

LUMINAIRE

STYLE

HPS CHFL

HPS CHFL

LED CHFL

LED CHFL

LED CHFL

LED CHFL

LED CHFL

LED CHFL

WATTS

400W

400W

98W

98W

98W

98W

52W

138W

MTG HT.

40'

40'

25'

25'

25'

25'

25'

25'

TYPE

EXIST STEEL

EXIST STEEL

EXIST WOOD

EXIST WOOD

EXIST WOOD

EXIST WOOD

EXIST WOOD

EXIST WOOD

ARM

10'

10'

12'

12'

14'

GRID#

568750 157052

568744 157049

<u>568795</u> 157052

568809 157052

568746 157043

#

EL1

EL2

EL3

EL4

EL5

EL6

EL7

EL8

TAG#

SLAF2282

SLAF2283

SLAL5880

SLAT4665

SLAT4666

SLAT4667

SLAP0463

SLAH1401

BILLING

SCH.

52

53

53

53

53

53

53

WO#

105093295

105093295

105093295

105093295

105093295

105093295

105093295

105093295

TOTAL

CONN LOAD

120/240

120/240

120/240

120/240

120/240

120/240

120/240

120/240

NOTES

Washington St E

Illuminance (Fc) Average = 0.67Maximum = 3.6

Minimum = 0.0

Avg/Min Ratio = N.A.

Valley Ave E & Langdon St

Average = 0.61Maximum = 1.8Minimum = 0.1

Illuminance (Fc)

Avg/Min Ratio = 6.10

Valley Ave E

Illuminance (Fc) Average = 0.69

Maximum = 3.3Minimum = 0.0

Avg/Min Ratio = N.A.

Valley Ave E & Washington St

Illuminance (Fc) Average = 2.75Maximum = 5.6

Minimum = 0.7

Avg/Min Ratio = 3.93

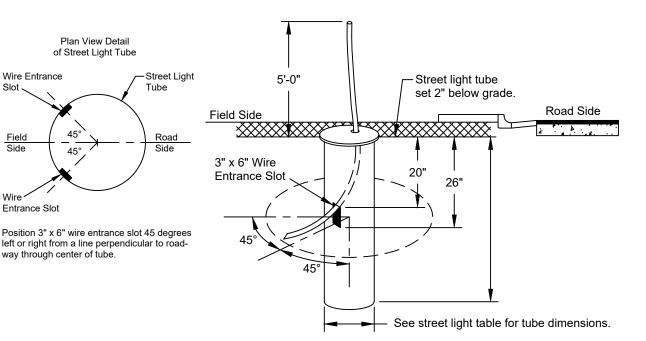
STREET LIGHT NOTES

POTELCO:

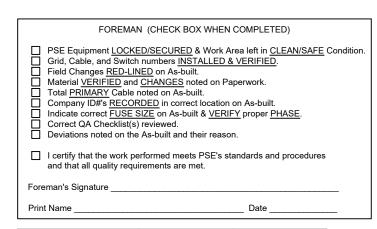
- 1. ALL STREET LIGHTING POLES ARE TO BE INSTALLED PER STANDARD 6375.4800 (page #2) IN THE "LINE WORK PRACTICES
- 2. ALL POLES (WOOD, CONCRETE OR FIBERGLASS) ARE TO BE SET PLUMB AND EMBEDDED TO THE GROUND LINE MARKED ON THE
- 3. BACKFILL AROUND POLE WITH 5/8" MINUS GRAVEL AND COMPACT IN 6" LIFTS. (PEA GRAVEL AND NATIVE SOILS ARE NOT ACCEPTABLE.) APPROXIMATELY 1 CU. YD. OF 5/8" MINUS CRUSHED ROCK WILL BE REQUIRED.
- 4. IN ALL SHOEBOX AND COBRAHEAD INSTALLATIONS, THE LUMINAIRE MUST BE LEVELED.

DEVELOPER/CUSTOMER:

- 1. THE DEVELOPER IS REQUIRED TO SUPPLY AND INSTALL PLASTIC (NON PAPER) STREET LIGHT TUBES (MINIMUM 18" DIAMETER) TO AID IN THE INSTALLATION OF THE STREET LIGHTING POLES.
- 2. DEVELOPER MUST SUPPLY DURABLE LID/COVER AT EACH STREET LIGHT TUBE.
- 3. DEVELOPER TO PROVIDE ALL TRENCHING AND CONDUIT WITH PULL-STRINGS FOR STREET LIGHTING CIRCUITRY.
- 4. CONDUIT SHALL BE SCH 40 PVC, CONDUIT CROSSING ROADWAYS OR DRIVEWAYS SHALL BE SCH 80 PVC.



