

TDS Telecom Deficiency Responses to CPUC

Attachment A

Response to #1

TDS Happy Valley GIS Geodatabase File List

TDS_HappyValley_env_GIS.gdb

Feature Dataset: env

FEATURE CLASS NAME

big_scale_balsamroot_survey (GEOMETRY TYPE Polygon)

bio_resources_study_area_50ftbuffer (GEOMETRY TYPE Polygon)

BLM_adjacent_to_proposed_TDS_fiber (GEOMETRY TYPE Polygon)

BLM_adjacent_to_proposed_TDS_fiber_CoParcel (GEOMETRY TYPE Polygon)

BoreLocations (GEOMETRY TYPE Polyline)

existing_nodes_DLCsites (GEOMETRY TYPE Point)

extended_bores (GEOMETRY TYPE Polyline)

proposed_nodes_DLCsites (GEOMETRY TYPE Point)

TDS_Existing_Fiber (GEOMETRY TYPE Polyline)

TDS_Proposed_Fiber (GEOMETRY TYPE Polyline)

sensitive_receptors (GEOMETRY TYPE Point)

existing_TDS_fiber (GEOMETRY TYPE Polyline)

waterway_crossings (GEOMETRY TYPE Polygon)

wetlands (GEOMETRY TYPE Polygon)

Zoning_Shasta_Co (GEOMETRY TYPE Polygon)

revised 2/14/2017, JDL

TDS Telecom Deficiency Responses to CPUC

Attachment B

Response to #4

Seed Mix Specification Sheet



California Ecological Unit M261Ai Eastern Klamath Mountains

USFS Ecoregions of California 1997

Domain	200	HUMID TEMPERATE DOMAIN
Division	M260	MEDITERRANEAN REGIME MOUNTAINS
Province	M261	FOREST-ALPINE MEADOWS OF WESTERN OCEANIC (MEDITERR)
Section	M261A	Klamath Mountains Section
Subsection	M261Ai	Eastern Klamath Mountains

USDA-NRCS Major Land Resource Regions and Areas 1994

LRR1994	A	Northwestern Forest, Forage, and Specialty Crop
MLRA1994	5	Siskiyou-Trinity Area

Sunset Climate Zones 2001

Zone	Extent	Precipitation (in)			Winter		Summer			
		Min	Avg	Max	Severity	Lowest Temp F	Severity	Hi Temp	Avg Grow Days	
2B	Intermountain	35			Moderate to Heavy	Cold	-20.00	Cold	80.00	115-160

Selected Seed Specifications

SpecID	Spec Type	Mix Type	Taxa Count	Sum PLS/ft2	Spec Details	Spec Excel
19	Biofilter	AnnGrass--PerGrass / AnnForb--PerForb	8	353	Spec19 details	Spec19 XLS

[Caltrans](#) > [Landscape Architecture Program](#) > [TransPLANT](#) > [County Index](#) > [SHASTA County](#)



Seed Specification 19

Biofilter

PLS/ft2

Spec Status	FINAL	Sum PLS/ft2	Provenance	Lifeform
		353	CANative19	08_Forb
Spec Author	DEFAULT	353	CANative19	10_TrueGrass
		353	CANative19	11_Graminoid
		353	CANative19	10_TrueGrass
Cover Duration	Indefinite	353	CANative19	10_TrueGrass
		353	CANative19	08_Forb
Mix Type	AnnGrass--PerGrass / AnnForb--PerForb	353	CANative19	10_TrueGrass
Spec Notes	Promotes biofiltration of unwanted chemicals potentially present in runoff water			

Vernacular Name	Accepted Taxon Name	Cultivar Name	iPLS_acPLS_ft2	Provenance	LifeForm	Duration	Legume
Western Yarrow	Achillea millefolium L. subsp. lanulosa (Nutt.) Pi	[anonymous]	270000047	CANative	08_Forb	Perennial>3Yr	Yes
Mountain Brome	Bromus marginatus Nees ex Steud.	[anonymous]	100000 48	CANative	10_TrueGrass	Perennial>3Yr	Yes
Clustered Field Sedge	Carex praegracilis W.Boott	[anonymous]	665000 49	CANative	11_Graminoid	Perennial>3Yr	Yes
Blue Wildrye	Elymus glaucus Buckley subsp. glaucus	[anonymous]	100000 46	CANative	10_TrueGrass	Perennial<3Yr	Yes
Barley	Hordeum brachyantherum Nevski	[anonymous]	98160 50	CANative	10_TrueGrass	Perennial>3Yr	Yes
Beardless Wildrye	Leymus triticoides (Buckley) Pilger	[anonymous]	145800 43	CANative	10_TrueGrass	Perennial>3Yr	Yes
Spanish Lotus	Lotus purshianus (Benth.) Clements et E.G.Clements	[anonymous]	103908 18	CANative	08_Forb	Annual	No
Small Fescue	Vulpia microstachys (Nutt.) Munro in Benth.	[anonymous]	551334 53	CANative	10_TrueGrass	Annual	Yes

2/14/2017 17:5 PM

TDS Telecom Deficiency Responses to CPUC

Attachment C

Response to #5

PEA Checklist section 3.7.2.3; Section V(11) of the Information and Criteria List



PEA Checklist section 3.7.2.3; section V(11) of
the Information and Criteria List

01/18/2017

Table of Contents

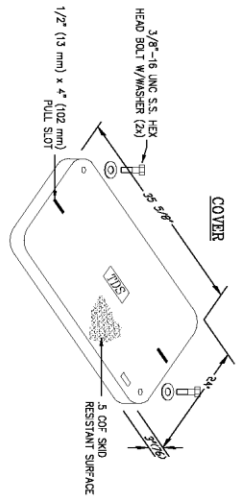
Hand Hole Spec 24x36x36.....	2
Hand hole Spec 30x48x30.....	3
Hand hole Spec 36x60x30.....	4
3D FDH on Hand Hole.....	5
Small Cabinet Spec.....	6
Medium Cabinet Spec.....	7
Large Cabinet Spec.....	8
Landscape Damage.....	9
Temporary Traffic Control.....	9
Site Restoration and Post Construction Evaluation.....	10
Excavation And Backfills.....	10
Scheduling and Conflicts.....	11
Special Requirements.....	11
Excavation.....	12
Hand Hole Excavation.....	15
Backfilling with Granular Backfill.....	16
Compaction Outside Road Right-of- Way.....	17
Compaction Within Road Right-of- Way.....	17
References.....	17
Soil Testing.....	17

