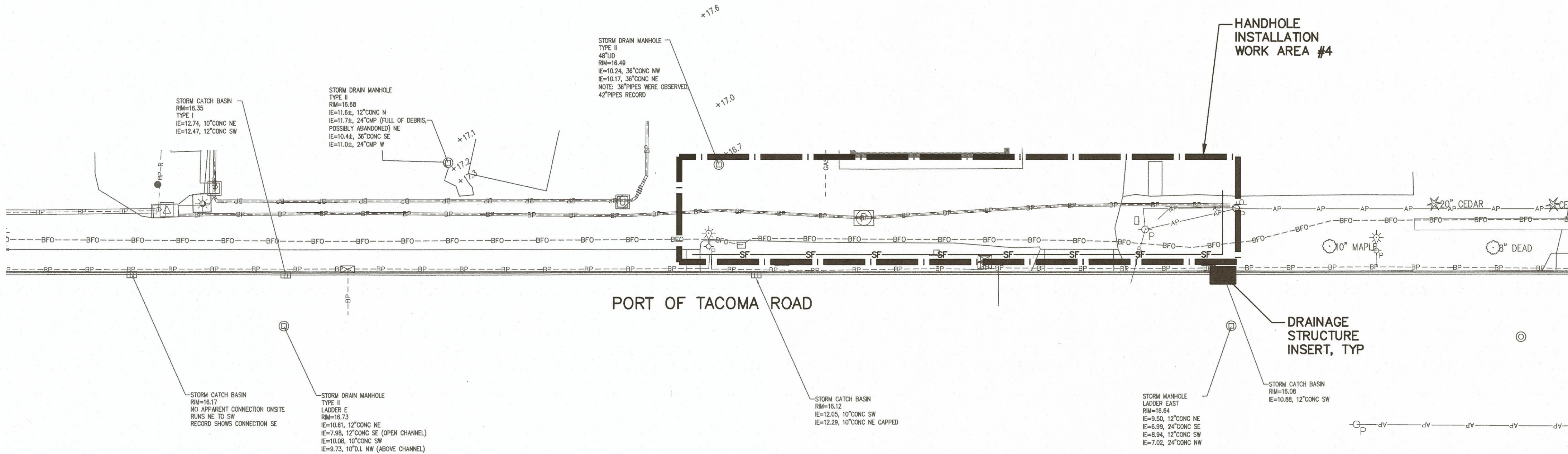
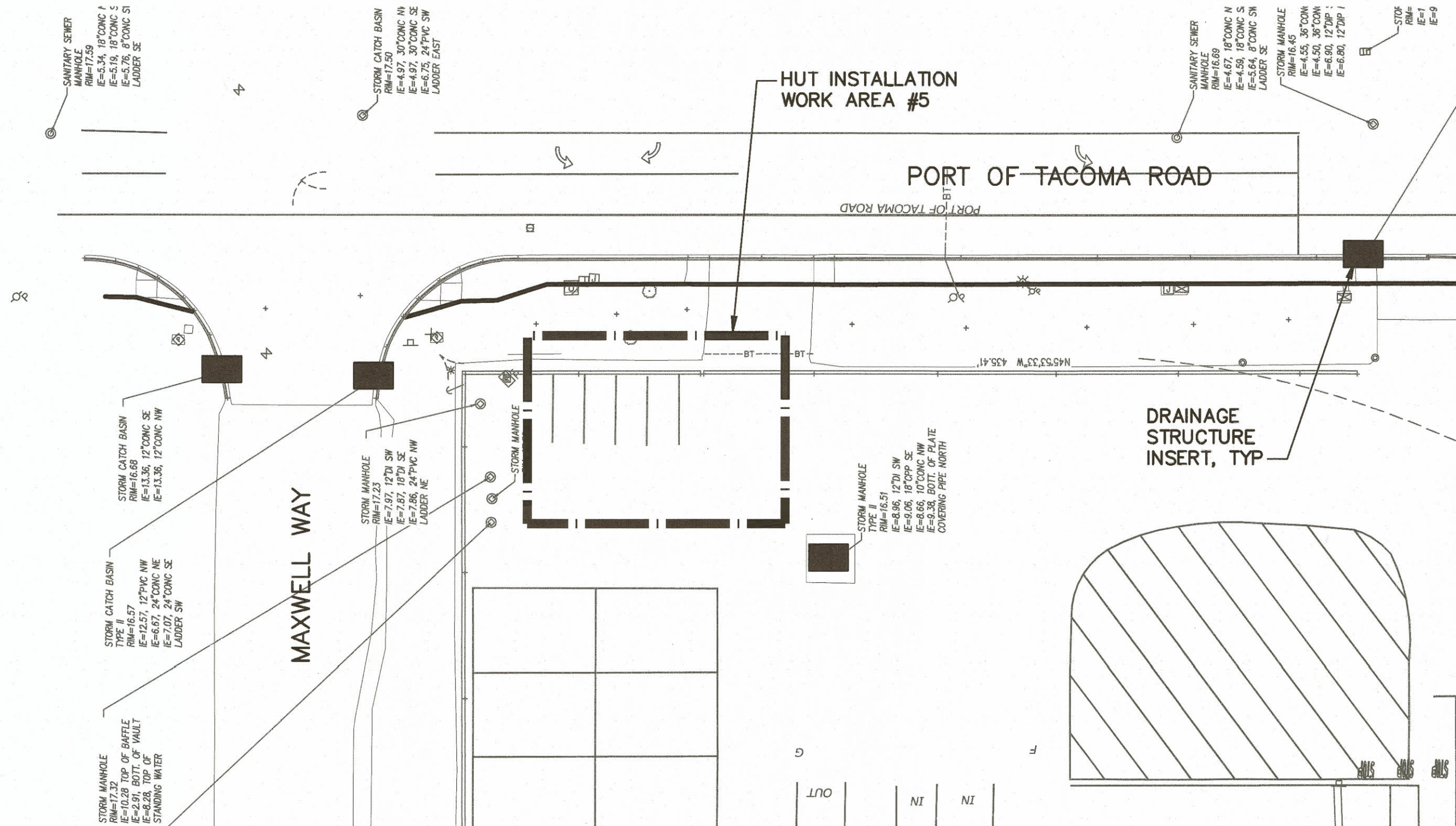




1 TESC PLAN - WORK AREA 4
C01.03 SCALE: 1"=30'



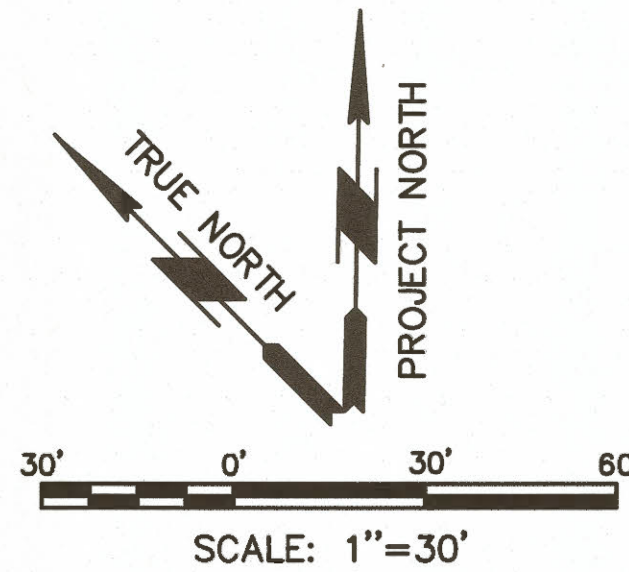
2 TESC PLAN - WORK AREA 5
C01.02 SCALE: 1"=30'

NOTES:

1. SEE SHEET C01.01 FOR TESC NOTES.
2. ONLY WORK AREAS REQUIRING EXCAVATION OR OTHER GROUND DISTURBING ACTIVITIES ARE SHOWN. AREAS OF AERIAL WORK NOT SHOWN. AREAS OF WORK UTILIZING EXISTING UNDERGROUND CONDUITS NOT SHOWN.
3. PLACE DRAINAGE STRUCTURE INSERTS IN ALL DRAINAGE STRUCTURES IN THE VICINITY OF THE WORK, PRIOR TO COMMENCEMENT OF WORK.
4. UTILITIES, STRUCTURES, AND SITE FEATURES NOT INDICATED FOR DEMOLITION SHALL BE PROTECTED IN PLACE.

