STANDARD PLANS

ELECTRICAL
ALL NOTES REFER TO DRAWING E-2

STREET LIGHT POLE, SEE NOTE 1

MAST ARM, SEE NOTE 1

STREET LIGHT FIXTURE, SEE NOTE 6

24" MIN

CURB AND GUTTER

1/2"X8' COPPER CLAD GROUND ROD

PULL BOX, SEE NOTE 14

JOINT UTILITY TRENCH

SIDEWALK

5'
NOTES


2. STREET LIGHT POLE FOUNDATIONS, BOLTS, AND REINFORCEMENT CAGES SHALL BE PER OCT 30, 2015 CALTRANS STANDARD PLANS AND SPECIFICATIONS DRAWING ES-7N. CAGES DO NOT REQUIRE WELDING.

3. STREET LIGHT LOCATIONS SHALL BE SHOWN ON IMPROVEMENT PLANS, POLE SPACING SHALL BE PROVIDED BY CITY OF NAPA ELECTRICAL DIVISION.

4. DEVELOPER SHALL CONTACT PG&E TO ESTABLISH STREET LIGHT SERVICE LOCATIONS, THEN PROVIDE CITY OF NAPA PUBLIC WORKS DEPARTMENT WITH SAME LOCATIONS, IN ACCORDANCE WITH THE LS2A RATE SCHEDULE.

5. LED FIXTURE SIZE MAY BE INCREASED ON COLLECTOR AND ARTERIAL STREETS OR AS OTHERWISE DETERMINED BY THE CITY OF NAPA ELECTRICAL DIVISION.

6. STREET LIGHT FIXTURE SHALL BE 120 VOLT LED CREE COBRA HEAD WITH TWIST LOCK PHOTO ELECTRIC CONTROL RECEPTACLE ON TOP. REFER TO IMPROVEMENT PLANS FOR SIZE.

7. PHOTO ELECTRIC CONTROL SHALL BE FISHER-PIERCE ELL-124.

8. STREET LIGHT WIRE FROM PULL BOX TO FIXTURE SHALL BE #10 THHN SOLID OR #10 THW STRANDED (TS) WIRE.

9. ALL FIELD WIRING SHALL BE #8 THHN OR THW STRANDED.

10. BOND WIRE SHALL BE CONNECTED TO ALL POLES AND GROUND RODS IN THE SYSTEM.

11. INSTALL 1/2" x 8’ COPPER CLAD GROUND ROD IN CENTER OF EACH FOUNDATION.

12. THERE SHALL BE NO SPLICES IN POLE BASE.

13. ALL CONDUITS SHALL BE 24" DEEP IN THE CLEAR FROM FINISH GRADE, 2’ SAND BED, 12’ MINIMUM SAND COVER.

14. PULL BOXES SHALL BE PLACED NEXT TO EACH STREET LIGHT AND AT PG&E SECONDARY BOX LOCATIONS THAT FEED STREET LIGHTS. ADDITIONAL PULL BOXES SHALL BE INSTALLED IN CONDUIT RUNS EXCEEDING 200’ OR AS OTHERWISE DIRECTED BY THE ENGINEER. BOX LIDS SHALL BE MARKED “STREET LIGHTING” AND SHALL HAVE HOLD DOWN BOLTS.

15. IN UNDEVELOPED AREAS CONSTRUCT A 30"x30" CONC. PAD (4" THICK), IF A ROUND FOOTING IS POURED, STOP AT THE ELEVATION OF THE BOTTOM OF THE SIDEWALK.

16. DUE TO POSSIBLE CONFLICTING UTILITIES, STREET LIGHTS ARE SUBJECT TO RELOCATION WITH CITY OF NAPA ELECTRICAL DIVISION APPROVAL.

17. COBRA HEAD MODEL NUMBERS SHALL BE LISTED ON THE IMPROVEMENT PLANS.

18. IT IS THE RESPONSIBILITY OF THE DEVELOPER OR THEIR REPRESENTATIVE TO CONTACT THE MANUFACTURER FOR THE LATEST MODEL NUMBERS/TYPES.

19. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL U.S.A (811) AT LEAST 2 WORKING DAYS PRIOR TO ANY EARTHWORK.

20. CONTACT CITY OF NAPA ELECTRICAL DIVISION AT (707) 257-9588 FOR INSPECTION 24 HOURS PRIOR TO POURING CONCRETE AND/OR BACKFILLING CONDUIT. CONTACT CITY OF NAPA ELECTRICAL DIVISION FOR FINAL INSPECTION AND TURN-ON.

21. ALL CONDUIT SHALL BE SEALED WITH APPROVED DUCT SEAL. CONDUITS FOR FUTURE EXTENSIONS SHALL BE CAPPED WITH CONDUIT PLUGS.
NOTE:
APPROVAL FROM CITY OF NAPA ENGINEER REQUIRED. 
SUBMIT SHOP DRAWINGS & SPECIFICATIONS FOR REVIEW.
NOTE:
APPROVAL FROM CITY OF NAPA ENGINEER REQUIRED.
SUBMIT SHOP DRAWINGS & SPECIFICATIONS FOR REVIEW.
1. REFER TO THE CITY OF NAPA DOWNTOWN SPECIFIC PLAN FOR APPROVED LOCATIONS OF THIS STANDARD STREET LIGHT; THIS STANDARD STREET LIGHT TO BE PLACED DOWNTOWN OR AS APPROVED BY THE ENGINEER. ALL OTHER STREET LIGHTS TO BE USED OUTSIDE THE DOWNTOWN SPECIFIC PLAN AREA SHALL CONFORM TO CITY STANDARD DRAWING E-1.

2. FOOTING SHALL BE 24" DIAMETER BY 3' DEEP CONCRETE. TOP OF FOOTING SHALL BE FLUSH WITH SIDEWALK.

3. ACCESS DOOR SECURED TO BASE WITH TAMPER PROOF HEX SOCKET SECURITY MACHINE SCREWS.

4. ACCESS DOOR SHALL BE POSITIONED AWAY FROM STREET.

5. BOLTS SHALL BE 5/8" x 18" x 3' GALVANIZED STREET LIGHT BOLTS WITH 12" BOLT CIRCLE.

6. POLE SHALL ADHERE TO SHAKESPEARE CS - CORAL GABLES 12' FLAT BLACK SPEC ANCHOR PLACE AND TENON. SPECIFICATION NO: ACG20-12AF1103

7. LED SHALL ADHERE TO LIGHT EFFICIENT DESIGN STANDARDS FOR LED-8029

8. GLOBE AND ASSEMBLY SHALL BE ELA COMPANY INC. GLOBE AND ASSEMBLY SHALL BE AN ACORN GLOBE WITH 9" OPENING. MEDIUM BASE PORCELAIN SOCKET WITH 1.5" x 1/B-27#4066, 120V BUTTON PHOTOCELL, CAST BALLAST HOUSING FITTER INCANDESCENT, MEDIUM BASE, ACRYLIC DIFFUSER AND STIPPLED. GLOBE ASSEMBLY TO BE APPROVED BY CITY ELECTRICAL DIVISION.
SECONDARY BOX SERVICE INSTALLATION


WOOD POLE SERVICE INSTALLATION

INSTALL NO. 3 1/2 PULL BOX ADJACENT TO EACH STREET LIGHT POLE ALONG WITH A FUSE HOLDER AND A 10 AMP FUSE (BUSS#HEB A-A FOR FNM FUSES OR EQUAL TO) THERE SHALL BE NO SPLICES IN POLE BASES.

SECONDARY BOX AND WOOD POLE SERVICE INSTALLATIONS
NOTES

1. SPRINKLER CONTROLLER SERVICE LOCATIONS SHALL BE ESTABLISHED PRIOR TO CONSTRUCTION.

2. ELECTRICAL SERVICE CONDUIT SIZE SHALL BE 1-1/2" SCHEDULE 40 18" DEEP.

3. CONDUCTORS SHALL BE MINIMUM NO. 10 (ONE WHITE, ONE RED) PULLED WITH A NUMBER 10 BARE COPPER BOND WIRE. BOND WIRE SHALL CONNECT TO ALL CONTROLLERS AND GROUND RODS IN THE SYSTEM.

4. CONTROLLER CABINETS SHALL BE INSTALLED PER CITY OF NAPA SPECIFICATIONS.

5. INSTALL 6"X6"X4" LANDING CAN WITH GROUND BUS. INSTALL #8 ARMORED GROUND CABLE FROM GROUND BUS TO CABINET FOUNDATION BOLT. INSTALL 1/2" OFFSET NIPPLE FROM LANDING CAN TO ONE SINGLE GANG HANDY BOX. INSTALL ONE GFCI DUPLEX RECEPTACLE INTO HANDY BOX.

6. INSTALL 14/3 SJO CORD WITH STRAIN RELIEF FROM SPRINKLER CONTROLLER BOX. INSTALL 90 DEGREE CORD CAP ON OTHER END OF SJO CORD AND PLUG INTO GFCI RECEPTACLE.

7. CONTACT CITY OF NAPA ELECTRICAL DIVISION PRIOR TO BACKFILLING ANY ELECTRICAL CONDUIT TRENCHES.

8. CONTACT CITY OF NAPA ELECTRICAL DIVISION FOR ELECTRICAL SERVICE LOCATIONS AND PRIOR TO STARTING ELECTRICAL WORK (707) 257-9588.

9. INSTALL 1/2"X8' COPPER CLAD GROUND ROD.
INDUCTIVE LOOPS FOR TRAFFIC SIGNALS

6' X 6' LOOPS TO BE WOUND IN ALTERNATE DIRECTIONS (TYP.)

PULL BOX W/ STEEL RING & COVER (S-14)

CENTER IN LANE (TYP.)

TYPE "D" LOOP (TYP.)

TYPE "A" LOOP (TYP.)

2" COND. SLEEVE (ONE CONDUIT FOR EACH SET OF LANE LOOPS)

PULL BOX W/ STEEL RING & COVER (S-14)

X-WALK/LIMIT LINE

CURB & GUTTER

2" CONDUIT SLEEVE (THROUGH WALL OF BOX.)

P.C.C. COLLAR

LOOP CABLES

LOOP CABLES (LOOP CABLES NOT IN SAWCUT SHALL BE COVERED WITH SAND & PATCHED WITH ASPHALT. CONCRETE SHALL NOT BE PLACE AROUND WIRES.)

PULL BOX W/ STEEL RING & COVER

PER CITY STD. S-14. COVER TO BE MARKED "ELECT".

2" CONDUIT SLEEVE TO #5 PULL BOX (ONE CONDUIT FOR EACH SET OF LOOPS.) DO NOT ENTER THROUGH BOX WALL.

PULL BOX WITH STEEL RING & COVER

6' X 6' LOOPS TO BE WOUND IN ALTERNATE DIRECTIONS (TYP.)

PULL BOX & LOOPS INSTALLATION

TYPE "A" & "D" LOOPS

TYPE "A" LOOPS (4 TURNS)

TYPE "D" LOOP (6 TURNS)
SOLAR PANEL AFFIXED PER MANUFACTURER
SPECIFICATIONS FOR TOP OF POLE AND
BRACKET, ADJUSTABLE ANGLE OF 45° TO 60°
VERTICALLY AND ABILITY TO ROTATE 360°

TOP OR SIDE POST MOUNT PER
MANUFACTURER’S SPECIFICATIONS

W11-2 OR S1-1 SIGN:
30” X 30” FOR POSTED SPEED ≤ 30 MPH
36” X 36” FOR POSTED SPEED ≥ 35 MPH

RAPID FLASHING BEACON (RFB)
CARMANAH R-920E

W16-7P [24” X 12”] SIGN

13-15 FT POLE & FOUNDATION PER
CALTRANS 2010 STD PLAN ES-7B, TYPE 1-A
(SEE NOTE 2)

ADA COMPLIANT PUSH BUTTON
PER CA MUTCD STANDARDS AND
SIGN R10-25

NOTES

1. ALL SIGNS PER CA MUTCD, LATEST EDITION.

2. 13’ POLE FOR POSTED SPEEDS OF LESS THAN OR EQUAL TO 30 MPH. 15’ POLE FOR
POSTED SPEEDS GREATER THAN OR EQUAL TO 35 MPH.

