

**FOR CONTRACT NO.: 03-1A7344**

# **INFORMATION HANDOUT**

## **PERMITS**

TAHOE REGIONAL PLANNING AGENCY

## **ELECTRICAL SYSTEMS**

BATTERY BACKUP SYSTEM FOUNDATION DETAILS

**ROUTE: 03-ED-50, PM 78.9/79.5**



**Mail**  
 PO Box 5310  
 Stateline, NV 89449-5310

**Location**  
 128 Market Street  
 Stateline, NV 89449

**Contact**  
 Phone: 775-588-4547  
 Fax: 775-588-4527  
 www.trpa.org



**PERMIT**

**PROJECT DESCRIPTION:** Caltrans – Highway 50, Ski Run Boulevard to Wildwood Avenue Water Quality Improvement Project

**TRPA PROJECT NUMBER:** 520-201-00

**FILE:** EIPC2009-0012

**PERMITTEE(S):** State of California, Department of Transportation (Caltrans)

**COUNTY/LOCATION:** El Dorado / US Highway 50 Ski Run to Wildwood

Having made the findings required by Agency ordinances and rules, the TRPA Hearings Officer approved the project on September 26, 2011, subject to the standard conditions of approval attached hereto (Attachment Q) and the special conditions found in this permit.

This permit shall expire on September 26, 2014 without further notice unless the construction has commenced prior to this date and diligently pursued thereafter. Commencement of construction consists of pouring concrete for a foundation and does not include grading, installation of utilities or landscaping. Diligent pursuit is defined as completion of the project within the approved construction schedule. The expiration date shall not be extended unless the project is determined by TRPA to be the subject of legal action which delayed or rendered impossible the diligent pursuit of the permit.

**NO DEMOLITION, TREE REMOVAL, CONSTRUCTION OR GRADING SHALL COMMENCE UNTIL:**

- (1) TRPA RECEIVES A COPY OF THIS PERMIT UPON WHICH THE PERMITTEE(S) HAS ACKNOWLEDGED RECEIPT OF THE PERMIT AND ACCEPTANCE OF THE CONTENTS OF THE PERMIT;
- (2) ALL PRE-CONSTRUCTION CONDITIONS OF APPROVAL ARE SATISFIED AS EVIDENCED BY TRPA’S ACKNOWLEDGEMENT OF THIS PERMIT;
- (3) THE PERMITTEE OBTAINS ALL NECESSARY PERMITS. THE TRPA PERMIT AND OTHER PERMITS ARE INDEPENDENT OF EACH OTHER AND MAY HAVE DIFFERENT EXPIRATION DATES AND RULES REGARDING EXTENSIONS; AND
- (4) A TRPA PRE-GRADING INSPECTION HAS BEEN CONDUCTED WITH THE PROPERTY OWNER AND/OR THE CONTRACTOR.

  
 \_\_\_\_\_  
 TRPA Executive Director/Designee

9-26-11  
 \_\_\_\_\_  
 Date

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PERMITTEE'S ACCEPTANCE: I have read the permit and the conditions of approval and understand and accept them. I also understand that I am responsible for compliance with all the conditions of the permit and am responsible for my agents' and employees' compliance with the permit conditions. I also understand that if the property is sold, I remain liable for the permit conditions until or unless the new owner acknowledges the transfer of the permit and notifies TRPA in writing of such acceptance. I also understand that certain mitigation fees associated with this permit are non-refundable once paid to TRPA. I understand that it is my sole responsibility to obtain any and all required approvals from any other state, local or federal agencies that may have jurisdiction over this project whether or not they are listed in this permit.

Signature of Permittee(s) \_\_\_\_\_ Date \_\_\_\_\_

PERMIT CONTINUED ON NEXT PAGE

**TRPA PROJECT NUMBER: 520-201-00**  
**FILE NO. EIPC2009-0012**

Security Posted: N/A

Required plans determined to be in conformance with approval: Date: \_\_\_\_\_

TRPA ACKNOWLEDGEMENT: The permittee has complied with all pre-construction conditions of approval as of this date:

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TRPA Executive Director/Designee

Date

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**SPECIAL CONDITIONS**

1. This permit specifically authorizes stormwater treatment, sidewalks, curb and gutter, and 4 foot shoulders (class II bike lanes) from on U.S. Highway 50 between Herbert Avenue and Wildwood Avenue in South Lake Tahoe, California.
2. The Standard Conditions of Approval listed in Attachment Q shall apply to this permit.
3. Prior to permit acknowledgement, the following conditions of approval must be satisfied.
  - A. The plans shall be modified as follows:
    - a. Sheet DD-3 shall be revised so the Drainage Inlet Marker says "No Dumping, Drains to Lake."
  - B. The permittee shall submit three (3) sets of final construction drawings and site plans to TRPA.
4. An onsite inspection by TRPA staff is required prior to any construction or grading activity. TRPA staff shall determine if the onsite improvements required by Attachment Q (Standard Conditions of Approval) have been properly installed. No grading or construction shall commence until TRPA pre-grade conditions of approval are met.
5. The permittee shall submit a construction schedule prior to commencement of construction. This schedule shall identify dates for the following:

- When installation of temporary erosion control structures will occur;
  - When construction will start;
  - When construction spoils and debris will be removed;
  - When installation of all permanent erosion control structures will occur;
  - When construction will be completed and the project area winterized; and,
  - The estimated date for when the final inspection by TRPA Environmental Compliance staff will take place to ensure that all conditions of project approval have been satisfied
6. Drop inlets and storm water conveyance and treatment facilities located downslope of excavated material shall be protected by temporary erosion control fences or fiber rolls (minimum 12" diameter), or approved equivalent.
  7. All new galvanized or reflective metal surfaces including but not limited to guardrails, guardrail posts, traffic signal posts, light posts, utility boxes, sign posts, backs of signs, markers, and exposed culverts shall be colored through use of Natina, City of South Lake Tahoe green, or an approved equivalent. Samples of colored structures shall be submitted to TRPA and approved prior to installation.
  8. This approval is based on the permittee's representation that all plans and information contained in the subject application are true and correct. Should any information or representation submitted in connection with the project application be incorrect or untrue, TRPA may rescind this approval, or take other appropriate action.
  9. Any modifications to the TRPA approved plans shall be submitted to TRPA for review and approval.
  10. Please note that straw bales are no longer preferred for temporary erosion control and that straw is no longer a recommended mulch material in the Lake Tahoe Basin. The use of straw has contributed to the spread of noxious weeds throughout the Basin. The use of alternatives to straw bales, such as pine needle bales, filter fabric, coir logs and pine needle or wood mulches for erosion control purposes is strongly encouraged.
  11. This site shall be winterized in accordance with the provisions of Attachment Q by October 15<sup>th</sup> of each construction season.

