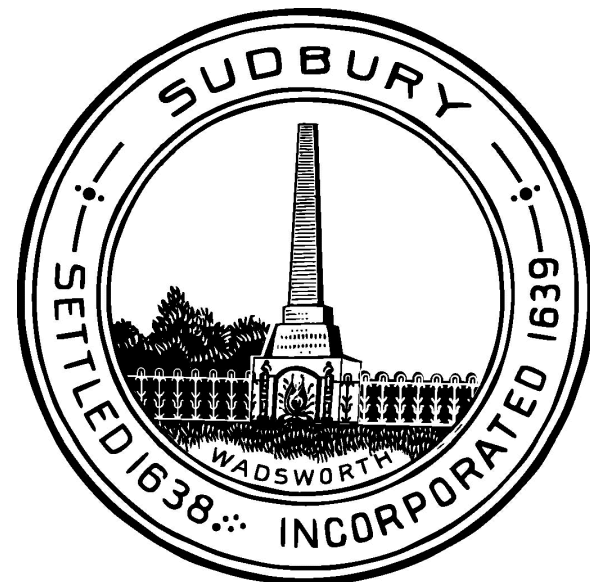


TOWN OF SUDBURY, MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

CONCORD ROAD
CULVERT REPAIRS

JANUARY 2020

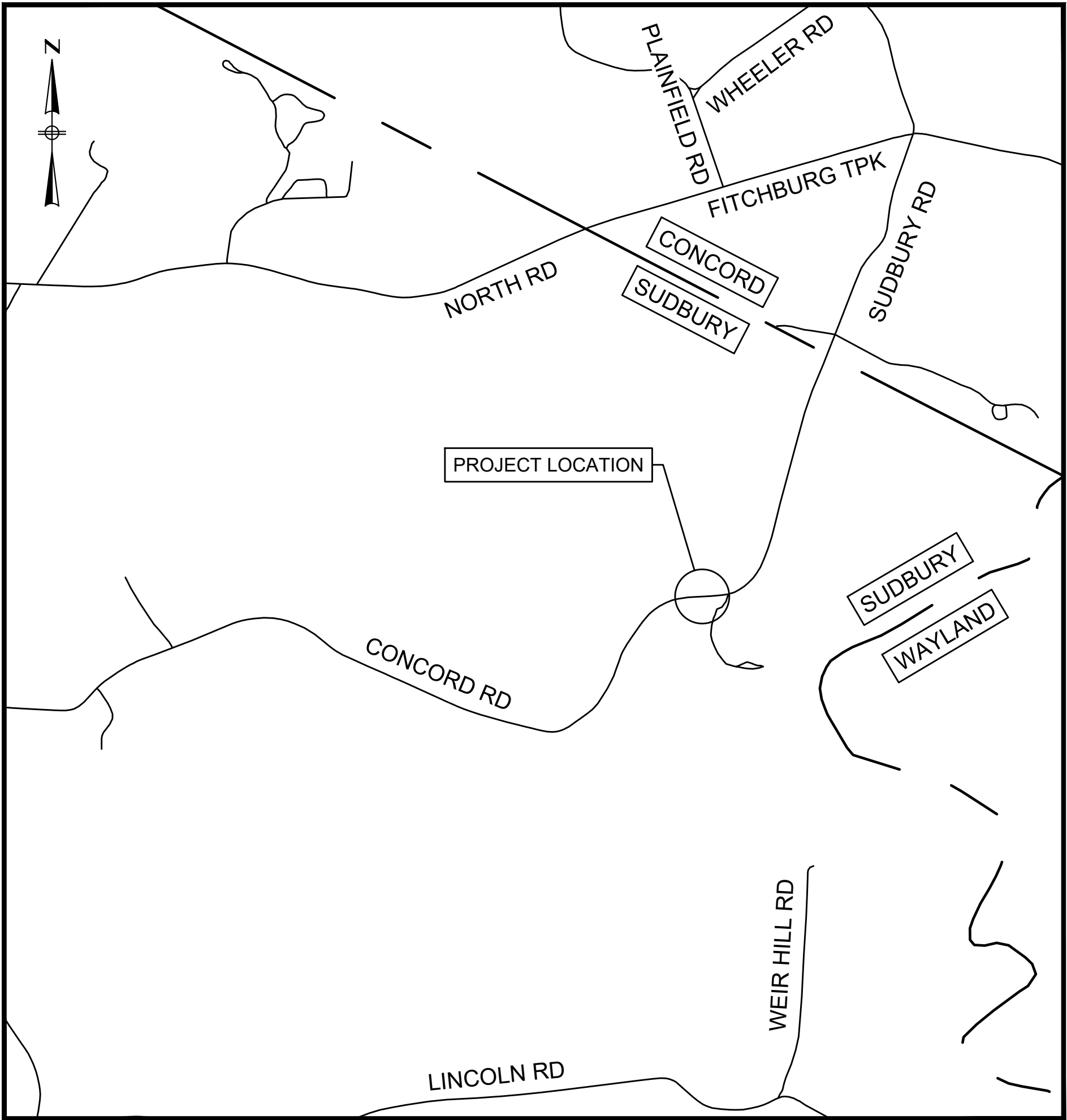


BOARD OF SELECTMEN

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DANIEL E. CARTY
WILLIAM SCHINELLER
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JANIE W. DRETLER

DEPARTMENT OF PUBLIC WORKS

DANIEL NASON, DIRECTOR



○ PROJECT LOCATION

LOCATION MAP
1" = 1000'

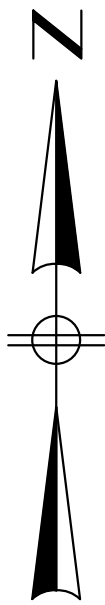
PLAN INDEX

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	ROADWAY CONSTRUCTION PLAN
3	RESOURCE IMPACTS
4	TEMPORARY TRAFFIC CONTROL PLAN
5	TEMPORARY TRAFFIC CONTROL PLAN
6	TEMPORARY TRAFFIC CONTROL PLAN
7	DETOUR PLAN
8	STRUCTURAL PLAN, ELEVATION, & LONGITUDINAL SECTION
9	STRUCTURAL DETAILS (1 OF 2)
10	STRUCTURAL DETAILS (2 OF 2)
11	ALTERNATE STRUCTURAL PLAN, ELEVATION & LONGITUDINAL SECTION
12	ALTERNATE STRUCTURAL DETAILS

PREPARED BY:



1/9/2020 1:00 PM O:\6705\6733 - SUDBURY - CONCORD RD CULVERT\DRAWING FILES\PLANSET\6733_HD(CONST).DWG (BETA STB BW STB)



GPS PT: 5002
N: 2974346.616 (NAD83)
E: 688852.165 (NAD83)
ELEV: 118.157 (NAVD88)
DESC: GPS PT 2

2
N: 2974346.614'
E: 688852.084'
EL: 118.184'
IR/CAP(SET)

N/F
COMM. OF MASSACHUSETTS
251 CAUSEWAY ST SUITE 400 - BOSTON, MA
ASSESS. MAP D13 - PARCEL ID: D13-0008

GPS PT: 5003
N: 2974363.539 (NAD83)
E: 689089.761 (NAD83)
ELEV: 119.422 (NAVD88)
DESC: GPS PT 204

N: 2974346.127'
E: 689147.983'
RRS CNTR PM FLUSH

SUDBURY N/F
RAMING ROCK WATER DISTRICT
ASSESS. MAP D13 - PARCEL ID: D13-0000
PL 1445 OF 1957 (OB 9032 PG 264)

- NOTES:
- THE COORDINATES, IN FEET, ARE BASED UPON MASSACHUSETTS STATE PLANE - MAINLAND ZONE NAD83 (2011) EPOCH 2010.00 - US FEET. THE VERTICAL DATUM IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (GEOID 12B) - US FEET.
 - DYL SHALL EXTEND TO TEMPORARY SIGNAL STOP LINES WHERE EXISTING MARKINGS WHERE REMOVED. FOR CLARITY PURPOSES DYL HAS ONLY BEEN SHOWN IN MILL AND OVERLAY AREAS ON THIS PLAN

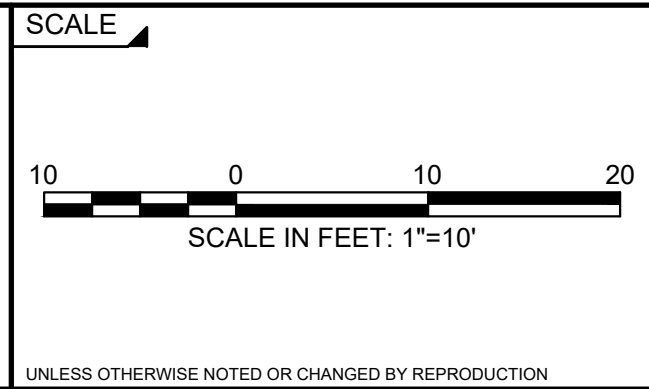
NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:	SD
DESIGNED BY:	SD
CHECKED BY:	CWJ

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TITLE	Concord Road over Cold Brook Sudbury, Massachusetts ROADWAY CONSTRUCTION PLAN
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BETA JOB NO.	6733
ISSUE DATE	
SHEET NO.	2

PAVEMENT NOTES
PROPOSED FULL DEPTH PAVEMENT

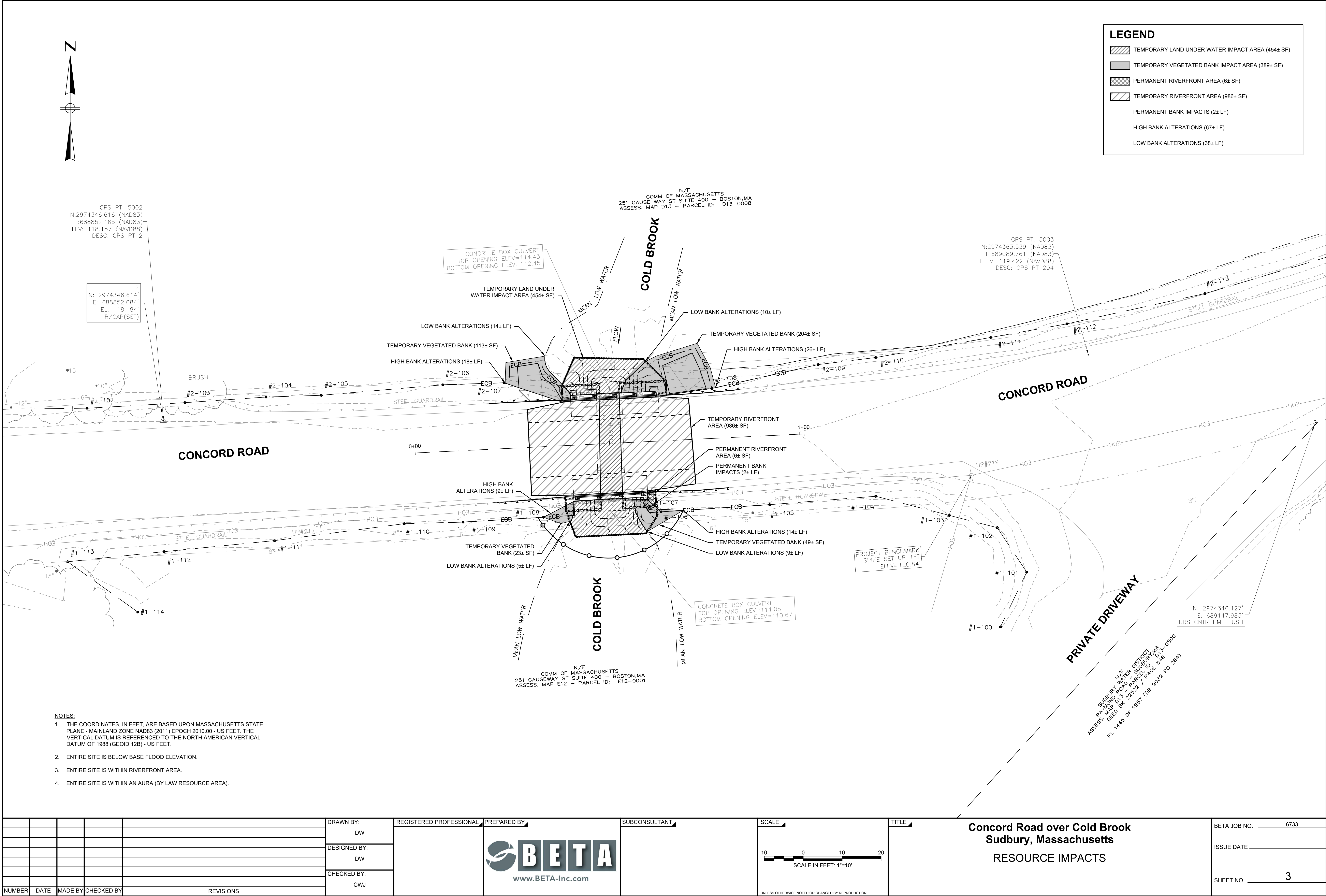
SURFACE COURSE:	1.75" HMA SURFACE COURSE (MODIFIED TOP) MATERIAL OVER
INTERMEDIATE COURSE:	1.75" HMA INTERMEDIATE COURSE (MODIFIED TOP) MATERIAL OVER ASPHALT EMULSION TACK COAT RS-1H OVER
BASE COURSE:	3.5" HMA BASE COURSE MATERIAL OVER
SUB-BASE:	4" DENSE GRADED CRUSHED STONE OVER GRAVEL BORROW, TYPE b (SEE LIMITS SHOWN ON DETAIL SHEET 9)
HMA SPILLWAY	6" HMA SURFACE COURSE (MODIFIED TOP)

PAVEMENT MILLING & OVERLAY

SURFACE COURSE:	1.75" HMA SURFACE COURSE (MODIFIED TOP) MATERIAL OVER ASPHALT EMULSION TACK COAT RS-1H OVER
PAVEMENT MILLING:	1.75" PAVEMENT MICROMILLING
1.	TACK COAT SHALL BE APPLIED FOR UNIFORM COVERAGE OF 90% AT RATE OF 0.07 TO 0.09 GALLONS PER SQUARE YARD FOR MILLED SURFACES AND 0.06 TO 0.08 GALLONS PER SQUARE YARD OVER SMOOTH TIGHT PAVEMENTS PRIOR TO PAVING AND OVERLAY.

