

PROJECT ID:
WITH:
2300-06-70

COUNTY:
WASHINGTON

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS =

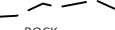
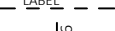
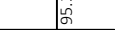


DESIGN DESIGNATION 2300-06-70

A.A.D.T.	2017	=	2600
A.A.D.T.	2047	=	3200
D.H.V.		=	
D.D.		=	59/41
T.		=	9.1
DESIGN SPEED		=	45 MPH
ESALS		=	

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

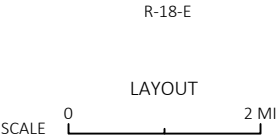
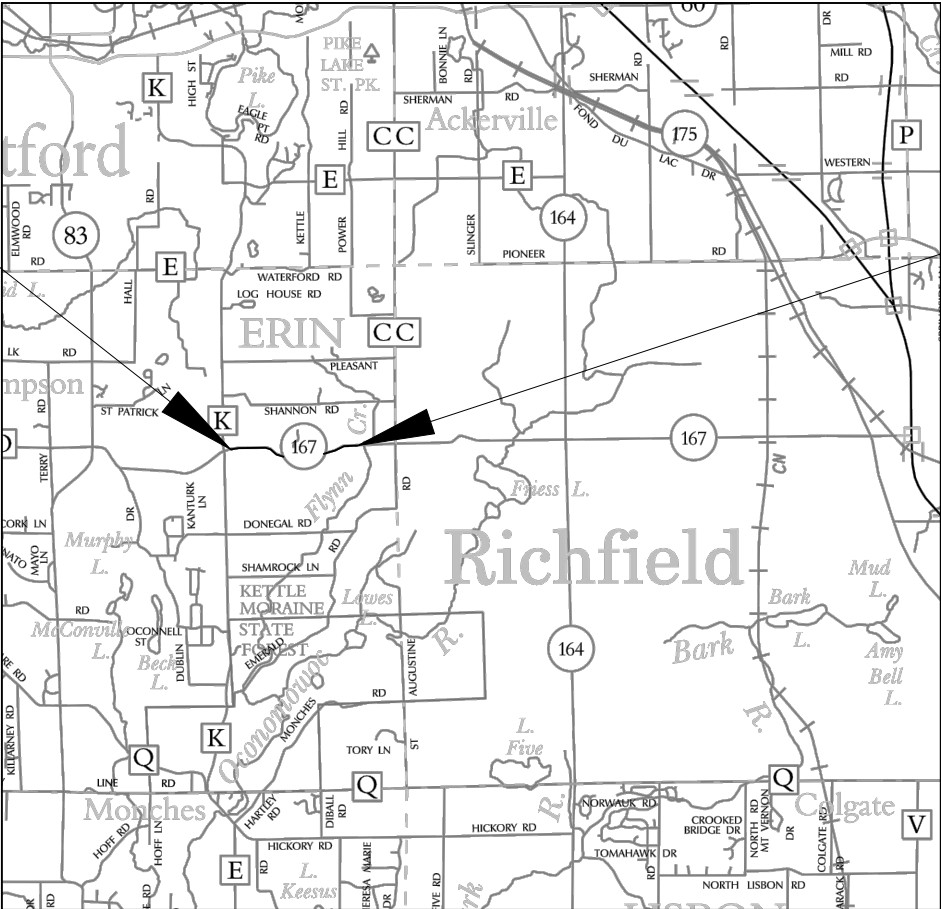
<u>PROFILE</u>	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
<u>UTILITIES</u>	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT
HIGHWAY SAFETY IMPROVEMENT PROGRAM

STH 167
CTH K TO CTH CC
STH 167
WASHINGTON COUNTY

STATE PROJECT NUMBER
2300-06-70



TOTAL NET LENGTH OF CENTERLINE = 1.27 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), COUNTY COUNTY, NAD83 HYEAR, IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (YEAR). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2300-03-03		

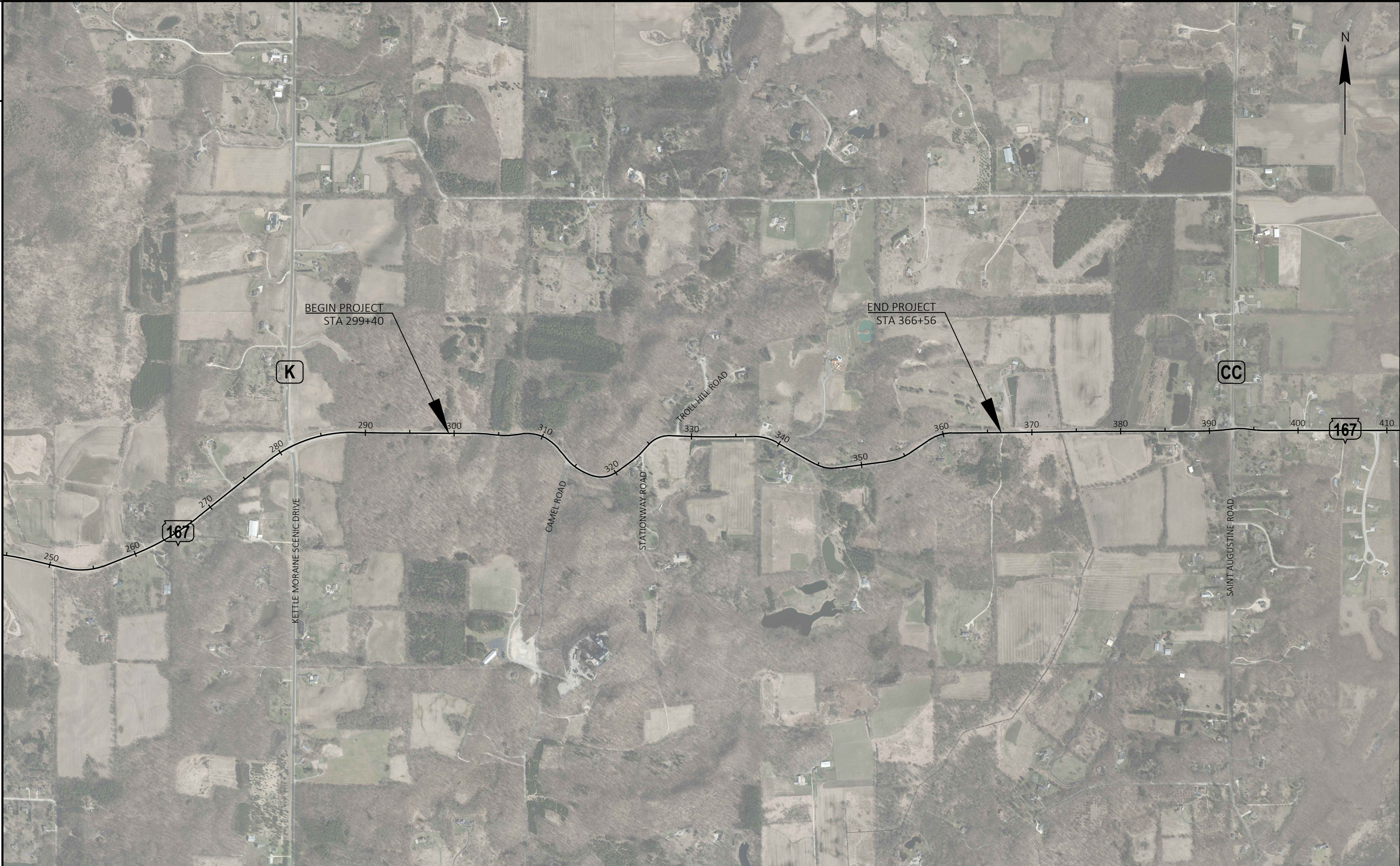
FINAL SCOPING PLAN
2/7/2020

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	WISDOT / SEWRPC LIDAR
Designer	
Project Manager	
Regional Examiner	
Regional Supervisor	
APPROVED FOR THE DEPARTMENT	
DATE:	(Signature)

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PROJECT NO:	2300-06-70
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HWY: STH 167

