USE 3/4" PVC TO ATTACH WIRE TO POLE IF THE DISTANCE FROM THE SECONDARY RACK TO THE MAST ARM IS MORE THAN 24”.

TRIM THROUGH BOLT TO 1” MAX. BEYOND NUT, AND FILE SMOOTH AND COLD GALV.

5/8” GALV. BOLT WITH MIN. 3” CURVED STRAIN PLATE AND SQUARE NUT

1/2” X 4” GALV. LAG BOLT BOTTOM HOLES

10’ MIN. TO THE CLOSEST PART OF THE LUMINAIRE

24” MIN. TO TV, TEL, ALARM

12” MIN.

NOTES:

1. WIRE SHALL BE MINIMUM #10 AWG COPPER 2 CONDUCTOR, CONNECT TO 240 VOLT, NO NEUTRAL OR GROUND CONNECTION. USE COMPRESSION CONNECTORS APPROVED BY ENGINEER.

2. LUMINAIRE SHALL BE LEVELLED AFTER INSTALLATION. SOCKET POSITION SHALL BE ADJUSTED TO ANOTHER POSITION IF REQUESTED BY THE ENGINEER BEFORE INSTALLATION.

3. ALL HARDWARE SHALL BE HOT DIP GALVANIZED LINE HARDWARE.

4. ALL WORK ON UTILITY POLES TO BE PERFORMED BY QUALIFIED LINEMEN.
TOOL FINISH TOP AND EDGES

4 EA ANCHOR BOLTS MINIMUM TOP 8" OF BOLT SHALL BE GALVANIZED (AASHTO M111)

CONDUIT SHALL BE CENTERED ON POLE W/CLEARANCE FOR COUPLINGS/PULLING BELLS

THERE SHALL BE A MINIMUM OF TWO CONDUITS IN EACH FOUNDATION. CONDUIT SHALL HAVE 18" RADIUS AND BE ORIENTED TO MINIMIZE CONDUIT BENDS.

(2) HOOPS WITHIN 5" OF TOP

SCRIBE A CIRCLE WITH END OF CONDUIT ABOVE EACH CONDUIT ENTERING THE FOUNDATION.

DESIGN BASED ON INSTALLATION IN MINIMUM 3000 PSF SOIL WITH SINGLE LUMINAIRE ON 10 FOOT ARM. INSTALLATIONS NOT MEETING THESE PARAMETERS ARE SUBJECT TO ENGINEERING REVIEW.

NOTES:
1. FOUNDATIONS SHALL BE INSTALLED IN 24" AUGERED HOLE IN UNDISTURBED MATERIAL. WHERE PRE-CAST BASES ARE USED, THE INSTALLATION SHALL BE REVIEWED AND APPROVED BY THE ENGINEER. ENTIRE HOLE SHALL BE BACKFILLED WITH CDF OR OTHER COMPACTIBLE MATERIAL APPROVED BY THE ENGINEER.

2. CALL FOR UTILITY LOCATION BEFORE DIGGING (1-800-424-5555)

3. ALL STEEL TO HAVE 3" MINIMUM CONCRETE COVER. HOOPS SHALL HAVE 135" HOOKS. ANCHOR BOLTS MAY BE SECURED TO HOOPS.

4. BOND CAGE TO GROUND LUG.

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CITY ENGINEER

3/9/03

DATE 2/4/03

STREETLIGHT FOUNDATION 30' & 40'

STANDARD PLAN NO. SL-02
NOTES:

1. INTERCEPT EXISTING CONDUIT, WHERE APPLICABLE, AND ROUTE TOWARD LIGHT STANDARD. TERMINATE CONDUIT(S) APPROXIMATELY 12" FROM BASE OF STANDARD. SEAL END OF CONDUITS WITH TAPE.

2. COIL THREE FEET OF WIRE AT END OF CONDUIT BEFORE ENTERING BASE OF STANDARD.

3. ROUTE WIRE UP TO TERMINAL BLOCK WITHOUT SPLICING.

4. MINIMUM AUGER SIZE IS 12". BACKFILL WITH CRUSHED SURFACING TOP COURSE. TAMP IN 6 INCH LIFTS.

5. SQUARE POLE TO CURB ±3 DEGREES.

* OR AS DETERMINED BY ENGINEER
WEATHERHEAD

PVC 40

CLASS II WOOD POLE
(PER WSDOT SPEC.)

2 HOLE CONDUIT STRAP
MIN. 3 PER CONDUIT LENGTH

10' GALV. RS

RISER CONDUIT W/2-#10 BLK. RHW
GALV RS FROM J-BOX TO 10'

TAPE

BOG DEPTH 6"-12"

GROUNDING BUSHING

J-BOX

BOG SHOE 4"x6"x6'
TREATED CROSS BRACE
W/2 EA MIN. 5/8" GALV. THROUGH BOLT
(WHEN REQUIRED BY ENGINEER)

CRUSHED SURFACING TOP COURSE.
TAMP IN 6 INCH LIFTS.