HIGHWAY GUARD DETAILS
CONNECT TO EXIST STA. 0+19.68 LT GUARDRAIL, TL-2 (SINGLE FACED) STA. 0+19.68 LT TO STA. 0+32.18 LT THRIE BEAM TRANSITION STA. 0+32.18 LT TO STA. 0+38.43 LT CONNECT TO BRIDGE GUARDRAIL STA. 0+38.43 LT
CONNECT TO BRIDGE GUARDRAIL STA. 0+65.18 LT THRIE BEAM TRANSITION STA. 0+65.18 LT TO STA. 0+71.42 LT GUARDRAIL, TL-2 (SINGLE FACED) STA. 0+71.42 LT TO STA. 0+83.92 LT CONNECT TO EXIST STA. 0+83.92 LT
CONNECT TO EXIST STA. 0+19.30 RT GUARDRAIL, TL-2 (SINGLE FACED) STA. 0+19.30 RT TO STA. 0+31.75 RT THRIE BEAM TRANSITION STA. 0+31.75 RT TO STA. 0+38.00 RT CONNECT TO BRIDGE GUARDRAIL STA. 0+38.00 RT
CONNECT TO BRIDGE GUARDRAIL STA. 0+61.25 RT THRIE BEAM TRANSITION STA. 0+61.25 RT TO STA. 0+67.50 RT GUARDRAIL, TL-2 (SINGLE FACED) STA. 0+67.50 RT TO STA. 0+80.00 RT CONNECT TO EXIST STA. 0+80.00 RT

1/9/2020 1:01 PM O:\6705\6733 - SUDBURY - CONCORD RD CULVERT\DRAWING FILES\PLANSET\0733_EV\IMPACTS.DWG (BETA STB BW STB)



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SCALE

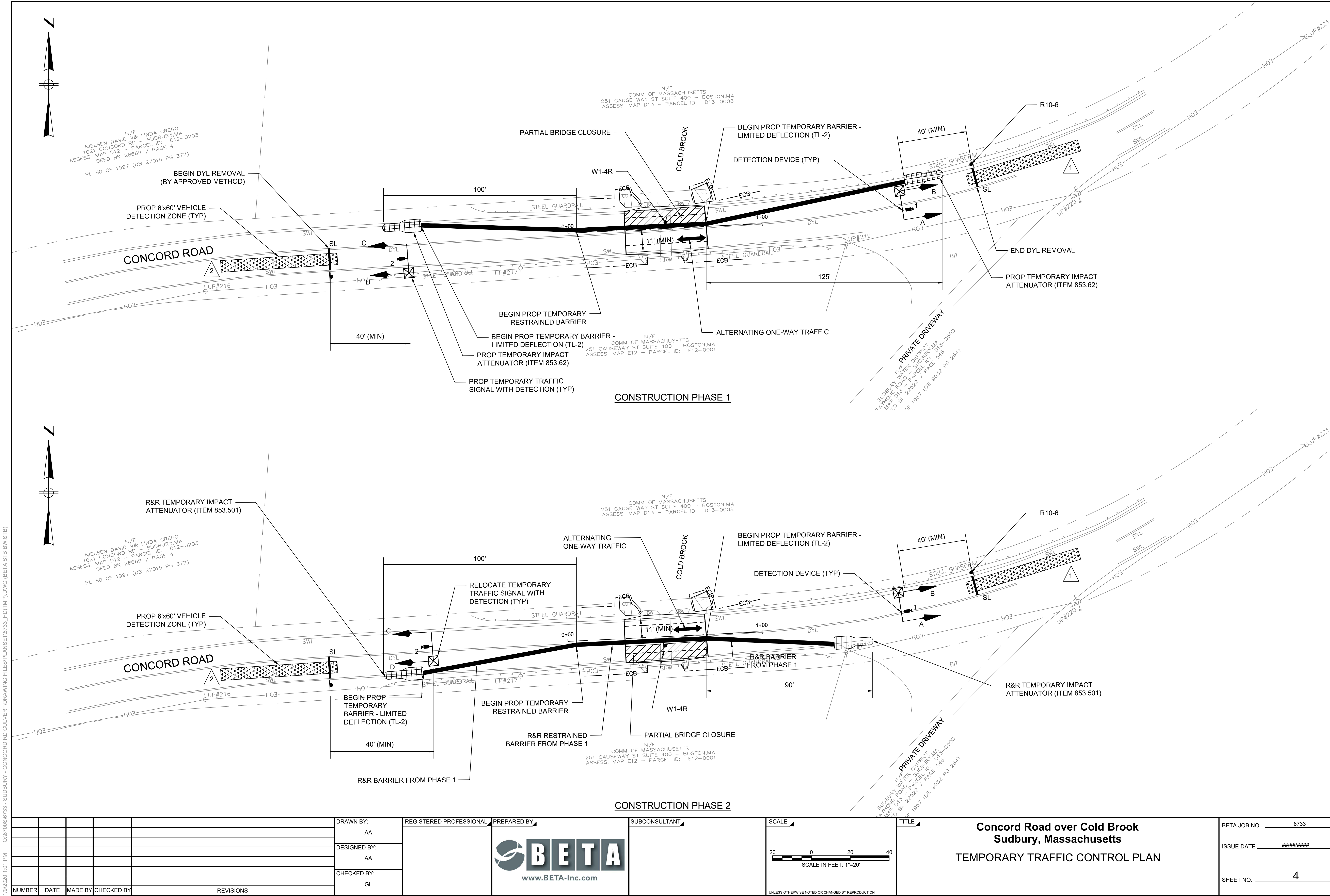

SCALE IN FEET: 1"=10'

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TITLE

Concord Road over Cold Brook
Sudbury, Massachusetts
RESOURCE IMPACTS

BETA JOB NO.	6733
ISSUE DATE	
SHEET NO.	3



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SCALE


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TITLE

Concord Road over Cold Brook
Sudbury, Massachusetts
TEMPORARY TRAFFIC CONTROL PLAN

BETA JOB NO.	6733
ISSUE DATE	#####
SHEET NO.	4

1/9/2020 1:01 PM O:\67005\6733 - SUDBURY - CONCORD RD CULVERT\DRAWING FILES\PLANSET\6733_HD(TMP).DWG (BETA STB BW STB)

SEQUENCE AND TIMING CHART FOR FULLY ACTUATED SIGNAL CONTROL (TEMPORARY)								
PHASE/EMERGENCY PRE-EMPTION			Ø1			Ø2		
STREET	DIRECTION	HOUSINGS	1	2	3	4	5	6
CONCORD ROAD	WB	A,B	G	Y	R	R	R	R
CONCORD ROAD	EB	C,D	R	R	R	G	Y	R
FLASH OPER.								
FR								
FR								
EMERGENCY ONLY								
TIMING IN SECONDS								
MINIMUM GREEN			10			10		
VEHICLE EXTENSION			2			2		
MAXIMUM GREEN			30			30		
CLEARANCE INTERVAL				4	10		4	10
DETECTOR MEMORY			NON-LOCK			NON-LOCK		
RECALL SWITCH			OFF			OFF		

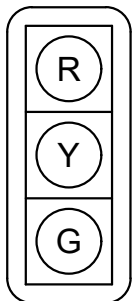
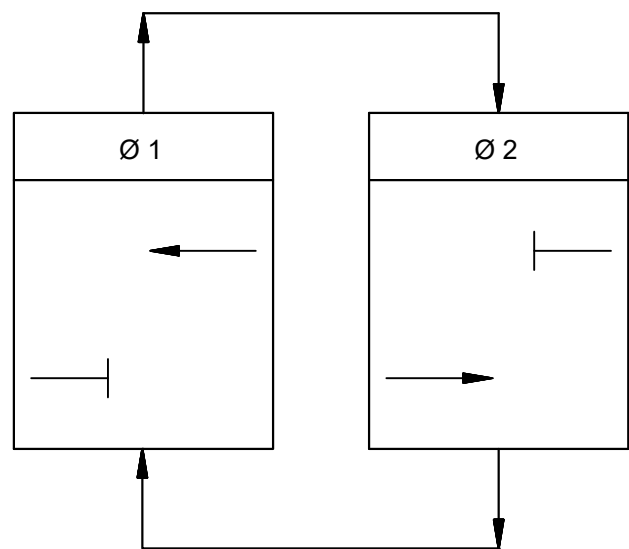
TRAFFIC SIGNAL NOTES:

- FLASHING OPERATION IS FOR EMERGENCY OPERATION ONLY. THE SIGNAL SHALL PROVIDE STOP AND GO OPERATION 24 HOURS DAILY.
- VEHICLE DETECTION MAY BE VIA MICROWAVE OR VIDEO.

DETECTOR GROUP NO.	VIDEO CAMERA NO.	NO. SECTION/ SIZE	OPERATIONS	EXTENSION (SECONDS)	CALL DELAY (SECONDS)	CALL PHASE	SWITCH	EXTEND PHASE
1	1	1 - 6'x60'	PRESENCE	0	0	Ø1	-	Ø1
2	2	1 - 6'x60'	PRESENCE	0	0	Ø2	-	Ø2

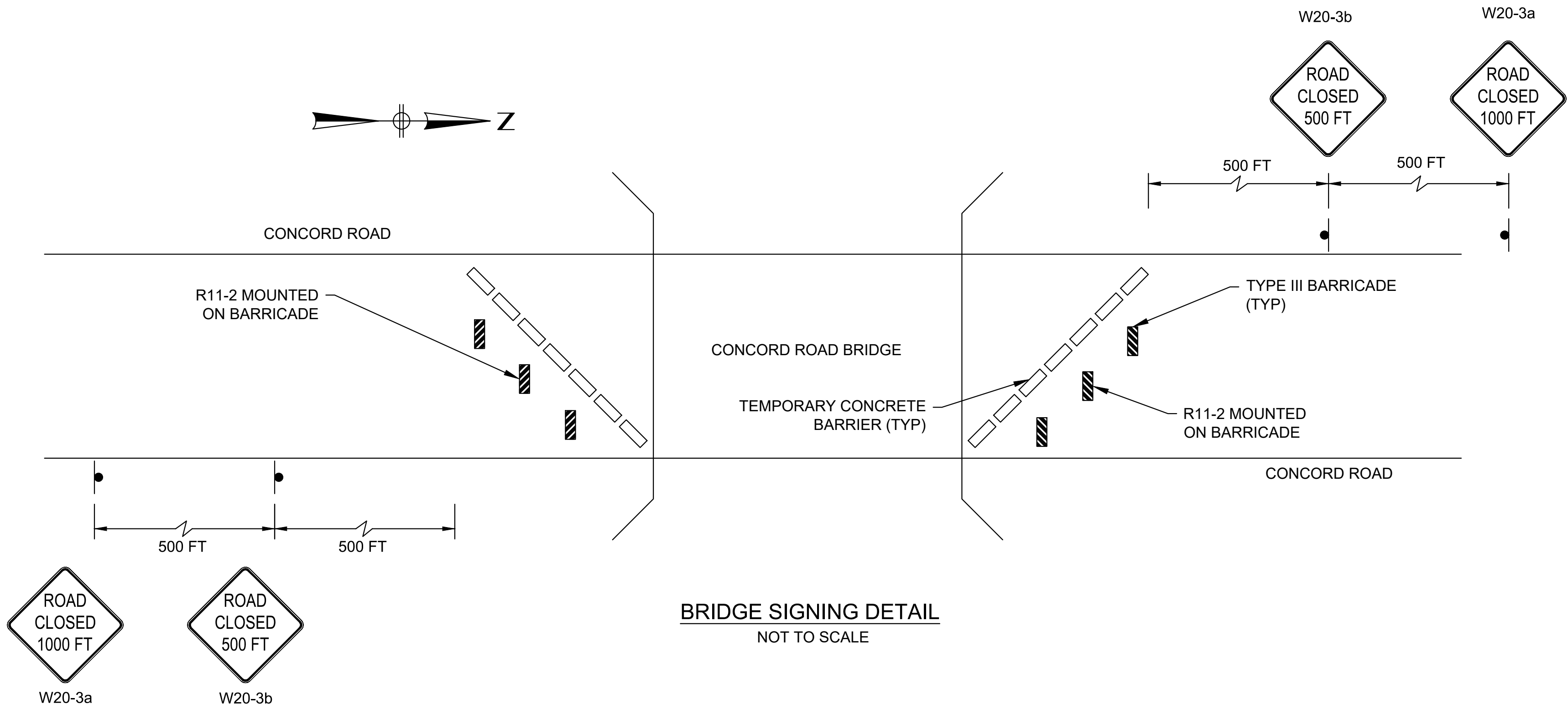
MAJOR ITEMS	
QUANTITY	DESCRIPTION
2	TEMPORARY TRAFFIC SIGNAL UNIT WITH VEHICLE DETECTION
PLUS ALL MISCELLANEOUS EQUIPMENT AND MATERIAL NECESSARY TO PROVIDE A COMPLETE OPERATING TRAFFIC CONTROL SIGNAL	

