

C A M P S I T E S

## EXISTING LAKE TAHOE CAMPSITES

1,200

1,000

800

600

400

200

1,200

58%

616

30%

204

10%

46

2%

SOUTH LAKE

WEST SHORE

EAST SHORE

NORTHLAKE

TOTAL NUMBER OF TAHOE BASIN CAMPGROUNDS :  
TOTAL NUMBER OF TAHOE BASIN CAMPSITES :

18  
2,066



### c. Regional Campsite Matrix

Regional Campgrounds		
		Sites
Tahoe Basin Campgrounds	Zephyr Cove	150
	NV Beach	54
	SL Campground	157
	Tahoe Valley	413
	Chris Haven	96
	LT KOA	71
	Fallen Leaf	205
	Camp Richardson	145
	Bayview	13
	Emerald Bay	100
	DL Bliss	265
	Meeks Bay	35
	Meeks Bay Marina	37
	Sugar Pine	175
	Kaspian	9
	William Kent	95
	Tahoe State	26
	Lake Forest	20
Total Basin Campsites		2066
Non-Basin Campgrounds	Donner Lake	154
	Goose Meadows	21
	Silver Creek	23
	Granite Flats	5
	Martis Lake	25
Total Campsites		228

RECEIVED

JUL 21 2010

TAHOE REGIONAL  
PLANNING AGENCY

d. Regional Campground Sampling Averages

Sites Per Acre	
Lake Forest	10
Lake Tahoe KOA	15
Campground by the Lake	6
Tahoe Valley Campground	13
Donner Lake	14

## E. Existing Tahoe Basin Campground Photos











## BROCKWAY CAMPGROUND COVERAGE

### CAMPSITES:

TYPE	QTY	SQ. FT.
CAMPERS	92	73,600
TENT & YURT PADS	362	81,450
ECO-SHELTERS	96	104,784

TOTAL 550 259,834

### STRUCTURES:

TYPE	QTY	SQ. FT.
BLDG. LODGE AMENITY	1	12,800
BLDG. POOL	1	12,500
BLDG. MAINTENANCE	1	3,200
BLDG. REGISTRATION	1	1,200
BLDG. RESTROOMS	22	13,300
BLDG. PAVILLION	11	9,350

TOTAL BUILDINGS 37 52,350

### PARKING:

TYPE	QTY	SQ. FT.
CAMPER SPOTS	202	40,400
TENTS/YURTS SPOTS	498	99,600
ECO-SHELTERS SPOTS	144	28,800
AMENITY SPOTS	32	6,400

TOTAL PARKING 876 175,200

### ROADS:

TYPE	SQ. FT.
MAIN ROADS (20' WIDE AND 18' WIDE)	357,540
SECONDARY ROADS (12' WIDE SITE ACCESS)	61,305
EXISTING DIRT ROADS	-36,000

TOTAL ROADS 382,845

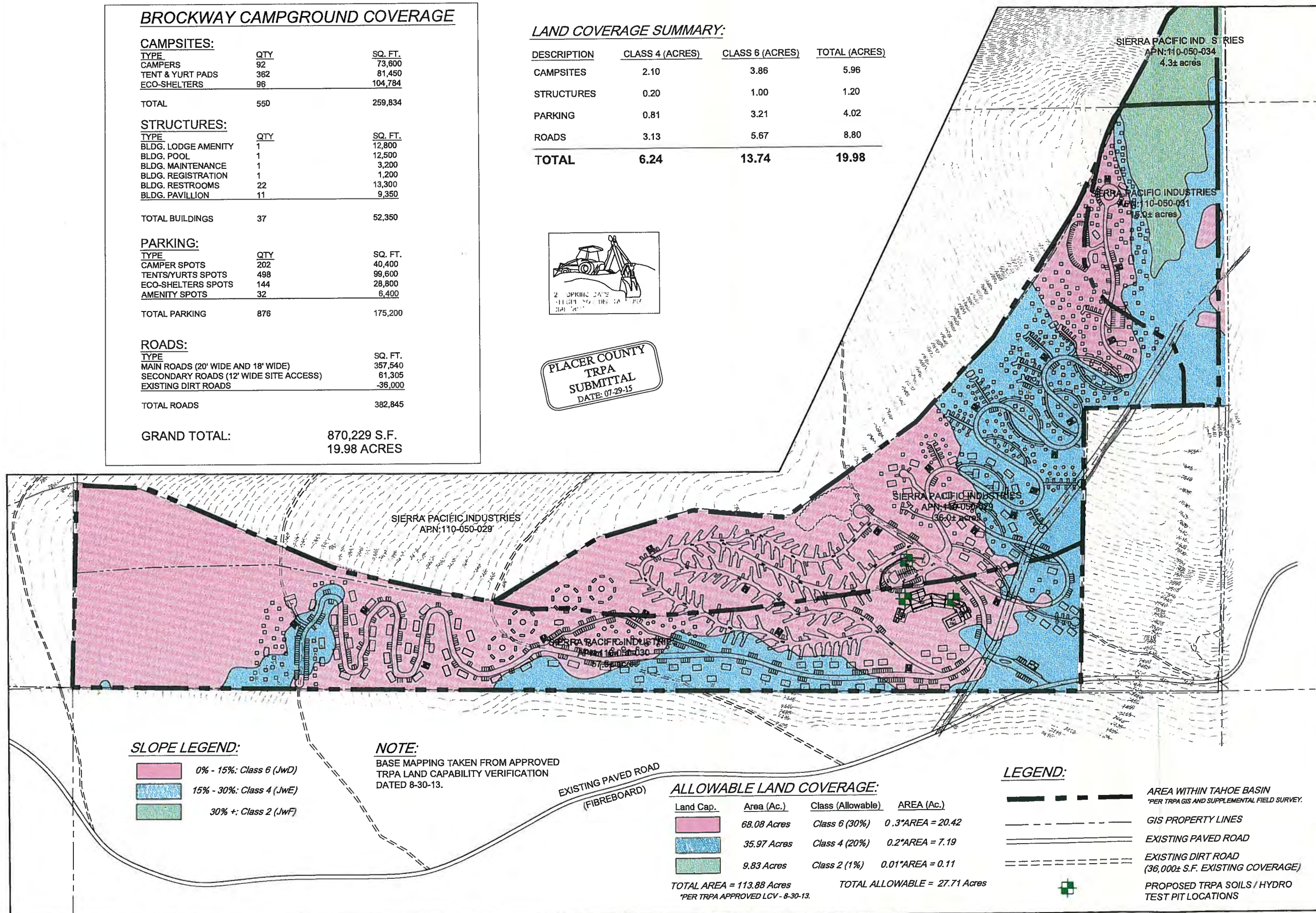
GRAND TOTAL: 870,229 S.F.  
19.98 ACRES

## LAND COVERAGE SUMMARY:

DESCRIPTION	CLASS 4 (ACRES)	CLASS 6 (ACRES)	TOTAL (ACRES)
CAMPSITES	2.10	3.86	5.96
STRUCTURES	0.20	1.00	1.20
PARKING	0.81	3.21	4.02
ROADS	3.13	5.67	8.80
<b>TOTAL</b>	<b>6.24</b>	<b>13.74</b>	<b>19.98</b>



PLACER COUNTY  
TRPA  
SUBMITTAL  
DATE: 07-29-15



### SLOPE LEGEND:

	0% - 15%: Class 6 (JwD)
	15% - 30%: Class 4 (JwE)
	30% +: Class 2 (JwF)

### NOTE:

BASE MAPPING TAKEN FROM APPROVED  
TRPA LAND CAPABILITY VERIFICATION  
DATED 8-30-13.

### ALLOWABLE LAND COVERAGE:

Land Cap.	Area (Ac.)	Class (Allowable)	AREA (Ac.)
	68.08 Acres	Class 6 (30%)	0.3*AREA = 20.42
	35.97 Acres	Class 4 (20%)	0.2*AREA = 7.19
	9.83 Acres	Class 2 (1%)	0.01*AREA = 0.11

TOTAL AREA = 113.88 Acres  
\*PER TRPA APPROVED LCV - 8-30-13.

TOTAL ALLOWABLE = 27.71 Acres

### LEGEND:

	AREA WITHIN TAHOE BASIN *PER TRPA GIS AND SUPPLEMENTAL FIELD SURVEY.
	GIS PROPERTY LINES
	EXISTING PAVED ROAD
	EXISTING DIRT ROAD (36,000± S.F. EXISTING COVERAGE)
	PROPOSED TRPA SOILS / HYDRO TEST PIT LOCATIONS

BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

WELSH & HAGEN  
ASSOCIATES  
ENGINEERING - PLANNING - SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

NOTE:  
This drawing is the property of  
Welsh Hagen Associates, Inc.,  
including all patented and  
patentable features, and/or  
confidential information. Its use  
is conditioned upon the user's  
agreement not to reproduce the  
drawing, in whole or part, nor  
the material described thereon;  
nor to use the drawing for any  
purpose other than specifically  
permitted in writing by  
Welsh Hagen Associates, Inc.



PRELIMINARY  
NOT FOR  
CONSTRUCTION

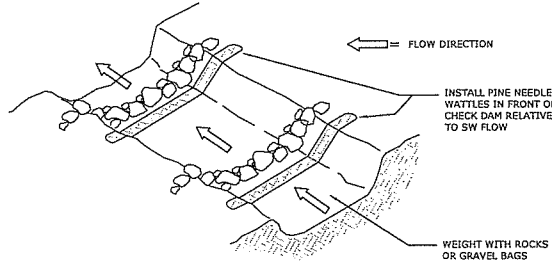
Sheet Title:

LAND  
CAPABILITY  
APPROVED LCV  
PROPOSED  
COVERAGE

Project: 404100  
Drawn By: BAMP  
Checked By: DLH  
Scale: AS-NOTED  
Date: JULY 2015  
Sheet Number:

C11.2

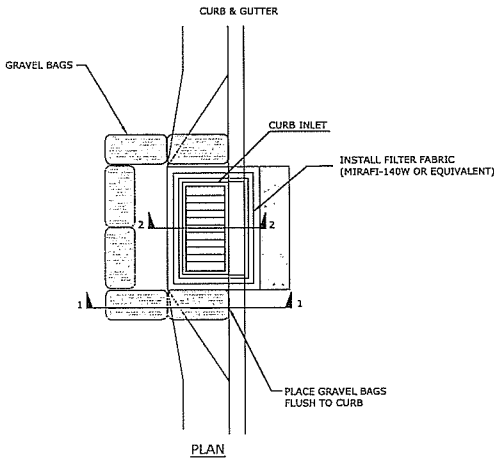




- NOTES:
1. CONSTRUCT CHECK DAMS OF ROCK OR GRAVEL BAGS PLACED ACROSS A NATURAL OR MAN MADE CHANNEL OR DRAINAGE DITCH.
  2. NOT TO BE USED IN LIVE STREAMS.
  3. CHECK DAMS SHALL BE PLACED AT A DISTANCE AND HEIGHT TO ALLOW SMALL POOLS TO FORM BEHIND THEM.
  4. ROCK SHALL BE PLACED INDIVIDUALLY BY HAND OR BY MECHANICAL METHODS.
  5. INSTALL ALONG A LEVEL CONTOUR.
  6. REMOVE SEDIMENT WHEN DEPTH REACHES ONE-THIRD OF THE CHECK DAM HEIGHT.
  7. REMOVE CHECK DAM AND ACCUMULATED SEDIMENT WHEN CHECK DAMS ARE NO LONGER NEEDED.

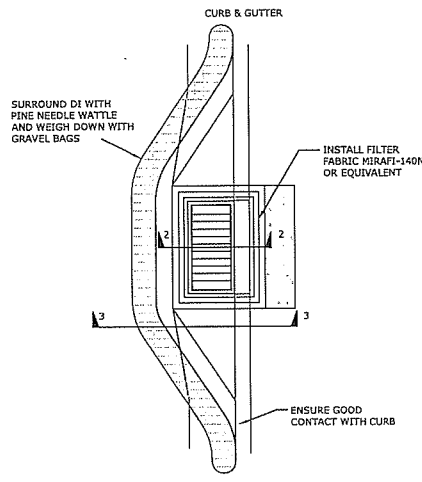
ROCK / FILTER ROLL CHECK DAM

1



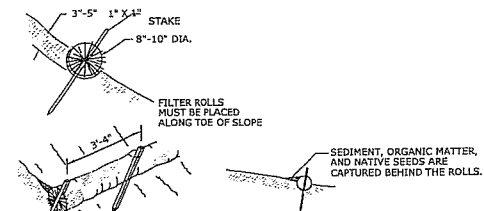
DROP INLET PROTECTION

2



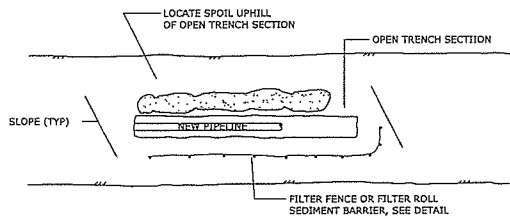
DROP INLET PROTECTION

3



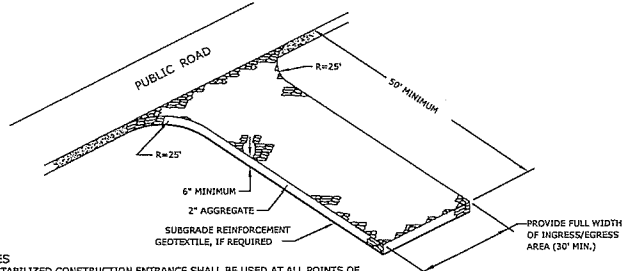
FILTER ROLL DETAIL

4



TYPICAL OPEN TRENCH DETAIL

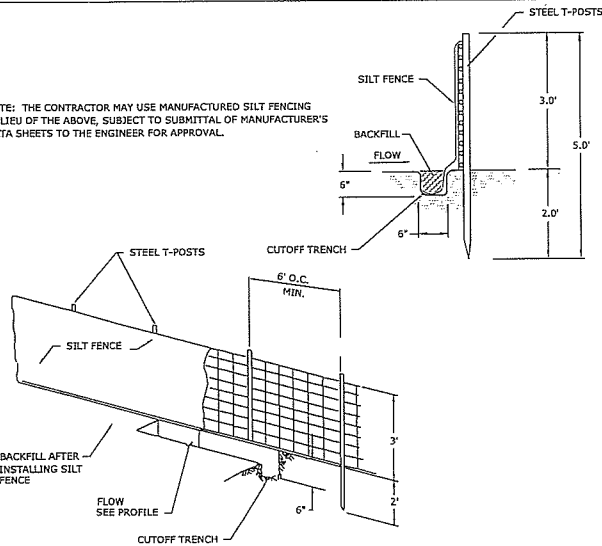
5



CONSTRUCTION ENTRANCE

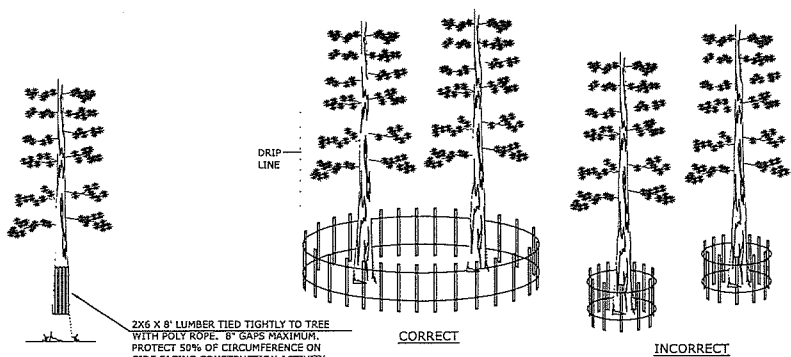
6

NOTE: THE CONTRACTOR MAY USE MANUFACTURED SILT FENCING IN LIEU OF THE ABOVE, SUBJECT TO SUBMITTAL OF MANUFACTURER'S DATA SHEETS TO THE ENGINEER FOR APPROVAL.



SILT FENCE DETAIL

7



TREE PROTECTION FENCING DETAIL

8

INDIVIDUAL TREE PROTECTION

RECORD DRAWINGS

DATE

ENGINEER INITIAL

BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

WELSH & HAGEN  
ASSOCIATES  
ENGINEERING · PLANNING · SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

NOTE:  
This drawing is the property of  
Welsh Hagen Associates, Inc.,  
including all patented and  
patentable features, and/or  
confidential information. Its use  
is conditioned upon the user's  
agreement not to reproduce the  
drawing, in whole or part, nor  
the material described therein;  
not to use the drawing for any  
purpose other than specifically  
permitted in writing by  
Welsh Hagen Associates, Inc.



PRELIMINARY  
NOT FOR  
CONSTRUCTION

Sheet Title:

BMP DETAILS

Project: 404100

Drawn By: BAMF

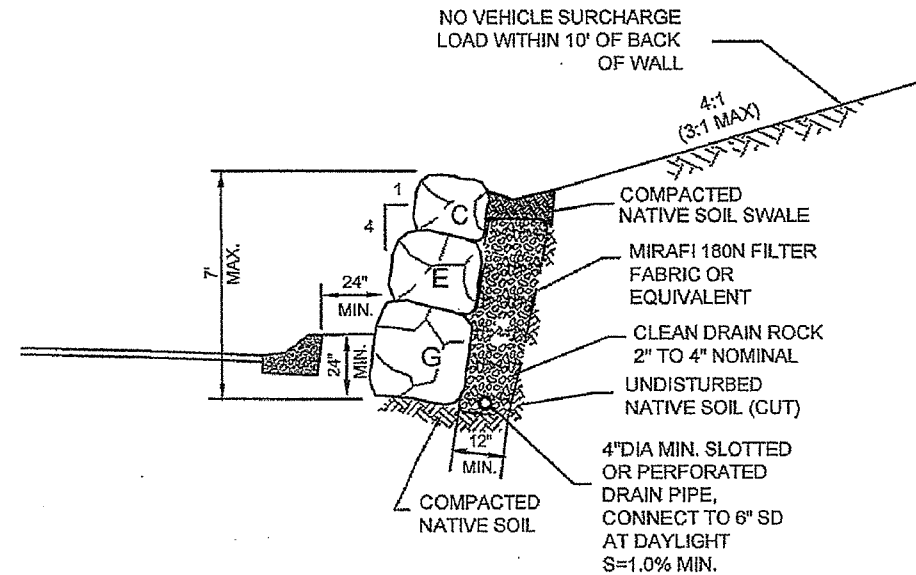
Checked By: DLH

Scale: AS-NOTED

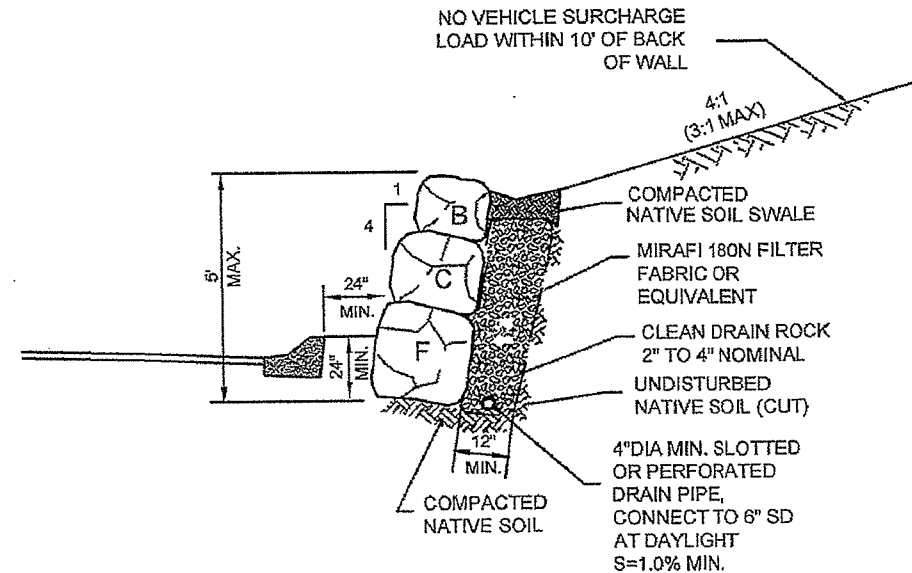
Date: JULY 2015

Sheet Number:

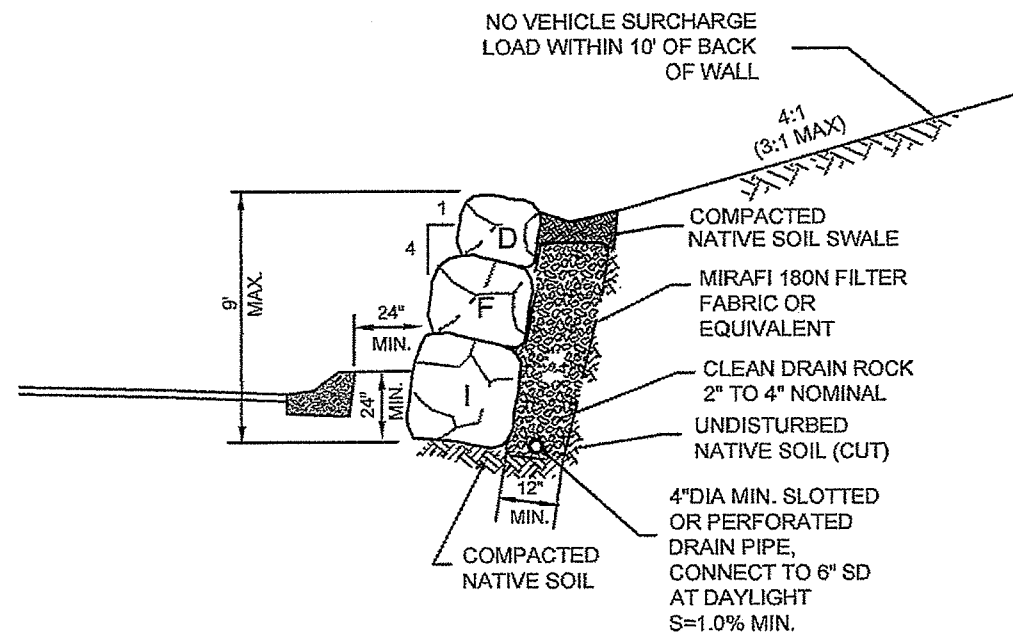
C7



**B** CROSS SECTION FOR WALLS UP TO 7 FEET  
NOT TO SCALE



**A** CROSS SECTION FOR WALLS UP TO 5 FEET  
NOT TO SCALE



**C** CROSS SECTION FOR WALLS UP TO 9 FEET  
NOT TO SCALE

APPROXIMATE ROCK DIMENSIONS					
ROCK	NOMINAL DIAMETER (FEET)	APPROXIMATE WEIGHT	ROCK	NOMINAL DIAMETER (FEET)	APPROXIMATE WEIGHT
A	1'	0.1-0.25 TONS	F	3.5'	2.5-3 TONS
B	1.5'	0.25-0.5 TONS	G	4'	3-4 TONS
C	2'	0.5-1 TONS	H	4.5'	4-5 TONS
D	2.5'	1-2 TONS	I	5'	5-7 TONS
E	3'	2-2.5 TONS	J	5.5'	7-8 TONS

#### ROCK WALL CONSTRUCTION NOTES:

- ROCK WIDTH DIMENSIONS SHOWN IN THE TABLE BELOW (AS MEASURED FROM WALL FACE TOWARD SLOPE) SHALL BE CONSIDERED MINIMUM. ROCK HEIGHT AND RESULTING NUMBER OF COURSES MAY VARY DEPENDING ON MATERIAL AVAILABILITY.
- ROCKS USED SHALL BE COMPETENT, DURABLE, UN-FRACTURED ROCK AND ANGULAR TO SUB-ROUNDED IN SHAPE. ALL ROCKS SHOULD HAVE A MINIMUM SPECIFIC GRAVITY OF 2.5.
- PLACE LONG DIMENSION OF ROCK HORIZONTAL AND PERPENDICULAR TO FACE OF WALL TO PROVIDE MAXIMUM STABILITY.
- ROCKS SHALL BE PLACED SO AS TO AVOID CONTINUOUS JOINT PLANES IN EITHER VERTICAL OR LATERAL DIRECTIONS.
- ROCKS SHOULD DECREASE IN SIZE FROM THE BOTTOM TO THE TOP OF THE WALL.
- DRAINAGE MATERIALS SHOULD CONSIST OF CLEAN, ANGULAR, WELL-GRADED CRUSHED STONE OR QUARRY SPALLS (2- TO 4-INCH) OR OTHER MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER.
- ROCKERY STONE SHALL BE PLACED AS TO:
  - TIP SLIGHTLY INTO THE RETAINED SLOPE.
  - HAVE LONGITUDINAL AXIS OF STONE PERPENDICULAR TO THE FACE OF WALL.
  - BE ARRANGED SO THAT EACH ROCK ABOVE THE FOUNDATION COURSE HAS A 3-POINT BEARING ON THE UNDERLYING ROCKS.
- BEARING ON SMALLER ROCKS WHICH MAY BE USED FOR CHINKING VOIDS IS NOT ACCEPTABLE.
- ROCKERY WALL CONSTRUCTION SHALL BE OBSERVED BY THE DESIGN ENGINEER.

NOTE:  
ROCKERY WALL DESIGN DETAILS FROM HOLDREGE & KULL CONSULTING  
ENGINEERS GEOLOGISTS  
10775 PIONEER TRAIL, SUITE 213  
TRUCKEE, CA 96161  
(530) 587-5156

PLACER COUNTY  
TRPA  
SUBMITTAL  
DATE: 07-29-15



2 WORKING DAYS  
BEFORE YOU DIG CALL USA  
DIAL '811'

RECORD DRAWINGS

DATE

ENGINEER INITIAL

BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

WELSH & HAGEN  
ASSOCIATES  
ENGINEERING - PLANNING - SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

NOTE:  
This drawing is the property of  
Welsh Hagen Associates, Inc.,  
including all patented and  
patentable features, and/or  
confidential information. Its use  
is conditioned upon the user's  
agreement not to reproduce the  
drawing, in whole or part, nor  
the material described thereon;  
nor to use the drawing for any  
purpose other than specifically  
permitted in writing by  
Welsh Hagen Associates, Inc.



**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

Sheet Title:

**ROCK WALL  
DETAILS  
H&K**

Project: 404100

Drawn By: BAMF

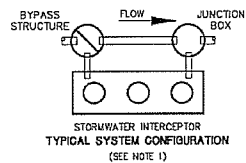
Checked By: DLH

Scale: AS-NOTED

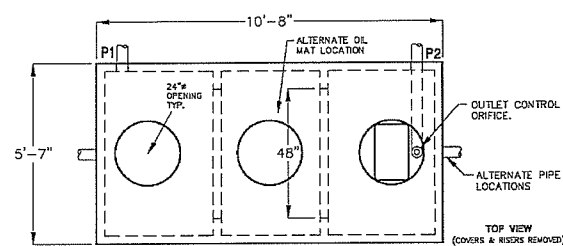
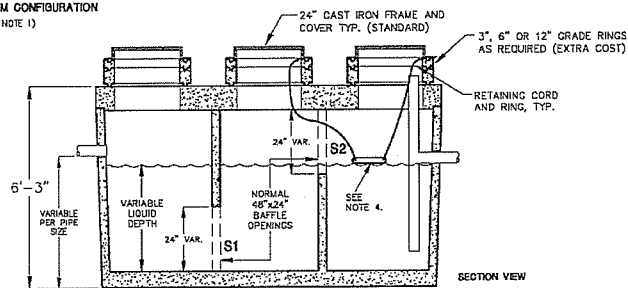
Date: JULY 2015

Sheet Number:

**C13**



## JPHV-1500 HIGH VELOCITY STORMWATER INTERCEPTOR



MODEL JPHV-1500

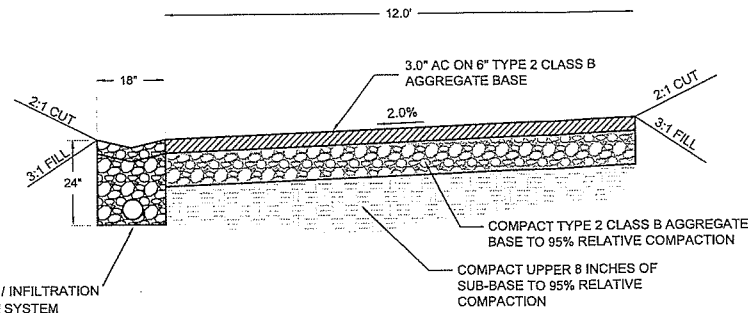
TOTAL TANK CAPACITY	MAXIMUM TREATMENT FLOW (GPM)	RECOMMENDED TREATMENT FLOW (GPM)	RECOMMENDED TREATMENT FLOW (GPM)	RECOMMENDED MIN. NO. OF SORBENT MATS	TANK ACCESS COVERS REQUIRED
1,793 GAL.	48	40	48" ROUND	1	3

- NOTES:
1. BYPASS STRUCTURE AND JUNCTION BOX SHALL BE SIZED ACCORDING TO PIPE SIZES AND FLOW. ALTERNATIVE CONFIGURATIONS AVAILABLE. CONTACT JENSEN PRECAST FOR MORE INFORMATION.
  2. BAFFLE OPENINGS (S1 & S2) SHALL BE SIZED ACCORDING TO FLOW.
  3. ALL EXTERNAL PIPING TO BE SUPPLIED BY OTHERS.
  4. OIL SORBENT MATS TO BE EQUIPPED WITH RETAINING CORD AND RING, SECURED TO OR UNDER FRAME AND COVER, FOR HAND ACCESS BY OTHERS.
  5. DESIGN LOAD: H-20 TRAFFIC FROM 1" TO 6" OF COVER. FOR OTHER DEPTHS, SPECIAL LOADINGS, AND COMPLETE DESIGN INFORMATION, CONTACT JENSEN PRECAST.
  6. MINIMUM GROSS TREATMENT HAZEN'S SURFACE AREA LOADING RATE (SALR) SHALL NOT BE GREATER THAN SIX (6) GALLONS PER MINUTE PER SQUARE FOOT. THE SALR SHALL BE CALCULATED BY DIVIDING THE TREATMENT FREE SURFACE AREA IN SQUARE FEET BY THE DESIGN FLOW RATE IN GALLONS PER MINUTE. NO EXCEPTIONS SHALL BE ALLOWED.