THIS INSTALLATION IS FOR WOOD POLES
WITH ONLY STREETLIGHTING INSTALLED
ON THE POLE. DO NOT USE ON
TACOMA POWER UTILITY POLES.

BOG SHOE

CONDUIT

RISER SPACE

TRAFFIC FLOW

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STREETLIGHT
ON TIMBER POLE TYPICAL
INSTALLATION W/UNDERGROUND FEED

STANDARD PLAN NO. SL-04

CITY ENGINEER

DATE 2/4/03

CHABAS

2/4/03
STREETLIGHTING TAP
FOR USE IN BASE OF STANDARDS

TAPING INSTRUCTIONS

1. MAKE SPLICE AS SHOWN IN FIGURE A
2. APPLY TAPE AS SHOWN IN FIGURE A
   APPLY TAPE AND "SCOTHKOTE" MOISTURE RESISTANT ELECTRICAL COATING OVER ENTIRE SPLICE AREA.
3. ATTACH CABLE TIE A MINIMUM OF 2" FROM THE PRESSURE CONNECTOR AS SHOWN IN FIGURE B.
4. APPLY SECOND COAT OF VARNISH.

FIGURE A

FIGURE B

COPPER BODY CRIMP

NO. 6 CU OR NO. 8 CU AS REQUIRED TYPE USE/RHW STRANDED

NO. 10 USE/RHW CU WIRE STRANDED

TO LUMINAIRE

TAPE VINYL PLASTIC ELECTRIC (SCOTCH 33+ OR EQUAL) THICKNESS EQUAL TO ORIGINAL WIRE INSULATION

1-1/2"
MINIMUM 2"

CABLE TIE

TO LUMINAIRE
WOOD POLES:
2" NUMBERS
NAIL ON ALUMINUM NUMBERS

METAL/CONCRETE/FIBERGLASS POLES
3" NUMBERS
(C OR D SERIES)

APPLY ADDRESS NUMBERS TO THE STREETSIDE OF THE POLE

COLORS:

CONCRETE POLES:
BACKGROUND: LIGHT BEIGE
FOREGROUND: DARK BROWN

UNPAINTED ALUMINUM OR GALVANIZED POLES:
BACKGROUND: NONE
FOREGROUND: BLACK

IF THERE ARE EXISTING NUMBERS ON POLE
PAINT OVER OR REMOVE OLD NUMBERS
MAXIMUM TENSION = 100 POUNDS
TYPICAL
MAXIMUM SPAN LENGTHS

<table>
<thead>
<tr>
<th>SAG</th>
<th>1/0</th>
<th>#2</th>
<th>#4</th>
<th>#5</th>
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<tbody>
<tr>
<td>2.5 FEET</td>
<td>65</td>
<td>85</td>
<td>105</td>
<td>125</td>
</tr>
<tr>
<td>5 FEET</td>
<td>95</td>
<td>120</td>
<td>150</td>
<td>180</td>
</tr>
<tr>
<td>7.5 FEET</td>
<td>115</td>
<td>150</td>
<td>180</td>
<td>220</td>
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</table>

WOOD POLE

GALVANIZED BOLT WITH SQUARE WASHER & SQUARE NUT.
TRIM THRU BOLT TO 1" MAX. BEYOND NUT & FILE SMOOTH.
50 AMP OR AS SPECIFIED
BACK-FED MAIN BREAKER
RETAINING CLIP

MINIMUM
10,000AC

WHEN SERVING FROM
TRANSFORMERS LARGER
THAN 50 KVA AN EVALUATION
OF INTERRUPT CAPACITY OF
THE SERVICE EQUIPMENT IS
REQUIRED.

<table>
<thead>
<tr>
<th>SIZE OF BRANCH CIRCUIT CONDUCTOR</th>
<th>MAXIMUM BREAKER SIZE</th>
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</thead>
<tbody>
<tr>
<td>#8 AWG COPPER</td>
<td>30AMP</td>
</tr>
<tr>
<td>#6 AWG COPPER</td>
<td>40AMP</td>
</tr>
</tbody>
</table>

* SIZE BASED ON ENSURING BREAKER WILL TRIP ON FAULTS AT END OF LONG CIRCUITS.

**PROCEDURE:**

1. OBTAIN ELECTRICAL PERMIT FROM TACOMA POWER FOR EACH ELECTRICAL SERVICE.

2. COMPLETE SERVICE PANEL INSTALLATION EXCEPT FOR ENTERING TRANSFORMER VAULT OR PAD. FOR SSB INSTALLATIONS, INSTALL CONDUIT AND WIRE INTO SSB.

