GENERAL NOTES

1. The plans do not show all underground utilities. The contractor shall investigate utilities prior to any foundation excavation and consult trenching to avoid damage to any underground utilities. Contact the owner's engineer if proposed construction conflicts with any existing utilities. All existing utility infrastructure to be protected at all times throughout construction.

2. Restore all impacted areas to original conditions including but not limited to retaining wall, landscaping, pavement, concrete, backfill, curb and gutter.

3. All equipment, breakers, disconnects, and chargers to be clearly marked using phenolic labels stating Tacoma Power as the owning party of the mentioned equipment.

4. Unfused disconnects shall be heavy duty type, horsepower rated with interlocking cover, appropriately NEMA rated for the location installed. Disconnect handle shall be on exterior of enclosure and be lockable in both the open and closed position. Labelled with the load served, voltage, phase, horsepower, and the panel and circuit number from where it is fed. Acceptable manufacturers include Square D, Siemens, GE, Eaton, or approved equal.

5. Panelboards shall be heavy duty, copper bus, continuous duty with short circuit current rating (SCCR) per Tacoma Power Standards. 0.05 AIC, circuit breakers shall comply with HDOF 2023 Standards Specification 2.0. Enclosure construction shall be surface mount NEMA 1. Acceptable manufacturers include Square D, Siemens, GE, Eaton, or approved equal.

6. Do not drill anchors into pre-stressed concrete structure. Attach to non-tensioned poured in place structure only.

7. All installations to meet the NEC, NFPA, and City of Tacoma Standards.

8. PVC is schedule 40 unless noted otherwise.

9. If information is shown anywhere in the plans it is the same as shown elsewhere it is applicable.

10. Dimensions are provided in details to establish approximate total area where equipment can be installed. Actual final dimensions to be coordinated in the field when exact dimensions of equipment are established.

11. The furnishing of the following equipment is not in contract (NC): Electric vehicle chargers, charger mounting pedestals where shown, cable management systems, breakaway baseplates, and new pad mounted service cabinets. These equipment are to be installed by contractor.

12. Conduit layout and equipment locations are diagrammatic. Final placement is to be coordinated in the field with other trades and project.
CONSTRUCTION NOTES

1. INSTALL CONCRETE FOUNDATION AND Owner FURNISHED SMART DC EV CHARGER PER MANUFACTURER SPECIFICATION AND DETAIL ON DRAWING EL9.

2. EXCAVATE NORTH SIDE OF VAULT, CORE HOLE THROUGH VAULT AND THROUGH RETAINING WALL PER TACOMA POWER CUSTOMER DRAWING. RUN GRP CONDUITS EXPOSED DOWN FACE OF RETAINING WALL THEN UNDERGROUND ACROSS PARKING LOT TO NEW XFMR VAULT IN PARKING LOT PER TACOMA POWER STANDARD C-UG-1100.

3. FURNISH AND INSTALL 6" X 6" XFMR VAULT PER TACOMA POWER STANDARD A-UG-1110, A-UG-1200, AND C-UG-1700. SEE DETAIL A FOR EQUIPMENT LAYOUT.

4. 200 KVA XFMR MV-480Y/277V 3-PH TO BE FURNISHED AND INSTALLED BY TACOMA POWER. XFMR IS SET ON TOP OF VALVE.

5. TRENCH AND BURY CONDUIT PER TACOMA POWER STANDARD C-UG-1100.

6. INSTALL STUBOUT TOWARD BACK OF SIDEWALK.

7. FURNISH AND INSTALL PROTECTIVE BOLLARDS TO PROTECT XFMR, EV CHARGERS AND SERVICE CABINET PER TACOMA POWER STANDARD C-UG-1400. COORDINATE FINAL LOCATION WITH TPU INSPECTOR.

8. INSTALL OWNER FURNISHED SERVICE-RATED 400A, 480Y/277V, 3-PH, 4-WIRE MAIN BREAKER, TACOMA POWER METER BASE, AND CURRENT TRANSFORMER. SEE DETAIL ON DRAWING EL12 AND THIS DRAWING FOR BREAKER SCHEDULE. REFERENCE TACOMA POWER STANDARD C-UG-1000 FOR METERING.

9. FURNISH AND INSTALL CONCRETE BASE AND GROUNDING UNDER SERVICE CABINET ON DETAIL ON DRAWING EL11 AND NEC.

10. PATCH RETAINING WALL CORES, RESTORE AREA LANDSCAPING, PAVEMENT, CONCRETE, BACKFILL, CURBING AND GUTTER TO ORIGINAL CONDITION.

11. FURNISH AND INSTALL EV CHARGING SIGNS PER DETAIL ON DRAWING EL10.

12. EV CHARGING PAVEMENT MARKINGS PER DETAIL ON DRAWING EL10 WILL BE PERFORMED BY OTHERS.

13. FURNISH AND INSTALL NSM 3R RATED, 3PH, 80A NONFUSED DISCONNECT SWITCH PER NEC.

14. TRANSFORMER, SERVICE CABINET, EV-1 & EV-1 ALT LAYOUT

15. CONCRETE, BACKFILL, CURBING AND GUTTER TO ORIGINAL CONDITION.

16. PATCH RETAINING WALL CORES. RESTORE AREA LANDSCAPING, PAVEMENT, CONCRETE, BACKFILL, CURBING AND GUTTER TO ORIGINAL CONDITION.

