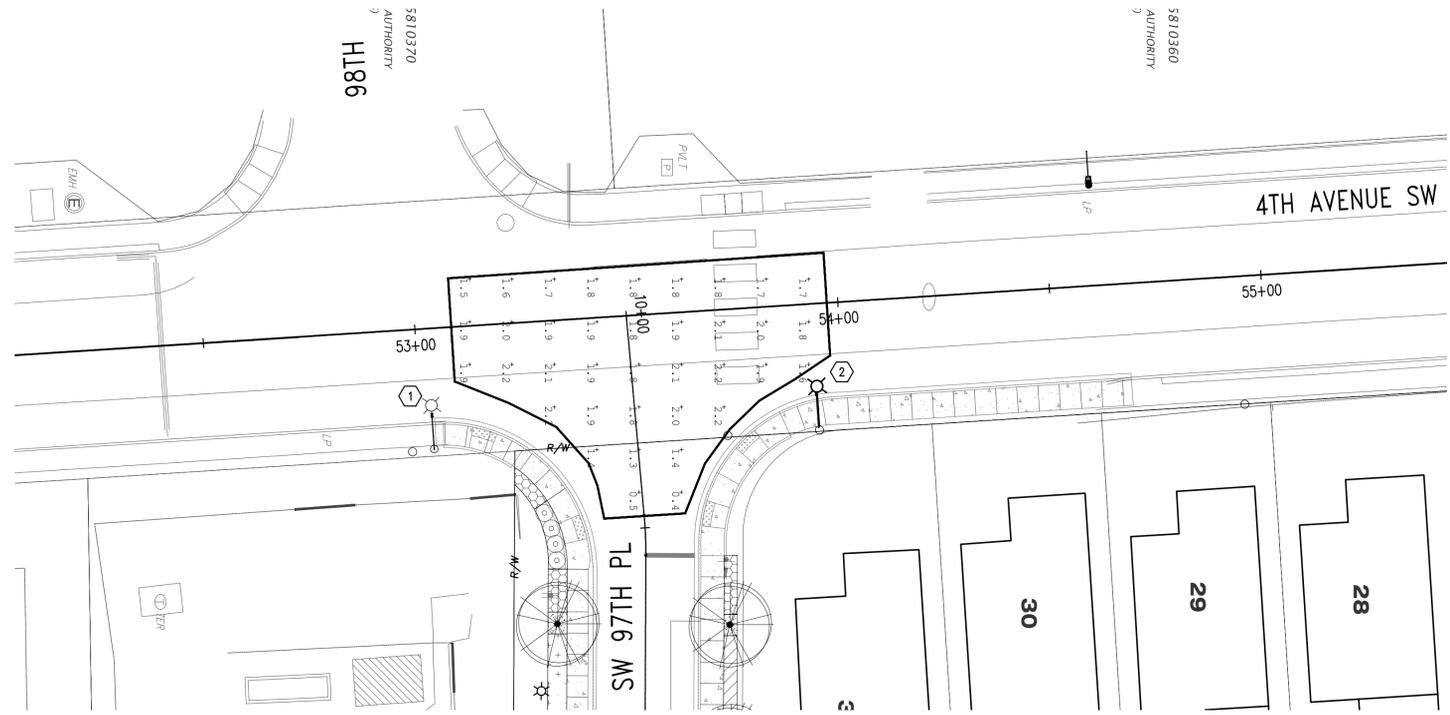


4TH AVE SW & SW 97TH PL STREET LIGHTING PLAN
SCALE: 1"=20'-0"



4TH AVE SW & SW 97TH PL PHOTOMETRICS
SCALE: 1"=20'-0"

PLAN NOTES

- ① EXISTING ALUMINUM POLE, ARM AND HIGH PRESSURE SODIUM HEAD. REMOVE HEAD AND PROVIDE NEW LED HEAD PER KING COUNTY DESIGN STANDARDS AND REQUIREMENTS. MAINTAIN CONNECTION TO EXISTING CIRCUIT.
- ② PROVIDE NEW LED HEAD, 8' ARM AND LED HEAD ON NEW WOOD POLE PER KING COUNTY DESIGN STANDARDS AND REQUIREMENTS. FIXTURE HEAD TO BE MOUNTED AT +35' ABOVE ROADWAY.
- ③ DIRECT CONNECT NEW LIGHT FIXTURE TO EXISTING OVERHEAD CIRCUIT.
- ④ EXISTING WOOD POLE TO BE MAINTAINED.
- ⑤ 98TH STREET WILL BE REMOVED.
- ⑥ FUTURE TRAIL CROSSING WILL BE ADDED.
- ⑦ EXISTING STEEL TRANSMISSION POLE. SHOWN FOR REFERENCE ONLY.
- ⑧ EXISTING WOOD POLE TO BE RELOCATED.

