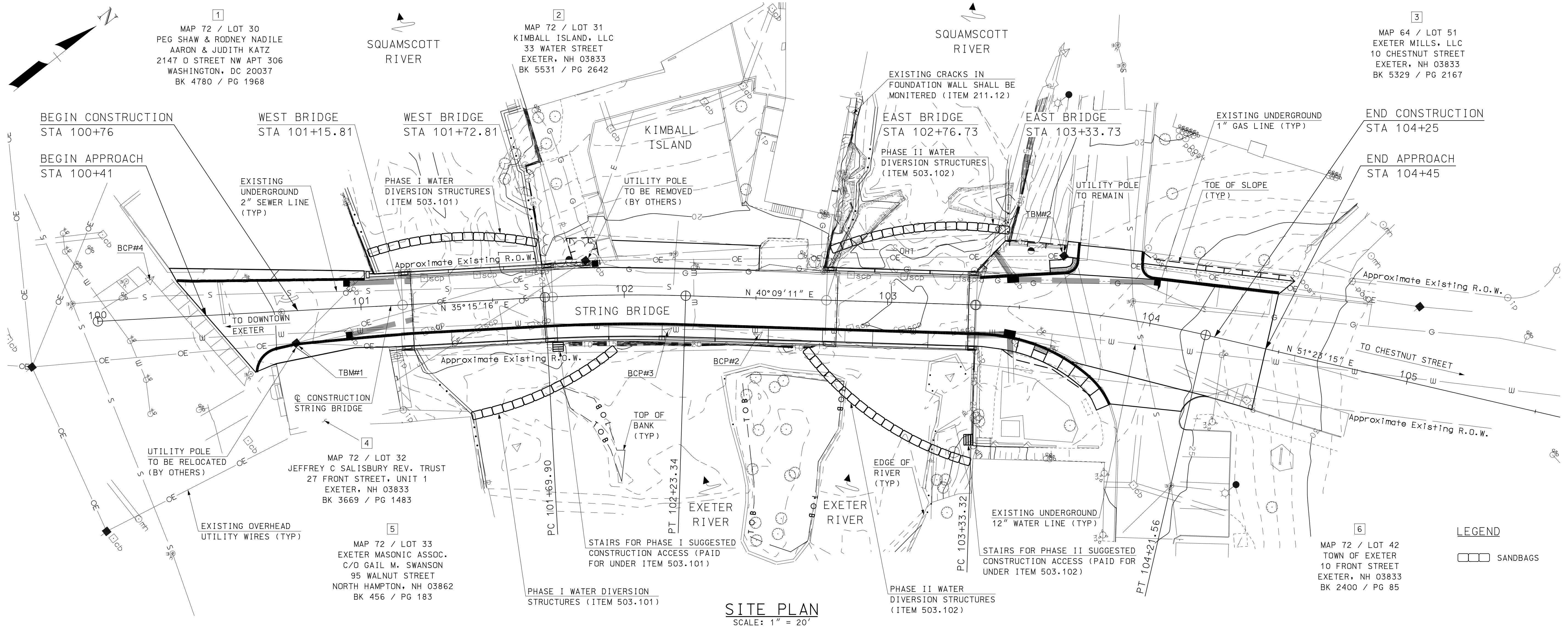
APRIL 25, 2016	DESIGN BY: JAS	DRAWN BY: TAG	CHKD. BY: STJ	SCALE: AS SHOWN
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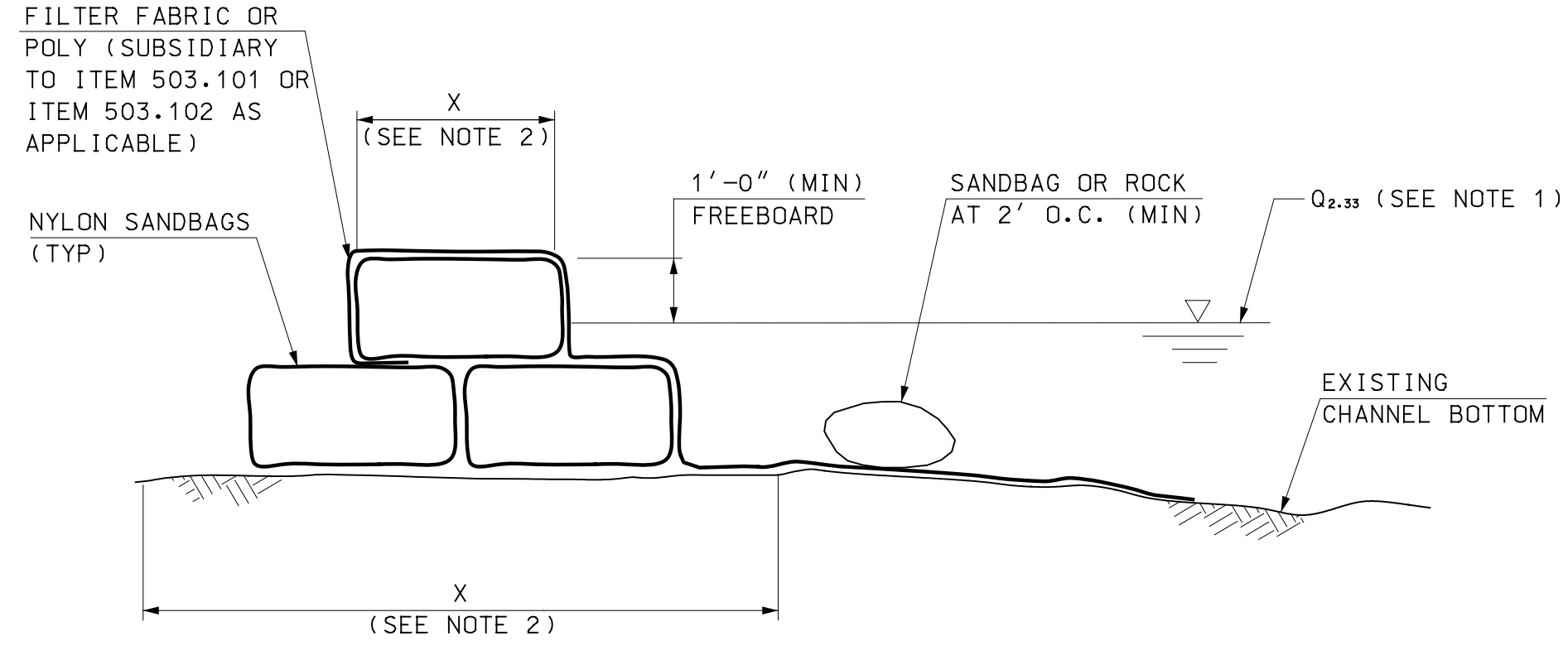
TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 GENERAL PLAN AND ELEVATION (EAST BRIDGE) (BR. NO. 102/074)

PROJECT NO.:	095222
FILE NAME:	095222Gen
MODEL NAME:	095222GenplanE

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SITE PLAN
SCALE: 1" = 20'



CONCEPTUAL SANDBAG WATER DIVERSION STRUCTURE
SCALE: 1" = 1'-0"

NOTES

1. ALL COFFERDAMS AND WATER DIVERSION STRUCTURES SHALL BE DESIGNED FOR MEAN ANNUAL FLOOD FLOWS (Q_{2.33}). SEE NOTE 3 OF THE WATER DIVERSION NOTES ON SHEET 4.
2. THE ABOVE DETAIL IS CONCEPTUAL IN NATURE AND IS PROVIDED FOR BIDDING PURPOSES ONLY. THE SANDBAG SIZE NUMBER AND ORIENTATION SHALL BE DETERMINED BY THE SWPPP PREPAPER AND SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.
3. NO WATER DIVERSION SHALL BE INSTALLED PRIOR TO JULY 1.

SUGGESTED CONSTRUCTION SEQUENCE

ROADWAY WORK

- PHASE 1 WEST BRIDGE CONSTRUCTION (2016)**
1. INSTALL TRAFFIC CONTROL FOR WEST BRIDGE CLOSURE AND MAINTAIN VEHICULAR ACCESS TO KIMBALL ISLAND VIA THE EAST BRIDGE.
 2. INSTALL TEMPORARY WATER AND SEWER SERVICE TO KIMBALL ISLAND.
 3. REMOVE EXISTING ROADWAY MATERIALS TO THE LIMITS OF PHASE 1 SHOWN ON SHEETS 25 AND 26. REMOVE THE EXISTING BARRIER MEMBRANE FROM THE WEST BRIDGE TOP SLAB.
 4. REPAIR EXISTING CONCRETE TOP SLAB, BRIDGE RAILINGS AND CONCRETE CURB. REPLACE EXISTING SCUPPERS.
 5. PLACE BARRIER MEMBRANE.
 6. PLACE ROADWAY MATERIALS, INSTALL SIDEWALK GRANITE CURB AND CONSTRUCT CONCRETE SIDEWALK. COMPLETE UTILITY WORK INCLUDING REPLACEMENT OF SEWER LINE AND INSTALLATION OF NEW GAS LINE (BY OTHERS). WATER LINE TO BE INSPECTED BY OTHERS.
 7. REMOVE TEMPORARY WATER AND SEWER SERVICE FROM KIMBALL ISLAND.
 8. INSTALL 3" BITUMINOUS PAVEMENT BINDER COURSE.

- PHASE 2 EAST BRIDGE CONSTRUCTION (2016)**
1. INSTALL TRAFFIC CONTROL FOR EAST BRIDGE CLOSURE AND MAINTAIN VEHICULAR ACCESS TO KIMBALL ISLAND VIA THE WEST BRIDGE.
 2. INSTALL TEMPORARY WATER SERVICE TO KIMBALL ISLAND.
 3. REMOVE EXISTING ROADWAY MATERIALS TO THE LIMITS OF PHASE II SHOWN ON SHEETS 25 AND 26. REMOVE THE EXISTING BARRIER MEMBRANE FROM THE EAST BRIDGE TOP SLAB.
 4. REPAIR EXISTING CONCRETE TOP SLAB, SOUTH BRIDGE RAIL AND CONCRETE CURB. CONSTRUCT NORTH CONCRETE BRIDGE RAIL. REPLACE EXISTING SCUPPERS.

5. PLACE BARRIER MEMBRANE.
6. PLACE ROADWAY MATERIALS, INSTALL SIDEWALK GRANITE CURB AND CONSTRUCT CONCRETE SIDEWALK. COMPLETE UTILITY WORK INCLUDING RELOCATING POWER, TELEPHONE AND CATV UNDERGROUND, AND INSTALLATION OF NEW GAS LINE (BY OTHERS). WATER LINE TO BE INSPECTED BY OTHERS.
7. REMOVE TEMPORARY WATER SERVICE FROM KIMBALL ISLAND.
8. INSTALL 3" BITUMINOUS PAVEMENT BINDER COURSE.
9. REMOVE TRAFFIC CONTROL AND RE-ESTABLISH VEHICULAR AND PEDESTRIAN ACCESS ALONG STRING BRIDGE.
10. INSTALL 1 1/2" BITUMINOUS PAVEMENT WEARING COURSE ALONG THE FULL EXTENDS OF THE PROJECT LIMITS.
11. REMOVE CONSTRUCTION MATERIALS AND EQUIPMENT FOR WINTER SHUTDOWN.

IN-WATER WORK

- PHASE 1A WEST BRIDGE CONSTRUCTION (2017)**
1. INSTALL TRAFFIC CONTROL FOR WEST BRIDGE CLOSURE AND MAINTAIN VEHICULAR ACCESS TO KIMBALL ISLAND VIA THE EAST BRIDGE.
 2. INSTALL WATER DIVERSION STRUCTURES UPSTREAM AND DOWNSTREAM OF THE WEST BRIDGE.
 3. REPAIR RIGID FRAME SOFFIT AND LEGS.
 4. REPAIR RIGID FRAME FASCIA AND WINGWALLS.
- PHASE 2A EAST BRIDGE CONSTRUCTION (2017)**
4. INSTALL TRAFFIC CONTROL FOR EAST BRIDGE CLOSURE AND MAINTAIN VEHICULAR ACCESS TO KIMBALL ISLAND VIA THE WEST BRIDGE.
 5. RELOCATE WATER DIVERSION STRUCTURES UPSTREAM AND DOWNSTREAM OF THE EAST BRIDGE.
 6. REPAIR RIGID FRAME SOFFIT, LEGS, FASCIA AND WINGWALLS.
 7. REMOVE WATER DIVERSION STRUCTURES.
 8. REMOVE TRAFFIC CONTROL AND RE-ESTABLISH VEHICULAR AND PEDESTRIAN ACCESS ALONG STRING BRIDGE.

REV	DESCRIPTION	DATE	DRW	CHKD	BY

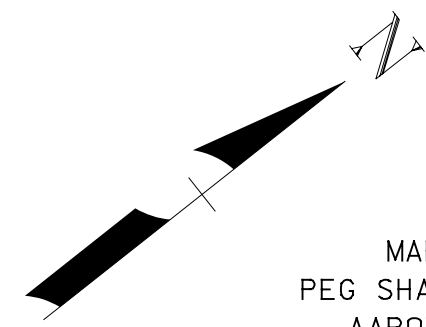
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TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 SITE PLAN

PROJECT NO.: 095222
 FILE NAME: 095222Site
 MODEL NAME: 095222Site
 SHEET NO.
20
 SHEET 20 OF 42

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1
MAP 72 / LOT 30
PEG SHAW & RODNEY NADILE
AARON & JUDITH KATZ
2147 O STREET NW APT 306
WASHINGTON, DC 20037
BK 4780 / PG 1968

SQUAMSCOTT RIVER

2
MAP 72 / LOT 31
KIMBALL ISLAND, LLC
33 WATER STREET
EXETER, NH 03833
BK 5531 / PG 2642

SQUAMSCOTT RIVER

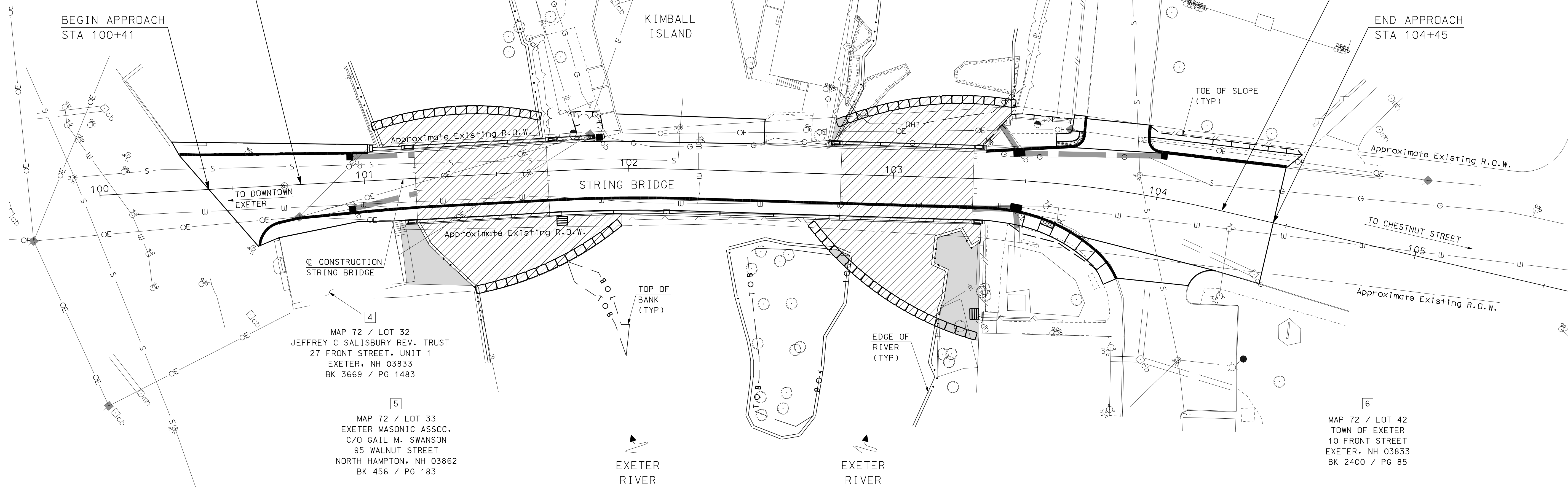
3
MAP 64 / LOT 51
EXETER MILLS, LLC
10 CHESTNUT STREET
EXETER, NH 03833
BK 5329 / PG 2167

BEGIN CONSTRUCTION
STA 100+76

BEGIN APPROACH
STA 100+41

END CONSTRUCTION
STA 104+25

END APPROACH
STA 104+45



4
MAP 72 / LOT 32
JEFFREY C SALISBURY REV. TRUST
27 FRONT STREET, UNIT 1
EXETER, NH 03833
BK 3669 / PG 1483

5
MAP 72 / LOT 33
EXETER MASONIC ASSOC.
C/O GAIL M. SWANSON
95 WALNUT STREET
NORTH HAMPTON, NH 03862
BK 456 / PG 183

6
MAP 72 / LOT 42
TOWN OF EXETER
10 FRONT STREET
EXETER, NH 03833
BK 2400 / PG 85

WETLAND IMPACT PLAN

SCALE: 1" = 20'

LEGEND

- TEMPORARY BANK OF STREAM IMPACT
- TEMPORARY BED OF STREAM IMPACT
- CUT SLOPE
- FILL SLOPE
- SANDBAG COFFERDAM
- TEMPORARY ACCESS STAIRWAY

GENERAL IMPACT NOTES

1. WETLAND IMPACTS
 PERMANENT BANK OF STREAM OR RIVER IMPACTS = 0 SF
 TEMPORARY BANK OF STREAM OR RIVER IMPACTS = 905 SF
 PERMANENT BED OF PERENNIAL STREAM IMPACTS = 0 SF
 TEMPORARY BED OF PERENNIAL STREAM IMPACTS = 7417 SF
 TOTAL NEW PERMANENT IMPACTS = 0 SF
 TOTAL NEW TEMPORARY IMPACTS = 8322 SF
 FILL BELOW ORDINARY HIGH WATER = 0 CY
2. AFTER COMPLETION OF IN-WATER WORK, REMOVE ALL WATER DIVERSION STRUCTURES AND RESTORE ALL DISTURBED AREAS TO PRE-CONSTRUCTION CONDITIONS. ALL COSTS FOR SUCH WORK SHALL BE SUBSIDIARY TO ITEM 503.101 AND ITEM 503.102 AS APPLICABLE.

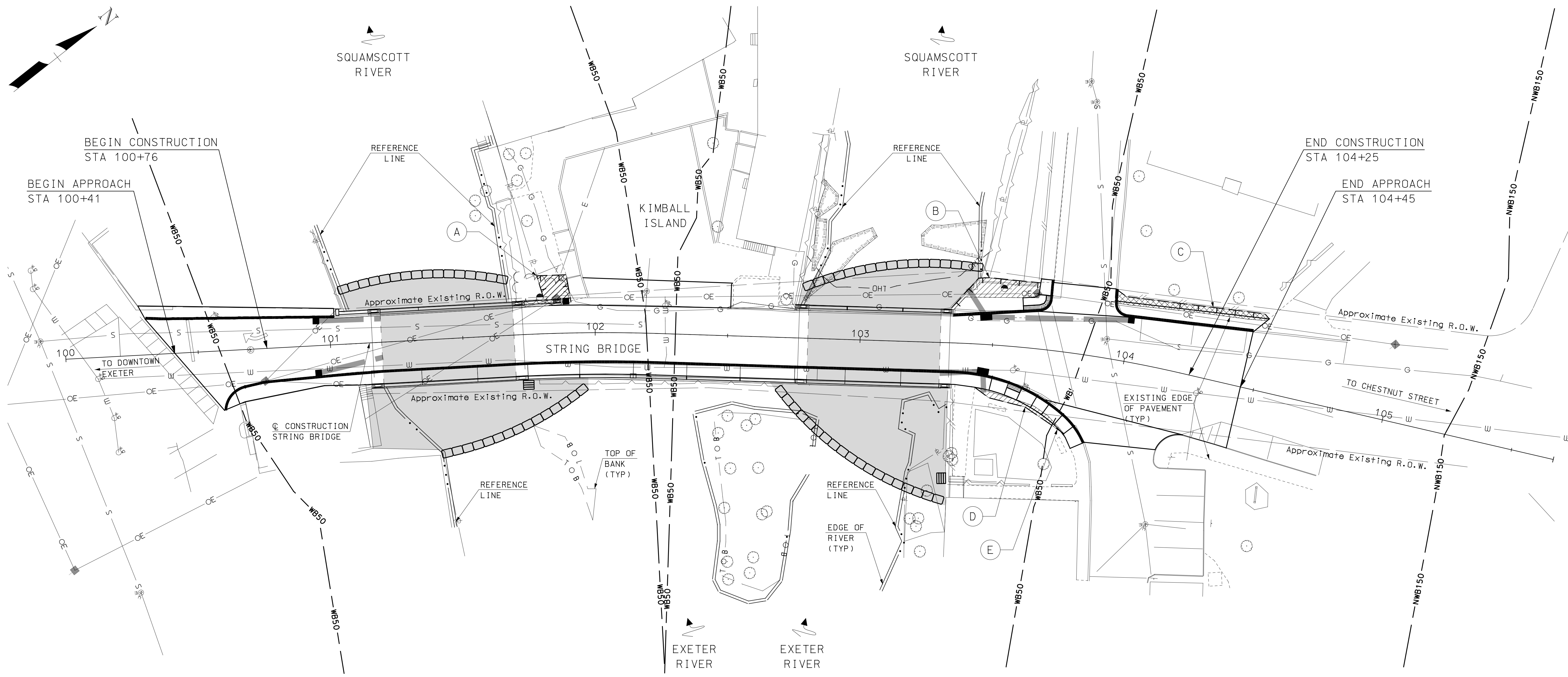
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REV	DESCRIPTION
APRIL 25, 2016	DESIGN BY: JAS
	DRAWN BY: TAG
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	SCALE: AS SHOWN

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TOWN OF EXETER	PROJECT NO.: 095222
EXETER, NEW HAMPSHIRE	FILE NAME: 095222Wet
STRING BRIDGE OVER EXETER RIVER	MODEL NAME: 095222Wetland
WETLAND IMPACT PLAN	SHEET NO.

21
SHEET 21 OF 42

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SHORELAND IMPACT PLAN
SCALE: 1" = 20'

LEGEND

(X) SHORELAND IMPACT LOCATION

TYPE OF SHORELAND IMPACT	SHADING/HATCHING
REF TO WB50	
WB50 TO NWB150	
NWB150 TO PS250	
WETLANDS JURISDICTION IMPACT	

---WB50--- WATERFRONT BUFFER LINE
 ---NWB150--- NATURAL WOODLAND BUFFER LINE
 ---PS250--- PROTECTED SHORELAND LINE

SHORELAND IMPACT SUMMARY			
LOCATION	AREAS (SF)		
	REF TO WB50	WB50 TO NWB150	NWB150 TO PS250
A	101		
B	183		
C		162	
D	59		
E		4	

TOTAL REF TO WB50 = 343 SF
 TOTAL WB50 TO NWB150 = 166 SF
 TOTAL NWB150 TO PS250 = 0 SF
 TOTAL IMPACTS WB50 TO PS250 = 509 SF

REV	DESCRIPTION	DATE	DRW	CHKD	BY

APRIL 25, 2016
 DESIGN BY: JAS
 DRAWN BY: TAG
 CHKD. BY: STJ
 SCALE: AS SHOWN

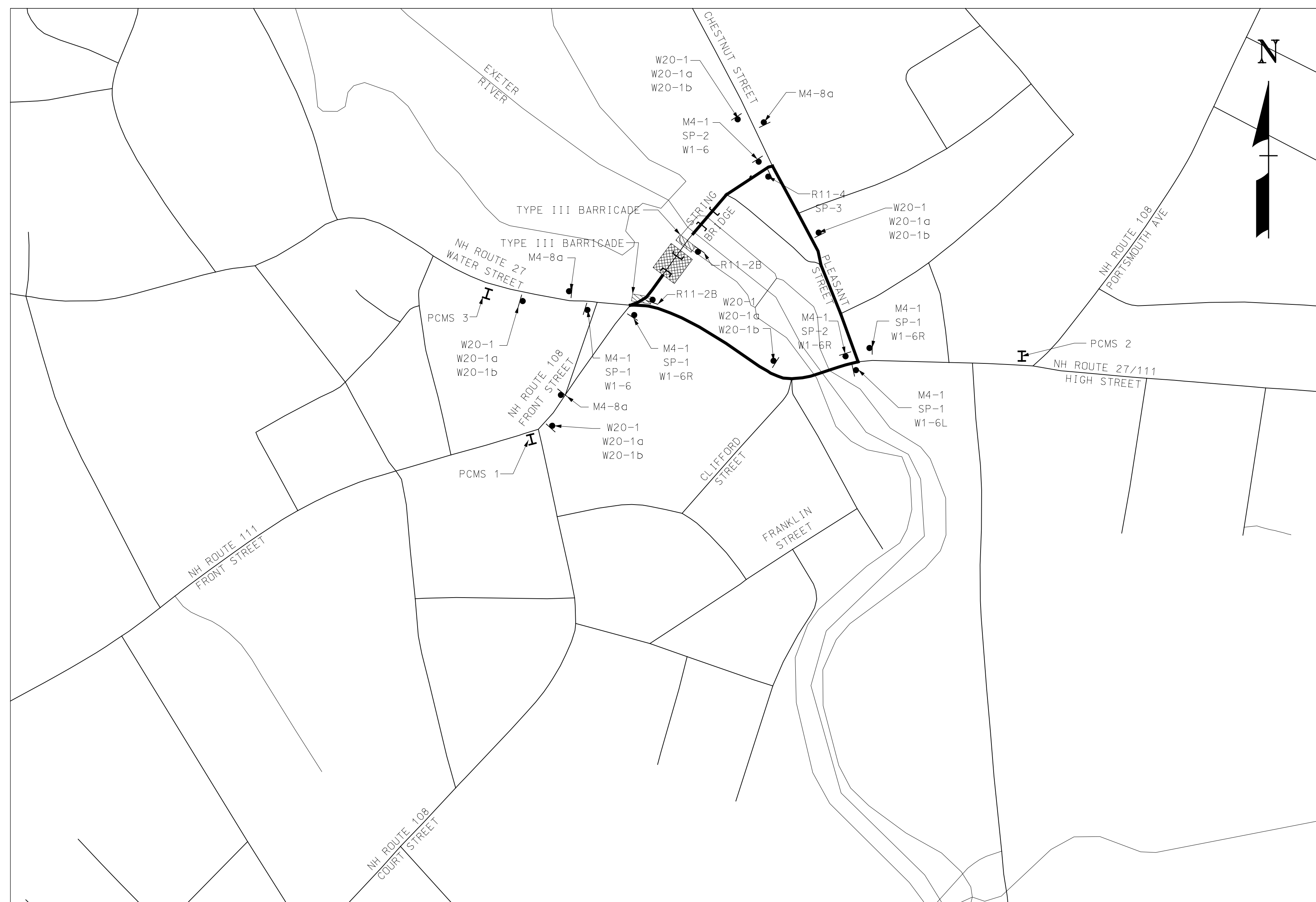
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TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 SHORLAND IMPACT PLAN

PROJECT NO.: 095222
 FILE NAME: 095222Shore
 MODEL NAME: 095222Shore
 SHEET NO.
22
 SHEET 22 OF 42

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DETOUR ROUTE LENGTH = 1,600 FEET ±
DETOUR ROUTE PLAN

SCALE: 1" = 400'

TRAFFIC CONTROL NOTES

- (1) TRAFFIC CONTROL DEVICES SHALL CONFORM TO SECTION 619 OF THE NHDOT STANDARD SPECIFICATIONS, AND THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AS PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION AND ADOPTED BY THE COMMISSIONER OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION. SIGNS SHALL ALSO CONFORM TO USDOT STANDARD HIGHWAY SIGNS AND NHDOT CONSTRUCTION SIGN STANDARDS.
- (2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING, ERECTING AND MAINTAINING PERMANENT CONSTRUCTION SIGNS AND WARNING DEVICES AS LISTED ON THE PLANS, AND SHALL ALSO BE RESPONSIBLE FOR SUPPLYING, ERECTING AND MAINTAINING ALL OPERATIONAL SIGNS AND WARNING DEVICES FOR HIS PLANNED METHODS OF OPERATION IN CONFORMANCE WITH THE MUTCD.
- (3) THE CONTRACTOR SHALL MARK ALL HAZARDS WITHIN THE LIMITS OF THE PROJECT AND CONNECTING ROADS WITH WELL MAINTAINED SIGNS AND WARNING DEVICES. ALL SIGNS AND WARNING DEVICES SHALL BE MOVED, SUPPLEMENTED, CHANGED, OR REMOVED DURING THE PROGRESS OF THE CONSTRUCTION AS NEEDED.
- (4) TRAFFIC CONTROL DEVICES SHALL BE REMOVED, AND SIGNS SHALL BE COVERED OR REMOVED, WHEN THEY NO LONGER APPLY TO THE EXISTING CONDITIONS.
- (5) PLYWOOD SUBSTRATE FOR CONSTRUCTION SIGNS SHALL CONFORM TO SECTION 619, AND FLAT ALUMINUM SHEETS SHALL CONFORM TO SECTION 615 OF THE NHDOT STANDARD SPECIFICATIONS.
- (6) DETOURS INVOLVING THE ROUTING OF TRAFFIC OVER ROADS OUTSIDE THE LIMITS OF THE PROJECT SHALL BE MARKED AND MAINTAINED BY THE CONTRACTOR (UNLESS OTHERWISE NOTED). THE CONTRACTOR SHALL BE REQUIRED TO ERECT AND MAINTAIN ANY REQUIRED SIGNS AND WARNING DEVICES AT THE BEGINNING AND END OF THE WORK AND AT INTERSECTING ROADWAYS. THE LOCATION AND POSITION OF THESE SIGNS AND WARNING DEVICES SHALL BE AS APPROVED BY THE ENGINEER. THE CONTRACTOR MAY ALSO BE REQUIRED TO UNCOVER, COVER AND OTHERWISE MAINTAIN DETOUR SIGNS SUPPLIED BY OTHERS.
- (7) PORTABLE CHANGEABLE MESSAGE SIGNS (ITEM 619.25) SHALL BE OPERATIONAL A MINIMUM OF TWO WEEKS PRIOR TO THE START OF ANY WORK THAT WILL IMPACT TRAFFIC. MESSAGE TO BE DISPLAYED SHALL BE COORDINATED WITH THE ENGINEER.
- (8) WORK ON THE PROJECT, OR ANY SEPARATE ACTIVITY THEREIN, SHALL NOT START UNTIL ALL THE REQUIRED SIGNS AND WARNING DEVICES ARE INSTALLED AND APPROVED BY THE ENGINEER.
- (9) SIGN LOCATIONS SHOWN ON THESE STANDARDS ARE RECOMMENDED AND MAY BE ADJUSTED AS DETERMINED BY THE ENGINEER. TYPICAL LAYOUTS SHOWN ARE NOT TO SCALE.
- (10) THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE THE ENGINEER WITH CERTIFICATION THAT ALL THE SIGNS AND WARNING DEVICES USED ON THE PROJECT MEET THE SPECIFICATIONS.
- (11) THE USE OF CONSTRUCTION SIGNS AND WARNING DEVICES NOT SHOWN ON THESE STANDARDS OR MUTCD, UNLESS APPROVED BY THE ENGINEER, SHALL BE PROHIBITED.
- (12) ALL COSTS FOR TRAFFIC CONTROL DEVICES, INCLUDING PLACEMENT, RELOCATION AND REMOVAL OF SIGNS SHALL BE INCLUDED IN ITEM 619.1, MAINTENANCE OF TRAFFIC.
- (13) THE CONTRACTOR SHALL MAINTAIN SAFE, CONTINUOUS ACCESS TO ALL PROPERTIES ADJACENT TO THE PROJECT LOCATION.
- (14) THE CONTRACTOR SHALL COORDINATE THEIR EFFORTS WITH ADJACENT CONSTRUCTION PROJECTS.
- (15) DETOUR SHALL BE SETUP AND TAKEN DOWN FOR PHASES 1 AND 1A. SEE SITE PLAN FOR ADDITIONAL CONSTRUCTION PHASING NOTES.