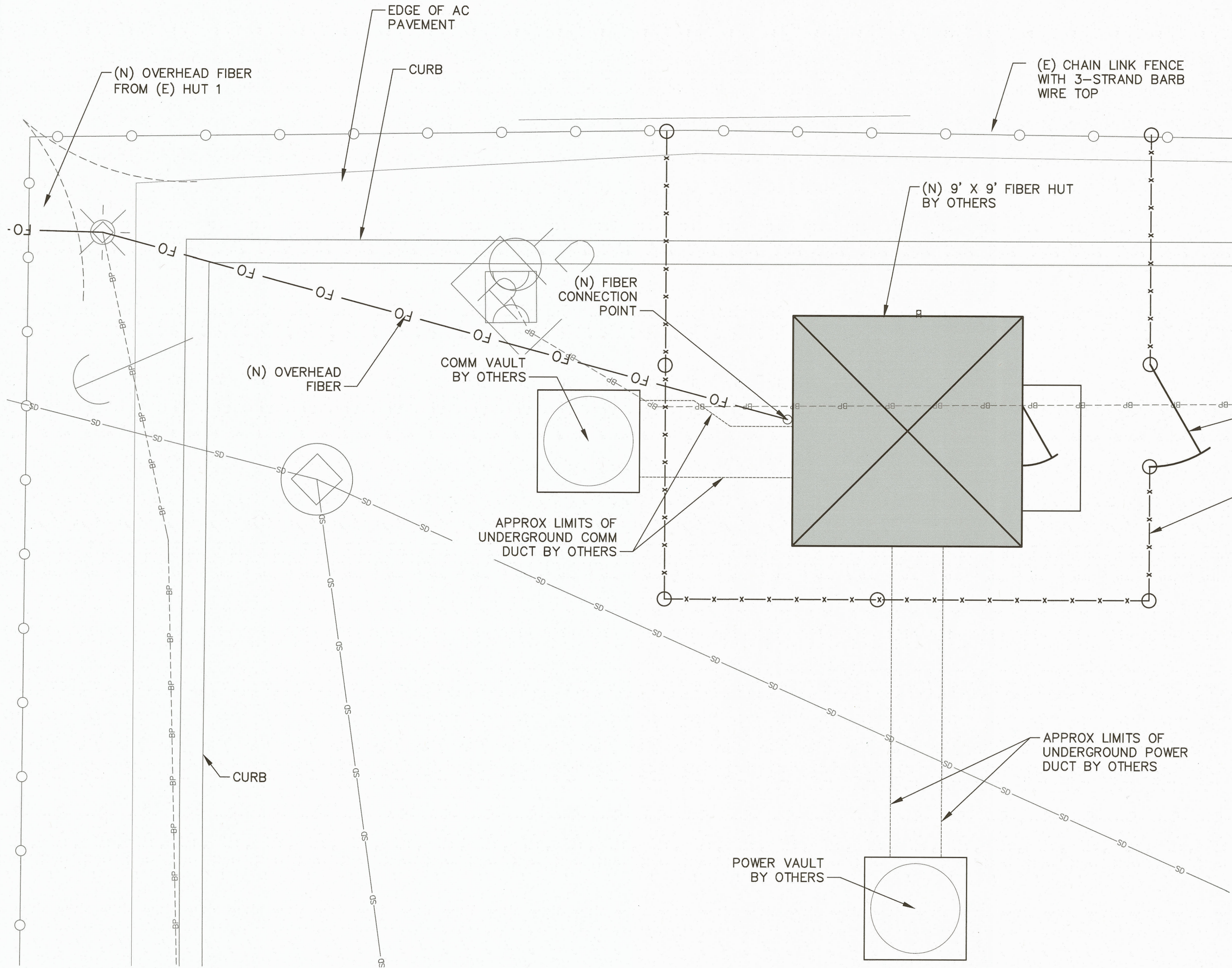
LEGEND

- CONSTRUCTION LIMITS
- TPT — TESC PERIMETER TREATMENT SEE 2/C01.01
- SF — SILT FENCE
- TEMPORARY DRAINAGE STRUCTURE INSERT SEE 1/C01.01



BID SET PLANS
ISSUED: 2019-12-09
NOT TO BE USED FOR CONSTRUCTION

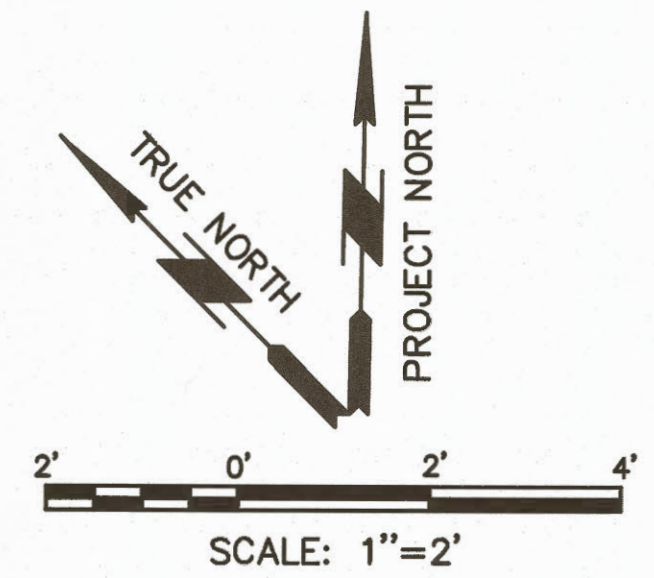
6636 C01.03 6 OF 22	PORT OF TACOMA FIBER TO LOT F TESC PLAN 2				APPROVED: TREVOR THORNSLEY DIRECTOR ENG. DATE: 12-09-19 PRINTED BY: jtoad Dec 09, 2019 PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98401-1837	SC 12-09-19 CHECKED BY: JT DATE: 12-09-19
	CONT/CONS: 071169 M. ID: 101286.01 PHASE: BID SET PLANS	TOWNSHIP: 21N RANGE: 3E SECTION: 34 M.L.W. 19.39' @ TIDE 22 1933 DAT-HRZ: WA83-SF PARCEL: DRAWING SCALE: AS NOTED	600 UNIVERSITY STREET SUITE# 610 SEATTLE, WA 98101 (206) 622-0222 moffatt & nichol		Port of Tacoma P.O. BOX 1837 TACOMA, WA 98401 (206) 622-0222	
		MARK: REVISION: BY: DATE: APPR:				



LEGEND

- x — FENCE WITH 3-STRAND BARB-WIRE
- FO — OVERHEAD FIBER OPTIC CABLE

1 HUT SITE PLAN - WORK AREA 5
C02.01 SCALE: 1"= 2'



BID SET PLANS
ISSUED: 2019-12-09
NOT TO BE USED FOR CONSTRUCTION

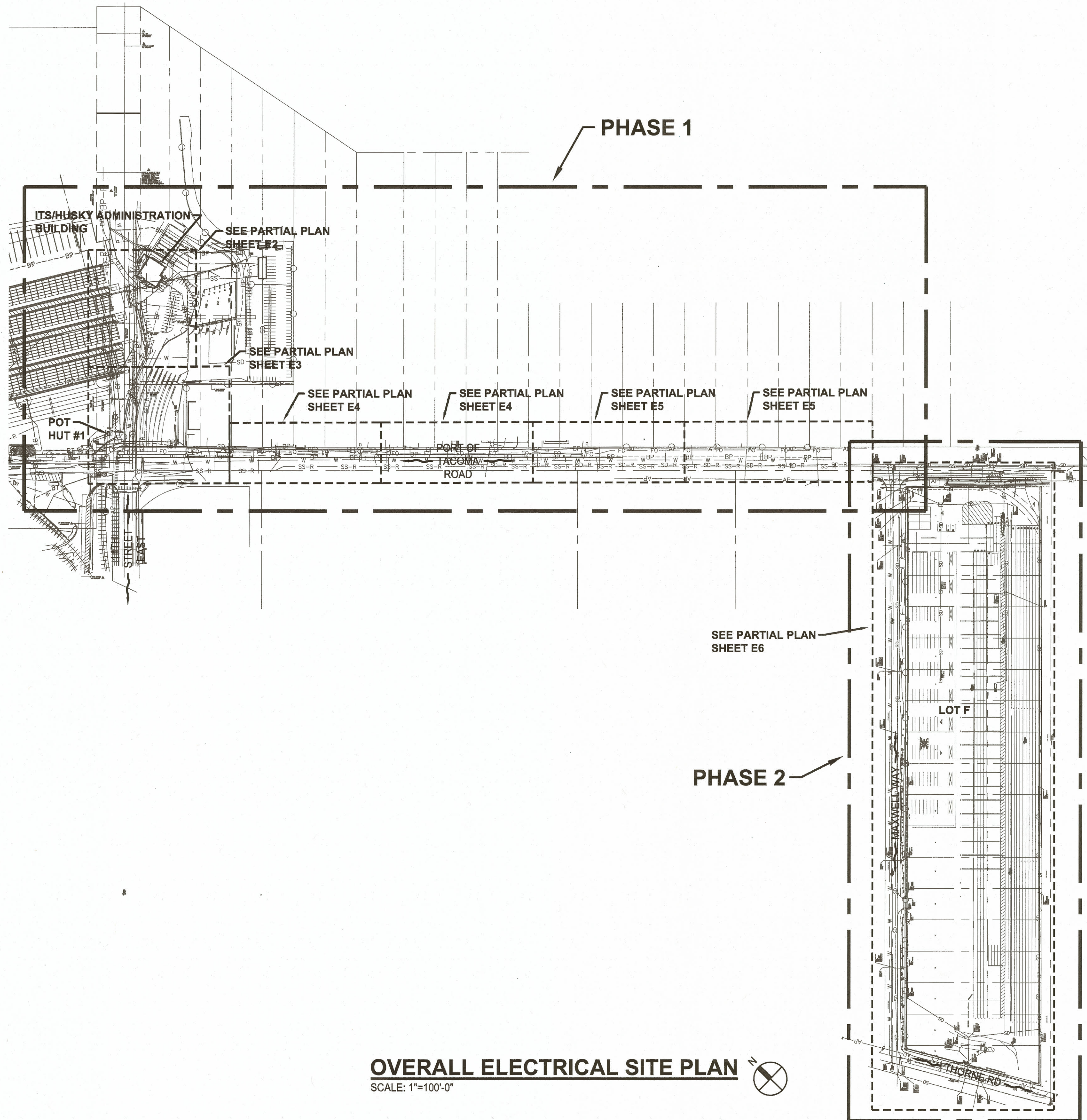
6636 C02.01 7 OF 22	PORT OF TACOMA FIBER TO LOT F SITE PLAN	APPROVED:	SG	12-09-19	
		TREVOR THORNSLEY	CHECKED BY	DATE	
CONT/CONS: 071169	TOWNSHIP: 21N	RANGE: 3E	SECTION: 34	PROJ. ENGR	DATE
M. ID: 101286.01	DAT-HRZ: WAB3-SF	VERT: MLW 19.39' @ TIDE 22 1933	PRINTED BY: itodd	Dec 09, 2019	
PHASE: BID SET PLANS	PARCEL:	DRAWING SCALE: AS NOTED	PORT ADDRESS: ONE SITCUM PLAZA	TACOMA, WA 98401-1837	
		600 UNIVERSITY STREET SUITE# 610 SEATTLE, WA 98101 (206) 622-0222		BY:	
		moffatt & nichol		REVISION:	
		Port of Tacoma P.O. BOX 1837 TACOMA, WA 98401 (253) 835-5841		APPR:	
				DATE:	

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1. LOCATE AND POTHOLE EXISTING UTILITIES AS FIRST ORDER OF WORK. NOTIFY ENGINEER IF LOCATION OF EXISTING UTILITIES DIFFER FROM SHOWN ON THE PLANS.
2. PAVEMENT SECTION B, "TERMINAL PAVEMENT SECTION" SHALL BE USED FOR PAVEMENT RESTORATION INSIDE THE TERMINAL BOUNDARY.
3. PAVEMENT SECTION C, "TYPICAL PAVEMENT SECTION", SHALL BE USED FOR ALL PAVEMENT RESTORATION OUTSIDE THE TERMINAL BOUNDARY, INCLUDING ANY PAVEMENT WORK AT LOT F.
4. PROVIDE PVC CONDUIT SADDLE SPACERS WHERE MULTIPLE CONDUITS ARE INSTALLED.
5. NATIVE BACKFILL SHALL BE CLEANED ORGANIC MATERIAL AND COBBLE LARGER THAN 3" AND SHALL BE COMPACTED TO 95% DRY DENSITY.
6. PAVEMENT SECTION D, "TRENCH SECTION IN ENVIRONMENTAL CAP" SHALL APPLY ONLY TO CONDUIT RUNS FOB24 AND SD60 ON ELECTRICAL SHEET E-6.
7. PAVEMENT SECTION E, "LOT F UTILITY TRENCH SECTIONS SHALL APPLY TO ALL OTHER TRENCH PAVEMENT PRECONSTRUCTION WITHIN LOT F. AS SHOWN ON SHEET E-6
8. MINIMUM HORIZONTAL SEPARATION OF POWER AND COMMUNICATIONS SHALL BE 12".