STREET LIGHT TUBE DETAIL



Print N	ame	Date						
PROJE	CT PHASE	NOTIF#	ORDER#					
PWR	Superior							
	New Install	508417543	105093295					
	St. Light							
	Removal							
	Temporary							
	Job Order							
GAS	Distribution							
	HP Main							
	HP Svc/MS							
CABLE	E TV							
PHON								







2 BUSINESS DAYS BEFORE YOU DIG

	"Flagging R	equired"	(Yes)		No		THIS SKE	TCH NOT TO BE REI	LIED UPON FOR EXACT	LOCATION OF EXIS	ΓING FACILITIE
V	X NEW BUSINESS			CORRECTIVE /		REAL E	STATE/EASEN	MENT	PERMIT		
			10 DAY WAIVED				N/A		N/A		
3							FUNCT	ION	CONTACT	PHONE NO	DATE
2							ACCOUNT MGR		Lars Larson	425-456-270	1
1						ENGR -	- POWER	Andrew Allwardt	425-603-590	4 12/12/19	
REV#		BY	DESCRIPTION			ENGR -	- GAS				
UNTY	,	Emer Sect	Gas	Wk Ctr	POWER WK CTR		DRAWN BY		Andrew Allwardt	425-603-590	4 12/12/19
PIEF	PIERCE			3515		CHECKED BY					
SEC		OP MAP		PLAT MAP		APPRO	VED BY				
							FOREM	1AN #1			
/AP NO (POWER)	OH CKT MA	ŀΡ	UG CKT	MAP	CIRCUIT NO	FOREM	1AN #2			
2004	E096	2004E09	6	2004	E096	GAR-15	MAPPII	NG			
					JOIN	IT FACILITIES A	RRANGE	MENTS			
	UTILITIES		N/A			N/A		N/A		N/A	
	CONTACT N/A			N/A		N/A		N/A			
	PHONE#		N/A			N/A			N/A	N/A	
	DLIC						_	_		INCIDENT	MAOP

DESIGNED BY: PSE

	BY	BY DESCRIPTION E					GAS					
	Emer Sect	Gas Wk Ctr POWER WK CTR			DRAWN BY Andrew Allward		425-603-5904		12/12/19			
					3515	CHECKED BY						
	OP MAP			PLAT MA	∖ P	APPROVED BY						
						FOREMAN #1						
	OH CKT MA	H CKT MAP UG CKT M		MAP	CIRCUIT NO	FOREMAN #2						
	2004E09	2004E096 2004E09		E096	GAR-15	MAPPING						
	JOINT FACILITIES ARRANGEMENTS											
S		N/A			N/A	N/A		N/A				
T		N/A N/A					N/A		N/A			
#		N/A N/A					1	N/A				
ST ANDREWS CHURCH JND EXISTING LIGHTS STREET LIGHT ANALYSIS									INCIDENT Gas Order	Ele	MAOP ect Order	
	RGY				LEY AVE E, SUM	_				_	5093295	
				401 VAL	LLI AVE E, SOIVI	INLIX VVA	. 90390		SCALE		PAGE	
				1"=60'		1 of 1						

