

PROJECT PLANS FOR: FORDYCE DAM SEEPAGE MITIGATION ACCESS ROAD IMPROVEMENTS

90% DESIGN PLANS

SHEET INDEX

C1	TITLE SHEET
C2	TYPICAL SECTIONS & DETAILS
C3	DRAINAGE DETAILS
C4	PLAN - STA 1+00 TO 75+00 (PM 0.0 TO 1.4)
C5	PLAN - STA 75+00 TO 137+00 (PM 1.4 TO 2.6)
C6	PLAN - STA 137+00 TO 213+00 (PM 2.6 TO 4.0)
C7	PLAN - STA 213+00 TO 297+00 (PM 4.0 TO 5.6)
C8	PLAN - STA 297+00 TO 359+00 (PM 5.6 TO 6.8)
C9	PLAN - STA 359+00 TO 414+00 (PM 6.8 TO 7.8)
C10	PLAN - STA 414+00 TO DAM (PM 7.8 TO 8.0)
C11	ROCK WALL IMPROVEMENTS 1 - EXISTING CONDITIONS & TREE REMOVAL
C12	ROCK WALL IMPROVEMENTS 2 - PROPOSED IMPROVEMENTS
C13	DAM TURNAROUND IMPROVEMENTS

ABBREVIATIONS

AB - AGGREGATE BASE
 AC - ASPHALT CONCRETE
 BC - BEGINNING OF CURVE
 CL - CENTERLINE
 DI - DRAINAGE INLET
 DIA - DIAMETER
 EC - END OF CURVE
 EP - EDGE OF PAVEMENT
 (E) - EXISTING
 FG - FINISH GRADE
 GB - GRADE BREAK
 FL - FLOW LINE
 LF - LINEAR FOOT
 MH - MANHOLE
 NTS - NOT TO SCALE
 (P) - PROPOSED
 PM - POST MILE
 R - RADIUS
 R/W - RIGHT OF WAY
 STD - STANDARD
 USDA - UNITED STATES DEPARTMENT OF AGRICULTURE
 WH/AP - WHERE APPLICABLE



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FORDYCE DAM SEEPAGE MITIGATION
ACCESS ROAD IMPROVEMENTS
TITLE SHEET

NEVADA COUNTY

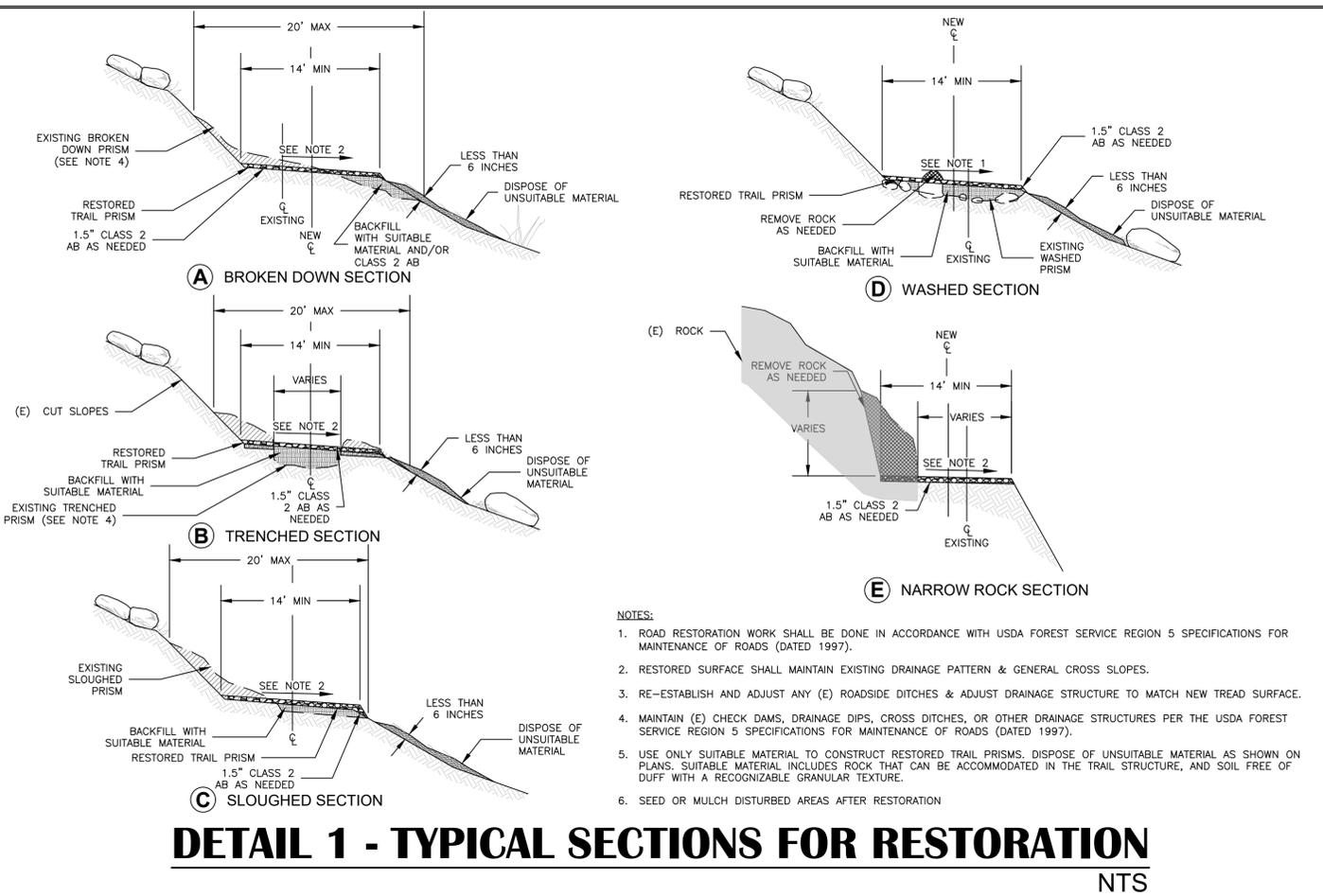
CALIFORNIA

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DATE: 3/30/2020
 DRAFTER: CCH/RJR
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PROJECT NO.
8635.038
 SHEET NO. **C1** OF **C13**

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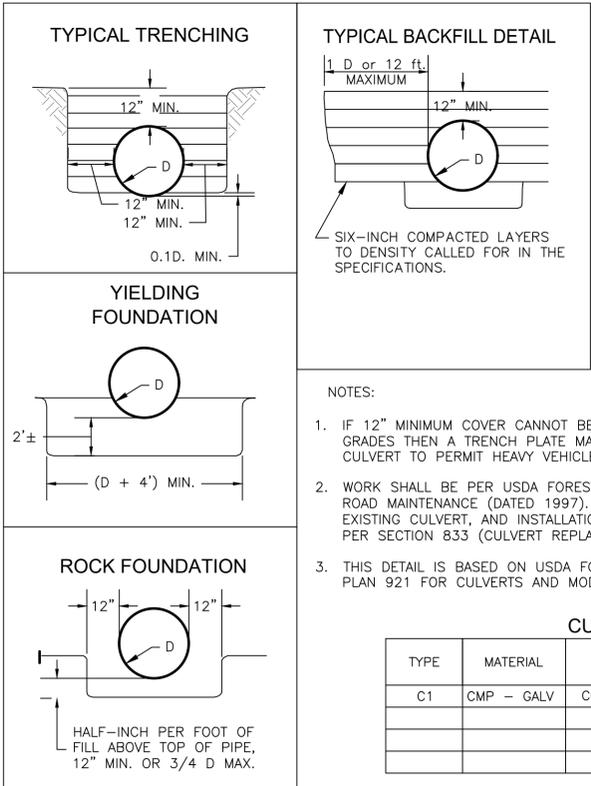
DETAIL 1 - TYPICAL SECTIONS FOR RESTORATION
NTS

- NOTES:**
- ROAD RESTORATION WORK SHALL BE DONE IN ACCORDANCE WITH USDA FOREST SERVICE REGION 5 SPECIFICATIONS FOR MAINTENANCE OF ROADS (DATED 1997).
 - RESTORED SURFACE SHALL MAINTAIN EXISTING DRAINAGE PATTERN & GENERAL CROSS SLOPES.
 - RE-ESTABLISH AND ADJUST ANY (E) ROADSIDE DITCHES & ADJUST DRAINAGE STRUCTURE TO MATCH NEW TREAD SURFACE.
 - MAINTAIN (E) CHECK DAMS, DRAINAGE DIPS, CROSS DITCHES, OR OTHER DRAINAGE STRUCTURES PER THE USDA FOREST SERVICE REGION 5 SPECIFICATIONS FOR MAINTENANCE OF ROADS (DATED 1997).
 - USE ONLY SUITABLE MATERIAL TO CONSTRUCT RESTORED TRAIL PRISMS. DISPOSE OF UNSUITABLE MATERIAL AS SHOWN ON PLANS. SUITABLE MATERIAL INCLUDES ROCK THAT CAN BE ACCOMMODATED IN THE TRAIL STRUCTURE, AND SOIL FREE OF DUFF WITH A RECOGNIZABLE GRANULAR TEXTURE.
 - SEED OR MULCH DISTURBED AREAS AFTER RESTORATION

CULVERT EXTENSIONS - SUMMARY TABLE

STA	GEOTEXTILE TYPE	BEDDING TYPE	CULVERT TYPE	RSP TYPE	RETAINER*	EXTENSION LENGTH	COMMENTS
99+00	N/A	B1/B2	C 1	RSP-1/2	ROCK	10±	EXTENSION AT OUTLET
193+00	N/A	B1/B2	C 1	RSP-1/2	ROCK	15±	EXTENSION AT OUTLET
322+80	N/A	B1/B2	C 1	RSP-1/2	ROCK	7±	EXTENSION AT INLET - SEE NOTE 4

N/A WHEN NOT APPLICABLE

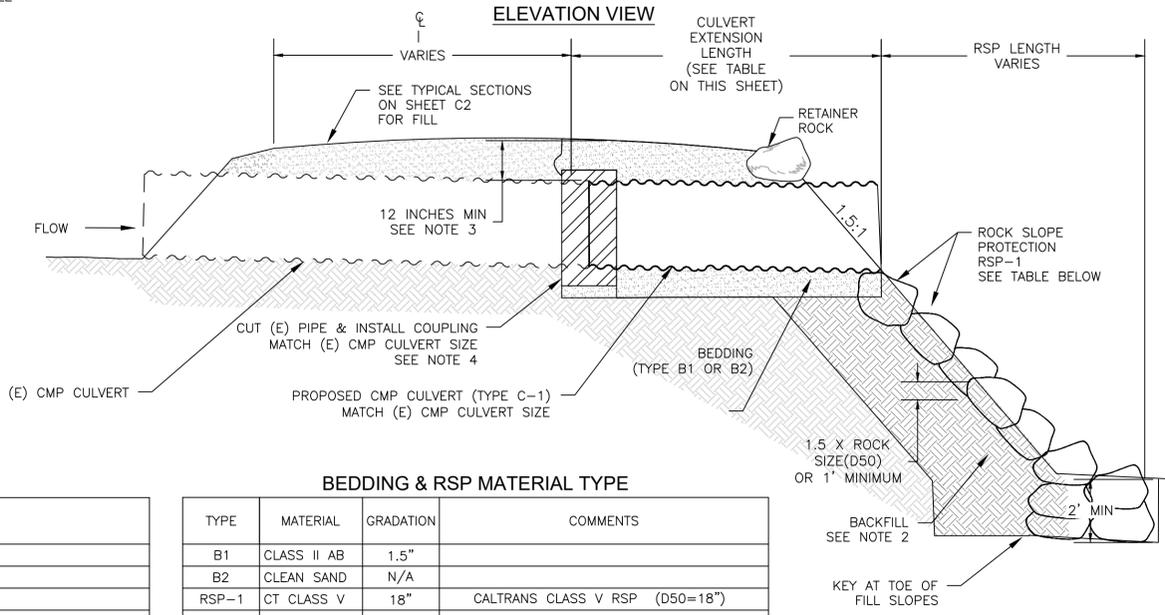


CULVERT TYPE

TYPE	MATERIAL	COMMENTS
C1	CMP - GALV	CONNECT TO (E) CMP WITH COUPLING

BEDDING & RSP MATERIAL TYPE

TYPE	MATERIAL	GRADATION	COMMENTS
B1	CLASS II AB	1.5"	
B2	CLEAN SAND	N/A	
RSP-1	CT CLASS V	18"	CALTRANS CLASS V RSP (D50=18")