12. A pre-grade inspection by TRPA staff is required prior to any construction or grading activity occurring. TRPA staff shall determine if the on-site improvements required by Attachment E (Standard Conditions of Approval) have been properly installed. No grading or construction shall be undertaken by the permittee until receipt of TRPA notification that pre-grading/pre-activity conditions of approval have been met.
13. Vegetation shall not be disturbed, injured or removed except in accordance with the TRPA Code or the conditions of project approval. All trees, major roots, and other vegetation, not specifically designated or approved for removal shall be protected according to methods approved by TRPA. All vegetation outside the construction site/project area boundary shall not be disturbed.
14. All waste resulting from the saw-cutting of pavement shall be removed using a vacuum (or other TRPA approved method) during the cutting process or immediately thereafter. Discharge of waste material to surface drainage features is prohibited and constitutes a violation of this permit.
15. Dust control measures shall include sprinkling with water as needed to keep the surface moistened but not saturated and sweeping of paved surfaces.
16. All rock material (gravel, cobble, and boulders) shall be clean and thoroughly washed prior to arrival at the site to ensure that the rock is free of any silt or clay particles.
17. All spoil piles shall be protected during construction by properly installing either filter fabric fencing or fiber rolls around the perimeter of the piles with a plastic or other impervious covering.
18. All excavated materials that are not to be reused on site shall be hauled to a TRPA approved disposal site or out of the Tahoe Region.
19. All vegetated areas disturbed by construction shall be re-vegetated in accordance with the TRPA Handbook of Best Management Practices.
20. This approval is based on the permittee's representation that all plans and information contained in the subject application are true and correct. Should any information or representation submitted in connection with the project application be incorrect or untrue, TRPA may rescind this approval, or take other appropriate action.
21. All permanent BMPs shall be maintained and functional. This includes visually inspecting BMPs at least bi-annually and after major storm events.

22. To the maximum extent allowable by law, the Permittee agrees to indemnify, defend, and hold harmless TRPA, its Governing Board, its Planning Commission, its agents, and its employees (collectively, TRPA) from and against any and all suits, losses, damages, injuries, liabilities, and claims by any person (a) for any injury (including death) or damage to person or property or (b) to set aside, attack, void, modify, amend, or annul any actions of TRPA. The foregoing indemnity obligation applies, without limitation, to any and all suits, losses, damages, injuries, liabilities, and claims by any person from any cause whatsoever arising out of or in connection with either directly or indirectly, and in whole or in part (1) the processing, conditioning, issuance, or implementation of this permit; (2) any failure to comply with all applicable laws and regulations; or (3) the design, installation, or operation of any improvements, regardless of whether the actions or omissions are alleged to be caused by TRPA or Permittee.

**END OF PERMIT**



**Mail**  
PO Box 5310  
Stateline, NV 89449-5310

**Location**  
128 Market Street  
Stateline, NV 89449

**Contact**  
Phone: 775-588-4547  
Fax: 775-588-4527  
www.trpa.org



## MITIGATED FINDING OF NO SIGNIFICANT EFFECT

**PROJECT DESCRIPTION:** Caltrans – Highway 50, Echo Summit Wall Parapet Replacement and Water Quality Improvement Project

**TRPA PROJECT NUMBER:** 520-201-00

**FILE:** EIPC2009-0012

**PERMITTEE(S):** State of California, Department of Transportation (Caltrans)

**COUNTY/LOCATION:** El Dorado / US Highway 50 from Ski Run to Wildwood

**Staff Analysis:** In accordance with Article IV of the Tahoe Regional Planning Compact, as amended, and Section 6.3 of the TRPA Rules and Regulations of Practice and Procedure, the TRPA staff has reviewed the information submitted with the subject project. On the basis of this initial environmental evaluation, Agency staff has found that the subject project will not have a significant effect on the environment.

**Determination:** Based on the above-stated finding, the subject project is conditionally exempt from the requirement to prepare an Environmental Impact Statement. The conditions of this exemption are the conditions of permit approval.

  
\_\_\_\_\_  
TRPA Chairman or Executive Director

9-26-11  
\_\_\_\_\_  
Date



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HOURS  
Mon. Wed. Thurs. Fri  
9 am-12 pm/1 pm-4 pm  
Closed Tuesday

New Applications Until 3:00 pm

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## **ATTACHMENT Q**

# **STANDARD CONDITIONS OF APPROVAL FOR GRADING PROJECTS**

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This handout on the standard conditions that must be met in all projects involving grading is divided into the following three sections:

- I. Pre-Grading Conditions (Pre-activity, where applicable)
- II. Construction/Grading Conditions
- III. General Conditions/Design Standards

Please read all of the conditions carefully to avoid any delays in construction of your project.

**NOTE:** Your plans have been reviewed and approved as required under Tahoe Regional Planning Agency (TRPA) Rules, Regulations and Ordinances only. TRPA has not reviewed and shall not be responsible for any elements contained in your plans, i.e., structural, electrical, mechanical, etc., which are not required for review under said Rules, Regulations and Ordinances.

### I. PRE-GRADING/PRE-ACTIVITY CONDITIONS:

The following conditions must be completely complied with prior to any site disturbance or commencement of activity.

#### A. Final Construction Plans:

Final construction plans must be submitted to and reviewed by TRPA to determine conformance with the approval. Said plans shall clearly depict the following:

1. Slope stabilization methods to stabilize all existing and proposed cut and fill slopes.
2. Areas to be revegetated, including complete specifications for such revegetation.
3. Fencing for vegetation protection.
4. Temporary and permanent erosion control devices.
5. Utility trenches.
6. Dust control measures.
6. All water quality improvements (BMPs) required in the conditional approval. Drainage facilities shall be designed to be capable of retaining runoff water for a two (2) year, six (6) hour storm.
8. The final plans shall contain equipment specifications necessary to establish compliance with Standard Conditions III. A-F.

#### B. Securities:

A security shall be posted with the TRPA to insure compliance with all permit conditions. The security shall include an amount equal to 110 percent of the cost of the BMPs and other erosion control and water quality improvements required. For further information on the acceptable types of securities, see Attachment J.