3. □ INDICATES DIMENSION TO BE USED UNLESS NOTED OTHERWISE. DO NOT
EXCEED MAXIMUM DIMENSION.
PERFORATED POLE IN CAST-IN-DRILLED-HOLE PIER

3" SQ X 7GA X 36" LONG GALV ANCHOR SLEEVE

(2) 3/8" Ø THRU-BOLTS CENTER ON POLE & PIER

3/8" Ø X 6" LONG STOP BOLT

18" MINIMUM FROM TOP OF SLEEVE

3" CLEAR, MIN.

2-1/2" SQ X 12GA STEEL PERFORATED POLE

FINISH GRADE

W11-2 OR S1-1 SIGN:
30" X 30" FOR POSTED SPEED ≤ 30 MPH
36" X 36" FOR POSTED SPEED ≥ 35 MPH

RAPID FLASHING BEACON (RFB)
CARMANAH R-920E

W16-7P (24" X 12") SIGN

ADA COMPLIANT PUSH BUTTON PER CA MUTCD STANDARDS AND SIGN R10-25

DESIGN PARAMETERS (PER CBC 2019):
- ALLOW SOIL BEARING = 1500 PSF
- PASSIVE PRESSURE = 150 PCF
- \( P_{\text{wind}} = 11.4 \times [\text{AREA OF SIGN}] \) - ASD LEVEL
- SEISMIC: \( S_{DS} = 1.325 \); \( I_E = 1.0 \)

PERFORATED POLE IN CAST-IN-DRILLED-HOLE PIER

NOTES
1. RAPID FLASHING BEACON SYSTEM ON GALVANIZED PERFORATED SQUARE POLE IS AN ALTERNATIVE INSTALLATION SUBJECT TO CITY APPROVAL.
2. ALL CONCRETE SHALL BE 2500 PSI MIN.
3. PIER DEPTH SHOWN IS MIN. FROM FINISH GRADE.
4. 13' POLE FOR POSTED SPEEDS OF LESS THAN OR EQUAL TO 30 MPH,
   15' POLE FOR POSTED SPEEDS GREATER THAN OR EQUAL TO 35 MPH.
22 x 72 Edgelit LED IISNS Legend Submittal

INTERNALLY ILLUMINATED STREET NAME SIGNS

CITY OF NAPA
PUBLIC WORKS DEPARTMENT

DRAWN BY: EBM
CHECKED BY: IHH
APPROVAL DATE: 10/2020
APPROVED BY: JBL
SCALE: NONE
DRAWING NO. E-11
REVISED DATE: NONE

CUSTOMER: JAM SERVICES
PO: 51918-01
JOB REF: -
CHANGE & RESUBMIT APPROV: -
MOD: 06-21-17
REVISION DATE: 07-07-17
PAGE: 1 OF 1

NOTE: THIS DRAWING IS NOT TO SCALE.
CITY OF NAPA
PUBLIC WORKS DEPARTMENT

ELECTRICAL CABINET
FOUNDATION BASE

28”

PLAN VIEW

SIDEWALK
A

28”

EX. CURB & GUTTER

24’ MIN.

24” MIN.

SECTION - A

SIDEWALK

20” ABOVE FINISHED GRADE

28”

FOUNDATION BASE
W = 28”
L = 28”
H = 24”

ELECTRICAL CABINET

20” ABOVE FINISHED GRADE

EX. CURB & GUTTER

28”

E-12
"P" CABINET FOUNDATION BASE

PLAN VIEW

NEW CURB & GUTTER

FOUNDATION BASE
W = 32"
L = 48"
H = 24"

32"

SECTION - A

"P" CABINET

DOOR

CURB & GUTTER

FOUNDATION BASE
W = 32"
L = 48"
H = 24"

SIDEWALK

32"