

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Eighth Edition 2017.

LIST OF DRAWINGS

Title Sheet	1
Estimated Quantities & General Construction Notes	2
General Plan & Profile	3
Cross Sections	4-10
Bridge Typical Details	11
Right of Way Map	12

TRAFFIC DATA

Current (2014) AADT	2980
Future (2039) AADT	3780
DHV - % of AADT	9
Design Hour Volume	338
Heavy Trucks (% of AADT)	15
Heavy Trucks (% of DHV)	11
Directional Distribution (% of DHV)	57
18 kip Equivalent P 2.0	574
18 kip Equivalent P 2.5	603
Design Speed (mph)	55

MATERIALS

Concrete:	
All	Class "A"
Reinforcing Steel	ASTM A 615/A 615M, Grade 60

BASIC DESIGN STRESSES

Concrete	f 'c = 4000 psi
Reinforcing Steel	f y = 60,000 psi

NEW PORTLAND
SOMERSET COUNTY
NEW GREAT WORKS BRIDGE
OVER
LEMON STREAM
ROUTE 27
FEDERAL AID PROJECT NO. 2363100
PROJECT LENGTH 0.085 mi.
BRIDGE NO. 5718

UTILITIES

Central Maine Power
Somerset Telephone Company

MAINTENANCE OF TRAFFIC

Maintain one lane of alternating one - way traffic with staged construction using traffic signals.

PROJECT LOCATION	New Great Works Bridge (#5718) over Lemon Stream. Located 0.06 of a mile south of Colegrove Road. Lat./Long. 44°52'15.8" N 70°7'1.05" W
PROGRAM AREA	Highway-Bridges
OUTLINE OF WORK	Bridge Wearing Surface Replacement and Tee Beam Repair

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
	COMMISSIONER: <i>Joshua Paul Hasbrouck</i>	3/20/19
	CHIEF ENGINEER: <i>Joseph Noel Taylor</i>	3-20-19

STATE OF MAINE DEPARTMENT OF TRANSPORTATION PROFESSIONAL ENGINEER	SIGNATURE <i>Joshua Paul Hasbrouck</i>	P.E. NUMBER 14372	DATE 15 March 2019
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PROJECT INFORMATION	PROGRAM Bridge	PROJECT MANAGER M. Wright	DESIGNER J. Hasbrouck	CONSULTANT	PROJECT RESIDENT CONTRACTOR	PROJECT COMPLETION DATE
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NEW PORTLAND NEW GREAT WORKS BRIDGE	TITLE SHEET
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SHEET NUMBER
1
OF 12

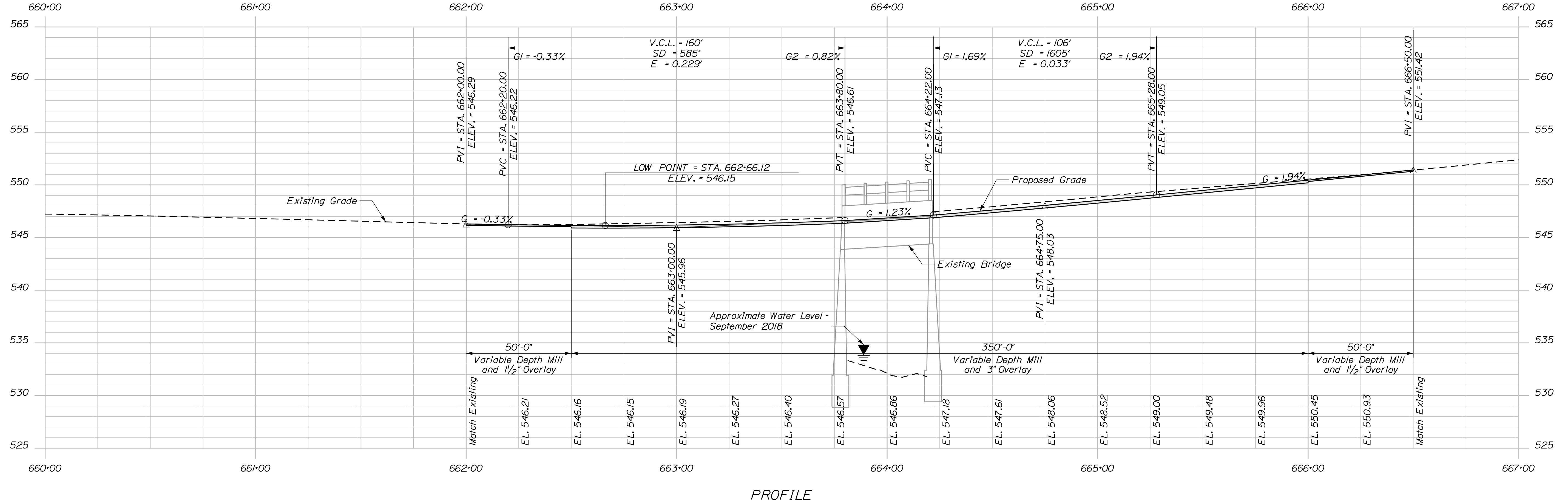
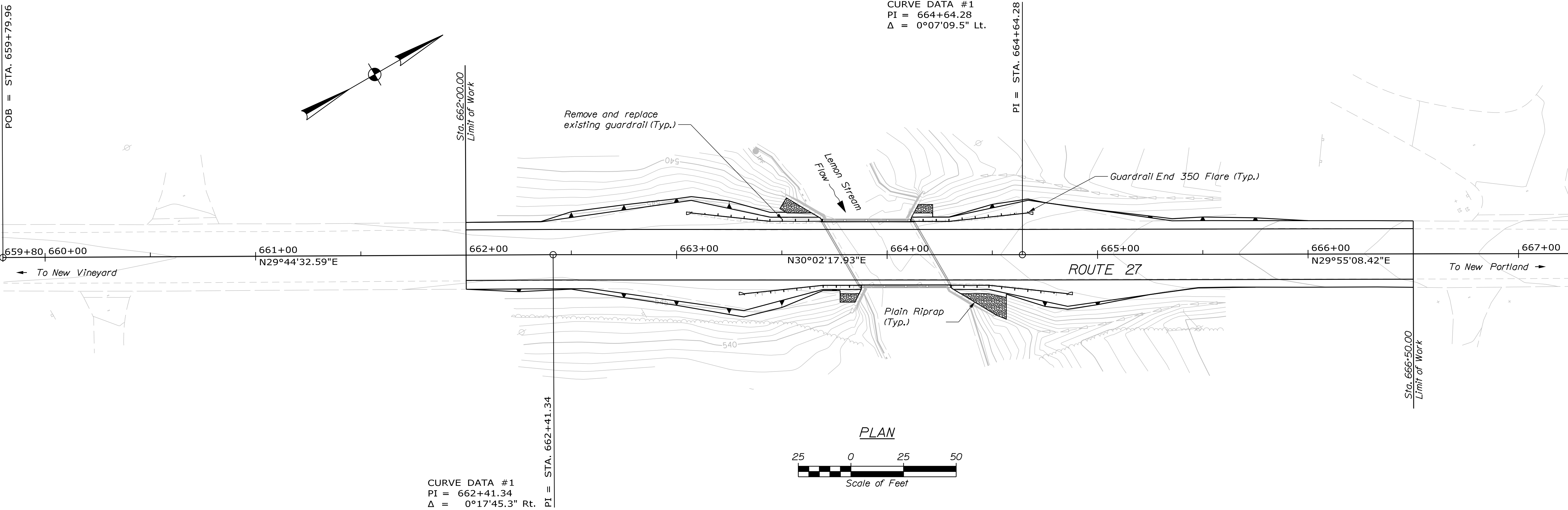
Username: Joshua.P.Hasbrouck Date:3/15/2019