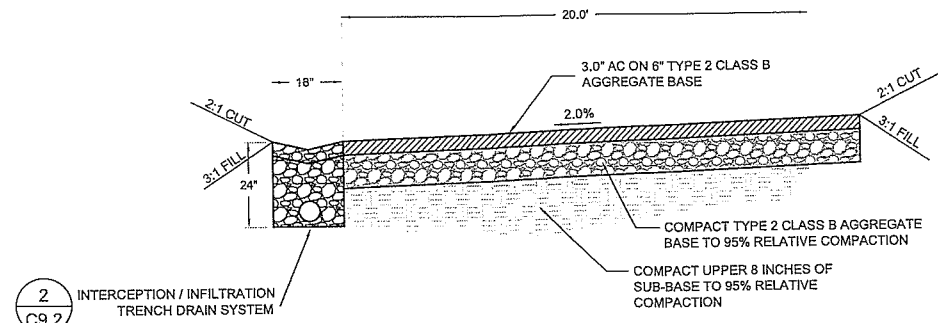
6/13/05  
JPHV1500\_C.dwg  
© 2005 Jensen Precast

**JENSEN  
PRECAST**

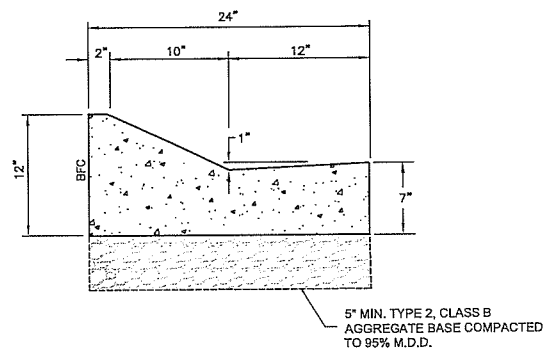
1  
C8.1  
COMBINATION SEWER TRENCH &  
STORM DRAIN TRENCH



5  
C8.1  
TYPICAL ON-SITE CAMP SITE ACCESS ROAD  
N.T.S.



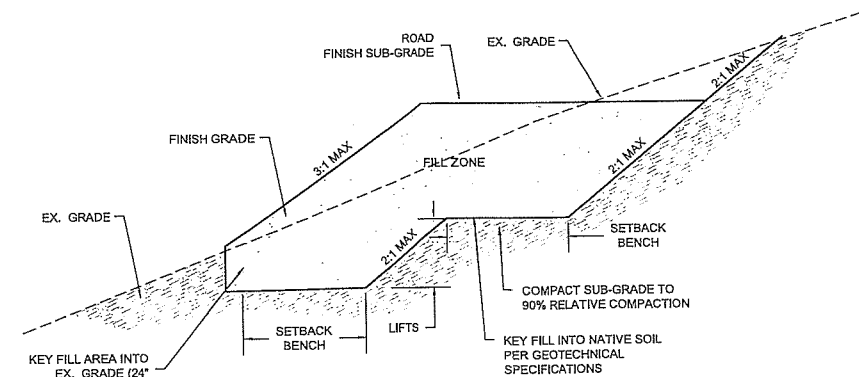
6  
C8.1  
TYPICAL ON-SITE ROAD SECTION  
N.T.S.



### CURB NOTES:

1. LOCATE 1/2" PREMOLDED TRANSVERSE EXPANSION JOINTS OF ASPHALT IMPREGNATED CELOTEX IN CURB AND GUTTER AT 20' INTERVALS.
2. CONCRETE TO CONFORM TO SPECIFICATIONS (WITH 6' AIR ENTRAINMENT)
3. THE MATERIALS AND METHOD OF PLACEMENT SHALL CONFORM TO THE SPECIFICATIONS UNDER SECTION COVERING CONCRETE PLACEMENT.
4. CURB AND GUTTER SHALL BE SPRAYED UNIFORMLY WITH A CLEAR PIGMENTED CURING COMPOUND. THE MATERIAL, METHOD AND RATE OF APPLICATION SHALL CONFORM TO THE SPECIFICATIONS.
5. ALL CURB AND GUTTER SHALL BE WATER TESTED.

4  
C8.1  
MODIFIED ROLLED PCC CURB AND GUTTER  
PARKING LOTS ONLY



3  
C8.1  
SLOPE STABILIZATION  
KEYED FILL SLOPE DETAIL  
N.T.S.



RECORD DRAWINGS

DATE

ENGINEER INITIAL

BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

**WELSH & HAGEN**  
ASSOCIATES  
ENGINEERING - PLANNING - SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

NOTE:  
This drawing is the property of  
Welsh Hagen Associates, Inc.,  
including all patented and  
patentable features, and/or  
confidential information. Its use  
is conditioned upon the user's  
agreement not to reproduce the  
drawing, in whole or part, nor  
the material described thereon;  
nor to use the drawing for any  
purpose other than specifically  
permitted in writing by  
Welsh Hagen Associates, Inc.



**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

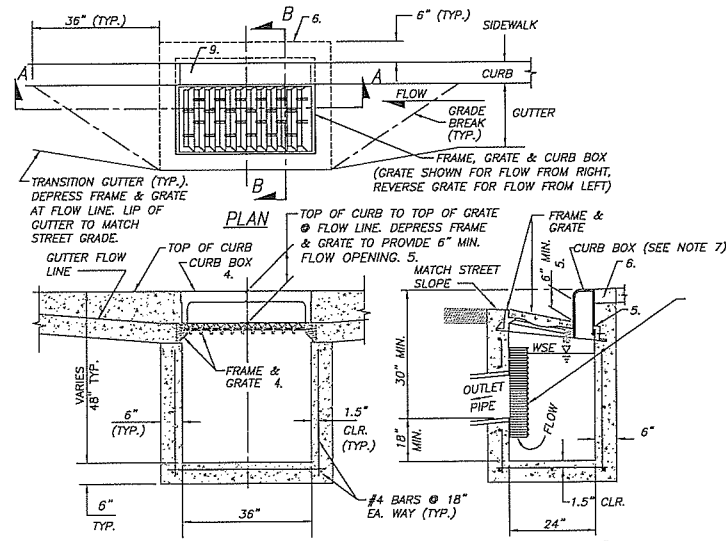
Sheet Title:

**STORM  
DRAINAGE  
DETAILS**

Project: 404100  
Drawn By: BAMF  
Checked By: DLH  
Scale: AS-NOTED  
Date: JULY 2015  
Sheet Number:

**C8.1**

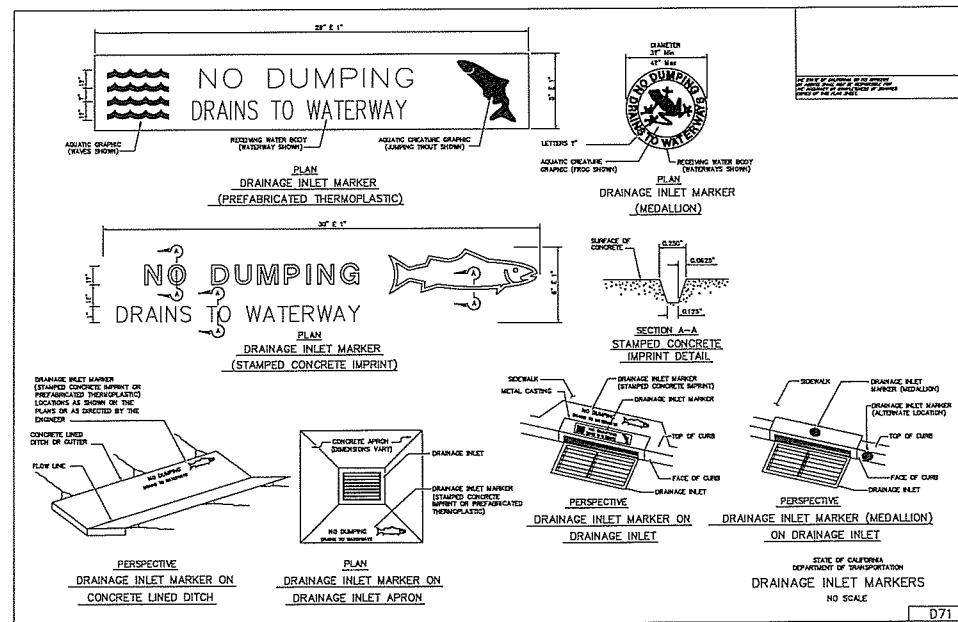




- NOTES:**
1. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH @ 28 DAYS, (CURB AND GUTTER TRANSITION ONLY, ALL UNEXPOSED CONCRETE MAY BE 3000 PSI) MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH A MAX. WATER/CEMENT RATIO OF 0.43, AIR ENTRAINMENT 6%  $\pm$  1.5%, SLUMP AT 1 TO 4 INCHES. ALL MATERIALS SHALL CONFORM TO SSPWC SECTION 202.
  2. REINFORCING STEEL SHALL BE GRADE 40 AND HAVE 1.5" MINIMUM CLEAR COVER.
  3. CONCRETE STRUCTURE MAY BE A PRE-CAST CONCRETE UNIT UPON APPROVAL OF THE CITY ENGINEER. BASE OF PRE-CAST CONCRETE UNIT SHALL BE PLACED ON 6" COMPACTED DRAIN ROCK.
  4. FRAME SHALL BE NEENAH R-3294, R-3295 OR R-3067 SINGLE CURB UNIT WITH A TYPE I "VANE GRATE" AND CURB BOX, SOUTH BAY FOUNDRY VANE GRATE SBF 1947 OR APPROVED EQUAL, INSTALLED WITH PROPER FLOW DIRECTION.
  5. TILT FRAME & GRATE AS REQUIRED TO ATTAIN 6" MIN. FLOW OPENING & INSTALL DURABLE SHIMS BETWEEN THE CURB BOX & FRAME AS REQUIRED TO MATCH CURB BOX TO TOP OF CURB AND FACE OF CURB (SEE SECTION B-B).
  6. CONCRETE SHALL BE PLACED AS SHOWN WHEN NOT LOCATED IN A SIDEWALK.
  7. CURB BOX SHALL BE EMBOSSED OR STAMPED WITH THE WORDS "NO DUMPING DRAINS TO WATERWAY". PAINTING THE WORDS SHALL NOT A BE A SUBSTITUTION. (SEE CALTRANS D71)
  8. DEBRIS AND SEDIMENT CONTROL DEVICE SHALL BE USED IN ALL DROP INLET APPLICATIONS.

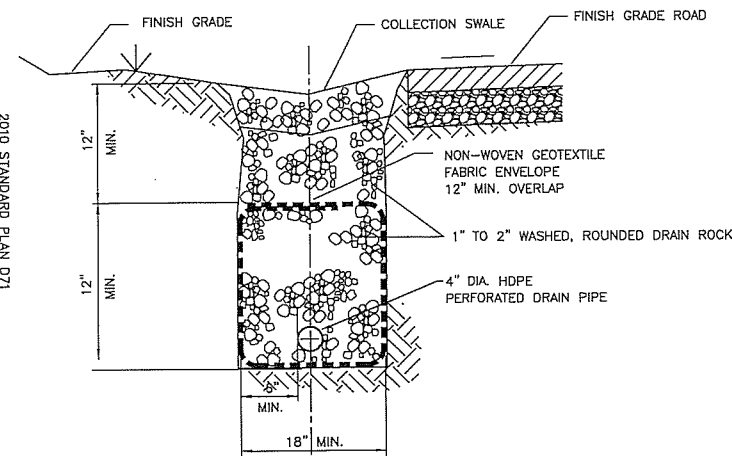
NOTE:  
SAND/OIL SEPARATOR TO BE ATTACHED TO DROP INLET WALL, PER ORIGINAL DETAIL, WITH (4) 3/8" DIA. REDHEADS.

1 CATCH BASIN TYPE 4R W/ OIL & SEDIMENT SEPARATOR  
C8.2 N.T.S.

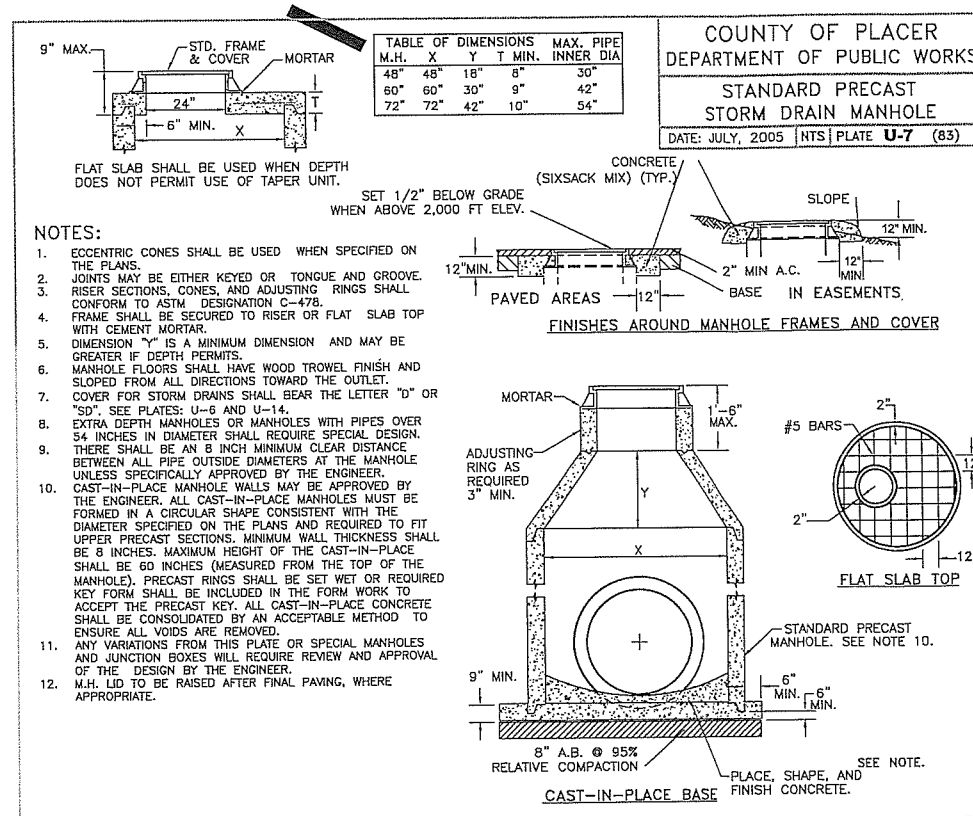


CATCH BASIN GRATE MARKINGS DETAIL  
C8.2 N.T.S.

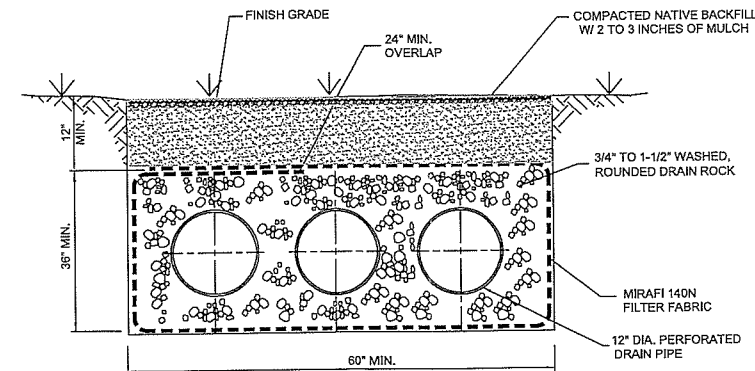
2010 STANDARD PLAN D71



INTERCEPTION / INFILTRATION TRENCH DRAIN SYSTEM  
N.T.S. 2 C8.2



5 STORM DRAIN MANHOLE  
C8.2 N.T.S.



NOTE:  
ENDS OF INFILTRATION TRENCHES SHALL ALSO BE WRAPPED WITH MIRAFI 140N FILTER FABRIC WITH A 24\"/>

6 DRY WELL INFILTRATION TRENCH  
N.T.S. C8.2



RECORD DRAWINGS

DATE

ENGINEER INITIAL

BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

WELSH & HAGEN  
ASSOCIATES  
ENGINEERING - PLANNING - SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

NOTE:  
This drawing is the property of Welsh Hagen Associates, Inc., including all patented and patentable features, and/or confidential information. Its use is conditioned upon the user's agreement not to reproduce the drawing, in whole or part, nor the material described therein; nor to use the drawing for any purpose other than specifically permitted in writing by Welsh Hagen Associates, Inc.



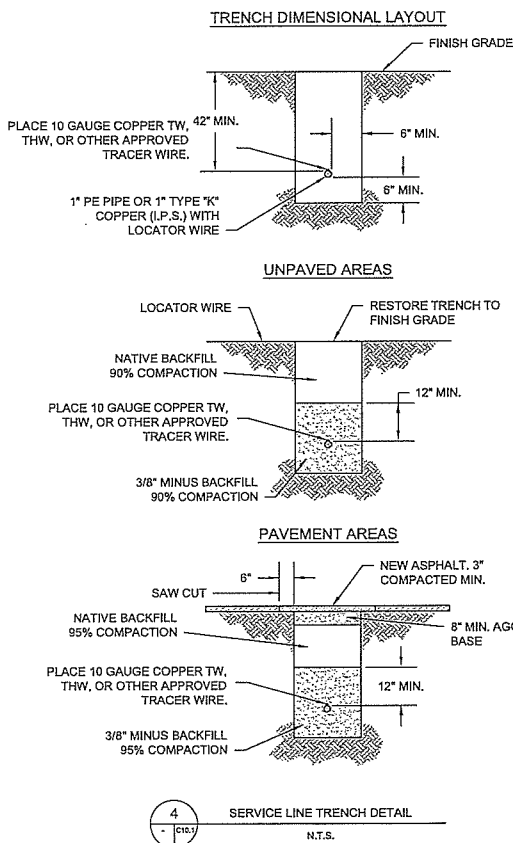
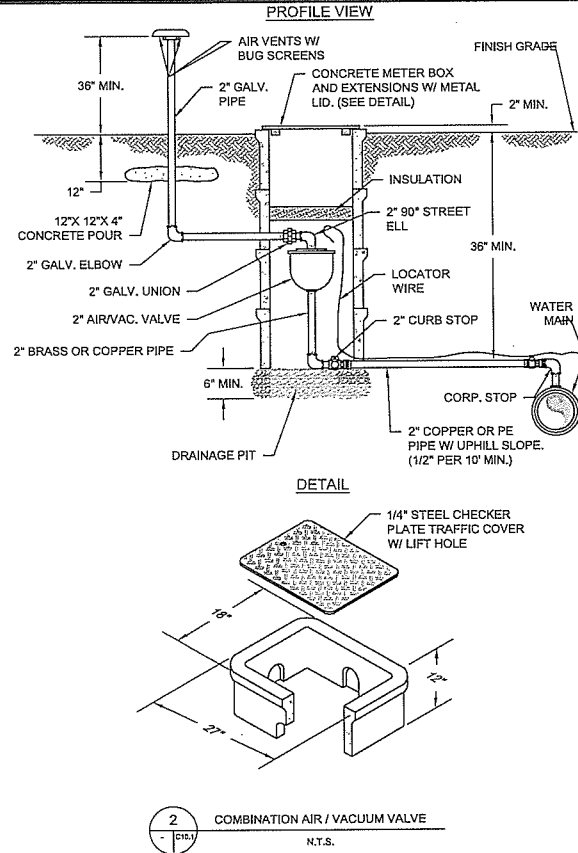
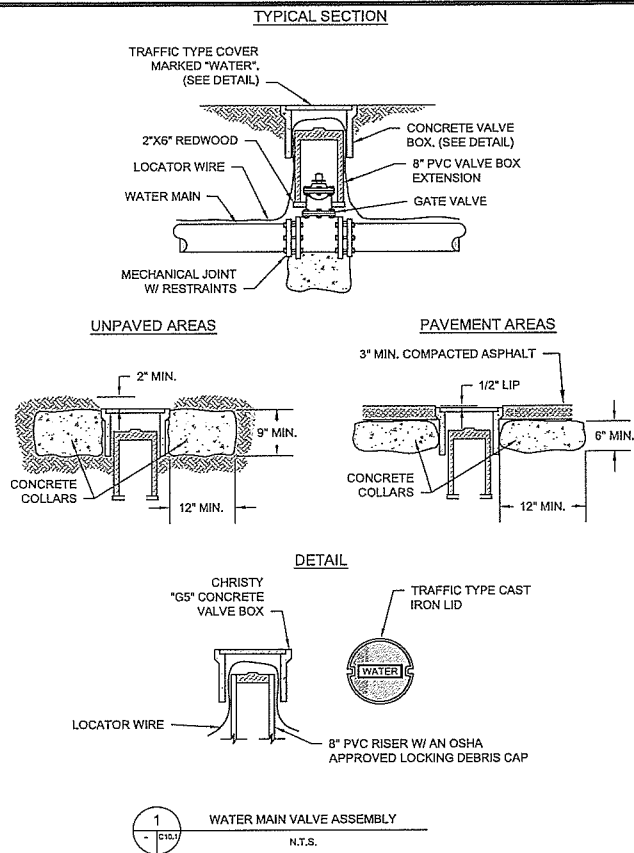
PRELIMINARY  
NOT FOR  
CONSTRUCTION

Sheet Title:

STORM  
DRAINAGE  
DETAILS

Project: 404100  
Drawn By: BAMB  
Checked By: DLH  
Scale: AS-NOTED  
Date: JULY 2015  
Sheet Number:

C8.2



**PLAN - HORIZONTAL THRUST BLOCK**  
NO SCALE

**ELEV. - VERTICAL THRUST BLOCK**  
NO SCALE

PIPE DIA. (in.)	HORIZONTAL THRUST BLOCK BEARING AREA (S.F.)				VERTICAL THRUST BLOCK VOL. OF CONCRETE (C.Y.)			
	$\Delta = 11-1/4^\circ$	$\Delta = 22-1/2^\circ$	$\Delta = 45^\circ$	$\Delta = 90^\circ$	$\Delta = 11-1/4^\circ$	$\Delta = 22-1/2^\circ$	$\Delta = 45^\circ$	$\Delta = 90^\circ$
4 & 6	1.0	1.1	2.2	4.0	0.3	0.5	1.1	2.0
8	1.0	1.9	3.7	6.9	0.5	0.9	1.8	3.4
10	1.6	3.1	6.2	11.4	0.8	1.6	3.0	5.6

**NOTES:**

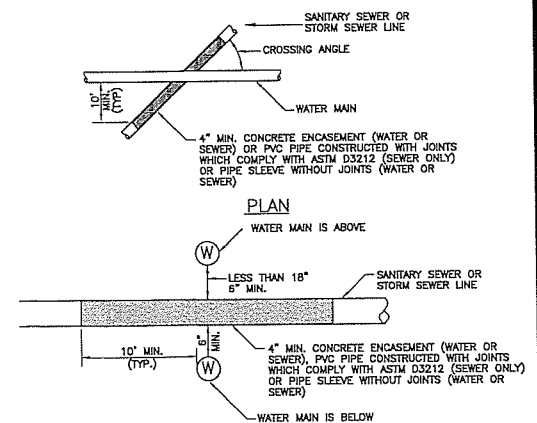
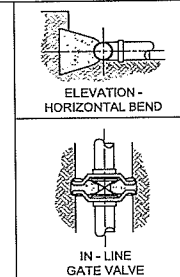
1. TEST PRESSURE = 150 PSI, SOIL BEARING PRESSURE = 2000 LBS/S.F.. USING HIGHER PRESSURE OR LOWER SOIL BEARING PRESSURE SHOULD BE ADJUSTED ACCORDINGLY, SUBJECT TO APPROVAL BY THE AGENCY ENGINEER.
2. THRUST BLOCKS TO BE CONSTRUCTED OF CLASS "B" CONCRETE, SUBJECT TO APPROVAL BY THE AGENCY ENGINEER.
3. THRUST BLOCKS TO BE PLACED AGAINST UNDISTURBED SOIL.
4. JOINTS, FACE OF PLUGS, NUTS AND BOLTS TO BE KEPT CLEAR OF CONCRETE AND MUST BE ABLE TO BE OPERATED WITHOUT DISTURBING THRUST BLOCK.
5. EXPOSED REBAR TO BE SHAPED WITH 90° BEND AT END, COATED WITH TWO COATS OF KOPPERS 505, TNEC 46-450, AMERON OR EQUAL 15 MILS EACH COAT.

**7 THRUST BLOCK DETAILS**  
N.T.S.

PIPE DIA. (in.)	HORIZONTAL THRUST BLOCK BEARING AREA (S.F.)			
	TEE	TEE W/ CAP OR BLD. FL.	CROSS	END OF LINE
4 & 6	2.8	2.8	2.8	2.8
8	4.9	4.9	4.9	4.9
10	8.1	8.1	8.1	7.7

**REBAR SIZES (EPOXY COATED OR WRAPPED)**

PIPE SIZE	$\Delta$	REBAR
4 - 10	0 - 90°	#5



**NOTES:**

1. WHERE THE WATER MAIN IS BELOW THE SEWER LINE, WHERE THE WATER MAIN IS LESS THAN 18 INCHES CLEAR ABOVE THE SEWER LINE OR WHERE THE HORIZONTAL SEPARATION CANNOT BE MAINTAINED, THE AREA OF CROSSING MUST BE CONSTRUCTED IN SUCH A MANNER THAT:
  - A. THE SEWER MAIN IS COMPOSED OF MATERIALS THAT COMPLY WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND THE AMERICAN WATER WORKS ASSOCIATION STANDARDS.
  - B. THE SEWER MAIN CONSISTS OF PVC WHICH IS CONSTRUCTED WITH JOINTS THAT COMPLY WITH STANDARD D3212 OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS.
  - C. THE SEWER MAIN OR WATER MAIN IS TOTALLY ENCASED IN AT LEAST 4 INCHES OF CEMENT SLURRY FOR A DISTANCE OF AT LEAST 10 FEET ON EACH SIDE OF THE POINT OF CROSSING; OR
  - D. THE SEWER MAIN OR WATER MAIN IS INSTALLED IN A PIPE SLEEVE THAT EXTENDS, WITHOUT JOINTS, AT LEAST 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.

**6 WATERLINE PROTECTION AT SEWER CROSSING**  
N.T.S.

RECORD DRAWINGS

DATE

ENGINEER INITIAL

PLACER COUNTY  
TRPA  
SUBMITTAL  
DATE: 07-29-15



BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

WELSH & HAGEN  
ASSOCIATES  
ENGINEERING - PLANNING - SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

**NOTE:**  
This drawing is the property of Welsh Hagen Associates, Inc., including all patented and patentable features, and/or confidential information. Its use is conditioned upon the user's agreement not to reproduce the drawing, in whole or part, nor the material described therein; nor to use the drawing for any purpose other than specifically permitted in writing by Welsh Hagen Associates, Inc.