HANDHOLE DETAIL

**24" x 36" x 30" PG STYLE (STACKABLE) ASSEMBLY
USE FOR OFF STREET PLACEMENT ONLY**

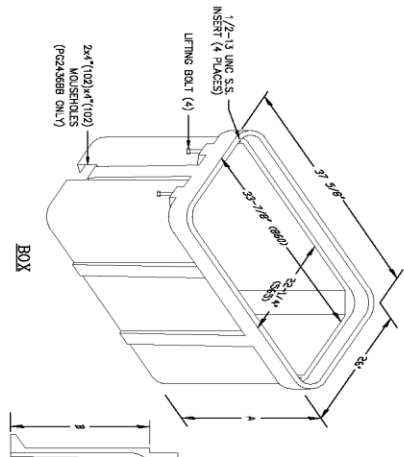
DESCRIPTION	PART NO.	WEIGHT #	DESIGN/TEST LOAD	ANSI TIER	SAP#
W/2 BOOTS	PG2436CA00	100(45.4 kg)	8,000/12,000	8	57310

COVERS



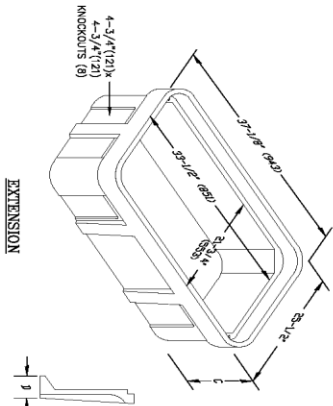
DESCRIPTION	PART NO.	WEIGHT #	DIMENSION "A"	DIMENSION "B"	DESIGN/TEST LOAD	ANSI TIER	SAP#
OPEN BOTTOM	PG2436BA30	198(88.9 kg)	30"(762 mm)	27"(686 mm)	22,500/33,750	15	57309

BOXES



DESCRIPTION	PART NO.	WEIGHT #	DIMENSION "C"	DIMENSION "D"	DESIGN/TEST LOAD	ANSI TIER	SAP#
OPEN BOTTOM	PG2436BA08	57(25.9 kg)	8'-3/4"(222 mm)	1"(25mm)	22,500/33,750	15	58443

EXTENSIONS



SCOPE:

THIS SPECIFICATION DEFINES THE REQUIREMENTS FOR A 30"x60"x36" OPEN BOTTOM POLYMER CONCRETE OUTSIDE PLANT (OSP) MEDIUM GROUND SLEEVE WITH COVERS, USED FOR CABLE SLACK STORAGE AND MOUNTING OF OSP ENCLOSURES.

MATERIALS:

- HANDHOLE AND COVER MATERIAL:
- MATERIAL TO BE REINFORCED PLASTIC MORTAR (RPM) ALSO CALLED POLYMER CONCRETE.
- COLOR TO BE CONCRETE GRAY.

- CABLE RACK MATERIAL:
- CABLE RACKING TO BE HOT DIPPED GALVANIZED STEEL.

- INSTALLED HARDWARE:
- INSTALLED HARDWARE TO BE 300 SERIES STAINLESS STEEL UNLESS OTHERWISE NOTED.

MECHANICAL REQUIREMENTS:

- LOAD RATING:
- THE PRODUCTS COVERED UNDER THIS SPECIFICATION MUST HAVE A LOAD RATING OF 10,400# WUC, IN ACCORDANCE WITH WESTERN UNDERGROUND COMMITTEE RECOMMENDED GUIDE #36, NON-CONCRETE ENCLOSURES.

- CHEMICAL RESISTANCE:
- THE PRODUCTS COVERED UNDER THIS SPECIFICATION MUST BE RESISTANT TO THE FOLLOWING CHEMICALS, WHEN TESTED IN ACCORDANCE WITH ASTM D-543: (SODIUM HYDROXIDE, KEROSENE, SODIUM CHLORIDE, SULFURIC ACID, HYDROCHLORIC ACID, SODIUM SULFATE, ACETIC ACID, SODIUM CARBONATE, AND TRANSFORMER OIL.

INSTALLED HARDWARE:

- FOUR SECTIONS OF CABLE RACKING TO BE INSTALLED IN LOCATIONS SHOWN ON DIAGRAM.
- FOUR LIFTING BOLTS TO BE INSTALLED IN LOCATIONS SHOWN IN DIAGRAM.
- UNISTRUT BEAM TO BE SUPPLIED.
- FOUR 3/8"-18 UNC THREADED INSERTS TO BE INSTALLED IN COVER IN LOCATIONS SHOWN IN DIAGRAM.

- KNOCKOUTS:
- EIGHT 4 1/2" DIA. KNOCKOUT HOLES TO BE LOCATED AS SHOWN, KNOCKOUTS TO BE SUPPLIED WITH REMOVABLE PLUGS.


- NON-SKID SURFACE:
- COVERS ARE TO HAVE A MINIMUM COEFFICIENCY OF FRICTION OF 0.50 UNDER WET OR DRY CONDITIONS.

PACKAGING & HANDLING REQUIREMENTS:

- PART PACKAGING:
- MATERIAL SUPPLIED TO THIS SPECIFICATION SHALL BE PACKED IN A MANNER THAT WILL PROVIDE PROTECTION FROM DAMAGE DURING SHIPMENT, HANDLING & STORAGE.

DATE	REVISIONS

DRAWN BY: WMC BAULETTS
CHECKED BY: _____



DATE: 12/29/07
FILE: 2436R HANDHOLE

HANDHOLE DETAIL 30"x48" PG STYLE (STACKABLE) ASSEMBLY 30"x48" PD STYLE (NESTABLE) ASSEMBLY USE FOR OFF-STREET PLACEMENT ONLY

COVERS

DESCRIPTION	PART NO.	WEIGHT #	DESIGN/TEST LOAD	ANSI TIER	SAP #
W/2 BOLTS	PG3048PGAD0	100(45.4 kg)	8,000(37,000)	B	88155

- COVERS/WATER LIDS AVAILABLE UPON REQUEST.
- GASKETS AND BOLT GROMMETS MUST BE USED WITH GASKETED BOX. GASKETS REDUCE THE INFLOW OF FLUIDS BUT DO NOT MAKE THE ENCLOSURE WATER TIGHT.
- LOADINGS FOR HH COVERS COMPLY WITH ALL TEST PROVISIONS OF ANSI/SC17 EXCEPT THAT THE VERTICAL DESIGN LOAD IS 22,500lbs. WITH A TEST LOAD OF 33,750lbs. OVER A 10"x20" PLATE.

PG BOXES (Stackable with self-aligning, replaceable W/2-NHL) 24" & 30" deep boxes must be used on bottom of any stack

DESCRIPTION	PART NO.	WEIGHT #	DIMENSION "A"	DIMENSION "B"	DESIGN/TEST LOAD	ANSI TIER	SAP #
OPEN BOTTOM	PG3048BAS0	345(155.6 kg)	36"(914 mm)	33"(838 mm)	22,500/33,750	15"	88155

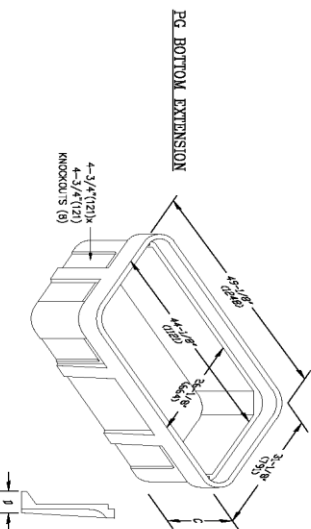
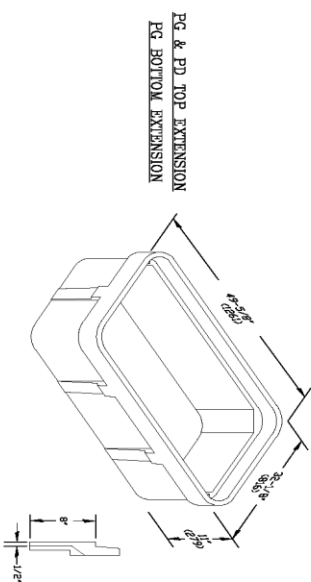
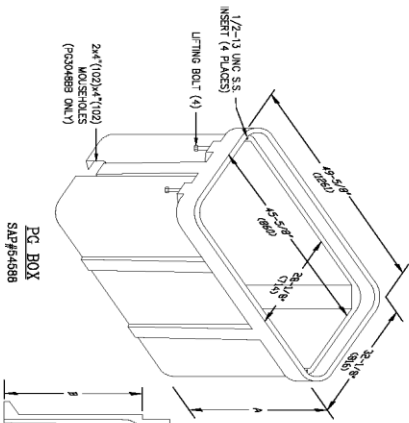
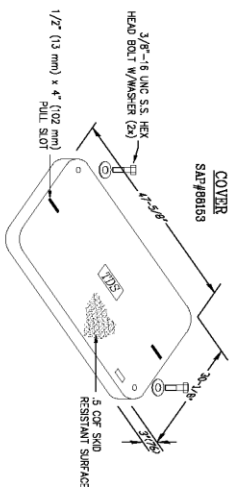
TOP EXTENSIONS (For use on top of PG & PD boxes of any depth)

DESCRIPTION	PART NO.	WEIGHT #	DESIGN/TEST LOAD	ANSI TIER	SAP #
OPEN BOTTOM	PG3048BALT	100(45.4 kg)	22,500/33,750	15"	88156

- IN ADDITION, THIS EXTENSION CAN BE USED AS A BOTTOM EXTENSION FOR 18" DEEP PG BOXES.

BOTTOM EXTENSIONS (For use under 18" deep PG style box only, one per box)

DESCRIPTION	PART NO.	WEIGHT #	DIMENSION "C"	DIMENSION "D"	DESIGN/TEST LOAD	ANSI TIER	SAP #
OPEN BOTTOM	PG3048BAS0	102(46.3 kg)	8-3/4"(222 mm)	1"(25mm)	22,500/33,750	15"	88340



SCOPE:

THIS SPECIFICATION DEFINES THE REQUIREMENTS FOR A 30"x60"x36" OPEN BOTTOM POLYMER CONCRETE OUTSIDE PLANT (OSP) MEDIUM GROUND SLEEVE WITH COVERS USED FOR CABLE SLACK STORAGE AND MOUNTING OF OSP ENCLOSURES.

MATERIALS:

- HANDHOLE AND COVER MATERIAL:
- MATERIAL TO BE REINFORCED PLASTIC MORTAR (RPW) ALSO CALLED POLYMER CONCRETE.
- COLOR TO BE CONCRETE GRAY.

CABLE RACK MATERIAL:

- CABLE RACKING TO BE HOT DIPPED GALVANIZED STEEL.
- INSTALLED HARDWARE: TO BE 300 SERIES STAINLESS STEEL UNLESS OTHERWISE NOTED.

MECHANICAL REQUIREMENTS:

- LOAD RATING:
- THE PRODUCTS COVERED UNDER THIS SPECIFICATION MUST HAVE A LOAD RATING OF 10,400# W/C, IN ACCORDANCE WITH WESTERN UNDERGROUND COMMITTEE RECOMMENDED GUIDE #3.6, NON-CONCRETE ENCLOSURES.

CHEMICAL RESISTANCE:

THE PRODUCTS COVERED UNDER THIS SPECIFICATION MUST BE RESISTANT TO THE FOLLOWING CHEMICALS, WHEN TESTED IN ACCORDANCE WITH ASTM D-543: (SODIUM HYDROXIDE, KEROSENE, SODIUM CHLORIDE, SULFURIC ACID, HYDROCHLORIC ACID, SODIUM SULFATE, ACETIC ACID, SODIUM CARBONATE, AND TRANSFORMER OIL.

INSTALLED HARDWARE:

- FOUR SECTIONS OF CABLE RACKING TO BE INSTALLED IN LOCATIONS SHOWN ON DIAGRAM.
- FOUR LIFTING BOLTS TO BE INSTALLED IN LOCATIONS SHOWN IN DIAGRAM.
- UNISTRUT BEAM TO BE SUPPLIED.
- FOUR 3/8"-16 UNC THREADED INSERTS TO BE INSTALLED IN COVER IN LOCATIONS SHOWN IN DIAGRAM.

KNOCKOUTS:

- EIGHT 4 1/2" DIA. KNOCKOUT HOLES TO BE LOCATED AS SHOWN, KNOCKOUTS TO BE SUPPLIED WITH REMOVABLE PLUGS.

NON-SLIP SURFACE:

- COVERS ARE TO HAVE A MINIMUM COEFFICIENT OF FRICTION OF 0.50 UNDER WET OR DRY CONDITIONS.