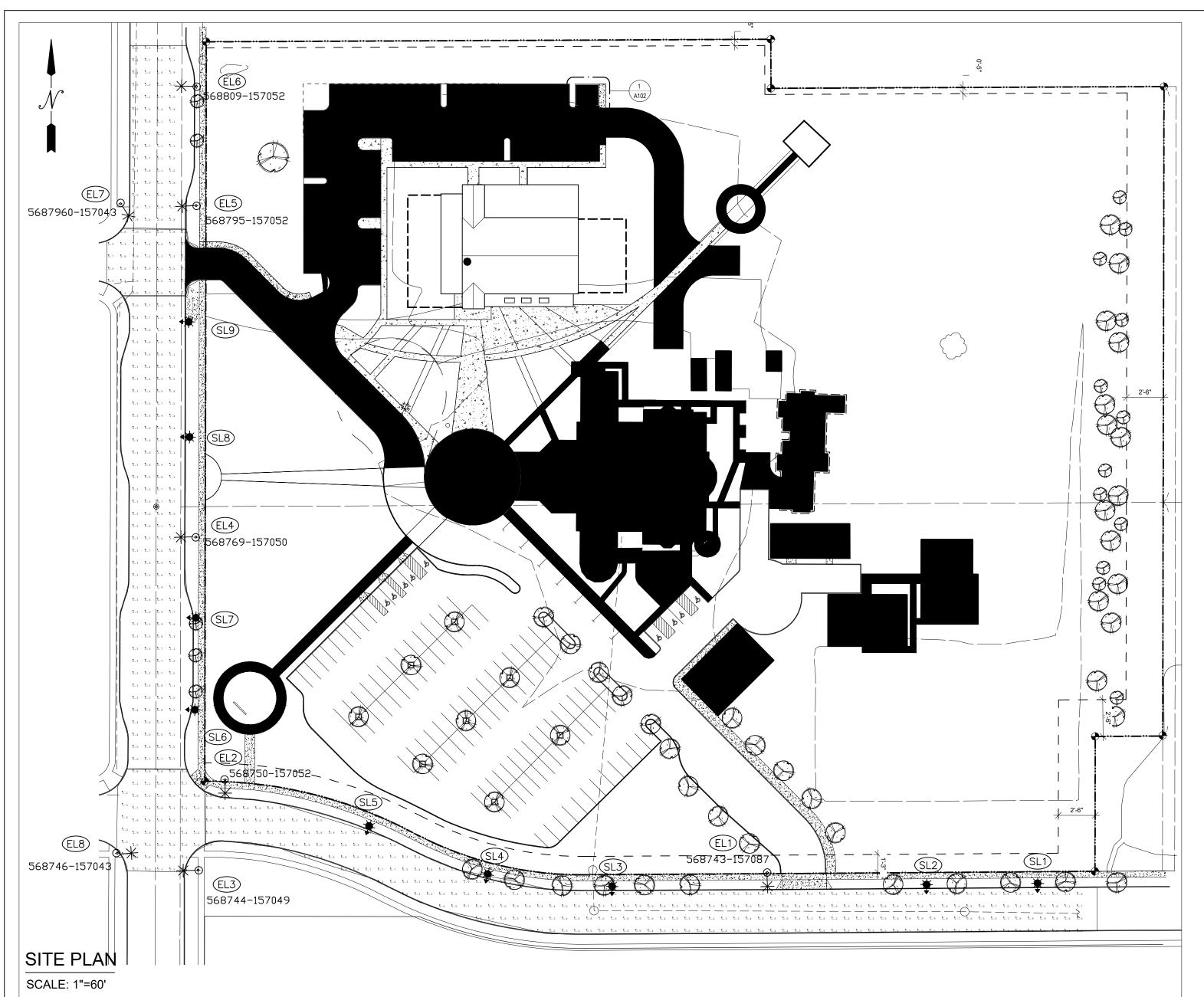
The existing lighting levels for Valley Ave E do not meet the city requirement for "Minor Arterial", Intermediate roadways of 0.8 Avg FC and 3:1 uniformity

The existing lighting levels for Washington St do not meet the city requirement for "Collector Arterial", Intermediate roadways of 0.6 Avg FC and 4:1 uniformity ratio.

Veiling Luminance cannot be measured here as the measurement requires a flat surface straightaway from measurement area as you approach the area from 300' away. Due to the curve in the roadway, PSE is unable to measure this like we would be able to on a typical highway.

EROSION & SEDIMENT CONTROL REQUIREMENTS

EROSION & SEDIMENT CONTROL SHALL BE PER PSE STANDARD PRACTICE 0150.3200 TECHNIQUES FOR TEMPORARY EROSION & SEDIMENT CONTROL & ANY ADDITIONAL LOCAL JURISDICITON REQUIREMENTS. (LOCAL JURISDICTIONS MAY HAVE ADDITIONAL REQUIREMENTS INCLUDING NOTES DETAILING WHERE EROSION OR SEDIMENT CONTROL STRUCTURES ARE TO BE INSTALLED, CROSS SECTION DETAILS OF THE TYPICAL EROSION STRUCTURES, & SPECIAL REQUIREMENTS FOR WORK IN SENSITIVE AREAS.)