Division: BRIDGE

Filename: \\00\BRIDGE\MSTA\001_Title.dgn

WIN 23631.00

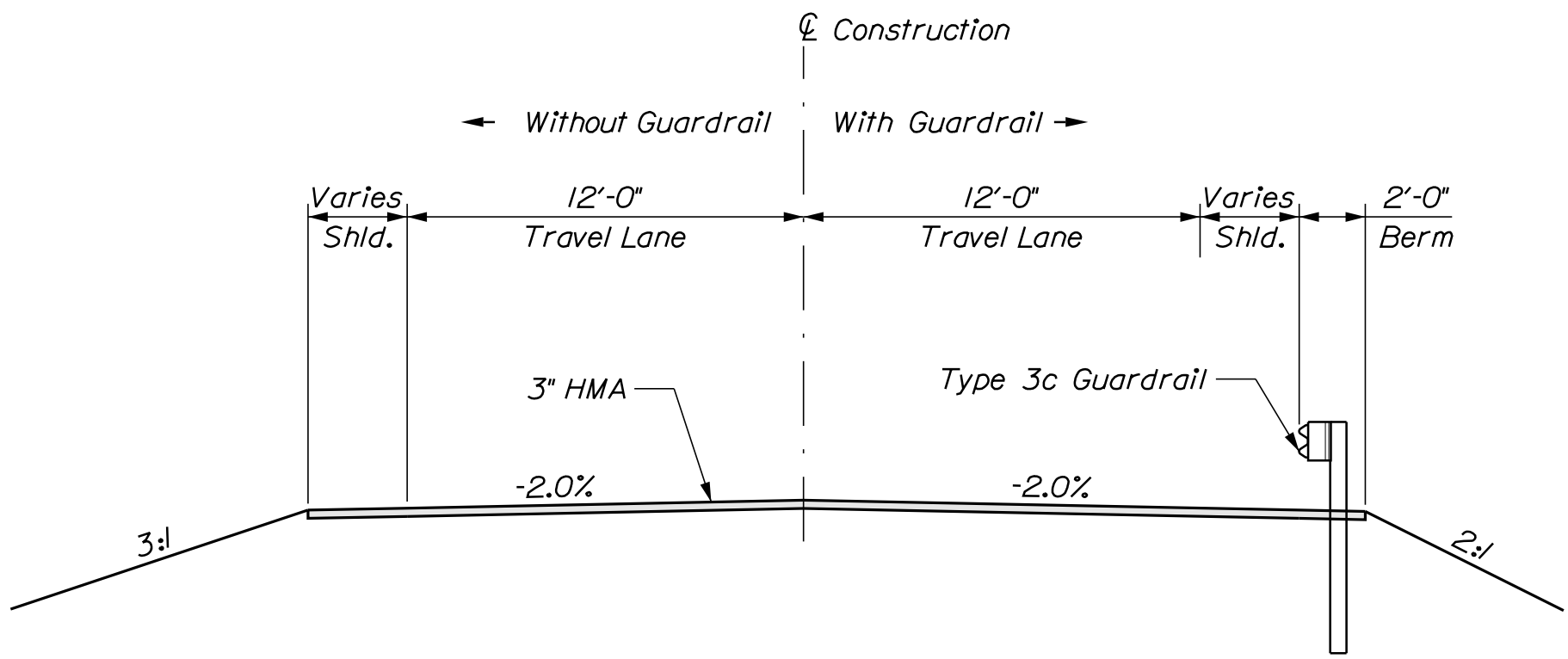
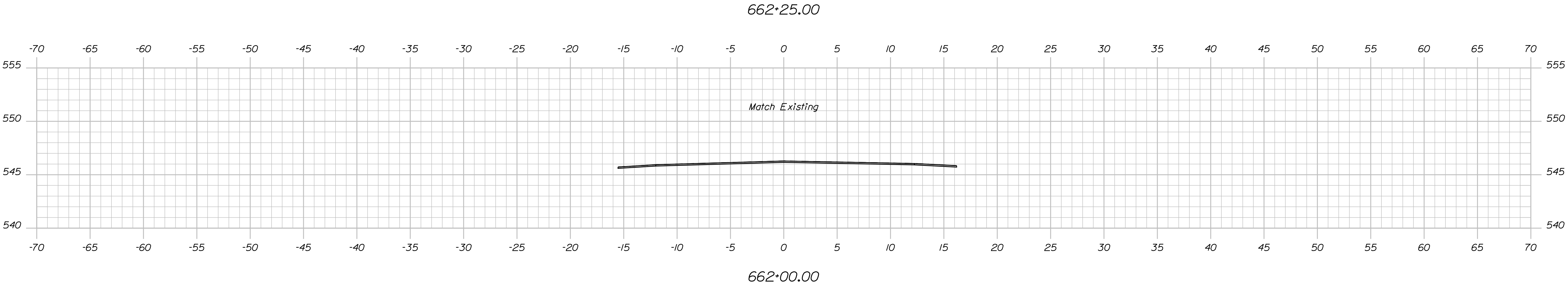
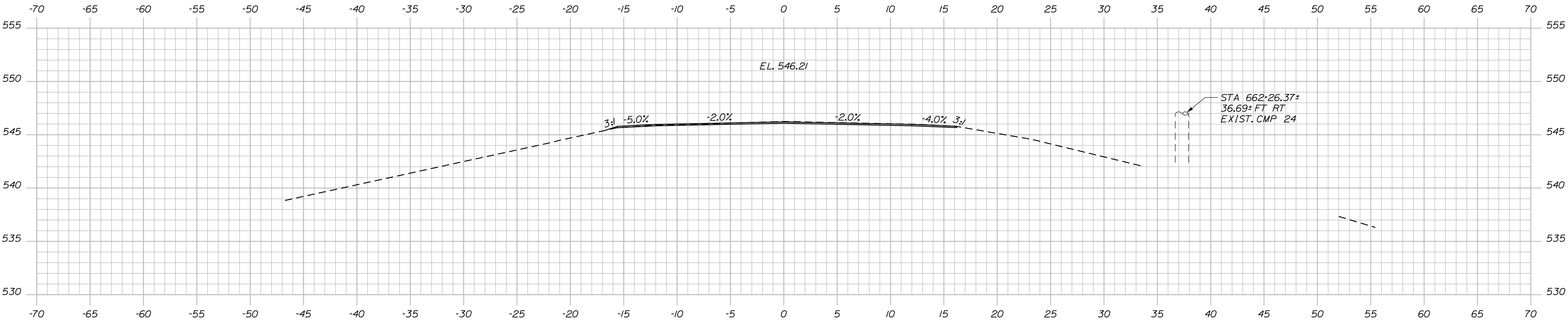
02363100



STATE OF MAINE DEPARTMENT OF TRANSPORTATION	SIGNATURE		DATE
	P.E. NUMBER		DATE
	BRIDGE NO. 5718		BRIDGE PLANS
02363100			
WIN 23631.00			
SHEET NUMBER			
3			
OF 12			