17. INSTALL CONCRETE FOUNDATION AND Owner FURNISHED SMART DC EV CHARGER PER MANUFACTURER SPECIFICATION AND DETAIL ON DRAWING EL9.

18. EXCAVATE NORTH SIDE OF VAULT, CORE HOLE THROUGH VAULT AND THROUGH RETAINING WALL PER TACOMA POWER CUSTOMER DRAWING. RUN GRP CONDUITS EXPOSED DOWN FACE OF RETAINING WALL THEN UNDERGROUND ACROSS PARKING LOT TO NEW XFMR VAULT IN PARKING LOT PER TACOMA POWER STANDARD C-UG-1100.

19. FURNISH AND INSTALL 6" X 6" XFMR VAULT PER TACOMA POWER STANDARD A-UG-1110, A-UG-1200, AND C-UG-1700. SEE DETAIL A FOR EQUIPMENT LAYOUT.

20. 200 KVA XFMR MV-480Y/277V 3-PH TO BE FURNISHED AND INSTALLED BY TACOMA POWER. XFMR IS SET ON TOP OF VALVE.

21. TRENCH AND BURY CONDUIT PER TACOMA POWER STANDARD C-UG-1100.

22. INSTALL STUBOUT TOWARD BACK OF SIDEWALK.

23. FURNISH AND INSTALL PROTECTIVE BOLLARDS TO PROTECT XFMR, EV CHARGERS AND SERVICE CABINET PER TACOMA POWER STANDARD C-UG-1400. COORDINATE FINAL LOCATION WITH TPU INSPECTOR.

24. INSTALL OWNER FURNISHED SERVICE-RATED 400A, 480Y/277V, 3-PH, 4-WIRE MAIN BREAKER, TACOMA POWER METER BASE, AND CURRENT TRANSFORMER. SEE DETAIL ON DRAWING EL12 AND THIS DRAWING FOR BREAKER SCHEDULE. REFERENCE TACOMA POWER STANDARD C-UG-1000 FOR METERING.

25. FURNISH AND INSTALL CONCRETE BASE AND GROUNDING UNDER SERVICE CABINET ON DETAIL ON DRAWING EL11 AND NEC.

26. PATCH RETAINING WALL CORES, RESTORE AREA LANDSCAPING, PAVEMENT, CONCRETE, BACKFILL, CURBING AND GUTTER TO ORIGINAL CONDITION.

27. FURNISH AND INSTALL EV CHARGING SIGNS PER DETAIL ON DRAWING EL10.

28. EV CHARGING PAVEMENT MARKINGS PER DETAIL ON DRAWING EL10 WILL BE PERFORMED BY OTHERS.

29. FURNISH AND INSTALL NSM 3R RATED, 3PH, 80A NONFUSED DISCONNECT SWITCH PER NEC.
CONSTRUCTION NOTES

1. Re-purpose existing 200A 3P switch and replace fuses with new 200A fuses.
2. Remove (2) existing contactor cabinets, time clock and associated unused equipment. Furnish and install a new panel rated 200A, 600V, 208Y/120V.
3. Remove existing conductors between existing switchboard and existing contactor enclosures. Modify existing gutter as required to run feeders to the new 200 AMP panelboard.
4. Install (2) two owner furnished wall-mounted Level-2 chargers and cable management systems per detail on drawing EL8 at parking stalls (52 and 54) adjacent to the existing Level-2 EV chargers.
5. Surface mount GRS conduit on wall and under concrete beams as shown in plan.
6. Core drill through wall by the entrance door for conduit installation.
7. Furnish and install 12X12X4 NEMA 4 Junction box for communication gateway. Locate within 10' of charging units where cell signal is strongest. See detail on drawing EL8.
8. Furnish and install EV charging signs per detail on drawing EL10.
9. EV charging pavement markings per detail on drawing EL10 will be performed by others.
10. Furnish and install 16X16X4 NEMA 4 junction box.
11. Furnish and install disconnect for each charger per NEC.

WIRE NOTES

(1) 3/4"C, 2#12, #12G
(2) 2"C, 3-#4/0, #4G
(1) 1.25"C, 4#8, #8G CU; (1) 2" SPARE CONDUIT
(1) 1.25"C, 4#8, #8G CU

EXISTING
200A MCB
208Y/120V
3PH, 4W
24SP

200A MCB
208Y/120V
3P, 4W
200A

20A/1P
40A/2P
200A/3P

GATEWAY
GATEWAY
GATEWAY

CONSTRUCTION BY FIELD BOOKS
DATE CHECKED FINAL DRAWN DATE DESIGNED PROJECT NAME SCALE SHEET OF DRAWING NAME SHEET NO. SPEC. NO. WBS NO.
CONSTRUCTION NOTES

 FEED NEW EV CHARGERS FROM EXISTSING PANEL 5A LOCATED ON THE FIFTH FLOOR.