BID SET PLANS
ISSUED: 2019-12-09
NOT TO BE USED FOR CONSTRUCTION



OVERALL ELECTRICAL SITE PLAN
SCALE: 1"=100'-0"

GENERAL NOTES:

- ALL AERIAL FIBER OPTIC CABLE INSTALLED ON EXISTING TACOMA POWER(TPU), CENTURY LINK POLES ALONG PORT OF TACOMA ROAD SHALL BE INSTALLED AND LABELED (POT AND ITS/HUSKY) PER TPU STANDARDS AND REQUIREMENTS. TPU CONSTRUCTION STANDARDS ARE AVAILABLE ON ELECTRICAL CONSTRUCTION STANDARDS-MYTPU.ORG. CONTRACTOR SHALL CONTACT TPU, F & BM GROUP (PWRJOINTUTILITIES@CI.TACOMA.WA.US) PRIOR TO STARTING WORK AND COORDINATE WORK WITH TPU. THE PORT OF TACOMA HAS CONTRACTED WITH TPU FOR TREES UNDER EXISTING AERIAL LINES TO BE TRIMMED PRIOR TO START OF CONSTRUCTION.
- POTM WILL SUPPLY THREE(3) EXISTING REELS OF 3-CELL(MAXCELL) FIBER OPTIC INNER DUCT TO THE CONTRACTOR AT THE CONSTRUCTION SITE FOR INSTALLATION AS PART OF THIS PROJECT. CONTRACTOR SHALL DOCUMENT TOTAL LENGTH OF INNER DUCT INSTALLED AND RETURN ANY REMAINING INNER DUCT TO POTM AT THEIR FACILITY.
- THERE WILL BE MULTIPLE CONTRACTORS, POTM, IT, ITS/HUSKY CONTRACTORS WORKING, FURNISHING OR INSTALLING EQUIPMENT AT LOT F. WUT TENANT WILL ALSO BE USING PORTIONS OF LOT F DURING CONSTRUCTION. THIS CONTRACTOR WILL NEED TO COORDINATE WITH AND INSTALL EQUIPMENT PROVIDED AS PART OF THIS WORK.
- ELECTRICAL REQUIREMENTS ARE NOT LIMITED TO ELECTRICAL DRAWINGS AND SPECIFICATIONS. THERE IS ADDITIONAL ELECTRICAL WORK REQUIRED TO BE INCLUDED IN THE BID, INDICATED ON CIVIL AND DRAWINGS. ADDITIONAL ELECTRICAL WORK REQUIRED IN THE BID IS ALSO LOCATED IN THE SPECIFICATIONS. CONTRACTOR SHALL REVIEW ALL CIVIL AND SPECIFICATIONS FOR ADDITIONAL ELECTRICAL INFORMATION AND INCLUDE COSTS FOR THIS WORK IN THE BID.
- THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATED LINE AT 1-(800)-424-5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL LOCATE MARKS ONCE THE UTILITIES HAVE BEEN LOCATED.

ELECTRICAL SYMBOLS LEGEND

- (E) EXISTING
(N) NEW
-- UGC -- EXISTING UNDERGROUND COMMUNICATIONS CONDUIT.
— UGC — NEW UNDERGROUND COMMUNICATIONS CONDUIT.
 CONDUIT AND CONDUCTOR IDENTIFICATION AS INDICATED ON CONDUIT AND CONDUCTOR SCHEDULE.
— AC — NEW AERIAL (2)48 FIBER OPTIC(OSP) CABLES LASHED EVERY 12" WITH STAINLESS STEEL LASHING WIRE TYPE 316.045 TO 1/4" GALVANIZED, 1x7 GUY(MESSENGER) WIRE AND LABELED PER TPU STANDARDS AND REQUIREMENTS.
TPXXXX EXISTING TACOMA POWER WOOD POLE. SUBSCRIPT IS TPU POLE ID #.
 EXISTING/NEW VAULT.
 EXISTING/NEW HANDHOLE.
POT PORT OF TACOMA ENGINEER.
POTM PORT OF TACOMA FACILITIES MAINTENANCE.
POTIT PORT OF TACOMA INFORMATION TECHNOLOGY DEPARTMENT.
TPU TACOMA POWER.
NIC NOT IN CONTRACT.
OSP OUTSIDE PLANT.

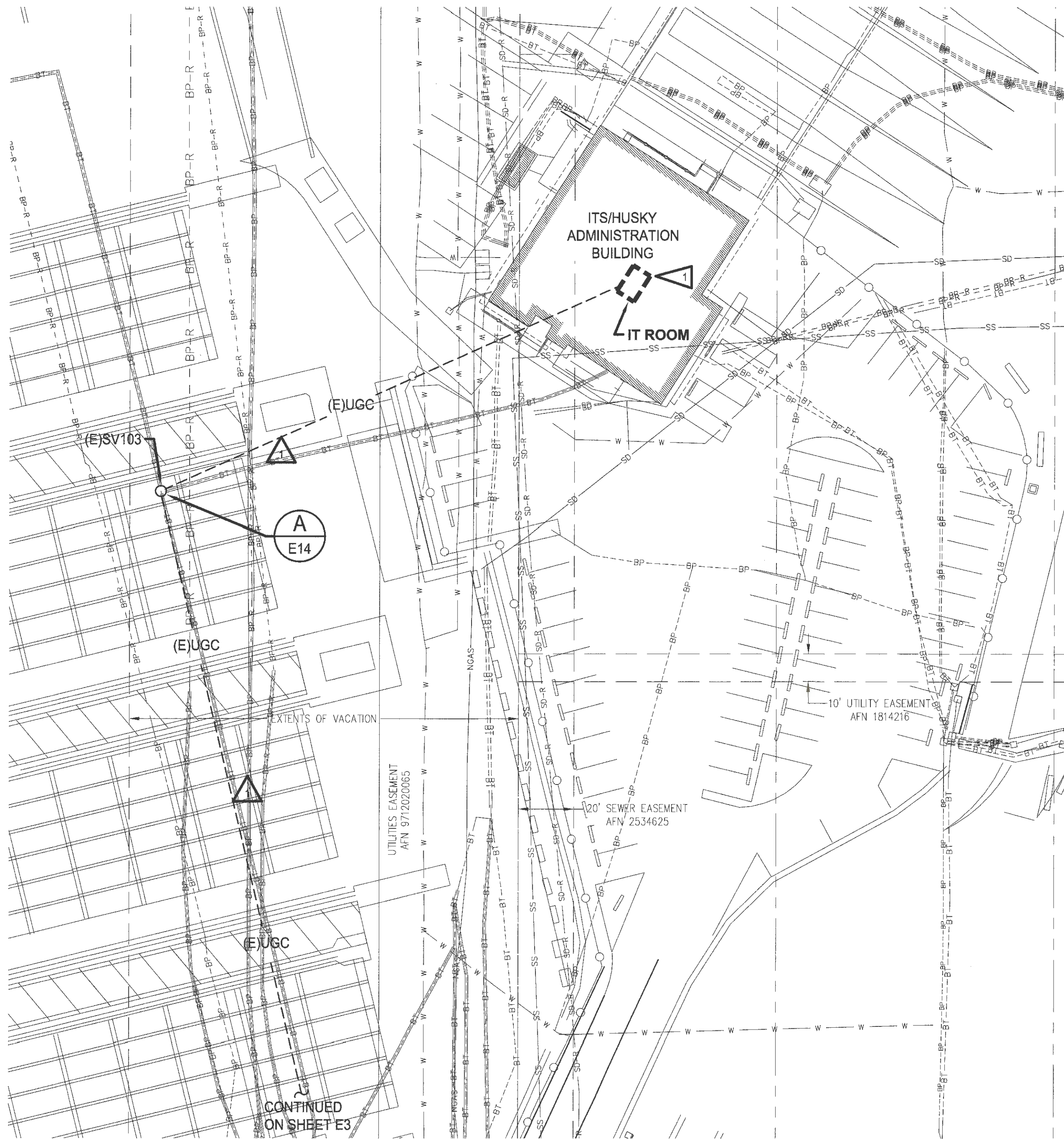
TRUE NORTH
PROJECT NORTH

GRAPHIC SCALE
1"=100'-0"
scale 100 0 100 200 feet

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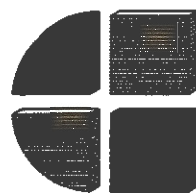
6636 E1 9 OF 22	PORT OF TACOMA FIBER TO LOT F OVERALL ELECTRICAL SITE PLAN		APPROVED: TREVOR THORNSLEY DIRECTOR PRINTED BY: Scott Dec 09, 2019 PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98401-1837	SLH 12-09-19 CHECKED BY: DATE GLW 12-09-19 PROJ. ENGR DATE SCOTT DEC 09, 2019		 600 UNIVERSITY STREET SUITE # 610 SEATTLE, WA 98101 (206) 622-0222	 P.O. BOX 1837 TACOMA, WA 98401 (253) 759-5841
	CONT/CONS: 071169 M. ID: 101286-01 PHASE: BID SET	TOWNSHIP: 21N RANGE: 3E SECTION: 34 DATE-HRZ: WA83-SF VERT: MLLW 19.39' @ TIDE 22 1933 PARCEL: DRAWING SCALE: AS NOTED	MARK: REVISION: 12/14/19 BY: DATE: APPR: DATE:				

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PARTIAL ELECTRICAL SITE PLAN
SCALE: 1"=30'-0"



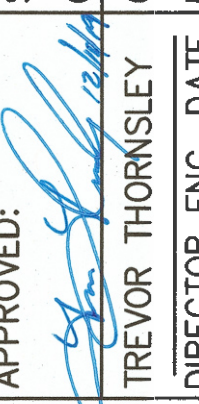
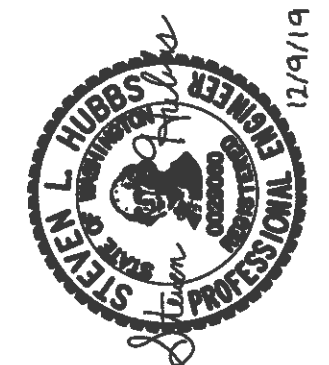