COUNTY: WASHINGTON

PROJECT OVERVIEW

SHEET

E

FILE NAME : N:\PDS\C3D\23000600\SHEETSPLAN\JJW\020201-PO.DWG
LAYOUT NAME - STH 167

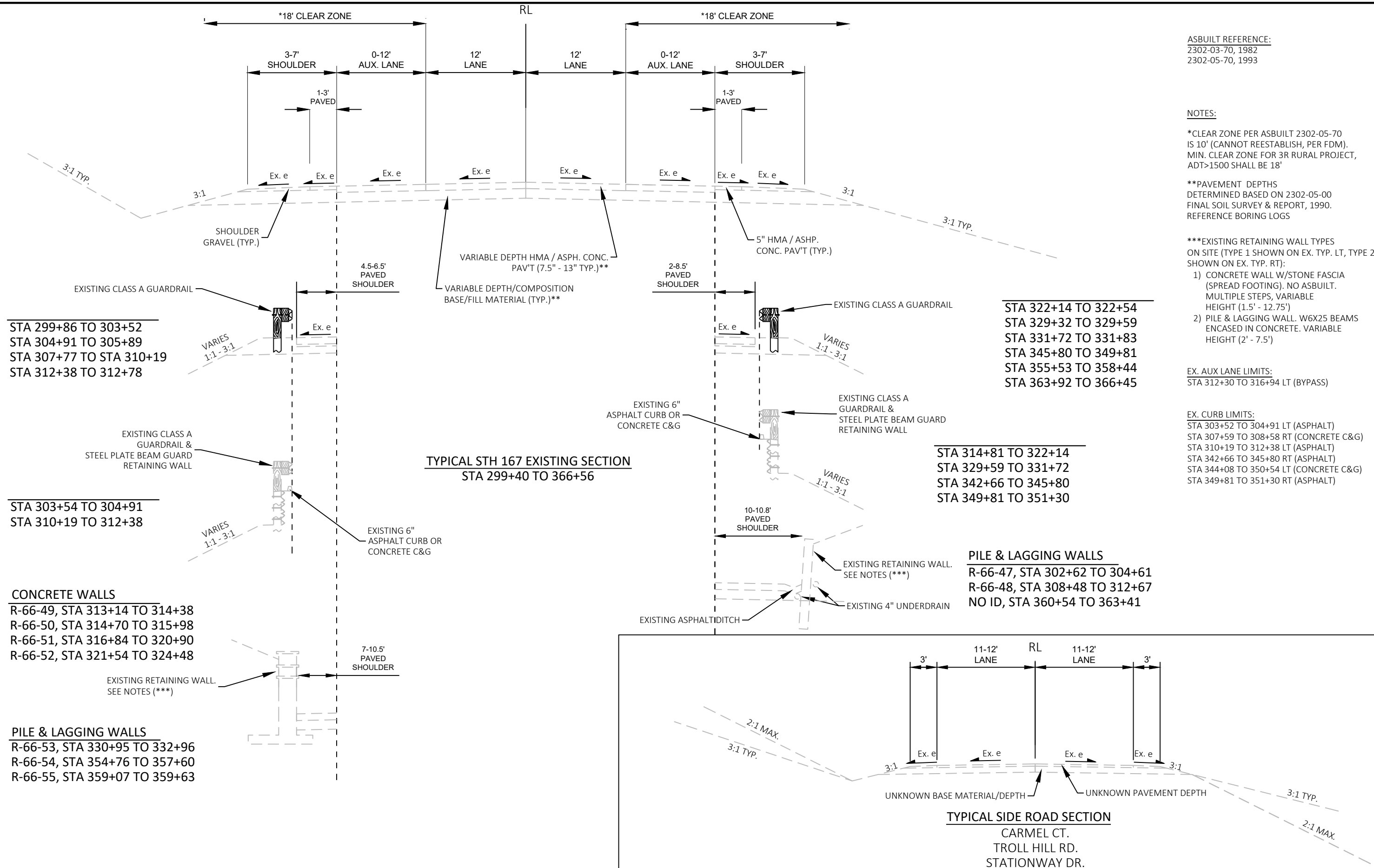
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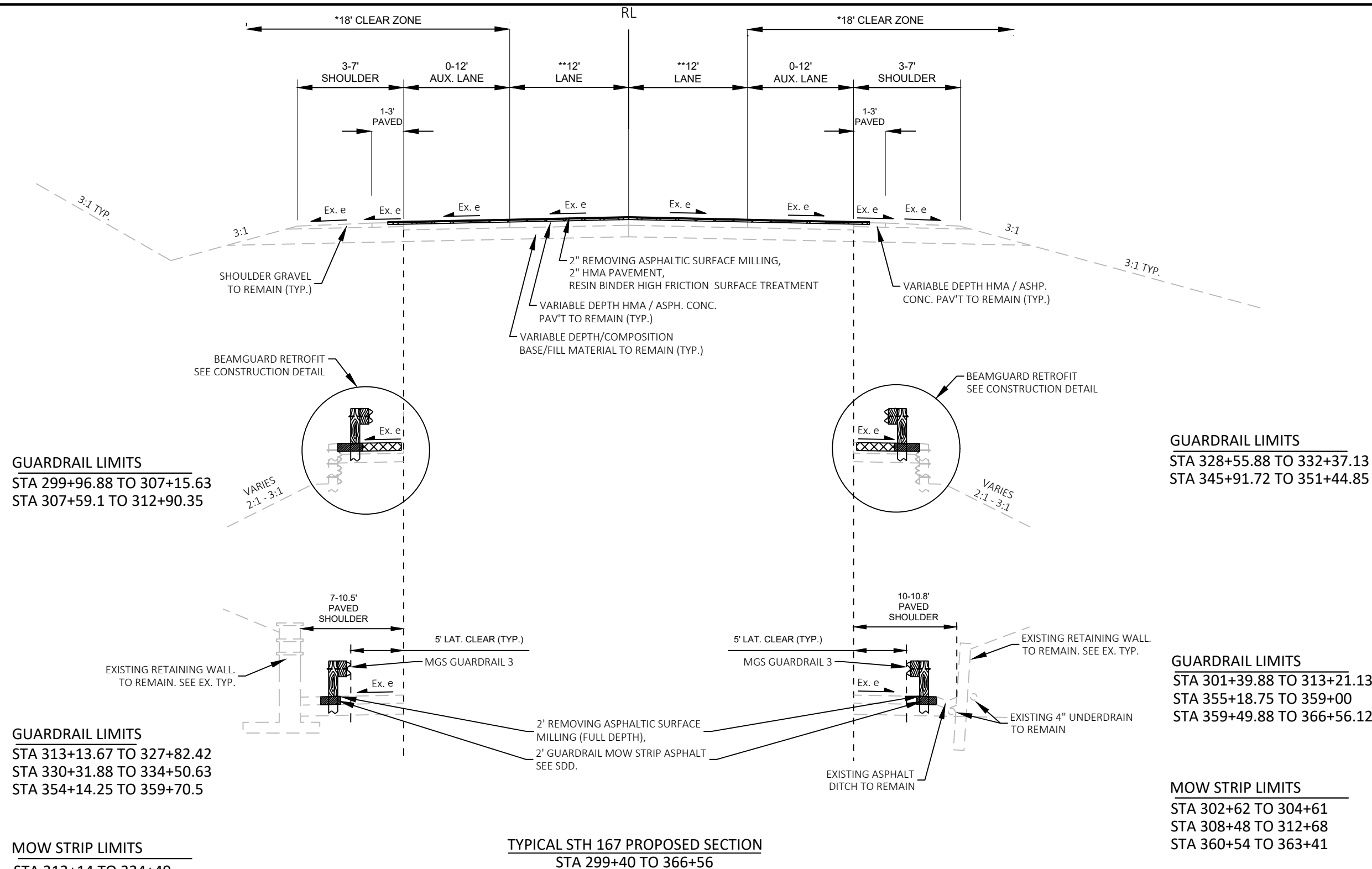
PLOT BY : WIESEN, JOSHUA J

PLOT NAME :

PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 42





REFERENCE GUIDE			
TOTAL SHLDR WIDTH	*LAT. CLEAR.	NEW GR. WIDTH	AVAIL. WORK. WIDTH
3	3	1.771	-
3.5	3	1.771	-
4	3	1.771	-
4.5	3	1.771	1.5
5	3	1.771	2.0
5.5	3	1.771	2.5
6	3	1.771	3.0
6.5	3	1.771	3.5
7	3	1.771	4.0

+NEW GUARDRAIL WIDTH BASED ON USE OF MGS STEEL POSTS
+SHLDR MEASURED FROM ETW TO BACK OF WALL (FACE OF EXISTING POST)
+MGS GR WIDTH (FOR TO BOP) WITH WOOD POSTS = 1.938'
+EX. GR WIDTH FOR CLASS A RAIL = 1.604'
+EX. WORKING WIDTH FOR CLASS A RAIL ON SITE = ~1'

* LATERAL CLEARANCE DIMENSION = USABLE PAVED SHOULDER WIDTH

DESIRABLE WORKING WIDTH	
MGS 3	4' - 5'
MGS 3 K (HS)	3.56' - 4.44'
MGS 3 (QS)	3.38' - 4.22'
THRIE BEAM	-

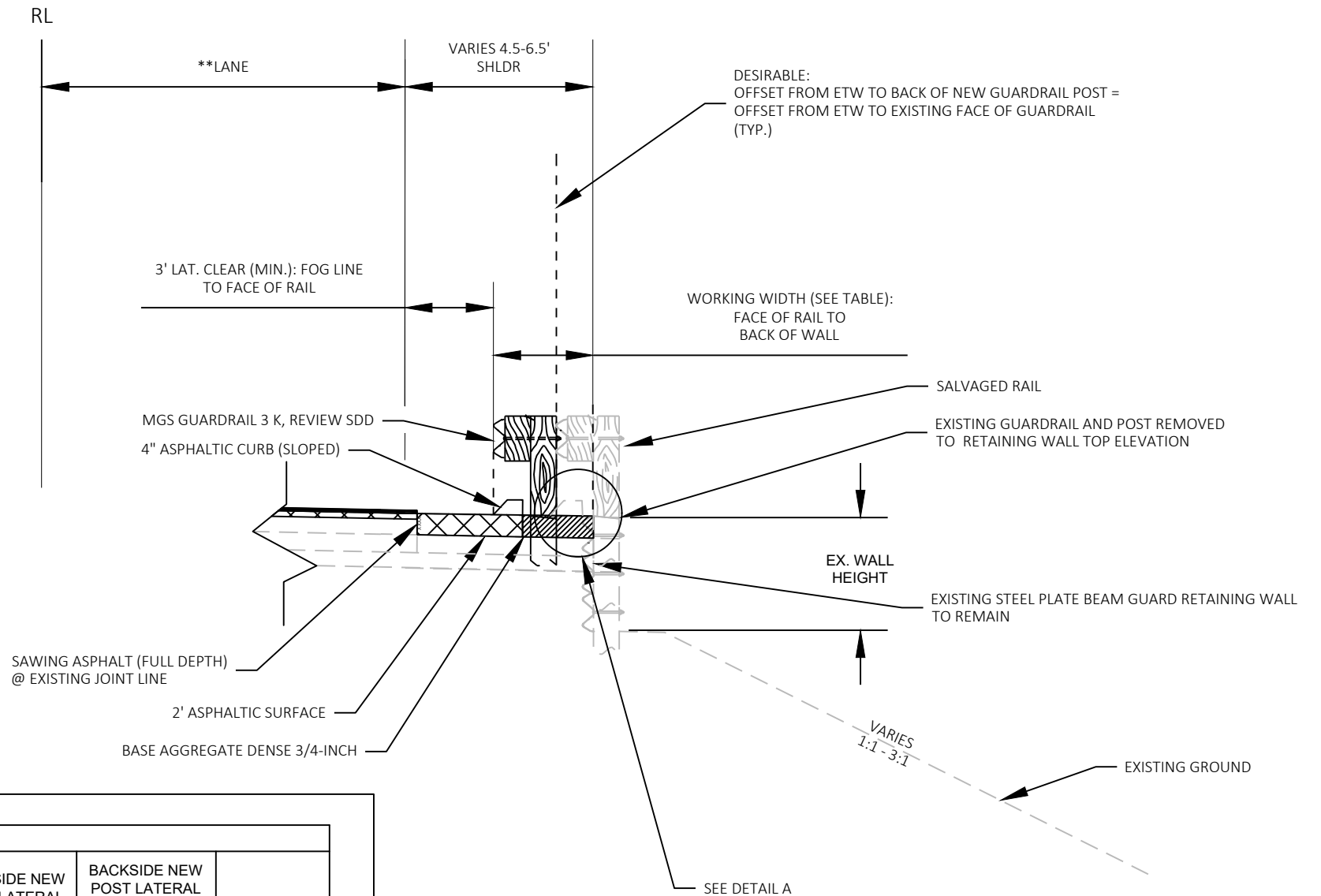
+ACCEPTABLE WORKING WIDTH "WINDOW" DERIVED
BY ANTICIPATED VEHICLE SPEEDS RANGING 30MPH
(ADVISORY) TO 45MPH (POSTED=DESIGN)