 INSTALL (6) SIX OWNER FURNISHED WALL-MOUNTED LEVEL-2 CHARGERS PER DETAIL ON DRAWING EL8. USE POWER SHARING. WIRE CONFIGURATION PER MANUFACTURER'S INSTALLATION MANUAL.

 FURNISH AND INSTALL CONDUIT FROM PANEL 5A TO NEW EV CHARGERS THROUGH THE WALL OPENING CLOSEST TO PANEL 5A.

 FURNISH AND INSTALL EV CHARGING SIGNS PER DETAIL ON DRAWING EL10.

 EV CHARGING PAVEMENT MARKINGS PER DETAIL ON DRAWING EL10 WILL BE PERFORMED BY OTHERS.

 FURNISH AND INSTALL 12X12X4 NM/NEMA 4 JUNCTION BOX FOR COMMUNICATION GATEWAY. LOCATE WITHIN 160' OF CHARGING UNITS WHERE CELL SIGNAL IS STRONGEST. SEE DETAIL ON DRAWING EL8.

 FURNISH AND INSTALL DISCONNECT PER NEC.

WIRE NOTES

1"C, 4/0, #6 G/CU
3/4"C, 2#12, #12 G/CU
1 60A/2P
2 60A/2P
1 40A/2P
2 40A/2P
1 20A/1P
GATEWAY

ONE-LINE DIAGRAM

NOT TO SCALE
CONSTRUCTION NOTES

1. INSTALL CONCRETE FOUNDATION AND OWNER FURNISHED SMART DC EV CHARGER PER MANUFACTURER SPECIFICATION AND DETAIL ON DRAWING EL9.

2. EXCAVATE THROUGH SIDEWALK TO EXPOSE WEST SIDE OF TACOMA POWER VAULT. CORE HOLE FOR 3" CONDUIT THROUGH SIDEWALL AND SEAL AND BOURNE HOLES AROUND PVC BELL END. COORDINATE ACCESS TO VAULT WITH TACOMA POWER.

3. FURNISH AND INSTALL 300 KVA XFMR VAULT PER TACOMA POWER STANDARD A-UG-1130, A-UG-520, AND C-UG-1150. SEE DETAIL A FOR EQUIPMENT LAYOUT.

4. 200 KVA XFMR 480Y/277V, 3PH TO BE FURNISHED AND INSTALLED BY TACOMA POWER. XFMR IS SET ON TOP OF VAULT.

5. TRENCH AND BURY CONDUIT 30" DEEP PER TACOMA POWER STANDARD C-UG-1110. INSTALL CONDUIT DIRECTLY BEHIND CURB OR SIDEWALK TO AVOID TREE ROOTS. COORDINATE WITH FIELD INSPECTOR.

6. INSTALL STUBOUT TO BACK OF SIDEWALK, APPROXIMATE LOCATION AS SHOWN. COORDINATE FINAL LOCATION WITH OWNER. UPDATE AS BUILT DRAWINGS.

7. FURNISH AND INSTALL PROTECTIVE BOLLARDS TO PROTECT XFMR, EV CHARGERS AND SERVICE CABINET PER TACOMA POWER STANDARD C-UG-1410. COORDINATE FINAL LOCATION WITH TPU INSPECTOR.

8. INSTALL OWNER FURNISHED SERVICE-RATED 400A 480Y/277V, 3 PHASE, 4 WIRE, 24 SPACE SERVICE CABINET WITH 400A MAIN BREAKER, TACOMA POWER METER BASE, AND CURRENT TRANSFORMER. SEE DETAIL ON DRAWING EL11 AND THIS DRAWING FOR BREAKER SCHEDULE. REFERENCE TACOMA POWER STANDARD C-MR-0035 AND C-MR-0040 FOR METERING.

9. FURNISH AND INSTALL CONCRETE BASE AND FOUNDATION UNDER SERVICE CABINET PER DETAIL ON DRAWING EL11 AND NEC.

10. PATCH CORES AND RESTORE ALL AREA LANDSCAPING, PAVEMENT, CONCRETE, BACKFILL, CURBING AND GUTTER TO ORIGINAL CONDITION.

11. FURNISH AND INSTALL EV CHARGING SIGNS PER DETAIL DRAWING EL10. EV CHARGING PARKING MARKINGS PER DETAIL ON DRAWING EL10 WILL BE PERFORMED BY OTHERS.

12. FURNISH AND INSTALL NEMA 3R RATED, 3PH, 80A NONFUSED DISCONNECT SWITCH PER NEC.

13. OPEN CUT ROADWAY PER CITY OF TACOMA STANDARDS. USE SCHEDULE 80 PVC UNDER ROADWAY. BACKFILL TRENCH USING WSDOT APPROVED CDF.