PACKING & HANDLING REQUIREMENTS:

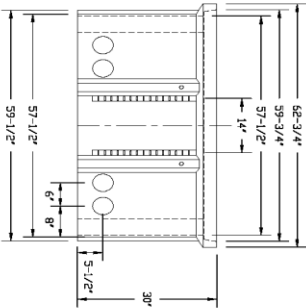
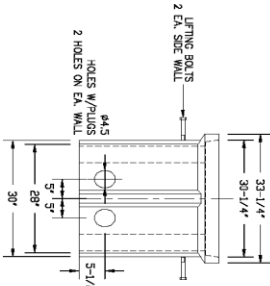
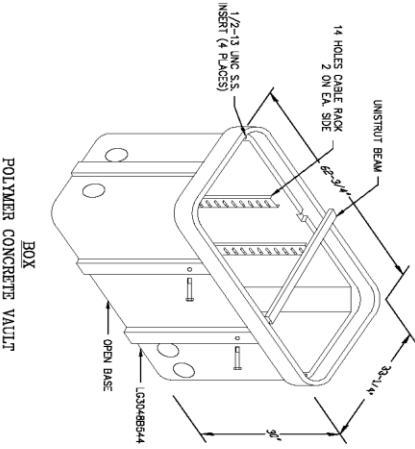
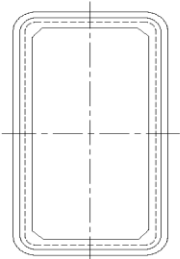
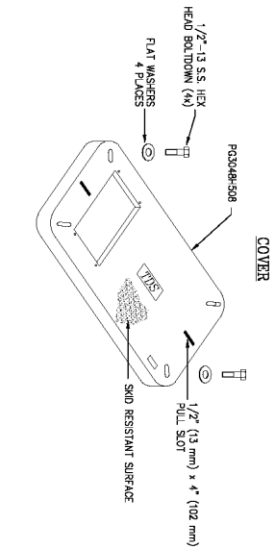
- PART PACKAGING:
- MATERIAL SUPPLIED TO THIS SPECIFICATION SHALL BE PACKED IN A MANNER THAT WILL PROVIDE PROTECTION FROM DAMAGE DURING SHIPMENT, HANDLING & STORAGE.

DATE	REVISIONS



DESIGN BY: URC BUNKERS DATE: 12/26/07
 CHECKED BY: TBS S&B MANORIE

HANDHOLE DETAIL
36"x60"x30" POLYMER CONCRETE VAULT ASSEMBLY
USE FOR OFF STREET PLACEMENT ONLY



COVERS

DESCRIPTION	PART NO.	WEIGHT #	DESIGN/TEST LOAD	ANST TIER	SAP#
W/2 BOLTS	LC59660CA00	222(100.7 kg)	5,000 /7,500	5	56622
W/2 BOLTS	PC368039A12	156(714.0 kg)	15,000 /22,500	15	88342

BOXES

DESCRIPTION	PART NO.	WEIGHT #	DIMENSION "A"	DIMENSION "B"	DIMENSION "C"	DESIGN/TEST LOAD	ANST TIER	SAP#
OPEN BOTTOM	PC368039A12	647(293.0 kg)	36"(914 mm)	34-1/2" (876 mm)	2"(51 mm)	22,500/33,750	22	56621
OPEN BOTTOM	PC368039B6	647(293.0 kg)	36"(914 mm)	34-1/2" (876 mm)	2"(51 mm)	22,500/33,750	22	88341

EXTENSIONS

DESCRIPTION	PART NO.	WEIGHT #	DIMENSION "A"	DIMENSION "B"	DIMENSION "C"	DESIGN/TEST LOAD	ANST TIER	SAP#
OPEN BOTTOM	PC368039A12	200(90.7 kg)	11-1/2"	10"	2"	22,500/33,750	22	88343

SCOPE:
 THIS SPECIFICATION DEFINES THE REQUIREMENTS FOR A 30"x60"x36" OPEN BOTTOM POLYMER CONCRETE OUTSIDE PLANT (OSP) MEDIUM GROUND SLEVE WITH COVERS, USED FOR CABLE SLACK STORAGE AND MOUNTING OF OSP ENCLOSURES.

MATERIALS:
 HANDHOLE AND COVER MATERIAL:
 • MATERIAL TO BE REINFORCED PLASTIC MORTAR (RPM) ALSO CALLED POLYMER CONCRETE.
 • COLOR TO BE CONCRETE GRAY.
 CABLE RACK MATERIAL:
 • CABLE RACKING TO BE HOT DIPPED GALVANIZED STEEL.

INSTALLED HARDWARE:
 • INSTALLED HARDWARE TO BE 300 SERIES STAINLESS STEEL UNLESS OTHERWISE NOTED.
MECHANICAL REQUIREMENTS:
LOAD RATING:
 • THE PRODUCTS COVERED UNDER THIS SPECIFICATION MUST HAVE A LOAD RATING OF 10,400 LBS. IN ACCORDANCE WITH WESTERN UNDERGROUND COMMITTEE RECOMMENDED GUIDE #3.6, NON-CONCRETE ENCLOSURES.

CHEMICAL RESISTANCE:
 • ALL PRODUCTS COVERED UNDER THIS SPECIFICATION MUST BE RESISTANT TO THE FOLLOWING CHEMICALS WHEN TESTED IN ACCORDANCE WITH ASTM D-543: (SODIUM HYDROXIDE, KEROSENE, SODIUM HYDROXIDE, SULFURIC ACID, HYDROCHLORIC ACID, SODIUM SULFATE, ACETIC ACID, SODIUM CARBONATE, AND TRANSFORMER OIL).

INSTALLED HARDWARE:
 • FOUR SECTIONS OF CABLE RACKING TO BE INSTALLED IN LOCATIONS SHOWN ON DIAGRAM.
 • FOUR LIFTING BOLTS TO BE INSTALLED IN LOCATIONS SHOWN IN DIAGRAM.
 • UNSTRUT BEAM TO BE SUPPLIED.
 • FOUR 3/8"-16 UNC THREADED INSERTS TO BE INSTALLED IN COVER IN LOCATIONS SHOWN IN DIAGRAM.