PROPOSED SIGNAL PHASING



LOCATION:
A,B,C,D

SIGNAL HEAD DESIGNATIONS
NOT TO SCALE



BRIDGE SIGNING DETAIL
NOT TO SCALE

CONSTRUCTION SIGN SUMMARY

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	DIMENSIONS (in)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA IN SQUARE FEET	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW		BACK- GROUND	LEGEND	BORDER			
M4-8a	24 in	18 in	END DETOUR				2	ORANGE	BLACK	BLACK	P-5 2	3.0	6.0
M4-9L	30 in	24 in	DETOUR ←				1	ORANGE	BLACK	BLACK	MOUNT W/ MA-D3-1	5.0	5.0
M4-9R	30 in	24 in	DETOUR →				2	ORANGE	BLACK	BLACK	MOUNT W/ MA-D3-1	5.0	10.0
M4-9V	30 in	24 in	DETOUR ↑				3	ORANGE	BLACK	BLACK	MOUNT W/ MA-D3-1	5.0	15.0
M4-10L	48 in	18 in	←DETOUR				1	ORANGE	BLACK	BLACK	MOUNT ON BARRICADE	6.0	6.0
M4-10R	48 in	18 in	DETOUR→				1	ORANGE	BLACK	BLACK	MOUNT ON BARRICADE	6.0	6.0
R10-6	24 in	30 in	STOP HERE ON RED				2	WHITE	BLACK	BLACK	P-5 2	5.0	10.0
R11-2	48 in	30 in	ROAD CLOSED				2	WHITE	BLACK	BLACK	MOUNT ON BARRICADE	10.0	20.0
R11-4	60 in	30 in	ROAD CLOSED TO THRU TRAFFIC				2	WHITE	BLACK	BLACK	MOUNT ON BARRICADE	12.5	25.0
W1-4R	36 in	36 in	↗				1	ORANGE	BLACK	BLACK	SEE NOTES	9.0	9.0
W3-3	36 in	36 in	⬆				2	ORANGE	BLACK	BLACK	P-5 2	9.0	18.0
W5-1	36 in	36 in	ROAD NARROWS				2	ORANGE	BLACK	BLACK	P-5 2	9.0	18.0
W13-1P	24 in	24 in	XX M.P.H.				2	ORANGE	BLACK	BLACK	MOUNT W/ W20-4	4.0	8.0
W20-3a	36 in	36 in	ROAD CLOSED 1000 FT				2	ORANGE	BLACK	BLACK	P-5 2	9.0	18.0
W20-3b	36 in	36 in	ROAD CLOSED 500 FT				2	ORANGE	BLACK	BLACK	P-5 2	9.0	18.0
W20-4	36 in	36 in	ONE LANE ROAD AHEAD				2	ORANGE	BLACK	BLACK	P-5 2	9.0	18.0
W21-5A	36 in	36 in	RIGHT SHOULDER CLOSED				2	ORANGE	BLACK	BLACK	P-5 2	9.0	18.0
MA-D3-1	36 in	12 in	Concord Rd	6/4D	3 3		7	ORANGE	BLACK	BLACK	P-5 (2) 7	3.0	21.0
MA- W20-7b	36 in	36 in	POLICE OFFICER AHEAD	SEE MASSDOT STANDARDS			2	ORANGE	BLACK	BLACK	P-5 2	9.0	18.0
SP-1	60 in	30 in	CONCORD RD BRIDGE CLOSED FOLLOW DETOUR	6C 5C 4C	4 3.5 3.5 4		3	ORANGE	BLACK	BLACK	P-5 (2) 3	12.5	38.0

SEE 2009
MUTCD STANDARDS


NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS	

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DESIGNED BY: AA
CHECKED BY: GL

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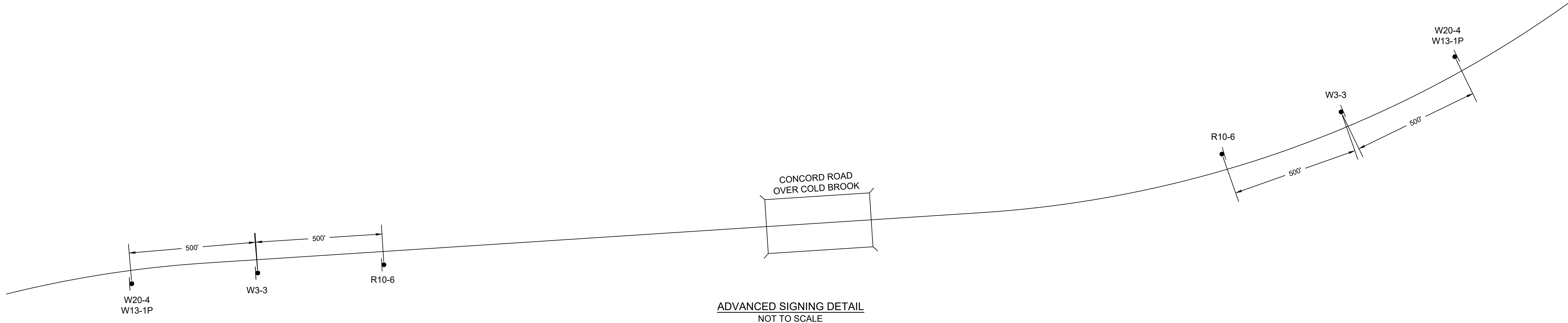
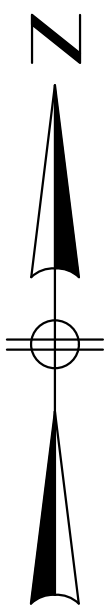
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TITLE Concord Road over Cold Brook Sudbury, Massachusetts TEMPORARY TRAFFIC CONTROL PLAN

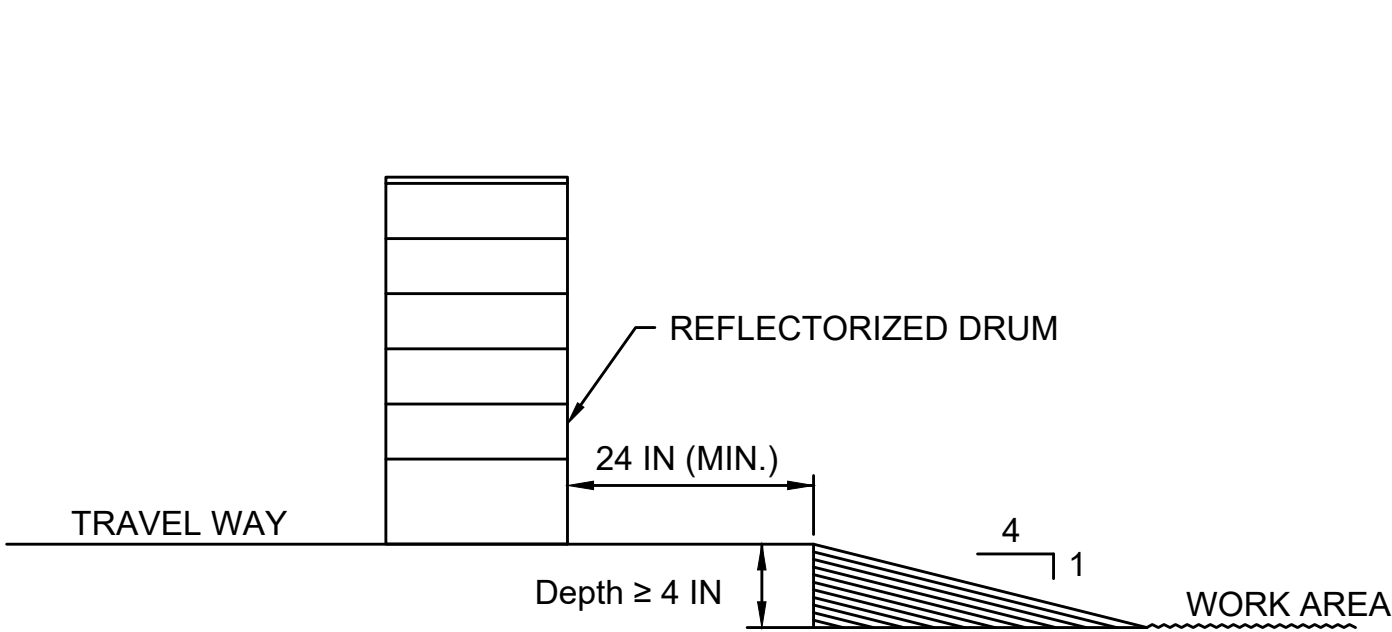
BETA JOB NO. 6733
ISSUE DATE #####
SHEET NO. 5



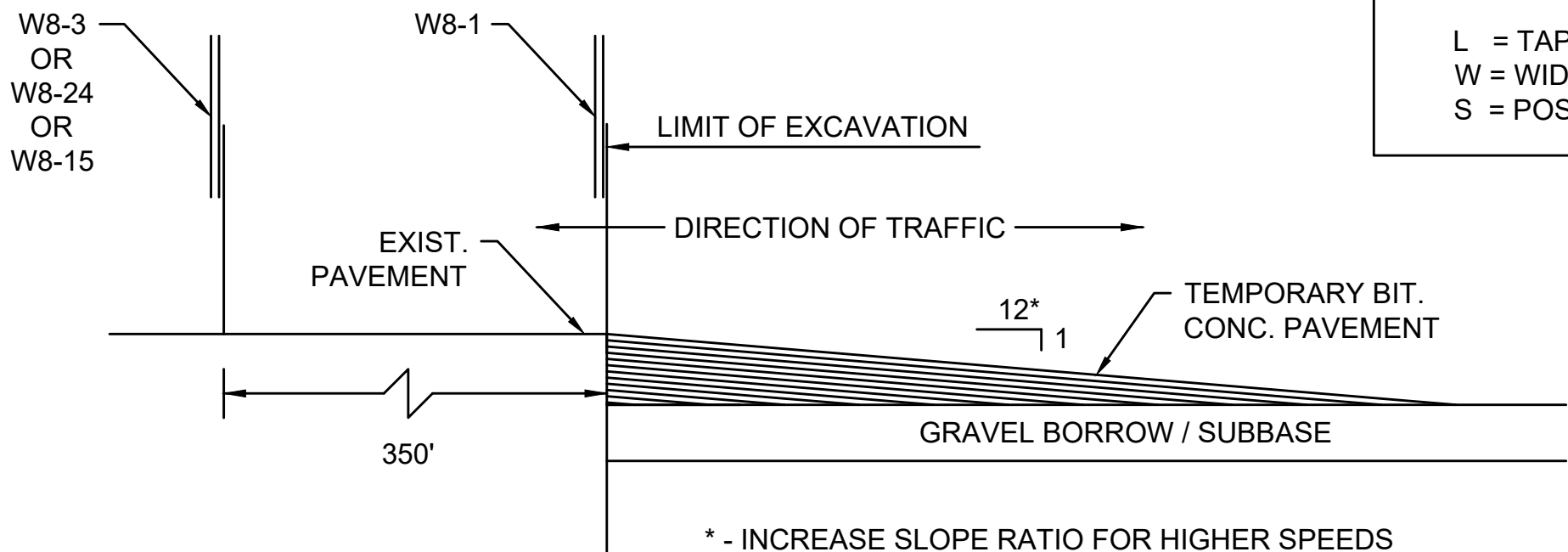
ADVANCED SIGNING DETAIL
NOT TO SCALE

NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE 2009 EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS.
2. ALL SIGN LEGENDS, BORDERS AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD, EXCEPT THAT BACKGROUND COLOR SHALL BE FLUORESCENT ORANGE, IN ACCORDANCE WITH MASSDOT SPECIFICATIONS.
3. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
4. TEMPORARY CONSTRUCTION SIGNING, BARRICADES AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
5. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, AND REFLECTORIZED PLASTIC DRUMS WITH LIGHTING DEVICES MOUNTED ON THEM, MUST PASS THE CRITERIA SET FORTH IN THE "MANUAL FOR ACCESSING SAFETY HARDWARE" (MASH).
6. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
7. THE FIRST TEN PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIAL FLASHING LIGHTS.
8. THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
9. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
10. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
11. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
12. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
13. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL NOT COVERED IN THE PLAN SHALL REFER TO MASSDOT "STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TRAFFIC MANAGEMENT PLANS".
14. W1-4 SIGN SHALL BE MOUNTED USING A TEMPORARY SUPPORT WHICH CAN BE MAINTAINED FOR SIGN VISIBILITY.
15. DYL REMOVED DURING CONSTRUCTION SHALL BE RE-STRIPED UPON COMPLETION OF CONSTRUCTION. TEMPORARY STOP LINES FOR TEMPORARY SIGNAL INSTALLATION SHALL BE REMOVED UPON REMOVAL OF TEMPORARY SIGNALS.