NEW GREAT WORKS BRIDGE
LEMON STREAM
NEW PORTLAND SOMERSET COUNTY

GENERAL PLAN & PROFILE



TYPICAL APPROACH SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

02363100

WIN
23631.00

BRIDGE NO. 5718

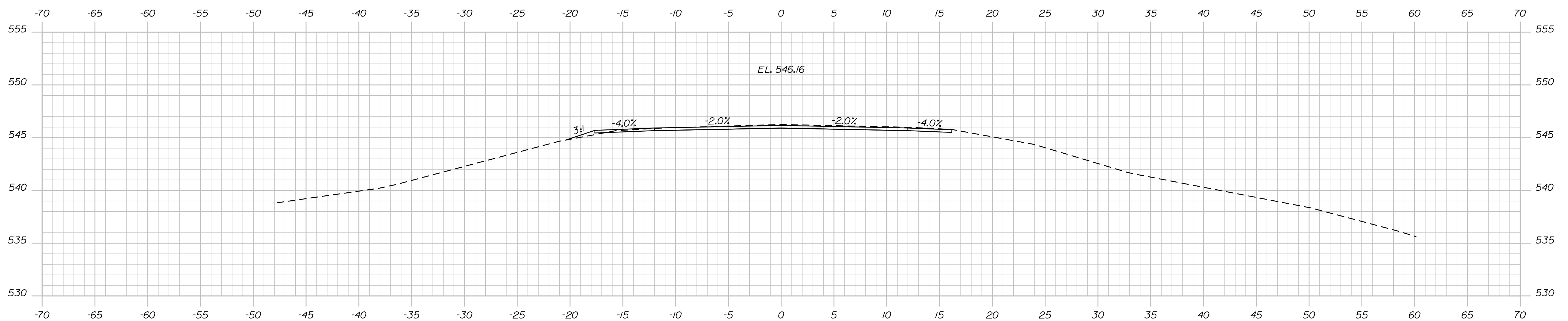
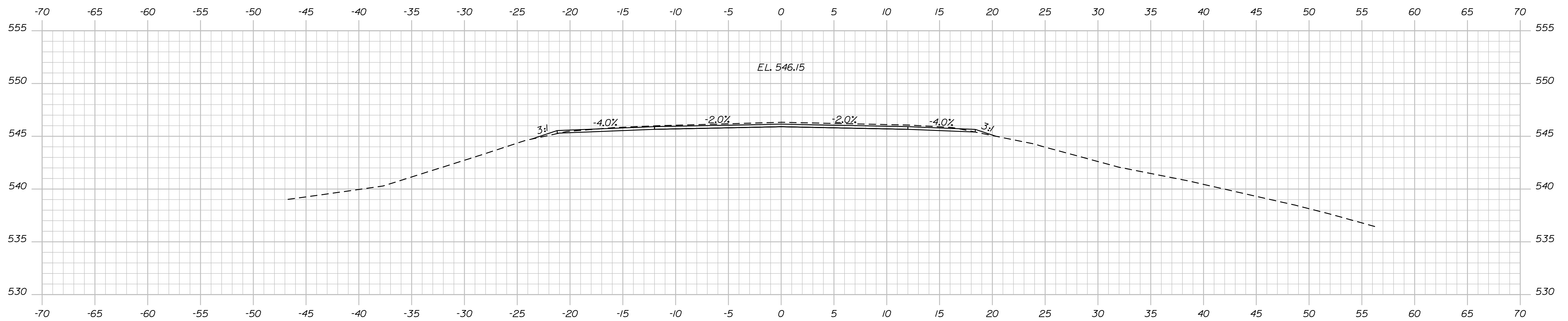
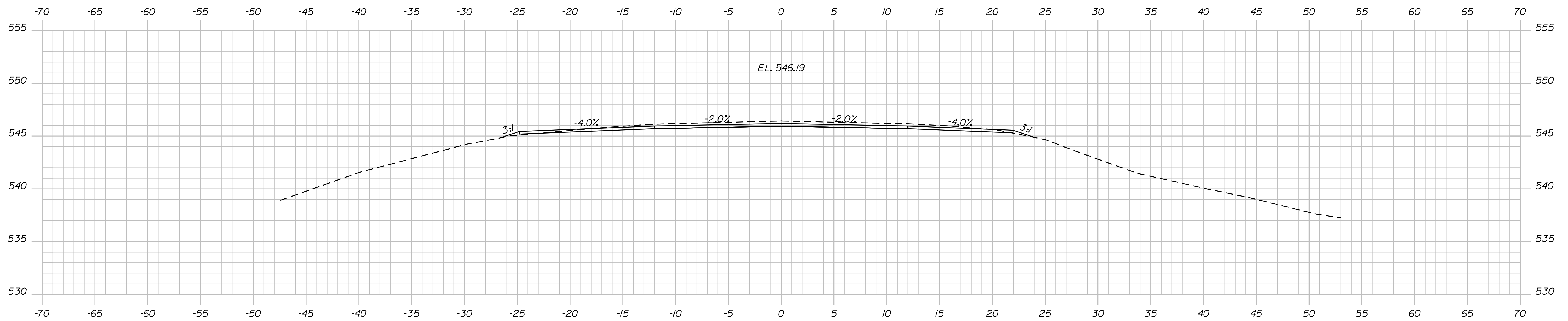
BRIDGE PLANS

PROJ. MANAGER	DESIGN-DETAILED	CHECKED-REVIEWED	BY	DATE
	J. PARADIS	A. PARADIS		MAR 2019
DESIGN-DETAILED	J. PARADIS	A. PARADIS		MAR 2019
DESIGN-DETAILED	J. PARADIS	A. PARADIS		MAR 2019
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

NEW GREAT WORKS BRIDGE
LEMON STREAM
NEW PORTLAND
SOMERSET COUNTY

CROSS SECTIONS

SHEET NUMBER
4
OF 12

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

DEPARTMENT OF TRANSPORTATION

02363100

3631.0

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BRIDGE NO. 5718

BRIDGE PLANS

NEW GREAT WORKS BRIDGE
LEMON STREAM

ND
LEMON SIREAM
SOMFE

[illegible]