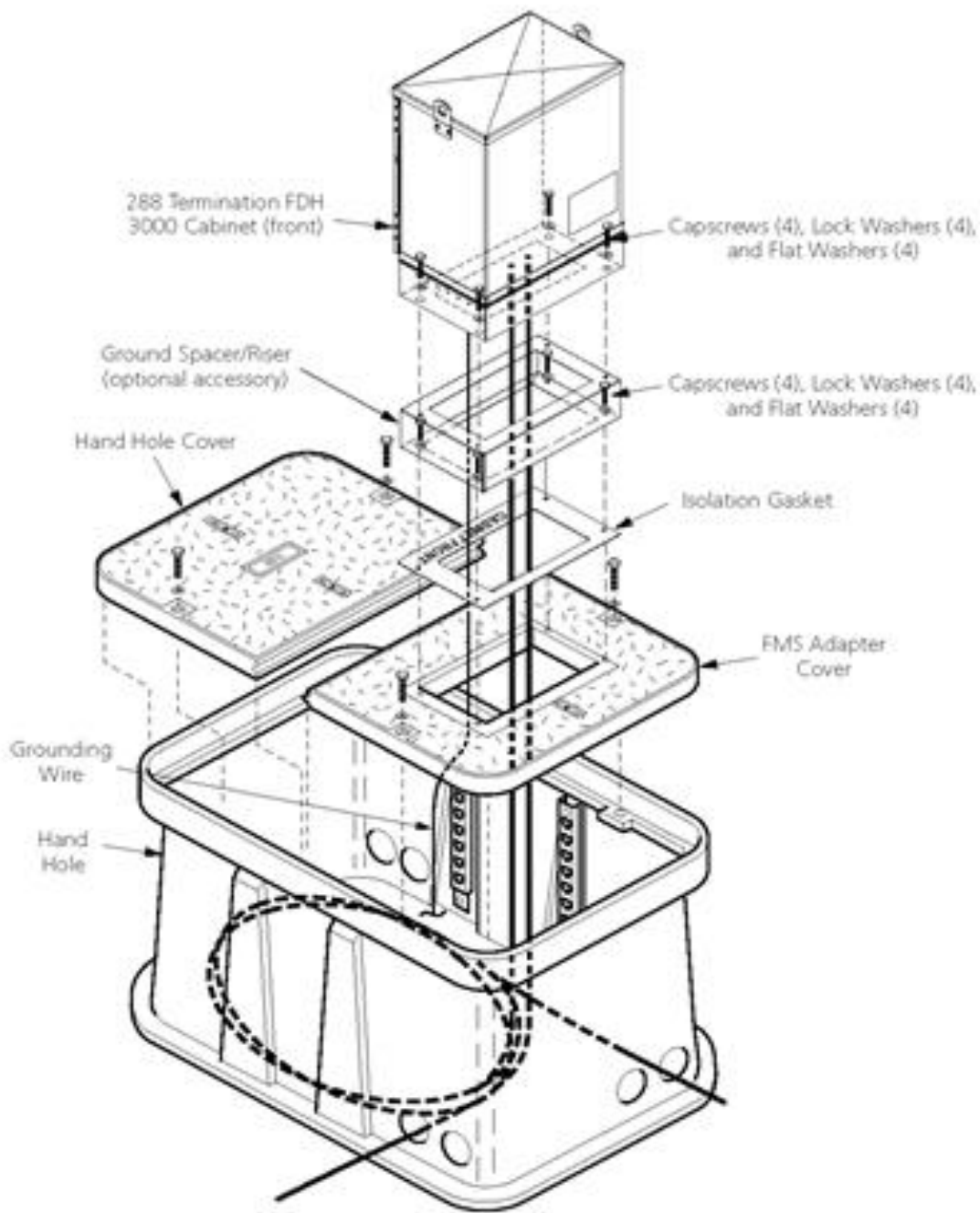
KNOCKOUTS:
 • EIGHT 1/2" DIA. KNOCKOUT HOLES TO BE LOCATED AS SHOWN.
 • COVERS ARE TO HAVE A MINIMUM COEFFICIENT OF FRICTION OF 0.50 UNDER WET OR DRY CONDITIONS.

PACKING & HANDLING REQUIREMENTS:
PART PACKAGING:
 • MATERIAL SUPPLIED TO THIS SPECIFICATION SHALL BE PACKED IN A MANNER THAT WILL PROVIDE PROTECTION FROM DAMAGE DURING SHIPMENT, HANDLING & STORAGE.