C. Mitigation Fees:

All required air quality, water quality, and excess coverage and offsite coverage mitigation fees shall be paid to TRPA.

D. Temporary BMPs:

The following temporary BMPs are required to be installed onsite prior to any grading activity occurring:

1. Installation of temporary erosion controls.
2. Installation of vegetation protection measures.
3. Installation of construction site boundary fencing.

E. Required Inspection:

An onsite inspection by TRPA staff is required prior to any construction or grading activity occurring. TRPA staff shall determine if the onsite improvements required by Condition II (1), above, have been properly installed. No grading or construction shall be undertaken by the permittee until receipt of TRPA notification that the pre-grading/pre-activity conditions of approval have been satisfied.

F. Required Notices:

The following notices to the TRPA are required prior to any grading or construction occurring on the project site:

1. Notice for Pre-Grading Inspection: The permittee shall notify the TRPA when all onsite improvements required under Condition II(1), above, have been installed so that the required pre-grading inspection may be scheduled.
2. Notice of Commencement of Construction: The permittee shall notify the TRPA at least 48 hours prior to commencement of construction or grading on the project site. Said notice shall include the date when construction will commence.

II. CONSTRUCTION/GRADING CONDITIONS:

The following conditions shall be complied with during the grading and construction phase of the project.

- A. All construction shall be accomplished in strict compliance with the plans approved by TRPA.
- B. The TRPA permit and the final construction drawings bearing the TRPA stamp of approval shall be present on the construction site from the time construction commences to final TRPA site inspection. The permit and plans shall be available for inspection upon request by any TRPA employee. Failure to present the TRPA permit and approved plans may result in the issuance of a Cease and Desist Order by the TRPA.
- C. Whenever possible, utilities shall occupy common trenches to minimize site disturbance.
- D. There shall be no grading or land disturbance performed with respect to the project between October 15 and May 1, except as follows:
  1. The grading or land disturbance is for excavation and backfilling for a volume not in excess of three cubic yards.
  2. The activity is completed within a 48-hour period.
  3. The excavation site is stabilized to prevent erosion.
  4. The pregrade inspection is performed by TRPA staff, and the activity passes the inspection.

5. The grading/project does not represent or involve a series of excavations, which, when viewed as a whole, would exceed the provisions of this Standard Condition of Approval, and Subsection 4.2.A of the TRPA Code of Ordinances.

**Grading is prohibited any time of the year during periods of precipitation and for the resulting period of time when the site is covered with snow, or is in a saturated, muddy, or instable condition (pursuant to Subsection 64.2.C of the TRPA Code of Ordinances.)**

- E. All material obtained from any excavation work that is not contained within foundations, retaining walls, or by other methods approved by TRPA shall be removed from the subject parcel and disposed of at a site approved by TRPA.
- F. Replanting of all exposed surfaces, in accordance with the revegetation and slope stabilization plan, shall be accomplished within the first growing season following disturbance, unless an approved construction/inspection schedule establishes otherwise.
- G. All trees and natural vegetation to remain on the site shall be fenced for protection. Scarring of trees shall be avoided and, if scarred, damaged areas shall be repaired with tree seal.
  1. Fencing specified shall be at least 48 inches high and shall be constructed of metal posts and either orange construction fencing or metal mesh fencing also at least 48 inches high (Section 65.2.I.3 and 65.2.J.3). Job sites with violations of the fencing standards will be required to re-fence the job site with a high gauge metal fencing.
  2. No material or equipment shall enter or be placed in the areas protected by fencing or outside the construction areas without prior approval from TRPA. Fences shall not be moved without prior approval (Section 65.2.I.2 and 65.2.J.2).
  3. To reduce soil disturbance and damage to vegetation, the area of disturbance during the construction of a structure shall be limited to the area between the footprint of the building and the public road. For the remainder of the site the disturbance areas shall not exceed 12 feet from the footprint of the structure, parking area or cut/fill slope. The approved plans should show the fencing and approved exceptions (Section 30.14.A).
- H. 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. The site shall be cleaned up and road right-of-way swept clean when necessary.
- I. During grading and construction, environmental protection devices such as erosion control devices, dust control, and vegetation protection barriers shall be maintained.
- J. 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.
- K. Excavated material shall be stored upgrate from the excavated areas to the extent possible. No material shall be stored in any stream zone or wet areas.
- L. Only equipment of a size and type that, under prevailing site conditions, and considering the nature of the work to be performed, will do the least amount of damage to the environment shall be used.
- M. No washing of vehicles or construction equipment, including cement mixers, shall be permitted anywhere on the subject property unless authorized by TRPA in writing.
- N. No vehicles or heavy equipment shall be allowed in any stream environment zone or wet areas, except as authorized by TRPA.
- O. All construction sites shall be winterized by October 15 to reduce the water quality impacts associated with winter weather as follows:

1. For the sites that will be inactive between October 15 and May 1:
  - (a) Temporary erosion controls shall be installed;
  - (b) Temporary vegetation protection fencing shall be installed;
  - (c) Disturbed areas shall be stabilized;
  - (d) Onsite construction slash and debris shall be cleaned up and removed;
  - (e) Where feasible, mechanical stabilization and drainage improvements shall be installed; and
  - (f) Spoil piles shall be removed from the site.
2. For sites that will be active between October 15 and May 1, in addition to the above requirements:
  - (a) Permanent mechanical erosion control devices shall be installed, including paving of driveway and parking areas; and
  - (b) Parking of vehicles and storage of building materials shall be restricted to paved areas.

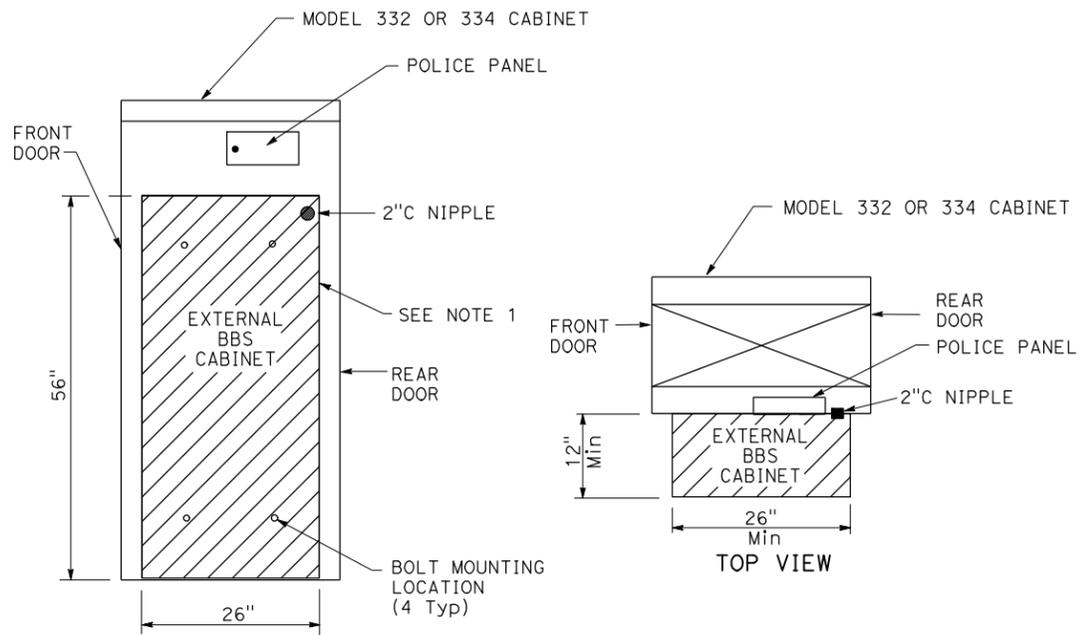
### III. GENERAL CONDITIONS/DESIGN STANDARDS:

- A. Projects approved by TRPA shall be subject to inspections by TRPA at any reasonable time. The permittee shall be responsible for making the project area accessible for inspection purposes. TRPA shall not be liable for any expense incurred by the permittee as a result of TRPA inspections.
- B. Construction shall be completed in accordance with an approved construction schedule. An extension of a completion schedule for a project may be granted provided the request is made in writing prior to the expiration of the completion schedule, a security is posted to ensure completion or abatement of the project, and TRPA makes either of the following findings:
  1. The project was diligently pursued, as defined in Subparagraph 4.12.C.(2) of the Code of Ordinances, during each building season (May 1 - October 15) since commencement of construction.
  2. That events beyond the control of the permittee, which may include engineering problems, labor disputes, natural disasters, or weather problems, have prevented diligent pursuit of the project.
- C. Water conservation appliances and fixtures shall be installed in all new facilities or, when replaced, in existing facilities: low flow flush toilets; low flow showerheads (3 gpm rated maximum flow); faucet aerators; and water-efficient appliances (e.g., washing machines and dishwashers).
- D. Water heaters shall not emit nitrogen oxides greater than 40 nanograms of nitrogen oxide (NO<sub>2</sub>) per joule of heat output.
- E. Space heaters shall not emit greater than 40 nanograms of nitrogen oxides (as NO<sub>2</sub>) per joule of useful heat delivered to the heated space.
- F. Wood heaters to be installed in the Region shall meet the safety regulations established by applicable city, county, and state codes. Coal shall not be used as a fuel source.
  1. Emission Standards: Wood heaters installed in the Region shall not cause emissions of more than 7.5 grams of particulates per hour for noncatalytic wood heaters or 4.1 grams per hour for catalytically equipped wood heaters.

2. Limitations: Wood heaters shall be sized appropriately for the space they are designed to serve. Multi-residential projects of five or more units, tourist accommodations, commercial, recreation and public service projects shall be limited to one wood heater per project area.
  3. List of Approved Heaters: TRPA shall maintain a list of wood heaters which may be installed in the Region. The list shall include the brand names, model number, description of the model and the name and address of the manufacturer. Wood heaters certified for use in either Colorado or Oregon shall be considered in compliance with 6(a), above.
- G. Construction materials shall be secured to prevent them from rolling, washing, or blowing off the project site. Rehabilitation and clean-up of the site following construction must include removal of all construction waste and debris.
- H. Plant species on the TRPA Recommended Native and Adapted Plant List shall be used for lawns and landscaping.
- I. The following sizes and spacing shall be required for woody plant materials at time of planting:
1. Trees shall be a minimum six feet tall or 1-1/2 inch caliper size or diameter at breast height;
  2. Shrubs shall be a minimum three gallon pot size where upright shrubs have a minimum height of 18 inches and a minimum spread of 18 inches; and spreading shrubs have a minimum spread of 18-24 inches.
  3. Groundcovers shall be a minimum four inch pot size or one gallon container and shall be maximum 24 inches on center spacing.
- J. Plant species not found on the TRPA Recommended Native and Adapted Plant List may be used for landscaping as accent plantings but shall be limited to borders, entryways, flower-beds, and other similar locations to provide accent to the overall native or adapted landscape design.
- K. The following exterior lighting standards shall apply:
1. Exterior lights shall not blink, flash or change intensity. String lights, building or roofline tube lighting, reflective or luminescent wall surfaces are prohibited.
  2. Exterior lighting shall not be attached to trees except for Christmas season.
  3. Parking lot, walkway, and building lights shall be directed downward.
  4. Fixture mounting height shall be appropriate to the purpose. The height shall not exceed the limitations set forth in Chapter 22 of the Code.
  5. Outdoor lighting shall be used for purposes of illumination only, and shall not be designed for, or used as, an advertising display. Illumination for aesthetic or dramatic purposes of any building or surrounding landscape utilizing exterior light fixtures projected above the horizontal is prohibited.
  6. The commercial operation of searchlights for advertising or any other purpose is prohibited. Seasonal lighting displays and lighting for special events which conflict with other provisions of this section may be permitted on a temporary basis.
- L. Any normal construction activities creating noise in excess of the TRPA noise standards shall be considered exempt from said standards provided all such work is conducted between the hours of 8:00 a.m. and 6:30 p.m.
- M. Fertilizer use on this property shall be managed to include the appropriate type of fertilizer, rate, and frequency of application to avoid release of excess nutrients and minimize use of fertilizer.
- N. No trees shall be removed or trimmed without prior TRPA written approval unless otherwise specifically exempted under Chapter 4 of the Code of Ordinances.