DETAIL 2 - CULVERT EXTENSION
NTS

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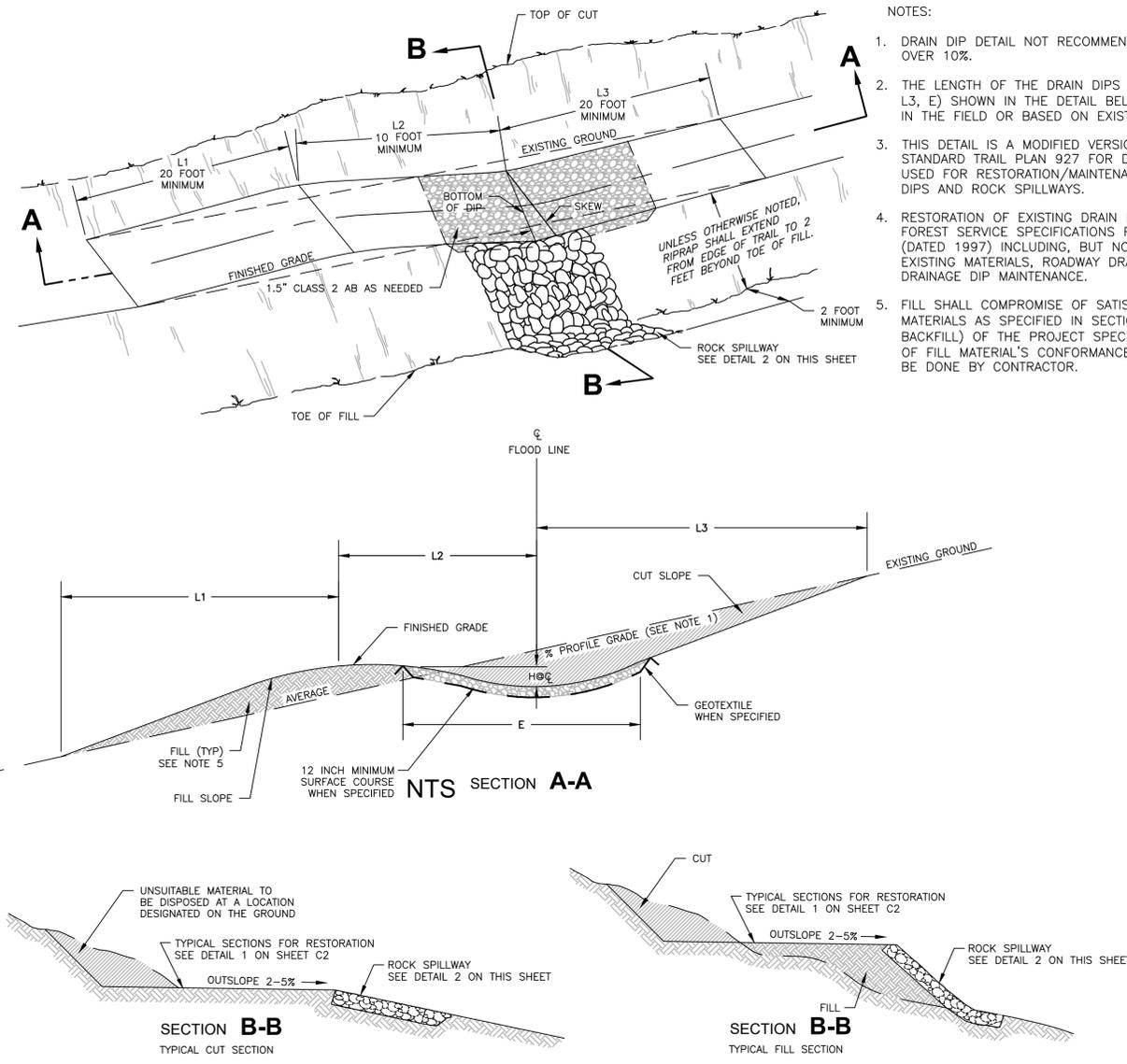
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FORDYCE DAM SEEPAGE MITIGATION
ACCESS ROAD IMPROVEMENTS
TYPICAL SECTIONS & DETAILS
NEVADA COUNTY CALIFORNIA

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PROJECT NO.
8635.038
SHEET NO. **C2** OF **C13**

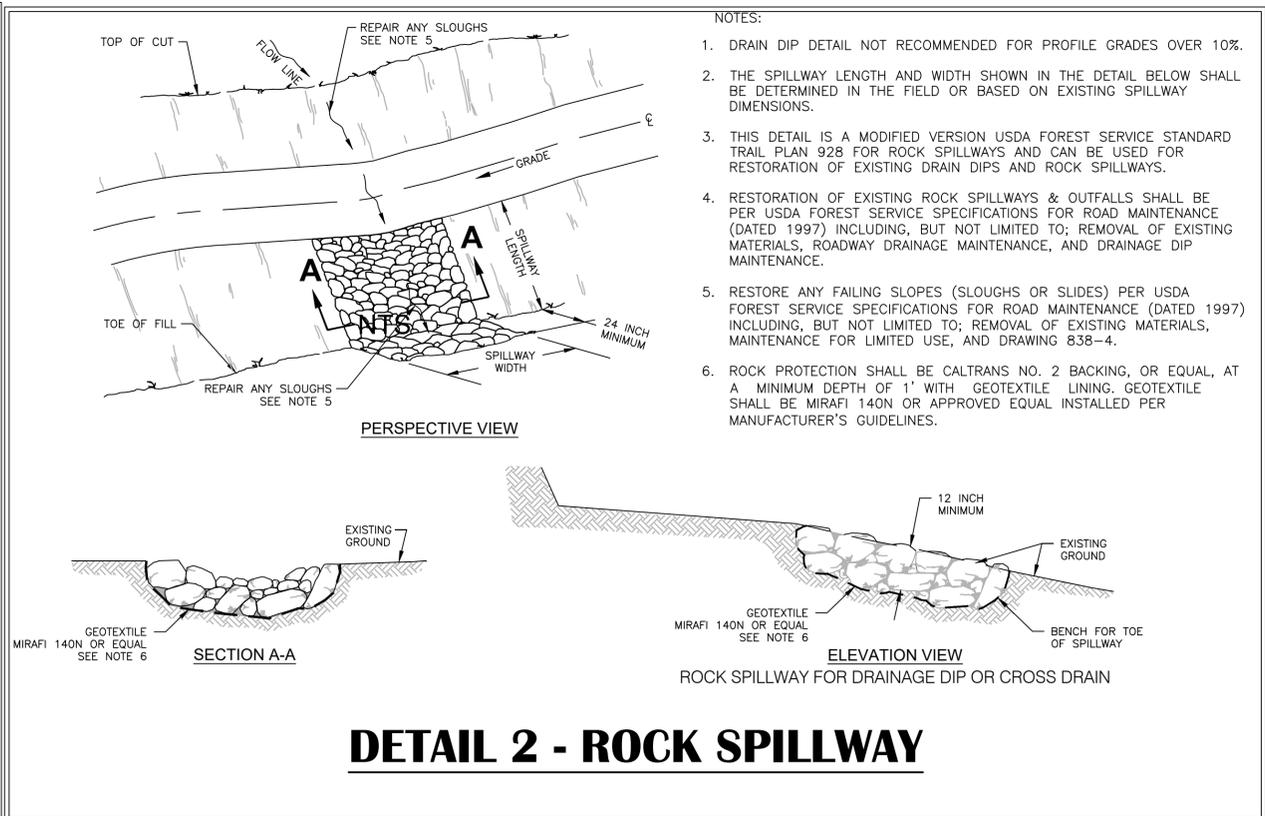
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DETAIL 1 - DRAINAGE DIP

NOTES:

1. DRAIN DIP DETAIL NOT RECOMMENDED FOR PROFILE GRADES OVER 10%.
2. THE LENGTH OF THE DRAIN DIPS GRADE CHANGES (L1, L2, L3, E) SHOWN IN THE DETAIL BELOW SHALL BE DETERMINED IN THE FIELD OR BASED ON EXISTING DRAIN DIP DIMENSIONS.
3. THIS DETAIL IS A MODIFIED VERSION USDA FOREST SERVICE STANDARD TRAIL PLAN 927 FOR DRAIN DIPS AND CAN BE USED FOR RESTORATION/MAINTENANCE OF EXISTING DRAIN DIPS AND ROCK SPILLWAYS.
4. RESTORATION OF EXISTING DRAIN DIPS SHALL BE PER USDA FOREST SERVICE SPECIFICATIONS FOR ROAD MAINTENANCE (DATED 1997) INCLUDING, BUT NOT LIMITED TO; REMOVAL OF EXISTING MATERIALS, ROADWAY DRAINAGE MAINTENANCE, AND DRAINAGE DIP MAINTENANCE.
5. FILL SHALL COMPROMISE OF SATISFACTORY OR NATIVE MATERIALS AS SPECIFIED IN SECTION 312323 (FILL AND BACKFILL) OF THE PROJECT SPECIFICATIONS. DETERMINATION OF FILL MATERIAL'S CONFORMANCE WITH SPECIFICATION SHALL BE DONE BY CONTRACTOR.