**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

Sheet Title:

**UTILITY DETAILS  
(WATER)**

Project: 404100

Drawn By: BAMF

Checked By: DLH

Scale: AS-NOTED

Date: JULY 2015

Sheet Number:

**C9.1**





# **BROCKWAY CAMPGROUND REVEGETATION SPECIFICATIONS**

## **A. GENERAL**

CONTRACTED WORK SHALL BE CONDUCTED AND/OR OVERSEEN BY A LICENSED CONTRACTOR AND INSPECTED BY THE OWNER. THE CONTRACTOR SHALL PERFORM ALL REVEGETATION WORK AS SPECIFIED HEREIN AND IN ACCORDANCE WITH THE PROVISIONS OF THESE REVEGETATION SPECIFICATIONS AND THE IMPROVEMENT PLANS. THE REVEGETATION WORK SHALL CONSIST OF ALL SITE PREPARATION ASSOCIATED WITH THE REVEGETATION TREATMENTS AND SHALL INCLUDE TEMPORARY EROSION CONTROL, SEEDBED PREPARATION, APPLICATION OF TOPSOIL, APPLICATION OF SOIL AMENDMENTS, SEEDING, AND MULCHING. VEGETATIVE COVER SHALL BE ACHIEVED ACCORDING TO THE PERFORMANCE STANDARDS INCLUDED IN THIS DOCUMENT. ALL DISTURBED AREAS SHALL BE STABILIZED OR REVEGETATED.

## **B. ASSUMPTIONS**

- DURING CLEARING AND GRUBBING, TOPSOIL WILL BE STOCKPILED FOR RE-USE IN THE PROJECT AREA. THIS TASK WILL BE PERFORMED BY OTHERS.
- WOODCHIPS AND/OR TUB GRINDINGS WILL BE STOCKPILED WITHIN THE PROJECT AREA BY OTHERS TO BE USED, AS NEEDED, FOR EROSION CONTROL AND REVEGETATION.
- ALL WORK MUST BE COMPLETED BY OCTOBER 15, 2013. THE CONTRACTOR SHALL PROVIDE A SCHEDULE TO THE OWNER WITH BID SUBMITTAL.
- ALL REVEGETATION AND EROSION CONTROL MATERIALS MUST BE CERTIFIED "WEED-FREE".

## **C. GENERAL INSTALLATION OF TREATMENTS**

- SOIL AMENDMENT:** SOIL AMENDMENTS WILL BE PLACED ON THE SOIL SURFACE TO A DEPTH OF 1.0", AS SPECIFIED BY THE OWNER. SOIL AMENDMENT SHALL CONSIST OF WOODY COMPOST, AGED WOODCHIPS OR LOCALLY DERIVED WOODCHIPS OR TUB GRINDINGS. WOODCHIPS AND/OR TUB GRINDINGS FROM TREE REMOVAL ACTIVITIES WILL BE AVAILABLE WITHIN THE PROJECT AREA TO BE TRANSPORTED BY THE CONTRACTOR FOR APPLICATION.
- SOIL LOOSENING:** FOLLOWING SOIL AMENDMENT APPLICATION, TOPSOIL SHALL BE APPLIED TO THE SURFACE AND THE SOIL SHALL BE TILLED TO AN AVERAGE DEPTH OF 12" (+/-), THROUGH THE TILLING PROCESS, THE SOIL AMENDMENT AND TOPSOIL WILL BE MIXED INTO THE SOIL WITH A HIGHER CONCENTRATION OF AMENDMENT MATERIAL AND TOPSOIL TOWARD THE SURFACE. SOIL SHALL BE TILLED WITH AN EXCAVATOR WITH A BUCKET ABLE TO REACH AND MIX TO THE SPECIFIED DEPTH. SOIL TILLING DEPTH SHALL VARY LEAVING THE SUBSURFACE IN A SCALLOPED CONFIGURATION. SOIL SURFACE WILL BE LEFT IN AN UNEVEN CONDITION WITH 1-10" OF SURFACE RELIEF OVER A 100 SQ. FT. AREA. THE SOIL SHALL BE COMPLETELY LOOSENED SO THAT NO CLUMPS LARGER THAN 6" IN DIAMETER REMAIN. AFTER TILLING, NO VEHICLE TRAVEL SHALL BE ALLOWED ON THE SURFACE IN ORDER TO AVOID COMPACTION AND MAINTAIN AN APPROXIMATE 12" DEPTH SOIL PENETRATION WITH A CONE PENETROMETER.
- ORGANIC, SLOW RELEASE FERTILIZER:** APPLY BIOSOL 6-1-3 (OR EQUIVALENT) AT A RATE OF 2000 LBS/AC. FERTILIZER AND SEED MAY BE APPLIED CONCURRENTLY.
- SEED:** APPLY REVEGETATION SEED MIX AT APPROXIMATELY 75 LBS/ACRE PLS (IF HAND SEEDING) OR 100 LBS/ACRE PLS (IF HYDRAULIC APPLICATION). MOUNTAIN MIX, OBTAINED FROM COMSTOCK SEED, 917 HWY 88, GARDNERVILLE, NV 89410, 775-265-0090.

SEED SHALL BE UNIFORMLY BROADCAST WITH HAND-HELD SEEDERS OR HYDRAULICALLY WITH OTHER MATERIALS. IF BROADCAST BY HAND METHODS, SEED AND FERTILIZER SHALL THEN BE RAKED LIGHTLY INTO THE SOIL IN ORDER TO ATTAIN GREATER SEED-SOIL. REGARDLESS OF THE METHOD OF APPLICATION, 95% OF SEED MUST HAVE DIRECT CONTACT WITH THE SOIL. CARE SHALL BE TAKEN NOT TO BURY THE SEED MORE THAN 1/8" BELOW THE SOIL SURFACE. SEED SHALL NOT BE LEFT UNCOVERED MORE THAN 24 HOURS UNLESS OTHERWISE APPROVED BY THE OWNER. SEEDING SHALL NOT OCCUR UNDER CONDITIONS THAT WOULD ALLOW THE SEED TO BECOME WINDBORNE (GREATER THAN 5 MPH MAXIMUM WIND SPEED).

PLS LBS/AC	VARIETY & SPECIES
26.00	BROME CALIFORNIA SIERRA
9.00	SQUIRRELTAIL
13.00	WILDRYE BLUE HIGH ELEVATION
9.00	FESCUE IDAHO
8.60	WHEATGRASS SLENDER REVENU
0.50	GOOSEBERRY SIERRA
2.50	BITTERBRUSH
0.20	CEANOTHUS VELUTINUS
0.15	CURRENT WAX
5.50	WILDFLOWER MIX - SIERRA
1.00	DAISY SHASTA
75.00	

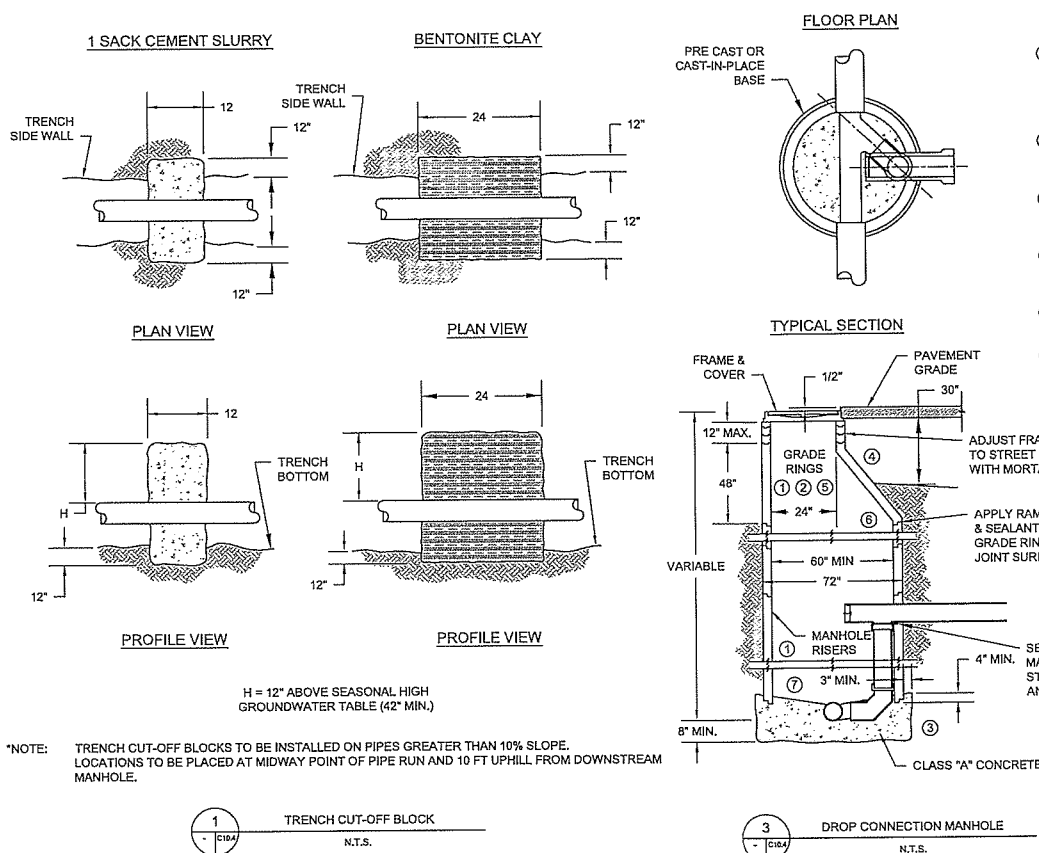
ALL SEED SHALL CONFORM TO ALL LAWS AND REGULATIONS PERTAINING TO THE SALE AND SHIPMENT OF SEED RECORDED BY THE CALIFORNIA FOOD AND AGRICULTURAL CODE OF 1982, REGULATIONS OF 1983, AND THE FEDERAL SEED ACT. ALL SEED MUST BE TESTED WITHIN 1 YEAR PRIOR TO APPLICATION DATE. SEED TAGS MUST REFLECT THE MOST RECENT TEST DATE. SUBMIT ORIGINAL SEED TESTS BY LOT NUMBER TO THE OWNER FOR APPROVAL PRIOR TO MIXING AND SUBSEQUENT PLACEMENT. WEED SEED SHALL NOT EXCEED 0.50% OF THE PURE LIVE SEED SPECIFIED AND SHALL NOT INCLUDE ANY SEED OF CHEATGRASS, (BROMUS TECTORUM) OR SWEET CLOVERS (MELILLOTUS OFFICINALIS, M. ALBA). CROP SEED SHALL NOT EXCEED 0.50%

SEED TAGS SHALL SHOW THE FOLLOWING INFORMATION:

SCIENTIFIC NAME  
COMMON NAME  
LOT NUMBER  
PERCENT PURITY  
PERCENT GERMINATION, INCLUDING HARD AND DORMANT SEED  
PERCENT WEED SEED  
ORIGIN  
REQUESTS FOR SUBSTITUTE SPECIES, AND/OR VARIETIES MUST BE SUBMITTED IN WRITING. WRITTEN APPROVAL FROM THE OWNER IS REQUIRED FOR ALL SUBSTITUTIONS.

- MULCH:** MULCH WILL CONSIST OF PINE NEEDLES OR WOODCHIPS. MULCH WILL BE APPLIED 1" THICK TO A CONDITION WHERE AT LEAST 85% OF THE GROUND SURFACE IS COVERED AND NOT VISIBLE TO THE EYE. MULCH WILL BE APPLIED BY BLOWER OR BY HAND. IN ADDITION TO THE USE OF CHIPPED WOODY MATERIAL AS MULCH DURING CLEARING AND GRUBBING, LARGER BRANCHES SHALL BE SALVAGED FOR USE AS MULCH. BRANCHES AND OTHER DEBRIS SHALL BE SCATTERED RANDOMLY AND IN AN UNEVEN FASHION FOLLOWING ALL SOIL TREATMENTS. DIAMETER OF MATERIAL SHALL NOT EXCEED 1.5".
- WATTLES:** WATTLES SHALL BE INSTALLED PER IMPROVEMENT PLANS. WATTLE LAYOUT SHALL BE FIELD FIT BY OWNER. WATTLES SHALL BE STRAW-FILLED OR PINE-NEEDLE FILLED TUBES OF FLEXIBLE NETTING MATERIAL. IF MADE OF STRAW, THEY SHALL BE A MACHINE-PRODUCED TUBE OF COMPACTED RICE STRAW THAT IS CERTIFIED WEED FREE FORAGE. THE NETTING SHALL CONSIST OF SEAMLESS, HIGH-DENSITY POLYETHYLENE AND ETHYL VINYL ACETATE AND CONTAIN ULTRA VIOLET INHIBITORS. LOGS SHALL AVERAGE 8.5" IN DIAMETER AND WEIGH 2.5 LBS/LINEAL FT. USE EARTH SAVER RICE STRAW WATTLES OR APPROVED EQUAL.  
A TRENCH 2"-4" (+/-) DEEP WITH A WIDTH EQUAL TO THE DIAMETER OF THE WATTLE MUST BE DUG INTO THE CONTOUR WHERE WATTLES WILL BE PLACED. WATTLES SHALL BE PLACED IN THE TRENCH SO THAT SOIL CONTACTS THE ENTIRE LOWER WATTLE SURFACE SUCH THAT RUNOFF CANNOT RUN UNDER OR AROUND THE WATTLES. STAKES SHALL BE DRIVEN THROUGH THE WATTLES TO SECURE THE WATTLES. DRIVE STAKES AT THE END OF EACH WATTLE AND SPACE APPROXIMATELY 4 FT (+/-) ON CENTER. ENSURE THAT ADJACENT WATTLES ARE OVERLAPPED AT LEAST 4". INSTALL WATTLES ALONG A LEVEL CONTOUR. AT THE END OF THE RUN OF WATTLES, TURN THE ENDS OF THE WATTLE UP SLOPE TO PREVENT RUNOFF FROM GOING AROUND THE WATTLE.

- WATERBARS:** EXISTING WATERBARS ON SKI TRAILS AND ROADWAYS SHALL BE RESTORED. WATERBARS SHALL BE INSTALLED PER IMPROVEMENT PLANS AND FIELD FIT BY OWNER.



## **D. TREATMENT SPECIFICATIONS BY REVEGETATION AREA**

**GRADED AREAS**  
GRADED AREAS SHALL RECEIVE FULL TREATMENT. PRIOR TO CONSTRUCTION, DUFF AND TOPSOIL WILL BE SALVAGED. FOLLOWING CONSTRUCTION, DUFF AND TOPSOIL WILL BE RE-SPREAD OVER THE AREA. THIS SPREADING WILL TAKE PLACE AFTER ANY SOIL AMENDMENT IS PLACED AND MIXED IN. ALL AREAS SHALL BE LOOSENEED TO 12+/- INCHES. THIS CAN BE ACCOMPLISHED EITHER BY TILLING FOLLOWING CONSTRUCTION OR BY LEAVING SOIL UNCOMPACTED FOLLOWING CONSTRUCTION. FERTILIZATION, SEEDING AND MULCHING SHALL BE PERFORMED AS SPECIFIED ABOVE. WATERBARS AND WATTLES SHALL BE PLACED ON SKI RUNS AND ROADWAYS AS SPECIFIED BY THE IMPROVEMENT PLANS AND FIELD FIT BY OWNER.

**STAGING AREAS AND TEMPORARY ACCESS ROADS**  
STAGING AREAS AND TEMPORARY ACCESS ROADS WILL BE RESTORED. LOOSEN COMPACTED SOILS TO 12+/- INCHES. APPLY SEED MIX AND SOIL AMENDMENTS AND INCORPORATE TO A DEPTH OF 0.5". APPLY WOODCHIP MULCH OR PINE NEEDLES TO ACHIEVE 85% COVER.

**TEMPORARY PROTECTION, WINTERIZATION**  
THE AREA SHALL BE STABILIZED BY APPLYING A LAYER OF WOOD CHIPS OR PINE NEEDLE MULCH AT LEAST ONE INCH THICK.

WOOD FIBER MULCH AND TACKIFIER MAY ALSO BE UTILIZED FOR TEMPORARY STABILIZATION. MIX WOOD FIBER MULCH AND TACKIFIER WITH A HYDROSEEDER. EVENLY APPLY THE MIXTURE IN ACCORDANCE WITH THE FOLLOWING:

WOOD-CELLULOSE FIBER MULCH: 500 LBS/ACRE  
TACKIFIER: 150 LBS/ACRE  
WATER: AS NEEDED

## **E. SUBMITTALS**

SUBMIT PROOF OF PURCHASE/ORDERS FOR MATERIALS WITHIN 30 DAYS OF THE CONTRACT AWARD TO THE OWNER. PROPOSED SUBSTITUTIONS MUST BE SUBMITTED IN WRITING FOR APPROVAL BY THE OWNER. SUBMIT MATERIAL SAMPLES OR LABELS FOR THE FOLLOWING MATERIALS:

- CONSTRUCTION SCHEDULE AND ORDER OF WORK
- SEED
- FERTILIZER
- MULCH MATERIAL (IF OBTAINED OFFSITE)
- RICE STRAW SEDIMENT LOGS

## **F. IMPLEMENTATION INSPECTIONS**

EACH STEP OF THE TREATMENT PROCESS SHALL BE INSPECTED PRIOR TO BEGINNING THE NEXT TREATMENT STEP. THE CONTRACTOR SHALL INFORM THE OWNER JUST PRIOR TO COMPLETION OF EACH STEP AND REQUEST AN INSPECTION. THE CONTRACTOR SHALL NOT BEGIN THE NEXT STEP UNTIL THE PREVIOUS STEP HAS BEEN INSPECTED AND APPROVED BY THE REVEGETATION INSPECTOR. THE STEPS SHALL BE AS FOLLOWS:

STEP	REQUIREMENT	IF NOT MET
SOIL AMENDMENT APPLICATION	1" DEPTH	APPLY ADDITIONAL AMENDMENT
TOPSOIL APPLICATION	3" DEPTH (WHERE AVAILABLE)	APPLY ADDITIONAL TOPSOIL
SOIL PREPARATION	12" WITH SURFACE RELIEF OF 6" IN 24"	RE-TILL AND/OR SMOOTH SURFACE
SEED	75#/AC OR 100#/AC (IF HYDRAULIC APPLICATION), APPROVED MIX	RE-SEED
FERTILIZER	2000#/AC, APPROVED BRAND	RE-FERTILIZE
MULCH	PINE NEEDLES OR WOODCHIPS, 1", 85% TOTAL COVER	ADD MULCH OR REMULCH

## **G. PERFORMANCE STANDARD AND ACCEPTANCE**

REVEGETATED AREAS WILL BE INSPECTED AT COMPLETION OF INSTALLATION OF EACH STEP AND A FINAL INSPECTION SHALL BE DONE WHEN ALL STEPS ARE COMPLETED. WORK SHALL BE ACCEPTED SUBJECT TO COMPLIANCE WITH SPECIFIED MATERIALS AND INSTALLATION REQUIREMENTS. FOR ONE FULL GROWING SEASON AFTER PLANTING, CONTRACTOR SHALL GUARANTY 85% COVER BY MULCH. IN THE YEAR FOLLOWING TREATMENT, SEEDING SPECIES SHALL MAKE UP AT LEAST 15% OF THAT TOTAL COVER. THERE SHALL NO SIGNIFICANT EVIDENCE OF RILLS, GULLIES OR SHEET EROSION AT ANY TIME WITHIN ONE FULL YEAR FOLLOWING IMPLEMENTATION OF REVEGETATION TREATMENTS. SIGNIFICANT RILLS ARE DEFINED AT GREATER THAN 1" DEEP. GULLIES ARE DEFINED AS GREATER THAN 1" DEEP. EROSION IS DEFINED INDIRECTLY AS EROSION THAT RESULTS IN DOWNSLOPE DEPOSITION OF GREATER THAN 1 CUBIC FOOT OF SEDIMENT. IF ADEQUATE COVERAGE IS NOT ACHIEVED AND/OR EROSION IS APPARENT, THE CONTRACTOR SHALL BE REQUIRED TO RE-APPLY MATERIALS OR PHYSICAL TREATMENTS TO REMEDY THE CAUSE OF THE PROBLEM AS DEFINED BY THE INSPECTOR.

THE REVEGETATION CONTRACTOR SHALL BE REQUIRED TO APPLY FOLLOW-UP TREATMENT WHERE DEEMED NECESSARY BY THE OWNER EITHER DURING THE SEASON OF TREATMENT AND/OR THE SEASON FOLLOWING TREATMENT. THE CONTRACTOR SHALL PROVIDE A UNIT COST FOR ALL OF THE REVEGETATION AND SOIL TREATMENT ELEMENTS SO THAT IF THE CONTRACTOR IS REQUIRED TO RE-TREAT AN AREA, THOSE UNIT COSTS WILL BE USED TO DETERMINE PAYMENT.

IN AREAS WHERE THE CONTRACTOR DID NOT MEET SPECIFICATIONS, NO PAYMENT WILL BE MADE FOR FOLLOW-UP TREATMENT SINCE THAT TREATMENT IS CONSIDERED PART OF THE ORIGINAL, INADEQUATELY IMPLEMENTED TREATMENT. IF TREATMENT IS REQUIRED DUE TO CIRCUMSTANCES BEYOND THE CONTROL OF THE CONTRACTOR, PAYMENT SHALL BE MADE ON A PER UNIT COST BASIS.

THE OWNER, UPON CONTRACTOR'S REQUEST, WILL MAKE FINAL INSPECTION AND ACCEPTANCE AT ONE FULL YEAR FOLLOWING COMPLETION OF SEEDING.

## **PREVENTION OF INVASIVE WEEDS**

A. EQUIPMENT USED IN THE PROJECT MUST BE SANITIZED AND FREE OF NON-NATIVE INVASIVE SPECIES BEFORE MOVING INTO THE PROJECT AREA TO ENSURE THAT THE EQUIPMENT IS FREE OF SOIL, SEEDS, VEGETATIVE MATERIAL, OR OTHER DEBRIS THAT COULD CONTAIN OR HOLD SEEDS OF NON-NATIVE INVASIVE SPECIES. ALL VEHICLES, ESPECIALLY LARGE, OFF-ROAD AND/OR EARTHMOVING VEHICLES MUST BE CLEANED OFFSITE PRIOR TO SITE MOBILIZATION. EQUIPMENT WILL BE CONSIDERED CLEAN WHEN THE OWNER VISUAL INSPECTION DOES NOT REVEAL SOIL, SEEDS, PLANT MATERIAL, OR OTHER SUCH DEBRIS.

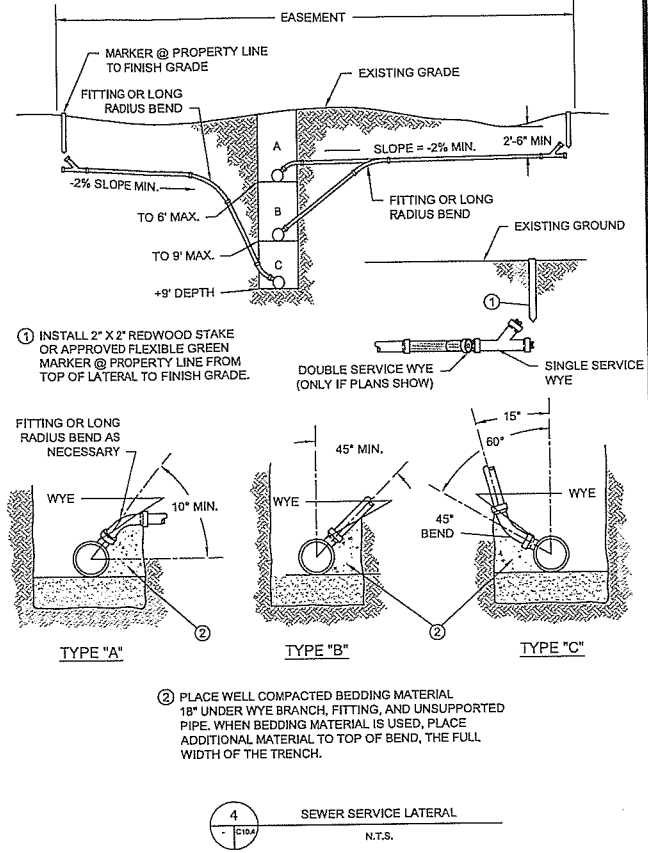
B. ALL GRAVEL, FILL, OR OTHER MATERIALS ARE REQUIRED TO BE "WEED-FREE". USE ONSITE SAND, GRAVEL, ROCK, OR ORGANIC MATTER WHEN POSSIBLE. OTHERWISE, OBTAIN "WEED-FREE" MATERIALS FROM GRAVEL PITS AND FILL SOURCES. CONTRACTOR MUST PROVIDE PROOF THAT ALL MATERIALS IMPORTED FROM SITES OUTSIDE PROJECT AREA ARE WEED-FREE AND THESE SOURCES MUST BE APPROVED BY OWNER.

C. USE "WEED-FREE" MULCHES, EROSION CONTROL PRODUCTS, AND SEED SOURCES. SALVAGE TOPSOIL FROM THE PROJECT AREA FOR USE IN ONSITE REVEGETATION. CONTRACTOR MUST PROVIDE PROOF THAT TOPSOIL AND FILL MATERIALS IMPORTED FROM SITES OUTSIDE THE PROJECT AREA ARE WEED-FREE AND THESE SOURCES MUST BE APPROVED BY OWNER. SOIL OR MATERIALS FROM AREAS CONTAMINATED BY CHEAT GRASS ARE PROHIBITED.

- THE USE OF HAY AND STRAW IS PROHIBITED.

## **NOTES:**

- REINFORCED CONCRETE GRADE RINGS, CONES, PIPE RISERS OR APPROVED PRE CAST MANHOLE SECTIONS SHALL CONFORM TO CURRENT A.S.T.M. SPEC. NO. C-478.
- MANHOLES IN PAVED AREAS SHALL HAVE AT LEAST ONE 2-INCH GRADE RING INSTALLED ON TOP OF THE CONE.
- FOR CAST-IN-PLACE BASES, CONCRETE SHALL BE PLACED AGAINST UNDISTURBED EARTH.
- CLASS 2 BACK FILL AT 95% R.C. IN ALL STREETS, CLASS 3 AT 90% R.C. IN OTHER AREAS.
- CHIMNEY SEAL REQUIRED ON MANHOLES IN PAVED AREAS.
- CONCENTRIC OR ECCENTRIC CONES PERMITTED.
- MINIMUM PIPELINE DROP 5 VERTICAL FEET.



## **4" Laterals @ 38% Slope Max (44.84 gpm)**

Given Input Data:

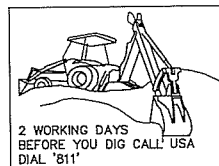
Shape ..... Circular  
Solving for ..... Depth of Flow  
Diameter ..... 4.0000 in  
Flowrate ..... 0.1000 cfs (44.84 gpm)  
Slope ..... 0.3900 ft/ft  
Manning's n ..... 0.0100

Computed Results:

Depth ..... 0.6940 in  
Area ..... 0.0873 ft<sup>2</sup>  
Wetted Area ..... 0.0101 ft<sup>2</sup>  
Wetted Perimeter ..... 3.4371 in  
Perimeter ..... 12.5664 in  
Velocity ..... 9.8708 fps  
Hydraulic Radius ..... 0.4245 in  
Percent Full ..... 17.3508 %  
Full flow Flowrate ..... 1.5251 cfs  
Full flow velocity ..... 17.4768 fps

Critical Information

Critical depth ..... 2.1188 in  
Critical slope ..... 0.0873 ft/ft  
Critical velocity ..... 2.1309 fps  
Critical area ..... 0.0469 ft<sup>2</sup>  
Critical perimeter ..... 6.5204 in  
Critical hydraulic radius ..... 1.0364 in  
Critical top width ..... 4.0000 in  
Specific energy ..... 1.5719 ft  
Minimum energy ..... 0.2848 ft  
Froude number ..... 8.6857  
Flow condition ..... Supercritical



RECORD DRAWINGS

DATE

ENGINEER INITIAL

BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

**WELSH & HAGEN ASSOCIATES**  
ENGINEERING • PLANNING • SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

**NOTE:**  
This drawing is the property of Welsh Hagen Associates, Inc., including all patented and patentable features, and/or confidential information. Its use is conditioned upon the user's agreement not to reproduce the drawing, in whole or part, nor the material described therein; nor to use the drawing for any purpose other than specifically permitted in writing by Welsh Hagen Associates, Inc.



