

# SECTION G PART 1 OF 2

# **CONTRACT DRAWINGS**

# CAMP SWITZERLAND LIFT STATION PROJECT

**FOR** 

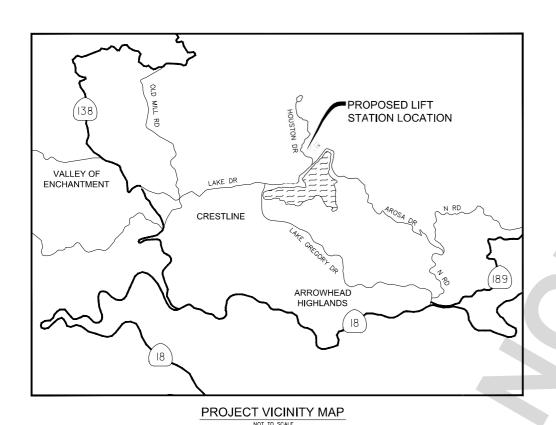
LAKE GREGORY REGIONAL PARK CRESTLINE, CALIFORNIA

PROJECT NO.: 30.30.0181

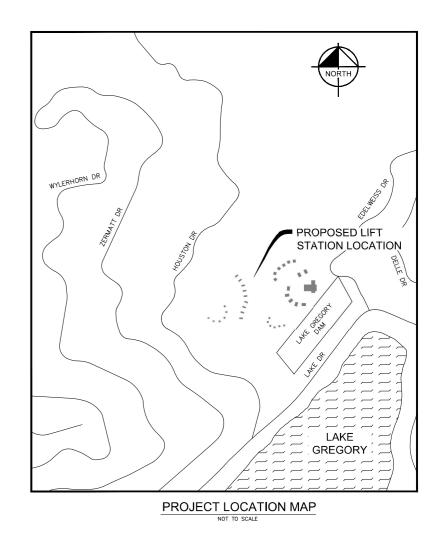


# SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS SPECIAL DISTRICTS

CAMP SWITZERLAND SEWER LIFT STATION APN: 033714105



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TWO WORKING DAYS BEFORE YOU DIG

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THE BEARINGS ARE BASED ON CALIFORNIA
COORDINATE SYSTEM ZONE 5. THE BEARING N
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	PREPARED UNDER THE SUPER	/ISION OF:	
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PREPARED UNDER THE SUPERVISION	N OF:	
RENEE K. CHUANG	92140	6/14/2024
PROFESSIONAL ENGINEER	R.C.E. No.	DATE

		REVISIONS				PLANS APPROVED E			Г
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					SPECIAL DISTRICTS				
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					APPROVALS	PROJECT MANAGER	Deanna Lestina	Septially signed by Dearna Leatina Audio 2004 UC 80 11 05 00-9709	
					ALLINOVALO	WAS, DÍVÍSION MANAGER		Digitally signed by Greg Brigder Date: 2004,07,24 15:03:41 -07:00*	
Ε	INITIAL	DESCRIPTION	APPR.	DATE		PM, DIVISION MANAGER	Noel Mondragon	Bed stratistical Emission PEC 2, Fredmind production (CFA); Bed Spring stress Source tempor per 20/20/21 (1.00-270)	

100% DRAFT IMPROVEMENT PLANS	DWG NO. 30.30.XXX
APN NO. 033714105	FILE NO.
CAMP SWITZERLAND	SDD-XXX
SEWER LIFT STATION	

COVER

#### **GENERAL NOTES**

- 1. EXISTING UTILITIES AND STRUCTURES (UNDERGROUND, SURFACE, AND OVERHEAD) ARE INDICATED ONLY TO THE EXTENT THAT SUCH INFORMATION WAS KNOWN BY THE ENGINEER IN PREPARING THE DRAWINGS. THE LOCATIONS, CONFIGURATIONS, AND ELEVATIONS OF SUBSURFACE UTILITIES ARE APPROXIMATE AND ALL UTILITIES MAY NOT BE SHOWN. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, THE ENGINEERING INVESTIGATIONS, LOCATION, AND DESIGNATION OF SUBSURFACE UTILITIES SHOWN ON THESE PLANS HAVE BEEN PERFORMED TO QUALITY LEVEL C IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRINCIPLES AND PRACTICES AS OUTLINED IN ASCE STANDARD GUIDELINE CI/ASCE 38-02. THE UNDERGROUND UTILITIES SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE. ADDITIONAL UTILITY LINES MAY BE PRESENT ON SITE. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING, IDENTIFYING, AND PROTECTING ALL BURIED UTILITIES AND UNDERGROUND STRUCTURES. EXISTING UTILITIES DAMAGED DURING CONSTRUCTION ACTIVITIES SHALL BE REPAIRED TO AS GOOD OR BETTER CONDITION AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL BURIED UTILITIES DAMAGED IMMEDIATELY OF ANY CONFLICT OR UTILITIES NOT SHOWN ON THE PLANS.
- PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, CONTRACTOR SHALL VERIFY THE LOCATION, MATERIAL, SIZE, AND DEPTH OF ALL CROSSINGS AND CONNECTING UTILITIES REQUIRED TO COMPLETE THE WORK. UTILITY INVESTIGATION SHALL BE COMPLETED BY HAND OR HYDRO-VAC METHODS. CONTRACTOR TO PROVIDE SCALED, DETAILED, UTILI CONFLICT FIELD NOTES AS CONDITION PRECEDENT TO PAYMENT FOR MOBILIZATION ACTIVITIES. PAY ITEMS FOR PIPELINE ADJUSTMENTS ARE INCLUDED IN THE BID FORMS IF
- 3. CONTRACTOR SHALL LOCATE AND PROTECT ALL SURVEY POINTS AND POTHOLE ALL SUBSURFACE UTILITIES AND POINTS OF CONNECTION NOTED ON THE PLANS BEFORE STARTING WORK, SUBMIT A RECORD OF FIELD VERIFICATION PRIOR TO SUBMITTAL OF MAJOR EQUIPMENT SHOP DRAWINGS AND SHALL IMMEDIATELY NOTIFY THE ENGINEER ANY DISCREPANCIES, CONTRACTOR SHALL FIELD VERIFY THE CONDITION AND DIMENSIONS OF EXISTING STRUCTURES AND UTILITIES TO BE MAINTAINED. CONTRACTOR SHAL NOTIFY ENGINEER IF THERE IS A CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONSTRUCTION BEFORE PROCEEDING WITH WORK.
- 4. ACCESS CONTROL: ALL CONTRACTOR'S PERSONNEL AND SUBCONTRACTORS ARE SUBJECT TO SAN BERNARDINO COUNTY'S SECURITY POLICY REFER TO CONTRACT GENERAL CONDITION 3.13.3; SEE SUPPLEMENTAL GENERAL PROVISIONS. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF PARKING AND STORAGE AREAS WITH THE OWNER'S REPRESENTATIVE CONTRACTOR PARKING AND STORAGE OF EQUIPMENT AND MATERIALS SHALL BE RESTRICTED TO AGREED UPON AREAS.
- 5. CONTRACTOR SHALL REESTABLISH PRE-CONSTRUCTION GROUND ELEVATIONS IN AREAS WHERE GRADING IS NOT DEFINED
- 6. UNLESS OTHERWISE INDICATED ON THE DRAWINGS OR SPECIFIED, CIVIL CONSTRUCTION SHALL BE PER COUNTY STANDARD DETAILS AND SPECIFICATIONS. TYPICAL DETAILS SHALL APPLY EVEN THOUGH NOT REFERENCED AT SPECIFIC LOCATIONS ON DRAWINGS.
- 7. CONTRACTOR SHALL COMPLY WITH LOCAL CONSTRUCTION STORM WATER DISCHARGE REGULATIONS AND REQUIREMENTS.
- 8. PIPES SMALLER THAN 12" SHALL HAVE A MINIMUM COVER OF 30" UNLESS OTHERWISE NOTED. PIPES SHALL BE ROUTED AS SHOWN UNLESS ADJUSTMENTS ARE NECESSARY TO AVOID EXISTING PIPES, CONDUITS, BURIED STRUCTURES, ETC. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL FITTINGS AND ADAPTERS REQUIRED TO MAKE THE ADJUSTMENTS AT THE UNIT BID PER ADJUSTMENT AS DESCRIBED IN THE BIDDING DOCUMENTS.
- 9. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT FROM DAMAGE EXISTING FACILITIES AND UTILITIES SHOWN OR NOT SHOWN THAT ARE TO REMAIN IN PLACE. ALL FACILITIES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE EXPEDITIOUSLY REPAIRED OR RECONSTRUCTED TO THE ORIGINAL OR BETTER CONDITION AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.
- 10. CONTRACTOR SHALL MAKE CONNECTIONS TO EXISTING PIPE, EQUIPMENT, ETC. AS REQUIRED AND SHALL PROVIDE ALL FITTINGS, ADAPTERS, AND APPURTENANCES REQUIRED TO MAKE THE CONNECTIONS. PROVIDE ALL SUPPORTS REQUIRED FOR A RIGIDLY SUPPORTED COMPLETE AND WORKING SYSTEM.
- 11. ADJUST ALL VALVE BOXES, VAULTS, PULL BOXES, AND MANHOLES TO FINISHED GRADE UNLESS OTHERWISE SHOWN OR DIRECTED. MANHOLES IN OPEN FIELDS SHALL BE SET TWELVE INCHES ABOVE FINISHED GRADE AND VAULTS SHALL BE SIX INCHES ABOVE FINISHED GRADE.
- 12. CONTRACTOR SHALL VERIFY THAT PIPING SHOWN TO BE ABANDONED OR AS ABANDONED PREVIOUSLY IS NO LONGER IN SERVICE. LINES IN SERVICE SHALL BE MAINTAINED UNTIL NO LONGER REQUIRED BY THE OWNER.
- 13. THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS IN THE VICINITY OF ANY UNDERGROUND OR OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL ABIDE BY THE NATIONAL ELECTRIC CODE AND ANY REQUIREMENT BY THE OWNER OF THE ELECTRIC LINES.
- 14 ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF

- ALL WORK SHALL BE IN ACCORDANCE WHIT HE LATEST ADDITION OF SAN BERNARDING COUNTY GRADING A EXCAVATION REGULATIONS AND GRADING MANUAL SAN BERNARDINO COUNTY STANDARD PLANS
  SAN BERNARDINO COUNTY SPECIAL DISTRICTS STANDARD SEWER SPECIFICATIONS AND DRAWINGS
  SPECIAL REQUIREMENTS OF THE GRADING PERMIT

- D. SPECIAL REQUIREMENTS OF THE SEALURG FERMIT
  E. THE CALIFORNIA BUILDING CODE (2022)
  F. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK, 2021)
  G. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2023 CALIFORNIA SUPPLEMENT WHENEVER SPECIAL REQUIREMENTS CONFLICT ON ANY SUBJECT MATTER, THE OWNERS REPRESENTATIVE WILL DETERMINE WHICH SPECIAL REQUIREMENTS AND/OR CODE WILL GOVERN.
- 17. EXPORT SOIL MUST GO TO A LEGAL DUMPSITE OR TO A LEGAL PERMITTED SITE APPROVED BY THE OWNERS REPRESENTATIVE.
- 18. NO DIRT, ROCK OR CONSTRUCTION MATERIAL MAY BE TRACKED OR DROPPED WITHIN THE PUBLIC RIGHTS-OF-WAY DURING THE PROJECT. ANY DEBRIS IN THE PUBLIC RIGHT-OF-WAY SHALL BE REMOVED IMMEDIATELY AND/OR AS DEEMED NECESSARY BY THE GRADING INSPECTOR.
- 19. CONTRACTOR SHALL TAKE CARE TO PROVIDE ODOR CONTROL MEASURES AS NECESSARY AT THE SOLE COST OF THE CONTRACTOR
- 20. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS AND TO THE LATEST EDITION OF THE STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION.
- 21, IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN A CURRENT AND APPROVED SET OF PLANS AND SPECIFICATIONS ON THE JOB SITE AT ALL TIMES.
- 22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ARRANGEMENTS FOR CONSTRUCTION INSPECTION AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.
- I. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE THEMSELVES WITH THE JOB SITE AND THE LOCATION OF ALL UNDERGROUND FACILITIES SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR ALL DIG ALERT REQUESTS AND EXPLORATORY EFFORTS NECESSARY TO VERIFY ANY UNDERGROUND OBSTRUCTIONS. THE CONTRACTOR WILL BE UNILATERALLY RESPONSIBLE FOR ANY DAMAGE DONE TO EXISTING UTILITIES THAT ARE SHOWN OR NOT SHOWN ON THESE PLANS.
- 24. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY STATE, COUNTY OR LOCAL PERMITS.
- 25. CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT AND ENCROACHMENT PERMIT OR OTHER REQUIRED PERMITS FROM THE SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS TRANSPORTATION, PRIOR TO ANY WORK WITHIN THE COUNTY RIGHT OF WAY BY CALLING (909) 387-7910.
- 26. THE CONTRACTOR SHALL NOTIFY ALL SERVING UTILITY COMPANIES 48 HOURS PRIOR WHEN WORK IS TO BE PERFORMED NEAR THEIR FACILITIES BY CALLING 811.
- 27. CONTRACTOR SHALL ENSURE THAT EASEMENTS HAVE BEEN RECORDED PRIOR TO START OF WORK.
- 28. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE UNDERSIGNED ENGINEER AND SAN BERNARDINO COUNTY SPECIAL DISTRICTS.
- 29. THE CONTRACTOR AGREES THAT IT SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUALLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; A THAT CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE GRINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WIT THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- 30. ALL EXCAVATIONS SHALL BE BACKFILLED AT THE END OF EACH WORKING DAY AND ROADS OPEN TO VEHICULAR TRAFFIC UNLESS OTHERWISE APPROVED BY SPECIAL DISTRICTS.
- 31. ALL WORK SHALL BE CONSTRUCTED ACCORDING TO THE VERTICAL AND HORIZONTAL MEASUREMENTS OF THESE PLANS AND EXISTING DESIGN STANDARDS. ADEQUATE STAKES SHALL BE SET UNDER THE DIRECTION OF A LICENSED SURVEYOR/ENGINEER FOR THE CONSTRUCTOR. ALL CONSTRUCTION SURVEYING SHALL BE PERFORMED IN ACCORDANCE TO THE SURVEYOR/ENGINEES OF THE SURVEYOR/ENGINEER OF RECORD, IT THIRD PARTY SUBCONTRACTORS PERFORM THE CONSTRUCTION LAYOUT AND SURVEYING FOR THIS PROJECT WITHOUT THE COORDINATION OF THE SURVEYOR/ENGINEER OR RECORD, THEY HAVE ASSUMED THE POSITION OF SURVEYOR/ENGINEER OF RECORD. THE FINAL CHECK OF THIS DESIGN IS TO BE THE CONSTRUCTION STAINING AS THE DESIGN MEETS THE EXISTING CONTROL AND ELEVATIONS. ALL EXISTING DISCREPANCIES TO THE STANDARD DESIGN CRITERIA SHALL BE BROUGHT TO THE SURVEYOR/ENGINEER OF RECORD'S ATTENTION PRIOR TO PROCEEDING WITH CONSTRUCTION. IF CONSTRUCTION CONTINUES WITHOUT VERIFICATION THE CONSTRUCTOR ASSUMES THE RESPONSIBILITY OF THE CORRECTNESS OF THE INTENDED DESIGN.
- 32. THE PROJECT AREA HAS THE POTENTIAL TO ENCOUNTER BEDROCK. CONTRACTOR ADVISED TO REFER TO GEOTECHNICAL REPORT AND FINDINGS FOR INFORMATION ON