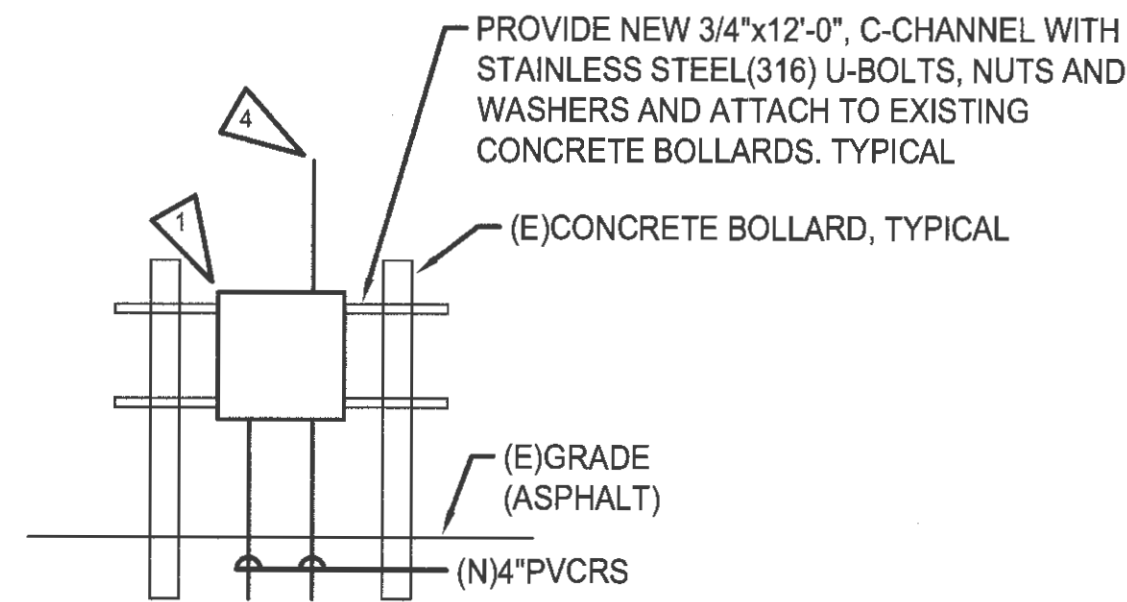
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Tacoma, WA 98405
info@crossengineers.com

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Job Number: 19-070

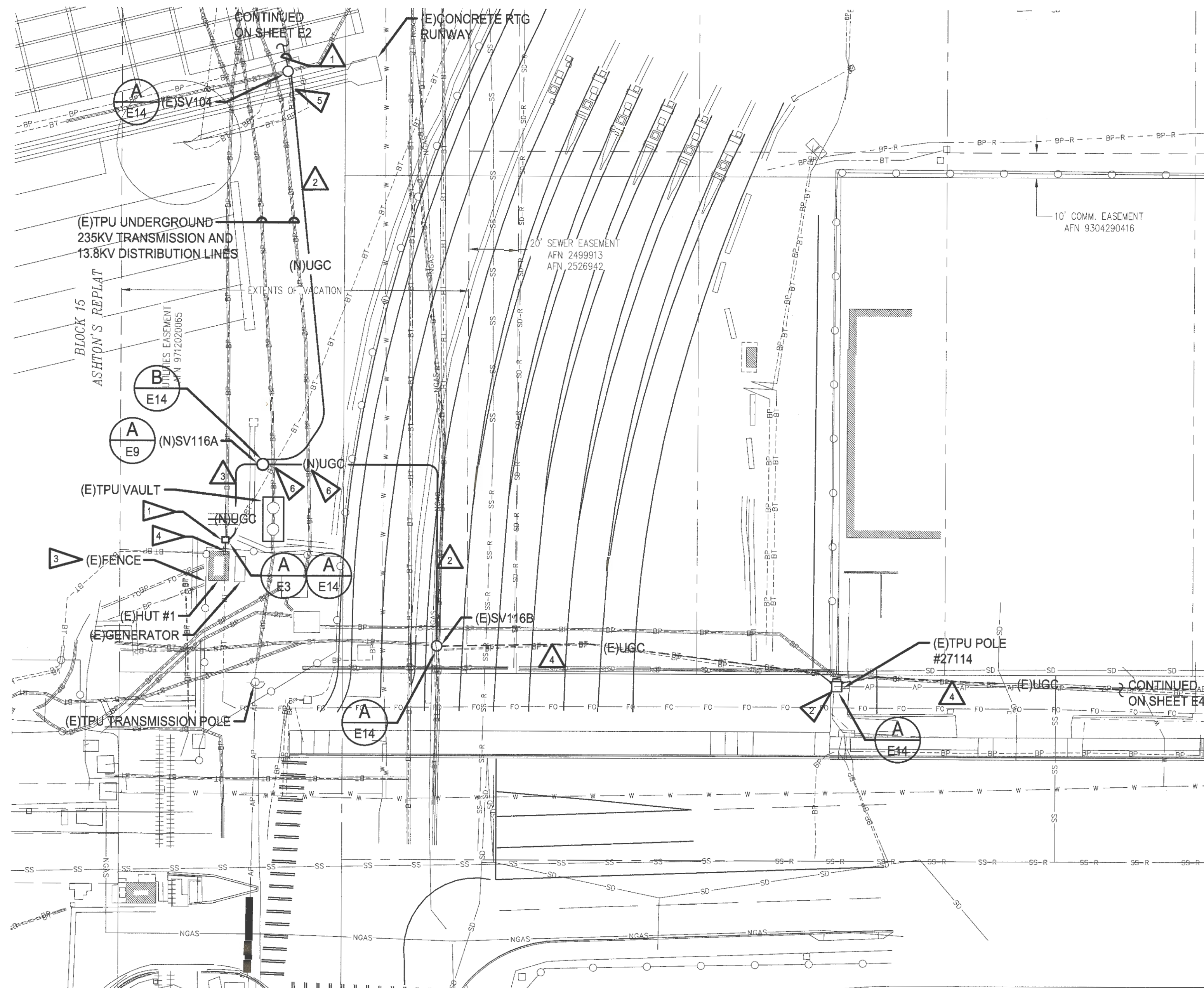
GRAPHIC SCALE
1"=30'-0"
scale 0 30 60 feet

- CONDUIT AND CONDUCTOR SCHEDULE:**
- 1 (E)4"C WITH (E)3-CELL MAXCELL FABRIC INNER DUCT. TWO (2) CELLS EMPTY. PROVIDE (2)NEW 48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES. (POT AND HUSKY).
- ELECTRICAL NOTES:**
- 1 ROUTE TWO(2) 48 FIBER COUNT, FO, OSP CABLING INTO IT ROOM. PROVIDE TWO(2) FO BULKHEADS SUITABLE TO TERMINATE 96 STRANDS OF FIBER EACH. TERMINATE ALL STRANDS WITH LC CONNECTORS. CONTRACTOR TO INSTALL POT AND ITS/HUSKY FURNISHED EQUIPMENT, TERMINATE, TEST AND LABEL ALL FIBER STRANDS.

6636 E2 10 OF 22	PORT OF TACOMA FIBER TO LOT F PARTIAL ELECTRICAL SITE PLAN		APPROVED:  TREVOR THORNSLEY DIRECTOR PRINTED BY: Scott Dec 09, 2019 PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98401-1837	SLH 12-09-19 CHECKED BY DATE CLW 12-09-19 PROJ. ENGR DATE Scott Dec 09, 2019		 600 UNIVERSITY STREET SUITE# 610 SEATTLE, WA 98101 (206) 622-0222	 P.O. BOX 1837 TACOMA, WA 98401 (253)865-5841
			MARK:	REVISION:	BY:	APPR:	DATE:



A COMMUNICATION CABINET MOUNTING
E3 NO SCALE



PARTIAL ELECTRICAL SITE PLAN

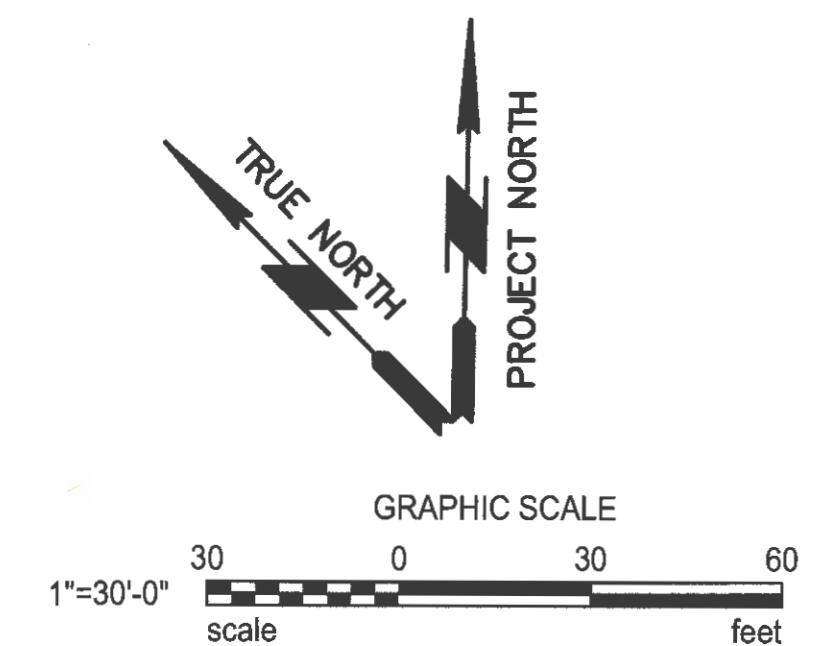
SCALE: 1"=30'-0"

CONDUIT AND CONDUCTOR SCHEDULE:

- 1 (E)3°C WITH (E)3-CELL MAXCELL FABRIC INNER DUCT PROVIDE (2)NEW 48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT FIBER CABLES.
- 2 (N)(2)4"SCHEDULE 80 PVC PROVIDE (1)4"C-EMPTY WITH PULLSTRING AND PROVIDE (1)4"C WITH (1)-MAXCELL 3-CELL INNERDUCT (1)-MAXCELL INNERDUCT CELL WITH (2)48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES. SAWCUT, TRENCH AND PATCH EXISTING PAVEMENT. SEE CIVIL.
- 3 (N)(2)4"SCHEDULE 80 PVC, (PVCRS ABOVE GRADE) PROVIDE (2)4"C WITH (1)-MAXCELL 3-CELL INNERDUCT IN EACH UTILIZE (2)-MAXCELL INNERDUCT CELLS IN ONE 4"C WITH (1)48 FIBER COUNT EACH, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES. SAWCUT, TRENCH AND PATCH EXISTING PAVEMENT. SEE CIVIL.
- 4 (E)2"C-(N)3-CELL MAXCELL FABRIC PROVIDE NEW MAXCELL 3-CELL FABRIC INNERDUCT. LEAVE (2)INNER DUCT CELLS EMPTY WITH PULLSTRING AND (1)CELL WITH (2)48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES.

