

Date:11/11/2019

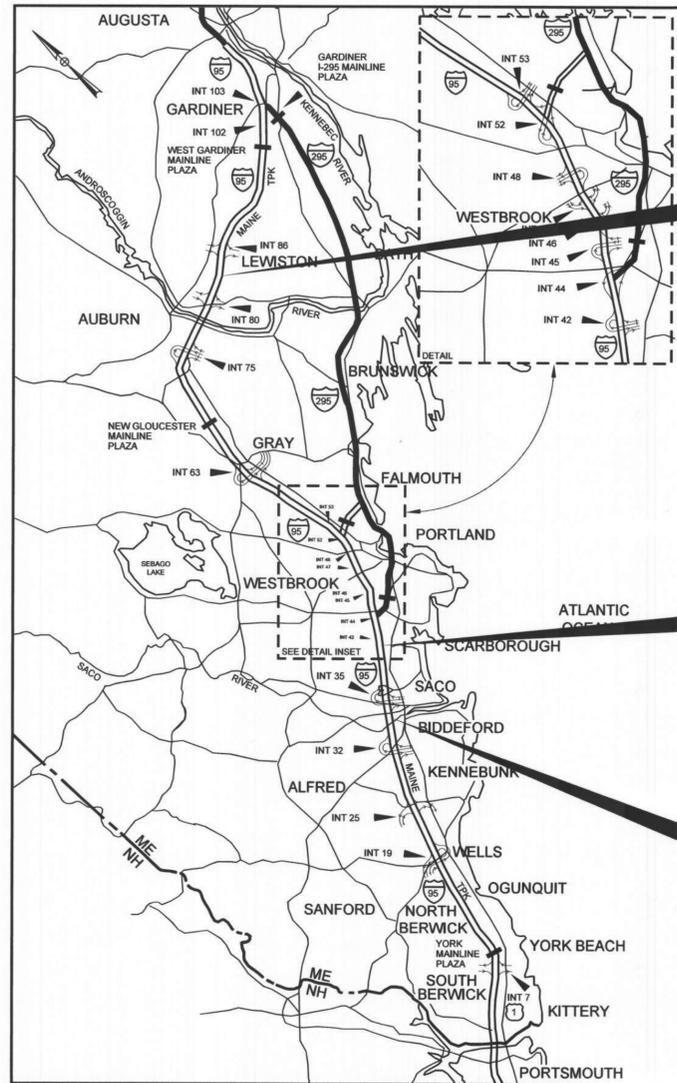
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Division: HIGHWAY

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THE GOLD STAR  
MEMORIAL HIGHWAY



LOCATION MAP

CONTRACT 2020.07  
BRIDGE REPAIRS,  
GROVE STREET  
UNDERPASS MILE 83.7

CONTRACT 2020.07  
BRIDGE REPAIRS,  
BEECH RIDGE ROAD  
UNDERPASS MILE 41.4

CONTRACT 2020.07  
BRIDGE REPAIRS,  
BOOM ROAD  
UNDERPASS MILE 33.4

# MAINE TURNPIKE AUTHORITY

DANIEL E. WATHEN, CHAIR  
ROBERT D. STONE, VICE CHAIR  
MICHAEL J. CIANCHETTE, MEMBER  
ANN R. ROBINSON, MEMBER  
THOMAS J. ZUKE, MEMBER  
BRUCE A. VAN NOTE, MEMBER EX-OFFICIO

S. PETER MILLS, EXECUTIVE DIRECTOR

## CONTRACT 2020.07

**BRIDGE REPAIRS 3 LOCATIONS:**  
BOOM ROAD UNDERPASS (MILE 33.4)  
BEECH RIDGE ROAD UNDERPASS (MILE 41.4)  
GROVE STREET UNDERPASS (MILE 83.7)

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CONTRACT 2020.07

APPROVED: MAINE TURNPIKE AUTHORITY

*Peter S. Merfeld*  
PETER S. MERFELD, P.E.  
CHIEF OPERATIONS OFFICER

11/12/19  
DATE

*Stephen R. Tartre*  
STEPHEN R. TARTRE, P.E.  
DIRECTOR OF ENGINEERING AND BUILDING MAINTENANCE

11/12/19  
DATE

TYLIN INTERNATIONAL



DANIEL S. MYERS, P.E.  
T.Y. LIN INTERNATIONAL PROJECT MANAGER

*Daniel S. Myers*

11/11/2019  
DATE

Date: 11/12/2019

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ESTIMATED QUANTITIES						
Item No.	Item Description	Unit	Mile 33.4 Boom Road Underpass	Mile 41.4 Beech Ridge Road Underpass	Mile 83.7 Grove Street Underpass	Combined Quantity
202.127	REMOVING EXISTING BITUMINOUS PAVEMENT (1260 SY)	LS		0.55	0.45	1
202.202	REMOVING PAVEMENT SURFACE	SY	900	210	295	1,405
203.20	COMMON EXCAVATION	CY			41	41
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	CY			32	32
403.208	HOT MIX ASPHALT - 12.5 mm NOMINAL MAXIMUM SIZE	TON	75	74	73	222
403.213	HOT MIX ASPHALT, 12.5 mm NOMINAL MAXIMUM SIZE (BASE AND INTERMEDIATE COURSE)	TON		57	62	119
409.15	BITUMINOUS TACK COAT RS-1 OR RS1h - APPLIED	GAL	27	48	44	119
502.701	BRIDGE DRAIN GRATE MODIFICATIONS	EA			4	4
502.7011	WEEP DRAIN EXTENSIONS	LS	0.33	0.33	0.34	1
508.14	HIGH PERFORMANCE WATERPROOFING MEMBRANE (1260 SY)	LS		0.55	0.45	1
513.09	SLOPE PROTECTION - PORTLAND CEMENT CONCRETE	SY	45	20		65
515.201	PIGMENTED PROTECTIVE COATING FOR CONCRETE SURFACES	SY			310	310
515.202	CLEAR PROTECTIVE COATING FOR CONCRETE SURFACES	SY	710	715	440	1,865
518.10	ABUTMENT REPAIRS	SF	10	10	75	95
518.20	PIER REPAIRS	SF	20		195	215
518.43	PARAPET JOINT REPAIRS	LF	270	260	315	845
518.75	FASCIA AND OVERHANG REPAIRS	SF			50	50
518.80	PARTIAL DEPTH CONCRETE DECK REPAIRS	SF		85	75	160
520.211	EXPANSION DEVICE MODIFICATIONS (BOOM ROAD)	LS	1			1
520.212	EXPANSION DEVICE MODIFICATIONS (BEECH RIDGE ROAD)	LS		1		1
520.213	EXPANSION DEVICE MODIFICATIONS (GROVE STREET)	LS			1	1
526.306	TEMPORARY CONCRETE BARRIER, TYPE I - SUPPLIED BY AUTHORITY	LS	0.32	0.34	0.34	1
613.319	EROSION CONTROL BLANKET	SY	25	25	25	75
615.07	LOAM	CY	4	4		8
618.14	SEEDING METHOD NUMBER 2	UN	1	1		2
619.1201	MULCH-PLAN QUANTITY	UN	1	1		2
619.1202	TEMPORARY MULCH	LS	0.33	0.33	0.34	1
619.1401	EROSION CONTROL MIX	CY			28	28
627.712	WHITE OR YELLOW PAVEMENT MARKING LINE	LF	755	750	930	2,435
639.19	FIELD OFFICE, TYPE B	EA	0.33	0.33	0.34	1
652.30	FLASHING ARROW BOARD	EA	4	4	2	10
652.312	TYPE III BARRICADE	EA		3	3	6
652.331	DRUM	LS	0.4	0.38	0.22	1
652.34	CONE	EA	25	25	25	75
652.35	CONSTRUCTION SIGNS	SF	1524	1768	1491	4,783
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	LS	0.33	0.33	0.34	1
652.38	FLAGGERS	HR	720	290	290	1,300
652.41	PORTABLE-CHANGEABLE MESSAGE SIGN	EA	2	2	2	6
652.45	TRUCK MOUNTED ATTENUATOR	CD	28	28	28	84
652.451	AUTOMATED TRAILER MOUNTED SPEED LIMIT SIGN	CD	14	14	14	42
652.46	TEMPORARY PORTABLE RUMBLE STRIPS	UNIT			84	84
656.50	BALED HAY, IN PLACE	EA	12	12	12	36
656.632	30 INCH TEMPORARY SILT FENCE	LF	125	135	195	455
659.10	MOBILIZATION	LS	0.29	0.32	0.39	1

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date		By	Date
Designed	DSM	10/2019	Checked	BLT	11/2019
Drawn	DSM	10/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
 FAX: (207) 781-4753



**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

ESTIMATED QUANTITIES

SHEET NUMBER: QT-01

CONTRACT: 2020.07

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Date: 11/12/2019

Filename: ... \MSTA003\_Gen Hwy NOTES.dgn

GENERAL CONSTRUCTION NOTES

1. ALL DETAILS SHALL BE IN CONFORMANCE WITH MAINE DEPARTMENT OF TRANSPORTATION (MaineDOT) STANDARD DETAILS HIGHWAYS AND BRIDGES LATEST REVISION AND MaineDOT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL LATEST REVISION UNLESS OTHERWISE INCLUDED IN THESE PLANS.
2. ALL EXISTING DELINEATOR AND MILE MARKER POSTS, WITHIN LIMITS OF DISTURBANCE, SHALL BE REMOVED AND RESET UPON COMPLETION OF THE CONTRACT. PAYMENT WILL BE INCIDENTAL TO CONTRACT.

EARTHWORK

1. WASTE MATERIALS SHALL BE DISPOSED OF OFF THE PROJECT SITE, IN ACCORDANCE WITH CHAPTER 404, DEPARTMENT OF ENVIRONMENTAL PROTECTION SOLID WASTE MANAGEMENT RULES.
2. EXCAVATIONS ACCOMPLISHED AS PART OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH OSHA SUBPART P OF 29 CFR PART 1926.650-652 (CONSTRUCTION STANDARDS FOR EXCAVATION).
3. FILL/BORROW SHALL BE COMPACTED TO 90% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR, EXCEPT AS AMENDED BY SPECIAL PROVISION 203. GRANULAR BORROW, AGGREGATE BASE, AND AGGREGATE SUBBASE SHALL BE COMPACTED TO 98% OF THEIR MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR FOR AREAS OF BACKFILL MATERIAL BEHIND ABUTMENTS AND RETAINING WALLS, EXCEPT AS AMENDED BY SPECIAL PROVISION 203. GRANULAR BORROW, AGGREGATE BASE, AND AGGREGATE SUBBASE SHALL BE COMPACTED TO 95% IN ALL OTHER AREAS.

EROSION CONTROL

1. THE ANTICIPATED EROSION CONTROL DEVICES FOR THE CONTRACT LIMIT OF DISTURBANCE ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROPOSE ACTUAL TYPE AND LOCATION OF DEVICES FOR APPROVAL BY THE RESIDENT. ADDITIONAL MEASURES MAY BE PROPOSED BY THE CONTRACTOR DUE TO SITE OR WEATHER CONDITIONS. THE RESIDENT MAY DIRECT THE CONTRACTOR TO IMPLEMENT ADDITIONAL MEASURES. ANY ADDITIONAL MEASURES APPROVED BY THE RESIDENT WILL BE MEASURED FOR PAYMENT.
2. 4" LOAM HAS BEEN ESTIMATED FOR 100% OF THE DISTURBED SLOPE AREA UNLESS OTHERWISE SPECIFIED ON THE PLANS. ACTUAL PLACEMENT OF THE LOAM SHALL BE AS DESIGNATED BY THE RESIDENT.
3. ALL SLOPES SHALL BE SEEDED WITH SEEDING METHOD NO. 2 UNLESS OTHERWISE NOTED IN THE PLANS.
4. MULCH SHALL BE APPLIED IN AREAS SEEDED EXCEPT WHERE EROSION CONTROL BLANKET IS SPECIFIED.
5. ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION BEST MANAGEMENT PRACTICES.

DRAINAGE

1. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED, OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.

LOCAL ROAD

1. ALL JOINTS BETWEEN EXISTING AND PROPOSED BITUMINOUS PAVEMENT SHALL BE BUTTED. PAYMENT SHALL BE MADE UNDER THE APPROPRIATE CONTRACT PAY ITEMS.

UTILITY

1. EXISTING UTILITIES ON THESE PLANS WERE COMPILED FROM FIELD SURVEY AND VARIOUS OTHER SOURCES. LOCATIONS ARE NOT GUARANTEED TO BE ACCURATE NOR IS IT GUARANTEED THAT ALL UTILITIES ARE SHOWN. NO SEPARATE OR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR DUE TO ANY VARIANCE BETWEEN THE DATA SHOWN ON THE PLANS AND THE ACTUAL FIELD CONDITIONS ENCOUNTERED. NO WORK SHALL BE STARTED UNTIL THE OWNERS OF THE VARIOUS UTILITIES ARE NOTIFIED BY THE CONTRACTOR OF THE PROPOSED CONSTRUCTION. THE CONTRACTOR IS ALSO REQUIRED TO CALL DIG SAFE AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO THE START OF THE WORK.
2. THE CONTRACTOR SHALL NOTIFY THE RESIDENT 10 DAYS PRIOR TO CONSTRUCTION SO THE RESIDENT CAN ARRANGE FOR MAINE TURNPIKE UNDERGROUND UTILITY LOCATION. ALL PROPOSED SIGN LOCATIONS AND EXCAVATION LOCATIONS SHALL BE MARKED AT THE NOTIFICATION TIME. EXCAVATING WILL NOT BE PERMITTED UNTIL THE AUTHORITY HAS LOCATED AND MARKED ITS UNDERGROUND UTILITIES, OR NOTIFIED THE RESIDENT THAT THERE ARE NO UNDERGROUND UTILITIES IN THE MARKED AREAS.
3. THE AUTHORITY HAS PROGRAMMED TWO FIELD VISITS FOR MAINE TURNPIKE UTILITY COORDINATION ON THIS PROJECT. SHOULD THE CONTRACTOR NEED ADDITIONAL SIGN LOCATIONS AND/OR ADDITIONAL EXCAVATION LOCATIONS MARKED, OR SHOULD THE CONTRACTOR FAIL TO MAINTAIN THE AUTHORITY'S PREVIOUSLY ESTABLISHED DIG SAFE MARKS, THE AUTHORITY SHALL DEDUCT THE ADDED MARKING COSTS FROM THE CONTRACTOR'S PAYMENTS.

GENERAL MAINTENANCE OF TRAFFIC NOTES:

1. CONTRACTOR SHALL REFER TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION, FOR TEMPORARY TRAFFIC CONTROL MEASURES AND TYPICAL APPLICATIONS FOR OTHER WORK ZONE ARRANGEMENTS ON TURNPIKE MAINLINE AND OVERPASS ROADWAYS.
2. FOR SIGN DETAILS, SEE MAINTENANCE OF TRAFFIC SIGN SUMMARY SHEETS.
3. ALL CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE NEW CONDITION.
4. ALL WORK TO CONFORM TO THE 2014 MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES, REVISION OF 2014, EXCEPT AS MODIFIED BY THE MAINE TURNPIKE AUTHORITY'S GENERAL AND SPECIAL PROVISIONS.
5. AT NO TIME SHALL SHOULDER CLOSURES ON BOTH SIDES OF THE TRAVEL LANES OCCUR ON THE SAME SIDE OF THE MAINLINE.
6. WORK WITHIN SHOULDER CLOSURES SHALL BE CONTINUOUS TO MINIMIZE IMPACTS TO MAINLINE TRAFFIC.
7. CONTRACTOR SHALL COORDINATE ALL MAINTENANCE OF TRAFFIC WITH ADJACENT PROJECTS.
8. WHEN TRUCK MOUNTED ATTENUATORS ARE INCLUDED IN THE CONTRACT (INCIDENTAL OR PAY ITEM), THEY SHALL BE LOCATED WITHIN THE WORK ZONE, NOT THE BUFFER ZONE.
9. LOCATIONS OF TEMPORARY TRAFFIC CONTROL DEVICES, SIGNS, AND PAVEMENT MARKINGS ARE APPROXIMATE. FINAL LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER.

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date	By	Date
Designed	BLT	09/2018	Checked	DSM 10/2019
Drawn	BLT	09/2019	In Charge of	DSM 10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
 FAX: (207) 781-4753



**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

GENERAL NOTES

SHEET NUMBER: GN-01

CONTRACT: 2020.07

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Date: 11/12/2019

Filename: ... \MSTA\004\_Bridge\_Gen\_Notes.dgn

**SPECIFICATIONS:**

DESIGN

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS  
8TH EDITION WITH INTERIMS THROUGH 2019.

CONSTRUCTION

STATE OF MAINE, DEPARTMENT OF TRANSPORTATION  
STANDARD SPECIFICATIONS NOVEMBER, 2014

STATE OF MAINE DEPARTMENT OF TRANSPORTATION  
STANDARD DETAILS, NOVEMBER 2014, WITH LATEST  
REVISIONS

AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS,  
THIRD EDITION WITH 2016 INTERIMS

**MATERIALS:**

CONCRETE

BRIDGE PATCHING AND REPAIR AREAS SHALL BE CLASS  
AAA-MODIFIED.

REINFORCING STEEL

AASHTO M31, GRADE 60 EPOXY-COATED.

**BASIC DESIGN STRESSES:**

CONCRETE

CLASS AAA,  $f_c = 4,500$  P.S.I.  
CLASS AAA - MODIFIED,  $f_c = 4,500$  P.S.I.

REINFORCING STEEL

$f_y = 60,000$  P.S.I.

**GENERAL NOTES:**

- FOR ADDITIONAL DETAILS REFERENCED OR NOT SHOWN IN THESE DRAWINGS, SEE THE STATE OF MAINE, DEPARTMENT OF TRANSPORTATION STANDARD DETAILS, HIGHWAYS AND BRIDGES, NOVEMBER 2014 WITH UPDATES.
- COPIES OF THE AS-BUILT PLANS ARE ON FILE AND ARE AVAILABLE ON THE MAINE TURNPIKE AUTHORITY WEBSITE. THE COMPLETENESS AND ACCURACY OF THESE PLANS IS NOT GUARANTEED.
- REINFORCING STEEL SHALL HAVE A CLEAR COVER OF 2" MIN., UNLESS OTHERWISE NOTED.
- CHAMFER ALL EXPOSED CONCRETE EDGES  $\frac{3}{4}$ " UNLESS OTHERWISE NOTED.
- ALL PROPOSED CONCRETE CURB FACES AND INSIDE AND TOP FACES OF THE ENDPOSTS SHALL RECEIVE A RUBBED FINISH PRIOR TO THE APPLICATION OF THE CLEAR PROTECTIVE COATING FOR CONCRETE SURFACE.
- SHIELDING REQUIRED DURING CONSTRUCTION SHALL NOT PROJECT BELOW THE BOTTOM FLANGES OF GIRDERS.
- ALL PAINT ON EXISTING STEEL, DAMAGED BY CONTRACTOR'S OPERATIONS, SHALL BE REPAIRED TO THE SATISFACTION OF THE RESIDENT AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL NOTE THAT THE EXISTING BRIDGE STRUCTURES CONTAIN LEAD BASED PAINT. THE CONTRACTOR SHALL INSTITUTE EVERY PRECAUTION WHEN WORKING WITH MATERIALS COATED WITH LEAD PAINT.

**CONCRETE REPAIR PROCEDURAL NOTES:**

- CONCRETE REPAIRS, INCLUDING THE ASSOCIATED REMOVALS, WILL BE PAID UNDER 518 ITEMS.
- ANY REINFORCING STEEL REQUIRED TO REPLACE DETERIORATED EXISTING REINFORCEMENT SHALL BE EPOXY COATED AND WILL BE INCIDENTAL TO 518 ITEMS.
- ANY EXISTING JOINTS IN THE CONCRETE SHALL BE MAINTAINED THROUGH REPLACEMENT CONCRETE THROUGH THE USE OF BOND BREAKERS OR AS DIRECTED BY THE RESIDENT.

**REMOVAL PROCEDURE:**

- CONTRACTOR SHALL REMOVE TECTYL COATING WHERE PRESENT PRIOR TO WORK. PAYMENT SHALL BE INCIDENTAL TO THE SPECIFIED 518 ITEMS.
- PRIOR TO THE START OF THE CONCRETE REMOVAL, THE RESIDENT AND THE CONTRACTOR SHALL SOUND ALL EXPOSED SURFACES OF CONCRETE AND AGREE ON THE REMOVAL LIMITS. SHOULD THE REMOVAL AREA LIMITS APPEAR TO CHANGE DURING THE DEMOLITION PROCESS, THE CONTRACTOR SHALL NOTIFY THE RESIDENT. THE RESIDENT AND CONTRACTOR SHALL AGREE ON THE REVISED PAY LIMITS PRIOR TO THE CONTRACTOR CONTINUING THE REMOVAL.
- PERFORM 1 INCH DEEP SAWCUTS ALONG LIMITS OF REMOVAL.
- CHIP CONCRETE TO DEPTH REQUIRED PER SPECIFICATIONS.

**CONCRETE SURFACE PATCH/REPAIR PROCEDURE:**

- PREPARE AND PATCH REPAIR AREAS WITH CLASS AAA - MODIFIED CONCRETE. SEE SPECIFICATIONS FOR MATERIAL, PREPARATION, PLACEMENT, AND CURING REQUIREMENTS.

**GENERAL FINISHING:**

- ALL EXPOSED CONCRETE SURFACES SHALL BE COATED WITH A PROTECTIVE COATING SUITABLE FOR CONCRETE SURFACES AFTER PATCHING IS COMPLETE AND PATCH MATERIALS HAVE CURED. PIGMENTED PROTECTIVE COATING SHALL BE APPLIED TO ALL ABUTMENT FACES, ALL WINGWALL FACES, AND ALL BARRIER OUTSIDE FACES AT GROVE STREET (MM 83.7). CLEAR PROTECTIVE COATING SHALL BE APPLIED TO ALL CONCRETE CURB FACES, ALL FASCIA'S AND FASCIA OVERHANGS, AND ALL BARRIER INSIDE AND TOP FACES FOR ALL STRUCTURES. CLEAR PROTECTIVE COATING SHALL ALSO BE APPLIED TO ALL ABUTMENT FACES, ALL WINGWALL FACES, AND ALL BARRIER OUTSIDE FACES AT BOOM ROAD (MM 33.4) AND BEECH RIDGE ROAD (MM 41.4) STRUCTURES.

**LIST OF ABBREVIATIONS**

ABUT.	ABUTMENT
ADDL.	ADDITIONAL
ASCG.	AGGREGATE SUBBASE COURSE GRAVEL
ALT.	ALTERNATE
APPROX.	APPROXIMATE
BOT.	BOTTOM
BRG.	BEARING
CL.	CLEAR
☉	CENTERLINE
CONC.	CONCRETE
CONSTR.	CONSTRUCTION
DEMO.	DEMOLITION
DIA.	DIAMETER
DIAPH.	DIAPHRAGM
EA.	EACH
EB	EASTBOUND
E.F.	EACH FACE
EL.	ELEVATION
EQ.	EQUAL
EXIST.	EXISTING
EXP.	EXPANSION
F.F.	FAR FACE
JT.	JOINT
MAX.	MAXIMUM
MIN.	MINIMUM
MTA	MAINE TURNPIKE AUTHORITY
NB	NORTHBOUND
N.F.	NEAR FACE
N.T.S.	NOT TO SCALE
O.H.W.	ORDINARY HIGH WATER
PED.	PEDESTAL
PGL	PROFILE GRADE LINE
℞	PLATE
PROP.	PROPOSED
RDWY.	ROADWAY
SHLD.	SHOULDER
SB	SOUTHBOUND
SP.	SPACES
STA.	STATION
T.&B.	TOP & BOTTOM
TPKE.	TURNPIKE
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
VERT.	VERTICAL
WB	WESTBOUND
W.P.	WORKING POINT

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<b>TYLIN INTERNATIONAL</b>					
CONSULTANT PROJECT MANAGER: Daniel S. Myers					
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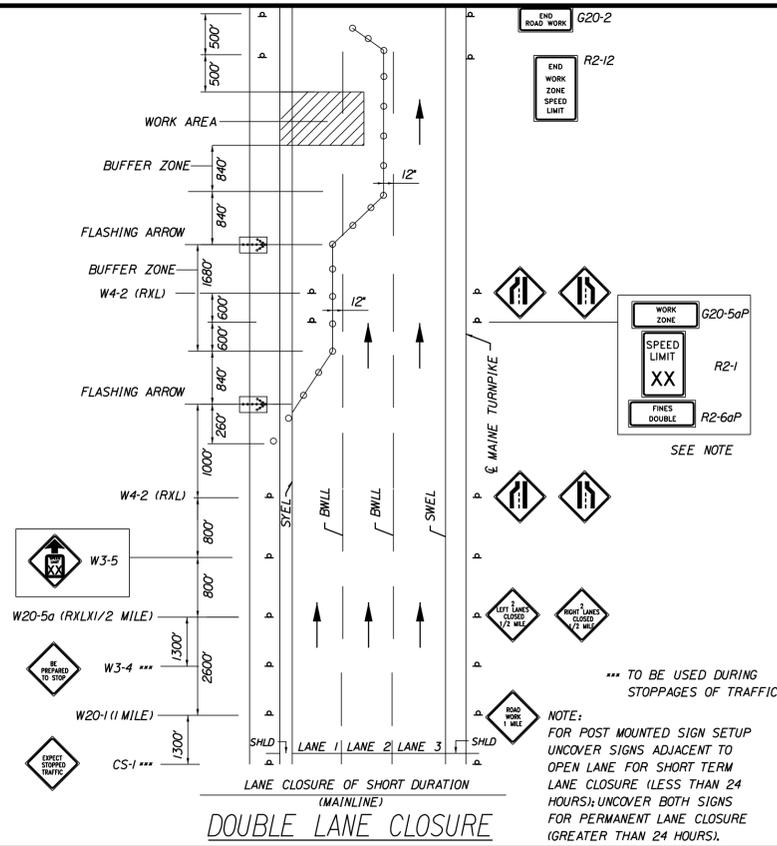
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12 Northbrook Drive  
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Falmouth, Maine 04105  
TEL: (207) 781-4721  
FAX: (207) 781-4753

**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

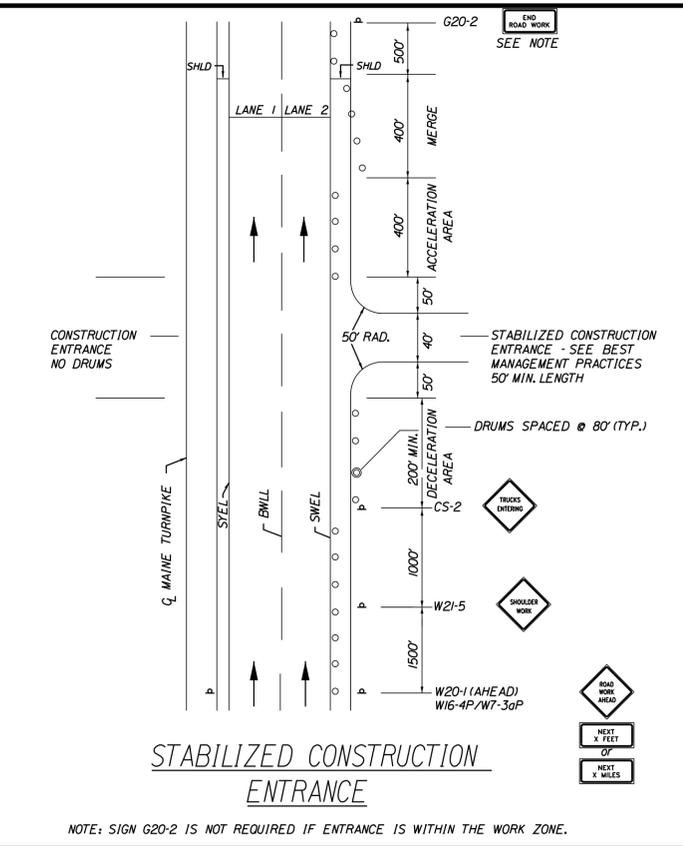
<p>2020 BRIDGE REPAIRS</p> <p>BRIDGE GENERAL NOTES</p>
<p>SHEET NUMBER: GN-02</p> <p>4 OF 37</p>

Date: 11/12/2019



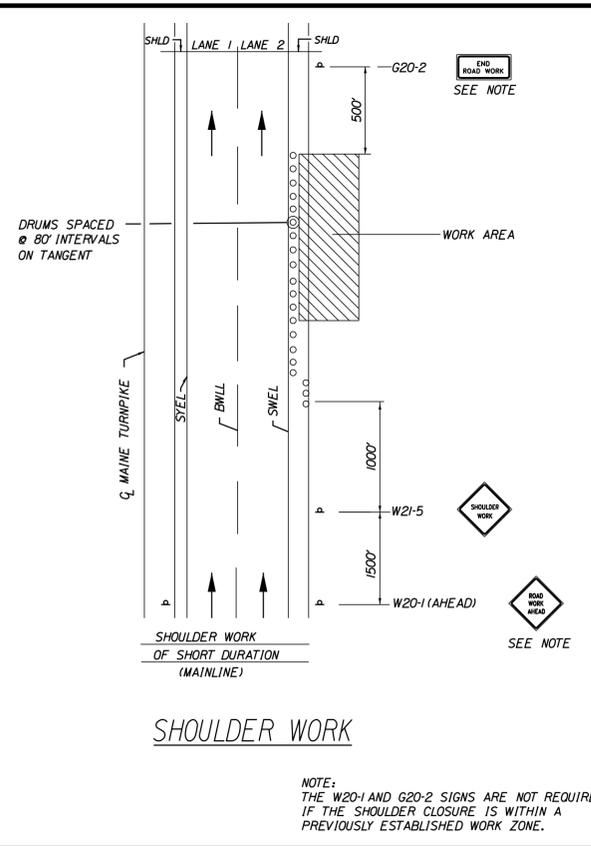
**DOUBLE LANE CLOSURE**

NOTE: FOR POST MOUNTED SIGN SETUP UNCOVER SIGNS ADJACENT TO OPEN LANE FOR SHORT TERM LANE CLOSURE (LESS THAN 24 HOURS); UNCOVER BOTH SIGNS FOR PERMANENT LANE CLOSURE (GREATER THAN 24 HOURS).