**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

Sheet Title:

**UTILITY DETAILS  
SEWER (2 OF 2)  
&  
REVEGETATION  
NOTES**

Project: 404100  
Drawn By: BAMF  
Checked By: DLH  
Scale: AS-NOTED  
Date: JULY 2015  
Sheet Number:

**C10.2**





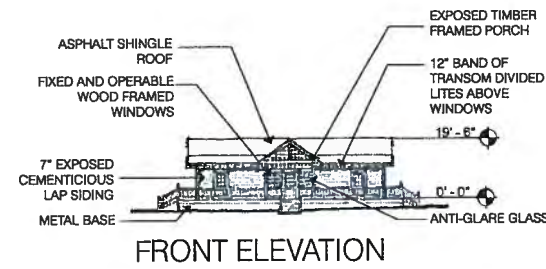
**BROCKWAY CAMPGROUND**  
**CAMPGROUND COMPARISON EXHIBIT**  
SUMMER 2015

RECEIVED

JUL 31 2015

TAHOE REGIONAL  
PLANNING AGENCY

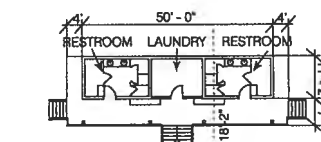




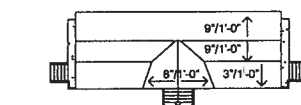
FRONT ELEVATION



SIDE ELEVATION



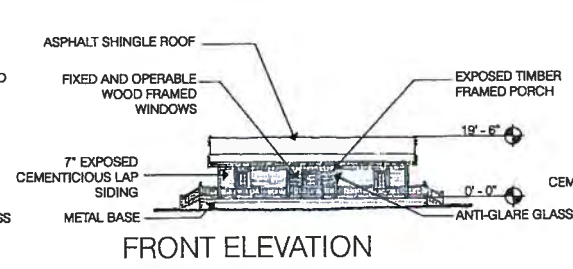
FLOOR PLAN



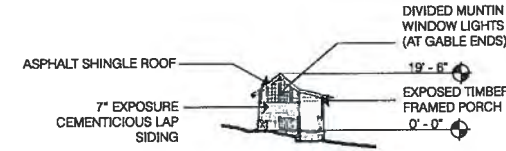
ROOF PLAN

BATH HOUSE

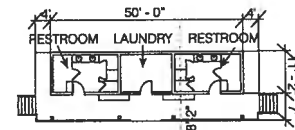
SCALE: 1" = 30'-0"



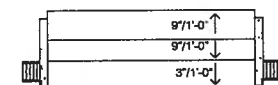
FRONT ELEVATION



SIDE ELEVATION



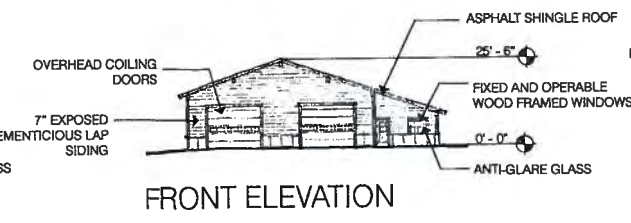
FLOOR PLAN



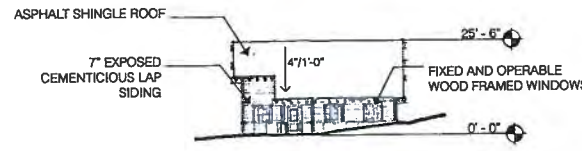
ROOF PLAN

BATH HOUSE - OPTION 2

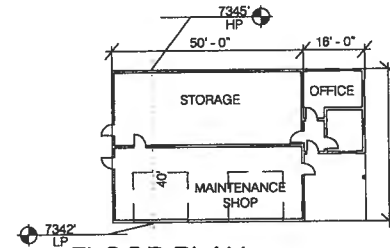
SCALE: 1" = 30'-0"



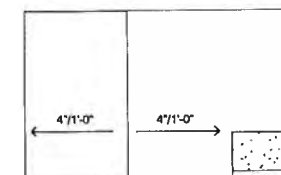
FRONT ELEVATION



SIDE ELEVATION



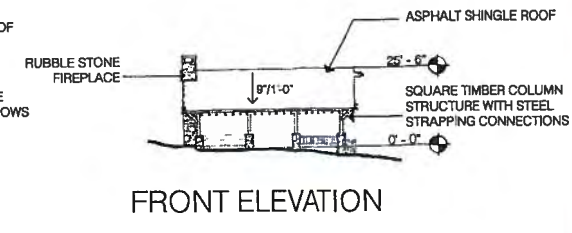
FLOOR PLAN



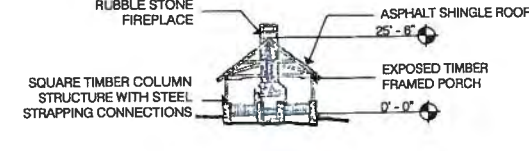
ROOF PLAN

MAINTENANCE AND STORAGE

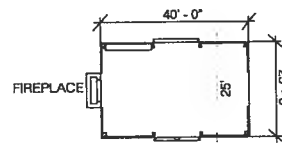
SCALE: 1" = 30'-0"



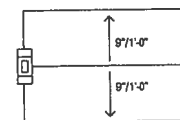
FRONT ELEVATION



SIDE ELEVATION



FLOOR PLAN



ROOF PLAN

SMALL PAVILION

SCALE: 1" = 30'-0"

	HIGH (USGS)	LOW (USGS)	DISTANCE (ft)	% GRADE	ROOF PITCH	RIDGE (ft)	MAX HEIGHT (ft)	MIN ALLOWED HEIGHT (ft)
BATH HOUSE	(7340-7780) **varies	0 to 3 ft	18 to 60 ft	0% to 17%	9:12	19' - 6"	22' - 6"	34' - 9"
MAINTENANCE AND STORAGE	7345	7342	40	7.50%	4:12	26' - 6"	28' - 6"	30' - 3"
SMALL PAVILION	(7340-7780) **varies	0 to 3 ft	25 to 50 ft	0% to 12%	9:12	25' - 6"	28' - 6"	34' - 9"

Brockway Campground				
Material Colors				
Material	Narrative	Munsell® color ranges	Value	chroma
Natural Wood siding stain color 1	7" exposure butt lap siding, Medium to dark earth tone dark brown	7.5R, 10R	From 2 to 6	From 2 to 6
		2.5YR, 5YR	From 3 to 5	From 2 to 6
Natural Wood siding stain color 2	7" exposure butt lap siding, Medium to dark earth tone dark brown	5YR, 7.5YR, 10YR	From 2 to 6	From 1 to 6
		2.5Y	From 3 to 5	From 1 to 4
Natural timber siding stain color	12" members with chinking between, Medium to dark earth tone dark brown	7.5R, 10R	From 2 to 6	From 2 to 6
		2.5YR, 5YR	From 3 to 5	From 2 to 6
Cementitious siding paint color 1	5" to 7" exposure lap siding, Medium to dark earth tone dark reddish brown	7.5R, 10R	From 2 to 6	From 2 to 6
		2.5YR, 5YR	From 3 to 5	From 2 to 6
Cementitious siding paint color 2	5" to 7" exposure lap siding, Medium to dark earth tone dark brown	5YR, 7.5YR, 10YR	From 2 to 6	From 1 to 6
		2.5Y	From 3 to 5	From 1 to 4
Timber columns and beams stain	Resawn finish, natural wood tone finish	7.5YR, 10YR, 2.5Y	From 5 to 7	From 2 to 6
Stone veneer	Native stone, rubble and ashlar set, large stones at base			
Asphalt Shingle roof	"Park Service" Dark Forest Green	5GY, 7.5GY, 10GY, 2.5G, 5G	From 0 to 4	From 0 to 4
Windows	Anti Reflective, wood framed, operable and fixed			
Clerestory windows	Anti Reflective, wood framed with muntins, operable and fixed			
Mechanical equipment screens	50% open, painted lattice	7.5R, 10R	From 2 to 6	From 2 to 6
		2.5YR, 5YR	From 3 to 5	From 2 to 6
metal wainscot	Natural matte brown steel wainscot	7.5R, 10R	From 2 to 6	From 2 to 6
		2.5YR, 5YR	From 3 to 5	From 2 to 6



3003 Larimer Street  
Denver, Colorado 80205  
phone 303.861.5704  
www.ozarch.com

BROCKWAY CAMPGROUND

07/14/2015  
© OZ ARCHITECTURE

BROCKWAY  
CAMPGROUND  
SHEET TITLE:  
BUILDING PLANS AND  
ELEVATIONS

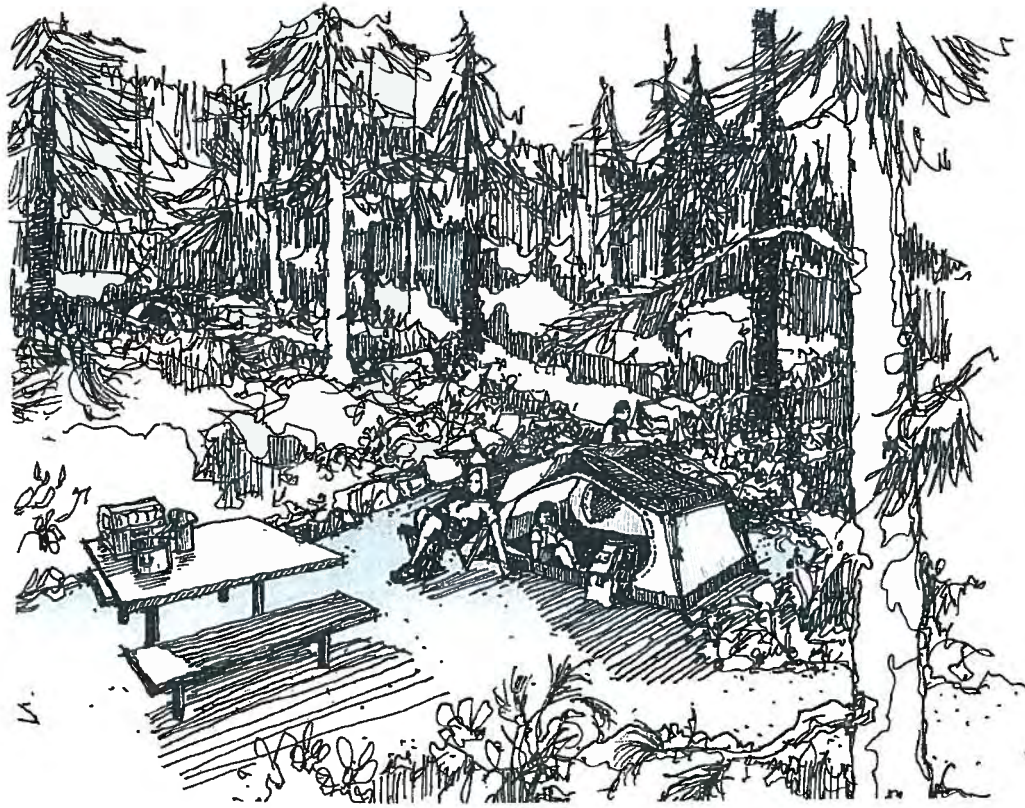
SCALE: 1" = 30'-0"  
SHEET NUMBER

G-101.0





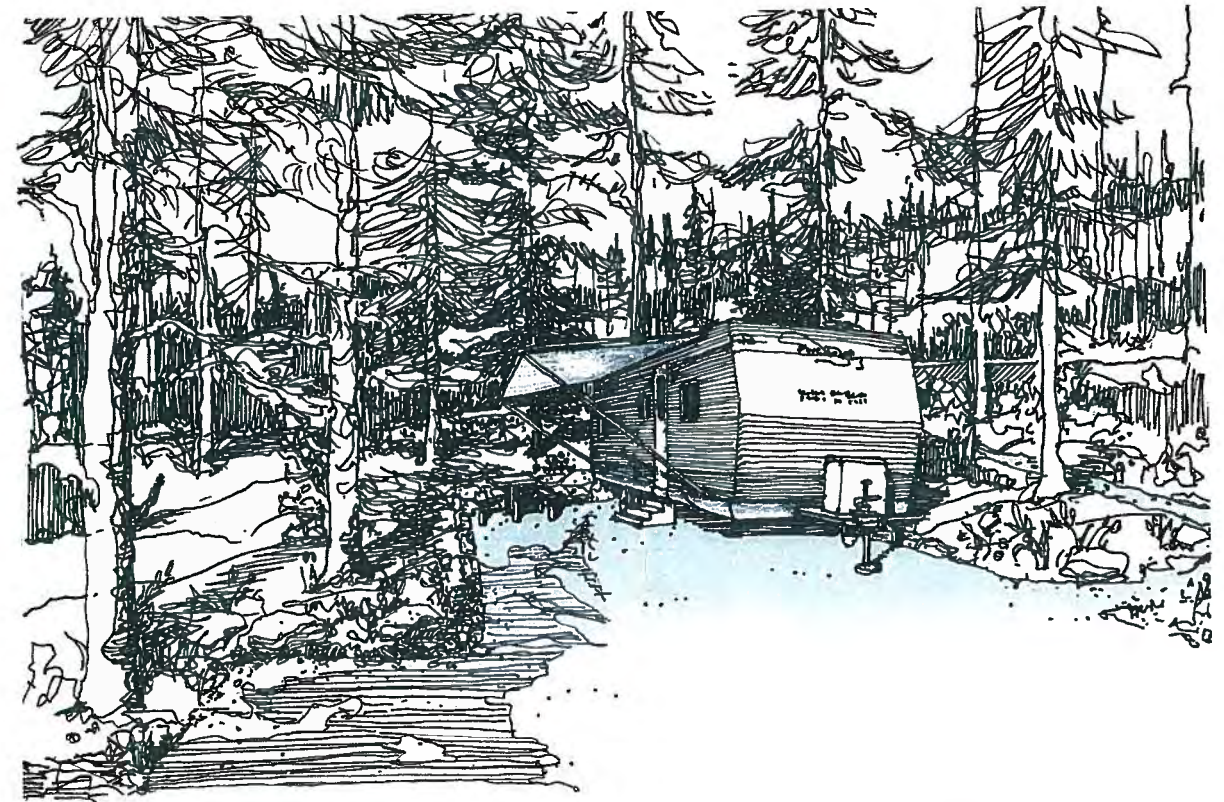




Tent Site



Eco Shelter

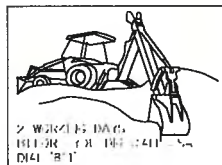


Camper Site

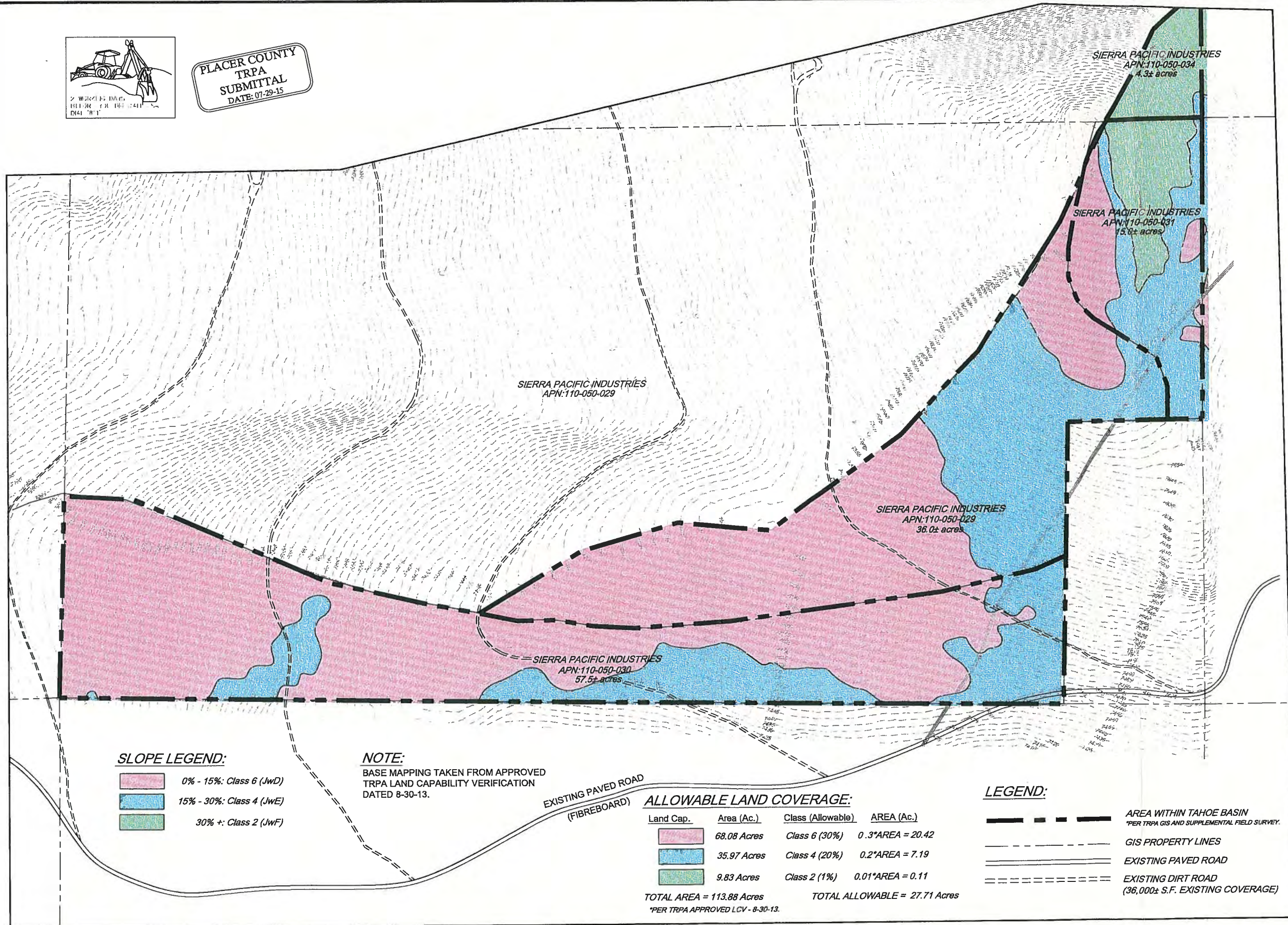








PLACER COUNTY  
TRPA  
SUBMITTAL  
DATE: 07-29-15



BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

WELSH & HAGEN  
ASSOCIATES  
ENGINEERING · PLANNING · SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

**NOTE:**  
This drawing is the property of  
Welsh Hagen Associates, Inc.,  
including all patented and  
patentable features, and/or  
confidential information. Its use  
is conditioned upon the user's  
agreement not to reproduce the  
drawing, in whole or part, nor  
the material described therein;  
nor to use the drawing for any  
purpose other than specifically  
permitted in writing by  
Welsh Hagen Associates, Inc.



**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

Sheet Title:

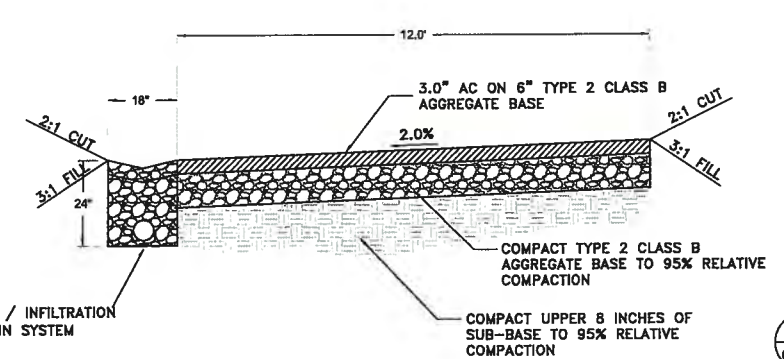
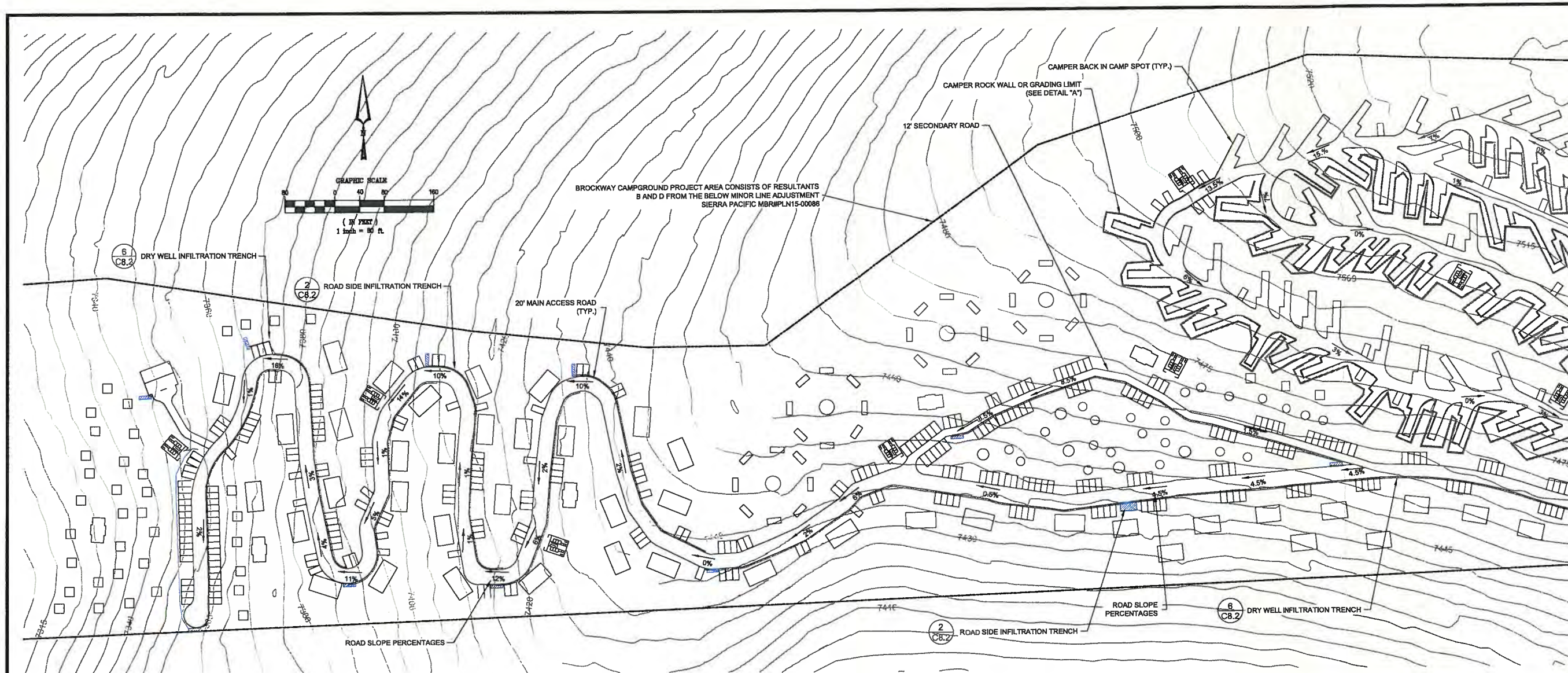
**LAND  
CAPABILITY  
APPROVED LCV  
ALLOWABLE  
COVERAGE**

Project: 404100  
Drawn By: BAMB  
Checked By: DLH  
Scale: AS-NOTED  
Date: JULY 2015

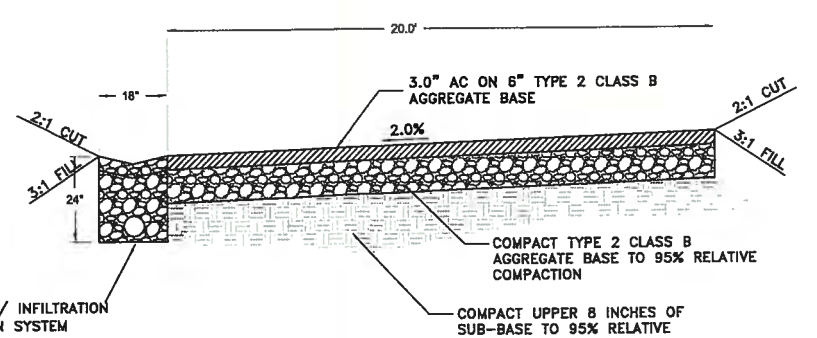
Sheet Number:

**C11.1**

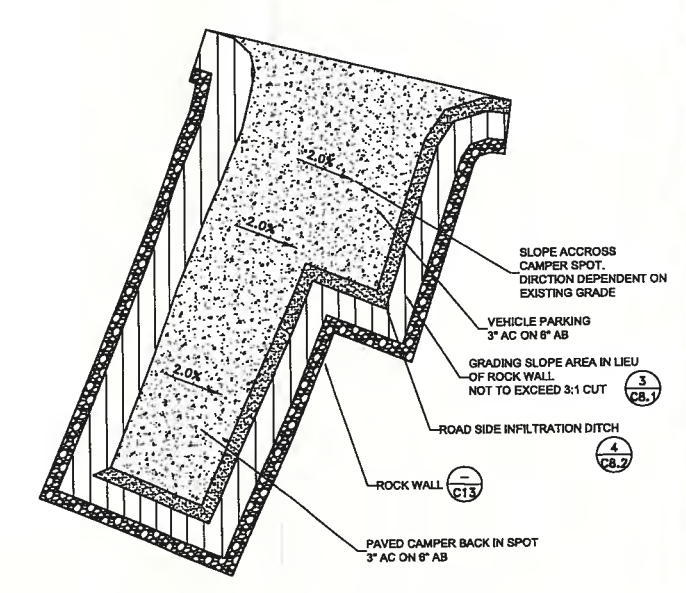




TYPICAL ON-SITE ROAD SECTION 5  
N.T.S. 8.1



TYPICAL ON-SITE ROAD SECTION 6  
N.T.S. 8.1



RECORD DRAWINGS  
DATE \_\_\_\_\_ ENGINEER INITIAL \_\_\_\_\_



PLACER COUNTY  
TRPA  
SUBMITTAL  
DATE: 07-29-15

NOTE:  
1. ROAD GRADE TO MATCH EXISTING GROUND ELEVATIONS TO MINIMIZE CUT AND FILL SLOPES.  
2. ROCK WALLS ARE TO BE USED WHERE SLOPES EXCEED 3:1 CUT OR 2:1 FILL AROUND ROADS BUILDINGS PARKING AND CAMPSITES. (SEE SHEET C13 FOR ROCK WALL DETAILS)

BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

WELSH HAGEN  
ASSOCIATES  
ENGINEERING - PLANNING - SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

NOTE:  
This drawing is the property of Welsh Hagen Associates, Inc., including all patented and patentable features, and/or confidential information. Its use is conditioned upon the user's agreement not to reproduce the drawing, in whole or part, nor the material described thereon; nor to use the drawing for any purpose other than specifically permitted in writing by Welsh Hagen Associates, Inc.