ELECTRICAL NOTES:

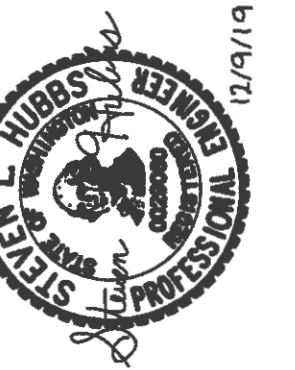
- 1 ROUTE NEW 2(1/4)8 COUNT OSP FIBER CABLE INTO NEW 36"x36"x10", NEMA 4X, 316 STAINLESS STEEL, SINGLE DOOR LOCKABLE (B-LINE OR EQUAL). COIL 50'-0" OF ITS/HUSKY (1/4)8 COUNT OSP FO CABLEING AND CONTINUE OUT OF CABINET WITHOUT TERMINATING. CONTRACTOR TO TERMINATE ON PORT PROVIDED TWO (2) FO BREAKOUT PANELS (ENTERING AND LEAVING) FOR POT (N)48 COUNT FO CABLEING. TERMINATE ALL STRANDS WITH LC CONNECTORS.
- 2 THERE ARE TWO(2) EXISTING CONDUITS STUBBED AT THIS LOCATION WITHIN 3'-0" OF EACH OTHER. CONTRACTOR SHALL PROVIDE A FREE STANDING TYPE NEMA 4X, 316 STAINLESS, SINGLE DOOR, LOCKABLE, 36"x30"x10" WITH LEGS (B-LINE OR EQUAL). PROVIDE 8"x8"x18"D CONCRETE PAD FOR EACH LEG. CONTRACTOR WILL BE REQUIRED TO REMOVE ASPHALT, HAND DIG AND EXTEND THE TWO(2) EXISTING CONDUITS INTO THEN NEW CABINET. DO NOT ATTACH CABINET TO TPU POLE. CABINET DOOR SHALL OPEN TO PROJECT WEST. PATCH ASPHALT TO MATCH EXISTING.
- 3 EXISTING TPU FENCED EQUIPMENT ENCLOSURE WITH POT IT HUT #1 AND GENERATOR. CONTRACTOR SHALL COORDINATE WITH TPU FOR ACCESS TO AREA AND POT FOR ACCESS TO HUT #1.
- 4 PROVIDE (1/4")PVCRS FROM COMMUNICATIONS CABINET THROUGH TPU FENCE AND INTO (E)HUT #1 WITH (1/4)8 COUNT, OSP FIBER CABLE INTO AND OUT OF HUT #1. TERMINATE ON POT PROVIDED CONTRACTOR INSTALLED FIBER BULKHEADS IN HUT. COORDINATE EXACT PENETRATION LOCATION WITH ENGINEER AND SEAL WEATHERTIGHT. PROVIDE ESCUTCHING AT FENCE PENETRATION.
- 5 CONTRACTOR SHALL PUSH CONDUIT UNDER EXISTING CONCRETE RTG RUNWAY AND FILL ANY VOIDS WITH CDF. DO NOT SAWCUT RTG CONCRETE RUNWAY.
- 6 WHERE COMMUNICATIONS CONDUITS CROSS EXISTING TPU DUCT BANKS CONTRACTOR SHALL ROUTE CONDUIT ABOVE TPU DUCTS AND ENCASE WITH CDF A MINIMUM OF 2'-0" PAST TPU DUCT EACH SIDE.



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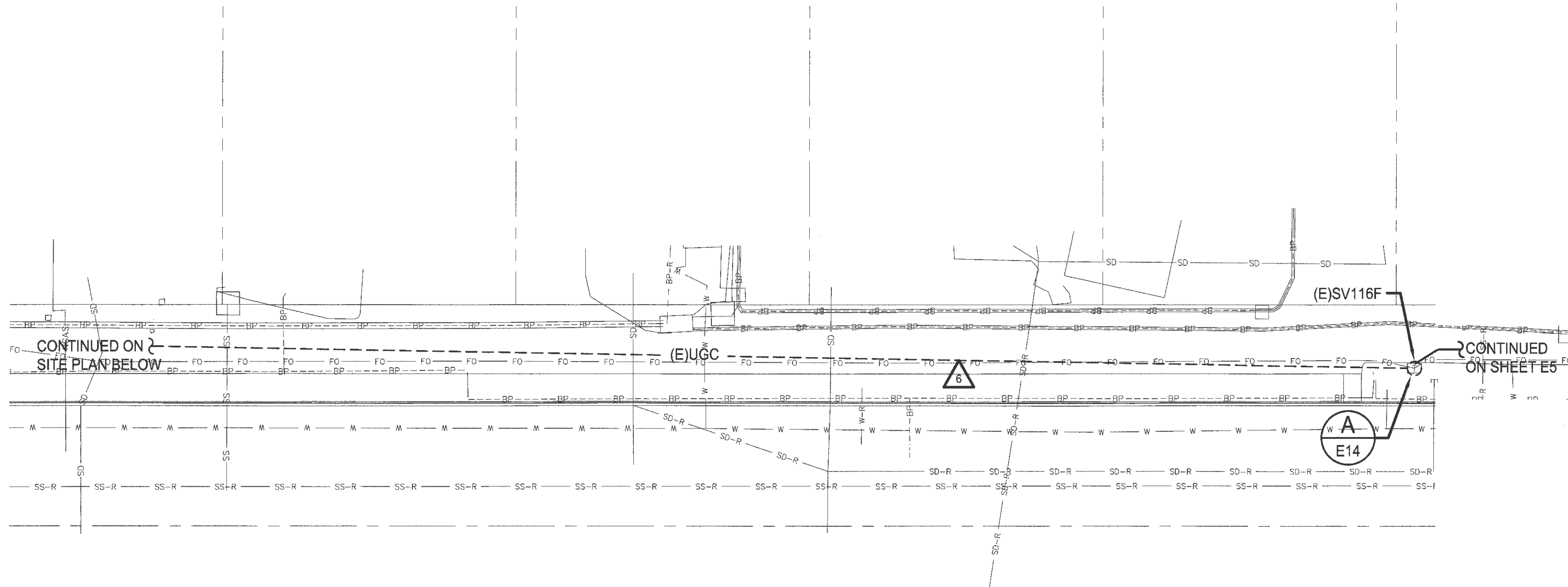


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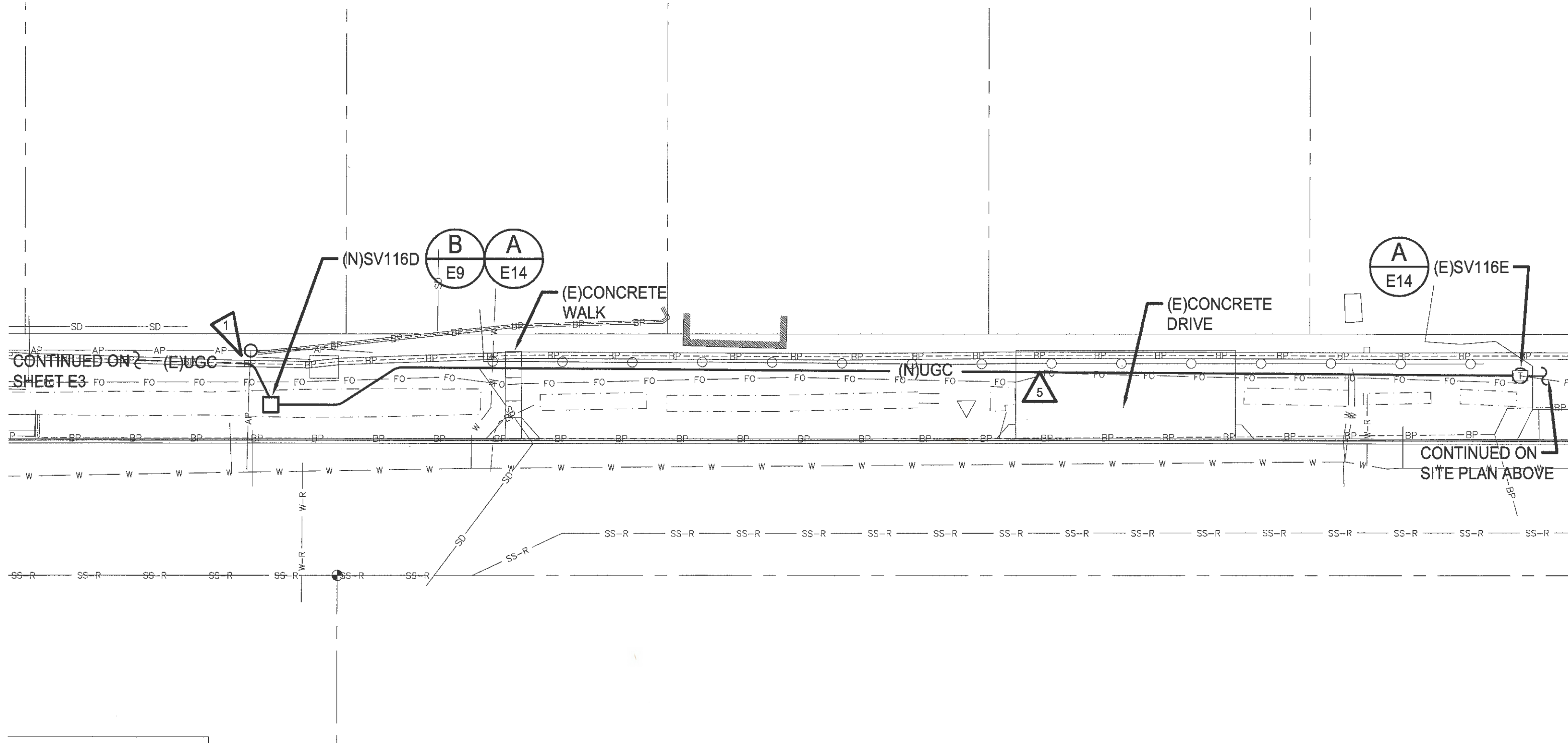
APPROVED:	SLH	12-09-19
<i>[Signature]</i>	CHECKED BY	DATE
TREVOR THORNLEY	GLW	12-09-19
DIRECTOR ENG. DATE	PROJ. ENGR	DATE
PRINTED BY: Scott Dec 09, 2019		
REPORT ADDRESS: ONE SITCUM PLAZA		
TACOMA, WA 98401-1837		