Washingt St E Illuminance (Fc) Average = 0.71Maximum = 2.8Minimum = 0.2

Illuminance (Fc) Average = 0.90Maximum = 3.7Minimum = 0.3Avg/Min Ratio = 3.00Avg/Min Ratio = 3.55

Valley Ave E

Valley Ave E & Langdon St Illuminance (Fc) Average = 1.02Maximum = 2.0Minimum = 0.3

Avg/Min Ratio = 3.40

Valley Ave E & Washingt St E Illuminance (Fc) Average = 1.84Maximum = 5.5Minimum = 0.6Avg/Min Ratio = 3.07

DEVELOPER NOTES:

-PROVIDE ALL TRENCHING, CONDUIT W/PULLSTRINGS, AND 4'X18" SONOTUBES AT SL LOCATIONS.

-STUB UP CONDUIT AT HANDHOLE & STREET LIGHT LOCATIONS.

POTELCO NOTES:

SL1-SL9:

-INSTALL 15' MH GREEN WHATLEY ALLENTOWN SERIES 406 POLES WITH 60W LED GREEN KING K118 POST TOP LUMINARIES.

-INSTALL STREET LIGHT TAGS

EL1-EL6, EL8:

-REMOVE EXISTING LUMINARIES FROM EXISTING ARMS. -INSTALL NEW LUMINARIES AS NOTED IN CHANGEOUT STREET LIGHT TABLE

-REMOVE LUMINAIRE & ARM

-INSTALL 16FT ARM & 47W LED T3 CHFL

-ORIENT AT PREVIOUS HEIGHT & ORIENTATION.

The existing lighting levels for Valley Ave E meets the city requirement for "Minor Arterial", Intermediate roadways of 0.8 Avg FC and 3:1 uniformity ratio.

The existing lighting levels for Washington St meets the city requirement for "Collector Arterial", Intermediate roadways of 0.6 Avg FC and 4:1 uniformity

Veiling Luminance cannot be measured here as the measurement requires a flat surface straightaway from measurement area as you approach the area from 300' away. Due to the curve in the roadway, PSE is unable to measure this like we would be able to on a typical highway.

EXISTING STREET LIGHT TABLE - CHANGEOUT

		POLE			LUMINAIRE						
SITE #	GRID#	TAG#	TYPE	PREVIOUS LUMINAIRE	NEW LUMINAIRE	PREVIOUS ARM LENGTH	NEW ARM LENGTH	BILLING SCH.	WO #'S	TOTAL CONN LOAD	NOTES
EL1	<u>568743</u> 157087	SLAF2282	EXIST STEEL	400W HPS	39W LED	10'		51	101xxxxxx 108xxxxxx	120/240	
EL2	<u>568750</u> 157052	SLAF2283	EXIST STEEL	400W HPS	39W LED	10'		51	101xxxxxx 108xxxxxx	120/240	
EL3	<u>568744</u> 157049	SLAL5880	EXIST WOOD	98W LED	71W LED	8'		53	101xxxxxx 108xxxxxx	120/240	
EL4	<u>568769</u> 157050	SLAT4665	EXIST WOOD	98W LED	39W LED	12'		53	101xxxxxx 108xxxxxx	120/240	
EL5	<u>568795</u> 157052	SLAT4666	EXIST WOOD	98W LED	71W LED	12'		53	101xxxxxx 108xxxxxx	120/240	
EL6	<u>568809</u> 157052	SLAT4667	EXIST WOOD	98W LED	71W LED	14'		53	101xxxxxx 108xxxxxx	120/240	
EL7	568960 157043	SLAP0463	EXIST WOOD	52W LED	47W LED T3	6'	16'	53	101xxxxxx 108xxxxxx	120/240	NEW ARM LENGHT
EL8	<u>568746</u> 157043	SLAH1401	EXIST WOOD	138W LED	111W LED	8'		53	101xxxxxx 108xxxxxx	120/240	