DATE	REVISIONS

DRAWN BY: MARC BARNHARTS DATE: 12/26/07
 CHECKED BY: FILE: XWD04.MARCHEN

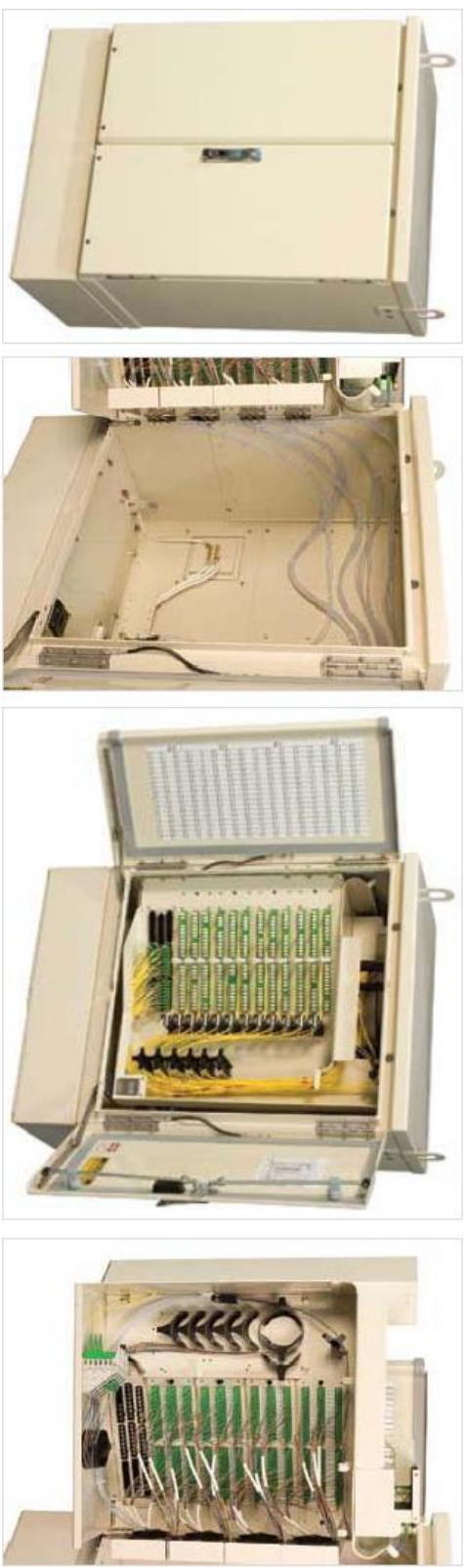


Hand Hole Kits

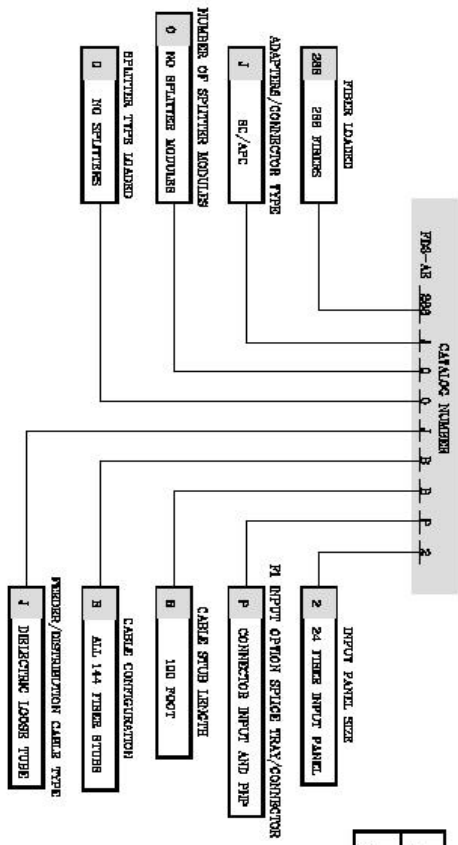
Ordering Information

Description	Catalog Number
30" x 60" Hand Hole and cover kit for extra small (24-144 fibers), small (72-288 fibers) and medium (72-432 fibers) cabinets	FMS-ACE100-KIT-A
48" x 60" Hand Hole and cover kit for extra small (24-144 fibers), small (72-288 fibers) and medium (72-432 fibers) cabinets	FMS-FD3EG-LKIT-A
48" x 60" Hand Hole and cover kit for large (72-864 fibers) cabinets	FMS-FD3J-KIT-A

**SMALL CABINETS
(72-289 FIBERS)**



SMALL CABINET (72-288 FIBERS)



CABINET	SIZE(LxWxD)	DISTRIBUTION AREA SIZE	ACCESS	MOUNTING OPTIONS	SPLITTER TYPES	CABLE RAY LOCATION	SAFE
SMALL (72-289)	30" x 47" x 16" (76.20x119.38x40.64 cm)	72-289	ALL FRONT	GROUND / POLE	12	TOP OR BOTTOM	YES/NO

DATE	REVISION

TDS

DRAWN BY: AMSC ENGINEER DATE: 12/28/12

DESIGNED BY: PLEN SMITH-CHESTER

Landscape Damage

1.01 Landscape Damage

Repair slopes or other existing facilities that were damaged after starting job site activities and before starting plant establishment.

As ordered, replace plants that have been damaged from either or both of the following conditions:

1. Ambient air temperature falling below 32 degrees F during the plant establishment period
2. Department or its supplier restricting or stopping water delivery during the plant establishment period

This plant replacement work is change order work.

Repair slopes or other existing facilities that were damaged before starting job site activities.

Repair slopes or other existing facilities that were damaged by a change in the runoff pattern from that which existed on the date of the Notice to Bidders and was the result of work by others within the highway.

Replace plants and repair slopes, irrigation systems, and other highway facilities damaged as a result of rain during the plant establishment period.

TEMPORARY TRAFFIC CONTROL

1.02 TEMPORARY TRAFFIC CONTROL

1.02.01 GENERAL

Section 1.04 -01 includes general specifications for flagging, placing and installing temporary traffic-handling equipment and devices, maintaining traffic, placing and installing temporary traffic control systems, and placing temporary pavement delineation. Temporary traffic control must comply with part 6, "Temporary Traffic Control," of the California MUTCD. For the California MUTCD, go to the Department's Web site.

1.02.02 FLAGGERS

Flagging apparel, traffic control devices, and equipment for flaggers must comply with part 6, "Temporary Traffic Control," of the California MUTCD. Assign flaggers to control traffic and to warn the public of any dangerous conditions resulting from work activities. Maintain flagging apparel, traffic control devices, and equipment for flaggers in good repair at all times.

1.02.03 FLAGGING COSTS

Contractor is responsible for the cost of furnishing all flaggers, including transporting flaggers and furnishing stands and towers for flaggers to provide for the passage of traffic through the work as specified in sections 7-1.03 and 7-1.04. The Department determines the cost under section 9-1.04 and pays you 1/2 of the cost. Furnishing and operating pilot cars if ordered is change order work.

SITE RESTORATION AND POST CONSTRUCTION EVALUATION

PART 2 - GENERAL

2.01 SITE RESTORATION AND POST CONSTRUCTION EVALUATION

All surfaces affected by the work shall be restored to their pre-existing conditions.

The permittee/contractor shall provide a set of as-built drawings to include both alignment and profile.

Drawings should be constructed from actual field readings. Raw data shall be submitted as part of the "As-Built" document. The contractor shall stipulate the tracking method used to ensure the data was captured.

EXCAVATION AND BACKFILL

PART 3 - GENERAL

3.01 SECTION INCLUDES

A. Excavation for Hand Hole Placement

B. Structure placement and backfill.

3.02 DESCRIPTION OF WORK

A. Perform all excavations required to complete the work shown in the Plans.

B. Prepare trench excavations and shoring, if required for new work, and install the utility lines, structures and system components, including foundation stabilization.

C. Complete specified backfill operation.

3.03 SUBMITTALS

A. Results of Standard Proctor and In-Place Density Tests on backfill, if required.

C. Upon requests, the Contractor will provide Material Certifications to the Permitting Authority.

3.04 SUBSTITUTIONS

A. Use only materials conforming to these specifications unless permitted otherwise by Permitting Authority.

B. Obtain approval of Permitting Authority for all substitutions prior to use.

3.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver only materials that fully conform to these specifications, or for which submittals have been provided to Permitting Authority and approved for use.
- B. Store delivered materials and excavated materials in locations that will not interfere with road operations and minimize environmental damage.
- C. Grade and shape stockpiles for drainage and protect adjacent areas from runoff. Provide erosion control around stockpiles.
- D. Remove unsuitable and excess materials from the site.

SCHEDULING AND CONFLICTS

3.06 SCHEDULING AND CONFLICTS

A. Construction Sequence:

1. Attend a preconstruction meeting if required by Permitting Authority.
2. Submit plan for construction sequence and schedule prior to commencing construction.

B. Conflict Avoidance:

1. Expose possible conflicts in advance of construction, such as utility lines and drainage structures. Contractor shall verify elevations and locations of each and verify clearance for proposed construction.
2. Complete other elements of the work which can affect line and grade in advance of other open cut construction unless noted on plans.
3. Notify Permitting Authority of conflicts discovered or changes needed to accommodate unknown or changed conditions.

SPECIAL REQUIREMENTS

3.07 SPECIAL REQUIREMENTS

A. Stop Work: Stop work and notify Permitting Authority immediately if contaminated soils, historical artifacts, or other environmental or historic items are encountered.

B. Conform to local, state, and federal requirements.

C. Abandoned Utilities: Remove and dispose of abandoned utility lines including, telephone conduits, service lines, etc. required to complete the work. Said work shall be incidental to the project unless otherwise specified.