DETAIL 2 - ROCK SPILLWAY

NOTES:

1. DRAIN DIP DETAIL NOT RECOMMENDED FOR PROFILE GRADES OVER 10%.
2. THE SPILLWAY LENGTH AND WIDTH SHOWN IN THE DETAIL BELOW SHALL BE DETERMINED IN THE FIELD OR BASED ON EXISTING SPILLWAY DIMENSIONS.
3. THIS DETAIL IS A MODIFIED VERSION USDA FOREST SERVICE STANDARD TRAIL PLAN 928 FOR ROCK SPILLWAYS AND CAN BE USED FOR RESTORATION OF EXISTING DRAIN DIPS AND ROCK SPILLWAYS.
4. RESTORATION OF EXISTING ROCK SPILLWAYS & OUTFALLS SHALL BE PER USDA FOREST SERVICE SPECIFICATIONS FOR ROAD MAINTENANCE (DATED 1997) INCLUDING, BUT NOT LIMITED TO; REMOVAL OF EXISTING MATERIALS, ROADWAY DRAINAGE MAINTENANCE, AND DRAINAGE DIP MAINTENANCE.
5. RESTORE ANY FAILING SLOPES (SLOUGHS OR SLIDES) PER USDA FOREST SERVICE SPECIFICATIONS FOR ROAD MAINTENANCE (DATED 1997) INCLUDING, BUT NOT LIMITED TO; REMOVAL OF EXISTING MATERIALS, MAINTENANCE FOR LIMITED USE, AND DRAWING 838-4.
6. ROCK PROTECTION SHALL BE CALTRANS NO. 2 BACKING, OR EQUAL, AT A MINIMUM DEPTH OF 1' WITH GEOTEXTILE LINING. GEOTEXTILE SHALL BE MIRAFI 140N OR APPROVED EQUAL INSTALLED PER MANUFACTURER'S GUIDELINES.

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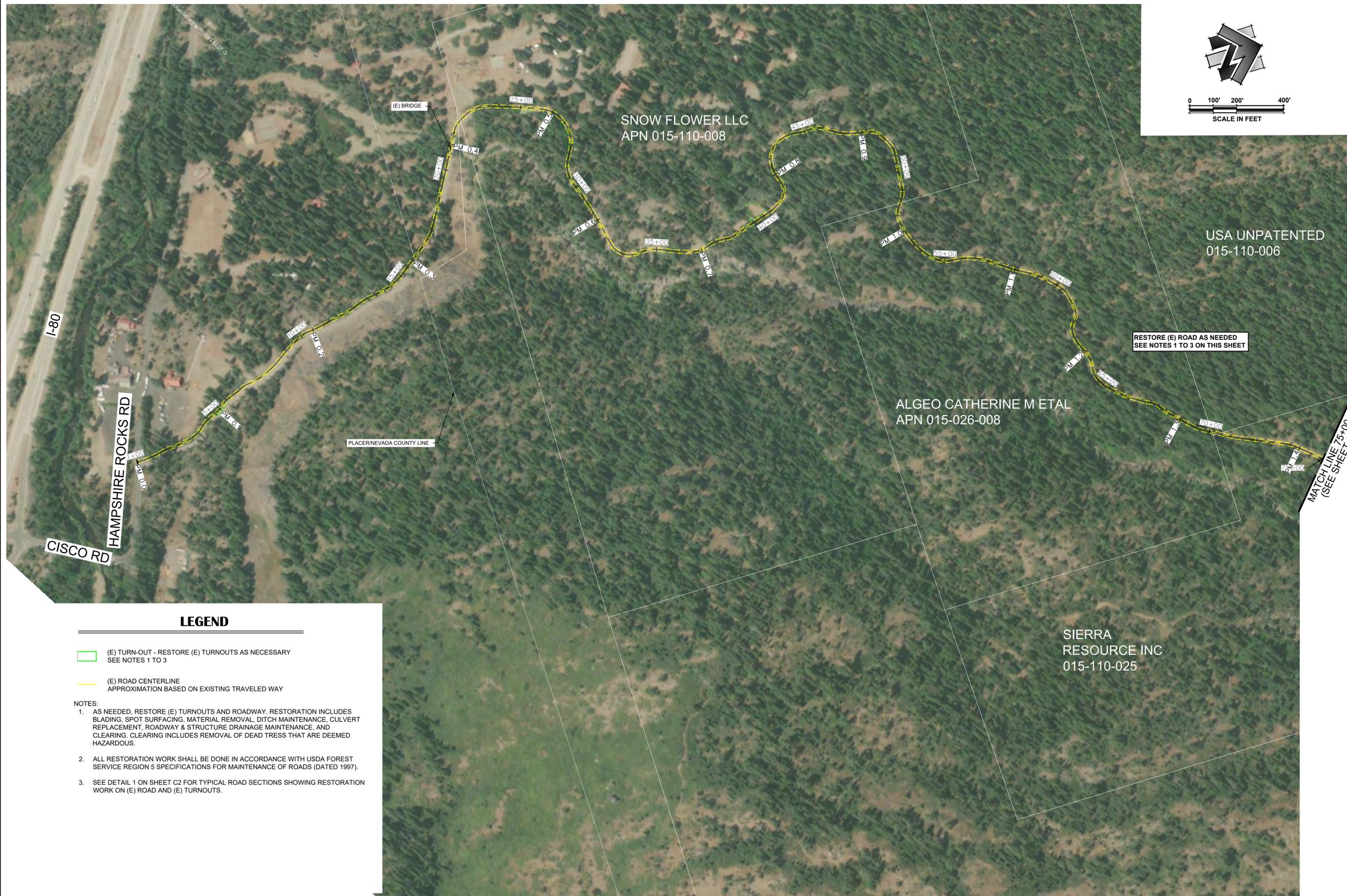
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ACCESS ROAD IMPROVEMENTS
DRAINAGE DETAILS
NEVADA COUNTY CALIFORNIA

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DATE:	3/30/2020
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PROJECT NO.
8635.038
SHEET NO. **C3** OF **C13**

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LEGEND

- (E) TURN-OUT - RESTORE (E) TURNOUTS AS NECESSARY
SEE NOTES 1 TO 3
- (E) ROAD CENTERLINE
APPROXIMATION BASED ON EXISTING TRAVELED WAY

NOTES:

1. AS NEEDED, RESTORE (E) TURNOUTS AND ROADWAY. RESTORATION INCLUDES BLADING, SPOT SURFACING, MATERIAL REMOVAL, DITCH MAINTENANCE, CULVERT REPLACEMENT, ROADWAY & STRUCTURE DRAINAGE MAINTENANCE, AND CLEARING. CLEARING INCLUDES REMOVAL OF DEAD TREES THAT ARE DEEMED HAZARDOUS.
2. ALL RESTORATION WORK SHALL BE DONE IN ACCORDANCE WITH USDA FOREST SERVICE REGION 5 SPECIFICATIONS FOR MAINTENANCE OF ROADS (DATED 1997).
3. SEE DETAIL 1 ON SHEET C2 FOR TYPICAL ROAD SECTIONS SHOWING RESTORATION WORK ON (E) ROAD AND (E) TURNOUTS.

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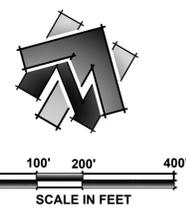
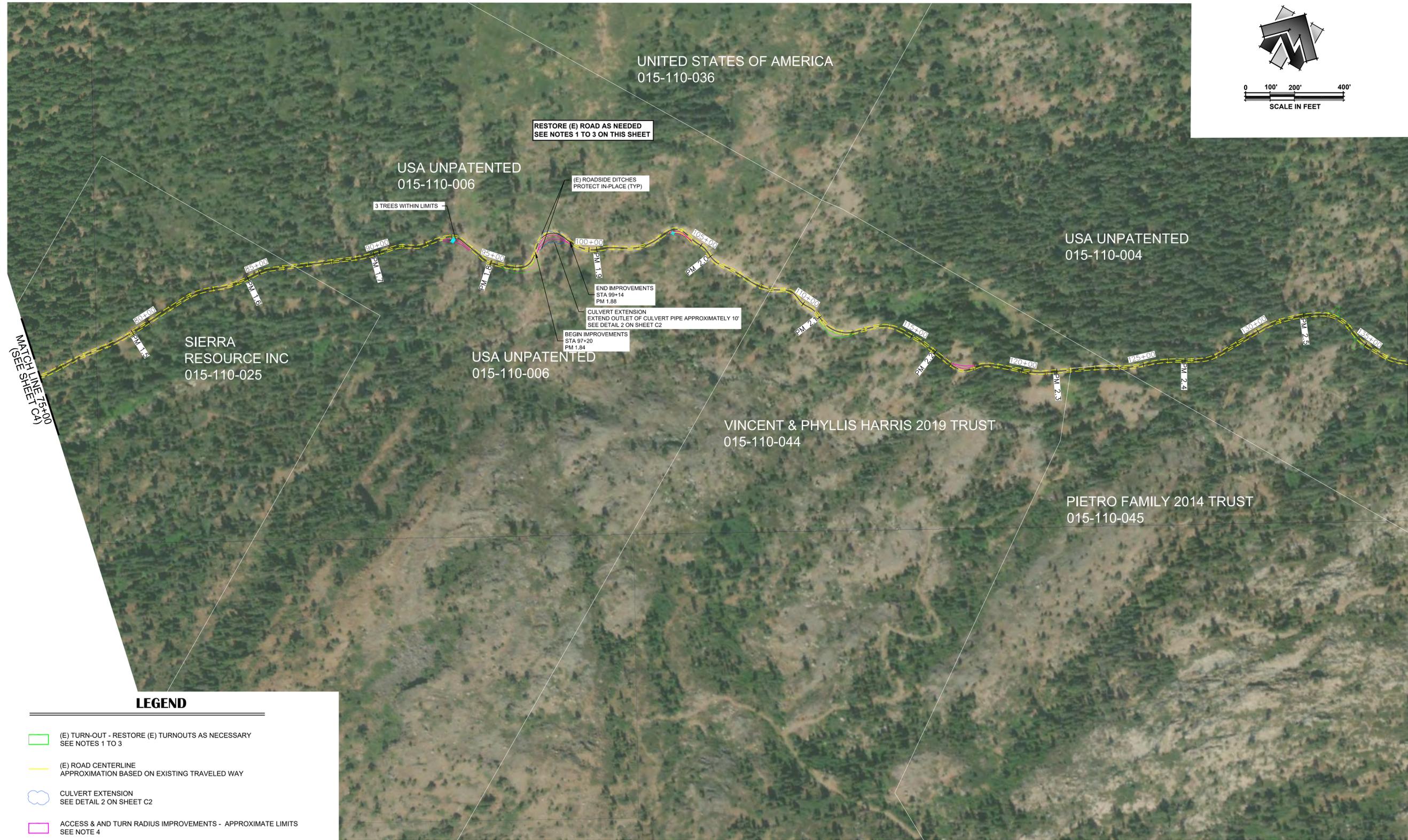
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FORDYCE DAM SEEPAGE MITIGATION
ACCESS ROAD IMPROVEMENTS
PLAN - STA 1+00 TO 75+00 (PM 0.0 TO 1.4)
 NEVADA COUNTY CALIFORNIA

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LEGEND

-  (E) TURN-OUT - RESTORE (E) TURNOUTS AS NECESSARY SEE NOTES 1 TO 3
-  (E) ROAD CENTERLINE APPROXIMATION BASED ON EXISTING TRAVELED WAY
-  CULVERT EXTENSION SEE DETAIL 2 ON SHEET C2
-  ACCESS & AND TURN RADIUS IMPROVEMENTS - APPROXIMATE LIMITS SEE NOTE 4
-  REMOVE (E) TREE - APPROXIMATE LOCATIONS AND QUANTITY

- NOTES:
1. AS NEEDED, RESTORE (E) TURNOUTS AND ROADWAY. RESTORATION INCLUDES BLADING, DITCH MAINTENANCE, CULVERT REPLACEMENT, ROADWAY & STRUCTURE DRAINAGE MAINTENANCE, AND CLEARING. CLEARING INCLUDES REMOVAL OF DEAD TREES THAT ARE DEEMED HAZARDOUS.
 2. ALL RESTORATION WORK SHALL BE DONE IN ACCORDANCE WITH USDA FOREST SERVICE REGION 5 SPECIFICATIONS FOR MAINTENANCE OF ROADS (DATED 1997).
 3. SEE DETAIL 1 ON SHEET C2 FOR TYPICAL ROAD SECTIONS SHOWING RESTORATION WORK ON (E) ROAD AND (E) TURNOUTS.
 4. ACCESS AND TURN RADIUS IMPROVEMENTS SHOWN ARE DETERMINED USING TURNING MOVEMENTS AND VEHICLE TRACKING OF A SEMI TRUCK WITH A 48' LONG TRAILER (AASHTO DESIGN VEHICLE WB-62)
 5. ONLY PROPOSED DRAINAGE IMPROVEMENTS ARE SHOWN. (E) DRAINAGE FEATURES ARE EXCLUDED FOR CLARITY.

