

STANDARD POLE FOUNDATION DETAIL

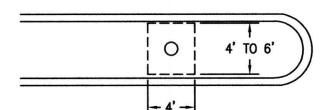
NOT TO SCALE

25" STREET LIGHT POLE - SPLIT BASE \*SQUARE FOUNDATION PEDESTAL. DIMENSION = BOLT CIRCLE DIA. +6" CLEAR 4" PCC OR BRICK - 3" CLEAR TREE EXCAVATION PIT PAVER PER LANDSCAPE DETAILS-#5 PULLBOX (LOCATION TO BE DETERMINED BY LANDSCAPE 3" CLEAR (TYP) -AREA ----THE ENGINEER) CONCRETE MEDIAN CURB - ROADWAY 4' TO 6' 5-#4 AT EACH FACE 2-#8, 1-#10 GROUND CONDUCTOR FROM PB 3/4" X 30" X 4" WITH DUAL NUTS AND WASHERS - 5-#5 TOP AND BOTTOM PROVIDED BY THE CITY -EACH WAY WITH 6" HOOK (SEE NOTE A)

# ALTERNATE POLE FOUNDATION DETAIL

NOT TO SCALE

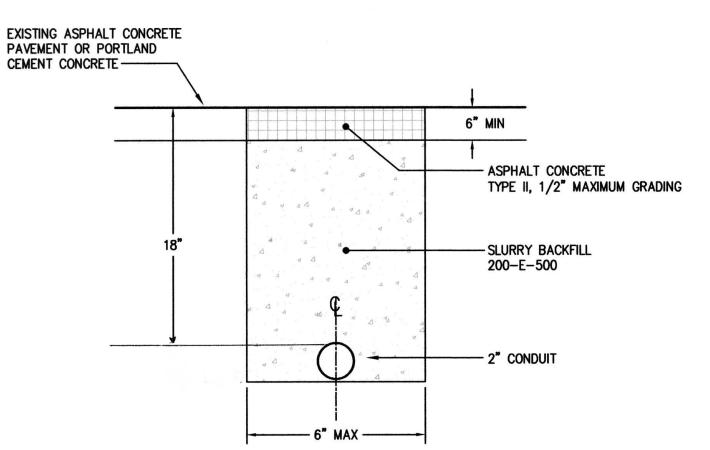
NOTE A) THE CONCRETE FOUNDATION MUST BE POURED TO MATCH TOP OF BACK OF CONCRETE MEDIAN CURB WHERE INSIDE WIDTH OF THE MEDIAN ISLAND IS 6' OR LESS.



#### DETAIL NOTES

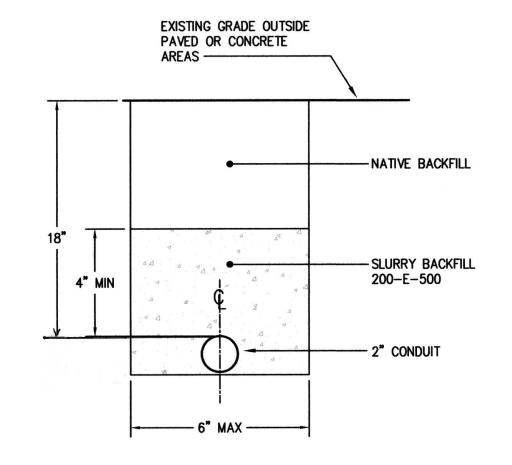
- STANDARD STREET LIGHT FOUNDATIONS ON MOUNT DIABLO BLVD. SHALL BE 2' DIAMETER BY 60" DEEP MEASURED TO THE TOP OF PCC OR BRICK PAVER SIDEWALK AS SHOWN IN DETAIL. SPREAD FOOTING (6) AS SHOWN ON DETAIL MAY BE SUBSTITUTED FOR STANDARD STREET LIGHT FOUNDATION WHERE REQUIRED BY SITE CONDITIONS.
- 2. FOUNDATIONS SHALL NOT BE LOADED UNTIL CONCRETE HAS ATTAINED FULL 28-DAY COMPRESSIVE
- 3. CONFORM WITH ACI 318 AND ACI 315 STANDARD FOR DETAILS AND DETAILING OF CONCRETE REINFORCEMENT. REINFORCING STEEL SHALL BE GRADE 60 (ASTM 615) Fy=60ksi.
- CONTRACTOR SHALL COORDINATE ANCHOR BOLT SIZE, EMBEDMENT AND PLACEMENT WITH POLE MANUFACTURER PRIOR TO PLACEMENT OF CONCRETE FOUNDATIONS. ANCHOR BOLTS SHALL BE CAST IN WITH FOUNDATION CONCRETE AND NOT AFTER CONCRETE HAS SET.
- 5. PEDESTAL SHALL BE INSTALLED IN AREAS WITH BRICK PAVERS. IN AREAS WITH 4" PCC SIDEWALK, THE PEDESTAL MAY BE ELIMINATED, HOWEVER, THE ANCHOR BOLT LENGTH SHALL BE INCREASED BY THE THICKNESS OF THE SIDEWALK (4") FROM DESIGN DEPTH.