Excavation

PART 4

4.01 EXCAVATION MATERIALS

A. Suitable Excavated Materials For Backfill:

1. Soil, clay, silt, sand and gravel with moisture content suitable to achieve required compaction. ASTM D 2321, Class II through IVA.
2. Fine-grained soils according to ASTM D 2321 Class IVB (inorganic) may be used in the final backfill upon approval of the Jurisdictional Engineer.
3. Adjust moisture content of excessively wet, but otherwise acceptable material by spreading, turning, aerating, and otherwise working material as necessary to achieve required moisture range.
4. Adjust moisture content of excessively dry, but otherwise acceptable material by adding water, then turning, mixing, and otherwise blending the water uniformly throughout the material until the required moisture range is achieved.
5. Lime or fly ash may be added to earth material to produce a suitable backfill material. Uniformly mix soil and additive. Prepare new Standard Proctor Tests of the modified material. Amount of additive applied is subject to Jurisdictional Engineer's approval.

G. Non-Manufactured (Excavated) Backfill Materials:

Class	Type	Soil Group Symbol D 2487	Description	Percentage Passing Sieve Sizes			Atterberg Limits		Coefficients	
				1½ in. (40 mm)	No. 4 (4.75 mm)	No. 200 (0.075 mm)	LL	PI	Uniformity C _u	Curvature C _c
II	Coarse-Grained Soils, clean	GW	Well-graded gravels and gravel-sand mixtures; little or no fines	100%	<50% of "Course Fraction"	<5%	Non Plastic	>4	1 to 3	
		GP	Poorly-graded gravels and gravel-sand mixtures; little or no fines.							<4
		SW	Well-graded sands and gravelly sands; little or no fines.	>50% of "Course Fraction"	>6	1 to 3				
		SP	Poorly-graded sands and gravelly sands; little or no fines.							<6

	Coarse-Grained Soils, borderline clean to w/fines	e.g. GW-GC, SP-SM	Sands and gravels which are borderline between clean and with fines.	100%	Varies	5% to 12%	Non Plastic	Same as for GW, GP, SW and SP		
III	Coarse-Grained Soils, with Fines	GM	Silty gravels, gravel-sand-silt mixtures.	100%	<50% of "Coarse Fraction"	12% to 50%		<4 or <"A" Line		
		GC	Clayey gravels, gravel-sand-clay mixtures.					>7 and >"A" Line		
		SM	Silty sands, sand-silt mixtures.		>50% of "Coarse Fraction"			>4 or <"A" Line		
		SC	Clayey sands, sand-clay mixtures.		>7 and >"A" Line					
IVA	Fine-Grained Soils (inorganic)	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, silts with slight plasticity.	100%	100%	>50%	<50	<4 or <"A" Line		
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clay, lean clays.					>7 and >"A" Line		
IVB	Fine-Grained Soils (inorganic)	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.	100%	100%	>50%	>50	<"A" Line		
		CH	Inorganic clays of high plasticity, fat clays.					>"A" Line		
V	Organic Soils (Unsuitable for backfill)	OL	Organic silts and organic silty clays of low plasticity.	100%	100%	>50%	<50	<4 or <"A" Line		
	Highly Organic (Unsuitable for backfill)	OH	Organic Clays of Medium to high plasticity, organic silts.					>50 <"A" Line		
		PT	Peat and other high organic soils.							

Figure 1

H. Unsuitable Material: Unsuitable materials such as trees, stumps, waste construction materials, scrap metals, and other materials not suitable for backfilling or for topsoil.

1. Rock with gradation not meeting the stated gradation for Stabilization Material.

2. Individual stones or concrete chunks larger than 6 inches, and averaging more than one per each cubic foot of earth.
3. Frozen materials.
4. Stumps, logs, branches, and brush.
5. Trash or construction waste.
6. Earth in clumps or clods larger than 6 inches, and without sufficient fine materials to fill voids during placement.
7. Earth, outside of the suitable soil range
8. Class V Material (ASTM D 2321).

I. Replacement of Unsuitable Earth Materials:

1. If the excavated material is determined by the Permitting Authority to be unsuitable and cannot be conditioned so that it becomes suitable, furnish all necessary earth backfill material.
2. Remove and dispose of unsuitable material from the site.

B. Porous Backfill Material:

1. Crushed stone or gravel with the following gradation:

Sieve	Percent Passing
3/4 inch	100
1/2 inch	95 to 100
3/8 inch	50 to 100
No. 4	10 to 50
No. 8	0 to 8

C. Coarse Aggregate: Use Stabilization Materials.

D. Pea Gravel: Use commercially available pea gravel.

E. Impervious Bedding: Use least permeable on-site materials.

HAND HOLE EXCAVATION

4.02 HAND HOLE EXCAVATION

- A. Notify Permitting Authority prior to start of excavation activities.
- B. Remove and stockpile top 8 inches of topsoil for subsequent reuse.
- C. Place excavated material away from trench. Grade spoil piles to drain. Do not allow spoil piles to obstruct drainage.
- D. Remove rock, rubbish, boulders, debris, and other unsuitable materials at least 6 inches below, and on each side of the pipe. Restore grade using soil suitable for backfill.
- E. Provide protective fences and barricades around open excavations, appropriate to the surrounding area.

F. Hand Hole Excavation:

1. Maximum Hand Hole trench width: Limit width at top of hand hole diameter of the hand hole, plus 24 inches, plus minimum clearance for shoring, sheeting, or trench box (if any).
2. Flat Hand hole bottom, conduit bearing directly on trench bottom of 12 inches of placed pea gravel.
3. Hand Hole bottom, conduit supported by pea gravel material.
 - a. Excavate hole as shown in Detailed Drawings.
 - b. Install bedding material to support the full length and width of the Hand Hole
4. Hand Hole Trench depth:
 - a. See Specification per Hand Hole size being placed.
 - b. For those material types not shown in Figure 1 and maximum height of bury will be 3 feet plus 12 inches clean pea gravel.
5. All trench operations shall conform to current OSHA regulations.

G. Moisture Control:

1. Moisture control is required; backfill material shall be placed in Bottom of Hand Hole not less than 12 inches in thickness.

H. Backfilling with Excavated Material:

1. When flowable mortar, controlled low strength material, or granular backfill is not specified in the contract documents, excavated material shall be used.
2. Backfilling shall continue to natural ground line unless there are inadequate quantities of suitable excavated material.
3. If there is inadequate quantities of suitable excavated material, backfilling shall be continued until the suitable material is depleted.
4. Material used for backfilling shall be free from organic material, boulders or broken concrete over 6 inches in the greatest dimension, or frozen material.
5. At the time soil is placed for backfill, its moisture content shall be suitable for compaction. When compaction with moisture control is required by the contract documents, the moisture content in the backfill material shall be increased or reduced, as necessary, to bring the moisture within the designated moisture limits prior to and during placement and compaction.