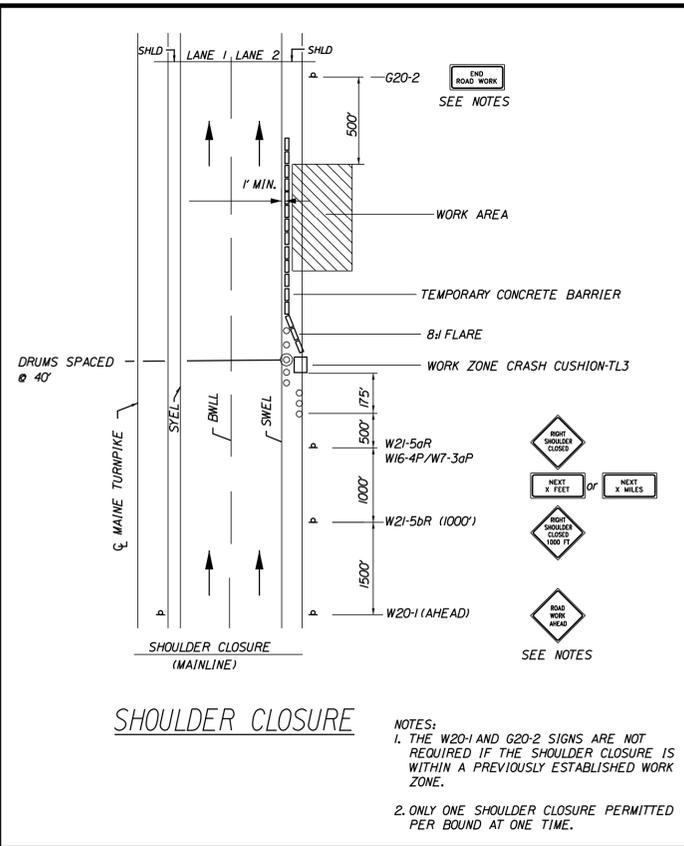
**STABILIZED CONSTRUCTION ENTRANCE**

NOTE: SIGN G20-2 IS NOT REQUIRED IF ENTRANCE IS WITHIN THE WORK ZONE.



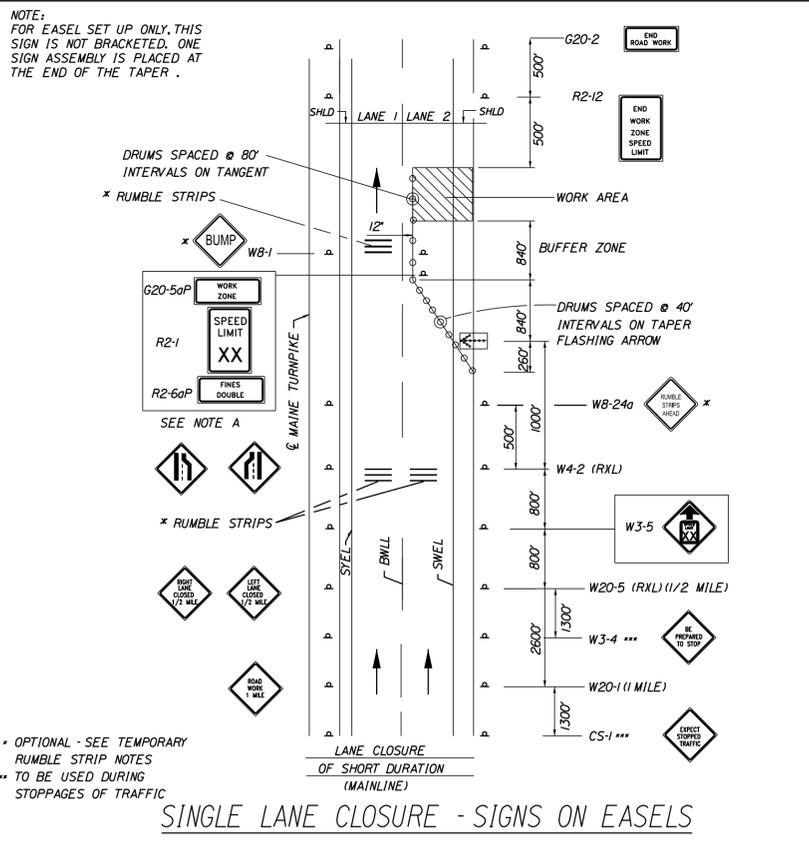
**SHOULDER WORK**

NOTE: THE W20-1 AND G20-2 SIGNS ARE NOT REQUIRED IF THE SHOULDER CLOSURE IS WITHIN A PREVIOUSLY ESTABLISHED WORK ZONE.



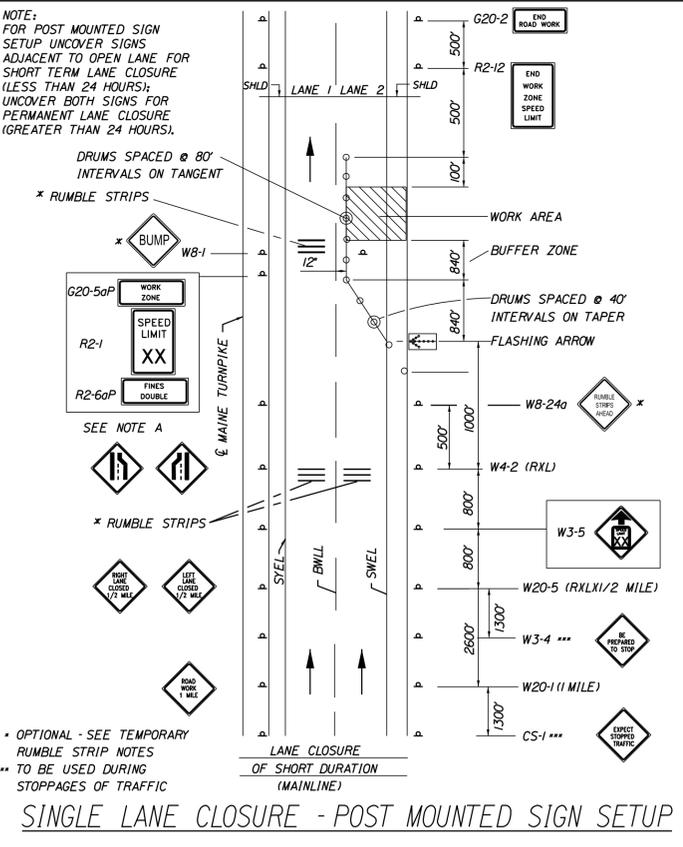
**SHOULDER CLOSURE**

NOTE: 1. THE W20-1 AND G20-2 SIGNS ARE NOT REQUIRED IF THE SHOULDER CLOSURE IS WITHIN A PREVIOUSLY ESTABLISHED WORK ZONE.  
2. ONLY ONE SHOULDER CLOSURE PERMITTED PER BOUND AT ONE TIME.



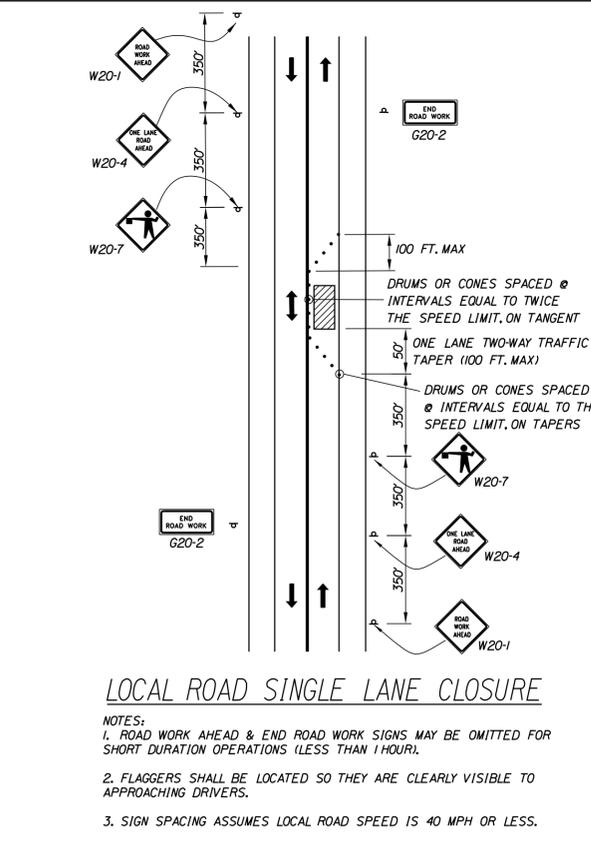
**SINGLE LANE CLOSURE - SIGNS ON EASELS**

NOTE: FOR EASEL SET UP ONLY, THIS SIGN IS NOT BRACKETED. ONE SIGN ASSEMBLY IS PLACED AT THE END OF THE TAPER.



**SINGLE LANE CLOSURE - POST MOUNTED SIGN SETUP**

NOTE: FOR POST MOUNTED SIGN SETUP UNCOVER SIGNS ADJACENT TO OPEN LANE FOR SHORT TERM LANE CLOSURE (LESS THAN 24 HOURS); UNCOVER BOTH SIGNS FOR PERMANENT LANE CLOSURE (GREATER THAN 24 HOURS).



**LOCAL ROAD SINGLE LANE CLOSURE**

NOTE: 1. ROAD WORK AHEAD & END ROAD WORK SIGNS MAY BE OMITTED FOR SHORT DURATION OPERATIONS (LESS THAN 1 HOUR).  
2. FLAGGERS SHALL BE LOCATED SO THEY ARE CLEARLY VISIBLE TO APPROACHING DRIVERS.  
3. SIGN SPACING ASSUMES LOCAL ROAD SPEED IS 40 MPH OR LESS.

**GENERAL MAINTENANCE OF TRAFFIC NOTES:**

- ALL PAVEMENT STRIPING & SIGNING SHALL BE IN ACCORDANCE WITH THE 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES', U.S.D.O.T., F.H.W.A., LATEST EDITION.
- THESE PLANS SHOW THE GENERAL CONDITION FOR TURNPIKE MAINLINE TRAFFIC CONTROL. DURING CONSTRUCTION, SLIGHT MODIFICATIONS IN CONSTRUCTION PROCEDURE MAY OCCUR AND MAY REQUIRE SOME MINOR ADJUSTMENTS TO BE MADE IN THE FIELD. ALL PROCEDURES MUST BE APPROVED BY THE RESIDENT.
- THE CONTRACTOR SHALL REMOVE ALL PAVEMENT MARKINGS THAT CONFLICT WITH PROPOSED PAVEMENT MARKINGS IN ACCORDANCE WITH THE SPECIFICATIONS AND MUTCD. PAYMENT SHALL BE MADE UNDER ITEM 627.77 - REMOVING PAVEMENT MARKINGS.
- EXPOSED BARRIER ENDS ON THE MAINE TURNPIKE SHALL BE PROTECTED BY A WORK ZONE CRASH CUSHION. PAYMENT WILL BE UNDER ITEM 527.341 - WORK ZONE CRASH CUSHION - TL-3.
- SPEED LIMIT, STOP, YIELD AND EXIT SIGNS SHALL BE A MINIMUM OF 5' ABOVE THE PAVEMENT.

**ABBREVIATIONS FOR ALL M.O.T. PLANS**

- BWLL = BROKEN WHITE LANE LINE
- SWEL = SOLID WHITE LANE LINE
- SYEL = SOLID YELLOW LANE LINE
- TBWL = TEMPORARY BROKEN WHITE LANE LINE
- TDWL = TEMPORARY DOTTED WHITE EDGE LINE
- TSWL = TEMPORARY SOLID WHITE EDGE LINE
- TSWLL = TEMPORARY SOLID WHITE LANE LINE
- TSYCL = TEMPORARY SOLID YELLOW CENTER LINE

**TEMPORARY RUMBLE STRIP NOTES**

- IF RUMBLE STRIPS ARE USED THEY SHALL BE PLACED IN ONE OF THE FOLLOWING CONFIGURATIONS:
  - ADJACENT TO THE WORK ZONE (1 UNIT)
  - UPSTREAM FROM THE TAPER FOR THE WORKZONE (2 UNITS)
  - BOTH ADJACENT TO THE WORKZONE AND PRIOR TO THE TAPER (3 UNITS)
 WB-1 SIGNS SHALL BE PLACED ADJACENT TO THE FIRST RUMBLE STRIP AT ANY LOCATION. ONLY ONE SET OF WB-24a SIGNS ARE REQUIRED FOR ANY OF THE ABOVE CONFIGURATIONS.
- RUMBLE STRIPS MAY BE PLACED UPSTREAM OF THE TAPER BETWEEN THE W3-5 SIGNS AND THE W4-2 SIGNS. IF RUMBLE STRIPS ARE INSTALLED PRIOR TO TAPER, WB-1 SIGNS SHALL BE PLACED ADJACENT TO THE FIRST STRIP AND THE WB-24a SIGNS SHALL BE MOVED TO 400' AFTER THE W20-5 SIGNS.

Filename: ...Traffic ControlDetails.dgn

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by: **TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

By	Date	By	Date
Designed	N/A 9/2019	Checked	TSK 9/2019
Drawn	MRM 9/2019	In Charge of	DSM 10/2019

T.Y. Lin International  
12 Northbrook Drive  
Building A, Suite One  
Falmouth, Maine 04105  
TEL: (207) 781-4721  
FAX: (207) 781-4753

**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

TRAFFIC CONTROL DETAILS

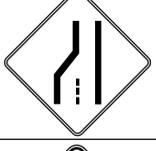
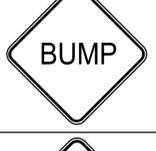
SHEET NUMBER: MT-01

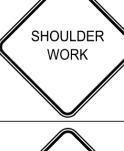
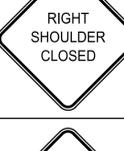
CONTRACT: 2020.07

5 OF 37

Date: 11/12/2019

Filename: ... \xxx\_MM\_33.4\_Sign\_Summary.dgn

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET	NOTES
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND BORDER			
CS-1	48"	48"		8C 8C 8C	4" 4"		4	ORANGE	BLACK		16.00 (64)	
CS-2	48"	48"		7C 7C	6"		1	ORANGE	BLACK		16.00 (16)	
G20-2	36"	24"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009			11	ORANGE	BLACK		6.00 (66)	
G20-5aP	48"	24"					4	ORANGE	BLACK		8.00 (32)	
R2-1	48"	60"					4	WHITE	BLACK		20 (80)	
R2-6aP	36"	24"					4	WHITE	BLACK		6.00 (24)	
R2-12	36"	54"					4	WHITE	BLACK		13.50 (54)	
W3-4	48"	48"					4	ORANGE	BLACK		16.00 (64)	
W3-5	48"	48"					4	ORANGE	BLACK		16.00 (64)	
W4-2 (LEFT) (RIGHT)	48"	48"					8 8	ORANGE	BLACK		16.00 (128) 16.00 (128)	
W8-1	48"	48"					4	ORANGE	BLACK		16.00 (64)	
W8-24a	48"	48"					4	ORANGE	BLACK		16.00 (64)	

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET	NOTES
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND BORDER			
W16-4P	36"	30"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009			4	ORANGE	BLACK		7.50 (30)	
W20-1 (AHEAD) (1 MILE)	36" 48"	36" 48"					2 10 4	ORANGE	BLACK		9.00 (18) 16.00 (160) 16.00 (64)	
W20-4	36"	36"					2	ORANGE	BLACK		9.00 (18)	
W20-5 (LEFT) (RIGHT)	48"	48"					4 4	ORANGE	BLACK		16.00 (64) 16.00 (64)	
W20-5a (LEFT) (RIGHT)	48"	48"					4 4	ORANGE	BLACK		16.00 (64) 16.00 (64)	
W20-7	36"	36"					2	ORANGE	BLACK		9.00 (18)	
W21-5	48"	48"					3	ORANGE	BLACK		16.00 (48)	
W21-5aR RIGHT	48"	48"					2	ORANGE	BLACK		16.00 (32)	
W21-5bR RIGHT	48"	48"					2	ORANGE	BLACK		16.00 (32)	

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

By	Date	By	Date
Designed MRM	9/2019	Checked TSK	10/2019
Drawn MRM	9/2019	In Charge of DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
 FAX: (207) 781-4753

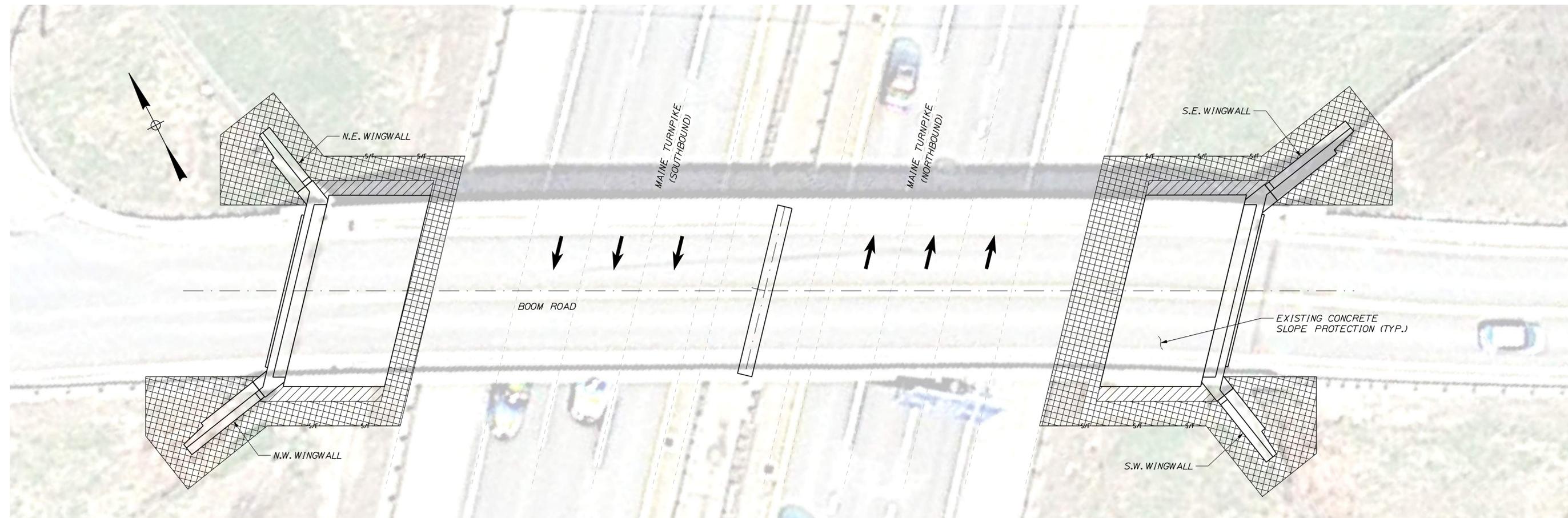
 **THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS  
 BOOM ROAD (MILE 33.4)  
 SIGN SUMMARY

SHEET NUMBER: BM-01  
 CONTRACT: 2020.07  
 6 OF 37

Date: 11/12/2019



LIMIT OF DISTURBANCE PLAN - BOOM ROAD

**LEGEND:**

-  CONTRACT LIMIT OF DISTURBANCE
-  CONTRACTOR'S LIMIT OF DISTURBANCE AREA FOR ACCESS AND STORAGE

**AREAS:**

CONTRACT LIMIT OF DISTURBANCE:

BOOM ROAD = 0.01 ACRES

CONTRACTOR'S LIMIT OF DISTURBANCE AREA FOR ACCESS AND STORAGE:

BOOM ROAD = 0.39 ACRES

**NOTES:**

1. EROSION AND SEDIMENT CONTROL DEVICES REQUIRED FOR THE CONTRACTOR'S ACCESS LOCATIONS AND STORAGE AREAS WILL NOT BE MEASURED FOR PAYMENT.
2. SEE SPECIFICATIONS FOR CONTRACTOR'S SUBMITTAL REQUIREMENTS IF INCREASING THE LIMITS OF DISTURBANCE TO THE PROJECT ESTIMATED QUANTITIES.
3. CONTRACTOR WILL BE ALLOWED TO UTILIZE THE EMERGENCY VEHICLE RAMP, WHICH IS LOCATED NORTH OF THE STRUCTURE AND CONNECTS THE NORTHBOUND LANES TO BOOM ROAD, FOR ACCESS DURING CONSTRUCTION ACTIVITIES. THIS AREA HAS BEEN INCLUDED IN THE LIMIT OF DISTURBANCE FOR ACCESS AND STORAGE TOTTALLED ON THIS SHEET. CONTRACTOR SHOULD NOTE THAT THIS ACCESS IS A BLIND DRIVE AND WILL REQUIRE FLAGGERS FOR TRUCKS EXITING ONTO BOOM ROAD. PAYMENT FOR FLAGGERS USED AT THIS LOCATION SHALL BE INCIDENTAL TO THE CONTRACT.

Filename: ... \xxx\_MM\_33.4\_Limit\_of\_Disturbance.DGN

Scale:			
NOT TO SCALE			
No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

Designed	By	Date	Checked	By	Date
Drawn	BLT	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
 FAX: (207) 781-4753



**THE GOLD STAR  
MEMORIAL HIGHWAY**

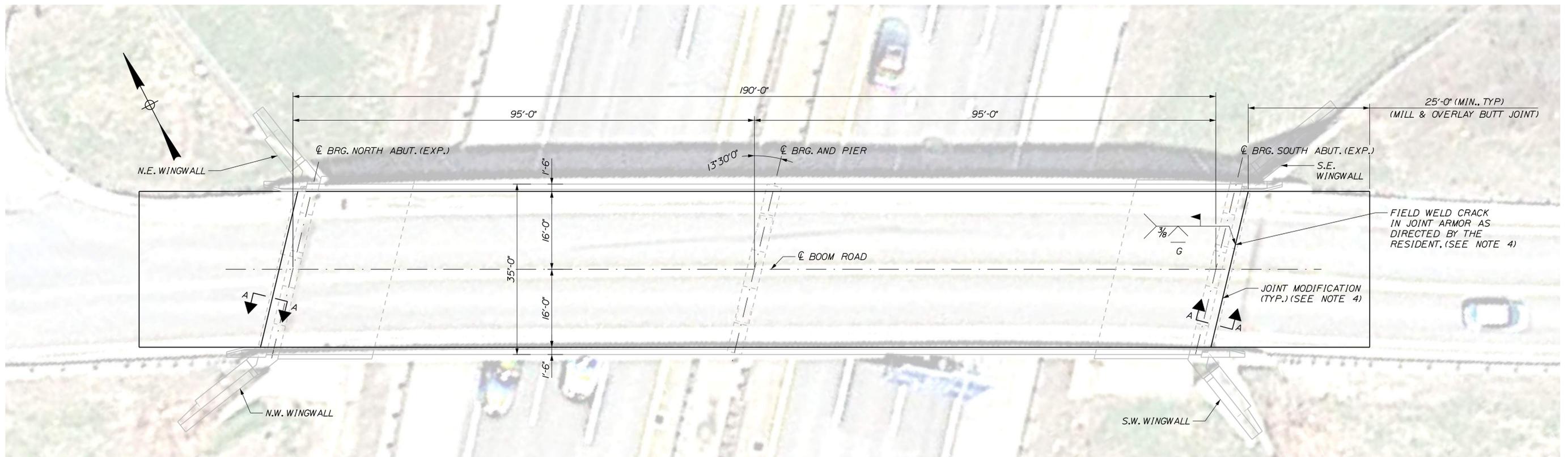
MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

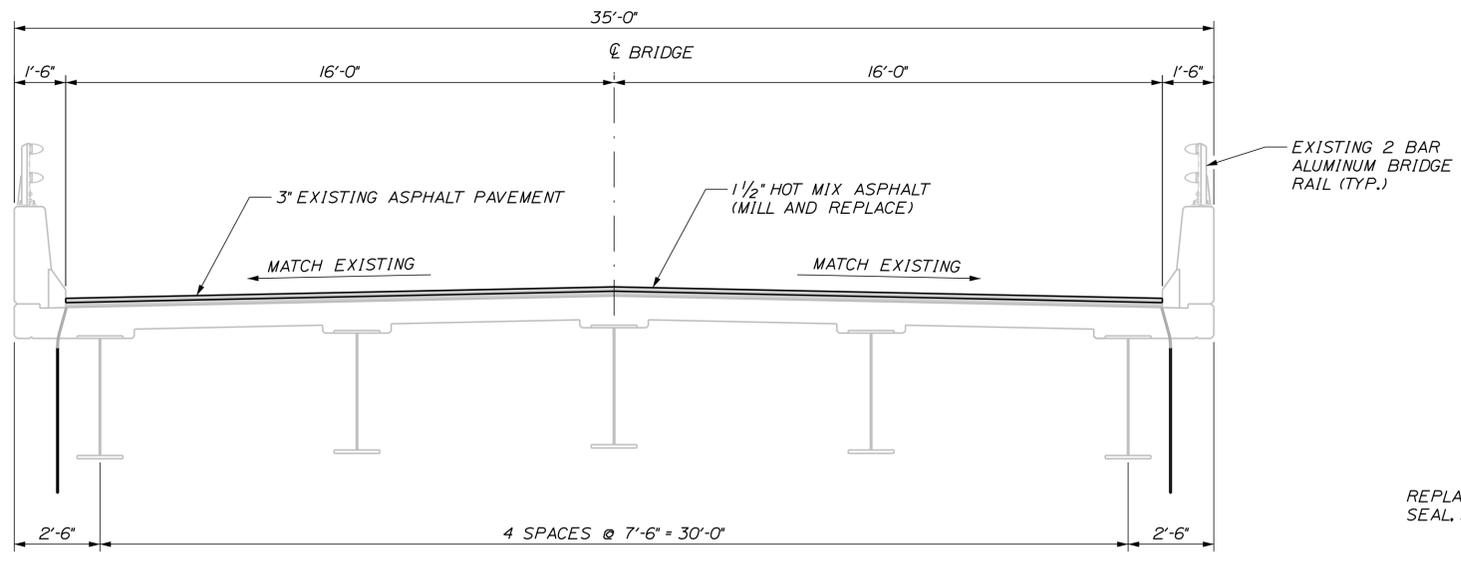
BOOM ROAD UNDERPASS (MM 33.4)  
LIMIT OF DISTURBANCE

SHEET NUMBER: BM-02  
CONTRACT: 2020.07  
7 OF 37

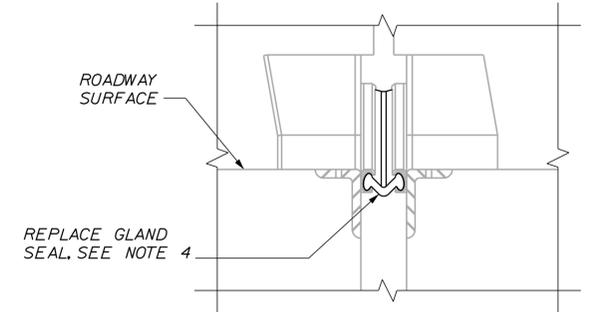
Date: 11/12/2019



PLAN  
SCALE: 3/32" = 10'



TRANSVERSE SECTION  
SCALE: 3/8" = 1'-0"



SECTION A-A  
SCALE: 1 1/2" = 1'-0"

NOTES:

1. ALL PVC DECK WEEPS WHICH DRAIN ONTO PIERS, ABUTMENTS OR STRUCTURAL STEEL SHALL BE EXTENDED AND DIVERTED AWAY FROM BRIDGE COMPONENTS BELOW DECK, AND SHALL EXTEND 1 FT BELOW BOTTOM FLANGE, AS DIRECTED BY THE RESIDENT. PAYMENT SHALL BE MADE UNDER PAY ITEM 502.7011, "WEEP DRAIN EXTENSIONS".
2. A BEAD OF HOT-APPLIED RUBBERIZED ASPHALT SEALER SHALL BE APPLIED ALONG CURB LINES PRIOR TO INSTALLATION OF SURFACE COURSE. PAYMENT SHALL NOT BE MADE DIRECTLY BUT SHALL BE CONSIDERED INCIDENTAL TO RELATED CONTRACT ITEMS.
3. REPAIR CONCRETE SLOPE PROTECTION AS DIRECTED BY THE RESIDENT. SEE SHEET "BOOM ROAD (MM 33.4) SLOPE PROTECTION REPAIR DETAILS." WORK WILL BE PAID FOR UNDER ITEM 513.09, "SLOPE PROTECTION - PORTLAND CEMENT CONCRETE."
4. REPLACE SEAL & REPAIR JOINT ARMOR. VERIFY EXISTING GLAND SEAL TYPE AND PROVIDE AND INSTALL APPROPRIATE REPLACEMENT SEAL. PAYMENT FOR SEAL REPLACEMENT AND JOINT ARMOR REPAIR SHALL BE MADE UNDER PAY ITEM 520.211, "EXPANSION DEVICE MODIFICATIONS (BOOM ROAD)".