14. COORDINATE VEGETATION REMOVAL AND REMEDIATION WITH FIELD INSPECTOR TO ACCOMMODATE NEW EQUIPMENT. REMOVE ALL ABOVE AND BELOW GROUND PORTIONS OF BOHEMIAN KNOTWEED PATCH AND DISPOSE OFFSITE VEGETATION REMOVED WITHOUT LEAVINGS FRAGMENTS. WITHIN THE PARKING LOT, PLANT A SAME OR SIMILAR SPECIES AND SIZE. REFER TO TACOMA MUNICIPAL CODE 13.06.090.B FOR LANDSCAPING STANDARDS.

15. TRENCH WITHIN THE SIDEWALK CONCRETE PANEL IMMEDIATE NORTH OR SOUTH OF EXISTING VAULT. AVOID CURB RAMPS AND CURB RADIUS OF SIDEWALK.

WIRE NOTES

(1) 1.5" PVC, 4-500KCM, #2/0G, (1) 4" SPARE

(2) 2" PVC CONDUIT STUB OUT

GENERAL NOTES

1. SOILS AT THIS LOCATION MAY BE CONTAMINATED. EXCAVATE, REMOVE AND DISPOSE OF CONTAMINATED SOIL PER RCRA SUBTITLE C OR D. THE EXCAVATED AREA SHALL BE REPLACED WITH CLEAN BACKFILL.

2. INSTALL CONDUIT DIRECTLY BEHIND CURB OR SIDEWALK TO AVOID TREE ROOTS. COORDINATE WITH FIELD INSPECTOR.

3. INSTALL STUBOUT TO BACK OF SIDEWALK, APPROXIMATE LOCATION AS SHOWN. COORDINATE FINAL LOCATION WITH OWNER. UPDATE AS BUILT DRAWINGS.

4. INSTALL FURNISHED LINING, 1.5" PVC, 4#4, #8G CU CONDUCTORS PER TACOMA POWER MANUFACTURER SPECIFICATION AND DETAIL ON DRAWING EL9.

5. INSTALL CONDUIT DIRECTLY BEHIND CURB OR SIDEWALK TO AVOID TREE ROOTS. COORDINATE WITH FIELD INSPECTOR.

6. INSTALL CONDUIT DIRECTLY BEHIND CURB OR SIDEWALK TO AVOID TREE ROOTS. COORDINATE WITH FIELD INSPECTOR.

7. INSTALL CONCRETE FOUNDATION AND OWNER FURNISHED SMART DC EV CHARGER PER MANUFACTURER SPECIFICATION AND DETAIL ON DRAWING EL9.

8. EXCAVATE THROUGH SIDEWALK TO EXPOSE WEST SIDE OF TACOMA POWER VAULT. CORE HOLE FOR 3" CONDUIT THROUGH SIDEWALL AND SEAL AND BOURNE HOLES AROUND PVC BELL END. COORDINATE ACCESS TO VAULT WITH TACOMA POWER.

9. FURNISH AND INSTALL 300 KVA XFMR VAULT PER TACOMA POWER STANDARD A-UG-1130, A-UG-520, AND C-UG-1150. SEE DETAIL A FOR EQUIPMENT LAYOUT.

10. 200 KVA XFMR 480Y/277V, 3PH TO BE FURNISHED AND INSTALLED BY TACOMA POWER. XFMR IS SET ON TOP OF VAULT.

11. TRENCH AND BURY CONDUIT 30" DEEP PER TACOMA POWER STANDARD C-UG-1110. INSTALL CONDUIT DIRECTLY BEHIND CURB OR SIDEWALK TO AVOID TREE ROOTS. COORDINATE WITH FIELD INSPECTOR.

12. INSTALL STUBOUT TO BACK OF SIDEWALK, APPROXIMATE LOCATION AS SHOWN. COORDINATE FINAL LOCATION WITH OWNER. UPDATE AS BUILT DRAWINGS.

13. FURNISH AND INSTALL PROTECTIVE BOLLARDS TO PROTECT XFMR, EV CHARGERS AND SERVICE CABINET PER TACOMA POWER STANDARD C-UG-1410. COORDINATE FINAL LOCATION WITH TPU INSPECTOR.

14. INSTALL OWNER FURNISHED SERVICE-RATED 400A 480Y/277V, 3 PHASE, 4 WIRE, 24 SPACE SERVICE CABINET WITH 400A MAIN BREAKER, TACOMA POWER METER BASE, AND CURRENT TRANSFORMER. SEE DETAIL ON DRAWING EL11 AND THIS DRAWING FOR BREAKER SCHEDULE. REFERENCE TACOMA POWER STANDARD C-MR-0035 AND C-MR-0040 FOR METERING.

15. FURNISH AND INSTALL CONCRETE BASE AND FOUNDATION UNDER SERVICE CABINET PER DETAIL ON DRAWING EL11 AND NEC.

16. PATCH CORES AND RESTORE ALL AREA LANDSCAPING, PAVEMENT, CONCRETE, BACKFILL, CURBING AND GUTTER TO ORIGINAL CONDITION.

