

ALAMEDA COUNTY FAIRMONT CAMPUS BHCS DATA UPGRADE

15430 FOOTHILL BLVD
SAN LEANDRO, CA 94575
PROJECT NO. 15024

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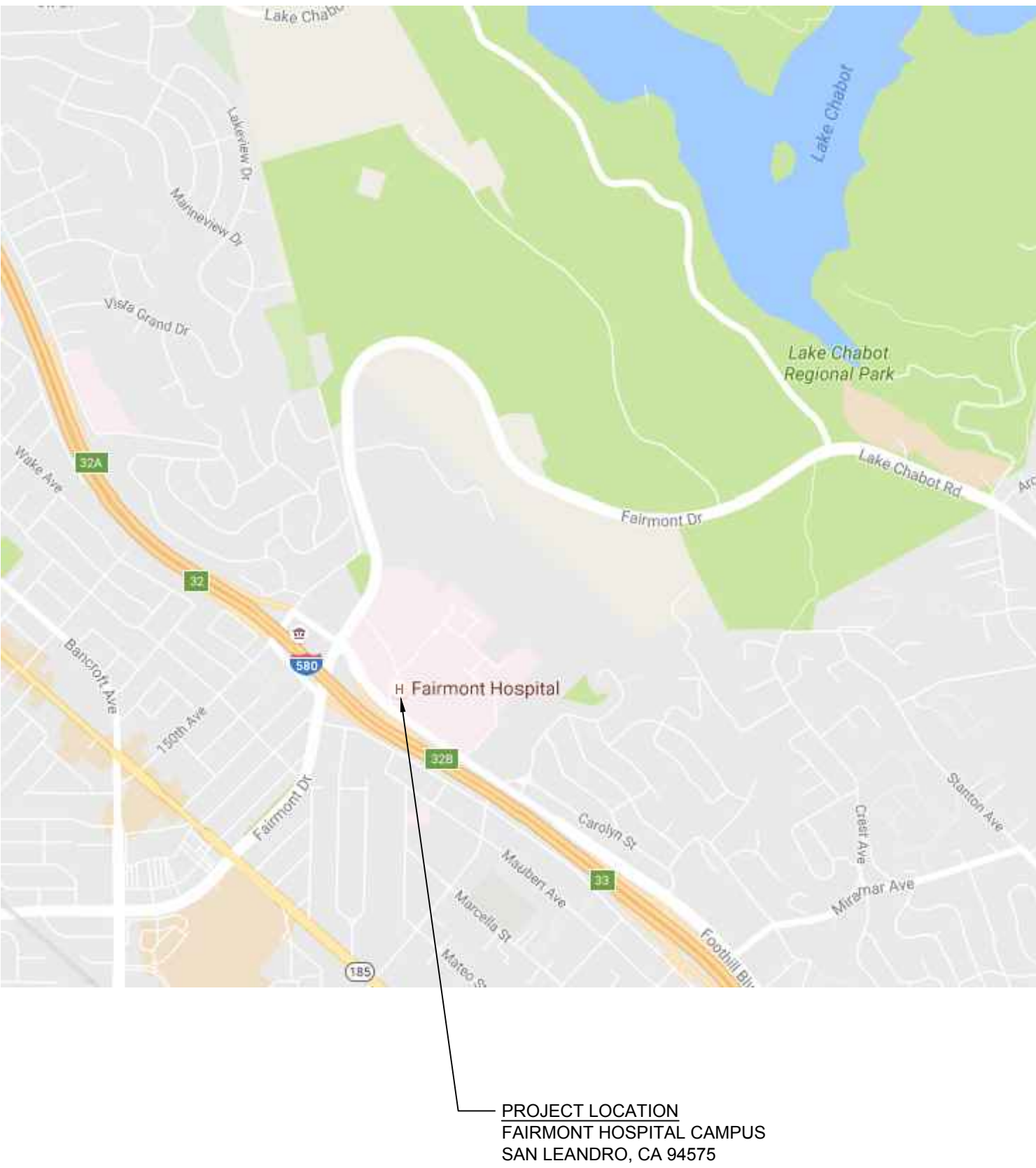
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VICINITY MAP



PROJECT LOCATION
FAIRMONT HOSPITAL CAMPUS
SAN LEANDRO, CA 94575

SHEET INDEX

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PROJECT DESCRIPTION

THIS PROJECT ENTAILS THE UPGRADE OF COMMUNICATION PATHWAYS TO FIBER CABLING FOR KEY BHCS FACILITIES ON THE FAIRMONT HOSPITAL CAMPUS. THE OBJECTIVE IS TO UPGRADE THE EXISTING BACKBONE CABLING INFRASTRUCTURE TO SUPPORT FUTURE DATA SERVICES.