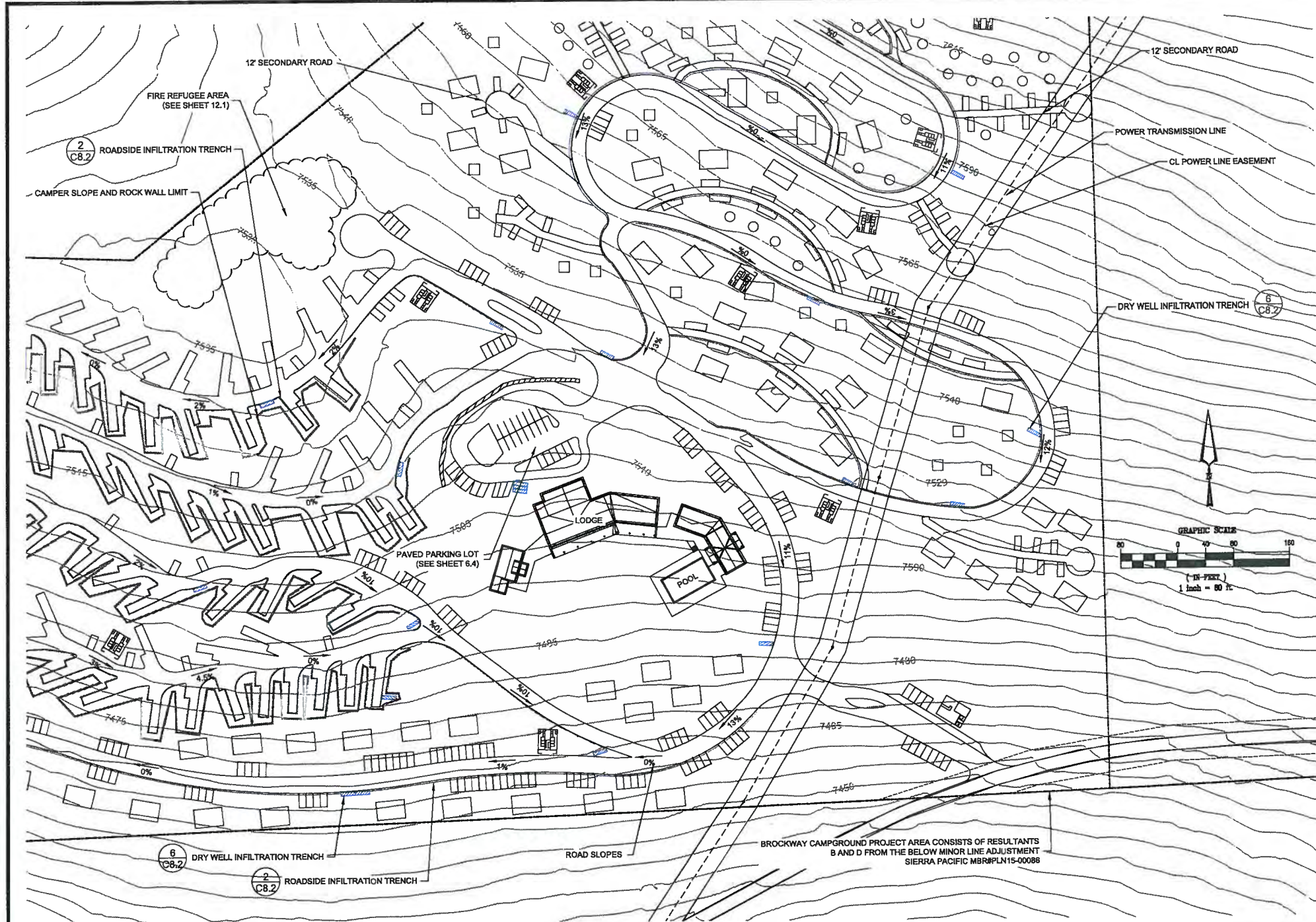
PRELIMINARY  
NOT FOR  
CONSTRUCTION

Sheet Title:  
**BMP  
TREE REMOVAL  
PLAN**

Project: 404100  
Drawn By: BAMF  
Checked By: DLH  
Scale: AS-NOTED  
Date: JULY 2015  
Sheet Number:

C6.1

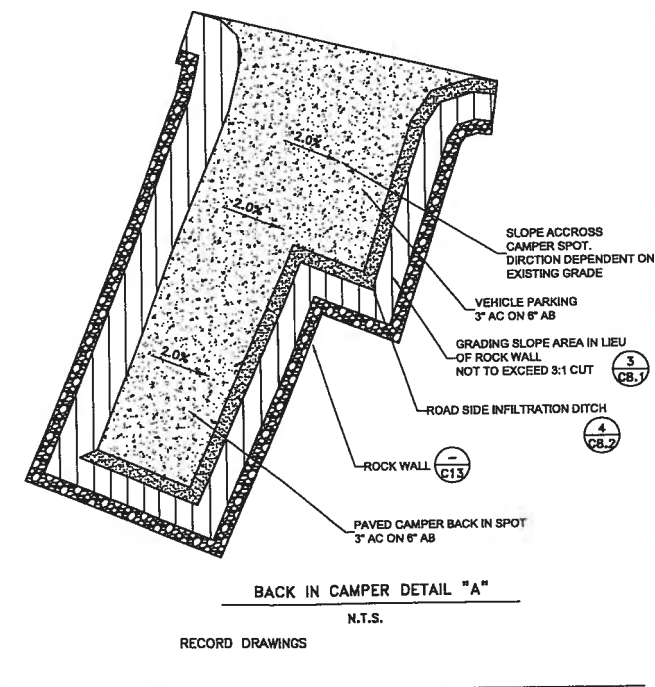
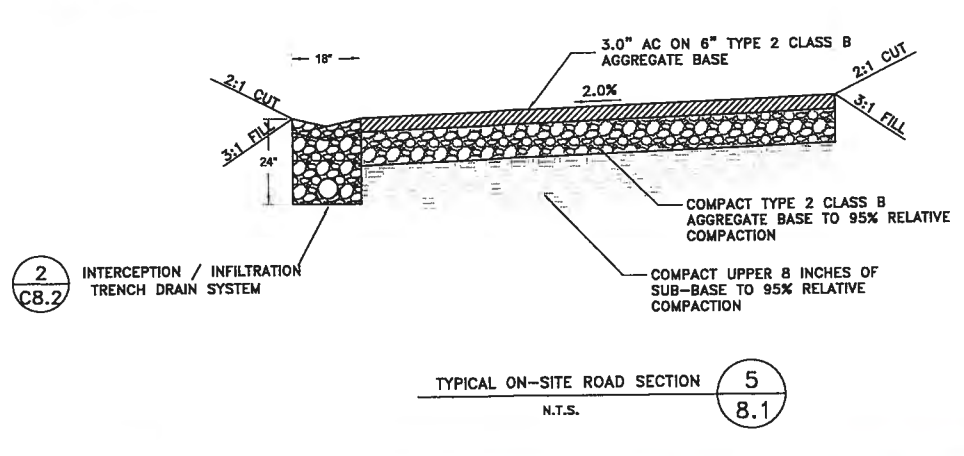
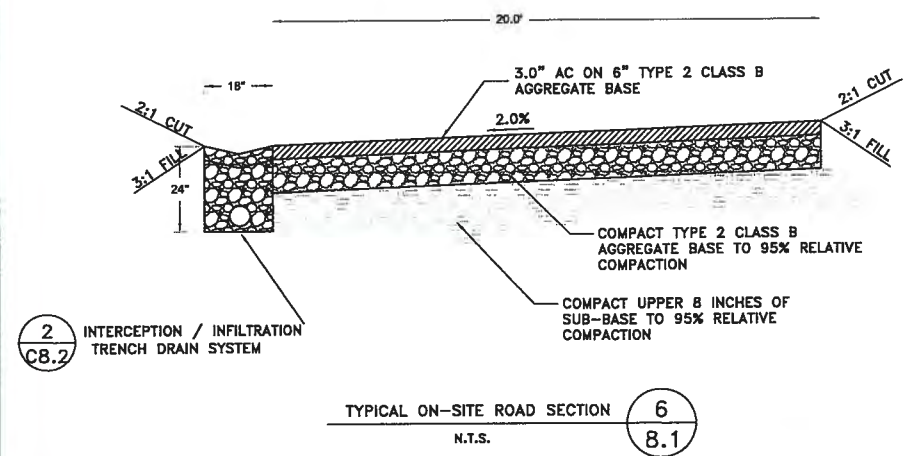
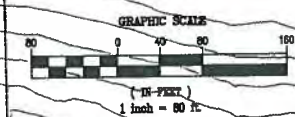




NOTE:  
 1. ROAD GRADE TO MATCH EXISTING GROUND ELEVATIONS TO MINIMIZE CUT AND FILL SLOPES.  
 2. ROCK WALLS ARE TO BE USED WHERE SLOPES EXCEED 3:1 CUT OR 2:1 FILL AROUND ROADS BUILDINGS PARKING AND CAMPSITES. (SEE SHEET C13 FOR ROCK WALL DETAILS)



PLACER COUNTY  
 TRPA  
 SUBMITTAL  
 DATE: 07-29-15



BROCKWAY CAMPGROUND  
 PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
 PO BOX 496028 REDDING, CA.  
 (530) 378-8000

Revisions:

WELSH & HAGEN  
 ASSOCIATES  
 ENGINEERING - PLANNING - SURVEYING  
 5490 Longley Lane  
 Reno, Nevada 89511  
 (775) 853-7776  
 www.welshhagen.com

NOTE:  
 This drawing is the property of  
 Welsh Hagen Associates, Inc.,  
 including all patented and  
 patentable features, and/or  
 confidential information. Its use  
 is conditioned upon the user's  
 agreement not to reproduce the  
 drawing, in whole or part, nor  
 the material described therein;  
 nor to use the drawing for any  
 purpose other than specifically  
 permitted in writing by  
 Welsh Hagen Associates, Inc.

PRELIMINARY  
 NOT FOR  
 CONSTRUCTION

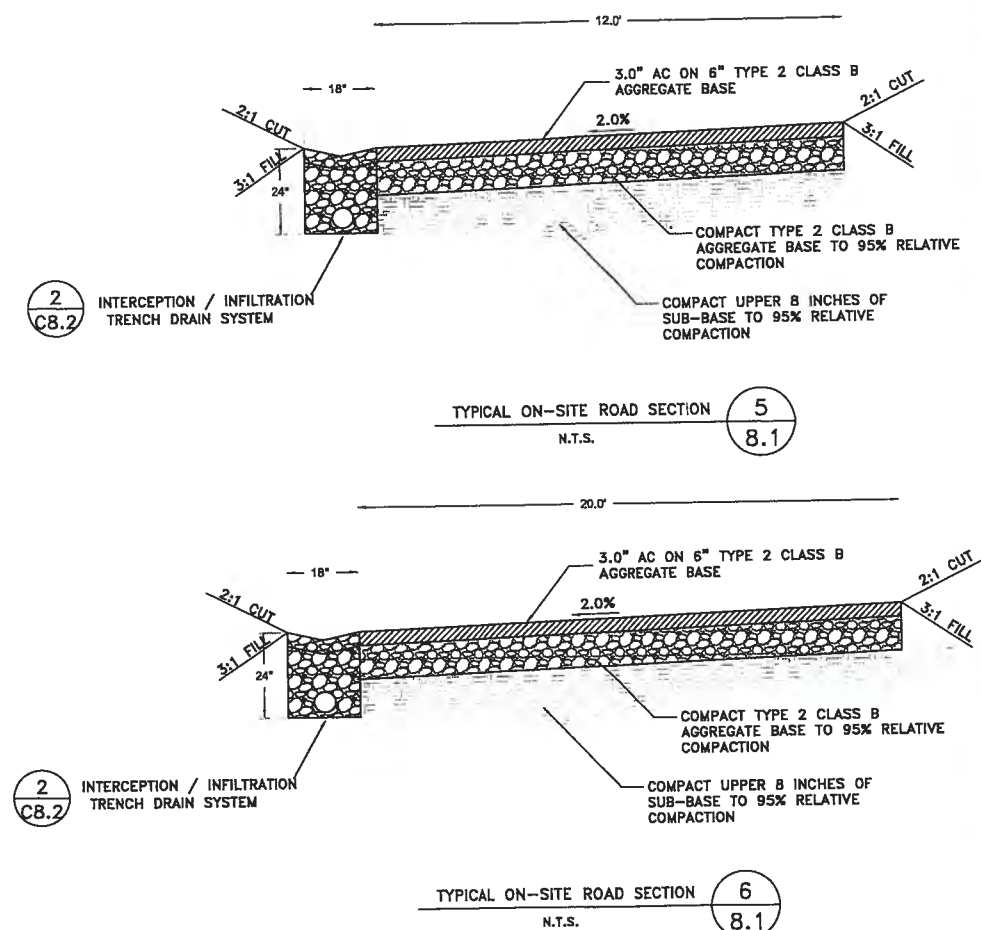
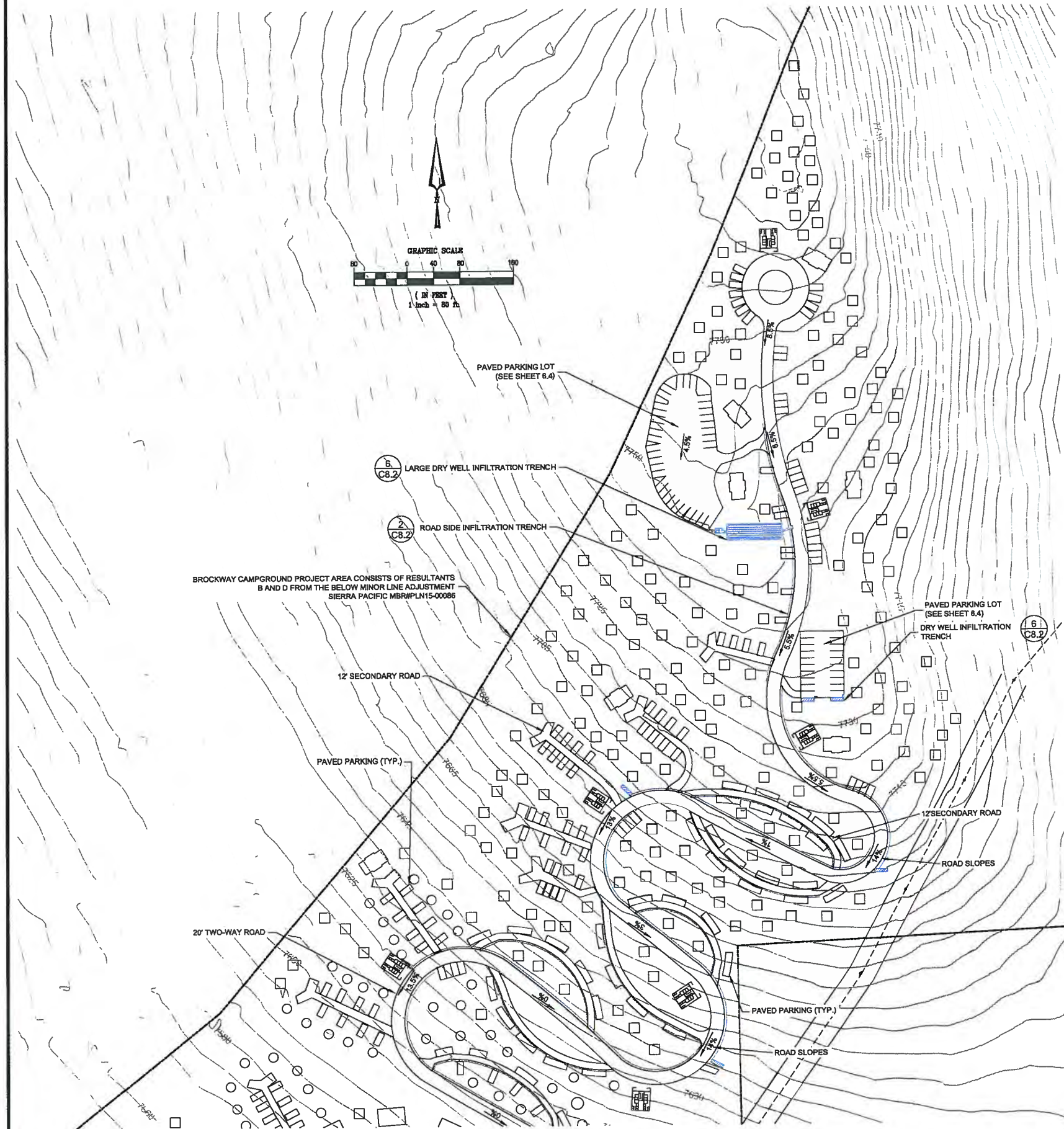
Sheet Title:  
 BMP  
 TREE REMOVAL  
 PLAN

Project: 404100  
 Drawn By: BAMF  
 Checked By: DLH  
 Scale: AS-NOTED  
 Date: JULY 2015  
 Sheet Number:

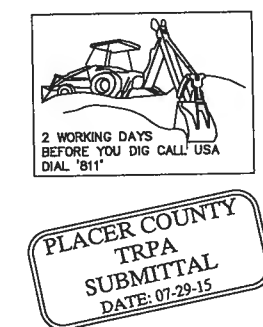
C6.2

RECORD DRAWINGS  
 DATE \_\_\_\_\_ ENGINEER INITIAL \_\_\_\_\_





NOTE:  
1. ROAD GRADE TO MATCH EXISTING GROUND ELEVATIONS TO MINIMIZE CUT AND FILL SLOPES. AND TO AVOID BRINGING LARGE AMOUNTS OF MATERIAL.  
2. ROCK WALLS ARE TO BE USED WHERE SLOPES EXCEED 3:1 CUT OR 2:1 FILL AROUND ROADS BUILDINGS PARKING AND CAMPSITES. (SEE SHEET C13 FOR ROCK WALL DETAILS)



RECORD DRAWINGS  
DATE \_\_\_\_\_ ENGINEER INITIAL \_\_\_\_\_

**BROCKWAY CAMPGROUND**  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:


**WELSH HAGEN ASSOCIATES**  
ENGINEERING · PLANNING · SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

NOTE:  
This drawing is the property of Welsh Hagen Associates, Inc., including all patented and patentable features, and/or confidential information. Its use is conditioned upon the user's agreement not to reproduce the drawing, in whole or part, nor the material described thereon; nor to use the drawing for any purpose other than specifically permitted in writing by Welsh Hagen Associates, Inc.

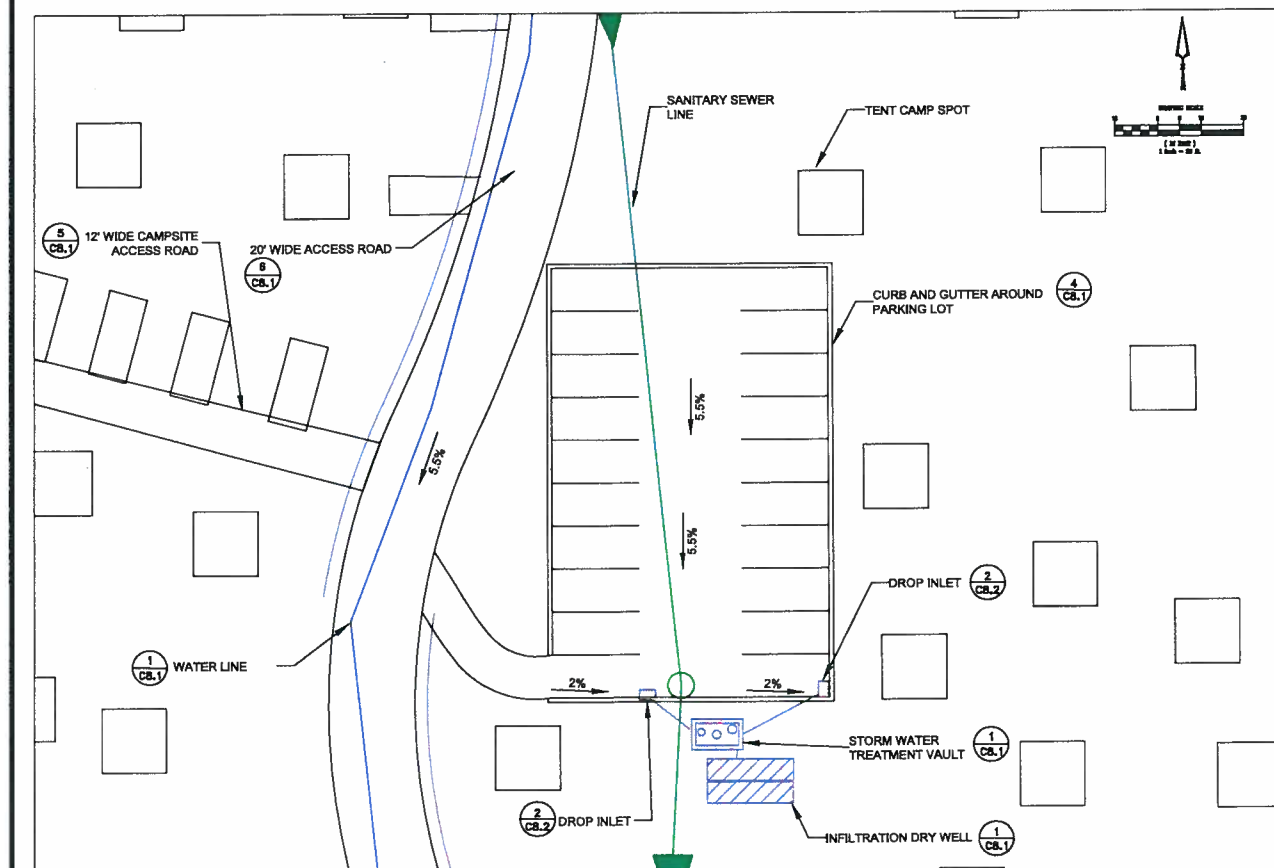
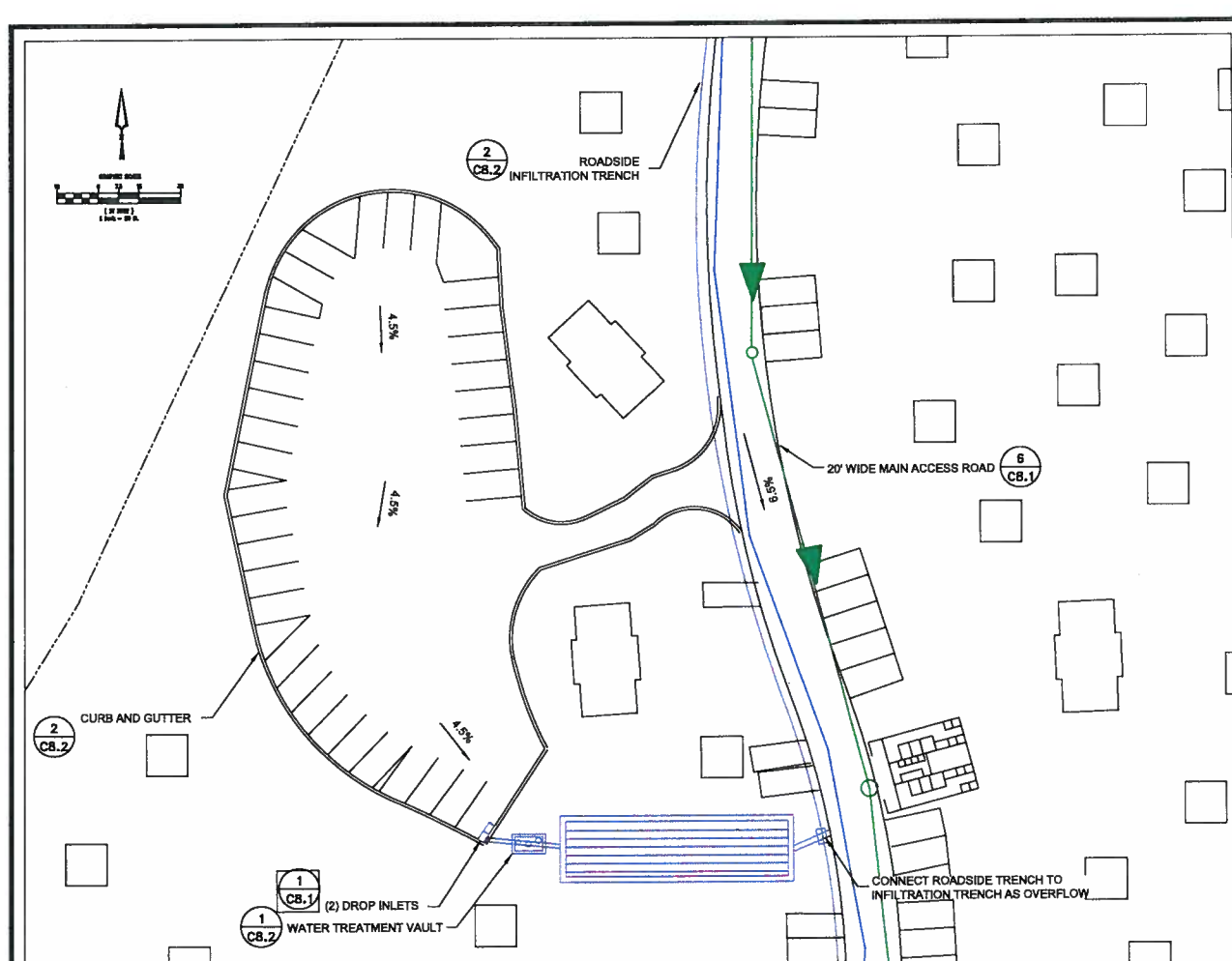
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

Sheet Title:  
**BMP  
TREE REMOVAL  
PLAN**

Project: 404100  
Drawn By: BAMP  
Checked By: DLH  
Scale: AS-NOTED  
Date: JULY 2015  
Sheet Number:

**C6.3**





**PLACER COUNTY TRPA SUBMITTAL**  
DATE: 07-29-15

RECORD DRAWINGS  
DATE \_\_\_\_\_ ENGINEER INITIAL \_\_\_\_\_

**BROCKWAY CAMPGROUND**  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:


**WELSH & HAGEN ASSOCIATES**  
ENGINEERING · PLANNING · SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

NOTE: This drawing is the property of Welsh Hagen Associates, Inc., including all patented and patentable features, and/or confidential information. Its use is conditioned upon the user's agreement not to reproduce the drawing, in whole or part, nor the material described therein; nor to use the drawing for any purpose other than specifically permitted in writing by Welsh Hagen Associates, Inc.