LATERAL DROP-OFF DETAIL
NOT TO SCALE



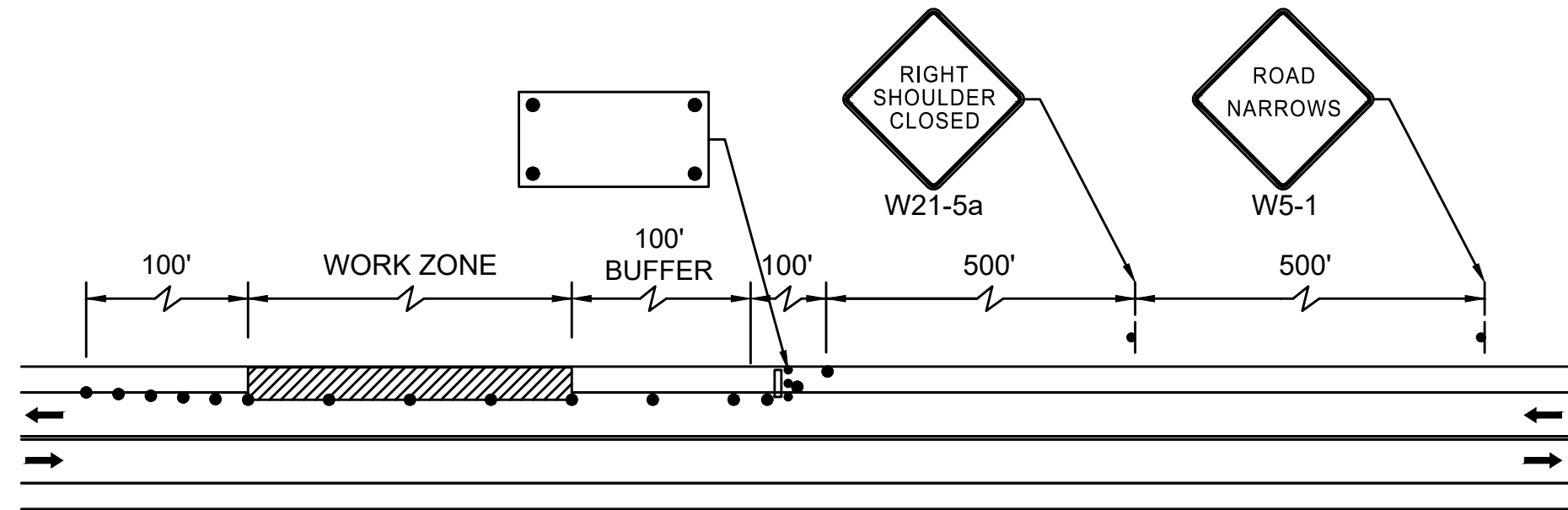
LONGITUDINAL DROP-OFF DETAIL
NOT TO SCALE

LEGEND:

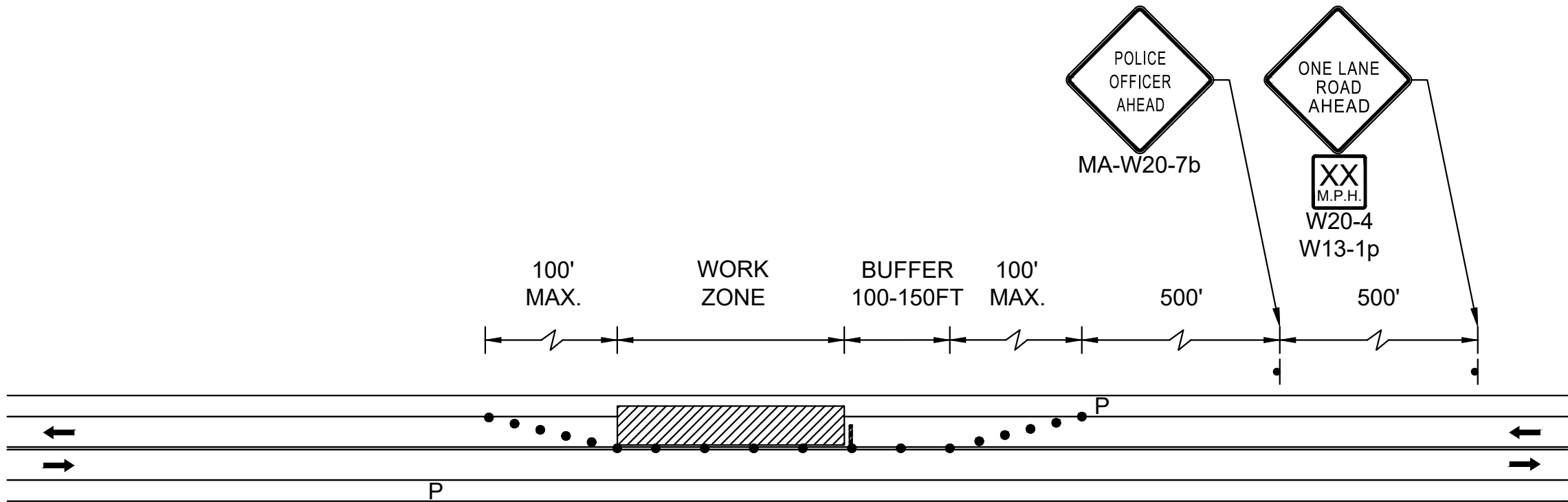
- REFLECTORIZED PLASTIC DRUM
- ▨ TYPE III BARRICADE
- ⬢ FLASHING ARROW PANNEL
- ⬢ FLASHING ARROW PANNEL
- ▨ WORK ZONE
- ➡ DIRECTION OF TRAFFIC
- ⬢ IMPACT ATTENUATOR
- ▭ MEDIAN BARRIER
- ⬢ MEDIAN BARRIER WITH WARNING LIGHTS
- ⬢ WORK VEHICLE
- ⬢ TRUCK MOUNTED ATTENUATOR
- ⬢ TRAFFIC OR PEDESTRIAN SIGNAL
- SIGN
- P POLICE DETAIL
- F FLAGGER

TAPER LENGTH

SPEED LIMIT	FORMULA
40 MPH or Less	$L = \frac{WS^2}{60}$
45 MPH or Greater	$L = W \times S$
L = TAPER LENGTH IN FEET W = WIDTH OF OFFSET IN FEET S = POSTED SPEED IN MPH	



TWO-LANE ROAD - SHOULDER CLOSED
NOT TO SCALE



TWO-LANE ROAD - ONE LANE ALTERNATING TRAFFIC
WITH POLICE DETAIL
NOT TO SCALE

NOTE: ONE LANE ALTERNATING WITH POLICE DETAIL SHALL BE USED IN SHORT TERM SCENARIOS SUCH AS GUARDRAIL PLACEMENT OR PLACEMENT AND REMOVAL OF TRAFFIC CONTROL DEVICES. IT SHALL NOT BE USED AS AN ALTERNATIVE TO ONE WAY ALTERNATING TRAFFIC WITH TRAFFIC SIGNAL CONTROL.

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DESIGNED BY:	AA
CHECKED BY:	GL

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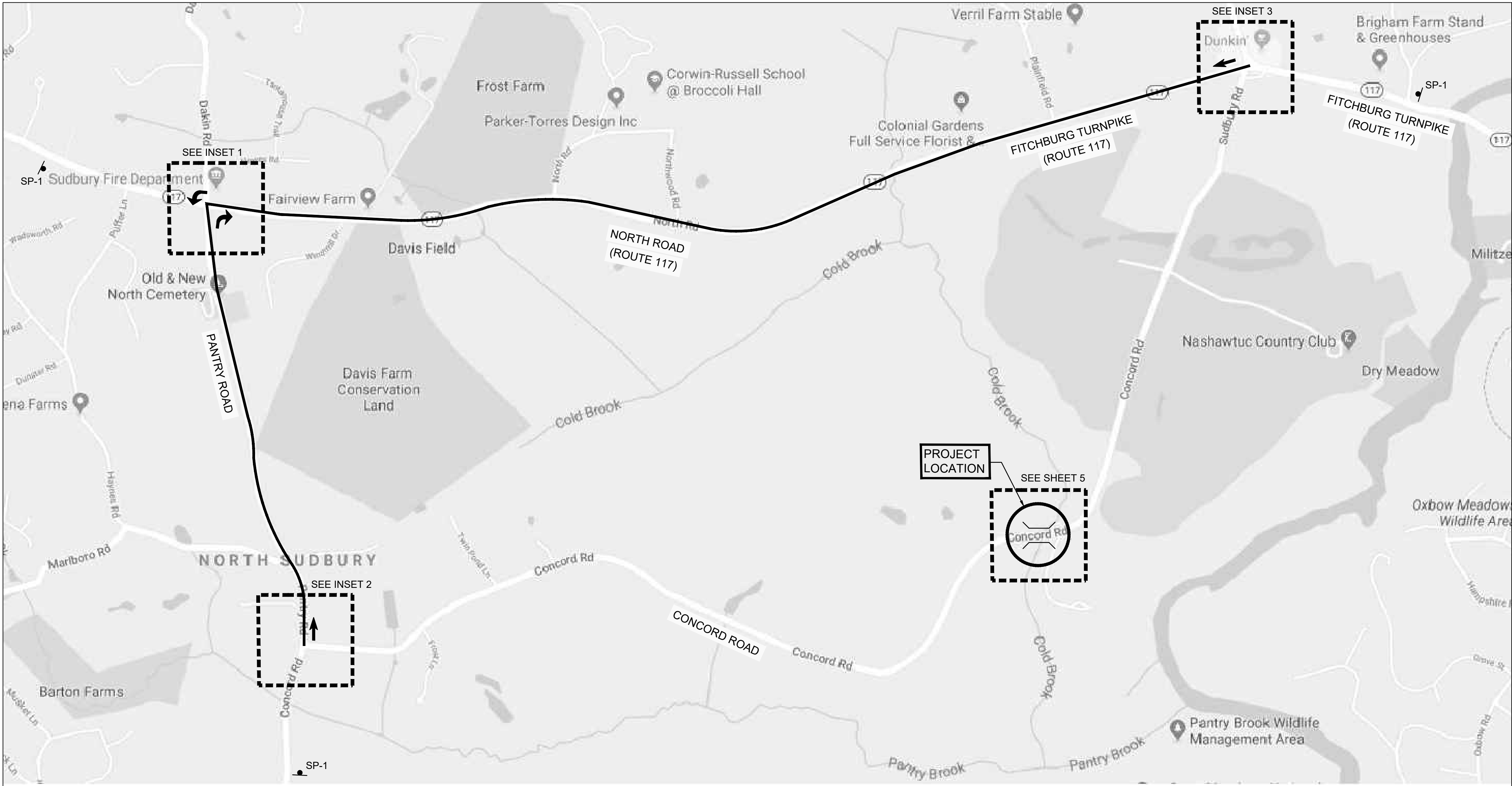
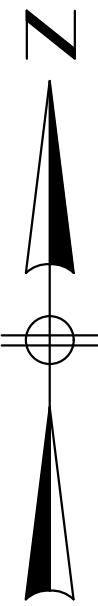
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SCALE
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Concord Road over Cold Brook Sudbury, Massachusetts TEMPORARY TRAFFIC CONTROL PLAN