Filename: ...MM\_33.4\_Typical\_Deck\_Plan\_Section.DGN

Scale: AS NOTED			
No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

Designed	By	Date	Checked	By	Date
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
12 Northbrook Drive  
Building A, Suite One  
Falmouth, Maine 04105  
TEL: (207) 781-4721  
FAX: (207) 781-4753

**MAINE TURNPIKE**

**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

BOOM ROAD UNDERPASS (MM 33.4)  
DECK PLAN & SECTION

SHEET NUMBER: BM-03  
CONTRACT: 2020.07  
8 OF 37

Date: 11/12/2019

Filename: ...\\xxx-MM\_33.4\_Existing\_Substructures.DGN

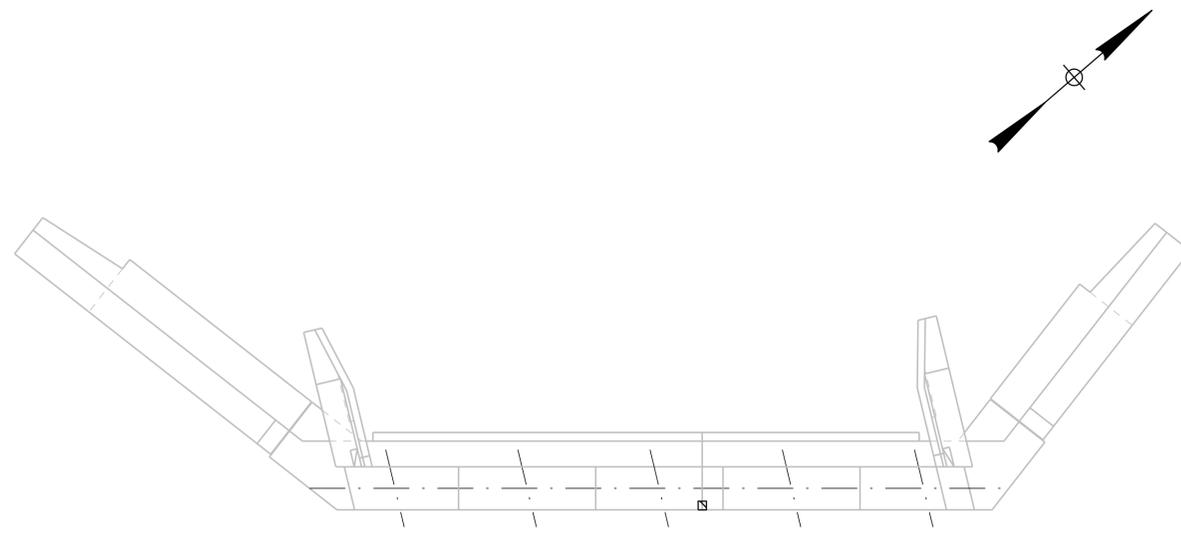
BOOM ROAD (MILE 33.4) ABUTMENTS ESTIMATED QUANTITY OF REPAIRS	
	NORTH ABUTMENT
ABUTMENT REPAIRS	10 S.F.
EPOXY-INJECTED CRACK REPAIR	0 S.F.

**NOTES:**

- FOR PROCEDURAL NOTES SEE SHEET "BRIDGE GENERAL NOTES".
- SHOULD CONCRETE REPAIR EXTEND BELOW GRADE, ANY EXCAVATION REQUIRED WILL BE CONSIDERED INCIDENTAL TO ITEM 518.10, "ABUTMENT REPAIRS".

**LEGEND:**

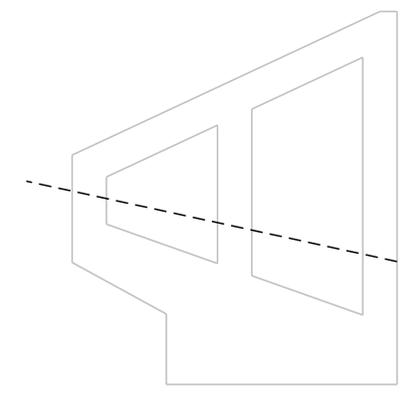
-  LIMIT OF CONCRETE SURFACE REPAIRS
-  LIMIT OF EPOXY INJECTED CRACK REPAIR
-  EXISTING CONCRETE
-  EXISTING AND PROPOSED GROUND



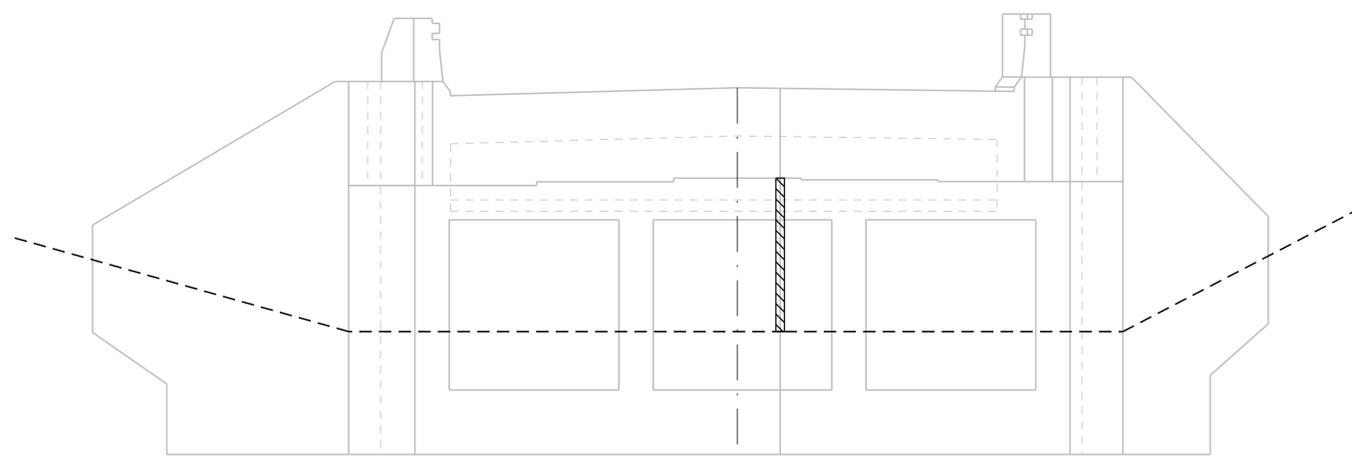
NORTH ABUTMENT - PLAN



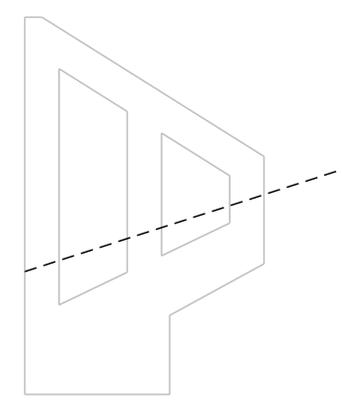
LOCATION PLAN



N.W. WINGWALL - ELEVATION



NORTH ABUTMENT - ELEVATION



N.E. WINGWALL - ELEVATION

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date	Checked	By	Date
Designed	DSM	9/2019	BLT	BLT	9/2019
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
 FAX: (207) 781-4753



**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

BOOM ROAD UNDERPASS (MM 33.4)  
SUBSTRUCTURE REPAIRS 1 OF 3

SHEET NUMBER: BM-04  
CONTRACT: 2020.07  
9 OF 37

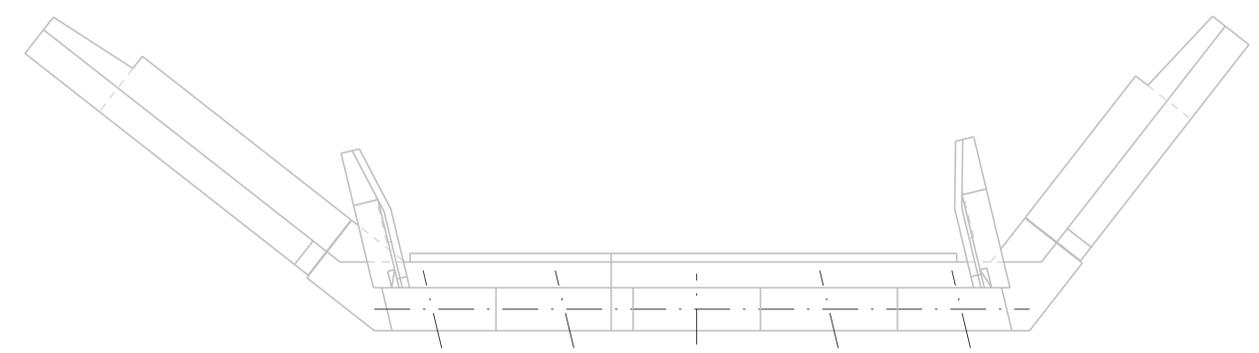
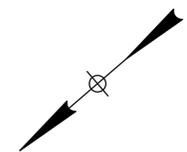
Date: 11/12/2019

Filename: ...MM\_33.4\_Existing\_Substructures.DGN

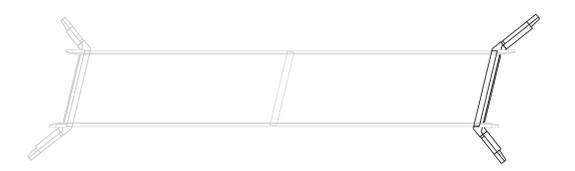
BOOM ROAD (MILE 33.4) ABUTMENTS ESTIMATED QUANTITY OF REPAIRS	
	SOUTH ABUTMENT
ABUTMENT REPAIRS	0 S.F.
EPOXY-INJECTED CRACK REPAIR	0 S.F.

- NOTES:**
- FOR PROCEDURAL NOTES SEE SHEET "BRIDGE GENERAL NOTES"
  - CONTRACTOR SHALL SECURE ALL ANCHOR BOLTS AS DIRECTED BY THE RESIDENT
  - SHOULD CONCRETE REPAIR EXTEND BELOW GRADE, ANY EXCAVATION REQUIRED WILL BE CONSIDERED INCIDENTAL TO ITEM 518.10, "ABUTMENT REPAIRS".

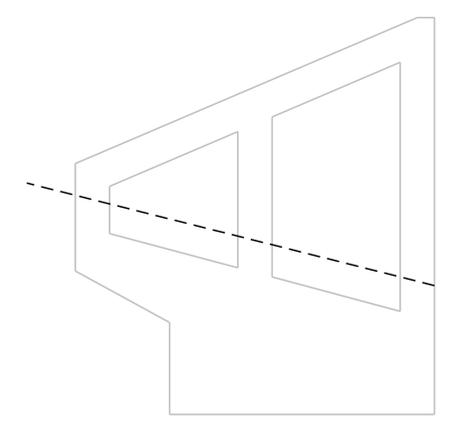
- LEGEND:**
- LIMIT OF CONCRETE SURFACE REPAIRS
  - LIMIT OF EPOXY INJECTED CRACK REPAIR
  - EXISTING CONCRETE
  - EXISTING AND PROPOSED GROUND



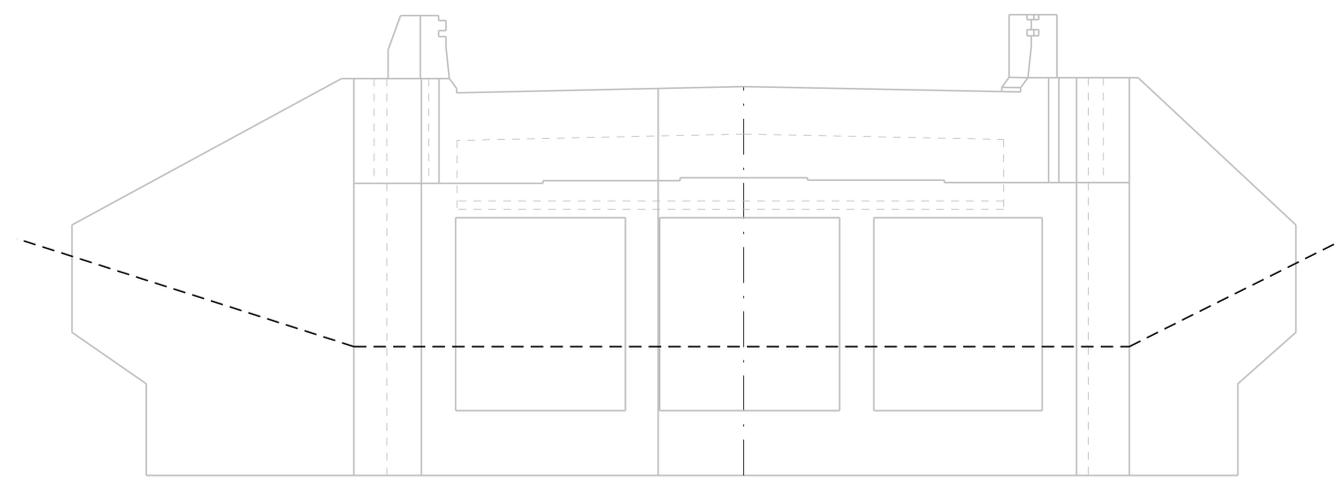
SOUTH ABUTMENT - PLAN



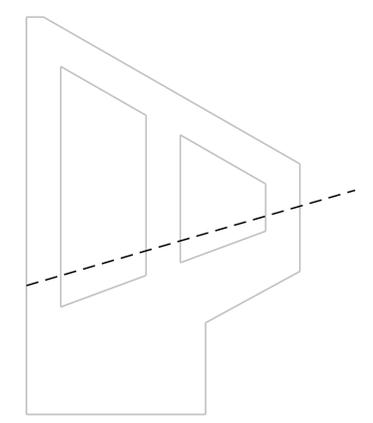
LOCATION PLAN



S.E. WINGWALL - ELEVATION



SOUTH ABUTMENT - ELEVATION



S.W. WINGWALL - ELEVATION

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date	Checked	By	Date
Designed	DSM	9/2019	BLT	BLT	9/2019
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
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**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

BOOM ROAD UNDERPASS (MM 33.4)  
SUBSTRUCTURE REPAIRS 2 OF 3

SHEET NUMBER: BM-05

CONTRACT: 2020.07

10 OF 37

Date: 11/12/2019

Filename: ...MM\_33.4\_Existing\_Substructures.DGN

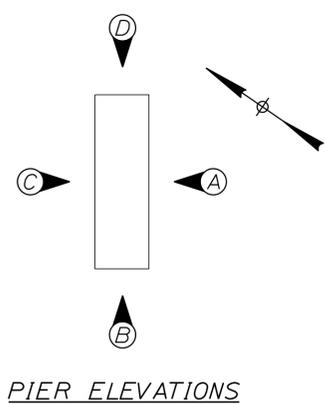
BOOM ROAD (MILE 33.4) PIERS ESTIMATED QUANTITY OF REPAIRS	
	PIER NO. 1
PIER REPAIRS	20 S.F.
EPOXY-INJECTED CRACK REPAIR	0 S.F.

**NOTES:**

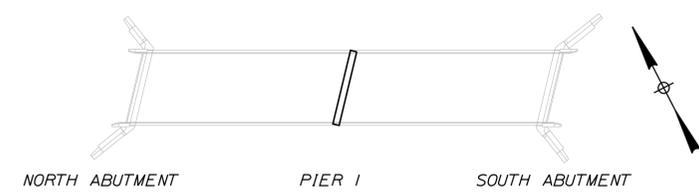
- FOR PROCEDURAL NOTES SEE SHEET "BRIDGE GENERAL NOTES"
- SHOULD CONCRETE REPAIR EXTEND BELOW GRADE, ANY EXCAVATION REQUIRED WILL BE CONSIDERED INCIDENTAL TO ITEM 518.20, "PIER REPAIRS".

**LEGEND:**

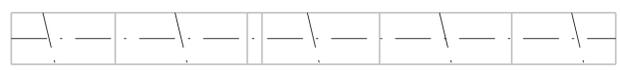
-  LIMIT OF CONCRETE SURFACE REPAIRS
-  LIMIT OF EPOXY INJECTED CRACK REPAIR
-  EXISTING CONCRETE
-  EXISTING AND PROPOSED GROUND



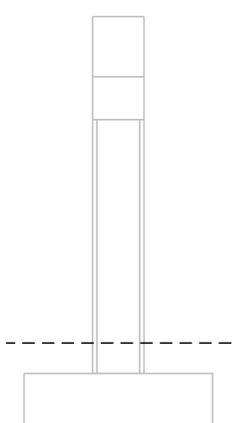
PIER ELEVATIONS



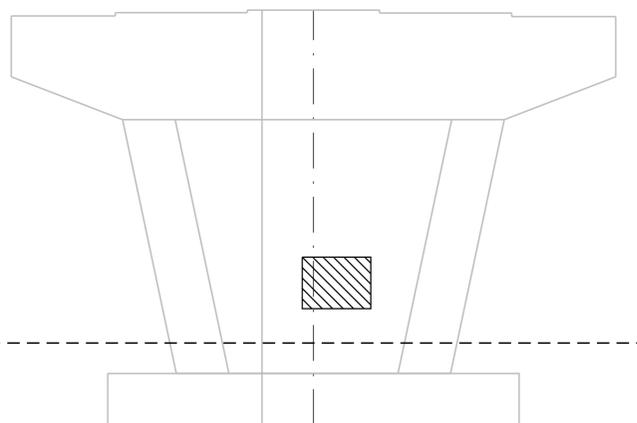
LOCATION PLAN



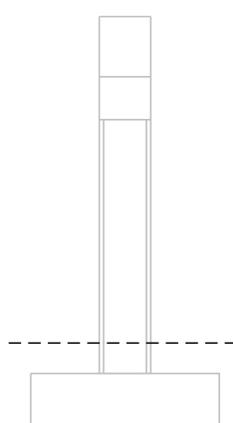
PLAN



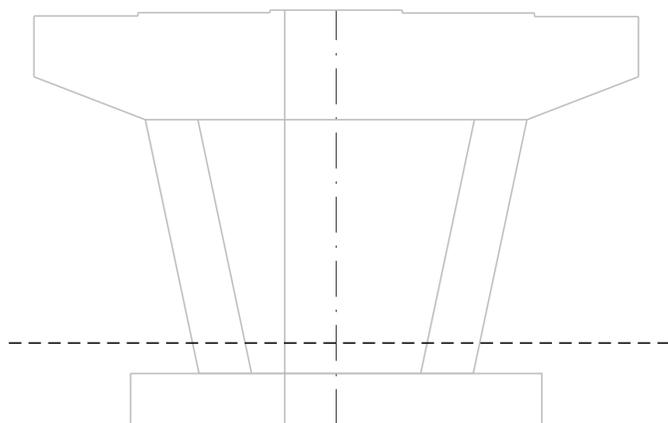
ELEVATION D



ELEVATION C



ELEVATION B



ELEVATION A

PIER 1

Scale: NOT TO SCALE			
No.	Revision	By	Date

Designed by: <b>TY-LIN INTERNATIONAL</b>					
CONSULTANT PROJECT MANAGER: Daniel S. Myers					
Designed	By	Date	Checked	By	Date
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
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**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

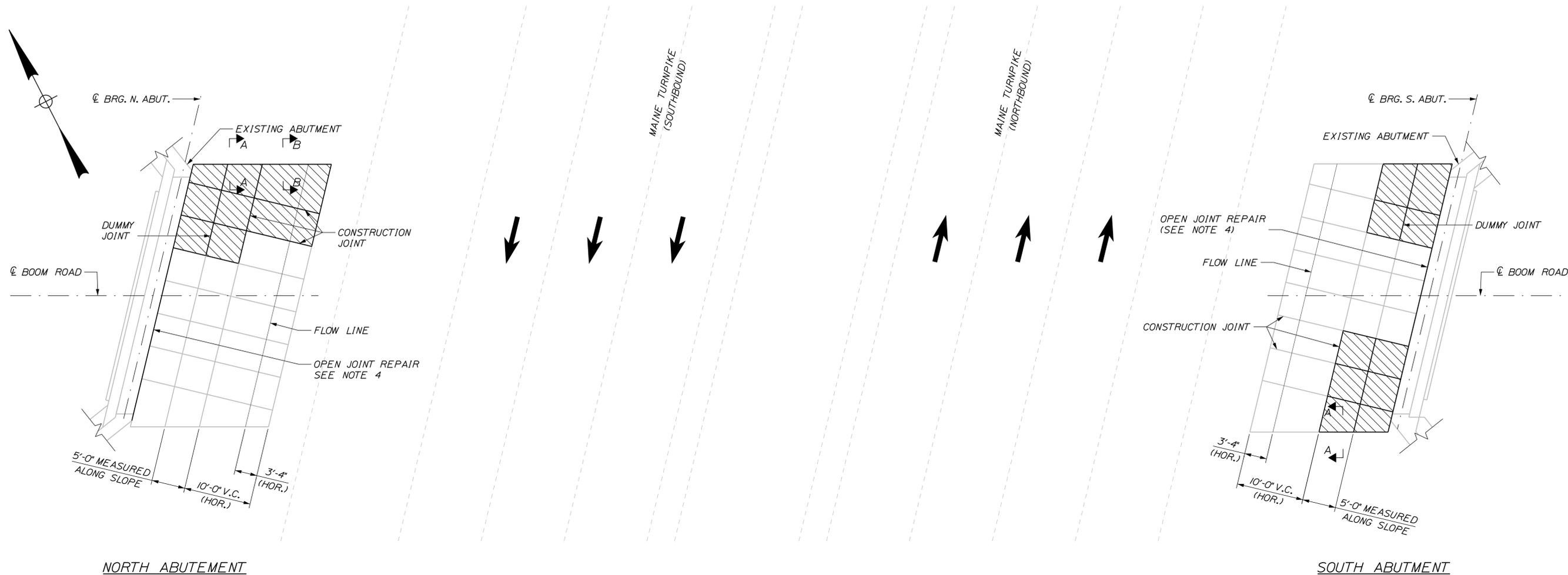
2020 BRIDGE REPAIRS

BOOM ROAD UNDERPASS (MM 33.4)  
SUBSTRUCTURE REPAIRS 3 OF 3

SHEET NUMBER: BM-06  
CONTRACT: 2020.07  
11 OF 37

Date: 11/12/2019

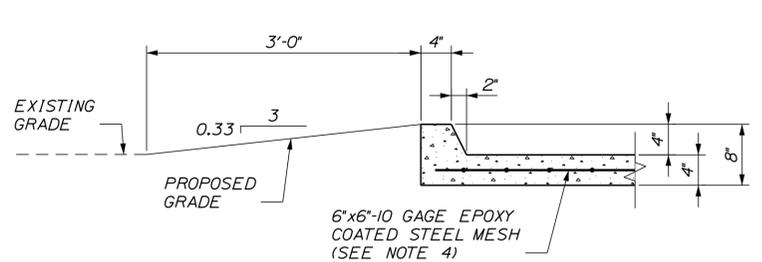
Filename: ... \xxx\_MM\_33.4\_Slope\_Protection\_Repairs.DGN



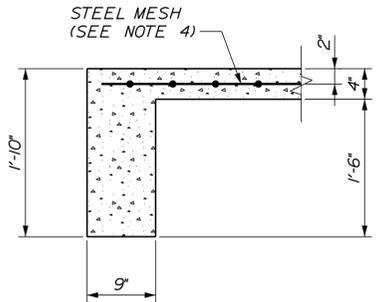
PLAN OF SLOPE PROTECTION  
SCALE: 1/8" = 1'-0"

**LEGEND**  
 LIMIT OF SLOPE PROTECTION REPAIRS  
 EXISTING CONCRETE

- SLOPE REPAIR ITEM NOTES:**
1. REGRADING AREA TO DRAIN WILL BE PAID FOR UNDER ITEM 513.09, "SLOPE PROTECTION - PORTLAND CEMENT CONCRETE."
  2. LOAM AND SEED REGRADED AREA WITH 2 INCHES OF LOAM.
  3. REMOVE AND REPLACE CONCRETE SLOPE PROTECTION IN-KIND DIRECTED BY THE RESIDENT. CLASS A CONCRETE SHALL BE USED FOR REPLACING CONCRETE SLOPE PROTECTION.
  4. WELDED WIRE FABRIC IS EPOXY COATED AND MEETS REQUIREMENTS OF ASTM A884.
  5. FILL OPEN JOINT BETWEEN CONCRETE SLOPE PROTECTION AND ABUTMENT WITH NON-SHRINK GROUT AS DIRECTED BY RESIDENT. COSTS SHALL BE INCIDENTAL TO ITEM 513.09, "SLOPE PROTECTION - PORTLAND CEMENT CONCRETE."



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



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

Scale: AS NOTED

No.	Revision	By	Date

Designed by: **TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date		By	Date
Designed	DSM	9/2019	Checked	BLT	9/2019
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

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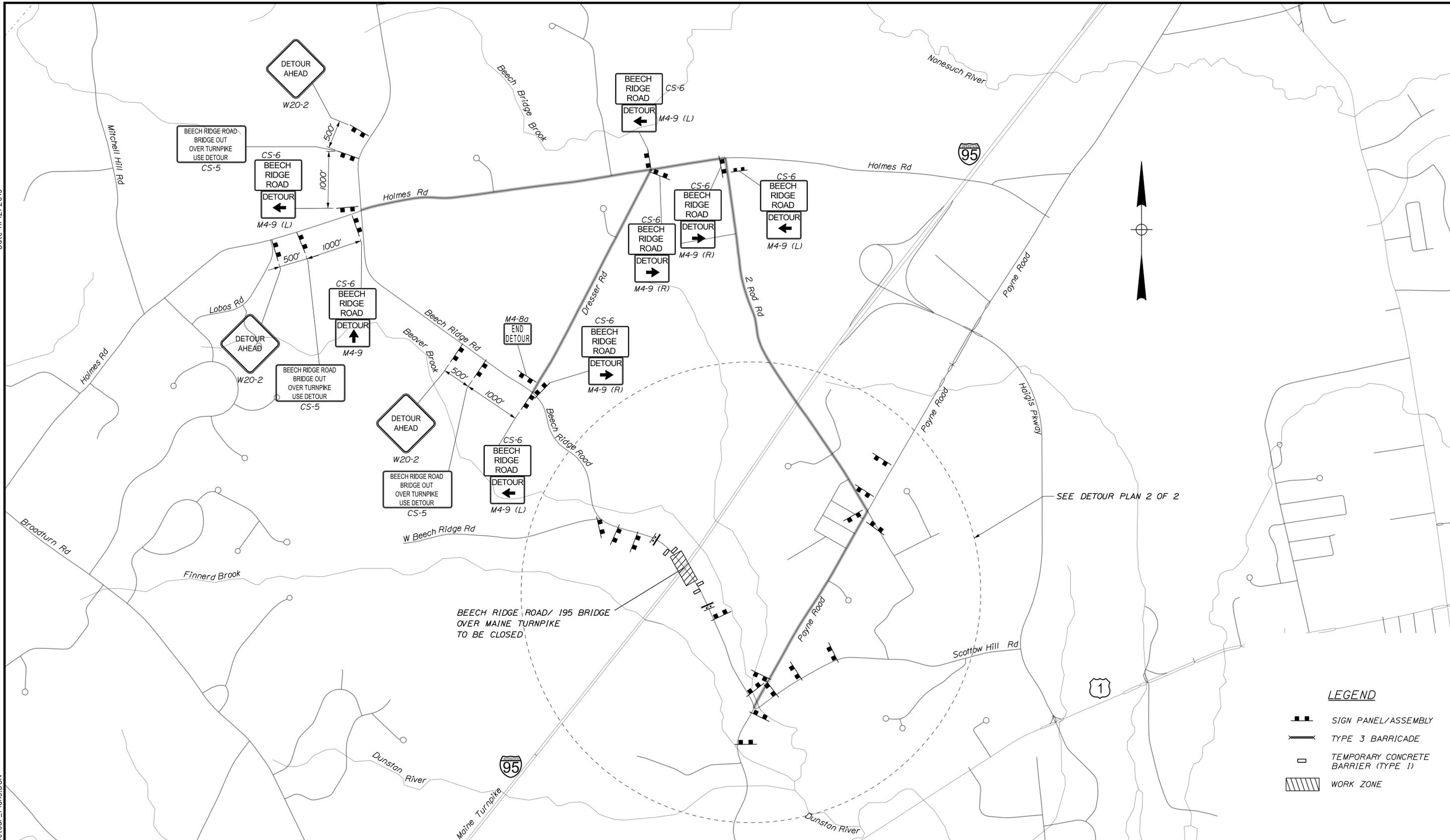
**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS  
 BOOM ROAD (MM 33.4)  
 SLOPE PROTECTION REPAIR DETAILS  
 SHEET NUMBER: BM-07  
 CONTRACT: 2020.07  
 12 OF 37

Date: 11/12/2019

Filename: ...\\xxx\_MM\_41.4\_Detour\_Plans.DGN



SEE DETOUR PLAN 2 OF 2

BEECH RIDGE ROAD / 195 BRIDGE OVER MAINE TURNPIKE TO BE CLOSED.