CODE REFERENCE

- 2016

CALIFORNIA BUILDING CODE (CBC)
PART 2, TITLE 24, CCR
(2015 IBC AND 2016 CALIFORNIA AMENDMENTS)
- 2016

CALIFORNIA ELECTRICAL CODE (CEC)
PART 3, TITLE 24, CCR
(2015 NEC AND 2016 CALIFORNIA AMENDMENTS)
- 2016

CALIFORNIA FIRE CODE (CFC)
PART 9, TITLE 24, CCR
(2015 IFC AND 2016 CALIFORNIA AMENDMENTS)

CALIFORNIA CODE REGULATIONS (CCR), TITLE 8 - INDUSTRIAL RELATIONS, SUBCHAPTER 4, CONSTRUCTION SAFETY ORDERS.

CALIFORNIA CODE REGULATIONS (CCR), TITLE 19 - PUBLIC SAFETY VOLUME 25, ARTICLE 14, SECTION 18958, HEALTH AND SAFETY CODE.

THE CONTRACTOR IS REQUIRED TO COMPLY WITH THE ABOVE CODES AND REGULATIONS AND ALL OTHER CODES OR ZONING REQUIREMENTS. ADVISE ENGINEER AND CLIENT OF ANY NON-COMPLIANCE IN THE CONSTRUCTION DOCUMENTS PRIOR TO PROCEEDING WITH WORK.



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ALAMEDA COUNTY FAIRMONT CAMPUS
BHCS DATA UPGRADE II

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SHEET TITLE

TITLE SHEET

REVISIONS

09-07-2018	PLAN REVIEW EDITS

DRAWN BY

Patrick Ostrea

CHECKED BY

Jason Nguyen

JOB NO.

2018-0283

DATE

09-07-2018

SHEET NUMBER

T0.0

PROJECT 2018-0283
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SYMBOL LIST

NOTE: This is a standard symbol list and not all items listed may be used.

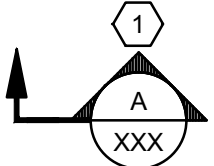
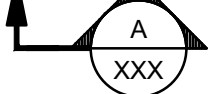
Abbreviations

(E)	EXISTING
(N)	NEW
A	AMPERES, AMBER
AFC	ABOVE FINISHED CEILING
AHJ	AUTHORITY HAVING JURISDICTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ARF	ABOVE RAISED FLOOR
AWG	AMERICAN WIRE GAUGE
C	CONDUIT, CLOSE, CONTROL
CA	CABLE
CAT	CATEGORY
CLG	CEILING
COM	COMMUNICATION
COORD	COORDINATE
CU	COPPER
DIA	DIAMETER
DIM	DIMENSION
DIV	DIVISION
DTL	DETAIL
DWG	DRAWING
E	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
FT	FOOT, FEET
G, GND	GROUND
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
IN	INCH, INCHES
KV	KILOVOLT
KVA	KILOVOLT AMPERES
KW	KILOWATT
LED	LIGHT EMITTING DIODE
N	NEUTRAL
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NESC	NATIONAL ELECTRIC SAFETY CODE
NTS	NOT TO SCALE
PH	PHASE
RFI	REQUEST FOR INFORMATION
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES
UON	UNLESS OTHERWISE NOTED
V	VOLTS, VOLTAGE

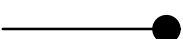
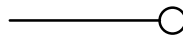
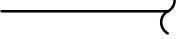
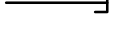
Connections / Equipment