LEGEND

---	UNPAVED ROAD	—	PAVED ROAD
●	TEMPORARY CONSTRUCTION SIGN	*	MOUNTED ON BARRICADE
■	TYPE III BARRICADE	**	MOUNTED ON POST WITH M4-1
▨	WORK AREA	B	BLACK
—/—	DETOUR ROUTE	W	WHITE
I	PORTABLE CHANGEABLE MESSAGE SIGN	O	ORANGE
		R	RED
		Y	YELLOW

CONSTRUCTION SIGNS AND WARNING DEVICES (ITEM 619.1)

TYPE	DESCRIPTION	SIZE WxH	SO. FT.	NO REQ.	TOTAL AREA	POST	COLOR
M4-1		36" X 18"	4.5	6	27	1 POST PER SIGN	B/O
R11-4		60" X 30"	12.5	1	12.5	1 POST PER SIGN	B/W
SP-1		54" X 8"	3	4	12	**	B/W
SP-2		48" X 8"	2.67	2	5.34	**	B/W
SP-3		60" X 8"	3.33	1	3.33	MOUNT WITH R11-4	B/W
W1-6	 TO BE MOUNTED POINTING UP	48" X 24"	8	2	16	**	B/O
W1-6L		48" X 24"	8	1	8	**	B/O
W1-6R		48" X 24"	8	3	24	**	B/O
W20-1 W20-1a W20-1b		36" X 36" 36" X 36" 36" X 36"	9 9 9	5 5 5	45 45 45	1 POST PER SIGN 1 POST PER SIGN 1 POST PER SIGN	B/O B/O B/O
R11-2B		48" X 30"	10	2	20	*	B/W
M4-8a		24" X 18"	3	3	9	1 POST PER SIGN	B/O

PORTABLE CHANGEABLE MESSAGE SIGN (ITEM 619.25)

PCMS1, PCMS2, PCMS3												
PHASE 1						PHASE 2						
S	T	R	N	G	B	R	F	O	L	L	O	W
N	O	T	H	R	U		A	L	T			
T	R	A	F	F	I	C	R	O	U	T	E	

ENGINEER

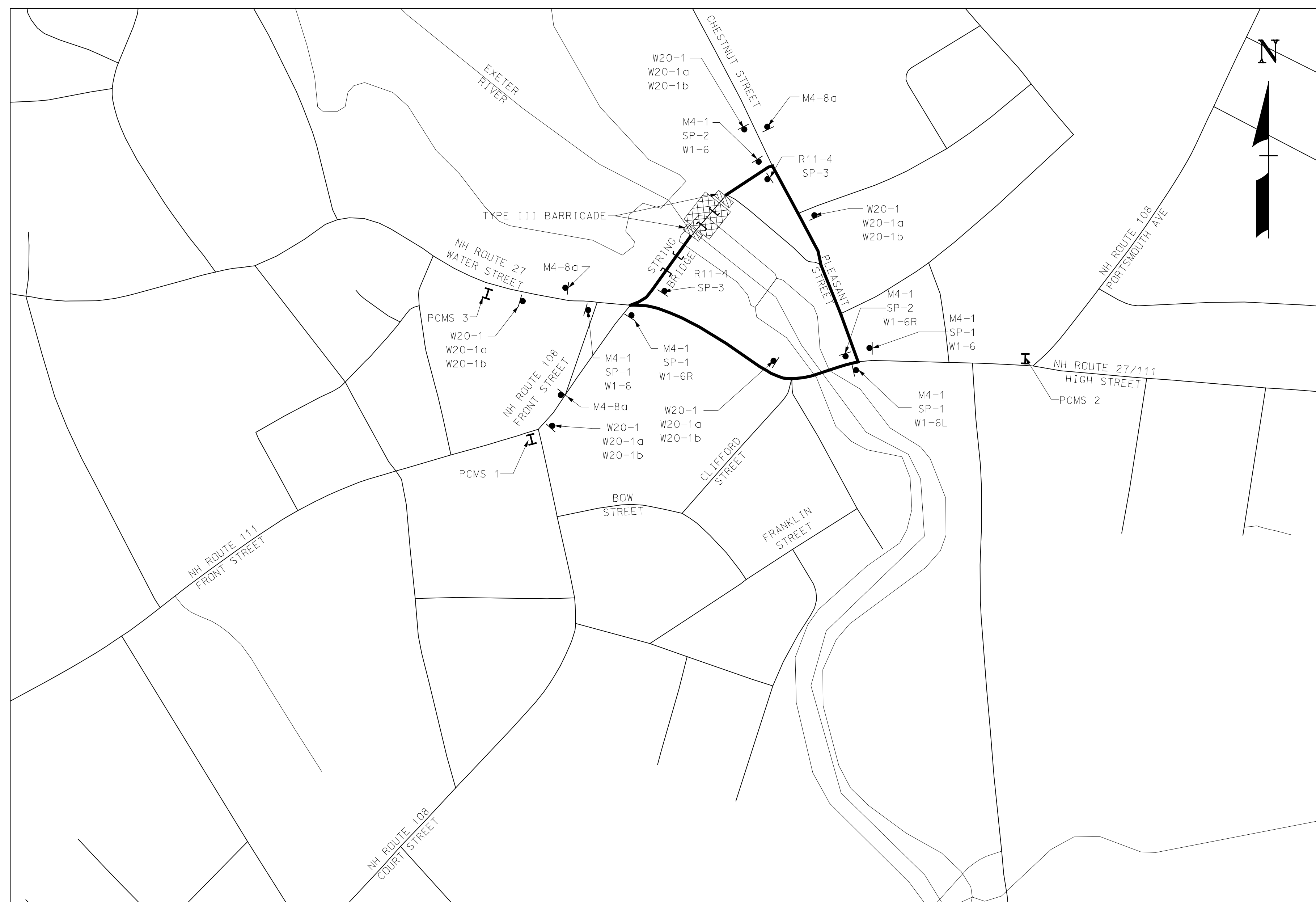
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TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 WEST BRIDGE CLOSURE
 DETOUR ROUTE PLAN

PROJECT NO.: 095222
 FILE NAME: 095222DetPlans
 MODEL NAME: 095222DET01
 SHEET NO.
23
 SHEET 23 OF 42

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DETOUR ROUTE LENGTH = 1,600 FEET ±
DETOUR ROUTE PLAN

SCALE: 1" = 400'

- (1) TRAFFIC CONTROL DEVICES SHALL CONFORM TO SECTION 619 OF THE NHDOT STANDARD SPECIFICATIONS, AND THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AS PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION AND ADOPTED BY THE COMMISSIONER OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION. SIGNS SHALL ALSO CONFORM TO USDOT STANDARD HIGHWAY SIGNS AND NHDOT CONSTRUCTION SIGN STANDARDS.
- (2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING, ERECTING AND MAINTAINING PERMANENT CONSTRUCTION SIGNS AND WARNING DEVICES AS LISTED ON THE PLANS, AND SHALL ALSO BE RESPONSIBLE FOR SUPPLYING, ERECTING AND MAINTAINING ALL OPERATIONAL SIGNS AND WARNING DEVICES FOR HIS PLANNED METHODS OF OPERATION IN CONFORMANCE WITH THE MUTCD.
- (3) THE CONTRACTOR SHALL MARK ALL HAZARDS WITHIN THE LIMITS OF THE PROJECT AND CONNECTING ROADS WITH WELL MAINTAINED SIGNS AND WARNING DEVICES. ALL SIGNS AND WARNING DEVICES SHALL BE MOVED, SUPPLEMENTED, CHANGED, OR REMOVED DURING THE PROGRESS OF THE CONSTRUCTION AS NEEDED.
- (4) TRAFFIC CONTROL DEVICES SHALL BE REMOVED, AND SIGNS SHALL BE COVERED OR REMOVED, WHEN THEY NO LONGER APPLY TO THE EXISTING CONDITIONS.
- (5) PLYWOOD SUBSTRATE FOR CONSTRUCTION SIGNS SHALL CONFORM TO SECTION 619, AND FLAT ALUMINUM SHEETS SHALL CONFORM TO SECTION 615 OF THE NHDOT STANDARD SPECIFICATIONS.
- (6) DETOURS INVOLVING THE ROUTING OF TRAFFIC OVER ROADS OUTSIDE THE LIMITS OF THE PROJECT SHALL BE MARKED AND MAINTAINED BY THE CONTRACTOR (UNLESS OTHERWISE NOTED). THE CONTRACTOR SHALL BE REQUIRED TO ERECT AND MAINTAIN ANY REQUIRED SIGNS AND WARNING DEVICES AT THE BEGINNING AND END OF THE WORK AND AT INTERSECTING ROADWAYS. THE LOCATION AND POSITION OF THESE SIGNS AND WARNING DEVICES SHALL BE AS APPROVED BY THE ENGINEER. THE CONTRACTOR MAY ALSO BE REQUIRED TO UNCOVER, COVER AND OTHERWISE MAINTAIN DETOUR SIGNS SUPPLIED BY OTHERS.
- (7) PORTABLE CHANGEABLE MESSAGE SIGNS (ITEM 619.25) SHALL BE OPERATIONAL A MINIMUM OF TWO WEEKS PRIOR TO THE START OF ANY WORK THAT WILL IMPACT TRAFFIC. MESSAGE TO BE DISPLAYED SHALL BE COORDINATED WITH THE ENGINEER.
- (8) WORK ON THE PROJECT, OR ANY SEPARATE ACTIVITY THEREIN, SHALL NOT START UNTIL ALL THE REQUIRED SIGNS AND WARNING DEVICES ARE INSTALLED AND APPROVED BY THE ENGINEER.

- (9) SIGN LOCATIONS SHOWN ON THESE STANDARDS ARE RECOMMENDED AND MAY BE ADJUSTED AS DETERMINED BY THE ENGINEER. TYPICAL LAYOUTS SHOWN ARE NOT TO SCALE.
- (10) THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE THE ENGINEER WITH CERTIFICATION THAT ALL THE SIGNS AND WARNING DEVICES USED ON THE PROJECT MEET THE SPECIFICATIONS.
- (11) THE USE OF CONSTRUCTION SIGNS AND WARNING DEVICES NOT SHOWN ON THESE STANDARDS OR MUTCD, UNLESS APPROVED BY THE ENGINEER, SHALL BE PROHIBITED.
- (12) ALL COSTS FOR TRAFFIC CONTROL DEVICES, INCLUDING PLACEMENT, RELOCATION AND REMOVAL OF SIGNS SHALL BE INCLUDED IN ITEM 619.1, MAINTENANCE OF TRAFFIC.
- (13) THE CONTRACTOR SHALL MAINTAIN SAFE, CONTINUOUS ACCESS TO ALL PROPERTIES ADJACENT TO THE PROJECT LOCATION.
- (14) THE CONTRACTOR SHALL COORDINATE THEIR EFFORTS WITH ADJACENT CONSTRUCTION PROJECTS.
- (15) DETOUR SHALL BE SETUP AND TAKEN DOWN FOR PHASES 2 AND 2A. SEE SITE PLAN FOR ADDITIONAL CONSTRUCTION PHASING NOTES.

LEGEND			
---	UNPAVED ROAD	—	PAVED ROAD
●	TEMPORARY CONSTRUCTION SIGN	*	MOUNTED ON BARRICADE
■	TYPE III BARRICADE	**	MOUNTED ON POST WITH M4-1
▨	WORK AREA	B	BLACK
—/—	DETOUR ROUTE	W	WHITE
I	PORTABLE CHANGEABLE MESSAGE SIGN	O	ORANGE
		R	RED
		Y	YELLOW

CONSTRUCTION SIGNS AND WARNING DEVICES (ITEM 619.1)

TYPE	DESCRIPTION	SIZE WxH	SO. FT.	NO REQ.	TOTAL AREA	POST	COLOR
M4-1		36" X 18"	4.5	6	27	1 POST PER SIGN	B/O
R11-4		60" X 30"	12.5	2	25	1 POST PER SIGN	B/W
SP-1		54" X 8"	3	4	12	**	B/W
SP-2		48" X 8"	2.67	2	5.34	**	B/W
SP-3		60" X 8"	3.33	2	6.66	MOUNT WITH R11-4	B/O
W1-6	 TO BE MOUNTED POINTING UP	48" X 24"	8	3	24	**	B/O
W1-6L		48" X 24"	8	1	8	**	B/O
W1-6R		48" X 24"	8	2	16	**	B/O
W20-1 W20-1a W20-1b		36" X 36" 36" X 36" 36" X 36"	9 9 9	5 5 5	45 45 45	1 POST PER SIGN 1 POST PER SIGN 1 POST PER SIGN	B/O B/O B/O
M4-8a		24" X 18"	3	3	9	1 POST PER SIGN	B/O

PORTABLE CHANGEABLE MESSAGE SIGN (ITEM 619.25)

PCMS1, PCMS2, PCMS3											
PHASE 1						PHASE 2					
S	T	R	N	G		F	O	L	L	O	W
N	O		T	H	R	A	A	L	T		
T	R	A	F	F	I	R	O	U	T	E	

ENGINEER

DRW CHD BY DATE

DESCRIPTION

REV.

APRIL 25, 2016

DESIGN BY: AGB

DRAWN BY: AGB

CHKD. BY: SBH

SCALE: AS SHOWN

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TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 EAST BRIDGE CLOSURE
 DETOUR ROUTE PLAN

PROJECT NO.: 095222

FILE NAME: 095222DetPlans

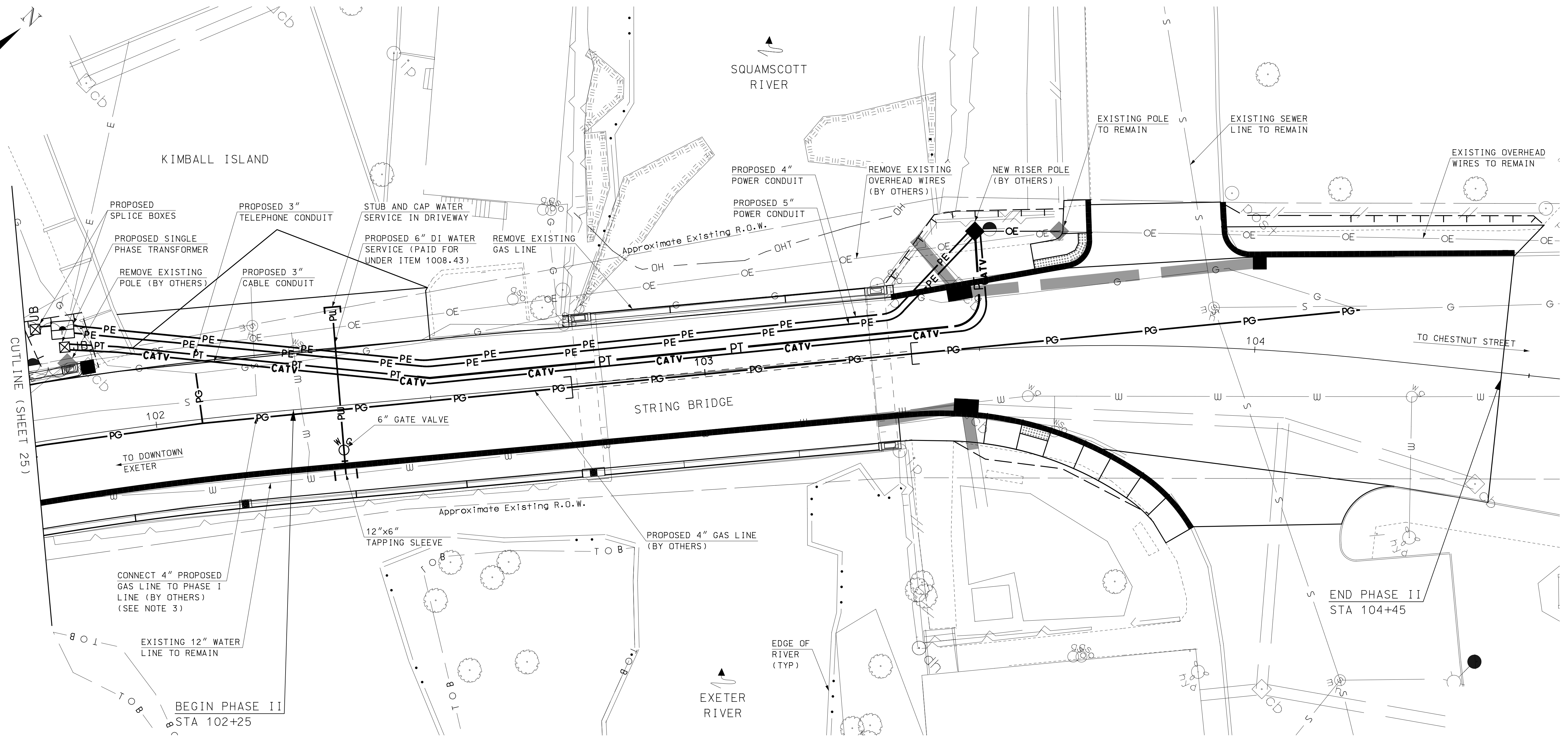
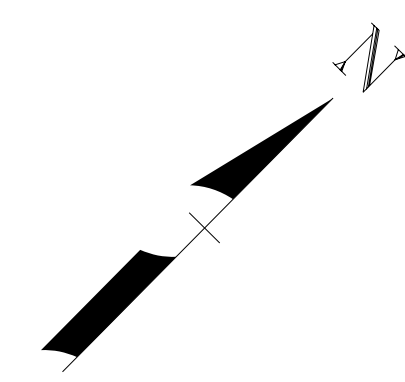
MODEL NAME: 095222DET02

SHEET NO.

24

SHEET 24 OF 42

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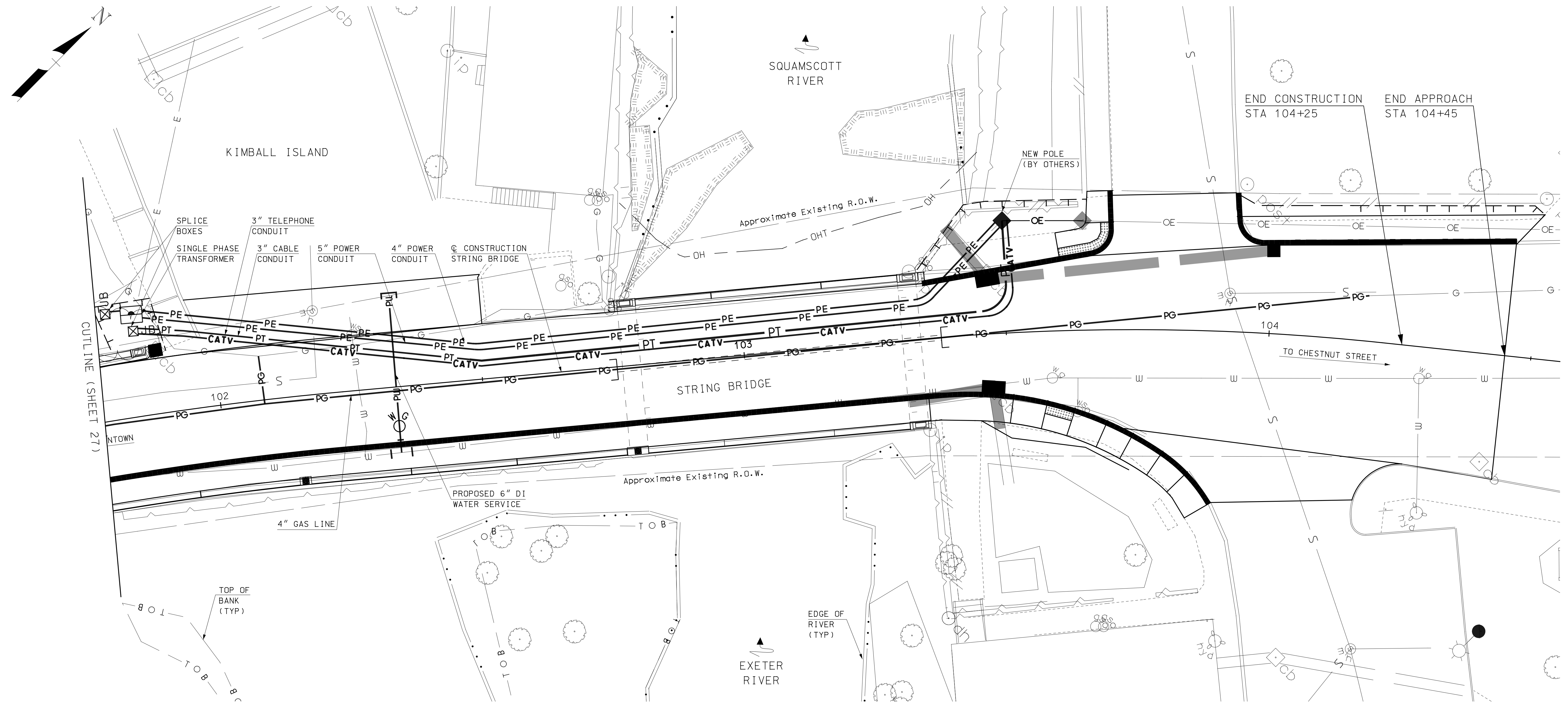
PHASE II UTILITY PLAN
SCALE: 1" = 10'

NOTES

- FOR UTILITY COORDINATION NOTES SEE SHEET 29.
- FOR FINAL UTILITY LOCATIONS SEE SHEETS 27 AND 28.
- LOCATION OF PROPOSED GAS LINE CONNECTION BETWEEN PHASES, AS SHOWN, IS APPROXIMATE. ACTUAL LOCATION OF PROPOSED GAS LINE CONNECTION BETWEEN PHASES TO BE LOCATED IN THE FIELD BY UTILITY OWNER.

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ENGINEER	
DRAWN BY: TAG	DATE:
DESIGN BY: JAS	DESCRIPTION:
CHKD. BY: STJ	REV:
SCALE: AS SHOWN	APRIL 25, 2016
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TOWN OF EXETER EXETER, NEW HAMPSHIRE STRING BRIDGE OVER EXETER RIVER	CONSTRUCTION UTILITY PHASING PLAN (2 OF 2)
PROJECT NO.: 095222	
FILE NAME: 095222Util-Phs	
MODEL NAME: 095222UtilPh2	
SHEET NO.	
26	
SHEET 26 OF 42	



FINAL UTILITY PLAN
SCALE: 1" = 10'

NOTES

1. FOR UTILITY COORDINATION NOTES SEE SHEET 29.
2. FOR UTILITY PHASING PLANS SEE SHEETS 25 AND 26.

ENGINEER	
DATE	APRIL 25, 2016
DESCRIPTION	DESIGN BY: JAS DRAWN BY: TAG CHKD. BY: STJ SCALE: AS SHOWN
REV	AS SHOWN
DRW CHG BY	AS SHOWN

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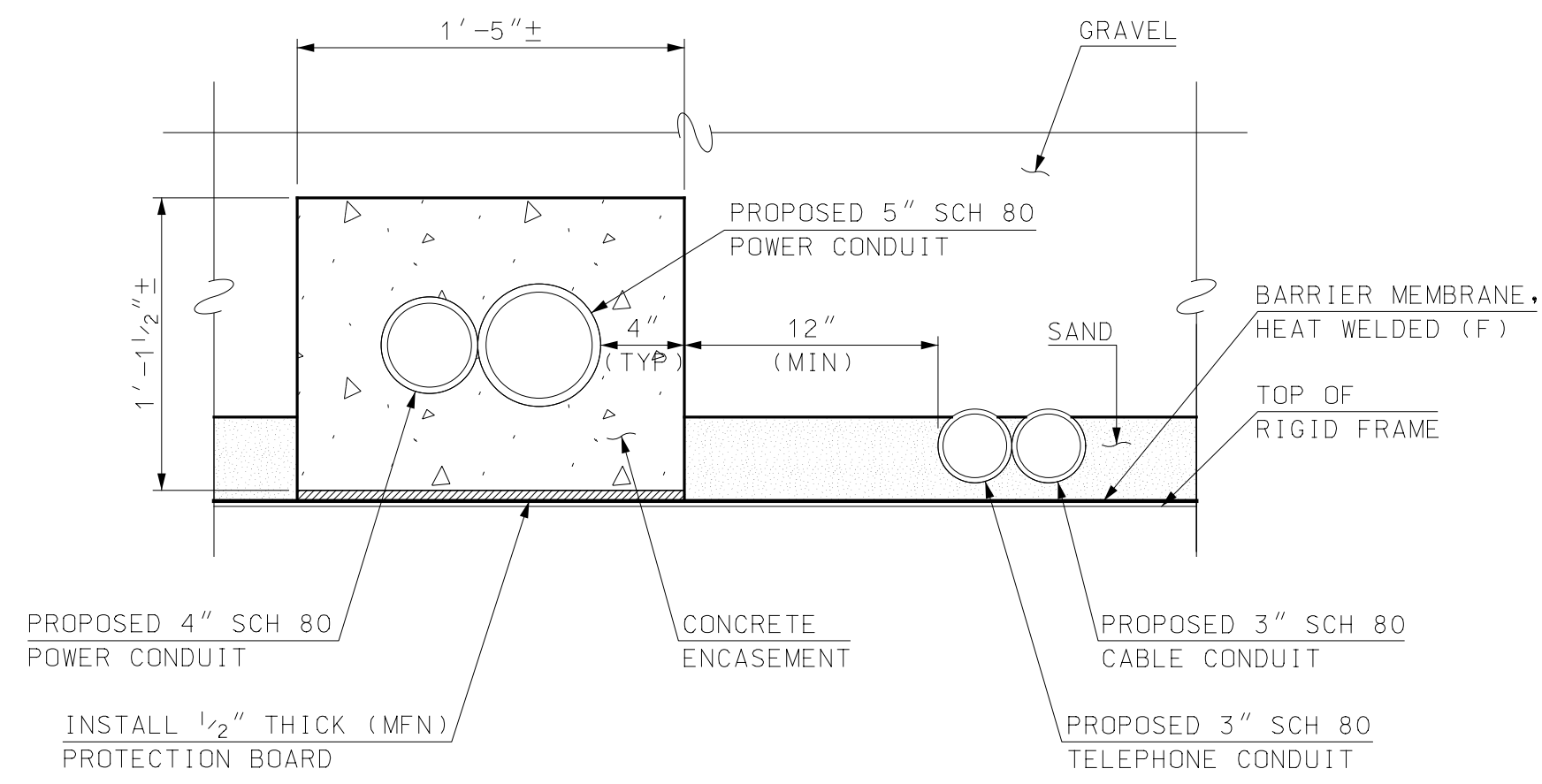
TOWN OF EXETER
EXETER, NEW HAMPSHIRE
STRING BRIDGE OVER EXETER RIVER

FINAL UTILITY PLAN (2 OF 2)

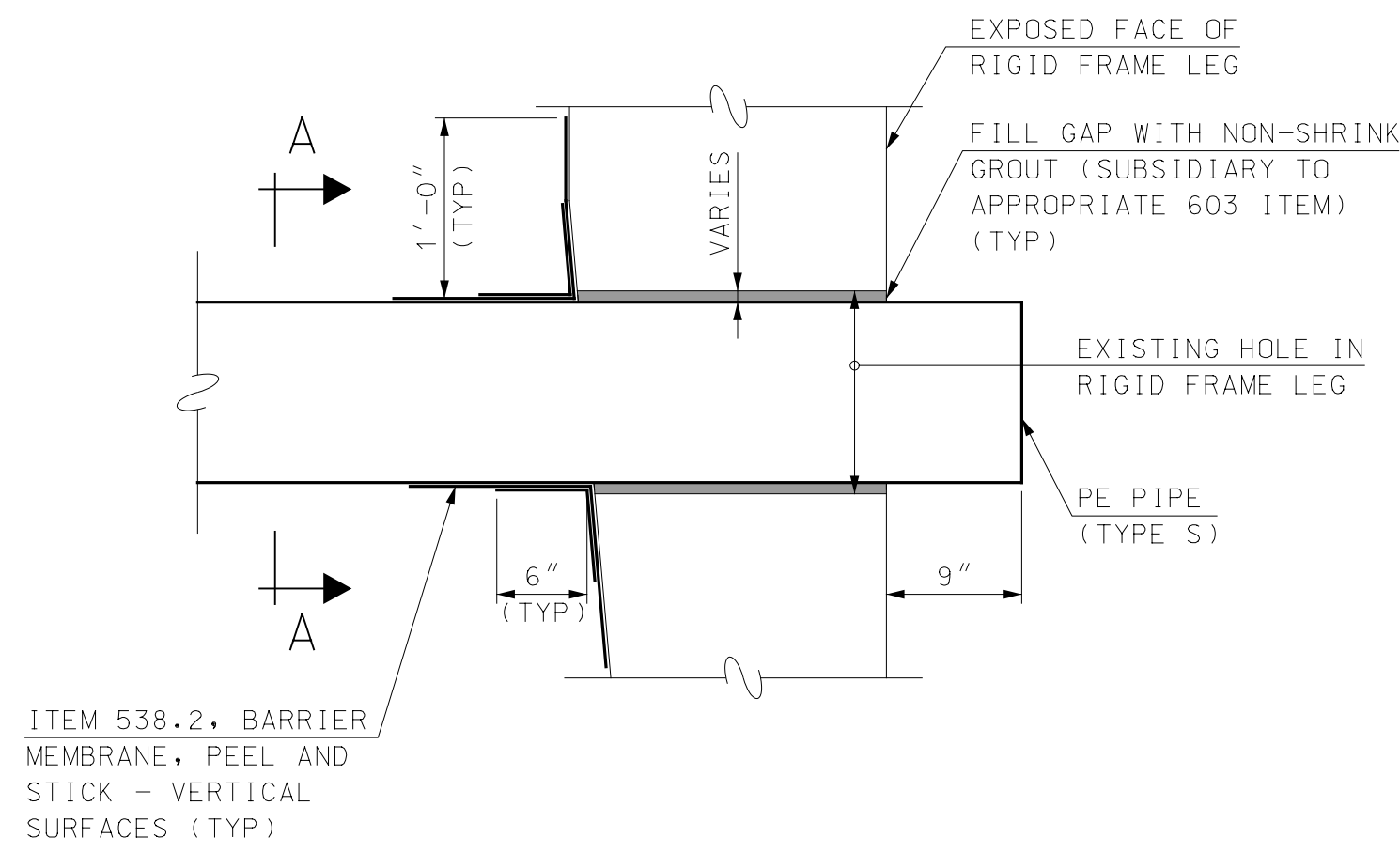
PROJECT NO.: 095222
FILE NAME: 095222Util
MODEL NAME: 095222Util2

SHEET NO.
28
SHEET 28 OF 42

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JOINT TRENCH OVER EAST BRIDGE
SCALE: 1 1/2" = 1'-0"