17. FURNISH AND INSTALL EV CHARGING SIGNS PER DETAIL DRAWING EL10. EV CHARGING PARKING MARKINGS PER DETAIL ON DRAWING EL10 WILL BE PERFORMED BY OTHERS.

18. FURNISH AND INSTALL NEMA 3R RATED, 3PH, 80A NONFUSED DISCONNECT SWITCH PER NEC.

19. OPEN CUT ROADWAY PER CITY OF TACOMA STANDARDS. USE SCHEDULE 80 PVC UNDER ROADWAY. BACKFILL TRENCH USING WSDOT APPROVED CDF.

20. COORDINATE VEGETATION REMOVAL AND REMEDIATION WITH FIELD INSPECTOR TO ACCOMMODATE NEW EQUIPMENT. REMOVE ALL ABOVE AND BELOW GROUND PORTIONS OF BOHEMIAN KNOTWEED PATCH AND DISPOSE OFFSITE VEGETATION REMOVED WITHOUT LEAVINGS FRAGMENTS. WITHIN THE PARKING LOT, PLANT A SAME OR SIMILAR SPECIES AND SIZE. REFER TO TACOMA MUNICIPAL CODE 13.06.090.B FOR LANDSCAPING STANDARDS.

21. TRENCH WITHIN THE SIDEWALK CONCRETE PANEL IMMEDIATE NORTH OR SOUTH OF EXISTING VAULT. AVOID CURB RAMPS AND CURB RADIUS OF SIDEWALK. 

WIRE NOTES

(2) 2" PVC CONDUIT STUB OUT

(1) 1.5" PVC, 4-500KCM, #2/0G, (1) 4" SPARE
CONSTRUCTION NOTES

1. Furnish and install a new panel rated 225A, M.O. 208Y/120V. Place in vicinity of existing panel L2G. See one-line diagram for breaker schedule.

2. Feed new panel from 225A spare breaker in switchboard LD1A as shown.

3. Install (6) six owner furnished wall-mounted Level-2 chargers on the ground floor along garage wall adjacent to dock street in parking stalls 168 to 173 as shown per detail on drawing EL9.

4. Furnish and install conduit exposed overhead in garage from main electrical room to EV chargers.

5. Furnish and install EV charging signs per detail on drawing EL10.

6. EV charging pavement markings per detail on drawing EL10 will be performed by others.

7. Furnish and install 12x12x4 NM NEMA 4 junction box for communication gateway. Locate within 160’ of all charging units where cell signal is strongest. See detail on drawing EL8.

8. Furnish and install disconnect for each charger per NEC.

WIRE NOTES

- 2"C, #4/0, #2G CU
- 1.25"C, #4, #8G CU
- 3/4"C, #12, #12G CU

TYP. ONE-LINE DIAGRAM

NOT TO SCALE
CONSTRUCTION NOTES

1. INSTALL (6) OWNER FURNISHED PEDESTAL-MOUNTED LEVEL-2 CHARGERS AS SHOWN PER DETAIL ON DRAWING EL13.

2. FURNISH AND INSTALL CONDUIT EXPOSED OVERHEAD IN GARAGE FROM PANEL 22M2 TO EV CHARGERS.

3. FURNISH AND INSTALL EV CHARGING SIGNS PER DETAIL ON DRAWING EL10.

4. EV CHARGING PAYMENT MESSAGES PER DETAIL ON DRAWING EL10 WILL BE PERFORMED BY OTHERS.

5. FURNISH AND INSTALL 12X12X4 NM NEMA 4 JUNCTION BOX FOR COMMUNICATION GATEWAY. LOCATE WITHIN 100' OF ALL CHARGING UNITS WHERE CELL SIGNAL IS STRONGEST. SEE DETAIL ON DRAWING EL8.

6. DISCONNECT MEANS FOR EACH CHARGER IS TO BE FURNISHED BY THE OWNER, INSTALLED IN PEDESTAL. SEE DETAIL ON DRAWING EL13.

WIRE NOTES

1. 1.25"C, #4#8, #8G CU

2. 3/4"C, 2#12, #12G

3. 40A/2P

4. 20A/1P

5. 208Y/120V

6. 3 PHASE, 4 WIRE

EXISTING PANEL 22M2

TYP.

ONE-LINE DIAGRAM

NOT TO SCALE
CONSTRUCTION NOTES

1. TACOMA POWER TO FURNISH AND INSTALL POLES, MV-208Y/120V XFMR AND 3 PHASE AERIAL SERVICE CONDUCTORS TO THE NEW POLE.

2. FURNISH AND INSTALL TACOMA POWER RISER ON POLE PLACED ABOVE/BEHIND ROCK WALL PER TACOMA POWER STANDARD C-UG-1200. INSTALL UNDERGROUND CONDUIT TO XFMR VAULT.

3. COORDINATE FINAL INSTALLATION LOCATION WITH TACOMA POWER.

4. FURNISH AND INSTALL 35X34M XFMR VAIL PER TACOMA POWER STANDARD A-UG-1400, A-UG-1403, AND C-UG-1700. SEE DETAIL A FOR EQUIPMENT LAYOUT.