GENERAL NOTE:

1. ALL EXCAVATIONS ADJACENT TO SEATTLE CITY LIGHT POLES OR OTHER FACILITIES INCLUDING VAULTS, HANDHOLES, ETC., SHALL BE DONE WITHOUT UNDERMINING THEIR STABILITY. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY SUPPORT WHICH MAY BE REQUIRED TO STABILIZE THE POLE.
2. CONTRACTOR SHALL MAINTAIN EXISTING STREET LIGHTING SYSTEM DURING CONSTRUCTION AND WILL BE RESPONSIBLE FOR THE COST OF TEMPORARY SYSTEM IF NECESSARY.
3. HIGH-VOLTAGE WORKING CLEARANCE: STATE LAW REQUIRES ALL CONSTRUCTION WORKERS, THEIR TOOLS, MACHINERY, TEMPORARY STRUCTURES, EQUIPMENT AND MATERIALS TO MAINTAIN A MINIMUM 10 FEET CLEARANCE FROM MANY TYPES OF POWER LINES (WAC 296-24-960). IF THIS PROJECT REQUIRES WORK IN PROXIMITY TO ANY ENERGIZED LINES, NOTIFY SEATTLE CITY LIGHT IN ADVANCE SO THAT WE CAN DE-ENERGIZE AND GROUND TH LINES, OR RELOCATE THE LINES TEMPORARILY.
4. USE #6 TRIPLEX FOR OVERHEAD WIRES PER SCL MATERIAL STANDARD 6007.50.
5. CONTRACTOR SHALL CONTACT SIGNAL CONSTRUCTION SUPERVISOR AT 206-423-0996 AND ELECTRICAL INSPECTOR AT 206-793-1099 PRIOR TO COMMENCING WORK.

POLE NO.	EXISTING		NEW		EX. PSE POLE NO.	MOUNTING HEIGHT		ARM LENGTH		LUMINAIRE WATTAGE			DIST. PATTERN	BASE TYPE	COMMENTS
	STATION	OFFSET	STATION	OFFSET		EX.	NEW	EX.	NEW	EXISTING LEOTEK LED	NEW LEOTEK LED	EQUIV. TO			
①	53+00	28' RT				35'		8'		GC1-40F			M-C-II	ALUM	
②			53+93	30' RT		35'		8'		GC1-40F			M-C-II	WOOD	

RUN NO.	CONDUIT	WIRE	COMMENTS
△	N/A	EXISTING OVERHEAD	
△	N/A	#6 TRIPLEX	DIRECT CONNECT TO EXISTING CIRCUIT

DESCRIPTION	AVG	MIN	AVG/MIN
4TH AVENUE SW/SW 97TH PL	1.67	0.4	4.18:1

ASSUMPTION FOR CALCULATIONS

1. NE CORNER LUMINAIRE: NEW KING COUNTY STANDARD LED HEAD NEW WOOD POLE, NEW 8' ARM. LEOTEK LIGHTING GC1-40F-MV-NW-2-GY-1A.
2. SE CORNER LUMINAIRE: NEW KING COUNTY STANDARD LED HEAD, EXISTING POLE, EXISTING 8' ARM. LEOTEK LIGHTING GC1-40F-MV-NW-2-GY-1A.
3. FIXTURE HEADS MOUNTED AT 35' ABOVE ROADWAY.