CROSS SECTIONS

SHEET NUMBER

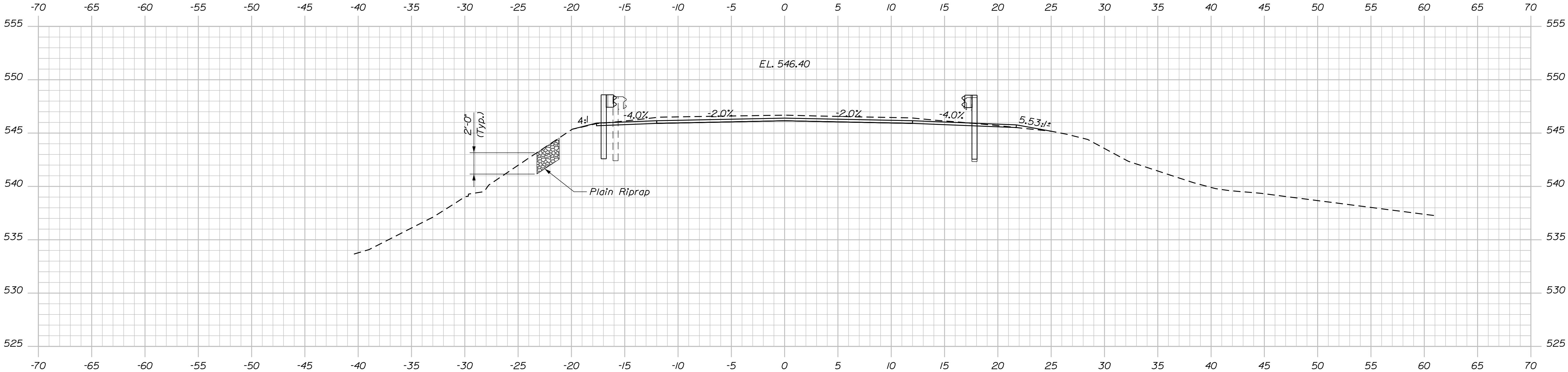
5

F 12

Sta. 662+50.00 to Sta. 663+00.00

Username: Joshua.P.Hasbrouck Date:3/15/2019

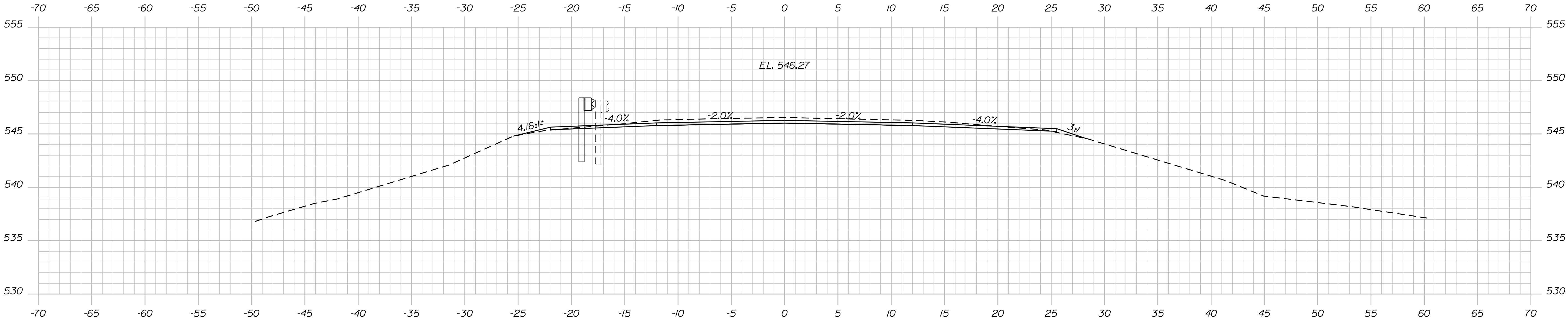
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Sta. 663+44.50±, 15.78 Ft. Lt. to Sta. 663+50.75±, 15.78 Ft. Lt.
Remove Guardrail Type 3B, Modify, and Reset to Guardrail Type 3c
Sta. 663+50.75±, 15.78 Ft. Lt. to Sta. 663+68.00±, 15.78 Ft. Lt.
Remove and Reset Bridge Transition Type 2

663+50.00

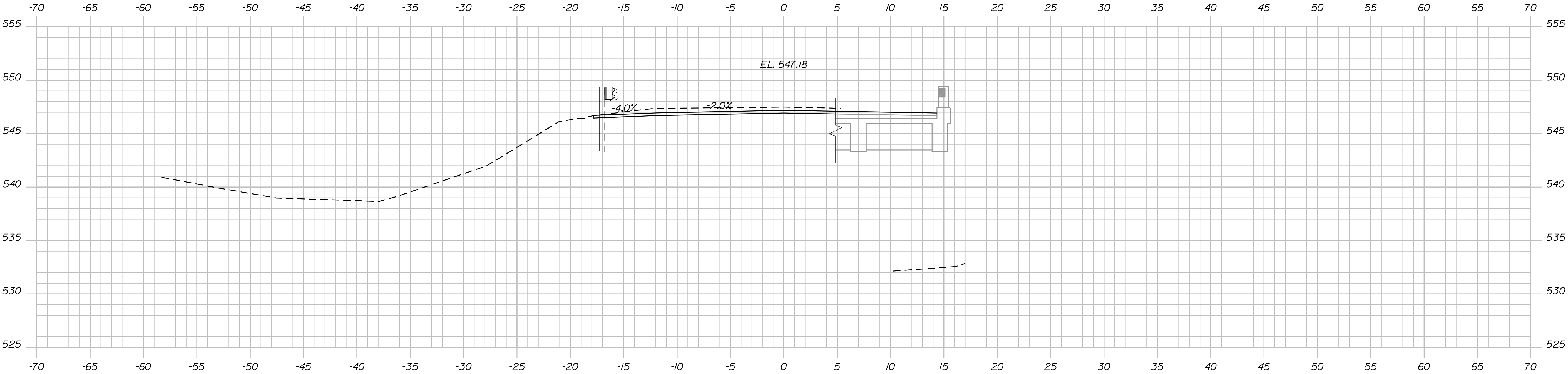
Sta. 663+32.00±, 18.57 Ft. Rt. to Sta. 663+69.50±, 14.55 Ft. Rt.
Install Guardrail 350 Flared End



Sta. 663+07.00±, 19.78 Ft. Lt. to Sta. 663+44.50±, 15.78 Ft. Lt.
Install Guardrail 350 Flared End

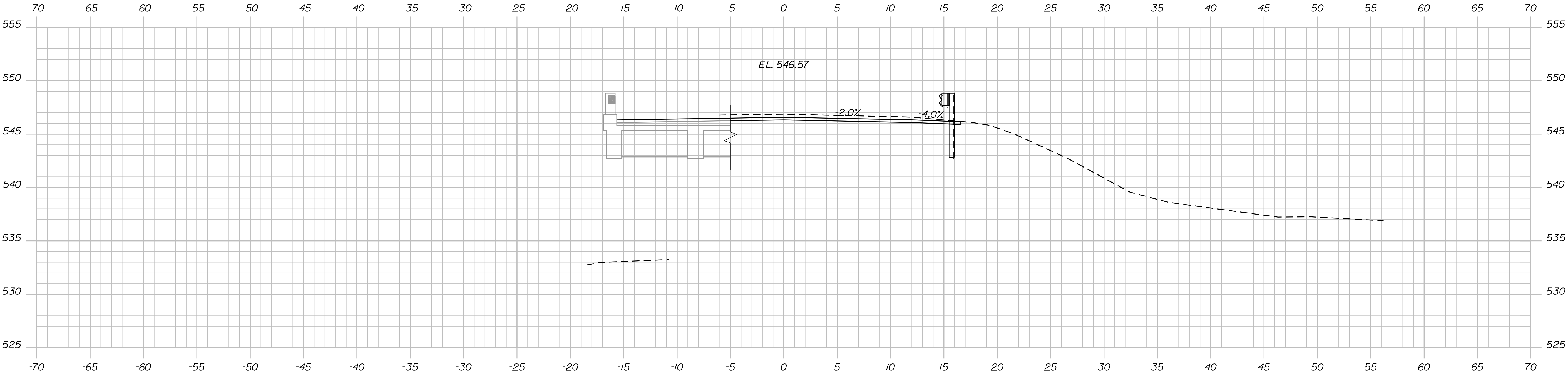
663+25.00

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
02363100		WIN	
BRIDGE NO. 5718		23631.00	
BRIDGE PLANS			
SIGNATURE		P.E. NUMBER	
DATE		DATE	
PROJ. MANAGER		BY	
DESIGN-DETAILED		M. WIGHT	
CHECKED-REVIEWED		J. HASBROUCK	
DESIGN-DETAILED		A. PARADIS	
REVISIONS 1		MAR 2019	
REVISIONS 2		MAR 2019	
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
NEW GREAT WORKS BRIDGE		SOMERSET COUNTY	
LEMON STREAM		CROSS SECTIONS	
NEW PORTLAND			
SHEET NUMBER		6	
OF 12			



Sta. 664+11.38±, 15.81 Ft. Lt. to Sta. 664+29.52±, 15.81 Ft. Lt
Remove and Reset Bridge Transition Type 2

664+25.00



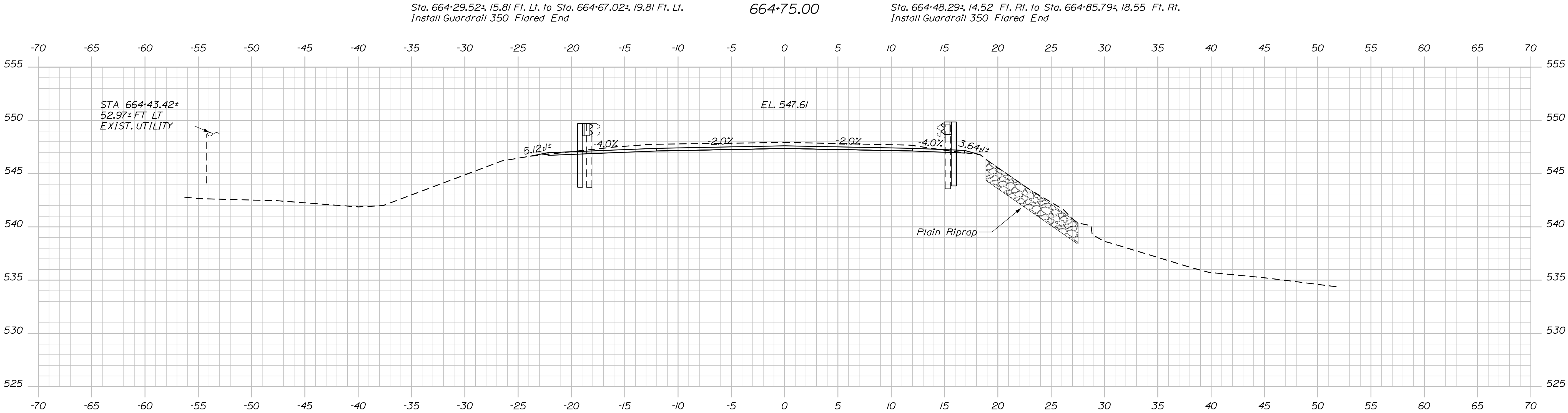
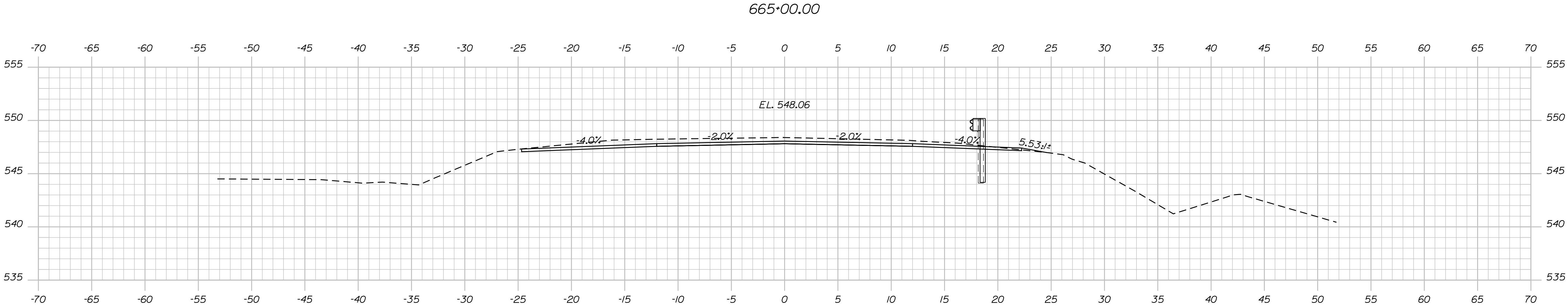
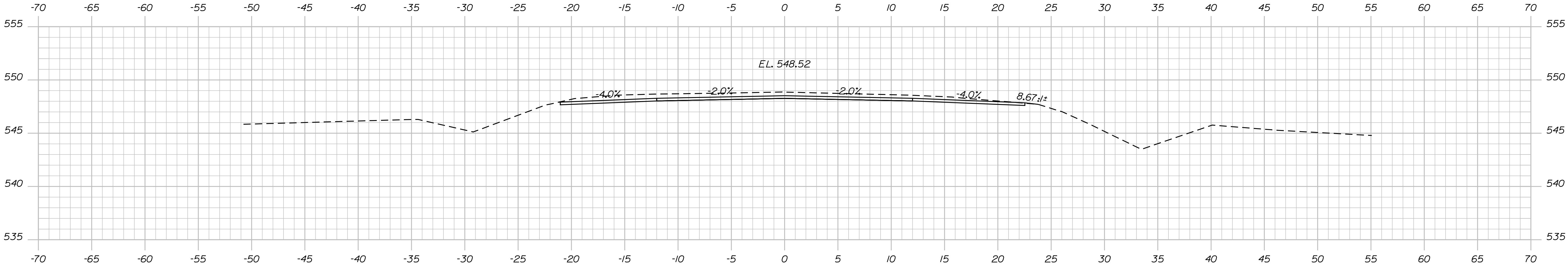
663+75.00

Sta. 663+69.50±, 14.55 Ft. Rt. to Sta. 663+87.26±, 14.55 Ft. Rt
Remove and Reset Bridge Transition Type 2

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	02363100		WIN 23631.00		BRIDGE NO. 5718	BRIDGE PLANS	
	NEW GREAT WORKS BRIDGE LEMON STREAM NEW PORTLAND SOMERSET COUNTY						
							CROSS SECTIONS
SHEET NUMBER						2	
OF 12							

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	J. PARADIS	MAR 2019
CHECKED-REVIEWED	J. PARADIS	MAR 2019
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE	P.E. NUMBER	DATE



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

02363100

WIN
23631.00

BRIDGE NO. 5718

BRIDGE PLANS

NEW GREAT WORKS BRIDGE
LEMON STREAM
NEW PORTLAND SOMERSET COUNTY

CROSS SECTIONS

SHEET NUMBER

8

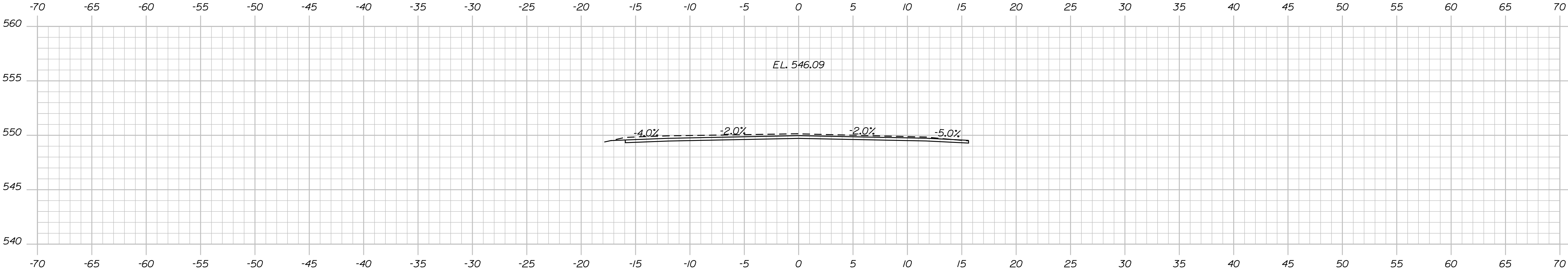
OF 12

PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN-DETAILED	J. HOSBROUCK	A. PARADIS	MAR 2019
CHECKED-REVIEWED	R. MYERS		MAR 2019
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