BARRIER RUN EVALUATION										
NEW RUN LIMITS	LT/RT	**EX. LANE WIDTH	EX. SHLDR WIDTH	NEW LANE WIDTH	***NEW SHLDR WIDTH	PROPOSED BARRIER OFFSET FROM CL	PROPOSED BARRIER TYPE	BACKSIDE NEW POST LATERAL SUPPORT (MGS W/ BLOCKOUTS). SEE DETAIL A	BACKSIDE NEW POST LATERAL SUPPORT (MGS W/O BLOCKOUTS). SEE DETAIL NEXT SHEET	EX. WALL HEIGHT
303+52 - 304+91	LT	12'	5.5'	11'	6.5'	14'	MGS 3 K	1.61' -2.98'	2.61' -3.98'	1'-2'
310+19 - 312+38	LT	11.5'	5'	11'	5.5'	14'	MGS 3 K	0.47'-2.65'	1.47'-3.65'	1'
~314+70 - 322+53	RT	12'	2' (MIN.)	12'			EXISTING TO REMAIN			1'-3'
329+59 - 331+72	RT	12'	5'	11'	6'	14'	MGS 3 K	1.21' - 1.68'	2.21' - 2.68'	1'
342+66 - 345+80	RT	12'	3' (MIN.)	11'	4' (MIN.)		EXISTING TO REMAIN			1'-3.5'
349+81 - 351+30	RT	12'	5'	11'	6' (MIN.)	14'	GABION WALL. SEE DETAIL.			1'-4'

+LIMITS SHOWN ARE ONLY THE SEGMENTS ADJACENT TO BEAMGUARD FILL WALLS, ALL OF THESE SEGMENTS ARE PART OF LONGER RUNS OF GUARDRAIL

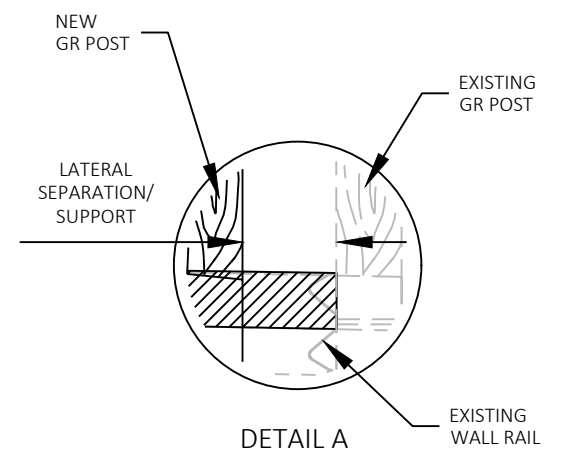
**RESTRIPE LANES TO 11' (SEE PAVEMENT MARKING PLANS) TO MAXIMIZE BACKSIDE LATERAL CLEARANCE TO ACCOUNT FOR WORKING WIDTH, BACKSIDE LATERAL SUPPORT FOR NEW POST, ROTATION OF NEW POST UPON IMPACT AND PREVENT DAMAGE TO EXISTING WALL UPON IMPACT TO NEW POST.

***NEW SHOULDER WIDTH DIMENSION MEASURED FROM ETW TO BACK OF WALL, USABLE PAVED SHOULDER WIDTH = LATERAL CLEARANCE OF 3'



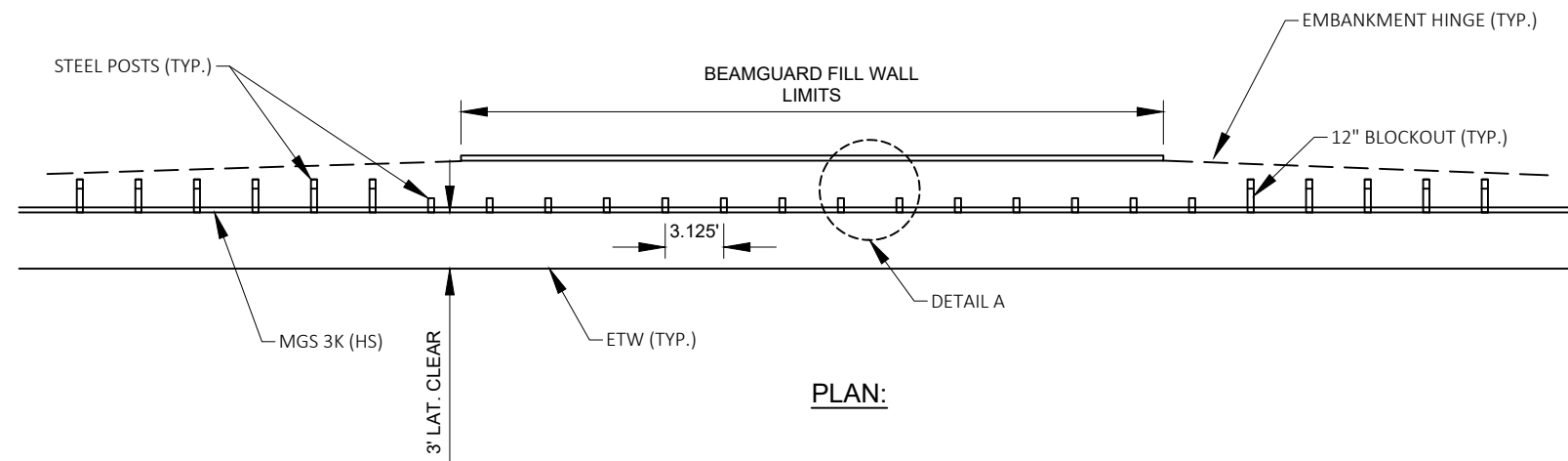
CONSTRUCTION DETAIL: BEAMGUARD RETROFIT

NTS

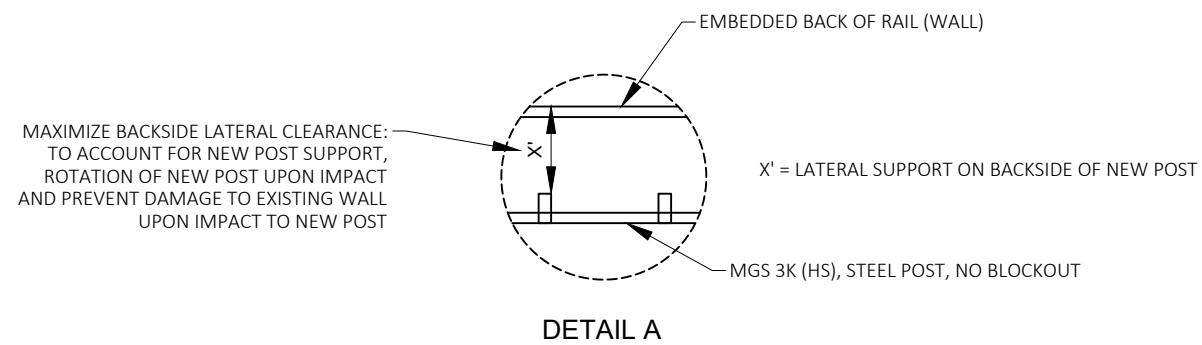


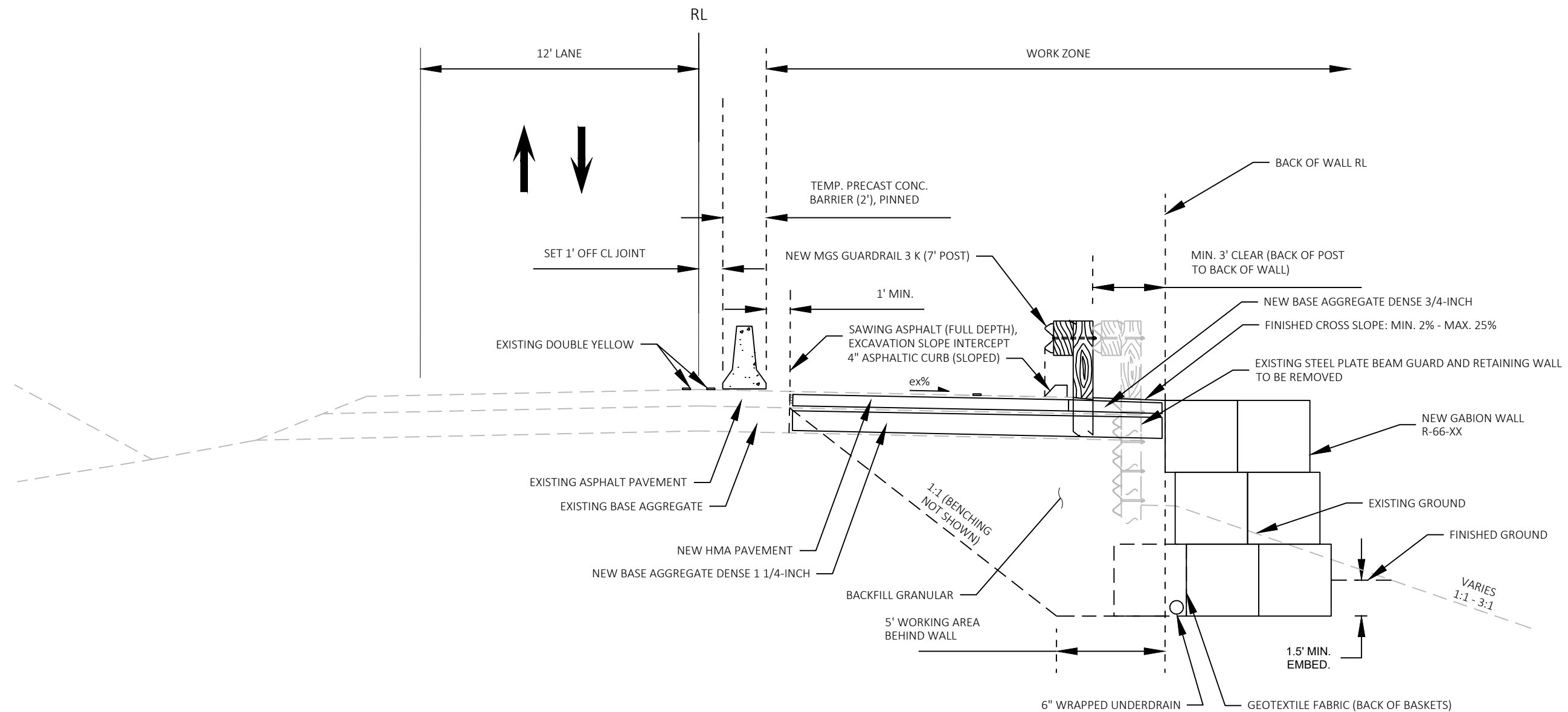
+LATERAL SUPPORT ON BACKSIDE OF NEW POST=3' (DES.)
+DRIVE MGS 3 K POSTS MIN. EMBED.: 4.35'