KING COUNTY DEPT. OF TRANSPORTATION	
REVIEW ENGINEER - SIGNALS & ILLUMINATION	DATE
SUPERVISING ENGINEER	DATE

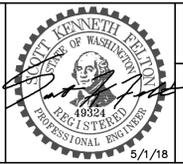
P:\Programs\160108\KCHA - Wind Rose\Drawings\01 Working Drawings\160108_E-1 - REVISED.dwg
 May 01, 2018 - 11:12am dph

NO.	DATE	BY	CHD.	APPR.	REVISION

DRAWN BY DPH
 DESIGNED BY DPH
 CHECKED BY DPH
 APPROVED BY SKF
 DATE MAY 1, 2018
 JOB No.: 114137.30



TRES WEST ENGINEERS, INC.
 2702 SOUTH 42ND STREET, SUITE 301
 TACOMA, WA 98409-7315
 Phone: 253-472-3300
 www.treswest.com



KING COUNTY HOUSING AUTHORITY WHITE CENTER, WASHINGTON WIND ROSE 4th AVENUE SW ILLUMINATION PLAN		SHEET E-1
--	--	---------------------

STREET LIGHT SCHEDULE

STREET LIGHT NO.	LOCATION	PROPOSED STATION *	OFFSET	POLE ID NO. **	MOUNTING HEIGHT	CIRCUIT	TYPE/WATT/DIST.	LUMINAIRE TYPE	BASE	COMMENTS
1	SW 97th PLACE	10+88	22.5' RIGHT	**	20'	1	LED/37W/TYP V	POLE: SCL STOCK NO. 014272 VALMONT INDUSTRIES, INC. R-1908-40-60-6-T4-DBL	FIXED	SEE SCL MATERIAL STANDARDS 5723.15 AND 5752.05
2	TRIKE TRACK	11+75	22.5' RIGHT	**	20'	1	LED/37W/TYP V		FIXED	SEE SCL MATERIAL STANDARDS 5723.15 AND 5752.05
3	SW 97th PLACE	12+00	20.5' LEFT	**	20'	1	LED/37W/TYP V		FIXED	SEE SCL MATERIAL STANDARDS 5723.15 AND 5752.05
4	SW 97th PLACE	13+18	20.5' LEFT	**	20'	1	LED/37W/TYP V		FIXED	SEE SCL MATERIAL STANDARDS 5723.15 AND 5752.05
5	SW 97th PLACE	14+20	20.5' LEFT	**	20'	1	LED/37W/TYP V	POST TOP HEAD: SCL STOCK NO. 013859 PHILIPS LUMEC MPTC-35W-32LED-4K-T-LE5- UNIV-PH6-8KTX	FIXED	SEE SCL MATERIAL STANDARDS 5723.15 AND 5752.05
6	SW 97th PLACE	15+25	20.5' LEFT	**	20'	1	LED/37W/TYP V		FIXED	SEE SCL MATERIAL STANDARDS 5723.15 AND 5752.05
7	PATHWAY	N/A	N/A	**	20'	1	LED/37W/TYP V		FIXED	SEE SCL MATERIAL STANDARDS 5723.15 AND 5752.05
8	SW 97th PLACE	16+30	20.5' LEFT	**	20'	1	LED/37W/TYP V		FIXED	SEE SCL MATERIAL STANDARDS 5723.15 AND 5752.05
9	SW 97th PLACE	17+28	20.5' LEFT	**	20'	1	LED/37W/TYP V		FIXED	SEE SCL MATERIAL STANDARDS 5723.15 AND 5752.05
10	SW 97th PLACE	18+20	22.5' RIGHT	**	20'	1	LED/37W/TYP V		FIXED	SEE SCL MATERIAL STANDARDS 5723.15 AND 5752.05

* STATIONS/OFFSETS ARE APPROXIMATE. CONTRACTOR SHALL CONFIRM ANY ADJUSTMENTS WITH ALL TRADES AND ENGINEER PRIOR TO IMPLEMENTING.
 ** TO BE NUMBERED AT THE TIME OF CONSTRUCTION.