Ⓢ OR Ⓜ JUNCTION BOX

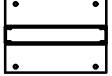
General

	EXISTING WORK
	NEW WORK
	KEYED NOTE
	SECTION NUMBER AND SHEET LOCATION

Raceways

	CONDUIT CONCEALED IN WALL OR CEILING SPACE
	CONDUIT ROUTED BELOW FLOOR / GRADE
	CONDUIT ELLED DOWN
	CONDUIT ELLED UP
	CONDUIT/WIRING CONTINUATION
	CONDUIT/WIRING STUBBED OUT WITH END CAP OR INSULATED PLASTIC BUSHING

Equipment

	2-POST EQUIPMENT RACK
	DOUBLE-SIDED VERTICAL WIRE MANAGEMENT

GENERAL NOTES

- A. COORDINATE WITH OWNER SO THAT WORK CAN BE SCHEDULED NOT TO INTERRUPT OPERATIONS, NORMAL ACTIVITIES, BUILDING ACCESS, ACCESS TO DIFFERENT AREAS. THE OWNER WILL COOPERATE TO THE BEST OF THEIR ABILITY TO ASSIST IN A COORDINATED SCHEDULE, BUT WILL REMAIN THE FINAL AUTHORITY AS TO TIME OF WORK PERMITTED.
- B. COORDINATE THE EXACT LOCATION OF EXISTING UTILITIES AND EQUIPMENT PRIOR TO COMMENCEMENT OF WORK. COMPENSATE THE OWNER FOR DAMAGES CAUSED BY THE FAILURE TO LOCATE AND PRESERVE UTILITIES. REPLACE DAMAGED ITEMS WITH NEW MATERIAL TO MATCH EXISTING.
- C. MAINTAIN ELECTRICAL CONTINUITY OF EXISTING SYSTEMS. REMOVE OR RELOCATE ELECTRICAL BOXES, CONDUIT, WIRING, EQUIPMENT, LUMINAIRES, AND THE LIKE, AS REQUIRED IN REMOVED OR REMODELED AREAS IN THE EXISTING CONSTRUCTION AFFECTED BY THIS WORK.
- D. MAINTAIN ACCESS TO EXISTING ELECTRICAL INSTALLATIONS WHICH REMAIN ACTIVE. MODIFY INSTALLATION OR PROVIDE ACCESS PANEL AS APPROPRIATE.
- E. CONNECT EQUIPMENT AND DEVICES FURNISHED UNDER OTHER DIVISIONS OF THIS CONTRACT, BY OWNER OR BY OTHER CONTRACTS.
- F. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL CONDUIT TRENCHING WITH OTHER DISCIPLINES TO AVOID CONFLICT.
- G. MINIMUM SIZE FOR EXTERIOR BELOW GRADE CONDUIT SHALL BE 1-1/4", U.O.N.
- H. COMMUNICATIONS PATHWAYS, MANHOLES AND POLES ARE SHOWN DIAGRAMMATICALLY. LOCATIONS ARE APPROXIMATE UNLESS SPECIFICALLY DIMENSIONED. FIELD COORDINATE ALL WORK.
- I. CONSTRUCTION DETAILS SHOW TYPICAL INSTALLATION, UON, AND APPLY TO ALL COMMUNICATIONS WORK INCLUDED IN THE SUMMARY OF WORK FOR THIS PACKAGE EVEN THOUGH NOT SPECIFICALLY REFERENCED ON THE PLAN DRAWINGS.
- J. INSTALL PULL STRINGS IN ALL CONDUITS AT THE TIME OF CONDUIT AND CABLE INSTALLATION.
- K. CONTRACTOR SHALL REPLACE ALL PAVING, LANDSCAPING, IRRIGATION, LIGHTING, ELECTRICAL WIRING, ETC. REMOVED AND/OR DAMAGED DURING THE COURSE OF THEIR WORK.
- L. CONTRACTOR SHALL DEVELOP AND SUBMIT TRAFFIC ROUTING & CONTROL PLANS FOR APPROVAL BY ALAMEDA COUNTY GSA/CP AND PROVIDE TRAFFIC CONTROL PER APPROVED PLANS DURING CONSTRUCTION.
- M. CONTRACTOR SHALL DEVELOP AND SUBMIT A WORK PLAN THAT INCLUDES BUT NOT LIMITED TO CONSTRUCTION PHASING & SEQUENCING, STAGING AREA, TRENCHING PLAN & SAFETY PROCEDURES.
- N. DRAWINGS AND SPECIFICATIONS COMPLIMENT EACH OTHER. REQUIREMENT BY EITHER INFERS REQUIREMENT FOR BOTH.
- O. REFER TO DIVISION 27 SPECIFICATIONS FOR ADDITIONAL COMMUNICATIONS REQUIREMENTS.