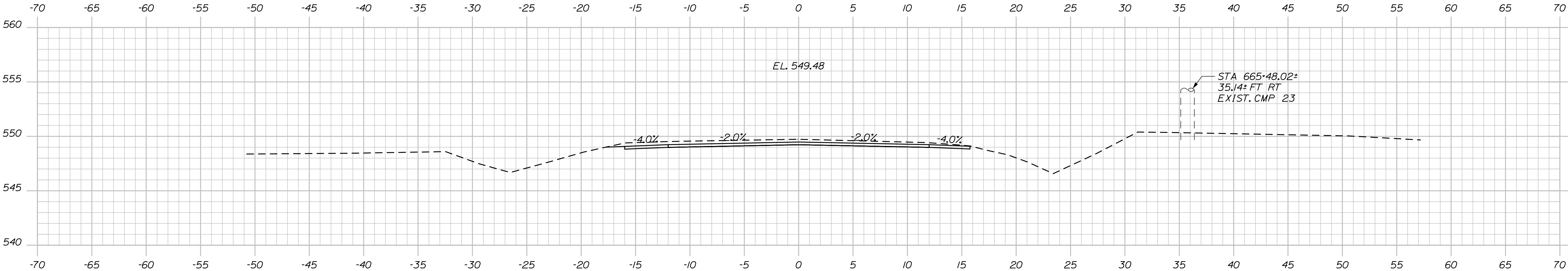
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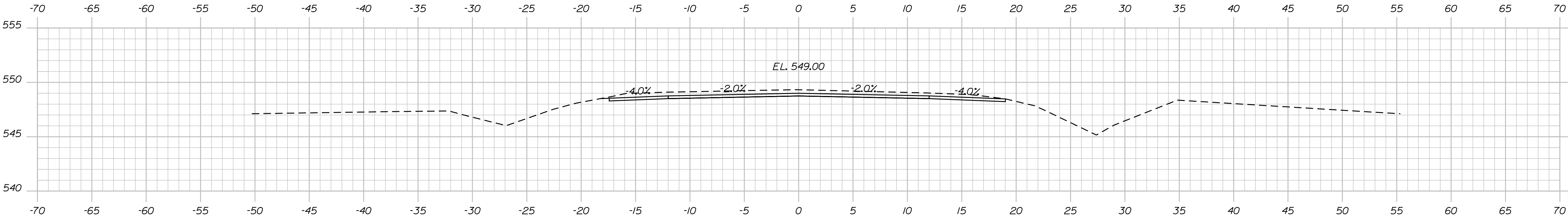
DATE



665+75.00

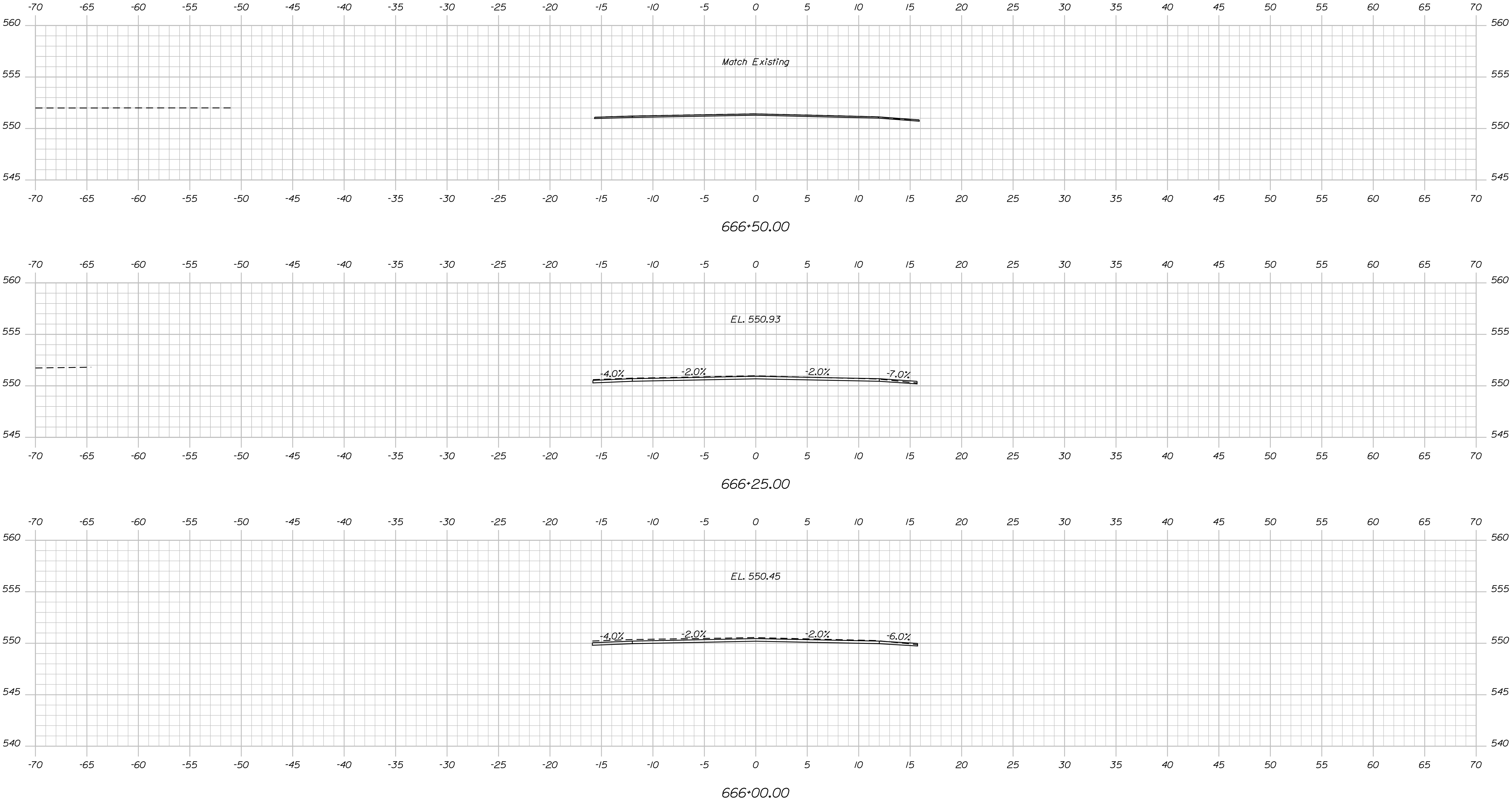


665+50.00



665+25.00

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	02363100		WIN		BRIDGE PLANS			
	SIGNATURE		P.E. NUMBER		DATE			
	MAR 2019		MAR 2019		BRIDGE NO. 5718			
NEW GREAT WORKS BRIDGE LEMON STREAM NEW PORTLAND SOMERSET COUNTY			CROSS SECTIONS			SHEET NUMBER 9 OF 12		