- LEGEND**
-  SIGN PANEL/ASSEMBLY
  -  TYPE 3 BARRICADE
  -  TEMPORARY CONCRETE BARRIER (TYPE 1)
  -  WORK ZONE

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date		By	Date
Designed	TSK	9/2019	Checked	KSD	9/2019
Drawn	MRM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
 FAX: (207) 781-4753

**MAINE TURNPIKE**

**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

BEECH RIDGE ROAD (MILE 41.4)  
 DETOUR PLAN 1 OF 2

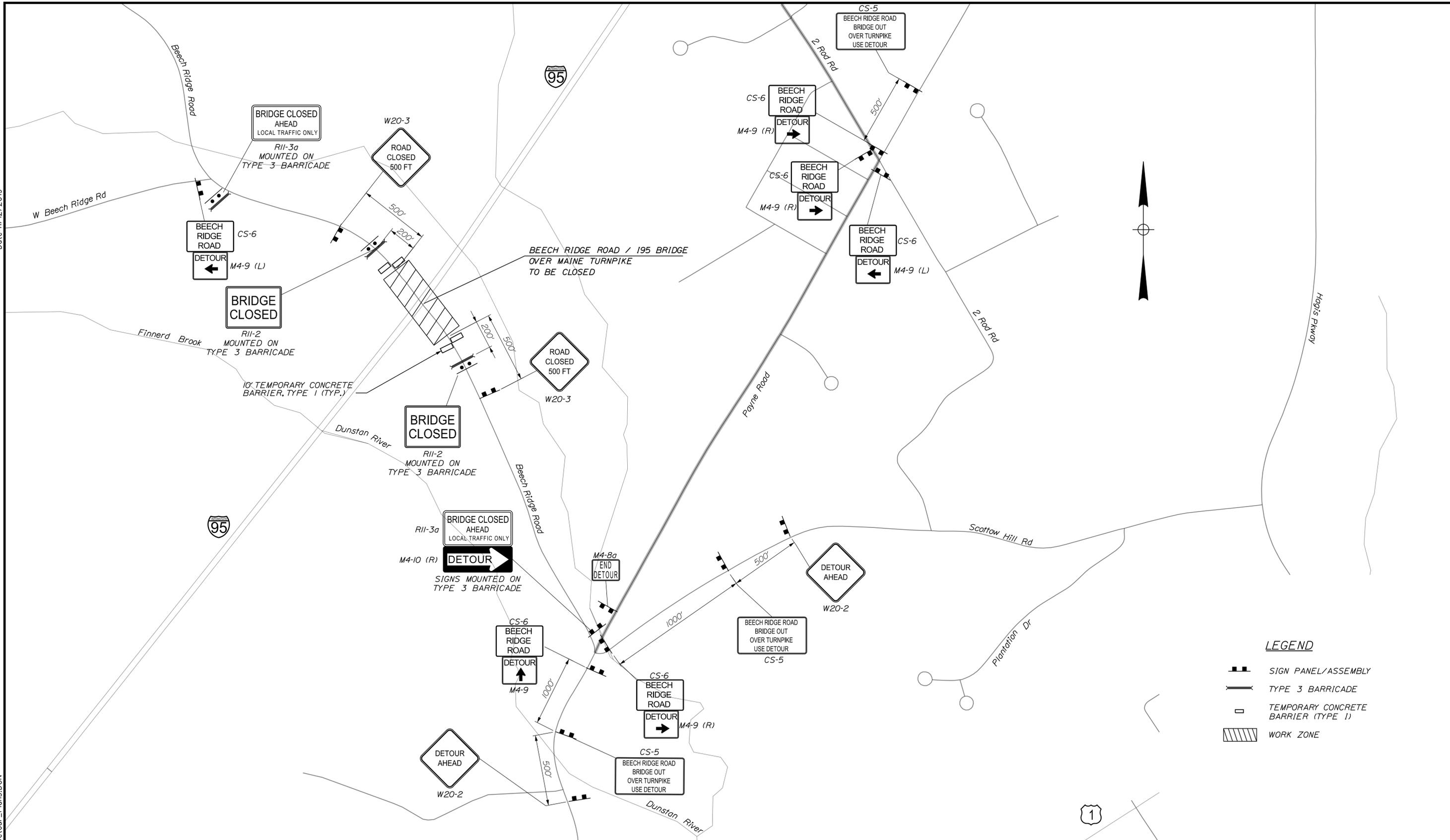
SHEET NUMBER: BRR-01

CONTRACT: 2020.07

13 OF 37

Date: 11/12/2019

Filename: ... \xxx\_MM\_41.4\_Detour\_Plans.DGN



**LEGEND**

- SIGN PANEL/ASSEMBLY
- TYPE 3 BARRICADE
- TEMPORARY CONCRETE BARRIER (TYPE 1)
- WORK ZONE

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date		By	Date
Designed	TSK	9/2019	Checked	KSD	9/2019
Drawn	MRM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
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**MAINE TURNPIKE**

**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

BEECH RIDGE ROAD (MILE 41.4)

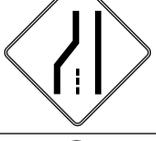
DETOUR PLAN 2 OF 2

SHEET NUMBER: BRR-02

CONTRACT: 2020.07

14 OF 37

Date: 11/12/2019

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET	NOTES
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND BORDER			
CS-1	48"	48"		8C 8C 8C	4" 4"		4	ORANGE	BLACK		16.00 (64)	
CS-2	48"	48"		7C 7C	6"		1	ORANGE	BLACK		16.00 (16)	
G20-2	36"	24"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009			9	ORANGE	BLACK		6.00 (54)	
G20-5aP	48"	24"					4	ORANGE	BLACK		8.00 (32)	
R2-1	48"	60"					4	WHITE	BLACK		20 (80)	
R2-6aP	36"	24"					4	WHITE	BLACK		6.00 (24)	
R2-12	36"	54"					4	WHITE	BLACK		13.5 (54)	
W3-4	48"	48"					4	ORANGE	BLACK		16 (64)	
W3-5	48"	48"					4	ORANGE	BLACK		16.00 (64)	
W4-2 (LEFT) (RIGHT)	48"	48"					8 8	ORANGE	BLACK		16.00 (128) 16.00 (128)	
W8-1	48"	48"					4	ORANGE	BLACK		16.00 (64)	

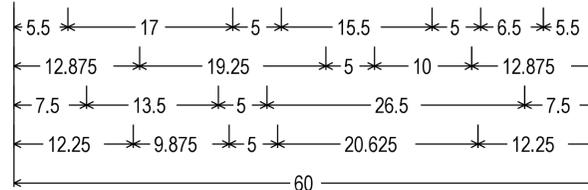
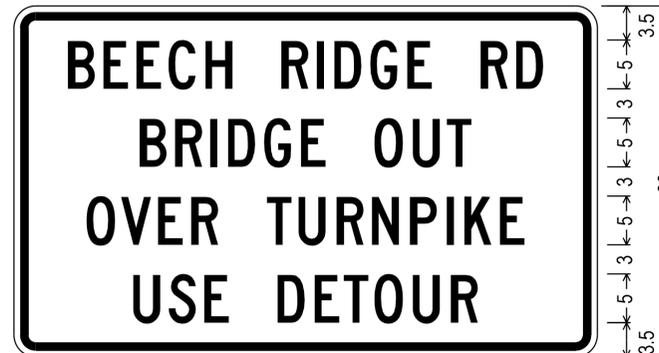
IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET	NOTES
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND BORDER			
W16-4P	36"	30"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009			4	ORANGE	BLACK		7.50 (30)	
W20-1 (AHEAD) (1 MILE)	48"	48"					10 4	ORANGE	BLACK		16.00 (160) 16.00 (64)	
W20-5 (LEFT) (RIGHT)	48"	48"					4 4	ORANGE	BLACK		16.00 (64) 16.00 (64)	
W20-5a (LEFT) (RIGHT)	48"	48"					4 4	ORANGE	BLACK		16.00 (64) 16.00 (64)	
W21-5	48"	48"					3	ORANGE	BLACK		16.00 (48)	
W21-5aR RIGHT	48"	48"					2	ORANGE	BLACK		16.00 (32)	
W21-5bR RIGHT	48"	48"					2	ORANGE	BLACK		16.00 (32)	

Filename: ... \xxx\_MM\_41.4\_Sign\_Summary.dgn

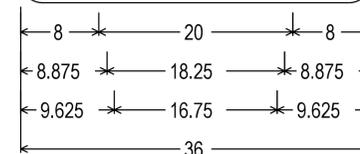
Scale: NOT TO SCALE		Designed by: <b>TYLIN INTERNATIONAL</b>		T.Y. Lin International 12 Northbrook Drive Building A, Suite One Falmouth, Maine 04105 TEL: (207) 781-4721 FAX: (207) 781-4753		 <b>THE GOLD STAR MEMORIAL HIGHWAY</b>		2020 BRIDGE REPAIRS BEECH RIDGE ROAD (MILE 41.4) SIGN SUMMARY	
No.	Revision	By	Date	CONSULTANT PROJECT MANAGER: Daniel S. Myers		MTA PROJECT MANAGER: Ralph C. Norwood, IV		CONTRACT: 2020.07	
				Designed	By: MRM	Date: 9/2019	Checked	By: TSK	Date: 10/2019
				Drawn	By: MRM	Date: 9/2019	In Charge of	By: DSM	Date: 10/2019
								SHEET NUMBER: BRR-03	
								15 OF 37	

Date: 11/12/2019

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET	NOTES
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND BORDER			
CS-5	60"	40"	BEECH RIDGE ROAD BRIDGE OUT OVER TURNPIKE USE DETOUR	6C 5C 5C 4C	4" 4" 4"		6	ORANGE	BLACK		16.67 (100.02)	
CS-6	36"	24"	BEECH RIDGE ROAD	5D 5D 5D	2.5" 2" 2.5"		14	ORANGE	BLACK		6.00 (84)	
M4-8A	24"	18"	END DETOUR	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009			2	ORANGE	BLACK		3.00 (6)	
M4-9	30"	24"	DETOUR ↑				2	ORANGE	BLACK		5.00 (10)	
M4-9(L)	30"	24"	DETOUR ←				6	ORANGE	BLACK		5.00 (30)	
M4-9(R)	30"	24"	DETOUR →				6	ORANGE	BLACK		5.00 (30)	
M4-10(R)	48"	18"	DETOUR →				1	ORANGE	BLACK		6.00 (6)	
R11-2	48"	30"	BRIDGE CLOSED				2	WHITE	BLACK		10.00 (20)	
R11-3b	60"	30"	BRIDGE CLOSED AHEAD LOCAL TRAFFIC ONLY				2	WHITE	BLACK		12.50 (25)	
W20-2	36"	36"	DETOUR AHEAD				5	ORANGE	BLACK		9.00 (45)	
W20-3 (500)	36"	36"	ROAD CLOSED 500 FT				2	ORANGE	BLACK		9.00 (18)	



2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;  
 [BEECH RIDGE RD] Black C 2K;  
 [BRIDGE OUT] Black C 2K;  
 [OVER TURNPIKE] Black C 2K;  
 [USE DETOUR] Black C 2K;



2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;  
 [BEECH] Black D 2K;  
 [RIDGE] Black D 2K;  
 [ROAD] Black D 2K;

Filename: ... \xxx\_MM\_41.4\_Sign\_Summary.dgn

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date		By	Date
Designed	MRM	9/2019	Checked	TSK	10/2019
Drawn	MRM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
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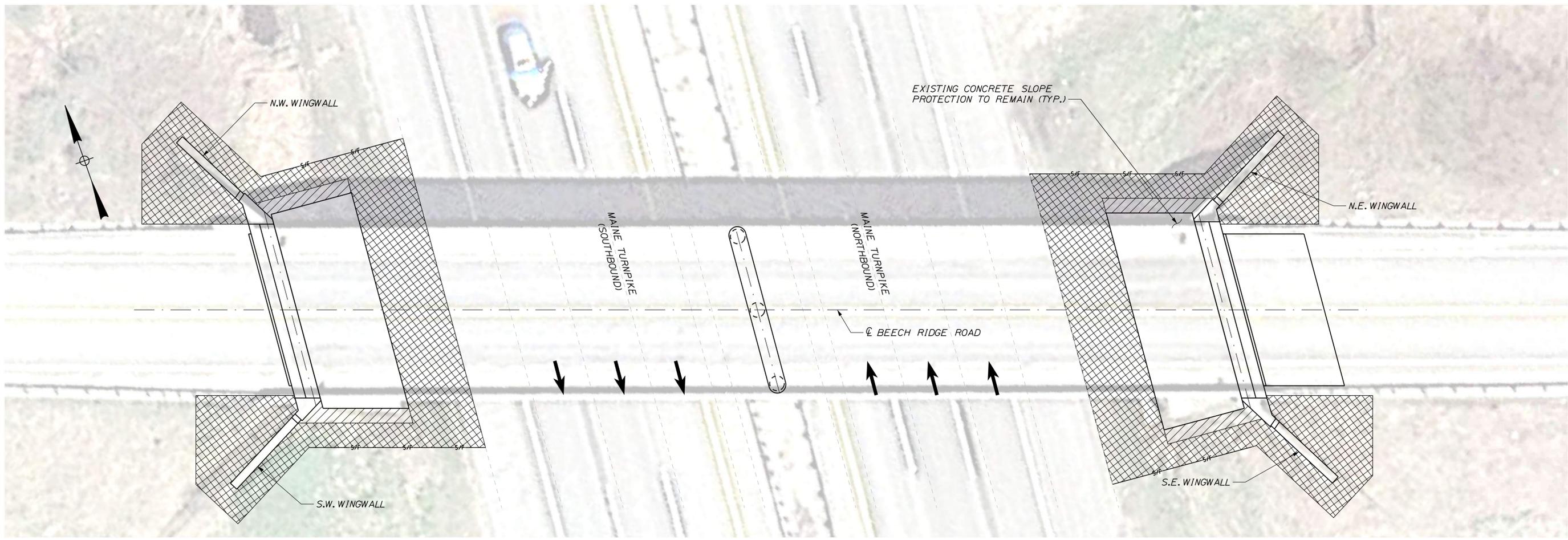
**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS  
 BEECH RIDGE ROAD (MILE 41.4)  
 SIGN SUMMARY

SHEET NUMBER: BRR-04  
 CONTRACT: 2020.07  
 16 OF 37

Date: 11/12/2019



LIMIT OF DISTURBANCE PLAN - BEECH RIDGE ROAD

**LEGEND:**

-  CONTRACT LIMIT OF DISTURBANCE
-  CONTRACTOR'S LIMIT OF DISTURBANCE AREA FOR ACCESS AND STORAGE

**AREAS:**

CONTRACT LIMIT OF DISTURBANCE:  
BEECH RIDGE ROAD = 0.01 ACRES

CONTRACTOR'S LIMIT OF DISTURBANCE AREA FOR ACCESS AND STORAGE:  
BEECH RIDGE ROAD = 0.08 ACRES

**NOTES:**

1. EROSION AND SEDIMENT CONTROL DEVICES REQUIRED FOR THE CONTRACTOR'S ACCESS LOCATIONS AND STORAGE AREAS WILL NOT BE MEASURED FOR PAYMENT.
2. THE CONTRACTOR WILL BE ALLOWED TO STORE MATERIAL AND EQUIPMENT ON GRAVEL AND PAVEMENT WITHIN THE CLOSED PORTIONS OF BEECH RIDGE ROAD. THESE AREAS ARE EITHER INCLUDED IN THE LIMITS OF DISTURBANCE OR HAVE BEEN PREVIOUSLY SURFACED AND DO NOT ADD TO THE LIMITS OF DISTURBANCE.
3. SEE SPECIFICATIONS FOR CONTRACTOR'S SUBMITTAL REQUIREMENTS IF INCREASING THE LIMITS OF DISTURBANCE TO THE PROJECT ESTIMATED QUANTITIES.

Filename: ...\\xxx\_MM\_41.4\_Limit\_of\_Disturbance.DGN

Scale:			
NOT TO SCALE			
No.	Revision	By	Date

Designed by:					
<b>TYLIN INTERNATIONAL</b>					
CONSULTANT PROJECT MANAGER: Daniel S. Myers					
	By	Date		By	Date
Designed	BLT	9/2019	Checked	DSM	10/2019
Drawn	BLT	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
12 Northbrook Drive  
Building A, Suite One  
Falmouth, Maine 04105  
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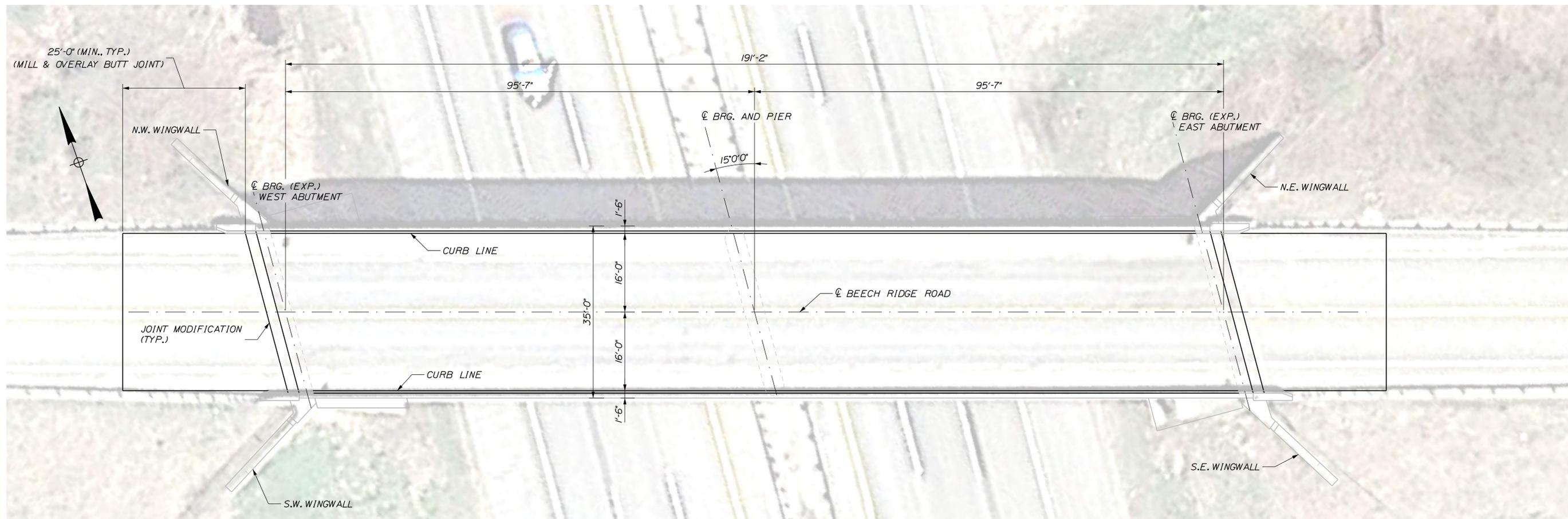


**THE GOLD STAR MEMORIAL HIGHWAY**

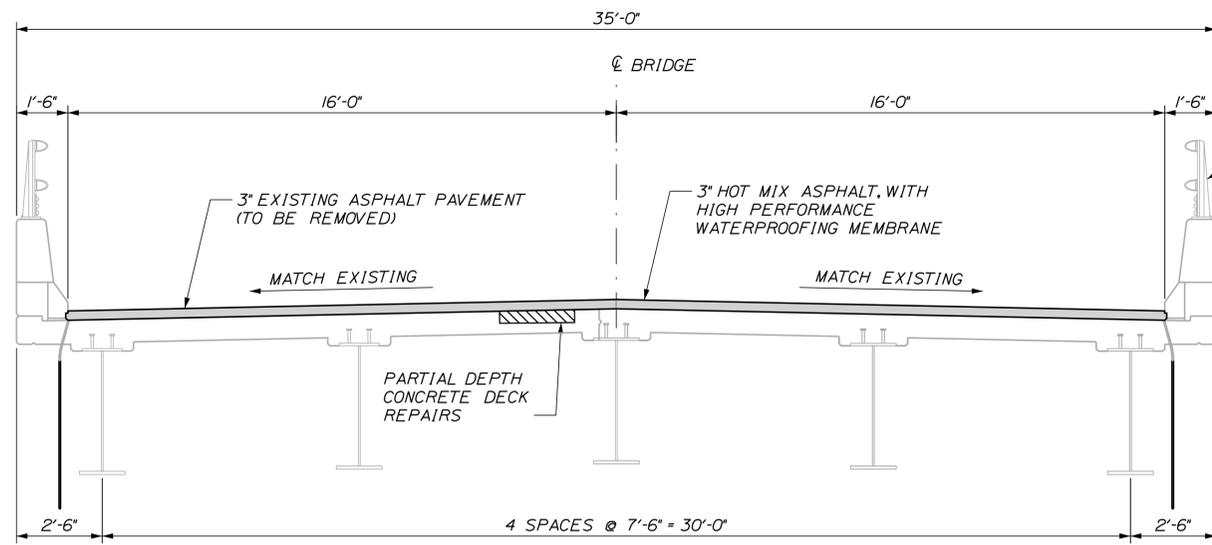
MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS BEECH RIDGE ROAD (MM 41.4) LIMIT OF DISTURBANCE
SHEET NUMBER: BRR-05 CONTRACT: 2020.07
17 OF 37

Date: 11/12/2019



PLAN  
SCALE: 3/32" = 10'



TRANSVERSE SECTION  
SCALE: 3/8" = 1'-0"

<b>41.4 BEECH RIDGE ROAD ESTIMATED SUPERSTRUCTURE REPAIR QUANTITIES</b>
PARTIAL DEPTH CONCRETE DECK REPAIRS
85 S.F.

LEGEND:

LIMITS OF PARTIAL DEPTH CONCRETE DECK REPAIRS (REPAIR AREAS TO BE FIELD VERIFIED)

NOTES:

- CONTRACTOR SHALL REPAIR AREAS OF CONCRETE DECK DETERIORATION AS IDENTIFIED BY THE RESIDENT. RESIDENT WILL IDENTIFY AND MARK AREAS FOR DECK REPAIR AFTER THE WEARING SURFACE AND MEMBRANE ARE REMOVED. CONTRACTOR SHALL ALSO REPAIR DETERIORATED AREAS OF PARAPET JOINTS. COORDINATE WORK WITH THE RESIDENT. PAYMENT FOR REPAIR WORK SHALL BE UNDER THE 518 PAY ITEMS. PAYMENT FOR REPAIRS TO THE INTERIOR AND TOP FACES OF THE PARAPET SHALL BE UNDER ITEM 518.80, "PARTIAL DEPTH CONCRETE DECK REPAIRS".
- ALL PVC DECK WEEPS WHICH DRAIN ONTO PIERS, ABUTMENTS OR STRUCTURAL STEEL SHALL BE EXTENDED AND DIVERTED AWAY FROM BRIDGE COMPONENTS BELOW DECK, AND SHALL EXTEND 1 FT BELOW BOTTOM FLANGE, AS DIRECTED BY THE RESIDENT. PAYMENT SHALL BE MADE UNDER PAY ITEM 502.7011 "WEEP DRAIN EXTENSIONS"
- A BEAD OF HOT-APPLIED RUBBERIZED ASPHALT SEALER SHALL BE APPLIED ALONG CURB LINES AFTER INSTALLATION OF BASE COURSE. PAYMENT SHALL NOT BE MADE DIRECTLY BUT SHALL BE CONSIDERED INCIDENTAL TO RELATED CONTRACT ITEMS.
- REPAIR CONCRETE SLOPE PROTECTION AS DIRECTED BY THE RESIDENT. SEE SHEET "BEECH RIDGE ROAD (MM 41.4) SLOPE PROTECTION REPAIR DETAILS". PAYMENT SHALL BE MADE UNDER ITEM 513.09 "SLOPE PROTECTION - PORTLAND CEMENT CONCRETE".