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SYMBOL LIST &
GENERAL NOTES

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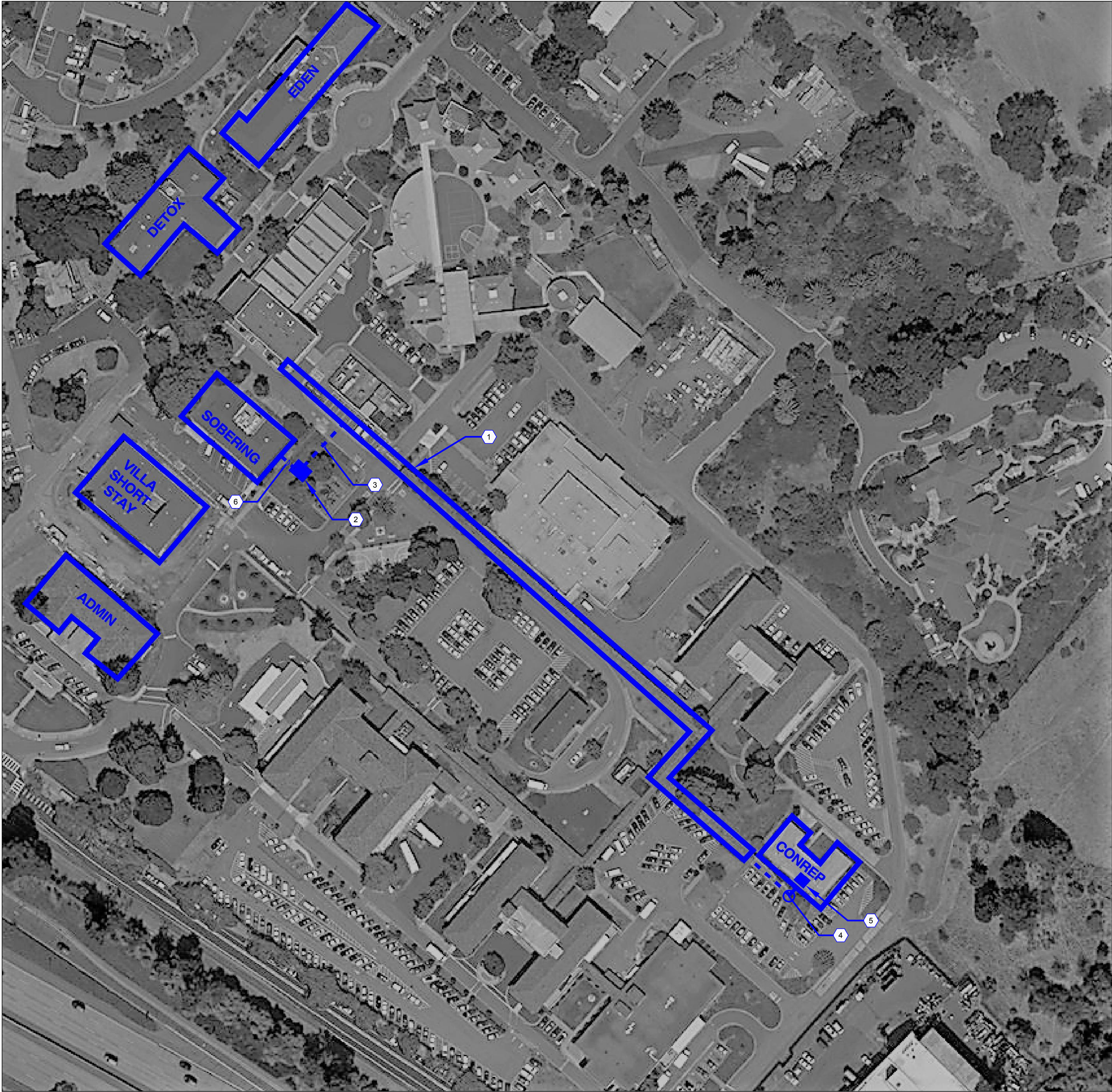
SHEET NUMBER