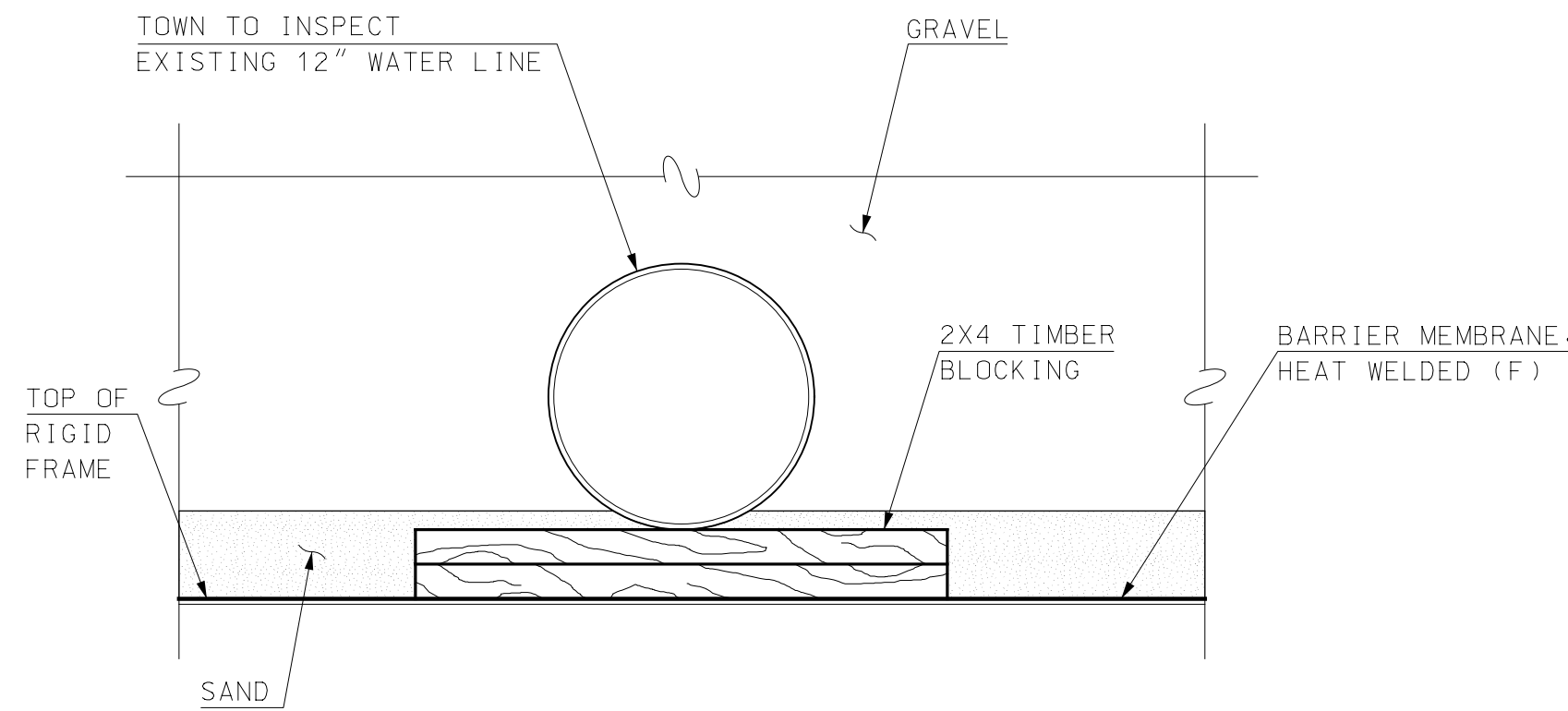


ITEM 538.2. BARRIER MEMBRANE, PEEL AND STICK - VERTICAL SURFACES (TYP)

NOTES

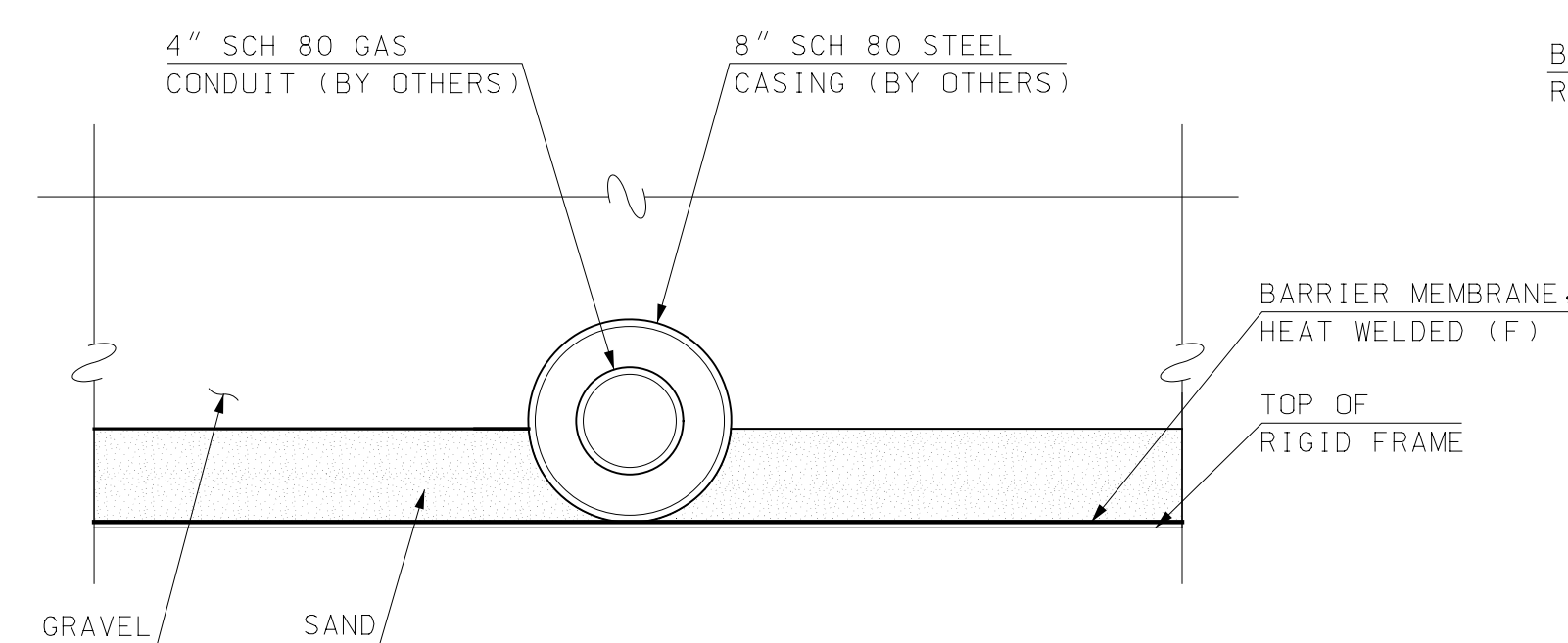
1. A TOTAL OF 4 PIPES ARE TO BE REPLACED WITHIN THE RIGID FRAME LEGS, 2 IN THE WEST LEG OF THE WEST BRIDGE AND 2 IN THE EAST LEG OF THE EAST BRIDGE. ONE PIPE IS TO BE REPLACED IN THE NORTHEAST WINGWALL OF THE EAST BRIDGE.
2. REMOVE ALL LOOSE MATERIAL INSIDE EXISTING HOLES IN THE RIGID FRAME LEGS AND WINGWALLS.
3. NEW PIPES SHALL EXTEND 9" BEYOND THE EXPOSED FACE OF THE RIGID FRAME LEGS OR WINGWALLS.
4. ALL EXPOSED PORTIONS OF THE NEW PIPES SHALL BE GREY.

PIPE DRAIN PENETRATION DETAIL
SCALE: 1" = 1'-0"



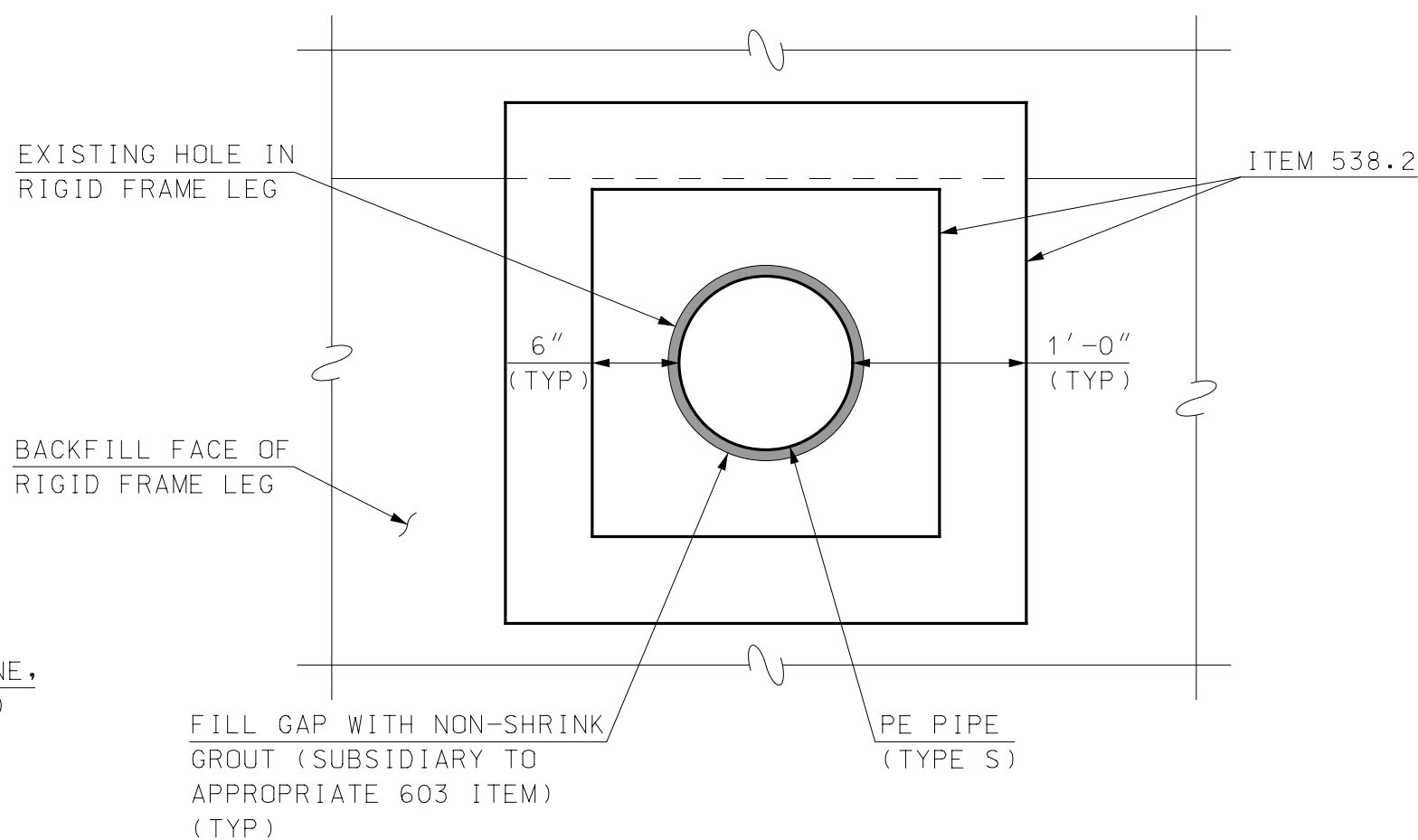
EXISTING WATER LINE
SCALE: 1 1/2" = 1'-0"

- NOTE**
1. WATER LINE PIPE AND BLOCKING WILL NEED TO BE TEMPORARILY RELOCATED TO INSTALL MEMBRANE AND TO REPAIR THE TOP SLAB OF THE RIGID FRAME. ALL COSTS FOR TEMPORARY RELOCATIONS SHALL BE SUBSIDIARY TO ITEM 538.5.



PROPOSED GAS LINE
SCALE: 1 1/2" = 1'-0"

- NOTES**
1. LOCATE GAS LINE ON BOTH BRIDGES TO MAXIMIZE COVER OVER STEEL CASING.
 2. STEEL CASING IS ONLY REQUIRED WITHIN THE LIMITS OF THE BRIDGES.
 3. TWO CASING VENT STACKS WILL BE LOCATED IN THE FIELD BY UNITIL, ONE AT EACH BRIDGE. UNITIL TO COORDINATE LOCATION OF 2" DIAMETER X 4' VENT STACKS WITH CONTRACTOR.



SECTION A-A
SCALE: 1" = 1'-0"

UTILITY COORDINATION NOTES

1. OVERHEAD UTILITIES ARE PRESENT WITHIN THE PROJECT SITE AND INCLUDE POWER, TELEPHONE AND CABLE:

OVERHEAD OWNER UTILITY INFORMATION:

UNITIL CORPORATION (POWER)
SERGE LAPRISE
PHONE: (603) 777-5512
EMAIL: LAPRISE@UNITIL.COM

FAIRPOINT COMMUNICATIONS
JOSEPH CONSIDINE
PHONE: (603) 427-5525
EMAIL: JCONSIDINE@FAIRPOINT.COM

COMCAST
DAN ROBERTS
PHONE: (603) 231-1128
EMAIL: DAN@CATVCONSTRUCTION.COM

FIREWIRE
LT. PAUL MORIN
PHONE: (603) 773-6133

2. UNDERGROUND UTILITIES ARE PRESENT WITHIN THE PROJECT SITE AND INCLUDE WATER, SEWER AND GAS:

UNDERGROUND UTILITY OWNER INFORMATION:

WATER
TOWN OF EXETER
JENNIFER MATES, ASSISTANT TOWN ENGINEER
PHONE: (603) 418-6431
EMAIL: JMATES@EXETERNH.GOV

SEWER
JEFF TURNER
PHONE: (603) 770-0721
EMAIL: JEFF@NHGREENBEAN.COM

UNITIL CORPORATION (GAS)
PHIL JOHNSON, CONSTRUCTION SUPERVISOR-NH
PHONE: (603) 294-5157
EMAIL: JOHNSON@UNITIL.COM

3. THE PROPOSED UTILITY RELOCATIONS SHOWN ARE CONCEPTUAL AND BASED ON PRELIMINARY COORDINATION WITH UNITIL (POWER), FAIRPOINT, COMCAST, TOWN OF EXETER, UNITIL (GAS) AND HOYLE, TANNER. THE CONTRACTOR SHALL BE FAMILIAR AND TAKE NECESSARY PRECAUTIONS WITH THESE UTILITIES DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTINUATION OF COORDINATION WITH UTILITY COMPANIES FOR THE TEMPORARY AND PERMANENT RELOCATIONS. ALL COST FOR THIS COORDINATION SHALL BE INCLUDED IN ITEM 692, MOBILIZATION.

4. THE OVERHEAD UTILITIES WITHIN PROJECT LIMITS ARE TO BE RELOCATED UNDERGROUND. ALL REMOVED UTILITIES SHALL BE SALVAGED TO OWNER IDENTIFIED IN NOTES 1 AND 2 ABOVE.

5. FOR UTILITY PHASING PLANS SEE SHEETS 25 AND 26.

6. FOR FINAL UTILITY LOCATIONS SEE SHEETS 27 AND 28.

7. COSTS ASSOCIATED WITH MISCELLANEOUS TREE TRIMMING AND CLEARING FOR PERMANENT UTILITY RELOCATIONS IS SUBSIDIARY TO THE CONTRACT.

8. COSTS FOR RELOCATING OVERHEAD POWER UNDERGROUND SHALL BE INCLUDED IN ITEM 1008.41, ALTERATIONS AND ADDITIONS AS NEEDED UTILITY ADJUSTMENTS (POWER). CONTRACTOR WILL BE RESPONSIBLE FOR SUPPLYING AND INSTALLING POWER CONDUITS AND UNITIL POWER WILL PULL THE LINES. COSTS ASSOCIATED WITH WORK COMPLETED BY UNITIL POWER, SUCH AS PULLING LINES AND PROVIDING SERVICE, SHALL BE PAID FOR UNDER ITEM 1008.411, ALTERATIONS AND ADDITIONS AS NEEDED UTILITY ADJUSTMENTS (POWER).

9. ALL COSTS FOR RELOCATING OVERHEAD TELEPHONE UNDERGROUND SHALL BE INCLUDED IN ITEM 1008.42, ALTERATIONS AND ADDITIONS AS NEEDED UTILITY ADJUSTMENTS (TELEPHONE). CONTRACTOR WILL BE RESPONSIBLE FOR SUPPLYING AND INSTALLING TELEPHONE CONDUITS AND FAIRPOINT WILL PULL THEIR LINES. COSTS ASSOCIATED WITH WORK COMPLETED BY FAIRPOINT, SUCH AS PULLING LINES AND PROVIDING SERVICE, SHALL BE PAID FOR UNDER ITEM 1008.421, ALTERATIONS AND ADDITIONS AS NEEDED UTILITY ADJUSTMENTS (TELEPHONE).

10. COMCAST SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH PROVIDING SERVICE TO KIMBALL ISLAND.

11. THE GAS LINE LOCATED ON THE DOWNSTREAM FASCIA OF THE EAST BRIDGE IS TO BE RELOCATED UNDERGROUND OVER THE EAST BRIDGE AND EXTENDED TO WATER STREET. UNITIL (GAS) SHALL BE RESPONSIBLE FOR ALL WORK AND COSTS ASSOCIATED WITH RELOCATING THE GAS LINE AND EXTENDING SERVICE TO WATER STREET.

12. CONTRACTOR SHALL EXPOSE EXISTING 2" SEWER LINE FOR INSPECTION BY UTILITY OWNER AND ENGINEER. REPAIR OR REPLACEMENT, IF REQUIRED, WILL BE PAID FOR UNDER ITEM 1008.43, ALTERATIONS AND ADDITIONS AS NEEDED - UTILITY ADJUSTMENTS (KIMBALL ISLAND).

13. THE TOWN SHALL INSPECT THE WATERLINE DURING EACH PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE TOWN WHEN THE WATERLINE IS EXPOSED DURING EACH PHASE.

14. ALL COSTS TO FURNISH AND INSTALL 6" DI WATER SERVICE TO KIMBALL ISLAND, INCLUDING CAP, VALVE AND TAPPING SLEEVE, SHALL BE PAID FOR UNDER ITEM 1008.43, ALTERATIONS AND ADDITIONS AS NEEDED - UTILITY ADJUSTMENTS (KIMBALL ISLAND).

15. WATER SHALL BE SHUTDOWN FOR THE DURATION OF CONSTRUCTION OF THE ROADWAY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE IN PROVIDING TEMPORARY WATER SERVICES TO KIMBALL ISLAND AT ALL TIMES DURING CONSTRUCTION. THE TEMPORARY SERVICE WILL BE REQUIRED TO BE PHASED TO ACCOMMODATE EACH BRIDGE SHUTDOWN. ALL COSTS ASSOCIATED WITH PROVIDING TEMPORARY WATER SERVICES TO KIMBALL ISLAND SHALL BE INCLUDED IN ITEM 611.99, TEMPORARY WATER AND APPURTENANCES.

16. SEWER SHALL BE SHUT DOWN DURING PHASE 1 CONSTRUCTION OF THE WEST BRIDGE ROADWAY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE IN PROVIDING TEMPORARY SEWER SERVICES TO KIMBALL ISLAND DURING THIS PHASE. ALL COSTS ASSOCIATED WITH PROVIDING TEMPORARY SEWER SERVICES TO KIMBALL ISLAND SHALL BE INCLUDED IN ITEM 612.99, TEMPORARY SEWER AND APPURTENANCES.

17. GAS SHALL BE SHUTDOWN FOR THE DURATION OF CONSTRUCTION. UNITIL WILL BE RESPONSIBLE FOR PROVIDING TEMPORARY GAS SERVICE TO KIMBALL ISLAND. THE CONTRACTOR SHALL NOTIFY UNITIL 4 WEEKS PRIOR TO REQUIRING THE EXISTING GAS LINE TO BE TAKEN OUT OF SERVICE.

18. REQUIRED UTILITY SEPARATIONS:

POWER CONDUITS SHALL HAVE A MINIMUM 12" OF SEPARATION FROM TELEPHONE AND CABLE CONDUITS.

POWER CONDUITS SHALL HAVE A MINIMUM OF 48" HORIZONTAL SEPARATION FOR WATER AND SEWER PARALLEL RUNS AND 12" VERTICAL SEPARATION FOR PERPENDICULAR CROSSINGS.

POWER CONDUITS SHALL HAVE A MINIMUM OF 36" HORIZONTAL SEPARATION FROM GAS LINES.

GAS LINES SHALL HAVE A 24" HORIZONTAL SEPARATION FROM TELEPHONE AND CABLE CONDUITS AND 12" VERTICAL SEPARATION FOR PERPENDICULAR CROSSINGS.

GAS LINES SHALL HAVE A 12" VERTICAL SEPARATION FROM WATER AND SEWER PERPENDICULAR CROSSINGS.

SEWER LINE SHALL HAVE A MINIMUM 10' OF HORIZONTAL SEPARATION FROM WATER LINE.

19. PROPOSED SPLICE BOXES SHALL BE LOCATED BY THE UTILITY COMPANIES.

20. EXISTING ABANDONED FAIRPOINT CONDUITS SPAN THE LENGTH OF STRING BRIDGE. THE LOCATION AND SIZE OF CONDUITS ARE UNKNOWN. A PORTION OF THE CONDUITS ARE CRUSHED. CONTRACTOR SHALL COORDINATE WITH FAIRPOINT TO REPAIR CRUSHED CONDUITS AND RUN SERVICE THROUGH THEM.

21. CONTRACTOR SHALL COORDINATE WITH UNITIL POWER FOR THE REMOVAL AND RESETTING OF THE UTILITY POLE SOUTHWEST OF THE BRIDGE.

22. CONTRACTOR SHALL COORDINATE WITH UNITIL POWER AND FAIRPOINT FOR THE REMOVAL OF OVERHEAD WIRES.

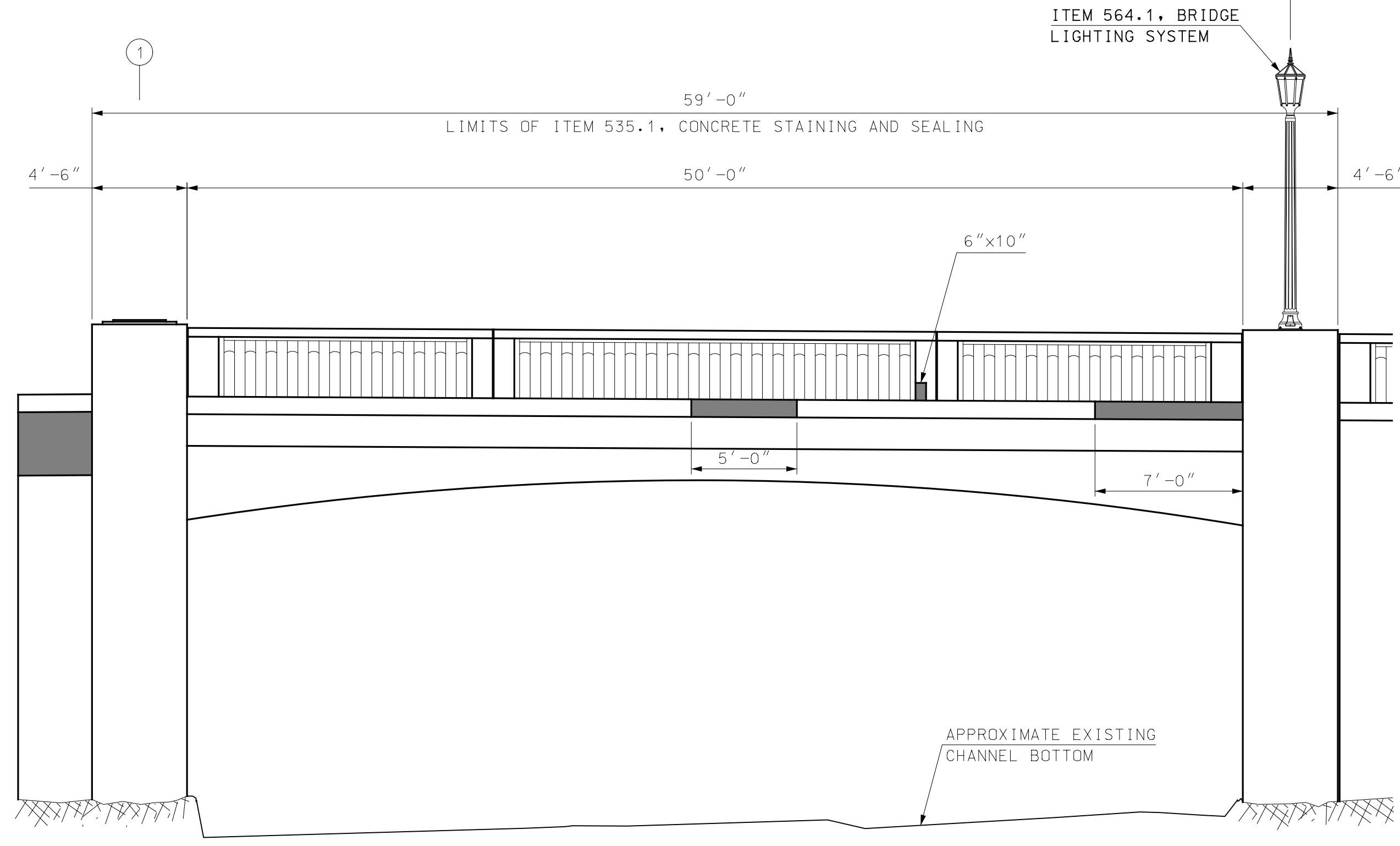
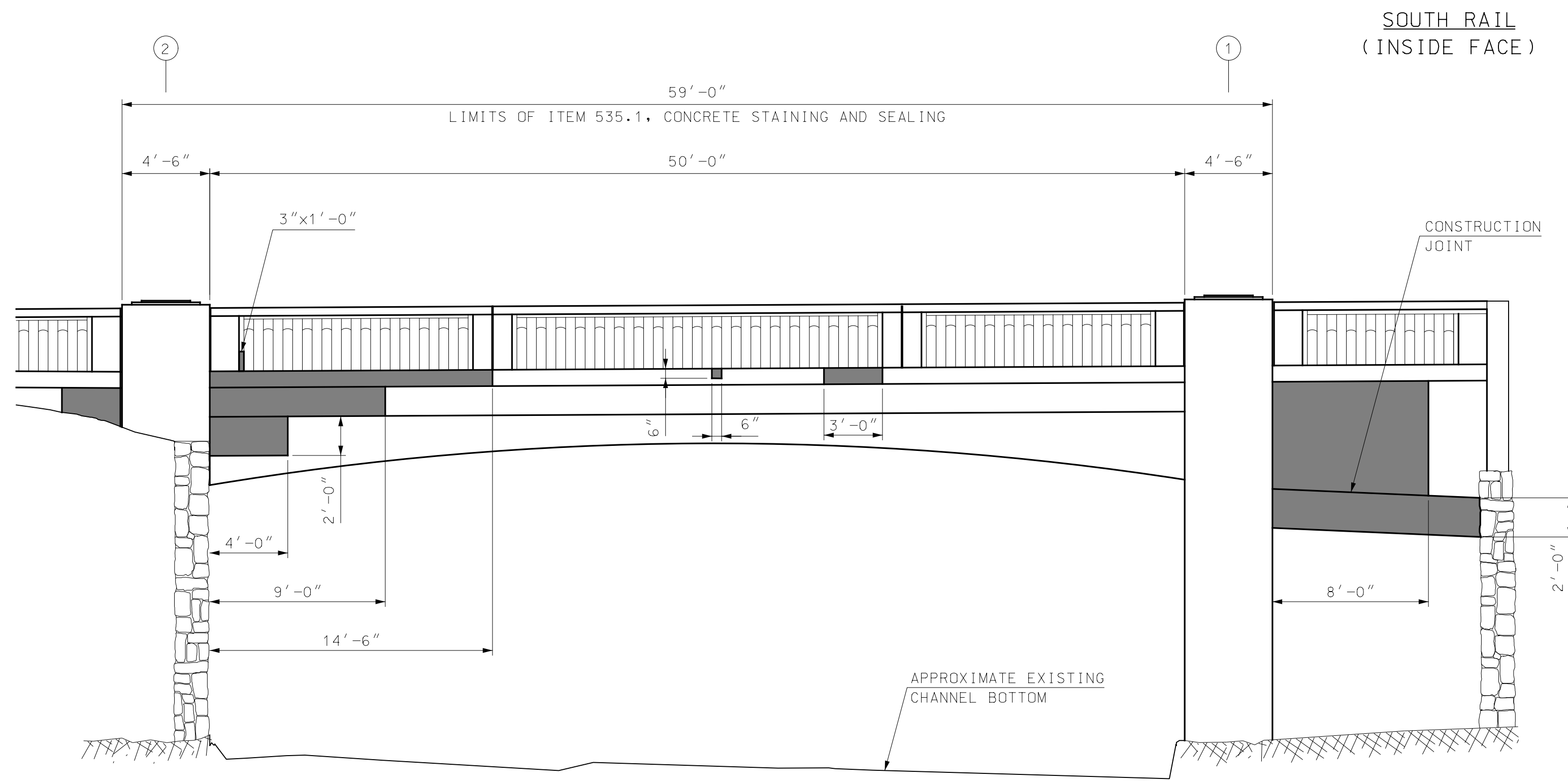
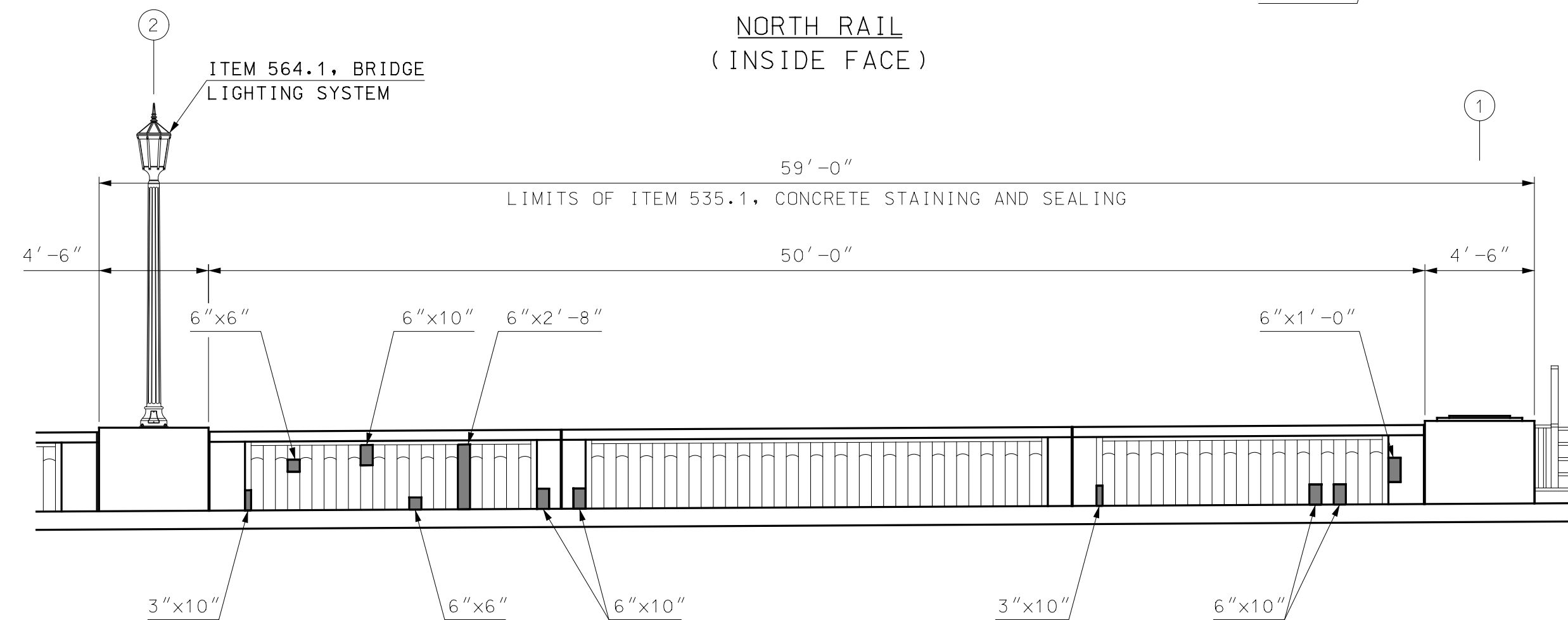
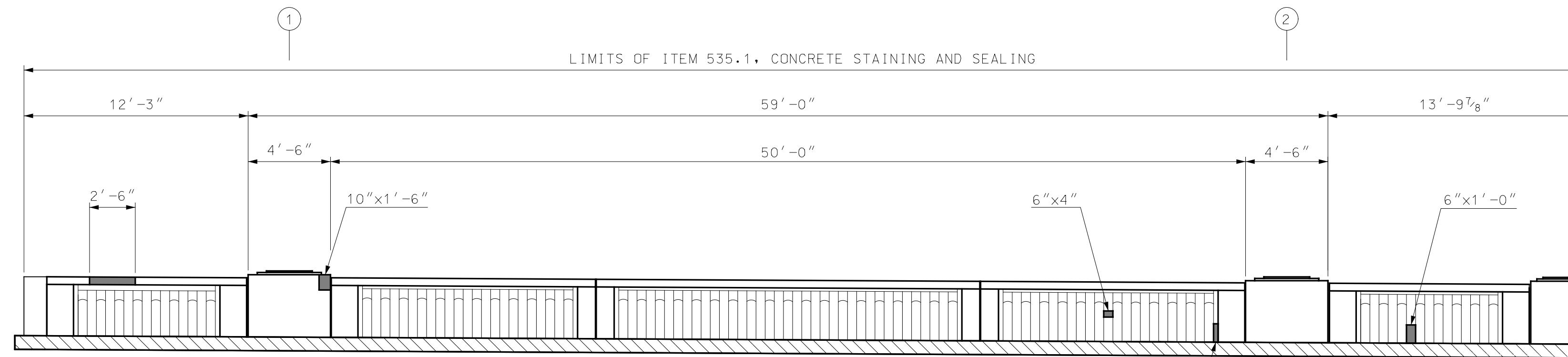
23. THE CONTRACTOR SHALL COORDINATE THE LOCATION AND SCHEDULE FOR ALL UTILITY WORK WITH EACH UTILITY COMPANY LISTED ABOVE. CONTRACTOR SHALL NOTIFY EACH UTILITY COMPANY 4 WEEKS PRIOR TO COMMENCEMENT OF UTILITY CONSTRUCTION. CONTRACTOR SHALL ANTICIPATE A MINIMUM OF 2 WEEKS FOR CONSTRUCTION WORK COMPLETED BY EACH UTILITY COMPANY.