Backfilling with Granular Backfill

I. Backfilling with Granular Backfill:

1. When granular backfill material is specified, backfill material shall meet the following requirements. When the volume of material excavated exceeds that of backfill required by the contract documents, the quantity of granular backfill material furnished shall be increased to provide backfill for the excess volume of excavation.

Sieve	Percent Passing
3 inch	100
No. 8	20 to 100
No. 200	0 to 10

Note: Crushed stone shall have 100% passing the 1" sieve.

2. Granular backfill shall be constructed in layers of not more than 8 inches. Each layer shall be thoroughly tamped or vibrated to insure compaction. The Engineer may require granular material to be moistened with water during backfilling operations.
3. Backfill in Water:
 - a. Backfill material may be placed in water only when removal of water from the area to be backfilled is impractical, within the waterway or in other deep excavations where removal of cofferdams is required before backfilling and such removal prevents dewatering.
 - b. Backfill material placed in water need not be consolidated.
 - c. When specified, all backfill material placed under water, over which a subsequent embankment is to be placed, shall be granular backfill material.

4. Backfill above Water:

- a. Backfill material placed above the water line shall be placed in layers not more than 6 inches in loose thickness.
- b. Each layer shall be thoroughly compacted before material for the next layer is placed.
- c. All compaction shall be accomplished by rolling with an approved roller or by tamping with a mechanical tamper. Pneumatic tampers shall be operated according to the manufacturer's recommendations.

F. Compaction Outside Road Right-of-Way in Unpaved Areas:

1. Place backfill in lifts not thicker than 6 inches, to 6 inches below finish grade.
2. Obtain at least 90 percent of maximum Standard Proctor Density using compaction equipment.

G. Compaction Within Road Right-of-Way, in Paved Areas, and in Areas to be Paved:

1. Place backfill more than 3 feet below pavement structure in lifts not thicker than 8 inches. Compact each lift to at least 95% of maximum Standard Proctor Density.
2. Place backfill in the remainder of the excavation in lifts not thicker than 6 inches. Compact each lift to at least 95 percent of Standard Proctor Density.

A. References:

1. ASTM C 136; Standard Method for Sieve Analysis of Fine and Coarse Aggregates.
2. ASTM D 698; Standard Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Moisture Using 5.5 lb. (4.54 kg) Rammer and 12 inch (305 mm) Drop. (Standard Proctor Method)
3. ASTM D 2922 and D 3017; Test Methods for Density of Soil and Soil-Aggregate in Place and Water Content of Soil and Rock by Nuclear Methods (Shallow Depth).
4. ASTM D 4253 and D 4254, Test Methods for Maximum Index Density of Soils using a Vibratory Table and Minimum Index Density of Soils and Calculation of Relative Density.
5. Caltrans Encroachment Permit Guidelines and Specifications for Trenchless Technology Projects
JANUARY 2015

B. Soil Testing:

1. Cohesive soils: Determine moisture-density relationships by ASTM D 698 (Standard Proctor). Perform at least one test for each type of cohesive soil used.
2. Cohesive soils: Determine in-place density and moisture content using ASTM D 1556 (sand-cone method) and D 2216 or ASTM D 2922 and D 3017 (nuclear).
3. Non-cohesive soils: Determine maximum and minimum index density and calculate relative density using ASTM D 4253 and D 4254 (cohesion less soils).
4. Gradation: Test in accordance with ASTM C 136.

TDS Telecom Deficiency Responses to CPUC

Attachment D

Response to #13

Native American Heritage Commission Suggested Distribution List

STATE OF CALIFORNIAEdmund G. Brown, Jr., Governor**NATIVE AMERICAN HERITAGE COMMISSION**

1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



December 11, 2014

Joseph Howell, Barbara Montgomery
Tierra Right of Way Service, Ltd.
1575 E. River Road, Suite 201
Tucson, Arizona 85718

Sent by Fax: (520) 323-3326
Number of Pages: 3

Re: TDS CASF Happy Valley Project, Shasta County.

Dear Mr. Howell, and Ms. Montgomery,

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 373-3712.

Sincerely,

A handwritten signature in black ink that reads "Katy Sanchez".

Katy Sanchez
Associate Government Program Analyst

**Native American Contacts
Shasta County
December 10, 2014**

Pit River Tribe of California
Dolores Raglin, Chairperson
36970 Park Ave
Burney , CA 96013
(530) 335-5421
(530) 335-3140 Fax

Pit River
Ajumawi - Atsugewi
Wintun

Wintu Educational and Cultural Council
Robert Burns
P.O. Box 483
Hayfork , CA 96041
(530) 628-5930

Wintu

Redding Rancheria
Tracy Edwards, Chief Executive Officer
2000 Redding Rancheria
Redding , CA 96001
tracye@redding-rancheria.
(530) 225-8979
(530) 241-1879 Fax

Wintu
Pit River
Yana

Pit River Tribe Historical Preservation Office
Morning Star Gali
36970 Park Ave
Burney , CA 96013
THPO@pitrivertribe.org
(530) 335-5421x-1205

Pit River
Wintun

Wintu Tribe of Northern California
Kelli Hayward
P.O. Box 995
Shasta Lake , CA 96019

Wintu

Winnemem Wintu Tribe
Caleen Sisk-Franco, Tribal Chair
14840 Bear Mountain Road
Redding , CA 96003
winnememwintutribes@gmail.

Nor-Rel-Muk Nation
Marilyn Delgado, Chairperson
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Weaverville , CA 96093
norenmuk@com-pair.net
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(877) 534-3109 Fax

Wintu

Redding Rancheria
Jason Hart, Chairperson
2000 Redding Rancheria
Redding , CA 96001
(530) 225-8979
(530) 241-1879 Fax

Wintu
Pit River
Yana

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting locative Americans with regard to cultural resources for the proposed TDS CASF Happy Valley Project, Shasta County.

**Native American Contacts
Shasta County
December 10, 2014**

Pit River Tribe of California		Matthew Root	
Alexis Barry, Tribal Administrator		16117 North St.	Wintu
36970 Park Ave	Pit River	Keswick , CA 96001	
Burney , CA 96013	Achumawi - Atsugewi	530-247-7351	
(530) 335-5421	Wintun		
(530) 335-3140 Fax			

United Tribe of Northern Calif., Inc., Wintu, Wintun, Wintoon		Loretta Root	
Gloria Gomes, Chairperson		5620 Kofford Lane	Wintu
20059 Parocast	Wintu	Redding , CA 96001	
Redding , CA 96003	Wintun		
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United Tribe of Northern Calif., Inc., Wintu, Wintun, Wintoon	
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Redding Rancheria Cultural Resources
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2000 Redding Rancheria **Wintu**
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(530) 242-4543
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