STREET LIGHT CONSTRUCTION

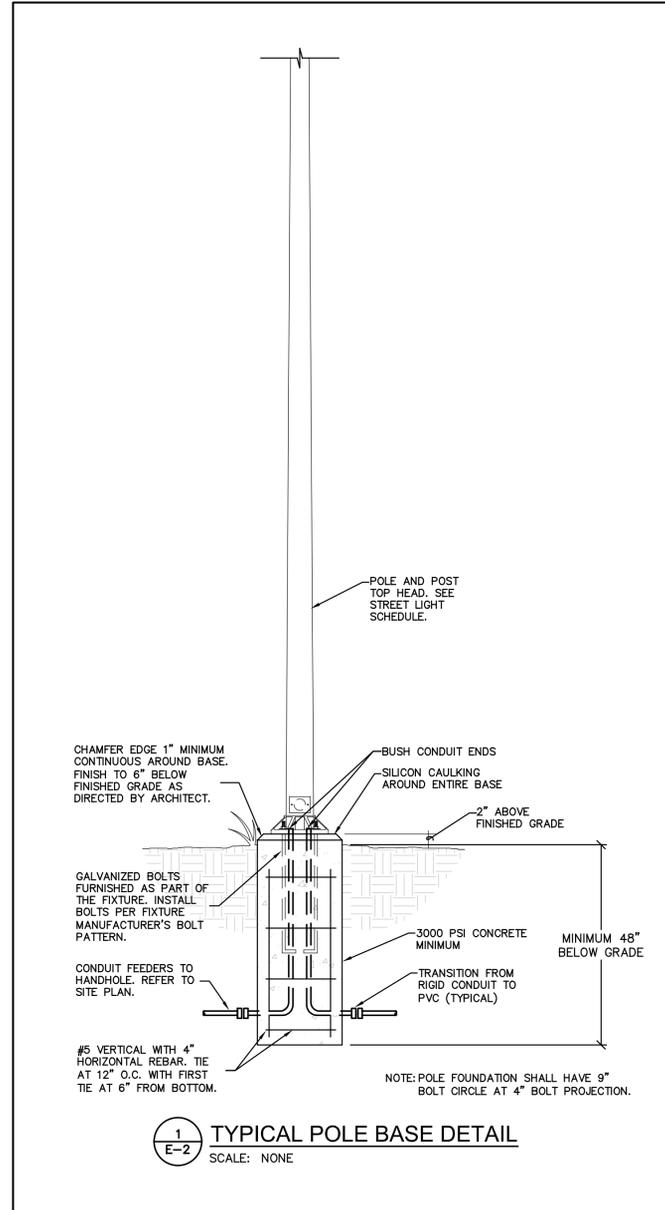
- ALL WORKMANSHIP, MATERIALS AND TESTING SHALL BE IN ACCORDANCE WITH WSDOT STANDARDS SPECIFICATIONS AND NATIONAL ELECTRICAL CODE (NEC) AND SEATTLE CITY LIGHT CONSTRUCTION AND MATERIAL STANDARDS.
- MODIFICATIONS OF ANY PORTION OF THE LIGHTING SYSTEM ARE PROHIBITED WITHOUT PRIOR APPROVAL BY KING COUNTY HOUSING AUTHORITY.
- ALL WIRE SHALL BE INSTALLED IN SCHEDULE 80 PVC CONDUIT.
- ELECTRICAL SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH ALL SEATTLE CITY LIGHT UTILITIES REQUIREMENTS AND EUSERC STANDARDS.
- AFTER INSTALLATION AND BEFORE ACCEPTANCE BY THE CITY, ALL POLES SHALL BE FREE OF DENTS AND MARKS. SONOTUBE SHALL BE REMOVED TO BELOW GROUND LEVEL. POLE BASES SHALL BE GROUTED AND ALL LUMINAIRE HEADS SHALL BE PLUMB AND LEVEL.
- CONDUIT SHALL EXTEND BETWEEN 3 AND 6 INCHES ABOVE THE CONCRETE BASE.

SEATTLE CITY LIGHT STREET LIGHTING GENERAL NOTES:

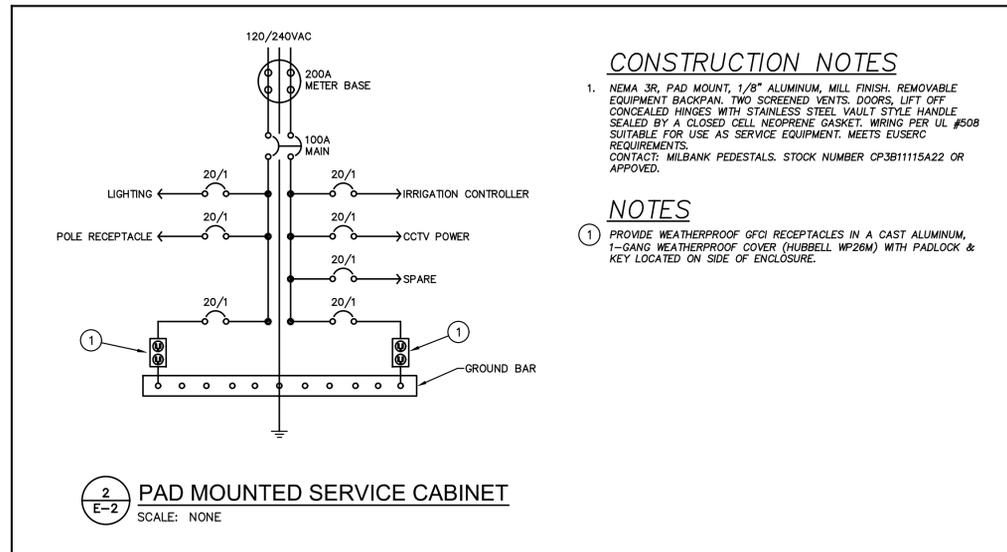
- ALL DISCONNECTIONS, TEMPORARY CONNECTIONS AND FINAL SERVICE CONNECTIONS WILL BE MADE BY SEATTLE CITY LIGHT (SCL) AT PROJECT'S EXPENSE.
- STREETLIGHT SYSTEM GROUNDING AND BONDING SHALL BE PER SEATTLE CITY LIGHT (SCL) CONSTRUCTION STANDARD 1714.50.
- ALL WIRING, INCLUDING STREET LIGHTING, PEDESTRIAN LIGHTING AND FESTOON LIGHTING CIRCUITS SHALL BE CLEARLY LABELED PER SEATTLE CITY LIGHT (SCL) CONSTRUCTION STANDARD 1714.10.
- EACH LUMINAIRE SHALL BE FUSED PER SEATTLE CITY LIGHT (SCL) CONSTRUCTION STANDARD 1730.00.
- CONTRACTOR SHALL CALL FOR AN INSPECTION OF THE STREET LIGHTING SYSTEM AT VARIOUS STAGES OF INSTALLATION/CONSTRUCTION OR AS INSTRUCTED BY THE SCL INSPECTOR.
- FOR STREET LIGHTING INSPECTIONS CONTACT SCL ELECTRICAL REVIEWER PAJE CHASE 206-730-1076.
- CONTRACTOR WILL ASSIST THE INSPECTOR DURING THE INSPECTION, COMMISSIONING, AND FINAL CONNECTION PHASES OF THE PROJECT AS INSTRUCTED BY THE INSPECTOR. SUCH ASSISTANCE WILL INCLUDE, BUT NOT BE LIMITED TO OPENING HANDHOLES, MANHOLES AND VARIOUS ACCESS COVERS, DISCONNECTING AND RECONNECTING FUSE HOLDERS AND MECHANICAL SPLICE CONNECTIONS, VERIFYING CONDUIT RUNS, ETC.
- CONTRACTOR SHALL PROVIDE AN OPERATOR AND MAN LIFT TRUCK FOR USE DURING INSPECTION OF INSTALLED STREETLIGHT FACILITIES.
- CONTRACTOR SHALL CORRECT ALL PUNCH LIST ITEMS AND CALL FOR A RE-INSPECTION WHERE REQUIRED BY THE INSPECTOR.
- UPON COMPLETION OF WIRING THE STREETLIGHT SYSTEM, THE CONTRACTOR SHALL PREPARE A SIGNED AS-BUILT AND WIRING DIAGRAM. THE DIAGRAM SHALL INCLUDE WHICH DUCT IS USED IN EACH DUCT BANK. CONTRACTOR SHALL PROVIDE THE AS-BUILT TO SCL ELECTRICAL INSPECTOR PRIOR TO REQUESTING FINAL STREETLIGHT SERVICE CONNECTION.
- COORDINATE ALL ENERGIZING AND DE-ENERGIZING OF STREET LIGHTING SERVICE WITH SCL ELECTRICAL SERVICE REPRESENTATIVE TEN (10) WORKING DAYS IN ADVANCE.

LEGEND

⊙ (# = POLE #)	STREET LIGHT & FOUNDATION. SEE LIGHT FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION. ARROW INDICATES AIMING DIRECTION OF FIXTURE
⬠	HANDHOLE WITH ANTI SLIP LOCKING LID. (SEE SCL CONSTRUCTION STANDARD 1716.07) PROVIDE 1" TACK WELDS AT BOTH ENDS OF THE J-BOX LID
⊞	SERVICE CABINET AND FOUNDATION
---	UNDERGROUND CONDUIT & WIRE. (SEE SCL CONSTRUCTION STANDARD 7020.05)
⚠	RUN NUMBER, SEE CONDUIT/WIRING SCHEDULE FOR ADDITIONAL INFORMATION.