REV	DESCRIPTION	DATE	DRW	CHKD	BY
APRIL 25, 2016	JAS	TAG	STU	AS SHOWN	

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TOWN OF EXETER
EXETER, NEW HAMPSHIRE
STRING BRIDGE OVER EXETER RIVER
UTILITY DETAILS

PROJECT NO.:	095222
FILE NAME:	095222Utl-Dtl1
MODEL NAME:	095222Utl-Dtl1



NORTH FASCIA

SOUTH FASCIA

WEST BRIDGE ELEVATIONS

1" = 5'

LEGEND

- PREPARATION FOR CONCRETE REPAIRS, CLASS II (ITEM 512.0201)
- PREPARATION FOR CONCRETE REPAIRS, CLASS II (ITEM 512.0202)

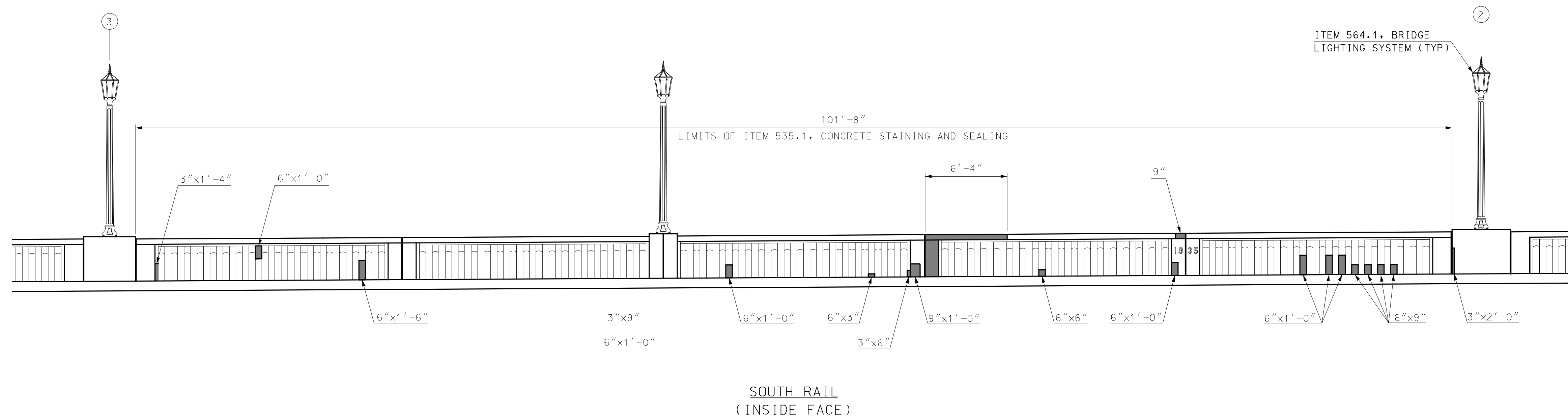
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APRIL 25, 2016	DESIGN BY: JAS			
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	CHKD. BY: STJ			
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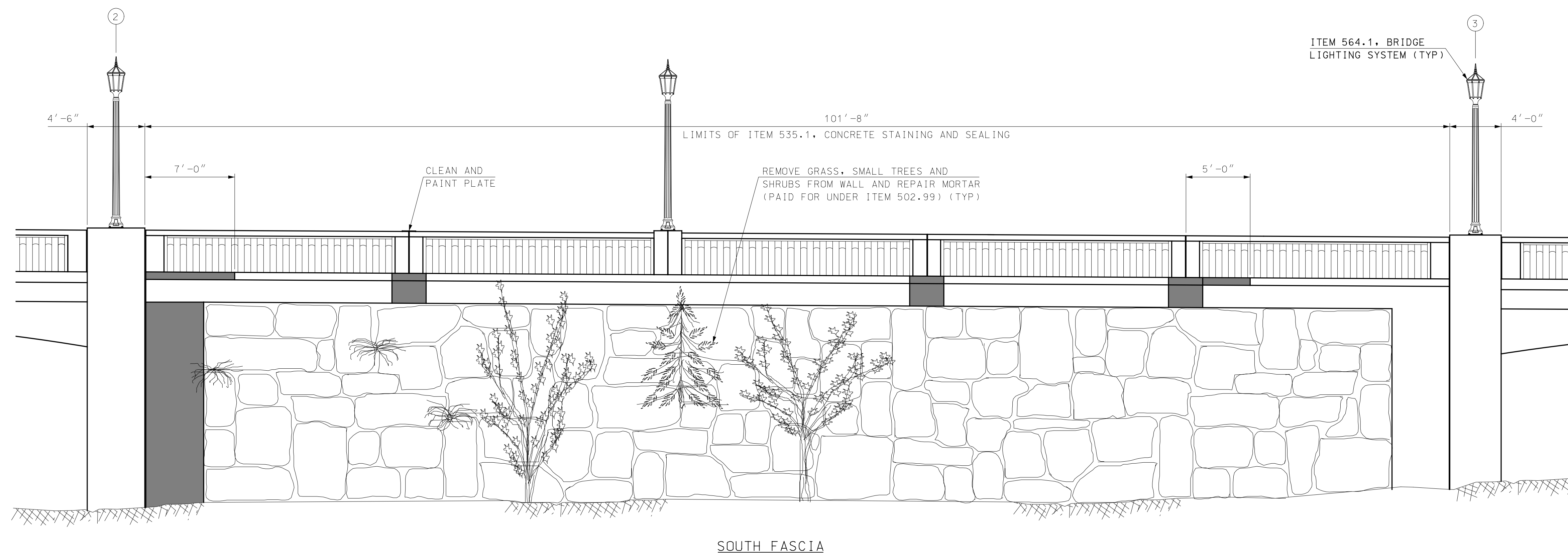
TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 BRIDGE REHABILITATION PLAN (1 OF 7)

PROJECT NO.: 095222
 FILE NAME: 095222SSDetls
 MODEL NAME: 095222SSDetls
 SHEET NO.
30
 SHEET 30 OF 42

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SOUTH RAIL
(INSIDE FACE)



SOUTH FASCIA

KIMBALL ISLAND ELEVATIONS

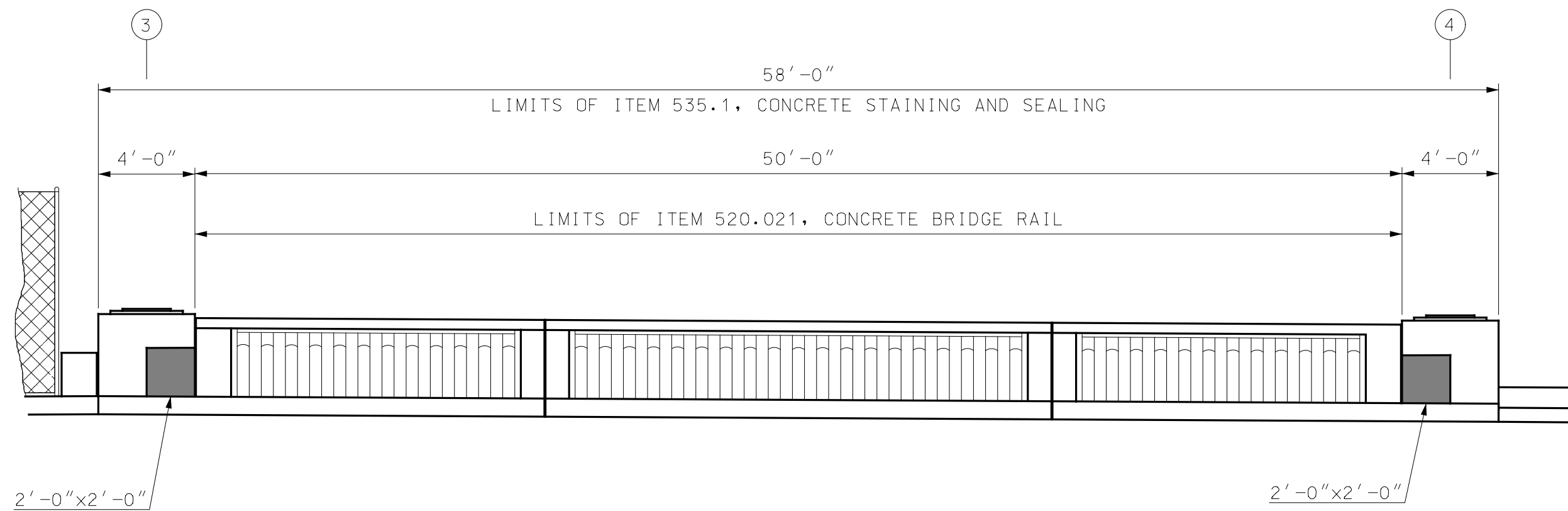
1" = 5'

LEGEND

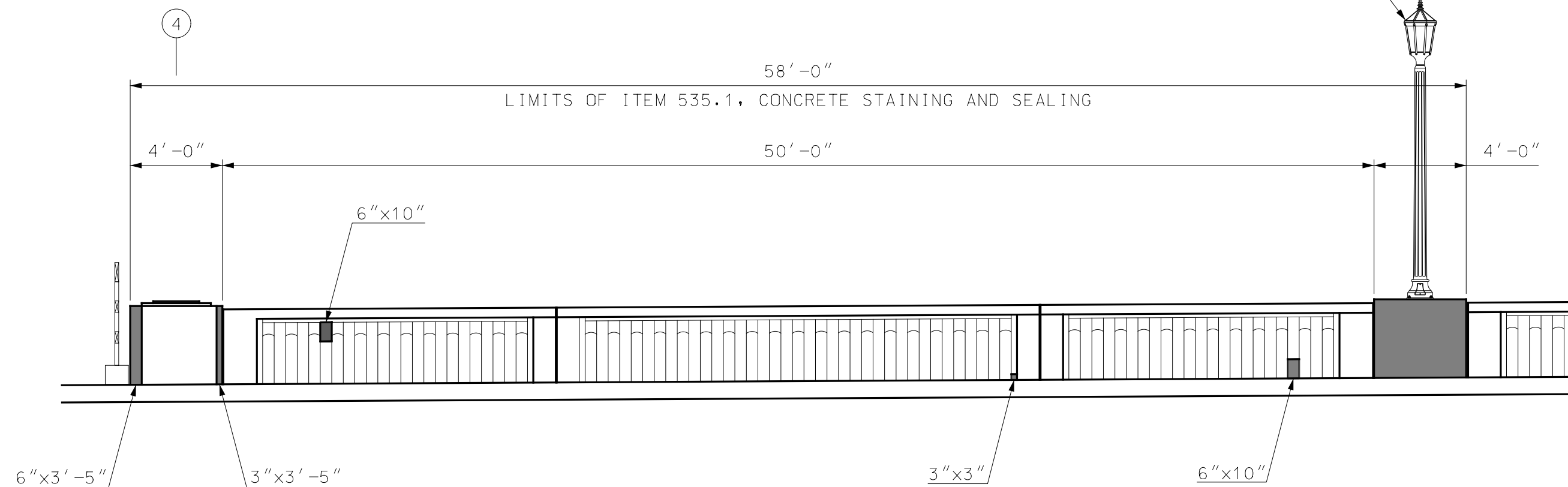
■ PREPARATION FOR CONCRETE REPAIRS, CLASS II (ITEM 512.0202)

ENGINEER	
DATE	
REV	
DESCRIPTION	
DRW	CHKD
BY	BY
APRIL 25, 2016	JAS
DESIGN BY:	JAS
DRAWN BY:	TAG
CHKD. BY:	STU
SCALE:	AS SHOWN
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<p>TOWN OF EXETER EXETER, NEW HAMPSHIRE STRING BRIDGE OVER EXETER RIVER BRIDGE REHABILITATION PLAN (2 OF 7)</p>	
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MODEL NAME:	095222SSDetls2
SHEET NO.	
31	
SHEET 31 OF 42	

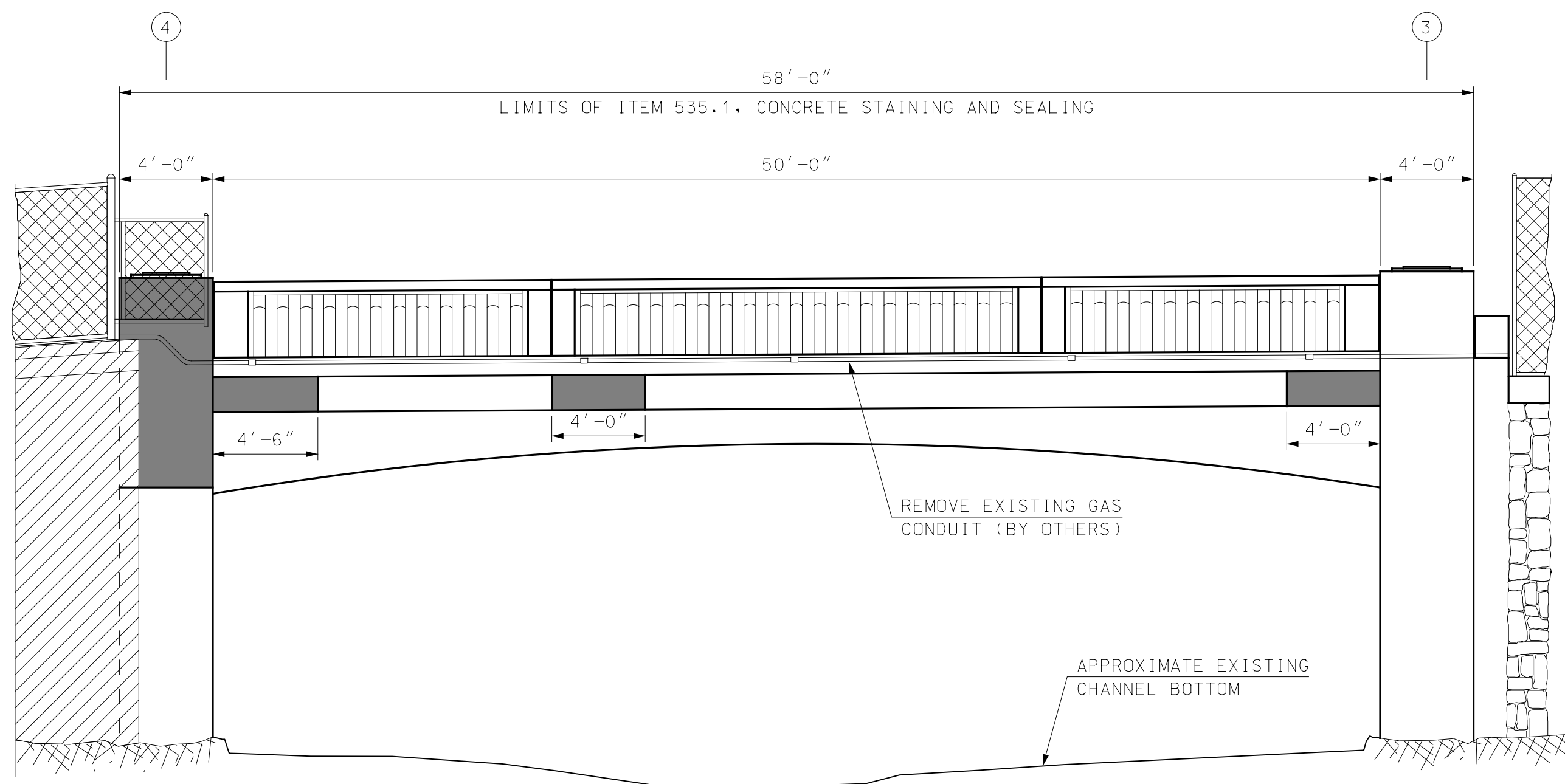
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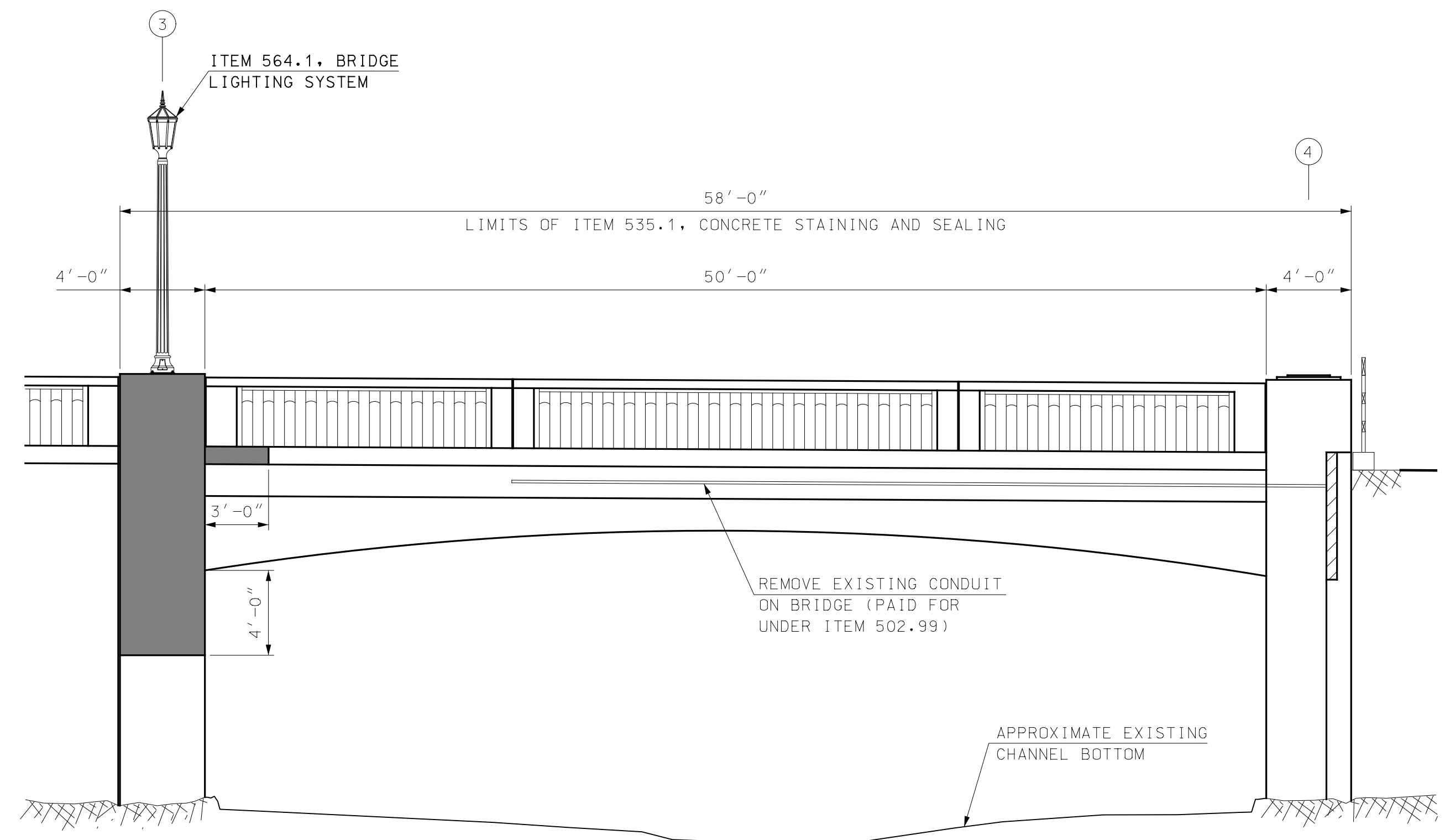
NORTH RAIL
(INSIDE FACE)



SOUTH RAIL
(INSIDE FACE)



NORTH FASCIA



SOUTH FASCIA

EAST BRIDGE ELEVATIONS

1" = 5'

LEGEND

- PREPARATION FOR CONCRETE REPAIRS, CLASS II (ITEM 512.0201)
- PREPARATION FOR CONCRETE REPAIRS, CLASS II (ITEM 512.0202)

ENGINEER	
DATE	
DESCRIPTION	
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APRIL 25, 2016	
DESIGN BY: JAS	
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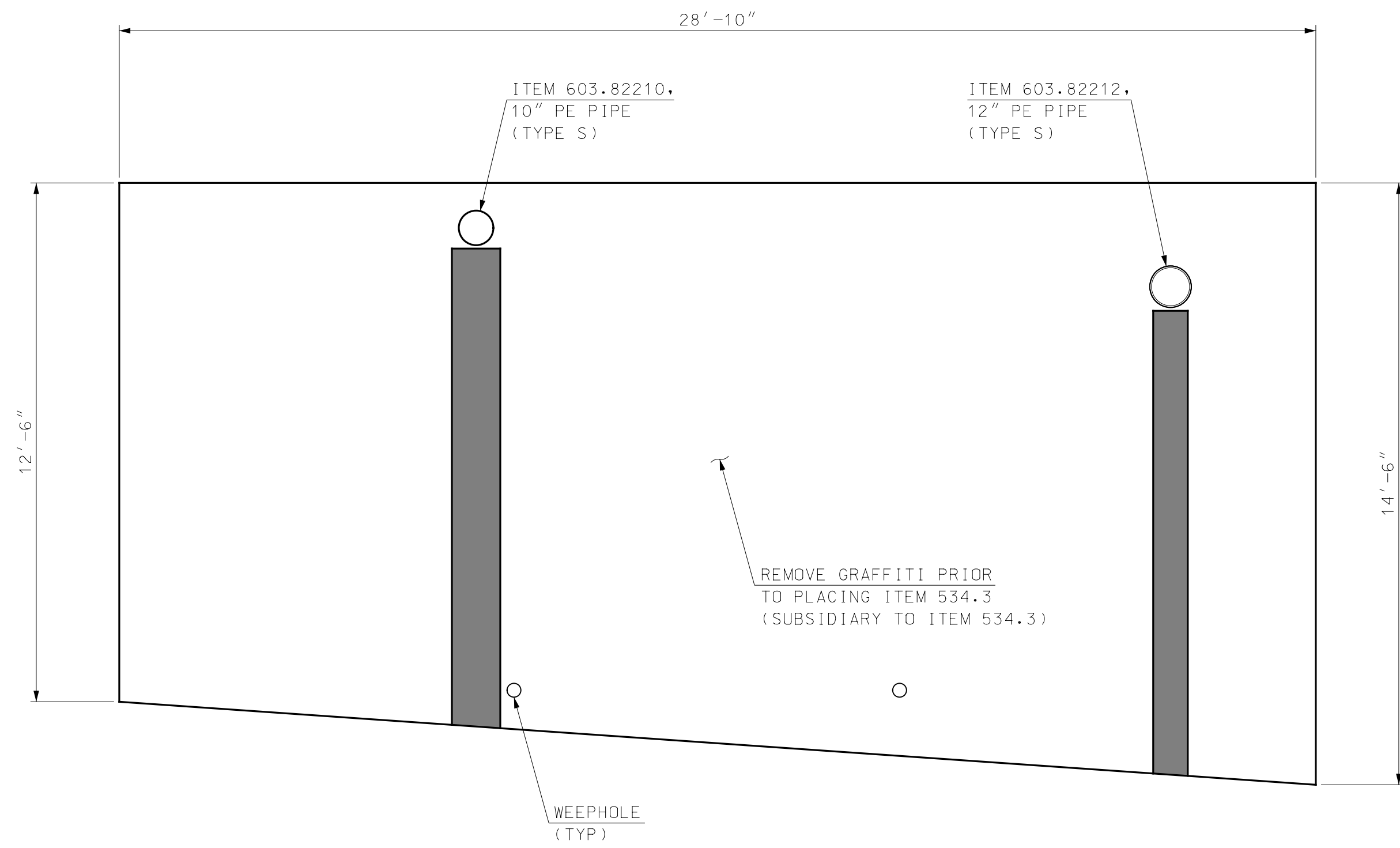
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TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 BRIDGE REHABILITATION PLAN (3 OF 7)

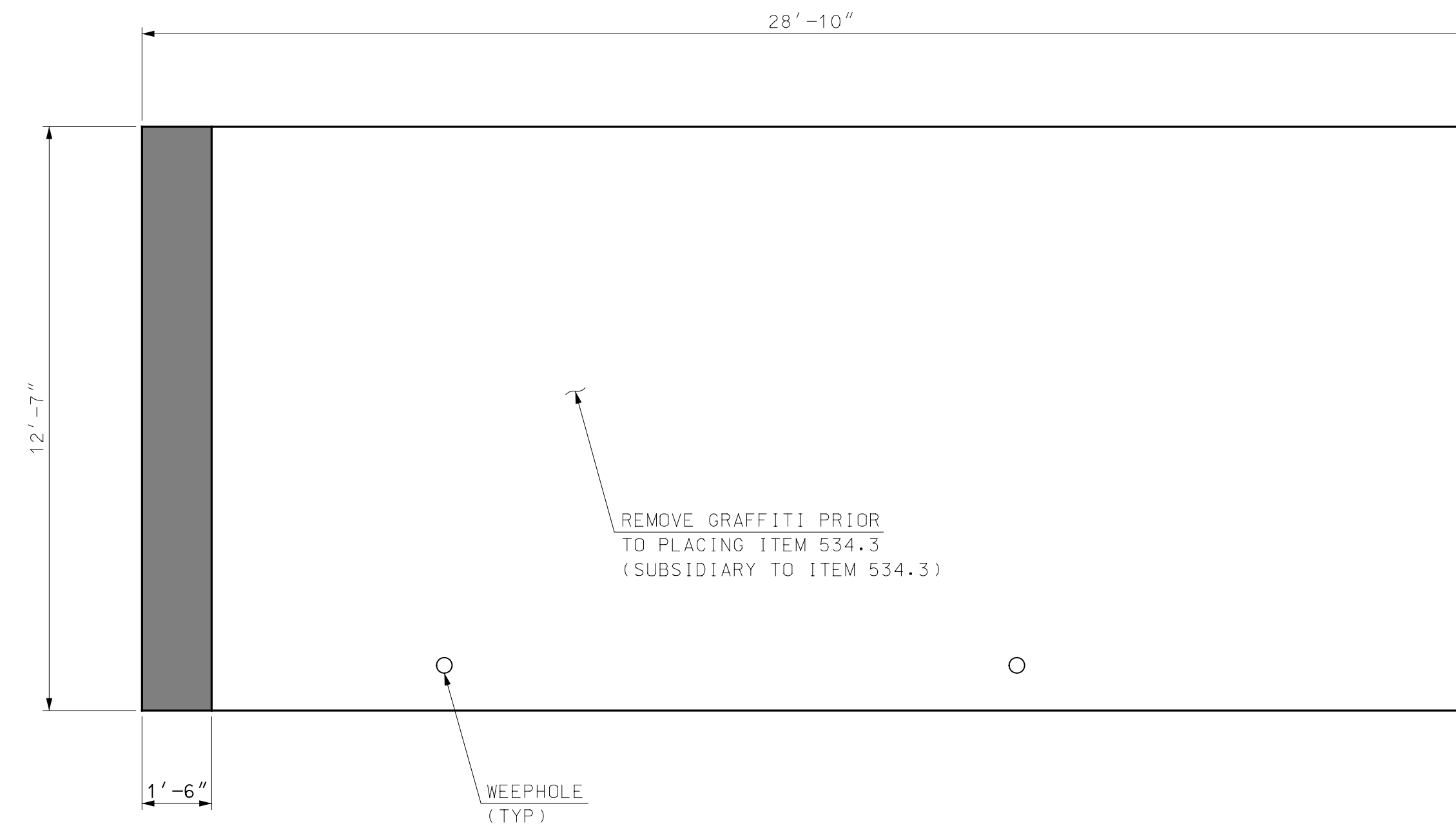
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FILE NAME:	095222SSDetls
MODEL NAME:	095222SSDetls3