5. INSTALL OWNER FURNISHED SERVICE-RATED 400A, 208Y/120V, 3 PHASE, 24 SPACE PANEL, INSTALLED IN PAD-MOUNTED TAMPER PROOF LOCKABLE ENCLOSURE. SEE DETAIL ON SHEET EL12.

6. INSTALL PROTECTIVE BOLLARDS TO PROTECT XFMR, EV CHARGERS AND SERVICE CABINET PER TACOMA POWER STANDARD C-UG-1400. COORDINATE FINAL LOCATION WITH TPU INSPECTOR.

7. FURNISH AND INSTALL 12X12X4 NM NEMA 4 JUNCTION BOX FOR COMMUNICATION GATEWAY. LOCATE WITHIN 160' OF ALL CHARGERS WHERE CELL SIGNAL IS STRONGEST. SEE DETAIL ON DRAWING EL8.

8. RESTORE ALL AREAS TO ORIGINAL CONDITION TO INCLUDE, BUT NOT LIMITED TO LANDSCAPING, PAVEMENT, CONCRETE, BACKFILL, CURBING AND GUTTER.

9. INSTALL (10) TEN OWNER FURNISHED PEDESTAL-MOUNTED LEVEL 2 CHARGERS PER DETAIL ON DRAWING EL13, WITH EACH PEDESTAL POSITIONED IN FRONT AND BETWEEN TWO PARKING STALLS.

10. FURNISH AND INSTALL EV CHARGING SIGNS PER DETAIL ON DRAWING EL10.

11. EV CHARGING PAVEMENT MARKING PER DETAIL ON DRAWING EL10 BY OTHERS.

12. INSTALL STUBOUT SOUTH OF XFMR, APPROXIMATE LOCATION AS SHOWN. COORDINATE FINAL LOCATION WITH OWNER. INCORPORATE IN AS-BUILT DRAWINGS.

13. FURNISH AND INSTALL CONCRETE BASE AND GROUNDING UNDER SERVICE CABINET PER DETAIL ON DRAWING EL11 AND NEC.

14. DISCONNECT MEANS FOR EACH CHARGER IS TO BE FURNISHED BY THE OWNER, INSTALLED IN BASE OF PEDESTAL. SEE DETAIL ON DRAWING EL15.
CONSTRUCTION NOTES

1. INSTALL CHARGER, POWER CONNECTIONS AND GROUND IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND INSTALLATION GUIDE.
2. CONSTRUCT CONCRETE FOUNDATION PER WSDOT STANDARD J-10.10-04 AND AS SHOWN.
3. DISCONNECT TO BE LOCKABLE IN BOTH THE OPEN AND CLOSED POSITION.
4. SEE ONE-LINE AND ELEVATIONS DRAWINGS FOR CONDUIT AND CABLE INFORMATION.
5. CABLE MANAGEMENT SYSTEM ATTACHED TO SIDE OF CHARGER.

PLACE REBAR IN CENTER OF SLAB

#3 REBAR 12" ON CENTER TYP.

COORDINATE DISCONNECT LOCATION WITH TPU INSPECTOR

FINISHED GRADE

ANCHOR CABINET TO PAD PER MANUFACTURER INSTALLATION GUIDE

POWER CONDUIT AND CABLE FROM DISCONNECT

CONDUIT AND CABLE TO SERVICE
NOTES

- THE FOLLOWING INSTRUCTIONS ARE FOR REFERENCE ONLY. PAVEMENT MARKING WILL BE PERFORMED BY OTHERS.
- PROVIDE 4.5" SPACING BETWEEN STENCILS.
- LOCATION: CENTER AT FOOT OF PARKING STALL
- FONT: STANDARD GOTHIC
- COLOR: GREEN ON EXISTING SURFACE (NO FILL INSIDE STENCIL)

1. PROVIDE 4.5" SPACING BETWEEN STENCILS.
2. LOCATION: CENTER AT FOOT OF PARKING STALL
3. FONT: STANDARD GOTHIC
4. COLOR: GREEN ON EXISTING SURFACE (NO FILL INSIDE STENCIL)

EVSE PAVEMENT MARKING AND SIGNAGE DETAILS

NOTES

- THE FOLLOWING INSTRUCTIONS ARE FOR REFERENCE ONLY. PAVEMENT MARKING WILL BE PERFORMED BY OTHERS.
- PROVIDE 4.5" SPACING BETWEEN STENCILS.
- LOCATION: CENTER AT FOOT OF PARKING STALL
- FONT: STANDARD GOTHIC
- COLOR: GREEN ON EXISTING SURFACE (NO FILL INSIDE STENCIL)

1. PROVIDE 4.5" SPACING BETWEEN STENCILS.
2. LOCATION: CENTER AT FOOT OF PARKING STALL
3. FONT: STANDARD GOTHIC
4. COLOR: GREEN ON EXISTING SURFACE (NO FILL INSIDE STENCIL)