1
E-2
TYPICAL POLE BASE DETAIL
SCALE: NONE



2
E-2
PAD MOUNTED SERVICE CABINET
SCALE: NONE

CONSTRUCTION NOTES

- NEMA 3R, PAD MOUNT, 1/8" ALUMINUM, MILL FINISH, REMOVABLE EQUIPMENT BACKPAN, TWO SCREENED VENTS, DOORS, LIFT OFF CONCEALED HINGES WITH STAINLESS STEEL VAULT STYLE HANDLE SEALED BY A CLOSED CELL NEOPRENE GASKET. WIRING PER UL #508 SUITABLE FOR USE AS SERVICE EQUIPMENT. MEETS EUSERC REQUIREMENTS. CONTACT: MILBANK PEDESTALS. STOCK NUMBER CP3B11115A22 OR APPROVED.

NOTES

- PROVIDE WEATHERPROOF GFCI RECEPTACLES IN A CAST ALUMINUM, 1-GANG WEATHERPROOF COVER (HUBBELL WP26M) WITH PADLOCK & KEY LOCATED ON SIDE OF ENCLOSURE.

P:\Proj\2018\160108_KCHA - Wind Rose Drawings\01 Working Drawings\160108_E-2.dwg

May 21, 2018 - 7:40am dph

NO.	DATE	BY	CHD.	APPR.	REVISION

DRAWN BY DPH	DESIGNED BY DPH
CHECKED BY DPH	APPROVED BY SKF
DATE MAY 1, 2018	
JOB No.: 114137.30	

811 Call 811
two business days before you dig

SCALE:
AS NOTED

TRES WEST ENGINEERS, INC.
2702 SOUTH 42ND STREET, SUITE 301
TACOMA, WA 98409-7315
Phone: 253-472-3300
www.treswest.com

King County Housing Authority

THE KENNETH ELLISON SCHOOL OF WASHINGTON
19324
HICKS STREET
PROFESSIONAL ENGINEER
5/21/18

KING COUNTY HOUSING AUTHORITY
WHITE CENTER, WASHINGTON

WIND ROSE
STREET LIGHT LEGEND, SCHEDULES AND NOTES

SHEET	E-2
-------	-----



GENERAL NOTES

1. SEE E-2 FOR STREETLIGHTING GENERAL NOTES.
2. STREETLIGHTING SYSTEM GROUNDING AND BONDING SHALL BE PER SEATTLE CITY LIGHT (SCL) CONSTRUCTION STANDARD 1714.50.
3. FUSE INDIVIDUAL LUMINAIRE PER SCL CONSTRUCTION STANDARD 1730.00.
4. #12TX PER SCL MATL STANDARD 6405.45.
5. ELECTRICAL CONTRACTOR TO FIELD VERIFY AND COORDINATE EXACT LOCATION OF LIGHT POLES AND JUNCTION BOXES PRIOR TO ROUGH-IN. LIGHT POLES AND JUNCTION BOXES SHALL BE LOCATED OUT OF DRIVEWAYS. IN ADDITION, COORDINATE WITH ALL WATERLINES, METERS, SEWER, STORM AND TREE LOCATIONS WHERE APPLICABLE PRIOR TO ROUGH-IN.
6. STREET LIGHTS LOCATED IN THE ROW SHALL BE OWNED AND MAINTAINED BY SEATTLE CITY LIGHT.
7. SCL TO PERFORM ALL FINAL SITE LIGHTING CONNECTIONS TO SCL SERVICE VAULTS. CONTRACTOR TO CONSTRUCT ENTIRE SITE LIGHTING SYSTEM PER PLAN WITH FINAL CONNECTION WIRES TIED OFF AT SCL SECONDARY SERVICE VAULT H-02 FOR SCL TO COMPLETE FINAL CONNECTIONS.