SHEET NO.
32
 SHEET 32 OF 42

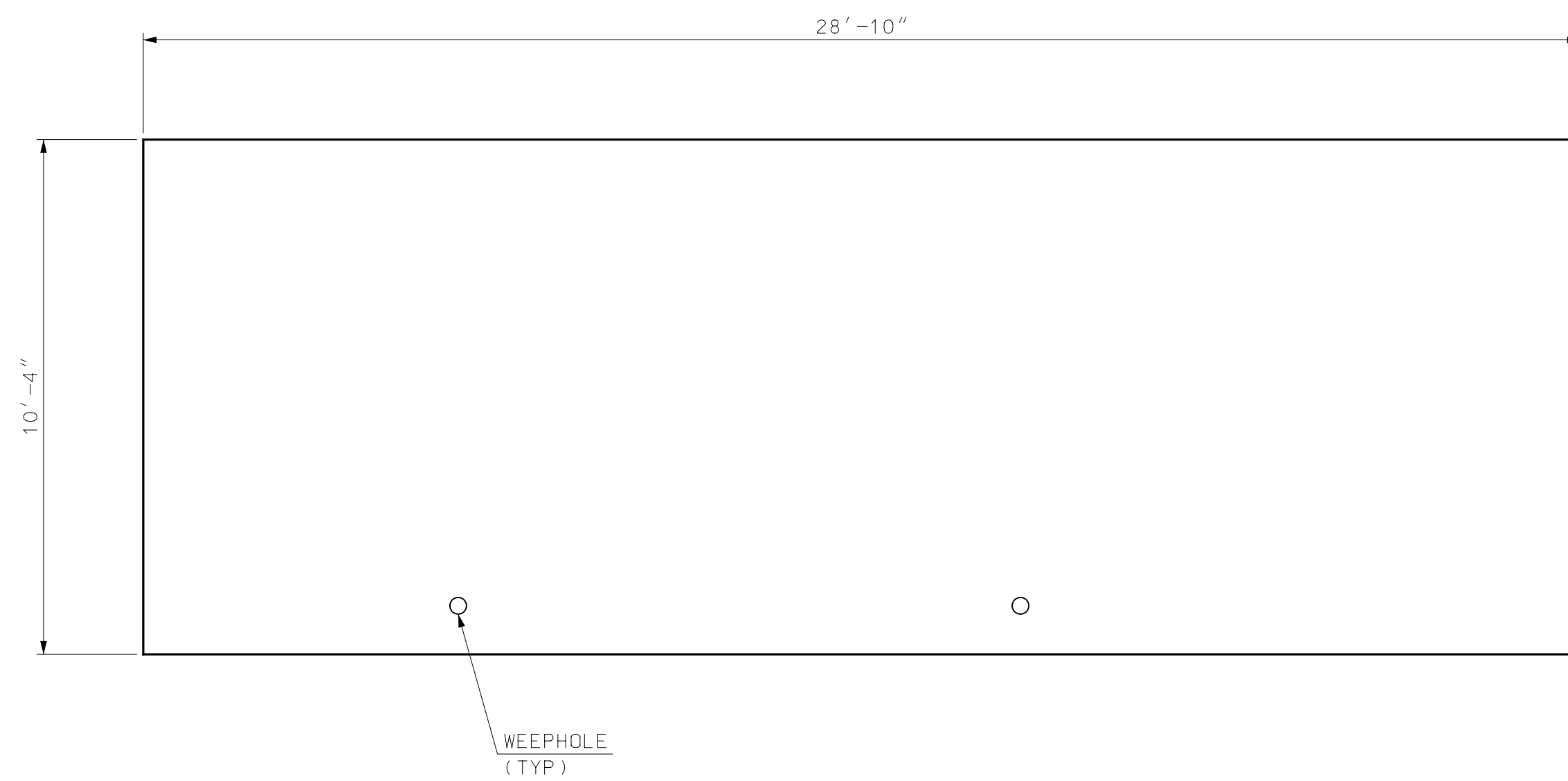
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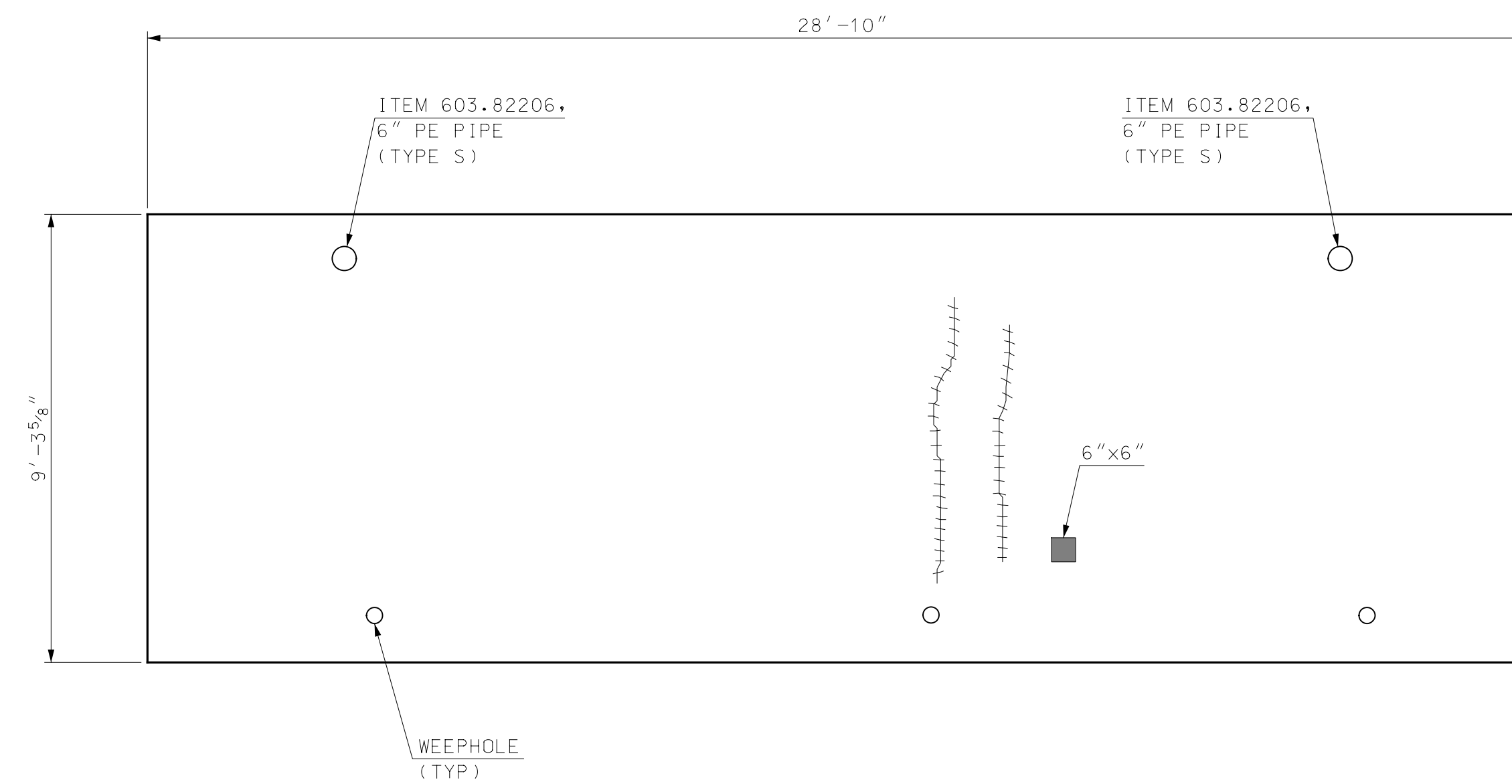
WEST LEG



EAST LEG



WEST LEG



EAST LEG

WEST BRIDGE
SCALE: 3/8" = 1'-0"

EAST BRIDGE
SCALE: 3/8" = 1'-0"

NOTES

1. SEE SHEET 14 FOR PIPE DRAINAGE NOTES.
2. GRAFFITI REMOVAL METHODS AND MATERIALS SHALL BE APPROVED BY THE ENGINEER PRIOR TO WORK. IT IS ANTICIPATED GRAFFITI TO BE REMOVED BY MEANS OF A GRAFFITI REMOVER CHEMICAL AND POWER WASHING.
3. GRAFFITI REMOVER CHEMICAL SHALL BE SOLVENT-BASED AND SHALL NOT CONTAIN METHANOL, METHYLENE CHLORIDE, OR HALOGENATED SOLVENTS.
4. WATER USED IN THE GRAFFITI REMOVAL PROCESS SHALL BE COLLECTED AND SHALL BE PREVENTED FROM GOING INTO THE EXETER RIVER.
5. SEE SHEET 29 FOR PIPE DRAIN PENETRATION DETAIL.

LEGEND

- PREPARATION FOR CONCRETE REPAIRS, CLASS II (ITEM 512.0202)
- +++++ ROUTE AND SEAL CRACK (SUBSIDIARY TO ITEM 512.0202)

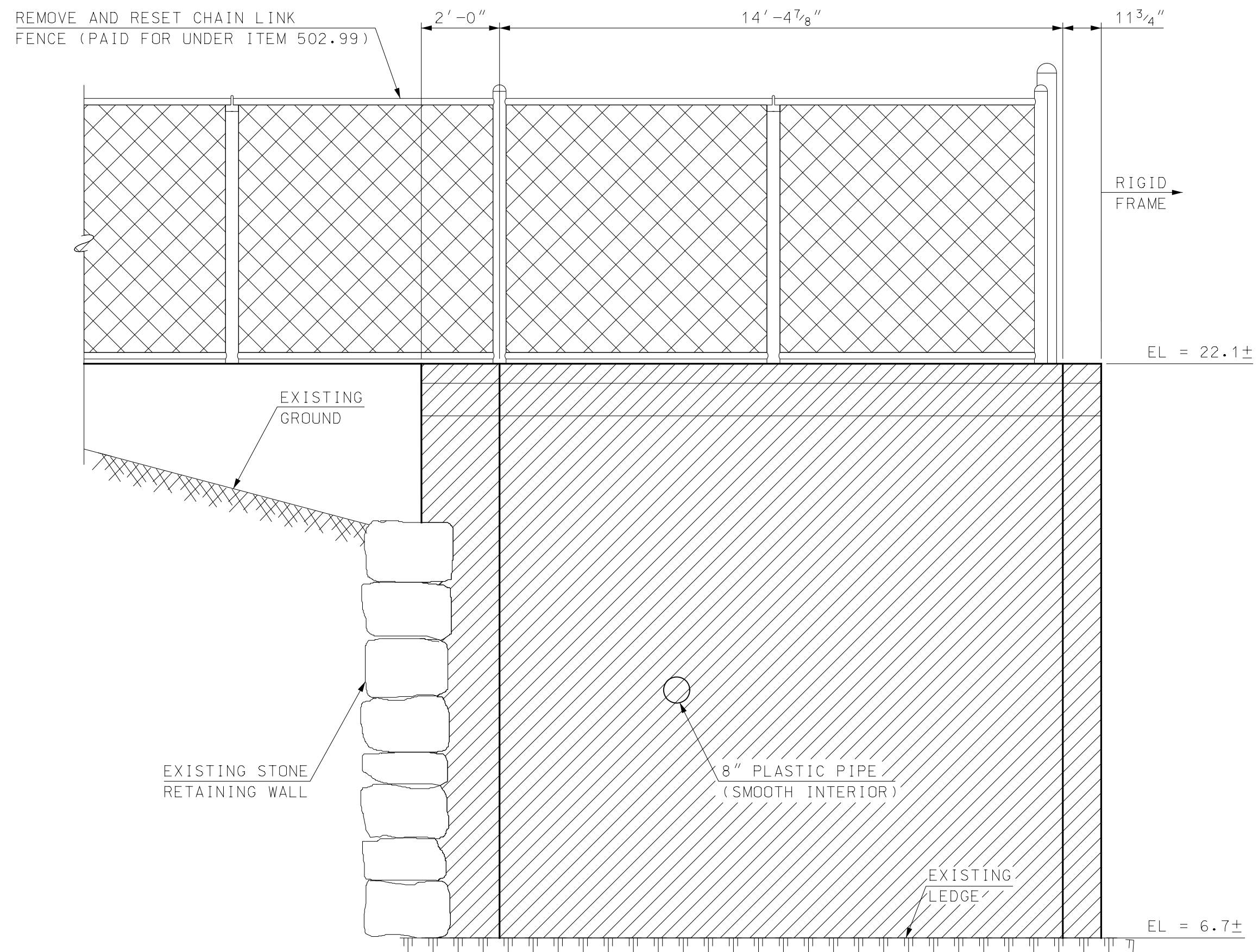
REV.	DESCRIPTION	DATE	BY	CHKD.
APRIL 25, 2016	DESIGN BY: JAS			
	DRAWN BY: TAG			
	CHKD. BY: STJ			
	SCALE: AS SHOWN			

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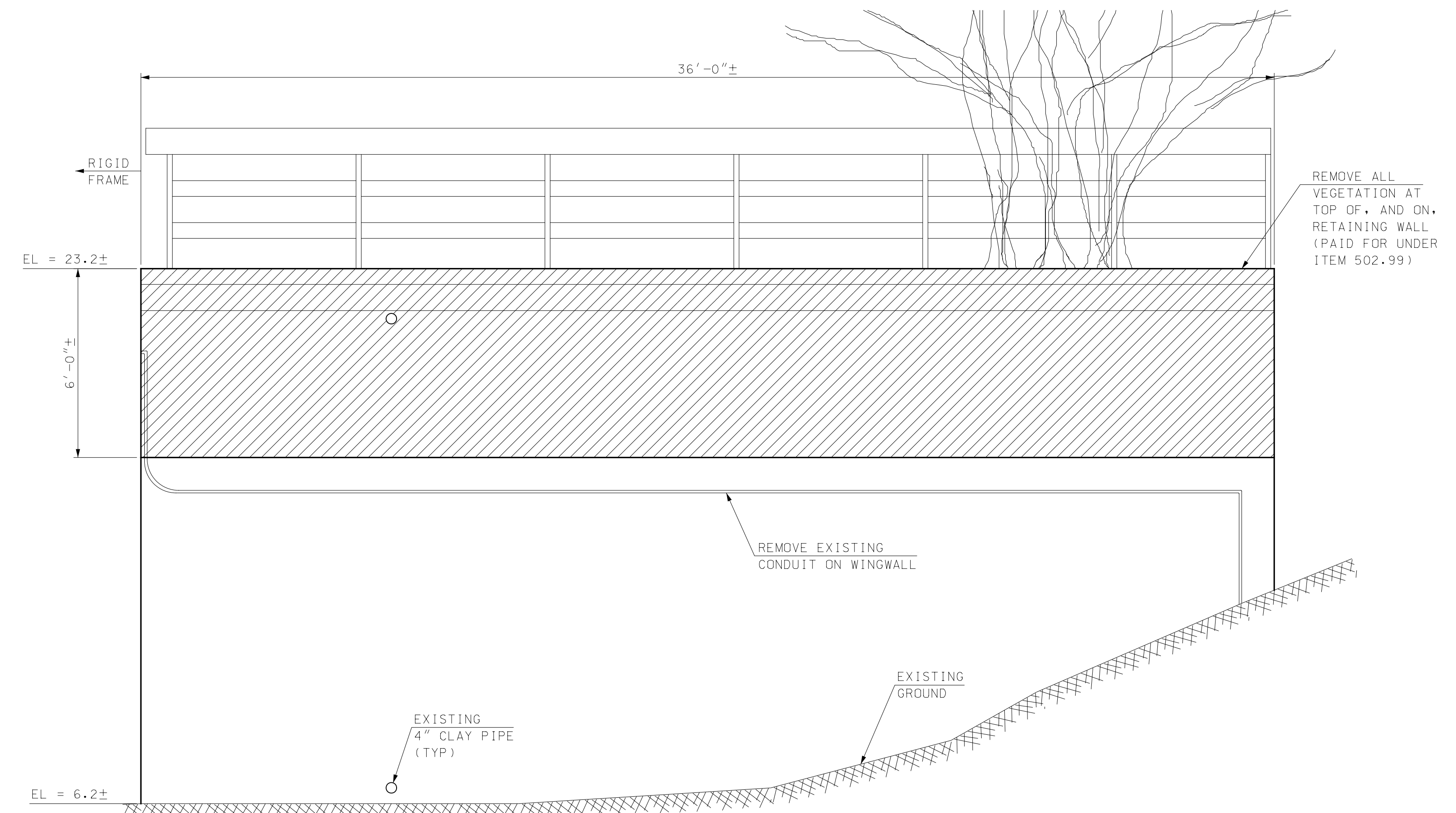
TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 BRIDGE REHABILITATION PLAN (6 OF 7)

PROJECT NO.: 095222
 FILE NAME: 095222SSDetls
 MODEL NAME: 095222SSDetls6
 SHEET NO.
35
 SHEET 35 OF 42

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NORTHEAST WINGWALL - DEVELOPED ELEVATION
 EAST BRIDGE
 SCALE: 3/8" = 1'-0"



SOUTHEAST WINGWALL ELEVATION
 EAST BRIDGE
 SCALE: 3/8" = 1'-0"

NOTES
 1. SEE SHEET 29 FOR PIPE DRAIN PENETRATION DETAIL.

LEGEND
 [Hatched Box] PREPARATION FOR CONCRETE REPAIRS, CLASS 11 (ITEM 512.0201)

REV	DESCRIPTION	DATE	BY	CHKD

APRIL 25, 2016	DESIGN BY: JAS	DRAWN BY: TAG	CHKD. BY: STJ	SCALE: AS SHOWN
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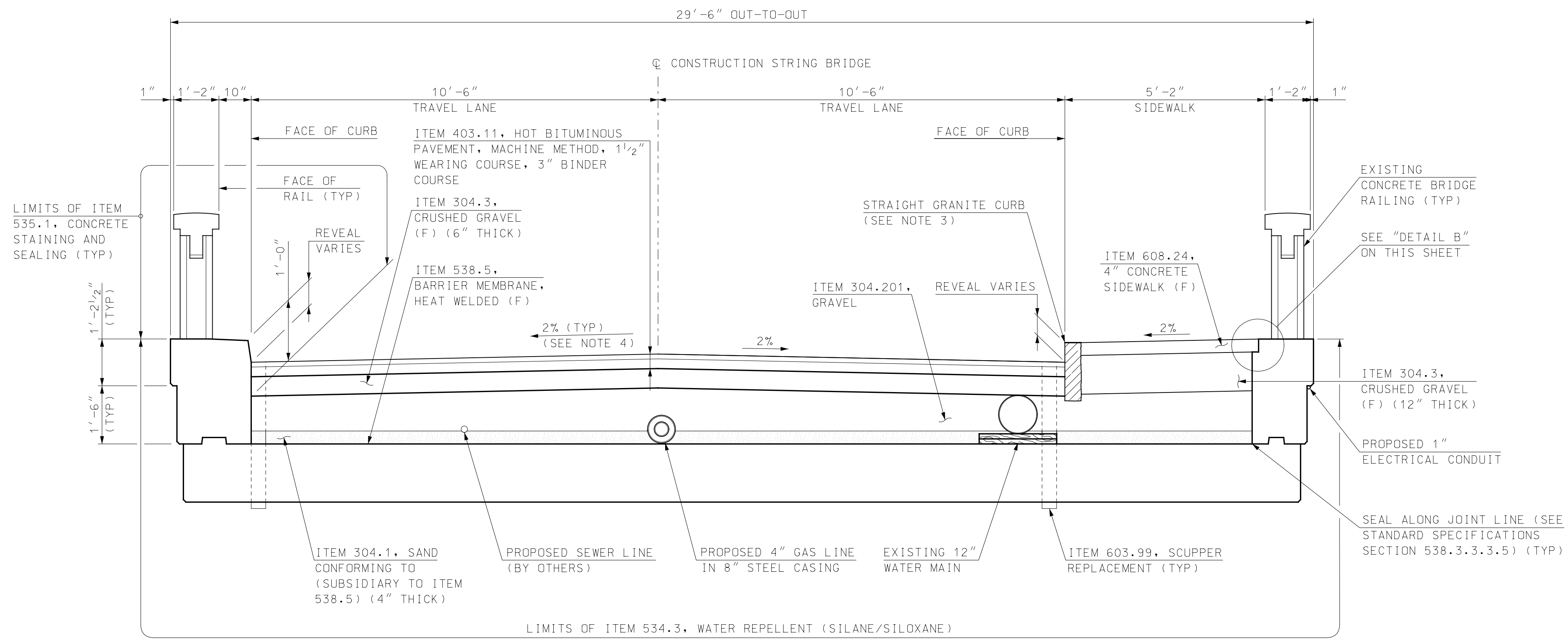
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TOWN OF EXETER
 EXETER, NEW HAMPSHIRE
 STRING BRIDGE OVER EXETER RIVER
 BRIDGE REHABILITATION PLAN (7 OF 7)

PROJECT NO.: 095222
 FILE NAME: 095222SSDetIs
 MODEL NAME: 095222SSDetIs7

SHEET NO.
36
 SHEET 36 OF 42

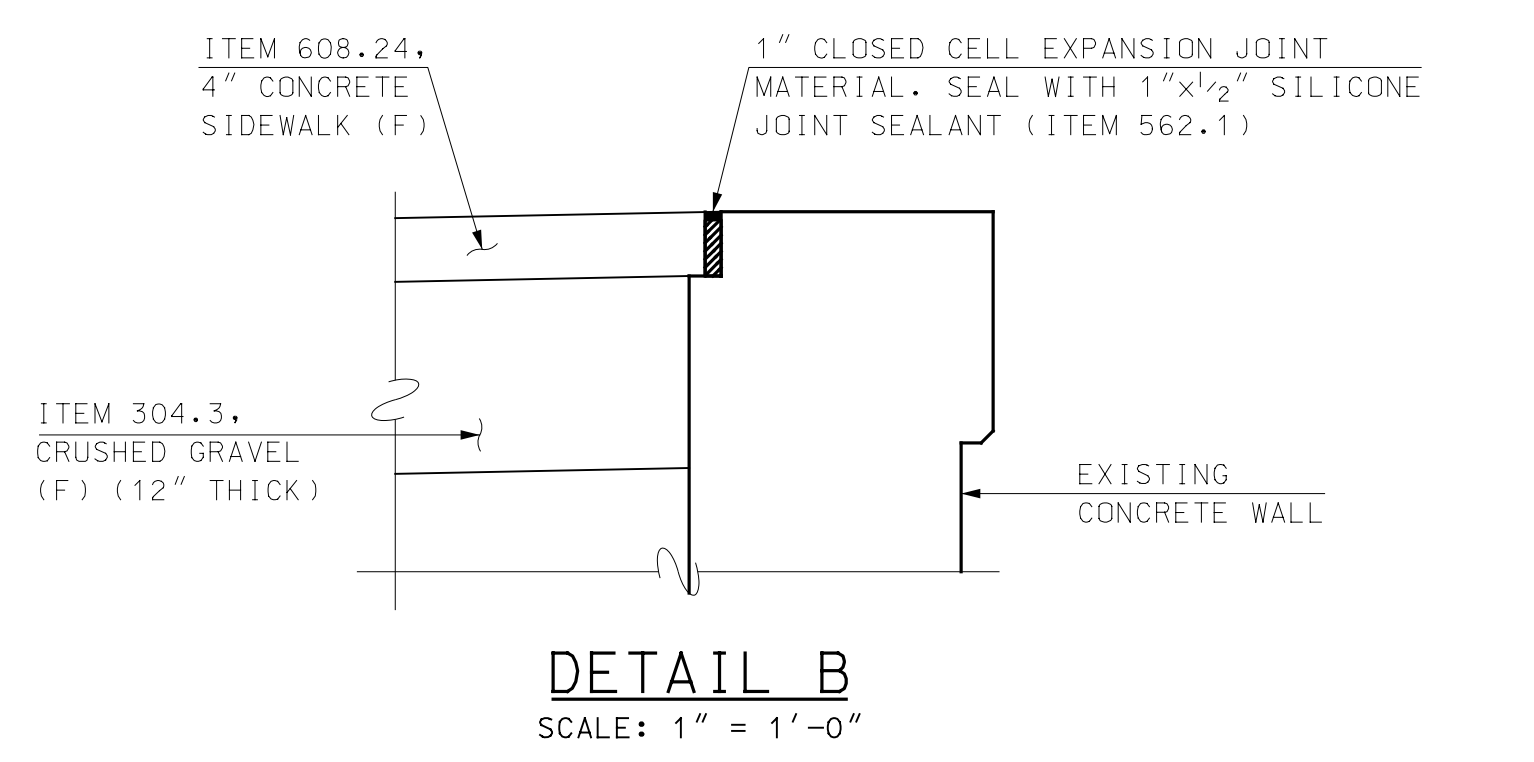
ENGINEER
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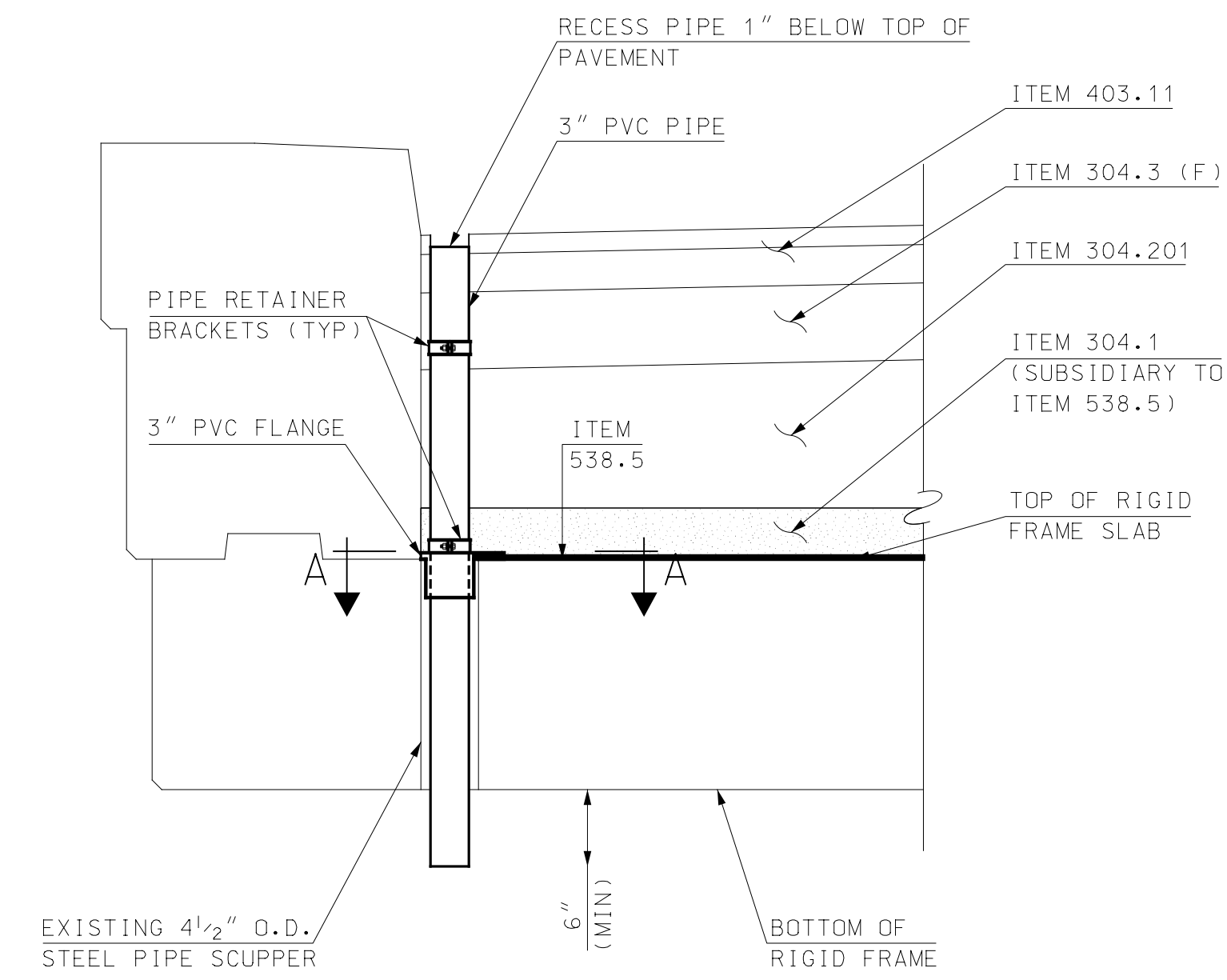
- NOTES**
- WEST BRIDGE (BR. NO. 103/074) SHOWN, EAST BRIDGE (BR. NO. 102/074) SIMILAR
 - END PILASTERS NOT SHOWN FOR CLARITY.
 - PLACE GRANITE CURB SUITABLE FOR REUSE STARTING AT KIMBALL ISLAND AND WORK OUTWARD. USE NEW CURB WHEN THERE IS NO MORE CURB SUITABLE FOR REUSE. CURB SUITABLE FOR REUSE SHALL BE PAID FOR UNDER ITEM 609.5, RESET GRANITE CURB. NEW CURB SHALL BE PAID FOR UNDER ITEM 609.2, CURVED GRANITE CURB OR ITEM 609.01, STRAIGHT GRANITE CURB, AS APPROPRIATE.
 - SEE NOTE 4 ON SHEET 8.

TYPICAL DECK SECTION
SCALE: 1/2" = 1'-0"

CURB REVEAL (IN)			
BRIDGE	STATION	LEFT	RIGHT
WEST BRIDGE	101+15.81	9.17	7.97
	101+72.81	7.45	6.02
EAST BRIDGE	102+76.73	7.16	5.96
	103+33.73	7.10	5.90

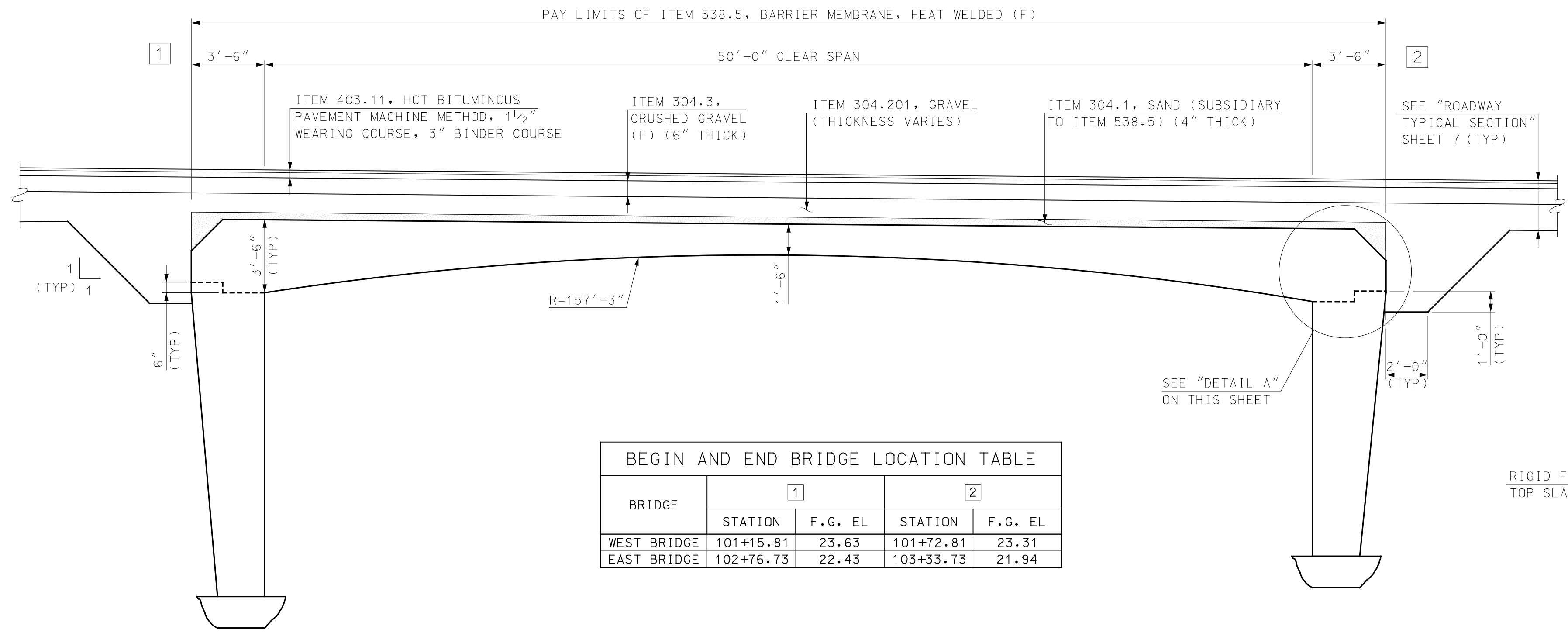


DETAIL B
SCALE: 1" = 1'-0"



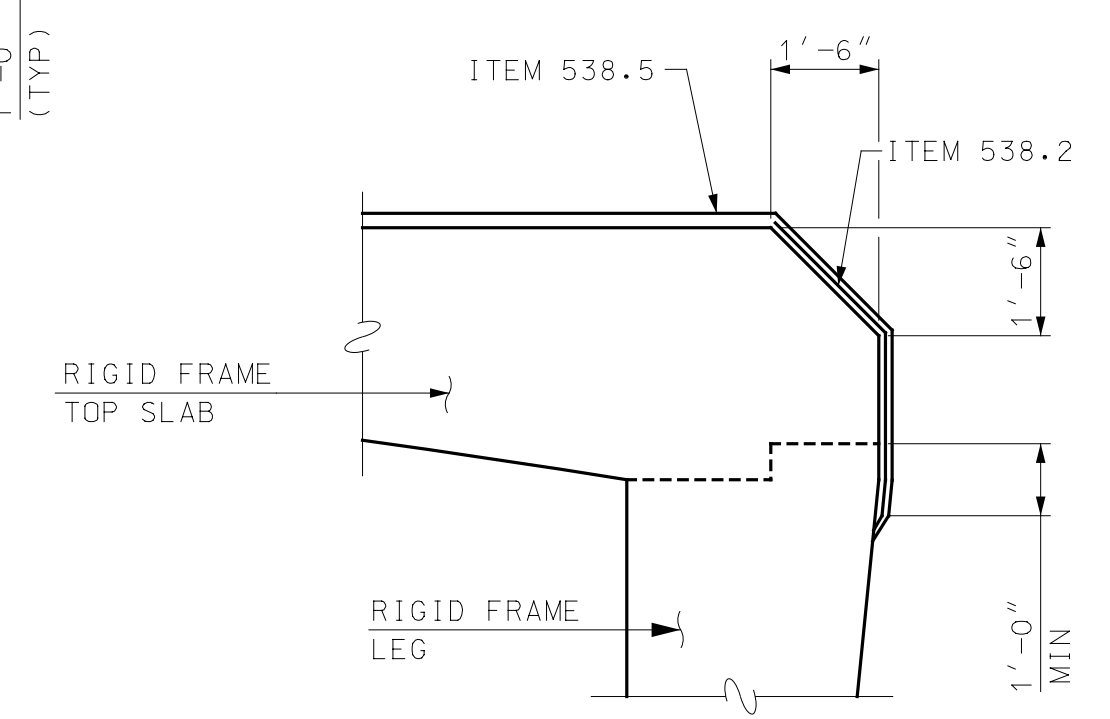
SCUPPER DETAIL
SCALE: 1" = 1'-0"

- NOTES**
- CUT EXISTING STEEL SCUPPER FLUSH WITH TOP AND BOTTOM OF RIGID FRAME SLAB.
 - PLACE ITEM 538.5, BARRIER MEMBRANE, HEAT WELDED (F) PRIOR TO INSTALLING 3" PVC FLANGE. CUT-OUT MEMBRANE AT SCUPPER LOCATIONS. ANY DAMAGE TO THE MEMBRANE SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
 - PVC PIPES AND FLANGES SHALL BE SCHEDULE 80 AND SHALL BE BLACK.
 - PVC FLANGES MAY REQUIRE NOTCHING TO CLEAR FACE OF CONCRETE BRUSH CURB.
 - ITEM 603.99, SCUPPER REPLACEMENT SHALL INCLUDE BUT IS NOT LIMITED TO, ALL MATERIALS AND INSTALLATION AS SHOWN IN THE DETAIL ABOVE.