3. PREFERRED PRACTICE IS TO OBTAIN SERVICE FROM SSB. CONTACT TACOMA POWER BEFORE SERVICING STREETLIGHTS FROM TRANSFORMER.

4. ARRANGE FOR ELECTRICAL INSPECTION AND CUT-IN BY TACOMA POWER (502-8277).

5. AFTER TACOMA POWER ACCEPTANCE OF SERVICE PANEL CONTACT THE UNDERGROUND RESIDENTIAL DISTRIBUTION (URD) OFFICE (502-8232) TO ARRANGE FOR CONDUIT AND CONDUCTOR ENTERANCE INTO TRANSFORMERS.

*6. PRIMARY GROUND ROD MAY BE LOCATED OUTSIDE OF SERVICE ENCLOSURE IN GROUND ROD BOX.

**7. DO NOT PENETRATE OUTER WALL OF ENCLOSURE WHEN MOUNTING EQUIPMENT HARDWARE.

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STREETLIGHT SERVICE DETAIL
UNDERGROUND TYPE A
STANDARD PLAN NO. SL-08
50 AMP OR AS SPECIFIED
BACK-FEED MAIN BREAKER
RETAINING CLIP
WHEN SERVING FROM
TRANSFORMERS LARGER
THAN 50 KVA AN EVALUATION
OF INTERRUPT CAPACITY OF
THE SERVICE EQUIPMENT IS
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* SIZE BASED ON ENSURING BREAKER WILL TRIP ON FAULTS AT END OF LONG CIRCUITS.

PROCEDURE:

1. OBTAIN ELECTRICAL PERMIT FROM TACOMA POWER FOR EACH ELECTRICAL SERVICE.

2. COMPLETE SERVICE PANEL INSTALLATION EXCEPT FOR ENTERING TRANSFORMER VAULT OR PAD. FOR SSB INSTALLATIONS, INSTALL CONDUIT AND WIRE INTO SSB.

3. PREFERRED PRACTICE IS TO OBTAIN SERVICE FROM SSB. CONTACT TACOMA POWER BEFORE SERVICING STREETLIGHTS FROM TRANSFORMER.

4. ARRANGE FOR ELECTRICAL INSPECTION AND CUT-IN BY TP (502-8277).

5. AFTER TP ACCEPTANCE OF SERVICE PANEL CONTACT THE UNDERGROUND RESIDENTIAL DISTRIBUTION (URD) OFFICE (502-8232) TO ARRANGE FOR CONDUIT AND CONDUCTOR ENTERANCE INTO TRANSFORMERS.

6. DO NOT PENETRATE OUTER WALL OF ENCLOSURE WHEN MOUNTING EQUIPMENT HARDWARE.

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STREETLIGHT SERVICE DETAIL
UNDERGROUND TYPE B
STANDARD PLAN NO. SL-09

CITY ENGINEER
DATE

SQUARE D 002-4RB W/40Amp
2 POLE BREAKER. SERVICE PEDESTAL SHALL MAINTAIN 12" MIN.
CLEARANCE FROM TRANSFORMER AT P.L. LOCATION MUST BE
APPROVED BY ENGINEER.

MAX. OF 2 CONDUITS IN SERVICE PANEL. CUT HOLES IN BOTTOM OF THE ENCLOSURE.

INSTALL 45° ELL WITH PULLING BELL INTO VAULT OR SSB, IF NO VAULT OR SSB EXTEND CONDUIT THRU TRANSFORMER PAD. PROVIDE 15' OF WIRE AT TRANSFORMER FOR MAKE UP. TP WILL TERMINATE IN TRANSFORMER.

COIL 6FT OF WIRE TERMINATION WILL BE MADE BY UTILITY CREWS.

GROUNDING ELECTRODE CONDUCTOR IN NON-METALLIC CONDUIT

SERVICE CONDUIT WITH BUSHINGS/BELL ENDS
1-1/4" PVC-80
W/2-#6 BLK
& 1-#6 W. USE/RHW, Cu OR AS SPECIFIED
CONDUIT GROUNDING

NOTES:
1. ALL STREETLIGHT CONDUITS SHALL INCLUDE AN EQUIPMENT GROUNDING CONDUCTOR.
2. METALLIC CONDUIT SHALL BE BONDED AT BOTH ENDS TO THE EQUIPMENT GROUNDING CONDUCTOR.
3. EQUIPMENT GROUNDING CONDUCTORS SHALL BE STRANDED INSULATED COPPER.

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STREETLIGHT GROUNDING DETAIL
STANDARD PLAN NO. SL-10

CITY ENGINEER  DATE 2/4/03