- O. The architectural design of this project shall include elements that screen from public view all external mechanical equipment, including refuse enclosures, satellite receiving disks, communication equipment, and utility hardware on roofs, buildings or the ground. Roofs, including mechanical equipment and skylights, shall be constructed of nonglare finishes that minimize reflectivity.
- P. The permittee is responsible for insuring that the project, as built, does not exceed the approved land coverage figures shown on the site plan. The approved land coverage figures shall supersede scaled drawings when discrepancies occur.
- Q. The adequacy of all required BMPs as shown on the final construction plans shall be confirmed at the time of the TRPA pre-grading inspection. Any required modifications, as determined by TPRA, shall be incorporated into the project permit at that time.
- R. It is the permittee's obligation to locate all subsurface facilities and/or utilities prior to any grading, dredging or other subsurface activity. The permittee is responsible for contacting the Northern Underground Service Alert (USA, usually known as USA DIGS 1-800-227-2600) prior to commencement of any activity on the site.
- S. The permittee agrees to indemnify, defend, hold harmless, TRPA, its Governing Board, its Planning Commission, its agents, and employees from and against any and all loss, damage, injury, liability, and claims thereof, for actions arising directly, or indirectly, from issuance or implementation, of this permit.
- T. This approval is based on the permittee's representation that all plans and information contained in the subject application are true and correct. Should any information or representation submitted in connection with the project application be incorrect or untrue, TRPA may rescind this approval or take other appropriate action.

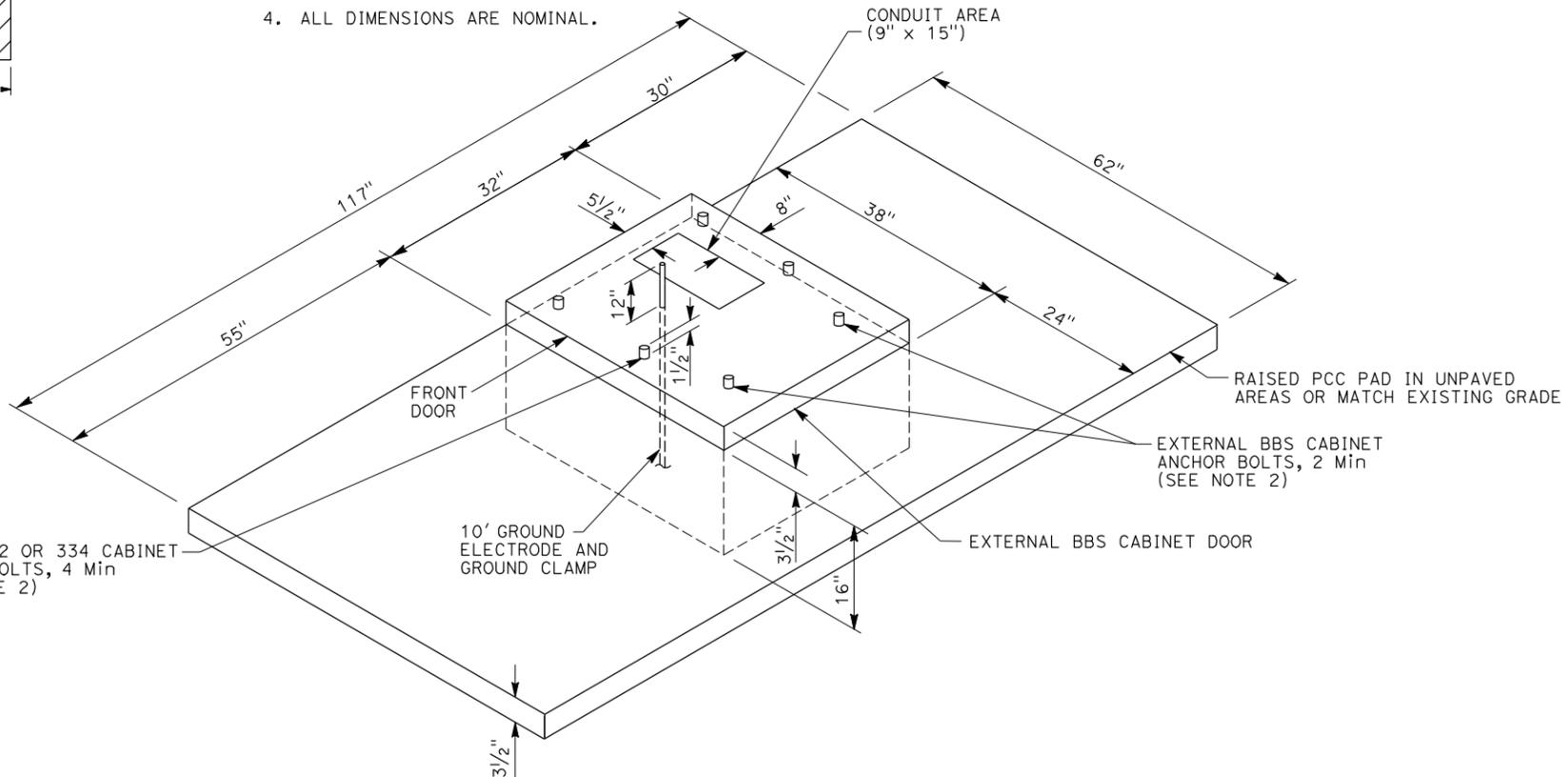
DIST	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
Theresa Gabriel			12-20-07		
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE					
Theresa A. Gabriel			REGISTERED PROFESSIONAL ENGINEER		
No. E15129			Exp. 6-30-10		
ELECT			STATE OF CALIFORNIA		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					



**NOTE: (THIS SHEET ONLY)**

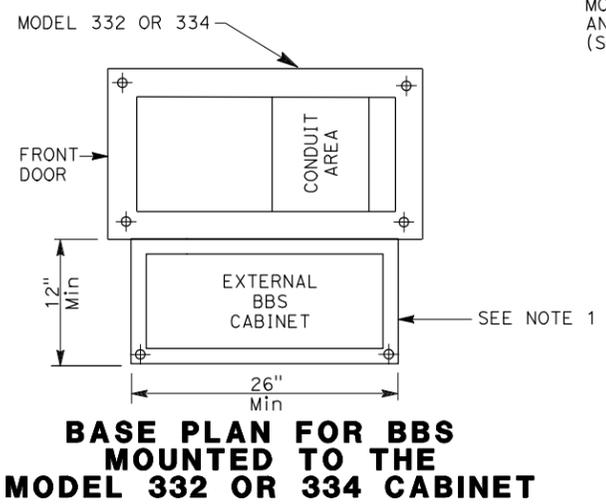
1. THE EXTERNAL BBS CABINET SHALL BE MOUNTED TO THE MODEL 332 OR 334 CABINET WITH FOUR 18-8 STAINLESS STEEL HEX HEAD, FULLY-THREADED, 3/8"-16 X 1" BOLTS; TWO WASHERS PER BOLT, DESIGNED FOR 3/8" BOLTS AND ARE 18-8 STAINLESS STEEL, 1" OUTSIDE DIAMETER, ROUND, AND FLAT; AND ONE K-LOCK NUT PER BOLT THAT IS 18-8 STAINLESS STEEL AND A HEX-NUT. THE ENGINEER WILL HAVE TO APPROVE THE BOLT MOUNTING LOCATION PRIOR TO INSTALLATION.
2. THE ANCHOR BOLTS SHALL BE 3/4" Dia X 15" WITH A 2"-90° BEND. THE CABINET MANUFACTURER'S SPECIFICATION SHALL DETERMINE THE LOCATION OF THE ANCHOR BOLTS IN THE FOUNDATION. THE ENGINEER WILL HAVE TO APPROVE THE ANCHOR BOLTS AND ITS LOCATION IN THE FOUNDATION PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL VERIFY THE DIMENSIONS OF THE BBS CABINET PRIOR TO CONSTRUCTING THE FOUNDATION OF THE MODIFIED PORTION OF THE Std MODEL 332 AND 334 CABINET FOUNDATION. THE ENGINEER WILL HAVE TO APPROVE ANY NECESSARY DEVIATIONS PRIOR TO CONSTRUCTION.
4. ALL DIMENSIONS ARE NOMINAL.

**EXTERNAL BBS CABINET MOUNTED TO THE MODEL 332 OR 334 CABINET**



**MODIFIED MODEL 332 AND 334 CABINET FOUNDATION DETAIL FOR BATTERY BACKUP SYSTEM (BBS)**

(FOR DIMENSIONS AND DETAILS NOT SHOWN AND ADDITIONAL NOTES, SEE SHEET ES-3C OF THE STANDARD PLANS FOR MODEL 332 AND 334 CABINETS)



**BASE PLAN FOR BBS MOUNTED TO THE MODEL 332 OR 334 CABINET**

(FOR DIMENSIONS AND DETAILS NOT SHOWN, SEE SHEET A6-1 TO A6-4, CABINET HOUSING DETAILS OF THE TRANSPORTATION ELECTRICAL EQUIPMENT SPECIFICATION (TEES))

**ELECTRICAL SYSTEMS (BBS FOUNDATION DETAILS)**

NO SCALE

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

RELATIVE BORDER SCALE IS IN INCHES



USERNAME => trcarol  
DGN FILE => BBS Foundation.dgn

CU 00000

EA 000000

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 Functional Supervisor  
 Calculated-Designed By  
 Checked By  
 Revised By  
 Date Revised  
 State of California logo

DATE PLOTTED => 13-MAR-2009  
 TIME PLOTTED => 09:11  
 LAST REVISION  
 2-2-09

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 FUNCTIONAL SUPERVISOR  
 CALCULATED-DESIGNED BY  
 CHECKED BY  
 REVISED BY  
 DATE REVISED

**LEGEND: (THIS SHEET ONLY)**

- PTS = POWER TRANSFER SWITCH
- UPS = UNINTERRUPTIBLE POWER SUPPLY
- UPSC = UNINTERRUPTIBLE POWER SUPPLY CONTROLLER
- UPSM = UPS MODE
- BP = BYPASS
- MBPS = MANUAL BYPASS SWITCH
- AC+ = UNGROUNDED CONDUCTOR
- AC- = GROUNDED CONDUCTOR
- C = COMMON
- Grn = GREEN
- Blk = BLACK
- Whit = WHITE
- SF = STATE-FURNISHED
- TB = TERMINAL BOARD
- Cntl = CONTROL
- Gnd = GROUND
- Temp = TEMPERATURE
- Batt = BATTERY

**NOTES: (THIS SHEET ONLY)**

1. TYPE A REFERS TO THE BBS EQUIPMENT FROM MANUFACTURER A.
2. CASE-1 REFERS TO THE SITUATION WHEN THE ENTIRE BBS EQUIPMENT INCLUDING THE BATTERIES ARE INSTALLED IN THE BBS CABINET.
3. THE LOCATION OF THE 2" NIPPLE WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL A NEMA-1 ENCLOSURE WITH 30 A, 1P, 120/240 VOLTS RATED CIRCUIT BREAKER MANUFACTURED PER UL STANDARD 489.
5. A TEMPERATURE PROBE SHALL BE ATTACHED TO THE BATTERY BY TAPE OR ATTACHED TO THE NEGATIVE TERMINAL OF THE BATTERY.
6. THE ELECTRICAL POWER FOR THE COOLING FAN FOR THE BBS CABINET SHALL BE TAPPED FROM THE BOTTOM OF THE TB IN THE 332 CABINET.
7. THE CONTRACTOR SHALL PROVIDE A 9-WIRE WIRING HARNESS OR BUNDLED 9 MULTICOLOR CONDUCTORS, #18 AWG WIRES FROM THE RELAY ON THE INVERTER/CHARGER UNIT TO THE CONTROLLER. THE ENDS OF THE CONDUCTORS SHALL BE INSULATED WITH TAPE AND A SIX-FOOT COIL ON EACH END.