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

02363100

BRIDGE NO. 5718WIN23631.00BRIDGE PLANS

NEW GREAT WORKS BRIDGE
LEMON STREAM
NEW PORTLAND SOMERSET COUNTY

CROSS SECTIONS

SHEET NUMBER

10

OF 12

PROJ. MANAGER
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN-DETAILED
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

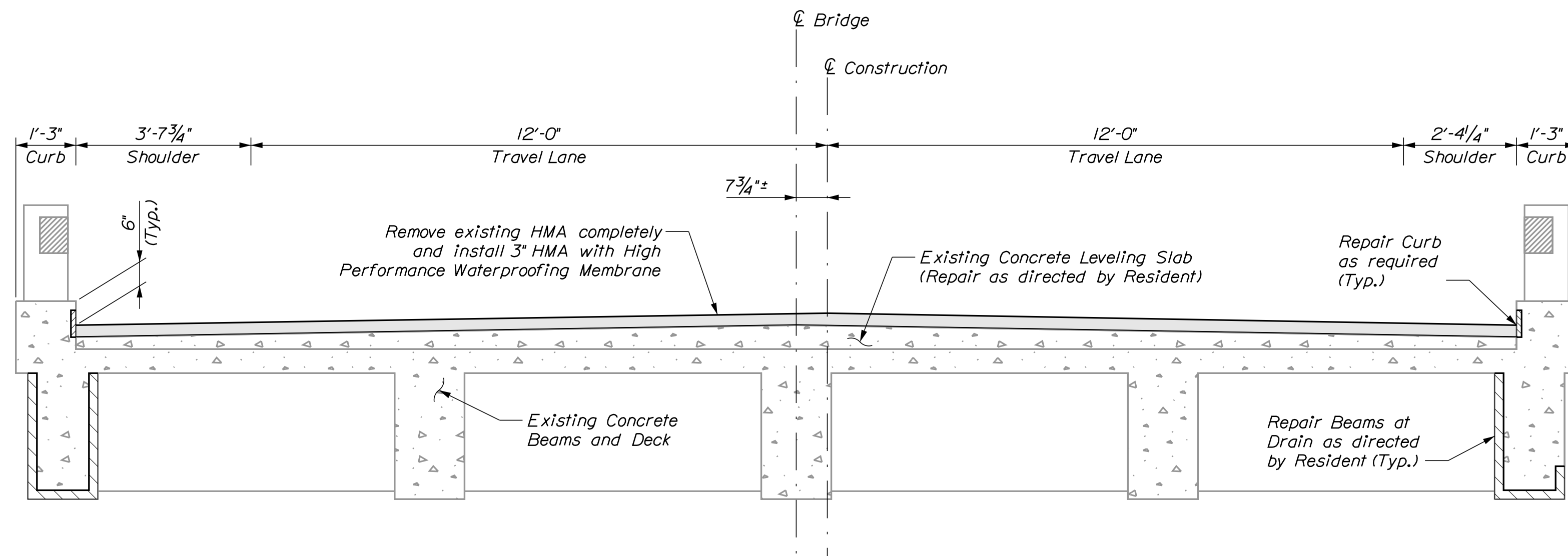
BY
A. PARADIS
R. MYERS

DATE
MAR 2019
MAR 2019

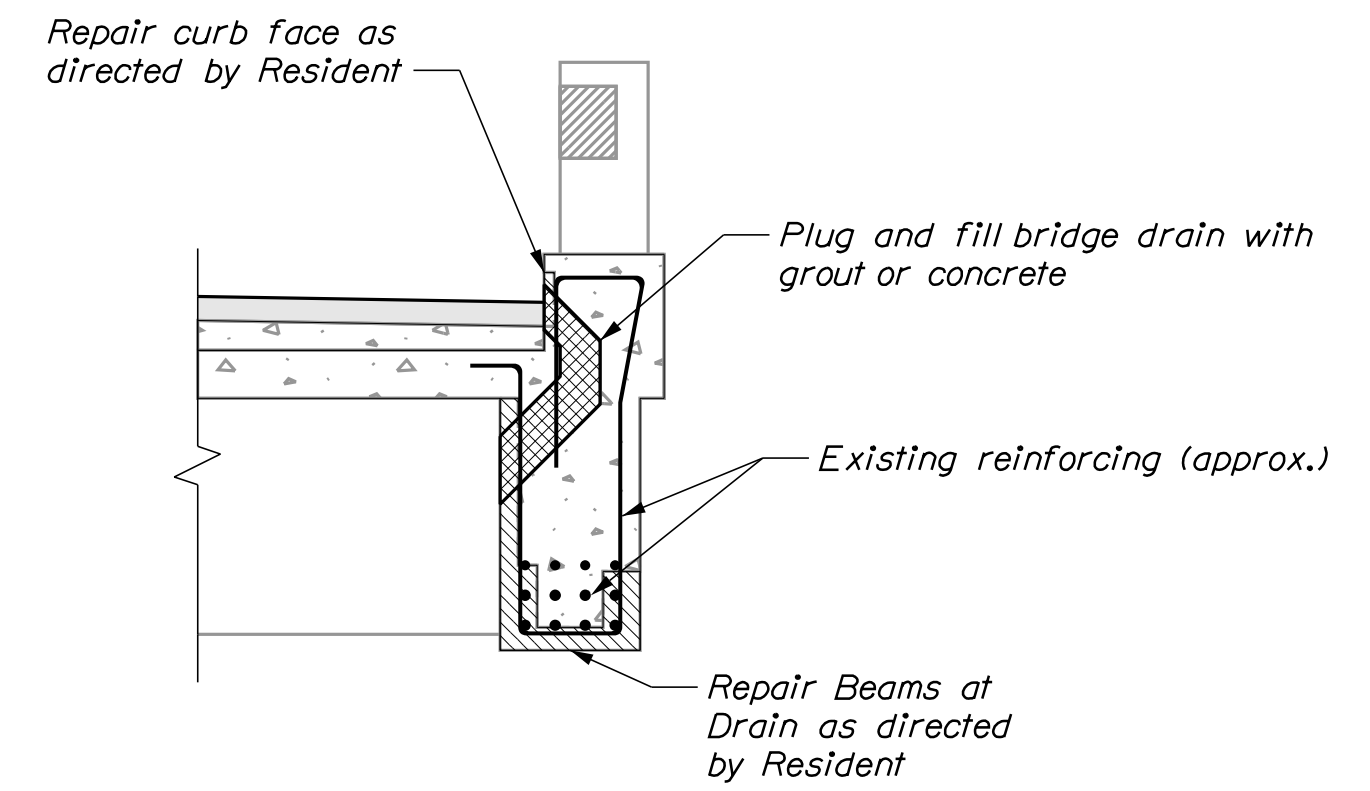
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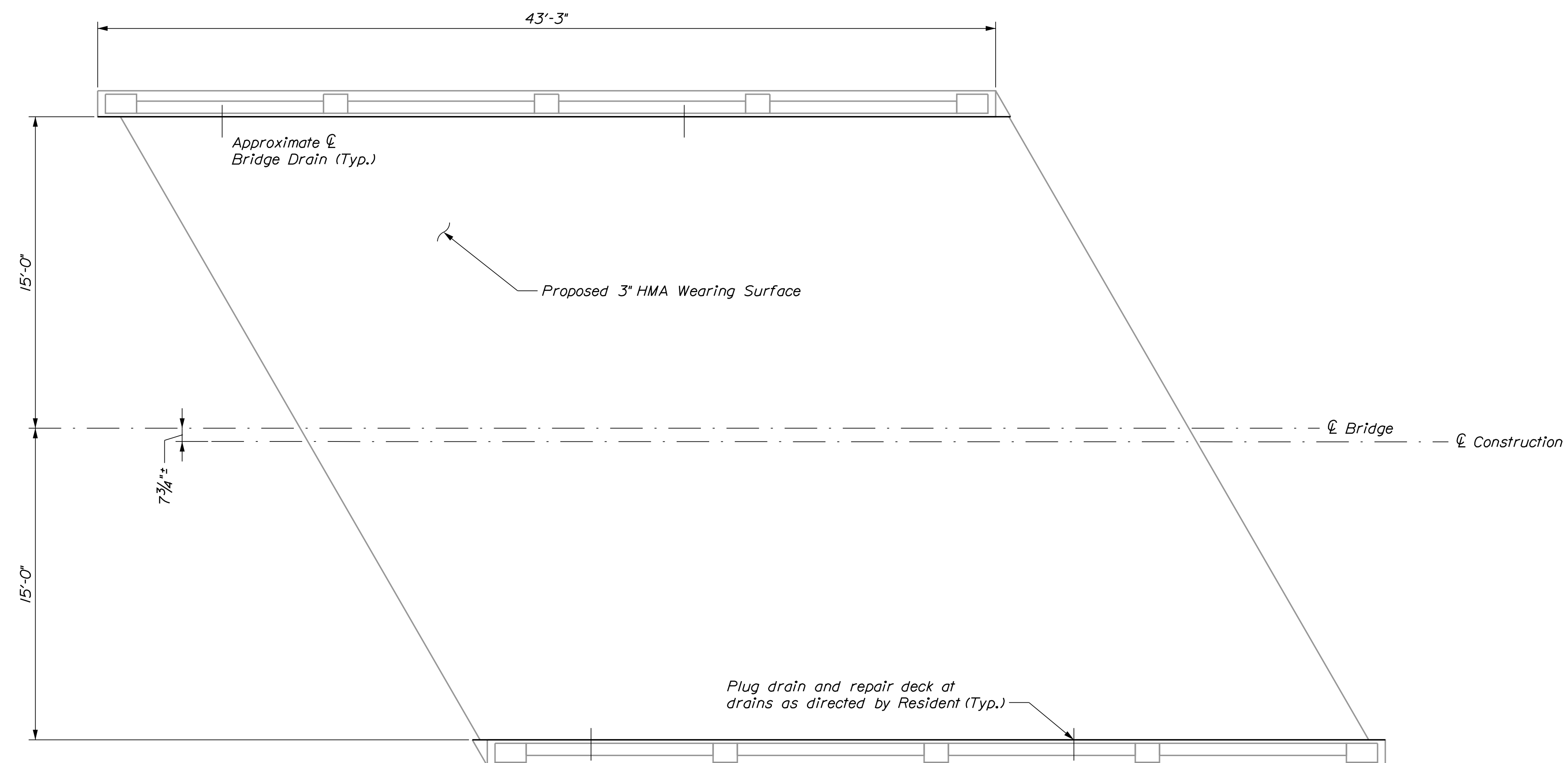
DATE