T0.1

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GENERAL SHEET NOTES

- A. CONTRACTOR TO VISIT SITE AND VERIFY THE EXACT CONDITIONS RELATING TO SITE WORK AND OBTAIN SUCH INFORMATION AS MAY BE NECESSARY TO PRESENT AN INTELLIGENT AND CONCLUSIVE BID. NO ALLOWANCE WILL BE MADE FOR ANY EXTRA EXPENSE DUE TO FAILURE TO MAKE SUCH A VISIT. VERIFY ALL ACTUAL FIELD CONDITIONS.
- B. ALL SITE WORK IS SHOWN DIAGRAMMATICALLY. CONTRACTOR TO VERIFY EXACT DISTANCES AND ROUTING IN FIELD. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND COORDINATING EXISTING UTILITIES LINES PRIOR TO THE START OF CONSTRUCTION.
- C. THE NATURE OF THE WORK REQUIRES DISTURBANCES OF EXISTING SITE SURFACE INSTALLATIONS BY TRENCHING. CONTRACTOR SHALL CONSULT WITH OWNER'S REPRESENTATIVE A MINIMUM OF SEVEN DAYS PRIOR TO OPENING ANY TRENCH OR DOING EXCAVATION. TAKE PROPER STEPS TO PROTECT EXISTING PLANTINGS IN THE AREA TO BE DISTURBED. CONTRACTOR SHALL REPLACE IN KIND ANY DAMAGED SOD, PLANTS OR IRRIGATION LINES.
- D. THE ROUTING OF TRENCHING IS GENERALLY SHOWN ON THE DRAWINGS, WHICH WERE PREPARED WITHOUT INDICATION OF EXISTING VEGETATION. CONTRACTOR, CONSULTING WITH THE OWNER'S REPRESENTATIVE WHERE NECESSARY, SHALL ROUTE TRENCHES TO AVOID TREES, AND WHERE POSSIBLE, SHRUBBERY, AND OTHER LANDSCAPING. THE ROUTE OF TRENCHES SHALL BE STAKED, AND SUFFICIENT TIME ALLOWED PRIOR TO EXCAVATION FOR OWNER TO VERIFY AND APPROVE ROUTE.
- E. CONTRACTOR SHALL PLAN HIS OPERATION TO AVOID DAMAGE TO ADJACENT PLANTINGS. DO NOT DISTURB EXISTING EARTH GRADES WITHIN THE DRIP LINE OF EXISTING TREES TO REMAIN.

SHEET KEYNOTES

- 1 EXISTING UNDERGROUND UTILITY TUNNEL.
- 2 EXISTING COMMUNICATIONS BOX.
- 3 PROVIDE (1) NEW 4" UNDERGROUND CONDUIT. ROUTE FROM (E) COMMUNICATIONS BOX TO (E) UNDERGROUND UTILITY TUNNEL. SEE 3/T3.1 FOR TRENCHING DETAIL AND 2/T3.1 FOR CABLING QUANTITIES.
- 4 PROVIDE (1) NEW 4" UNDERGROUND CONDUIT. ROUTE FROM (E) UNDERGROUND UTILITY TUNNEL TO CONREP TEL/DATA CLOSET. SEE 3/T3.1 FOR TRENCHING DETAIL AND 2/T3.1 FOR CABLING QUANTITIES.
- 5 APPROXIMATE LOCATION OF CONREP TEL/DATA CLOSET.
- 6 EXISTING 4" CONDUIT PATHWAY.



SHEET TITLE
SITE PLAN
-TECHNOLOGY

REVISIONS	
09-07-2018	PLAN REVIEW EDITS

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INTERFACE ENGINEERING

GENERAL SHEET NOTES

A. ALL FIBER CABLING TO TERMINATE ON LC TYPE CONNECTORS AT INDICATED IDF ROOMS. SEE ALSO SPECIFICATION 27 13 00.



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DETAILS
- TECHNOLOGY

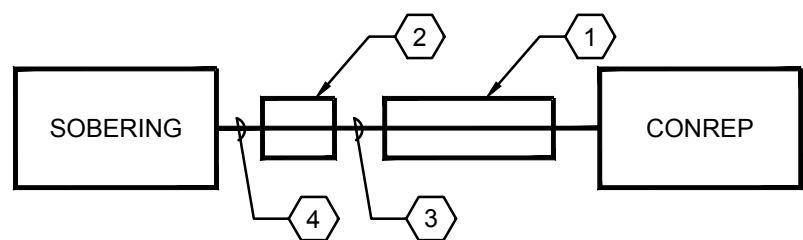
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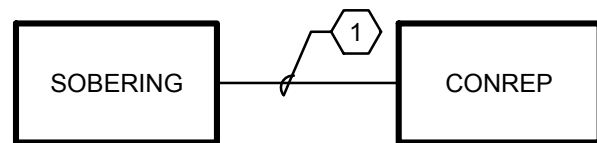
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DETAIL KEYNOTES

- EXISTING UTILITY TUNNEL
- EXISTING PULLBOX
- NEW (1)-4" CONDUIT
- EXISTING 4" CONDUIT PATHWAY

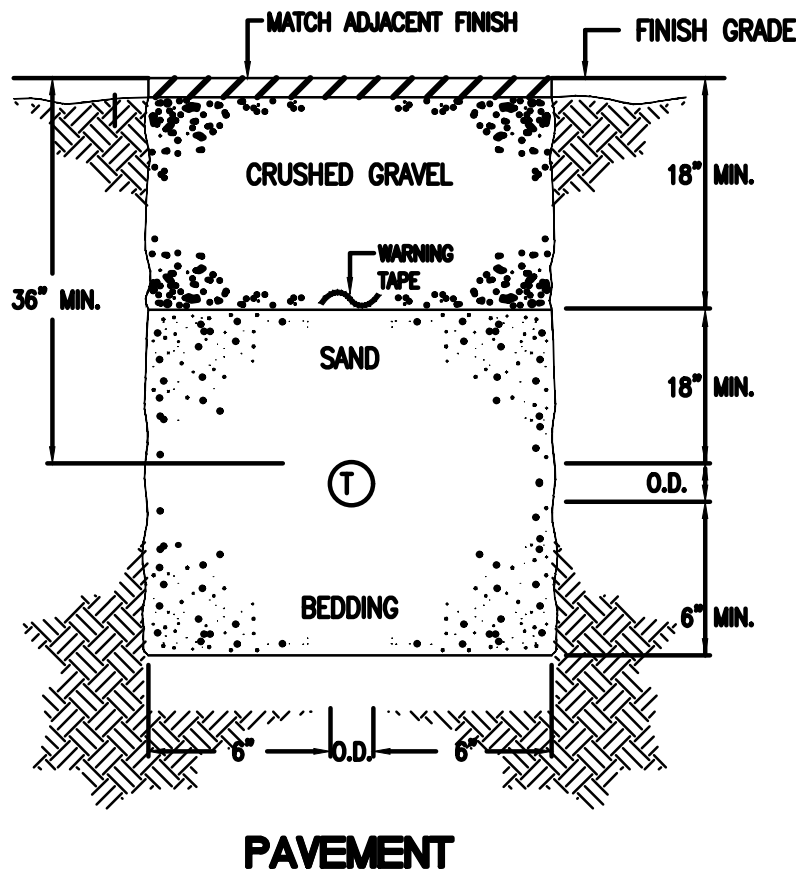
1 CONDUIT PATHWAY DIAGRAM
NO SCALE



DETAIL KEYNOTES

- PROVIDE (1) 24-STRAND SINGLE MODE OUTDOOR FIBER CABLE IN 1" FIBER INNERDUCT. SUPPORT INNERDUCT RUN INSIDE UNDERGROUND UTILITY TUNNEL.

