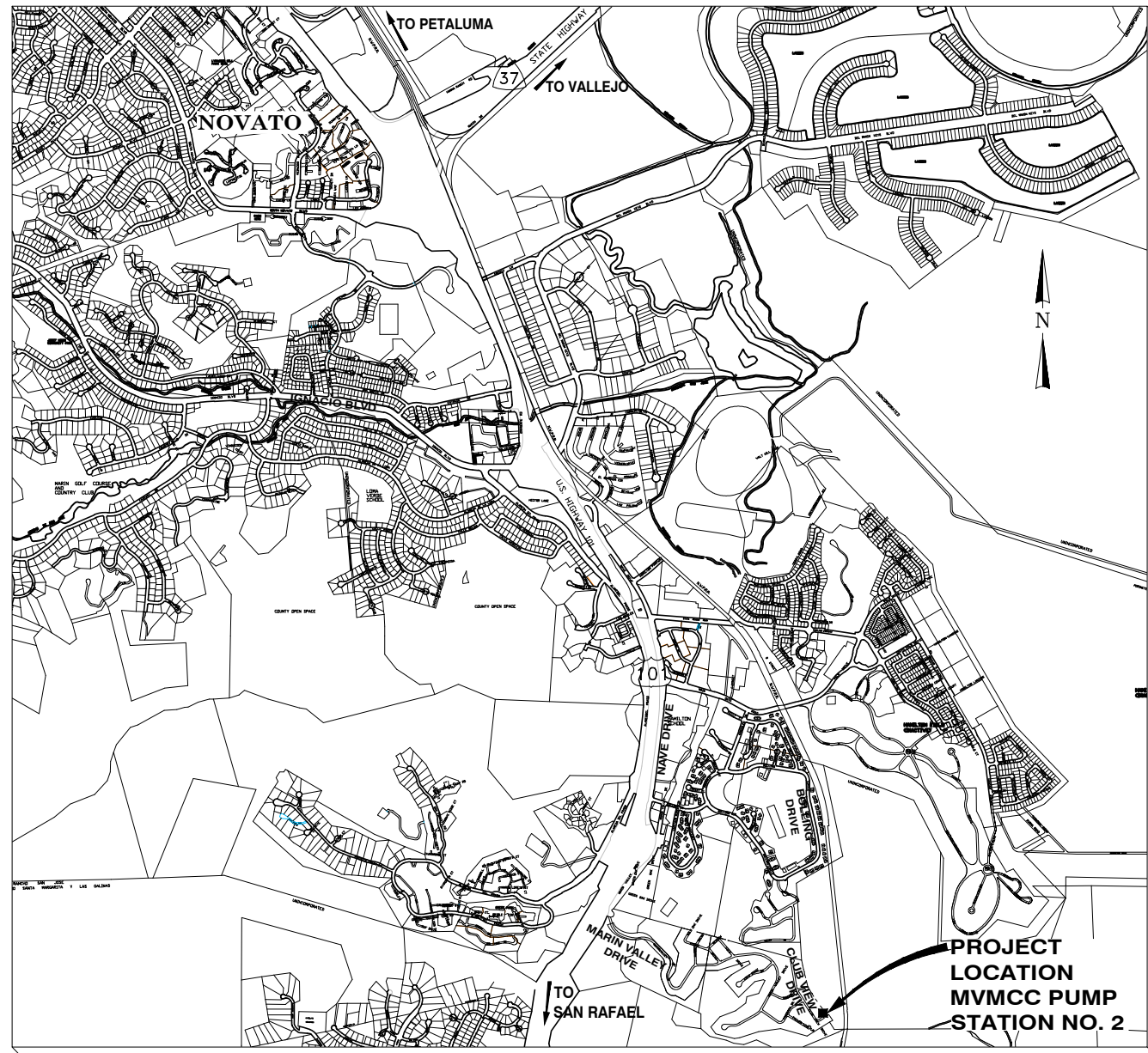


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PROJECT LOCATION MAP

NTS

INDEX TO PLANS

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THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS

Marin County, California

PLANS

FOR THE CONSTRUCTION OF

MARIN VALLEY MOBILE COUNTRY CLUB PUMP STATION NO. 2 IMPROVMENTS

CIP PROJECT NO. 19-302

MAY 2020

CITY COUNCIL

- DENISE ATHAS - MAYOR
PAT EKLUND - MAYOR PRO TEM
ERIC LUCAN - COUNCILMEMBER
AMY PEELE - COUNCILMEMBER
SUSAN WERNICK - COUNCILMEMBER
ADAM MCGILL - CITY MANAGER/POLICE CHIEF
- CHRIS BLUNK - DIRECTOR OF PUBLIC WORKS
ELISA SARLATTE - SENIOR CIVIL ENGINEER
MATT GREENBERG - MVMCC GENERAL MANAGER

NUTE ENGINEERING

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<p>CONTRACT NO.: 19-302</p> <p>DATE: 5/15/2020</p> <p>SHEET: G01</p> <p>TOTAL SHEETS: 1 OF 28</p>					

Construction contractor agrees that in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours, and construction contractor further agrees to defend, indemnify and hold design professional harmless from any and all liability, real or alleged, in connection with the performance of work on this project, except for liability arising from the sole negligence of design professional.



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SAFETY

- THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL BE IN POSSESSION OF AN APPROVED SAFETY PLAN. THE SAFETY PLAN SHALL MEET OR EXCEED ALL CAL-OSHA REQUIREMENTS AND THE CSRMA CONTRACTOR SAFETY HANDBOOK.
- THE CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR POLICE, FIRE, AMBULANCE, AND THOSE AGENCIES RESPONSIBLE FOR MAINTENANCE OF UTILITIES IN THE VICINITY OF JOBSITE.
- TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL CONFORM TO THE CONTRACT DOCUMENTS AND APPROVED TRAFFIC CONTROL PLANS.
- OVERHEAD ELECTRIC AND TELEPHONE DISTRIBUTION SYSTEMS AND INDIVIDUAL SERVICE LINES EXIST IN THE VICINITY OF THE WORK AREA AND ARE NOT ALL SHOWN ON THE DRAWINGS. CONTRACTOR SHALL EXERCISE CAUTION WHILE WORKING NEAR OR UNDER ALL UTILITY LINES.
- WHILE WORKING ON THE PROJECT, THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH THE CITY'S CONFINED SPACE ENTRY PROCEDURES FOR ALL PERMIT SPACE ENTRIES. THE FOLLOWING SPACES ARE HEREBY DESIGNATED PERMIT SPACES: MANHOLES, PUMP PITS, VALVE PITS, UNDERGROUND PITS, PUMP STATIONS, CONCRETE CULVERTS.