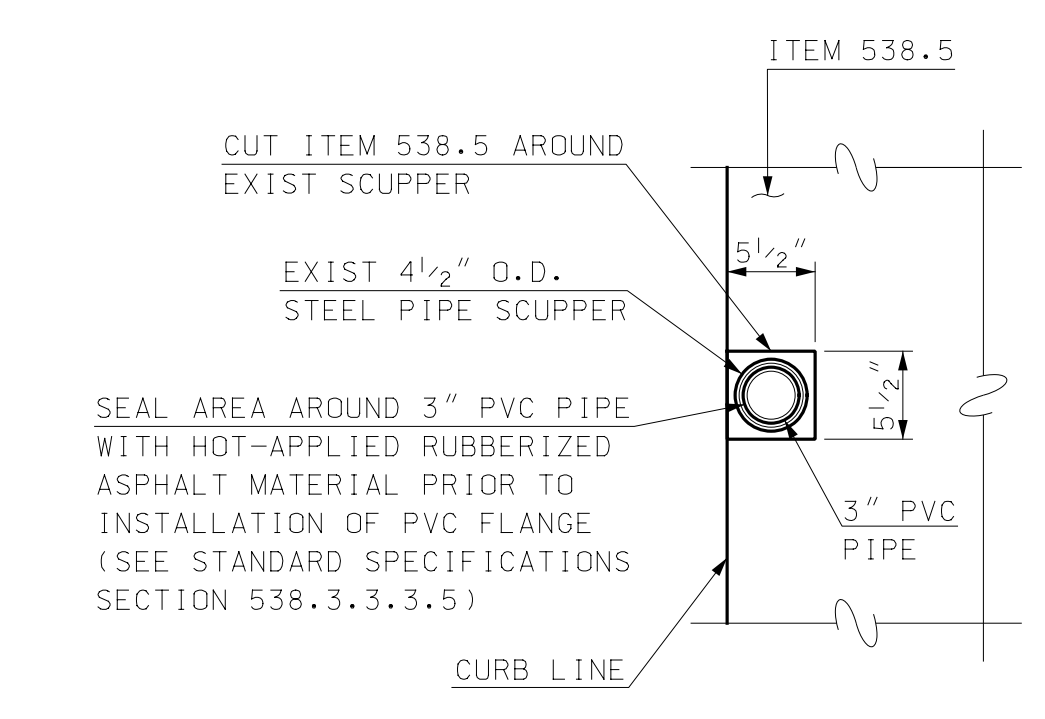


BEGIN AND END BRIDGE LOCATION TABLE				
BRIDGE	1		2	
	STATION	F.G. EL	STATION	F.G. EL
WEST BRIDGE	101+15.81	23.63	101+72.81	23.31
EAST BRIDGE	102+76.73	22.43	103+33.73	21.94

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



DETAIL A
SCALE: 3/8" = 1'-0"



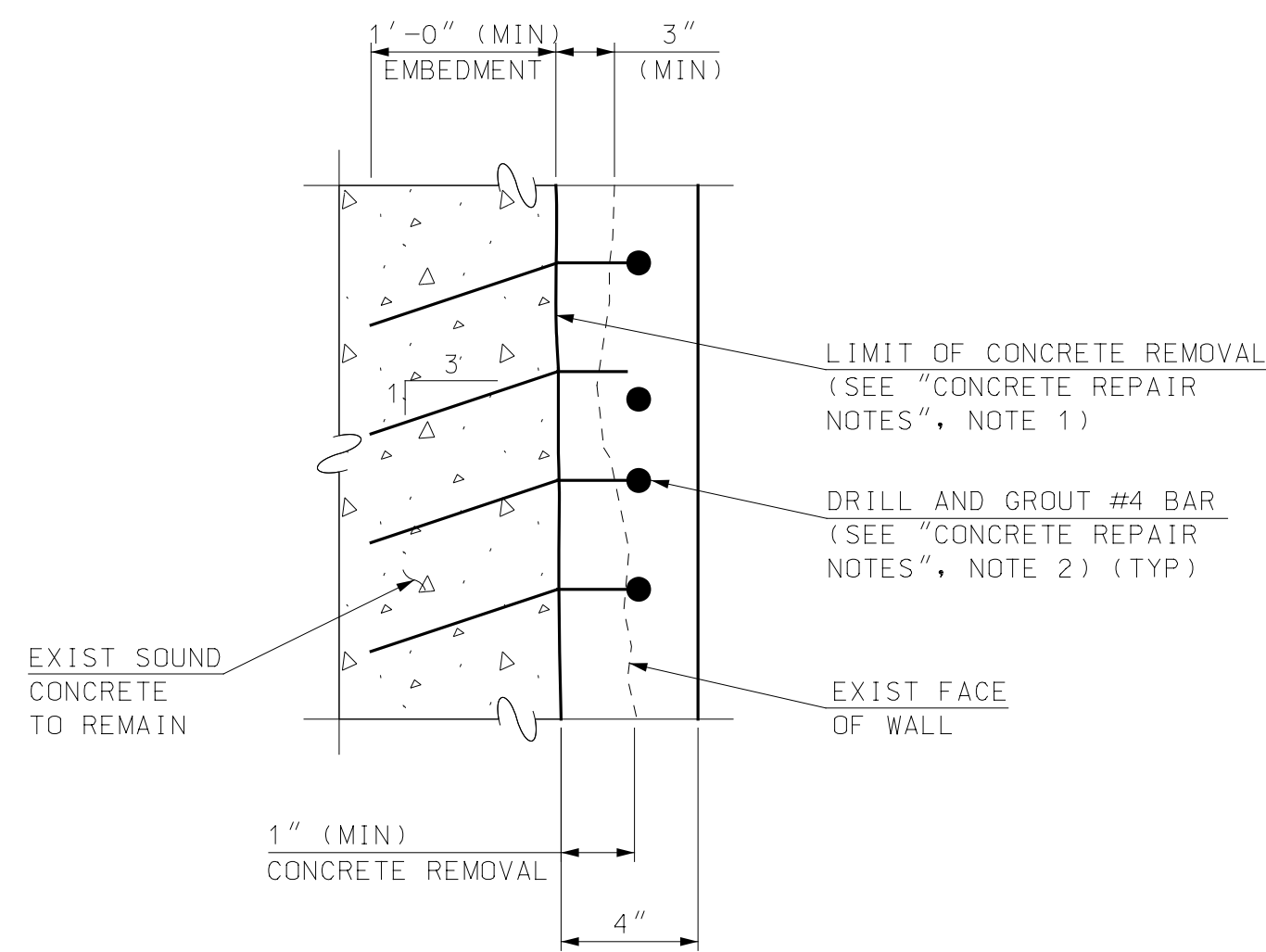
SECTION A-A
SCALE: 1" = 1'-0"

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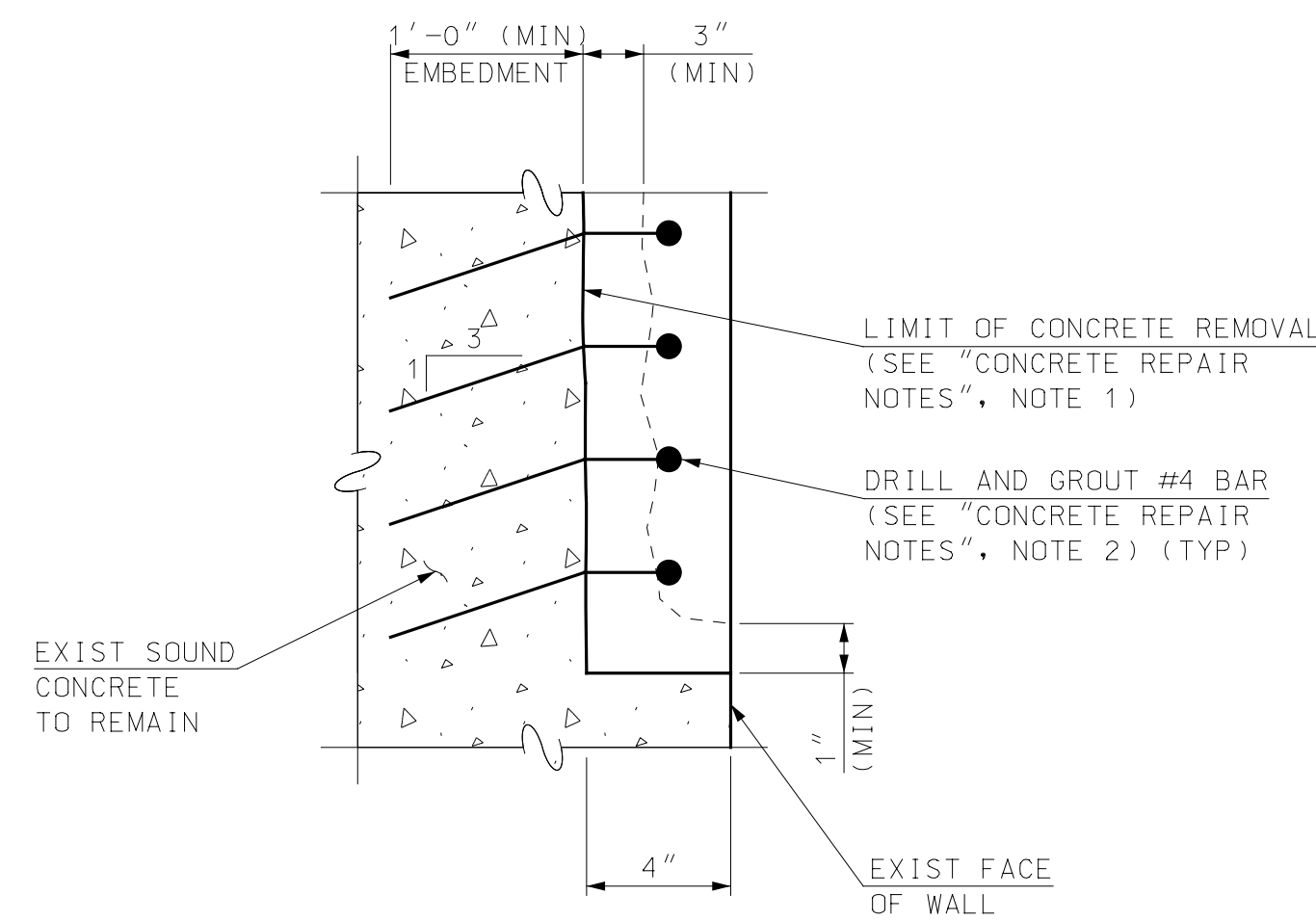
TOWN OF EXETER
EXETER, NEW HAMPSHIRE
STRING BRIDGE OVER EXETER RIVER
BRIDGE REHABILITATION DETAILS (1 OF 2)

PROJECT NO.: 095222
FILE NAME: 095222SSDets
MODEL NAME: 095222SSDets8

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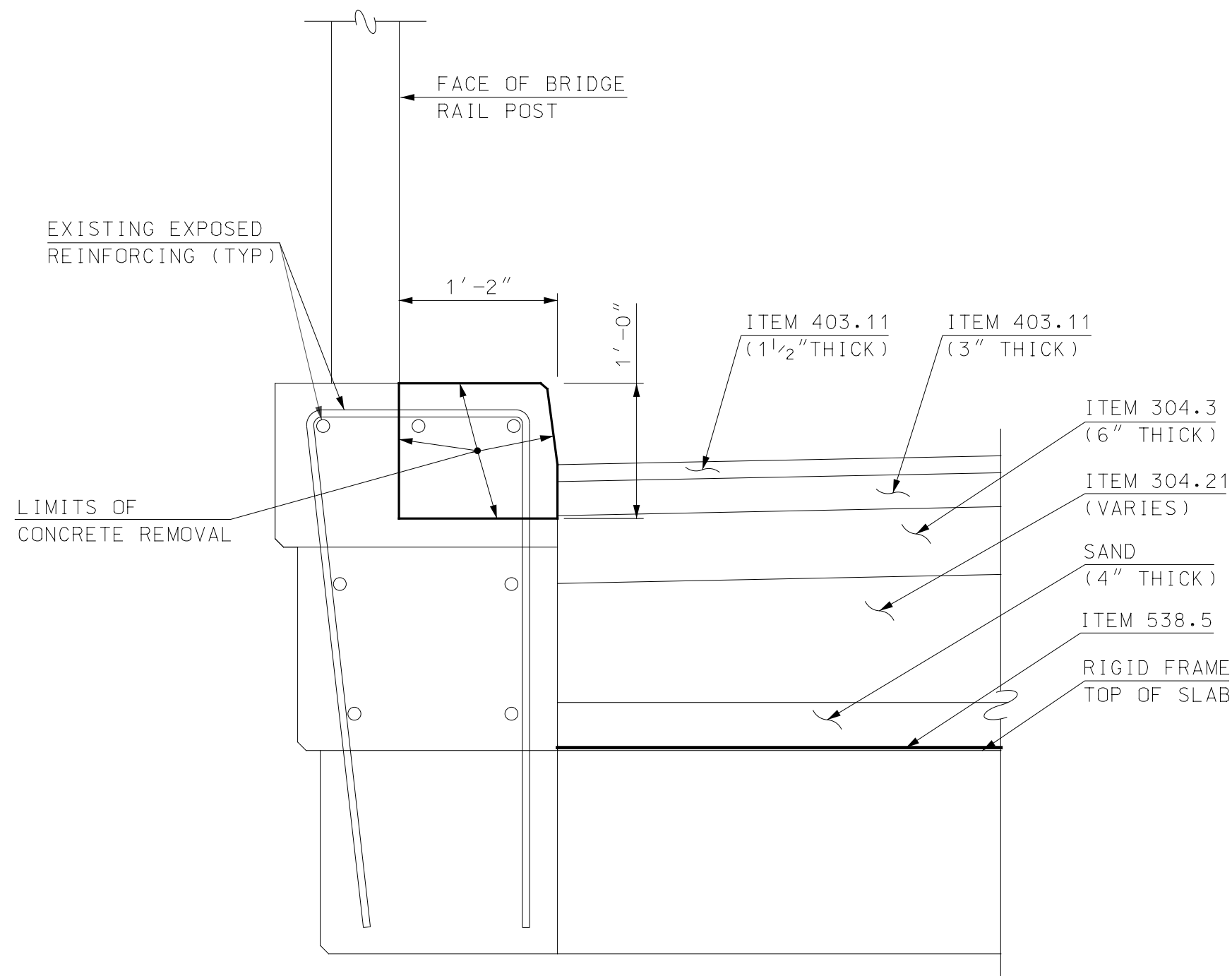
NORTHEAST WINGWALL



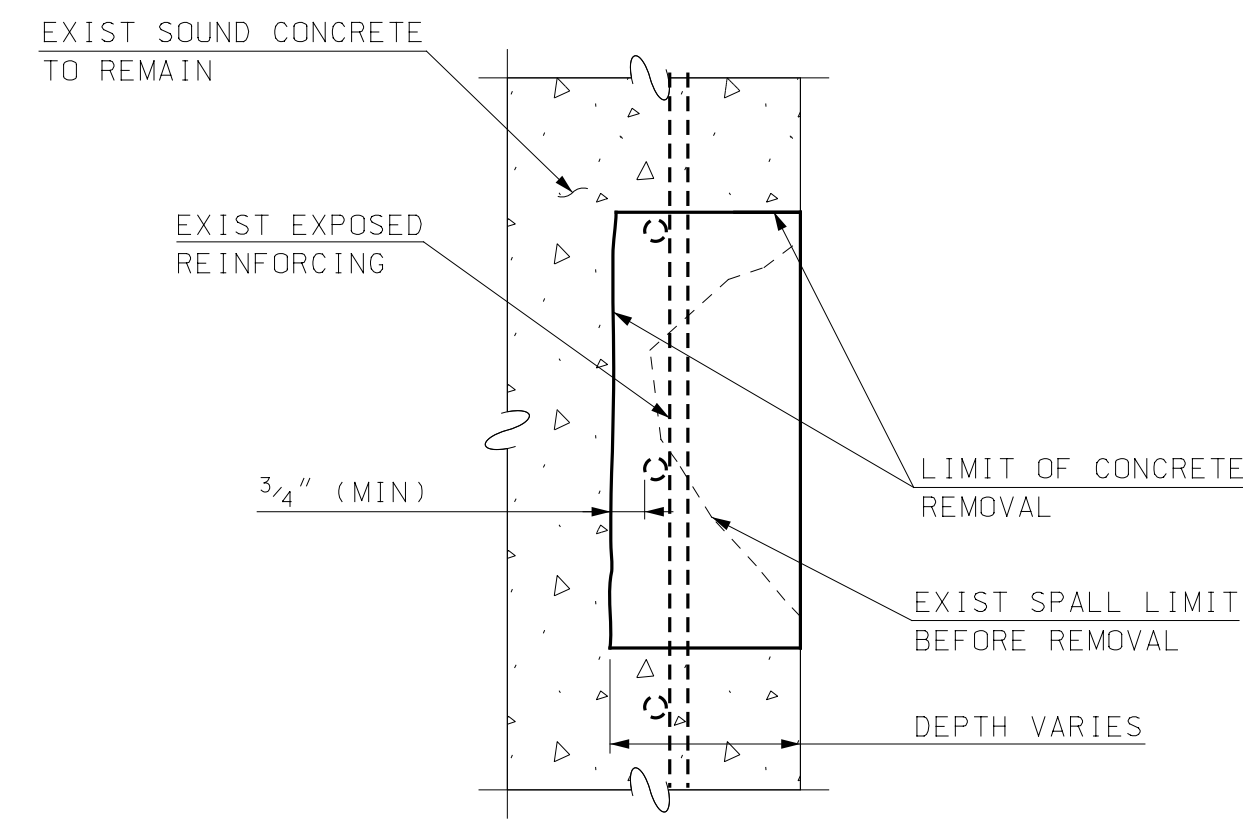
SOUTHEAST WINGWALL

TYPE II CONCRETE REPAIR DETAIL FOR WINGWALLS
(ITEM 512.0201)
NOT TO SCALE

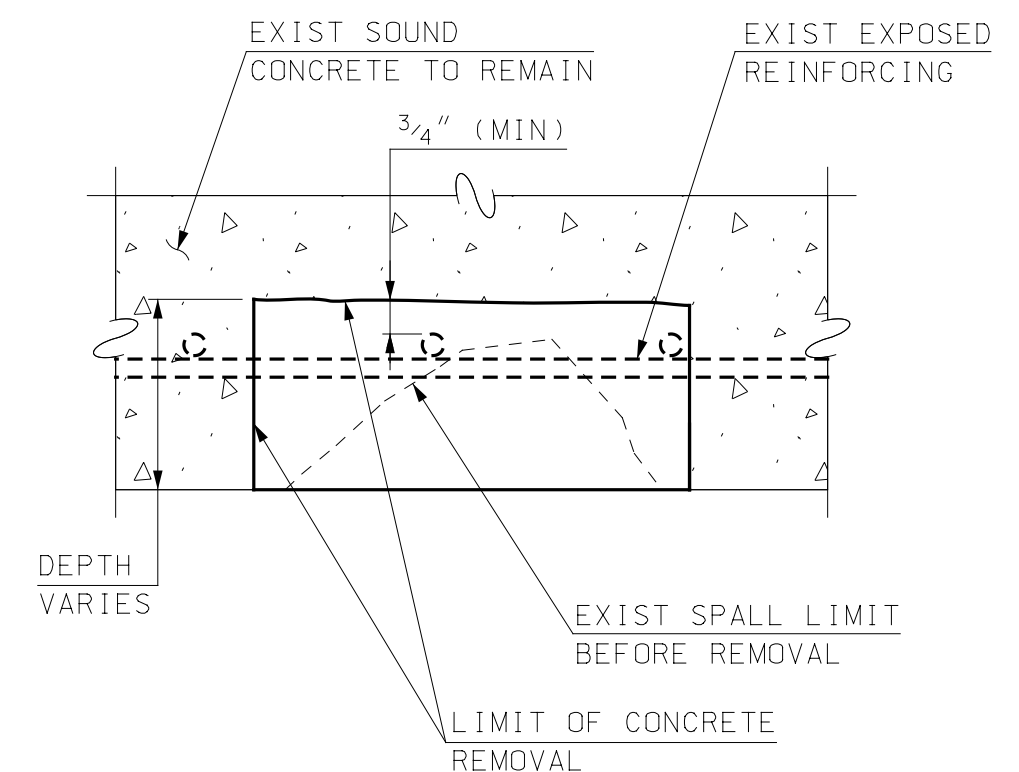
CONCRETE REPAIR PAYMENT SUMMARY			
ITEM	LOCATION	REPAIR PREPARATION ITEM	REPAIR MATERIAL
512.0201	WINGWALLS, WEST BRIDGE NORTH CURB	512.0201	520.01
512.0202	VERTICAL REPAIRS	512.0202	512.0202
512.0203	OVERHEAD REPAIRS	512.0203	512.0203
512.0204	TOP SLAB HORIZONTAL REPAIRS	512.0204	512.0204



TYPE II CONCRETE REPAIR DETAIL FOR CONCRETE CURB ON WEST BRIDGE
(ITEM 512.0201)
SCALE: 1" = 1'-0"



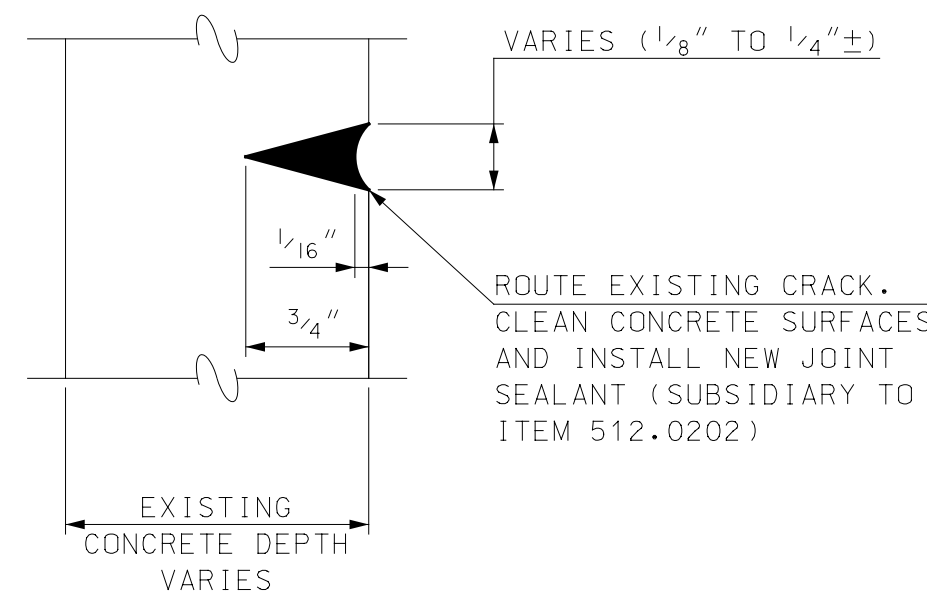
TYPE II VERTICAL CONCRETE REPAIR DETAIL
(ITEM 512.0202)
NOT TO SCALE



TYPE II OVERHEAD CONCRETE REPAIR DETAIL
(ITEM 512.0203)
NOT TO SCALE

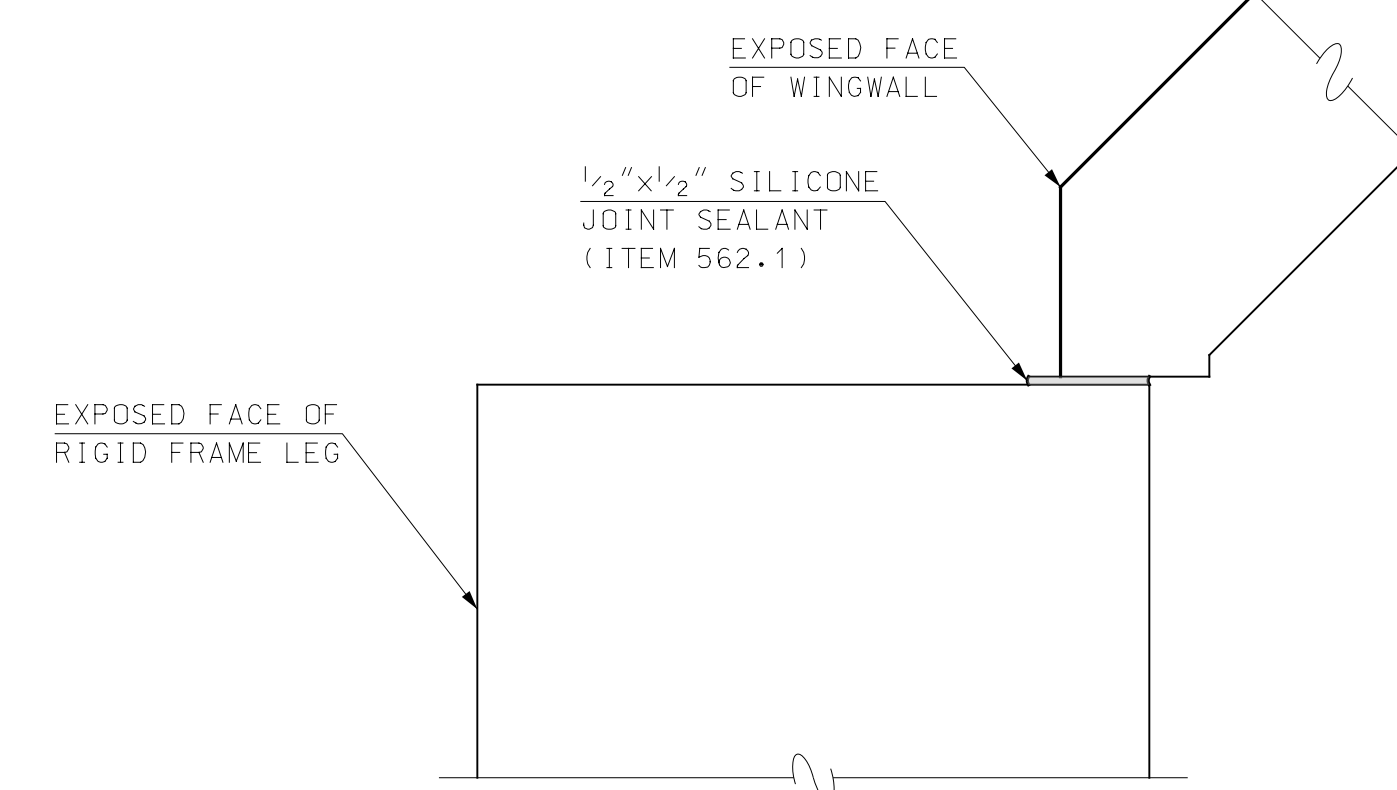
CONCRETE REPAIR NOTES

- PREPARE SPALLED AREA BY REMOVING ALL DETERIORATED CONCRETE TO A MINIMUM DEPTH OF 1" SQUARE OR AS SHOWN BY CUTTING REPAIR AREA. FEATHERED REMOVAL EDGES WILL NOT BE PERMITTED. MINIMUM REPAIR AREA SHALL BE 1'x1'.
- IF REINFORCING STEEL IS EXPOSED, REMOVE ALL DETERIORATED CONCRETE TO A MINIMUM DEPTH OF 3/4" BEHIND THE REAR FACE OF THE FIRST MAT OF REINFORCING STEEL, 1 1/2" AT WINGWALLS, AND TO SOUND CONCRETE BY SQUARE CUTTING REPAIR AREA.
- USE OF CHIPPING HAMMERS HEAVIER THAN NOMINAL 15 POUND CLASS ARE NOT PERMITTED.
- AFTER CONCRETE REMOVAL, THE REPAIR SURFACE AND EXISTING REINFORCING BARS SHALL BE THOROUGHLY CLEANED OF INJURIOUS RUST, CONCRETE, DIRT, GREASE, OR ANY OTHER BOND-INHIBITING MATERIALS. APPLY ONE COAT OF CONPROCO CORPORATION ECB (ELECTRO-CHEMICAL BARRIER), FERROSEAL BY ISOMAT, MAPEFER BY MAPEI OR APPROVED EQUAL TO ANY EXPOSED REINFORCING.
- COAT ALL REPAIR SURFACES WITH AN APPROVED BONDING AGENT PRIOR TO PLACING REPAIR MATERIAL.
- PATCH REPAIR AREA WITH AN APPROVED REPAIR MATERIAL. THE CONCRETE REPAIR MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES.
- WINGWALLS AND CONCRETE CURB: PATCH REPAIR AREA, WITH ITEM 520.01, CONCRETE CLASS AA.
- BRIDGE RAILINGS AND RIGID FRAME: REPAIR MATERIAL SHALL BE A FAST-SETTING CEMENT REPAIR MORTAR LISTED BELOW OR AN APPROVED EQUAL WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI IN 28 DAYS:
 - SIKA CORPORATION PRODUCT: SIKATOP 123 PLUS
 - FOSROC, INC PRODUCT: RENDEROC HB2
 - MASTER BUILDING TECHNOLOGIES PRODUCT: MASTEREMACO T545
- APPLY A PENETRATING, CORROSION-INHIBITING IMPREGNATION COATING, SIKA FERROGARD 903, CORTEC CORPORATION MCI-2020 V/O, GRACE CONSTRUCTION PRODUCTS POST RITE OR APPROVED EQUAL FOR A DISTANCE OF 3' BEYOND THE EDGE OF THE CONCRETE REPAIR 7 DAYS AFTER APPLYING REPAIR MATERIAL.
- WINGWALLS AND CONCRETE CURB: ALL COSTS FOR WORK ASSOCIATED WITH PREPARING CONCRETE SURFACE FOR CONCRETE REPAIR SHALL BE INCLUDED IN ITEM 512.0201.
- BRIDGE RAILINGS AND RIGID FRAME: ALL COSTS FOR WORK ASSOCIATED WITH PREPARING CONCRETE SURFACE FOR CONCRETE REPAIR AND REPAIR MATERIAL SHALL BE PAID UNDER ITEM 512.0202 OR ITEM 512.0203, AS APPROPRIATE.
- TOP SLAB: TOP SLAB HORIZONTAL REPAIR SHALL BE SIMILAR TO TYPE II VERTICAL CONCRETE REPAIR DETAIL - ITEM 512.0202 AS SHOWN ABOVE. ALL COSTS FOR WORK ASSOCIATED WITH PREPARING SURFACE FOR CONCRETE REPAIR AND REPAIR MATERIAL SHALL BE PAID FOR UNDER ITEM 512.0204.