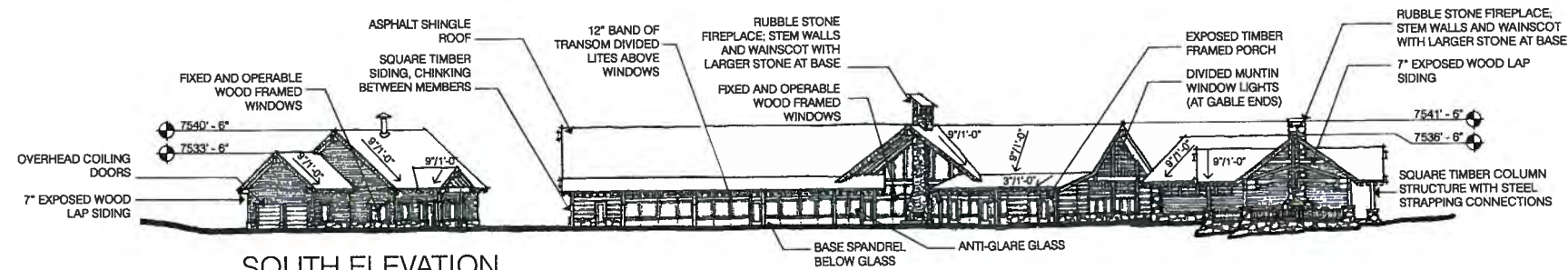
**BROCKWAY CAMPGROUND**

**PRELIMINARY NOT FOR CONSTRUCTION**

Sheet Title:  
**PARKING LOT GRADING**

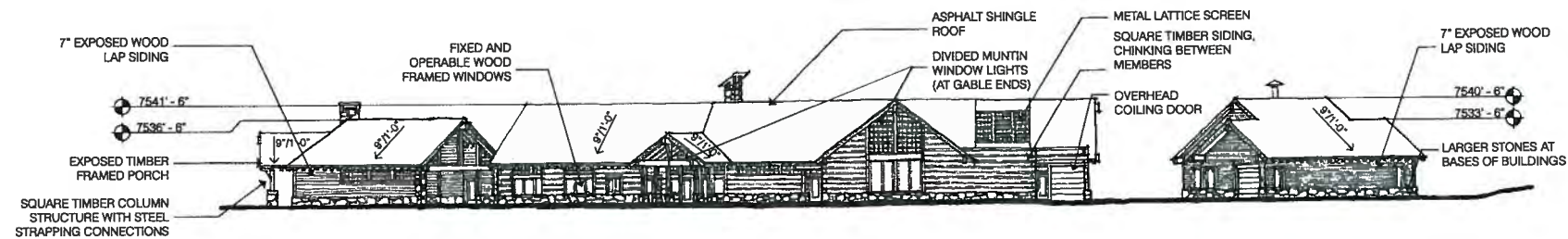
Project: 404100  
Drawn By: BAMB  
Checked By: DLH  
Scale: AS-NOTED  
Date: JULY 2015  
Sheet Number:

**C6.4**



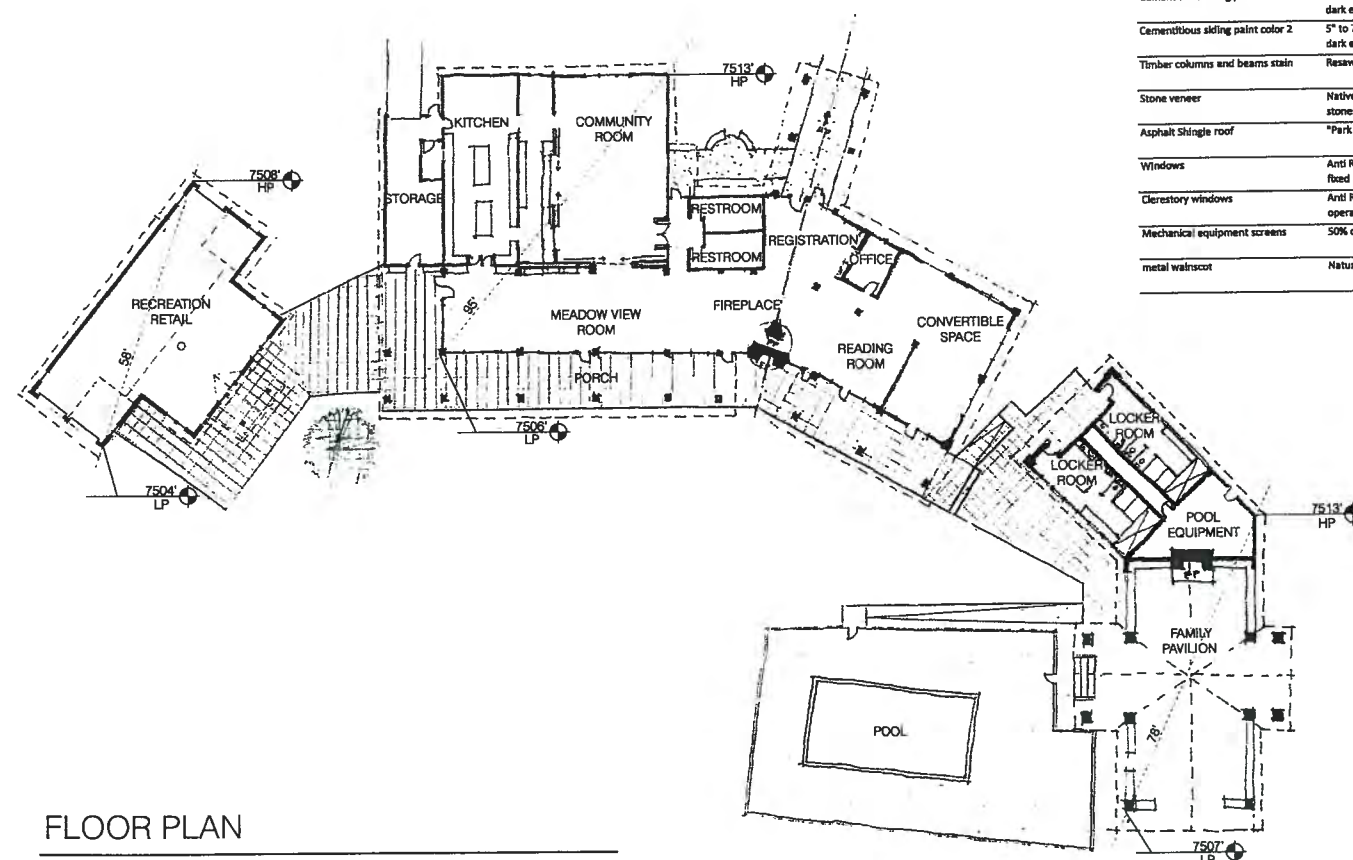
SOUTH ELEVATION

SCALE: 1" = 30'-0"



NORTH ELEVATION

SCALE: 1" = 30'-0"



FLOOR PLAN

SCALE: 1" = 30'-0"

	HIGH (USGS)	LOW (USGS)	DISTANCE (ft)	% GRADE	ROOF PITCH	RIDGE (USGS)	HEIGHT (ft)	ALLOWED HEIGHT (ft)
LODGE	7513	7508	95	7.37%	9:12	7541.5	35' - 6"	36' - 3"
SHOP	7508	7504	58	6.90%	9:12	7540.5	36' - 6"	36' - 3"
POOL HOUSE	7513	7507	78	7.69%	9:12	7536.5	29' - 6"	36' - 3"

Brockway Campground

Material	Narrative	Munsell® color ranges		
Material Colors		Hue	Value	chroma
Natural Wood siding stain color 1	7" exposure butt lap siding, Medium to dark earth tone dark brown	7.5R, 10R 2.5YR, 5YR	From 2 to 6 From 3 to 5	From 2 to 6 From 2 to 6
Natural Wood siding stain color 2	7" exposure butt lap siding, Medium to dark earth tone dark umber brown	5YR, 7.5YR, 10YR 2.5Y	from 3 to 6 from 3 to 5	from 1 to 6 From 3 to 4
Natural timber siding stain color	12" members with chinking between, Medium to dark earth tone dark brown	7.5R, 10R 2.5YR, 5YR	From 2 to 6 From 3 to 5	From 2 to 6 From 2 to 6
Cementitious siding paint color 1	5" to 7" exposure lap siding, Medium to dark earth tone dark reddish brown	7.5R, 10R 2.5YR, 5YR	From 2 to 6 From 3 to 5	From 2 to 6 From 2 to 6
Cementitious siding paint color 2	5" to 7" exposure lap siding, Medium to dark earth tone dark umber brown	5YR, 7.5YR, 10YR 2.5Y	from 3 to 6 from 3 to 5	from 1 to 6 From 1 to 4
Timber columns and beams stain	Resawn finish, natural wood tone finish	7.5YR, 10YR, 2.5Y	from 5 to 7	from 2 to 6
Stone veneer	Native stone, rubble and ashlar set, large stones at base			
Asphalt Shingle roof	*Park Service® Dark Forest Green	5GY, 7.5GY, 10GY, 2.5G, 5G	From 0 to 4	From 0 to 4
Windows	Anti Reflective, wood framed, operable and fixed			
Clerestory windows	Anti Reflective, wood framed with muntins, operable and fixed			
Mechanical equipment screens	50% open, painted lattice	7.5R, 10R 2.5YR, 5YR	From 2 to 6 From 3 to 5	From 2 to 6 From 2 to 6
metal wainscot	Natural matte brown steel wainscot	7.5R, 10R 2.5YR, 5YR	From 2 to 6 From 3 to 5	From 2 to 6 From 2 to 6



ARCHITECTURE

3003 Larimer Street  
Denver, Colorado 80205  
phone 303.861.5704  
www.ozarch.com

BROCKWAY CAMPGROUND

07/14/2015  
© OZ ARCHITECTURE

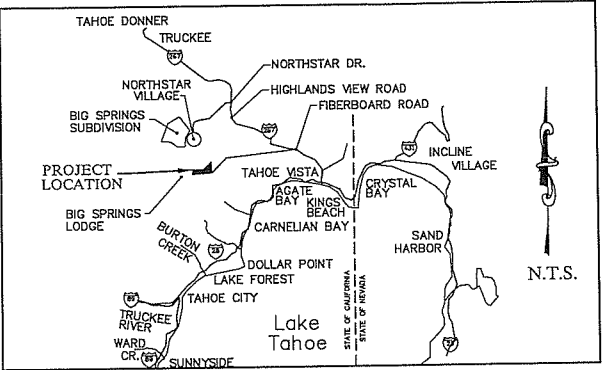
BROCKWAY  
CAMPGROUND  
SHEET TITLE:  
BUILDING PLANS AND  
ELEVATIONS

SCALE: 1" = 30'-0"  
SHEET NUMBER

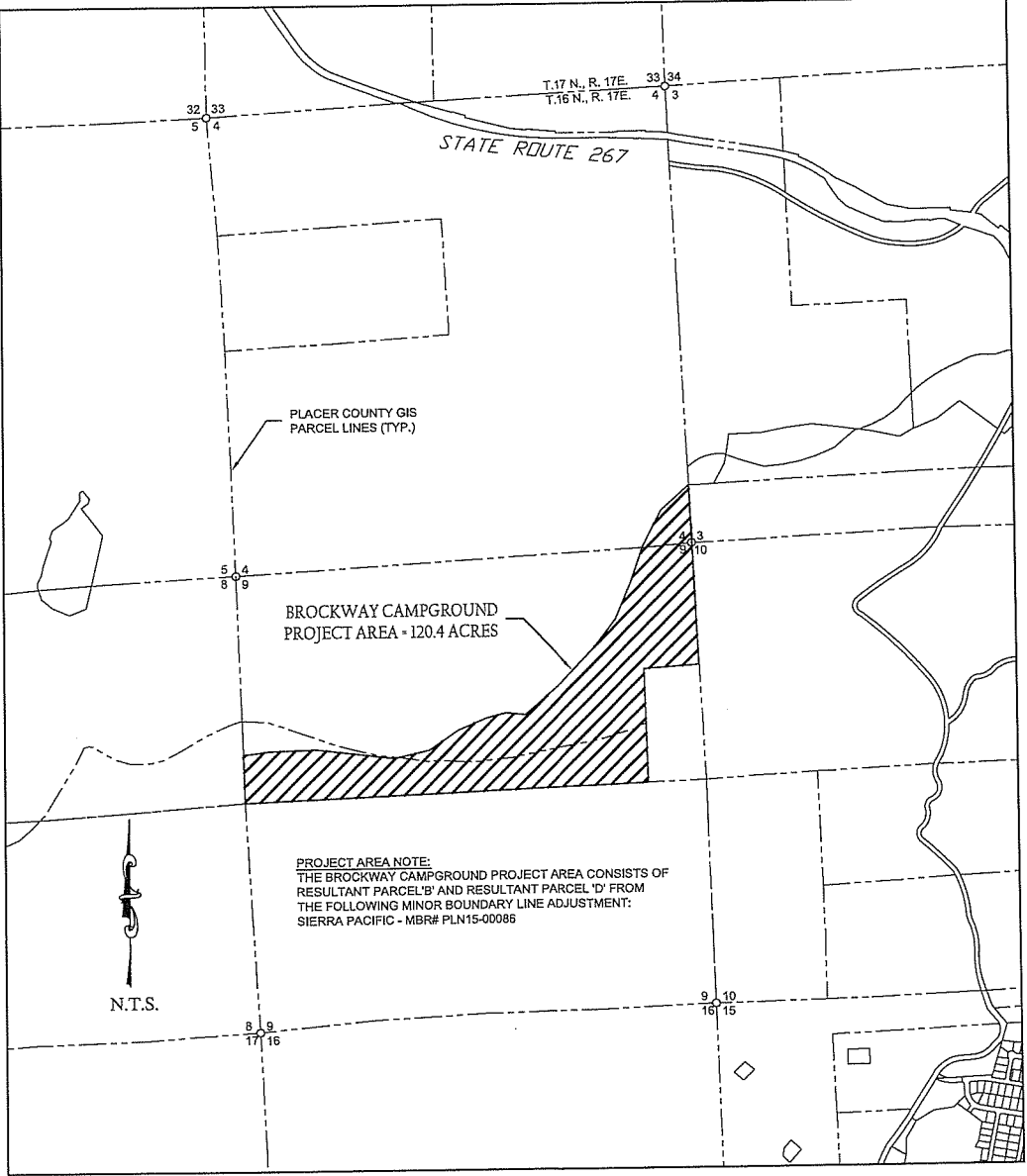
G-100.0



**BROCKWAY CAMPGROUND**  
APN 110-050-030, 110-050-029, 110-050-031, & 110-050-034  
**SECTION 4 AND A PORTION OF SECTION 3 & 9, T.17N., R16E., M.D.M.**  
**PLACER COUNTY, CALIFORNIA**  
**2015**



VICINITY MAP



SITE MAP

**OWNER:**  
SIERRA PACIFIC INDUSTRIES  
P.O. BOX 496028  
REDDING, CA 96160  
(530) 378-8000

**ENGINEER:**  
**WELSH HAGEN**  
ASSOCIATES  
ENGINEERING · PLANNING · SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

INSTRUCTIONS TO CONTRACTORS  
48 HOUR NOTICE REQUIRED  
PRIOR TO COMMENCING WORK

BEFORE COMMENCING WORK, ALL PLANS, SCHEDULES, AND PROGRAMS MUST BE SUBMITTED AND APPROVED IN CONFORMANCE WITH THE REQUIREMENTS OF SECTION 7-1.01E, 7-1.01G AND 8-1.04 OF THE PLACER COUNTY GENERAL SPECIFICATIONS DATED AUGUST 2005, AND THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS DATED MAY 2006. BEFORE COMMENCING WORK, THE CONTRACTOR SHALL NOTIFY THE PLACER COUNTY DEPARTMENT OF ENGINEERING AND SURVEYING 48 HOURS IN ADVANCE OF THE TIME OF COMMENCEMENT. CALL AUBURN (530) 889-7558, LAKE TAHOE (530) 581-6227

SHEET INDEX	
DRAWING NO.	DESCRIPTION
C1	TITLE SHEET
C2	GENERAL NOTES, SHEET INDEX, LEGEND, AND ABBREVIATIONS
C3	TREE REMOVAL PLAN AND BMP PLAN
C4	OVERALL SITE PLAN
C5.1	SITE & UTILITY PLAN
C5.2	SITE & UTILITY PLAN
C5.3	SITE & UTILITY PLAN
C6.1	GRADING PLAN
C6.2	GRADING PLAN
C6.3	GRADING PLAN
C6.4	GRADING PLAN
C7.1	TEMPORARY BMP DETAILS
C8.1	STORM DRAINAGE DETAILS
C8.2	STORM DRAINAGE DETAILS
C8.3	WATER DETAILS
C8.4	WATER DETAILS
C10.1	SANITARY SEWER DETAILS
C10.2	SANITARY SEWER DETAILS
C11.1	LAND CAPABILITY - APPROVED LCV - ALLOWABLE COVERAGE
C11.2	LAND CAPABILITY - APPROVED LCV - PROPOSED COVERAGE
C12.1	FIRE LIFE SAFETY EXHIBIT
C13.0	H&K ROCK RETAINING WALL DETAILS

**PLACER COUNTY APPROVAL**

PLANS ARE ACCEPTED FOR USE AS WORKING DOCUMENTS. UNDISCOVERED ERRORS AND OMISSIONS SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE AS DISCOVERED. THIS APPROVAL EXPIRES THREE (3) YEARS FROM THE APPROVAL DATE UNLESS AN EXTENSION IS APPROVED IN WRITING BY THE COUNTY DEPARTMENT(S) BELOW OR CONSTRUCTION HAS BEEN INITIATED. EXPIRATION WILL RESULT IN A REQUIREMENT TO RESUBMIT THE PLANS FOR PLAN CHECK, PAYMENT OF CURRENT FEES AND COMPLIANCE WITH CURRENT COUNTY STANDARDS.

DATE: \_\_\_\_\_  
**COMMUNITY DEVELOPMENT RESOURCE AGENCY**  
**ENGINEERING AND SURVEYING DIVISION**

SIGNED: \_\_\_\_\_  
PRINT NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_  
DATE: \_\_\_\_\_

**COMMUNITY DEVELOPMENT RESOURCE**  
**AGENCY PLANNING DIVISION**

SIGNED: \_\_\_\_\_  
PRINT NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_  
DATE: \_\_\_\_\_

**DEPARTMENT OF HEALTH AND HUMAN**  
**SERVICES ENVIRONMENTAL HEALTH DIVISION**

SIGNED: \_\_\_\_\_  
PRINT NAME: \_\_\_\_\_

**DATUM**

BASIS OF ELEVATIONS: ELEVATION ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS). GPS SYSTEM USED: TRIMBLE GPS UNIT

**BASIS OF BEARING**

THE BASIS OF BEARING IS IDENTICAL TO THAT OF RECORD OF SURVEY NO. 1665 FILED IN BOOK 13 OF SURVEYS, PAGE 26, OFFICIAL RECORDS OF PLACER COUNTY, CALIFORNIA AND IS STATED THEREON AS BEING CALIFORNIA COORDINATE SYSTEM, ZONE 2.

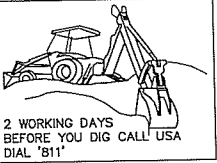
**NOTE:**

THE BEARINGS AND DISTANCES USED ALONG THE BOUNDARY OF THE PROPERTY SHOWN ON RECORD OF SURVEY NO. 1253 FILED IN BOOK 10 OF SURVEYS PAGE 126, OFFICIAL RECORDS OF PLACER COUNTY AND RECORD OF SURVEY NO. 1665 FILED IN BOOK 13 OF SURVEYS, PAGE 26, OFFICIAL RECORDS OF PLACER COUNTY ARE NOT BASED UPON A FIELD SURVEY AS DESCRIBED IN L.S. ACT SECTION 8762. THEY DO NOT ESTABLISH THE BOUNDARY OF SAID PROPERTY AND ARE INCLUDED TO ASSIST IN LOCATING THE NEW BOUNDARY APPROVED BY MINOR BOUNDARY LINE ADJUSTMENT NO. PLN15-00086 ONLY.

**EARTHWORK QUANTITIES**  
CUT: + 75,000 YD  
FILL: - 75,000 YD  
NET: 0,000 YD

NOTE: EARTHWORK QUANTITIES DO NOT INCLUDE STRIP OR SHRINK / SWELL POTENTIAL.

**PLACER COUNTY**  
**TRPA**  
**SUBMITTAL**  
DATE: 07-29-15



**RECORD DRAWINGS NOTE**

ALL INFORMATION SHOWN ON THESE PLANS HAS BEEN PREPARED BY, OR UNDER DIRECTION OF, THE UNDERSIGNED ENGINEER. ADJUSTMENTS MADE IN THE FIELD DURING CONSTRUCTION ARE INCLUDED HEREIN AND ARE BASED UPON FIELD OBSERVATIONS MADE UNDER THE DIRECTION OF OR BY THE UNDERSIGNED AND/OR INFORMATION RECEIVED FROM THE PROJECT OWNER, PROJECT CONTRACTORS, AND PUBLIC AGENCIES WHEN THE ENGINEER IS ADVISED IN WRITING OF SUCH CHANGE. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, CHANGES TO THESE PLANS NOT AUTHORIZED BY THE ENGINEER.

DATE \_\_\_\_\_ ENGINEER SIGNATURE \_\_\_\_\_  
(STAMP OR SEAL)

BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

**WELSH HAGEN**  
ASSOCIATES  
ENGINEERING · PLANNING · SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

**NOTE:**  
This drawing is the property of Welsh Hagen Associates, Inc., including all patented and patentable features, and/or confidential information. Its use is conditioned upon the user's agreement not to reproduce the drawing, in whole or part, nor the material described thereon; nor to use the drawing for any purpose other than specifically permitted in writing by Welsh Hagen Associates, Inc.



**PRELIMINARY**  
**NOT FOR**  
**CONSTRUCTION**

Sheet Title:

**TITLE**  
**SHEET**

Project: 404100  
Drawn By: BAMF  
Checked By: DLH  
Scale: AS-NOTED  
Date: JULY 2015  
Sheet Number:

**C1**



GENERAL NOTES

1. ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE REQUIREMENTS OF COUNTY OF PLACER CALIFORNIA GENERAL SPECIFICATIONS DATED AUGUST, 2005. ALL REFERENCES TO STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SHALL REFER TO THE 2010 EDITION OF THE STANDARD SPECIFICATIONS. ATTENTION IS ALSO DIRECTED TO THE STANDARD DRAWINGS CONTAINED IN THE PLACER COUNTY CALIFORNIA LAND DEVELOPMENT MANUAL AND THE CURRENT EDITION OF THE CALTRANS STANDARD PLANS, WHICH, WHEN APPLICABLE, ARE INCLUDED IN THESE DRAWINGS AND REFERENCED BY PLATE OR STANDARD PLAN NUMBER.

2. COUNTY, DEPARTMENT OR ENGINEER, AS USED ON THESE PLANS AND NOTES, REFERS TO THE DIRECTOR OF THE PLACER COUNTY CALIFORNIA DEPARTMENT OF ENGINEERING AND SURVEYING OR AN AUTHORIZED AGENT APPOINTED BY THE DIRECTOR.

3. PUBLIC SAFETY AND TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH COUNTY REQUIREMENTS AND AS DIRECTED BY THE ENGINEER. SAFE VEHICULAR AND PEDESTRIAN ACCESS SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION.

4. A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR SHALL, DO ALL FIELD STAKING. THE OWNER SHALL PROVIDE ONE SET OF CONSTRUCTION CONTROL STAKES; ANY ADDITIONAL STAKING NECESSARY SHALL BE PROVIDED BY THE ENGINEER/SURVEYOR AT THE EXPENSE OF THE CONTRACTOR. ALL STAKING SHALL BE DONE PER SECTION 5-1.07 PLACER COUNTY CALIFORNIA GENERAL SPECIFICATIONS.

5. THE CONTRACTOR IS HEREBY NOTIFIED THAT PRIOR TO COMMENCING CONSTRUCTION, HE IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR VERIFICATION AT THE CONSTRUCTION SITE OF THE LOCATIONS OF ALL UNDERGROUND FACILITIES WHERE SUCH FACILITIES MAY POSSIBLY CONFLICT WITH THE PLACEMENT OF THE IMPROVEMENTS SHOWN ON THESE PLANS. CALL "UNDERGROUND SERVICE ALERT" AT 800-227-2600 TWO (2) DAYS MINIMUM TO FOURTEEN (14) DAYS MAXIMUM BEFORE ANY EXCAVATION IS STARTED.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS. MONUMENTS AND SURVEY MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

7. ALL EXISTING A.C. SURFACES SHALL BE SAW CUT ONE-FOOT MINIMUM INSIDE THE EDGE OF PAVEMENT TO A NEAT, STRAIGHT LINE AND REMOVED. THE EXPOSED EDGE SHALL BE GRADED, RE-COMPACTED AND RESEALED PRIOR TO PAVING. THE EXPOSED BASE MATERIAL SHALL BE GRADED, RE-COMPACTED AND RESEALED PRIOR TO PAVING.

8. THE CONTRACTOR SHALL MAINTAIN ADEQUATE DUST CONTROL PER SECTION 10, CALTRANS STANDARD SPECIFICATIONS.

9. THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH CONSTRUCTION.

10. NO CONSTRUCTION SHALL BE DONE BETWEEN OCTOBER 15 AND MAY 1 WITHOUT A COUNTY APPROVED SEDIMENT AND EROSION CONTROL PLAN TO PREVENT SOIL EROSION. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND RECOMMENDATIONS CONTAINED IN THE "EROSION AND SEDIMENT CONTROL GUIDELINES FOR DEVELOPING AREAS OF THE SIERRA FOOTHILLS AND MOUNTAINS", LATEST EDITION.

11. INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF SIGNIFICANT EROSION AND SILT 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 BY THE COUNTY INSPECTOR. THE CONTRACTOR SHALL MAINTAIN EROSION CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION AND UNTIL ALL DISTURBED AREAS HAVE BECOME STABILIZED AND SHALL NOT BE LIMITED TO WET WEATHER PERIODS.

12. AFTER STRIPPING THE DEBRIS, ANY EXISTING LOOSE FILL, UNSUITABLE SOIL, SILTY SAND DEPOSITS, OR DISTURBED NATURAL SOILS SHALL BE EXCAVATED AND PROPERLY DISPOSED OF TO THE SATISFACTION OF THE ENGINEER.

13. THE CONTRACTOR SHALL REMOVE ALL ROAD MARKINGS, PAVEMENT MARKERS, AND OTHER DELINEATION THAT ARE IN CONFLICT WITH THE DELINEATION SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL LAYOUT ALL PAVEMENT MARKINGS FOR APPROVAL BY THE ENGINEER. AFTER APPROVAL, THE CONTRACTOR SHALL APPLY ALL PAINTED MARKINGS AND THERMOPLASTIC PAVEMENT MARKINGS WITHIN COUNTY RIGHT-OF-WAY AS WELL AS ALL ON-SITE PAINTED OR THERMOPLASTIC MARKINGS.

14. PERMANENT TRAFFIC SIGNS SHALL CONFORM TO CALIFORNIA MUTCD TRAFFIC SIGN STANDARDS FOR "STANDARD" SIZE CHARACTER DIMENSIONS AND LETTER STROKE WIDTH. ALL STOP SIGNS SHALL BE 30-INCH MINIMUM SIZE OF HIGH INTENSITY GRADE SHEETING.

15. ASPHALT CONCRETE SHALL BE TYPE A, 1/2" MAXIMUM MEDIUM GRADING WITH PBA 6B OR PG 64-28 AND CONFORM TO SECTION 39 OF THE PLACER COUNTY GENERAL SPECIFICATIONS. ALL ASPHALT CONCRETE 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.

16. THE UPPER 6" OF AGGREGATE BASE SHALL BE CLASS 2, 3/4" MAXIMUM GRADING. WHERE THE BASE THICKNESS EXCEEDS 6", THE DEPTH BELOW 6" MAY BE CLASS 2, 1 1/2" MAXIMUM GRADING. AGGREGATE BASE SHALL CONFORM TO SECTION 26 OF THE COUNTY GENERAL SPECIFICATIONS.

17. ALL WORK WITHIN COUNTY RIGHT-OF-WAY SHALL CONFORM TO ALL PROVISIONS OF ENCROACHMENT STATED IN THE PERMIT SPECIFICATIONS AND GENERAL PROVISIONS OF ENCROACHMENT. ATTENTION IS DIRECTED TO ITEMS 2, 5 AND 8 OF THE GENERAL PROVISIONS ON THE ENCROACHMENT PERMIT.

18. 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.

19. 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 THE EXPENSE OF THE DEVELOPER, SHALL SANDBLAST ALL TEMPORARY PAINTED MARKINGS THAT ARE TO BE REMOVED.

20. 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 MAY BE REQUIRED TO REMOVE AND REPLACE SUCH IMPROVEMENTS AT THEIR EXPENSE.

21. PRIOR TO ANY ACTIVITY WITHIN THE COUNTY RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL W20-1 (C23) SIGNS IN ACCORDANCE WITH PART 6 OF THE CALIFORNIA MUTCD. THE SIGNS SHALL BE PROFESSIONALLY MADE, METAL, REFLECTORIZED AND PLACED ON WOODEN POSTS FOR THE DURATION OF THE PROJECT. THE MINIMUM SIZE SHALL BE 36". THE SIGNS SHALL BE REPLACED OR REPAIRED IF STOLEN OR DAMAGED. THE PLACEMENT, TYPE AND LOCATION OF ALL TRAFFIC CONTROL DEVICES SHALL BE REVIEWED AND APPROVED BY THE COUNTY INSPECTOR. THE INSPECTOR SHALL DIRECT THE INSTALLATION OR CHANGES TO SIGNS, STRIPING, CONES, BARRICADES ETC. DURING THE COURSE OF CONSTRUCTION FOR TRAFFIC SAFETY.

22. ONLY THE APPROXIMATE LOCATION OF THE EXISTING SANITARY SEWER HAS BEEN SHOWN. THE CONTRACTOR SHALL VERIFY EXACT LOCATION IN THE FIELD AND IMMEDIATELY NOTIFY THE PROJECT ENGINEER IF SAID LOCATION IS DIFFERENT FROM THAT SHOWN ON THIS PLAN.

23. ALL GRADING AND PAVING OPERATIONS SHALL CONFORM TO THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL ENGINEERING REPORT PREPARED FOR THE PROJECT.

24. UNBALANCED EARTHWORK QUANTITIES MAY REQUIRE A SEPARATE GRADING PERMIT FOR THE OFF-SITE FACILITY IF THE EXPORT/IMPORT EXCEEDS 250 CUBIC YARDS AS REQUIRED BY THE COUNTY'S GRADING ORDINANCE. IF EXCESS MATERIAL WILL BE PLACED ON SITE, THEN THE PROJECT ENGINEER SHALL SUBMIT A REVISION TO THE PLANS SHOWING WHERE THE EXCESS MATERIAL WILL BE PLACED ON SITE.

DEVELOPERS NOTES

1. GEOTECHNICAL ENGINEERING REPORT, "PRELIMINARY GEOTECHNICAL ENGINEERING AND GEOLOGIC REVIEW FOR MARTIS VALLEY OPPORTUNITY, PLACER COUNTY, CALIFORNIA", BY: HOLDRIDGE & KULL, DATED: AUGUST 16, 2013.

2. THE BASIS OF BEARING, DATUM, AND CONTROL POINTS FOR THE PROJECT ARE PRESENTED ON SHEET C1.

3. THE CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING STREETS, SURROUNDING LANDSCAPE AND OTHER IMPROVEMENTS WITH SMOOTH TRANSITIONS AND AVOIDING ANY ABRUPT OR APPARENT CHANGES IN GRADES OR CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS.

4. THE FOLLOWING STANDARDS AND SPECIFICATIONS ARE REQUIREMENTS APPLICABLE TO THIS PROJECT AND SHALL BE MAINTAINED EXCEPT AS EXPLICITLY MODIFIED OR SUPPLEMENTED BY THESE PLANS. ALL REFERENCE STANDARDS AND SPECIFICATIONS ARE THE LATEST EDITIONS.