NOT APPROVED
BY BPD



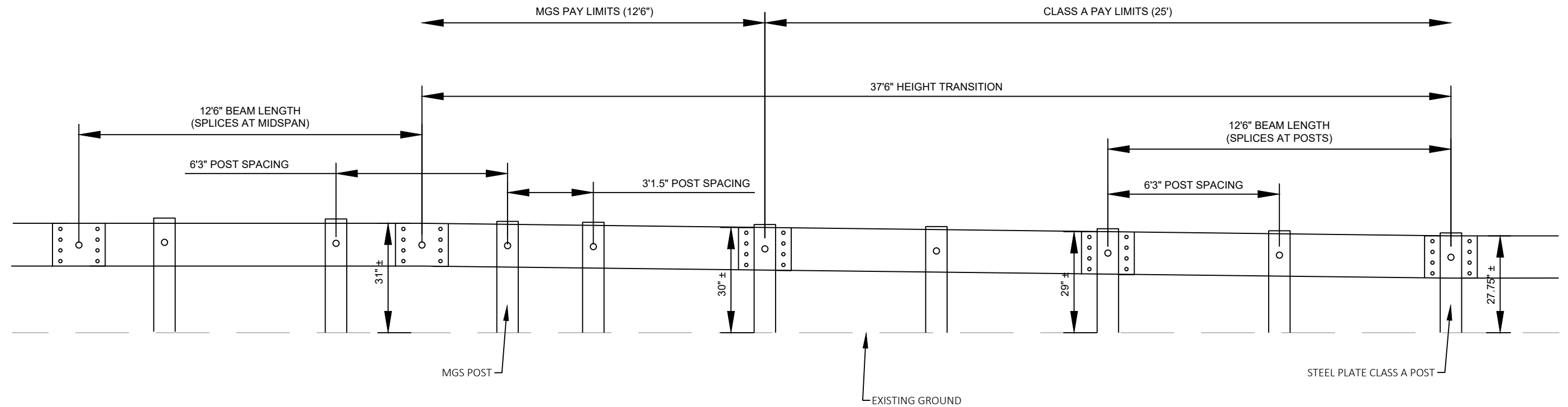
CONSTRUCTION DETAIL:
NEW BEAMGUARD PLACEMENT AT
EXISTING BEAMGUARD FILL WALL
LOCATIONS (NO BLOCKOUTS)



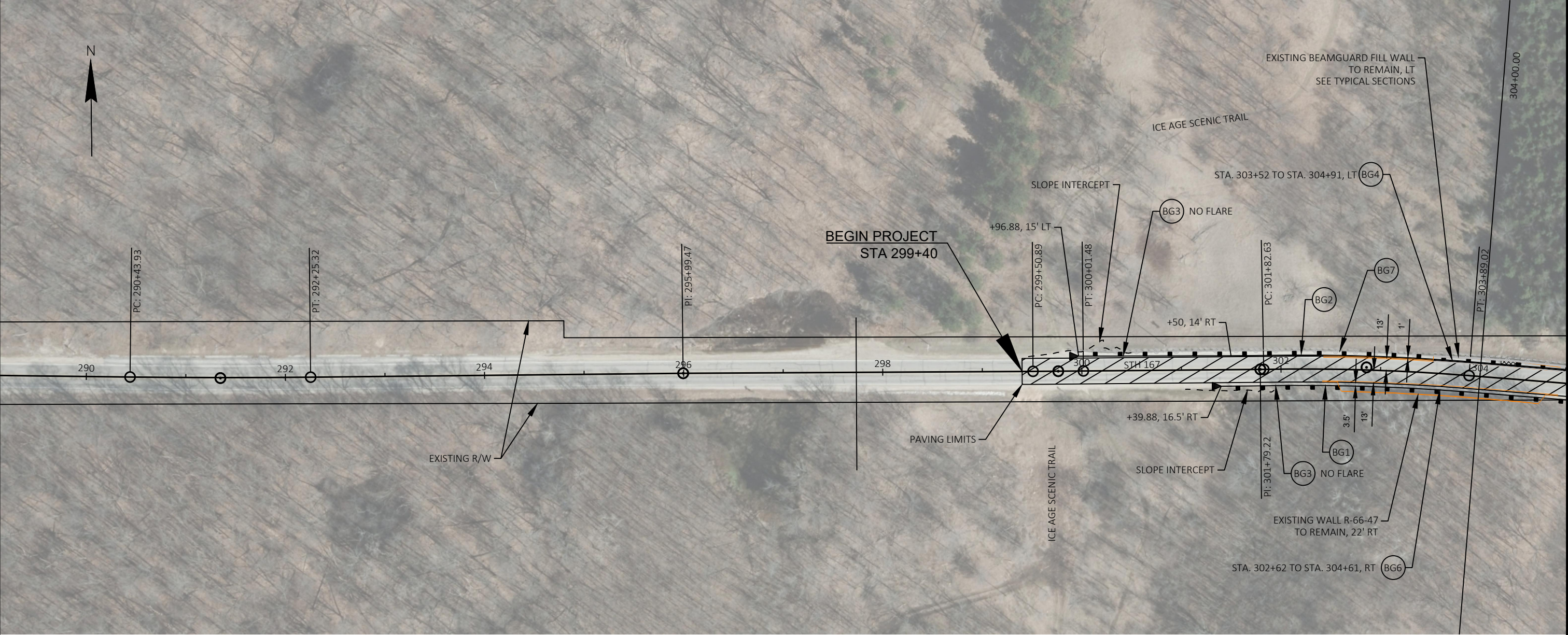


GABION WALL DETAIL:
STA 349+81 - 351+31

NTS



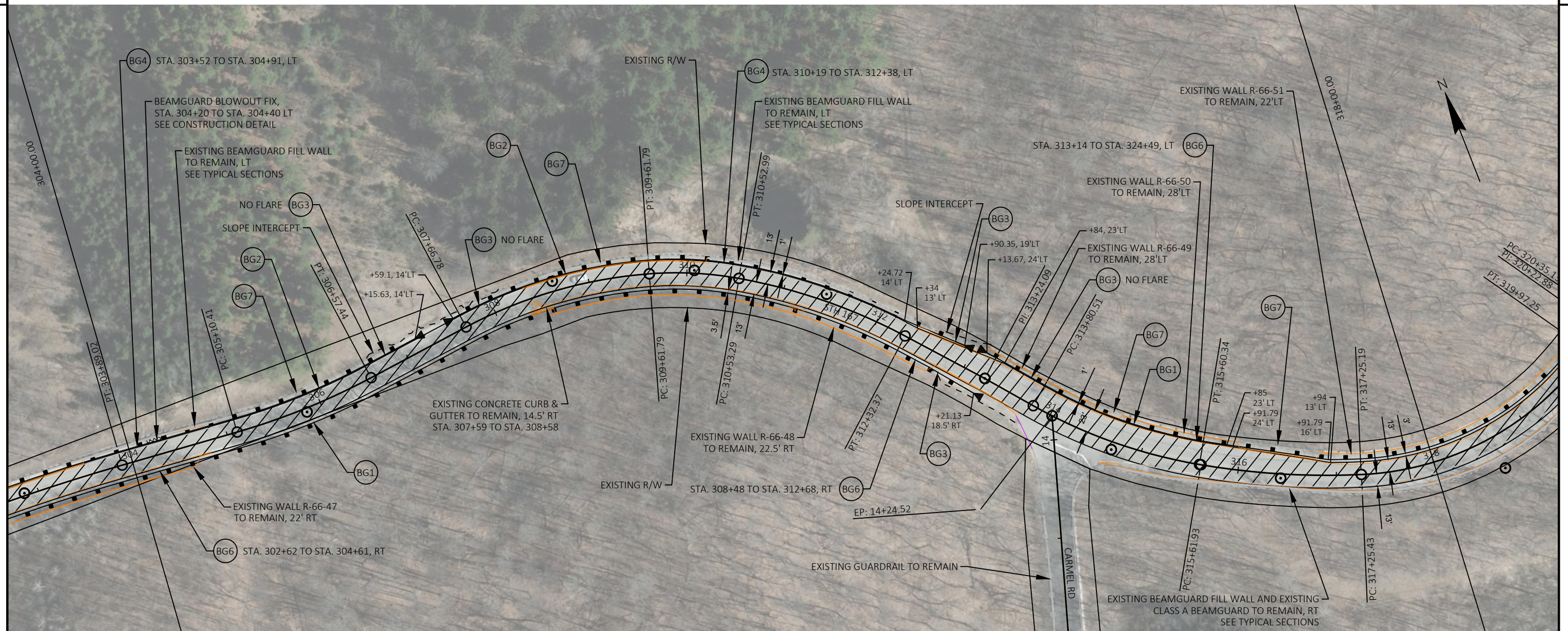
GUARDRAIL TRANSITION DETAIL:
EXISTING CLASS A TO NEW MGS,
HEIGHT TRANSITION AND SPLICE
LOCATIONS



LEGEND:

 2" REMOVING ASPHALTIC SURFACE MILLING,
2" HMA PAVEMENT,
RESIN BINDER HIGH FRICTION SURFACE TREATMENT

- | | | | |
|---|---|---|--|
|  BG1 | MGS GUARDRAIL 3 |  BG5 | STEEL PLATE BEAMGUARD ENERGY ABSORBING TERMINAL |
|  BG2 | MGS GUARDRAIL 3 K |  BG6 | GUARDRAIL MOW STRIP ASPHALT,
REMOVING ASPHALTIC SURFACE MILLING
(SEE TYPICAL SECTIONS) |
|  BG3 | MGS GUARDRAIL TERMINAL EAT |  BG7 | REMOVING GUARDRAIL |
|  BG4 | BEAMGUARD RETROFIT
(SEE CONSTRUCTION DETAIL) |  BG8 | GUARDRAIL TRANSITION FROM CLASS A TO MGS
(SEE CONSTRUCTION DETAIL) |



LEGEND:

2" REMOVING ASPHALTIC SURFACE MILLING,
2" HMA PAVEMENT,
RESIN BINDER HIGH FRICTION SURFACE TREATMENT

- | | | | |
|-----|---|-----|--|
| BG1 | MGS GUARDRAIL 3 | BG5 | STEEL PLATE BEAMGUARD ENERGY ABSORBING TERMINAL |
| BG2 | MGS GUARDRAIL 3 K | BG6 | GUARDRAIL MOW STRIP ASPHALT,
REMOVING ASPHALTIC SURFACE MILLING
(SEE TYPICAL SECTIONS) |
| BG3 | MGS GUARDRAIL TERMINAL EAT | BG7 | REMOVING GUARDRAIL |
| BG4 | BEAMGUARD RETROFIT
(SEE CONSTRUCTION DETAIL) | BG8 | GUARDRAIL TRANSITION FROM CLASS A TO MGS
(SEE CONSTRUCTION DETAIL) |

PROJECT NO: 2300-06-70

HWY: STH 167

COUNTY: WASHINGTON

PLAN DETAIL

SHEET

E

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LAYOUT NAME - 02

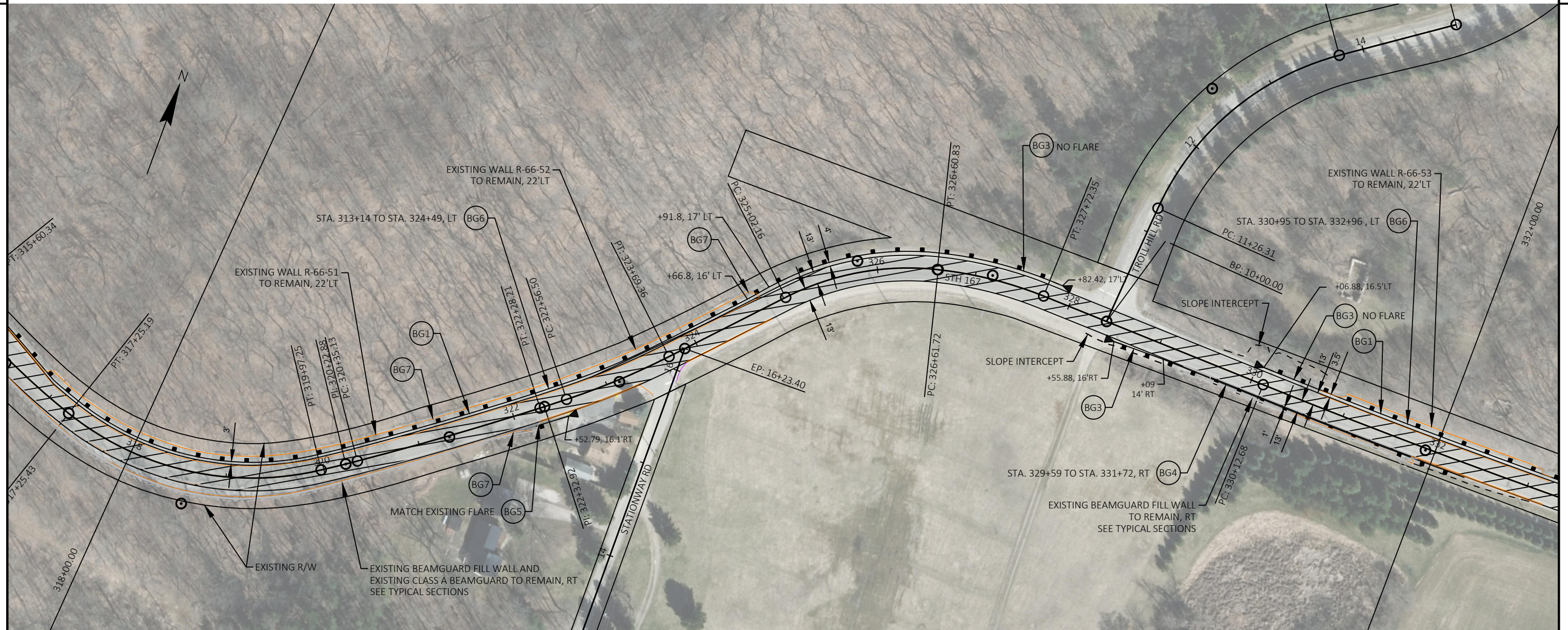
PLOT DATE : 2/6/2020 1:22 PM

PLOT BY : WIESEN, JOSHUA J

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDs SHEET 42



LEGEND:

2" REMOVING ASPHALTIC SURFACE MILLING,
2" HMA PAVEMENT,
RESIN BINDER HIGH FRICTION SURFACE TREATMENT

- | | | | |
|-----|---|-----|--|
| BG1 | MGS GUARDRAIL 3 | BG5 | STEEL PLATE BEAMGUARD ENERGY ABSORBING TERMINAL |
| BG2 | MGS GUARDRAIL 3 K | BG6 | GUARDRAIL MOW STRIP ASPHALT,
REMOVING ASPHALTIC SURFACE MILLING
(SEE TYPICAL SECTIONS) |
| BG3 | MGS GUARDRAIL TERMINAL EAT | BG7 | REMOVING GUARDRAIL |
| BG4 | BEAMGUARD RETROFIT
(SEE CONSTRUCTION DETAIL) | BG8 | GUARDRAIL TRANSITION FROM CLASS A TO MGS
(SEE CONSTRUCTION DETAIL) |

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COUNTY: WASHINGTON

PLAN DETAIL

SHEET

E

FILE NAME : N:\PDS\C3D\23000600\SHEETSPLAN\JJW\021201-PD.DWG
LAYOUT NAME - 03

PLOT DATE : 2/6/2020 1:22 PM

PLOT BY : WIESEN, JOSHUA J

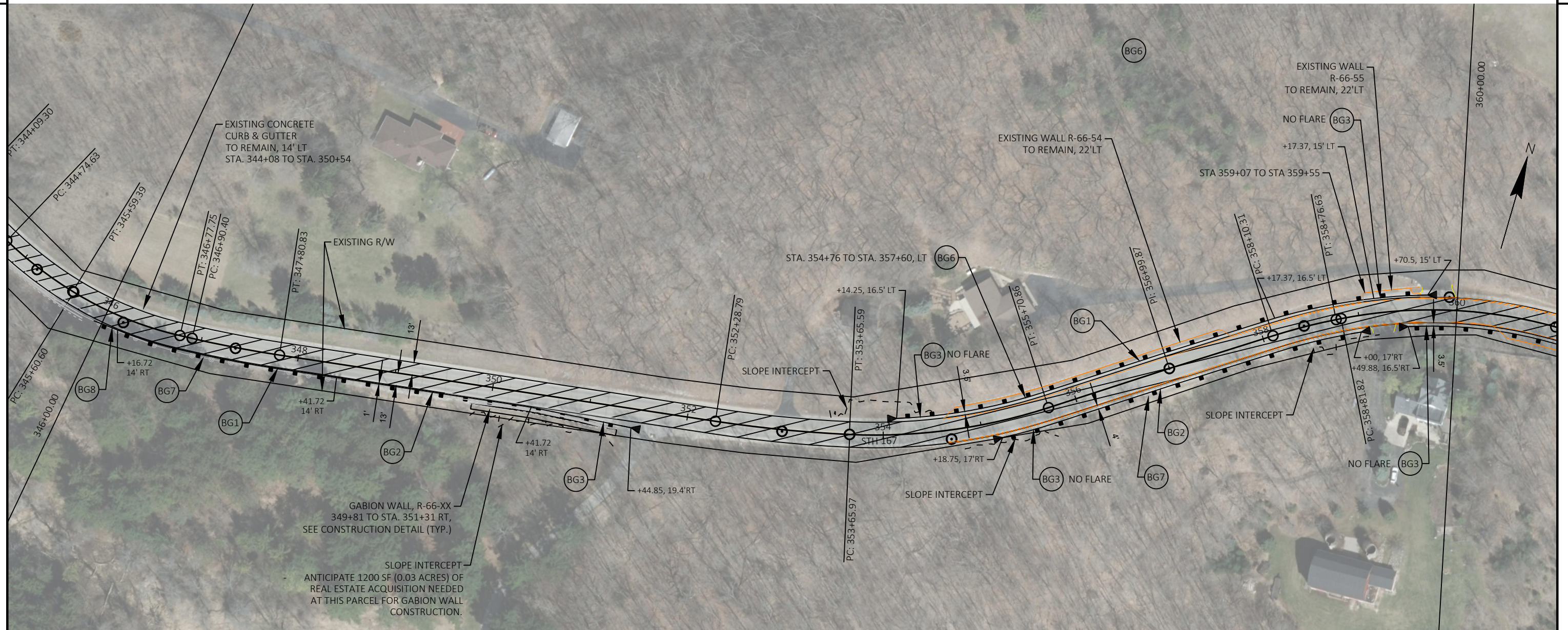
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PLOT SCALE : 1 IN:100 FT

WISDOT/CADDs SHEET 42



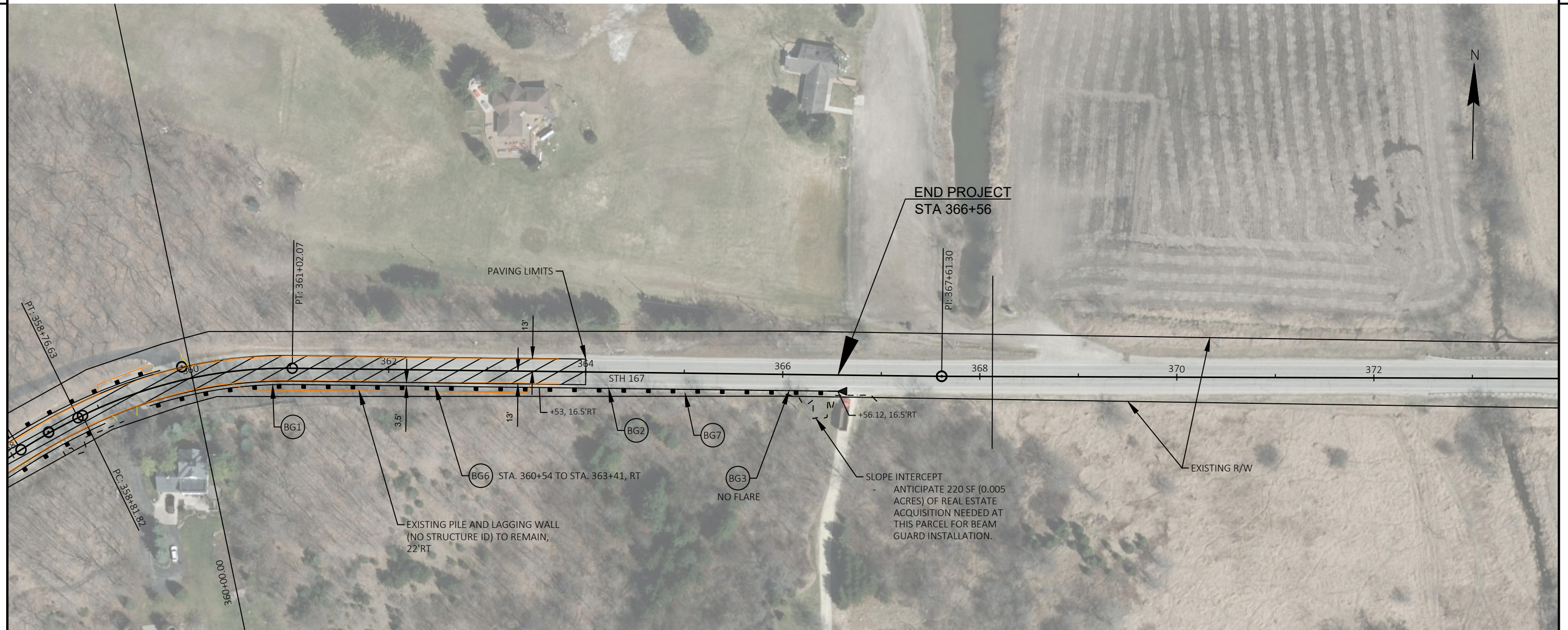
- | | | |
|---|--|--|
|  | 2" REMOVING ASPHALTIC SURFACE MILLING,
2" HMA PAVEMENT,
RESIN BINDER HIGH FRICTION SURFACE TREATMENT | |
|  | MGS GUARDRAIL 3 |  |
|  | MGS GUARDRAIL 3 K |  |
|  | MGS GUARDRAIL TERMINAL EAT |  |
|  | BEAMGUARD RETROFIT
(SEE CONSTRUCTION DETAIL) |  |
| | | STEEL PLATE BEAMGUARD ENERGY ABSORBING TERMINAL |
| | | GUARDRAIL MOW STRIP ASPHALT,
REMOVING ASPHALTIC SURFACE MILLING
(SEE TYPICAL SECTIONS) |
| | | REMOVING GUARDRAIL |
| | | GUARDRAIL TRANSITION FROM CLASS A TO MGS
(SEE CONSTRUCTION DETAIL) |



LEGEND:

 2" REMOVING ASPHALTIC SURFACE MILLING,
2" HMA PAVEMENT,
RESIN BINDER HIGH FRICTION SURFACE TREATMENT

- | | | | |
|---|---|---|--|
|  BG1 | MGS GUARDRAIL 3 |  BG5 | STEEL PLATE BEAMGUARD ENERGY ABSORBING TERMINAL |
|  BG2 | MGS GUARDRAIL 3 K |  BG6 | GUARDRAIL MOW STRIP ASPHALT,
REMOVING ASPHALTIC SURFACE MILLING
(SEE TYPICAL SECTIONS) |
|  BG3 | MGS GUARDRAIL TERMINAL EAT |  BG7 | REMOVING GUARDRAIL |
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(SEE CONSTRUCTION DETAIL) |  BG8 | GUARDRAIL TRANSITION FROM CLASS A TO MGS
(SEE CONSTRUCTION DETAIL) |



LEGEND:

 2" REMOVING ASPHALTIC SURFACE MILLING,
2" HMA PAVEMENT,
RESIN BINDER HIGH FRICTION SURFACE TREATMENT

- | | | | |
|---|---|---|--|
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REMOVING ASPHALTIC SURFACE MILLING
(SEE TYPICAL SECTIONS) |
|  BG3 | MGS GUARDRAIL TERMINAL EAT |  BG7 | REMOVING GUARDRAIL |
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(SEE CONSTRUCTION DETAIL) |  BG8 | GUARDRAIL TRANSITION FROM CLASS A TO MGS
(SEE CONSTRUCTION DETAIL) |

PROJECT NO: 2300-06-70

HWY: STH 167

COUNTY: WASHINGTON

PLAN DETAIL

SHEET

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FILE NAME : N:\PDS\C3D\23000600\SHEETPLAN\JJW\021201-PD.DWG
LAYOUT NAME - 06