EVSE PAVEMENT MARKING

EVSE PARKING SIGNAGE

NOTES

- FURNISH AND INSTALL SIGNING. COORDINATE WITH FIELD INSPECTOR AND TACOMA POWER SIGNING DEPARTMENT.
- SIGNS (1) AND (2) ARE TO BE PLACED TO IDENTIFY EV CHARGING PARKING SPACE.
- SIGN (3) IS TO BE PLACED TO SHOW THE DIRECTION OF CHARGING STATION(S).
- FURNISH AND INSTALL SIGNING ADJACENT TO EACH PARKING STALL SERVED BY AN EV CHARGER. MOUNT ON APPROPRIATE WALL OR INSTALL ON 4X4 TREATED WOOD POST WHERE WALL MOUNTING IS NOT SUITABLE. COORDINATE EXACT LOCATIONS WITH CITY OF TACOMA SITE REPRESENTATIVE.

EVSE PAVEMENT MARKING

EVSE PARKING SIGNAGE

NOTES

- FURNISH AND INSTALL SIGNING. COORDINATE WITH FIELD INSPECTOR AND TACOMA POWER SIGNING DEPARTMENT.
- SIGNS (1) AND (2) ARE TO BE PLACED TO IDENTIFY EV CHARGING PARKING SPACE.
- SIGN (3) IS TO BE PLACED TO SHOW THE DIRECTION OF CHARGING STATION(S).
- FURNISH AND INSTALL SIGNING ADJACENT TO EACH PARKING STALL SERVED BY AN EV CHARGER. MOUNT ON APPROPRIATE WALL OR INSTALL ON 4X4 TREATED WOOD POST WHERE WALL MOUNTING IS NOT SUITABLE. COORDINATE EXACT LOCATIONS WITH CITY OF TACOMA SITE REPRESENTATIVE.
CONSTRUCTION NOTES

1. Furnish and install 5/8" x 10' copper clad ground rod in all 4 corners of the foundation.
2. Construct concrete service foundation in accordance with WSDOT Standard J-10.10-04.
3. Furnish and install continuous bare copper conductor ground ring 6" inside the edge of the concrete foundation, buried 12" below the bottom of the concrete foundation, in full contact with native soil material and connected to all ground rods using approved NEC compliant connectors.
4. Furnish and install accessible ground well at each ground rod.
5. Extend bare copper ground tail from two ground rods to the service cabinet ground terminal. Protect copper conductor through concrete by installing in conduit.
6. #3 rebar 12" on center. Place rebar mat in the center of concrete pad per WSDOT Standard J-10.10-04.
8. Internal utility power meter
9. Main breaker
10. Lockable distribution circuit breakers see one line for information.
11. Utility termination CT section per Tacoma Power requirements
GENERAL NOTES

1. DESIGN SHOWN IS BASED ON SKYLINE MANUFACTURING - SERIES 67850. MANUFACTURER'S NAMES AND MODELS ARE PROVIDED AS A POINT OF REFERENCE FOR A STANDARD, QUALITY AND FUNCTIONALITY AND ARE NOT INTENDED TO IMPLY SOURCING OF THE PRODUCT OR SERVICE PANEL. THE SERVICE PANEL MUST MUST NOT EXCEED THE CHARACTERISTICS SHOWN.
2. CIRCUIT BREAKERS SHALL COMPLY WITH WSDOT 2023 STANDARD SPECIFICATION 9-29.24 AND SERVICE ENCLOSURE SHALL COMPLY WITH SECTION 9-29.25.
3. SERVICE CABINET IS FURNISHED BY CITY OF TACOMA.

277/480V PANEL

COMPONENT SCHEDULE

1. 400A, 3Ø, 4W CT LANDING PAD, B-LINE 6067HAL
2. 13 JAW CT RATED METER BASE, B-LINE 121413
3. PANELBOARD:
   277/480V, 400A COPPER BUS, 3Ø, 4W, 24CKT, 200KAIC SERIES RATED
   MAIN BREAKER: 600A FRAME, 400A TRIP, 3 POLE, EATON PDG33F0400FTAJ
   BOLT ON BRANCH BREAKERS (QUANTITY PER PANEL SCHEDULES ON SHEETS EL14 AND EL15):
   100A FRAME, 80A TRIP, 2 POLE, EATON BAB2040
   100A FRAME, 20A TRIP, 1 POLE, EATON BAB1020
   LOCKOUT ACCESSORY (QUANTITY PER PANEL SCHEDULES ON SHEETS EL14 AND EL15):
   EATON QL123EL

CABINET NOTES

- NEMA TYPE 3R OUTDOOR PADMOUNT
- #12 GA PRE-GALV STEEL CONSTRUCTION
- OPEN BOTTOM FRAMED WITH 2" ANGLE
- TOP AND BOTTOM SCREENED AND GASKETED VENTS
- DOORS HEAVY-DUTY COSWELD HINGES (SUIT-UP TYPE), PADLOCKABLE
- STAINLESS STEEL VAULT HANDLES WITH ROLLER RODS THAT PROVIDE 3-POINT COMPRESSION ON CLOSED CELL NEOPRENE GASKET
- CT SECTION: METERBASE AND DEAD-FRONTED CT LANDING PAD
- DEAD-FRONTED DISTRIBUTION SECTION
- FINISH: ASA61 GREY POLYESTER POWERED COAT FINISH OVER ZINC PRIMER
- EQUIPMENT MOUNTING PAN WHITE
- UL 598A ENCLOSED INDUSTRIAL CONTROL PANEL