GENERAL PROJECT NOTES

- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL OF THE WORK PERFORMED BY HIS SUBCONTRACTORS, WITHOUT EXCEPTION.
- THE CONTRACTOR SHALL IDENTIFY A RESPONSIBLE CONTACT PERSON, WHO IS AN EMPLOYEE OF THE CONTRACTOR, AND A 24-HOUR TELEPHONE NUMBER TO CALL TO RESOLVE PROBLEMS WITH NOISE, DUST OR OTHER CONSTRUCTION-RELATED ISSUES.
- THE CONTRACTOR SHALL BE REQUIRED TO KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE RIGHTS-OF-WAY AND EASEMENTS OBTAINED FOR THIS PROJECT UNLESS OTHERWISE SHOWN. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, VEHICLES AND EQUIPMENT, LIMITS OF TRENCH EXCAVATIONS, AND STOCKPILED NEW MATERIAL.
- THE CONTRACTOR SHALL PROVIDE PROTECTION DEVICES INCLUDING BARRICADES, FENCING, WARNING SIGNS, LIGHTS, FLAGGERS, CHANGEABLE MESSAGE SIGNS, FLASHING ARROW BOARDS OR OTHER ITEMS NECESSARY TO ENSURE PUBLIC SAFETY WITHIN THE PROJECT SITE. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- CONTRACTOR SHALL EXERCISE DUE CAUTION DURING CONSTRUCTION TO PROTECT ALL EXISTING LANDSCAPING, FENCING, EQUIPMENT, PIPES WHICH ARE TO REMAIN. ANY DAMAGE RESULTING FROM CONTRACTOR OPERATIONS SHALL BE REPAIRED AS DIRECTED BY THE CITY'S REPRESENTATIVE, AT NO ADDITIONAL COST TO THE CITY.
- CONTRACTOR SHALL CONFORM TO ALL LAWS REGARDING MONUMENT AND SURVEY POINT PROTECTION, PRESERVATION, AND RESTORATION. THE CONTRACTOR SHALL PRESERVE ALL SURVEY MARKERS AND MONUMENTATION. THE CONTRACTOR SHALL NOTIFY THE CITY/COUNTY ENGINEER OF ANY EXISTING FEDERAL, STATE, COUNTY, CITY AND PRIVATE LAND SURVEY MARKER REQUIRING RESETTING PRIOR TO DISTURBANCE.
- CONTRACTOR SHALL RESTORE STRIPING ON ROADWAY REMOVED OR DAMAGED AS PART OF CONSTRUCTION WITH THERMOPLASTIC INCLUDING CROSSWALK LINES, PAVEMENT LEGENDS AND ALL STRIPING.
- CONTRACTOR SHALL RESTORE ALL EXISTING PRIVATE AND PUBLIC IMPROVEMENTS TO THEIR EXISTING CONDITION OR BETTER. THIS INCLUDES, BUT IS NOT LIMITED TO ALL LANDSCAPING, IRRIGATION, AND UTILITIES UNLESS NOTED OR DIRECTED OTHERWISE BY THE DISTRICT'S REPRESENTATIVE.
- CONTRACTOR SHALL COMPLY WITH THE CITY OF NOVATO'S STANDARD SPECIFICATIONS AND DRAWINGS.
- ALL ABANDONED PIPES SHALL BE PLUGGED AT BOTH ENDS WITH 3' CONCRETE AND/OR FILLED WITH GROUT AS SPECIFIED ON PLANS.
- PROJECT ACCEPTANCE WILL NOT BE MADE UNTIL THE CONTRACTOR DELIVERS TO THE CITY A NEAT AND LEGIBLE SET OF AS BUILT PRINTS.

LAYOUT NOTES

- ALL ELEVATIONS ON THE DRAWINGS ARE BASED ON NAVD 88.
- HORIZONTAL AND VERTICAL DIMENSIONS PROVIDED ON THE DRAWINGS ARE APPROXIMATE. FIELD MEASUREMENTS MAY VARY FROM THOSE ON THE DRAWINGS. ADJUSTMENTS TO LINE AND GRADE MAY BE MADE BY THE ENGINEER DURING CONSTRUCTION.
- SHOULD IT APPEAR THAT THE WORK TO BE DONE OR ANY MATTER RELATIVE THERETO, IS INSUFFICIENTLY OR INCORRECTLY DETAILED OR EXPLAINED ON THESE PLANS, CONTRACTOR SHALL CONTACT THE CITY'S REPRESENTATIVE FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- THE CONTRACTOR SHALL NOTIFY THE CITY'S REPRESENTATIVE IMMEDIATELY, UPON DISCOVERY OF ANY POTENTIAL FIELD CONFLICTS.