Filename: ... \xxx-MM-41.4\_Typical\_Deck\_Plan\_Section.DGN

Scale: AS NOTED			
No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

By	Date	By	Date
Designed DSM	9/2019	Checked BLT	9/2019
Drawn SAM	9/2019	In Charge of DSM	10/2019

T.Y. Lin International  
12 Northbrook Drive  
Building A, Suite One  
Falmouth, Maine 04105  
TEL: (207) 781-4721  
FAX: (207) 781-4753

**MAINE TURNPIKE**

**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

BEECH RIDGE ROAD (MM 41.4)

DECK PLAN & SECTION

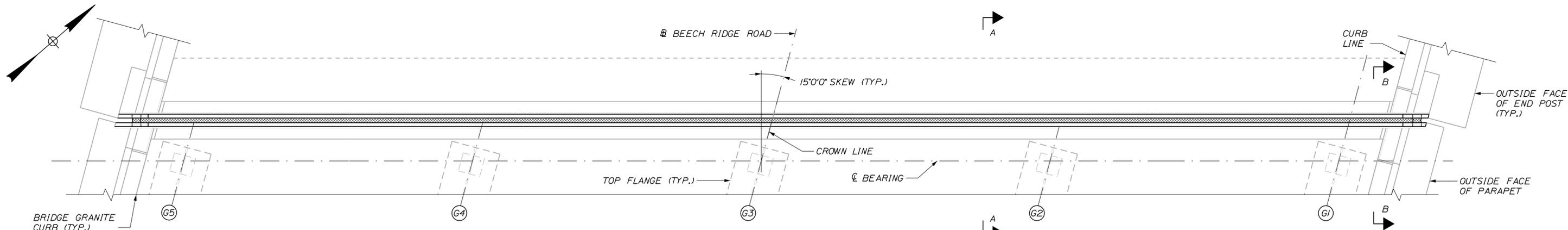
SHEET NUMBER: BRR-06

CONTRACT: 2020.07

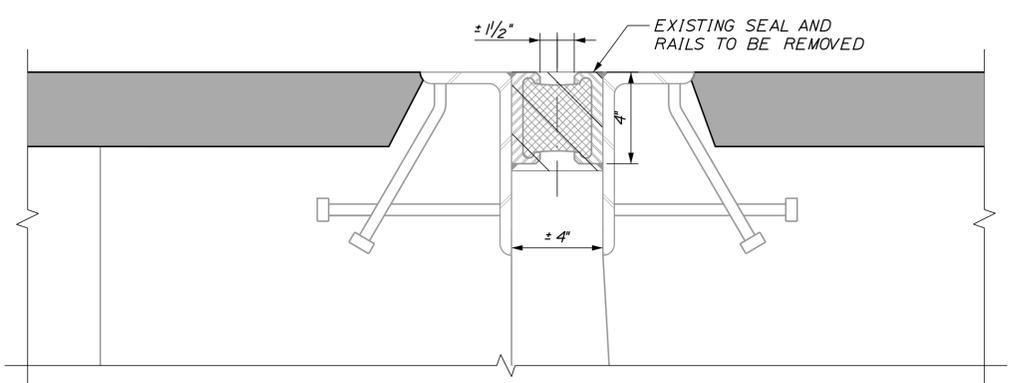
18 OF 37

Date: 11/12/2019

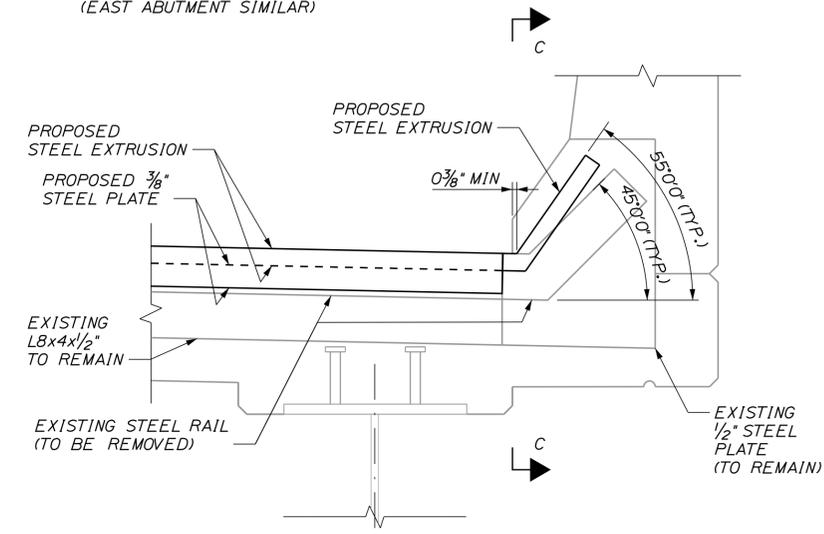
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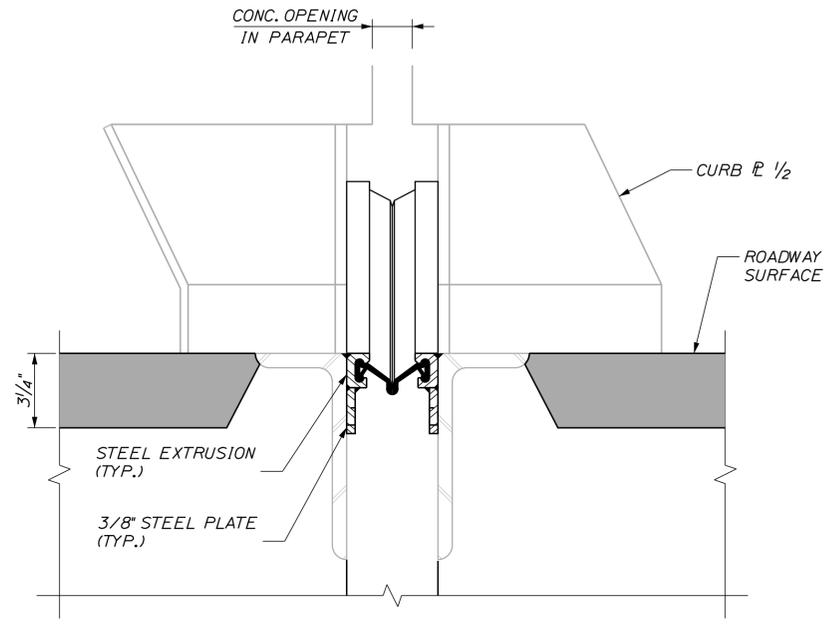
**PLAN - WEST ABUTMENT**  
SCALE: 3/4" = 1'-0"  
(EAST ABUTMENT SIMILAR)



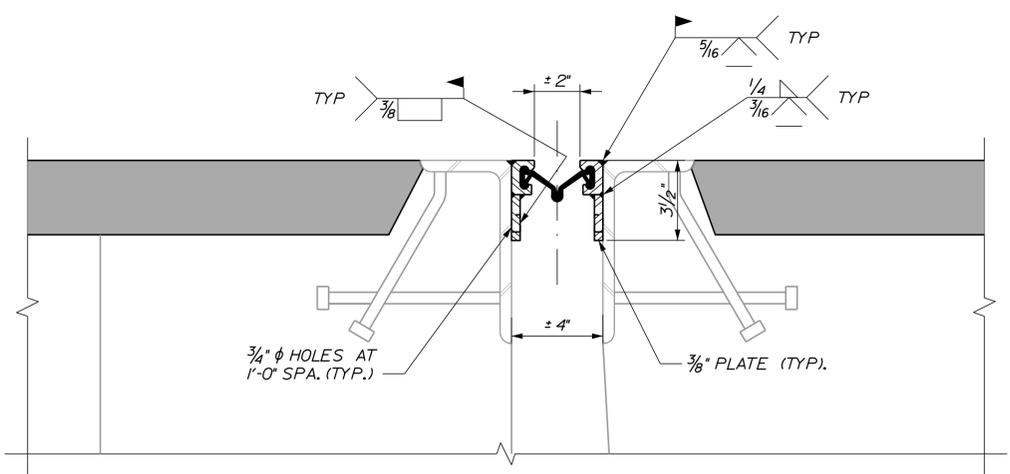
**DEMOLITION - SECTION**  
SCALE: 3" = 1'-0"



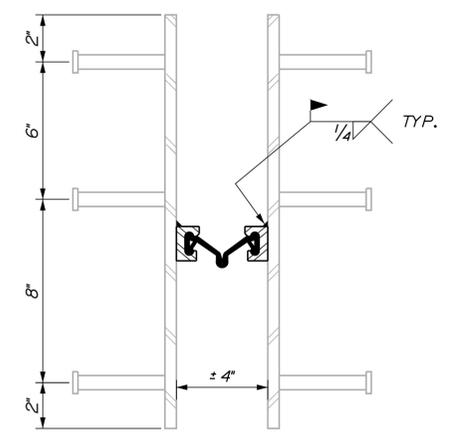
**CURB DETAIL**  
1/2" = 1'-0"



**SECTION B-B**  
SCALE: 3" = 1'-0"



**SECTION A-A**  
SCALE: 3" = 1'-0"



**SECTION C-C**  
SCALE: 3" = 1'-0"

**EXPANSION JOINT DETAILS:**

1. EXPANSION JOINT STEEL SHALL BE AASHTO M270 GRADE 50 (ASTM A709 GRADE 50), EXCEPT AS OTHERWISE ALLOWED. THE ENTIRE ASSEMBLY, INCLUDING ELASTOMERIC SEAL, SHALL BE PAID FOR AS ITEM 520.212, "EXPANSION DEVICE MODIFICATIONS (BEECH RIDGE ROAD)."
2. SPLICES FOR EXPANSION JOINT STEEL SHALL DEVELOP FULL STRENGTH.
3. ELASTOMERIC STRIP SEAL SHALL BE FURNISHED IN ONE CONTINUOUS LENGTH. HORIZONTAL ANGLE BREAKS SHALL BE PROVIDED BY MANUFACTURER. NO OTHER SPLICES WILL BE ALLOWED.
4. IMMEDIATELY AFTER THE JOINT HAS BEEN SECURED TO THE STRUCTURAL STEEL AND BACKWALL, REMOVE SHIPPING DEVICES AND GRIND SMOOTH ANY WELDS ON EXPOSED SURFACES. REPAIR ANY DAMAGE TO EXPOSED GALVANIZED SURFACES WITH ZINC-RICH PRIMER.
5. PROTECT TOP OF EXPANSION JOINT DURING PLACEMENT OF BITUMINOUS PAVEMENT.
6. THE ELASTOMERIC STRIP SEAL SHALL HAVE A MINIMUM RANGE OF MOVEMENT OF 3 INCHES. STRIP SEAL SHALL BE D.S. BROWN A2R-400 OR WATSON BOWMAN ACME SE-400.
7. NO "LOW PROFILE" STEEL EXTRUSIONS SHALL BE ALLOWED.

Scale: AS NOTED			
No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

Designed	By	Date	Checked	By	Date
Drawn	JJL	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
12 Northbrook Drive  
Building A, Suite One  
Falmouth, Maine 04105  
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**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS  
BEECH RIDGE ROAD (MILE 41.4)  
JOINT REPAIRS

SHEET NUMBER: BRR-07  
CONTRACT: 2020.07  
19 OF 37

Date: 11/12/2019

Filename: ...\\xxx\_MM\_41.4\_Existing\_Substructures.DGN

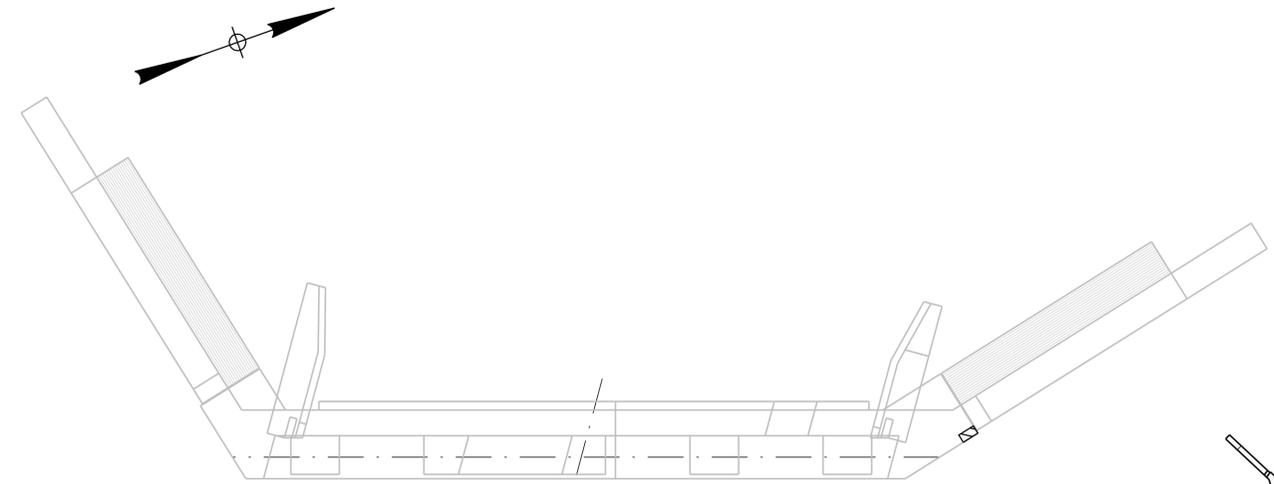
ESTIMATED QUANTITY OF REPAIRS			
	ABUT. NO. 1	ABUT. NO. 2	TOTAL
ABUTMENT REPAIRS	10 SF	0 SF	10 SF

**NOTES:**

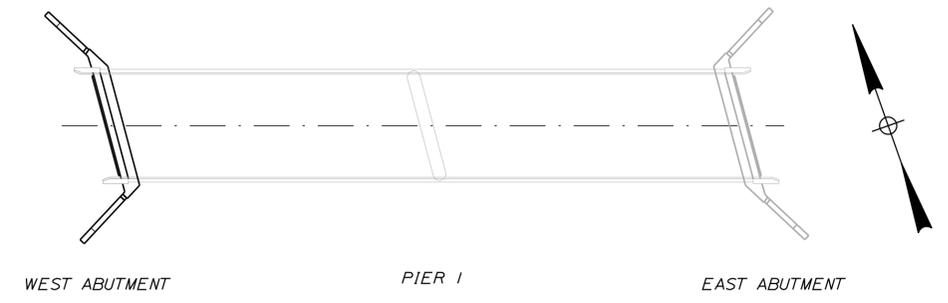
- FOR PROCEDURAL NOTES SEE SHEET "BRIDGE GENERAL NOTES".
- SHOULD CONCRETE REPAIR EXTEND BELOW GRADE, ANY EXCAVATION REQUIRED WILL BE CONSIDERED INCIDENTAL TO ITEM 518.10, "ABUTMENT REPAIRS".

**LEGEND:**

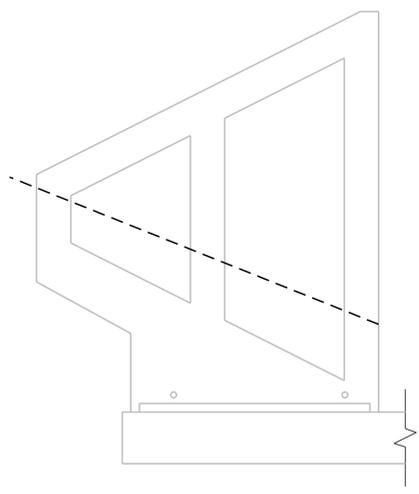
-  LIMIT OF CONCRETE SURFACE REPAIRS
-  LIMIT OF EPOXY INJECTED CRACK REPAIR
-  EXISTING CONCRETE
-  EXISTING AND PROPOSED GROUND



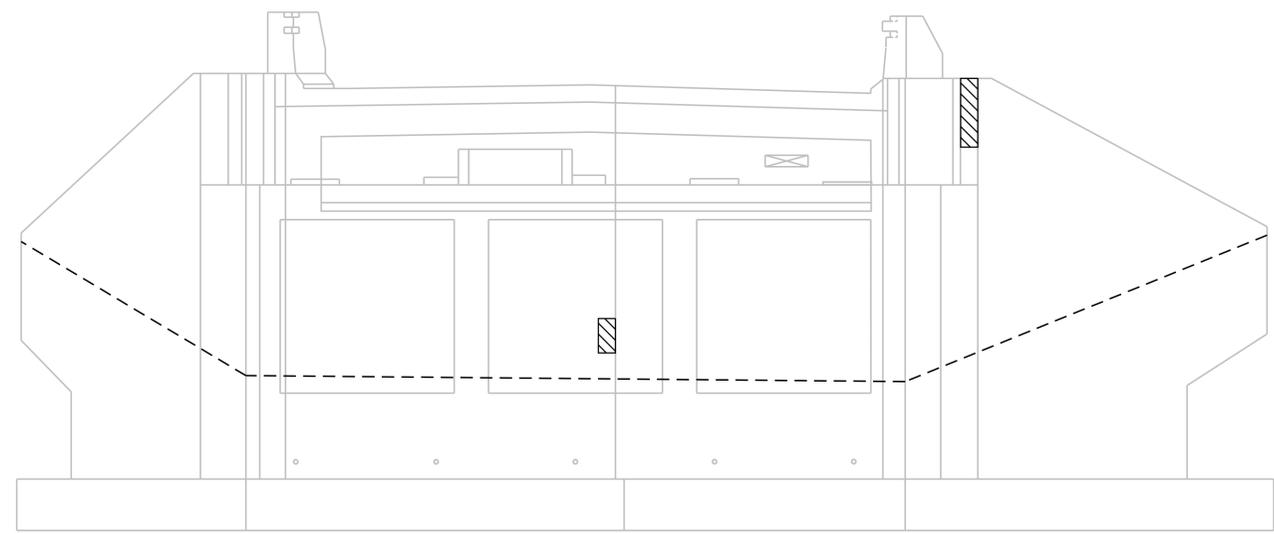
WEST ABUTMENT - PLAN



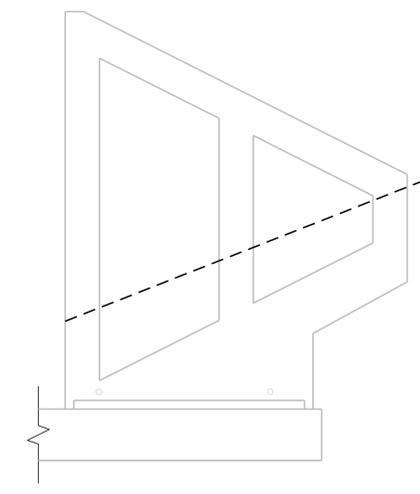
LOCATION PLAN



S.W. WINGWALL - ELEVATION



WEST ABUTMENT - ELEVATION



N.W. WINGWALL - ELEVATION

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TY-LIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date	Checked	By	Date
Designed	DSM	9/2019	BLT	BLT	9/2019
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
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**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

BEECH RIDGE ROAD (MILE 41.4)  
 SUBSTRUCTURE REPAIRS - 1 OF 3

CONTRACT: 2020.07

SHEET NUMBER: BRR-08  
 20 OF 37

Date: 11/12/2019

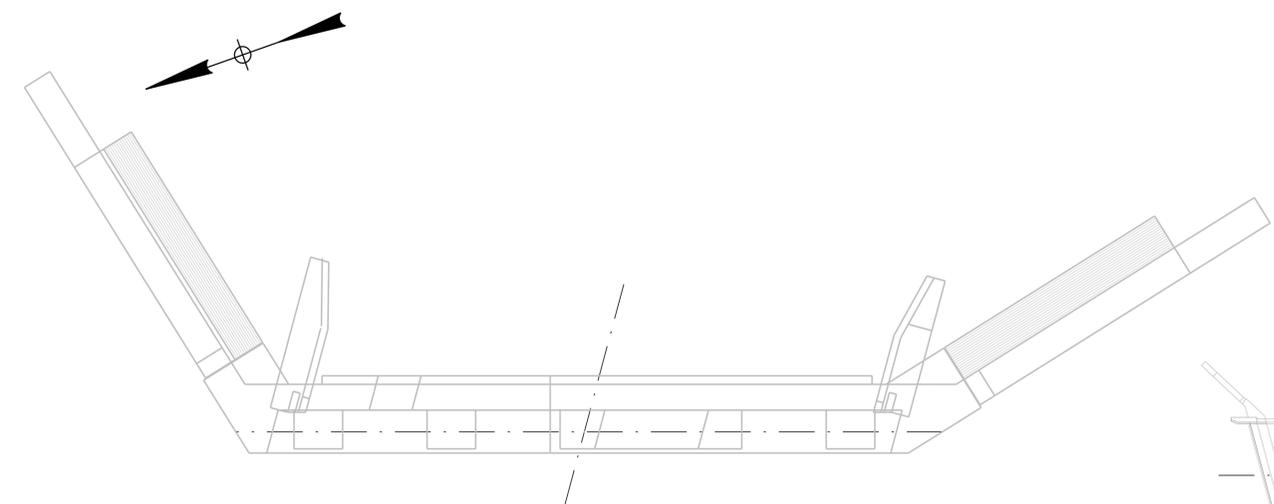
Filename: ...\\xxx-MM-41.4\_Existing\_Substructures.DGN

**NOTES:**

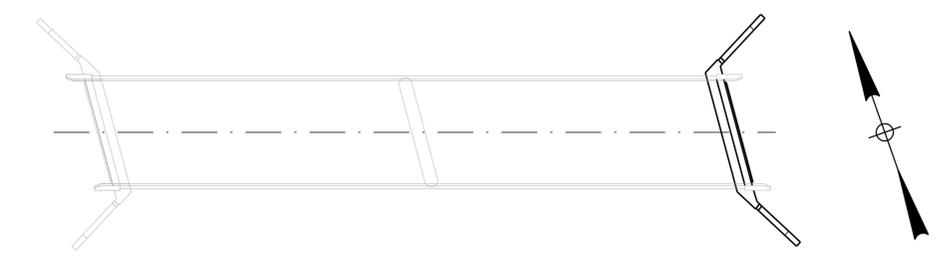
- FOR PROCEDURAL NOTES SEE SHEET "BRIDGE GENERAL NOTES".
- SHOULD CONCRETE REPAIR EXTEND BELOW GRADE, ANY EXCAVATION REQUIRED WILL BE CONSIDERED INCIDENTAL TO ITEM 518.10, "ABUTMENT REPAIRS".

**LEGEND:**

-  LIMIT OF CONCRETE SURFACE REPAIRS
-  LIMIT OF EPOXY INJECTED CRACK REPAIR
-  EXISTING CONCRETE
-  EXISTING AND PROPOSED GROUND

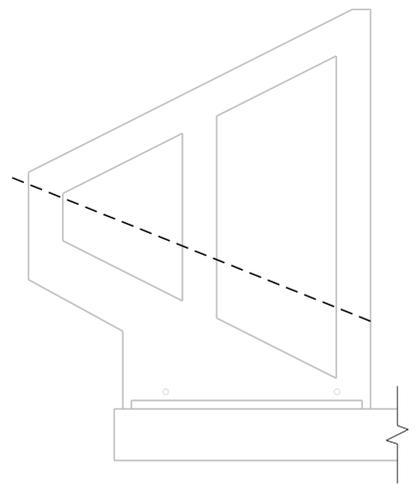


EAST ABUTMENT - PLAN

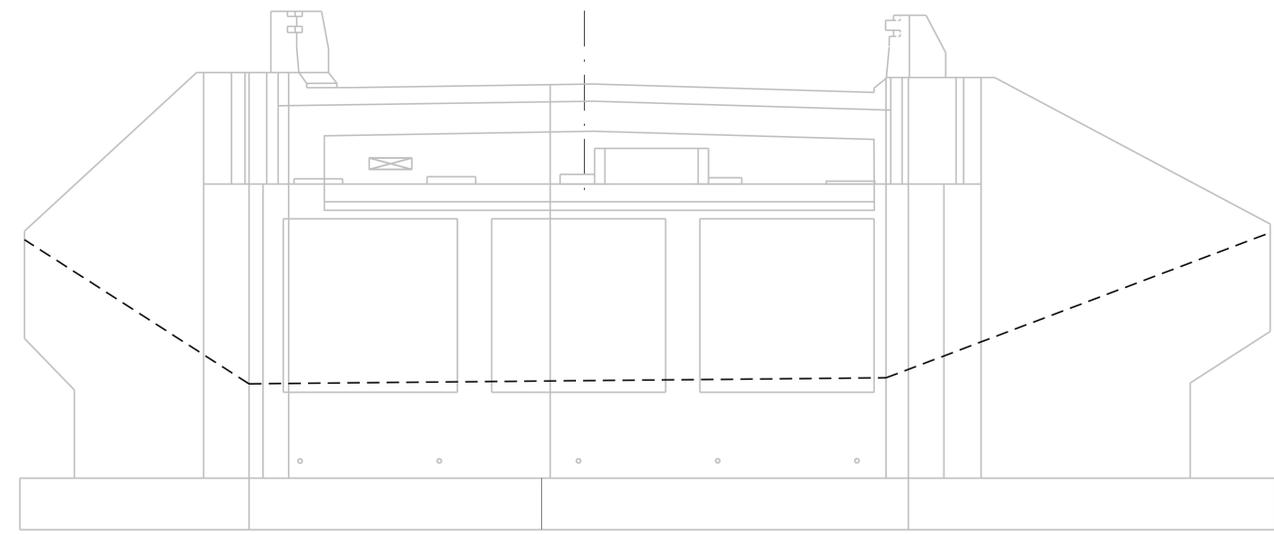


WEST ABUTMENT                      PIER 1                      EAST ABUTMENT

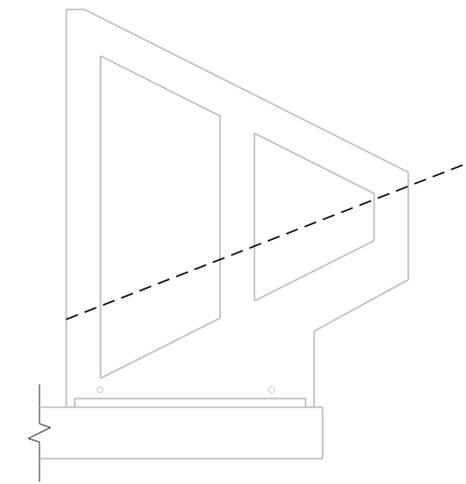
LOCATION PLAN



N.E. WINGWALL - ELEVATION



EAST ABUTMENT - ELEVATION



S.E. WINGWALL - ELEVATION

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TY-LIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date		By	Date
Designed	DSM	9/2019	Checked	BLT	9/2019
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

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**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

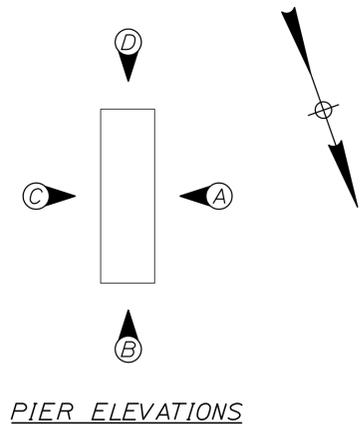
BEECH RIDGE ROAD (MILE 41.4)  
SUBSTRUCTURE REPAIRS - 2 OF 3

SHEET NUMBER: BRR-09  
21 OF 37

CONTRACT: 2020.07

Date: 11/12/2019

Filename: ...\\xxx-MM-41.4\_Existing\_Substructures.DGN



PIER ELEVATIONS

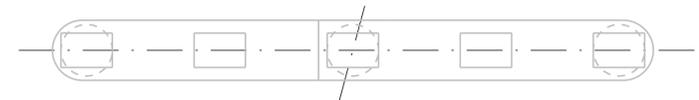
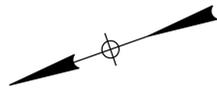
ESTIMATED QUANTITY OF REPAIRS	
PIER REPAIRS	PIER NO. 1
	0 SF

**NOTES:**

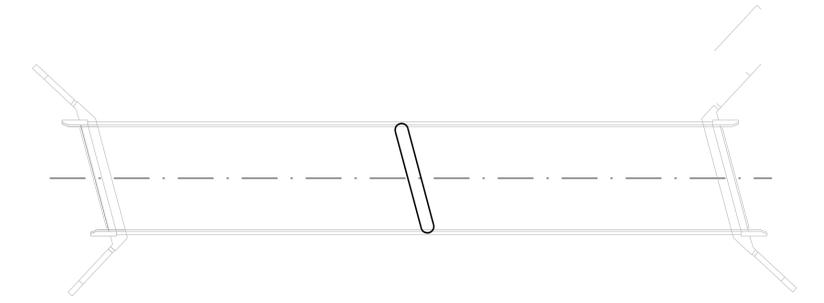
- FOR PROCEDURAL NOTES SEE SHEET "BRIDGE GENERAL NOTES".
- SHOULD CONCRETE REPAIR EXTEND BELOW GRADE, ANY EXCAVATION REQUIRED WILL BE CONSIDERED INCIDENTAL TO ITEM 518.20, "PIER REPAIRS".