3 CABLING DIAGRAM
NO SCALE



NOTES

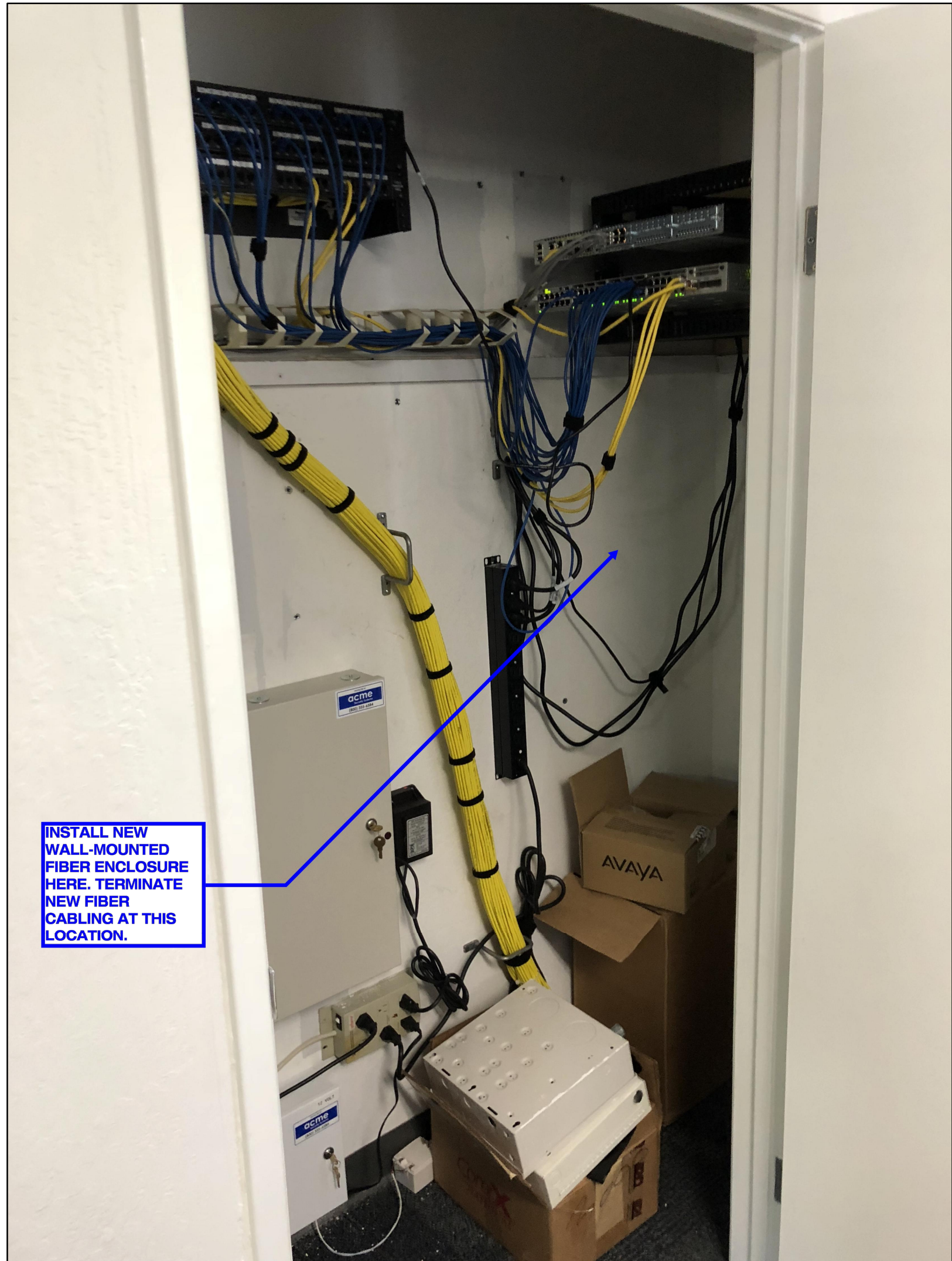
- ALL TRENCHES MUST CONFORM TO O.S.H.A. REQUIREMENTS.
- SAND BEDDING MATERIAL REQUIRES 90% COMPACTION MINIMUM.
- CRUSHED GRAVEL MATERIAL REQUIRES 95% COMPACTION MINIMUM.
- MATCH PATCHING TO EXISTING.

2 TYPICAL TRENCH DETAILS
NO SCALE



EXISTING FIBER ENCLOSURE. TERMINATE NEW FIBER CABLING AT THIS LOCATION.