BETA JOB NO.	6733
ISSUE DATE	#####
SHEET NO.	6

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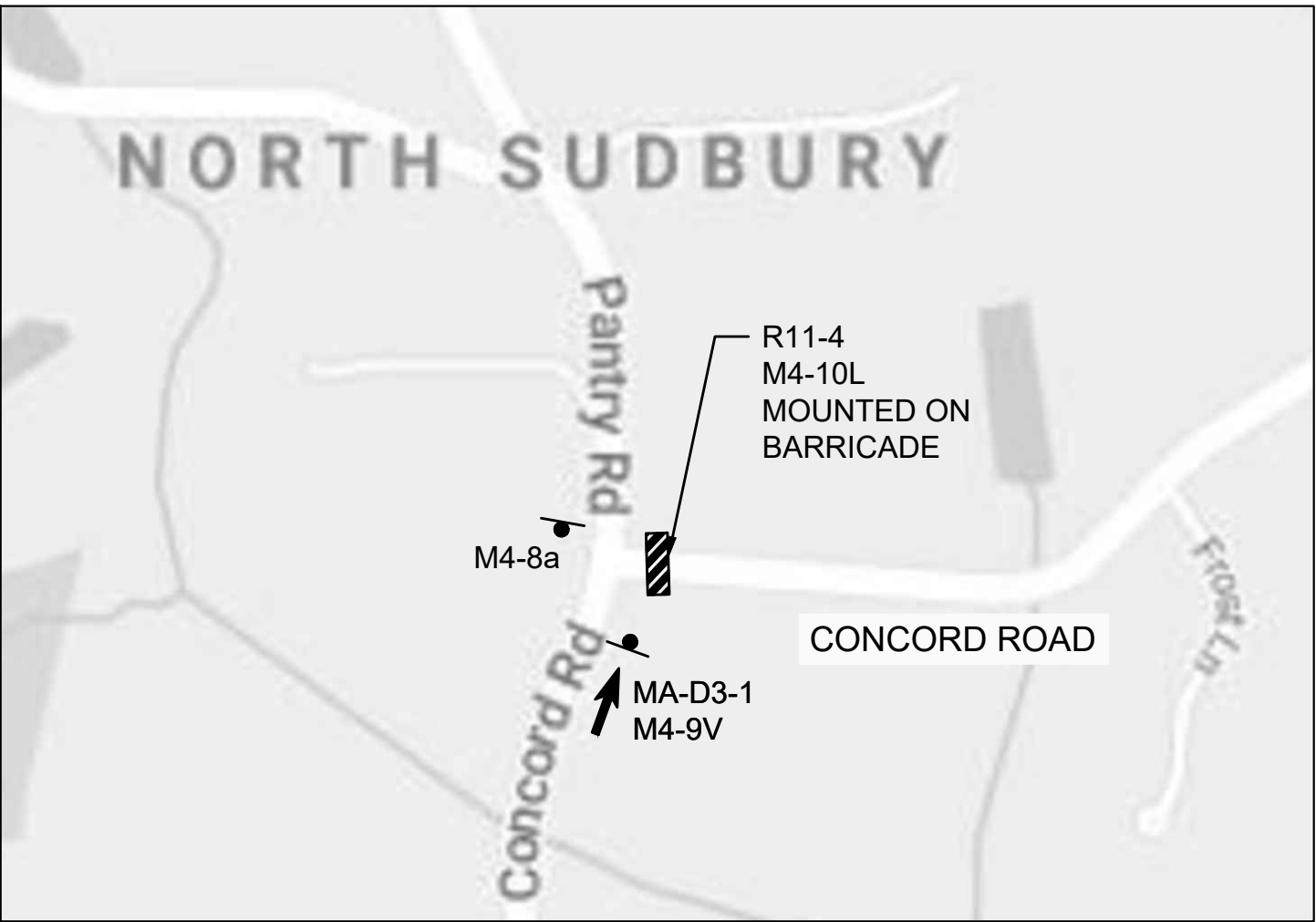


NOTE: DETOUR SIGNS SHALL BE COVERED WHEN DETOUR IS NOT IN ACTIVE USE.