**LEGEND:**

- LIMIT OF CONCRETE SURFACE REPAIRS
- LIMIT OF EPOXY INJECTED CRACK REPAIR
- EXISTING CONCRETE
- EXISTING AND PROPOSED GROUND

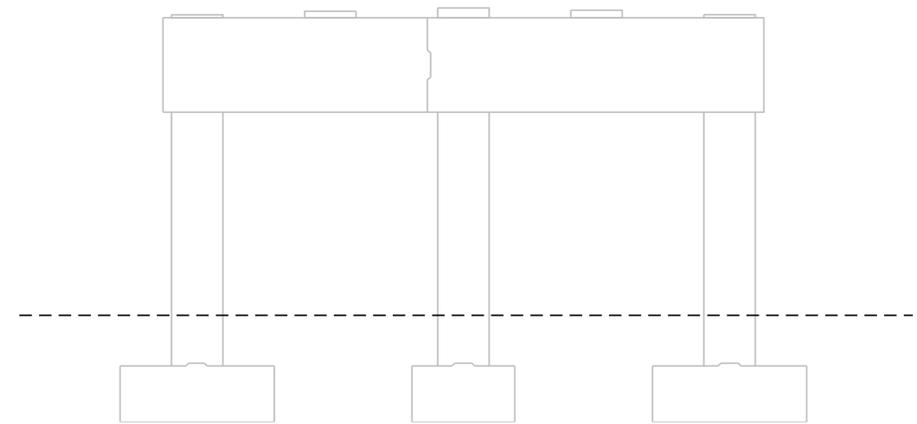


PLAN

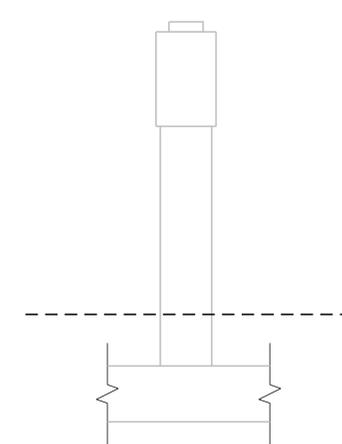


WEST ABUTMENT PIER 1 EAST ABUTMENT

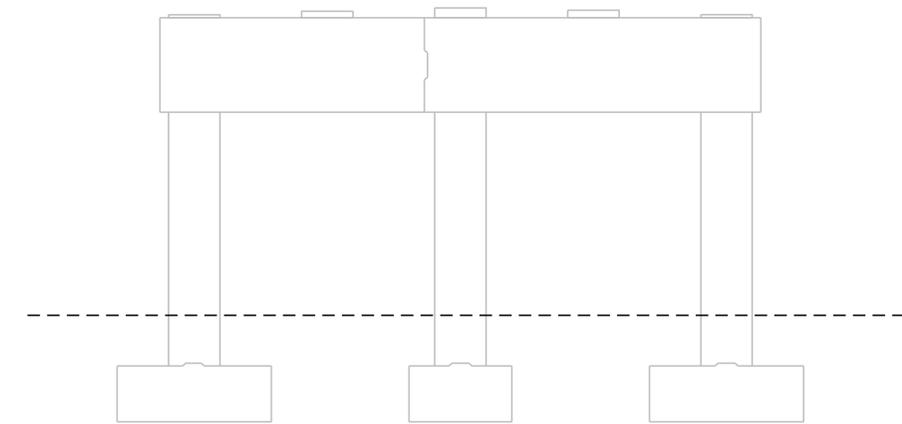
LOCATION PLAN



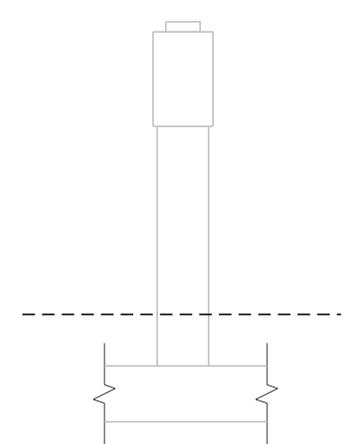
ELEVATION C



ELEVATION B



ELEVATION A



ELEVATION D

PIER 1

Scale:			
NOT TO SCALE			
No.	Revision	By	Date

Designed by:					
<b>TY-LIN INTERNATIONAL</b>					
CONSULTANT PROJECT MANAGER: Daniel S. Myers					
Designed	By	Date	Checked	By	Date
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
 FAX: (207) 781-4753

THE GOLD STAR  
MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph C. Norwood, IV

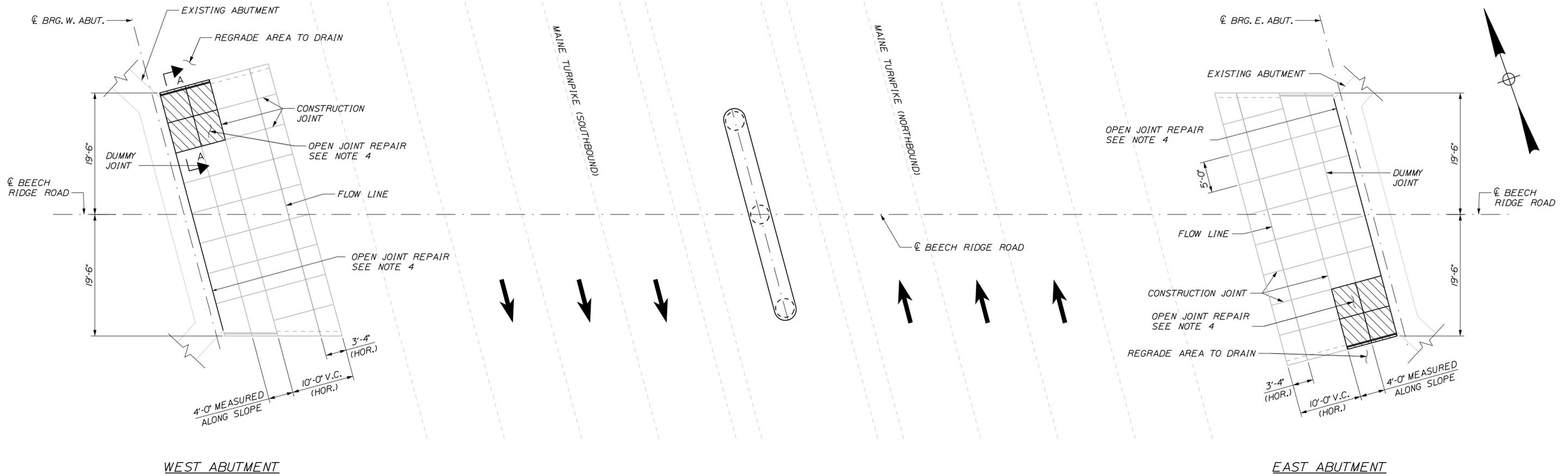
2020 BRIDGE REPAIRS

BEECH RIDGE ROAD (MILE 41.4)  
 SUBSTRUCTURE REPAIRS - 3 OF 3

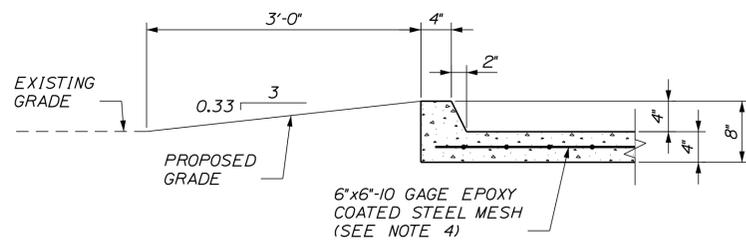
SHEET NUMBER: BRR-10  
 CONTRACT: 2020.07  
 22 OF 37

Date: 11/12/2019

Filename: ...MM\_41.4\_Slope\_Protection\_Repairs.DGN



PLAN OF SLOPE PROTECTION  
SCALE: 1/8" = 1'-0"



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

**LEGEND**

- LIMIT OF SLOPE PROTECTION REPAIRS
- EXISTING CONCRETE

**SLOPE REPAIR ITEM NOTES:**

1. REGRADING AREA TO DRAIN SHALL BE INCIDENTAL TO ITEM 513.09, "SLOPE PROTECTION - PORTLAND CEMENT CONCRETE."
2. LOAM AND SEED REGRADED AREA WITH 2 INCHES OF LOAM.
3. REMOVE AND REPLACE CONCRETE SLOPE PROTECTION IN-KIND DIRECTED BY THE RESIDENT. CLASS A CONCRETE SHALL BE USED FOR REPLACING CONCRETE SLOPE PROTECTION.
4. WELDED WIRE FABRIC IS EPOXY COATED AND MEETS REQUIREMENTS OF ASTM A884.
5. FILL OPEN JOINT BETWEEN CONCRETE SLOPE PROTECTION AND ABUTMENT WITH NON-SHRINK GROUT AS DIRECTED BY RESIDENT. COSTS SHALL BE INCIDENTAL TO ITEM 513.09, "SLOPE PROTECTION - PORTLAND CEMENT CONCRETE."

Scale: AS NOTED			
No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

By	Date	By	Date
Designed DSM	9/2019	Checked BLT	9/2019
Drawn SAM	9/2019	In Charge of DSM	10/2019

T.Y. Lin International  
12 Northbrook Drive  
Building A, Suite One  
Falmouth, Maine 04105  
TEL: (207) 781-4721  
FAX: (207) 781-4753



**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS  
BEECH RIDGE ROAD (MM 41.4)  
SLOPE PROTECTION REPAIR DETAILS

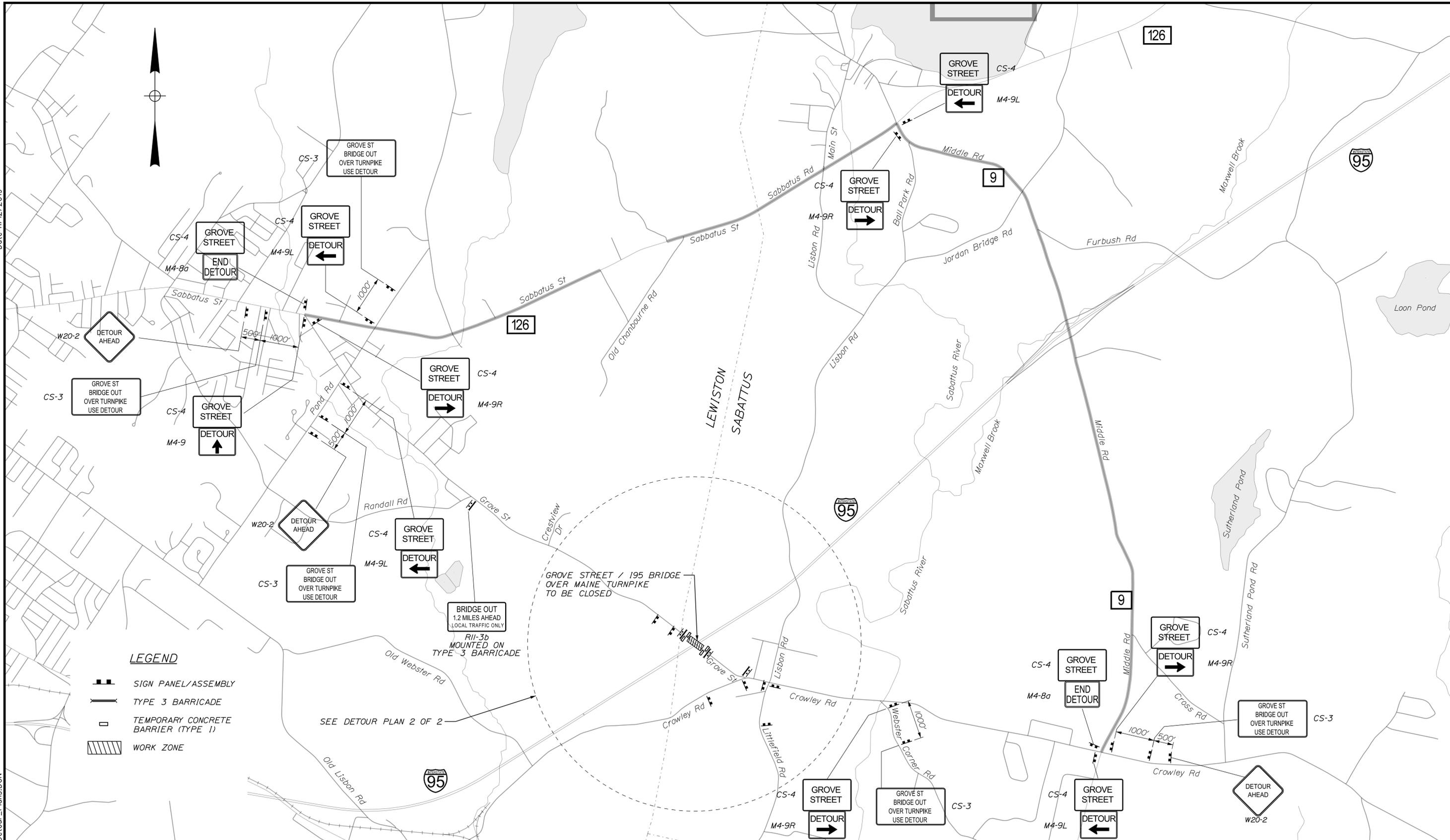
CONTRACT: 2020.07

SHEET NUMBER: BRR-11

23 OF 37

Date: 11/12/2019

Filename: ...\\xxx\_MM\_83.7\_Detour\_Plans.DGN



**LEGEND**

-  SIGN PANEL/ASSEMBLY
-  TYPE 3 BARRICADE
-  TEMPORARY CONCRETE BARRIER (TYPE 1)
-  WORK ZONE

SEE DETOUR PLAN 2 OF 2

BRIDGE OUT  
1.2 MILES AHEAD  
LOCAL TRAFFIC ONLY  
R11-3b  
MOUNTED ON  
TYPE 3 BARRICADE

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date	By	Date
Designed	TSK	10/2019	Checked	DWB1 10/2019
Drawn	TSK	10/2019	In Charge of	DSM 10/2019

T.Y. Lin International  
12 Northbrook Drive  
Building A, Suite One  
Falmouth, Maine 04105  
TEL: (207) 781-4721  
FAX: (207) 781-4753



**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

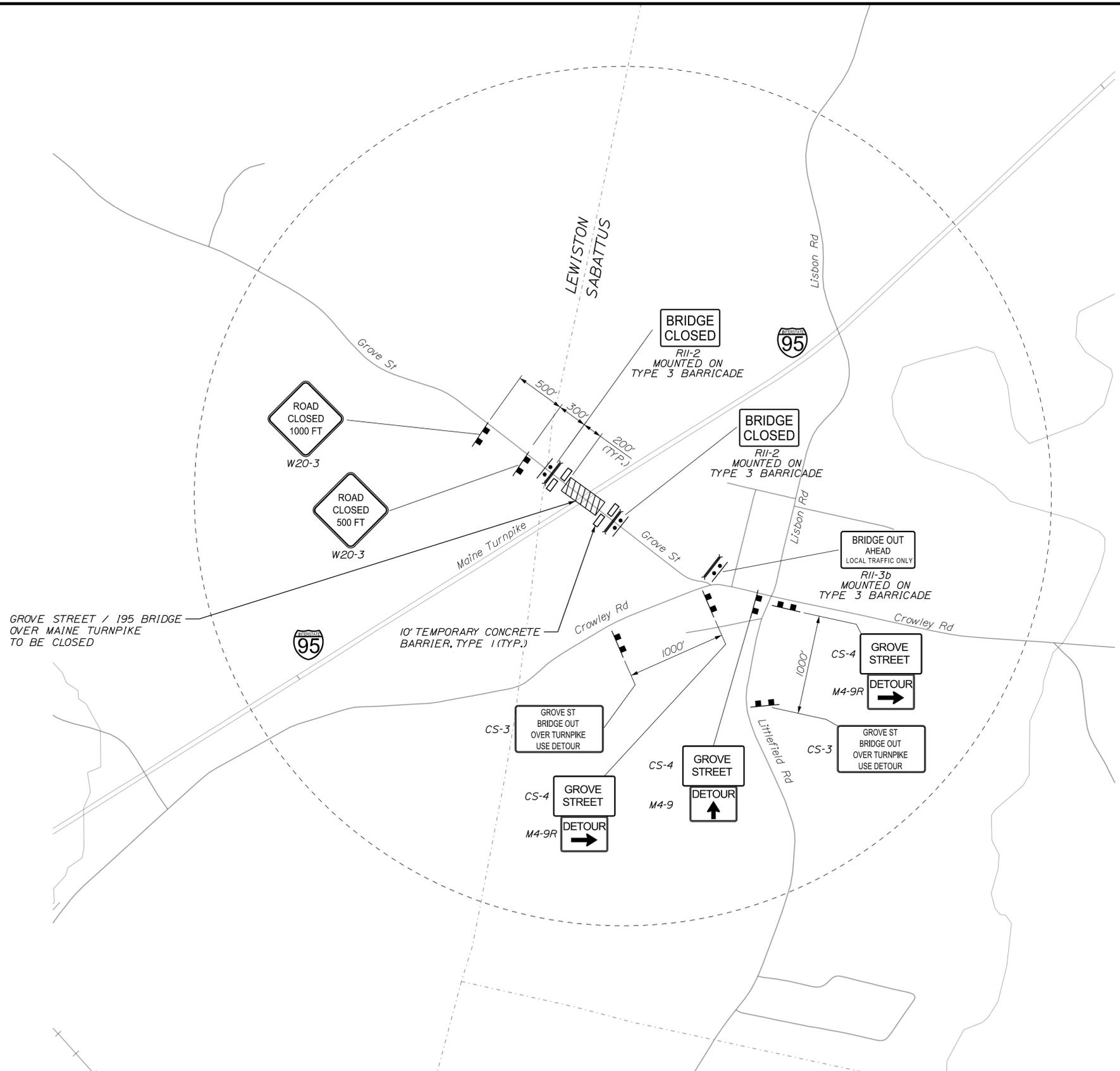
2020 BRIDGE REPAIRS  
GROVE STREET (MILE 83.7)  
DETOUR PLAN 1 of 2

SHEET NUMBER: GS-01  
24 OF 37

CONTRACT: 2020.07

Date: 11/12/2019

Filename: ...\\xxx\_MM\_83.7\_Detour\_Plans.DGN



**LEGEND**

	SIGN PANEL/ASSEMBLY
	TYPE 3 BARRICADE
	TEMPORARY CONCRETE BARRIER (TYPE 1)
	WORK ZONE

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date	Checked	By	Date
Designed	TSK	10/2019	DWB1	DWB1	10/2019
Drawn	TSK	10/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
 FAX: (207) 781-4753

**THE GOLD STAR MEMORIAL HIGHWAY**

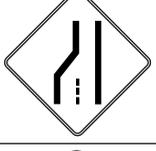
MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS  
 GROVE STREET (MILE 83.7)  
 DETOUR PLAN 2 of 2

SHEET NUMBER: GS-02  
 CONTRACT: 2020.07  
 25 OF 37

Date:11/12/2019

Filename: ...\\xxx\_MM\_83.7\_Sign\_Summary.dgn

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET	NOTES
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND BORDER			
CS-1	48"	48"		8C 8C 8C	4" 4"		4	ORANGE	BLACK		16.00 (64)	
CS-2	48"	48"		7C 7C	6"		1	ORANGE	BLACK		16.00 (16)	
G20-2	36"	24"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009			9	ORANGE	BLACK		6.00 (54)	
G20-5aP	48"	24"					2	ORANGE	BLACK		8.00 (16)	
R2-1	48"	60"					2	WHITE	BLACK		20.00 (40)	
R2-6aP	36"	24"					2	WHITE	BLACK		6.00 (12)	
R2-12	36"	54"					4	WHITE	BLACK		13.50 (54)	
W3-4	48"	48"					4	ORANGE	BLACK		16.00 (64)	
W3-5	48"	48"					4	ORANGE	BLACK		16.00 (64)	
W4-2 (LEFT) (RIGHT)	48"	48"					4 4	ORANGE	BLACK		16.00 (64) 16.00 (64)	
W8-1	48"	48"					4	ORANGE	BLACK		16.00 (64)	
W8-24a	48"	48"					4	ORANGE	BLACK		16.00 (64)	

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET	NOTES
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND BORDER			
W16-4P	36"	30"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009			4	ORANGE	BLACK		7.50 (30)	
W20-1 (AHEAD) (1 MILE)	48"	48"					10 4	ORANGE	BLACK		16.00 (160) 16.00 (64)	
W20-5 (LEFT) (RIGHT)	48"	48"					4 4	ORANGE	BLACK		16.00 (64) 16.00 (64)	
W21-5	48"	48"					3	ORANGE	BLACK		16.00 (48)	
W21-5aR RIGHT	48"	48"					2	ORANGE	BLACK		16.00 (32)	
W21-5bR RIGHT	48"	48"					2	ORANGE	BLACK		16.00 (32)	

Scale:

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

By	Date	By	Date
Designed TWA	10/2019	Checked TSK	10/2019
Drawn TWA	10/2019	In Charge of DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
 FAX: (207) 781-4753



**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

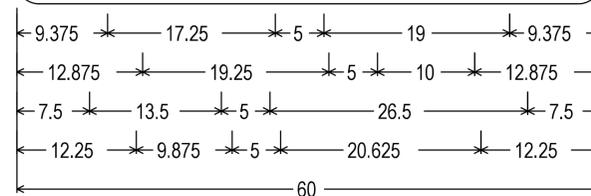
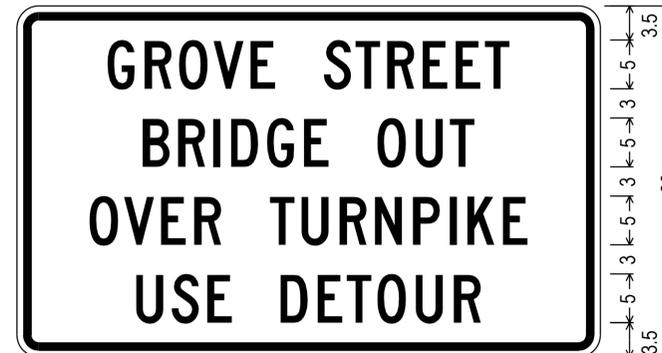
2020 BRIDGE REPAIRS  
 GROVE STREET (MILE 83.7)  
 SIGN SUMMARY

SHEET NUMBER: GS-03  
 CONTRACT:2020.07  
 26 OF 37

Date: 11/12/2019

Filename: ... \xxx\_MM\_83.7\_Sign\_Summary.dgn

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET	NOTES
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND BORDER			
CS-3	60"	40"	GROVE STREET BRIDGE OUT OVER TURNPIKE USE DETOUR	6C 5C 5C 4C	4" 4" 4"		7	ORANGE	BLACK		16.67 (116.69)	
CS-4	36"	24"	GROVE STREET	5D 5D 5D	2.5" 2" 2" 2.5"		14	ORANGE	BLACK		6.00 (84)	
M4-8a	24"	18"	END DETOUR	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009			2	ORANGE	BLACK		3.00 (6)	
M4-9	30"	24"	DETOUR ↑				2	ORANGE	BLACK		5.00 (10)	
M4-9(L)	30"	24"	DETOUR ←				4	ORANGE	BLACK		5.00 (20)	
M4-9(R)	30"	24"	DETOUR →				6	ORANGE	BLACK		5.00 (30)	
R11-2	48"	30"	BRIDGE CLOSED				2	WHITE	BLACK		10.00 (20)	
R11-3b	60"	30"	BRIDGE CLOSED AHEAD LOCAL TRAFFIC ONLY				2	WHITE	BLACK		12.50 (25)	
W20-2	36"	36"	DETOUR AHEAD				3	ORANGE	BLACK		9.00 (27)	
W20-3 (500) (1000)	36"	36"	ROAD CLOSED 500 FT				1 1	ORANGE	BLACK		9.00 (9) 9.00 (9)	



2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;  
 [GROVE STREET] Black C 2K;  
 [BRIDGE OUT] Black C 2K;  
 [OVER TURNPIKE] Black C 2K;  
 [USE DETOUR] Black C 2K;



2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;  
 [GROVE] Black D 2K;  
 [STREET] Black D 2K;

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date		By	Date
Designed	TWA	10/2019	Checked	TSK	10/2019
Drawn	TWA	10/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
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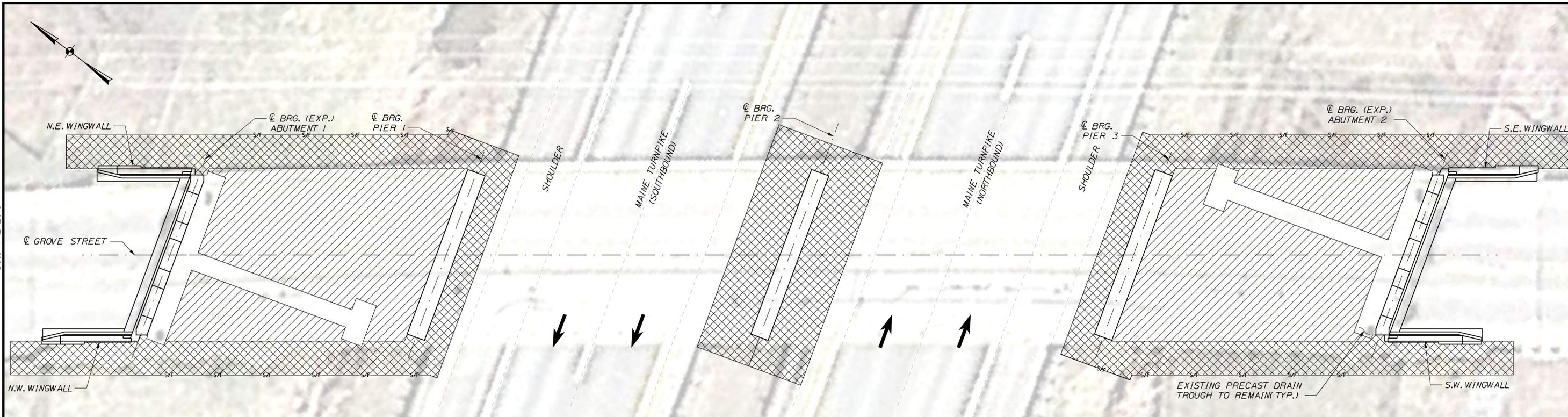
**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS  
 GROVE STREET (MILE 83.7)  
 SIGN SUMMARY

SHEET NUMBER: GS-04  
 CONTRACT: 2020.07  
 27 OF 37

Date: 11/12/2019



LIMIT OF DISTURBANCE PLAN - GROVE STREET

**LEGEND:**

-  CONTRACT LIMIT OF DISTURBANCE
-  CONTRACTOR'S LIMIT OF DISTURBANCE AREA FOR ACCESS AND STORAGE

**AREAS:**

CONTRACT LIMIT OF DISTURBANCE:

GROVE STREET = 0.05 ACRES

CONTRACTOR'S LIMIT OF DISTURBANCE AREA FOR ACCESS AND STORAGE:

GROVE STREET = 0.06 ACRES

**NOTES:**

1. EROSION AND SEDIMENT CONTROL DEVICES REQUIRED FOR THE CONTRACTOR'S ACCESS LOCATIONS AND STORAGE AREAS WILL NOT BE MEASURED FOR PAYMENT.
2. THE CONTRACTOR WILL BE ALLOWED TO STORE MATERIAL AND EQUIPMENT ON GRAVEL AND PAVEMENT WITHIN THE CLOSED PORTIONS OF GROVE STREET. THESE AREAS ARE EITHER INCLUDED IN THE LIMITS OF DISTURBANCE OR HAVE BEEN PREVIOUSLY SURFACED AND DO NOT ADD TO THE LIMITS OF DISTURBANCE.
3. SEE SPECIFICATIONS FOR CONTRACTOR'S SUBMITTAL REQUIREMENTS IF INCREASING THE LIMITS OF DISTURBANCE TO THE PROJECT ESTIMATED QUANTITIES.

Filename: ...\\xxx\_MM\_83.7\_Limit\_of\_Disturbance.DGN

Scale:			
NOT TO SCALE			
No.	Revision	By	Date

Designed by:					
<b>TYLIN INTERNATIONAL</b>					
CONSULTANT PROJECT MANAGER: Daniel S. Myers					
	By	Date		By	Date
Designed	BLT	9/2019	Checked	DSM	10/2019
Drawn	BLT	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
 FAX: (207) 781-4753



THE GOLD STAR  
MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph C. Norwood, IV

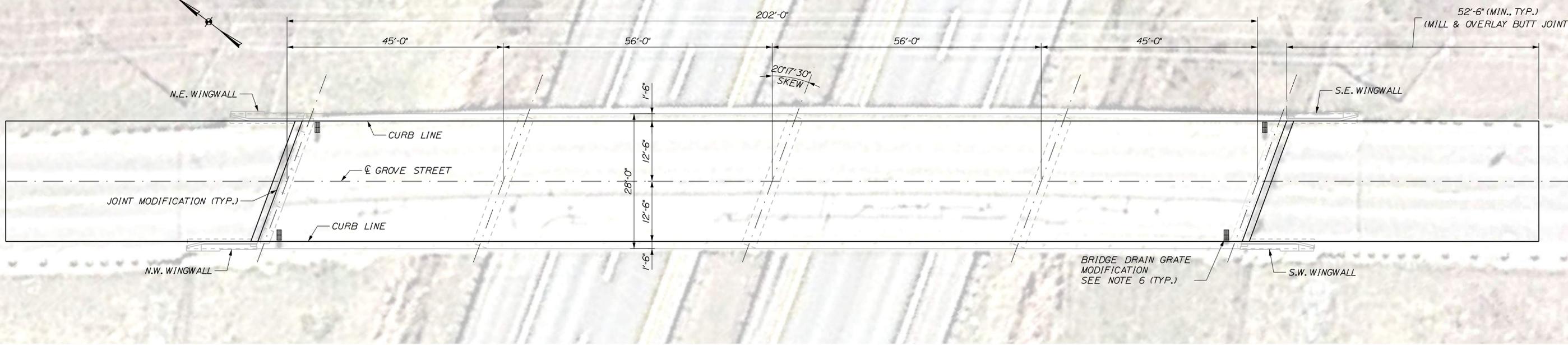
2020 BRIDGE REPAIRS

GROVE STREET (MM 83.7)  
LIMIT OF DISTURBANCE

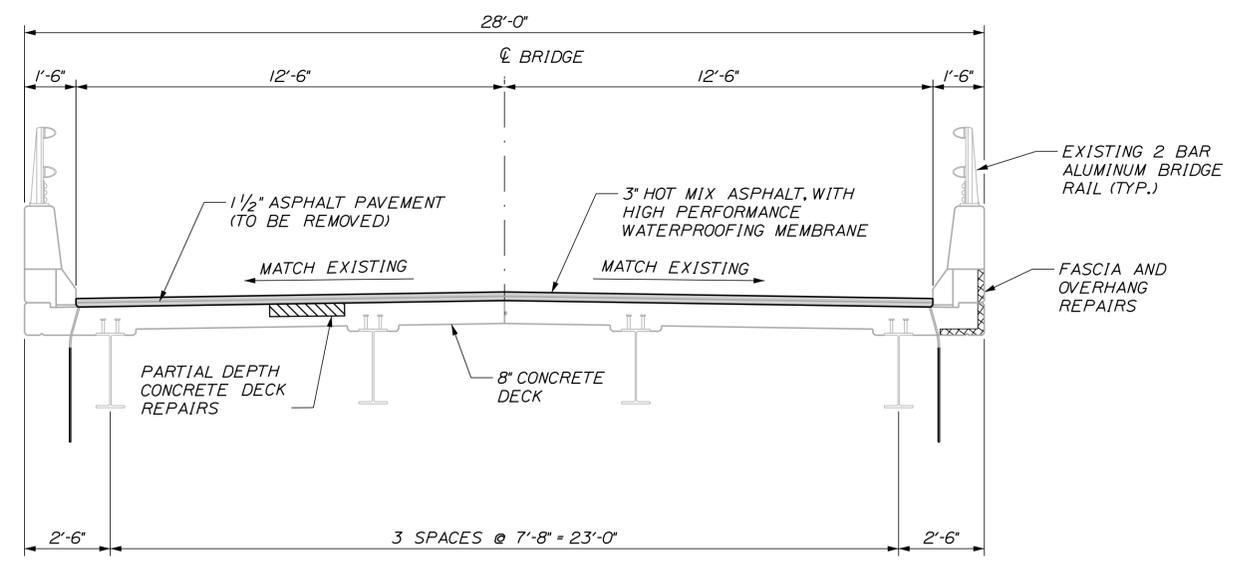
SHEET NUMBER: GS-01

CONTRACT: 2020.07 28 OF 37

Date: 11/12/2019



**PLAN**  
SCALE: 3/32" = 1'-0"



**TRANSVERSE SECTION**  
SCALE: 3/8" = 1'-0"

83.7 GROVE STREET ESTIMATED SUPERSTRUCTURE REPAIR QUANTITIES	
PARTIAL DEPTH CONCRETE DECK REPAIRS (S.F.)	FASCIA AND OVERHANG REPAIRS (S.F.)
75 S.F.	50 S.F.