6636 E3 11 OF 22	PORT OF TACOMA FIBER TO LOT F PARTIAL ELECTRICAL SITE PLAN
CONT./CONS: 071169 M. ID: 101286-01 PHASE: BID SET	TOWNSHIP: 21N RANGE: 3E SECTION: 34 DAT-HRZ: WA83-SF VERT: MLLW 19.39' @ TIDE 22 1933 PARCEL: _____ DRAWING SCALE: AS NOTED

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PARTIAL ELECTRICAL SITE PLAN
SCALE: 1"=30'-0"



PARTIAL ELECTRICAL SITE PLAN
SCALE: 1"=30'-0"

- ELECTRICAL NOTES:**
- CONTRACTOR SHALL TRANSITION/EXTEND (E)UNDERGROUND 2" CONDUIT (STUB) AT EXISTING TACOMA POWER POLE INTO NEW VAULT.
- CONDUIT AND CONDUCTOR SCHEDULE:**
- (N)(3)-2"SCHEDULE 80 PVC
(1)-EMPTY WITH PULLSTRING
(2)-MAXCELL 3-CELL INNERDUCT WITH PULLSTRINGS
(1)-MAXCELL INNERDUCT CELL WITH (2)48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES.
 - (E)(3)2"SCHEDULE 80 PVC
(1)-EMPTY WITH PULLSTRING
(2)-MAXCELL 3-CELL INNERDUCT WITH PULLSTRINGS
(1)-MAXCELL 3-CELL INNERDUCT WITH (E)CABLE. PROVIDE (N)(2)48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES IN (1)CELL OF THE (E)MAXCELL WITH (E)CABLE.
(E)(2)2"C-WITH CABLES

GRAPHIC SCALE
1"=30'-0"
scale 0 30 60 feet

TRUE NORTH
PROJECT NORTH

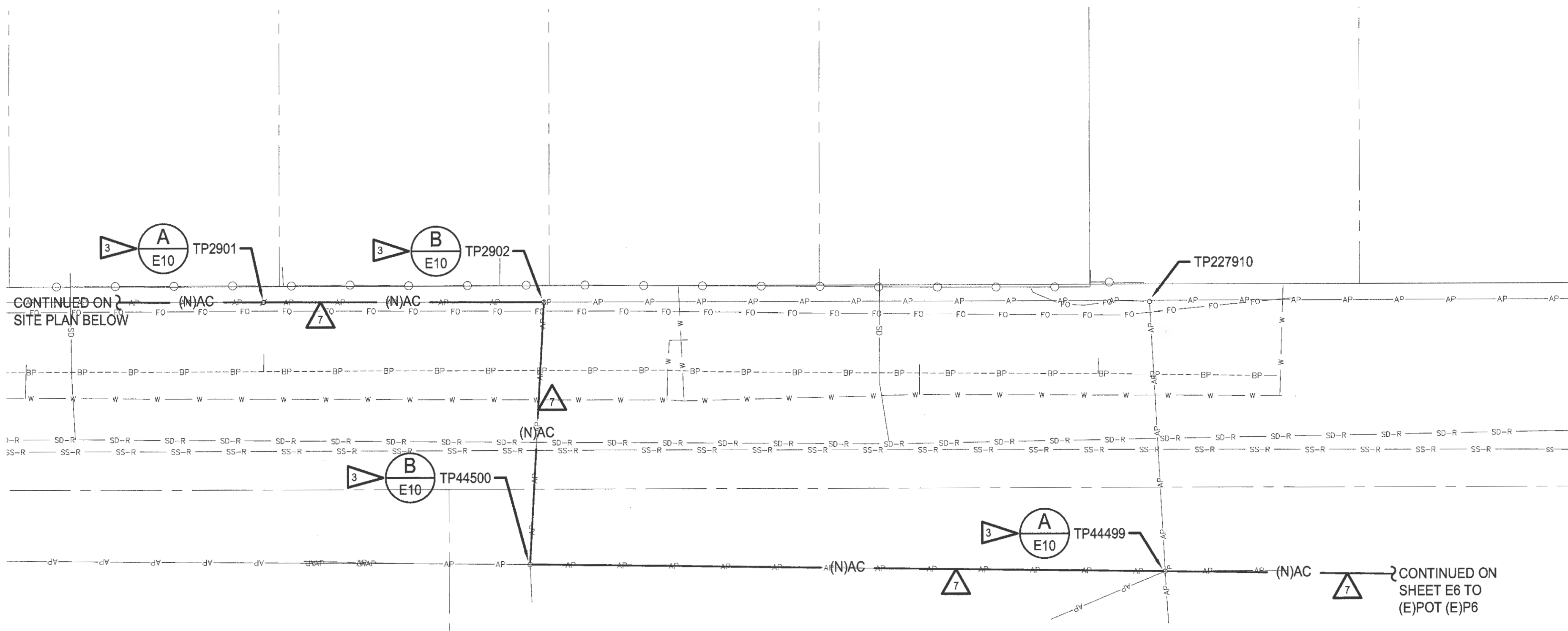
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Tacoma, WA 98405
info@crossengineers.com
Phone: (253) 759-0118
Job Number: 19-070

6636 E4 12 OF 22	PORT OF TACOMA FIBER TO LOT F PARTIAL ELECTRICAL SITE PLAN	APPROVED:	SLH 12-09-19	CHECKED BY: DATE
		TREVOR THORNSLEY	CLW 12-09-19	
CONT/CONS: 071169 M. ID: 101286-01 PHASE: BID SET	TOWNSHIP: 21N RANGE: 3E SECTION: 34 VERT: MLLW 19.39' @ TIDE 22 1933 DAT-HRZ: WA83-SF PARCEL: AS NOTED	DIRECTOR ENG. DATE	PROJ. ENGR DATE	
		PRINTED BY: Scott Dec 09, 2019		
		PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98401-1837		
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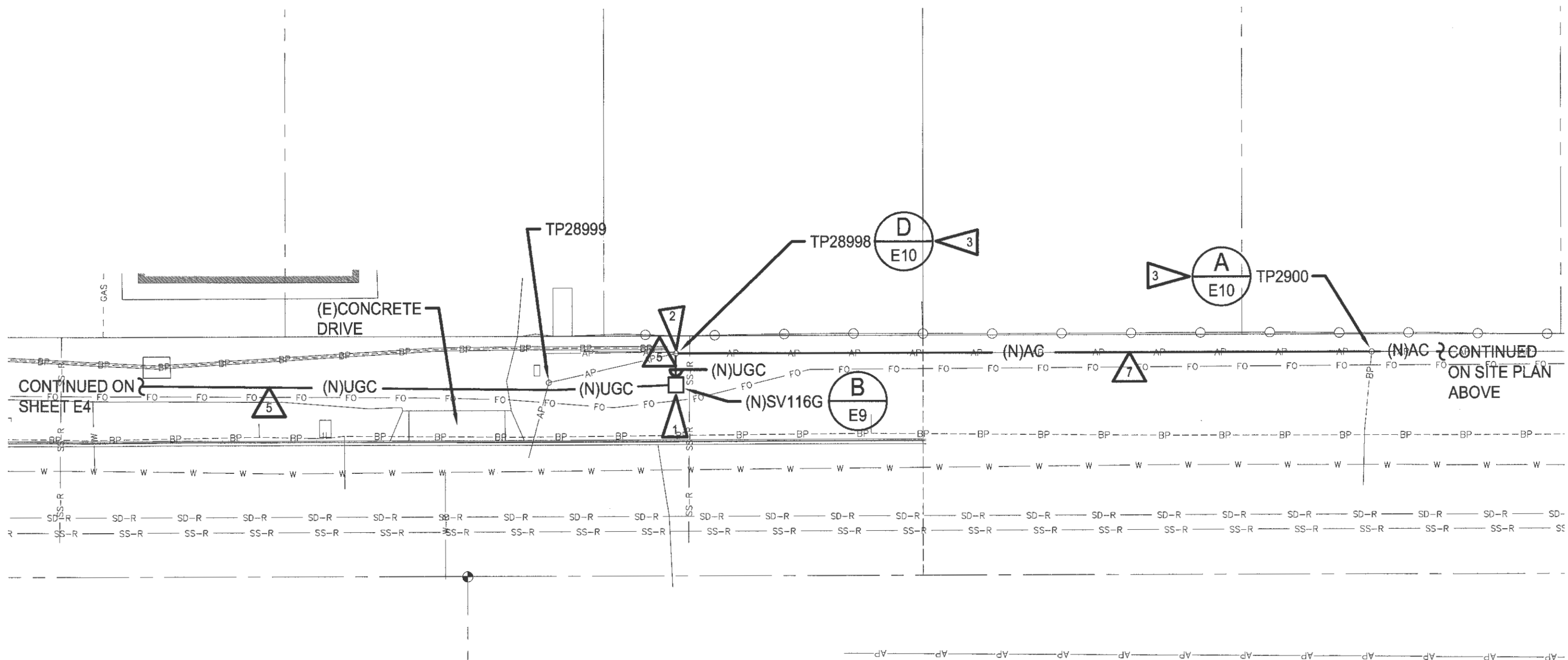
12/4/19

MARK: REVISION: BY: DATE: APPR:



PARTIAL ELECTRICAL SITE PLAN

SCALE: 1"=30'-0"



PARTIAL ELECTRICAL SITE PLAN

SCALE: 1"=30'-0"



ELECTRICAL NOTES:

- 1 CONTRACTOR SHALL PROVIDE NEW UNDERGROUND CONDUIT INTO NEW HANDHOLE.
- 2 CONTRACTOR SHALL TRANSITION (2)48 STRAND OSP FO CABLING FROM UNDERGROUND TO OVERHEAD VIA A NEW POLE CONDUIT RISER PER TPU STANDARDS AND REQUIREMENTS.
- 3 CONTRACTOR SHALL ATTACH NEW (2)48 STRAND OSP FO CABLE WITH 1/4" STEEL MESSENGER AT HEIGHT NOTED. SEE SHEET E12.