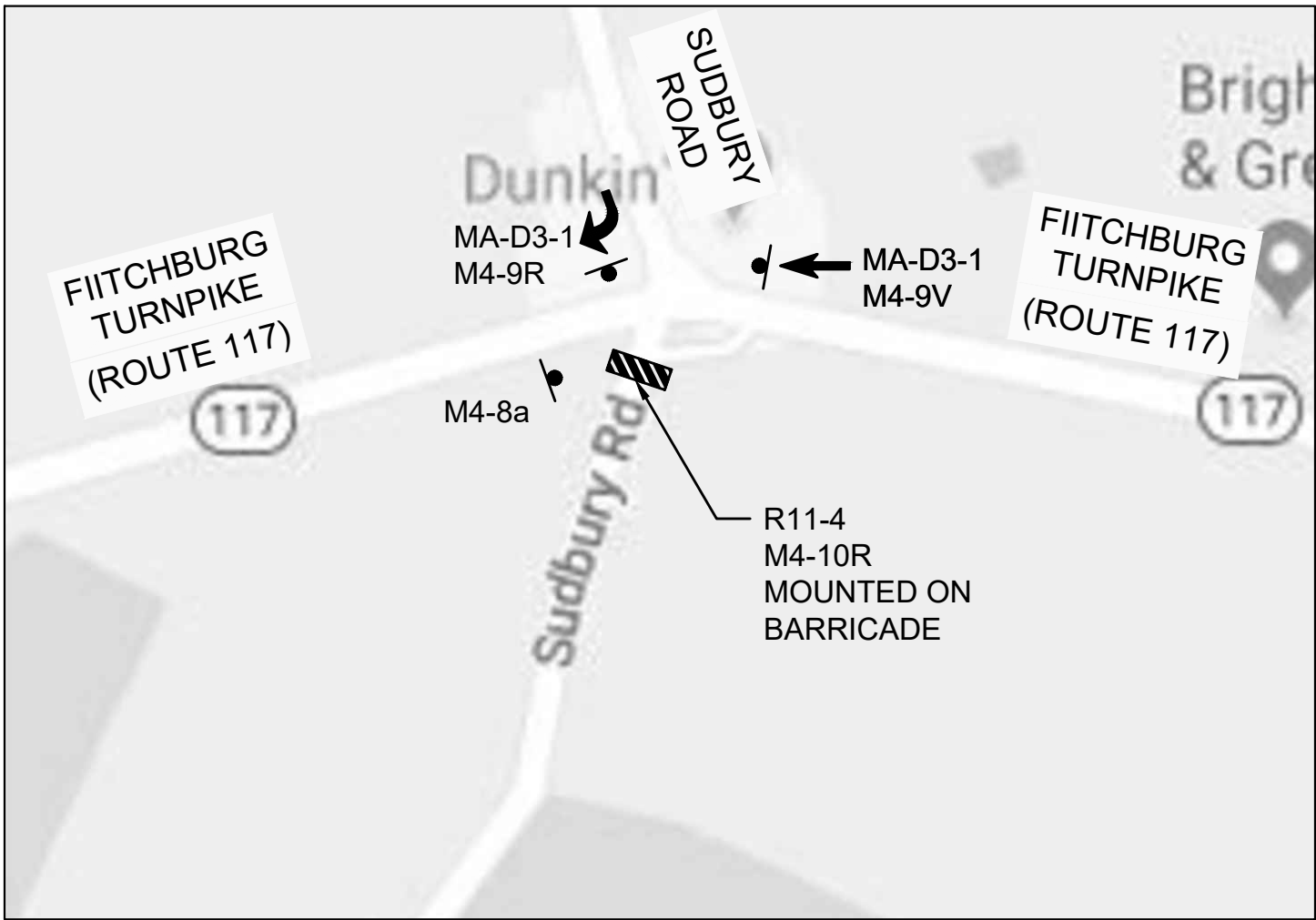
DETOUR PLAN
NOT TO SCALE



INSET 1
NOT TO SCALE



INSET 2
NOT TO SCALE



INSET 3
NOT TO SCALE

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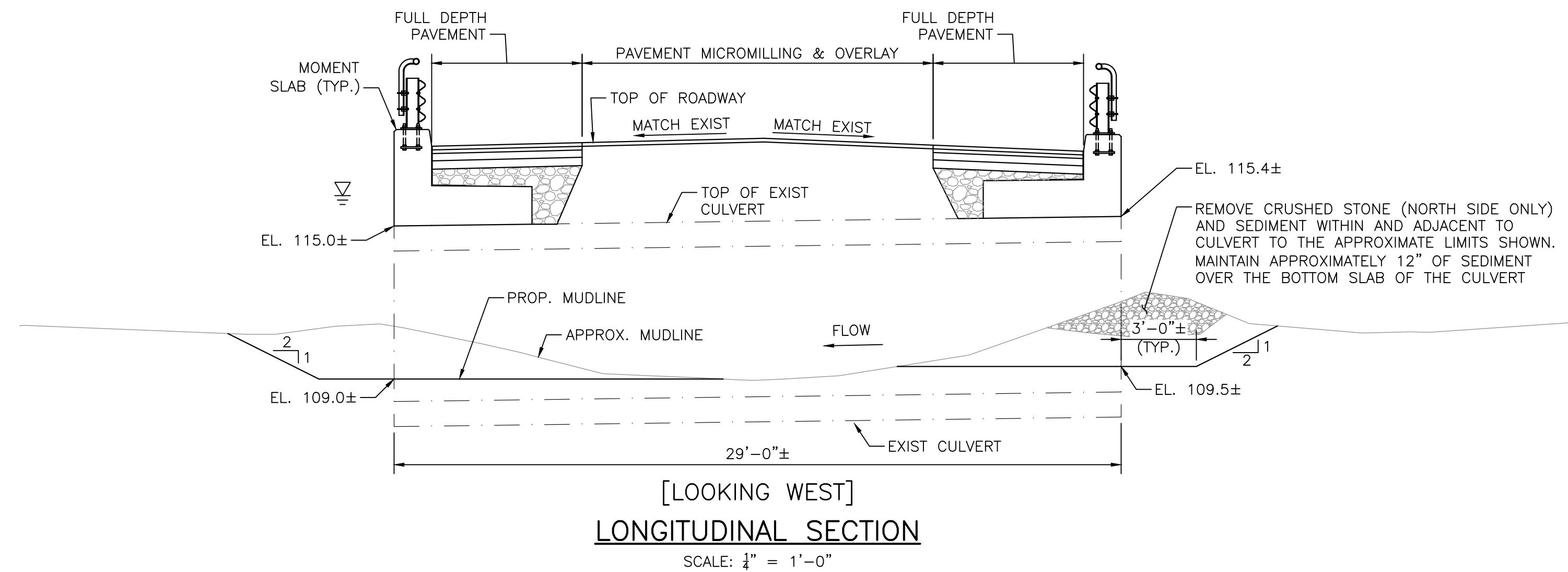
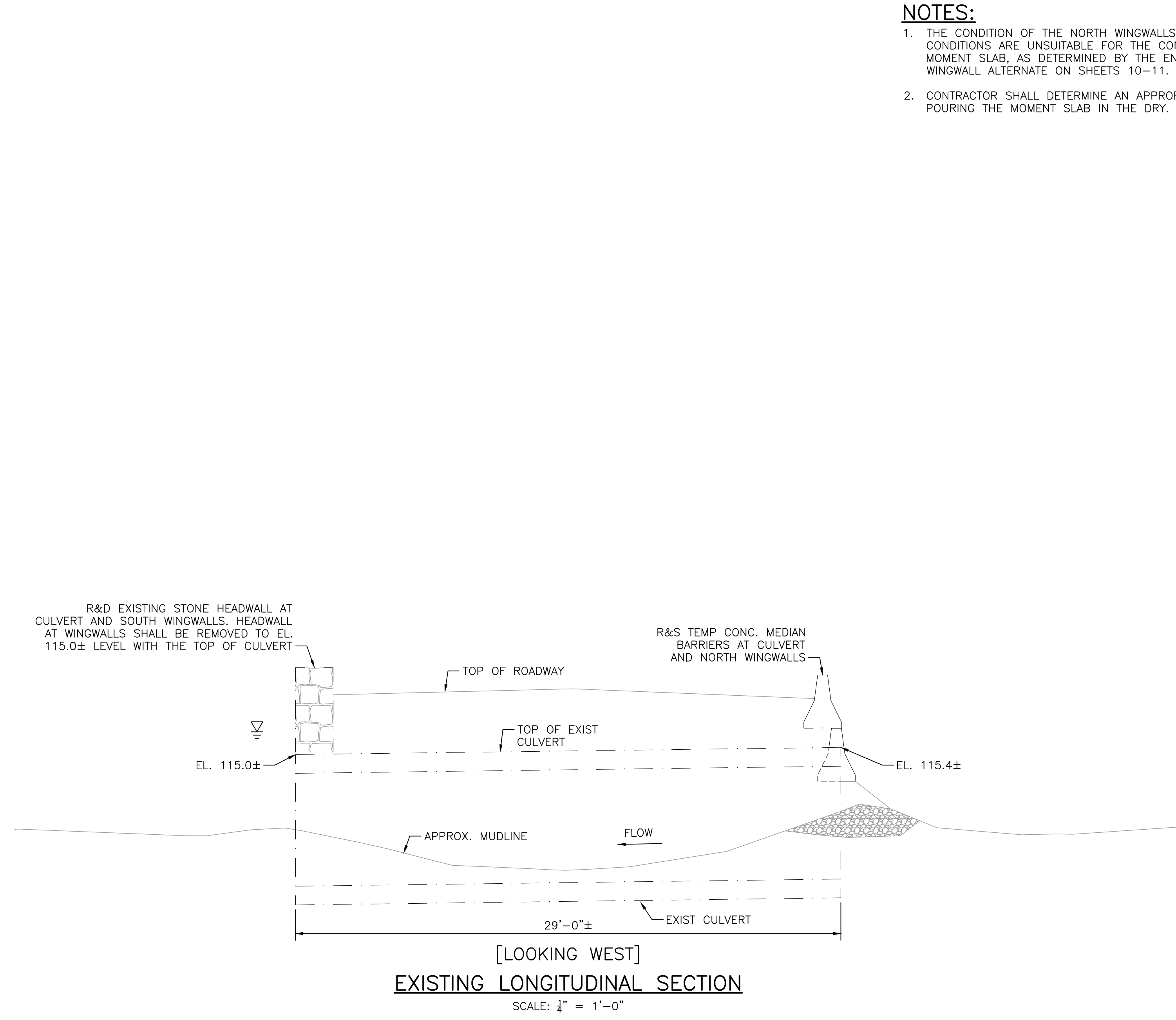
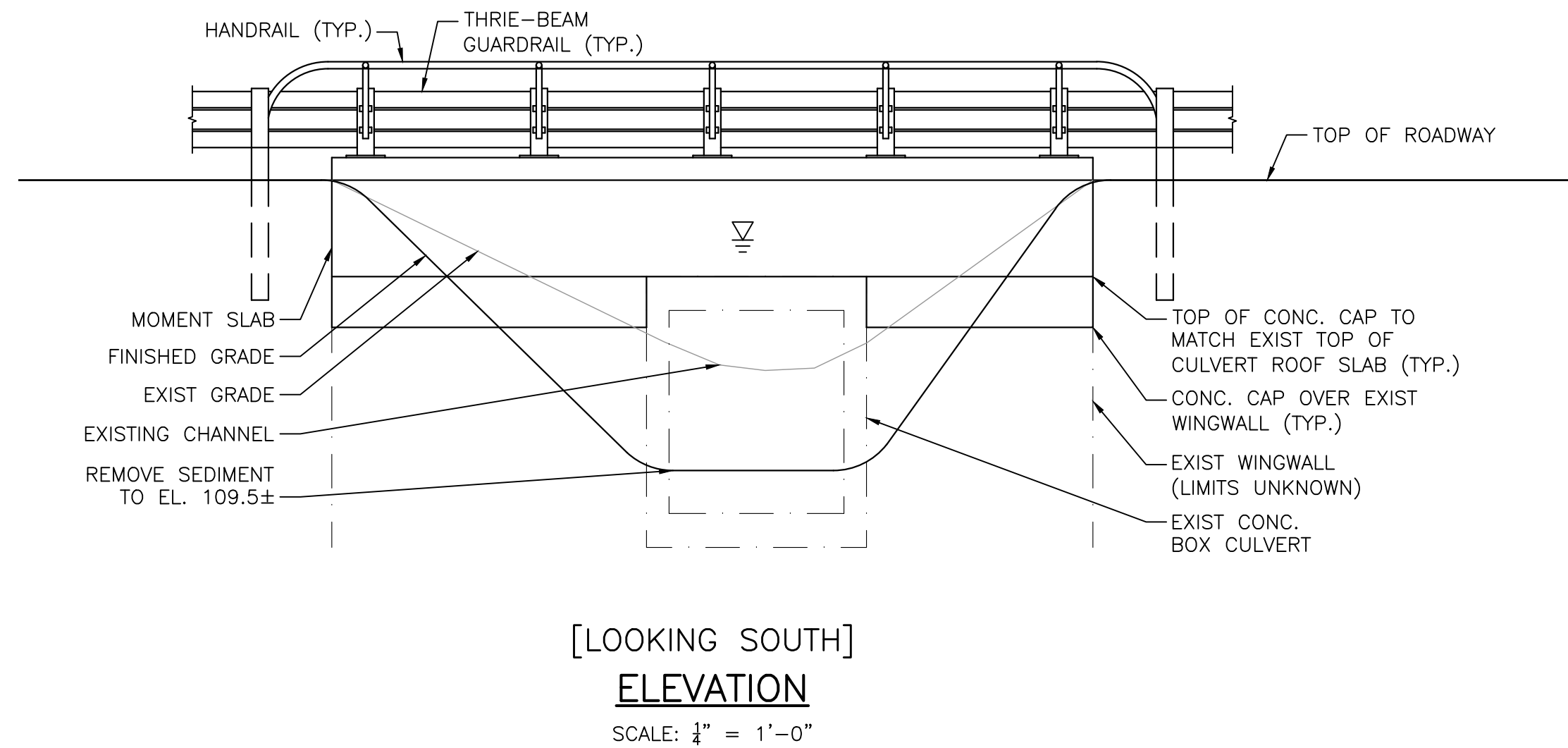
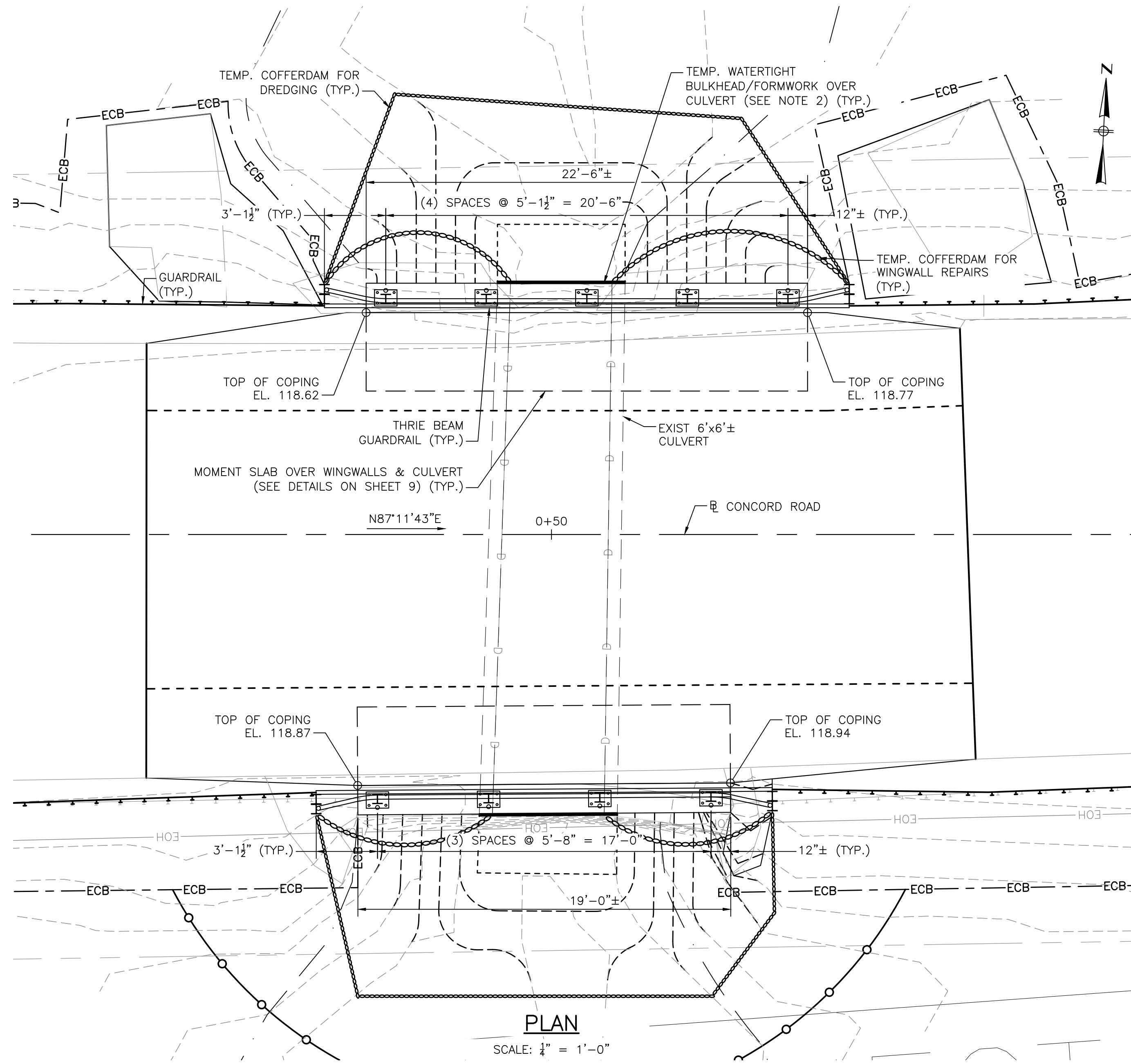
SUBCONSULTANT

SCALE

SCALE IN FEET: 1"=20'
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TITLE
Concord Road over Cold Brook Sudbury, Massachusetts
DETOUR PLAN

BETA JOB NO.	6733
ISSUE DATE	#####
SHEET NO.	7

1/9/2020 1:01 PM O:\6705\6733 - SUDBURY - CONCORD RD CULVERT\DRAWING FILES\PLANSET\6733_SR(1).DWG (BETA STB BW STB)



- NOTES:**
1. THE CONDITION OF THE NORTH WINGWALLS ARE UNKNOWN. IF CONDITIONS ARE UNSUITABLE FOR THE CONSTRUCTION OF THE MOMENT SLAB, AS DETERMINED BY THE ENGINEER, SEE WINGWALL ALTERNATE ON SHEETS 10-11.
 2. CONTRACTOR SHALL DETERMINE AN APPROPRIATE METHOD FOR POURING THE MOMENT SLAB IN THE DRY.

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DESIGNED BY:	DW
CHECKED BY:	CWJ

REGISTERED PROFESSIONAL	PREPARED BY

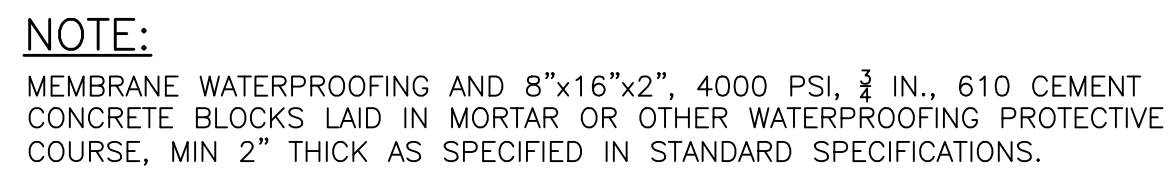


SUBCONSULTANT

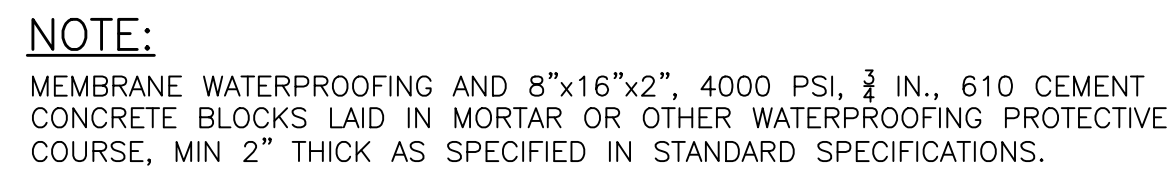
SCALE
AS SHOWN
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

TITLE
Concord Road Over Cold Brook Sudbury, Massachusetts
STRUCTURAL PLAN, ELEVATION, & LONGITUDINAL SECTION

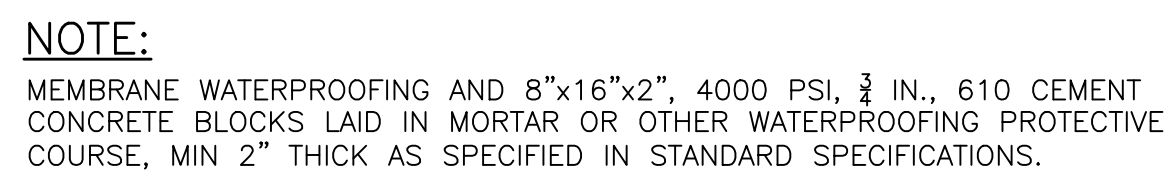
BETA JOB NO.	6733
ISSUE DATE	
SHEET NO.	8