## PRIVATE ENGINEER'S NOTE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUERED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN ON THESE DRAWINGS AND TO VERIFY ALL DIMENSIONS, PIPE SIZES, PIPE MATERIALS, FLANGE SIZES, AND BOLT CONFIGURATIONS PRIOR TO ORDERING PARTS AND BEGINNING WORK. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE DRAWINGS.

CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD SAN BERNARDINO COUNTY, SPECIAL DISTRICTS, THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE

#### NOTIFICATIONS

- AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL NOTIFY:

  1. SPECIAL DISTRICTS (909) 386—8800

  2. PERMIT AGENCY: SAN BERNARDING COUNTY, SPECIAL DISTRICTS

  3. CRESTLINE SANITATION DISTRICT (919) 338—1751

  4. UNDERGROUND SERVICE ALERT (USA): 811

  5. ALL OTHER AFFECTED AGENCIES THAT ARE NOT MEMBERS OF USA ALERT

#### LEGEND/ABBREVIATIONS

- AC ARV BFV CIDH CL CMU ASPHALT CONCRETE AIR RELEASE VALVE BUTTERFLY VALVE CAST-IN-DRILLED HOLE CENTERLINE CONCRETE MASONRY UNIT CONCRETE CONC CSA DET DI DIP EG EXIST COUNTY SERVICE AREA DETAIL
  DUCTILE IRON
  DUCTILE IRON PIPE
  EXISTING GRADE
- EXISTING
  FINISHED GRADE
  FLANGE
  FINISHED SURFACE
- FINISHED SUMF ACE
  GROOVE END
  GALLONS PER MINUTE
  HIGH-DENSITY POLYETHYLENE
  HORIZONTAL
  HORSEPOWER
  HIGHWAY
  INSIDE DIAMETER
  INVERT
- FG FLG FS GE GPM HDPE HORZ HP HWY I.D. INV MAX
- MAXIMUM MANUFACTURER MINIMUM MAX MFR MIN O.C. O.D. PCC PE PIP PROP
- ON CENTER
  OUTSIDE DIAMETER
  PORTLAND CEMENT CONCRETE PLAIN END PROTECT IN PLACE
- PROPOSEI PRESSURE RELEASE VALVE
- PRV PVC P&ID PIPING AND INSTRUMENTATION DRAWING
- RD RPM REVOLUTIONS PER MINUTE SAN BERNARDINO COUNTY STANDARD DRAWINGS
- SBCSD SCH SCHEDULE
  STAINLESS STEEL
  STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION
- SSPWC STD STL TDH STANDARD
- STANDARD
  STEEL
  TOTAL DYNAMIC HEAD
  VOLT
  VITRIFIED CLAY PIPE
  VERTICAL
  VARIABLE FREQUENCY DRIVE
- WATER AGENCIES' STANDARDS

UNDERGROUND SERVICE ALERT

Call: TOLL FREE 1-800-227-2600 TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK N CHS MARK AT NORTH WESTERLY CORNER OF BRIDGE AT HOUSTON SPILLWAY AND LAKE DRIVE SAN BERNARDINO COUNTY SURVEYOR BENCH MARK DATUM = NGVD 29 REFERENCE; CSFB4084 — PAGES 1308, 1540

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BASIS OF BEARINGS HE BEARINGS ARE BASED ON CALIFORNIA CORDINATE SYSTEM ZONE 5. THE BEARING N 2° 10' 52" E BETWEEN SOPAC CORS TATIONS P612 AND MSOB WAS USED AS THE BASIS OF BEARINGS FOR THIS SURVEY