**LEGEND:**

- ▨ LIMITS OF PARTIAL DEPTH CONCRETE DECK REPAIRS (REPAIR AREAS TO BE FIELD VERIFIED)
- ▩ LIMITS OF FASCIA AND OVERHANG REPAIRS (REPAIR AREAS TO BE FIELD VERIFIED)

**NOTES:**

1. CONTRACTOR SHALL REPAIR AREAS OF CONCRETE DECK DETERIORATION AS IDENTIFIED BY THE RESIDENT. RESIDENT WILL IDENTIFY AND MARK AREAS FOR DECK REPAIR AFTER THE WEARING SURFACE AND MEMBRANE ARE REMOVED. CONTRACTOR SHALL ALSO REPAIR DETERIORATED AREAS OF FASCIA, FASCIA OVERHANGS, AND PARAPET JOINTS. COORDINATE WORK WITH THE RESIDENT. PAYMENT FOR REPAIR WORK SHALL BE UNDER THE 518 PAY ITEMS. PAYMENT FOR REPAIRS TO THE INTERIOR AND TOP FACES OF THE PARAPET SHALL BE UNDER ITEM 518.80, "PARTIAL DEPTH CONCRETE DECK REPAIRS".
2. ALL PVC DECK WEEPS WHICH DRAIN ONTO PIERS, ABUTMENTS OR STRUCTURAL STEEL SHALL BE EXTENDED AND DIVERTED AWAY FROM BRIDGE COMPONENTS BELOW DECK, AND SHALL EXTEND 1 FT BELOW BOTTOM FLANGE, AS DIRECTED BY THE RESIDENT. PAYMENT SHALL BE MADE UNDER PAY ITEM 502.7011 "WEEP DRAIN EXTENSIONS".
3. A BEAD OF HOT-APPLIED RUBBERIZED ASPHALT SEALER SHALL BE APPLIED ALONG CURB LINES AFTER INSTALLATION OF BASE COURSE. PAYMENT SHALL NOT BE MADE DIRECTLY BUT SHALL BE CONSIDERED INCIDENTAL TO RELATED CONTRACT ITEMS.
4. REPAIR EROSION AT DRAINAGE TROUGHS. DRAINAGE TROUGHS ALONG THE ABUTMENTS SHALL HAVE ALL SAND REMOVED AND SEALANTS REPLACED. PAYMENT SHALL BE INCIDENTAL TO THE CONTRACT.
5. ALL DISTURBED SLOPES BENEATH THE BRIDGE THAT ARE UNLIKELY TO GROW SIGNIFICANT VEGETATION DUE TO SHADE SHALL BE COVERED WITH EROSION CONTROL MIX AS DIRECTED BY THE RESIDENT. PAYMENT FOR REQUIRED SLOPE REPAIRS WILL BE PAID FOR UNDER ITEM 619.1401 "EROSION CONTROL MIX".
6. MODIFY BRIDGE DRAIN GRATE AND EXTEND DOWNSPOUTS. FOR BRIDGE DRAIN GRATE MODIFICATION NOTES AND DETAILS, SEE TO SHEET "MISCELLANEOUS DETAILS SHEET 1 OF 2".

Filename: ...MM\_83.7\_Typical\_Deck\_Plan\_Section.DGN

Scale: AS NOTED			
No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

By	Date	By	Date
DSM	9/2019	BLT	9/2019
Drawn	SAM	In Charge of	DSM
	9/2019		10/2019

T.Y. Lin International  
12 Northbrook Drive  
Building A, Suite One  
Falmouth, Maine 04105  
TEL: (207) 781-4721  
FAX: (207) 781-4753

**MAINE TURNPIKE**

**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

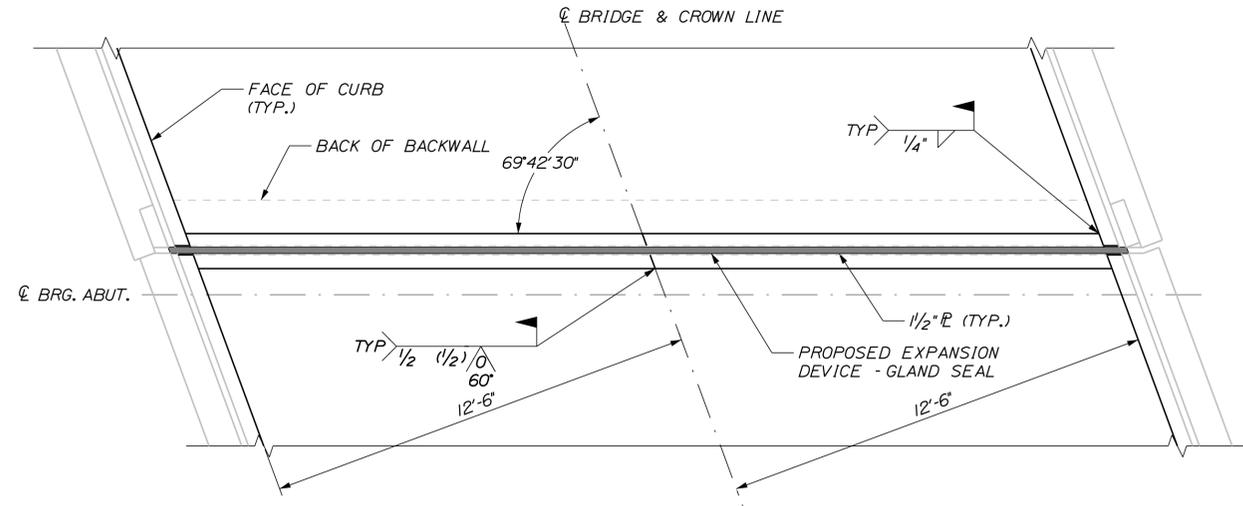
GROVE STREET (MM 83.7)  
DECK PLAN & SECTION

SHEET NUMBER: GS-02

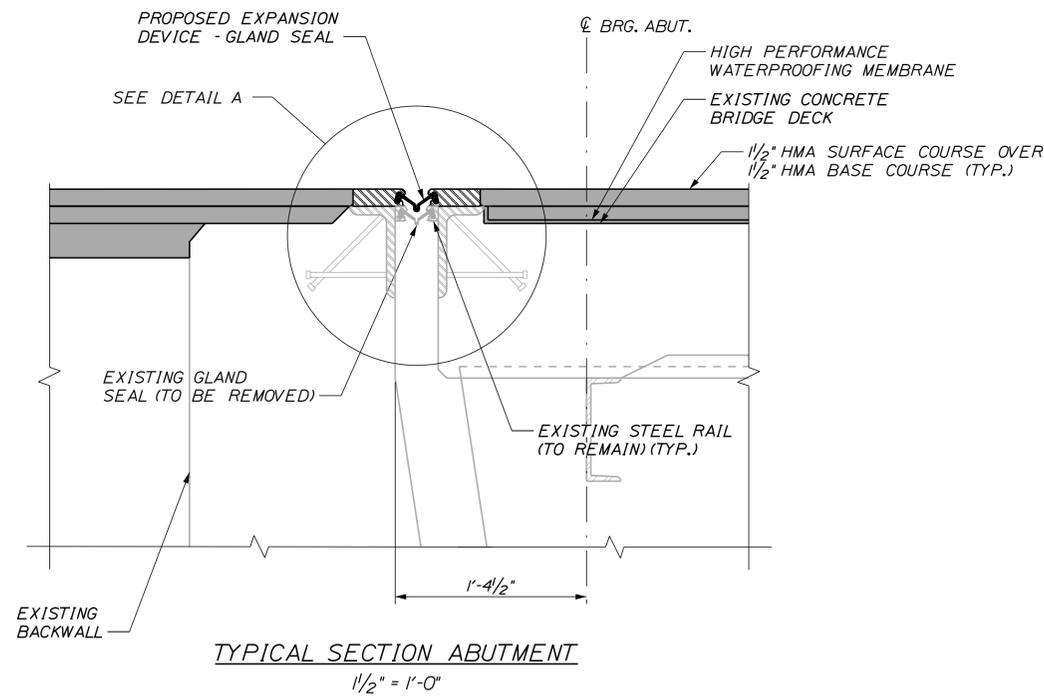
CONTRACT: 2020.07

29 OF 37

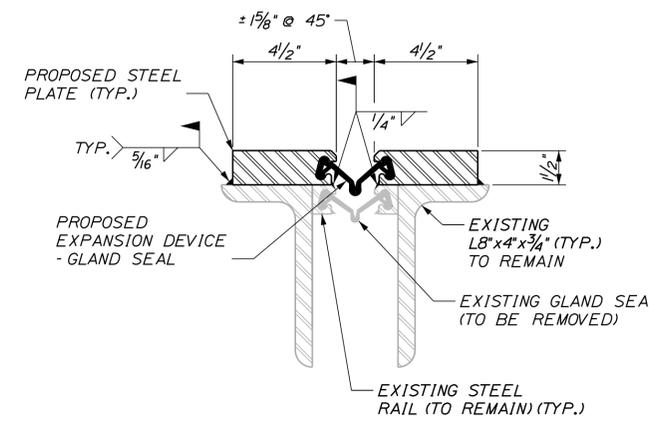
Date: 11/12/2019



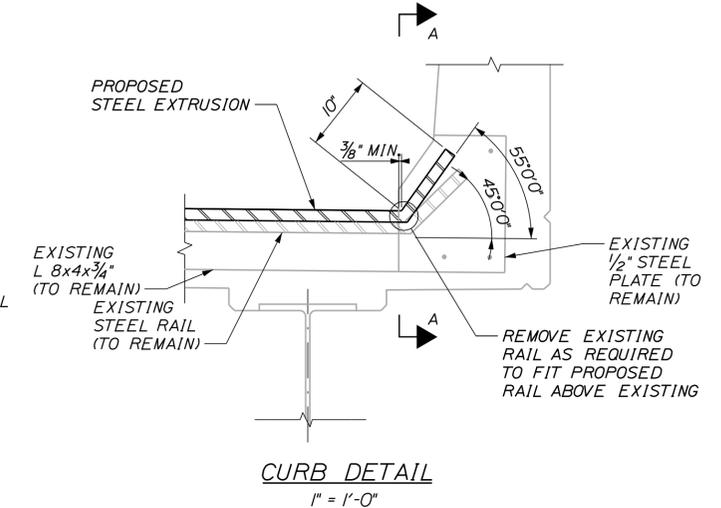
**ABUTMENT PLAN - GROVE STREET**  
(ABUTMENT 1 SHOWN, ABUTMENT 2 SIMILAR)  
SCALE: 3/8" = 1'-0"



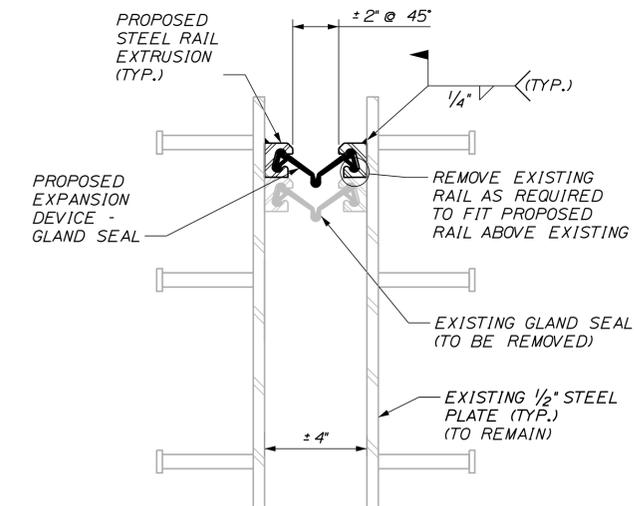
**TYPICAL SECTION ABUTMENT**  
1/2" = 1'-0"



**DETAIL A**  
3" = 1'-0"



**CURB DETAIL**  
1" = 1'-0"



**SECTION A-A**  
3" = 1'-0"  
(CONCRETE NOT SHOWN)

**EXPANSION JOINT NOTES:**

1. ALL STEEL COMPONENTS SHALL BE UNCOATED AASHTO M270 GRADE 36, UNLESS OTHERWISE NOTED.
2. CONTRACTOR SHALL FIELD MEASURE EXISTING CURB PLATE AND JOINT DIMENSIONS PRIOR TO DEVELOPMENT OF SHOP DRAWINGS.
3. EXPANSION JOINT MODIFICATIONS AT EACH ABUTMENT SHALL BE PAID UNDER ITEM 520.213, "EXPANSION DEVICE MODIFICATIONS, (GROVE STREET)".
4. THE ELASTOMERIC STRIP SEAL SHALL HAVE A MINIMUM RANGE OF MOVEMENT OF 3 INCHES. STRIP SEAL SHALL BE D.S. BROWN A2R-400 OR WATSON BOWMAN ACME SE-400.

Filename: ... \xxx\_MM\_83.7\_Joint\_Repair.dgn

Scale: AS NOTED			
No.	Revision	By	Date

Designed by: <b>TYLIN INTERNATIONAL</b>					
CONSULTANT PROJECT MANAGER: Daniel S. Myers					
	By	Date		By	Date
Designed	DSM	9/2019	Checked	BLT	9/2019
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
12 Northbrook Drive  
Building A, Suite One  
Falmouth, Maine 04105  
TEL: (207) 781-4721  
FAX: (207) 781-4753



**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS  
GROVE STREET (MILE 83.7)  
JOINT REPAIRS

CONTRACT: 2020.07

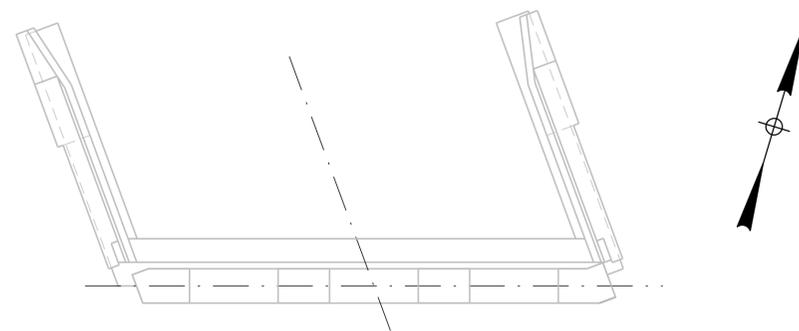
SHEET NUMBER: GS-03

30 OF 37

Date: 11/12/2019

Filename: ...MM\_83.7\_Existing\_Substructures.DGN

ESTIMATED QUANTITY OF REPAIRS			
	ABUT. NO. 1	ABUT. NO. 2	TOTAL
ABUTMENT REPAIRS	0 SF	75 SF	0 SF



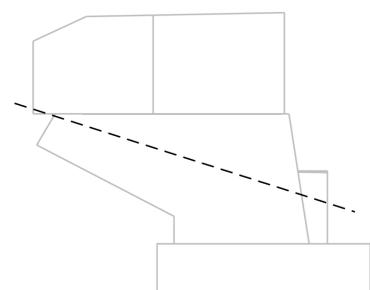
ABUTMENT NO. 1 PLAN

**NOTES:**

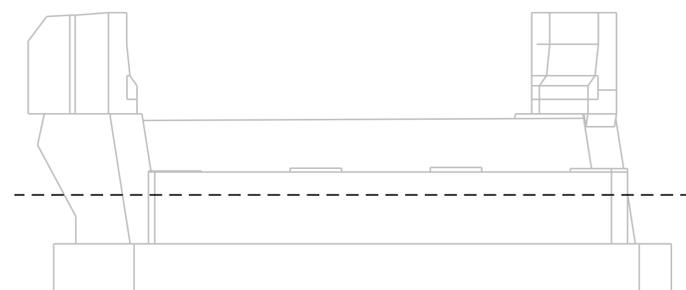
- FOR PROCEDURAL NOTES SEE SHEET "BRIDGE GENERAL NOTES".
- SHOULD CONCRETE REPAIR EXTEND BELOW GRADE, ANY EXCAVATION REQUIRED WILL BE CONSIDERED INCIDENTAL TO ITEM 518.10, "ABUTMENT REPAIRS".

**LEGEND:**

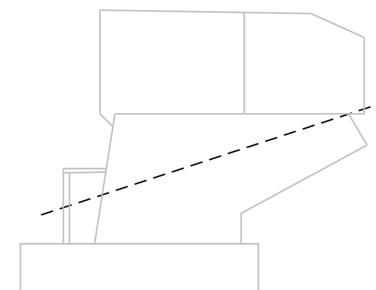
- LIMIT OF CONCRETE SURFACE REPAIRS
- LIMIT OF EPOXY INJECTED CRACK REPAIR
- EXISTING CONCRETE
- EXISTING AND PROPOSED GROUND



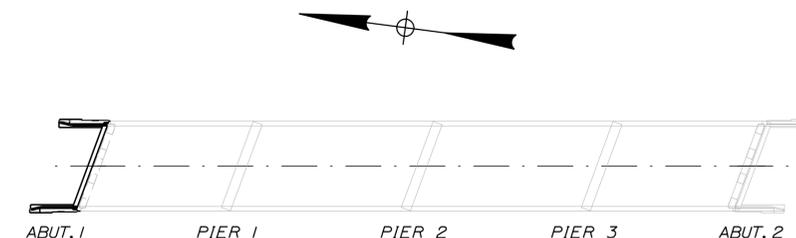
N.W. WINGWALL



ABUTMENT NO. 1 ELEVATION



N.E. WINGWALL



LOCATION PLAN

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TY-LIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date	Checked	By	Date
Designed	DSM	9/2019	BLT	BLT	9/2019
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
 FAX: (207) 781-4753

**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

GROVE STREET (MILE 83.7)  
 SUBSTRUCTURE REPAIRS - 1 OF 5

CONTRACT: 2020.07

SHEET NUMBER: GS-04  
 31 OF 37

Date: 11/12/2019

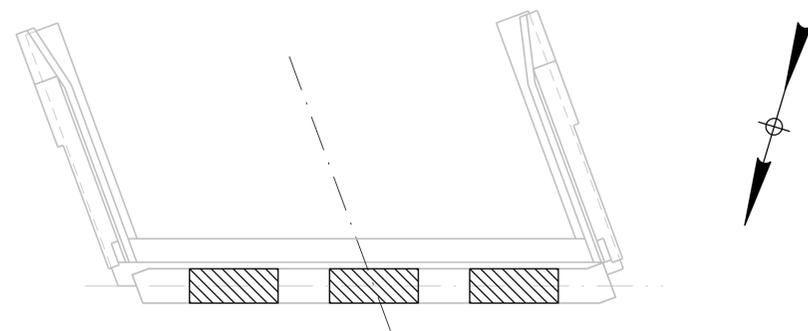
Filename: ...MM\_83.7\_Existing\_Substructures.DGN

**NOTES:**

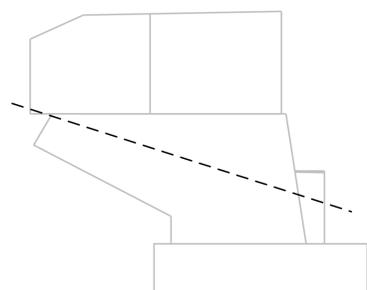
1. FOR PROCEDURAL NOTES SEE SHEET "BRIDGE GENERAL NOTES".
2. SHOULD CONCRETE REPAIR EXTEND BELOW GRADE, ANY EXCAVATION REQUIRED WILL BE CONSIDERED INCIDENTAL TO ITEM 518.10, "ABUTMENT REPAIRS".

**LEGEND:**

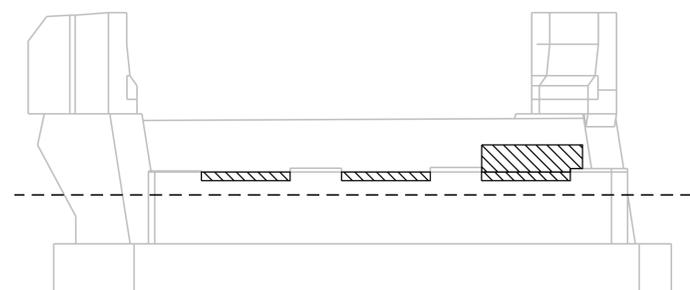
-  LIMIT OF CONCRETE SURFACE REPAIRS
-  LIMIT OF EPOXY INJECTED CRACK REPAIR
-  EXISTING CONCRETE
-  EXISTING AND PROPOSED GROUND



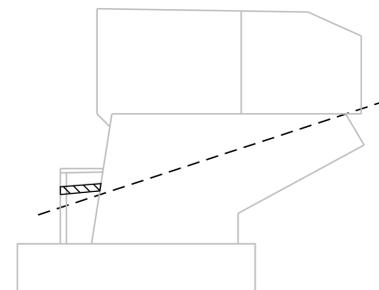
ABUTMENT NO. 2 PLAN



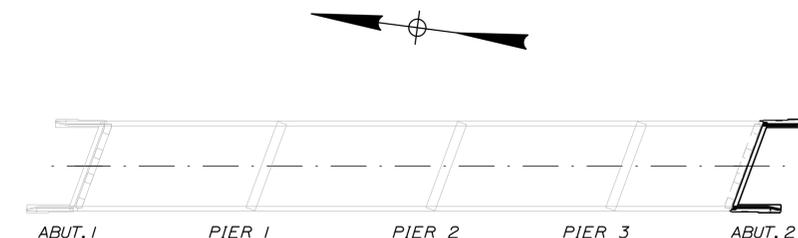
S.E. WINGWALL



ABUTMENT NO. 2 ELEVATION



S.W. WINGWALL



LOCATION PLAN

Scale:			
NOT TO SCALE			
No.	Revision	By	Date

Designed by:					
<b>TY-LIN INTERNATIONAL</b>					
CONSULTANT PROJECT MANAGER: Daniel S. Myers					
	By	Date		By	Date
Designed	DSM	9/2019	Checked	BLT	9/2019
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
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 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
 FAX: (207) 781-4753



**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

GROVE STREET (MILE 83.7)  
 SUBSTRUCTURE REPAIRS - 2 OF 5

SHEET NUMBER: GS-05  
 CONTRACT: 2020.07

32 OF 37

Date: 11/12/2019

Filename: ...MM\_83.7\_Existing\_Substructures.DGN

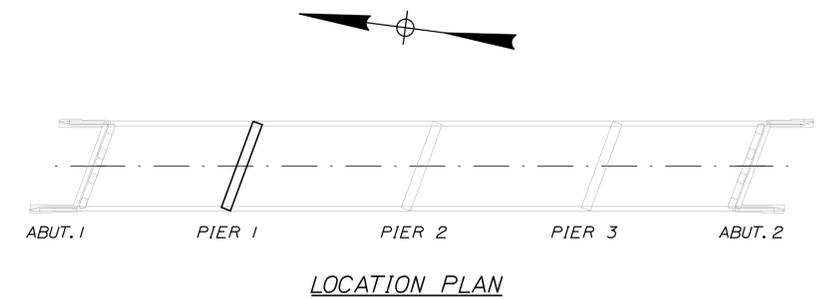
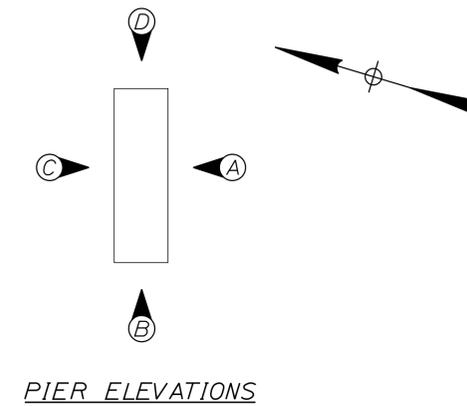
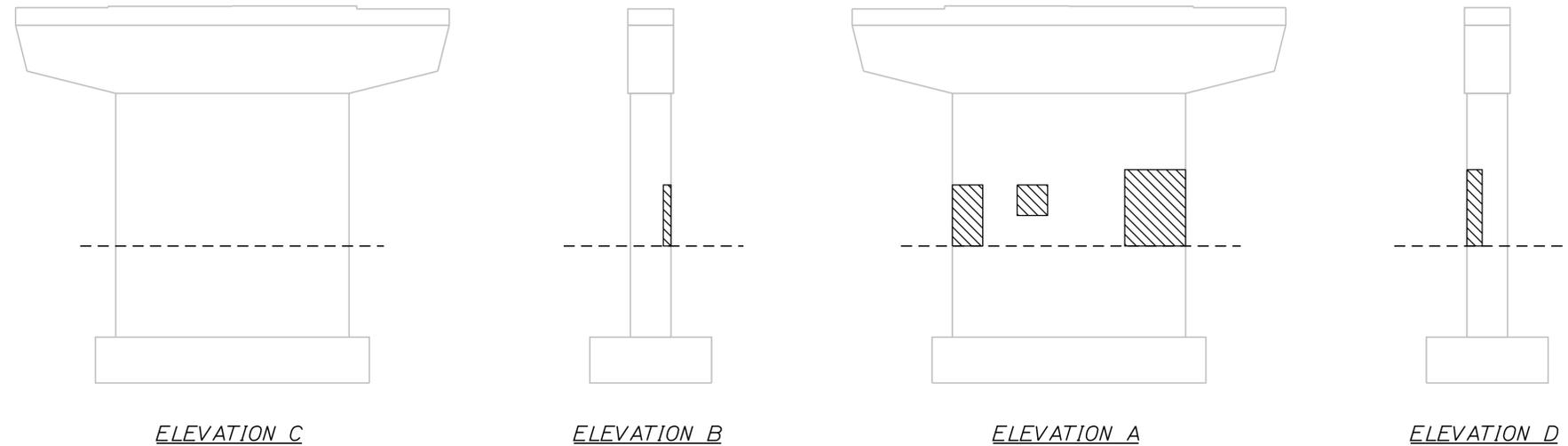
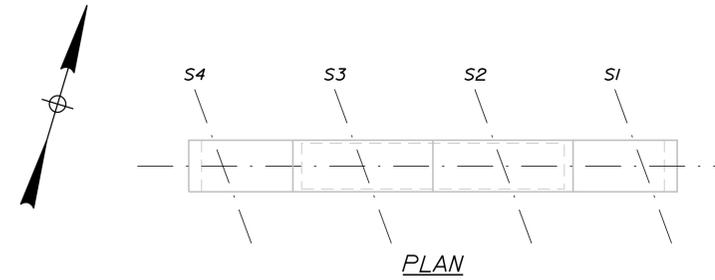
ESTIMATED QUANTITY OF REPAIRS				
	PIER NO. 1	PIER NO. 2	PIER NO. 3	TOTAL
PIER REPAIRS	60 SF	130 SF	15 SF	195 SF

**NOTES:**

- FOR PROCEDURAL NOTES SEE SHEET "BRIDGE GENERAL NOTES".
- SHOULD CONCRETE REPAIR EXTEND BELOW GRADE, ANY EXCAVATION REQUIRED WILL BE CONSIDERED INCIDENTAL TO ITEM 518.20, "PIER REPAIRS".

