UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION FIVE
LAKE TAHOE BASIN MANAGEMENT UNIT

NOTE: DRAWINGS AND SPECIFICATIONS ARE BASED ON PLANS TITLED "SAXON CREEK BRIDGE, FOUNTAIN PLACE ROAD", R-1659, DATED 3/23/15, BY USFS

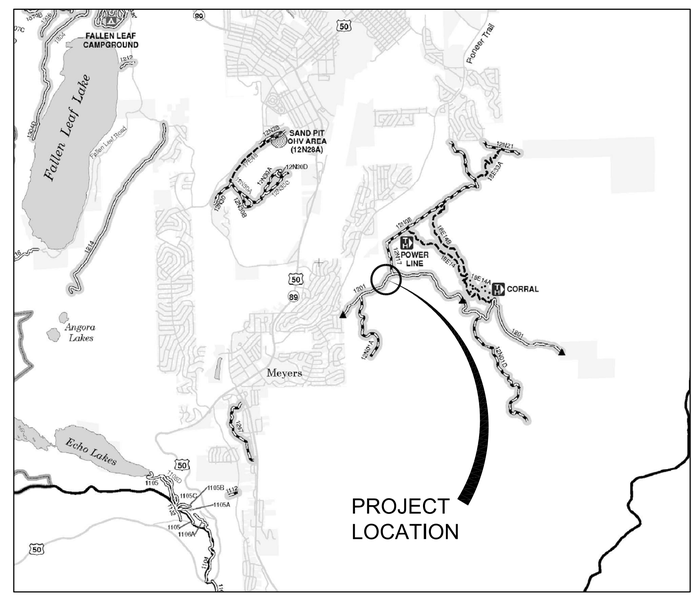
DRAWINGS FOR PROPOSED

SAXON CREEK AQUATIC ORGANISM PASSAGE PROJECT

FOREST SERVICE ROAD 1201
EL DORADO COUNTY, CALIFORNIA

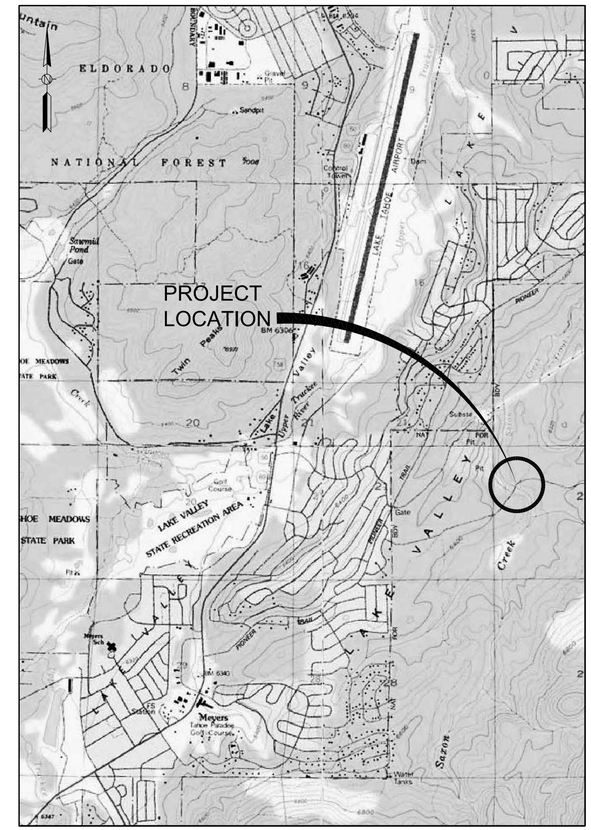
STATE OF CALIFORNIA

NOT TO SCALE



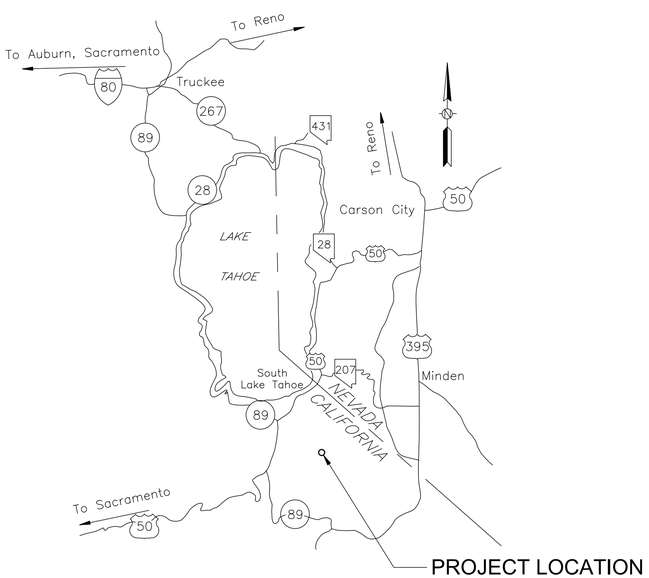
PROJECT AREA

NOT TO SCALE



PROJECT LOCATION MAP

NOT TO SCALE



LOCATION MAP

NOT TO SCALE

TOWNSHIP 12 N, RANGE 18 E, SECTION 22
LATITUDE 38° 52' 19" N, LONGITUDE 119° 58' 58" W

INDEX TO SHEETS

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SHEET NUMBER	SHEETS
G0	1 OF 13

APPROVED BY _____ FOREST ENGINEER _____ FOREST SUPERVISOR _____ DATE _____

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SYMBOLS

LINE TYPES
GENERAL

- IMPROVEMENTS (BOLD LINETYPE, ALL SYSTEMS)
- EXISTING FACILITIES (SCREENED LINETYPE ALL SYSTEMS)
- DEMOLITION HATCHING
- CENTER LINE
- PARCEL BOUNDARY
- ORANGE CONSTRUCTION FENCING
- FIBER ROLL LOG
- INDIVIDUAL TREE PROTECTION FENCING
- TREE PROTECTION FENCING
- FLOW LINE
- 6265 CONTOUR LINE
- EXISTING GRADE, PROFILE
- TOE OF EXISTING FILL, PLAN
- EDGE OF EXISTING AC PAVEMENT, PLAN
- INTERIOR EDGE OF BUILDING, ABOVE GRADE
- HAND RAILING
- GRADE BREAK

SYMBOLS
GENERAL, CIVIL

- HORIZONTAL CONTROL POINT
- VERTICAL CONTROL POINT
- 30"TR 30"ø PINE TREE
- 30"TR REMOVE 30"ø PINE TREE
- Ø DIAMETER
- FIRE HYDRANT
- UTILITY POLE
- MANHOLE
- FITTING
- THRUST BLOCK
- EXIST FIRE HYDRANT
- ROCK RIP RAP
- FLARED END SECTION
- SLOPE, DIRECTION OF FLOW BY GRAVITY
- BENCH MARK, PLAN
- DEPRESSION
- DRAINAGE INLET

MATERIAL SYMBOLS
IN SECTION

- CONCRETE
- A.C. PAVEMENT
- AGGREGATE BASE
- SAND, SUITABLE NATIVE BACKFILL
- EARTH
- MASONRY
- STEEL, IRON
- WOOD
- GROUT
- SEALANT,MASTIC,WATER STOP
- REINFORCING STEEL
- INSULATION
- RIGID INSULATION
- PIPE
- COBBLE SIZE ROCK (6"–8")

MATERIAL SYMBOLS
IN PLAN

- A.C. PAVEMENT
- CONCRETE
- DRAIN ROCK OR AGGREGATE BASE
- REVEGETATION, GRASS
- MASONRY WALL
- COBBLE SIZE ROCK (6"–12")
- CONSTRUCT WATERBAR
- INSTALL ROLLING DIP W/ GEOCELL
- GATE VALVE
- REDUCER

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ABBREVIATIONS

A

AB	AGGREGATE BASE
ABS	ACRYLONITRILE––BUTADIENE STYRENE
AC	ASBESTOS CEMENT, ASPHALT CONCRETE
AGG	AGGREGATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APN	ASSESSOR'S PARCEL NUMBER
APPROX.	APPROXIMATE, APPROXIMATELY
ARV	AIR RELEASE VALVE
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
AVE	AVENUE
AWWA	AMERICAN WATER WORKS ASSOCIATION

B

BC	BEGIN HORIZONTAL CURVE
BCC	BEGIN COMPOUND CURVE
BEG	BEGIN
BF	BLIND FLANGE
BLDG	BUILDING
BLVD	BOULEVARD
BM	BENCH MARK
BMP	BEST MANAGEMENT PRACTICE
BOC	BACK OF CURB
BVC	BEGIN VERTICAL CURVE

C

C & G	CURB AND GUTTER
CA	CALIFORNIA
CAP	CORRUGATED ALUMINUM PIPE
CAPA	CORRUGATED ALUMINUM PIPE ARCH
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CI	CAST IRON
CIRCUM	CIRCUMFERENCE
CL	CENTERLINE, CHAIN LINK, CLASS, COIR LOG
CLR	CLEAR, CLEARANCE
CMP	CORRUGATED METAL PIPE
CMPA	CORRUGATED METAL PIPE ARCH
CO	COUNTY, CLEAN OUT, CONTRACTING OFFICER
COL	COLUMN
CONST	CONSTRUCTION
COORD	COORDINATE
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CORP	CORPORATION
CPLG	COUPLING
CTC	CALIFORNIA TAHOE CONSERVANCY
CTV	CABLE TV
CU	CUBIC
CV	CHECK VALVE
CY	CUBIC YARD

D

D	DEPTH, DRAIN
DEG	DEGREE
DEL	DELINEATOR
DET	DETAIL
DI	DRAINAGE INLET
DIA	DIAMETER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DIST	DISTANCE
DR	DRIVE
DWG	DRAWING
DWL	DOWEL
DW	DRIVEWAY

E

E	EAST, EASTING, ELECTRIC
EA	EACH
EC	EROSION CONTROL, END CURVE
ECR	END CURB RETURN
EF	EACH FACE
EG	EXISTING GRADE
EL	ELBOW, ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATION
EMB	EMBANKMENT
EP	EDGE OF PAVEMENT
EQUIP	EQUIPMENT
ES	EDGE OF SHOULDER
ETW	END OF TRAVELED WAY
EVC	END VERTICAL CURVE
EW	ENDWALL, EACH WAY
EXC	EXCAVATION
EX, EXIST	EXISTING
EXP JT	EXPANSION JOINT

F

FES	FLARED END SECTION
FF	FILTER FENCE, FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE, FLANGE
FLG	FLANGE
FLR	FLOOR
FM	FORCE MAIN
FMSS	FORCE MAIN SANITARY SEWER
FT	FOOT OR FEET
FTG	FOOTING

G

G	GAS
GA	GAGE
GAL	GALLON
GALV	GALVANIZED
GB	GRADE BREAK
GR	GRADE
GS	GROUND SHOT

H

H	HEIGHT
HEX	HEXAGONAL
HORIZ	HORIZONTAL
HWY	HIGHWAY

I

IE	INVERT ELEVATION
INV	INVERT
IRR	IRRIGATION

J

JT	JOINT

L

L	LENGTH
LE	LIBERTY ENERGY
LF	LINEAR FEET
LN	LANE
LOC	LOCATION
LP	LODGE POLE PINE TREE
LT	LEFT

M

MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MI	MILE(S)
MJ	MECHANICAL JOINT
MKR	MARKER
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	MATERIAL
MVC	MIDDLE VERTICAL CURVE