PROPOSED TRANSVERSE SECTION



REPAIR DETAIL AT DRAINS



PROPOSED SUPERSTRUCTURE PLAN

SHEET NUMBER 11 OF 12	NEW GREAT WORKS BRIDGE LEMON STREAM NEW PORTLAND SOMERSET COUNTY				PROJ. MANAGER	M. WIGHT	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION 02363100 BRIDGE NO. 5718 WIN 23631.00 BRIDGE PLANS
	BRIDGE TYPICAL DETAILS				DESIGN-DETAILED	J. HIRSTOUCH	A. PARADIS	MAR 2018	
					CHECKED-REVIEWED	R. WYERS		SIGNATURE	
					DESIGN2-DETAILED2			P.E. NUMBER	
					DESIGN3-DETAILED3				
				REVISIONS 1					
				REVISIONS 2					
				REVISIONS 3					
				REVISIONS 4				DATE	
				FIELD CHANGES					

Town, County, State
Approx. Property Lines
Existing Right of Way
Limits of Wrought Portion
Control Of Access
New Right of Way
New Easement
New Temporary Rights
New R/W Within Existing R/W

P.L.
L.O.W.P.
C.O.A.

New R/W Along Existing R/W

Building
Trees
Tree Line
Water Edge
Ledge
Fence
Sign

Along Existing R/W
Clearing Limit Line
Conifer
Deciduous
Bush Line
Rock/Boulder
Flag Pole
Stockade
Chain Link
Barb Wire
Well
Mailbox

PLAN LEGEND

Sanitary Sewer
Telephone Line
Electric Line
Water Line
Underdrain Line
Gas Line
Guardrail
Culvert

Existing
Proposed

Traveled Way
Ditch
Catch Basin
Manhole
Sewer Manhole
Utility Pole
Fire Hydrant
Curbing

Cut Line
Stonewall
Baseline
Monument
Iron Rod Found
Replacement Pin Set

Fill Line
Retaining Wall
Traverse Point
Pipe Found

STATE OF MAINE
REGISTRY OF DEEDS

COUNTY RECEIVED
at _____ h _____ m _____ M and recorded in
Plan Book _____, Page _____
Attest: _____ REGISTER

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

2500
Scale of Feet

BOUNDARY SURVEY FOR RONALD BAGLEY
BY SACKETT & BRAKE SURVEY, INC.
DATED FEBRUARY 24, 2006
S.C.R.D. PLAN FILE 2006, PAGE 65

GRID NORTH
US STATE PLANE NAD83 (2011)
MAINE 2000 WEST ZONE
NAD83
COMBINED FACTOR 0.99999589

MECHANIC FALLS AUTO SUPPLY
MAP 24 LOT 8
TOTAL AREA = 3.2± AC. (PER SURVEY)

CURVE DATA #1
PI = 664+64.28
Δ = 0°07'09.5" Lt.

NOWETAH K. CYR
THOMAS CYR
MAP 24 LOT 2

DEBRA L. HEBERT
RICHARD M. HEBERT
MAP 24 LOT 7

JOHN W. LEVECQUE
MAP 24 LOT 10

EXISTING RIGHT OF WAY REFERENCES
SOMERSET COUNTY COMMISSIONERS RECORDS
VOLUME 2, PAGE 90
1833, 4 RODS WIDE
S.H.C. FILE NO. 13-74, SHEET6, JUNE 1953

NOTE: PRESCRIPTIVE EASEMENT FOR HIGHWAY PURPOSES WITHIN LIMITS OF WROUGHT PORTION (L.O.W.P.)

ROUTE 27 LEMON STREAM ROAD STATE HIGHWAY 41

NEW GREAT WORKS BRIDGE OVER LEMON STREAM

REVISIONS

NO. DATE DESCRIPTION BY

PLAN FILED IN PLAN BOOK

NO. GRANTOR INSTRUMENT DATE BOOK PAGE

DAVID BERNHARDT

COMMISSIONER

JOYCE NOEL TAYLOR

CHIEF ENGINEER

DATE

STATE HIGHWAY "41"

ROUTE 27 LEMON STREAM ROAD

NEW PORTLAND SOMERSET COUNTY

FEDERAL AID PROJECT NO. 23631.00

DECEMBER 2018

SCALE 1" = 25'

RIGHT-OF-WAY MAP

SHEET 1 OF 1

D.O.T. FILE NO. 13-XXX

SHEET NUMBER

12

OF 12