**LEGEND:**

-  LIMIT OF CONCRETE SURFACE REPAIRS
-  LIMIT OF EPOXY INJECTED CRACK REPAIR
-  EXISTING CONCRETE
-  EXISTING AND PROPOSED GROUND



Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date	By	Date	
Designed	DSM	9/2019	Checked	BLT	9/2019
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

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 Building A, Suite One  
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 TEL: (207) 781-4721  
 FAX: (207) 781-4753



**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

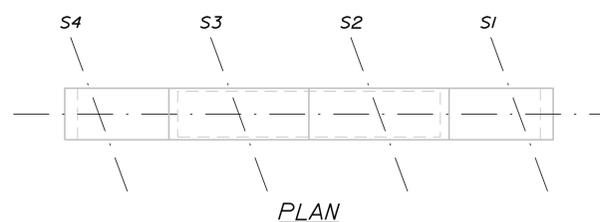
GROVE STREET (MILE 83.7)  
 SUBSTRUCTURE REPAIRS - 3 OF 5

CONTRACT: 2020.07

SHEET NUMBER: GS-06  
 33 OF 37

Date: 11/12/2019

Filename: ...MM\_83.7\_Existing\_Substructures.DGN



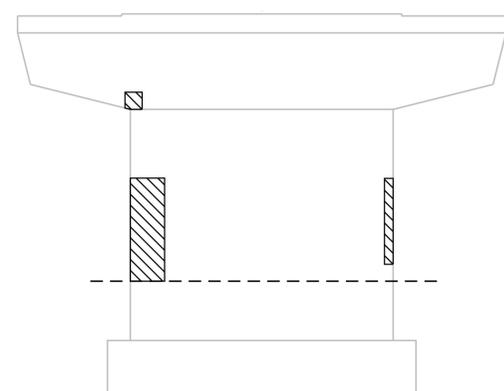
PLAN

**NOTES:**

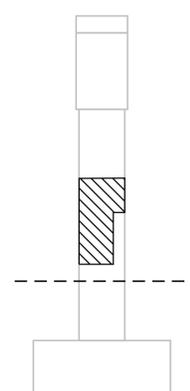
1. FOR PROCEDURAL NOTES SEE SHEET "GENERAL NOTES".
2. SHOULD CONCRETE REPAIR EXTEND BELOW GRADE, ANY EXCAVATION REQUIRED WILL BE CONSIDERED INCIDENTAL TO ITEM 518.20, "PIER REPAIRS".
3. FOR QUANTITY, SEE SHEET "GROVE STREET (MILE 82.7) SUBSTRUCTURE REPAIRS 3 OF 5"

**LEGEND:**

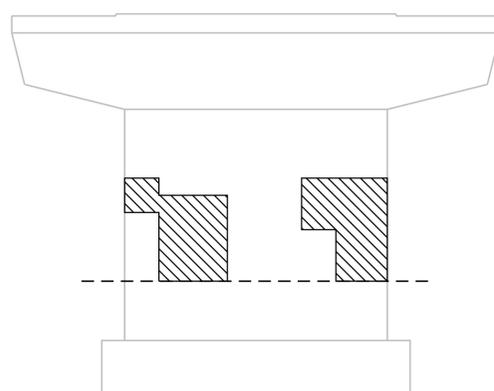
- LIMIT OF CONCRETE SURFACE REPAIRS
- LIMIT OF EPOXY INJECTED CRACK REPAIR
- EXISTING CONCRETE
- EXISTING AND PROPOSED GROUND



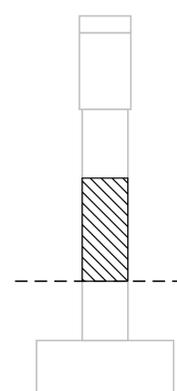
ELEVATION C



ELEVATION B

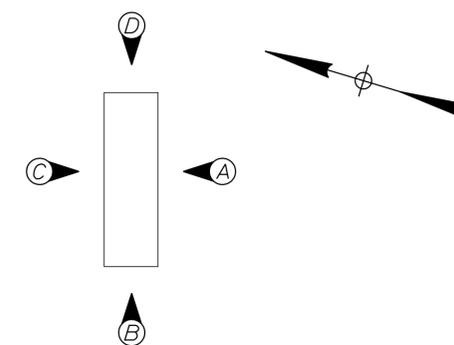


ELEVATION A

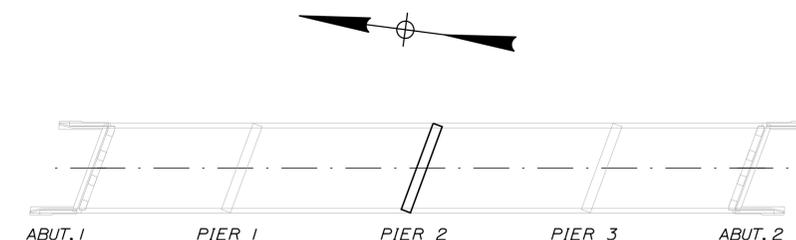


ELEVATION D

PIER 2



PIER ELEVATIONS



LOCATION PLAN

Scale:			
NOT TO SCALE			
No.	Revision	By	Date

Designed by:					
<b>TYLIN INTERNATIONAL</b>					
CONSULTANT PROJECT MANAGER: Daniel S. Myers					
	By	Date		By	Date
Designed	DSM	9/2019	Checked	BLT	9/2019
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

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 Falmouth, Maine 04105  
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 FAX: (207) 781-4753



**THE GOLD STAR  
 MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS  
 GROVE STREET (MILE 83.7)  
 SUBSTRUCTURE REPAIRS - 4 OF 5

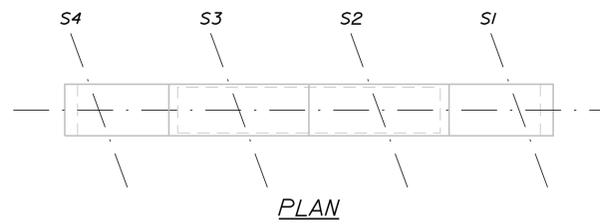
CONTRACT: 2020.07

SHEET NUMBER: GS-07

34 OF 37

Date:11/12/2019

Filename: ...MM\_83.7\_Existing\_Substructures.DGN

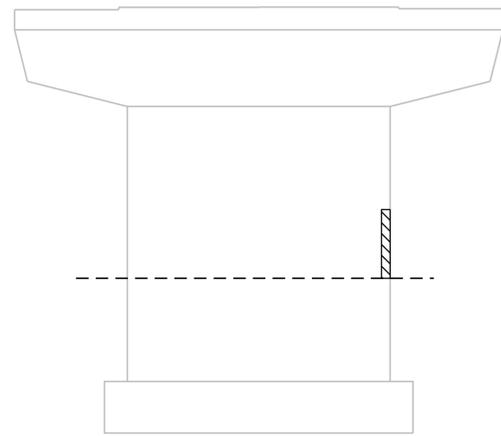


**NOTES:**

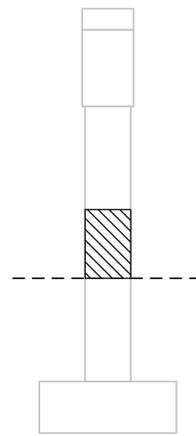
1. FOR PROCEDURAL NOTES SEE SHEET "GENERAL NOTES".
2. SHOULD CONCRETE REPAIR EXTEND BELOW GRADE, ANY EXCAVATION REQUIRED WILL BE CONSIDERED INCIDENTAL TO ITEM 518.20, "PIER REPAIRS".
3. FOR QUANTITY, SEE SHEET "GROVE STREET (MILE 83.7) SUBSTRUCTURE REPAIRS 3 OF 5"

**LEGEND:**

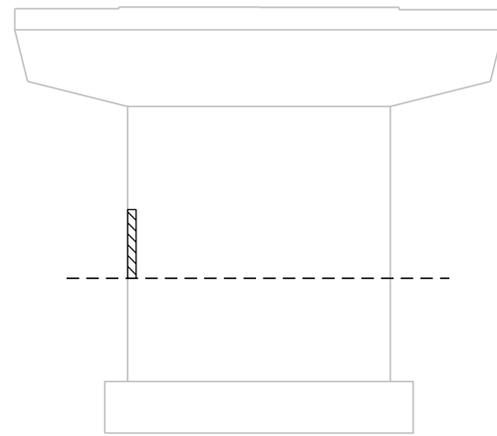
- LIMIT OF CONCRETE SURFACE REPAIRS
- LIMIT OF EPOXY INJECTED CRACK REPAIR
- EXISTING CONCRETE
- EXISTING AND PROPOSED GROUND



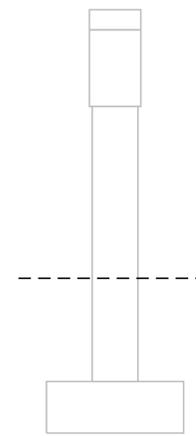
ELEVATION C



ELEVATION B

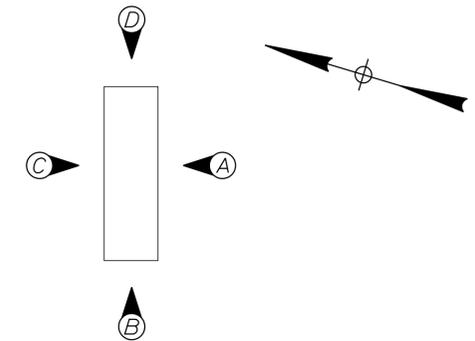


ELEVATION A

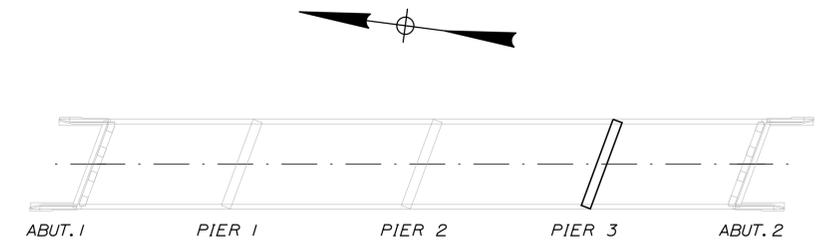


ELEVATION D

PIER 3



PIER ELEVATIONS



LOCATION PLAN

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

**TYLIN INTERNATIONAL**

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date	Checked	By	Date
Designed	DSM	9/2019		BLT	9/2019
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
 12 Northbrook Drive  
 Building A, Suite One  
 Falmouth, Maine 04105  
 TEL: (207) 781-4721  
 FAX: (207) 781-4753



**THE GOLD STAR  
 MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

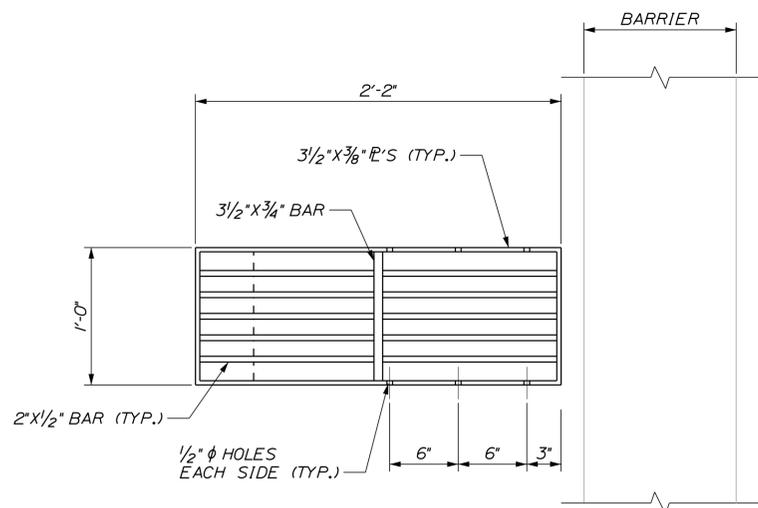
2020 BRIDGE REPAIRS  
 GROVE STREET (MILE 83.7)  
 SUBSTRUCTURE REPAIRS - 5 OF 5

CONTRACT:2020.07

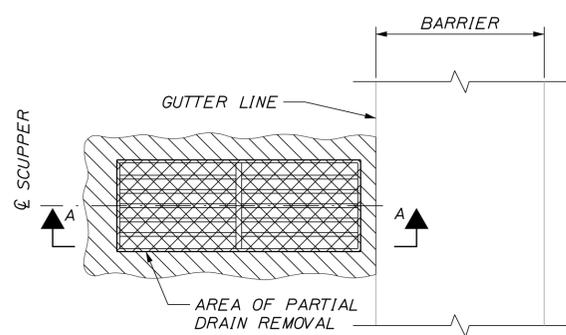
SHEET NUMBER: GS-08

35 OF 37

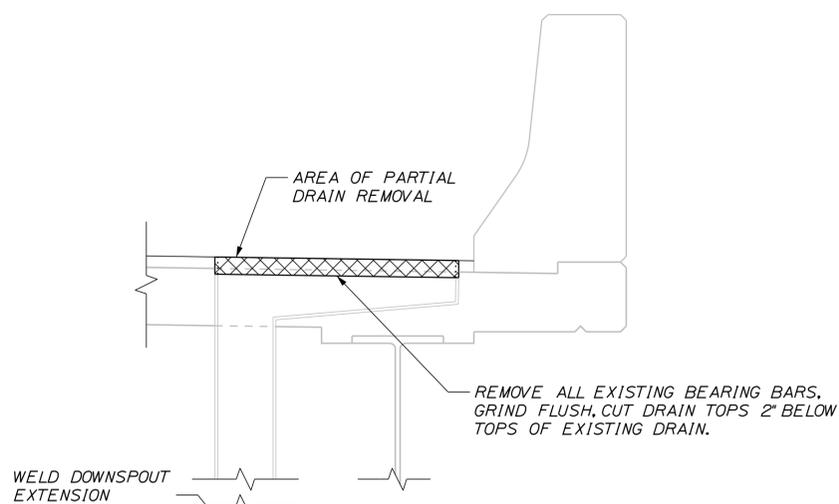
Date: 11/12/2019



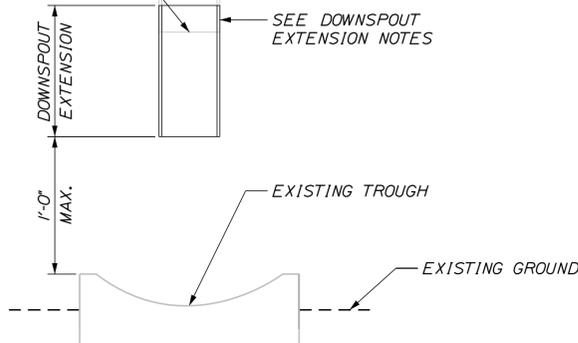
**PROPOSED PLAN**  
NOT TO SCALE



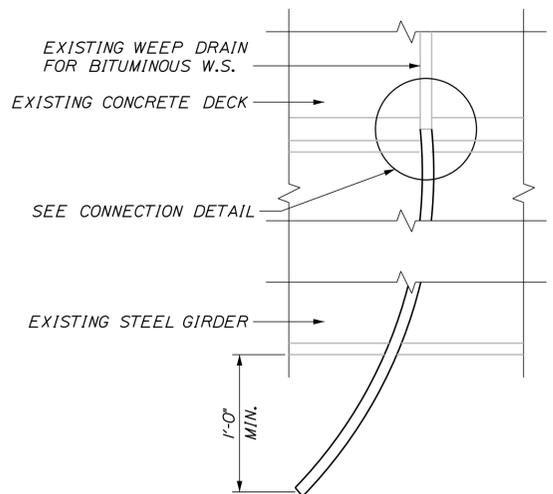
**EXISTING PLAN**  
NOT TO SCALE



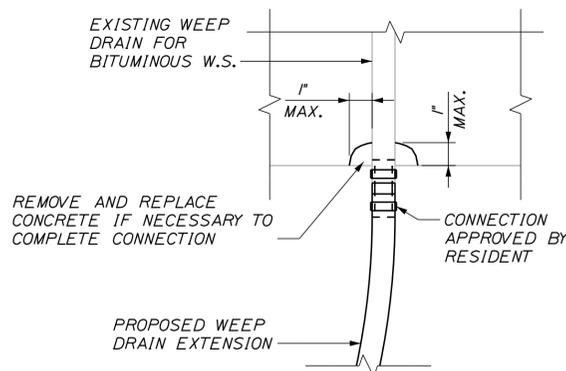
**SECTION A-A**  
NOT TO SCALE



**BRIDGE DRAIN GRATE MODIFICATION**  
(GROVE STREET UNDERPASS BRIDGE)



**WEEP DRAIN EXTENSION**  
SCALE: 3" = 1'-0"



**WEEP DRAIN CONNECTION DETAIL**  
NOT TO SCALE

NOTE: DECK REINFORCEMENT NOT SHOWN FOR CLARITY

**DOWNSPOUT EXTENSION NOTES:**

1. PRIOR TO STARTING THE WORK THE CONTRACTOR SHALL FIELD MEASURE EACH DRAIN. THIS INFORMATION SHALL BE USED FOR THE FABRICATION OF THE DOWNSPOUT EXTENSIONS.
2. DOWNSPOUT EXTENSIONS SHALL CONFORM TO ASTM A 36 AND SHALL BE HOT DIP GALVANIZED AFTER FABRICATION. IN ACCORDANCE WITH ASTM A 123.
3. PREPARE NEW AND EXISTING DOWNSPOUT FOR FIELD WELD. FIELD WELD THE EXTERIOR PERIMETER JOINTS BETWEEN NEW AND EXISTING DOWNSPOUTS. THE INTERIOR AND EXTERIOR OF THE NEW DOWNSPOUT WELDS SHALL BE COATED WITH AN APPROVED COLD GALVANIZING COMPOUND AFTER WELDING.
4. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS ASSOCIATED WITH THE BRIDGE DRAIN MODIFICATION WILL BE UNDER ITEM 502.701, "BRIDGE DRAIN GRATE MODIFICATION."

**BRIDGE DRAIN GRATE MODIFICATION NOTES:**

1. PRIOR TO STARTING THE WORK THE CONTRACTOR SHALL FIELD MEASURE EACH DRAIN. THIS INFORMATION SHALL BE USED FOR THE FABRICATION OF THE DRAIN GRATE EXTENSIONS.
2. CONTRACTOR SHALL CLEANLY CUT AND REMOVE THE TOP OF EXISTING DRAINS 2" BELOW EXISTING TOP OF DRAIN. THE DECK CONCRETE AROUND THE FULL PERIMETER OF THE DRAIN SHALL BE MECHANICALLY REMOVED TO A MINIMUM DEPTH OF 1 1/2" BY A MINIMUM WIDTH OF 3".
3. ALL PLATES SHALL CONFORM TO ASTM A 36. DRAIN GRATE EXTENSIONS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A 123.
4. ALIGNMENT TABS ARE OPTIONAL. AFFIX AND GALVANIZE WITH DRAIN GRATE EXTENSIONS, IF USED.
5. PREPARE EXISTING DRAIN BODY AND NEW DRAIN TOP GRATE EXTENSION FOR FIELD WELD. FIELD WELD THE EXTERIOR PERIMETER JOINT BETWEEN EXISTING DRAIN BODY AND NEW TOP OF DRAIN AFTER WELDING. THE INTERIOR AND EXTERIOR OF THE NEW TOP OF DRAIN SHALL BE COATED WITH AN APPROVED COLD GALVANIZING COMPOUND.
6. AREAS OF CONCRETE REMOVAL SHALL BE PATCHED USING A SHALLOW CONCRETE PATCHING MATERIAL SELECTED FROM THE MTA APPROVED PRODUCTS LIST. CONCRETE PATCH SHALL BE PLACED, FINISHED AND CURED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
7. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS ASSOCIATED WITH THE BRIDGE DRAIN MODIFICATION WILL BE UNDER ITEM 502.701, "BRIDGE DRAIN GRATE MODIFICATION."

**WEEP DRAIN EXTENSION NOTES:**

1. ALL PVC DECK WEEPS WHICH DRAIN ONTO PIERS, ABUTMENTS OR STRUCTURAL STEEL SHALL BE EXTENDED AND DIVERTED AWAY FROM BRIDGE COMPONENTS BELOW DECK, AND SHALL EXTEND 1 FT BELOW BOTTOM FLANGE, AS DIRECTED BY THE RESIDENT. PAYMENT SHALL BE MADE UNDER PAY ITEM 502.701, "WEEP DRAIN EXTENSIONS".

Filename: ... \MSTA\xxx\_Misc\_Details\_1.dgn

Scale:			
AS NOTED			
No.	Revision	By	Date

Designed by:					
<b>TYLIN INTERNATIONAL</b>					
CONSULTANT PROJECT MANAGER: Daniel S. Myers					
	By	Date		By	Date
Designed	DSM	9/2019	Checked	BLT	9/2019
Drawn	SAM	9/2019	In Charge of	DSM	10/2019

T.Y. Lin International  
12 Northbrook Drive  
Building A, Suite One  
Falmouth, Maine 04105  
TEL: (207) 781-4721  
FAX: (207) 781-4753



MAINE  
TURNPIKE

THE GOLD STAR  
MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph C. Norwood, IV

2020 BRIDGE REPAIRS

MISCELLANEOUS DETAILS

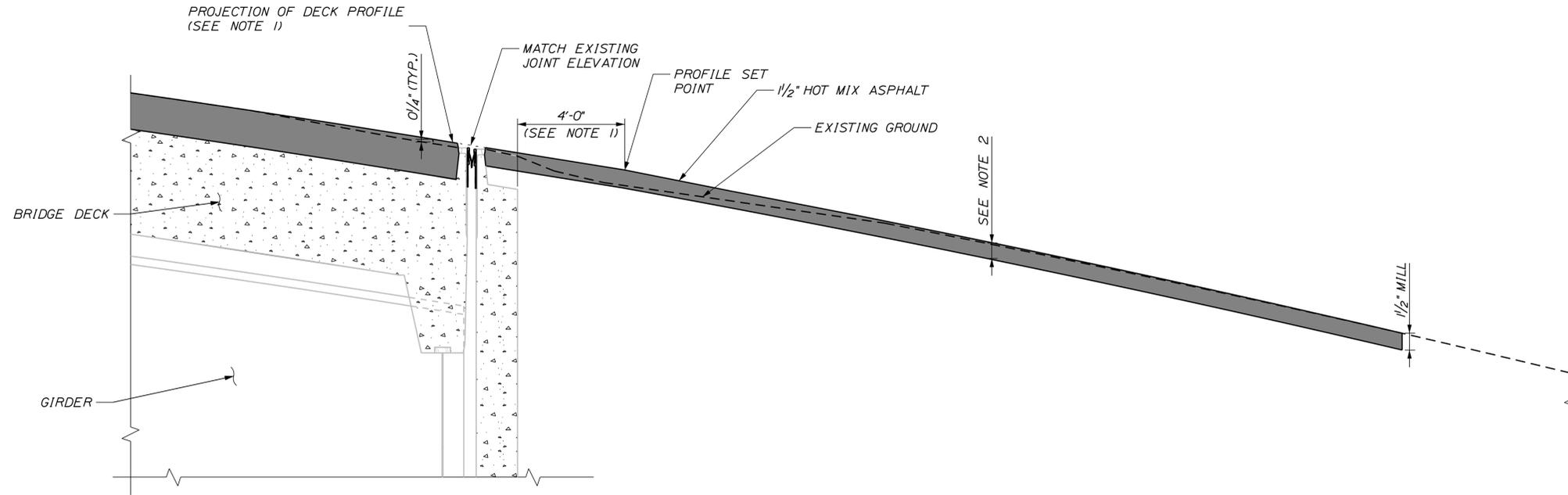
SHEET 1 OF 2

SHEET NUMBER: DET-01

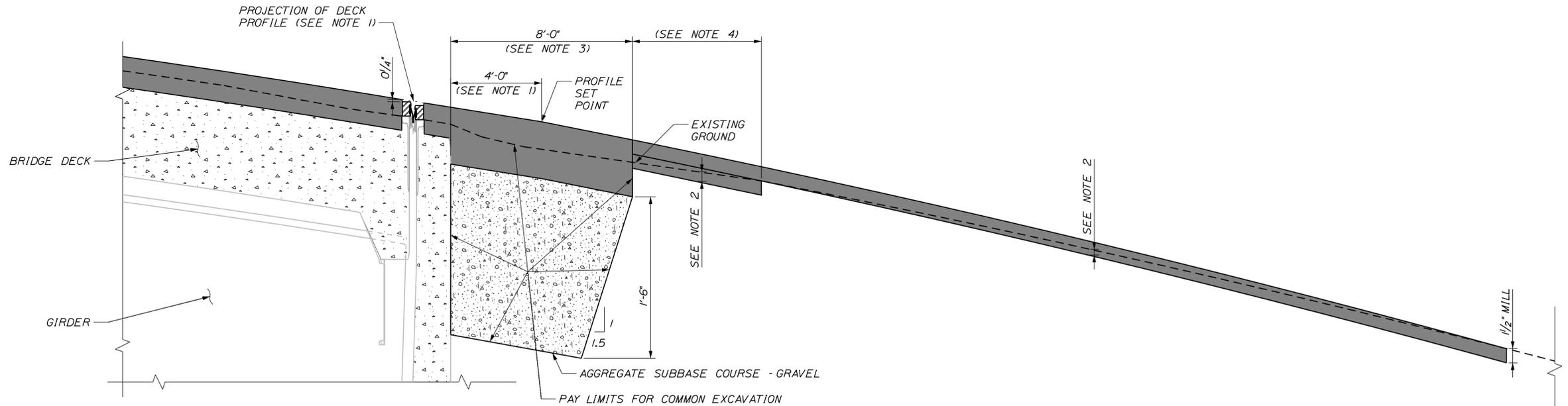
CONTRACT: 2020.07

36 OF 37

Date: 11/12/2019



**PAVING SECTION AT ABUTMENT  
(BOOM ROAD AND BEECH RIDGE ROAD)**  
(BEECH RIDGE ROAD SHOWN, BOOM ROAD SIMILAR)



**EARTHWORK AND PAVING SECTION  
AT ABUTMENT (GROVE STREET)**

**NOTES:**

1. EXTEND DECK PROFILE 4'-0" BEYOND BACKWALL BEFORE BEGINNING TRANSITION TO EXISTING PROFILE.
2. MILL VARIABLE DEPTH BASED ON PROFILE CORRECTION. MILLING AND PROFILE CORRECTION EVALUATION SHALL BE PAID FOR UNDER ITEM 202.202, "REMOVING PAVEMENT SURFACE."
3. PAVEMENT SHALL BE 1/2" HOT MIX ASPHALT SURFACE COURSE OVER 1/2" HOT MIX ASPHALT BASE COURSE OVER 3" HOT MIX ASPHALT BASE COURSE.
4. MILL VARIABLE DEPTH AND PAVE A 1/2" HOT MIX ASPHALT BASE COURSE. LENGTH SHALL BE AS DIRECTED BY THE RESIDENT BASED ON STRING-LINE MEASUREMENTS TO ACHIEVE A UNIFORM 1/2" HOT MIX ASPHALT SURFACE COURSE. PAYMENT SHALL BE MADE UNDER ITEM 403.213, "HOT MIX ASPHALT, 12.5mm NOMINAL MAXIMUM SIZE (BASE AND INTERMEDIATE COURSE)."

Filename: ... \MSTA\xxx\_Misc\_Details\_2.dgn

Scale: 3/8" = 1'-0" HORIZONTALLY  
VERTICAL SCALE EXAGGERATED 5 TIMES

Designed by:

**TYLIN INTERNATIONAL**

T.Y. Lin International  
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TEL: (207) 781-4721  
FAX: (207) 781-4753



**THE GOLD STAR  
MEMORIAL HIGHWAY**

2020 BRIDGE REPAIRS

MISCELLANEOUS DETAILS  
SHEET 2 OF 2

No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: Daniel S. Myers

	By	Date		By	Date
Designed	DSM	9/2019	Checked	BLT	10/2019
Drawn	DSM	9/2019	In Charge of	DSM	10/2019

MTA PROJECT MANAGER: Ralph C. Norwood, IV

CONTRACT: 2020.07

SHEET NUMBER: DET-02

37 OF 37