CTREET LIGHT TABLE NEW INCTALL

			POLE	LU	MINAIRE		BILLING	TOTAL			
SITE #	GRID#	TAG # TYPE		MTG HT.		WATTS	STYLE	WO #	SCH.	CONN LOAD	NOTES
SL1	568xxx 157xxx		GRN WHATLEY ALLENTOWN SERIES 406	15'		60W	LED K118 GREEN	105093295	51	120/240	
SL2	568xxx 157xxx		GRN WHATLEY ALLENTOWN SERIES 406	15'		60W	LED K118 GREEN	105093295	51	120/240	
SL3	568xxx 157xxx		GRN WHATLEY ALLENTOWN SERIES 406	15'		60W	LED K118 GREEN	105093295	51	120/240	
SL4	568xxx 157xxx		GRN WHATLEY ALLENTOWN SERIES 406	15'		60W	LED K118 GREEN	105093295	51	120/240	
SL5	568xxx 157xxx		GRN WHATLEY ALLENTOWN SERIES 406	15'		60W	LED K118 GREEN	105093295	51	120/240	
SL6	568xxx 157xxx		GRN WHATLEY ALLENTOWN SERIES 406	15'		60W	LED K118 GREEN	105093295	51	120/240	
SL7	568xxx 157xxx		GRN WHATLEY ALLENTOWN SERIES 406	15'		60W	LED K118 GREEN	105093295	51	120/240	
SL8	568xxx 157xxx		GRN WHATLEY ALLENTOWN SERIES 406	15'		60W	LED K118 GREEN	105093295	51	120/240	
SL9	568xxx 157xxx		GRN WHATLEY ALLENTOWN SERIES 406	15'		60W	LED K118 GREEN	105093295	51	120/240	

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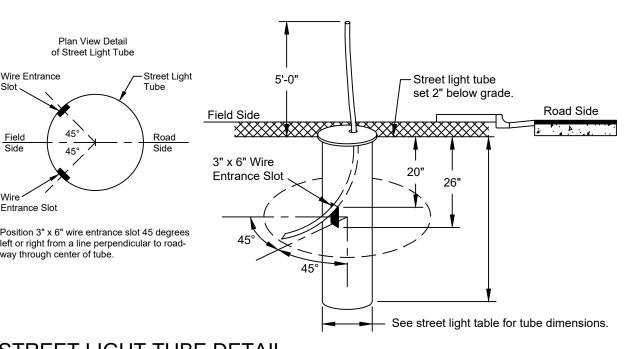
STREET LIGHT NOTES

POTELCO:

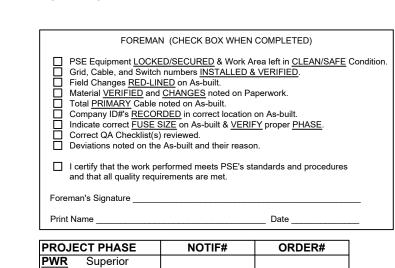
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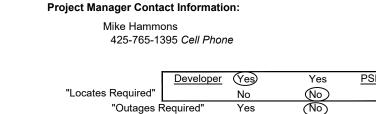
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STREET LIGHT TUBE DETAIL SCALE: NONE



New Install St. Light Removal Temporary Job Order		NOTIF#	ORDER#
PWR	Superior		
	New Install	508417543	105093295
	St. Light		
	Removal		
	Temporary		
	Job Order		
GAS	Distribution		
	HP Main		
	HP Svc/MS		
CABLE	TV		
PHON	E		



"Flagging Required" Yes



							TITIO OILE	TOTTION TO BE THE	LIEB OF ONE FOR EXCITE	ECONTION OF EMOTIF	IO I MOILINIEC	
Χ	NEW DUG	NECC			COR	RECTIVE /	REAL E	STATE/EASEM	PERMIT			
NEW BUSINESS				10 DAY WAIVED				N/A		N/A		
3						FUNCTION			CONTACT	PHONE NO	DATE	
2							ACCOL	JNT MGR	Lars Larson	425-456-2701		
1							ENGR -	POWER	Andrew Allwardt	425-603-5904	12/12/19	
REV#		BY	DES	DESCRIPTION				GAS				
UNTY		Emer Sect	Gas	Gas Wk Ctr POWER WK CTR			DRAWN	N BY	Andrew Allwardt	425-603-5904	12/12/19	
PIERCE						3515	CHECK	ED BY				
SEC	SEC OP MAP		PLAT MAR			IAP	APPROVED BY					
							FOREMAN #1					
MAP NO (F	POWER)	OH CKT MA	·P	UG CKT	MAP	CIRCUIT NO	FOREM	1AN #2				
2004E0	096	2004E09	6	2004	E096	GAR-15	MAPPI	NG				
JOINT FACILITIES ARRANGEMENTS												
	UTILITIES N/A				N/A		1	N/A				
(CONTACT		N/A		N/A			1	V/A	N/A		



PHONE#

ST ANDREWS CHURCH **EXISTING LIGHTS STREET LIGHT ANALYSIS** 1401 VALLEY AVE E, SUMNER WA 98390

N/A

N/A INCIDENT | MAOP Gas Order Elect Order 105093295 1"=60'