A. CALIFORNIA DEPARTMENT OF TRANSPORTATION

B. PLACER COUNTY

5. CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR PUBLIC WORKS, AMBULANCE, POLICE AND FIRE DEPARTMENTS AT ALL PROJECT SITE ENTRANCES.

6. CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS.

7. THE PROPOSED WORK IS SUBJECT TO ENVIRONMENTAL PROTECTION REQUIREMENTS AS SET FORTH BY THE LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD (LRWQCB). THE CONTRACTOR SHALL CONDUCT ALL OPERATIONS IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THIS AGENCY, AND AS OUTLINED IN THEIR PROJECT APPROVALS.

8. ALL GRADING WORK SHALL CONFORM TO PROVISIONS OF THE COUNTY GRADING ORDINANCE (CHAPTER 29, PLACER COUNTY CODE) LATEST EDITION.

9. ALL MOBILE CONSTRUCTION EQUIPMENT, INCLUDING ELECTRICAL GENERATORS AND COMPRESSORS, UTILIZED DURING CONSTRUCTION SHALL BE PROPERLY MAINTAINED AND TUNED-UP. AS PRACTICAL, LOW EMISSION EQUIPMENT SHALL BE USED ON-SITE. LOW SULFUR FUEL FOR CONSTRUCTION EQUIPMENT SHALL BE USED.

10. LOSS OR DAMAGE TO TREES NOT MARKED ON THE TREE REMOVAL PLANS DUE TO CONTRACTOR NEGLIGENCE OR IMPROPER CONSTRUCTION ACTIVITIES WILL RESULT IN LIQUIDATED DAMAGES.

8" TO 18" TRUNK - \$20,000  
18" TO 28" TRUNK - \$50,000  
28" TO 42" TRUNK - \$75,000

11. TEMPORARY POWER IF REQUIRED SHALL UTILIZE EXISTING POWER SERVICES OR CLEAN FUEL GENERATORS RATHER THAN TEMPORARY POWER GENERATORS.

12. EXISTING AERIAL TOPOGRAPHY PERFORMED BY SPENCER B. GROSS, RENO, NEVADA. FLIGHT DATE 10/20/97 AND A TOPOGRAPHIC SURVEY BY AUERBACH ENGINEERING GROUP ON 08/24/99, AND TOPOGRAPHIC SURVEY BY.

13. IN ADDITION TO CONTACTING USA FOR EXISTING UTILITY LOCATIONS, THE CONTRACTOR SHALL NOTIFY ANY FRANCHISE UTILITIES IN THE VICINITY PRIOR TO CONSTRUCTION.

14. THE CONTRACTOR SHALL KEEP DETAILED RECORDS AND AS-BUILTS SHOWING ALL MODIFICATIONS MADE TO THESE PLANS. THESE RECORDS AND AS-BUILTS SHALL BE PROVIDED TO THE ENGINEER UPON PROJECT COMPLETION FOR USE IN PREPARING RECORD DRAWINGS.

15. IF APPLICABLE BLASTING SHALL COMPLY WITH APPLICABLE REGULATIONS INCLUDING, BUT NOT LIMITED TO: STATE FIRE MARSHAL (CCR, TITLE 19), OSHA (CCR, TITLE 8), U.S. DEPARTMENT OF TRANSPORTATION (CFR TITLE 29), AND ANY CONDITIONS IMPOSED BY PLACER COUNTY PERTAINING TO THE USE OF EXPLOSIVES FOR CONSTRUCTION SITE BLASTING. THE CONTRACTOR SHALL OBTAIN A BLASTING PERMIT FROM PLACER COUNTY'S SHERIFF DEPARTMENT. THE CONTRACTOR SHALL NOTIFY PLACER COUNTY DPW A MINIMUM OF 48 HOURS IN ADVANCE OF ANY PROPOSED BLASTING. BLASTING WILL BE LIMITED TO THE HOURS OF 8:00 AM TO 8:00 PM.

16. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH ALL WARRANTIES OR GUARANTEES PROVIDED BY ANY SUPPLIER, DISTRIBUTOR, OR MANUFACTURER OF MATERIALS OR SUPPLIES USED IN THE CONSTRUCTION OF THE IMPROVEMENTS INDICATED IN THESE PLANS. THESE WARRANTIES OR GUARANTEES SHALL BE PROVIDED IN ADDITION TO ANY WARRANTIES OR GUARANTEES SEPARATELY REQUIRED BY THE OWNER FROM THE CONTRACTOR.

17. WHERE THE LOCATION OF UTILITY PADS OR BOXES FALL IN OR WITHIN 5' OF SLOPE EXCEEDING 15% A GRADED PAD WILL BE PROVIDED AT A SLOPE NOT EXCEEDING 10% THAT EXTENDS A MINIMUM OF 5' AROUND THE PERIMETER OF ALL UTILITY PADS AND BOXES.

18. FOR ALL SUBDIVISION CONSTRUCTION OR LOT GRADING, THE CONTRACTOR SHALL BE REQUIRED TO USE A CHIPPER UNIT, FUEL WOODING, AND/OR YARDING TO DISPOSE OF WOOD DEBRIS AS AN ALTERNATIVE TO OPEN BURNING OF CLEARED TREES AND BRUSH. NO BURNING OF CONSTRUCTION DEBRIS OR OTHER ILLEGAL MATERIALS IS ALLOWED.

19. THE EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR VERIFICATION OF EXISTING UNDERGROUND UTILITIES, WHETHER INDICATED OR NOT ON THE DRAWINGS, PRIOR TO ANY CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL PROTECT AND ASSUME LIABILITY FOR ALL EXISTING OR NEWLY PLACED UTILITY STRUCTURES AND LINES FROM ANY DAMAGE OR DISRUPTION OF SERVICE DURING CONSTRUCTION.

20. THE CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITY LINES AT LEAST ONE WORKING DAY AHEAD OF PIPE LAYING OPERATION TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES. ANY CONFLICTS WILL BE RESOLVED BY THE ENGINEER PRIOR TO PIPE INSTALLATION.

21. WELSH HAGEN ASSOCIATES HAS EXERCISED A NORMAL STANDARD OF CARE IN THE PREPARATION OF THESE PLANS. HOWEVER, THE DESIGN PROCESS INCLUDES ACTIVITIES OCCURRING AFTER PLAN SIGNATURE. THESE ACTIVITIES INCLUDE CALCULATION, PLAN CHECK AND VERIFICATIONS DURING CONSTRUCTION. SHOULD PERSONS, OTHER THAN WELSH HAGEN ASSOCIATES, PERFORM THE CONSTRUCTION STAKING OPERATION, THEY SHALL INDEMNIFY WELSH HAGEN ASSOCIATES FROM ANY DAMAGES RESULTING FROM FAILURE TO PERFORM THOSE TASKS OR ANY EXPENSE OR DAMAGE RESULTING FROM COMMISSION OR ERROR CONTAINED IN THE PLANS WHICH WOULD REASONABLY HAVE BEEN DISCOVERED AND CORRECTED BY WELSH HAGEN ASSOCIATES.

22. THE CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY GREEN CONSTRUCTION FENCING AROUND THE PERIMETER OF THE PROJECT SITE FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. MATERIALS SHALL BE STORED IN LAYDOWN AREAS DESIGNATED EITHER BY THE ENGINEER OR AS SHOWN ON PLANS.

TRPA BMP NOTES:

1. ALL BARREN AREAS AND AREAS DISTURBED BY CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH THE TRPA HANDBOOK OF BEST MANAGEMENT PRACTICES. APPLICATION OF MULCH MAY ENHANCE VEGETATIVE ESTABLISHMENT.

2. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE MULCHED WITH A 2 TO 3 INCH LAYER OF PINE NEEDLES OR WOOD CHIPS AS DUST CONTROL MEASURES. THIS MULCH SHALL BE MAINTAINED FROM COMPLETION OF THE INITIAL GRADING THROUGH PROJECT COMPLETION.

3. INSTALL A 3 INCH LAYER OF GRAVEL (1 TO 2 INCH DRAIN ROCK) UNDER ALL RAISED DECKS AND STAIRS.

4. STANDARD WORK DAYS SHALL BE MONDAY THROUGH SATURDAY. SUNDAYS MAY BE WORKED ON OCCASION ONLY TO MAKE UP FOR WEATHER DELAYS OR OTHER SCHEDULE DELAYS. NOISE GENERATING ACTIVITIES WILL BE LIMITED TO THE HOURS OF 8:00 AM TO 6:30 PM.

5. NOISE SHALL BE REDUCED BY THE MANDATORY USE OF MUFFLERS ON ALL CONSTRUCTION VEHICLES AND EQUIPMENT. WHERE FEASIBLE, SOLENOIDAL PAVEMENT BREAKERS WILL BE USED IN LIEU OF AIR POWERED JACK HAMMERS. NOISE GENERATING ACTIVITIES WILL BE LIMITED TO THE HOURS OF 8:00 AM TO 6:30 PM.

6. THE CONTRACTOR SHALL PROVIDE A WATER TRUCK TO WATER AREAS AS NECESSARY TO CONTROL DUST.

7. THE CONTRACTOR SHALL PROVIDE CRUSHED ROCK IN AREAS OF TEMPORARY CONSTRUCTION ACCESS TO MINIMIZE MIGRATION OF SEDIMENT.

8. ALL DISTURBED AREAS SHALL BE REVEGETATED WITH NATIVE SPECIES PER TRPA BEST MANAGEMENT PRACTICES (BMP). EXISTING VEGETATION REMOVED DURING CONSTRUCTION SHALL BE CHIPPED AND MULCHED ON-SITE AND STORED FOR USE DURING REVEGETATION.

9. ALL TREES AND NATURAL VEGETATION TO REMAIN ON THE SITE SHALL BE PROTECTED PER TRPA RECOMMENDATIONS.

10. SOIL AND CONSTRUCTION MATERIAL SHALL NOT BE TRACKED OFF THE CONSTRUCTION SITE. GRADING OPERATIONS SHALL CEASE IN THE EVENT THAT A DANGER OF VIOLATING THIS CONDITION EXISTS.

11. DURING CONSTRUCTION ENVIRONMENTAL PROTECTION DEVICES, SUCH AS EROSION CONTROL, DUST CONTROL AND VEGETATION PROTECTION DEVICES SHALL BE MAINTAINED AT ALL TIMES.

12. LOOSE SOIL MOUNDS OR SURFACES SHALL BE PROTECTED FROM WIND OR WATER EROSION BY BEING APPROPRIATELY COVERED WHEN CONSTRUCTION IS NOT IN ACTIVE PROGRESS OR WHEN REQUIRED BY TRPA.

13. EXCAVATED MATERIAL SHALL BE STORED UPGRADE FROM THE EXCAVATED AREA WHENEVER POSSIBLE. NO MATERIAL SHALL BE STORED IN ANY STREAM ENVIRONMENT ZONE (SEZ) OR WET AREA.

14. ONLY EQUIPMENT OF A SIZE AND TYPE THAT WILL DO THE LEAST AMOUNT OF DAMAGE, UNDER PREVAILING SITE CONDITIONS, AND CONSIDERING THE NATURE OF THE WORK TO BE PERFORMED, WILL BE USED.

15. NO WASHING OF VEHICLES OR HEAVY EQUIPMENT, INCLUDING CEMENT MIXERS, SHALL BE PERMITTED ANYWHERE ON THE SUBJECT PROPERTY UNLESS AUTHORIZED BY TRPA IN WRITING.

16. NO VEHICLE OR HEAVY EQUIPMENT SHALL BE ALLOWED IN A STREAM ENVIRONMENT ZONE OR WET AREA EXCEPT AS AUTHORIZED BY TRPA.

17. ALL CONSTRUCTION SHALL BE WINTERIZED BY OCTOBER 15 TO REDUCE THE WATER QUALITY IMPACTS ASSOCIATED WITH WINTER WEATHER AS FOLLOWS:

A) FOR THE SITES THAT WILL BE INACTIVE BETWEEN OCTOBER 15TH AND MAY 1ST:

1)TEMPORARY EROSION CONTROLS SHALL BE INSTALLED

2)TEMPORARY VEGETATION PROTECTION FENCING SHALL BE INSTALLED

3)DISTURBED AREAS SHALL BE STABILIZED

4)ONSITE CONSTRUCTION SLASH AND DEBRIS SHALL BE CLEANED UP AND REMOVED

5)MECHANICAL STABILIZATION AND DRAINAGE IMPROVEMENTS SHALL BE INSTALLED

6)SPOIL PILES SHALL BE REMOVED FROM THE SITE

B)FOR THE SITES THAT WILL BE ACTIVE BETWEEN OCTOBER 15TH AND MAY 1ST, IN ADDITION TO THE ABOVE REQUIREMENTS:

1)PERMANENT MECHANICAL EROSION CONTROL DEVICES SHALL BE INSTALLED, INCLUDING PAVING OF THE DRIVEWAYS AND PARKING AREAS

2)PARKING OF VEHICLES AND STORAGE OF BUILDING MATERIALS SHALL BE RESTRICTED TO PAVED AREAS

ADDITIONAL BMP NOTES:

1. PHASING OF ADDITIONAL BMP'S SHALL BE NECESSARY AS THE PROJECT PROGRESSES IN DEVELOPMENT. THE CONTRACTOR SHALL ENSURE, AT ALL TIMES, THAT ADDITIONAL BMP'S ARE INSTALLED AND MAINTAINED UNTIL THE PROJECT IS DEEMED COMPLETE.

2. UPON COMPLETION OF SURFACE DRAINAGE APPURTENANCES, THE CONTRACTOR SHALL ENSURE PROPER BMP INSTALLATION TO PROTECT INTERMEDIATE YARD DRAINS, TRENCH DRAINS, AND DROP INLETS.

LEGEND

NAME	EXISTING	PROPOSED
DROP INLET		
MANHOLE		
STORM DRAIN		
SANITARY SEWER		
SANITARY SEWER LAT		
SANITARY SEWER CLEANOUT		
WATER MAIN (LINE)		
WATER SERVICE		
GATE VALVE		
STANDARD FIRE HYDRANT		
PULL BOX/ELEC		
CONTOUR		
EDGE OF PAVEMENT		
CURB & GUTTER		
RIGHT-OF-WAY		
CENTER LINE		
PROPERTY LINE		
P.U.E. LINE		
GRADE BREAK		
ELEVATION		
MONUMENT		
JOINT TRENCH		
REMOVE TREE		
GUARD RAIL		
SILT FENCE		
CONSTRUCTION FENCE		
TREE PROTECTION FENCE		
FIBER/SEDIMENT ROLL		
LOT NUMBER (TYPICAL)		
EXISTING TREES (TYPICAL)		
EX. ROCK/BOULDER (TYPICAL)		
CONSTRUCTION ENTRANCE		
GRAVEL ACCESS ROAD		
AC HATCH		
ROCK RETAINING WALL		
ROCK INFILTRATION SWALE		

ABBREVIATIONS

NOT ALL ABBREVIATIONS LISTED ARE USED IN THESE PLANS

AB	AGGREGATE BASE	M.D.D.	MAXIMUM DRY DENSITY
AC	ASPHALT CONCRETE OR ACRE	MI.	MILE
D	AT	MIN.	MINIMUM
APPROX.	APPROXIMATE	MISC.	MISCELLANEOUS
AVG.	AVERAGE	MJ	MECHANICAL JOINT
AWWA	AMERICAN WATER WORKS ASSOCIATION	MVC	MIDDLE OF VERTICAL CURVE
BW	BOTTOM OF WALL	N	NORTH
BVC	BEGIN VERTICAL CURVE	N.I.C.	NOT IN CONTRACT
C&G	CURB AND GUTTER	N.T.S.	NOT TO SCALE
C.B.	CATCH BASIN	# OR NO.	NUMBER
CL	CENTERLINE	O.C.	ON CENTER
CO	CLEAR	O.G.	ORIGINAL GRADE
CONST.	CONSTRUCT	±	PLUS OR MINUS
CF	CUBIC FEET	PT.	POINT
CMP	CORRUGATED METAL PIPE	PC2	PORTLAND CEMENT CONCRETE
CY	CUBIC YARD	PDE	PRIVATE DRAINAGE EASEMENT
OR DEG.	DEGREE(S)	PVC	POLYVINYL CHLORIDE
DI	DROP INLET	PVMT	PAVEMENT
Ø OR DIA.	DIAMETER	P.S.I.	POUNDS PER SQUARE INCH
DWG	DRAWING	PL	PROPERTY LINE
DW, DWY	DRIVEWAY	P.U.E.	PUBLIC UTILITY EASEMENT
DRC	DESIGN REVIEW COMMITTEE	P.R.E.	PUBLIC ROAD EASEMENT
EA	EACH	R	RADIUS
EAS	EMERGENCY ACCESS EASEMENT	RCP	REINFORCED CONCRETE PIPE
EASE	EASEMENT	RT,R	RIGHT
E	EAST	R/W, ROW	RIGHT-OF-WAY
ELEC	ELECTRIC	SS	SANITARY SEWER/STAINLESS STEEL
EP	EDGE OF PAVEMENT	SSCO	SANITARY SEWER CLEAN OUT
ELEV.	ELEVATION	SSMH	SANITARY SEWER MANHOLE
EVC	END OF VERTICAL CURVE	S	SLOPE, SOUTH
EVA	EMERGENCY VEHICLE ACCESS	SF OR SQ.FT	SQUARE FOOT/FEET
EX., EXIST.	EXISTING	SHT	SHEET
F.G.	FINISH GRADE	SY	SQUARE YARD
FH	FIRE HYDRANT	STD.	STANDARD
FES	FLARED END SECTION	SDR	STANDARD DIMENSION RATIO
FL	FLOWLINE	ST	STATION
FLG	FLANGE	SDMH	STORM DRAIN MANHOLE
FT.	FOOT, FEET	TBC	TOP BACK OF CURB
GV	GATE VALVE	TC	TOP OF CURB
HP	HIGH POINT	TW	TOP OF WALL
IO	IRREVOCABLE OFFER OF DEDICATION	TYP.	TYPICAL
INT., INTX.	INTERSECTION	UGE	UNDERGROUND ELECTRIC LINES
IE	INVERT ELEVATION	UGT	UNDERGROUND TELEPHONE LINES
IRR.	IRRIGATION	VG	VERTICAL CURVE
LT, L	LEFT	VG	VALLEY CUTTER
LEN.	LENGTH	W	WATER
LF	LINEAR FEET	WL	WATERLINE
LP	LOW POINT	W	WEST
LS	LUMP SUM	W/W	WITH
MH	MANHOLE	WM	WATER METER
MAX.	MAXIMUM		



BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

WELSH HAGEN ASSOCIATES  
ENGINEERING - PLANNING - SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 833-7776  
www.welshhagen.com

NOTE:  
This drawing is the property of Welsh Hagen Associates, Inc., including all patented and patentable features, and/or confidential information. Its use is conditioned upon the user's agreement not to reproduce the drawing, in whole or part, nor the material described herein; nor to use the drawing for any purpose other than specifically permitted in writing by Welsh Hagen Associates, Inc.



PRELIMINARY  
NOT FOR  
CONSTRUCTION

Sheet Title:

GENERAL  
NOTES, LEGEND,  
AND  
ABBREVIATIONS

Project: 404100

Drawn By: BAMF

Checked By: DLH

Scale: AS-NOTED

Date: JULY 2015

Sheet Number:

C2






RECORD DRAWINGS

DATE

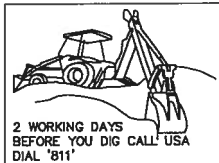
ENGINEER INITIAL



# LEGEND:

-  EXISTING TREES TO BE REMOVED (800 TREES TOTAL TO BE REMOVED)
-  EXISTING TREE
-  SILT FENCING
-  CONSTRUCTION FENCING
-  TREE PROTECTION FENCING

NOTE:  
ALL CONSTRUCTION FENCING, SILT FENCING/FIBER ROLLS, AND TREE PROTECTION IS TO BE PERFORMED IN STAGES. CONTRACTOR IS TO REUSE UNDAMAGED MATERIAL IN FUTURE STAGES TO ELIMINATE THE AMOUNT OF MATERIAL AND SUPPLIES REQUIRED FOR ALL TEMPORARY BMPs THROUGH OUT THE LIFE SPAN OF THE PROJECT.



2 WORKING DAYS  
BEFORE YOU DIG CALL USA  
DIAL '811'

PLACER COUNTY  
TRPA  
SUBMITTAL  
DATE: 07-29-15

## TREE SURVEY ON CAMPGROUND SITE ONLY:

TREE SIZE	QTY	REMOVED	REMAINING
TREES UNDER 30" DIAMETER	3,970	676	3,294
TREES 30" AND OVER	530	61	469
<b>TOTAL TREES</b>	<b>4,500</b>	<b>737</b>	<b>3,763</b>

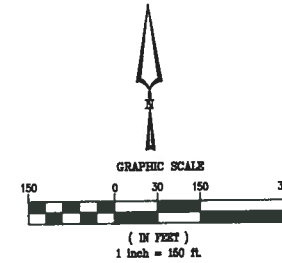
## REMOVAL PERCENTAGES:

TREE SIZE	ON TOTAL PROJECT AREA*
TREES UNDER 30" DIAMETER	676 / 4,764 = 14.2%
TREES 30" AND OVER	61 / 636 = 9.6%

\*TREE SURVEY & REMOVAL NOTE:  
THE FIELD TREE SURVEY WAS PERFORMED ON THE CAMPGROUND SITE ONLY (90± ACRES). THE PROJECT AREA IS APPROXIMATELY 120.4 ACRES; THEREFORE, THE ESTIMATED, TO BE VERIFIED, TOTAL TREES IN PROJECT AREA IS APPROXIMATELY 5,400 TREES RESULTING IN REMOVAL PERCENTAGES THAT ARE LESS THAN ABOVE; ADDITIONALLY, AS THE SITE DESIGN IS REFINED AND PERMITTED, TREES, NAMELY OVER 30", WILL BE AVOIDED WHERE FEASIBLE.

## TRPA Notes:

- 61.14.C  
2. Limited Forest Plan  
Private landowners may prepare a limited forest plan when there would be limited proposed impact to large trees.
- a. A limited forest plan may be prepared if ten percent or less of the trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types within the project site are proposed to be cut within the life of the plan.
- b. The limited forest plan shall include:
- (i) The relative state permit application, if available;
  - (ii) Description of harvest activities;
  - (iii) Description of management activities;
  - (iv) Explanation of how thresholds, goals and policies shall be attained under the forest plan; and
  - (v) The expiration date of the plan. A minimum lifespan of ten years and a maximum lifespan of 50 years shall be accepted.
3. TRPA shall review proposed cutting of trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside or larger forest types on a tree-by-tree basis consistent with the forest plan.



CONSTRUCTION FENCING PHASE AREA (TYP.)

TREE PROTECTION FENCING AREA PER PHASE OF CONSTRUCTION (TYP.)

9  
C7 2,800± LF. OF CONSTRUCTION FENCE PER PROJECT PHASE

BROCKWAY CAMPGROUND PROJECT AREA CONSISTS OF RESULTANTS B AND D FROM THE BELOW MINOR LINE ADJUSTMENT SIERRA PACIFIC MBR#PLN15-00086

9  
C7 DUE TO HIGH AMOUNTS OF HIKERS BIKERS AND OTHER ACT USING THIS AREA CONSTRUCTION FENCING IS TO BE APPLIED TO THE PHASED PROJECT AREA AND THEN DISASSEMBLED AND RELOCATED TO THE NEXT PROJECT AREA. THIS IS TO LIMIT THE AMOUNT OF MATERIAL AT PROJECT SITE AND PROVIDE SAFETY TO THE PUBLIC

7  
C7 SILT FENCING IS TO BE PLACED DOWN HILL OF CONSTRUCTION ALONG WITH FIBER ROLLS WERE APPROPRIATE. FENCING AND UN DAMAGED FIBER ROLLS MAY BE USED AGAIN IN DIFFERENT PHASING OF CONSTRUCTION

8  
C7 CONSTRUCTION FENCING AREA PER PHASE (TYP.)

8  
C7 TREES TO BE GROUP PROTECTED AND SINGLE PROTECTION DEPENDENT ON LOCATION AND SURROUNDING TREES

8  
C7 TREE PROTECTION FENCING AREA PER PHASE OF CONSTRUCTION (TYP.)

7  
C7 SILT FENCING AND FIBER ROLLS (TYP.)

2,500± LF OF SILT FENCING AND FIBER ROLLS PER PROJECT PHASE

CONSTRUCTION FENCING (TYP.)

RECORD DRAWINGS

DATE

ENGINEER INITIAL

BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

WELSH & HAGEN  
ASSOCIATES  
ENGINEERING - PLANNING - SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

NOTE:  
This drawing is the property of Welsh Hagen Associates, Inc., including all patented and patentable features, and/or confidential information. Its use is conditioned upon the user's agreement not to reproduce the drawing, in whole or part, nor the material described thereon; nor to use the drawing for any purpose other than specifically permitted in writing by Welsh Hagen Associates, Inc.



PRELIMINARY  
NOT FOR  
CONSTRUCTION

Sheet Title:

BMP  
TREE REMOVAL  
PLAN

Project: 404100

Drawn By: BAMF

Checked By: DLH

Scale: AS-NOTED

Date: JULY 2015

Sheet Number:

C3



GENERAL NOTES

ROADWAYS

TWO-WAY ROADS -	20'
ONE-WAY ROADS -	18'
SECONDARY ROADS -	12'
PARKING SPACES -	20'X10'
(TOTAL 876)	

KEYS

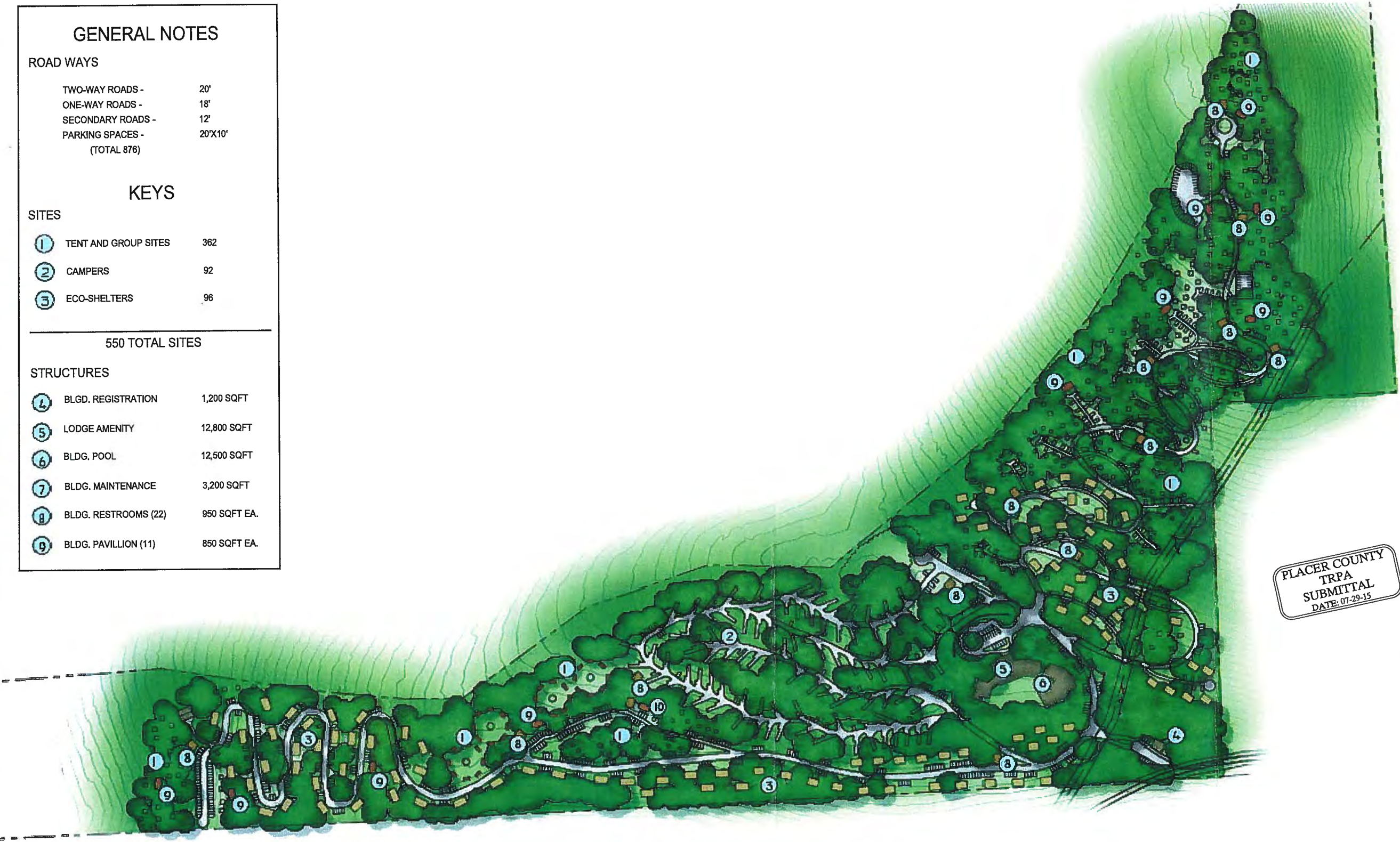
SITES

1	TENT AND GROUP SITES	362
2	CAMPERS	92
3	ECO-SHELTERS	96

550 TOTAL SITES

STRUCTURES

4	BLDG. REGISTRATION	1,200 SQFT
5	LODGE AMENITY	12,800 SQFT
6	BLDG. POOL	12,500 SQFT
7	BLDG. MAINTENANCE	3,200 SQFT
8	BLDG. RESTROOMS (22)	950 SQFT EA.
9	BLDG. PAVILLION (11)	850 SQFT EA.