CONDUIT AND CONDUCTOR SCHEDULE:

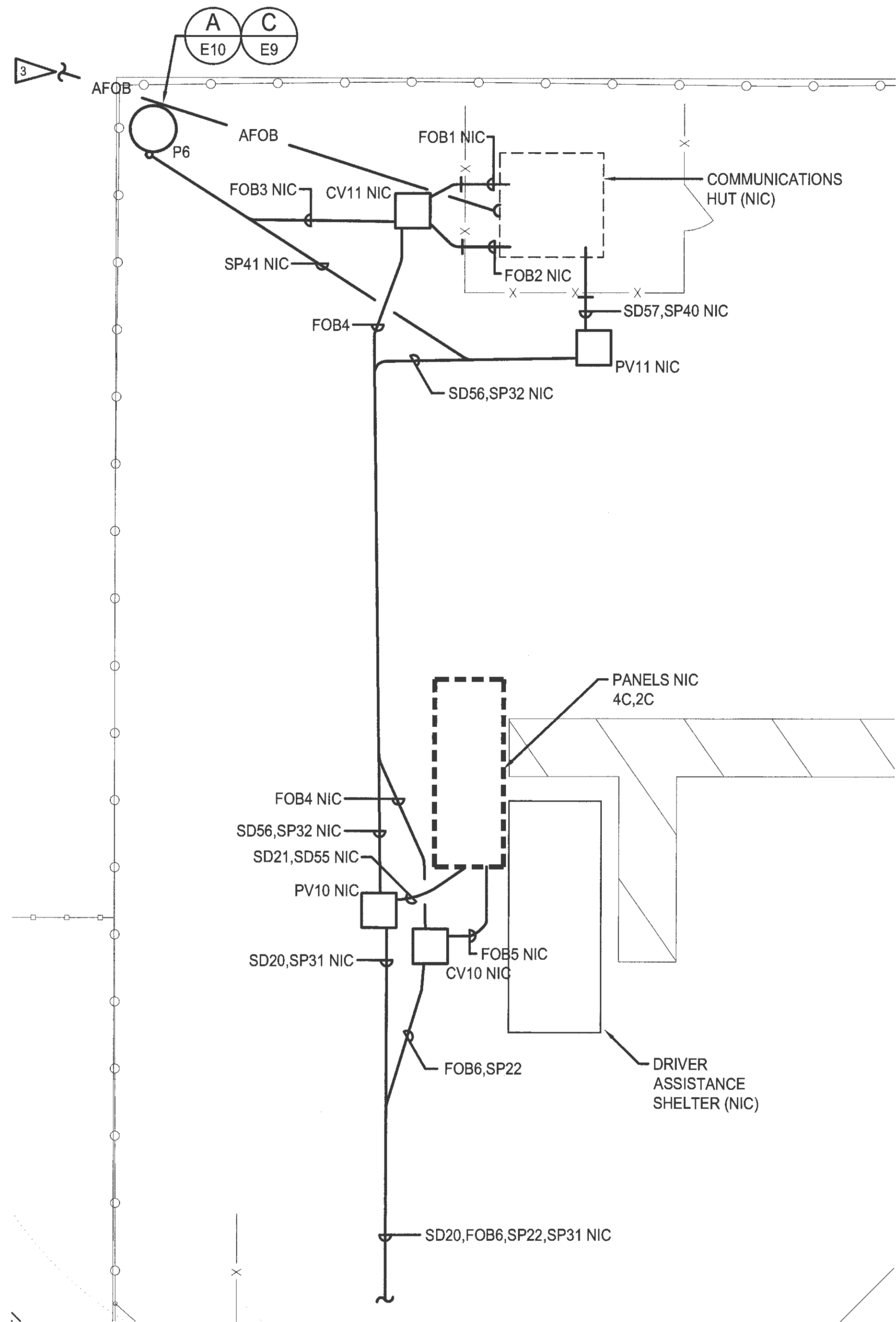
- 5 (N)(3)-2"SCHEDULE 80 PVC
(1)-EMPTY WITH PULLSTRING
(2)-MAXCELL 3-CELL INNERDUCT WITH PULLSTRINGS
(1)-MAXCELL INNERDUCT CELL WITH (2)48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES.
- 7 (N)(2)48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT FIBER CABLES, MESSENGER MOUNTED TO WOOD POLES. LASH FIBER CABLES EVER 12" TO MESSENGER.

1"=30'-0"
scale feet

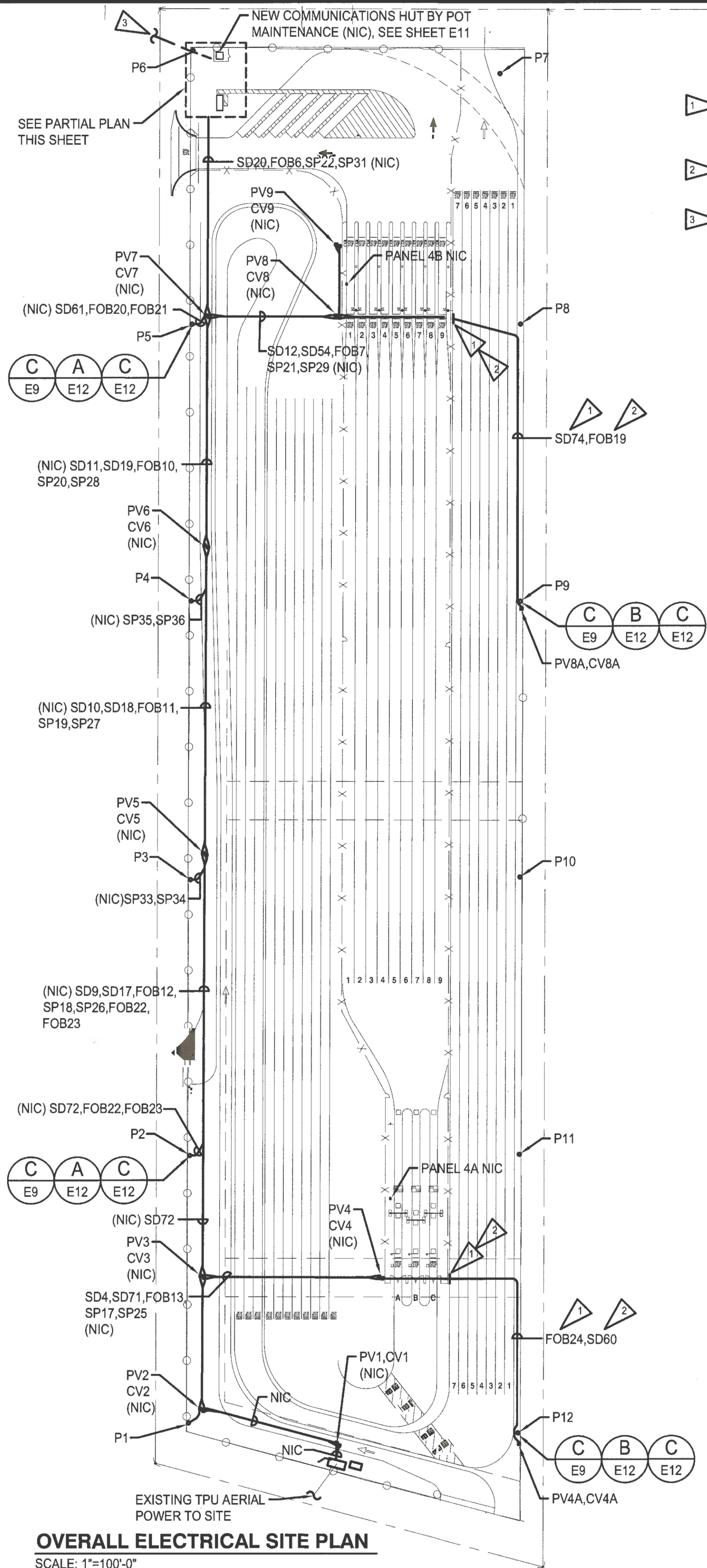
TRUE NORTH
PROJECT NORTH

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Phone: (253) 759-0118
Job Number: 19-070

6636		PORT OF TACOMA				APPROVED: 		SLH	12-09-19			600 UNIVERSITY STREET SUITE #610 SEATTLE, WA 98101 (206) 622-0222		P.O. BOX 1837 TACOMA, WA 98401 (206)383-1941	MARK:	REVISION:	BY:	APPR:	DATE:	
E5		FIBER TO LOT F				TREVOR THORNSELEY	CLW	12-09-19												
13 OF 22		PARTIAL ELECTRICAL SITE PLAN				DIRECTOR	PROJ. ENGR	DATE												
						PRINTED BY: Scot H. Dec 09, 2019	PORT ADDRESS: ONE SITCUM PLAZA													
CON/CONS: 071169		TOWNSHIP: 21N	RANGE: 3E	SECTION: 34																
M. ID: 101286-01		DAT-HRZ: WA83-SF		VERT: MLLW 19'39" @ TIDE 22 1933																
PHASE: BID SET		PARCEL:		DRAWING SCALE: AS NOTED																
				TACOMA, WA 98401-1837																

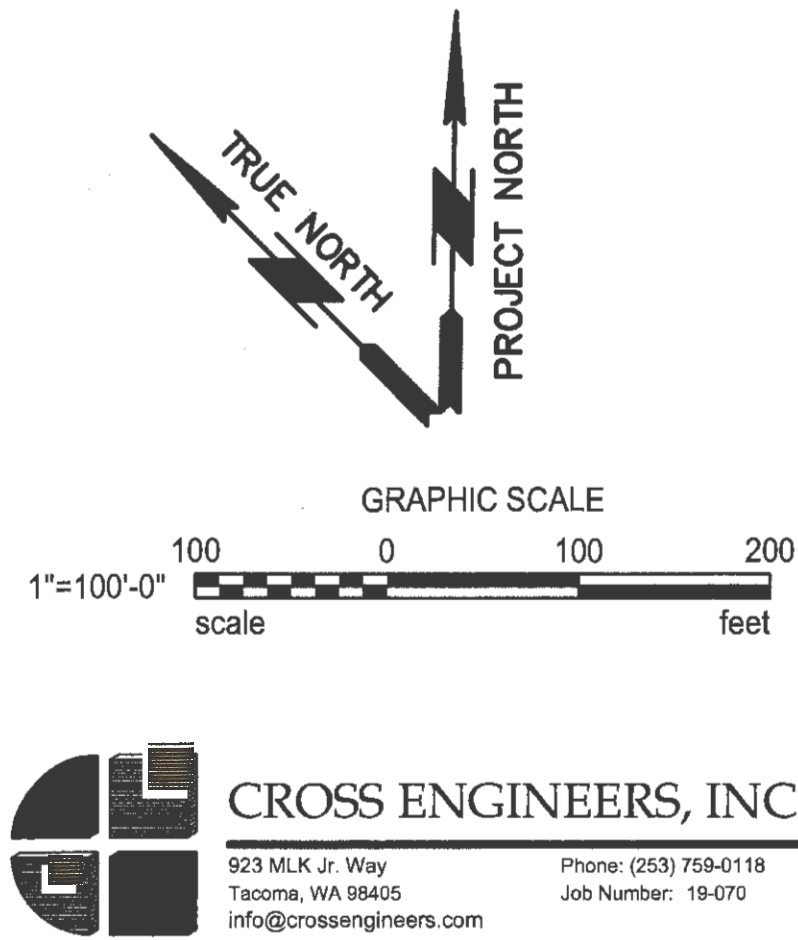


PARTIAL ELECTRICAL SITE PLAN
SCALE: 1/8"=1'-0"