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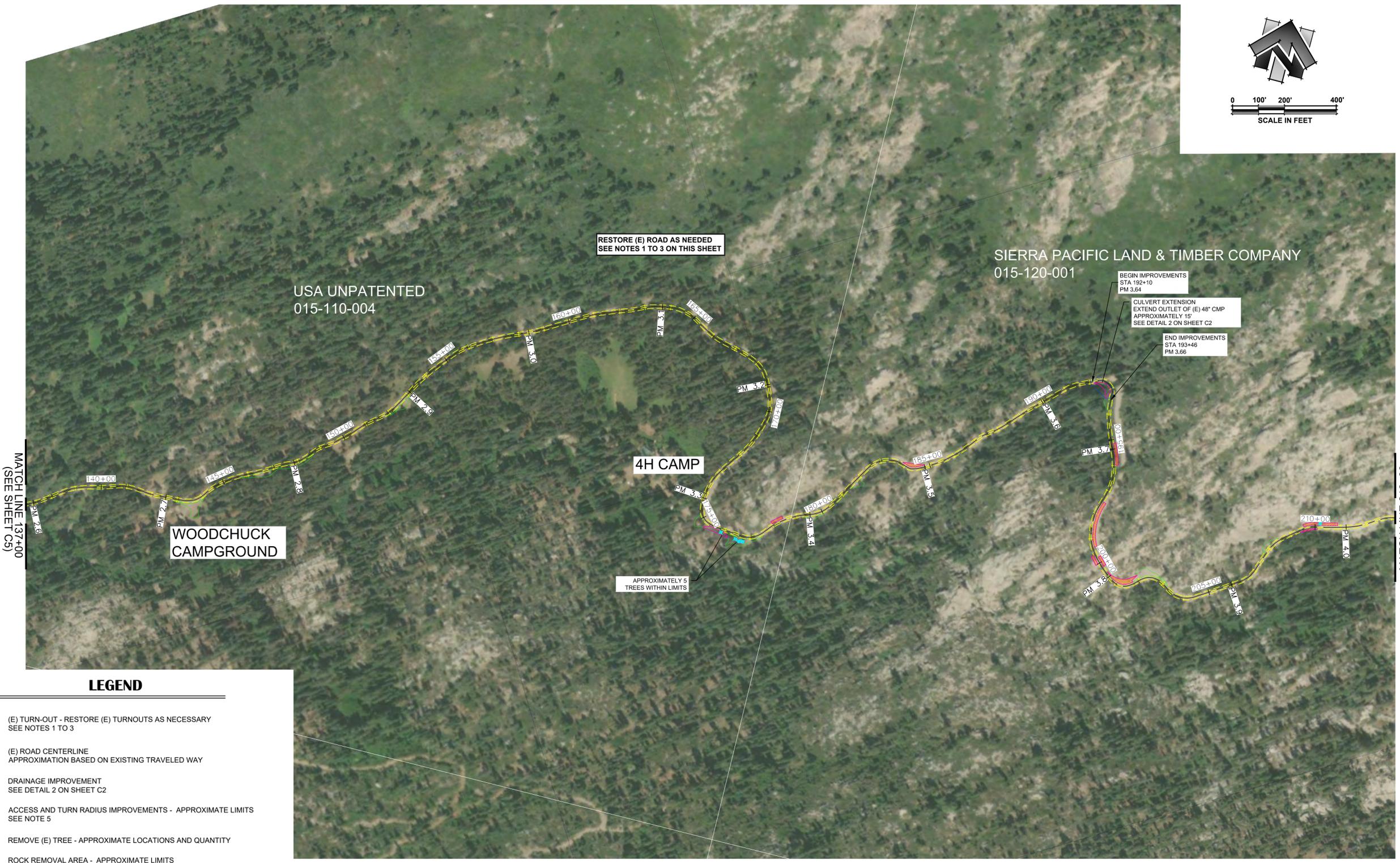
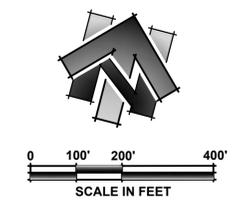
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FORDYCE DAM SEEPAGE MITIGATION
ACCESS ROAD IMPROVEMENTS
 PLAN - STA 75+00 TO 137+00 (PM 1.4 TO 2.6)
 NEVADA COUNTY CALIFORNIA

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PROJECT NO.
8635.038
 SHEET NO. **C5** OF **C13**

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LEGEND

- (E) TURN-OUT - RESTORE (E) TURNOUTS AS NECESSARY SEE NOTES 1 TO 3
- (E) ROAD CENTERLINE APPROXIMATION BASED ON EXISTING TRAVELED WAY
- DRAINAGE IMPROVEMENT SEE DETAIL 2 ON SHEET C2
- ACCESS AND TURN RADIUS IMPROVEMENTS - APPROXIMATE LIMITS SEE NOTE 5
- REMOVE (E) TREE - APPROXIMATE LOCATIONS AND QUANTITY
- ROCK REMOVAL AREA - APPROXIMATE LIMITS SEE NOTE 5

- NOTES:
1. AS NEEDED, RESTORE (E) TURNOUTS AND ROADWAY. RESTORATION INCLUDES BLADING, DITCH MAINTENANCE, CULVERT REPLACEMENT, ROADWAY & STRUCTURE DRAINAGE MAINTENANCE, AND CLEARING. CLEARING INCLUDES REMOVAL OF DEAD TREES THAT ARE DEEMED HAZARDOUS.
 2. ALL RESTORATION WORK SHALL BE DONE IN ACCORDANCE WITH USDA FOREST SERVICE REGION 5 SPECIFICATIONS FOR MAINTENANCE OF ROADS (DATED 1997).
 3. SEE DETAIL 1 ON SHEET C2 FOR TYPICAL ROAD SECTIONS SHOWING RESTORATION WORK ON (E) ROAD AND (E) TURNOUTS.
 4. ACCESS AND TURN RADIUS IMPROVEMENTS SHOWN ARE DETERMINED USING TURNING MOVEMENTS AND TRACKING OF A SEMI TRUCK WITH A 48' LONG TRAILER (AASHTO DESIGN VEHICLE WB-62)
 5. ROCK REMOVAL MAY INCLUDE DRILLING, SPLITTING, BLASTING, OR GRINDING. ROCK REMOVAL IS REQUIRED TO PROVIDE ADEQUATE ROAD WIDTH AND ACCESS AND TURN RADIUS IMPROVEMENTS.
 6. ONLY PROPOSED DRAINAGE IMPROVEMENTS ARE SHOWN. (E) DRAINAGE FEATURES ARE EXCLUDED FOR CLARITY.

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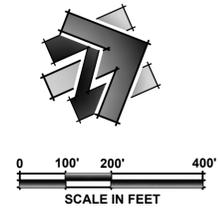
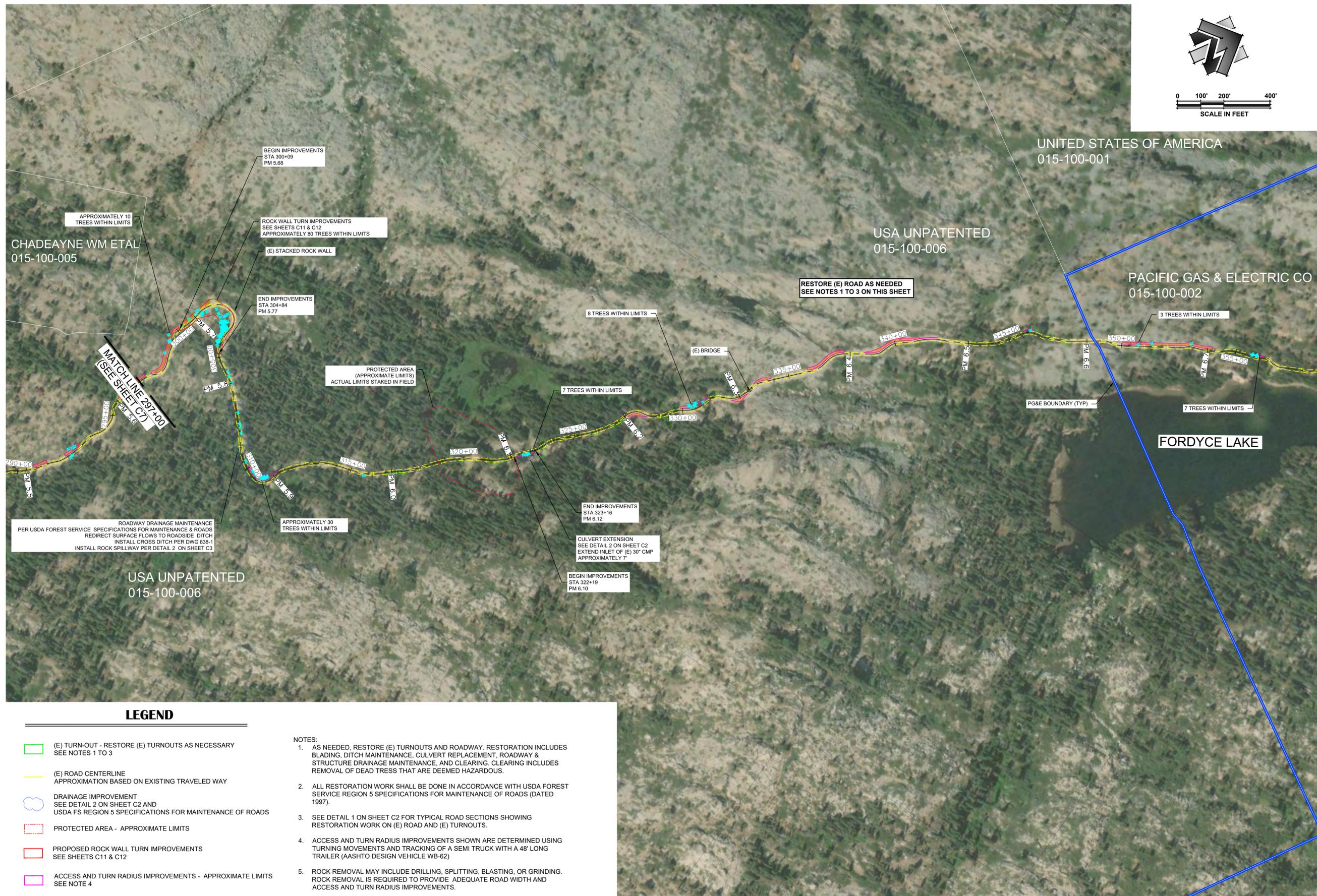
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FORDYCE DAM SEEPAGE MITIGATION
ACCESS ROAD IMPROVEMENTS
PLAN - STA 137+00 TO 213+00 (PM 2.6 TO 4.0)
 NEVADA COUNTY CALIFORNIA