1 SOBERING IDF
NO SCALE

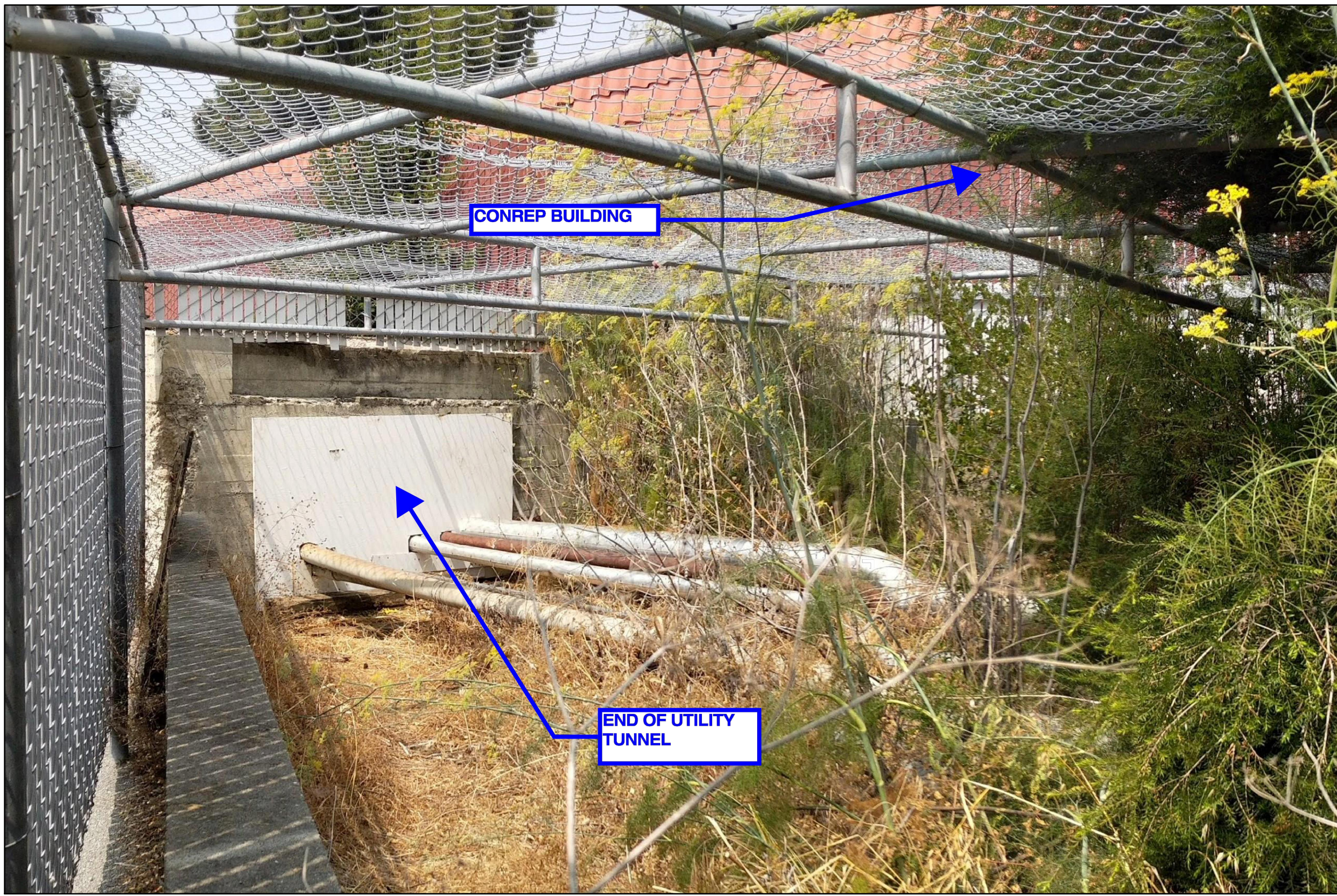


INSTALL NEW WALL-MOUNTED FIBER ENCLOSURE HERE. TERMINATE NEW FIBER CABLING AT THIS LOCATION.

3 CONREP TEL/DATA CLOSET
NO SCALE



2 UNDERGROUND UTILITY TUNNEL
NO SCALE



CONREP BUILDING

END OF UTILITY TUNNEL

4 END OF UNDERGROUND UTILITY TUNNEL
NO SCALE