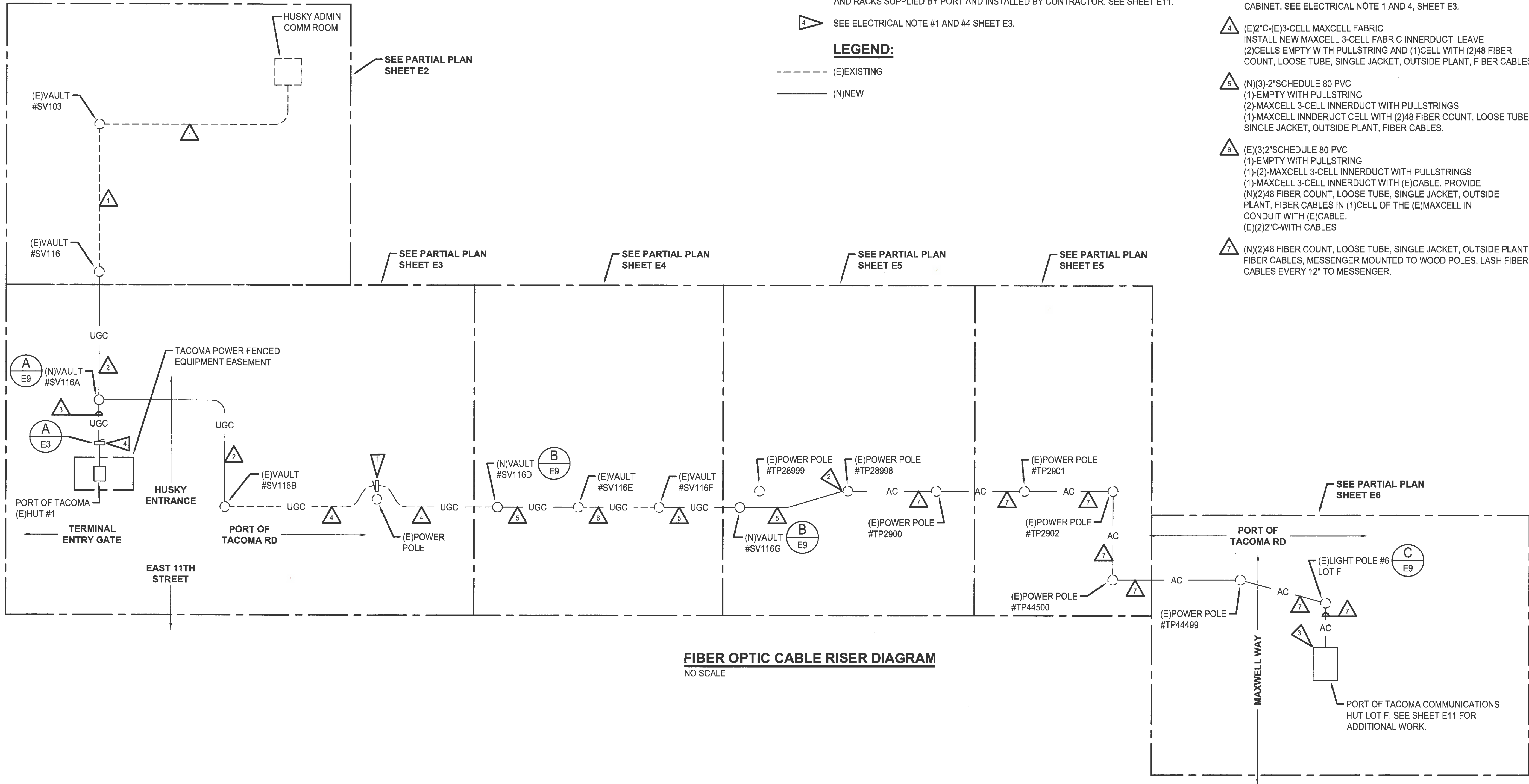
OVERALL ELECTRICAL SITE PLAN
SCALE: 1"=100'-0"

- ELECTRICAL NOTES:**
- 1 EXTENSION OF 1" POWER CONDUIT FROM THIS LOCATION TO P9 AND P12 BY POT CONTRACTOR. WIRES (2#8 CU & 1#10 CU GRD) FROM PANELS 4A AND 4B TO UNIT SUB AT EACH POLE BY POT CONTRACTOR.
 - 2 EXTENSION OF (2)2" COMMUNICATIONS CONDUIT FROM THIS LOCATION TO P9 AND P12 BY POT CONTRACTOR.
 - 3 (2) 48 COUNT, AERIAL, OSP, FO CABLE TO HUT. ATTACH TO P6.



6636 E6 14 OF 22	PORT OF TACOMA FIBER TO LOT F OVERALL LOT F ELECTRICAL SITE PLAN		APPROVED: TREVOR THORNSELEY DATE: 12-09-19	CHIEF ENGINEER DATE: 12-09-19
	CONTRACT/CONS: 071169 M. ID: 101286-01 PHASE: BID SET	TOWNSHIP: 21N RANGE: 3E SECTION: 34 TIDE: 22 1933 DRAWING SCALE: AS NOTED	DIRECTOR: SCOTT K. DEC DATE: 12-09-19 PRINTED BY: ONE SITCUM PLAZA TACOMA, WA 98401-1837	DATE: 12/4/19

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FIBER OPTIC CABLE RISER DIAGRAM
NO SCALE

ELECTRICAL NOTES:

- 1 THERE ARE TWO(2) EXISTING CONDUITS STUBBED AT THIS LOCATION WITHIN 3'-0" OF EACH OTHER. CONTRACTOR SHALL PROVIDE A FREE STANDING TYPE NEMA 4X, 316 STAINLESS, SINGLE DOOR, 36"x30"x10" WITH LEGS (B-LINE OR EQUAL). PROVIDE 8"x8"x18"D CONCRETE PAD WITH EACH LEG. CONTRACTOR WILL BE REQUIRED TO REMOVE ASPHALT, HAND DIG AND EXTEND THE TWO(2) EXISTING CONDUITS INTO THEN NEW CABINET. DO NOT ATTACH CABINET TO TPU POLE. CABINET DOOR SHALL OPEN TO PROJECT WEST. PATCH ASPHALT TO MATCH EXISTING.
- 2 PROVIDE (3)(N)2"C-SCHEDULE 80 UP POLE. CAP(2) AT 12'-0" AFG. EXTEND (1)2"C WITH (2)48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES UP POLE, ATTACH TO POLE AND CONTINUE AERIAL TO LOT F NEW HUT.
- 3 SECURE FIBER MESSENGER TO WEATHER HEAD. PROVIDE 4"PVCRS MAST WITH WEATHERHEAD AT HUT. EXTEND (2)48 FIBER COUNT CABLE THROUGH WEATHER HEAD AND TERMINATE ON PORT AND ITS/HUSKY EQUIPMENT RACKS. BULK HEADS AND RACKS SUPPLIED BY PORT AND INSTALLED BY CONTRACTOR. SEE SHEET E11.
- 4 SEE ELECTRICAL NOTE #1 AND #4 SHEET E3.

LEGEND:

- (E)EXISTING
- (N)NEW

CONDUIT AND CONDUCTOR SCHEDULE:

- 1 (E)4"C WITH (E)3-CELL MAXCELL FABRIC INNER DUCT PROVIDE (2)NEW 48 FIBER COUNT, IN SINGLE CELL, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES.
- 2 (N)(2)4"SCHEDULE 80 PVC PROVIDE (1)4"C-EMPTY WITH PULLSTRING PROVIDE (1)4"C WITH (2)-MAXCELL 3-CELL INNERDUCT WITH PULLSTRINGS. PROVIDE (2)48 FIBER COUNT IN SINGLE CELL, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES.
- 3 (N)(2)4"SCHEDULE 80 PVC (PVCRS ABOVE GRADE) PROVIDE (1)4"C-EMPTY WITH PULLSTRING PROVIDE (1)4"C WITH (2)-MAXCELL 3-CELL INNERDUCT WITH PULLSTRINGS. UTILIZE (2)-MAXCELL INNERDUCT CELLS EACH WITH (2)48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES INTO CABINET. SEE ELECTRICAL NOTE 1 AND 4, SHEET E3.
- 4 (E)2"C-(E)3-CELL MAXCELL FABRIC INSTALL NEW MAXCELL 3-CELL FABRIC INNERDUCT. LEAVE (2)CELLS EMPTY WITH PULLSTRING AND (1)CELL WITH (2)48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES.
- 5 (N)(3)-2"SCHEDULE 80 PVC (1)-EMPTY WITH PULLSTRING (2)-MAXCELL 3-CELL INNERDUCT WITH PULLSTRINGS (1)-MAXCELL INNERDUCT CELL WITH (2)48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES.
- 6 (E)(3)2"SCHEDULE 80 PVC (1)-EMPTY WITH PULLSTRING (1)-(2)-MAXCELL 3-CELL INNERDUCT WITH PULLSTRINGS (1)-MAXCELL 3-CELL INNERDUCT WITH (E)CABLE. PROVIDE (N)(2)48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT, FIBER CABLES IN (1)CELL OF THE (E)MAXCELL IN CONDUIT WITH (E)CABLE. (E)(2)2"C-WITH CABLES
- 7 (N)(2)48 FIBER COUNT, LOOSE TUBE, SINGLE JACKET, OUTSIDE PLANT FIBER CABLES, MESSENGER MOUNTED TO WOOD POLES. LASH FIBER CABLES EVERY 12" TO MESSENGER.

6636 E7 15 OF 22	PORT OF TACOMA FIBER TO LOT F FIBER OPTIC CABLE RISER DIAGRAM				APPROVED: TREVOR THORNLEY DIRECTOR ENG. DATE PRINTED BY: Scott Dec 09, 2019 PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98401-1837		600 UNIVERSITY STREET SUITE# 610 SEATTLE, WA 98101 (206) 622-0222 moftatt & nichol		Port of Tacoma P.O. BOX 1887 TACOMA, WA 98401 (206)368-3441	
	CONTRACT/CONS: 071169 M. ID: 101286-01 PHASE: BID SET	TOWNSHIP: 21N DAT-HRZ: WA83-SF PARCEL:	RANGE: 3E VERT: MLLW 19.39' @ TIDE 22 1933 DRAWING SCALE: AS NOTED	SECTION: 34	SJH: 12-09-19 CHECKED BY: CLW PROJ. ENGR: DATE SCOTT DEC 09, 2019	DATE: 12-09-19 DATE: 12-09-19 DATE: 12-09-19 DATE: 12/9/19	MARK:	REVISION:	BY:	APPR: