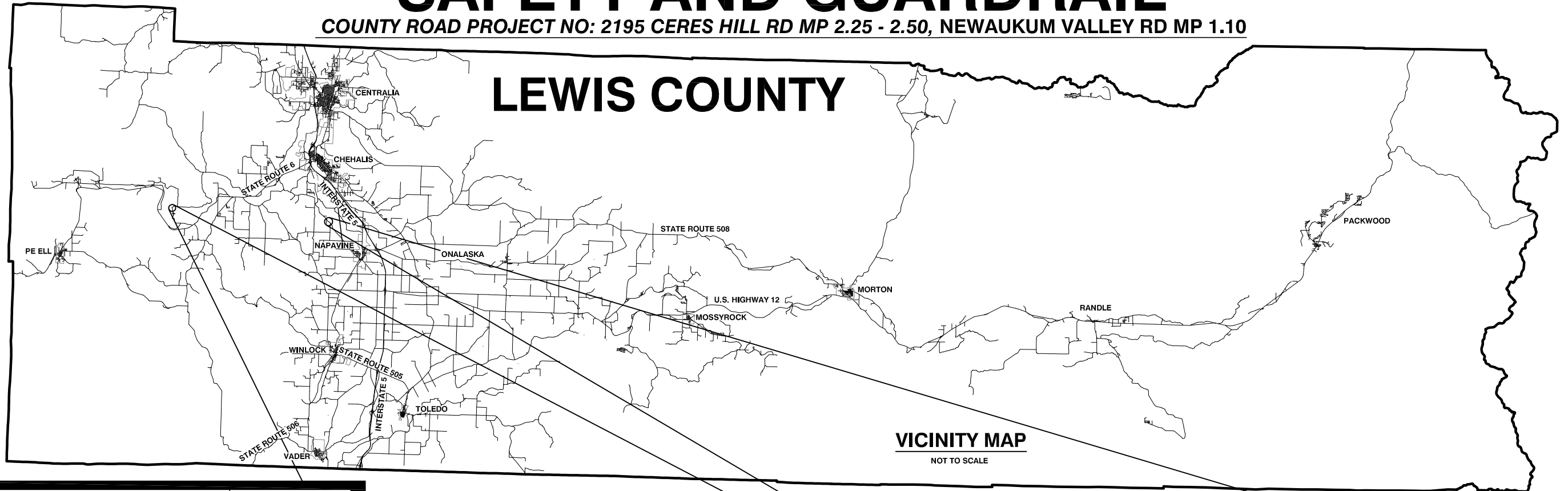


2022 COUNTYWIDE MISCELLANEOUS SAFETY AND GUARDRAIL

COUNTY ROAD PROJECT NO: 2195 CERES HILL RD MP 2.25 - 2.50, NEWAUKUM VALLEY RD MP 1.10



LEWIS COUNTY
DEPARTMENT OF PUBLIC WORKS
APPROVED FOR CONSTRUCTION:

06/29/2022
Date

Geoff R. Soderquist, P.E.
Assistant County Engineer



ROADWAY SECTIONS INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	SUMMARY OF QUANTITIES & LEGEND
3	TRAFFIC CONTROL PLAN
4-7	CERES HILL RD GUARDRAIL PLANS
8	NEWAUKUM VALLEY RD GUARDRAIL PLAN

COMMISSIONERS:

SEAN D. SWOPE, DISTRICT 1
LINDSEY R. POLLOCK, DVM, DISTRICT 2
F. LEE GROSE, DISTRICT 3

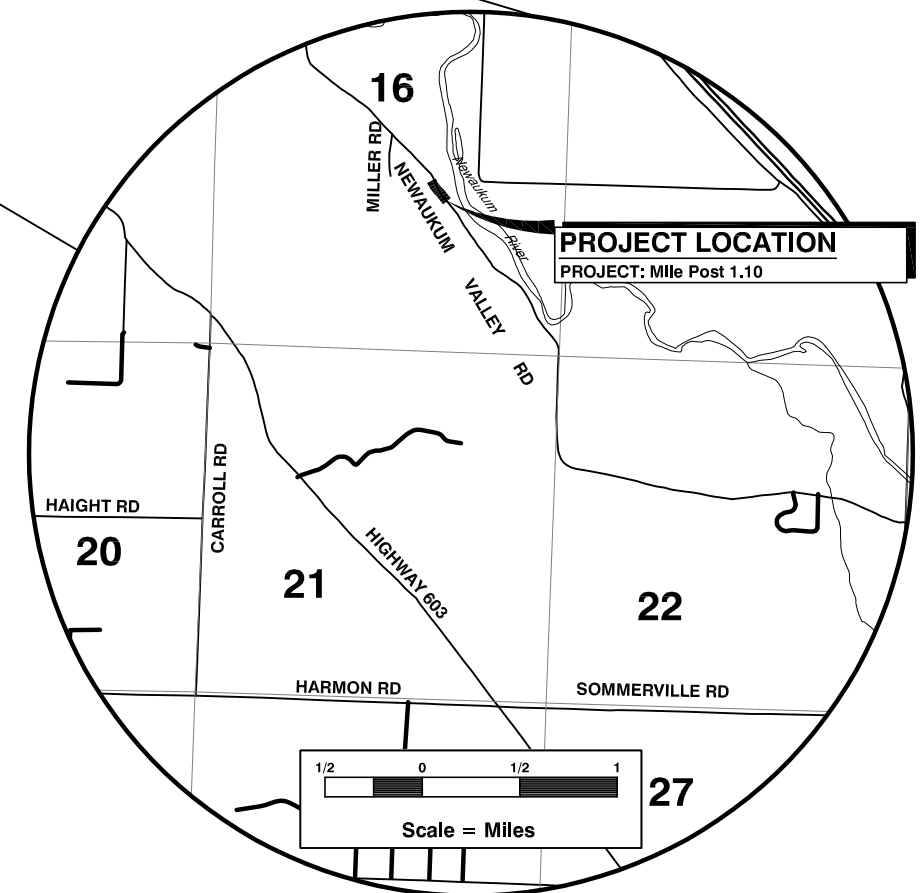
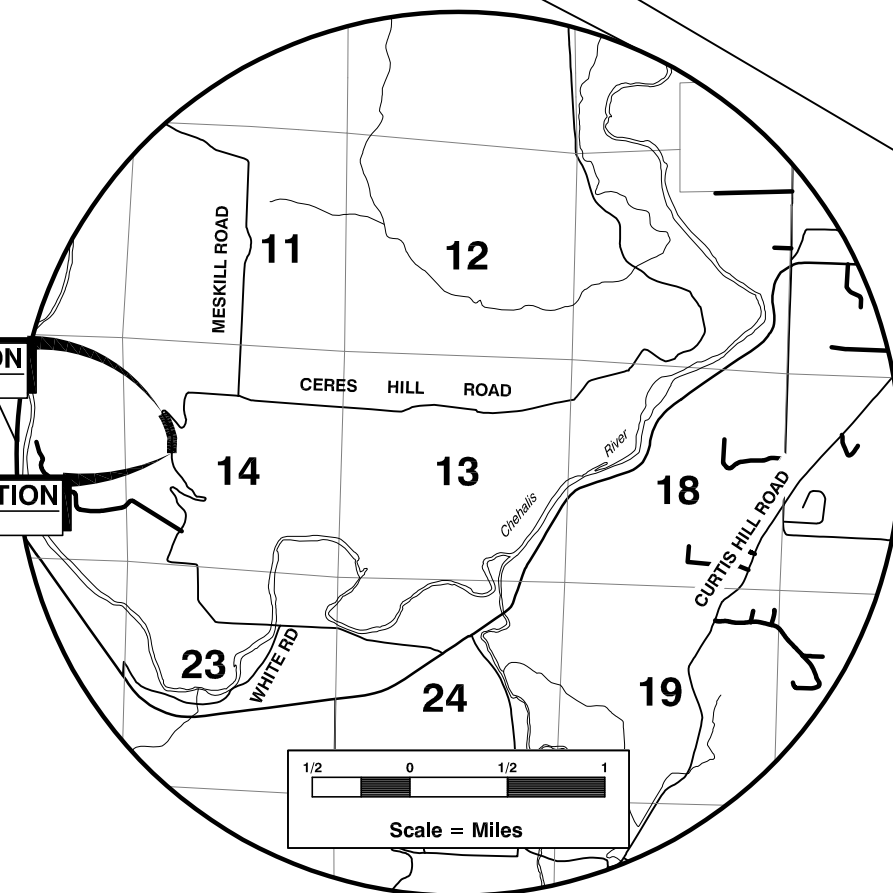


Department of Public Works

**ENGINEERING-
DESIGN SECTION**

EOP PROJECT LOCATION
END PROJECT: Mile Post 2.50

BOP PROJECT LOCATION
BEGIN PROJECT: Mile Post 2.25



2022 COUNTYWIDE MISCELLANEOUS SAFETY AND GUARDRAIL

SUMMARY OF QUANTITIES

ITEM NO.	STD. ITEM NO.	ITEM DESCRIPTION	CERES HILL RD	NEWAUKUM VALLEY RD	TOTAL QUANTITY	UNIT
PREPARATION						
1	0001	MOBILIZATION		LUMP SUM		LUMP SUM
2	0025	CLEARING AND GRUBBING	-	0.03	0.03	ACRE
3	0170	REMOVING GUARDRAIL	12.50	50	62.50	L.F.
GRADING						
4	0310	ROADWAY EXCAVATION INCL. HAUL	-	10	10	C.Y.
SURFACING						
5	5100	CRUSHED SURFACING BASE COURSE	-	150	150	TON
EROSION CONTROL AND ROADSIDE PLANTING						
6	6479	WATTLE	-	130	130	L.F.
TRAFFIC						
7	6711	BEAM GUARDRAIL TYPE 31 - 8 FT. LONG POST	-	137.50	137.50	L.F.
8	6713	BEAM GUARDRAIL TYPE 31 - 11 FT. LONG POST	1137.50	100	1237.50	L.F.
9	6757	BEAM GUARDRAIL TYPE 31	18.75	-	18.75	L.F.
10	6719	BEAM GUARDRAIL TYPE 31 NON - FLARED TERMINAL	1	1	2	EACH
11	6971	PROJECT TEMPORARY TRAFFIC CONTROL		LUMP SUM		LUMP SUM
OTHER ITEMS						
12	7725	REIMBURSEMENT FOR THIRD PARTY DAMAGE		EST.		DOLLAR
13	7728	MINOR CHANGE		CALC.		DOLLAR
14	7736	SPCC PLAN		LUMP SUM		LUMP SUM

LEGEND

<p>EXISTING FEATURES</p> <ul style="list-style-type: none"> TELEPHONE RISER GUY WIRE SIGN GUY POLE RIGHT OF WAY EXISTING CULVERT EXISTING ROADWAY CENTERLINE EXISTING ROAD EDGE FENCE EXISTING DITCH FLOWLINE DECIDUOUS TREE CONIFER TREE STUMP 	<p>NEW CONSTRUCTION FEATURES</p> <ul style="list-style-type: none"> CALLOUT GUARDRAIL (TYPE 31) GUARDRAIL (TYPE 31 XX FT LONG POST) WATTLE CLEARING & GRUBBING FILL EDGE OF ROAD ALIGNMENT CENTERLINE ALIGNMENT POINT OF CURVATURE POINT OF INTERSECTION POINT OF TANGENT ALIGNMENT ANGLE POINTS
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GENERAL NOTES

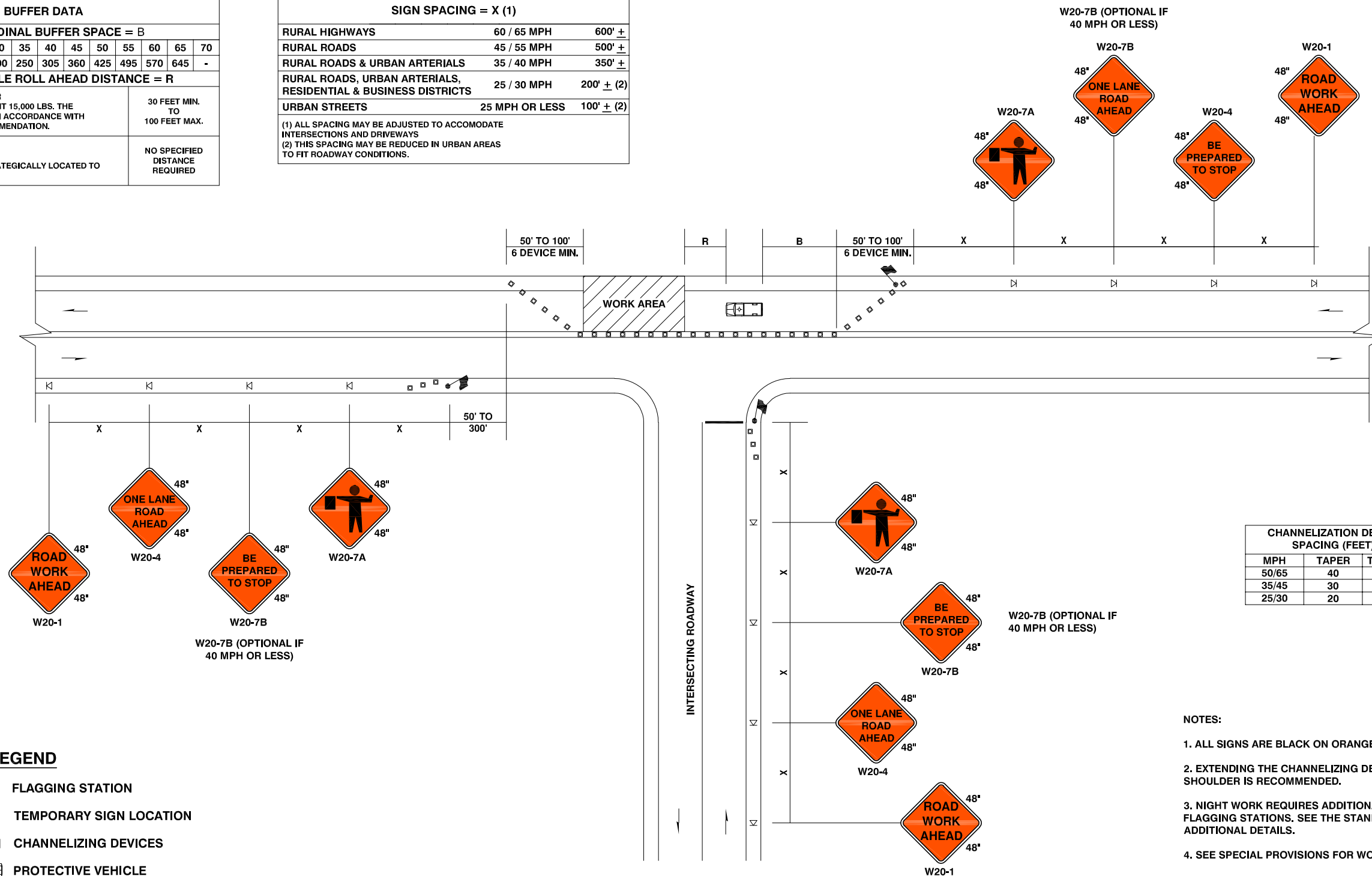
1. AT ALL TIMES FOR THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL HAVE ON HAND, THE PROJECT CONTRACT PROVISIONS AND PLANS, AND A CURRENT EDITION OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (M 41-10).
2. THE CONTRACTOR WILL COORDINATE, COOPERATE AND ASSIST IN THE INSPECTION PROCESSES THAT IS REQUIRED FOR THE COMPLETION OF THE PROJECT.
3. AT NO COST TO THE CONTRACTOR, ALL NECESSARY CONSTRUCTION SURVEY REQUESTS SHALL BE GIVEN 3 DAYS ADVANCE WRITTEN NOTICE. HOWEVER, THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING NEEDED SURVEY STAKES DESTROYED THROUGH NORMAL OPERATIONS, NEGLIGENCE, OR INATTENTION.
4. AT THE END OF EACH DAY, THE CONTRACTOR SHALL CLEAN UP THE PROJECT AREA AND LEAVE IT IN A NEAT AND SECURED MANNER. UPON COMPLETION, THE CONTRACTOR SHALL LEAVE THE PROJECT FREE OF DEBRIS AND UNUSED MATERIAL.
5. THE CONTRACTOR IS TO MAINTAIN INGRESS AND EGRESS FROM THE PROJECT SITE AND PRIVATE PROPERTY DRIVEWAYS DURING CONSTRUCTION.
6. AT A MINIMUM, THE CONTRACTOR IS TO MAINTAIN ALTERNATING ONE WAY TRAFFIC CONTROL UNLESS APPROVED TRAFFIC CONTROL PLAN ALLOWS OTHERWISE.

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BUFFER DATA										
LONGITUDINAL BUFFER SPACE = B										
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (FEET)	155	200	250	305	360	425	495	570	645	-
BUFFER VEHICLE ROLL AHEAD DISTANCE = R										
TRANSPORTABLE ATTENUATOR MINIMUM HOST VEHICLE WEIGHT 15,000 LBS. THE MAXIMUM WEIGHT SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATION.										30 FEET MIN. TO 100 FEET MAX.
PROTECTIVE VEHICLE MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA.										NO SPECIFIED DISTANCE REQUIRED

SIGN SPACING = X (1)		
RURAL HIGHWAYS	60 / 65 MPH	600' ±
RURAL ROADS	45 / 55 MPH	500' ±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' ± (2)
URBAN STREETS	25 MPH OR LESS	100' ± (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.



LEGEND

- FLAGGING STATION
- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- PROTECTIVE VEHICLE

NOTES:

1. ALL SIGNS ARE BLACK ON ORANGE.
2. EXTENDING THE CHANNELIZING DEVICE TAPER ACROSS SHOULDER IS RECOMMENDED.
3. NIGHT WORK REQUIRES ADDITIONAL ROADWAY LIGHTING AT FLAGGING STATIONS. SEE THE STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
4. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.

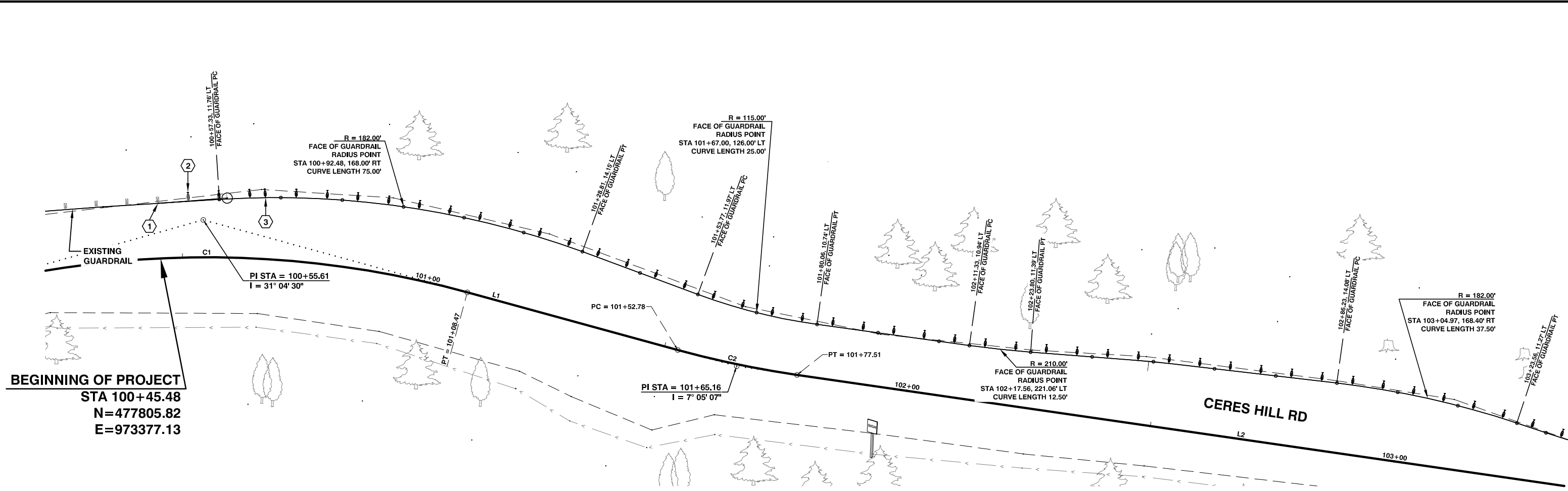
ONE-LANE, TWO WAY TRAFFIC CONTROL WITH FLAGGERS

NOT TO SCALE

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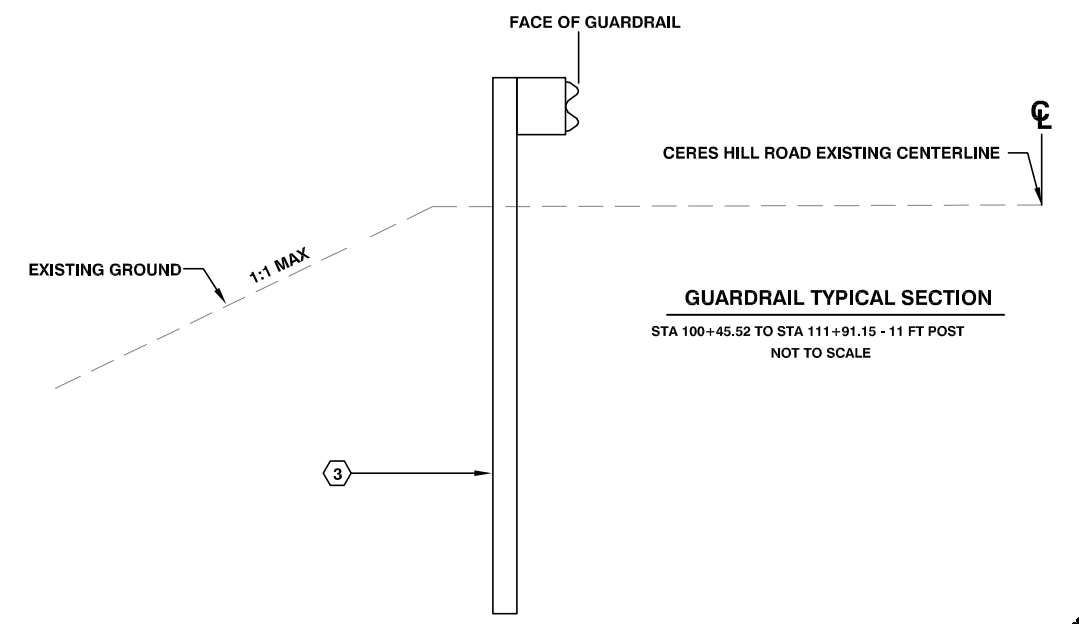
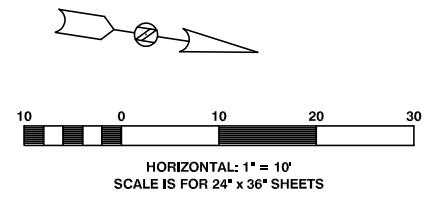
BEGINNING OF PROJECT
 STA 100+45.48
 N=477805.82
 E=973377.13

CONSTRUCTION NOTES

- ① STA 100+45.52, 11.19' LT TO STA 100+57.33, 11.79' LT
 REMOVING GUARDRAIL - 12.50 L.F.
- ② STA 100+45.52, 11.19' LT TO STA 100+69.09, 12.67' LT
 BEAM GUARDRAIL TYPE 31 TO BEAM GUARDRAIL TYPE 1 ADAPTER
 STA 100+45.52, 11.19' LT TO STA 100+69.09, 11.79' LT
 BEAM GUARDRAIL TYPE 31 - 11 FT LONG POST - 25.00 L.F.
 SEE WSDOT STANDARD PLAN C-25.80
- ③ STA 100+69.09, 11.79' LT TO STA 111+91.15, 11.26' LT
 BEAM GUARDRAIL TYPE 31 - 11 FT LONG POST - 1112.50 L.F.

CENTERLINE LINE DATA		
Line #	Length	Direction
L1	44.31	N06° 26' 42"E
L2	159.51	N00° 38' 25"W

CENTERLINE CURVE DATA				
Curve #	Δ	R	L	T
C1	031° 04' 30"	200.00	108.47	55.61
C2	007° 05' 07"	200.00	24.73	12.38



Lewis County
 Department of Public Works
 2025 N. E. KRESKY AVE.
 CHEHALIS WA 98532
 PHONE # (360) 740-1123
 FAX # (360) 740-2719

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RAW					
WRA					
06/28/2022					

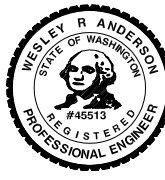
2022 COUNTYWIDE MISCELLANEOUS SAFETY AND GUARDRAIL

COUNTY ROAD PROJECT NO: 2195
 CERES HILL RD MP 2.25 - 2.50
 GUARDRAIL PLAN

SHEET
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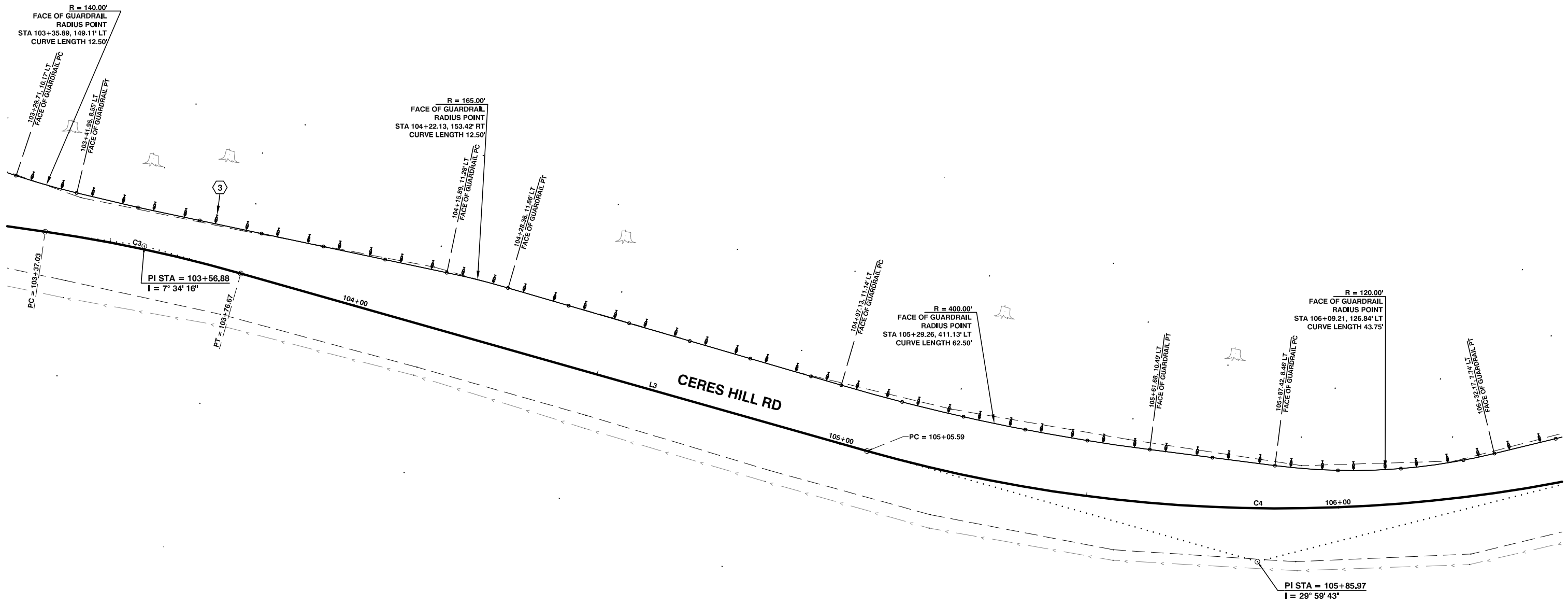


Wesley R Anderson, P.E.
 Senior Engineer/Design
 Date: 06/28/2022



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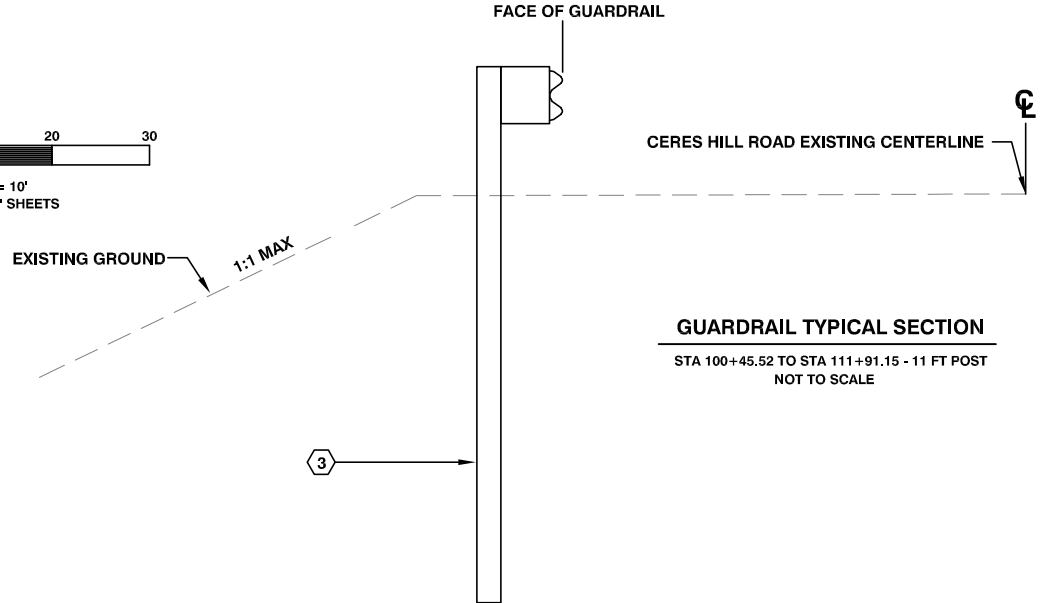
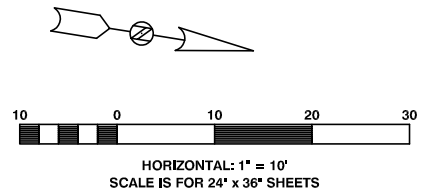
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CONSTRUCTION NOTES
 3 STA 100+69.09, 11.79' LT TO STA 111+91.15, 11.26' LT
 BEAM GUARDRAIL TYPE 31 - 11 FT LONG POST - 1112.50 L.F

CENTERLINE LINE DATA		
Line #	Length	Direction
L3	128.93	N06° 55' 51\"/>

CENTERLINE CURVE DATA				
Curve #	Δ	R	L	T
C3	007° 34' 16\"/>			



Lewis County
 Department of Public Works
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 CHEHALIS WA 98532
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 DRAWN BY : RAW
 CHECKED BY : WRA
 DATE : 06/28/2022

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2022 COUNTYWIDE MISCELLANEOUS SAFETY AND GUARDRAIL

COUNTY ROAD PROJECT NO: 2195
 CERES HILL RD MP 2.25 - 2.50
 GUARDRAIL PLAN

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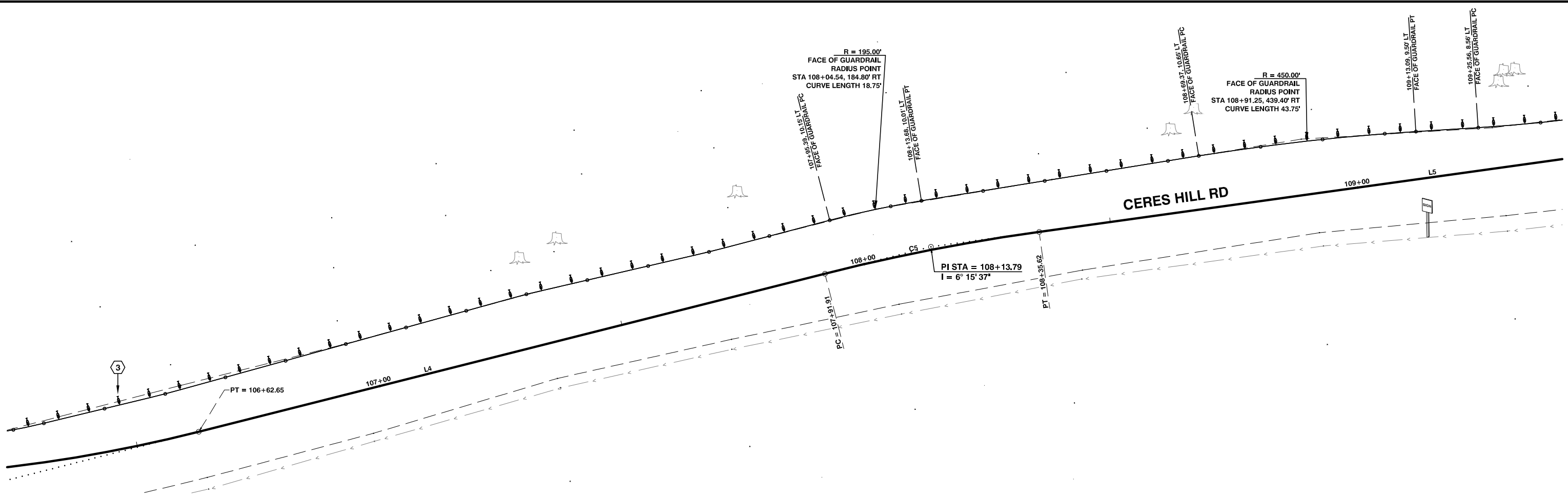


Wesley R Anderson, P.E.
 Senior Engineer/Design
 Date: 06/28/2022



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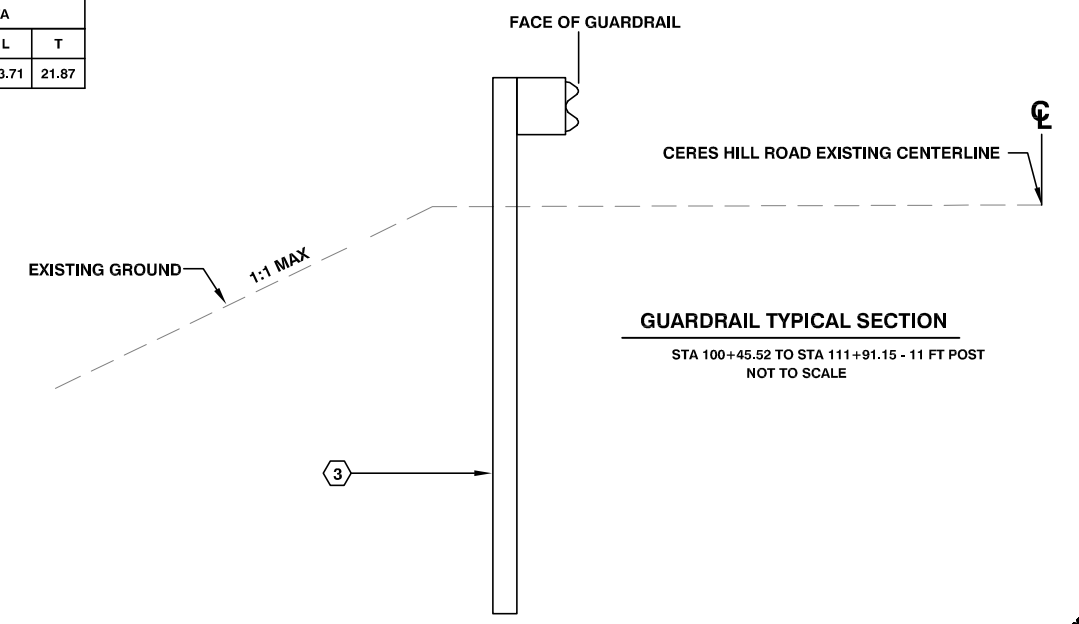
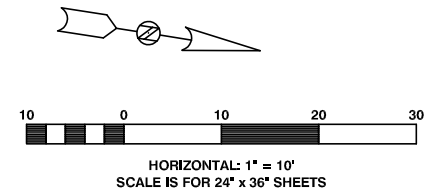
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CONSTRUCTION NOTES
 STA 100+69.09, 11.79' LT TO STA 111+91.15, 11.26' LT
 BEAM GUARDRAIL TYPE 31 - 11 FT LONG POST - 1112.50 L.F