DRAWING INFO
 DATE: 3/30/2020
 DRAFTER: CCH/RJR
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PROJECT NO.
8635.038
 SHEET NO. **C6** OF **C13**

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FORDYCE DAM SEEPAGE MITIGATION
ACCESS ROAD IMPROVEMENTS
PLAN - STA 297+00 TO 359+00 (PM 5.6 TO 6.8)
 NEVADA COUNTY CALIFORNIA

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 DATE: 3/30/2020
 DRAFTER: CHURCH
 DESIGNER: R/R
 REVIEWER: R/R

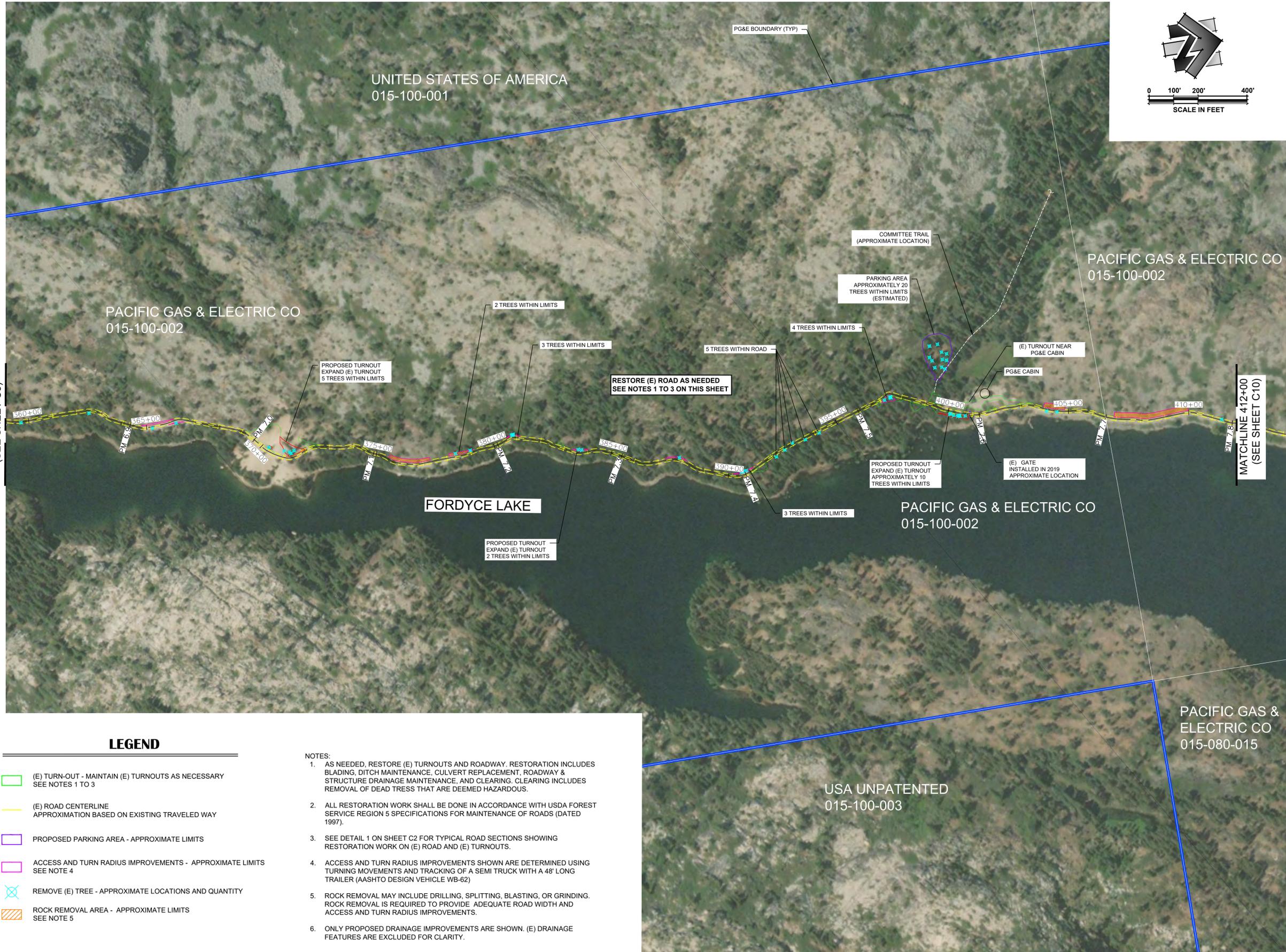
PROJECT NO. **8635.038**
 SHEET NO. **C8** OF **C13**

LEGEND

- (E) TURN-OUT - RESTORE (E) TURNOUTS AS NECESSARY SEE NOTES 1 TO 3
- (E) ROAD CENTERLINE APPROXIMATION BASED ON EXISTING TRAVELED WAY
- DRAINAGE IMPROVEMENT SEE DETAIL 2 ON SHEET C2 AND USDA FS REGION 5 SPECIFICATIONS FOR MAINTENANCE OF ROADS
- PROTECTED AREA - APPROXIMATE LIMITS
- PROPOSED ROCK WALL TURN IMPROVEMENTS SEE SHEETS C11 & C12
- ACCESS AND TURN RADIUS IMPROVEMENTS - APPROXIMATE LIMITS SEE NOTE 4
- REMOVE (E) TREE - APPROXIMATE LOCATIONS AND QUANTITY
- ROCK REMOVAL AREA - APPROXIMATE LIMITS SEE NOTE 5

- NOTES:**
1. AS NEEDED, RESTORE (E) TURNOUTS AND ROADWAY. RESTORATION INCLUDES BLADING, DITCH MAINTENANCE, CULVERT REPLACEMENT, ROADWAY & STRUCTURE DRAINAGE MAINTENANCE, AND CLEARING. CLEARING INCLUDES REMOVAL OF DEAD TREES THAT ARE DEEMED HAZARDOUS.
 2. ALL RESTORATION WORK SHALL BE DONE IN ACCORDANCE WITH USDA FOREST SERVICE REGION 5 SPECIFICATIONS FOR MAINTENANCE OF ROADS (DATED 1997).
 3. SEE DETAIL 1 ON SHEET C2 FOR TYPICAL ROAD SECTIONS SHOWING RESTORATION WORK ON (E) ROAD AND (E) TURNOUTS.
 4. ACCESS AND TURN RADIUS IMPROVEMENTS SHOWN ARE DETERMINED USING TURNING MOVEMENTS AND TRACKING OF A SEMI TRUCK WITH A 48' LONG TRAILER (AASHTO DESIGN VEHICLE WB-62)
 5. ROCK REMOVAL MAY INCLUDE DRILLING, SPLITTING, BLASTING, OR GRINDING. ROCK REMOVAL IS REQUIRED TO PROVIDE ADEQUATE ROAD WIDTH AND ACCESS AND TURN RADIUS IMPROVEMENTS.
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LEGEND

- (E) TURN-OUT - MAINTAIN (E) TURNOUTS AS NECESSARY SEE NOTES 1 TO 3
- (E) ROAD CENTERLINE APPROXIMATION BASED ON EXISTING TRAVELED WAY
- PROPOSED PARKING AREA - APPROXIMATE LIMITS
- ACCESS AND TURN RADIUS IMPROVEMENTS - APPROXIMATE LIMITS SEE NOTE 4
- ✕ REMOVE (E) TREE - APPROXIMATE LOCATIONS AND QUANTITY
- ROCK REMOVAL AREA - APPROXIMATE LIMITS SEE NOTE 5

- NOTES:**
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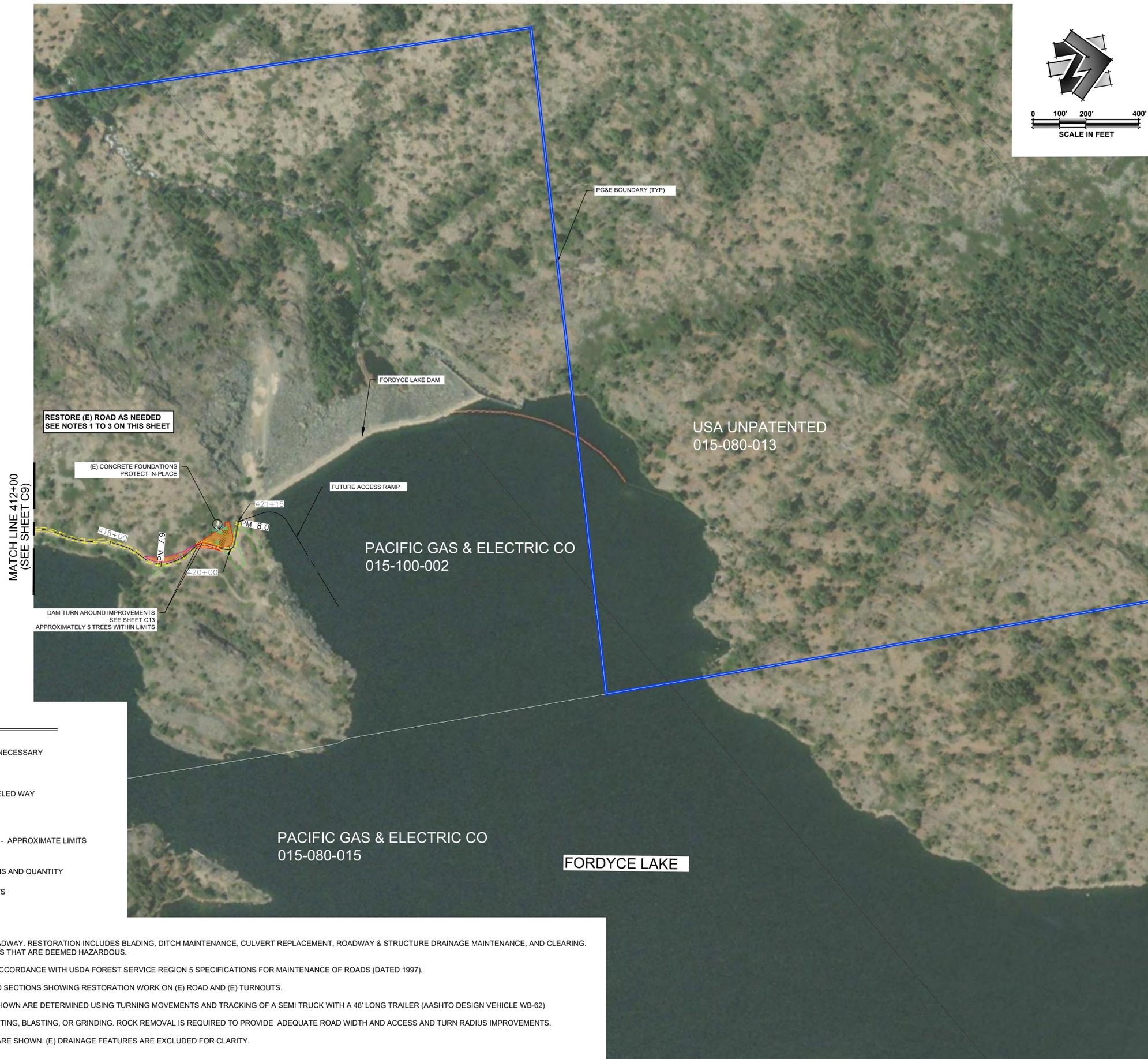
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FORDYCE DAM SEEPAGE MITIGATION
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 PLAN - STA 359+00 TO 414+00 (PM 6.8 TO 7.8)
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DRAWING INFO
 DATE: 3/30/2020
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 REVIEWER: RJR