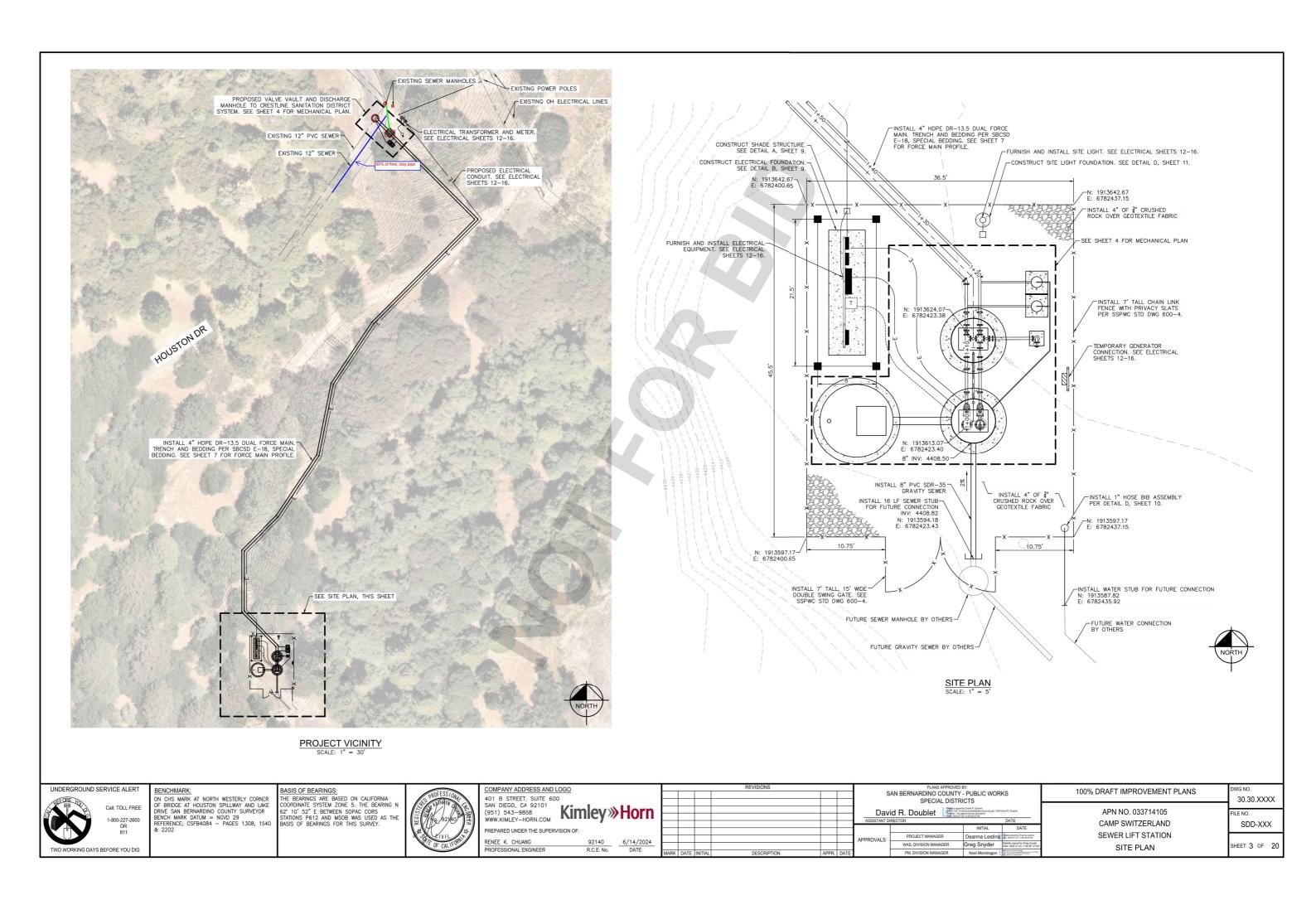
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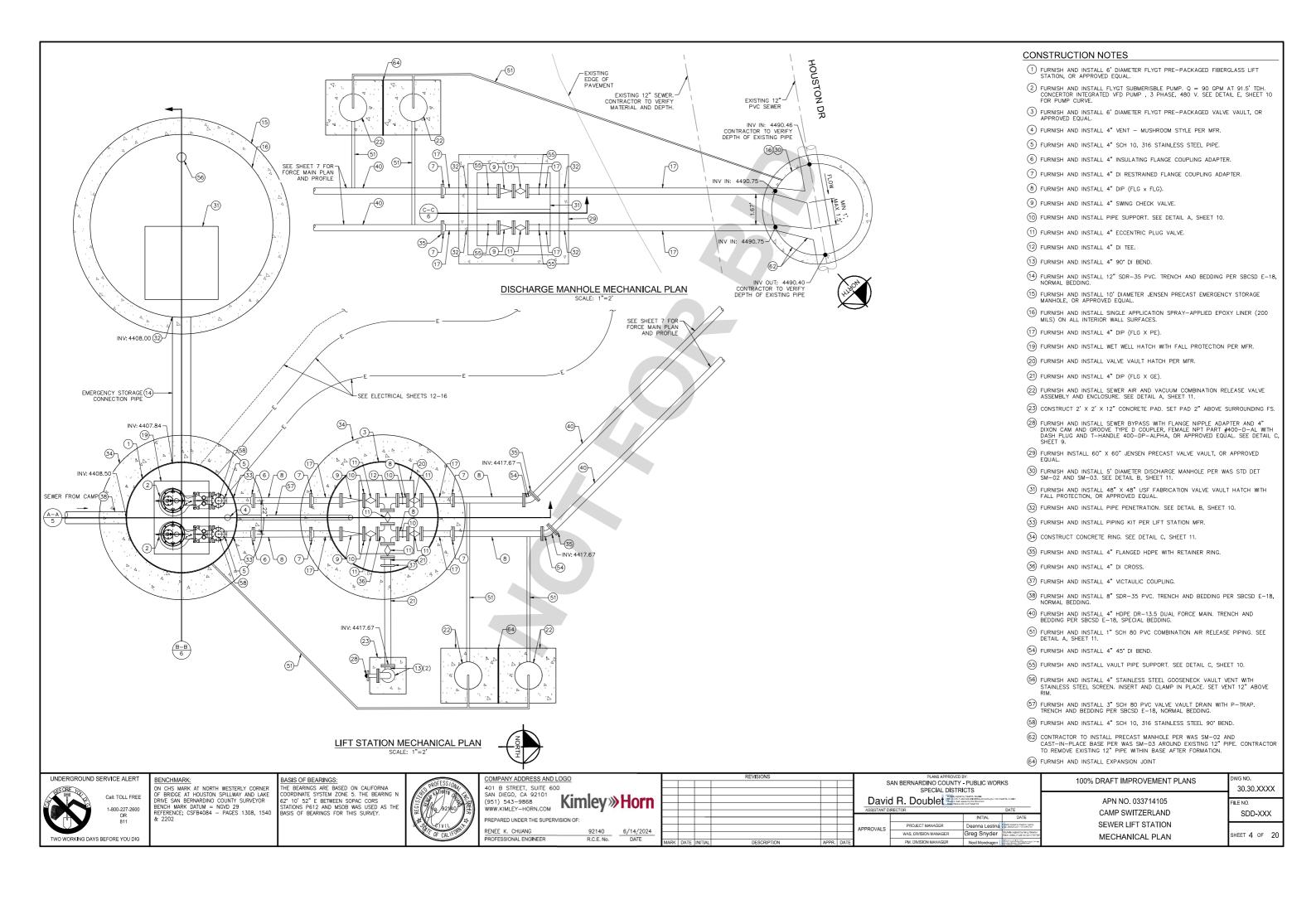
PREPARED UNDER THE SUPERVISION OF 92140 6/14/2024 R.C.E. No. DATE PROFESSIONAL ENGINEER

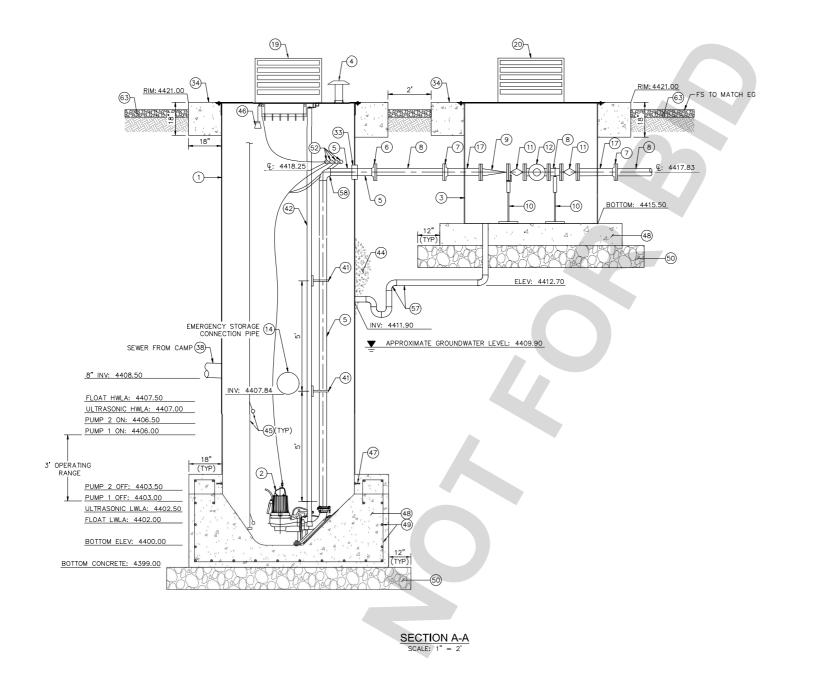
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		PLANS APPROVED	BY:	
	S	AN BERNARDINO COUNTY	- PUBLIC WOR	KS
-		SPECIAL DISTR	ICTS	
-				
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1	APPROVALS	PROJECT MANAGER	Deanna Lestina	Netally signed by Deaans Leefins Netro 2004,07,09 11:30:16-0790
1	AFFROVALS	WAS, DÍVÍSION MANAGER	Greg Snyder	Digitally signed by Greg Snyder Rate: 2004.07.24 11:25:20 -07:00*

100% DRAFT IMPROVEMENT PLANS 30 30 XXXX APN NO 033714105 CAMP SWITZERLAND SDD-XXX SEWER LIFT STATION HEET 2 OF 20 **GENERAL NOTES** 







## CONSTRUCTION NOTES

- 1) FURNISH AND INSTALL 6' DIAMETER FLYGT PRE-PACKAGED FIBERGLASS LIFT STATION, OR APPROVED EQUAL.
- (2) FURNISH AND INSTALL FLYGT SUBMERISBLE PUMP, Q = 90 GPM AT 91.5' TDH. CONCERTOR INTEGRATED VFD PUMP, 3 PHASE, 480 V. SEE DETAIL E, SHEET 10 FOR PUMP CURVE.
- 3 FURNISH AND INSTALL 6' DIAMETER FLYGT PRE-PACKAGED VALVE VAULT, OR APPROVED EQUAL.
- $\stackrel{\textstyle (4)}{}$  FURNISH AND INSTALL 4" VENT MUSHROOM STYLE PER MFR.
- (5) FURNISH AND INSTALL 4" SCH 10, 316 STAINLESS STEEL PIPE.
- 6 FURNISH AND INSTALL 4" INSULATING FLANGE COUPLING ADAPTER.
- 7 FURNISH AND INSTALL 4" DI RESTRAINED FLANGE COUPLING ADAPTER.
- (8) FURNISH AND INSTALL 4" DIP (FLG x FLG).
- 9 FURNISH AND INSTALL 4" SWING CHECK VALVE.
- (10) FURNISH AND INSTALL PIPE SUPPORT. SEE DETAIL A, SHEET 10.
- (11) FURNISH AND INSTALL 4" ECCENTRIC PLUG VALVE.
- (12) FURNISH AND INSTALL 4" DI TEE.
- (14) FURNISH AND INSTALL 12" SDR-35 PVC. TRENCH AND BEDDING PER SBCSD E-18, NORMAL BEDDING.
- 17) FURNISH AND INSTALL 4" DIP (FLG X PE).
- (19) FURNISH AND INSTALL WET WELL HATCH WITH FALL PROTECTION PER MFR.
- (20) FURNISH AND INSTALL VALVE VAULT HATCH PER MFR.
- (33) FURNISH AND INSTALL PIPING KIT PER LIFT STATION MFR.
- (34) CONSTRUCT CONCRETE RING. SEE DETAIL C, SHEET 11.
- (38) FURNISH AND INSTALL 8" SDR-35 PVC. TRENCH AND BEDDING PER SBCSD E-18, NORMAL BEDDING.
- (41) FURNISH AND INSTALL U-BOLT PER LIFT STATION MFR.
- (42) FURNISH AND INSTALL PUMP GUIDERAILS PER LIFT STATION MFR.
- (44) FURNISH AND INSTALL GRANULAR BACKFILL PER LIFT STATION MFR.
- (45) FURNISH AND INSTALL CABLE AND BACKUP FLOATS.
- (46) FURNISH AND INSTALL LEVEL TRANSDUCER.
- 47) FURNISH AND INSTALL ANTI-FLOTATION FLANGE PER LIFT STATION MFR.
- (48) CONSTRUCT CONCRETE FOUNDATION. CONCRETE TO BE CLASS 560-C-3250. FOUNDATION PREP PER MFR AND GEOTECH RECOMMENDATIONS.
- (49) FURNISH AND INSTALL #6 @ 12" O.C. EACH WAY.
- 50 FURNISH AND INSTALL 12" DEPTH OF 3/4" CRUSHED ROCK BEDDING.
- 52 FURNISH AND INSTALL FOUR (4) 3" ELECTRICAL CONDUIT PENETRATIONS.
- (57) FURNISH AND INSTALL 3" SCH 80 PVC VALVE VAULT DRAIN WITH P-TRAP. TRENCH AND BEDDING PER SBCSD E-18, NORMAL BEDDING.
- (58) FURNISH AND INSTALL 4" SCH 10, 316 STAINLESS STEEL 90° BEND.
- 63 INSTALL 4" OF 3/4" CRUSHED ROCK OVER GEOTEXTILE FABRIC

UNDERGROUND SERVICE ALERT

TWO WORKING DAYS BEFORE YOU DIG



BENCHMARK ON CHS MARK AT NORTH WESTERLY CORNER
OF BRIDGE AT HOUSTON SPILLWAY AND LAKE
DRIVE SAN BERNARDINO COUNTY SURVEYOR
BENCH MARK DATUM = NGVD 29
REFERENCE; CSFB4084 — PAGES 1308, 1540

BASIS OF BEARINGS:

JOSE STATINGS ARE BASED ON CALIFORNIA COORDINATE SYSTEM ZONE 5. THE BEARING N 62' 10' 52" E BETWEEN SOPAC CORS STATIONS P612 AND MSOB WAS USED AS THE BASIS OF BEARINGS FOR THIS SURVEY



COMPANY ADDRESS AND LOGO 401 B STREET, SUIT SAN DIEGO, CA 921 (951) 543-9868 PREPARED UNDER THE

PROFESSIONAL ENGINE

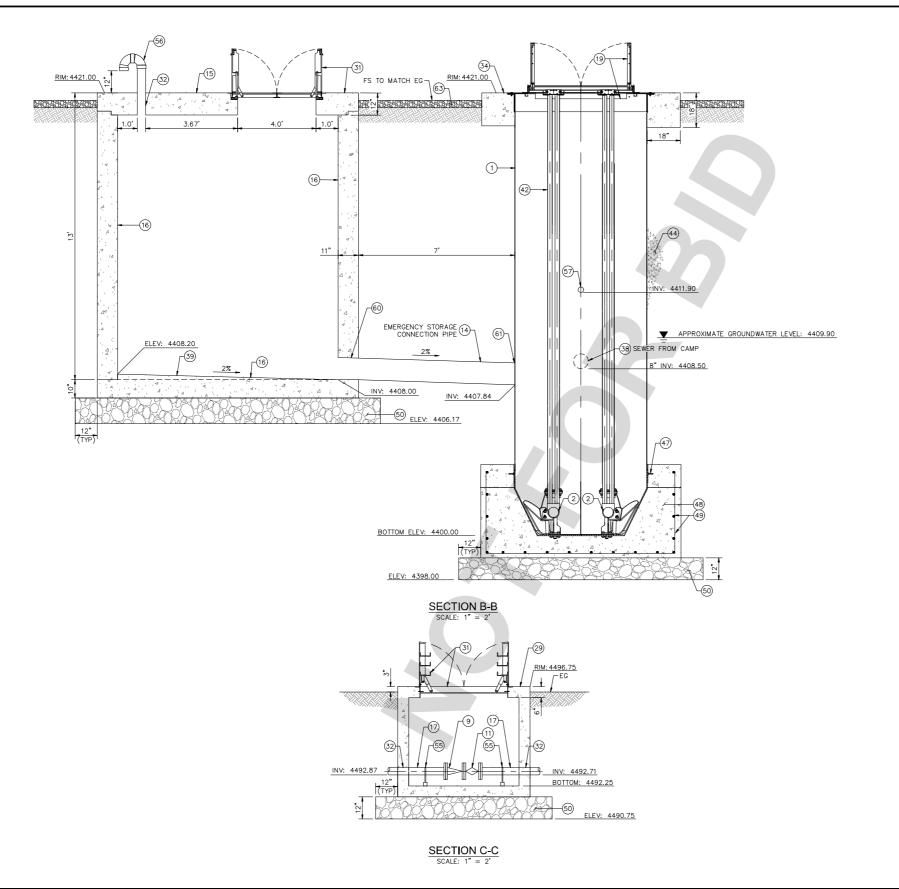
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PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS David R. Doublet Greg Snyder

WAS, DIVISION MANAGER

APN NO. 033714105 CAMP SWITZERLAND SEWER LIFT STATION SECTIONS

100% DRAFT IMPROVEMENT PLANS 30 30 XXXX SDD-XXX HEET 5 OF 20



## CONSTRUCTION NOTES

- 1 FURNISH AND INSTALL 6' DIAMETER FLYGT PRE-PACKAGED FIBERGLASS LIFT STATION, OR APPROVED EQUAL.
- (2) FURNISH AND INSTALL FLYGT SUBMERISBLE PUMP. Q = 90 GPM AT 91.5' TDH. CONCERTOR INTEGRATED VFD PUMP , 3 PHASE, 480 V. SEE DETAIL E, SHEET 10 FOR PUMP CURVE.
- (9) FURNISH AND INSTALL 4" SWING CHECK VALVE.
- (11) FURNISH AND INSTALL 4" ECCENTRIC PLUG VALVE.
- $\ensuremath{ \begin{tabular} \includegraphics[width=0.7\linewidth]{linewidth} \includegraphics[width=0$
- $\ensuremath{\fbox{(15)}}$  Furnish and install 10' diameter jensen precast emergency storage manhole, or approved equal.
- (16) FURNISH AND INSTALL SINGLE APPLICATION SPRAY-APPLIED EPOXY LINER (200 MILS) ON ALL INTERIOR WALL SURFACES.
- 17) FURNISH AND INSTALL 4" DIP (FLG X PE).
- (19) FURNISH AND INSTALL WET WELL HATCH WITH FALL PROTECTION PER
- $\ensuremath{\bigcirc}$  Furnish install 60" x 60" jensen precast valve vault, or approved equal.
- (32) FURNISH AND INSTALL PIPE PENETRATION. SEE DETAIL B, SHEET 10.
- (34) CONSTRUCT CONCRETE RING. SEE DETAIL C, SHEET 11.
- (38) FURNISH AND INSTALL 8" SDR-35 PVC. TRENCH AND BEDDING PER SBCSD E-18, NORMAL BEDDING.
- (39) CONSTRUCT GROUT STRUCTURE BASE AT 2% TOWARDS OUTLET
- (42) FURNISH AND INSTALL PUMP GUIDERAILS PER LIFT STATION MFR.
- (44) FURNISH AND INSTALL GRANULAR BACKFILL PER LIFT STATION MFR.
- 47) FURNISH AND INSTALL ANTI-FLOTATION FLANGE PER LIFT STATION MFR
- (48) CONSTRUCT CONCRETE FOUNDATION. CONCRETE TO BE CLASS 560-C-3250. FOUNDATION PREP PER MFR AND GEOTECH RECOMMENDATIONS.
- 49 FURNISH AND INSTALL #6 @ 12" O.C. EACH WAY.
- (50) FURNISH AND INSTALL 12" DEPTH OF 3/4" CRUSHED ROCK BEDDING.
- $\stackrel{\textstyle (55)}{}$  FURNISH AND INSTALL VAULT PIPE SUPPORT. SEE DETAIL C, SHEET 10.
- (56) FURNISH AND INSTALL 4" STAINLESS STEEL GOOSENECK VAULT VENT WITH STAINLESS STEEL SCREEN. INSERT AND CLAMP IN PLACE. SET VENT 12" ABOVE RIM.
- (57) FURNISH AND INSTALL 3" SCH 80 PVC VALVE VAULT DRAIN WITH P-TRAP. TRENCH AND BEDDING PER SBCSD E-18, NORMAL BEDDING.
- $\ensuremath{\ensuremath{\widehat{\bigoplus}}}$  Furnish and install 12" A-Lok boot connector, or approved Equal.
- 61) FURNISH AND INSTALL 12" INSERTA-TEE TYPE FITTING PER LIFT STATION MFR RECOMMENDATIONS, OR APPROVED EQUAL.
- 63 INSTALL 4" OF 3/4" CRUSHED ROCK OVER GEOTEXTILE FABRIC

UNDERGROUND SERVICE ALERT

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK

BENCHMARK:
ON CHS MARK AT NORTH WESTERLY CORNER
OF BRIDGE AT HOUSTON SPILLWAY AND LAKE
DRIVE SAN BERNARDINO COUNTY SURVEYOR
BENCH MARK DATUM = NGVD 29
REFERENCE; CSFB4084 — PAGES 1308, 1540

BASIS OF BEARINGS:

BASIS OF BEARNINGS: THE BEARINGS ARE BASED ON CALIFORNIA COORDINATE SYSTEM ZONE 5. THE BEARING N 62° 10° 52° E BETWEEN SOPAC CORS STATIONS PEIZ AND MSOB WAS USED AS THE BASIS OF BEARINGS FOR THIS SURVEY.