N

N	NORTH, NORTHING
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE

O

OC	ON CENTER
OH	OVERHEAD POWER

P

PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE OR PORTLAND CEMENT CONCRETE
PCVC	POINT OF COMPOUND VERTICAL CURVE
PD	PIPE DIAMETER
PE	PLAIN END
PED	PEDESTRIAN
PEP	POLYETHYLENE PIPE
PERF	PERFORATED
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PNT	POINT
POC	POINT ON HORIZONTAL CURVE
POT	POINT ON TANGENT
POVC	POINT ON VERTICAL CURVE
PP	POWER POLE
PRC	POINT OF REVERSE CURVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE

Q

QTY	QUANTITY

R

R	RADIUS
RC	RELATIVE COMPACTION
RCP	REINFORCED CONCRETE PIPE
REF	REFERENCE
REINF	REINFORCED OR REINFORCING
REL	RELATIVE
REQ'D	REQUIRED
REVEG	REVEGETATION
RJ	RESTRAINED JOINT
RND	ROUND
R & R	REMOVE AND REPLACE
R & S	REMOVE AND SALVAGE
RSP	ROCK SLOPE PROTECTION
RT	RIGHT
RTE	ROUTE
RW	RETAINING WALL
R/W	RIGHT–OF–WAY

S

S	SOUTH, SLOPE
SBSB	STRAW BALE SEDIMENT BARRIER
SCH	SCHEDULE
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SDR	STANDARD DIAMETER RATIO
SF	SQUARE FOOT
SHT	SHEET
SPEC	SPECIFICATIONS
SQ	SQUARE
SS	SANITARY SEWER, STAINLESS STEEL
SSL	SANITARY SEWER LATERAL
SSMH	SANITARY SEWER MANHOLE
SST	STAINLESS STEEL
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
SY	SQUARE YARD

T

T	TELEPHONE
TAN	TANGENT
TBC	TOP OF CURB ELEVATION
TC	TOP OF CURB
TCB	TRAFFIC CONTROL BOX
TEMP	TEMPORARY
TG	TOP OF GRATE
TR	TOP OF RIM
TRPA	TAHOE REGIONAL PLANNING AGENCY
TS	TOP OF SLOPE
TW	TRAVELED WAY
T/W	TOP OF WALL (TOP OF POST)
TYP	TYPICAL

U

UG	UNDERGROUND
USFS	U.S. FOREST SERVICE
UTIL	UTILITY

V

VC	VERTICAL CURVE
VERT	VERTICAL
VPI	POINT OF INTERSECTION OF VERTICAL CURVE

W

W	WIDTH, WEST, WATER
W/	WITH
WL	WATER LATERAL
WV	WATER VALVE
WWF	WELDED WIRE FABRIC

Y

YD	YARD

CONTROL POINTS

CONTROL POINT	EXISTING ELEVATION	EASTING	NORTHING
CP 1	6336.10	5000.0000	5000.0000
CP 2	6341.86	4990.6400	4895.0610
CP 3	6345.34	5087.6010	4841.7010
CP 4	6347.37	5155.2060	4939.8300
CP 5	6342.54	5004.3192	4780.3032
CP 6	6342.78	4951.5340	4687.9589
CP 7	6346.37	4960.9847	4623.0439
CP 8	6339.25	4913.1477	4831.6990
CP 9	6340.53	4946.7804	4888.6406
CP 10	6339.33	4829.3541	4801.7992
CP 11	6607.66	4870.1488	4741.7605

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL ACQUAINT THEMSELVES WITH AND ABIDE BY THE REQUIREMENTS AS OUTLINED IN THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS FP–03.

2. THE CONTRACTOR ACKNOWLEDGES THAT THEY ARE SATISFIED AS TO THE NATURE AND LOCATION OF THE WORK, THE GENERAL AND LOCAL CONDITIONS, PARTICULARLY THOSE BEARING UPON AVAILABILITY OF TRANSPORTATION, DISPOSAL, HANDLING AND STORAGE OF MATERIALS, AVAILABILITY OF LABOR, WATER, ELECTRIC POWER, ROADS, AND UNCERTAINTIES OF WEATHER, CREEK STAGES, OR SIMILAR PHYSICAL CONDITIONS AT THE SITE, THE CONFORMATION AND CONDITIONS OF THE GROUND, THE CHARACTER OF EQUIPMENT AND FACILITIES NEEDED PRIMARILY TO AND DURING THE PROSECUTION OF THE WORK OR THE COST THEREOF AS SHOWN ON THESE DRAWINGS.

   THE CONTRACTOR FURTHER ACKNOWLEDGES THEY ARE SATISFIED AS TO THE CHARACTER, QUALITY AND QUANTITY OF SURFACE AND SUBSURFACE MATERIALS TO BE ENCOUNTERED FROM INSPECTING THE SITE AND FROM INFORMATION PRESENTED BY THE DRAWINGS. ANY FAILURE BY THE CONTRACTOR TO ACQUAINT THEMSELVES WITH ALL THE AVAILABLE INFORMATION WILL NOT RELIEVE THEM FROM RESPONSIBILITY FOR PROPERLY ESTIMATING THE DIFFICULTY AND COST OF SUCCESSFULLY PERFORMING THE WORK.

3. AT NO TIME SHALL THE CONTRACTOR UNDERTAKE TO CLOSE OFF ANY UTILITY OR OPEN VALVES OR TAKE ANY OTHER ACTION WHICH WOULD AFFECT THE OPERATION OF THE EXISTING SYSTEM EXCEPT AS SPECIFICALLY REQUIRED BY THE PLANS, AND AFTER APPROVAL IS GRANTED BY THE RESPECTIVE UTILITY COMPANY. APPROPRIATE ADVANCE APPROVAL BY THE UTILITY IS REQUIRED PRIOR TO INTERRUPTION OF THE EXISTING SYSTEM.

4. EXISTING UTILITIES ARE INDICATED ON THE PLANS WHERE SUCH UTILITIES ARE KNOWN. THE LOCATION AND EXTENT OF SUCH UTILITIES ARE APPROXIMATE ONLY. NO GUARANTEE IS MADE AS TO THE ACCURACY OF SUCH INFORMATION, AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE, PROTECT, AND MAINTAIN ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THE PLANS.

   CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES ONE WEEK PRIOR TO THE BEGINNING OF CONSTRUCTION AND ARRANGE FOR THE LINE LOCATIONS AND APPROPRIATE SAFETY PROCEDURES. CONTRACTOR SHALL ALSO NOTIFY THE FOLLOWING UNDERGROUND UTILITY SERVICE: UNDERGROUND SERVICES ASSOCIATION 811.

5. AT ALL TIMES DURING CONSTRUCTION ADEQUATE TEMPORARY EROSION CONTROLS SHALL BE IN PLACE. THE EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE TRPA "HANDBOOK OF BEST MANAGEMENT PRACTICES" AND THE APPROVED SWPPP. THE CONTRACTOR SHALL CONTACT TRPA AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF WORK FOR A PRE–GRADING INSPECTION OF THE INSTALLED TEMPORARY EROSION CONTROL.

6. THE CONTRACTOR SHALL UTILIZE CONSTRUCTION TECHNIQUES WHICH MINIMIZE GRADING, VEGETATION REMOVAL AND TEMPORARY AND PERMANENT DISTURBANCE. NO DISTURBANCE SHALL OCCUR OUTSIDE OF THE OF THE CONSTRUCTION FENCE.

7. ELEVATIONS NOTED ON PLANS FOR PIPE INVERTS, TOP OF GRATES OR RIMS, CUTS, ETC., ARE BASED UPON THE TOPOGRAPHIC INFORMATION SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY ALL NECESSARY SURFACE ELEVATIONS IN THE FIELD AND NOTIFY THE OWNER OR ENGINEER BEFORE BREAKING GROUND, AND PRIOR TO INSTALLATION OF ANY FACILITIES. THE ENGINEER SHALL BE CONTACTED IN THE EVENT THE ELEVATIONS ARE INCORRECT SO THAT PROPER ADJUSTMENTS CAN BE MADE PRIOR TO INSTALLATION OF THE FACILITIES.

8. ALL EXCAVATED MATERIAL SHALL BE STOCKPILED ON AN APPROVED SITE, AND APPROVED MATERIAL MAY BE RETURNED FOR USE AS BACKFILL, AS STAKED IN FIELD BY C.O.

9. CONTRACTOR SHALL REQUEST SPECIFIC SITES FOR STORAGE OF EQUIPMENT AND MATERIALS AND OBTAIN APPROVAL FROM CO FOR USE OF THE SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF ALL EQUIPMENT AND MATERIALS.

10. ROAD DELAYS AND CLOSURES SHALL BE ACCORDING TO SPECIFICATION SECTION 156 OF FP–03; TEMPORARY ROAD CLOSURES.

11. ALL AREAS OF EARTH DISTURBANCE RESULTING FROM CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT SHALL BE REVEGETATED IN ACCORDANCE WITH THE TRPA HANDBOOK OF BEST MANAGEMENT PRACTICES. APPLICATION OF MULCH MAY ENHANCE VEGETATIVE ESTABLISHMENT.

12. ALL VEGETATION OUTSIDE THE CONSTRUCTION ZONE SHALL BE PROTECTED BY THE INSTALLATION OF VEGETATION PROTECTION FENCING AS SHOWN IN THE SWPPP.

13. ORANGE CONSTRUCTION FENCE SHALL BE INSTALLED AT LIMITS OF STAGING AREAS. STAGING AREA LIMITS WILL BE APPROVED BY THE C.O. BASED ON SITE CONDITIONS.

DEWATERING MAINTENANCE NOTES

1. INSPECTIONS AND MAINTENANCE SHALL BE IN ACCORDANCE WITH THE APPROVED SWPPP AND DISCHARGE PERMIT.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. DEWATERING BMPs ARE REQUIRED IN ADDITION TO ALL OTHER PERMIT REQUIREMENTS.

REGISTERED PROFESSIONAL ENGINEER JENNIFER G. ROSS No. 54137 Exp. 12-31-17 CIVIL STATE OF CALIFORNIA

6–28–16

VV : G1 044–11 MAS8–2012.dwg JUN 28, 2016

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LAKE TAHOE BASIN MANAGEMENT UNIT

UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE
The Pacific Southwest Region

USDA FOREST SERVICE LTBMU
SAXON CREEK AOP PROJECT

SYMBOLS AND ABBREVIATIONS, CONSTRUCTION NOTES

SHEET NUMBER
G1
2 OF 13 SHEETS

PROJECT NO.
FSR-1201-12

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DISCHARGE WATER FROM DEWATERING PUMPS VIA SPRINKLER IN UPLAND VEGETATED AREA IN MANNER THAT DOES NOT CAUSE EROSION

FL=6338.86

GRAVEL BAG DAM TOP=6342.0

2/P3 TEMPORARY BYPASS CHANNEL S=0.003

PROTECT CHANNEL AND BANKS FROM EROSION TO ACCOMODATE PEDESTRIAN AND BICYCLE TRAFFIC

EXISTING TRAIL

TEMPORARY PEDESTRIAN TRAIL, 470 LF

REALIGNED TRAIL, 60 LF

FL=6338.31

FOUNTAIN PLACE ROAD (1201)

SAXON CREEK

TRANSITION BYPASS CHANNEL TO EX CULVERT

FL=6337.59

EX 24" CMP TO REMAIN

UPPER GROUNDWATER PUMP SYSTEM

CHECK VALVES AS REQUIRED

TEMPORARY BYPASS CHANNEL S=0.008

REMOVE EX 72" CMP CULVERT, 24 LF

TOP OF DITCH, TYP

FOUNTAIN PLACE ROAD

STAGING AREA

STAGING AREA

SAWCUT AND REMOVE AC PAVEMENT, 314 SY

TOP OF BANK, TYP

TOE OF BANK, TYP

SEE C AND L SHEETS FOR CHANNEL AND LANDSCAPE IMPROVEMENTS

LOWER GROUNDWATER PUMP SYSTEM

EX FENCE

FL=6335.70

GRAVEL BAG STEPS

TIE INTO EX CREEK FLOWLINE

GRAVEL BAG DAM TOP=6335.0

CP1 CP2 CP3 CP4 CP5 CP6 CP8 CP9 CP10 CP11

PROJECT NORTH

GRAPHIC SCALE

20 0 20 40

(IN FEET)