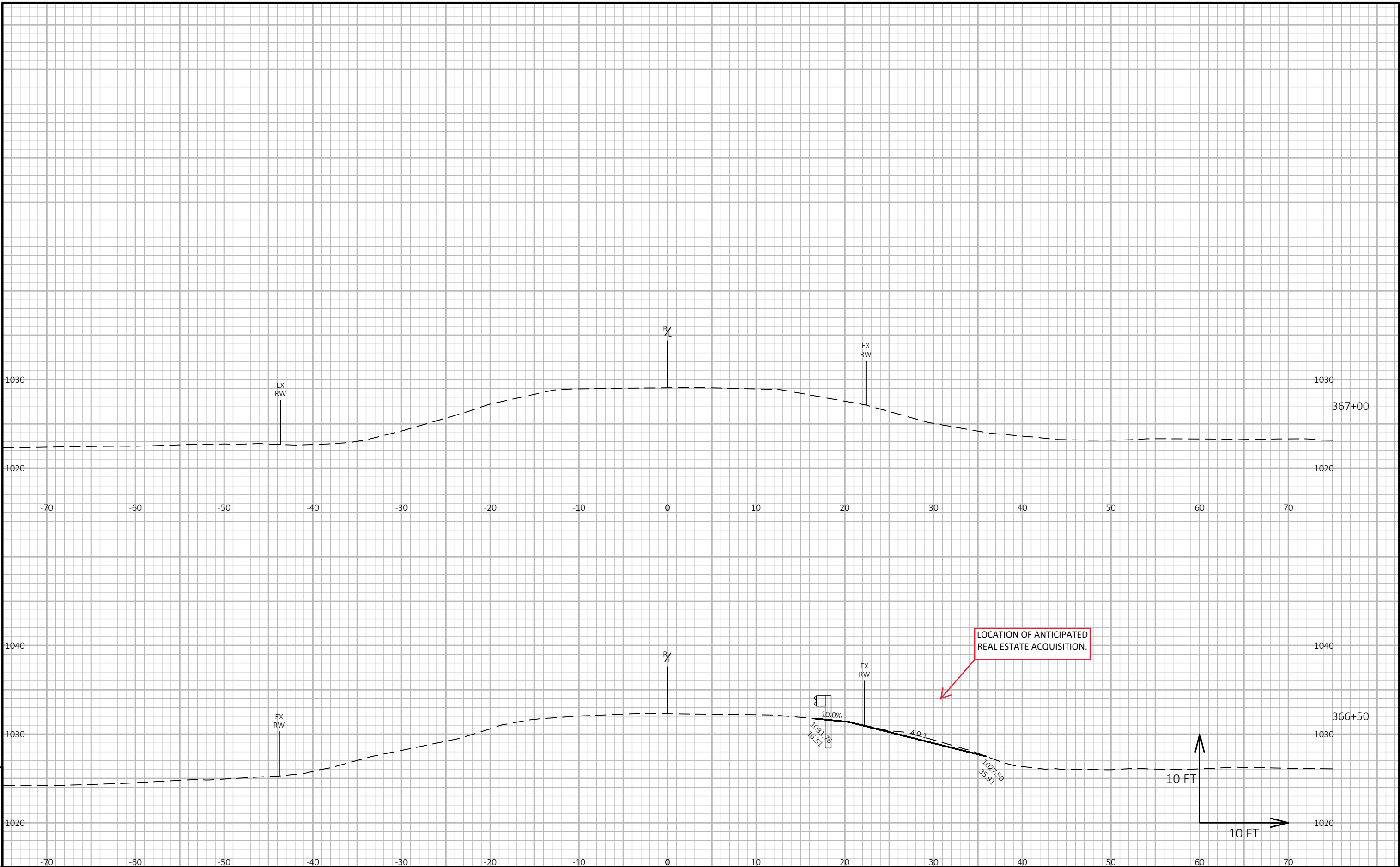
PLOT DATE : 2/6/2020 1:22 PM

PLOT BY : WIESEN, JOSHUA J

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

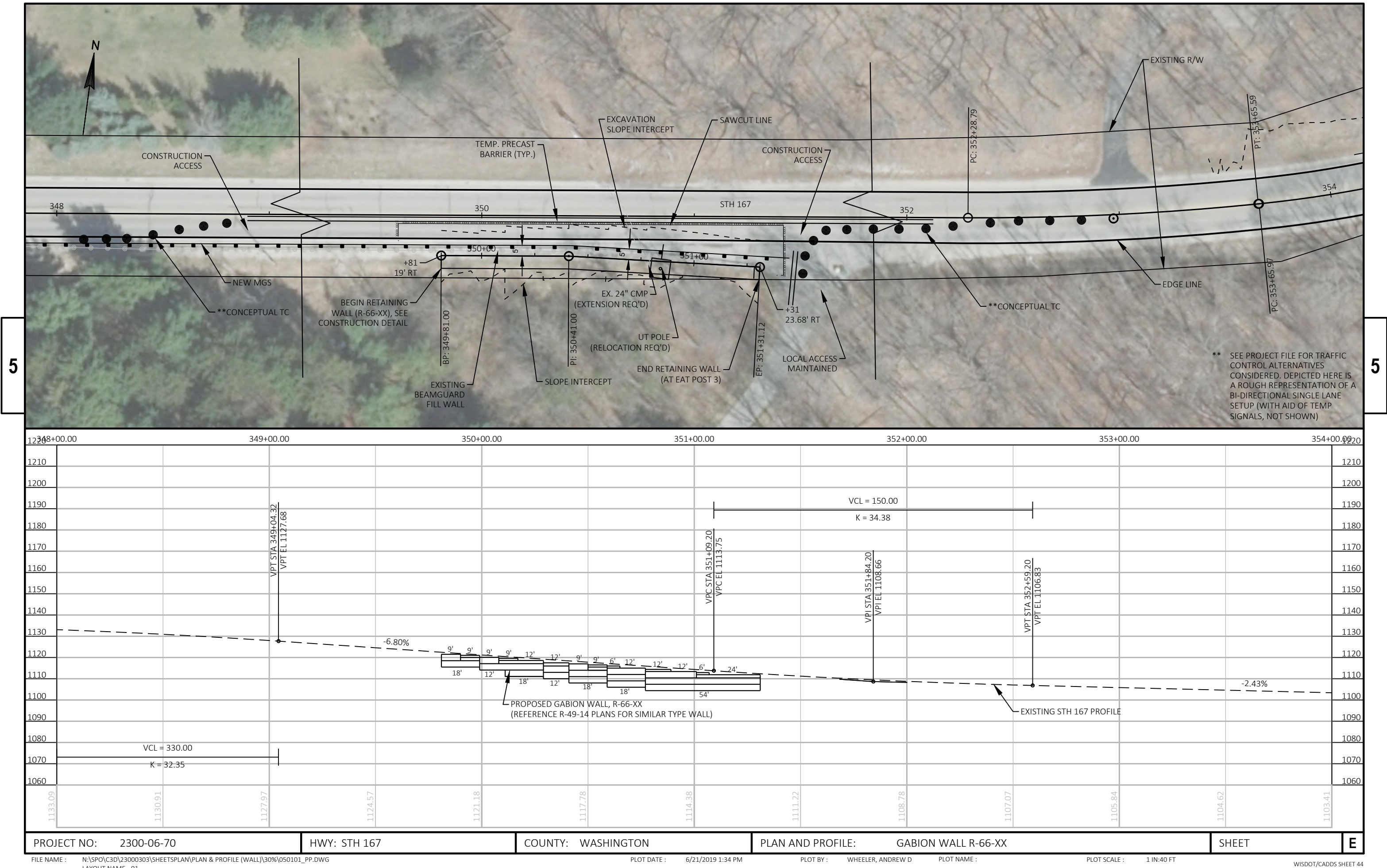
WISDOT/CADDs SHEET 42



GABION WALL DETAILS

- PLAN & PROFILE

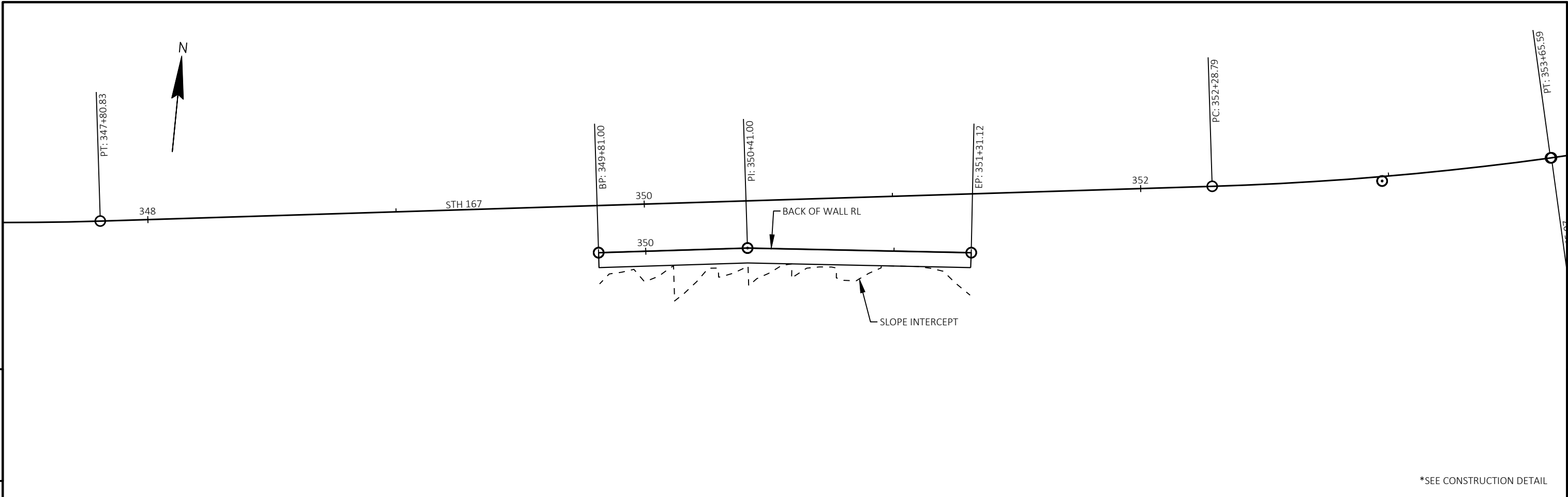
- CROSS SECTIONS



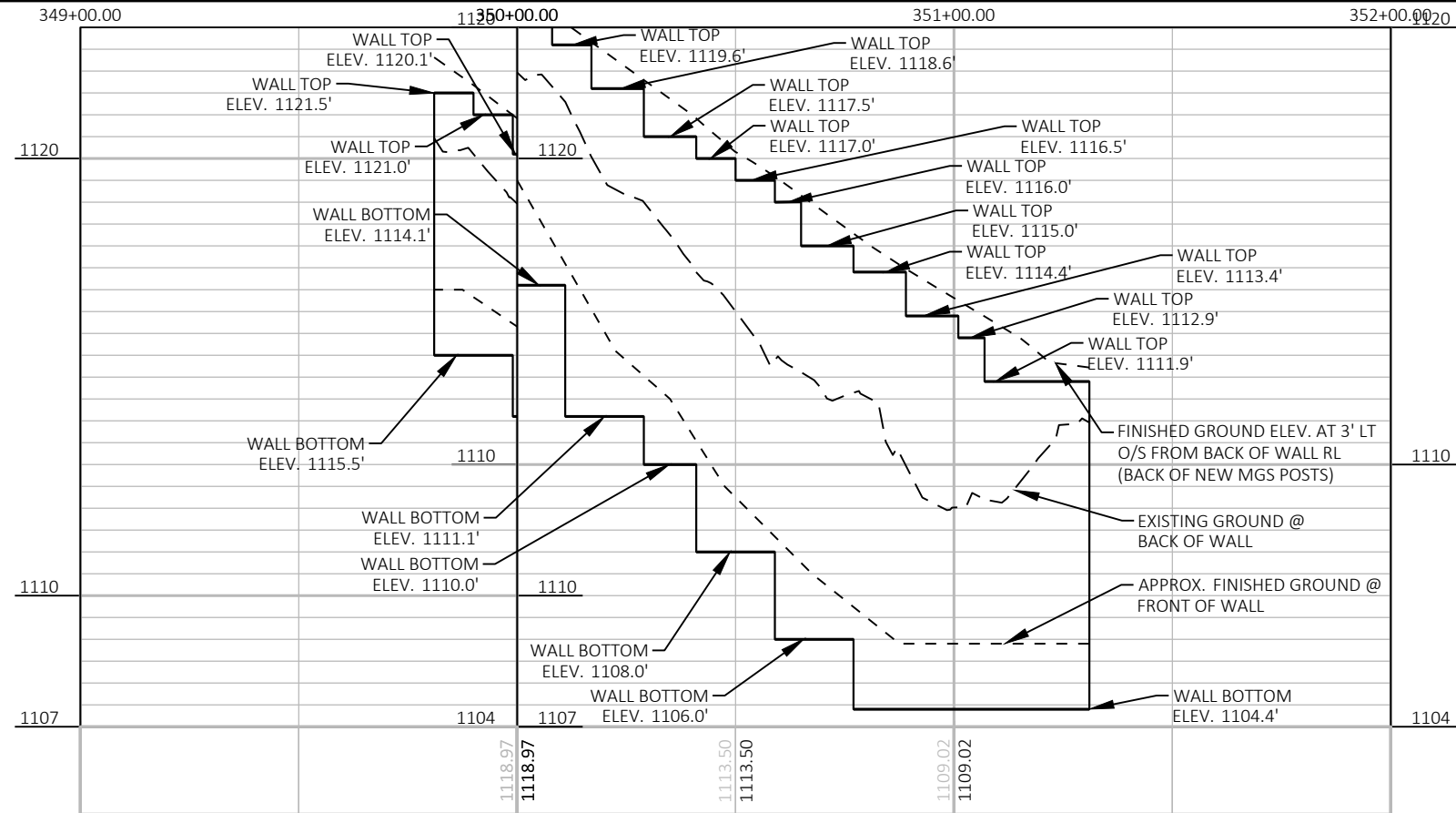
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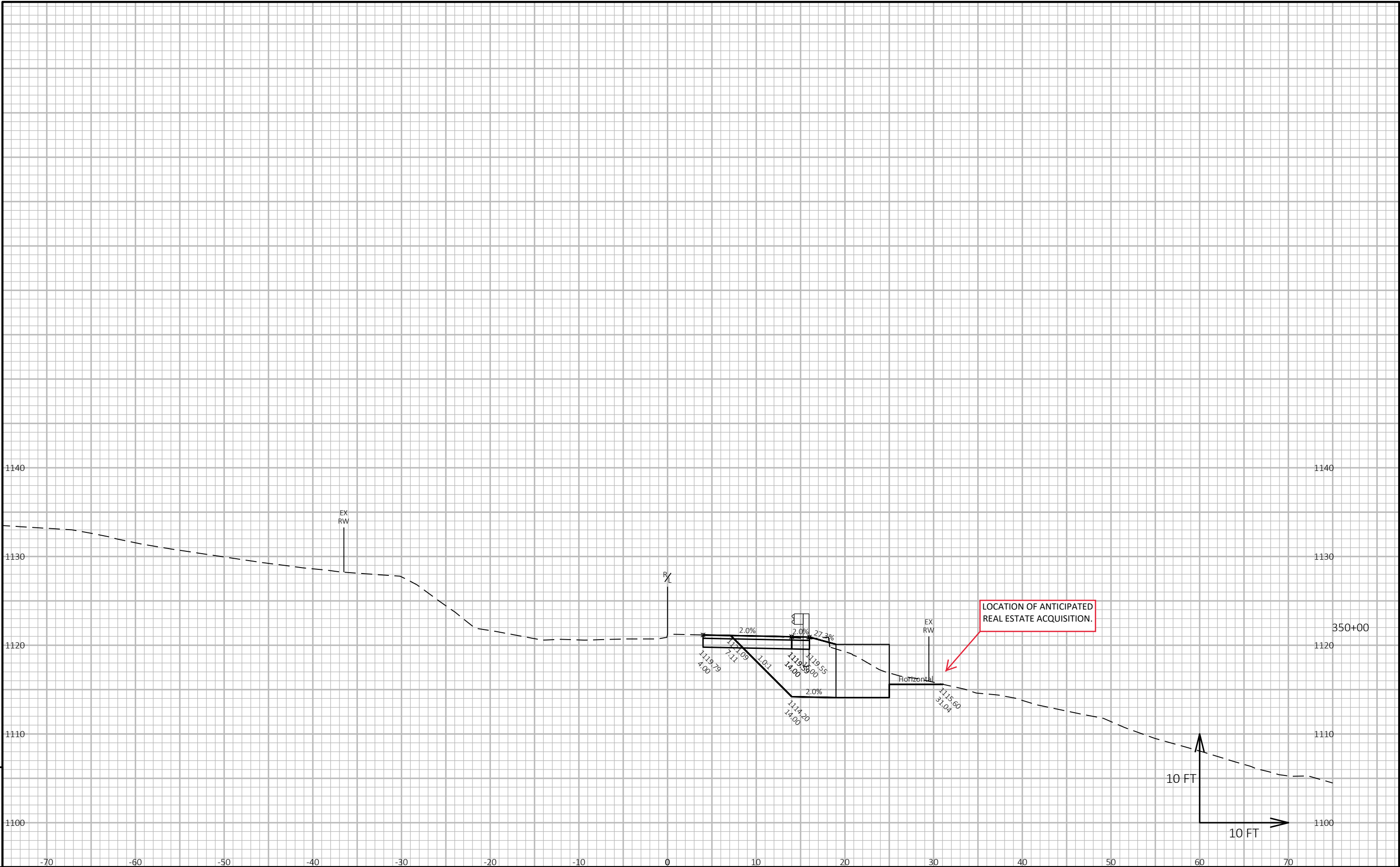