TYPICAL TRENCH SECTION ASHPALT CONCRETE PAVEMENT PORTLAND CEMENT CONCRETE AREAS

NOT TO SCALE



## TYPICAL TRENCH SECTION OUTSIDE ASHPALT CONCRETE PAVEMENT OR PORTLAND CEMENT CONCRETE AREAS

NOT TO SCALE

- MATCH EXISTING PAVEMENT SURFACE 6" MIN OR DEPTH EQUALS EXISTING AC THICKNESS +1" SLURRY BACKFILL 200-E-500 SCH 40 PVC IRRIGATION PIPE AND SLEEVE 2" ELECTRICAL CONDUIT

TYPICAL JOINT TRENCH SECTION ASHPALT CONCRETE PAVEMENT PORTLAND CEMENT CONCRETE AREAS NOT TO SCALE

### ELECTRICAL GENERAL NOTES

FUSE PROTECTION REQUIRED).

- 1. ELECTRICAL CONTRACTOR IS TO PROVIDE LABOR, MATERIALS, TRANSPORTATION, EQUIPMENT, RELATED HAND TOOLS, SPECIAL AND OCCASIONAL SERVICES TO CONSTRUCT AND INSTALL THE COMPLETE ELECTRICAL SYSTEM AS SPECIFIED AND SHOWN ON THE PLANS.
- 2. BONDING JUMPERS SHALL BE INSTALLED TO INSURE CONTINUITY WHERE CONDUIT CONNECTIONS AT CONCENTRIC KNOCKOUTS ARE TO SERVE AS A GROUND.
- 3. PROVIDE GREEN THWN COPPER GROUND WIRE FROM PANELBOARD GROUND BUS TO ALL BRANCH CIRCUITS.
- 4. THE ELECTRICIAN SHALL CHECK THE TIGHTNESS OF ALL PANELBOARD BUSES AND CIRCUIT BREAKER LUGS. COMPLETELY VACUUM AND CLEAN INTERIOR OF EQUIPMENT PRIOR TO TURN OVER TO THE OWNER.
- 5. ALL NEW AND EXISTING PANELBOARDS AND SWITCHBOARDS SHALL BE PROVIDED WITH NEW TYPEWRITTEN DIRECTORIES TO IDENTIFY THE LOCATION OF EACH LOAD SERVED.
- 6. ALL EQUIPMENT SHALL BE U.L. LISTED AND INSTALLED AS PER LISTING OR LABELING (I.E. MAX. FUSE SIZES MEAN
- 7. CONTRACTOR TO COORDINATE ALL NEW WORK WITH ALL OTHER TRADES FOR A SMOOTH FLOW OF INSTALLATION WORK
- 8. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO ALL EXISTING STRUCTURES AND EQUIPMENT INCURRED DURING ELECTRICAL CONSTRUCTION. IF DAMAGE OCCURS DURING ELECTRICAL CONSTRUCTION, THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH CITY TO PATCH, PAINT AND REPAIR TO MATCH EXISTING CONDITIONS.
- COORDINATE EQUIPMENT LOCATIONS AND ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT REQUIRING ELECTRICAL HOOK-UP WITH CONTRACTOR RESPONSIBLE FOR PROVIDING EQUIPMENT AND EQUIPMENT MANUFACTURER DATA
- 10. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND ALTHOUGH THE SIZE AND LOCATIONS OF EQUIPMENT IS SHOWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL MAKE USE OF MANUFACTURER'S OR OWNER'S DATA AVAILABLE AND/OR VERIFY DATA IN THE FIELD FOR PROVIDING AND INSTALLING CORRECT CABLE LENGTHS.
- 11. ALL EQUIPMENT MUST BE LISTED, LABELED, OR CERTIFIED BY A NATIONAL RECOGNIZED TESTING LABORATORY (NRTL).
- 12. MAINTAIN "AS-BUILT" RECORDS AT ALL TIMES, SHOWING EXACT LOCATION OF ALL UNDERGROUND AND/OR CONCEALED CONDUITS AND SERVICES INSTALLED UNDER THIS CONTRACT, INCLUDING CIRCUIT IDENTIFICATION WHERE APPLICABLE. PROVIDE ENGINEER WITH "AS-BUILT" DOCUMENTS AS INDICATED IN THE PROJECT SPECIAL
- 13. DRAWINGS INDICATE THE LOCATION OF DEVICES, FIXTURES AND EQUIPMENT AND THE CIRCUIT NUMBER AND PANEL DESIGNATION WHICH SUPPLIES THEM. THE CONTRACTOR SHALL VERIFY WITH ENGINEER/VENDORS AND COORDINATE ALL LOCATIONS PRIOR TO INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETELY CONNECTING ALL ELECTRICAL DEVICES TO CIRCUITS INDICATED ON THE DRAWINGS.
- 14. ALL EQUIPMENT GROUNDING SHALL CONFORM TO ARTICLE 250 OF THE NATIONAL ELECTRIC CODE, LATEST EDITION.
- 15. ALL EXTERIOR CONDUIT ABOVE GRADE, SHALL BE RIGID GALVANIZED STEEL, U.O.N. COAT ALL EXPOSED THREADS WITH GALVANIZING PAINT.
- 16. ALL UNDERGROUND CONDUIT RUNS SHALL BE SEALED TO PREVENT GAS/MOISTURE ENTERING THE PIPE PER ARTICLE 230-8, 300.5 AND 300.50E.
- 17. PROVIDE EXPANSION FITTINGS AND/OR CONDUIT FLEX TO CONDUITS PASSING THROUGH STRUCTURAL EXPANSION JOINT SYSTEM. VERIFY/COORDINATE WITHIN THE FIELD FOR LOCATION.
- 18. ALL EQUIPMENT/COMPONENTS/DEVICES INSTALLED OUTDOORS SHALL BE U.L. LISTED FOR WET LOCATION.
- 19. THE CONTRACTOR SHALL PAY FOR ALL REQUIRED PERMITS AND INSPECTION FEES.
- 20. THE CONTRACTOR SHALL VERIFY WITH THE OTHER TRADES ALL LOCATIONS AND DIMENSIONS OF DEVICES/EQUIPMENT PRIOR TO ROUGH-IN.
- 21. STREET LIGHTING AND IRRIGATION CONDUITS THAT RUN GENERALLY IN THE SAME LOCATION AND DIRECTION SHALL BE INSTALLED IN ONE TRENCH TO MINIMIZE THE DISRUPTIONS TO ROADWAY USERS AND MINIMIZE DAMAGE TO EXISTING FACILITIES.
- 22. PROTECT ALL EXISTING TRAFFIC LOOPS WHERE NOT SHOWN ON PLANS TO REPLACE AND/OR RECONNECT.

## ABBREVIATION LIST

SYMBOL LIST

EXISTING CONDUIT AND CONDUCTORS TO REMAIN

NEW UNDERGROUND CONDUIT AND CONDUCTORS

NO. 5 PULLBOX PER CALTRANS STANDARDS

EXISTING TYPE C BIKE DETECTOR LOOP

NEW TYPE D VEHICLE DETECTOR LOOP

NEW TYPE E VEHICLE DETECTOR LOOP

EXISTING TYPE D VEHICLE DETECTOR LOOP

EXISTING TYPE E VEHICLE DETECTOR LOOP

NEW LIGHTING STANDARD BASE, POLE AND TWIN HEAD LIGHTING FIXTURE

\*\*\* SLB DENOTES STREET LIGHTING PULLBOX, TSB DENOTES TRAFFIC SIGNAL

EXISTING

CENTERLINE

COPPER

GROUND FAULT INTERRUPTER

GROUND FAULT PROTECTION

EMPTY CONDUIT WITH PULL CORD

ISOLATED GROUND

PEDESTRIAN PUSH BUTTON

STREET LIGHTING PULLBOX

TRAFFIC SIGNAL PULLBOX

**WEATHERPROOF** 

UNDERGROUND

UNLESS OTHERWISE NOTED

REFERS TO DETAIL NO. 1 ON DRAWING E-1

VERIFY IN FIELD

CONSTRUCTION NOTE

## ELECTRICAL CONSTRUCTION NOTES

- (1) EXISTING STREET LIGHT POLE TO REMAIN.
- 2 EXISTING 2" CONDUIT WITH 2#6 TO REMAIN.
- NEW STREET LIGHT POLE AND ADJACENT STREET LIGHTING PULLBOX. POLE AND LUMINAIRE ARE FURNISHED BY CITY, INSTALLED BY CONTRACTOR. CONTRACTOR SHALL FURNISH AND INSTALL NO. 5 PULLBOX PER CALTRANS STANDARDS.
- (4) NEW 2" CONDUIT WITH 2#6 IN JOINT TRENCH. SEE DETAIL 4/E01.
- (5) EXISTING TRAFFIC SIGNAL LOOP AND LEAD LINE TO BE REPLACED WITH NEW, DUE TO NEW CURB INSTALLATION.
- (6) EXISTING TRAFFIC SIGNAL LOOP AND LEAD LINE TO BE REPLACED TO ALIGN WITH NEW LANE(S) AND RECONNECTED
- (7) EXISTING SIGNAL CONDUIT TO BE PROTECTED DURING CONSTRUCTION.
- (8) EXISTING PEDESTRIAN PUSHBUTTON TO REMAIN.
- 9 EXISTING 120/240V PG&E SERVICE POINT METER AND BRANCH CIRCUIT PANEL. NEW STREET LIGHTING SHALL BE CONNECTED TO EXISTING BREAKERS. SEE PANEL SCHEDULE ON SHEET E03.
- (10) NEW 2" CONDUIT WITH 4#6.
- (11) EXISTING SIGNAL LOOP LEAD LINE AND HANDHOLE BOX THAT ARE DAMAGED TO BE REPLACED WITH NEW AND RECONNECTED
- (12) EXISTING TRAFFIC SIGNAL PEDESTAL.
- (13) EXISTING 2" CONDUIT WITH 4#6 TO REMAIN.
- (14) INSTALL NEW G5 BOX AND NEW 2" STUB TO EXISTING BOX BY POLE.
- (15) NEW 2" CONDUIT WITH 2#6. SEE DETAIL 3/E01.

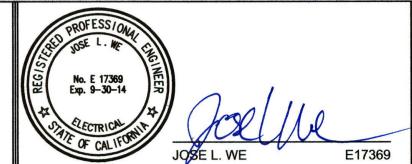
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SHEET

E01

NO. DATE **REVISIONS** SCALE AS NOTED 08/22/2013 DATE **ENGINEER** SCH PROJECT NO. 13016 WHM INCORPORATED

Engineering Consultants 1605 School Street Moraga, CA 94556 Tel (925)376-2902 \* Fax (925)376-2904 cad@whminc.com 13-018



CITY OF LAFAYETTE

PROJECT No. 014-9696

MOUNT DIABLO BLVD / FIRST STREET TO BROWN AVENUE EAST END PED/BIKE AND STREETSCAPE IMPROVEMENTS PROJECT

STA: 2+00 TO 7+00

REVIEWED BY: **CITY OF LAFAYETTE** 

OF E04 SHEETS

TONY COE ENGINEERING SERVICES MANAGER PROJ. NO. 014-9696

LAFAYETTE

**CALIFORNIA**