PLACER COUNTY  
TRPA  
SUBMITTAL  
DATE: 07-29-15

BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

BUD SURLES  
CONSULTING  
GROUP

10 S Main St #201  
Victor, ID 83455  
(208) 787-5011

NOTE:  
This drawing is the property of  
Bud Surles Consulting Group,  
including all patented and  
patentable features, and/or  
confidential information. Its use  
is conditioned upon the user's  
agreement not to reproduce the  
drawing, in whole or part, nor  
the material described thereon;  
nor to use the drawing for any  
purpose other than specifically  
permitted in writing by  
Bud Surles Consulting Group.



PRELIMINARY  
NOT FOR  
CONSTRUCTION

Sheet Title:

OVERALL  
SITE PLAN

Project: 404100  
Drawn By: JC  
Checked By: BS  
Scale: N.T.S.  
Date: JULY 2015

Sheet Number:

C4











BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA  
(530) 378-8000

Revisions:


**WELSH HAGEN ASSOCIATES**  
ENGINEERING · PLANNING · SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7716  
www.welshhagen.com

**NOTE:**  
This drawing is the property of  
Welsh Hagen Associates, Inc.,  
including all patented and  
patentable features, and/or  
confidential information. Its use  
is conditioned upon the user's  
agreement not to reproduce the  
drawing, in whole or part, nor  
the material described thereon;  
nor to use the drawing for any  
purpose other than specifically  
permitted in writing by  
Welsh Hagen Associates, Inc.



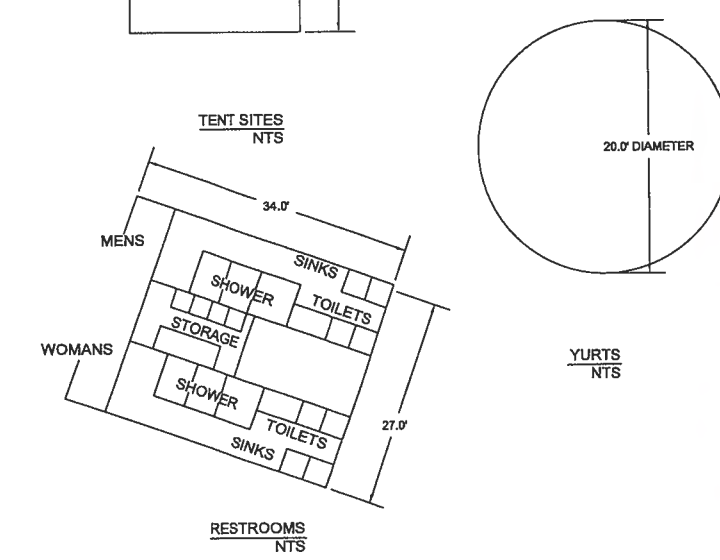
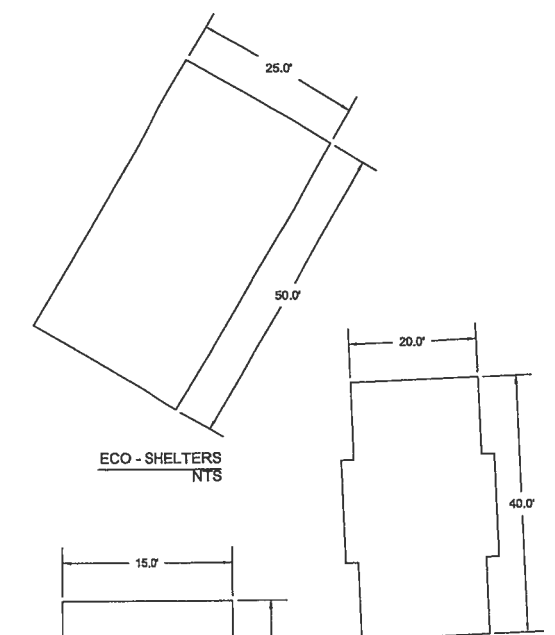
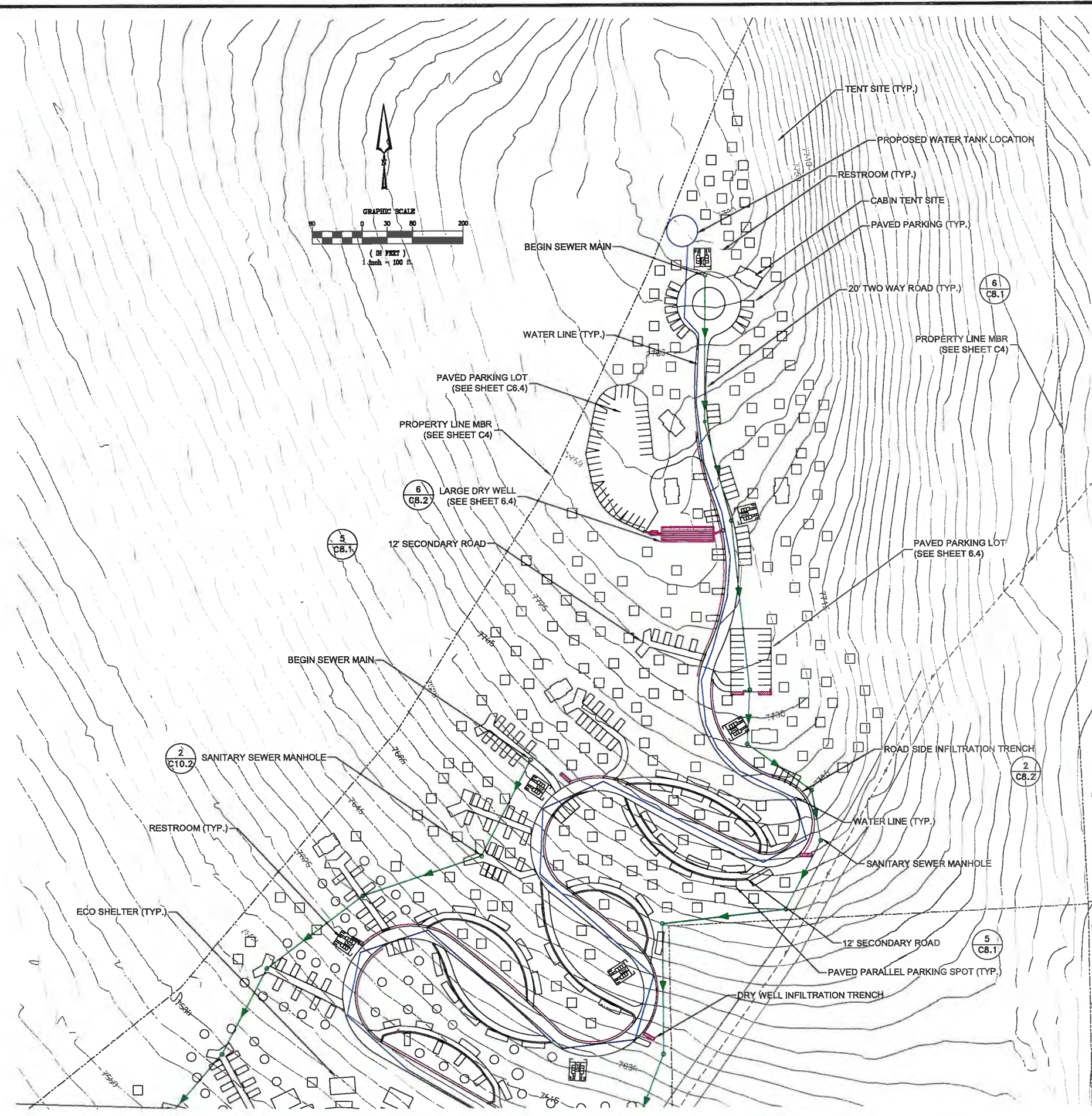
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

Sheet Title:

**SITE  
PLAN**

Project: 404100  
Drawn By: BAMF  
Checked By: DLH  
Scale: AS-NOTED  
Date: JULY 2015  
Sheet Number:

**C5.3**

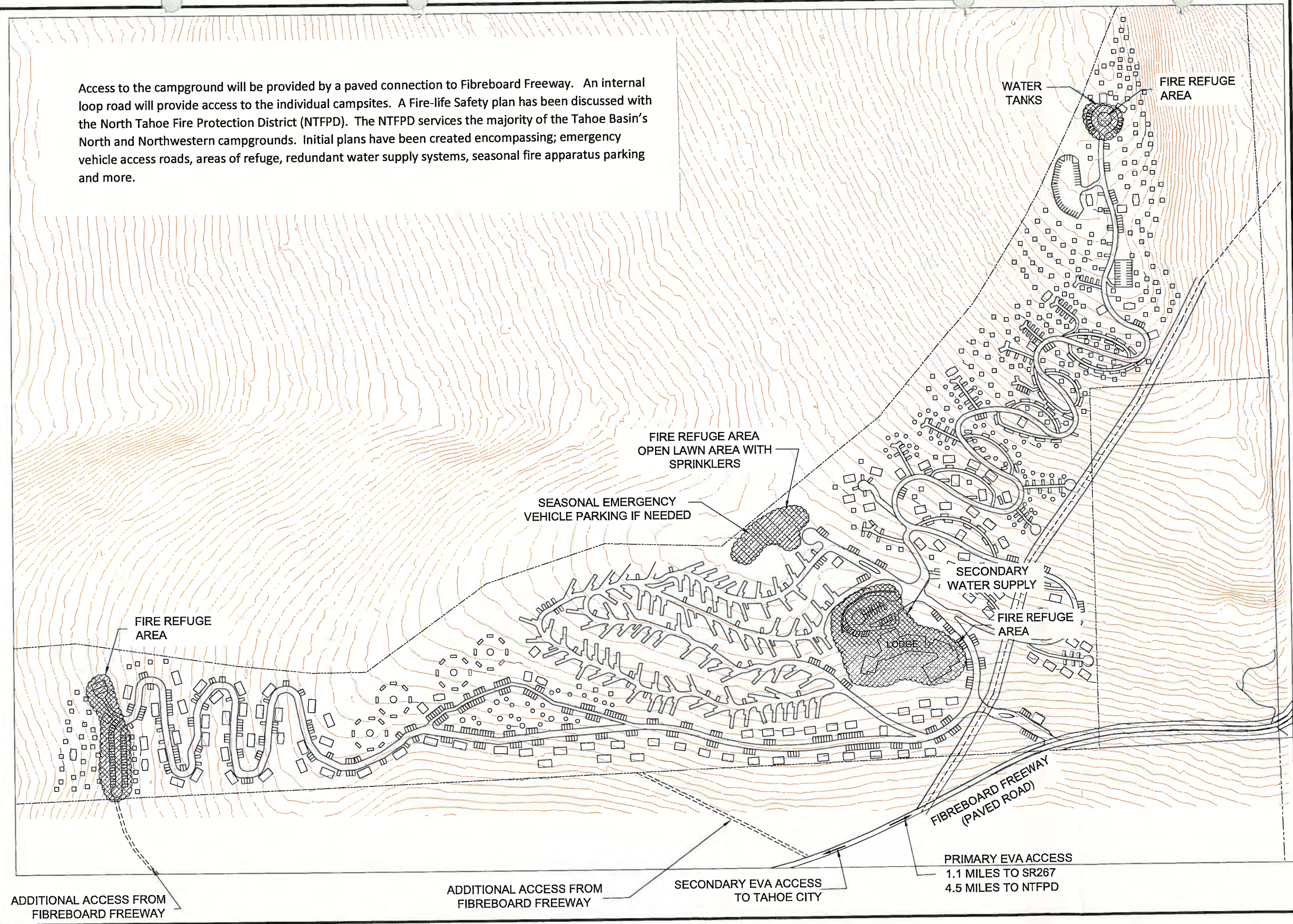


**PLACER COUNTY  
TRPA  
SUBMITTAL  
DATE: 07-29-15**

RECORD DRAWINGS  
DATE \_\_\_\_\_ ENGINEER INITIAL \_\_\_\_\_



Access to the campground will be provided by a paved connection to Fibreboard Freeway. An internal loop road will provide access to the individual campsites. A Fire-life Safety plan has been discussed with the North Tahoe Fire Protection District (NTFPD). The NTFPD services the majority of the Tahoe Basin's North and Northwestern campgrounds. Initial plans have been created encompassing; emergency vehicle access roads, areas of refuge, redundant water supply systems, seasonal fire apparatus parking and more.



BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:


**WELSH HAGEN**  
ASSOCIATES  
ENGINEERING - PLANNING - SURVEYING  
5490 Longley Lane  
Reno, Nevada 89511  
(775) 853-7776  
www.welshhagen.com

**NOTE:**  
This drawing is the property of  
Welsh Hagen Associates, Inc.,  
including all patented and  
patentable features, and/or  
confidential information. Its use  
is conditioned upon the user's  
agreement not to reproduce the  
drawing, in whole or part, nor  
the material described thereon;  
nor to use the drawing for any  
purpose other than specifically  
permitted in writing by  
Welsh Hagen Associates, Inc.



**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

Sheet Title:

**FIRE LIFE  
SAFETY**

Project:	404100
Drawn By:	BAMF
Checked By:	DLH
Scale:	AS-NOTED
Date:	JULY 2015
Sheet Number:	

**C12.1**



GENERAL NOTES

ROADWAYS

TWO-WAY ROADS -	20'
ONE-WAY ROADS -	18'
SECONDARY ROADS -	12'
PARKING SPACES -	20'X10'
(TOTAL 876)	

KEYS

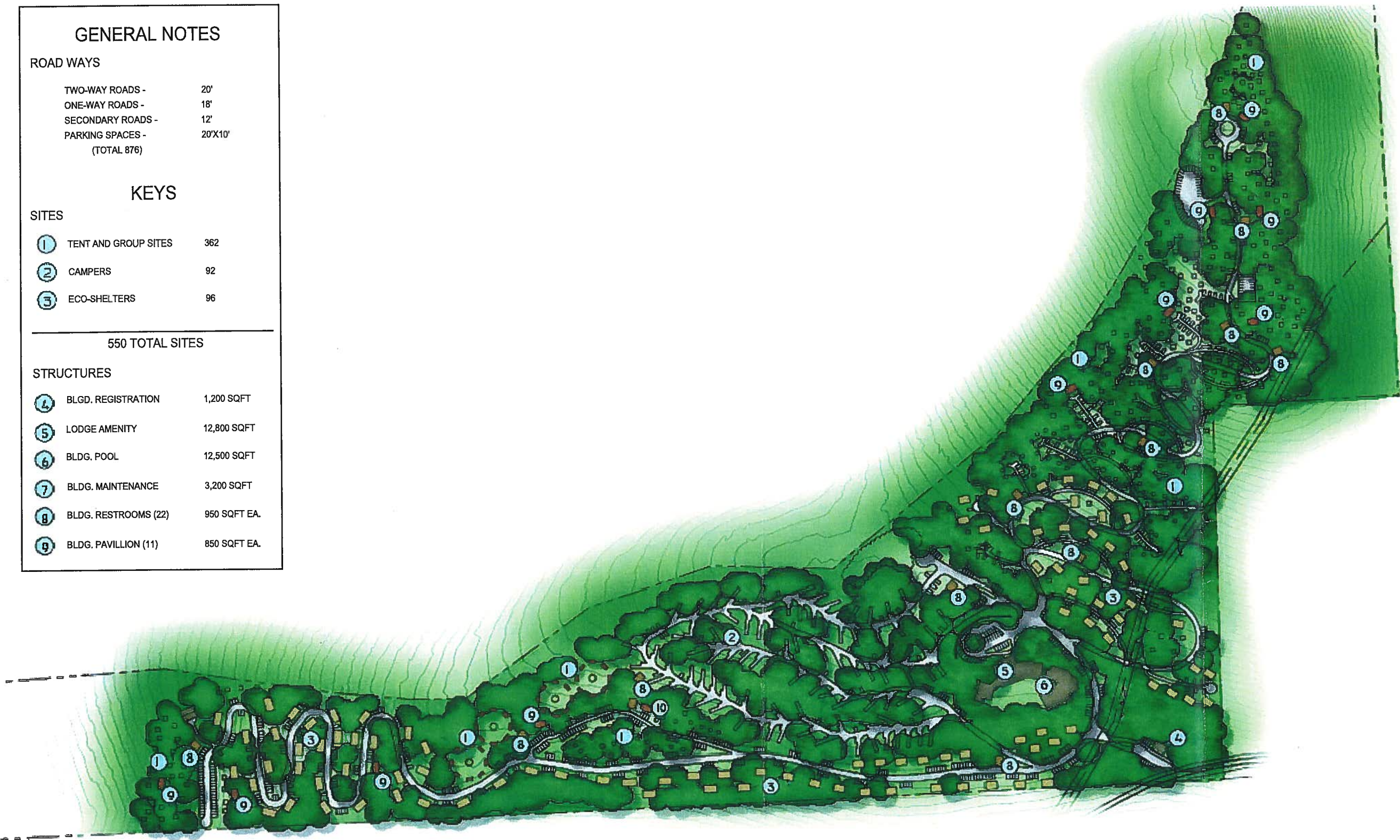
SITES

1	TENT AND GROUP SITES	362
2	CAMPERS	92
3	ECO-SHELTERS	96

550 TOTAL SITES

STRUCTURES

4	BLDG. REGISTRATION	1,200 SQFT
5	LODGE AMENITY	12,800 SQFT
6	BLDG. POOL	12,500 SQFT
7	BLDG. MAINTENANCE	3,200 SQFT
8	BLDG. RESTROOMS (22)	950 SQFT EA.
9	BLDG. PAVILLION (11)	850 SQFT EA.



BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

BUD SURLS  
CONSULTING  
GROUP

10 S Main St #201  
Victor, ID 83455  
(208) 787-5011

NOTE:  
This drawing is the property of  
Bud Surls Consulting Group,  
including all patented and  
patentable features, and/or  
confidential information. Its use  
is conditioned upon the user's  
agreement not to reproduce the  
drawing, in whole or part, nor  
the material described thereon;  
nor to use the drawing for any  
purpose other than specifically  
permitted in writing by  
Bud Surls Consulting Group.



PRELIMINARY  
NOT FOR  
CONSTRUCTION

Sheet Title:

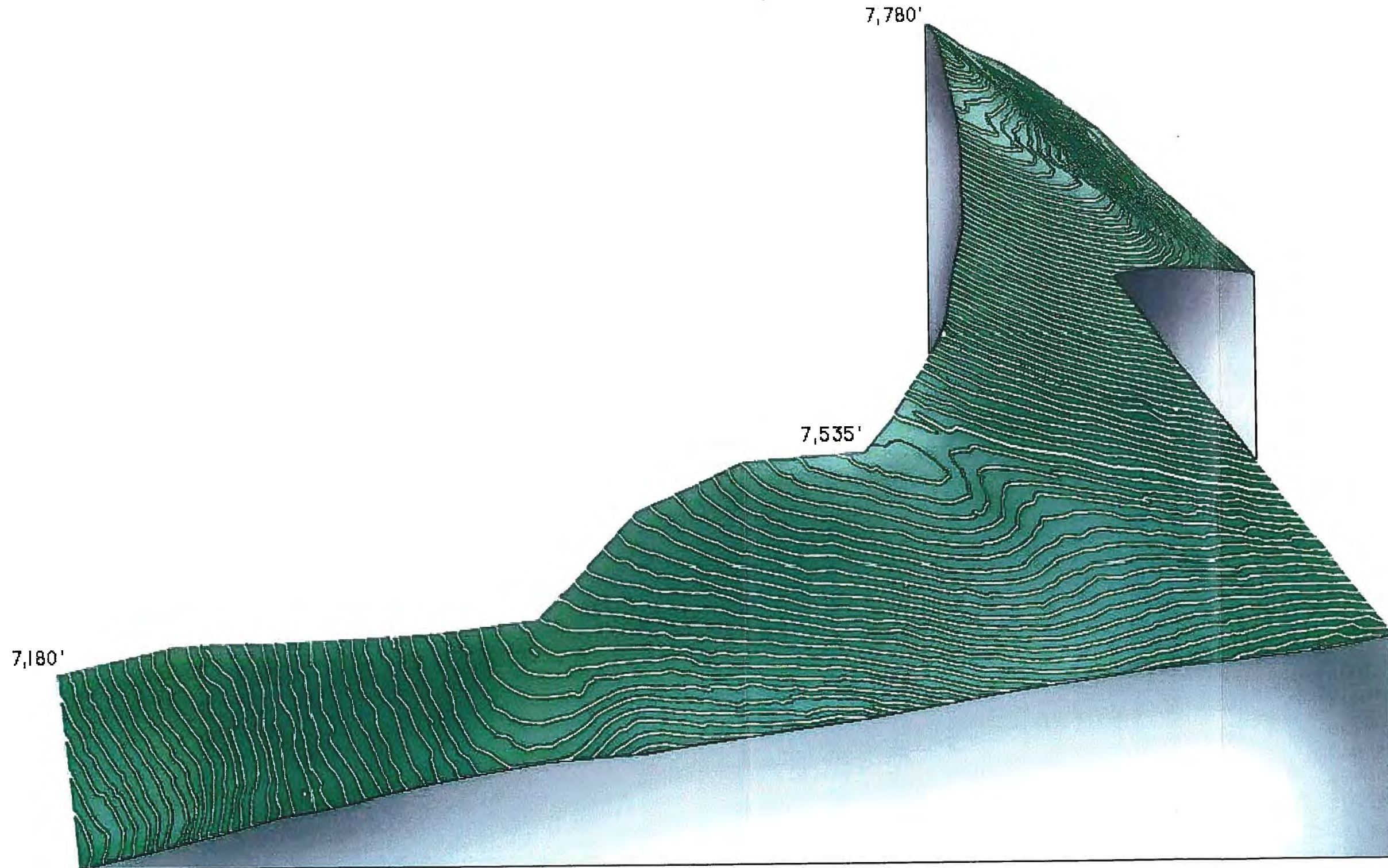
SITE LAYOUT  
ANALYSIS

Project: 404100  
Drawn By: JC  
Checked By: BS  
Scale: N.T.S.  
Date: JULY 2015

Sheet Number:

1 OF 3





BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

BUD SURLES  
CONSULTING  
GROUP

10 S Main St #201  
Victor, ID 83455  
(208) 787-5011

NOTE:  
This drawing is the property of  
Bud Surles Consulting Group,  
including all patented and  
patentable features, and/or  
confidential information. Its use  
is conditioned upon the user's  
agreement not to reproduce the  
drawing, in whole or part, nor  
the material described thereon;  
nor to use the drawing for any  
purpose other than specifically  
permitted in writing by  
Bud Surles Consulting Group.



**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

Sheet Title:

**TERRAIN  
ANALYSIS**

Project: 404100

Drawn By: JC

Checked By: BS

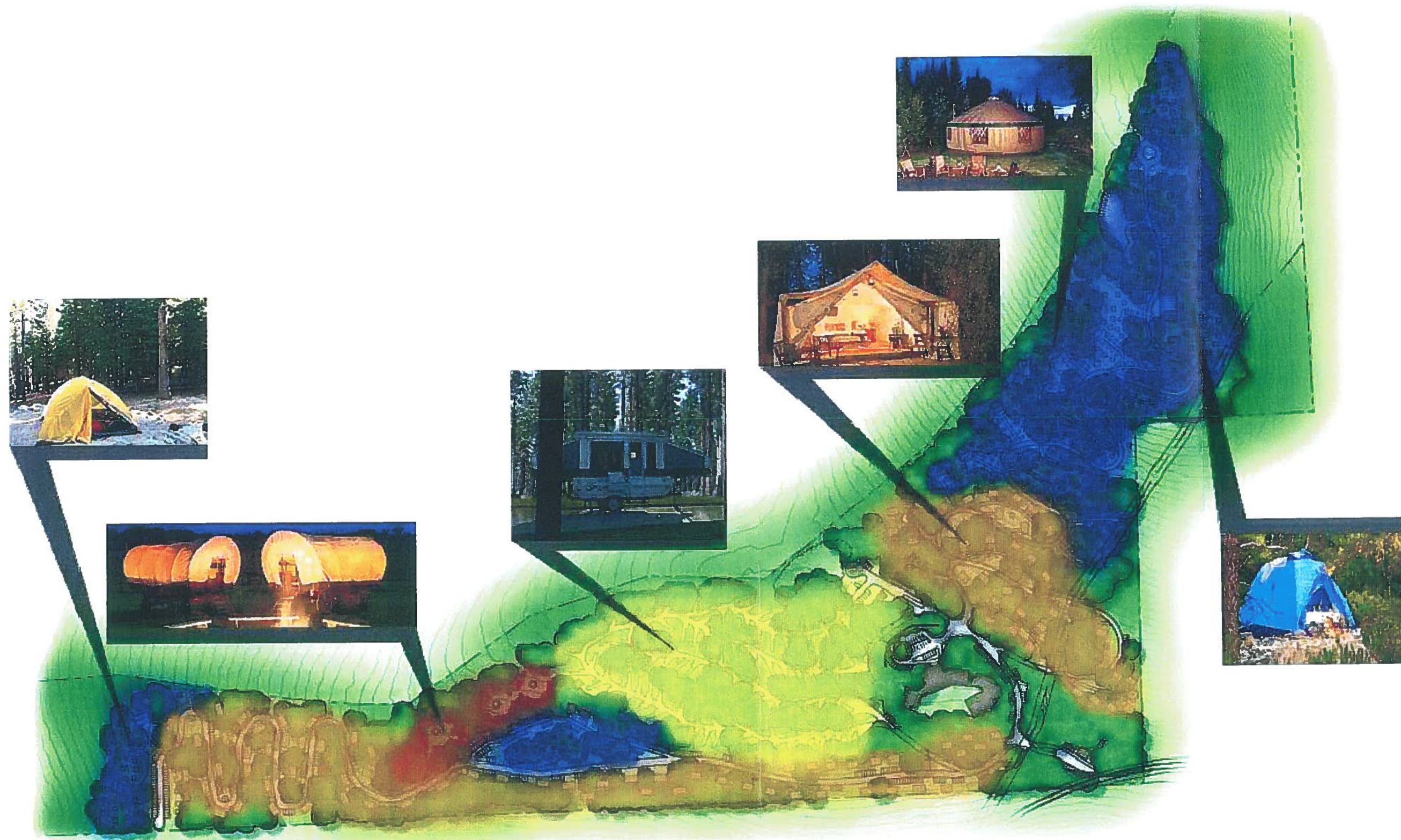
Scale: N.T.S.

Date: JULY 2015

Sheet Number:

**2** OF **3**





BROCKWAY CAMPGROUND  
PLACER COUNTY, CALIFORNIA

SIERRA PACIFIC INDUSTRIES  
PO BOX 496028 REDDING, CA.  
(530) 378-8000

Revisions:

BUD SURLES  
CONSULTING  
GROUP

10 S Main St #201  
Victor, ID 83455  
(208) 787-5011

**NOTE:**  
This drawing is the property of  
Bud Surles Consulting Group,  
including all patented and  
copyrightable features, and/or  
confidential information. Its use  
is conditioned upon the user's  
agreement not to reproduce the  
drawing, in whole or part, nor  
the material described therein;  
nor to use the drawing for any  
purpose other than specifically  
permitted in writing by  
Bud Surles Consulting Group.



**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

Sheet Title:

**SITE LAYOUT  
ANALYSIS**

Project: 404100  
Drawn By: JC  
Checked By: BS  
Scale: N.T.S.  
Date: JULY 2015

Sheet Number:

**3** OF **3**