CRACK SEAL DETAIL
NOT TO SCALE

- NOTE**
- NEW JOINT SEALANT SHALL BE AN APPROVED ONE COMPONENT POLYURETHANE ELASTOMERIC SEALANT COMPLIANT WITH STANDARD SPECIFICATIONS SECTION 566. ACCEPTABLE PRODUCTS INCLUDE SIKAFLEX-201 FROM SIKA, DYMONIC FC FROM TREMCO OR MAPLEFLEX PI FROM MAPEI.



WINGWALL TO RIGID FRAME DETAIL
NOT TO SCALE

- NOTES**
- THIS DETAIL APPLIES TO THE EAST BRIDGE CONCRETE WINGWALLS.
 - NORTHEAST WINGWALL SHOWN, SOUTHEAST WINGWALL IS SIMILAR.
 - COPING NOT SHOWN FOR CLARITY.

REV	DESCRIPTION	DATE	DRW	CHKD	BY
APRIL 25, 2016	DESIGN BY: JAS				
	DRAWN BY: TAG				
	CHKD BY: STU				
	SCALE: AS SHOWN				

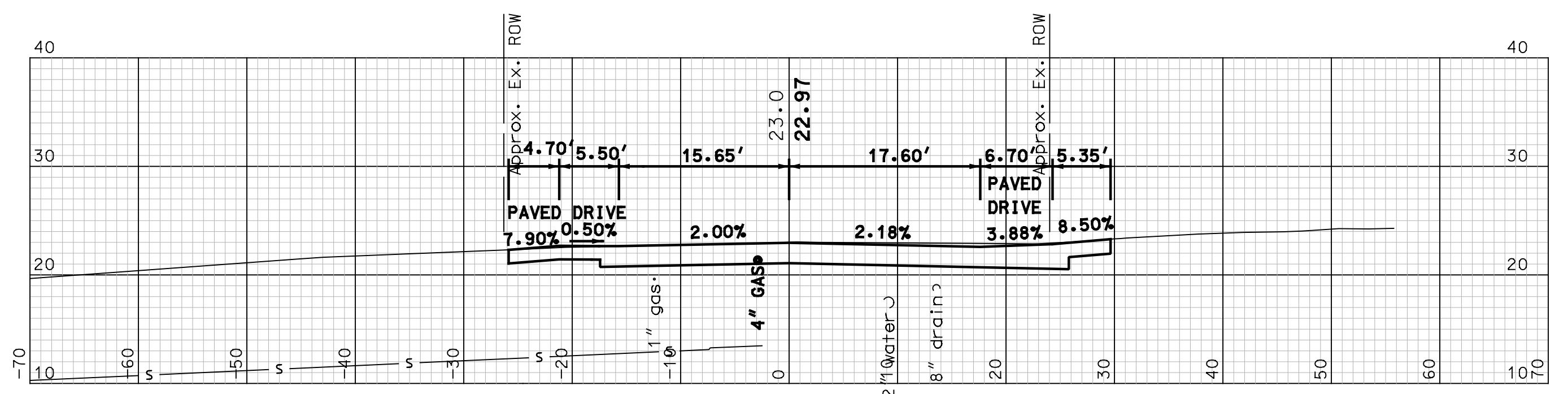
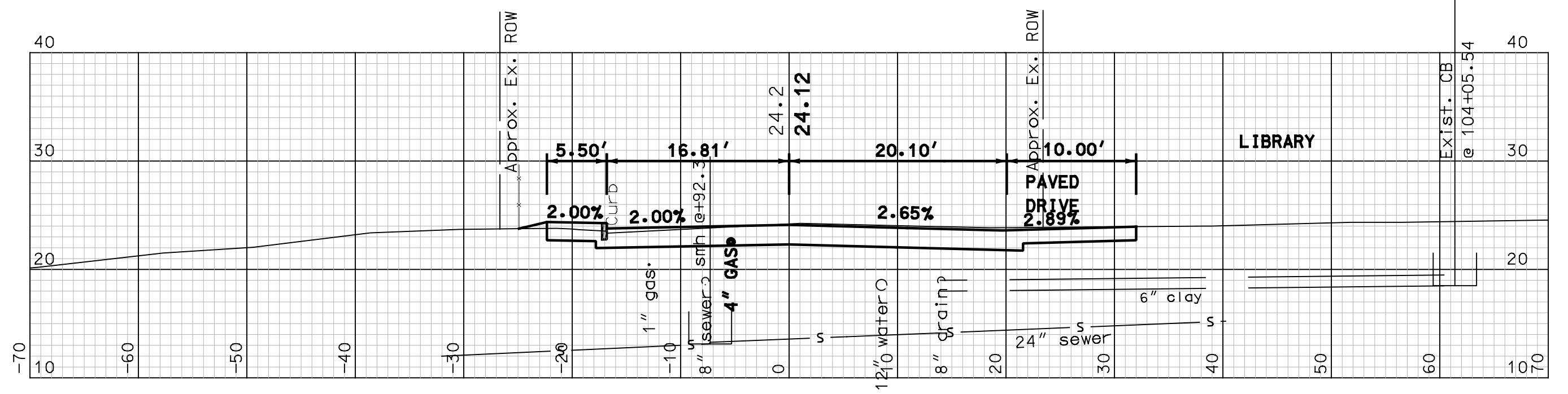
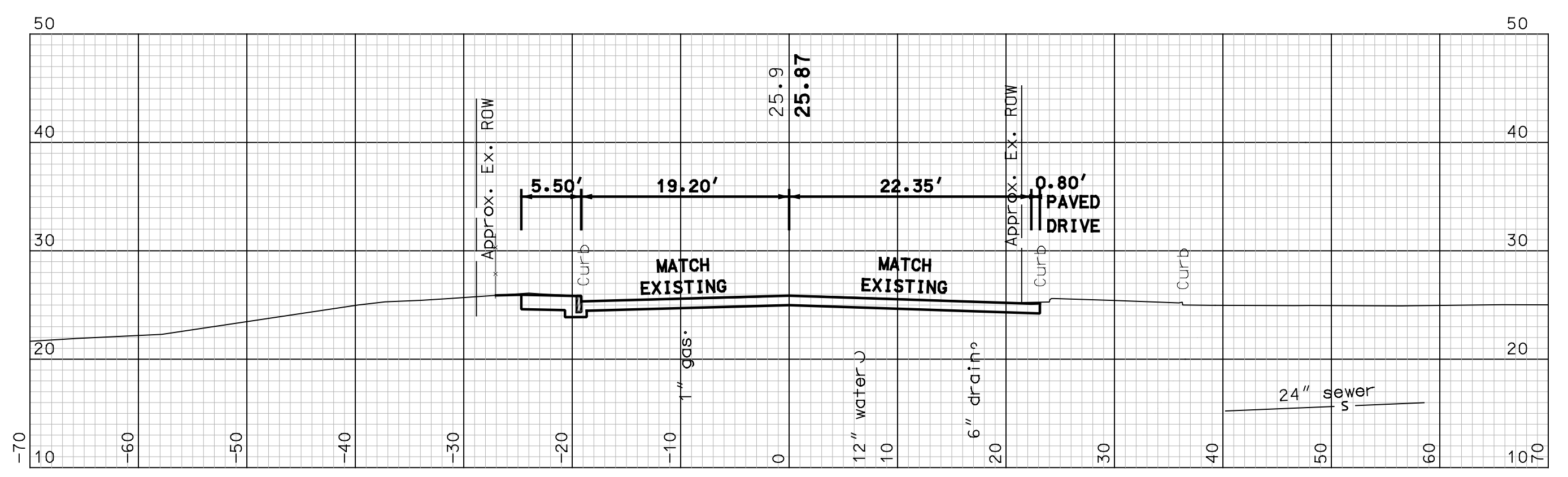
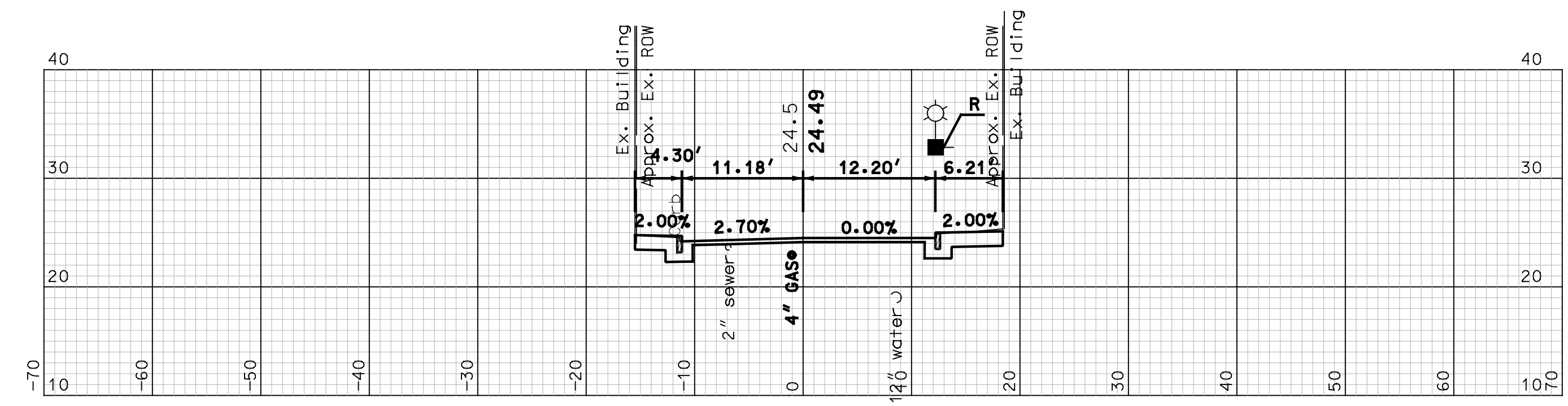
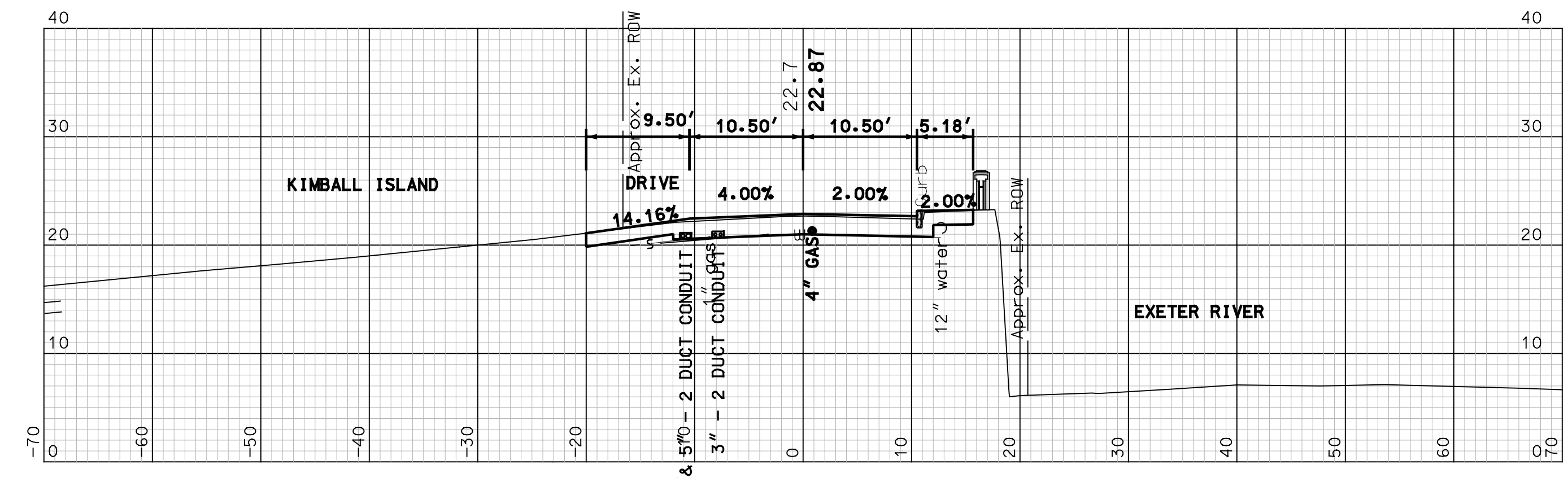
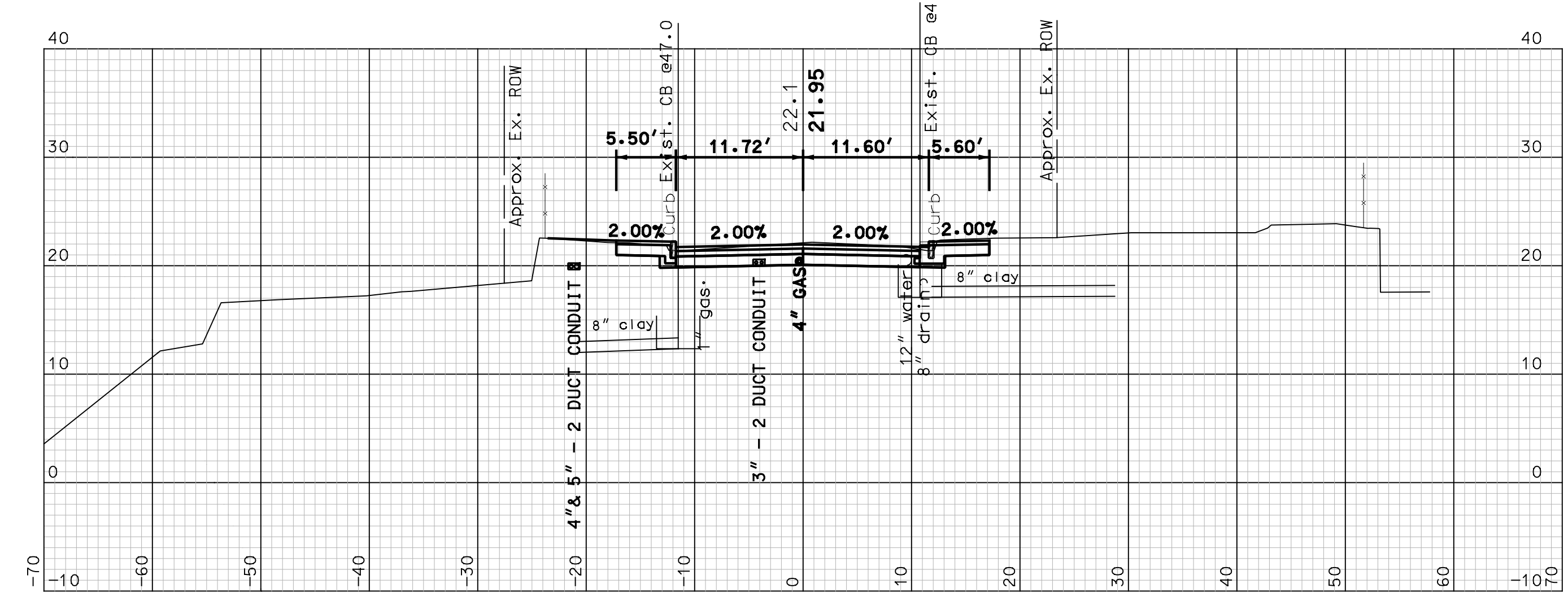
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TOWN OF EXETER
EXETER, NEW HAMPSHIRE
STRING BRIDGE OVER EXETER RIVER
BRIDGE REHABILITATION DETAILS (2 OF 2)

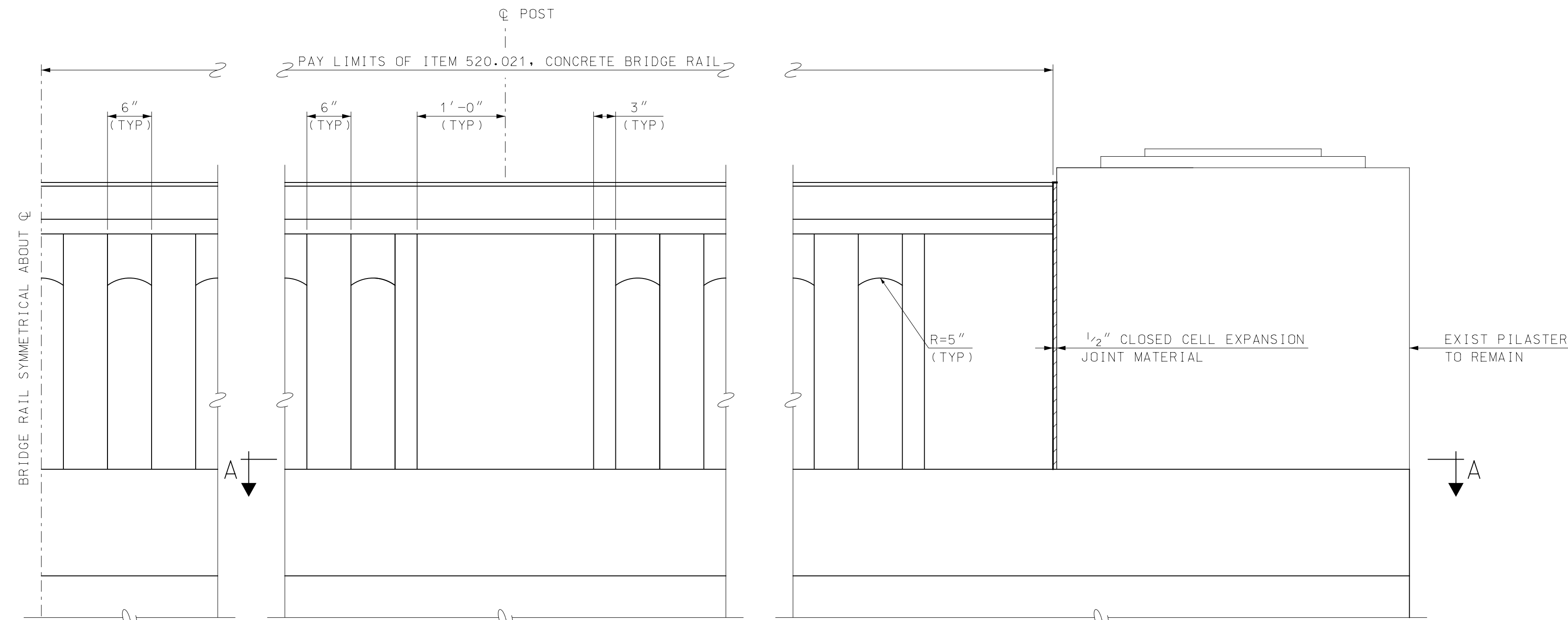
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NOTES:
1. PROPOSED DRAINAGE HAS NOT BEEN SHOWN ON CROSS SECTIONS. SEE GENERAL PLAN FOR DRAINAGE NOTE AND LAYOUT INFORMATION.

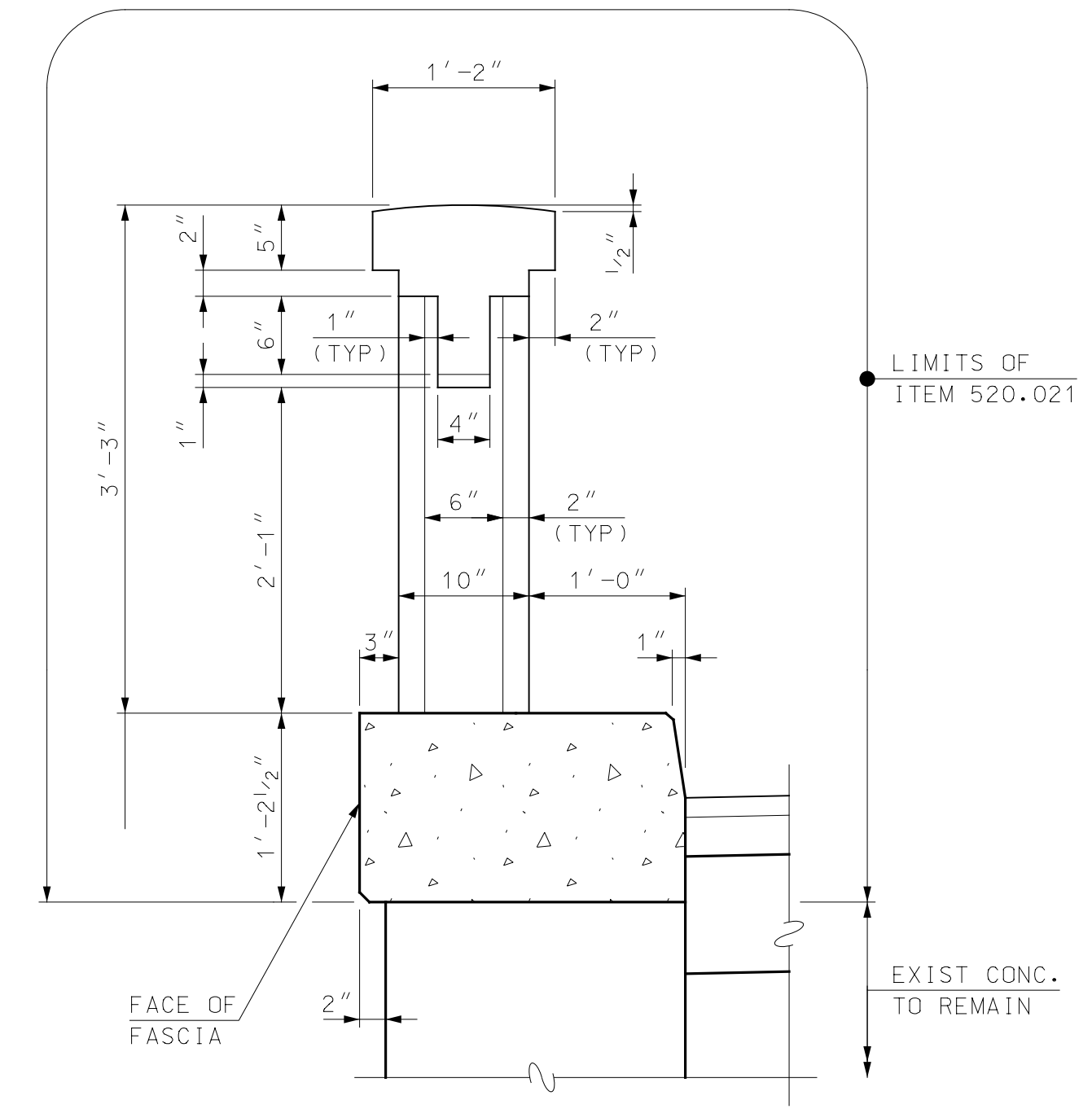


ENGINEER	
DATE	
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APRIL 25, 2016	
DESIGN BY: AGB	
DRAWN BY: AGB	
CHKD. BY: SBH	
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<p>TOWN OF EXETER EXETER, NEW HAMPSHIRE STRING BRIDGE OVER EXETER RIVER CRITICAL AND DRIVE CROSS SECTIONS</p>	
PROJECT NO.:	095222
FILE NAME:	095222XS1M00
MODEL NAME:	XS01
SHEET NO.	39
SHEET 39 OF 42	

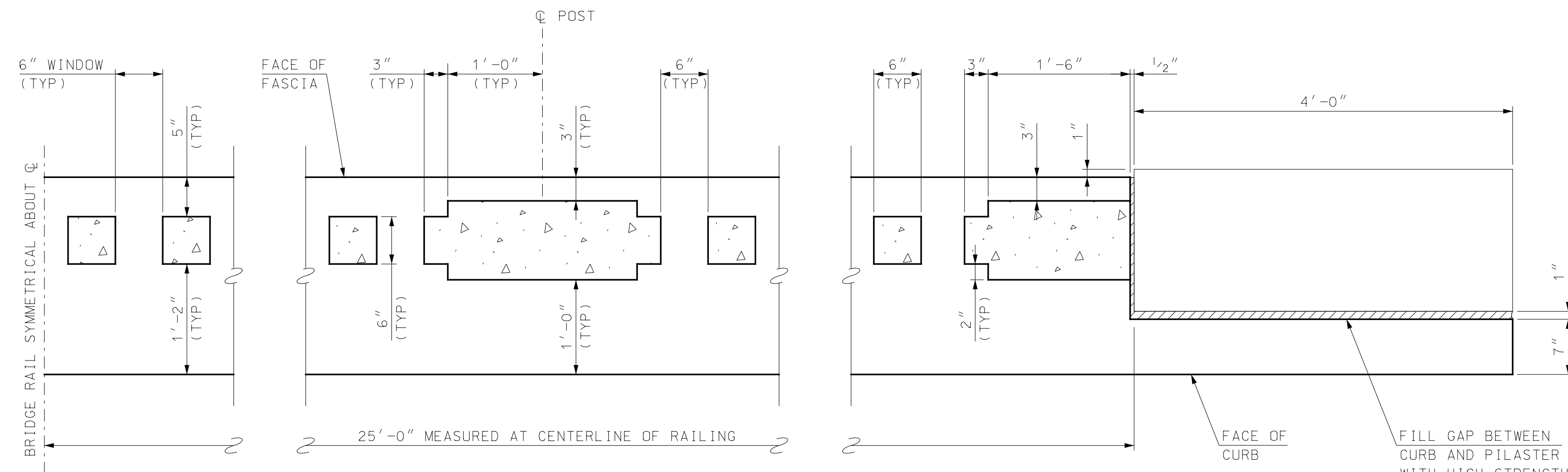


NOTE
ROADWAY ITEMS NOT SHOWN FOR CLARITY.