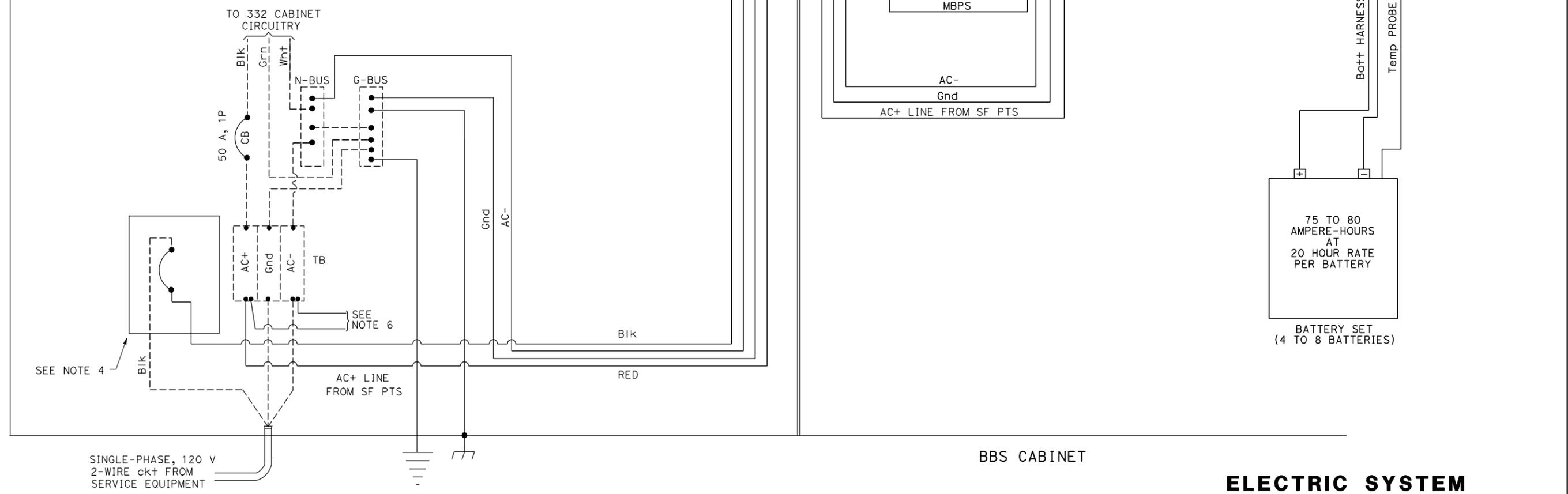
Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Theresa Gabriel  
 REGISTERED CIVIL ENGINEER  
 DATE 12-20-07

PLANS APPROVAL DATE

Theresa A. Gabriel  
 No. E15129  
 Exp. 6-30-10  
 ELECT  
 STATE OF CALIFORNIA

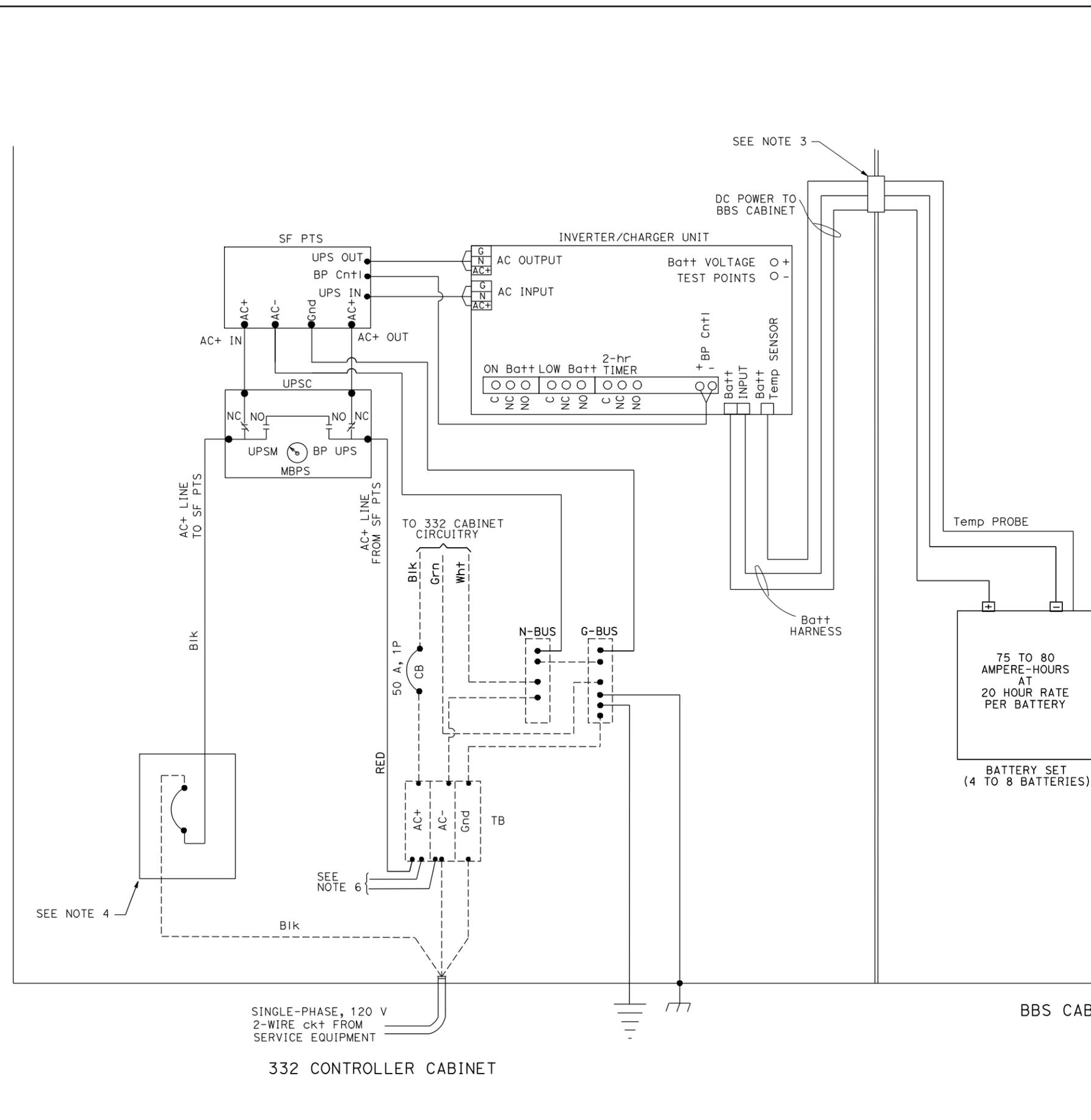
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**ELECTRIC SYSTEM  
 (BBS POWER CONNECTION DIAGRAM,  
 TYPE A, CASE-1)**

Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
<i>Theresa Gabriel</i> REGISTERED CIVIL ENGINEER			12-20-07 DATE	Theresa A. Gabriel No. E15129 Exp 6-30-10 ELECT STATE OF CALIFORNIA	
PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

REVISOR: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 FUNCTIONAL SUPERVISOR: \_\_\_\_\_  
 DEPARTMENT OF TRANSPORTATION  
 STATE OF CALIFORNIA



**LEGEND: (THIS SHEET ONLY)**

- PTS = POWER TRANSFER SWITCH
- UPS = UNINTERRUPTIBLE POWER SUPPLY
- UPSC = UNINTERRUPTIBLE POWER SUPPLY CONTROLLER
- UPSM = UPS MODE
- BP = BYPASS
- MBPS = MANUAL BYPASS SWITCH
- AC+ = UNGROUNDED CONDUCTOR
- AC- = GROUNDED CONDUCTOR
- C = COMMON
- Grn = GREEN
- Blk = BLACK
- Wht = WHITE
- SF = STATE-FURNISHED
- Batt = BATTERY
- Temp = TEMPERATURE
- TB = TERMINAL BOARD
- Cntl = CONTROL
- Gnd = GROUND