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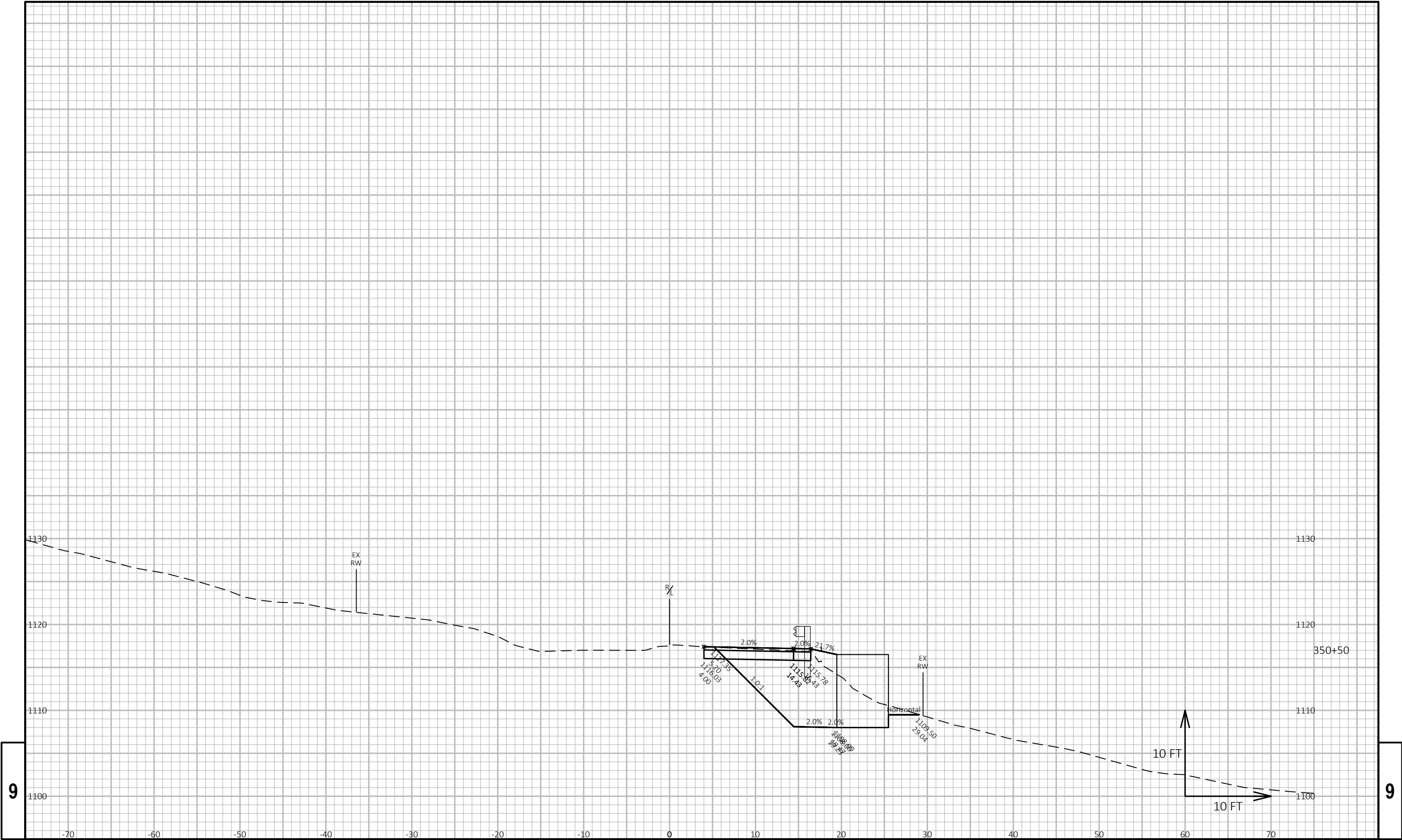
PROJECT NO:	2300-06-70	HWY:	STH 167	COUNTY:	WASHINGTON	PLAN AND PROFILE:	GABION WALL R-66-XX	SHEET	E
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*SEE CONSTRUCTION DETAIL

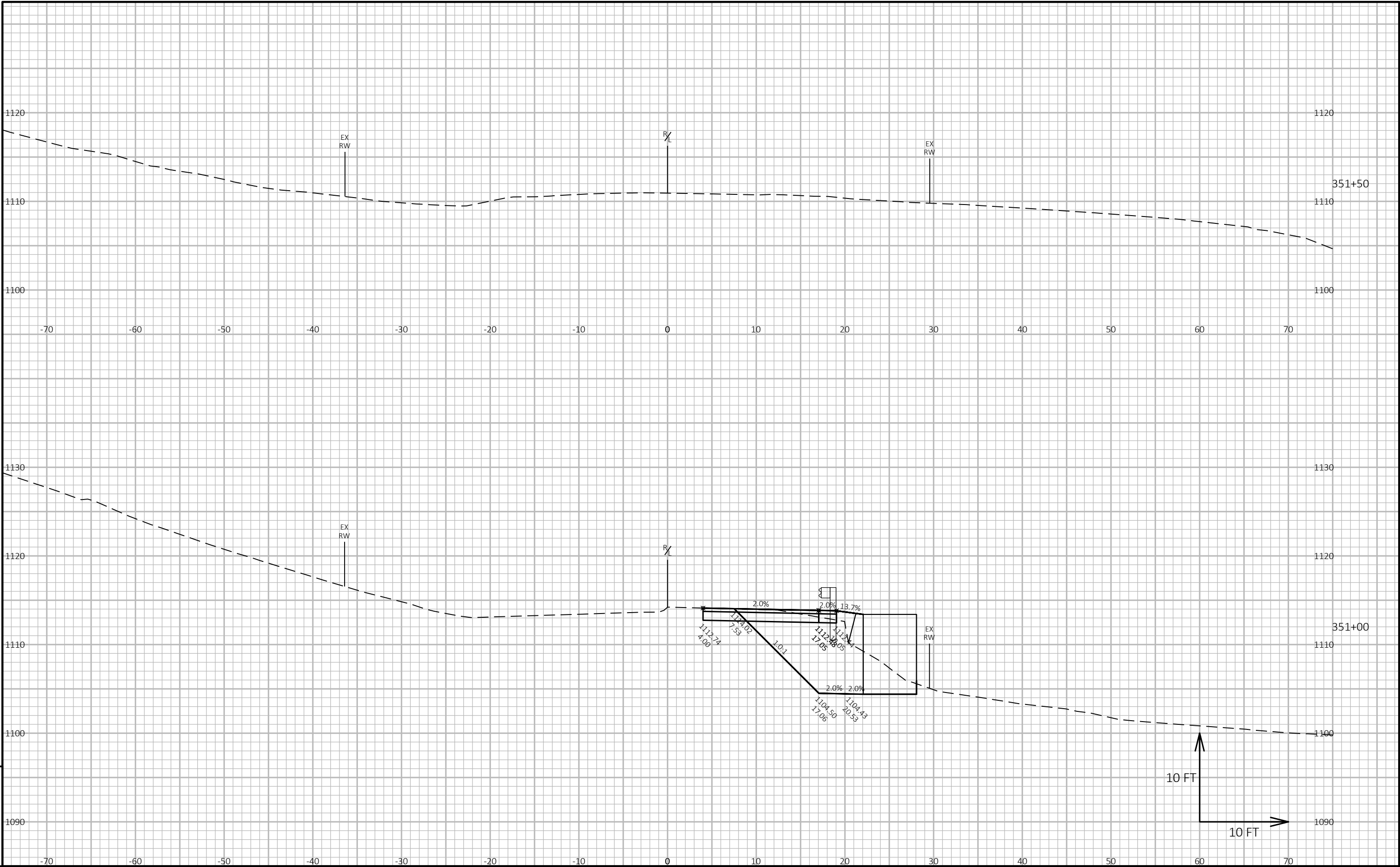






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