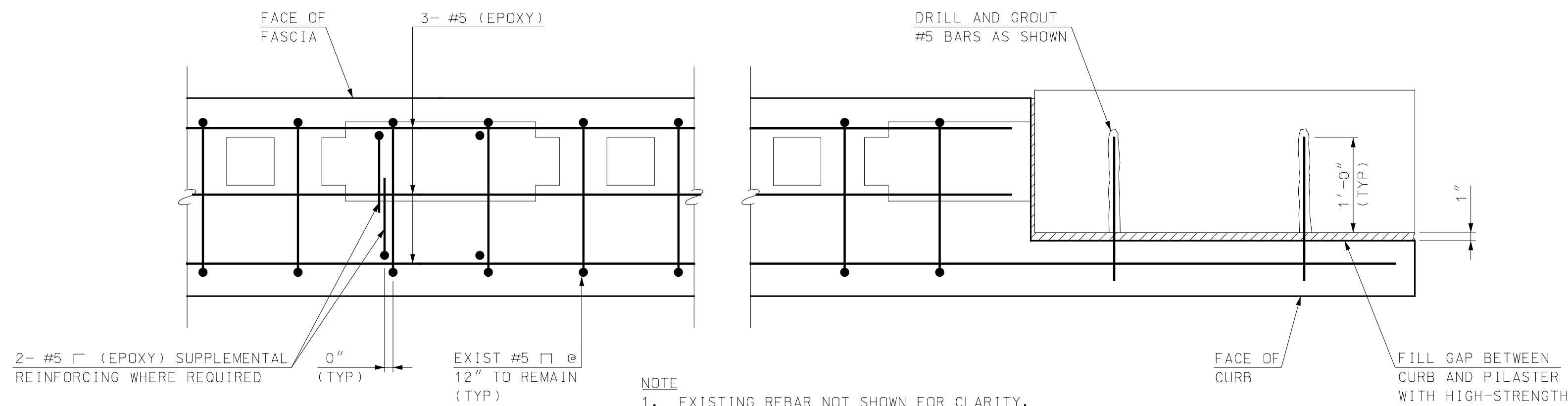
PARTIAL ELEVATION
SCALE: 1" = 1'-0"



MASONRY SECTION
SCALE: 1" = 1'-0"



**PARTIAL PLAN
(BELOW ARCHES)**
SCALE: 1" = 1'-0"



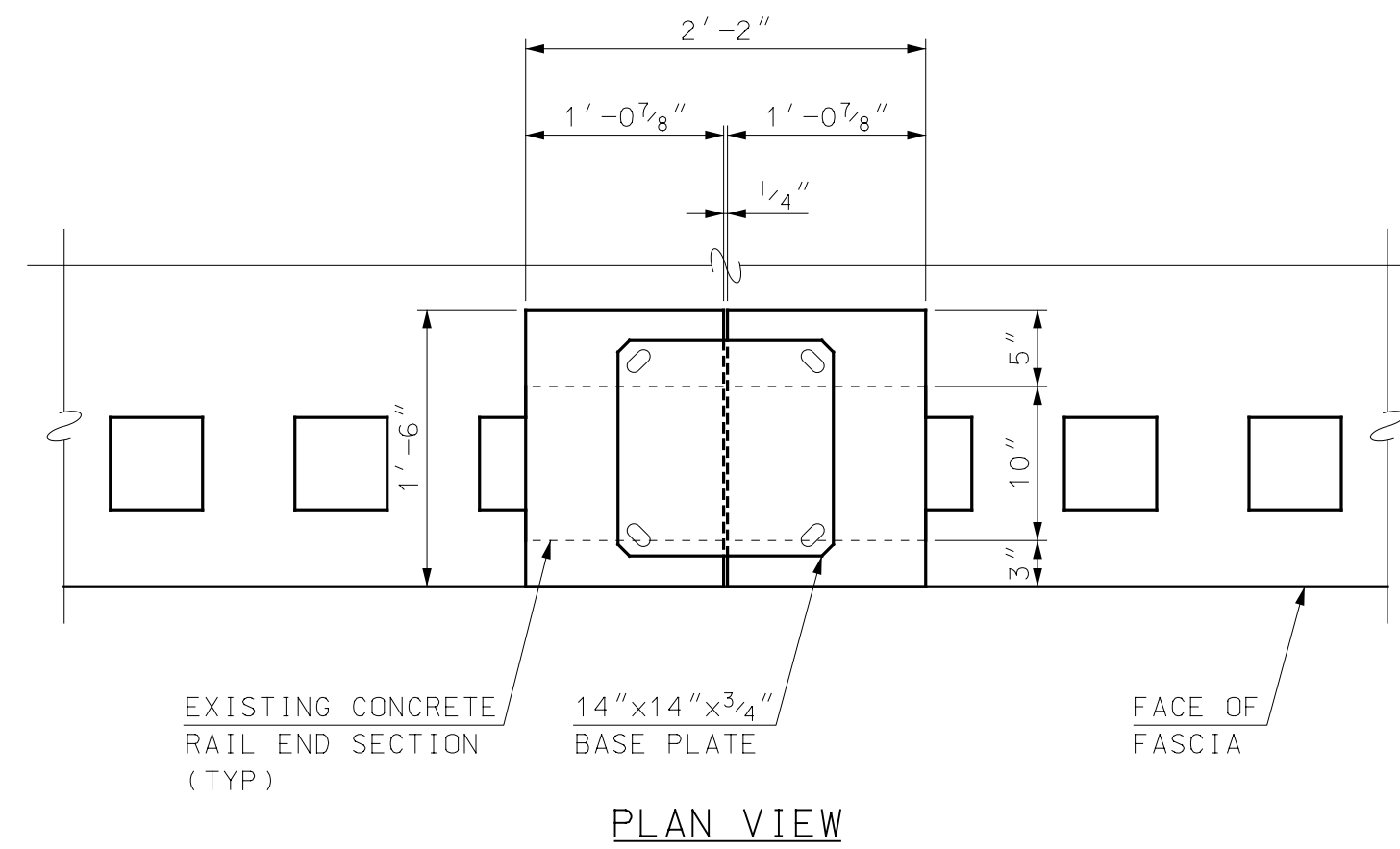
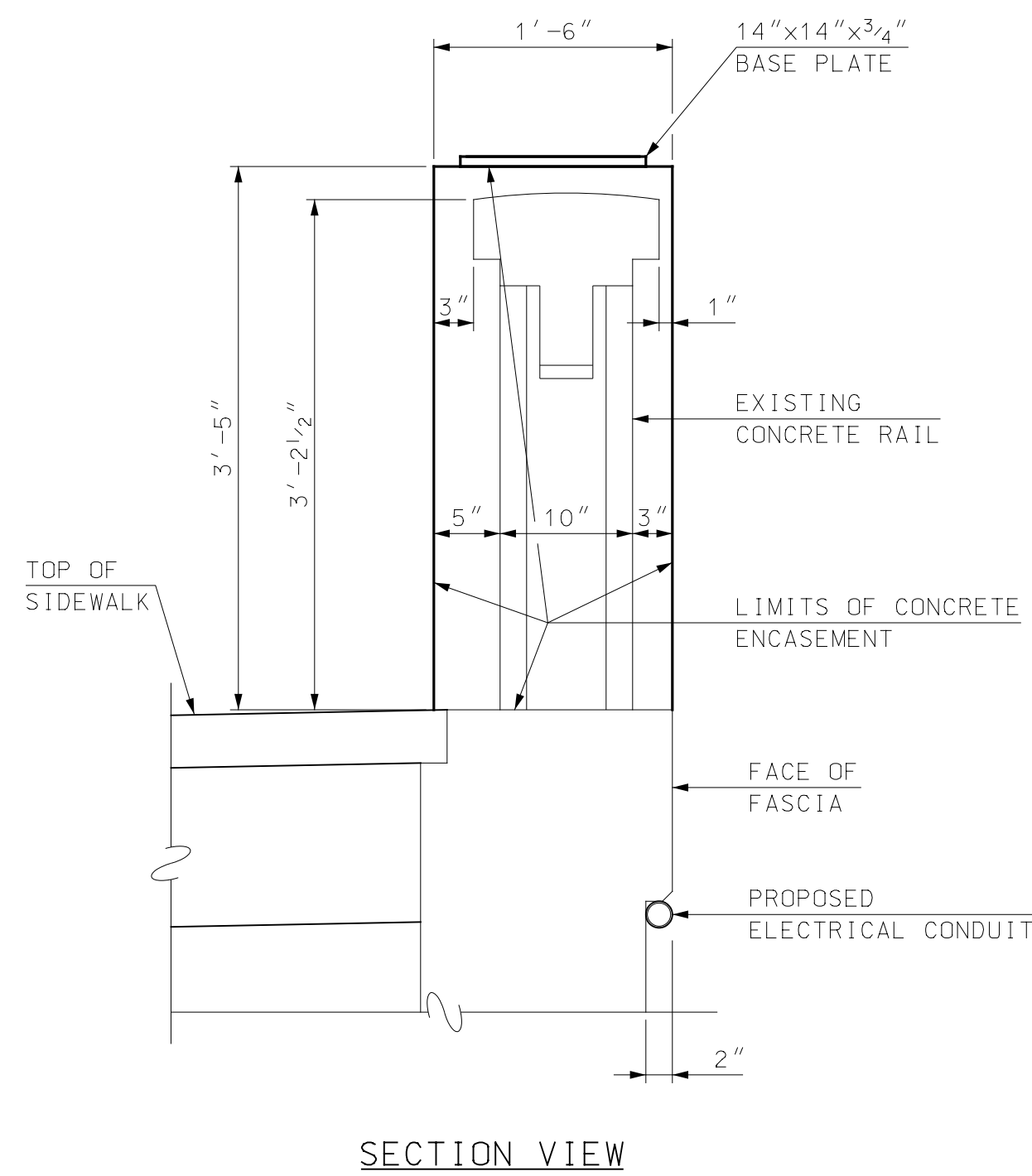
SECTION A-A
SCALE: 1" = 1'-0"

NOTES

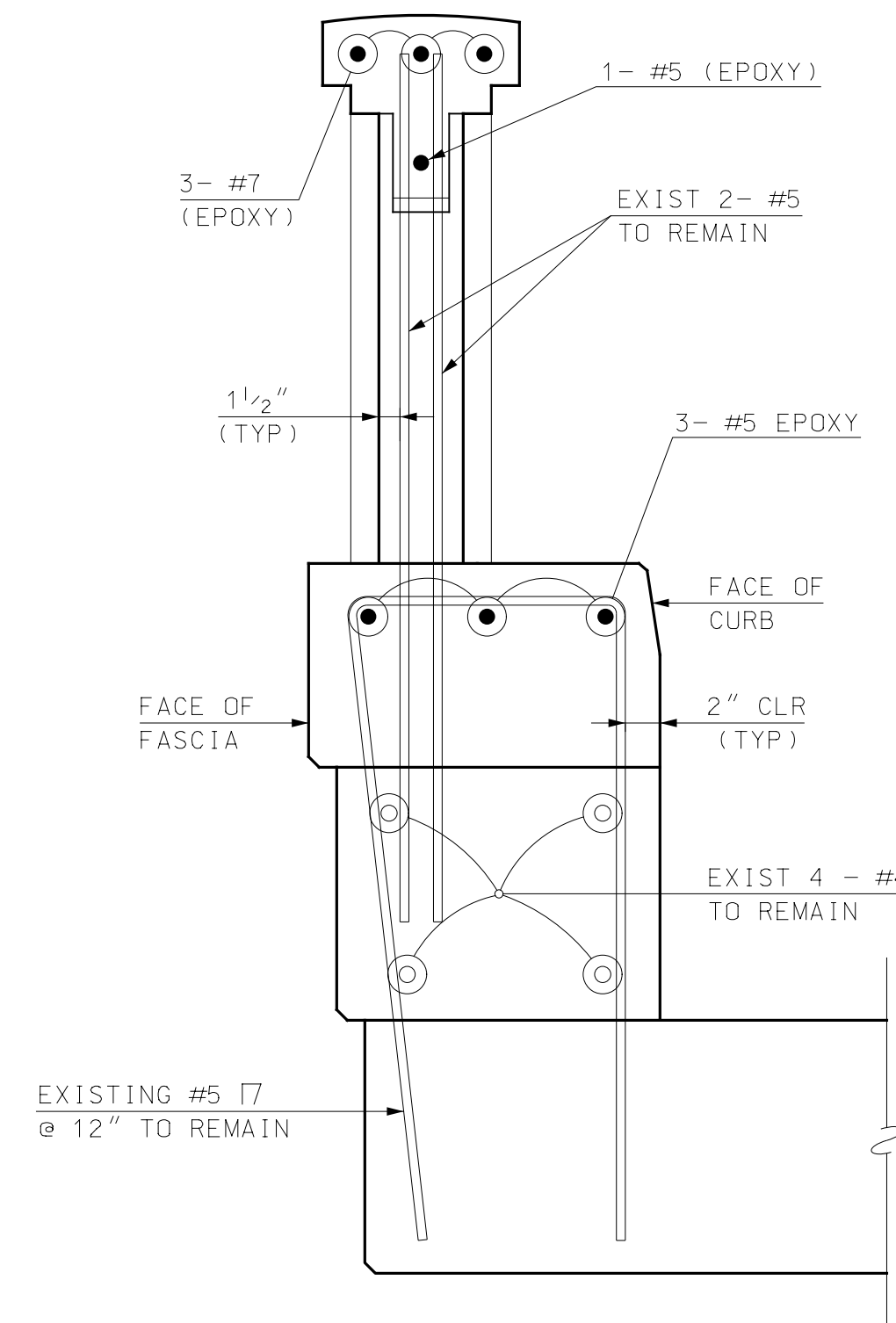
1. DETAILS SHOWN ON THIS SHEET APPLY TO THE NORTH BRIDGE RAIL ON THE EAST BRIDGE.
2. FOR REINFORCING SECTIONS SEE SHEET 41.
3. THE NORTH BRIDGE RAIL ON THE EAST BRIDGE SHALL BE REPLACED IN-KIND. REMOVAL OF THE EXISTING BRIDGE RAIL SHALL BE PAID FOR UNDER ITEM 520.021, CONCRETE BRIDGE RAIL.
4. EXISTING REINFORCING SHALL REMAIN UNLESS DEEMED INADEQUATE BY THE ENGINEER. EXISTING REINFORCING SHALL BE SUPPLEMENTED WITH NEW REINFORCING WHEN THE EXISTING REINFORCING EXHIBITS MORE THAN 35% SECTION LOSS OR AS DIRECTED BY THE ENGINEER.
5. ALL SUPPLEMENTAL REINFORCING SHALL BE EPOXY COATED.
6. CONCRETE SHALL CONFORM TO CONCRETE CLASS AAA.
7. PAYMENT UNDER 520.021, CONCRETE BRIDGE RAIL SHALL INCLUDE, BUT IS NOT LIMITED TO, REMOVAL OF EXISTING BRIDGE RAIL, SUPPLEMENTAL REINFORCING, CONCRETE, AND FORMING AND PLACING NEW BRIDGE RAIL.

ENGINEER	
DATE	
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APRIL 25, 2016	
DESIGN BY: JAS	
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CHKD. BY: STJ	
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<p>TOWN OF EXETER EXETER, NEW HAMPSHIRE STRING BRIDGE OVER EXETER RIVER</p>	
<p>BRIDGE RAIL DETAILS (1 OF 2)</p>	
PROJECT NO.:	095222
FILE NAME:	095222Rail
MODEL NAME:	095222Pre-Rail1
SHEET NO.	
40	
SHEET 40 OF 42	

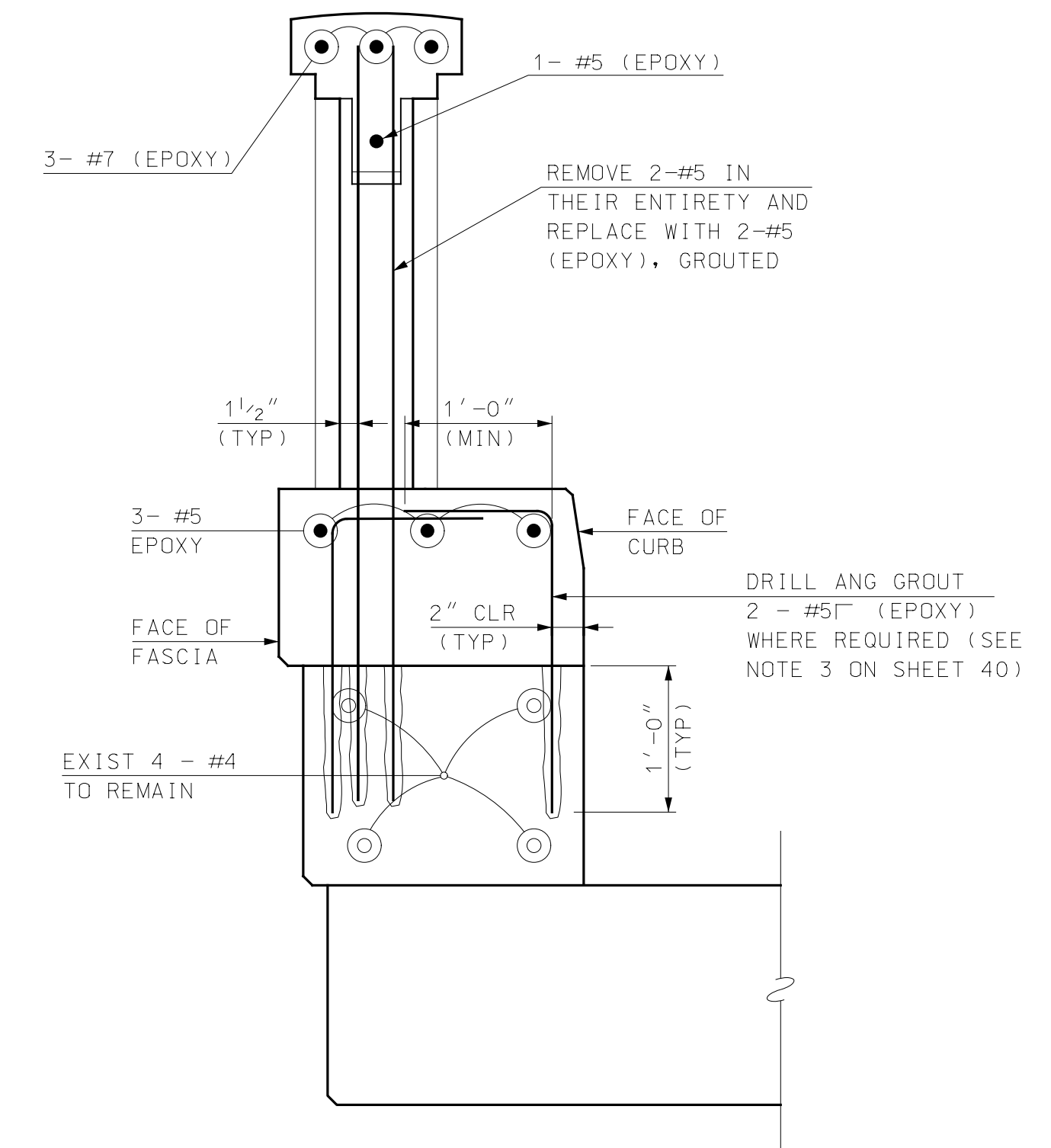
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LIGHT ANCHORAGE ON CONCRETE RAIL
SCALE: 1" = 1'-0"

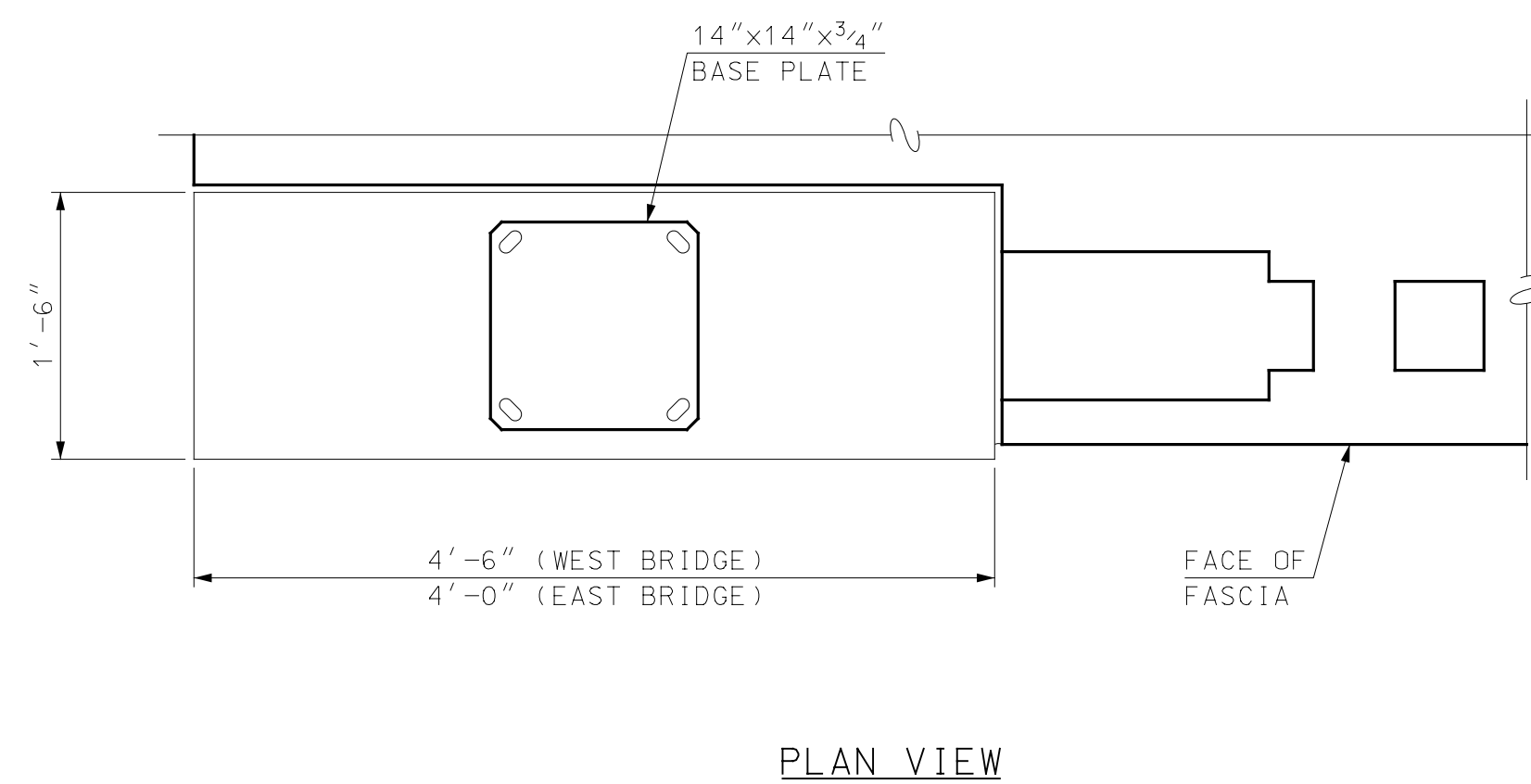
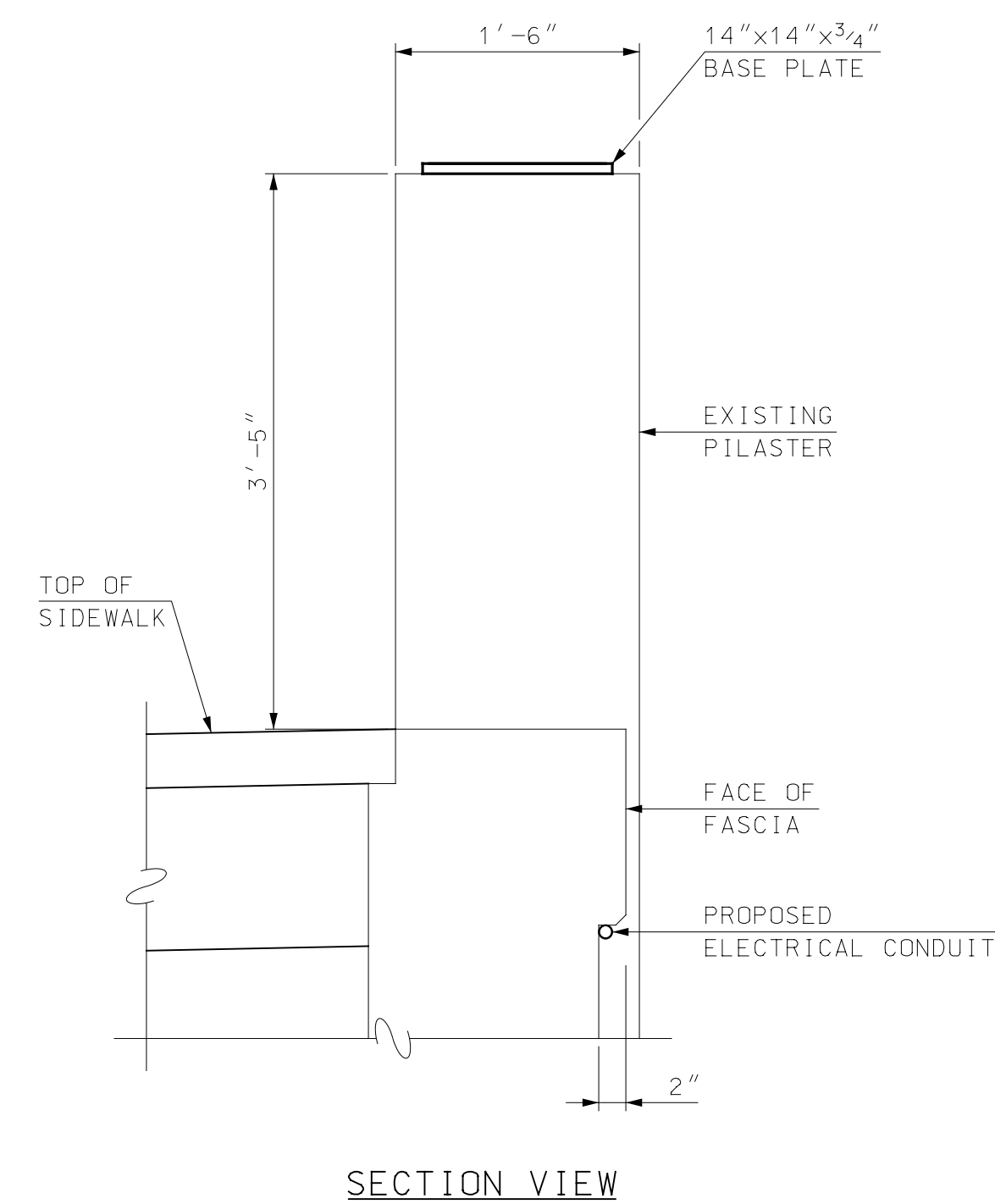


REINFORCEMENT SECTION
SCALE: 1" = 1'-0"



SUPPLEMENTAL REINFORCEMENT SECTION
SCALE: 1" = 1'-0"

NORTH RAIL ON EAST BRIDGE



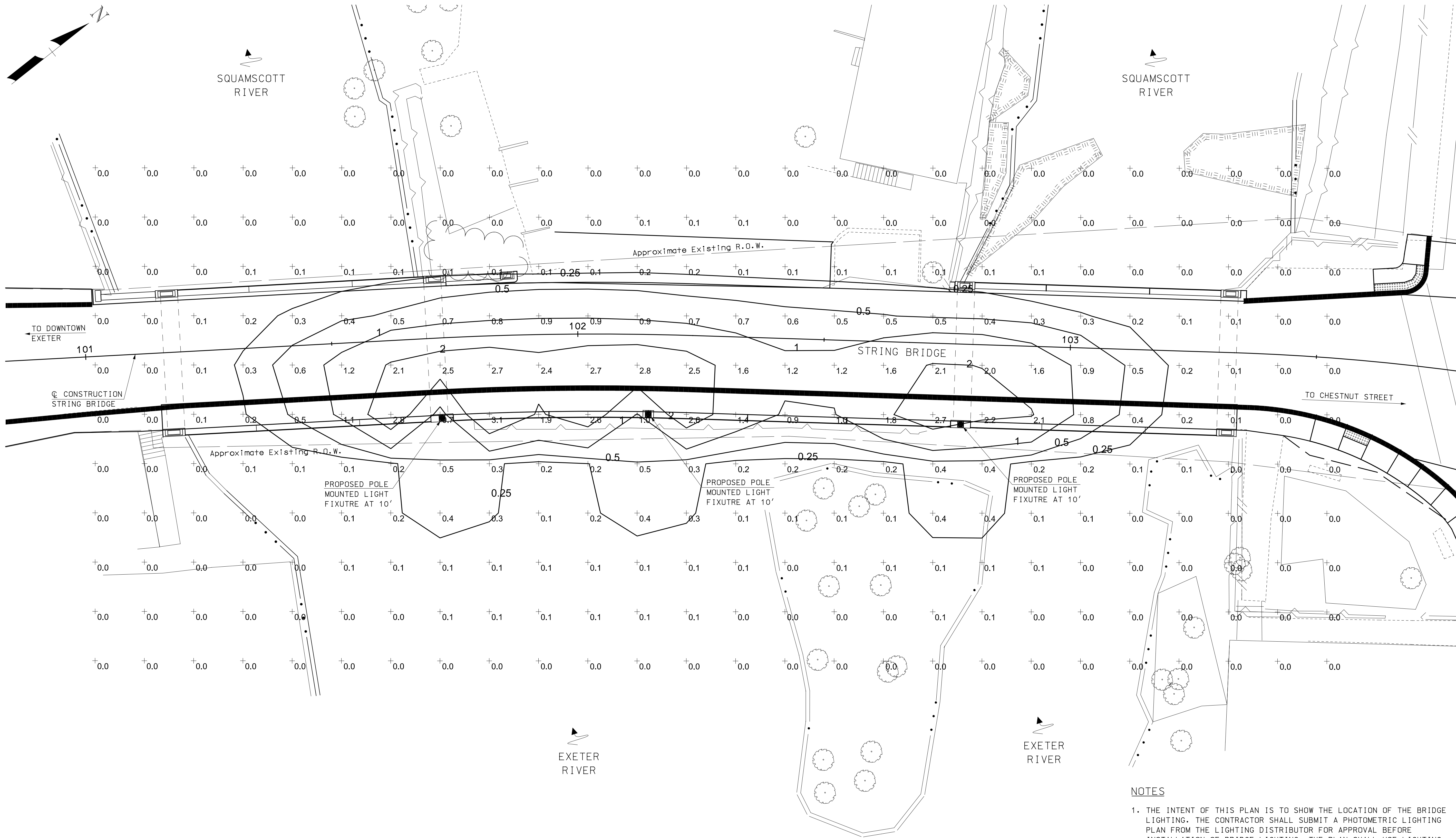
LIGHT ANCHORAGE ON PILASTER
SCALE: 1" = 1'-0"

LIGHTING ANCHORAGE NOTES

1. THE BRIDGE LIGHTING SYSTEM SHALL CONSIST OF THREE LIGHTS. SEE SHEETS 17, 18 AND 19 FOR LIGHT LOCATIONS.
2. THE TWO DECORATIVE LAYERS, 1" THICK AND 1 1/2" THICK, ON TOP OF THE EXISTING PILASTERS AT THE LOCATION OF THE LIGHTS SHALL BE REMOVED PRIOR TO INSTALLATION OF BRIDGE LIGHTING SYSTEM. THE 1" THICK LAYER IS 2'-6"x10" ON THE WEST BRIDGE AND 2'-0"x10" ON EAST BRIDGE. THE 1 1/2" THICK LAYER IS 3'-6"x1'-2" ON THE WEST BRIDGE AND 3'-0"x1'-2" ON THE EAST BRIDGE.
3. THE EXISTING CONCRETE RAIL END SECTIONS AT THE LOCATIONS OF THE LIGHTS SHALL BE ENCASED WITH CONCRETE TO THE DIMENSIONS SHOWN IN THE LIGHT ANCHORAGE ON CONCRETE RAIL DETAIL ON THIS SHEET.
4. THE BASE PLATES SHALL BE INSTALLED IN THE CENTER OF THE PILASTERS AND THE CONCRETE ENCASED RAIL END SECTIONS.
5. BASE PLATES SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH AASHTO M 232 (ASTM A 152).
6. BASE PLATES SHALL BE ANCHORED USING HILTI HIT-HY 200 AR ADHESIVE WITH HILTI HAS THREADED RODS, OR APPROVED EQUAL. HILTI HAS THREADED RODS SHALL BE 3/4" DIAMETER WITH 6 3/4" EMBEDMENT.
7. ALL ELECTRICAL CONDUITS FOR THE BRIDGE LIGHTING SYSTEM SHALL BE ATTACHED TO THE FASCIA OF THE BRIDGES AND RETAINING WALL. THE BRIDGE PILASTERS AND CONCRETE RAIL POST, AT THE LOCATIONS OF THE LIGHTS, SHALL ACCOMMODATE A 1" ELECTRICAL CONDUIT. ELECTRICAL CONDUITS SHALL BE LIGHT GREY IN COLOR AND SHALL BE HIDDEN FROM VIEW TO THE GREATEST EXTENT PRACTICAL.
8. ALL COSTS FOR WORK ASSOCIATED WITH INSTALLING THE BRIDGE LIGHTING SYSTEM SHALL BE INCLUDED IN ITEM 564.1. WORK AS DESCRIBED ABOVE AND SHOWN IN THE LIGHT ANCHORAGE DETAILS ABOVE SHALL BE PAID FOR UNDER ITEM 564.1.

ENGINEER	
DATE	
DESCRIPTION	
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APRIL 25, 2016	JAS
DESIGN BY:	TAG
DRAWN BY:	STU
CHKD. BY:	AS SHOWN
SCALE:	
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<p>TOWN OF EXETER EXETER, NEW HAMPSHIRE STRING BRIDGE OVER EXETER RIVER BRIDGE RAIL DETAILS (2 OF 2)</p>	
PROJECT NO.:	095222
FILE NAME:	095222Rail
MODEL NAME:	095222Pre-Rail2
SHEET NO.	
41	
SHEET 41 OF 42	

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BRIDGE LIGHTING PLAN
SCALE: 1" = 10'

- NOTES**
1. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF THE BRIDGE LIGHTING. THE CONTRACTOR SHALL SUBMIT A PHOTOMETRIC LIGHTING PLAN FROM THE LIGHTING DISTRIBUTOR FOR APPROVAL BEFORE INSTALLATION OF BRIDGE LIGHTING. THE PLAN SHALL USE LIGHTING FIXTURES AS SPECIFIED IN THE SPECIAL PROVISIONS.
 2. LIGHTING SPOTS SHOWN ARE MEASURED IN FOOT-CANDLES.
 3. COORDINATE ALL LIGHT POLE BASE LOCATIONS, CONDUIT ROUTING, CONDUIT SIZE AND POWER SUPPLY WITH AN ELECTRICAL ENGINEER.
 4. LIGHTING SOURCES SHALL BE LED.
 5. LIGHT FIXTURES SHALL BE DARK SKY FRIENDLY.
 6. ALL COSTS FOR INSTALLATION OF BRIDGE LIGHTING SHALL BE PAID FOR UNDER ITEM 564.1, BRIDGE LIGHTING SYSTEM.

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ENGINEER										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	REV	DESCRIPTION	DATE						
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<p>Hoyle, Tanner & Associates, Inc. 150 Dow Street, Manchester, NH 03101-1227 Tel (603) 669-5555 - Fax (603) 669-4168 www.hoyletanner.com</p>										
<p>TOWN OF EXETER EXETER, NEW HAMPSHIRE STRING BRIDGE OVER EXETER RIVER</p>	<p>BRIDGE LIGHTING</p>									
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