120/208V PANEL

COMPONENT SCHEDULE

1. 400A, 3Ø, 4W CT LANDING PAD, B-LINE 6067HAL
2. 13 JAW CT RATED METER BASE, B-LINE 121413
3. PANELBOARD:
   120/208V, 400A COPPER BUS, 3Ø, 4W, 24CKT, 200KAIC SERIES RATED
   MAIN BREAKER: 600A FRAME, 400A TRIP, 3 POLE, EATON PDG33F0400FTAJ
   BOLT ON BRANCH BREAKERS (QUANTITY PER PANEL SCHEDULES ON SHEETS EL14 AND EL15):
   40A, 2P BRANCH
   40A, 2P BRANCH
   40A, 2P BRANCH
   40A, 2P BRANCH
   40A, 2P BRANCH
   40A, 2P BRANCH
   40A, 2P BRANCH
   40A, 2P BRANCH
   LOCKOUT ACCESSORY (QUANTITY PER PANEL SCHEDULES ON SHEETS EL14 AND EL15):
   EATON GL132EL

CABINET NOTES

- NEMA TYPE 3R OUTDOOR PADMOUNT
- #12 GA PRE-GALV STEEL CONSTRUCTION
- OPEN BOTTOM FRAMED WITH 2" ANGLE
- TOP AND BOTTOM SCREENED AND GASKETED VENTS
- DOORS HEAVY-DUTY COSWELD HINGES (SUIT-UP TYPE), PADLOCKABLE
- STAINLESS STEEL VAULT HANDLES WITH ROLLER RODS THAT PROVIDE 3-POINT COMPRESSION ON CLOSED CELL NEOPRENE GASKET
- CT SECTION: METERBASE AND DEAD-FRONTED CT LANDING PAD
- DEAD-FRONTED DISTRIBUTION SECTION
- FINISH: ASA61 GREY POLYESTER POWERED COAT FINISH OVER ZINC PRIMER
- EQUIPMENT MOUNTING PAN WHITE
- UL 598A ENCLOSED INDUSTRIAL CONTROL PANEL
PEDESTAL INSTALLATION DETAILS

1.5" GRC

V-SHAPED MOUNTING BRACKET
REFER TO MANUFACTURER'S PEDESTAL AND CABLE MANAGEMENT SYSTEM INSTALLATION GUIDE.

1.5" GRC SUPPORT AS NEEDED AND PER NEC

FRONT VIEW

SIDE VIEW

NOT TO SCALE

PEDESTAL WITH SURFACE MOUNT CONDUIT

CABLE MANAGEMENT SYSTEM
INSTALL PER MANUFACTURER INSTALLATION REQUIREMENTS

NOTE
MANUFACTURER INSTALLATION GUIDE FOR INSTALLATION DETAILS.

MOUNTING BRACKET
NOT TO SCALE

DUAL CIRCUIT BREAKERS AND DISCONNECT

ISOLATED TERMINAL BLOCK; USE ONLY FOR POWER SHARING APPLICATIONS, OTHERWISE CONNECT CONDUCTORS DIRECTLY TO DUAL CIRCUIT BREAKERS ABOVE.

NON-ISOLATED TERMINAL BLOCK

WIRING INFORMATION STICKER

PUNCH OUT HOLE IN BACK OF PEDESTAL OPPOSITE OF ACCESS DOOR TO CREATE CONDUCTOR PATH.

DUAL CIRCUIT BREAKERS
AND DISCONNECT

PEDESTAL WITH SURFACE MOUNT CONDUIT

ATTACH PEDESTAL TO BREAKAWAY BASE USING 3/8" STAINLESS STEEL HARDWARE

ANCHOR OWNER FURNISHED METAL BREAKAWAY BASE TO CONCRETE SLAB USING 3/4" DIAMETER 304 STAINLESS STEEL EPOXY ANCHOR AS MANUFACTURED BY HILTI OR APPROVED EQUAL, WITH MINIMUM 2-1/2" EMBEDMENT. AVOID DRILLING INTO REBAR. USE LEVELING NUTS BETWEEN CONCRETE AND BREAKAWAY BASE TO PLUM AND LEVEL CHARGER PEDESTAL. GROUT VOID UNDER BREAKAWAY BASE USING APPROVED 4000 PSI NON-SHRINK GROUT.

NOT TO SCALE

CONCRETE

53.75"

5"
### New Panel Schedule

**New Panel Enclosed in Service Cabinet: Furnished by City of Tacoma**

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### Existing Panel Schedule 5A

**Existing Panel Schedule 5A**

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