CENTERLINE LINE DATA		
Line #	Length	Direction
L4	129.27	N23° 03' 52"W
L5	232.31	N16° 48' 15"W

CENTERLINE CURVE DATA				
Curve #	Δ	R	L	T
C5	006° 15' 37"	400.00	43.71	21.87



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**2022 COUNTYWIDE MISCELLANEOUS
 SAFETY AND GUARDRAIL**

COUNTY ROAD PROJECT NO: 2195
 CERES HILL RD MP 2.25 - 2.50
 GUARDRAIL PLAN

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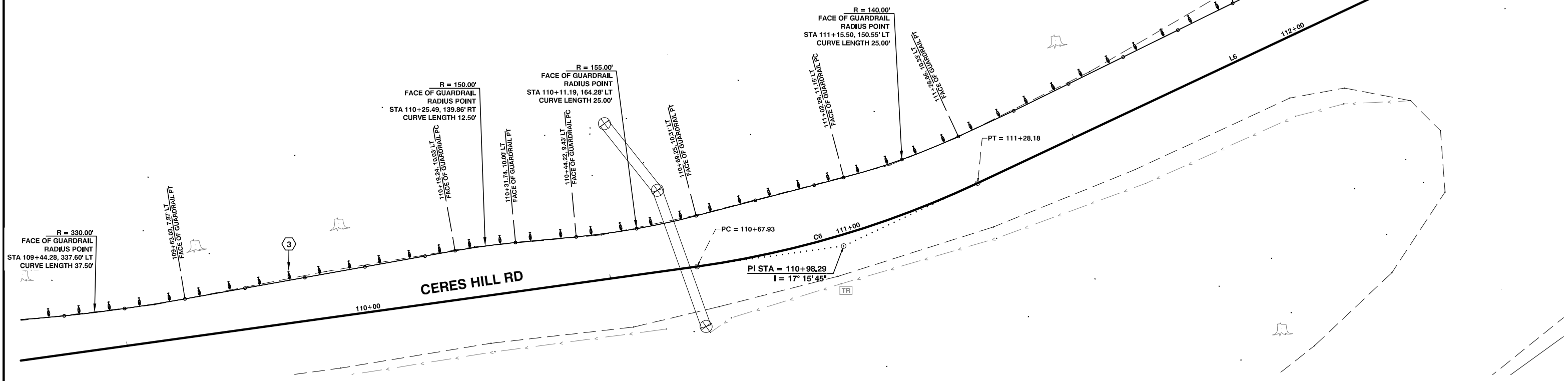
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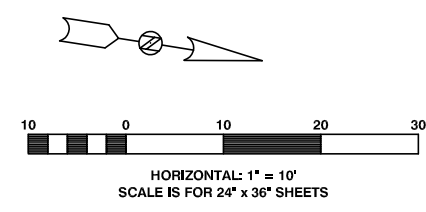
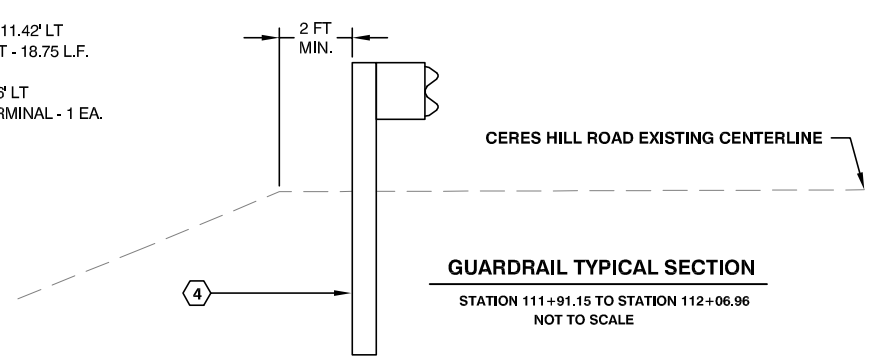
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END OF PROJECT
STA 112+46.43
N=478952.48
E=973149.98

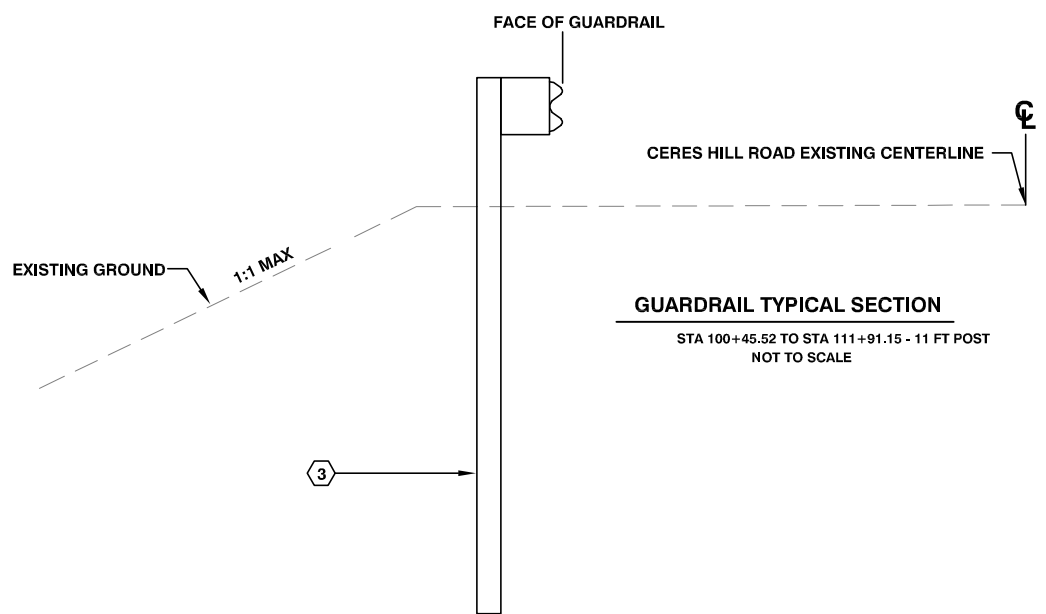


- CONSTRUCTION NOTES**
- 3 STA 100+69.09, 11.79' LT TO STA 111+91.15, 11.26' LT
BEAM GUARDRAIL TYPE 31 - 11 FT LONG POST - 1112.50 L.F.
 - 4 STA 111+91.15, 11.26' LT TO STA 112+09.92, 11.42' LT
BEAM GUARDRAIL TYPE 31 - 6 FT LONG POST - 18.75 L.F.
 - 5 STA 112+09.92, 11.42' LT TO 112+44.24, 13.36' LT
BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL - 1 EA.
SEE WSDOT STANDARD PLAN C-22.45



