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PROJECT LOCATION

#	CODE	STREET NAME	LOCATION
1.	G24060401/02	GREENHORN ROAD	LATITUDE: 39.213937 LONGITUDE: -121.005834
2.	G24060101	GREENHORN ROAD	LATITUDE: 39.216606 LONGITUDE: -120.961188
3.	G21090101/02	MAGNOLIA ROAD	LATITUDE: 39.050258 LONGITUDE: -121.065568
4.	G32060901/02	McCOURTNEY ROAD	LATITUDE: 39.098393 LONGITUDE: -121.150903
5.	G32060201	McCOURTNEY ROAD	LATITUDE: 39.201569 LONGITUDE: -121.090998
6.	G35090401/02	PENN VALLEY DRIVE	LATITUDE: 39.198886 LONGITUDE: -121.174621
7.	G34030204	PLEASANT VALLEY ROAD	LATITUDE: 39.236684 LONGITUDE: -121.217754
8.	G36140302	ROUGH AND READY HWY	LATITUDE: 39.230566 LONGITUDE: -121.134938
9.	G22860101	TAMMY WAY	LATITUDE: 39.135118 LONGITUDE: -121.047992

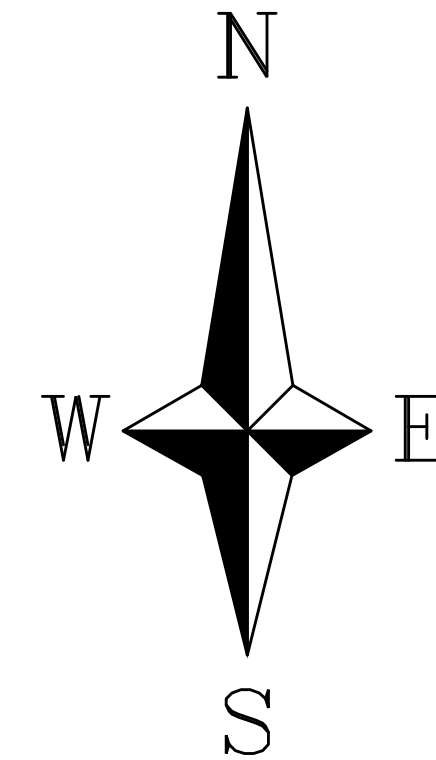
NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS

PLANS FOR THE CONSTRUCTION OF

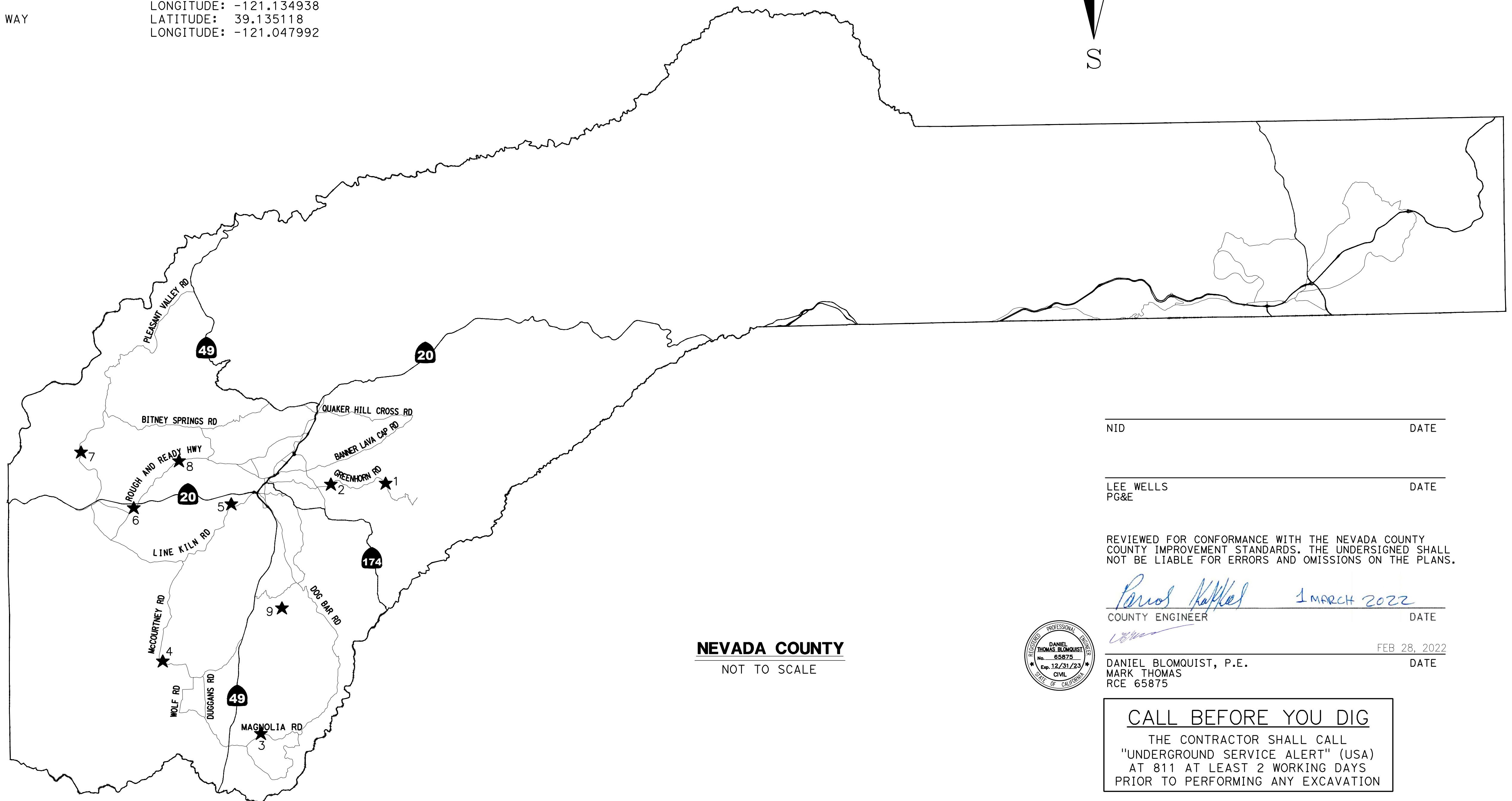
GUARDRAIL SAFETY AUDIT PROJECT
NEVADA COUNTY, CALIFORNIA

FEDERAL PROJECT NO. HSIPL-5917(102)

COUNTY PROJECT NO. 225035



STATE OF CALIFORNIA
NOT TO SCALE



NEVADA COUNTY
NOT TO SCALE

NID _____ DATE _____

LEE WELLS
PG&E _____ DATE _____

REVIEWED FOR CONFORMANCE WITH THE NEVADA COUNTY
COUNTY IMPROVEMENT STANDARDS. THE UNDERSIGNED SHALL
NOT BE LIABLE FOR ERRORS AND OMISSIONS ON THE PLANS.

Daniel Blomquist 1 MARCH 2022
COUNTY ENGINEER _____ DATE _____

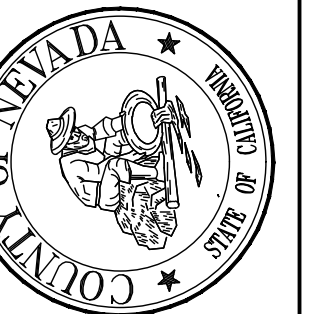
DANIEL BLOMQUIST, P.E.
MARK THOMAS
RCE 65875 _____ DATE _____

CALL BEFORE YOU DIG

THE CONTRACTOR SHALL CALL
"UNDERGROUND SERVICE ALERT" (USA)
AT 811 AT LEAST 2 WORKING DAYS
PRIOR TO PERFORMING ANY EXCAVATION

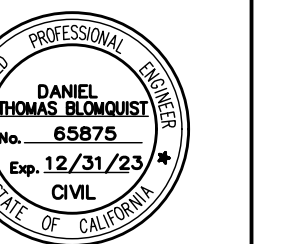
REVISIONS

NO.	DESCRIPTION	BY	DATE



GUARDRAIL SAFETY AUDIT PROJECT
TITLE SHEET
NEVADA COUNTY - DEPARTMENT OF PUBLIC WORKS

MARK
THOMAS



DATE: FEB 28, 2022

DRAWING: EL

DESIGNED: EM

DRAWN: KH

CHECKED: JW

JOB NO: 225035

DATE: FEB 28, 2022

SCALE REFERENCE
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DRAWING
T-1

SHEET

1

OF 16 SHEETS

NOTES:

1. COUNTY, DEPARTMENT OR ENGINEER, AS USED ON THESE PLANS AND NOTES, REFERS TO THE DIRECTOR OF THE NEVADA COUNTY DEPARTMENT OF PUBLIC WORKS OR AN AUTHORIZED AGENT APPOINTED BY THE DIRECTOR.
2. ALL EXISTING ASPHALT SURFACES SHALL BE SAWCUT OR GROUND TO A DEPTH OF AT LEAST 0.20-FOOT A DISTANCE OF ONE FOOT MINIMUM BEYOND THE LIMITS OF DISTURBANCE TO A NEAT, STRAIGHT LINE AND REMOVED. ANY EXPOSED ASPHALT SHALL BE SEALED WITH HOT EMULSION PRIOR TO PAVING. THE EXPOSED BASE MATERIAL SHALL BE GRADED AND RECOMPACTED PRIOR TO PAVING.
3. THE CONTRACTOR SHALL MAINTAIN ADEQUATE DUST CONTROL PER SECTION 10-5 OF THE CALTRANS STANDARD SPECIFICATIONS.
4. INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF ANY EROSION OR SILTATION ENTERING THE STORM DRAIN SYSTEM, NATURAL DRAINAGE COURSES AND/OR INTRUDING UPON ADJACENT ROADWAYS AND PROPERTIES. WINTERIZATION AND EROSION CONTROL SHOWN ON THESE PLANS IS INTENDED AS A GUIDE. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER. THIS RESPONSIBILITY SHALL APPLY THROUGHOUT THE COURSE OF CONSTRUCTION AND UNTIL ALL DISTURBED AREAS HAVE BECOME STABILIZED AND SHALL NOT BE LIMITED TO WET WEATHER PERIODS.
5. HOT MIX ASPHALT (HMA) SHALL CONFORM TO SECTION 39 OF THE SPECIAL PROVISIONS AND SHALL BE TYPE A, MEDIUM GRADATION, 1/2" MAXIMUM, WITH PG 64-16. ALL HMA PLACED, WHETHER NEW ROADWAY OR OVERLAY, SHALL BE MATCHED TO GRADE WITH AN AGGREGATE BASE SHOULDER. THIS SHOULDER BACKING SHALL BE A MINIMUM OF 1’ WIDE OR MATCH THE PROJECT PLANS, WHICHEVER IS GREATER.
6. THE UPPER 8" OF AGGREGATE BASE SHALL BE CLASS 2, 3/4" MAXIMUM GRADING. WHERE THE BASE THICKNESS EXCEEDS 8", THE DEPTH BELOW 8" MAY BE CLASS 2, 1 1/2" MAXIMUM GRADING. AGGREGATE BASE SHALL CONFORM TO SECTION 26 OF THE SPECIAL PROVISIONS.
7. ALL WORK WITHIN COUNTY RIGHT_OF_WAY SHALL CONFORM TO ALL PROVISIONS OF ENCROACHMENT STATED IN THE ENCROACHMENT PERMIT.
8. THE CONTRACTOR MUST IMMEDIATELY REINSTALL ANY TRAFFIC SIGNS REMOVED IN THE COURSE OF CONSTRUCTION. ANY SIGNS LOST OR DAMAGED BY THE CONTRACTOR SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.
9. THE CONTRACTOR MUST PROVIDE TEMPORARY TRAFFIC STRIPING IF EXISTING DELINEATION IS DESTROYED DURING TRENCHING OR OTHER WORK. PAINTED MARKINGS OR STRIPING TAPE MAY BE USED. THE TEMPORARY STRIPING MUST BE APPROVED FOR MATERIAL AND LAYOUT BY THE ENGINEER BEFORE TRENCHING OR OTHER WORK IS STARTED. THE CONTRACTOR, AT THEIR EXPENSE, SHALL SANDBLAST ALL TEMPORARY PAINTED MARKINGS THAT ARE TO BE REMOVED.
- 10.THE COUNTY MAY REQUIRE THE CONTRACTOR TO UNCOVER ANY IMPROVEMENTS THAT HAVE BEEN COMPLETED WITHOUT PROPER COUNTY INSPECTION AND/OR APPROVAL. IF THE INSTALLATION IS FOUND NOT TO MEET COUNTY STANDARDS OR PREVIOUSLY APPROVED ALTERNATIVES SHOWN ON THE PLANS, THE CONTRACTOR SHALL REMOVE AND REPLACE SUCH IMPROVEMENTS AT THE CONTRACTOR’S EXPENSE.
- 11.THE DEPARTMENT OF PUBLIC WORKS (DPW) SHALL HAVE FIRST RIGHT OF REFUSAL FOR AC GRINDINGS AND/OR REUSABLE AB MATERIAL THAT IS REMOVED FROM EXISTING PUBLIC ROADWAYS. CONTRACTOR SHALL NOTIFY DPW ROAD MAINTENANCE DIVISION AT LEAST 24 HOURS PRIOR TO BEGINNING WORK WITHIN THE PUBLIC ROADWAY TO DETERMINE IF DPW INTENDS TO RETAIN AC GRINDINGS AND/OR REUSABLE AB MATERIAL. IF DPW OPTS TO RETAIN ANY MATERIAL THEY WILL PROVIDE THE CONTRACTOR WITH A LOCAL SITE FOR THE CONTRACTOR TO DEPOSIT, AT CONTRACTOR’S EXPENSE, THE REUSABLE MATERIALS FOR THE BENEFIT OF DPW. IF DPW OPTS TO NOT RETAIN ANY MATERIAL THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR FINAL MATERIAL DISPOSAL.
- 12.IF ANY ARCHAEOLOGICAL ARTIFACTS, EXOTIC ROCK (NON-NATIVE), OR UNUSUAL AMOUNTS OF SHELL OR BONE ARE UNCOVERED DURING ANY ON-SITE CONSTRUCTION ACTIVITIES, ALL WORK MUST STOP IMMEDIATELY IN THE AREA AND A QUALIFIED ARCHAEOLOGIST RETAINED TO EVALUATE THE DEPOSIT. IF THE DISCOVERY CONSISTS OF HUMAN REMAINS, THE NEVADA COUNTY CORONER AND NATIVE AMERICAN HERITAGE COMMISSION MUST ALSO BE CONTACTED. WORK IN THE AREA MAY ONLY PROCEED AFTER AUTHORIZATION IS GRANTED BY THE COUNTY.
- 13.THE CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE LATEST 2018 EDITION OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AND STANDARD PLANS, INCLUDING REVISED STANDARD PLANS AND SPECIFICATIONS, AND APPLICABLE NEVADA COUNTY STANDARD DRAWINGS. IN CASE OF CONFLICT, REFER TO THE PROJECT SPECIAL PROVISIONS FOR ORDER OF PRECEDENCE.
- 14.NEVADA COUNTY HAS MADE EVERY EFFORT TO SHOW LOCATIONS OF ANY AND ALL EXISTING SURFACE AND SUBSURFACE FACILITIES. HOWEVER, ACTUAL FIELD CONDITIONS AND LOCATIONS CAN VARY CONSIDERABLY FROM PLAN LOCATION. THEREFORE, NEVADA COUNTY CANNOT, AND DOES NOT, ASSUME RESPONSIBILITY FOR THE EXISTENCE OR LOCATION OF ANY FACILITIES SUCH AS, BUT NOT LIMITED TO, UTILITIES, PIPELINES AND SEWER. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL AGENCIES AND/OR OWNERS TO VERIFY THIS INFORMATION PRIOR TO AND DURING CONSTRUCTION OF IMPROVEMENTS SHOWN HEREIN, AND TO CONTACT THE ENGINEER IN THE EVENT OF ANY SIGNIFICANT DISCREPANCY.
- 15.EXISTING UTILITIES SHALL BE PROTECTED. UTILITY AGENCIES SHALL BE NOTIFIED AND ALLOWED TO MARK THEIR UTILITIES IN THE FIELD AT LEAST 48 HOURS BEFORE EXCAVATION. CALL USA (800) 642-2444.
- 16.THE CONTRACTOR SHALL BE RESPONSIBLE FOR POTHOLING EXISTING UTILITIES PRIOR TO CONSTRUCTION OF ANY UNDERGROUND WORK.
- 17.THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.
- 18.THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK AND FOR PROVIDING PROPER AND SAFE ROUTING OF THE VEHICULAR AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO WORKING HOURS. THE USE OF FLAGGERS, BARRICADES AND CONSTRUCTION SIGNING SHALL COMPLY WITH THE CURRENT EDITION OF WORK AREA AND TRAFFIC CONTROL HANDBOOK (W.A.T.C.H.) AND THE CALIFORNIA MUTCD.
- 19.AT THE TIME THE CONTRACT IS AWARDED, THE CONTRACTOR SHALL POSSESS A CLASS "A" LICENSE, OR A COMBINATION OF CLASSES REQUIRED BY THE CATEGORIES AND CLASSES OF WORK INCLUDED IN THIS CONTRACT.

- 20.THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR PRESERVING ALL EXISTING MONUMENTS WHICH WILL BE DISTURBED OR REMOVED AS REQUIRED BY CONTRACTOR’S WORK. CONTRACTOR SHALL COORDINATE WITH RESIDENT ENGINEER/SURVEYOR PRIOR TO DISTURBANCE OF EXISTING MONUMENTS, AND SHALL RESET MONUMENTS OR PROVIDE PERMANENT WITNESS MONUMENTS AND FILE DOCUMENTATION WITH THE COUNTY SURVEYOR PURSUANT TO BUSINESS AND PROFESSIONS CODE SECTION 8771.
- 21.CONTRACTOR SHALL COMPLY WITH BUSINESS AND PROFESSIONS CODE SECTION 8771(B) REGARDING REFERENCING, PRESERVING AND RECONSTRUCTING MONUMENTS, WHETHER OR NOT MONUMENTS ARE SHOWN IN THESE PLANS.
- 22.A TRAFFIC CONTROL PLAN SHALL BE PREPARED BY THE CONTRACTOR AT LEAST 20 DAYS PRIOR TO COMMENCEMENT OF ANY WORK. UNLESS SPECIFICALLY SET FORTH AS SPECIAL PROVISIONS, ALL MARKED LANES OF TRAFFIC SHALL BE UNOBSTRUCTED IN EACH DIRECTION DURING THE PEAK TRAFFIC HOURS OF 7:00 TO 9:00AM AND 3:30 TO 6:00PM, UNLESS OTHERWISE APPROVED BY COUNTY ENGINEER OR AS SPECIFIED IN THE SPECIAL PROVISIONS. A TRAFFIC LANE SHALL BE CONSIDERED UNOBSTRUCTED IF IT IS SURFACED WITH ASPHALT AND IS AT LEAST TEN FEET WIDE.
- 23.FOR ADDITIONAL ABBREVIATIONS, SEE CALTRANS STANDARD PLANS A3A, A3B & A3C.
- 24.ALL TRAFFIC STRIPES, ARROWS, AND PAVEMENT MARKINGS SHALL BE REPLACED IN-KIND WITH LIKE MATERIALS (PAINT OR THERMOPLASTIC) TO THE SPECIFICATIONS SET FORTH IN CHAPTER 3 OF THE CALIFORNIA MUTCD LATEST EDITION. ALL DELINEATORS SHALL BE WHITE WITH THE APPROPRIATE COLOR OF RETRORELECTIVE SHEETING AS SPECIFIED IN CHAPTER 3 OF THE CALIFORNIA MUTCD LATEST EDITION.

ABBREVIATIONS

ABN	ABANDON	LT	LEFT
ADJ	ADJUST	MC	CURVE MIDPOINT
AITS	ALTERNATIVE IN-LINE TERMINAL SYSTEM	MGS	MIDWEST GUARD RAIL SYSTEM
AP	ANGLE POINT	MOD	MODIFY, MODIFIED
Assy	ASSEMBLY	NIC	NOT IN CONTRACT
AT&T	AMERICAN TELEPHONE AND TELEGRAPH	NID	NEVADA IRRIGATION DISTRICT
BB	BEGINNING OF BRIDGE	PCC	POINT OF COMPOUND CURVE
BEG	BEGINNING	PG&E	PACIFIC GAS AND ELECTRIC
CLR	CLEARANCE	Rem	REMOVE
CP	CATCH POINT	RT	RIGHT
CRT	CONTROLLED RELEASING TERMINAL	SAW	SAWCUT
CULV	CULVERT	SNS	STREET NAME SIGN
DWY	DRIVEWAY	SW	SIDEWALK
EB	END OF BRIDGE	TCE	TEMPORARY CONSTRUCTION EASEMENT
EG	EDGE OF GRAVEL	TEMP	TEMPORARY
ESMT	EASEMENT	TFC	TOP FACE OF CURB
FOW	FACE OF WALK	TL	TEST LEVEL
HMA-A	HOT MIX ASPHALT TYPE A	TYP	TYPICAL
HP	HINGE POINT	VAR	VARIES
HW	HEAD WALL	VERT	VERTICAL

STANDARD PLANS (SEE SPECIAL PROVISIONS FOR DETAILS)

ABBREVIATIONS	A3A-A3C
LEGEND	A10A,RSP A10B-A10E
PAVEMENT MARKINGS	A20B
MARKERS AND DELINEATORS	A73A, A73B, A73C
MGS STANDARD SECTION	A77L1, A77L2
METAL BEAM GUARD RAIL RECONSTRUCT INSTALLATION	A77L3
MGS STANDARD HARDWARE	A77M1
MGS POST AND BLOCK DETAILS	A77N1,A77N2
MGS TYPICAL LINE POST AND EMBEDMENT AND HINGE POINT DETAILS	A77N3
MGS TYPICAL RAILING DELINEATION AND DIKE POSITIONING DETAILS	A77N4
MGS TYPICAL LAYOUTS FOR EMBANKMENTS	A77P1, A77P2, A77P3, A77P4, A77P5, A77P6
MGS TYPICAL LAYOUTS FOR FIXED OBJECTS BETWEEN SEPARATE ROADBEDS	A77R1
MGS TYPICAL LAYOUTS FOR ROADSIDE FIXED OBJECTS	A77R4
MGS END ANCHOR ASSEMBLY (TYPE SFT)	A77S1
METAL RAILING END ANCHOR ASSEMBLY (TYPE CA)	A77T1
MGS BURIED POST END ANCHOR	A77T2
MGS TRANSITION RAILING (TYPE WB-31)	A77U4
THRIE BEAM BARRIER STANDARD HARDWARE DETAILS	A78C1
THRIE BEAM	A78F1, A78F2

UTILITY	COMPANY	REPRESENTATIVE	PHONE
ELECTRIC	PG&E	LEE WELLS	530-320-3908
GAS	PG&E	LEE WELLS	530-320-3908
WATER	NID	TONIA HERRERA	530-271-6815
TELECOM	AT&T	LEE NIETO	916-434-6527
TELECOM	COMCAST	JESSICAR NARAG	925-596-3161

REVISIONS

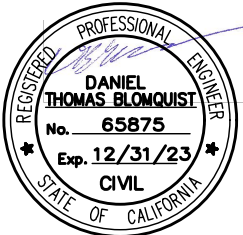
NO.	DESCRIPTION	BY	DATE



GUARDRAIL SAFETY AUDIT PROJECT

GENERAL NOTES

NEVADA COUNTY – DEPARTMENT OF PUBLIC WORKS



DATE:FEB 28, 2022

DRAWING: EL

DESIGNED: EM

DRAWN: KH

CHECKED: JW

JOB NO: 225035

DATE: FEB 28, 2022

SCALE REFERENCE

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DRAWING

GN-1

SHEET

2

OF 16 SHEETS

LEGEND:

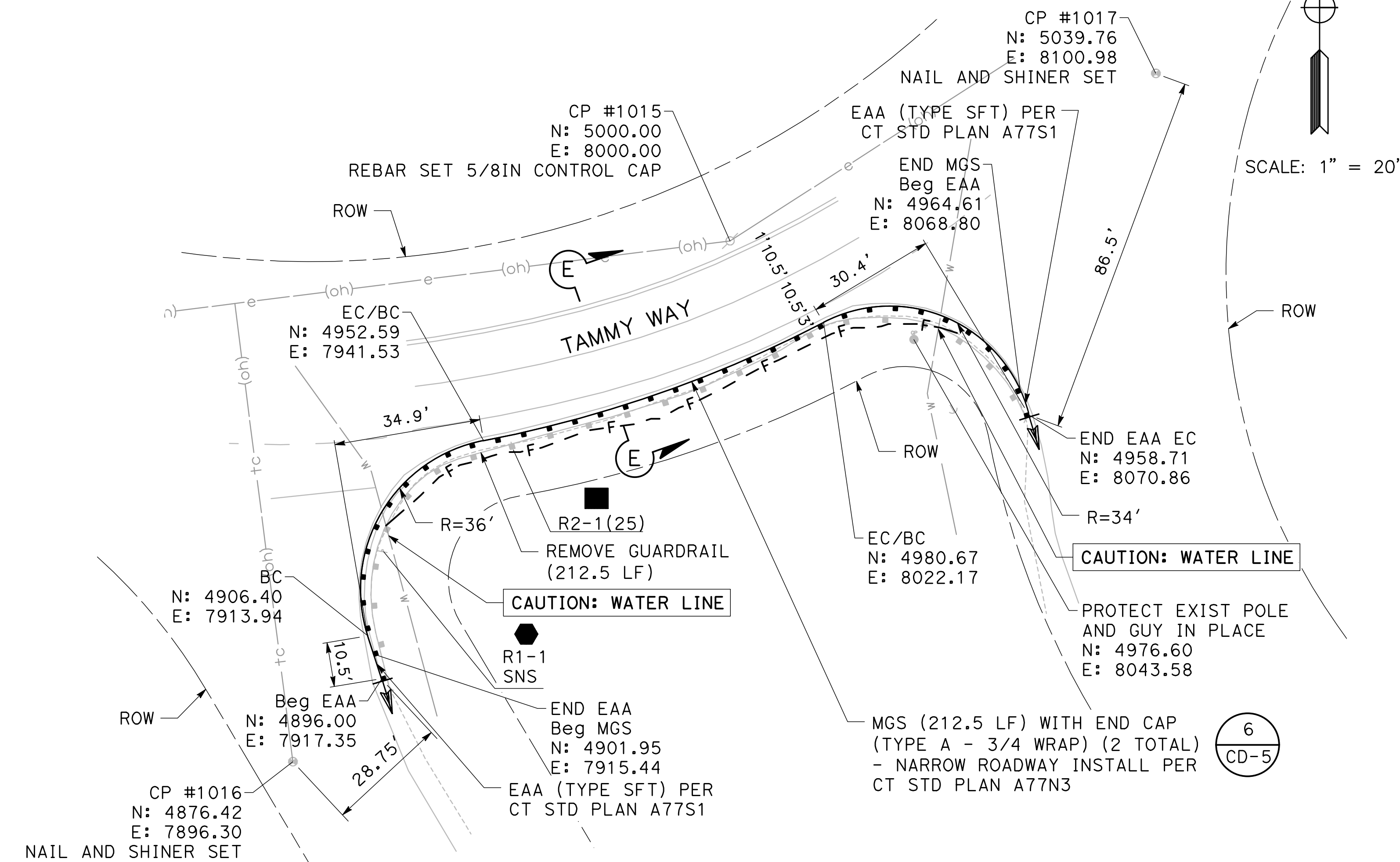
- c--- CUT LINE
---f--- FILL LINE
---m--- MIDWEST GUARDRAIL SYSTEM (MGS)
---a--- END ANCHOR ASSEMBLY (EAA) TYPE AS SHOWN
---p--- ALTERNATIVE IN-LINE TERMINAL SYSTEM (AITS)
---g--- EXISTING GUARD RAIL
---w--- PROPOSED WALL
---e--- EXIST WALL
● EXISTING POLE
---e--- EXISTING UNDERGROUND ELECTRICAL
---tc---(oh)--- EXISTING OVERHEAD ELECTRICAL
---w--- EXISTING WATER
---gs--- EXISTING PG&E GAS
---r--- RIGHT OF WAY (ROW)
---e--- EASEMENT

- ▲ SURVEY MONUMENT/CONTROL POINT
+ EXISTING SIGN
+ PROPOSED SIGN
▶ DELINEATOR (CLASS 1 TYPE F)
* OBJECT MARKER (TYPE P-CA)
* SIGN INSTALL
▲ RELOCATE ROADSIDE SIGN
● ROADSIDE SIGN TO REMAIN
◆ REMOVE ROADSIDE SIGN
■ RESET ROADSIDE SIGN
○ EXISTING TREE
✕ REMOVE EXISTING TREE
→ FLOW DIRECTION

- FILL
▨ ROADWAY EXCAVATION
■ CLASS 2 AB
▨ REMOVE BASE & SURFACING

NOTE:

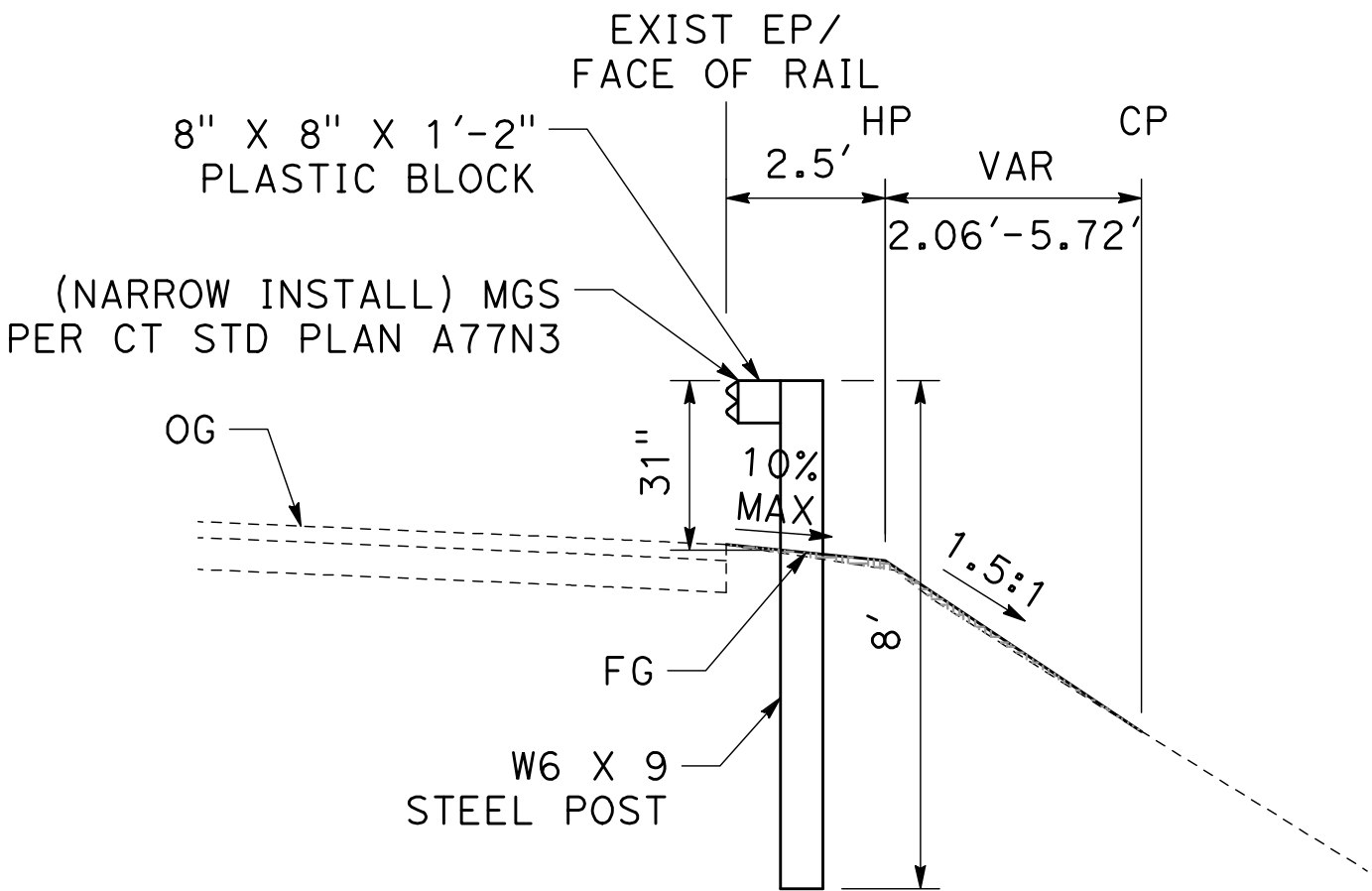
- * DESIGN PER CALTRANS TRAFFIC SAFETY SYSTEMS GUIDANCE MANUAL DATED MARCH 2019.
1. HORIZONTAL AND VERTICAL CONTROL IS BASED ON LOCAL CONTROL POINTS ONLY. NO EFFORT HAS BEEN MADE TO REFERENCE TO STATE PLANE COORDINATES OR VERTICAL DATUM.
2. MGS POSTS ARE STEEL UNLESS NOTED OTHERWISE.



TAMMY WAY - G22860101
POSTED SPEED LIMIT: 25 MPH

PROJECT CONTROL POINTS				
POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1015	5000.00	8000.00	2000.00	REBAR SET 5/8IN CONTROL CAP
1016	4876.42	7896.30	2000.50	NAIL AND SHINER SET
1017	5039.76	8100.98	2003.76	NAIL AND SHINER SET

NOTE: NORTHING, EASTING, AND ELEVATIONS ARE ASSUMED.



SECTION E-E

ALTERNATE BID

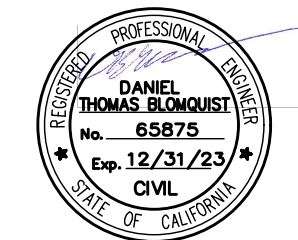
REVISIONS

NO.	DESCRIPTION	BY	DATE



GUARDRAIL SAFETY AUDIT PROJECT
LAYOUT
NEVADA COUNTY - DEPARTMENT OF PUBLIC WORKS

MARK THOMAS



DATE: FEB 28, 2022

DRAWING: EL

DESIGNED: EM

DRAWN: KH

CHECKED: JW

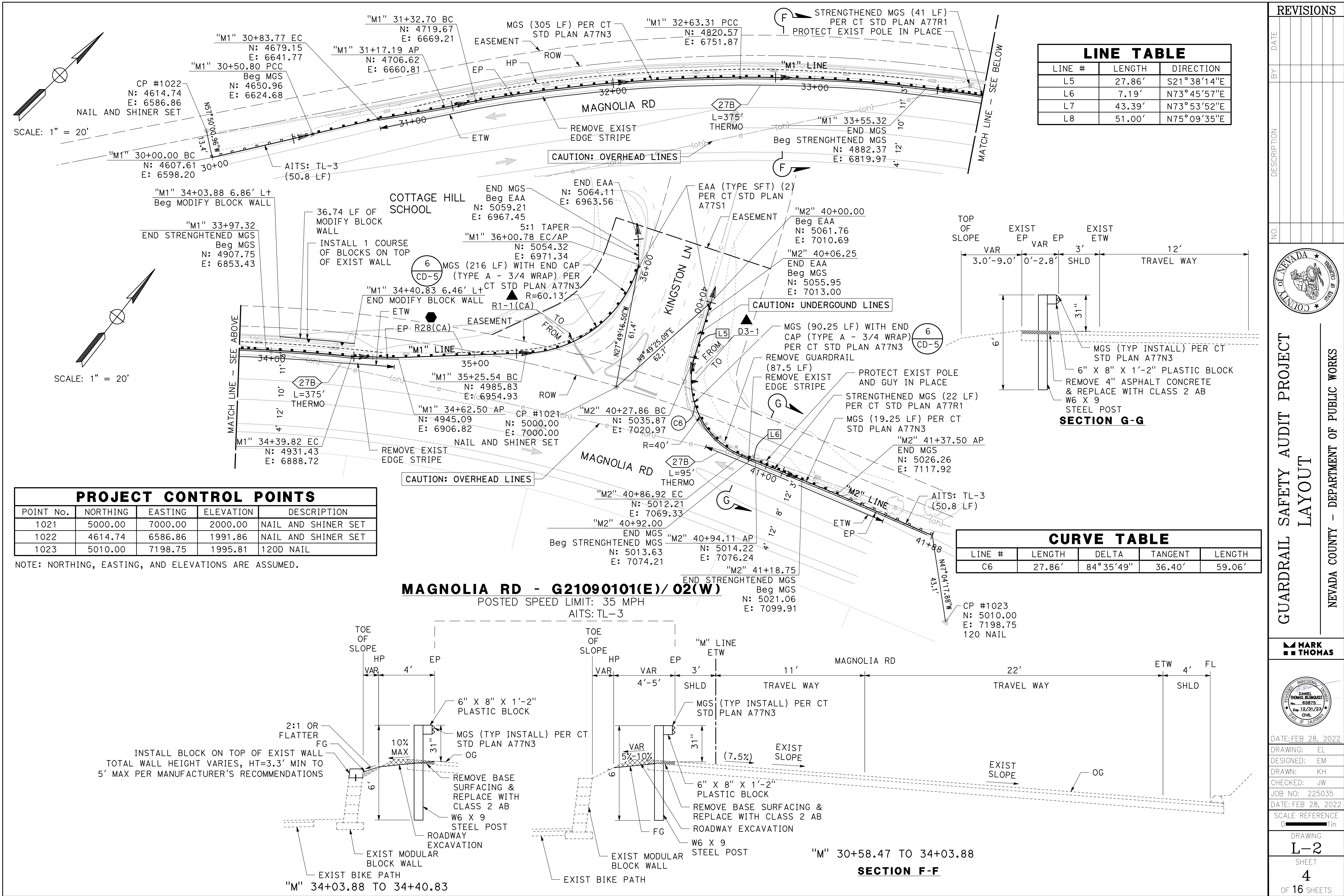
JOB NO: 225035

DATE: FEB 28, 2022

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L-1

SHEET
3
OF 16 SHEETS



REVISIONS

NO.	DESCRIPTION	BY	DATE

COUNTY OF NEVADA

GUARDRAIL SAFETY AUDIT PROJECT LAYOUT

NEVADA COUNTY – DEPARTMENT OF PUBLIC WORKS

MARK THOMAS

DANIEL THOMAS BLOMQUIST

No. 65875

Exp. 12/31/25

Civil

STATE OF CALIFORNIA

DATE: FEB 28, 2022

DRAWING: EL

DESIGNED: EM

DRAWN: KH

CHECKED: JW

JOB NO: 225035

DATE: FEB 28, 2022

SCALE REFERENCE

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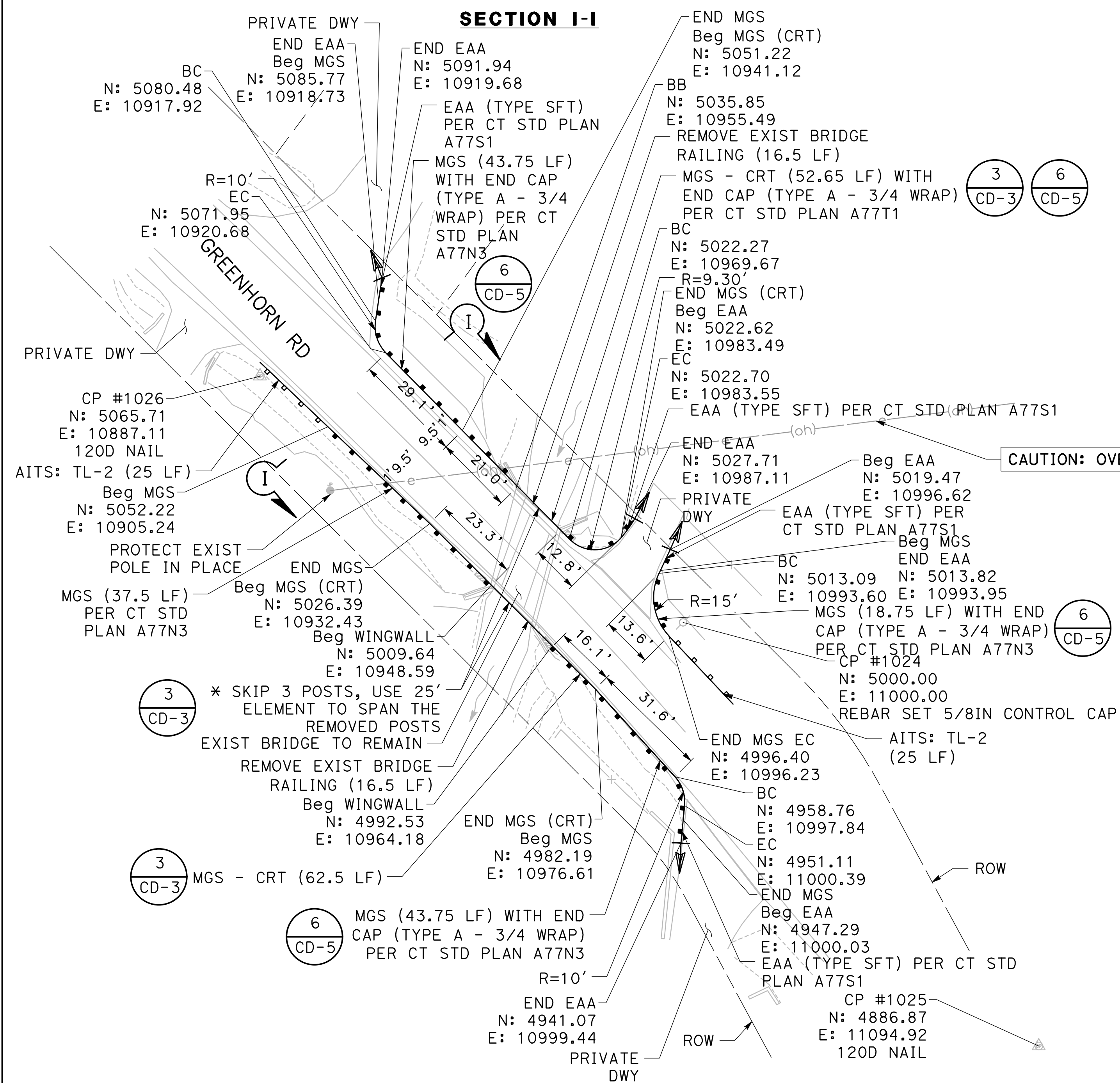
L-2

SHEET

4

OF 16 SHEETS

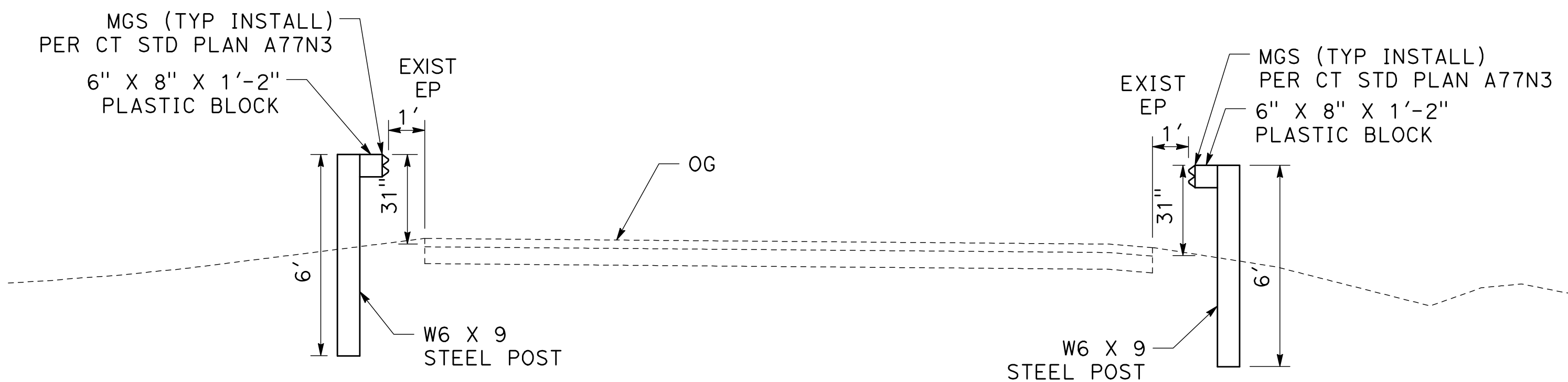
- NOTE:
- * DESIGN PER CALTRANS TRAFFIC SAFETY SYSTEMS GUIDANCE MANUAL DATED MARCH 2019.
 - 1. HORIZONTAL AND VERTICAL CONTROL IS BASED ON LOCAL CONTROL POINTS ONLY. NO EFFORT HAS BEEN MADE TO REFERENCE TO STATE PLANE COORDINATES OR VERTICAL DATUM.
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GREENHORN RD - G24060401(N)/ 02(S)
POSTED SPEED LIMIT: 35 MPH
AITS: TL-2

PROJECT CONTROL POINTS				
POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1024	5000.00	11000.00	2000.00	REBAR SET 5/8IN CONTROL CAP
1025	4886.87	11094.92	2007.26	120D NAIL
1026	5065.71	10887.11	1999.01	120D NAIL

NOTE: NORTHING, EASTING, AND ELEVATIONS ARE ASSUMED.

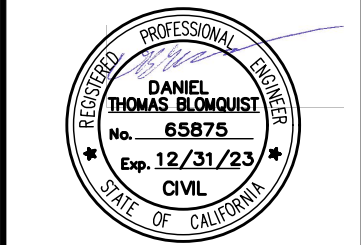


REVISIONS

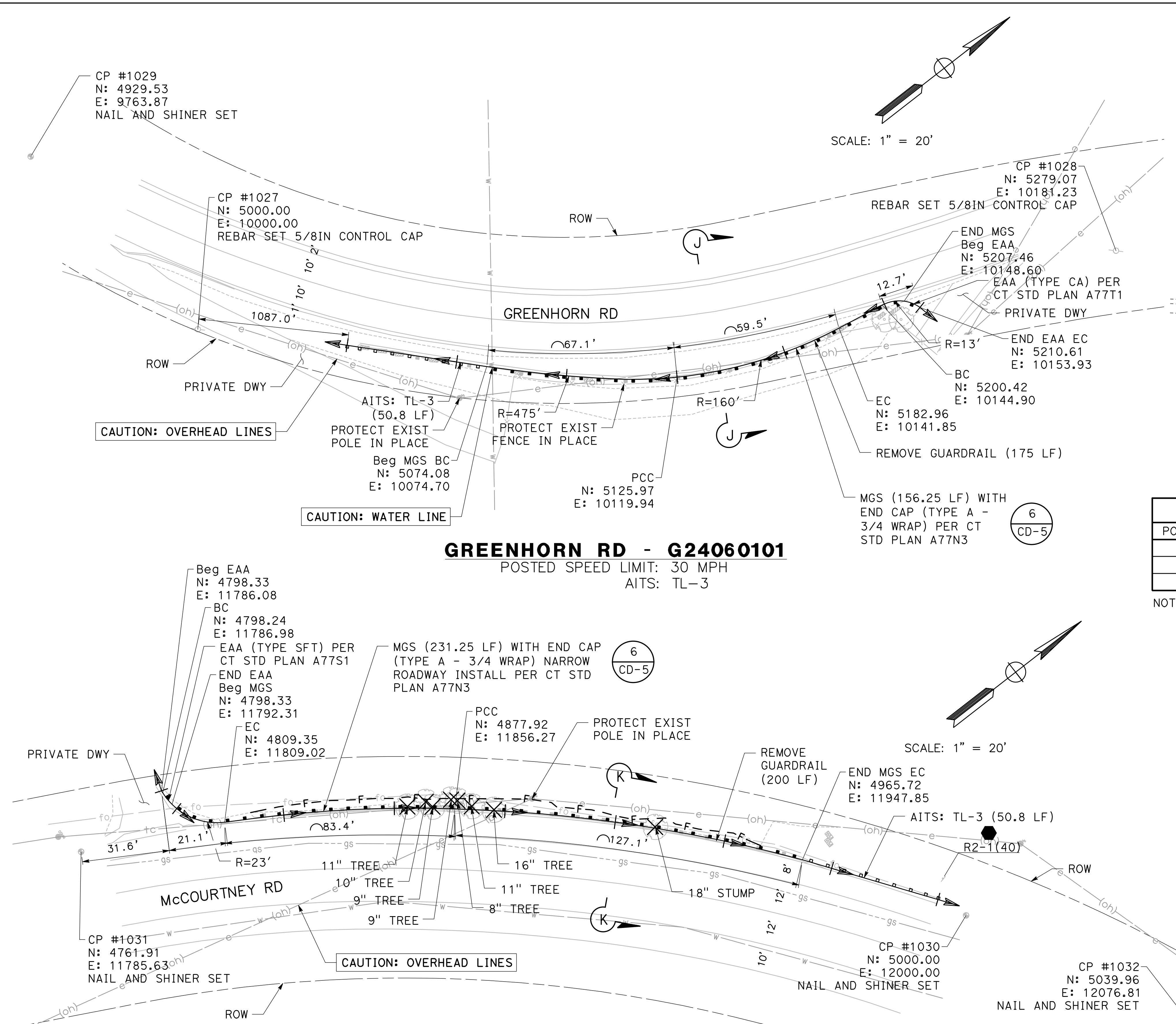
NO.	DESCRIPTION	BY	DATE



GUARDRAIL SAFETY AUDIT PROJECT
LAYOUT
NEVADA COUNTY - DEPARTMENT OF PUBLIC WORKS



DATE: FEB 28, 2022
DRAWING: EL
DESIGNED: EM
DRAWN: KH
CHECKED: JW
JOB NO: 225035
DATE: FEB 28, 2022
SCALE REFERENCE 0 1 in
DRAWING L-3
SHEET 5
OF 16 SHEETS



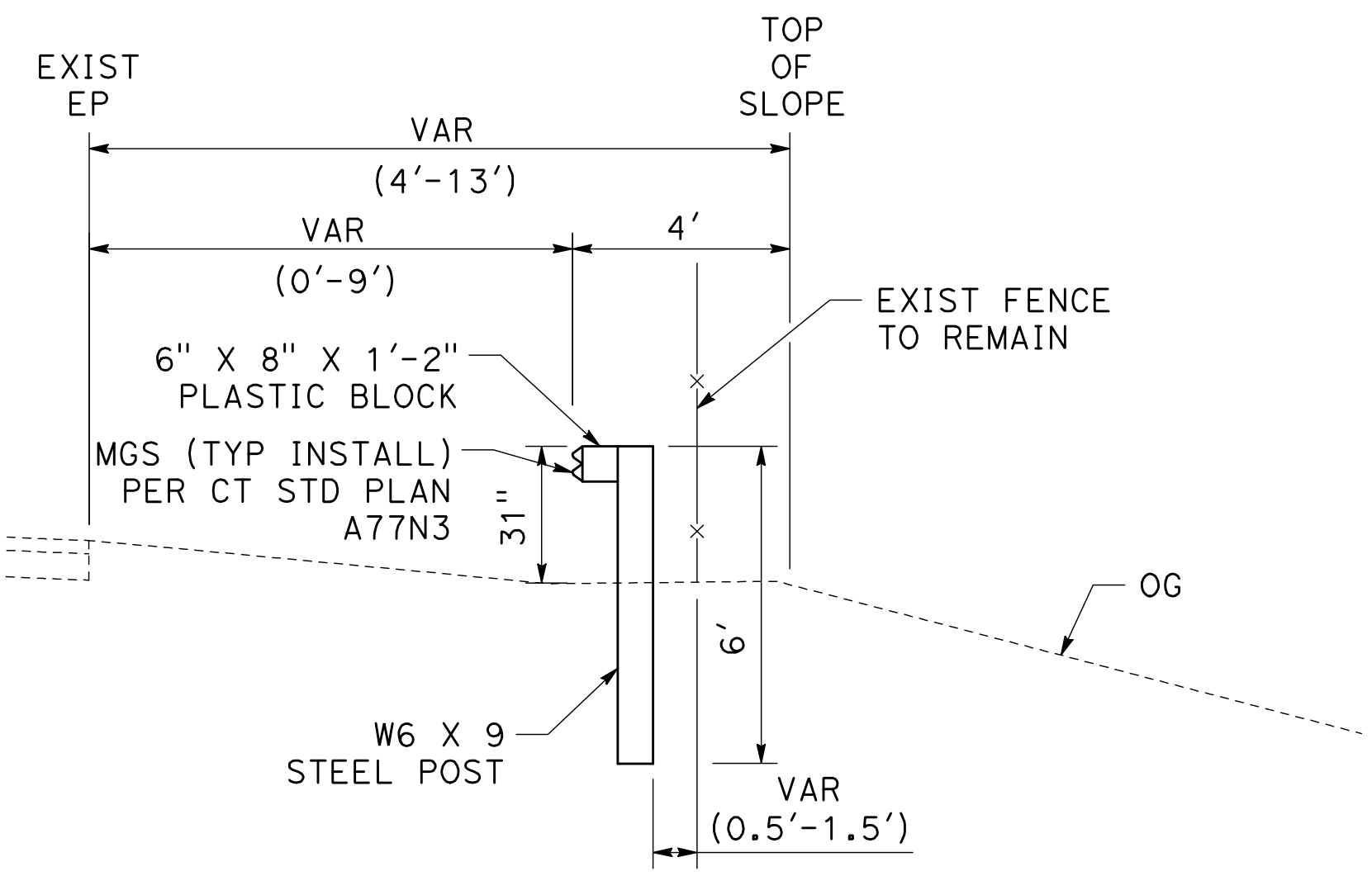
GREENHORN RD - G24060101

POSTED SPEED LIMIT: 30 MPH
AITS: TL-3

McCOURTNEY RD - G32060201

POSTED SPEED LIMIT: 40 MPH
AITS: TL-3

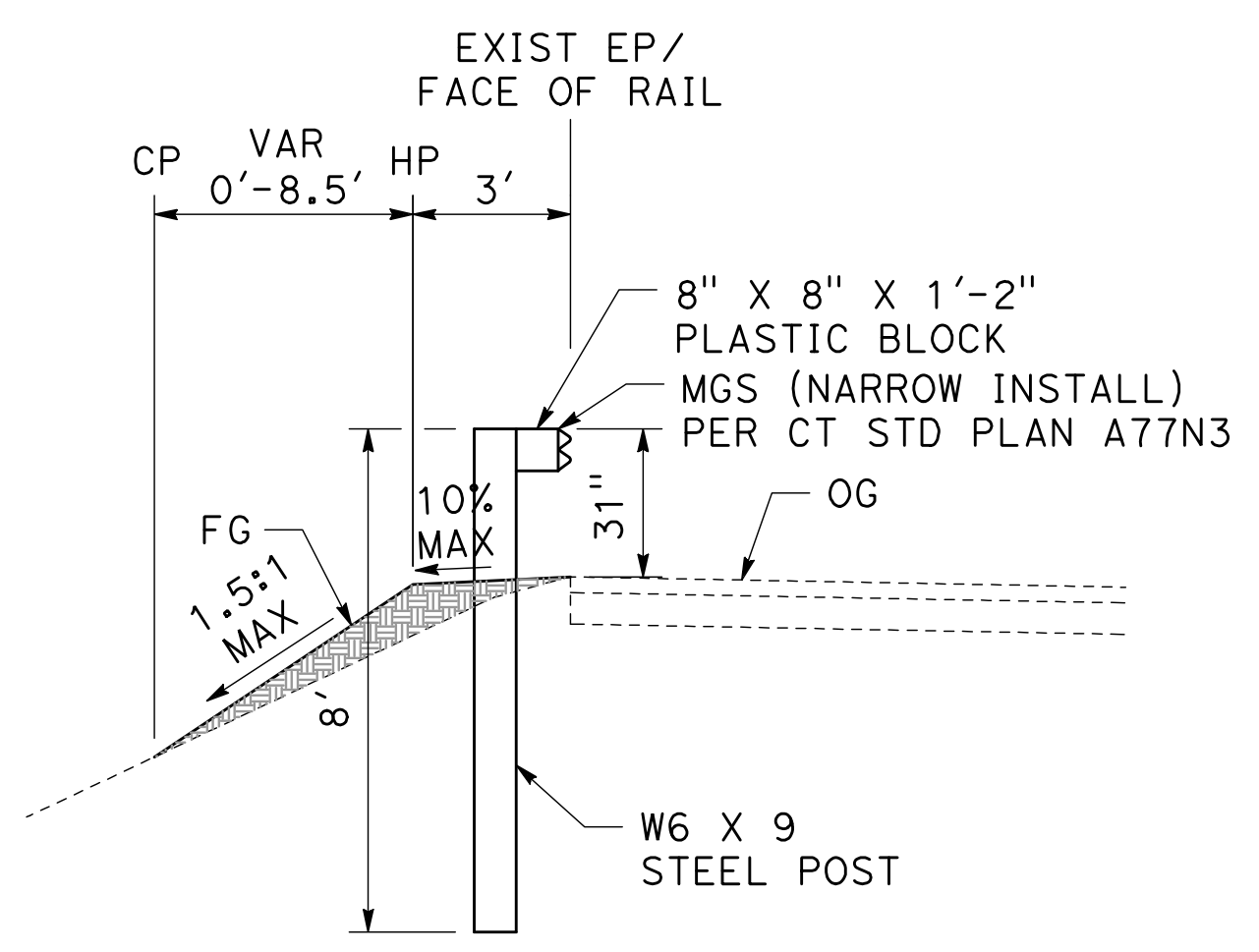
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SECTION J-J

PROJECT CONTROL POINTS				
POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1027	5000.00	10000.00	2000.00	REBAR SET 5/8IN CONTROL CAP
1028	5279.07	10181.23	1982.90	REBAR SET 5/8IN CONTROL CAP
1029	4929.53	9763.87	2015.48	NAIL AND SHINER SET

NOTE: NORTHING, EASTING, AND ELEVATIONS ARE ASSUMED.



SECTION K-K

PROJECT CONTROL POINTS				
POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1030	5000.00	12000.00	2000.00	NAIL AND SHINER SET
1031	4761.91	11785.63	1987.43	NAIL AND SHINER SET
1032	5039.96	12076.81	2000.20	NAIL AND SHINER SET

NOTE: NORTHING, EASTING, AND ELEVATIONS ARE ASSUMED.

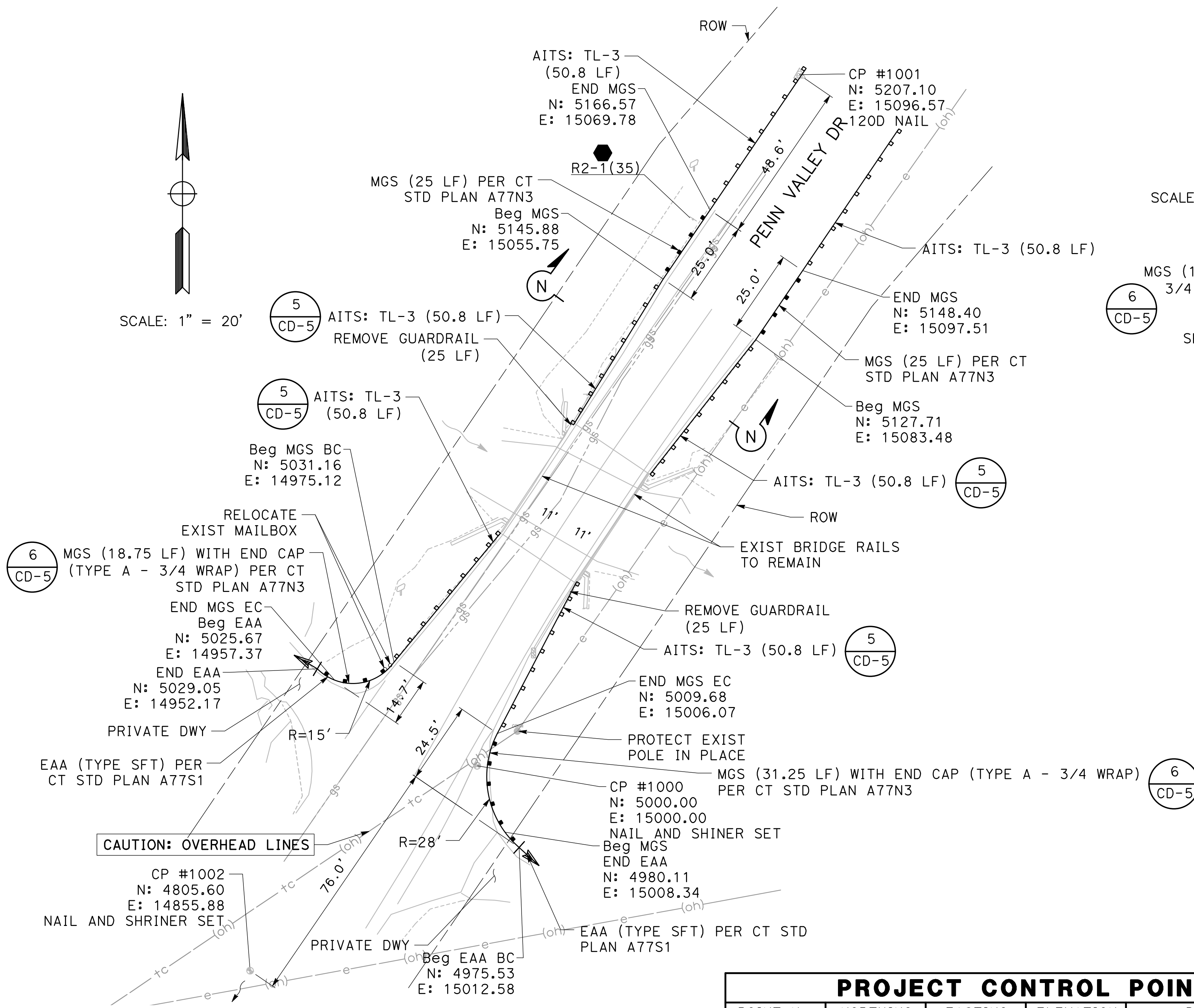
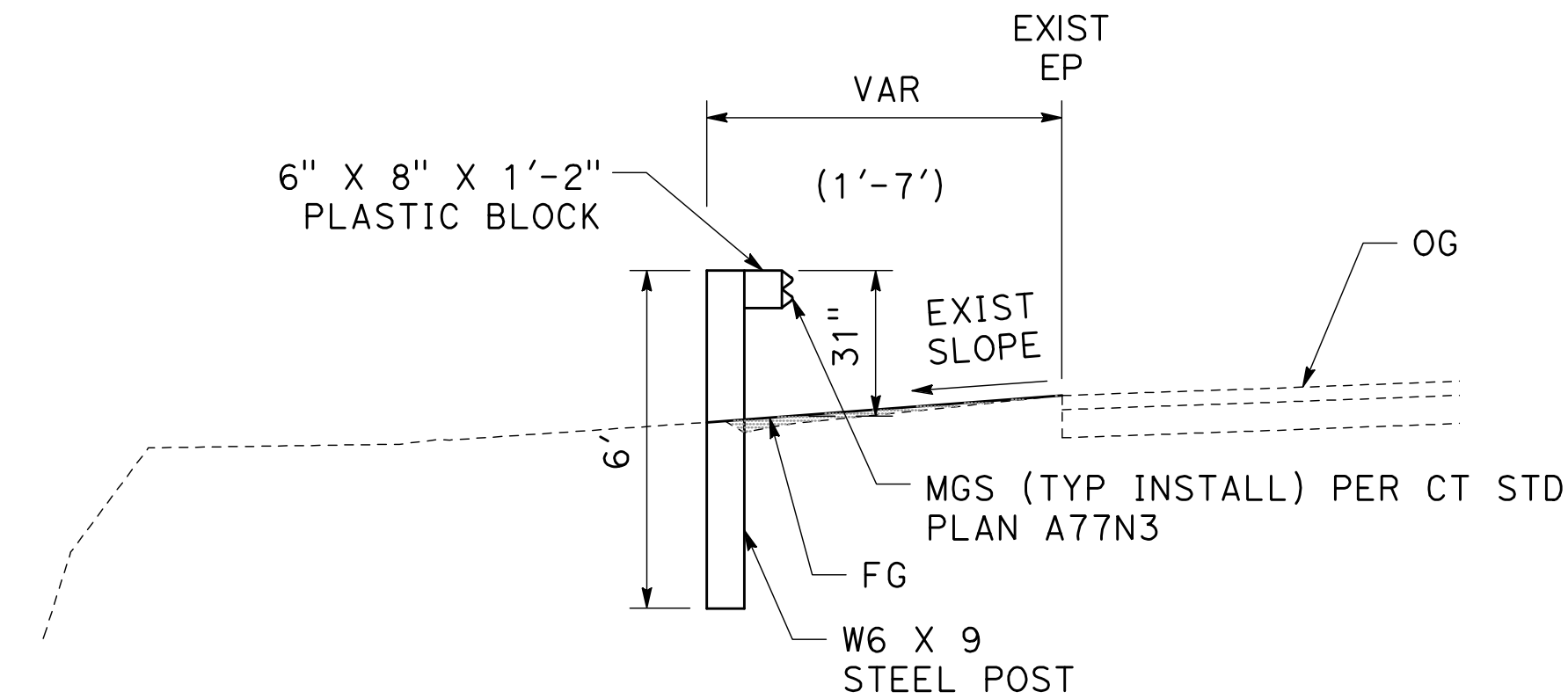
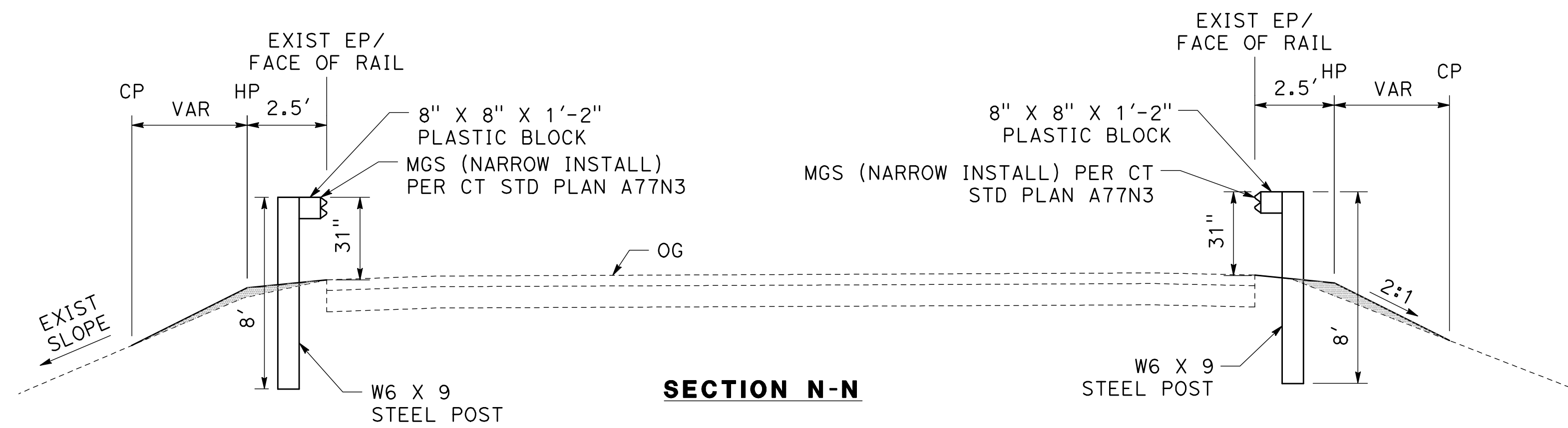
REVISIONS

NO.	DATE	BY	DESCRIPTION

GUARDRAIL SAFETY AUDIT PROJECT LAYOUT

NEVADA COUNTY - DEPARTMENT OF PUBLIC WORKS

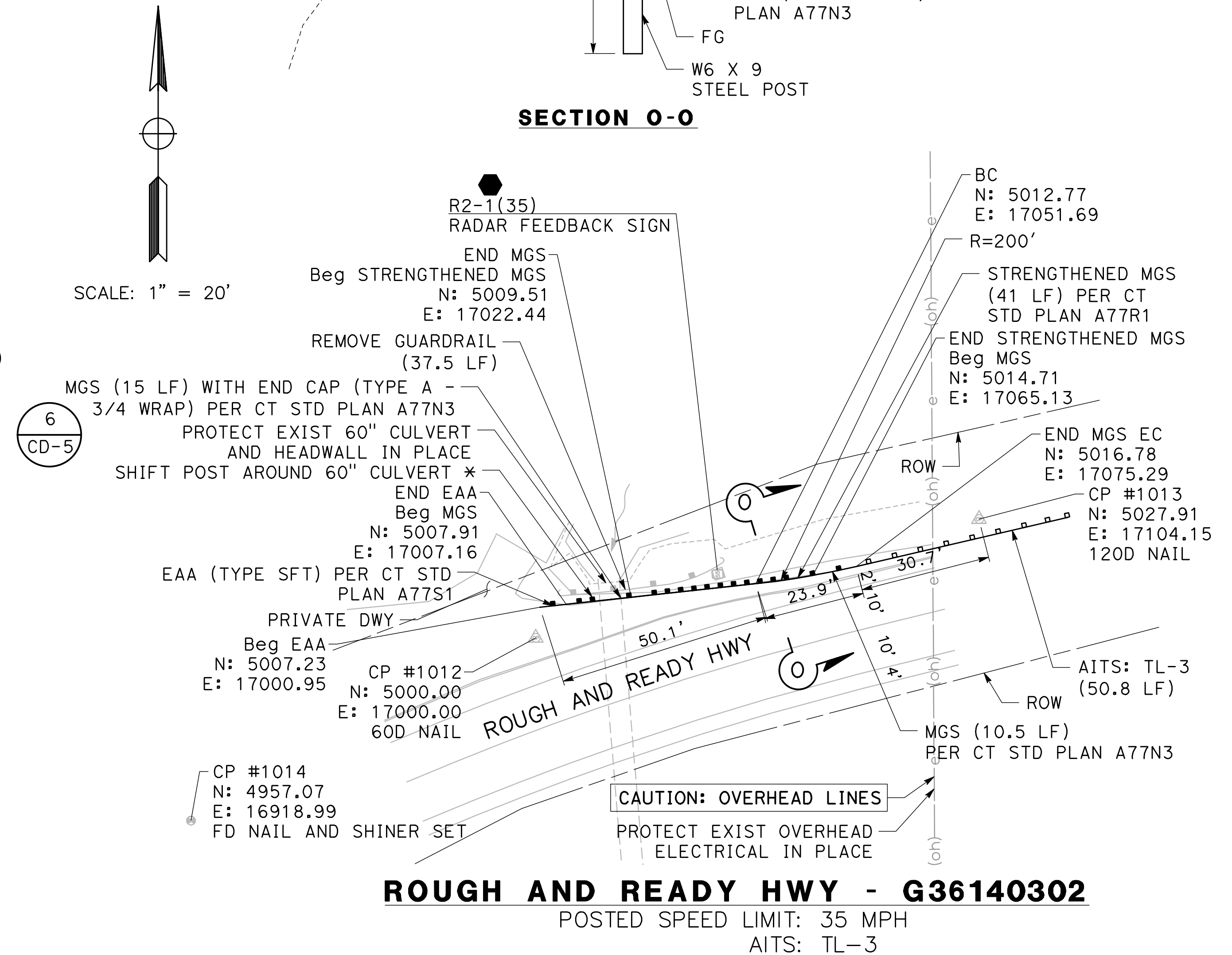
DATE: FEB 28, 2022
DRAWING: EL
DESIGNED: EM
DRAWN: KH
CHECKED: JW
JOB NO: 225035
DATE: FEB 28, 2022
SCALE REFERENCE: 0" = 1 in
DRAWING: L-4
SHEET: 6
OF 16 SHEETS



PENN VALLEY DR - G35090401(N)/ 02(S)
 POSTED SPEED LIMIT (NORTH): 45 MPH
 POSTED SPEED LIMIT (SOUTH): 35 MPH
 AITS: TL-3

PROJECT CONTROL POINTS				
POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1000	5000.00	15000.00	2000.00	NAIL AND SHINER SET
1001	5207.10	15096.57	1993.67	120D NAIL
1002	4805.60	14855.88	2017.67	NAIL AND SHINER SET

NOTE: NORTHING, EASTING, AND ELEVATIONS ARE ASSUMED.



ROUGH AND READY HWY - G36140302
 POSTED SPEED LIMIT: 35 MPH
 AITS: TL-3

PROJECT CONTROL POINTS				
POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1012	5000.00	17000.00	2000.00	60D NAIL
1013	5027.91	17104.15	2009.94	120D NAIL
1014	4957.07	16918.99	1994.38	FD NAIL AND SHINER SET

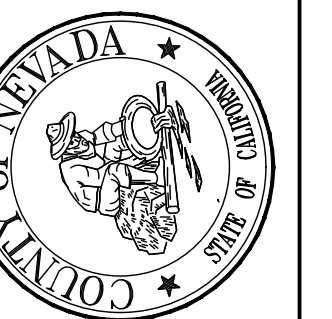
NOTE: NORTHING, EASTING, AND ELEVATIONS ARE ASSUMED.

NOTE:

- * DESIGN PER CALTRANS TRAFFIC SAFETY SYSTEMS GUIDANCE MANUAL DATED MARCH 2019.
- 1. HORIZONTAL AND VERTICAL CONTROL IS BASED ON LOCAL CONTROL POINTS ONLY. NO EFFORT HAS BEEN MADE TO REFERENCE TO STATE PLANE COORDINATES OR VERTICAL DATUM.
- 2. MGS POSTS ARE STEEL UNLESS NOTED OTHERWISE.

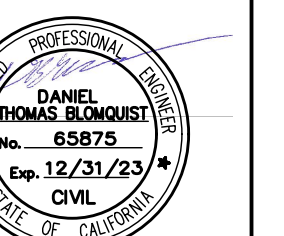
REVISIONS

NO.	DATE	DESCRIPTION



GUARDRAIL SAFETY AUDIT PROJECT LAYOUT
 NEVADA COUNTY - DEPARTMENT OF PUBLIC WORKS

MARK THOMAS

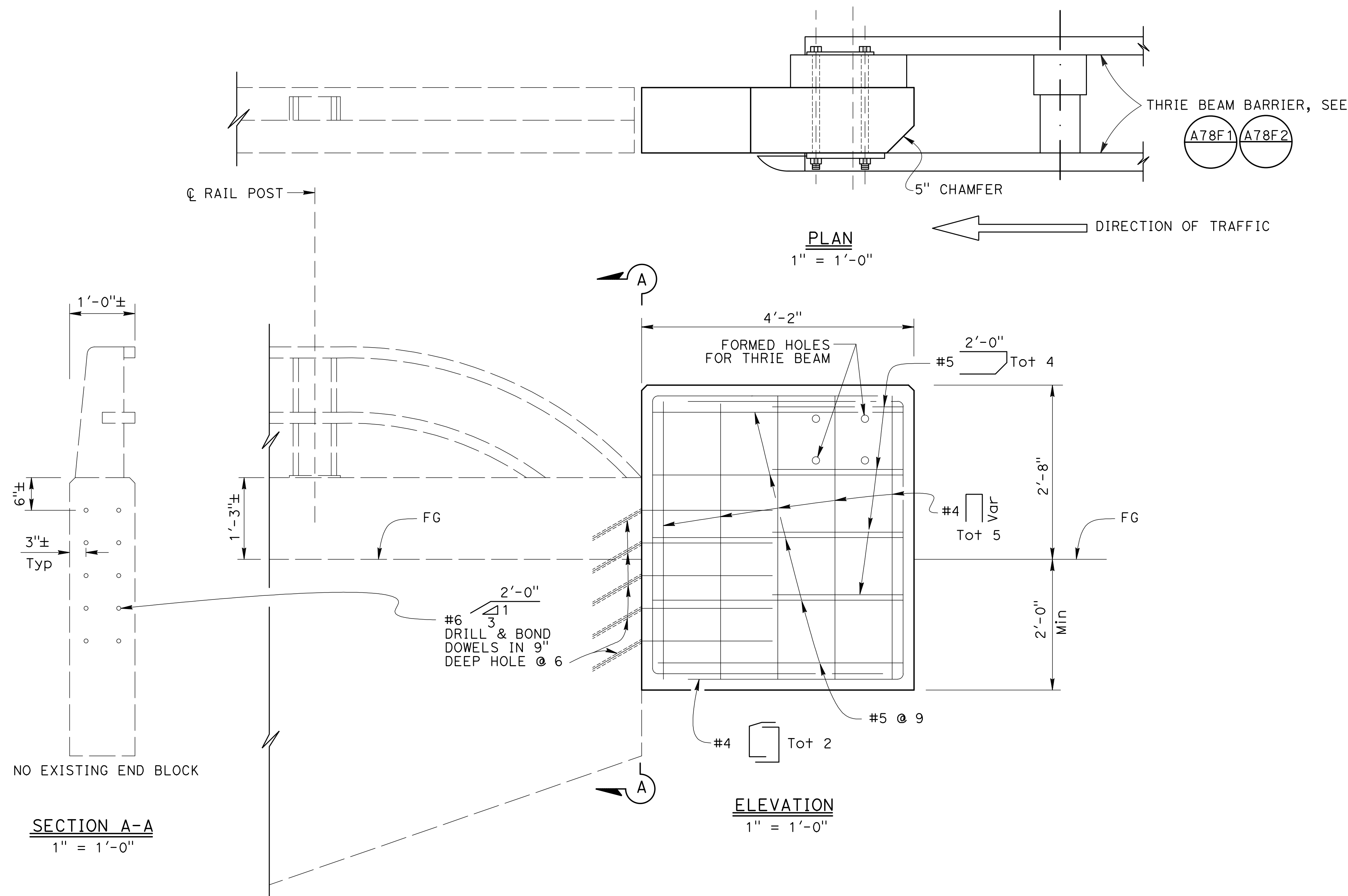


DATE: FEB 28, 2022
 DRAWING: EL
 DESIGNED: EM
 DRAWN: KH
 CHECKED: JW
 JOB NO: 225035
 DATE: FEB 28, 2022

SCALE REFERENCE
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DRAWING
L-6

SHEET
8
 OF 16 SHEETS



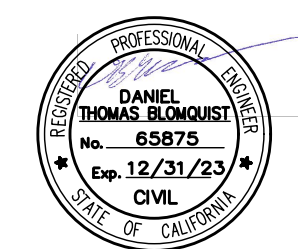
1
-
THRIE BEAM CONNECTION - TYPE 9

REVISIONS

NO.	DESCRIPTION	BY	DATE



GUARDRAIL SAFETY AUDIT PROJECT
CONSTRUCTION DETAILS
NEVADA COUNTY - DEPARTMENT OF PUBLIC WORKS



DATE: FEB 28, 2022

DRAWING: EL

DESIGNED: EM

DRAWN: KH

CHECKED: JW

JOB NO: 225035

DATE: FEB 28, 2022

SCALE REFERENCE
0 1 in

DRAWING
CD-1

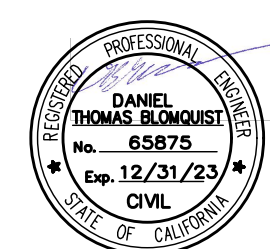
SHEET
9
OF 16 SHEETS

REVISIONS

[illegible]

GUARDRAIL SAFETY AUDIT PROJECT CONSTRUCTION DETAILS

NEVADA COUNTY - DEPARTMENT OF PUBLIC WORKS



DATE: FEB 28, 2022

DRAWING: EL

DESIGNED: EM

DRAWN: KH

CHECKED: JW

JOB NO: 22503

DATE: FEB 28, 2022

SCALE REFERENCE

0 1in

DRAWING

CD-3

SHEET

11

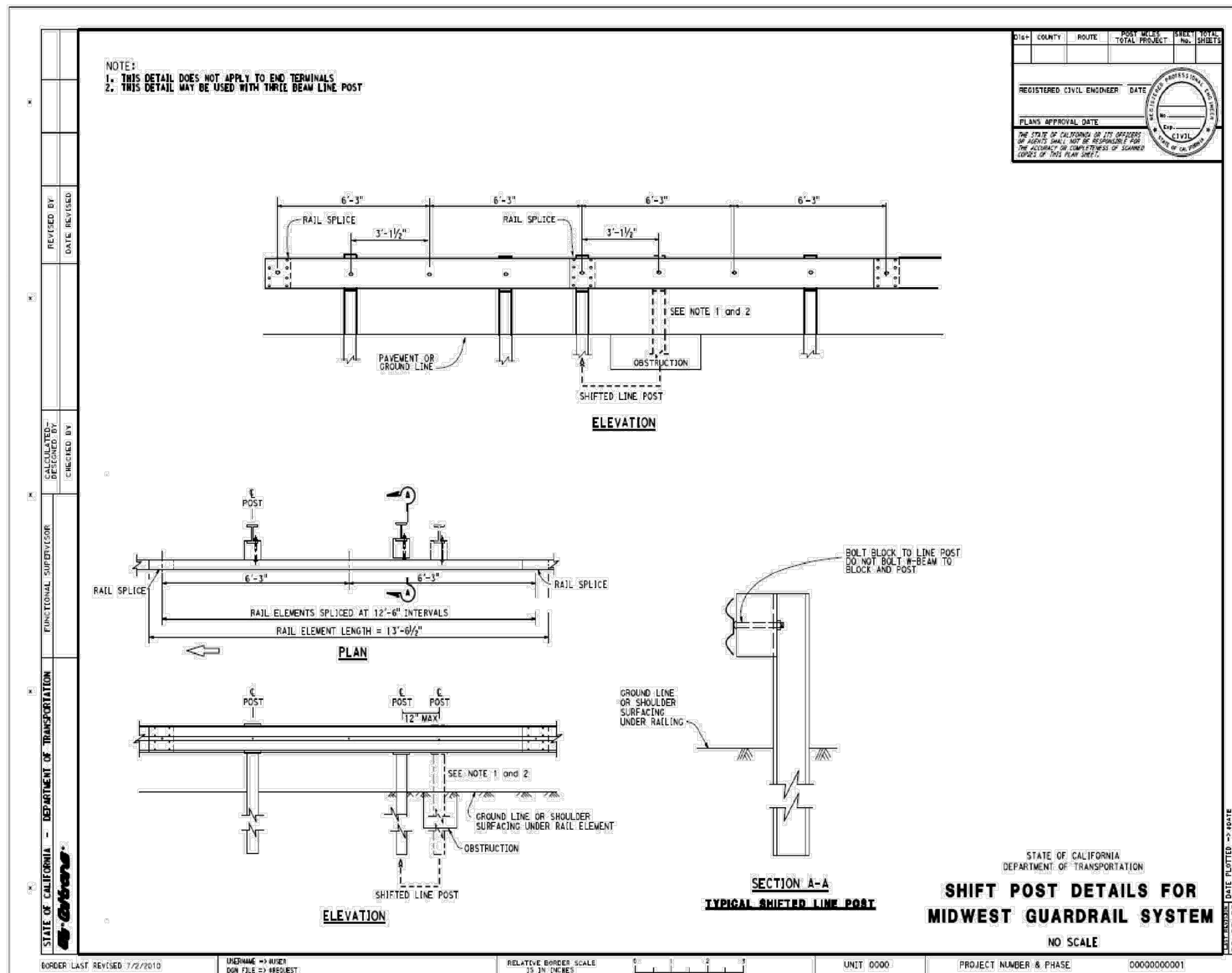
11
OF 16 QUESTIONS

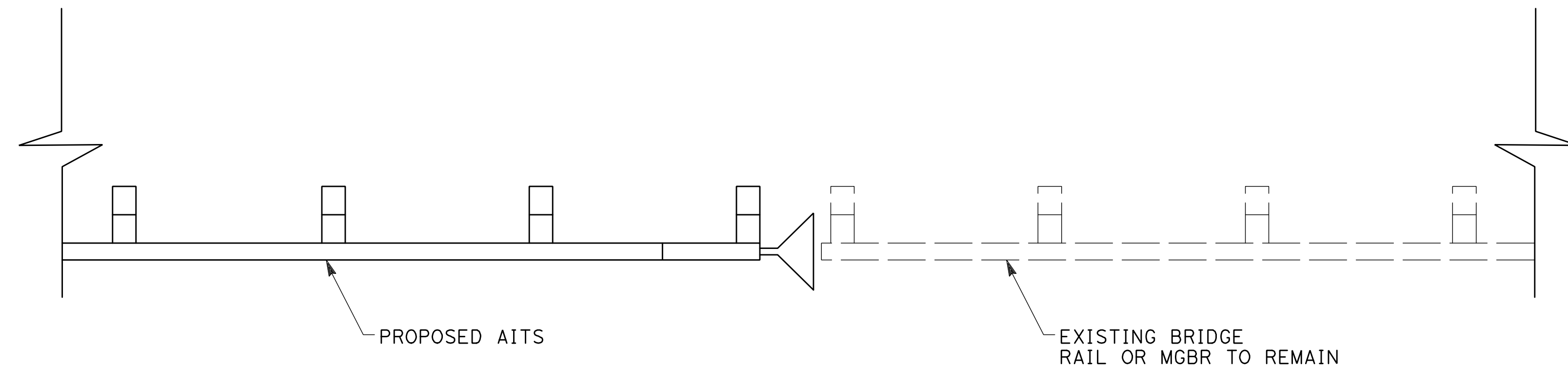
TRAFFIC SAFETY SYSTEMS GUIDANCE

03-2019

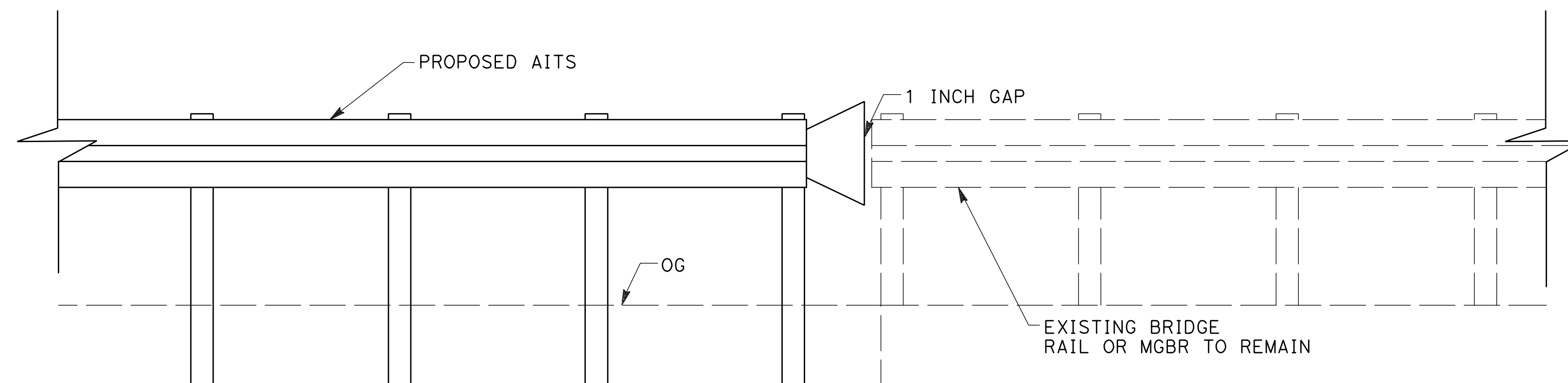
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Figure 15 Midwest Guardrail Shift Post Detail

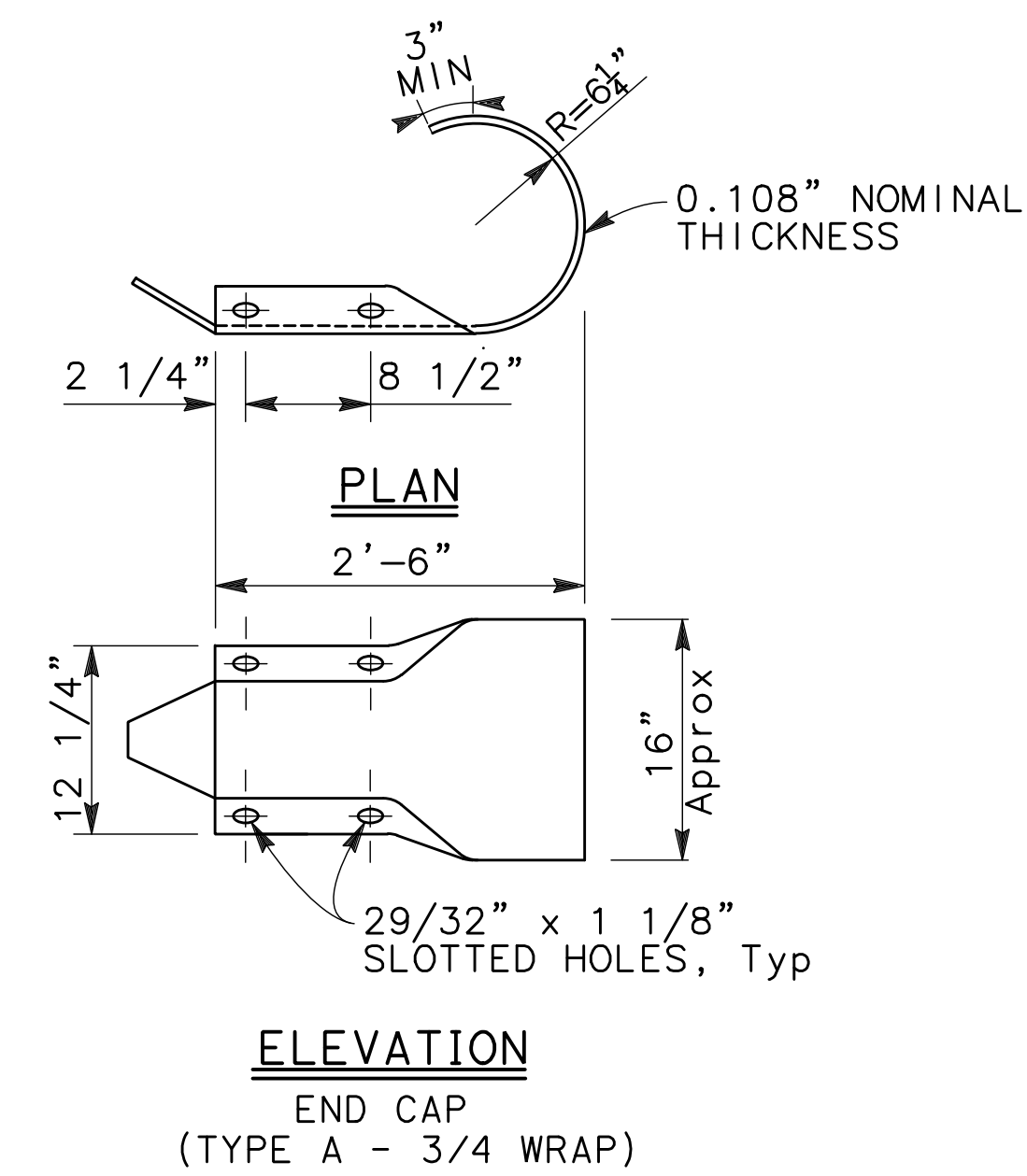




PLAN
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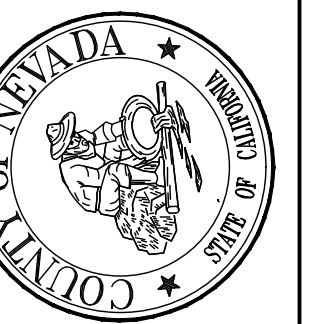
ELEVATION
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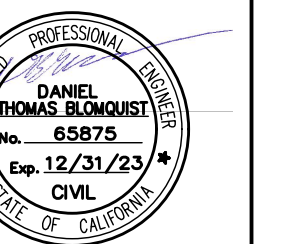
ELEVATION
END CAP
(TYPE A - 3/4 WRAP)

REVISIONS

NO.	DESCRIPTION	BY	DATE



GUARDRAIL SAFETY AUDIT PROJECT
CONSTRUCTION DETAILS
NEVADA COUNTY - DEPARTMENT OF PUBLIC WORKS



DATE: FEB 28, 2022

DRAWING: EL

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JOB NO: 225035

DATE: FEB 28, 2022

SCALE REFERENCE
0 1 in

DRAWING
CD-4

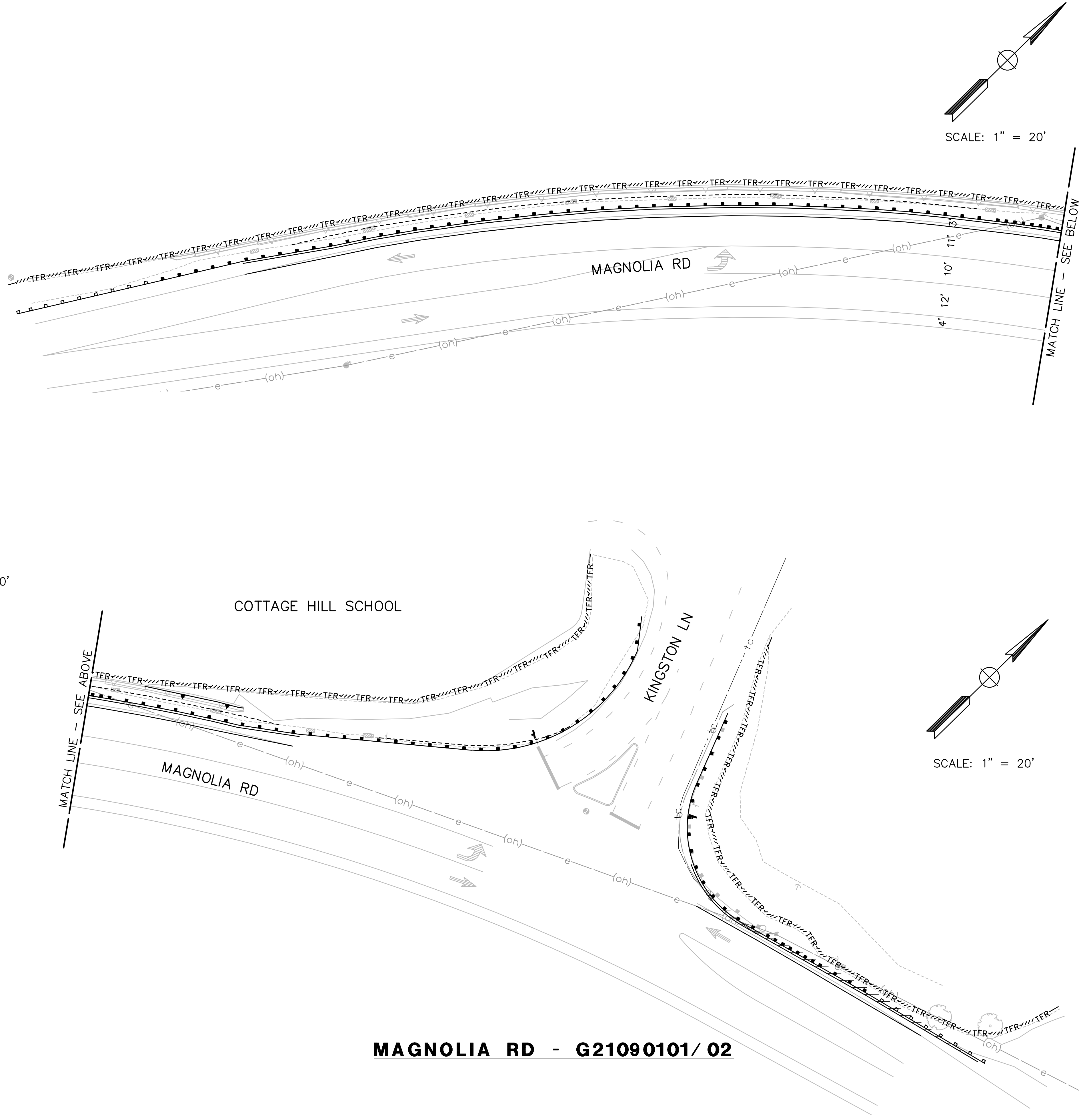
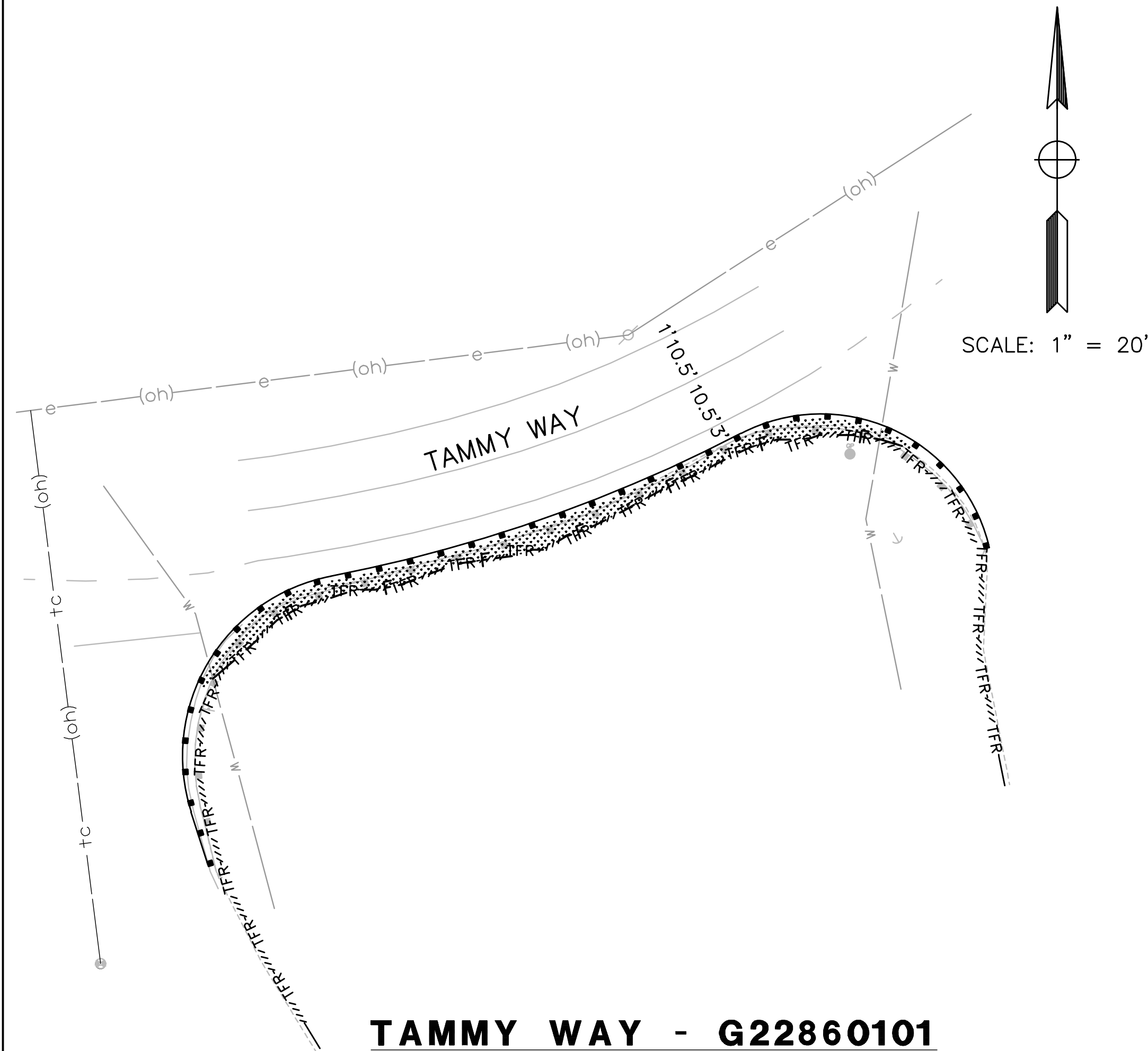
SHEET
12
OF 16 SHEETS

LEGEND:

- ////TFR////TFR- TEMPORARY FIBER ROLL
→ DRAINAGE CANAL FLOW DIRECTION
PERMANENT EROSION CONTROL (HYDROSEEDING)

NOTES:

1. PAYMENT FOR ALL WORK SHOWN ON THIS SHEET IS INCLUDED IN WATER POLLUTION CONTROL BID ITEM. EROSION CONTROL PLAN SHOWN IS FOR INFORMATION PURPOSES ONLY.

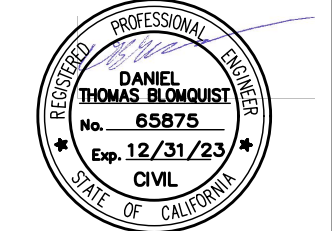


REVISIONS

NO.	DESCRIPTION	BY	DATE



GUARDRAIL SAFETY AUDIT PROJECT
WATER POLLUTION CONTROL
NEVADA COUNTY - DEPARTMENT OF PUBLIC WORKS

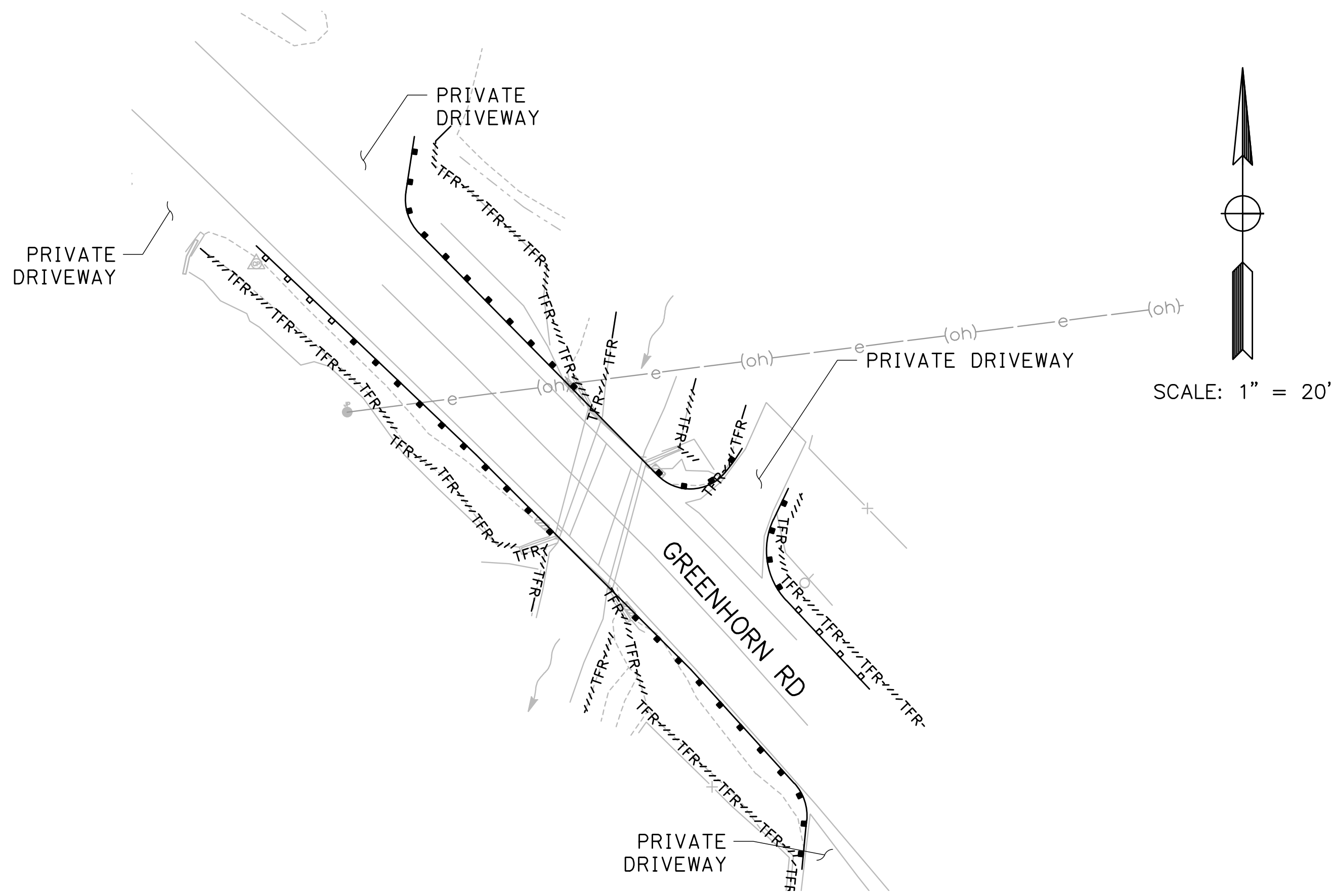


DATE: FEB 28, 2022
DRAWING: EL
DESIGNED: EM
DRAWN: KH
CHECKED: JW
JOB NO: 225035
DATE: FEB 28, 2022

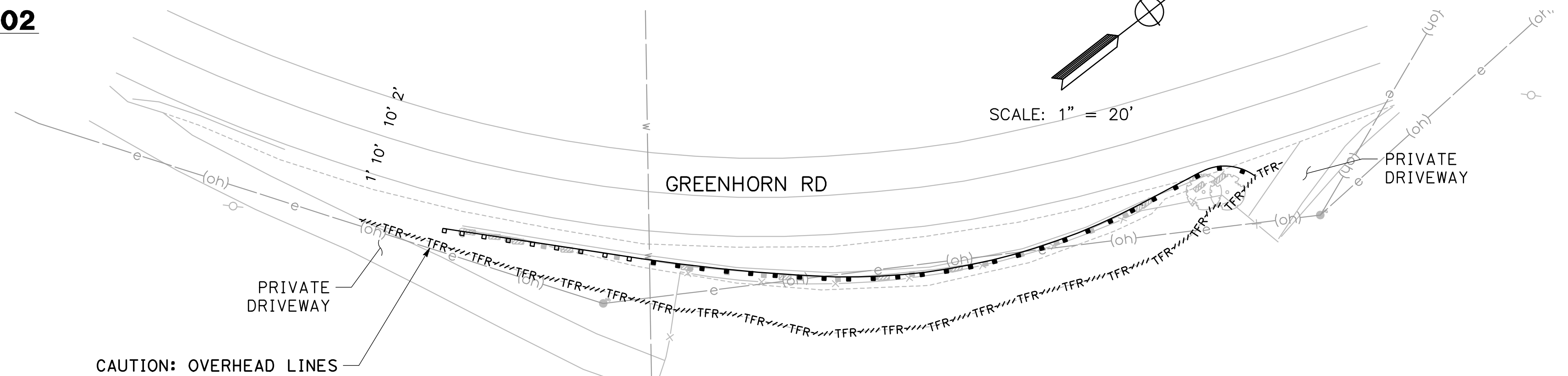
SCALE REFERENCE
0 1 in

DRAWING
WPC-1

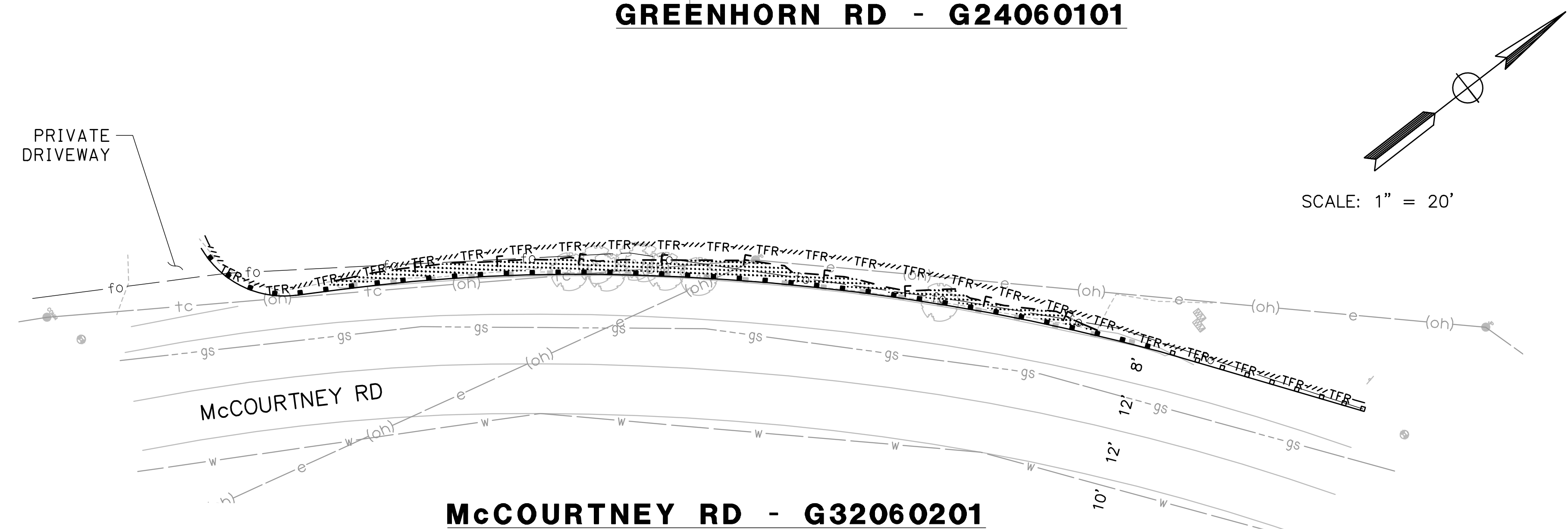
SHEET
13
OF 16 SHEETS



GREENHORN RD - G24060401/ 02



GREENHORN RD - G24060101



McCOURTNEY RD - G32060201

LEGEND:

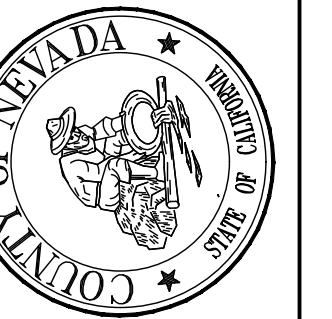
- TEMPORARY FIBER ROLL
- DRAINAGE CANAL FLOW DIRECTION
- PERMANENT EROSION CONTROL (HYDROSEEDING)

NOTES:

- PAYMENT FOR ALL WORK SHOWN ON THIS SHEET IS INCLUDED IN WATER POLLUTION CONTROL BID ITEM. EROSION CONTROL PLAN SHOWN IS FOR INFORMATION PURPOSES ONLY.

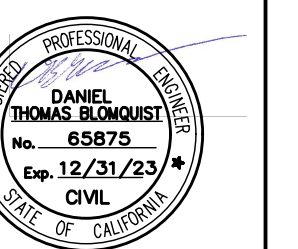
REVISIONS

NO.	DESCRIPTION	BY	DATE



**GUARDRAIL SAFETY AUDIT PROJECT
WATER POLLUTION CONTROL**
NEVADA COUNTY – DEPARTMENT OF PUBLIC WORKS

MARK THOMAS



DATE: FEB 28, 2022

DRAWING: EL

DESIGNED: EM

DRAWN: KH

CHECKED: JW

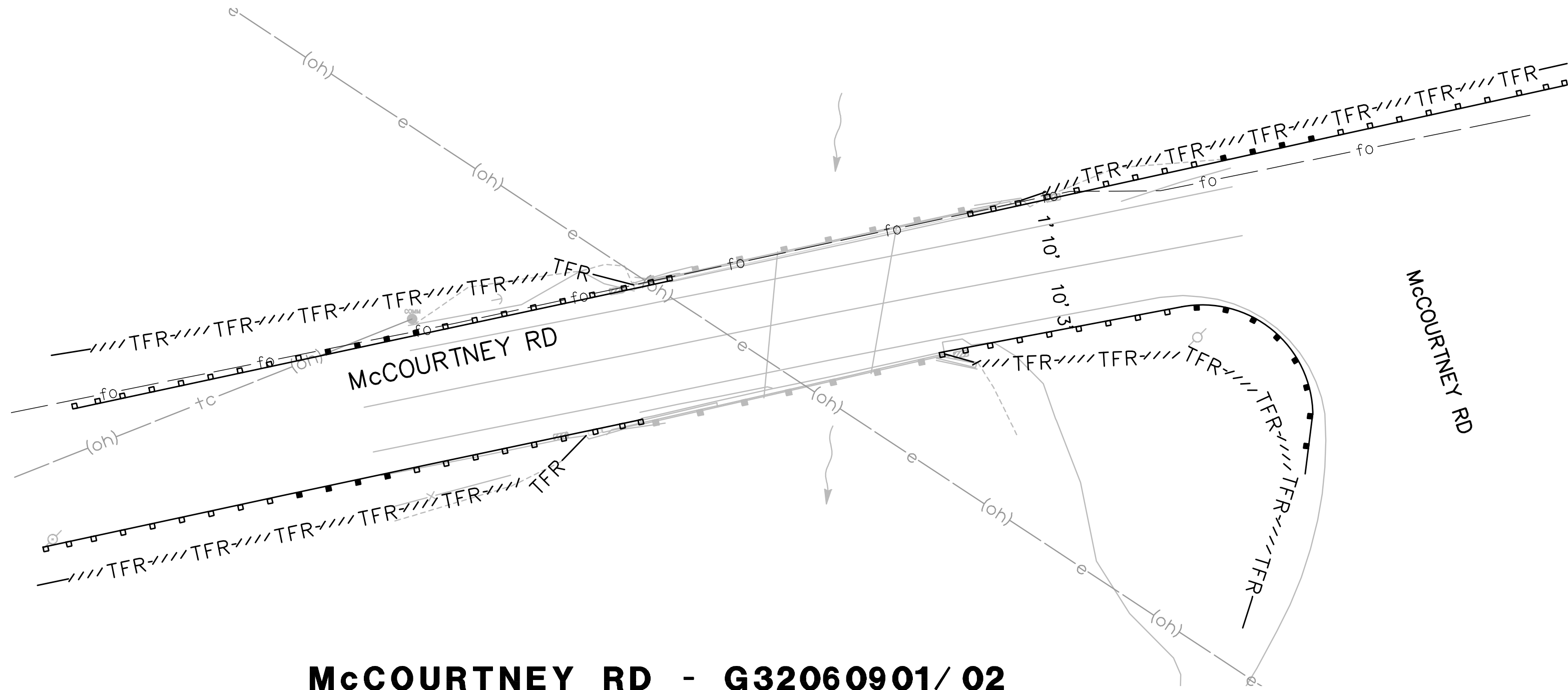
JOB NO: 225035

DATE: FEB 28, 2022

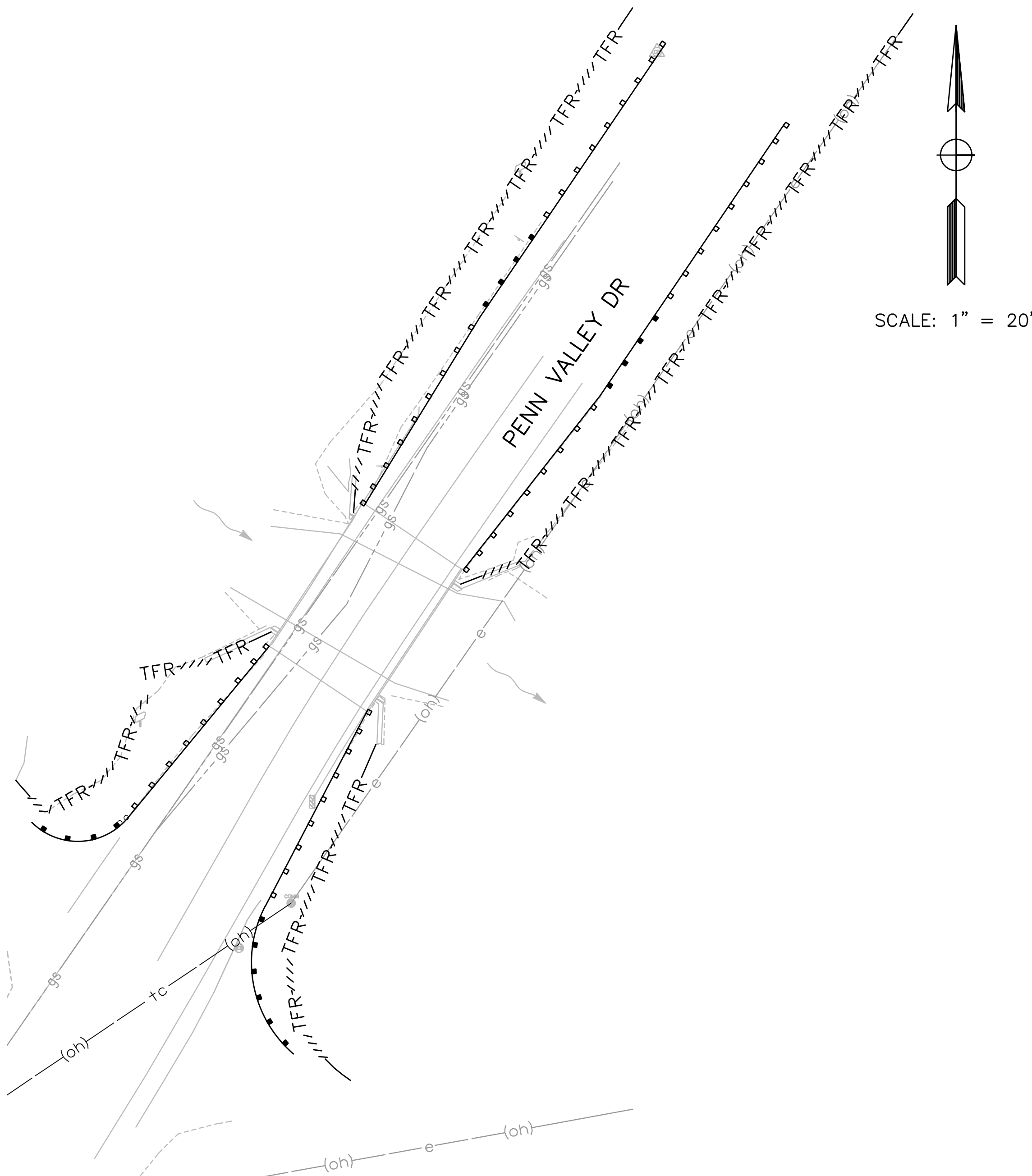
SCALE REFERENCE
0 1 in

DRAWING
WPC-2

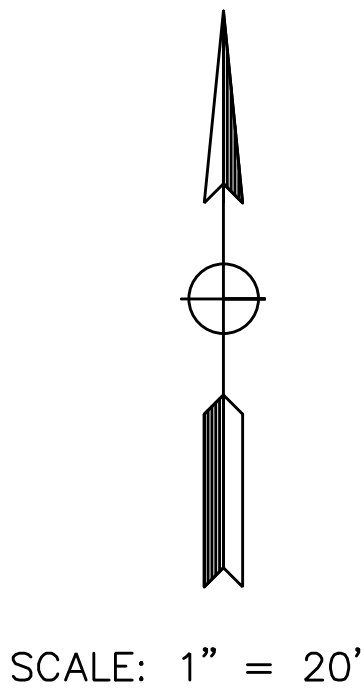
SHEET
14
OF 16 SHEETS



McCOURTNEY RD - G32060901/ 02

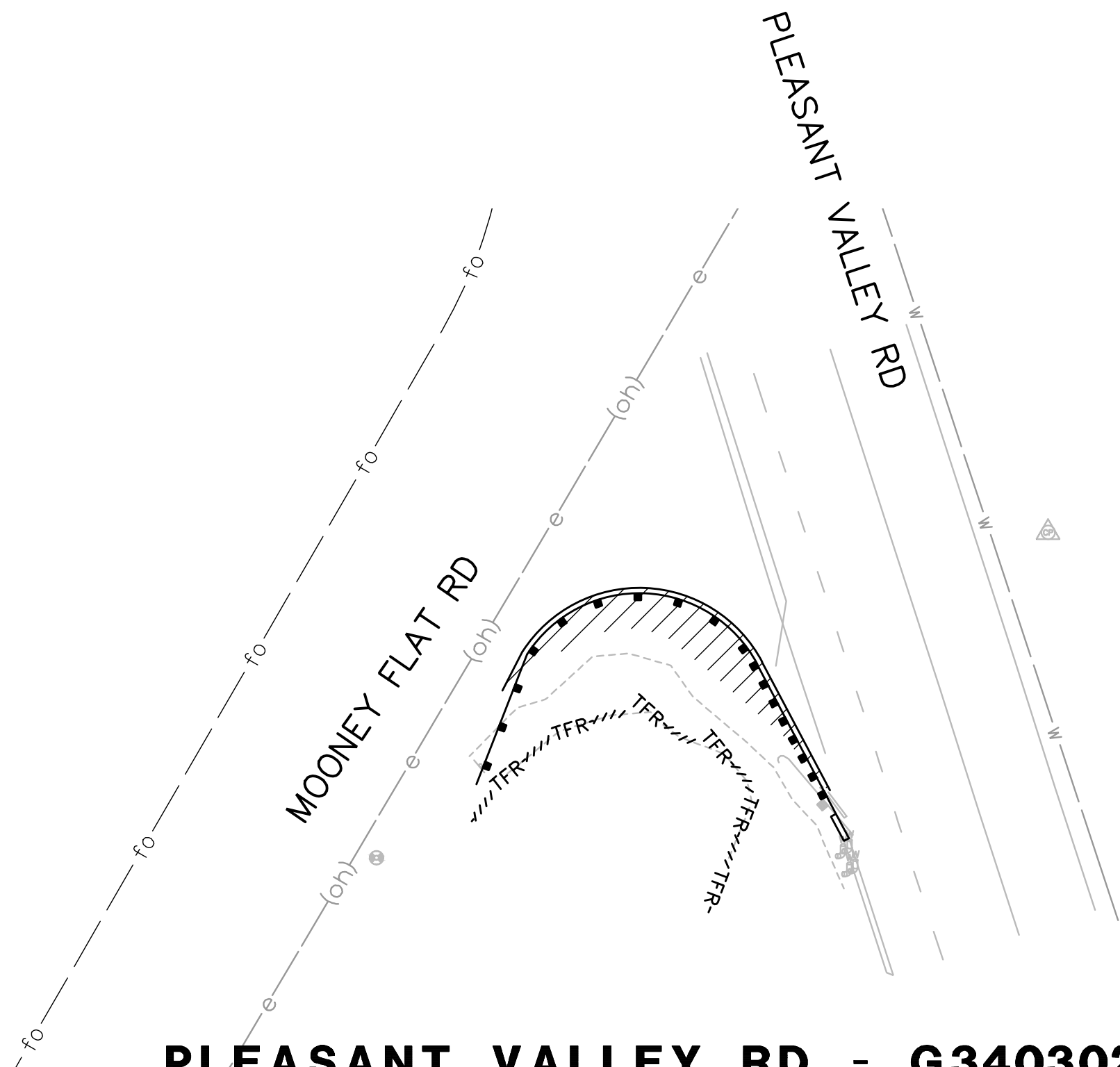


PENN VALLEY DR - G35090401/ 02

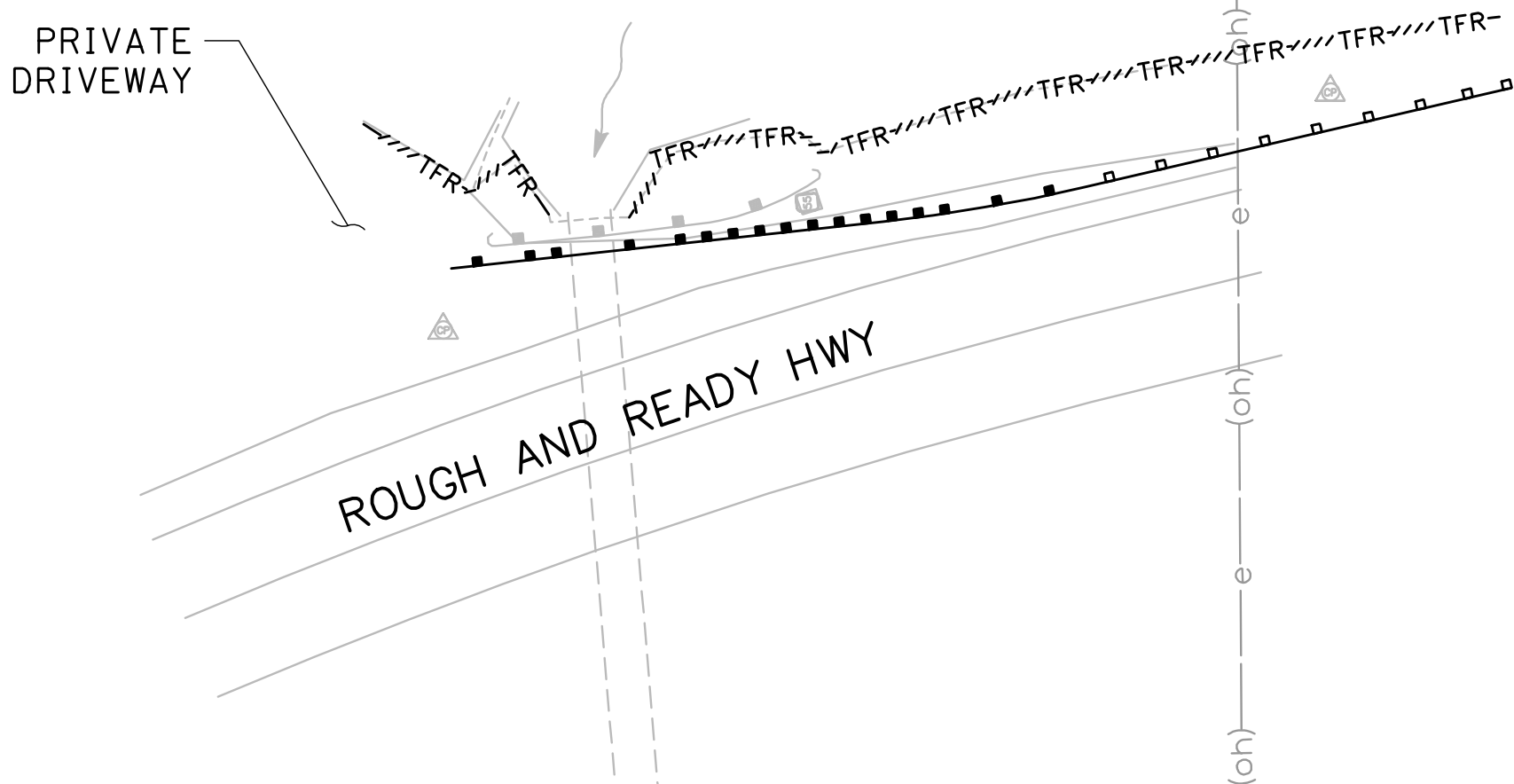
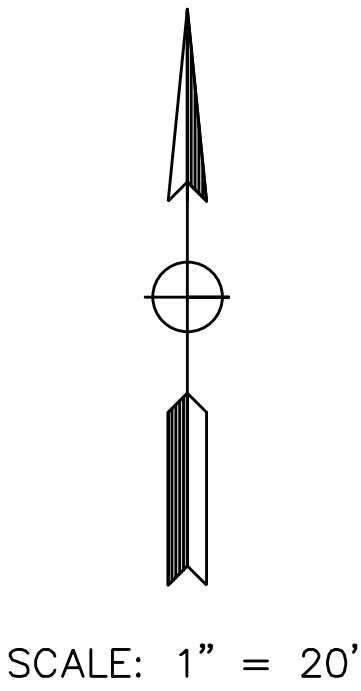
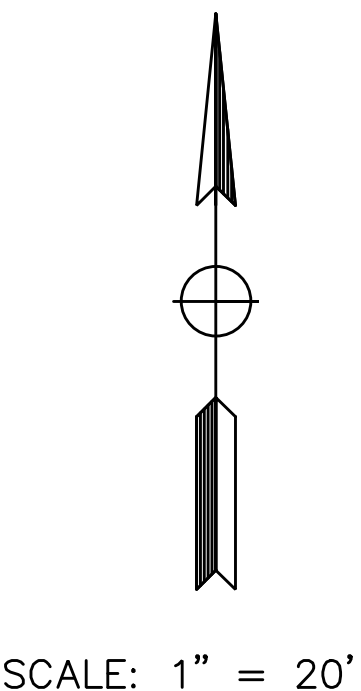


- LEGEND:**
- TFR---TFR--- TEMPORARY FIBER ROLL
 - DRAINAGE CANAL FLOW DIRECTION
 - PERMANENT EROSION CONTROL (HYDROSEEDING)

- NOTES:**
- PAYMENT FOR ALL WORK SHOWN ON THIS SHEET IS INCLUDED IN WATER POLLUTION CONTROL BID ITEM. EROSION CONTROL PLAN SHOWN IS FOR INFORMATION PURPOSES ONLY.



PLEASANT VALLEY RD - G34030204



ROUGH AND READY HWY - G36140302

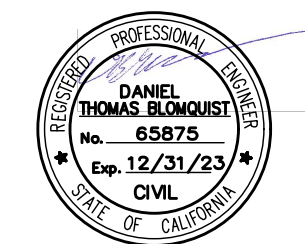
REVISIONS

NO.	DESCRIPTION	BY	DATE



**GUARDRAIL SAFETY AUDIT PROJECT
WATER POLLUTION CONTROL**

NEVADA COUNTY – DEPARTMENT OF PUBLIC WORKS



DATE: FEB 28, 2022
DRAWING: EL
DESIGNED: EM
DRAWN: KH
CHECKED: JW
JOB NO: 225035
DATE: FEB 28, 2022

SCALE REFERENCE
0 1 in

DRAWING
WPC-3

SHEET
15
OF 16 SHEETS

TAMMY WAY (G22860101) (ALTERNATE BID)		
ITEM No.	ITEM DESCRIPTION	QUANTITIY
1	PERMANENT EROSION CONTROL (HYDROSEEDING)	450 SF
2	CLEARING AND GRUBBING	1 LS
3	REMOVE GUARDRAIL	213 LF
4	IMPORTED BORROW	5 CY
5	MIDWEST GUARDRAIL SYSTEM (NARROW INSTALLATION)	212.5 LF
6	END ANCHOR ASSEMBLY (TYPE SFT)	2 EA
7	END CAP (TYPE A - 3/4 WRAP)	2 EA
8	RESET ROADSIDE SIGN	1 EA
9	OBJECT MARKER (TYPE P-CA)	2 EA

GREENHORN ROAD (G24060401/ 02)		
ITEM No.	ITEM DESCRIPTION	QUANTITIY
1	REMOVE BRIDGE RAILING	33 LF
2	ALTERNATIVE IN-LINE TERMINAL SYSTEM (TL-2)	2 EA
3	MIDWEST GUARDRAIL SYSTEM (TYPICAL INSTALLATION)	143.75 LF
4	MIDWEST GUARDRAIL SYSTEM - CONTROLLED RELEASING TERMINAL	115.15 LF
5	END ANCHOR ASSEMBLY (TYPE SFT)	4 EA
6	END CAP (TYPE A - 3/4 WRAP)	4 EA
7	OBJECT MARKER (TYPE P-CA)	4 EA

GREENHORN ROAD (G24060101)		
ITEM No.	ITEM DESCRIPTION	QUANTITIY
1	REMOVE GUARDRAIL	175 LF
2	ALTERNATIVE IN-LINE TERMINAL SYSTEM (TL-3)	1 EA
3	MIDWEST GUARDRAIL SYSTEM (TYPICAL INSTALLATION)	156.25 LF
4	END ANCHOR ASSEMBLY (TYPE CA)	1 EA
5	END CAP (TYPE A - 3/4 WRAP)	1 EA
6	DELINEATORS (CLASS 1, TYPE F)	6 EA
7	OBJECT MARKER (TYPE P-CA)	1 EA

McCOURTNEY ROAD (G32060201)		
ITEM No.	ITEM DESCRIPTION	QUANTITIY
1	PERMANENT EROSION CONTROL (HYDROSEEDING)	450 SF
2	CLEARING AND GRUBBING	1 LS
3	REMOVE TREE	8 EA
4	IMPORTED BORROW	10 CY
5	REMOVE GUARDRAIL	200 LF
6	ALTERNATIVE IN-LINE TERMINAL SYSTEM (TL-3)	1 EA
7	MIDWEST GUARDRAIL SYSTEM (NARROW INSTALLATION)	231.25 LF
8	END ANCHOR ASSEMBLY (TYPE SFT)	1 EA
9	END CAP (TYPE A - 3/4 WRAP)	1 EA
10	DELINEATORS (CLASS 1, TYPE F)	8 EA
11	OBJECT MARKER (TYPE P-CA)	1 EA

McCOURTNEY ROAD (G32060901/ 02)		
ITEM No.	ITEM DESCRIPTION	QUANTITIY
1	ALTERNATIVE IN-LINE TERMINAL SYSTEM (TL-3)	7 EA
2	MIDWEST GUARDRAIL SYSTEM (TYPICAL INSTALLATION)	127.6 LF
3	END ANCHOR ASSEMBLY (TYPE CA)	1 EA
4	END CAP (TYPE A - 3/4 WRAP)	1 EA
5	REMOVE DELINEATOR	4 EA
6	OBJECT MARKER (TYPE P-CA)	1 EA

PLEASANT VALLEY ROAD (G34030204)		
ITEM No.	ITEM DESCRIPTION	QUANTITIY
1	REMOVE GUARDRAIL	17 LF
2	ROADWAY EXCAVATION	4 CY
3	CLASS 2 AGGREGATE BASE	4 CY
4	THRIE BEAM CONNECTION (TYPE 9)	1 EA
5	TRANSITION RAILING (TYPE WB-31)	1 EA
6	MIDWEST GUARDRAIL SYSTEM (TYPICAL INSTALLATION)	56.25 LF
7	END ANCHOR ASSEMBLY (TYPE CA)	1 EA
8	END CAP (TYPE A - 3/4 WRAP)	1 EA
9	END CAP (TYPE TC)	1 EA
10	RELOCATE ROADSIDE SIGN	1 EA
11	OBJECT MARKER (TYPE P-CA)	1 EA

PENN VALLEY DRIVE (G35090401/ 02)		
ITEM No.	ITEM DESCRIPTION	QUANTITIY
1	REMOVE GUARDRAIL	50 LF
2	ALTERNATIVE IN-LINE TERMINAL SYSTEM (TL-3)	6 EA
3	MIDWEST GUARDRAIL SYSTEM (NARROW INSTALLATION)	100 LF
4	END ANCHOR ASSEMBLY (TYPE SFT)	2 EA
5	END CAP (TYPE A - 3/4 WRAP)	2 EA
6	OBJECT MARKER (TYPE P-CA)	2 EA

ROUGH AND READY HIGHWAY (G36140302)		
ITEM No.	ITEM DESCRIPTION	QUANTITIY
1	REMOVE GUARDRAIL	37.5 LF
2	ALTERNATIVE IN-LINE TERMINAL SYSTEM (TL-3)	1 EA
3	MIDWEST GUARDRAIL SYSTEM (TYPICAL INSTALLATION)	25.5 LF
4	END ANCHOR ASSEMBLY (TYPE SFT)	1 EA
5	STRENGTHENED MIDWEST GUARDRAIL SYSTEM	41 LF
6	END CAP (TYPE A - 3/4 WRAP)	1 EA

REVISIONS

NO.	DESCRIPTION	BY	DATE



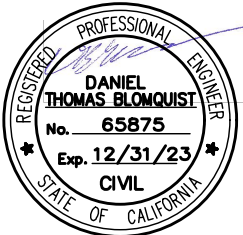
GUARDRAIL SAFETY AUDIT PROJECT

SUMMARY OF QUANTITIES

NEVADA COUNTY – DEPARTMENT OF PUBLIC WORKS



MARK THOMAS



Daniel Thomas Blomquist
Professional Engineer
No. 65875
Exp. 12/31/25
Civil
State of Nevada

DATE: FEB 28, 2022

DRAWING: EL

DESIGNED: EM

DRAWN: KH

CHECKED: JW

JOB NO: 225035

DATE: FEB 28, 2022

SCALE REFERENCE
0  1 in

DRAWING
Q-1

SHEET
16
OF 16 SHEETS