PROJECT NO.
8635.038
 SHEET NO. **C9** OF **C13**

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LEGEND

-  (E) TURN-OUT - MAINTAIN (E) TURNOUTS AS NECESSARY
SEE NOTES 1 TO 3
-  (E) ROAD CENTERLINE
APPROXIMATION BASED ON EXISTING TRAVELED WAY
-  PROPOSED TURN-AROUND AT DAM
SEE SHEET C13
-  ACCESS AND TURN RADIUS IMPROVEMENTS - APPROXIMATE LIMITS
SEE NOTE 4
-  REMOVE (E) TREE - APPROXIMATE LOCATIONS AND QUANTITY
-  ROCK REMOVAL AREA - APPROXIMATE LIMITS
SEE NOTE 5

NOTES:

1. AS NEEDED, RESTORE (E) TURNOUTS AND ROADWAY. RESTORATION INCLUDES BLADING, DITCH MAINTENANCE, CULVERT REPLACEMENT, ROADWAY & STRUCTURE DRAINAGE MAINTENANCE, AND CLEARING. CLEARING INCLUDES REMOVAL OF DEAD TREES THAT ARE DEEMED HAZARDOUS.
2. ALL RESTORATION WORK SHALL BE DONE IN ACCORDANCE WITH USDA FOREST SERVICE REGION 5 SPECIFICATIONS FOR MAINTENANCE OF ROADS (DATED 1997).
3. SEE DETAIL 1 ON SHEET C2 FOR TYPICAL ROAD SECTIONS SHOWING RESTORATION WORK ON (E) ROAD AND (E) TURNOUTS.
4. ACCESS AND TURN RADIUS IMPROVEMENTS SHOWN ARE DETERMINED USING TURNING MOVEMENTS AND TRACKING OF A SEMI TRUCK WITH A 48' LONG TRAILER (AASHTO DESIGN VEHICLE WB-62)
5. ROCK REMOVAL MAY INCLUDE DRILLING, SPLITTING, BLASTING, OR GRINDING. ROCK REMOVAL IS REQUIRED TO PROVIDE ADEQUATE ROAD WIDTH AND ACCESS AND TURN RADIUS IMPROVEMENTS.
6. ONLY PROPOSED DRAINAGE IMPROVEMENTS ARE SHOWN. (E) DRAINAGE FEATURES ARE EXCLUDED FOR CLARITY.

NO.	REVISION	DESCRIPTION	CHECKED BY	DATE
		PRELIMINARY DESIGN NOT FOR CONSTRUCTION		

DRAWING SCALE
 HOR. SCALE: AS NOTED
 VERT. SCALE: N.T.S.

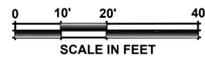


REY ENGINEERS, INC.
 Civil Engineers | Land Surveyors | LDAR
 905 Silver Street, Suite 200, Folsom, CA 95630
 Phone: (916) 366-3000 Fax: (916) 366-3333

FORDYCE DAM SEEPAGE MITIGATION
ACCESS ROAD IMPROVEMENTS
PLAN - STA 414+00 TO DAM (PM 7.8 TO 8.0)
 NEVADA COUNTY CALIFORNIA

DRAWING INFO
 DATE: 3/30/2020
 DRAFTER: COH/RJR
 DESIGNER: RJR
 REVIEWER: RJR

PROJECT NO.
8635.038
 SHEET NO. **C10** OF **C13**



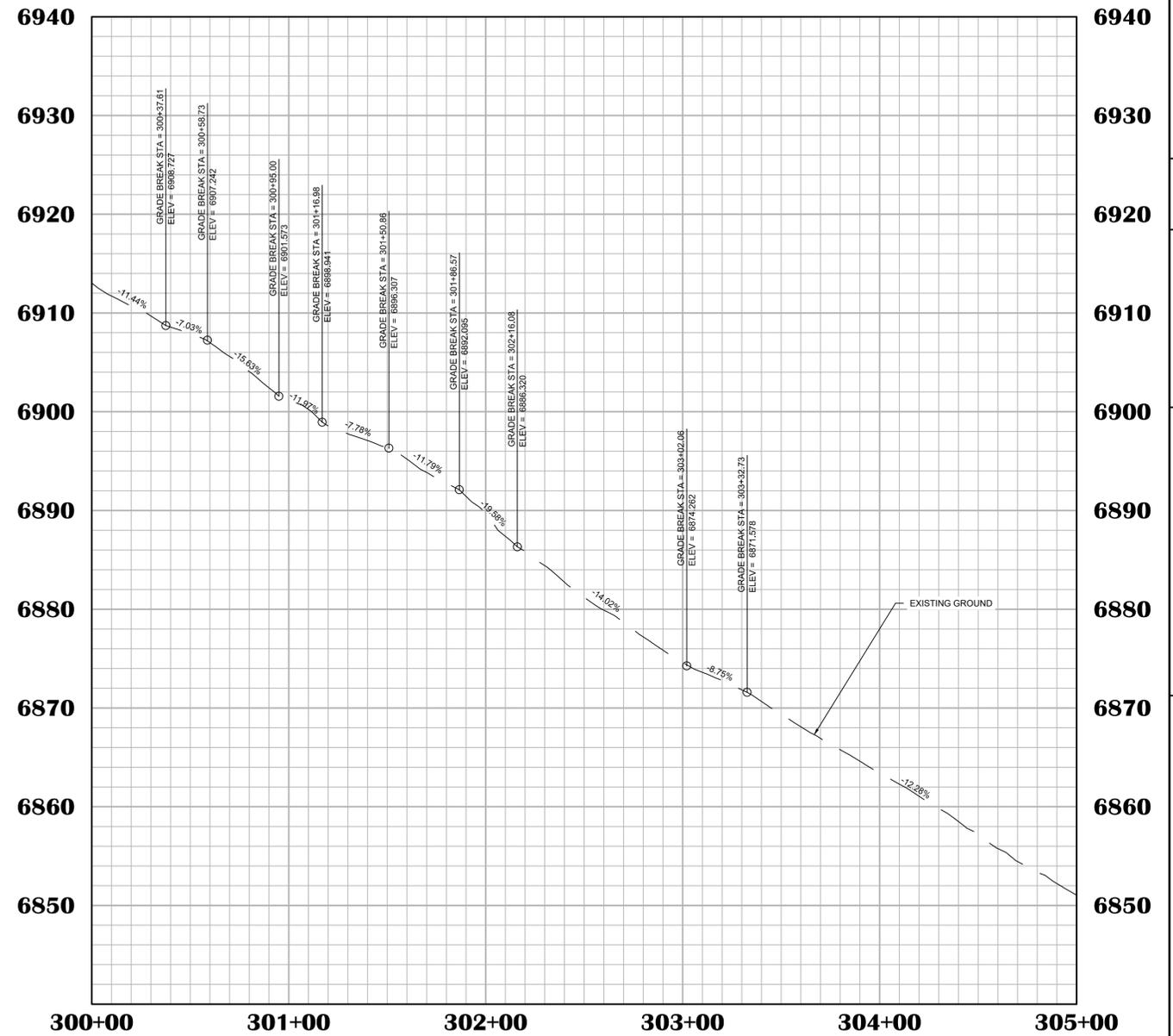
LEGEND

SCALED FOR CLARITY

- (E) EDGE OF ROAD
- (E) TREE - APPROXIMATE LOCATION
- (E) TOP/TOE OF SLOPE

NOTES:

1. EXISTING SURFACE WAS DEVELOPED BASED ON FIELD SURVEYS PERFORMED IN AUGUST 2019 AND MAY HAVE CHANGED.
2. APPROXIMATELY 80 TREES ESTIMATED TO BE REMOVED FROM STA 300+00 TO 304+84. TREES IDENTIFIED ARE THOSE ESTIMATED TO HAVE A DIAMETER GREATER THAN 4" NEAR THE BASE. DETERMINATION OF THE TREES THAT REQUIRE REMOVAL IS BASED ON THE IMPROVEMENTS SHOWN ON SHEET C11.



(E) ROAD CENTERLINE

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1		PRELIMINARY DESIGN		
2		NOT FOR CONSTRUCTION		