CENTERLINE LINE DATA		
Line #	Length	Direction
L6	118.25	N34° 04' 00"W

CENTERLINE CURVE DATA				
Curve #	Δ	R	L	T
C6	017° 15' 45"	200.00	60.26	30.36



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WRA					
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2022 COUNTYWIDE MISCELLANEOUS SAFETY AND GUARDRAIL

COUNTY ROAD PROJECT NO: 2195
 CERES HILL RD MP 2.25 - 2.50
 GUARDRAIL PLAN

SHEET
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 OF
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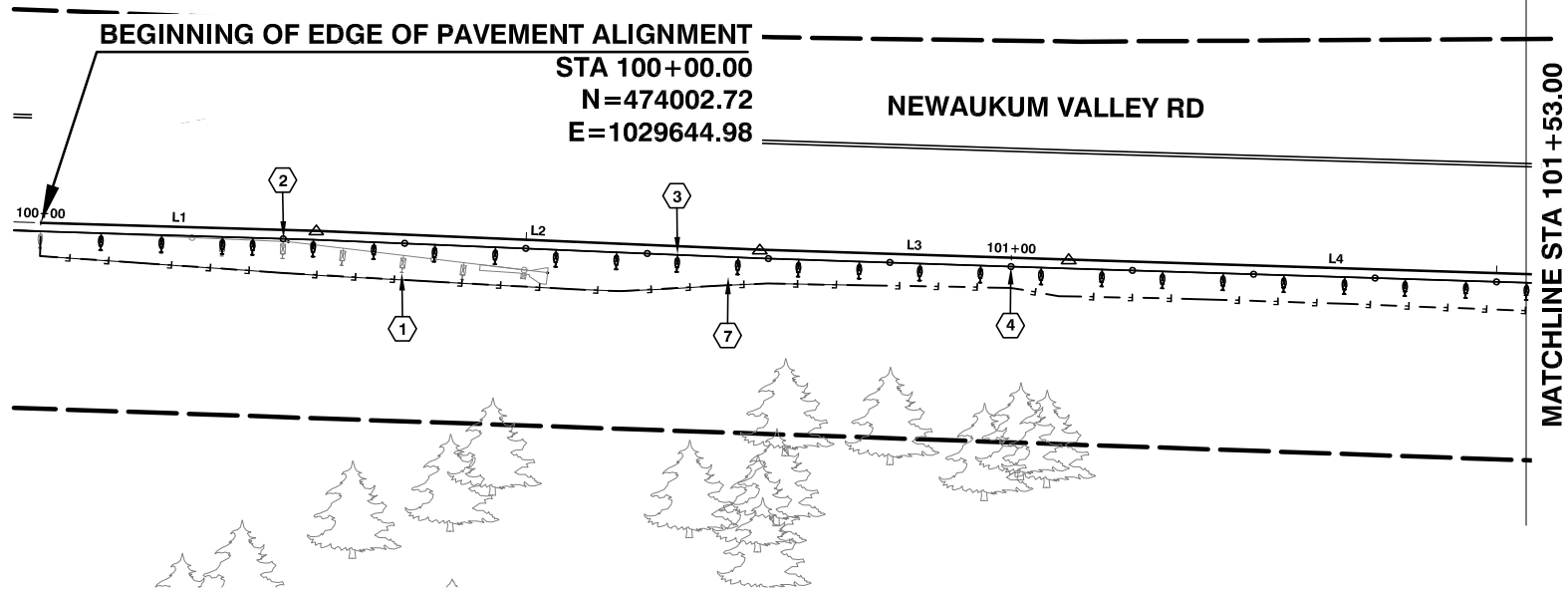