PLAN NOTES

1. CONTRACTOR TO FIELD VERIFY LOCATION OF NEAREST SEATTLE CITY LIGHT VAULT FOR CONNECTION OF STREET LIGHT FIXTURES. COORDINATE ALL REQUIREMENTS AND CONNECTIONS WITH SEATTLE CITY LIGHT.
2. CONTRACTOR TO FIELD VERIFY LOCATION OF POWER PEDESTAL AND METER. COORDINATE ALL REQUIREMENTS AND CONNECTIONS WITH SEATTLE CITY LIGHT AND CONSTRUCTION GUIDELINE U12-1.3/NMT-10. METER TO FEED 240/120V, 1 PHASE, 3 WIRE, 100A 12 CIRCUIT PANELBOARD WITH 60A MAIN CIRCUIT BREAKER.
3. CONTRACTOR TO FIELD VERIFY LOCATION OF NEAREST SEATTLE CITY LIGHT VAULT FOR CONNECTION OF METERED SERVICE CABINET LOCATED IN PARK. COORDINATE ALL REQUIREMENTS AND CONNECTIONS WITH SEATTLE CITY LIGHT.
4. PROVIDE LIGHTING SERVICE CABINET AND FOUNDATION PAD. MILBANK # CP3B1115A22 OR APPROVED EQUAL. SEE PAD-MOUNTED SERVICE CABINET DETAIL 2 ON SHEET E-2 AND POWER PEDESTAL PADMOUNT DETAIL P ON SHEET U1-6 FOR ADDITIONAL INFORMATION AND REQUIREMENTS. COORDINATE ALL REQUIREMENTS AND CONNECTIONS WITH SEATTLE CITY LIGHT. SERVICE CABINET OWNED AND MAINTAINED BY KCHA. COORDINATE WITH KCHA FOR ADDITIONAL REQUIRED CONNECTIONS TO SERVICE CABINET, RECEPTACLES, IRRIGATION CONTROLLER, ETC.

ELECTRICAL NOTES

- E1 (2)-2" SCH 80 PVC SL ECD AT 24" DEPTH BENEATH SIDEWALKS.
- E2 (2)-3" SCH 80 PVC SL ECD AT 36" DEPTH BENEATH CROSSINGS.
- E3 (1)-2" SCH 80 PVC SL ECD AT 24" DEPTH BETWEEN HANDHOLE AND POLE FOUNDATION.
- E4 (1)-3" SCH 80 PVC SL ECD AT 24" DEPTH BETWEEN H-01 TO HANDHOLE.
- E5 TYPE 3 (24"x36"x12") HANDHOLE WITH 6" MIN THICKNESS MINERAL AGGREGATE FILL AND 8" GROUND ROD PER COS STANDARD 550a OR SCL CONSTRUCTION STANDARD 1716.07.
- E6 TYPE 1 (14"x19"x12") HANDHOLE WITH 6" MIN THICKNESS MINERAL AGGREGATE FILL AND 8" GROUND ROD PER COS STANDARD 550a OR SCL CONSTRUCTION STANDARD 1716.07.

WIRING SCHEDULE

- △ 2-2" (1 SPARE)
4-#6 (L1,L2,N,G)
- △ 2-2" (1 SPARE)
3-#6 (L1,N,G)
- △ 2-2" (1 SPARE)
3-#6 (L2,N,G)
- △ 1-2"
1-#12TX (L1,N,G)
1-#6 (G)
- △ 1-2"
1-#12TX (L2,N,G)
1-#6 (G)
- △ 1-3"
3-#2 (L1,L2,N)
FUSE SYSTEM L1
& L2 AT 30A
- △ 1-2"
2-#3
1-#6 (G)
- △ 1-2"
3-#2

ILLUMINATION PLAN
SCALE: 1"=40'-0"
0 40 80

P:\Proj\2016\160108_KCHA - Wind Rose Drawings\01 Working Drawings\160108_E-3.dwg

May 01, 2018 - 11:49am dph

NO.	DATE	BY	CHD.	APPR.	REVISION

DRAWN BY DPH
DESIGNED BY DPH
CHECKED BY DPH
APPROVED BY SKF
DATE MAY 1, 2018
JOB No.: 114137.30

811 Call 811
two business days before you dig

SCALE: AS NOTED

TRES WEST ENGINEERS, INC.
2702 SOUTH 42ND STREET, SUITE 301
TACOMA, WA 98409-7315
Phone: 253-472-3300
www.treswest.com

King County Housing Authority

W. KENNETH EDLSON
STATE OF WASHINGTON
19324
ELECTRICAL ENGINEER
5/1/18

KING COUNTY HOUSING AUTHORITY
WHITE CENTER, WASHINGTON
WIND ROSE
PEDESTRIAN SITE ILLUMINATION PLAN

SHEET
E-3