TREE REMOVAL

DBH	NUMBER
<12"	0
12 TO 24"	15
>24"	6

NOTES:

1. SEE STORMWATER POLLUTION PROTECTION PLAN FOR TEMPORARY CONTROLS
2. ADDITIONAL STAGING AREA IS AVAILABLE IN THE PARKING AREA ON FOUNTAIN PLACE ROAD TO THE EAST OF THE PROJECT AREA

REGISTERED PROFESSIONAL ENGINEER WALTER G. ROMBERG No. 54137 Exp.12-31-17 CIVIL STATE OF CALIFORNIA

6-28-16

W : P1 044-11 MAS8-2012.dwg JUN 28, 2016

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UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE
The Pacific Southwest Region

USDA FOREST SERVICE LTBMU
SAXON CREEK AOP PROJECT

OVERALL SITE AND DEMOLITION PLAN

SHEET NUMBER
P1
3 OF 13 SHEETS

PROJECT NO.
FSR-1201-12

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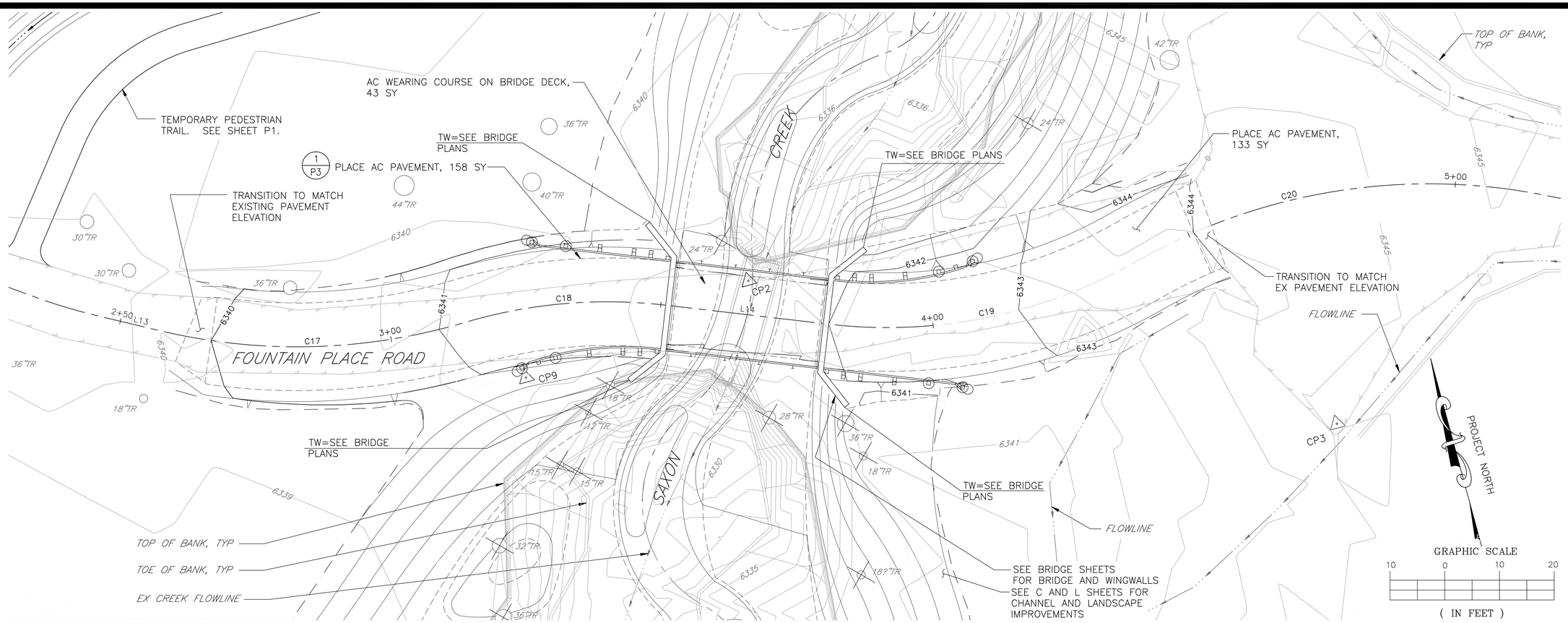

PROFILE

VERT SCALE FACTOR = 2

REGISTERED PROFESSIONAL ENGINEER JENNIFER G. ROWLEY No. 54137 Exp. 12-31-17 CIVIL STATE OF CALIFORNIA

6-28-16

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LAKE TAHOE BASIN MANAGEMENT UNIT

UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE
The Pacific Southwest Region

USDA FOREST SERVICE LTBMU
SAXON CREEK AOP PROJECT

ROAD PLAN & PROFILE

SHEET NUMBER
P2
4 OF 13 SHEETS

PROJECT NO.
FSR-1201-12

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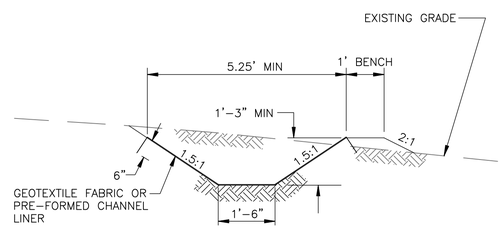
TEMPORARY PEDESTRIAN TRAIL ALIGNMENT							
TAG	FROM	TO	LENGTH	RADIUS	LINE/CHORD DIRECTION	FROM	TO
L1	1+00.00	1+23.36	23.36'		N38° 11' 26.94"E	N 4933.9608 E 4863.5748	N 4952.3231 E 4878.0198
C1	1+23.36	1+52.56	29.19'	33.00'	N63° 32' 07.09"E	N 4952.3231 E 4878.0198	N 4964.9135 E 4903.3112
L2	1+52.56	1+80.52	27.97'		N88° 52' 47.24"E	N 4964.9135 E 4903.3112	N 4965.4602 E 4931.2728
C2	1+80.52	2+55.75	75.23'	55.00'	N49° 41' 41.98"E	N 4965.4602 E 4931.2728	N 5010.4171 E 4984.2748
C3	2+55.75	2+95.81	40.06'	26.00'	N54° 38' 42.09"E	N 5010.4171 E 4984.2748	N 5031.3698 E 5013.8072
L3	2+95.81	3+27.44	31.63'		S81° 13' 12.53"E	N 5031.3698 E 5013.8072	N 5026.5426 E 5045.0619
C4	3+27.44	4+40.41	112.98'	104.00'	S50° 05' 56.17"E	N 5026.5426 E 5045.0619	N 4957.5821 E 5127.5346
C5	4+40.41	5+13.46	73.05'	100.00'	S39° 54' 14.99"E	N 4957.5821 E 5127.5346	N 4902.7839 E 5173.3598
C6	5+13.46	5+66.88	53.42'	50.00'	S30° 13' 30.83"E	N 4902.7839 E 5173.3598	N 4858.7930 E 5198.9890
L4	5+66.88	5+69.81	2.94'		S00° 22' 48.51"W	N 4858.7930 E 5198.9890	N 4855.8555 E 5198.9695

TRAIL REALIGNMENT							
TAG	FROM	TO	LENGTH	RADIUS	LINE/CHORD DIRECTION	FROM	TO
C14	1+00.00	1+10.11	10.11'	16.32'	N36° 17' 25.97"E	N 4921.4119 E 5100.0202	N 4929.4319 E 5105.9094
C15	1+10.11	1+43.90	33.79'	39.64'	N05° 53' 11.89"W	N 4929.4319 E 5105.9094	N 4962.0382 E 5102.5476
C16	1+43.90	1+60.06	16.16'	16.93'	N02° 57' 56.08"W	N 4962.0382 E 5102.5476	N 4977.5704 E 5101.7429

FOUNTAIN ROAD ALIGNMENT							
TAG	FROM	TO	LENGTH	RADIUS	LINE/CHORD DIRECTION	FROM	TO
L13	2+50.00	2+57.37	7.37'		S61° 22' 42.15"E	N 4917.9963 E 4877.9586	N 4914.4642 E 4884.4311
C17	2+57.37	3+13.77	56.39'	108.00'	S76° 20' 12.12"E	N 4914.4642 E 4884.4311	N 4901.2945 E 4938.6065
C18	3+13.77	3+50.91	37.14'	92.00'	S79° 43' 47.57"E	N 4901.2945 E 4938.6065	N 4894.7176 E 4974.9041
L14	3+50.91	3+80.91	30.00'		S68° 09' 53.06"E	N 4894.7176 E 4974.9041	N 4883.5594 E 5002.7518
C19	3+80.91	4+39.25	58.34'	92.00'	S86° 19' 53.70"E	N 4883.5594 E 5002.7518	N 4879.8889 E 5060.0028
C20	4+39.25	5+00.00	60.75'	108.00'	S88° 22' 59.06"E	N 4879.8889 E 5060.0028	N 4878.1971 E 5119.9345

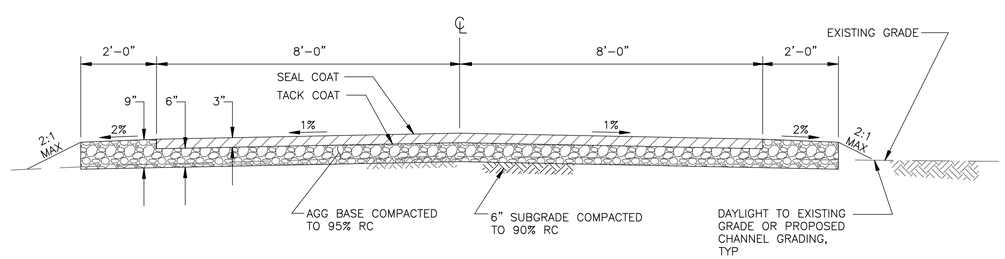
TEMPORARY BYPASS CHANNEL ALIGNMENT							
TAG	FROM	TO	LENGTH	RADIUS	LINE/CHORD DIRECTION	FROM	TO
L5	1+00.00	1+20.25	20.25'		N08° 03' 06.60"W	N 4678.6968 E 4826.2593	N 4698.7470 E 4823.4230
C7	1+20.25	1+40.26	20.01'	38.79'	N23° 52' 01.93"W	N 4698.7470 E 4823.4230	N 4716.8412 E 4815.4171
L6	1+40.26	1+42.02	1.76'		N38° 38' 29.53"W	N 4716.8412 E 4815.4171	N 4718.2145 E 4814.3192
C8	1+42.02	2+65.05	123.04'	150.00'	N15° 08' 35.63"W	N 4718.2145 E 4814.3192	N 4833.6775 E 4783.0714
L7	2+65.05	2+76.02	10.97'		N08° 21' 18.28"E	N 4833.6775 E 4783.0714	N 4844.5268 E 4784.6648
C9	2+76.02	2+94.81	18.79'	38.27'	N25° 32' 16.25"E	N 4844.5268 E 4784.6648	N 4861.3143 E 4792.6856
C10	2+94.81	3+15.23	20.42'	103.16'	N35° 47' 46.52"E	N 4861.3143 E 4792.6856	N 4877.8497 E 4804.6097
L8	3+15.23	3+68.50	53.26'		N29° 49' 47.83"E	N 4877.8497 E 4804.6097	N 4924.0569 E 4831.1049
L9	3+68.50	3+76.72	8.22'		N48° 37' 13.88"E	N 4924.0569 E 4831.1049	N 4929.4913 E 4837.2735
L10	3+76.72	3+98.21	21.49'		N37° 13' 21.29"E	N 4929.4913 E 4837.2735	N 4946.6061 E 4850.2749
L11	3+98.21	4+03.14	4.93'		N02° 39' 41.26"W	N 4946.6061 E 4850.2749	N 4951.5266 E 4850.0462
L12	4+03.14	4+06.91	3.77'		N36° 10' 14.02"E	N 4951.5266 E 4850.0462	N 4954.5722 E 4852.2729
C11	4+06.91	4+60.95	54.05'	60.00'	N61° 58' 33.31"E	N 4954.5722 E 4852.2729	N 4979.1158 E 4898.3858
C12	4+60.95	5+58.86	97.91'	100.00'	N59° 43' 56.43"E	N 4979.1158 E 4898.3858	N 5026.5183 E 4979.6107
C13	5+58.86	5+85.00	26.14'	85.47'	N40° 26' 36.01"E	N 5026.5183 E 4979.6107	N 5046.3317 E 4996.4991



NOTE: WHEN TEMPORARY BYPASS CHANNEL IS NO LONGER NEEDED, REMOVE THE GEOTEXTILE AND ANY SEDIMENT ACCUMULATION IN THE CHANNEL, RESTORE THE CHANNEL TO ORIGINAL GRADE, AND REVEGETATE.

TEMPORARY BYPASS CHANNEL (2 / P3)

NO SCALE



FOUNTAIN PLACE ROAD TYPICAL SECTION (1 / P3)

NO SCALE

REGISTERED PROFESSIONAL ENGINEER
JENNIFER G. ROMINE
No. 54137
Exp.12-31-17
CIVIL
STATE OF CALIFORNIA
6-28-16

VV : D1 044-11 MAS8-2012.dwg JUN 28, 2016

REV	DATE

DESIGN BY:
DRAWN BY:
CHECKED BY:
SCALE:

LAKE TAHOE BASIN MANAGEMENT UNIT

UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE
The Pacific Southwest Region

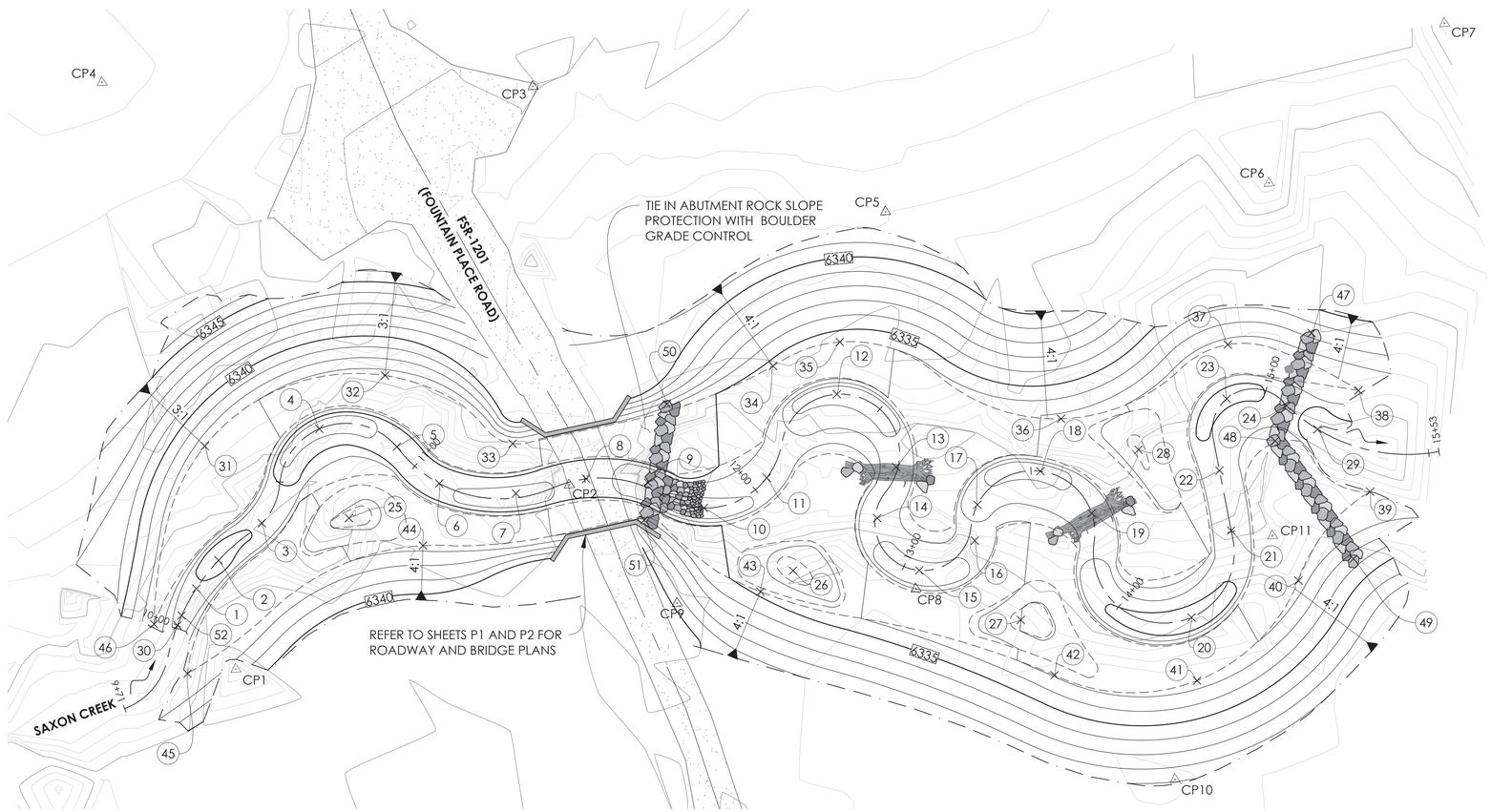
USDA FOREST SERVICE LTBMU
SAXON CREEK AOP PROJECT

DETAILS – 1

SHEET NUMBER
P3
5 OF 13 SHEETS

PROJECT NO.
FSR-1201-12

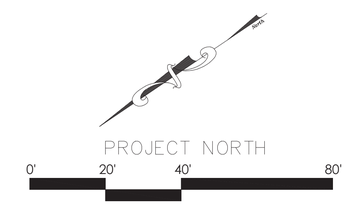
S:\09\2011\044-11 Saxon Cr\044-11 MAS8-2012.dwg, C28/2016 4:26:21 PM, Adobe PDF-8OTAITD.pc3, Custom 1x1.11



PLAN

CHANNEL GRADING PLAN LEGEND

6340	FINISH INDEX CONTOUR
	FINISH INTERMEDIATE CONTOUR
	GRADE BREAK LINE
	LIMIT OF GRADING
CP4	CONTROL POINT
7	STAKING POINT CODE/LOCATION



SCALE: 1" = 20'

NOTE: PROJECT NORTH IS BASED ON AN ARBITRARY DATUM ADOPTED FROM THE TOPOGRAPHIC SURVEY. ALL CONTROL AND STAKING POINTS ARE REFERENCED TO THE PROJECT NORTH COORDINATE SYSTEM.

CONTROL POINT	EXISTING ELEVATION	EASTING	NORTHING
CP1	6336.10	5000.0000	5000.0000
CP2	6341.86	4990.6400	4895.0610
CP3	6345.34	5087.6010	4841.7010
CP4	6347.37	5155.2060	4939.8300
CP5	6342.54	5004.3192	4780.3032
CP6	6342.78	4951.5340	4687.9589
CP7	6346.37	4960.9847	4623.0439
CP8	6339.25	4913.1477	4831.6990
CP9	6340.53	4946.7804	4888.6406
CP10	6339.33	4829.3541	4801.7992
CP11	6607.66	4870.1488	4741.7605

POINT TABLE

POINT CODE	ELEVATION	NORTHING	EASTING	STATION	DESCRIPTION
1	6335.6	4996.5	5024.6	10+11.5	RIFFLE
2	6334.0	4987.1	5027.6	10+21.4	BTM. POOL
3	6335.5	4971.4	5029.4	10+37.2	RIF. CREST
4	6333.0	4943.6	5042.2	10+69.1	BTM. POOL
5	6334.9	4928.7	5026.0	10+92.7	RIF. CREST
6	6334.4	4924.6	5011.1	11+08.3	RIFFLE
7	6333.0	4908.6	4996.9	11+30.4	BTM. POOL
8	6334.2	4890.2	4989.4	11+50.4	RIF. CREST
9	6333.7	4876.6	4979.0	11+67.4	BOULDERS
10	6332.0	4867.8	4964.5	11+84.6	BTM. POOL
11	6333.5	4848.7	4961.7	12+04.6	RIF. CREST
12	6331.0	4819.7	4970.0	12+37.1	BTM. POOL
13	6332.9	4817.4	4944.1	12+67.8	RIF. CREST
14	6332.4	4829.6	4935.3	12+83.3	RIFFLE

POINT TABLE

POINT CODE	ELEVATION	NORTHING	EASTING	STATION	DESCRIPTION
15	6331.0	4828.1	4916.9	13+04.4	BTM. POOL
16	6332.2	4810.7	4915.1	13+21.9	RIF. CREST
17	6331.7	4804.6	4922.9	13+31.6	RIFFLE
18	6330.0	4784.9	4920.9	13+52.6	BTM. POOL
19	6331.5	4779.7	4903.3	13+71.9	RIF. CREST
20	6329.0	4772.9	4864.0	14+21.5	BTM. POOL
21	6330.8	4750.4	4877.8	14+50.4	RIF. CREST
22	6330.3	4743.8	4893.3	14+67.2	RIFFLE
23	6329.0	4731.0	4908.7	14+88.5	BTM. POOL
24	6330.1	4718.4	4897.8	15+07.2	BOULDERS
25	6335.9	4950.7	5017.2	N/A	DEPRESSION
26	6333.5	4857.0	4936.4	N/A	DEPRESSION
27	6332.0	4889.8	4812.5	N/A	DEPRESSION
28	6331.1	4910.6	4759.1	N/A	DEPRESSION

POINT TABLE

POINT CODE	ELEVATION	NORTHING	EASTING	STATION	DESCRIPTION
29	6329.1*	4714.9	4887.6	10+00.0	TIE IN TO EX.
30	6336.0*	5006.6	5019.1	15+18.0	TIE IN TO EX.
31	6337.6	4972.6	5056.0	N/A	TOE OF SLOPE
32	6336.7	4920.3	5044.2	N/A	TOE OF SLOPE
33	6336.1	4901.6	5008.9	N/A	TOE OF SLOPE
34	6334.7	4829.9	4986.4	N/A	TOE OF SLOPE
35	6334.2	4810.9	4981.5	N/A	TOE OF SLOPE
36	6332.8	4772.1	4929.7	N/A	TOE OF SLOPE
37	6331.7	4722.4	4920.9	N/A	TOE OF SLOPE
38	6331.4	4699.5	4890.2	N/A	TOE OF SLOPE
39	6331.8	4712.5	4865.2	N/A	TOE OF SLOPE
40	6331.5	4742.7	4855.9	N/A	TOE OF SLOPE
41	6332.5	4781.5	4848.6	N/A	TOE OF SLOPE
42	6332.9	4813.3	4871.9	N/A	TOE OF SLOPE

POINT TABLE

POINT CODE	ELEVATION	NORTHING	EASTING	STATION	DESCRIPTION
43	6334.9	4867.8	4936.6	N/A	TOE OF SLOPE
44	6336.9	4938.0	4999.4	N/A	TOE OF SLOPE
45	6337.5	5011.7	5006.5	N/A	TOE OF SLOPE
46	6337.1	5011.8	5023.0	N/A	TOE OF SLOPE
47	6333.0 B	4701.3	4910.6	N/A	BOULDER SILL
48	6331.0 B	4726.5	4891.5	N/A	BOULDER SILL
49	6333.0 B	4726.8	4852.4	N/A	BOULDER SILL
50	6336.0 B	4860.2	4994.1	N/A	BOULDER SILL
51	6336.0 B	4883.4	4971.0	N/A	BOULDER SILL
52	6335.9	5004.1	5020.7	10+03.0	RIFFLE

* ELEVATION TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND RESOLVED WITH THE PROJECT ENGINEER OR ENGINEER'S REPRESENTATIVE IF THERE IS A DISCREPANCY

ELEVATIONS FOLLOWED BY A "B" INDICATE THE ELEVATION OF THE BURIED BOULDER SILL. ADD 0.5 FEET FOR FINISHED GRADE ELEVATION

REGISTERED PROFESSIONAL ENGINEER
EDWARD D. BALLMAN
No. C64095
Exp. 09-30-16
CIVIL
STATE OF CALIFORNIA
06-29-2016

REV.	DATE

DESIGN BY: BKH
DRAWN BY: PK
CHECKED BY: EB
SCALE: 1" = 20'

LAKE TAHOE BASIN MANAGEMENT UNIT

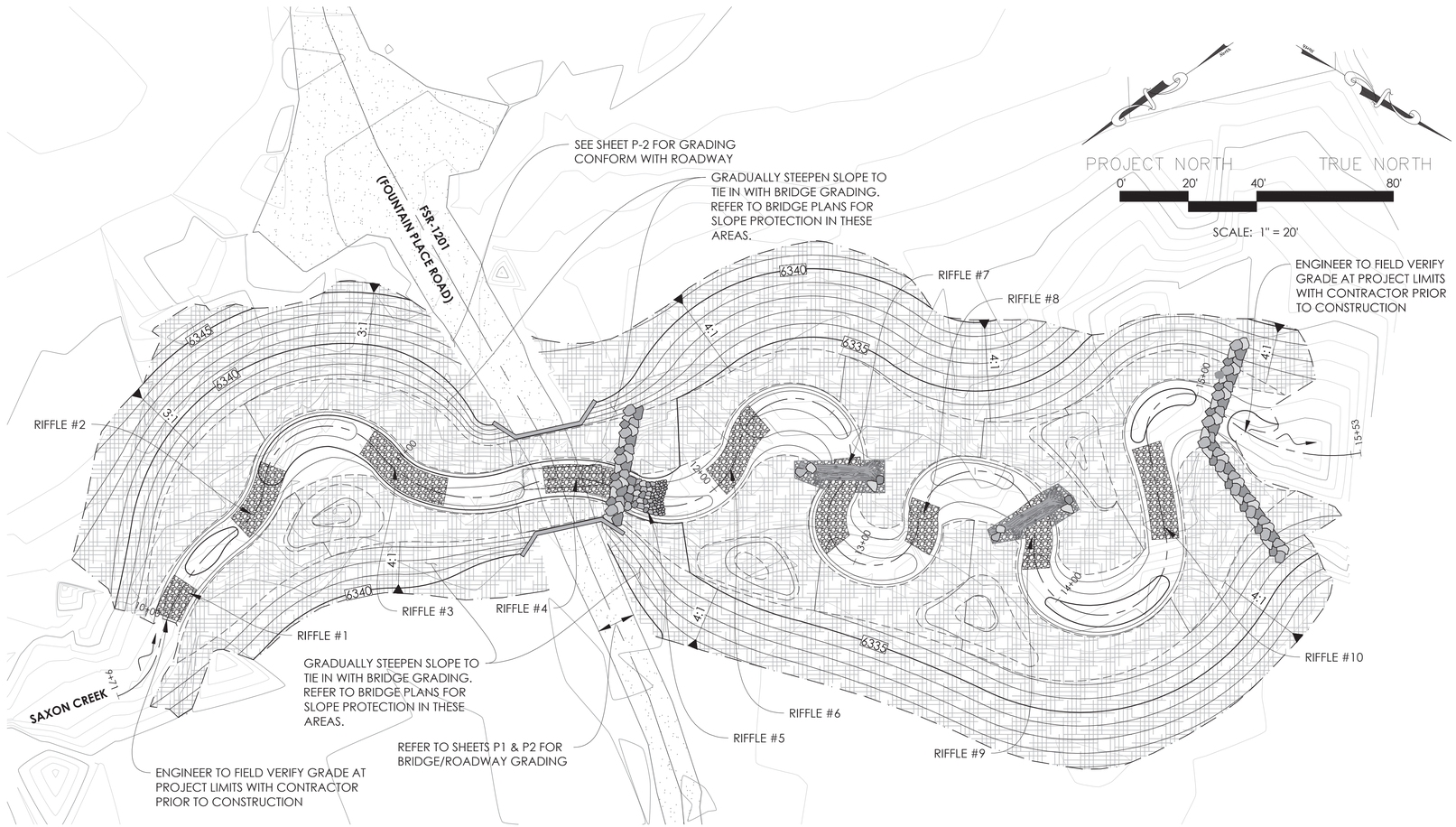
UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE
The Pacific Southwest Region

USDA FOREST SERVICE LTBMU
SAXON CREEK AOP PROJECT

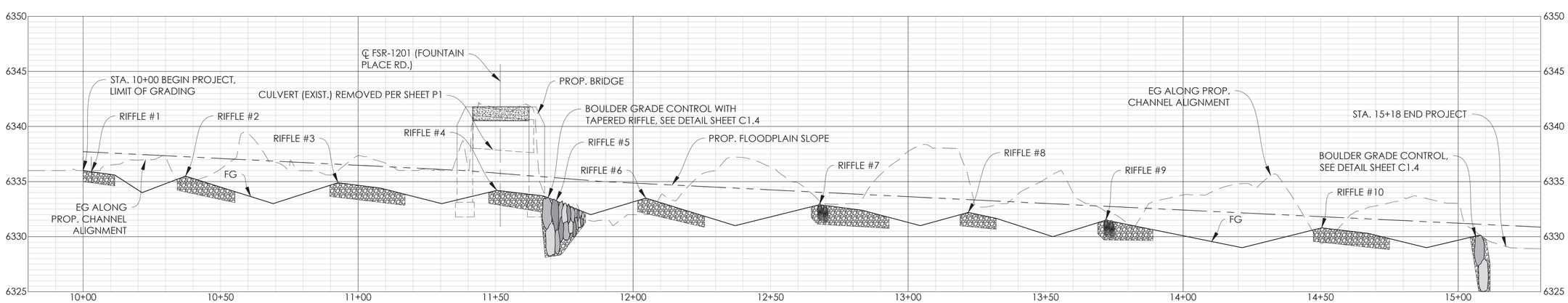
CHANNEL STAKING PLAN

SHEET NUMBER
C1.0
06 OF 13 SHEETS

PROJECT NO.
FSR-1201-12



PLAN



PROFILE

SCALE: 1" = 20' HORIZONATAL
1" = 5' VERTICAL

CHANNEL GRADING PLAN LEGEND

- 6340 — FINISH INDEX CONTOUR
- FINISH INTERMEDIATE CONTOUR
- GRADE BREAK LINE
- LIMIT OF GRADING
- PROPOSED FLOODPLAIN SLOPE
- RIFFLE PROTECTION: PLACE WELL-GRADED GRAVEL MIXTURE
- TOP DRESSING FILL, 0.5' DEEP

REGISTERED PROFESSIONAL ENGINEER
EDWARD D. BALLMAN
No. C64095
Exp. 09-30-16
CIVIL
STATE OF CALIFORNIA
06-29-2016

RIFFLE TABLE

RIFFLE #	STATION	ELEVATION	LENGTH	SEE DETAIL	POINT CODE
1	10+03.0	6335.9	8	1, C1.4	52
2	10+37.2	6335.5	18	1, C1.4	3
3	10+92.7	6334.9	25	1, C1.4	5
4	11+50.4	6334.2	17	1, C1.4	8
5	11+67.4	6333.7	12	3(D), C1.4	9
6	12+04.6	6333.5	21	1, C1.4	11
7	12+67.8	6332.9	25	2, C1.4	13
8	13+21.9	6332.2	10	1, C1.4	16
9	13+71.9	6331.5	17	2, C1.4	19
10	14+50.4	6330.8	25	1, C1.4	21

NOTES:
1. RIFFLE STATIONS AND ELEVATIONS REFER TO RIFFLE CONTROL POINT, SEE DETAIL SHEET C1.4
2. REFER TO SHEET C1.0 FOR RIFFLE POINT CODE

REV	DATE

DESIGN BY: BKH
DRAWN BY: PK
CHECKED BY: EB
SCALE: 1" = 20'

LAKE TAHOE BASIN MANAGEMENT UNIT

UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE
The Pacific Southwest Region

USDA FOREST SERVICE LTBMU
SAXON CREEK AOP PROJECT

CHANNEL GRADING AND RIFFLE PLAN

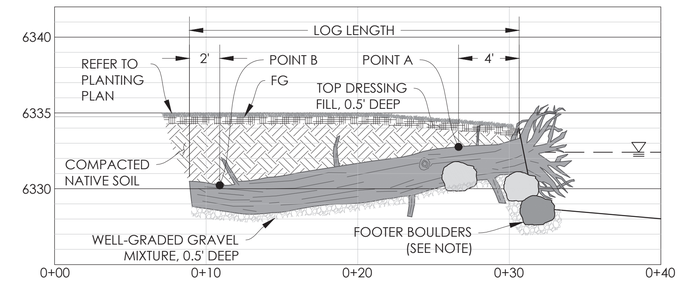
SHEET NUMBER
C1.1
07 OF 13 SHEETS

PROJECT NO.
FSR-1201-12

LOG TABLE								
LOG #	POINT A			POINT B			LENGTH	NOTES
	NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION		
1	4943.5	5048.2	6336.0	4931.6	5045.7	SEE NOTE	18	LOG 1 RESTS ON LOG 2, ELEV. B IS DETERMINED BY THIS RELATION
2	4933.2	5045.0	6334.0	4921.1	5047.0	SEE NOTE	18	LOG 2 RESTS ON LOG 3, ELEV. B IS DETERMINED BY THIS RELATION
3	4927.2	5041.5	6336.0	4923.6	5051.8	6334.0	17	
4	4922.1	5036.5	6336.0	4914.5	5041.6	6334.5	15	
5	4921.1	5030.1	6335.5	4910.3	5028.7	6334.0	17	
6	4870.2	4955.8	6334.0	4878.9	4947.6	6334.0	18	
7	4863.6	4951.7	6334.0	4865.1	4941.3	6333.0	16	
8	4857.8	4952.3	6334.0	4852.3	4943.2	6333.0	17	
9	4851.6	4951.6	6333.5	4845.2	4943.0	6332.5	17	
10	4844.9	4952.3	6333.5	4838.9	4942.3	6332.5	18	
11	4826.3	4978.9	6334.5	4815.1	4974.7	6333.0	18	
12	4811.1	4970.9	6334.0	4799.8	4966.9	SEE NOTE	18	LOG 12 RESTS ON LOG 13, ELEV. B IS DETERMINED BY THIS RELATION
13	4809.4	4969.5	6333.0	4808.1	4978.2	6331.0	15	
14	4806.4	4961.0	6334.0	4794.2	4961.5	6332.0	18	
15	4805.8	4953.6	6334.0	4798.8	4943.8	SEE NOTE	18	LOG 15 RESTS ON LOG 16, ELEV. B IS DETERMINED BY THIS RELATION
16	4805.5	4948.4	6333.0	4796.0	4940.8	6329.5	18	
17	4807.3	4943.5	6333.0	4802.3	4935.4	6330.0	15	
18	4816.1	4942.8	6333.0	4827.2	4951.2	6332.7	20	LOG RIFFLE
19	4821.6	4943.8	6333.0	4812.0	4936.5	6332.7	18	LOG RIFFLE
20	4837.5	4917.8	6333.0	4839.8	4908.0	6332.0	16	
21	4827.5	4908.5	6333.5	4834.7	4918.3	6332.0	18	
22	4818.5	4902.6	6332.0	4812.5	4893.8	6331.0	17	
23	4819.1	4902.8	SEE NOTE	4827.7	4894.7	6331.5	18	LOG 23 RESTS ON LOG 22, ELEV. A IS DETERMINED BY THIS RELATION
24	4813.0	4902.3	6333.0	4814.5	4891.7	SEE NOTE	17	LOG 24 RESTS ON LOG 22, ELEV. B IS DETERMINED BY THIS RELATION
25	4785.3	4930.3	6333.0	4775.9	4935.3	6331.0	17	
26	4781.3	4925.7	SEE NOTE	4770.7	4928.4	6331.0	17	LOG 26 RESTS ON LOG 27, ELEV. A IS DETERMINED BY THIS RELATION
27	4777.0	4918.1	6332.0	4781.8	4928.6	6330.5	18	
28	4771.1	4908.0	6332.0	4761.1	4906.2	6330.0	16	
29	4777.8	4903.0	6331.6	4791.7	4904.4	6331.3	20	LOG RIFFLE
30	4781.4	4901.0	6331.6	4769.6	4899.9	6331.3	18	LOG RIFFLE
31	4792.0	4869.0	6331.0	4784.3	4859.5	SEE NOTE	18	LOG 31 RESTS ON LOG 32, ELEV. B IS DETERMINED BY THIS RELATION
32	4786.9	4859.9	6330.5	4794.3	4855.2	6330.5	15	
33	4775.1	4856.9	6331.0	4771.5	4845.2	6331.0	18	
34	4762.5	4859.0	6332.0	4771.7	4857.2	6332.0	15	
35	4754.8	4858.5	6331.0	4748.8	4847.9	6330.0	18	
36	4750.1	4862.9	6331.0	4744.4	4852.6	6330.0	18	
37	4745.1	4913.4	6331.0	4750.3	4919.6	6330.0	15	
38	4737.6	4914.3	6331.0	4728.9	4918.5	6329.0	16	
39	4730.0	4918.4	SEE NOTE	4726.8	4926.4	6331.0	15	LOG 39 RESTS ON LOG 38, ELEV. A IS DETERMINDED BY THIS RELATION
40	4723.1	4916.7	6331.0	4713.4	4923.7	6331.5	18	
41	4719.0	4814.2	6331.0	4708.3	4920.0	6331.5	18	

LOG PLACEMENT PLAN

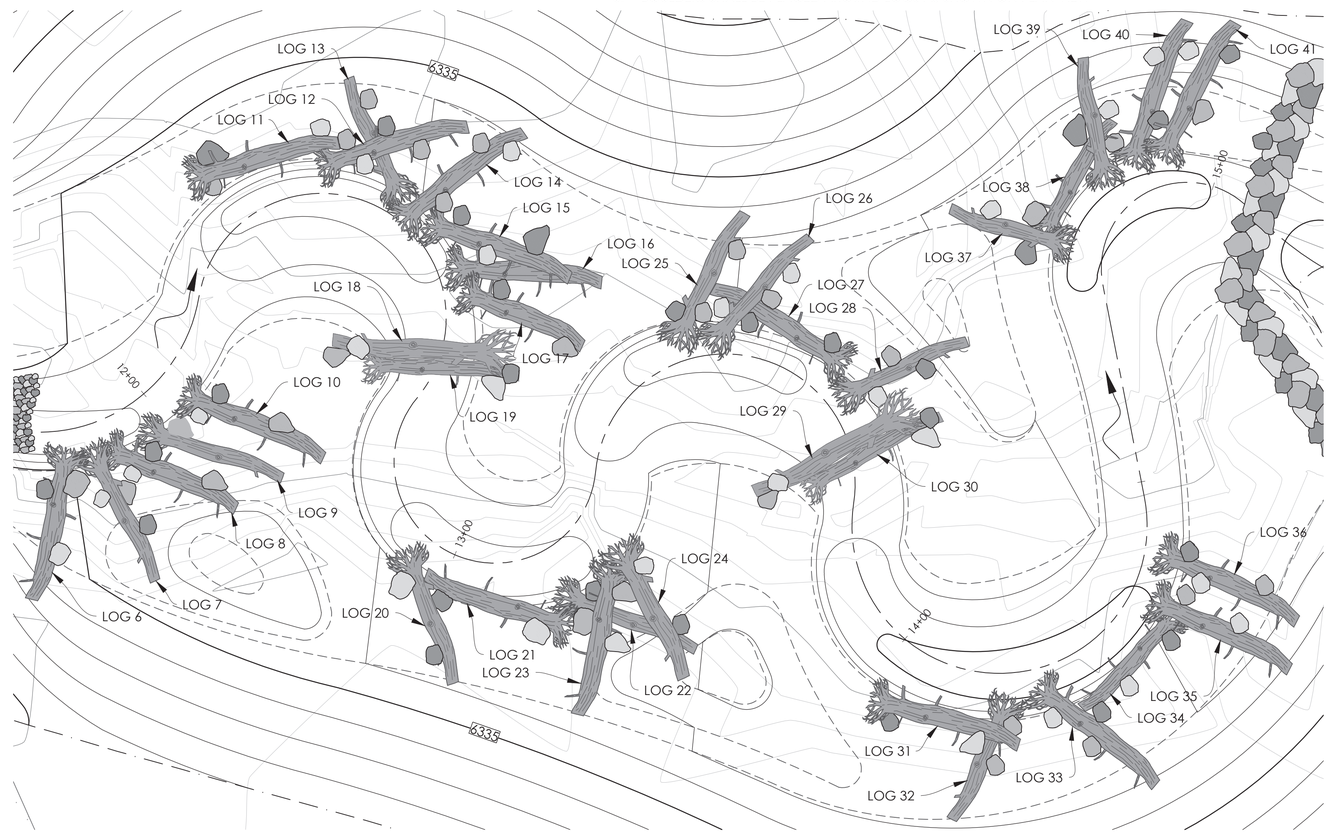
UPSTREAM (SOUTH) PORTION 1" = 10'



1 LOG PLACEMENT
SCALE: 1" = 5'

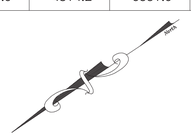
LOG PLACEMENT NOTES:

1. POINT A IS THE TOP OF LOG, 4' FROM THE BASE OF THE ROOTWAD
2. POINT B IS THE TOP OF LOG, 2' FROM THE CUT END
3. LOG LENGTH IS MEASURED FROM THE CUT END TO THE BASE OF THE ROOTWAD
4. FOOTER BOULDERS SHALL BE INSTALLED FOR LOG PLACEMENTS WHERE THE BASE OF LOG IS HIGHER THAN THE BANK TOE
5. BOULDERS SHALL BE PLACED AROUND LOGS AS SHOWN ON PLAN VIEW



LOG PLACEMENT PLAN

DOWNSTREAM (NORTH) PORTION 1" = 10'



PROJECT NORTH

NOTE: PROJECT NORTH IS BASED ON AN ARBITRARY DATUM ADOPTED FROM THE TOPOGRAPHIC SURVEY. ALL CONTROL AND STAKING POINTS ARE REFERENCED TO THE PROJECT NORTH COORDINATE SYSTEM.

REGISTERED PROFESSIONAL ENGINEER
EDWARD D. BALLMAN
No. C64095
Exp. 09-30-16
CIVIL
STATE OF CALIFORNIA
06-29-2016

REV	DATE

DESIGN BY: BKH
DRAWN BY: PK
CHECKED BY: EB
SCALE: VARIES

LAKE TAHOE BASIN MANAGEMENT UNIT

UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE
The Pacific Southwest Region

USDA FOREST SERVICE LTBMU
SAXON CREEK AQP PROJECT

LOG PLACEMENT PLAN

SHEET NUMBER
C1.2
08 OF 13 SHEETS

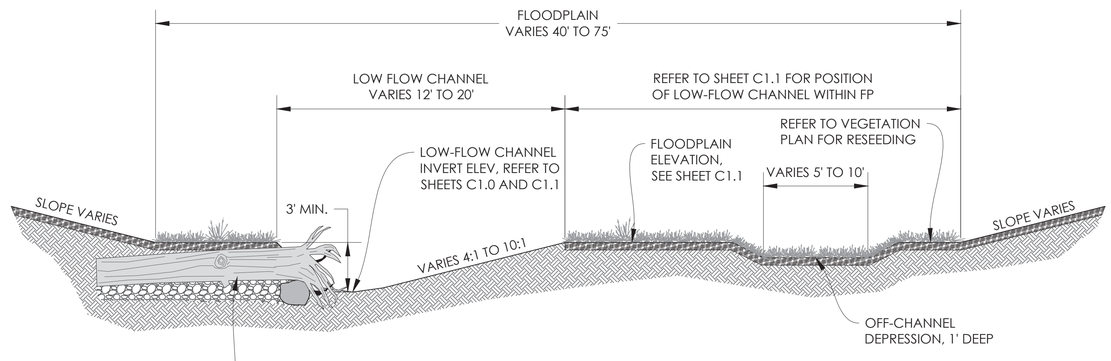
PROJECT NO.
FSR-1201-12

LEGEND:

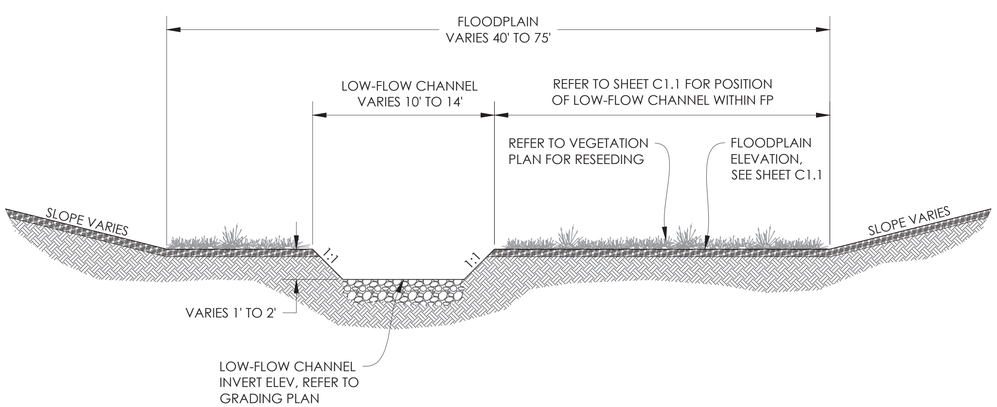
- TOP-DRESSING FILL, 0.5' DEEP
- WELL-GRADED GRAVEL MIXTURE, DEPTH VARIES REFER TO DETAILS SHEETS C1.2 AND C1.4
- NATIVE SOILS OR GENERAL FILL

REFER TO SPECS FOR GRADATION OF MATERIALS

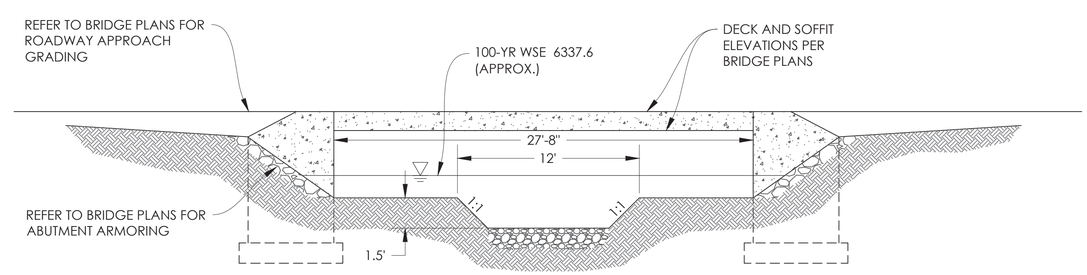
REGISTERED PROFESSIONAL ENGINEER
EDWARD D. BALLMAN
No. C64095
Exp. 09-30-16
CIVIL
STATE OF CALIFORNIA
06-29-2016



POOL
TYPICAL CROSS SECTION
SCALE: 1" = 5' (1 / C1.3)



RIFFLE
TYPICAL CROSS SECTION
SCALE: 1" = 5' (2 / C1.3)



BRIDGE CROSSING
TYPICAL CROSS SECTION
SCALE: 1" = 5' (3 / C1.3)

REV.	DATE

DESIGN BY: BKH
DRAWN BY: PK
CHECKED BY: EB
SCALE: 1" = 5'

LAKE TAHOE BASIN MANAGEMENT UNIT

UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE
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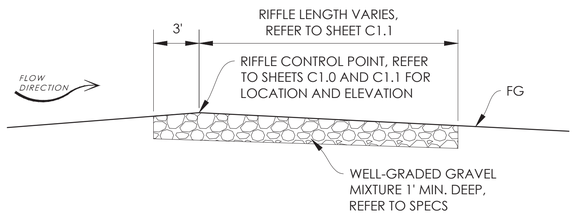
USDA FOREST SERVICE LTBMU
SAXON CREEK AOP PROJECT

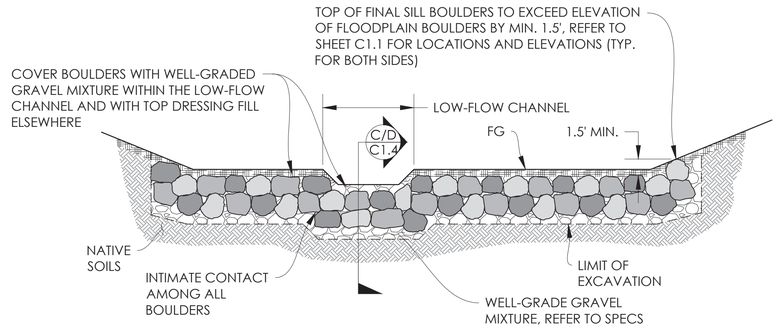
CHANNEL TYPICAL CROSS SECTIONS

SHEET NUMBER
C1.3
09 OF 13 SHEETS

PROJECT NO.
FSR-1201-12

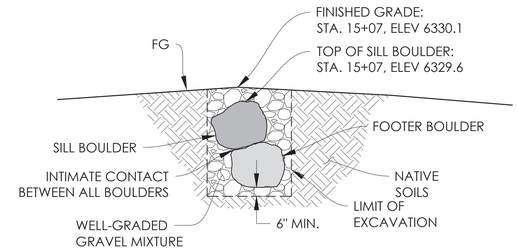


1 GRAVEL RIFFLE PROTECTION
SCALE: 1" = 5'

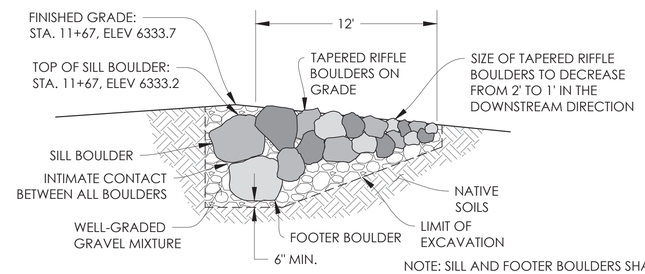


NOTE: IF BEDROCK ENCOUNTERED DURING EXCAVATION, REFER TO SPECS

3 BOULDER GRADE CONTROL
SCALE: 1" = 10'

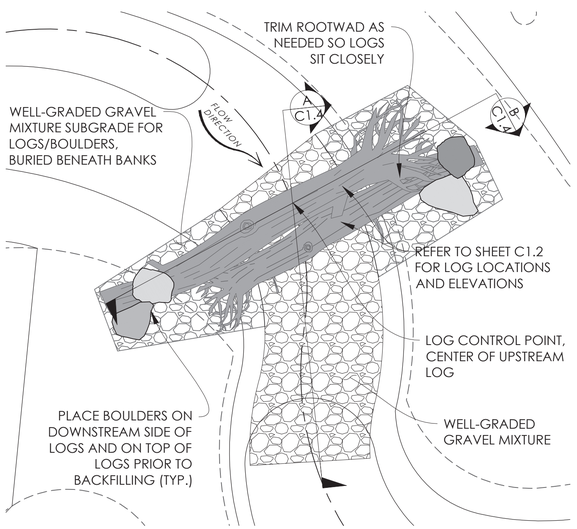


BOULDER GRADE CONTROL
PROFILE VIEW
SCALE: 1" = 5' C C1.4

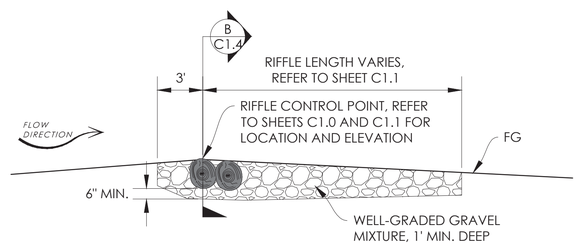


NOTE: SILL AND FOOTER BOULDERS SHALL HAVE A MINIMUM 2' DIAMETER IN ALL DIRECTIONS; THE SIZE TAPERED RIFFLE BOULDERS SHALL VARY BETWEEN 1' AND 2' AS DESCRIBED IN THE SPECIFICATIONS.

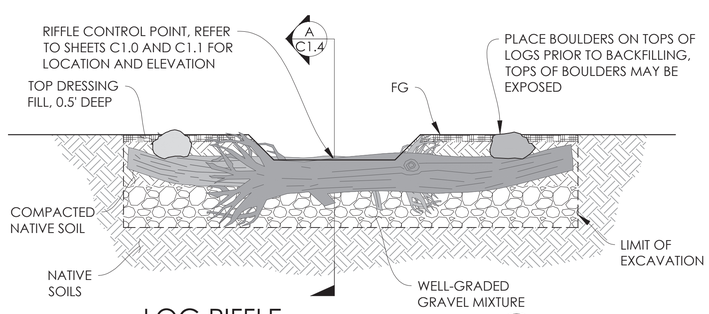
BOULDER GRADE CONTROL
PROFILE VIEW WITH TAPERED RIFFLE
SCALE: 1" = 5' D C1.4



2 GRAVEL RIFFLE PROTECTION WITH LOG CREST
SCALE: 1" = 5'



LOG RIFFLE
TYPICAL PROFILE VIEW
SCALE: 1" = 5' A C1.4



LOG RIFFLE
TYPICAL SECTION VIEW
SCALE: 1" = 5' B C1.4

REGISTERED PROFESSIONAL ENGINEER
EDWARD D. BALLMAN
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CIVIL
STATE OF CALIFORNIA
06-29-2016

REV	DATE

DESIGN BY: BKH
DRAWN BY: PK
CHECKED BY: EB
SCALE: VARIES

LAKE TAHOE BASIN MANAGEMENT UNIT

FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE

UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE
The Pacific Southwest Region

USDA FOREST SERVICE LTBMU
SAXON CREEK AOP PROJECT

CHANNEL DETAILS

SHEET NUMBER
C1.4
10 OF 13 SHEETS

PROJECT NO.
FSR-1201-12

H. T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS
www.harveyecology.com 408-458-3200

PLANTING NOTES

1. INSTALL ALL PLUG CONTAINER PLANTS PER DETAIL 1/L1.2
2. INSTALL ALL SMALL CONTAINER PLANTS IN THE SLOPE PLANTING ZONE PER DETAIL 2/L1.2
3. INSTALL ALL SMALL CONTAINER PLANTS IN THE WATER'S EDGE PLANTING ZONE PER DETAIL 3/L1.2
4. HARVEST AND INSTALL ALL WILLOW STAKES PER DETAILS 4/L1.2 AND 5/L1.2
5. ALL PLANTING ZONES SHALL RECEIVE SEED MIX.
6. PLANTINGS WITHIN THE WATER'S EDGE PLANTING ZONE WILL INCLUDE INSTALLATION OF WILLOW STAKES, PLUG CONTAINER PLANTS, AND SMALL CONTAINER PLANTS WITHIN THE LOG PLACEMENT AREAS AS SHOWN ON THE LOG PLACEMENT PLAN, SHEET C1.2.

ABBREVIATIONS

APPROX	APPROXIMATE
C.D.	CONSTRUCTION DOCUMENTS
FT	FOOT
NTS	NOT TO SCALE
OC	ON CENTER
PSI	POUNDS PER SQUARE INCH
TYP	TYPICAL

PLANTING SCHEDULES

WATER'S EDGE PLANTING ZONE SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	TYPE	CONTAINER SIZE	OC SPACING	QUANTITIES - WATER'S EDGE ZONE				
						N1	N2	S1	S2	TOTAL
	CAREX ATHROSTACHYA	SLENDER SEDGE	PLUG CONTAINER	TREEBAND	3	19	17	43	41	**120**
	CAREX PRAEGRACILIS	CLUSTER SEDGE	PLUG CONTAINER	TREEBAND	3	19	17	43	41	**120**
	JUNCUS NEVADENSIS	SIERRA RUSH	PLUG CONTAINER	TREEBAND	3	19	17	43	41	**120**
	SALIX EXIGUA	NARROWLEAF WILLOW	WILLOW STAKE	-	6	4	3	8	8	**23**
	SALIX LEMMONII	LEMMON WILLOW	WILLOW STAKE	-	6	4	3	8	8	**23**
	SALIX LUCIDA SSP LASIANDRA	PACIFIC WILLOW	WILLOW STAKE	-	6	4	3	8	8	**23**
	ALNUS INCANA SPP TENUIFOLIA	THINLEAF ALDER	SMALL CONTAINER	TREEPOT 4	12	1	1	2	2	**6**

MEADOW PLANTING ZONE SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	TYPE	CONTAINER SIZE	OC SPACING	QUANTITIES - FLOODPLAIN MEADOW ZONE				
						N1	N2	S1	S2	TOTAL
	CAREX ATHROSTACHYA	SLENDER SEDGE	PLUG CONTAINER	TREEBAND	3	54	52	124	146	**376**
	CAREX PRAEGRACILIS	CLUSTER SEDGE	PLUG CONTAINER	TREEBAND	3	54	52	124	146	**376**
	JUNCUS NEVADENSIS	SIERRA RUSH	PLUG CONTAINER	TREEBAND	3	54	52	124	146	**376**

SLOPE PLANTING ZONE SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	TYPE	CONTAINER SIZE	OC SPACING	QUANTITIES - SLOPE PLANTING ZONE				
						N1	N2	S1	S2	TOTAL
	ROSA WOODSII	WOOD ROSE	SMALL CONTAINER	DEEPOT	8	15	6	21	21	63
	RUBUS PARVIFLORUS	THIMBLEBERRY	SMALL CONTAINER	DEEPOT	8	15	6	21	21	63
	SYMPHORIACARPUS MOLLIS	CREEPING SNOWBERRY	SMALL CONTAINER	DEEPOT	8	15	6	21	21	63

SEEDING SCHEDULE

SEED MIX

BOTANICAL NAME	COMMON NAME	PURE LIVE SEED RATE (POUNDS/ACRE)
DESCHAMPSIA CESPITOSA	TUFTED HAIRGRASS	2
ELYMUS GLAUCUS	BLUE WILDRYE	15
LUPINUS POLYPHYLLUS	LARGE-LEAVED LUPINE	3
HORDEUM BRACHYANTHERUM CALIFORNICUM	CALIFORNIA MEADOW BARLEY	15

REGISTERED LANDSCAPE ARCHITECT
JOSEPH M. HOWARDS
4598
Exp. 12/31/16
STATE OF CALIFORNIA

100% C.D.– 06/28/16

REV.	DATE

DESIGN BY: PM/JH
DRAWN BY: LD
CHECKED BY: JN/PR
SCALE: AS NOTED

LAKE TAHOE BASIN MANAGEMENT UNIT

UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE
The Pacific Southwest Region

USDA FOREST SERVICE LTBMU
SAXON CREEK AOP PROJECT

PLANTING AND SEEDING SCHEDULES, NOTES, AND ABBREVIATIONS

SHEET NUMBER
L-1.0
10 OF 12 SHEETS

PROJECT NO.
FST-1209-10
DATE: 06/28/2016

H. T. HARVEY & ASSOCIATES
ECOLOGICAL CONSULTANTS
www.harveyecology.com 408-458-3200

PLANTING AND SEEDING LEGEND

- SLOPE PLANTING ZONE
- MEADOW PLANTING ZONE
- WATER'S EDGE PLANTING ZONE
- CREEK CENTERLINE
- GRADE BREAK LINE

PLANTING NOTES:

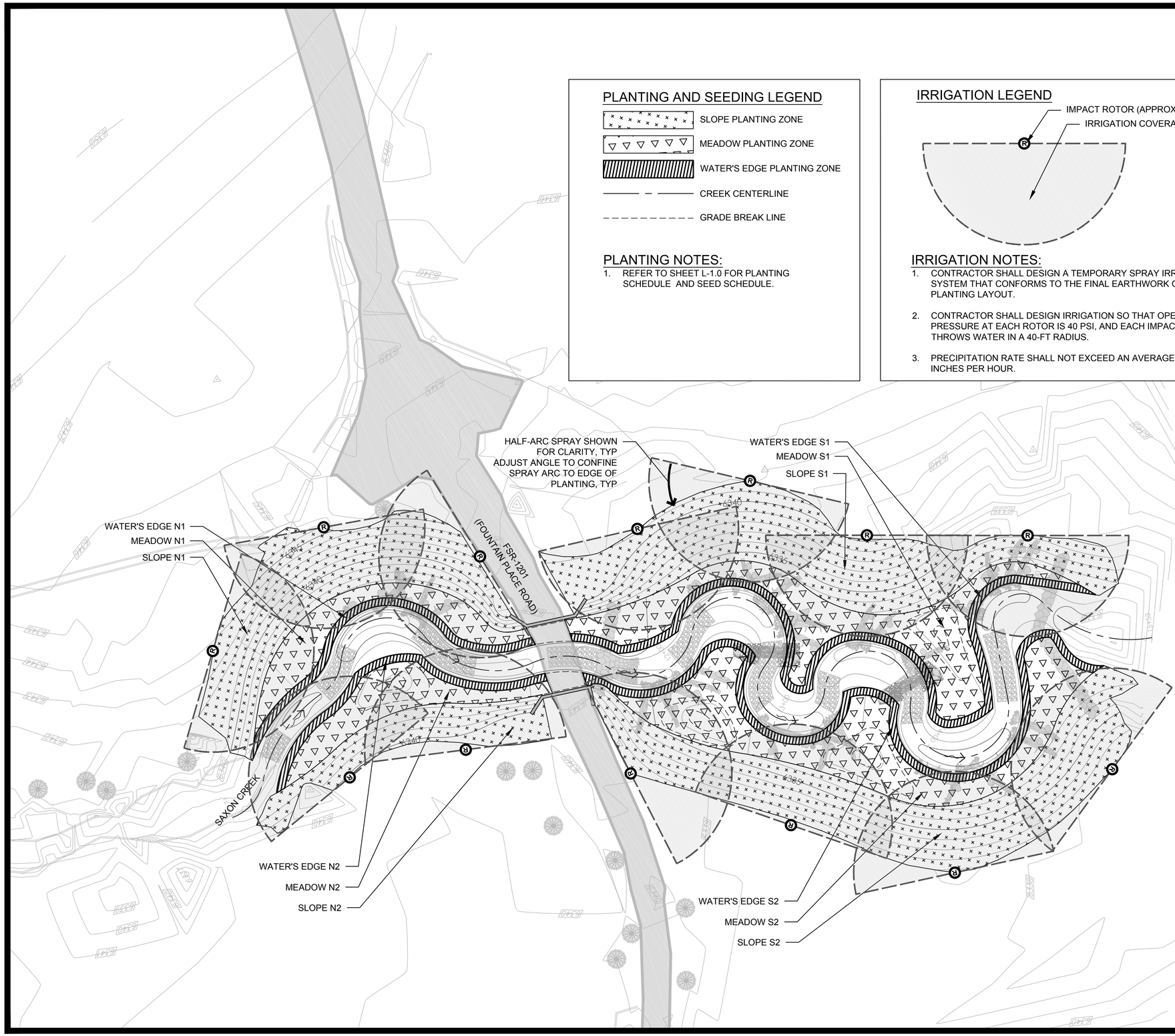
1. REFER TO SHEET L-1.0 FOR PLANTING SCHEDULE AND SEED SCHEDULE.

IRRIGATION LEGEND

IMPACT ROTOR (APPROX LOCATION)
IRRIGATION COVERAGE AREA (APPROX)

IRRIGATION NOTES:

1. CONTRACTOR SHALL DESIGN A TEMPORARY SPRAY IRRIGATION SYSTEM THAT CONFORMS TO THE FINAL EARTHWORK GRADES AND PLANTING LAYOUT.
2. CONTRACTOR SHALL DESIGN IRRIGATION SO THAT OPERATING PRESSURE AT EACH ROTOR IS 40 PSI, AND EACH IMPACT ROTOR THROWS WATER IN A 40-FT RADIUS.
3. PRECIPITATION RATE SHALL NOT EXCEED AN AVERAGE OF 0.5 INCHES PER HOUR.



PROJECT NORTH

GRAPHIC SCALE
20 0 20 40 60
(IN FEET)

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4598
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USDA FOREST SERVICE LTBMU
SAXON CREEK AOP PROJECT

LANDSCAPE PLANTING PLAN

SHEET NUMBER
L-1.1
11 OF 12 SHEETS

PROJECT NO.
FST-1209-10
DATE: 06/28/2016

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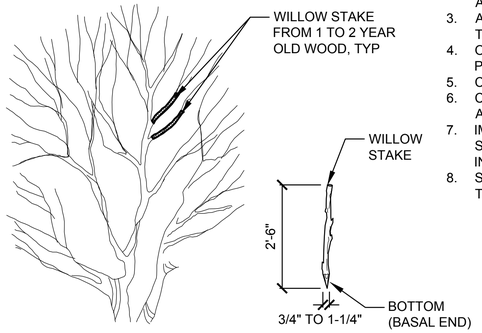
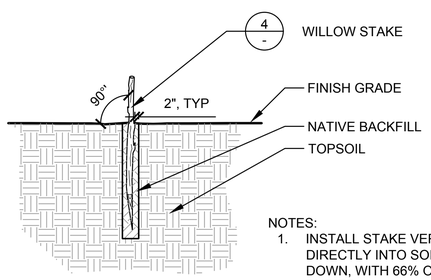


NOTES:
1. COLLECT MATERIAL FROM SELECT, HEALTHY GREEN WOOD FROM LOCATIONS APPROVED BY PROJECT BIOLOGIST.
2. NO MORE THAN 30% OF THE BRANCHES OF ANY SINGLE TREE SHALL BE COLLECTED.
3. AFTER CLEANLY CUTTING STAKE FROM TREE, TRIM TWIGS AND BRANCHES FLUSH TO STAKE.
4. ORIENT STAKE WITH LEAF BUD SCARS POINTING UP.
5. CUT TOP SQUARE.
6. CUT BOTTOM (BASAL END) AT A 45 DEGREE ANGLE.
7. IMMEDIATELY AFTER CUTTING AND TRIMMING, SUBMERGE 75% OF STAKE, BASAL END DOWN, IN WATER TO PREVENT DESICCATION.
8. STAKES SHALL BE PLANTED THE SAME DAY THEY ARE CUT.

ELEVATION
NTS

4 WILLOW STAKE COLLECTION

WILLOW COLLECTION-STAKE_16

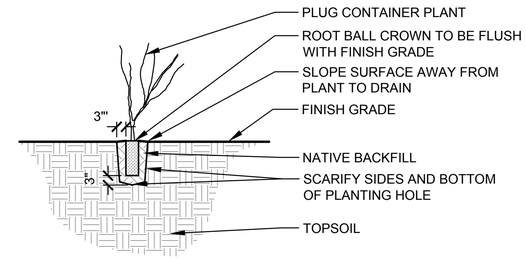


NOTES:
1. INSTALL STAKE VERTICALLY AND DIRECTLY INTO SOIL, BASAL END DOWN, WITH 66% OF THE STAKE BURIED.

SECTION
NTS

5 WILLOW STAKE INSTALLATION

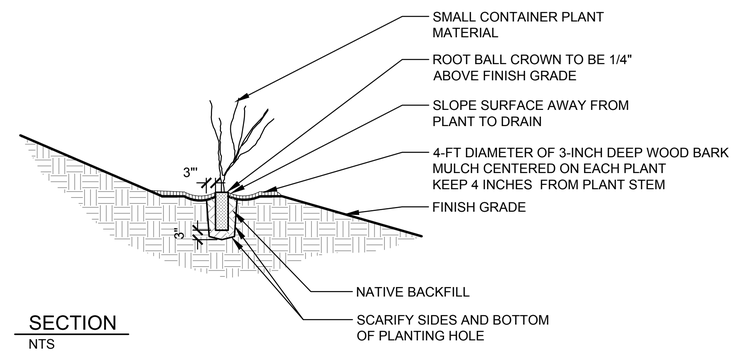
WILLOW STAKE PLANTING-NO PLANTING PIT, NO BASIN_24



SECTION
NTS

1 PLUG CONTAINER PLANTING

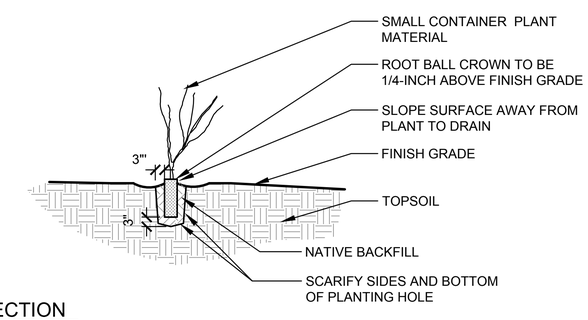
PLANT SMALL CONT-NO BASIN_24



SECTION
NTS

2 SMALL CONTAINER PLANTING-SLOPE

PLANT SMALL CONT-SLOPE, MULCH, STAKE_ENGLISH_24



SECTION
NTS

3 SMALL CONTAINER PLANTING-WATER'S EDGE

PLANT SMALL CONT-SLOPE, MULCH, STAKE_ENGLISH_24

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The Pacific Southwest Region

USDA FOREST SERVICE LTBMU
SAXON CREEK AOP PROJECT

LANDSCAPE DETAILS

SHEET NUMBER
L-1.2
12 OF 12 SHEETS

PROJECT NO.
FST-1209-10
DATE: 06/28/2016