SCALE: $\frac{3}{4}" = 1'-0"$



SCALE: $\frac{3}{4}" = 1'-0"$

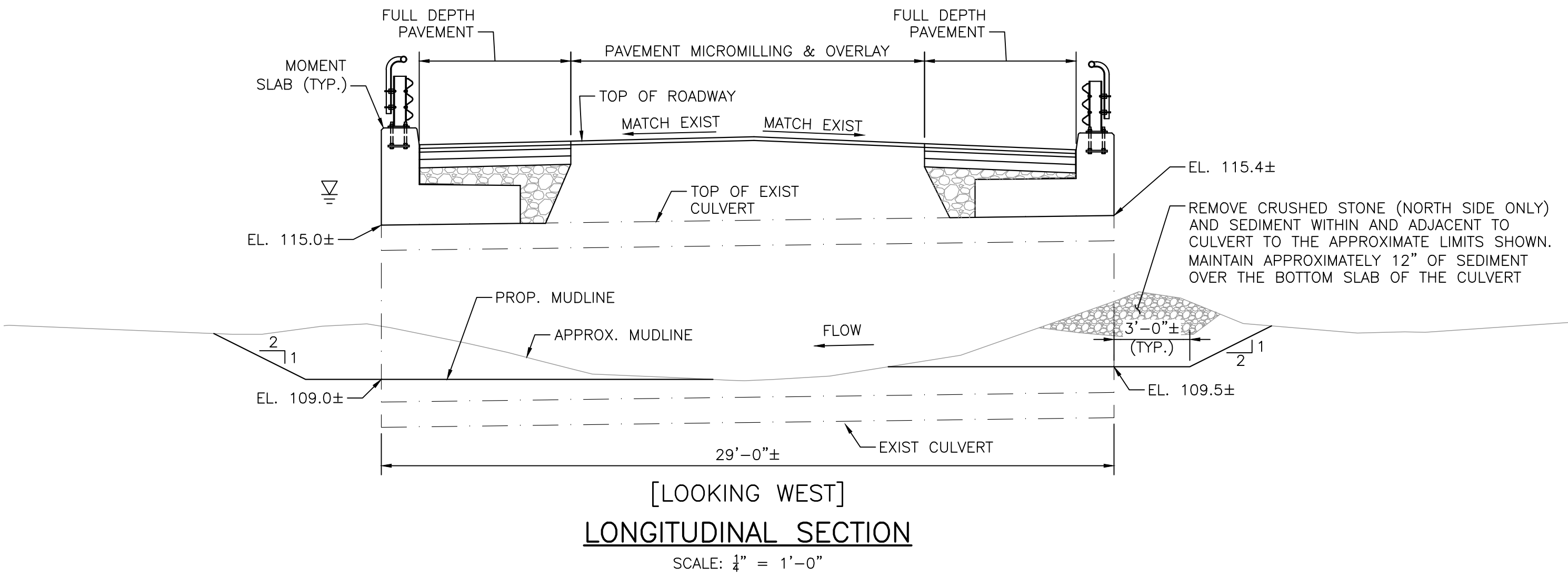
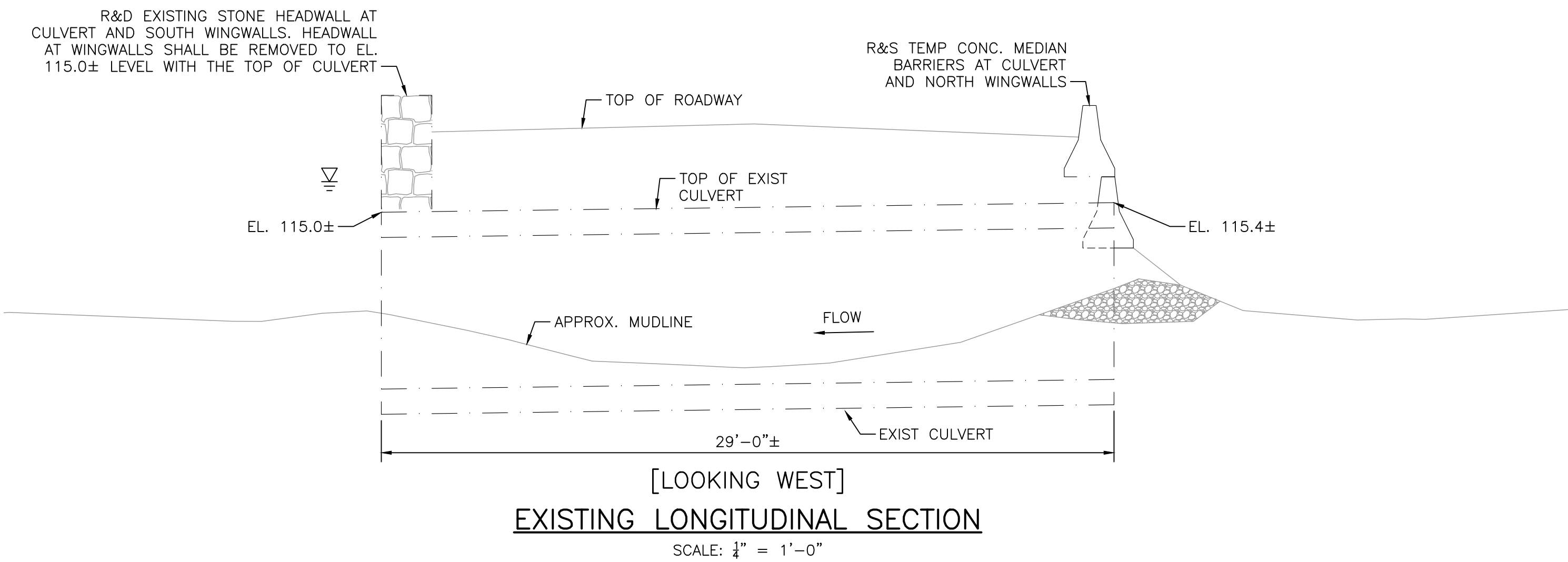
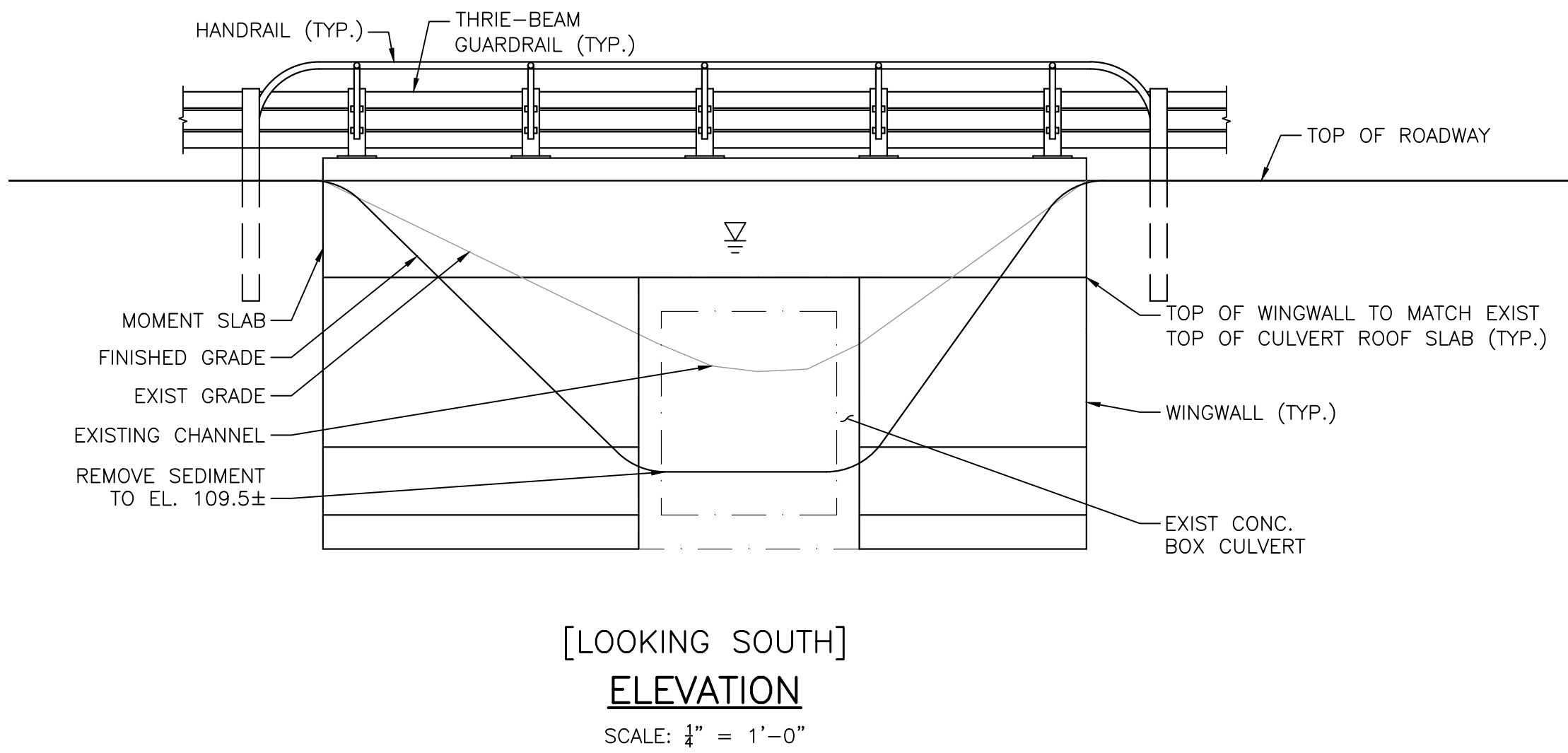
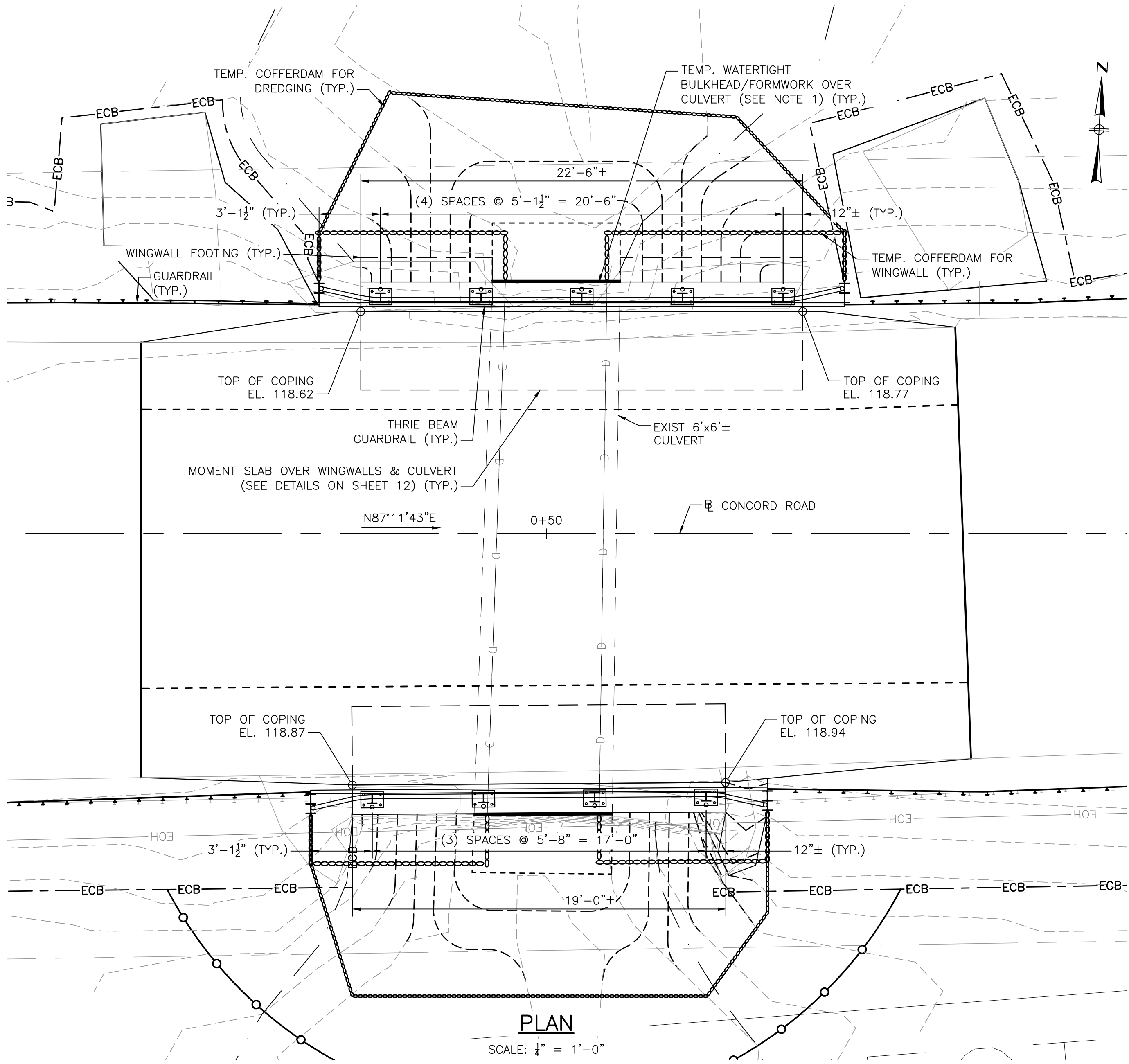


SCALE: $\frac{3}{4}" = 1'-0"$

1. MOMENT SLAB CONCRETE SHALL BE 5000 PSI, $\frac{3}{4}$ IN., 685 HP CEMENT CONCRETE.
2. ALL REINFORCING SHOWN IN THESE DETAILS SHALL BE EPOXY COATED.

9/20/2020 1:01 PM O:\6700SI\6733 - SUDBURY - CONCORD RD CULVERT\DRAWING FILES\PLANSET\6733_SR(2).DWG (BETA STB.BW.STB)

NOTE:
1. CONTRACTOR SHALL DETERMINE AN APPROPRIATE METHOD FOR POURING THE MOMENT SLAB IN THE DRY.