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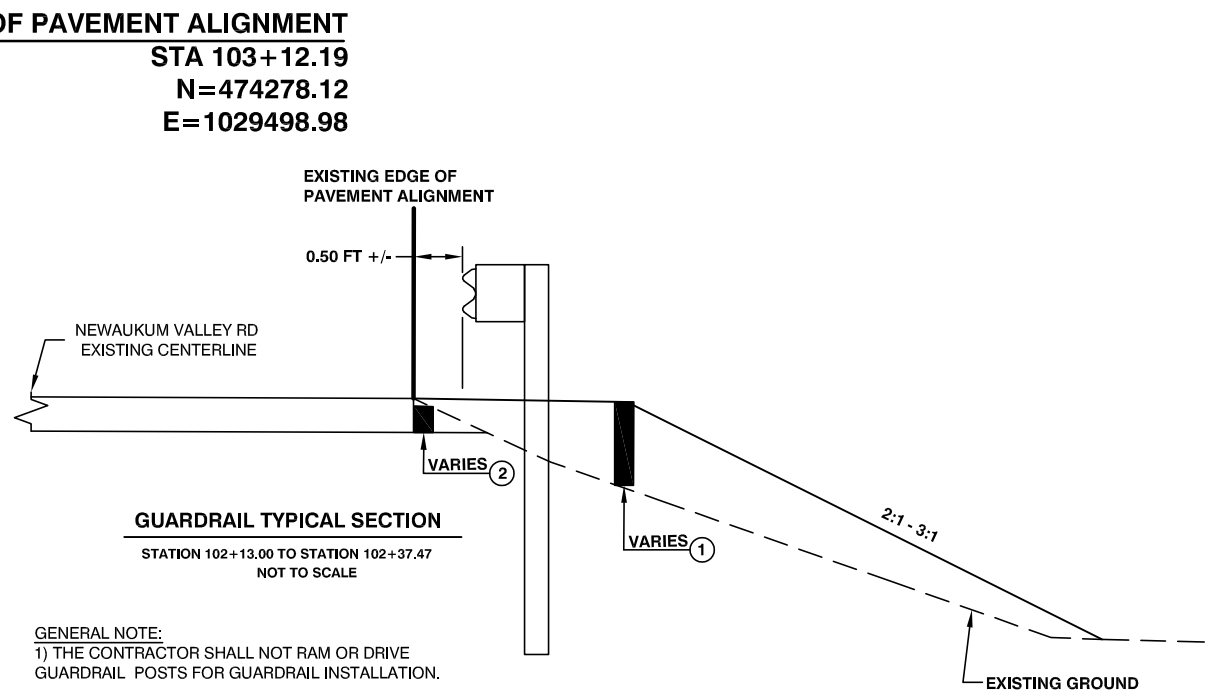
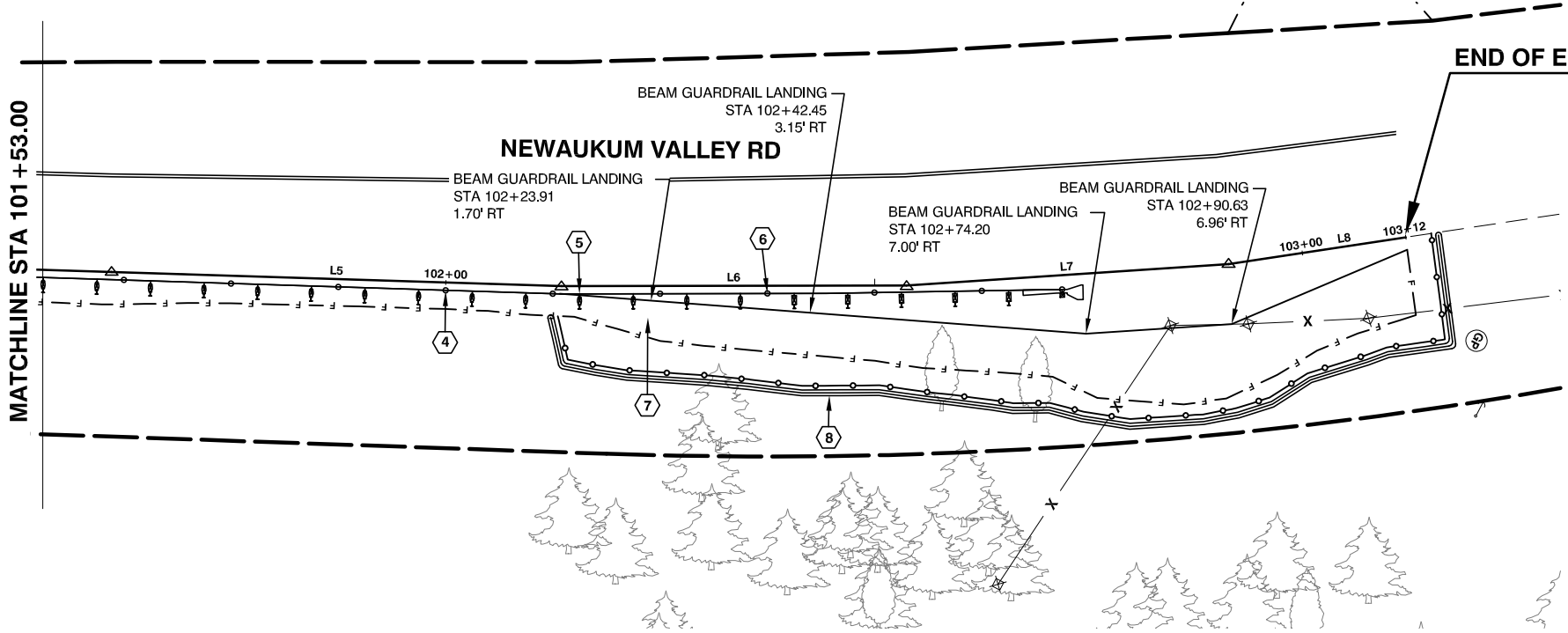
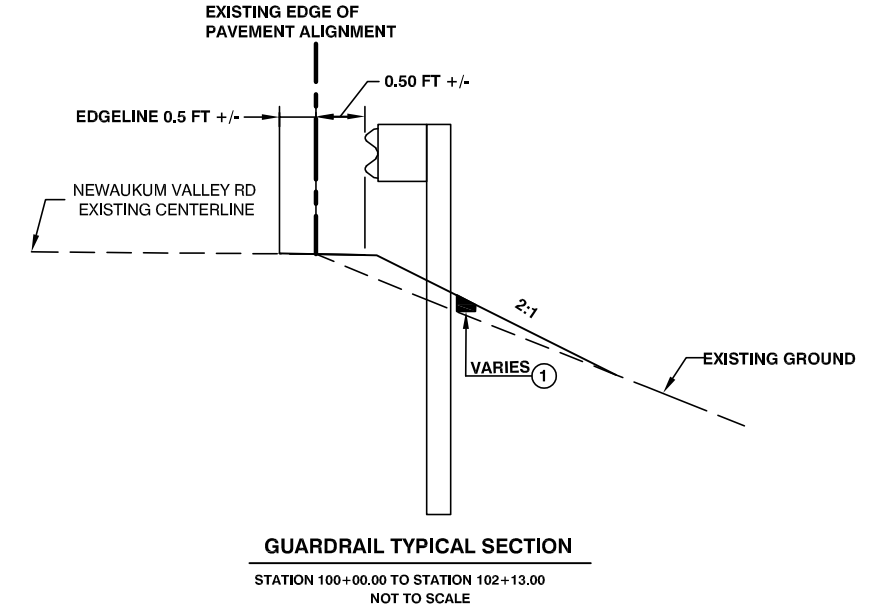


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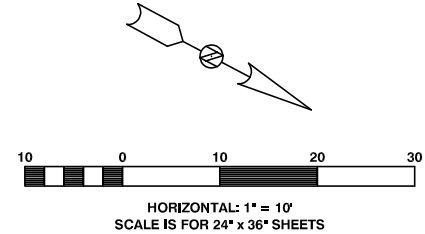
- CONSTRUCTION NOTES**
- ① STA 100+00.00, 0.85' RT TO STA 100+50.50, 3.11' RT
REMOVE GUARDRAIL - 50 L.F.
 - ② STA 100+00.00, 0.85' RT TO STA 100+25.00, 0.90' RT
BEAM GUARDRAIL TYPE 31 TO BEAM GUARDRAIL TYPE 1 ADAPTER
SEE WSDOT STANDARD PLAN C-25.80
 - ③ STA 100+00.00, 0.85' RT TO STA 101+00.00, 0.90' RT
BEAM GUARDRAIL TYPE 31 - 8 FT LONG POST - 100.00 L.F.
 - ④ STA 101+00.00, 0.90' RT TO STA 102+00.00, 0.90' RT
BEAM GUARDRAIL TYPE 31 - 11 FT LONG POST - 100.00 L.F.
 - ⑤ STA 102+00.00, 0.90' RT TO STA 102+37.47, 0.90' RT
BEAM GUARDRAIL TYPE 31 - 8 FT LONG POST - 37.50 L.F.
 - ⑥ STA 102+37.47, 0.90' RT TO STA 102+71.77, 1.67' RT
BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL - 1 EA.
SEE WSDOT STANDARD PLAN C-22.45
 - ⑦ STA 100+00.00 TO STA 103+12.00
CONSTRUCT SHOULDER AND GUARDRAIL LANDING
150 TON CRUSHED SURFACING BASE COURSE
10 C.Y. ROADWAY EXCAVATION INCL. HAUL
 - ⑧ STA 102+12.00 RT TO STA 103+12.00 RT
130 L.F. WATTLE
SEE WSDOT STANDARD PLAN I-30.30-02
0.03 ACRE CLEARING & GRUBBING



GENERAL NOTE:
1) THE CONTRACTOR SHALL NOT RAM OR DRIVE GUARDRAIL POSTS FOR GUARDRAIL INSTALLATION.

- ① CRUSHED SURFACING BASE COURSE
- ② ROADWAY EXCAVATION INCL. HAUL

EDGE OF PAVEMENT ALIGNMENT LINE DATA		
Line #	Length	Direction
L1	28.36	N26° 30' 47"W
L2	45.73	N25° 48' 16"W
L3	31.83	N26° 21' 50"W
L4	55.11	N26° 24' 42"W
L5	52.46	N26° 23' 58"W
L6	40.20	N28° 19' 55"W
L7	37.62	N32° 01' 24"W
L8	20.88	N36° 48' 30"W



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RAW					
DRAWN BY : RAW					
CHECKED BY : WRA					
DATE : 06/28/2022					

2022 COUNTYWIDE MISCELLANEOUS SAFETY AND GUARDRAIL

COUNTY ROAD PROJECT NO: 2195
NEWAUKUM VALLEY RD MP 1.10
GUARDRAIL PLAN

SHEET
8
OF
8



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