COMPANY ADDRESS AND LOGO A01 B STREET, SUITE 600
SAN DIEGO, CA 92101
(951) 643–9888
WWW.KIMLEY-HORN.COM PREPARED UNDER THE SUPERVISION OF

R.C.E. No.

PROFESSIONAL ENGINEER

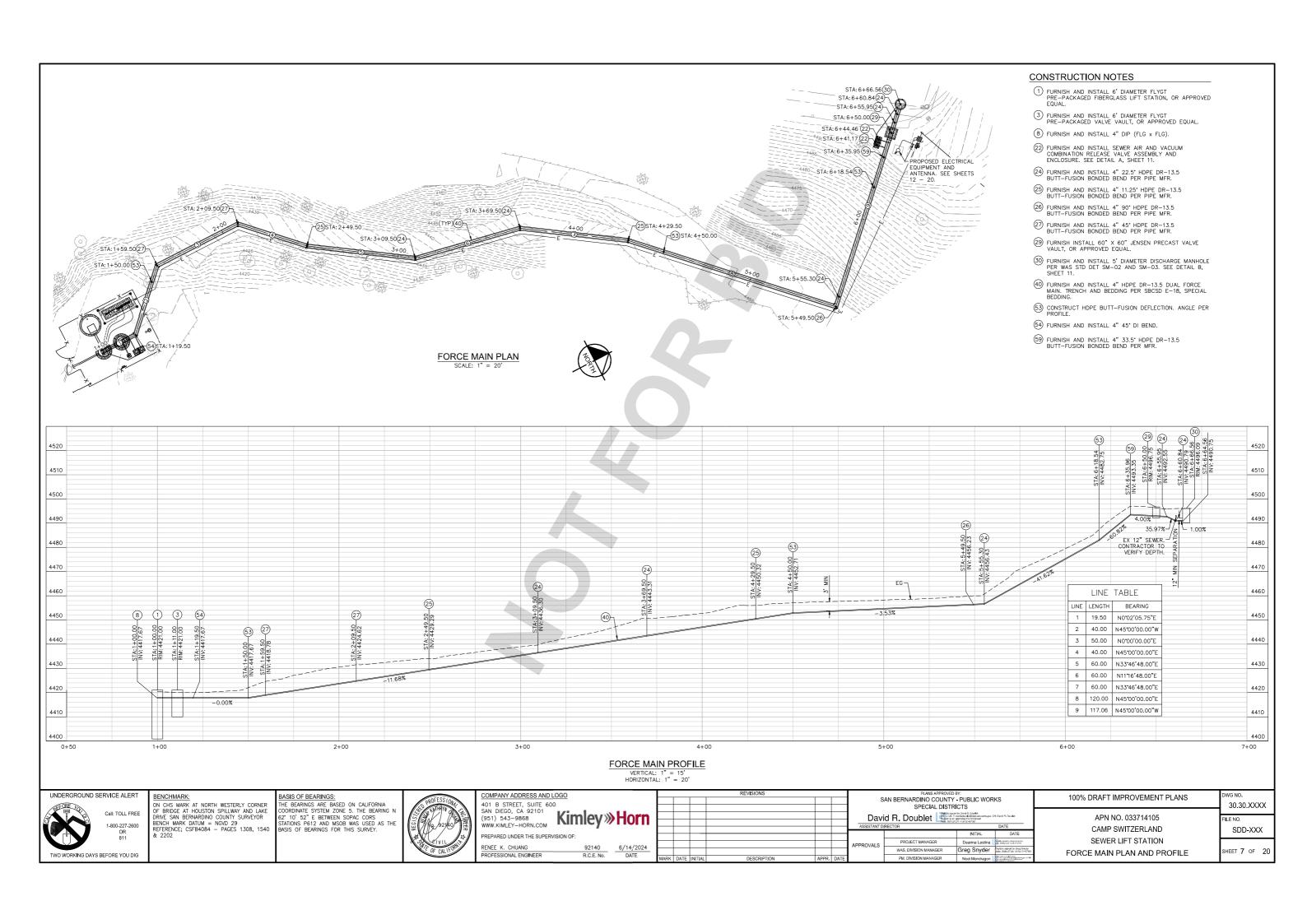
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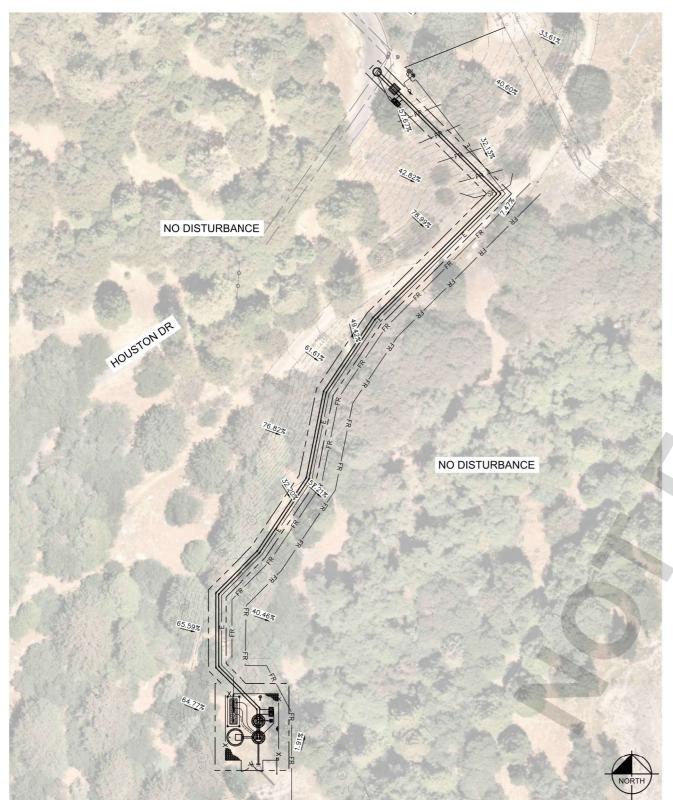
PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS David R. Doublet Deanna Lestina WAS, DÍVÍSION MANAGER

100% DRAFT IMPROVEMENT PLANS APN NO. 033714105 CAMP SWITZERLAND SEWER LIFT STATION

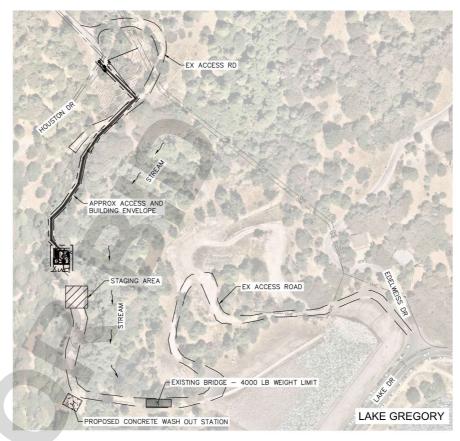
SECTIONS

30.30.XXXX SDD-XXX HEET 6 OF 20





PROJECT SITE SCALE: 1" = 30'



#### PROJECT VICINITY SCALE: 1" = 100'

## **EROSION CONTROL NOTES**

- 1. IN CASE OF EMERGENCY, CALL THE COUNTY'S EMERGENCY CONTACT AT (760) 995 9885, PRESS 1.
- 2. POLLUTION AND EROSION PREVENTION MEASURES, ALSO KNOWN AS BEST MANAGEMENT PRACTICES (BMPS), MUST BE INSTALLED PRIOR TO CONSTRUCTION. THESE MEASURES, INCLUDING THE PREVENTION OF SEDIMENTATION OR FLOOD DAMAGE, TO OFFSITE PROPERTY SHALL BE ADEQUATE WHETHER OR NOT AN EROSION CONTROL PERMIT IS REQUIRED.
- 3. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ONSITE AND MAY NOT BE TRANSPORTED FROM THE SITE VA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
- 4. EROSION CONTROL DEVICES SHALL BE FUNCTIONING AT ALL TIMES. IN CASE OF FAILURE, RAPID CONSTRUCTION OF EMERGENCY DEVICES SHALL BE IMPLEMENTED.
- 5. STOCKPILES OF EARTH AND OTHER CONSTRUCTION—RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
- 6. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOILS AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DIMBLIBLE SYSTEM. DRAINAGE SYSTEM.
- 7. EXCESS OR WASTE CONCRETE MUST BE CONTAINED ONSITE. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ONSITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.

AVAILABLE FOR REVIEW BY THE COUNTY.

- 9. TRASH AND CONSTRUCTION-RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
- 10. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
- 11. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
- 12. ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM AND BE DISPOSED OF PROPERLY.
- 13. ALL STORM WATER CAPTURE DEVICES SHALL BE PROTECTED AT ALL TIMES.

#### **EROSION CONTROL LEGEND**

BMP FACT SHEET*	NAME	SYMBOL
SE-1	STANDARD SILT FENCE	SF
SC-5	TYPE 1 TEMPORARY FIBER ROLLS	——FR ——
[MM-1]	MATERIALS STORAGE AND STAGING AREA	
N/A	APPROX ACCESS AND BUILDING ENVELOPE LINE	
N/A	DIRECTION OF FLOW	57.67%
N/A	CONSTRUCTION ACCESS/EXIT	
N/A	CONCRETE WASH OUT STATION	

\*NOTE: BMP FACT SHEETS PER "CALIFORNIA STORMWATER BEST

#### RELEVANT BMP FACT SHEETS

EC-1 SCHEDULING

EC-2 PRESERVATION OF EXISTING VEGETATION

1. CONTRACTOR TO PRESERVE ALL VEGETATION OUTSIDE OF ACCESS AND BUILDING ENVELOPE LINE

EC-4 HYDROSEEDING

CONTRACTOR TO SUBMIT REVEGETATION PROPOSAL TO COUNTY PRIOR TO REVEGETATION SPECIFYING TYPES OF PLANTS FOR ALL SURFACE TO BE EXPOSED DURING DEVELOPMENT ACTIVITIES

SE-1 SILT FENCE

SE-5 FIBER ROLLS

SE-6 STREET SWEEPING AND VACUUMING

WE-1 WIND EROSION CONTROL

WM-1 MATERIAL DELIVERY AND STORAGE

WM-5 SOLID WASTE MANAGEMENT

- 1. WHEN CONIFERS ARE CUT DOWN, THE STUMP SHALL BE WHEN CONIEERS ARE CUI DOWN, HE STUMP SHALL BE TREATED WITH GRANULAR BORAX WITHIN ONE (1) HOUR OF CUTTING. ALL FRESHLY CUT LOGS USED ON SITE SHALL BE TREATED WITH AN INSECTICIDE OR THE BARK REMOVED. SLASH SHALL BE TREATED IN A METHOD APPROVED BY THE AGRICULTURE COMMISSIONER
- ALL EXCESS SPOILS SHALL BE REMOVED TO A SITE WHICH HAS APPROVED EROSION CONTROL.

WM-8 CONCRETE WASTE MANAGEMENT

CONTRACTORS ARE RESPONSIBLE TO ENSURE ALL EROSION CONTROL DEVICES AND BMPS ARE INSTALLED AND FUNCTIONING PROPERLY PER PLAN. PROPER PRECAUTION SHALL BE CONSIDERED WHEN 50% OR GREATER PROBABILITY OF PREDICTED PRECIPITATION, AND AFTER ACTUAL PRECIPITATION. A CONSTRUCTION SITE INSPECTION CHECKLIST AND INSPECTION LOG SHALL BE MAINTAINED AT THE PROJECT SITE AT ALL TIMES AND

UNDERGROUND SERVICE ALERT

TWO WORKING DAYS BEFORE YOU DIG

Call: TOLL FREE

& 2202

BENCHMARK DENCHMARK: AT NORTH WESTERLY CORNER OF BRIDGE AT HOUSTON SPILLWAY AND LAKE DRIVE SAN BERNARDINO COUNTY SURVEYOR BENCH MARK DATUM = NGVD 29
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COMPANY ADDRESS AND LOGO 401 B STREET, SUITE 600 SAN DIEGO, CA 92101 (951) 543–9868 WWW.KIMLEY-HORN.COM

PREPARED UNDER THE SUPERVISION OF: 92140 6/14/2024 R.C.E. No. DATE

PROFESSIONAL ENGINEER

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	ASSISTANT DIR	ECTOR		DATE		
-			INITIAL	DATE		
-	APPROVALS -	PROJECT MANAGER	Deanna Lestina	Digitally signed to Disense Lestine East 2024 67 83 11 38 46 67 90		
		WAS, DIVISION MANAGER	Greg Snyder	Digitally signed by Greg Snyder Date: 2024.07.24 12:05:06 -07:00		
ATE	i	PM, DIVISION MANAGER	Noel Mondragon	Milledo regressible Nacio Mandagor Miller - Sel. S. Anni mentraprograms descurit, per S. Public Meller - Special Exercis, Oli Naci Mandagor		

100% DRAFT IMPROVEMENT PLANS	DWG NO. 30.30.XXXX
APN NO. 033714105 CAMP SWITZERLAND	FILE NO.
SEWER LIFT STATION EROSION CONTROL	SHEET 8 OF 20