**NOTES: (THIS SHEET ONLY)**

1. TYPE B REFERS TO THE BBS EQUIPMENT FROM MANUFACTURER B.
2. CASE-2 REFERS TO THE SITUATION WHEN ONLY THE BATTERIES ARE INSTALLED IN THE BBS CABINET. THE REMAINING EQUIPMENT IS PLACED IN THE 332 CONTROLLER CABINET.
3. THE LOCATION OF THE 2" NIPPLE WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL A NEMA-1 ENCLOSURE WITH 30 A, 1P, 120/240 VOLTS RATED CIRCUIT BREAKER MANUFACTURED PER UL STANDARD 489.
5. A TEMPERATURE PROBE SHALL BE ATTACHED TO THE BATTERY BY TAPE OR ATTACHED TO THE NEGATIVE TERMINAL OF THE BATTERY.
6. THE ELECTRICAL POWER FOR THE COOLING FAN FOR THE BBS CABINET SHALL BE TAPPED FROM THE BOTTOM OF THE TB IN THE 332 CABINET.
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**ELECTRICAL SYSTEMS**  
**(BBS POWER CONNECTION DIAGRAM,**  
**TYPE A, CASE-2)**

NO SCALE



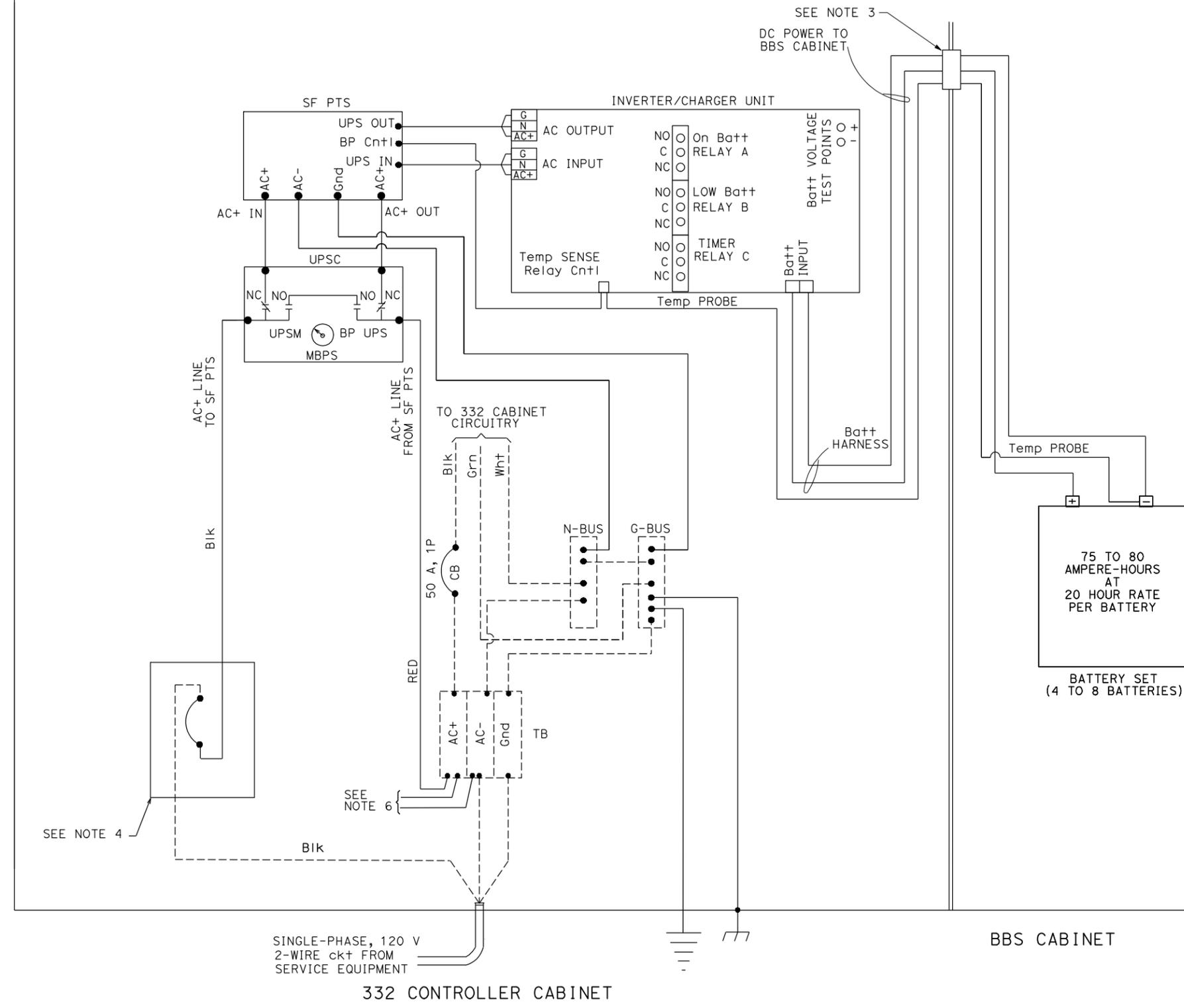
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 FUNCTIONAL SUPERVISOR  
 CALCULATED-DESIGNED BY  
 CHECKED BY  
 REVISED BY  
 DATE REVISED

Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

*Theresa Gabriel*  
 REGISTERED CIVIL ENGINEER DATE 12-20-07  
 Theresa A. Gabriel  
 No. E15129  
 Exp 6-30-10  
 ELECT  
 STATE OF CALIFORNIA

PLANS APPROVAL DATE

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**NOTES: (THIS SHEET ONLY)**

1. TYPE B REFERS TO THE BBS EQUIPMENT FROM MANUFACTURER B.
2. CASE-2 REFERS TO THE SITUATION WHEN ONLY THE BATTERIES ARE INSTALLED IN THE BBS CABINET. THE REMAINING EQUIPMENT IS PLACED IN THE 332 CONTROLLER CABINET.
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**ELECTRICAL SYSTEM  
 (BBS POWER CONNECTION DIAGRAM,  
 TYPE B, CASE-2)**