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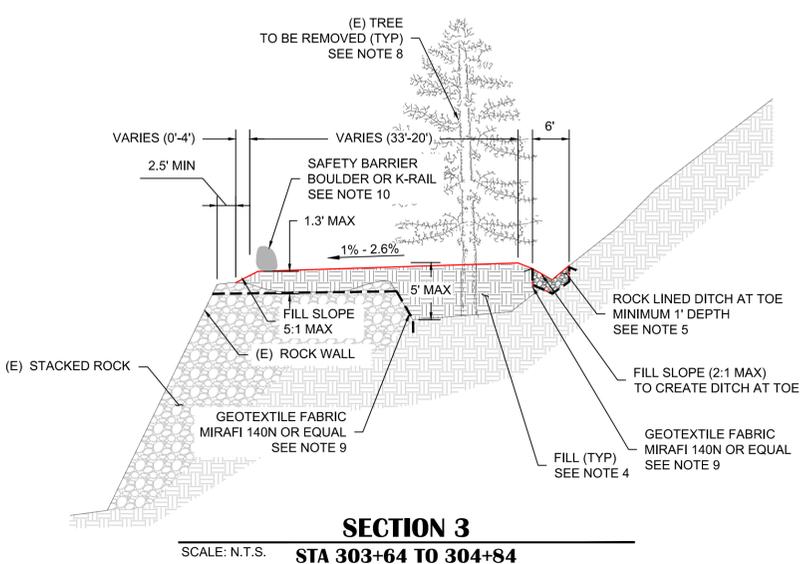
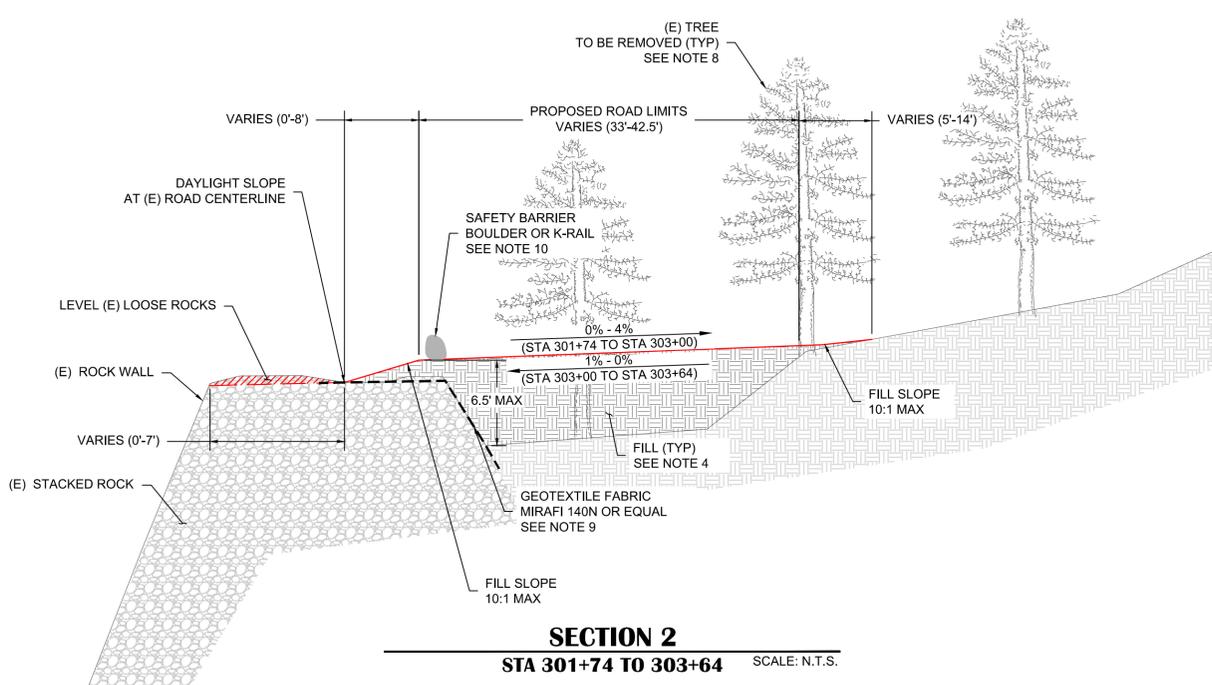
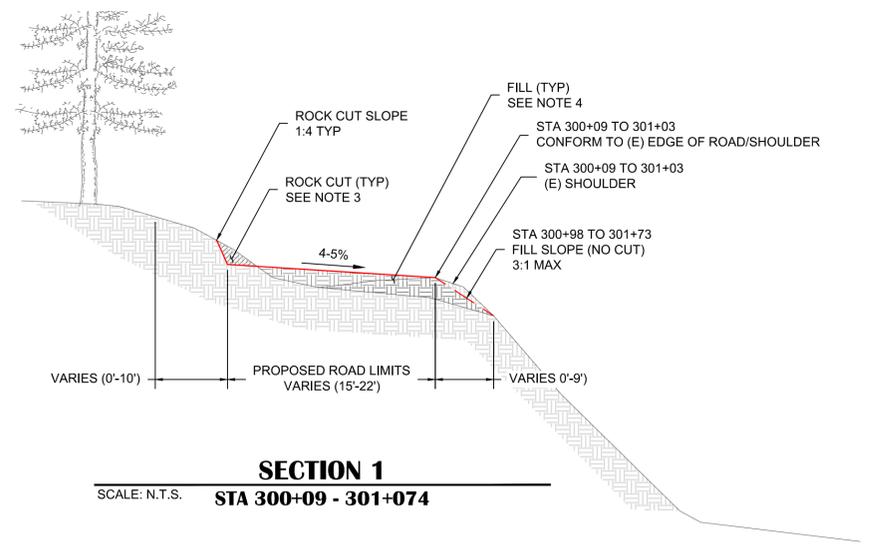
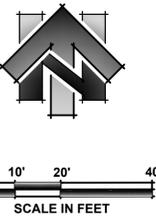
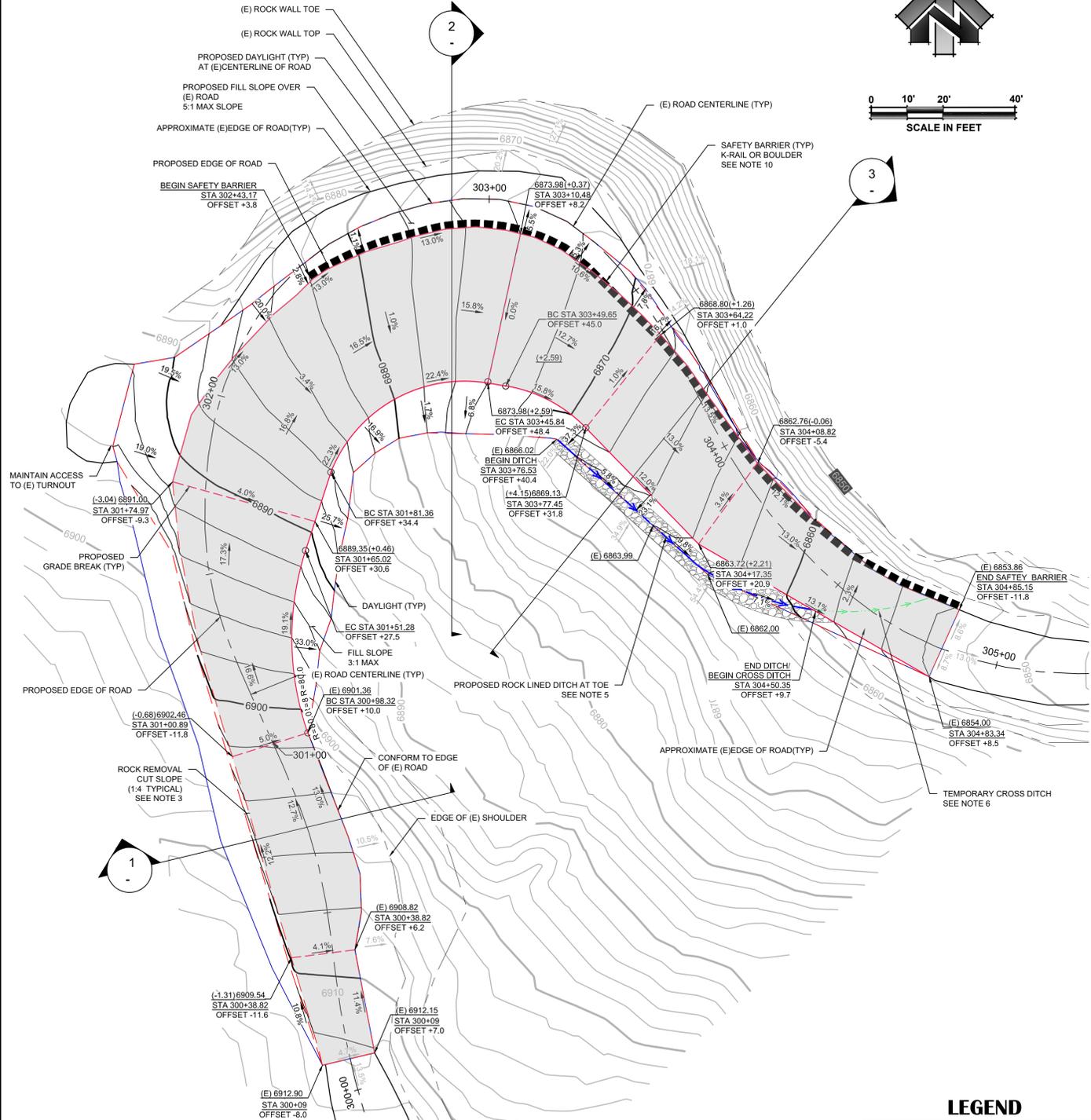
REVENGE ENGINEERS, INC.
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FORDYCE DAM SEEPAGE MITIGATION
ACCESS ROAD IMPROVEMENTS
ROCK WALL IMPROVEMENTS 1
EXISTING CONDITIONS & TREE REMOVAL
 CALIFORNIA
 NEVADA COUNTY

DRAWING INFO
 DATE: 3/30/2020
 DRAFTER: CCH/RR
 DESIGNER: RR
 REVIEWER: RR

PROJECT NO.
8635.038
 SHEET NO. **C11** OF **C13**

R:\8635 - SYBLON RED CONSTRUCTION\038 - Fordyce Dam Seepage Mitigation\10 - CAD Drawings\8635.035 - ROCK WALL.dwg Mar 30, 2020 - 2:03pm, ruddick



LEGEND

	PROPOSED ROAD LIMITS
	(E) EDGE OF ROAD
	PROPOSED EDGE OF ROAD
	PROPOSED GRADE BREAK
	PROPOSED DAYLIGHT
	PROPOSED CROSS DITCH (SEE NOTE 6)
	PROPOSED DITCH AT TOE (SEE NOTE 5)
	FINISH GRADE MAJOR CONTOUR (10')
	FINISH GRADE MINOR CONTOUR (2')
	SAFETY BARRIER K-RAIL OR BOULDER

- NOTES:**
1. DIFFERENCE FROM EXISTING GRADE TO FINISH GRADE IS SHOWN IN PARENTHESIS
 2. ACCESS AND TURN RADIUS IMPROVEMENTS SHOWN ARE DETERMINED USING TURNING MOVEMENTS AND TRACKING OF A SEMI TRUCK WITH A 48' LONG TRAILER (AASHTO DESIGN VEHICLE WB-62).
 3. CUT MAY REQUIRE ROCK REMOVAL. ESTIMATED CUT VOLUME FROM EXISTING GROUND TO FINISH GRADE IS 310 CUBIC YARDS.
 4. FILL SHALL COMPROMISE OF SATISFACTORY OR NATIVE MATERIALS AS SPECIFIED IN SECTION 312323 (FILL AND BACKFILL) OF THE PROJECT SPECIFICATIONS. DETERMINATION OF FILL MATERIAL'S CONFORMANCE WITH SPECIFICATION SHALL BE DONE BY CONTRACTOR. TOP 6" OF ROAD SHALL BE 1.5" CLASS 2 AB. ESTIMATED FILL VOLUME FROM EXISTING GROUND TO FINISH GRADE IS 610 CUBIC YARDS.
 5. INSTALL ROADSIDE DITCH AT TOE OF SLOPE FROM STA 303+76 TO 304+50 WITH ROCK PROTECTION. ROCK PROTECTION SHALL BE NO. 2 BACKING AT A MINIMUM DEPTH OF 1' WITH GEOTEXTILE LINING. GEOTEXTILE SHALL BE MIRAFI 140N OR APPROVED EQUAL INSTALLED PER MANUFACTURER'S GUIDELINES.
 6. DURING SEASONAL WINTERIZATION OF ROAD, INSTALL TEMPORARY CROSS DITCH PER USDA FOREST SERVICE REGION 5 SPECIFICATIONS OF MAINTENANCE OF ROADS DRAWING 838-1.
 7. EXISTING SURFACE WAS DEVELOPED BASED ON FIELD SURVEYS PERFORMED IN AUGUST 2019 AND MAY HAVE CHANGED.
 8. APPROXIMATELY 80 TREES ESTIMATED TO BE REMOVED FROM STA 300+00 TO 304+84 . TREES TO BE REMOVED ARE SHOWN ON SHEET 1 OF THIS EXHIBIT.
 9. INSTALL GEOTEXTILE FABRIC BETWEEN INTERFACE OF EXISTING ROCK WALL AND PROPOSED FILL. GEOTEXTILE SHALL BE MIRAFI 140N OR APPROVED EQUAL INSTALLED PER MANUFACTURER'S GUIDELINES.
 10. SAFETY BARRIER SHALL BE K-RAIL OR BOULDER AND BE PLACED AT INSIDE OR OUTSIDE THE EDGE OF THE ROAD AS SHOWN ON PLANS.