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NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:	INITIALS
DESIGNED BY:	INITIALS
CHECKED BY:	INITIALS

REGISTERED PROFESSIONAL	PREPARED BY



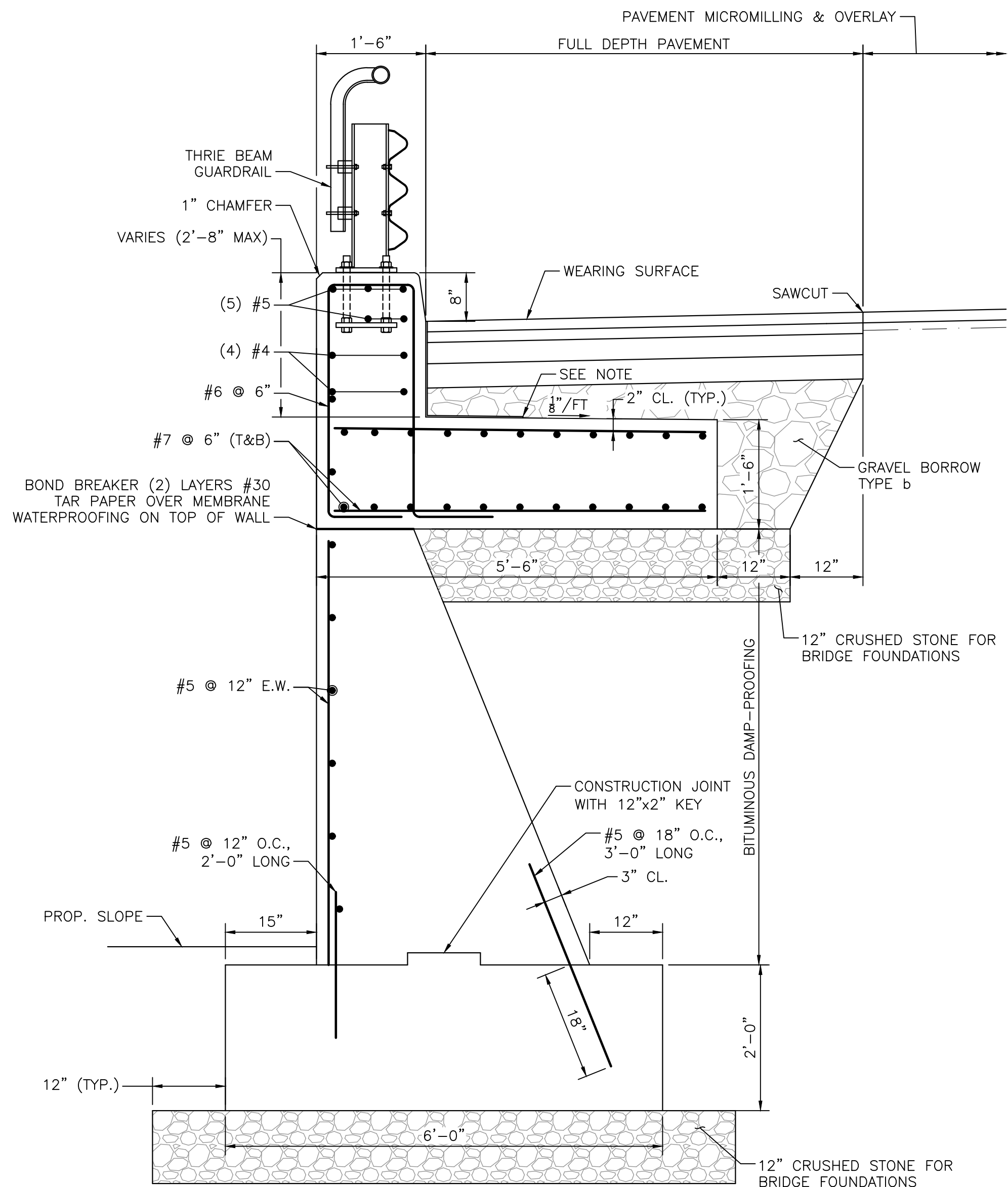
SUBCONSULTANT

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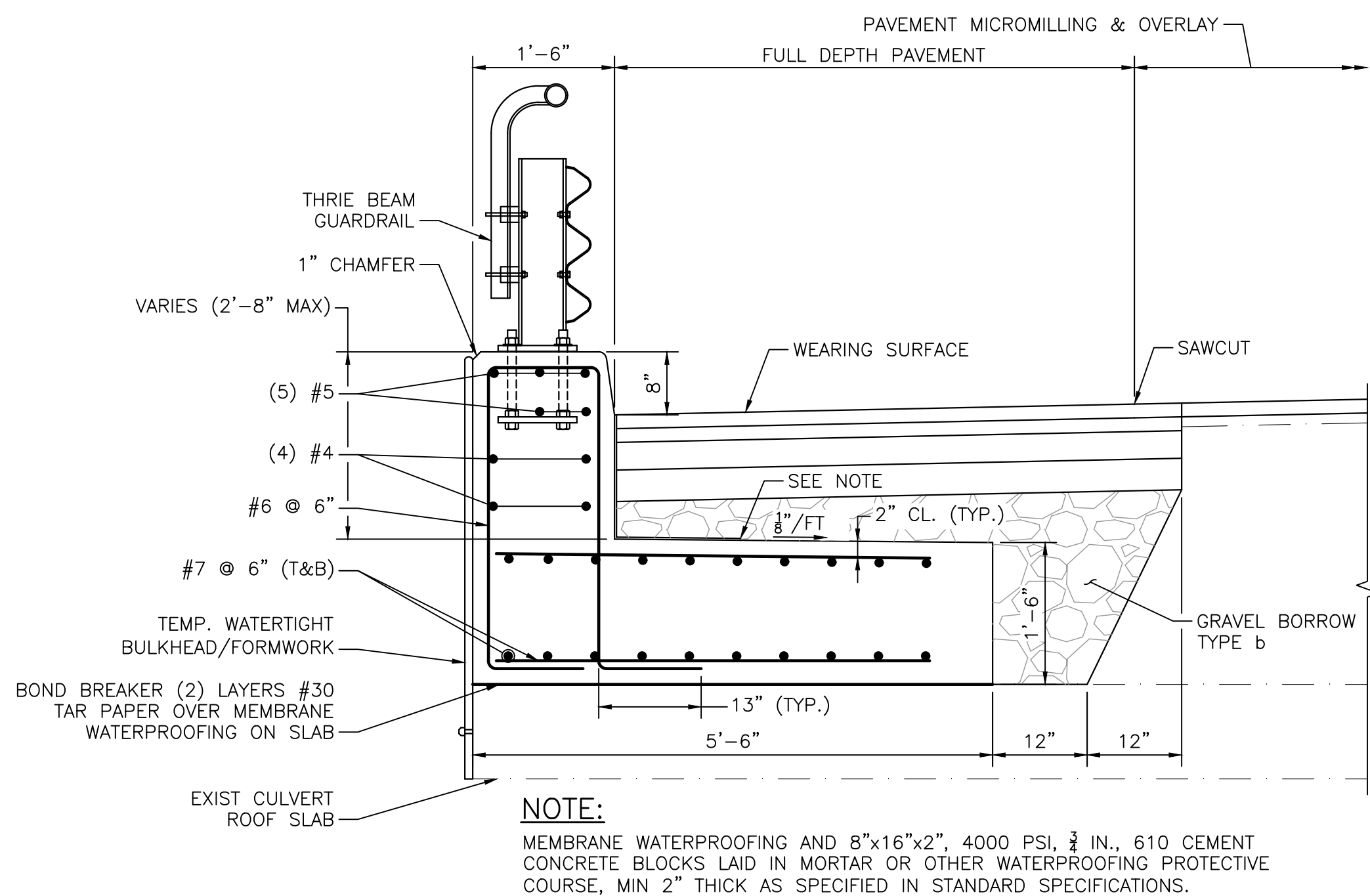
TITLE
Concord Road Over Cold Brook Sudbury, Massachusetts ALTERNATE STRUCTURAL PLAN, ELEVATION & LONGITUDINAL SECTION

BETA JOB NO.	6733
ISSUE DATE	
SHEET NO.	11

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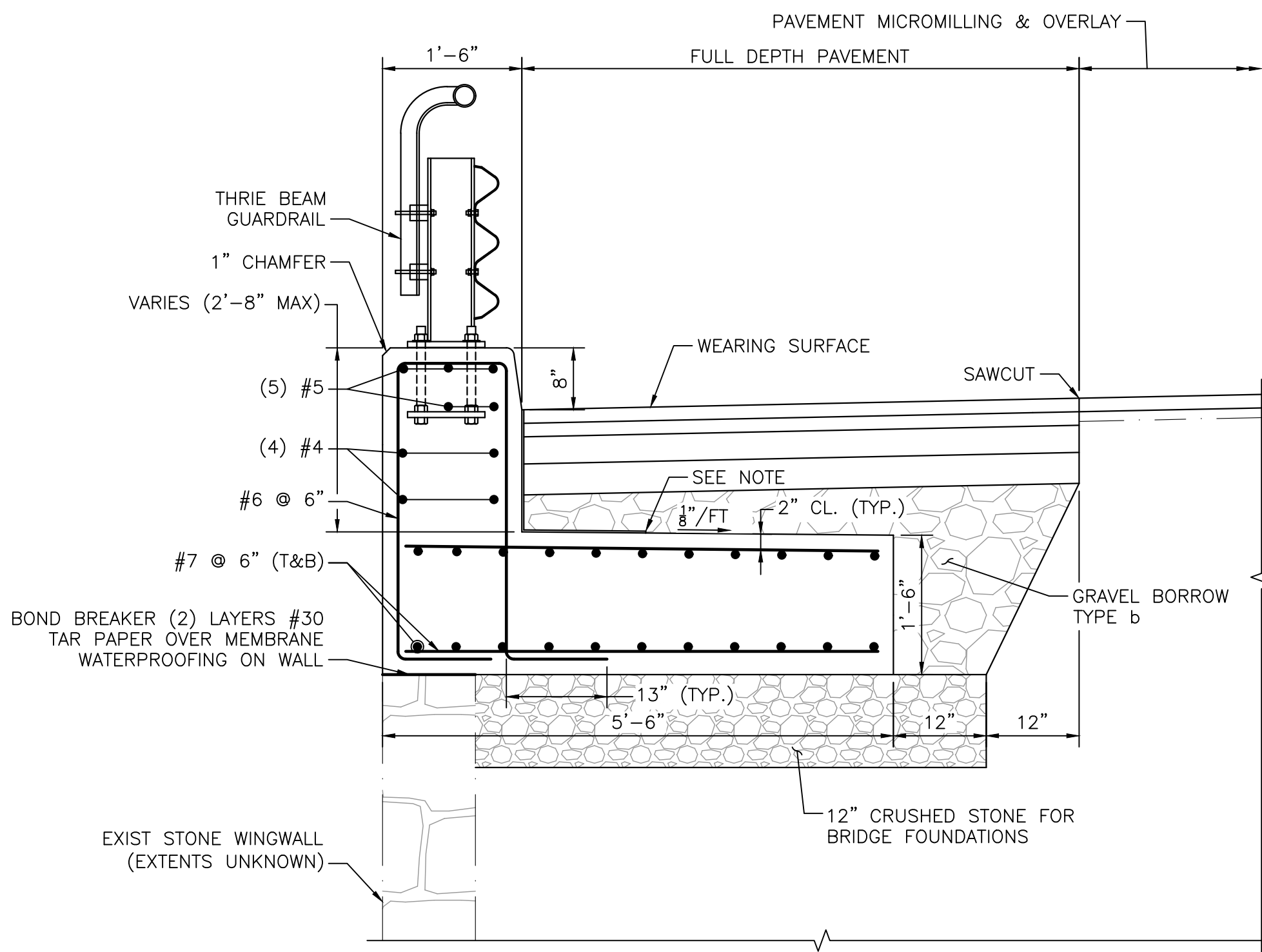


WINGWALL DETAIL
SCALE: 3/4" = 1'-0"



NOTE:
MEMBRANE WATERPROOFING AND 8"x16"x2", 4000 PSI, 3/4 IN., 610 CEMENT CONCRETE BLOCKS LAID IN MORTAR OR OTHER WATERPROOFING PROTECTIVE COURSE, MIN 2" THICK AS SPECIFIED IN STANDARD SPECIFICATIONS.

MOMENT SLAB DETAIL OVER CULVERT
SCALE: 3/4" = 1'-0"



NOTE:
MEMBRANE WATERPROOFING AND 8"x16"x2", 4000 PSI, 3/4 IN., 610 CEMENT CONCRETE BLOCKS LAID IN MORTAR OR OTHER WATERPROOFING PROTECTIVE COURSE, MIN 2" THICK AS SPECIFIED IN STANDARD SPECIFICATIONS.

MOMENT SLAB DETAIL OVER SOUTH WINGWALLS
SCALE: 3/4" = 1'-0"

NOTES:

1. MOMENT SLAB CONCRETE SHALL BE 5000 PSI, 3/4 IN., 685 HP CEMENT CONCRETE.
2. WINGWALL CONCRETE SHALL BE 4000 PSI, 1 1/2 IN., 565 CEMENT CONCRETE.
3. ALL REINFORCING SHOWN IN THESE DETAILS SHALL BE EPOXY COATED.

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INITIALS	
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INITIALS	

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TITLE Concord Road over Cold Brook Sudbury, Massachusetts ALTERNATE STRUCTURAL DETAILS		BETA JOB NO. 6733
		ISSUE DATE
		SHEET NO. 12