NO. REVISION	DESCRIPTION	CHECKED BY	DATE
	PRELIMINARY DESIGN NOT FOR CONSTRUCTION		

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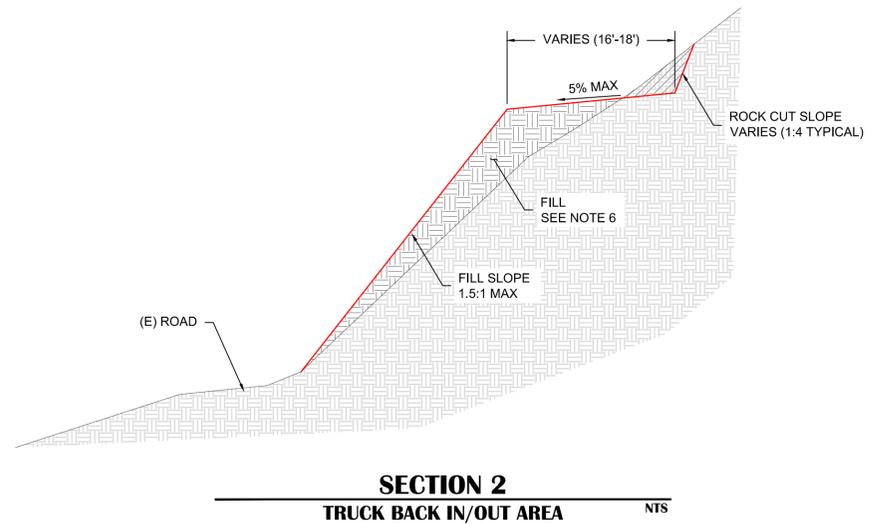
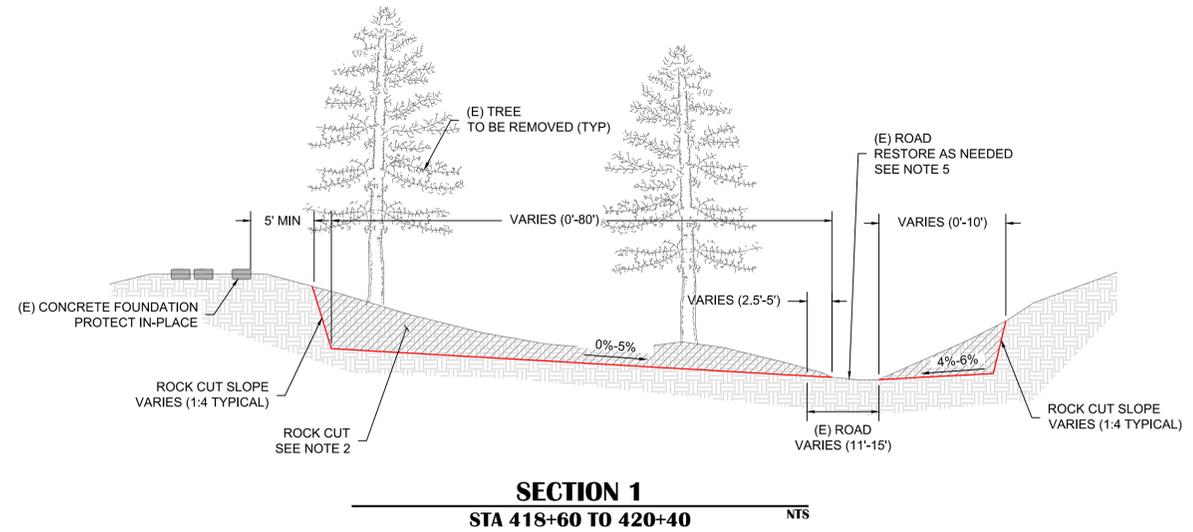
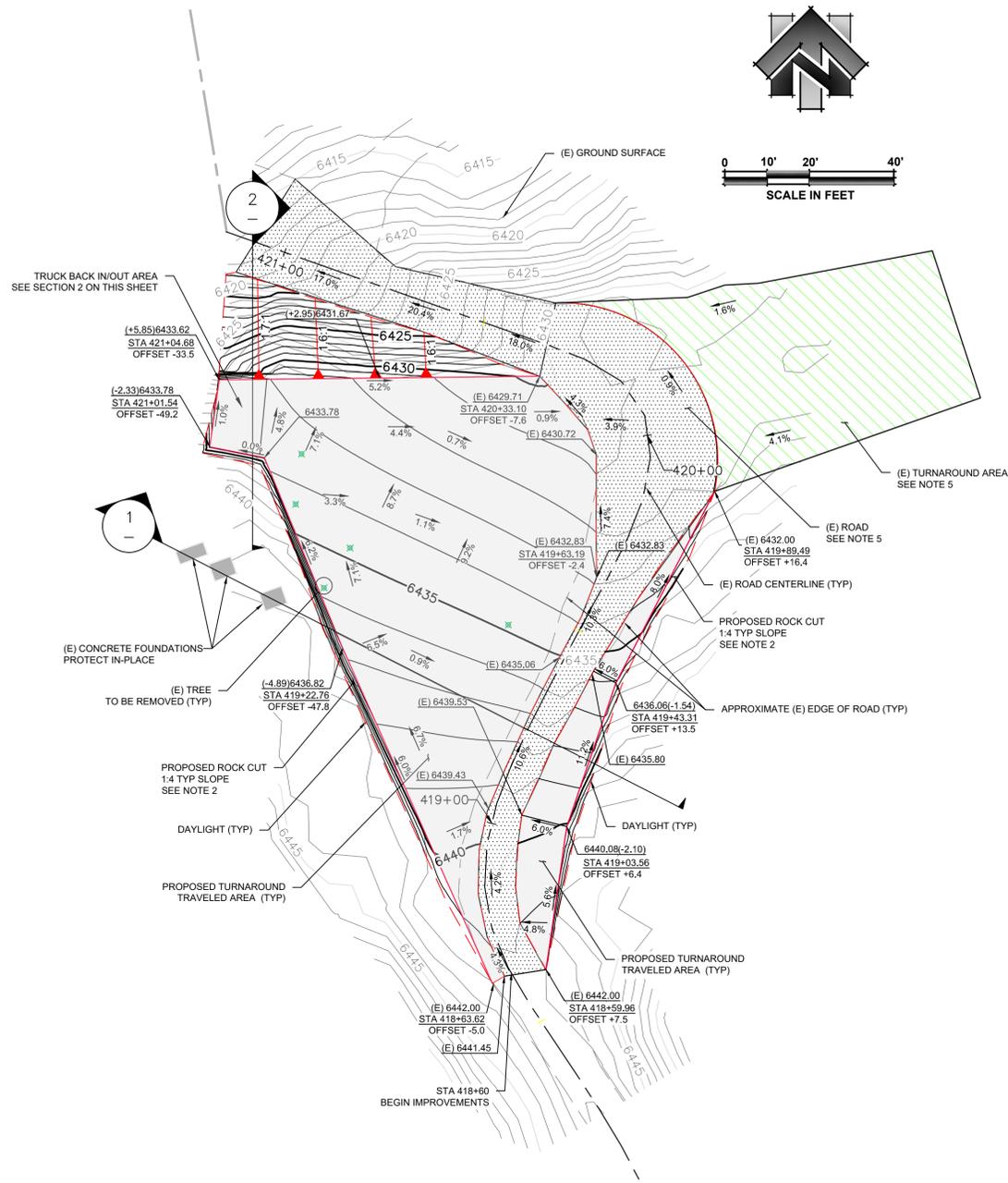
RE:ENGINEERS, INC.
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FORDYCE DAM SEEPAGE MITIGATION
ACCESS ROAD IMPROVEMENTS
ROCK WALL IMPROVEMENTS 2
PROPOSED IMPROVEMENTS
 CALIFORNIA
 NEVADA COUNTY

DRAWING INFO
 DATE: 3/30/2020
 DRAFTER: CHURR
 DESIGNER: RR
 REVIEWER: RR

PROJECT NO.
8635.038
 SHEET NO. **C12** OF **C13**

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NOTES:

- CUTS AND FILLS FROM FINISHED GROUND TO EXISTING GROUND ARE SHOWN IN PARENTHESIS.
- CUT MAY REQUIRE ROCK REMOVAL. GRADES AND CUTS/FILLS SHOWN MAY BE ADJUSTED IN FIELD TO REDUCE ROCK REMOVAL & FILLS WHILE STILL MAINTAINING A DRIVABLE SURFACE TO ALLOW FOR A TRUCK TO TURNAROUND. ESTIMATED CUT VOLUME FROM EXISTING GROUND SURFACE TO FINISH GRADE SURFACE SHOWN IN THIS SHEET IS 490 CUBIC YARDS.
- EXISTING SURFACE WAS DEVELOPED BASED ON FIELD SURVEYS PERFORMED IN AUGUST 2019 AND MAY HAVE CHANGED.
- APPROXIMATELY 5 TREES ESTIMATED TO BE REMOVED FROM STA 418+60 TO 420+24. TREES IDENTIFIED ARE THOSE ESTIMATED TO HAVE A DIAMETER GREATER THAN 4" NEAR THE BASE. DETERMINATION OF THE TREES THAT REQUIRE REMOVAL IS BASED ON THE LIMITS OF THE IMPROVEMENTS SHOWN ON THIS SHEET.
- RESTORE (E) TURNOUT AND (E) ROAD AS NEEDED. GRADE AREA TO PROVIDE DRIVABLE SURFACE & MAINTAIN (E) DRAINAGE PATTERN & GENERAL CROSS SLOPES.
- FILL SHALL COMPROMISE OF SATISFACTORY OR NATIVE MATERIALS AS SPECIFIED IN SECTION 312323 (FILL AND BACKFILL) OF THE PROJECT SPECIFICATIONS. DETERMINATION OF FILL MATERIAL'S CONFORMANCE WITH SPECIFICATION SHALL BE DONE BY CONTRACTOR. TOP 6" OF ROAD SHALL BE 1.5" CLASS 2 AB. ESTIMATED FILL VOLUME FROM EXISTING GROUND TO FINISH GRADE IS 70 CUBIC YARDS.

LEGEND

- PROPOSED TURNAROUND TRAVELED AREA
- EXISTING TURNAROUND AREA - RESTORE (E) TURNOUT AS NECESSARY (SEE NOTE 5)
- EXISTING ROAD - RESTORE (E) ROAD AS NECESSARY (SEE NOTE 5)
- PROPOSED FILL SLOPE (1.5:1 MAX)
- PROPOSED DAYLIGHT / TURNAROUND IMPROVEMENT LIMITS
- (E) EDGE OF ROAD
- FINISH GRADE MAJOR CONTOUR (5')
- FINISH GRADE MINOR CONTOUR (1')
- REMOVE (E) TREE - APPROXIMATE LOCATION (SEE NOTE 4)

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FORDYCE DAM SEEPAGE MITIGATION
ACCESS ROAD IMPROVEMENTS
DAM TURNAROUND IMPROVEMENTS
 CALIFORNIA
 NEVADA COUNTY

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DATE: 3/30/2020
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DESIGNER: RJR
REVIEWER: RJR

PROJECT NO.
8635.038
SHEET NO. **C13** OF **C13**