APPROVALS & COORDINATION NOTES

- A MINIMUM OF 2 WORKING DAYS, BUT NOT MORE THAN 14 CALENDAR DAYS, PRIOR TO COMMENCING ANY EXCAVATION WORK, THE CONTRACTOR SHALL CALL "UNDERGROUND SERVICE ALERT" AT 1-800-227-2600 FOR LOCATING AND MARKING UTILITIES IN THE AREAS OF THE WORK.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL PERMITS NECESSARY TO PERFORM THE WORK SHOWN IN THESE PLANS FROM THE APPROPRIATE AGENCIES, PRIOR TO COMMENCING WORK.
- THE CONTRACTOR SHALL PREPARE A WRITTEN NOTIFICATION OF THE STARTING AND ENDING DATES OF THE WORK AND DELIVER TO HOMES AND BUSINESSES IN THE VICINITY OF THE PROJECT AT LEAST TWO WEEKS IN ADVANCE OF THE WORK. THE CONTRACTOR SHALL INCLUDE THE HOURS OF WORK IN THE WRITTEN NOTIFICATIONS. PROVIDE THE CITY OF NOVATO WITH A COPY OF ALL NOTIFICATION LETTERS TO BE SENT TO THE RESIDENTS AND BUSINESSES.
- THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL SOUND CONTROL AND NOISE LEVEL RULES, REGULATION AND ORDINANCES WHICH APPLY TO ANY WORK PERFORMED UNDER THE CONTRACT. EACH INTERNAL COMBUSTION ENGINE USED ON THE PROJECT SHALL BE EQUIPPED WITH A SPARK ARRESTING MUFFLER RECOMMENDED BY THE MANUFACTURER. NO INTERNAL COMBUSTION ENGINE SHALL BE OPERATED ON THE PROJECT WITHOUT SAID MUFFLER. NOISE LEVELS SHALL BE KEPT TO THE SATISFACTION OF THE CITY.
- THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE CITY, OTHER CONTRACTORS WORKING IN THE AREA AND WITH THE APPROPRIATE UTILITY COMPANY.
- LOCATIONS OF UTILITIES SHOWN ARE FROM THE RECORDS OF THE VARIOUS, UTILITY COMPANIES, LOCAL CITY AND COUNTY PUBLIC WORK AGENCIES, AND MAY NOT ALL BE SHOWN. THE CITY AND ITS ENGINEER MAKE NO GUARANTEE THAT THE LOCATIONS OF UTILITIES ENCOUNTERED WILL NOT BE DIFFERENT THAN THOSE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND MAKING HIS(HER) OWN DETERMINATION OF LOCATIONS OF EXISTING UTILITIES BY POT-HOLING (HAND EXCAVATING) POTENTIAL CONFLICTS IN ADVANCE OF CONSTRUCTING THE CONTRACT PIPELINES OR AS REQUIRED ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO AND ALL PROTECTION FOR, AND/OR COORDINATING THE RELOCATION OF EACH BY THE UTILITY COMPANY AS NECESSARY.

ADDITIONAL NOTES

- UNDERGROUND SERVICE LINES TO BUILDINGS INCLUDING WATER, GAS, ELECTRIC, TELEPHONE, CABLE ETC ARE NOT ALL SHOWN. THE CONTRACTOR SHALL ASSUME THAT ALL BUILDINGS HAVE UNDERGROUND SERVICE LINES. CALL USA FOR MARKING AND POT-HOLE PRIOR TO TRENCHING. BID ITEM FOR POT-HOLING COVERS POT-HOLING FOR UTILITY MAINS ONLY.
- WHERE THE NEW SEWER IS TO FOLLOW THE ALIGNMENT OF THE EXISTING SEWER THE CONTRACTOR SHALL LOCATE THE ALIGNMENT OF THE EXISTING SEWER BY ELECTRONIC MEANS OR BY POT-HOLING PRIOR TO SAW CUTTING PAVEMENT.
- THE CONTRACTOR SHALL USE SHORING METHODS THAT WILL PREVENT MOVEMENT OF ADJACENT GROUND.
- AT THE END OF THE DAY'S WORK PERIOD NOT MORE THAN 20' OF TRENCH MAY BE LEFT WITHOUT COMPACTED BACKFILL TO THE GROUND SURFACE UNLESS APPROVED BY CITY ENGINEER.
- WHERE A WATER MAIN IS CLOSE TO THE SEWER ALIGNMENT THE CONTRACTOR SHALL COORDINATE HIS WORK WITH MMWD. IT IS THE CONTRACTORS RESPONSIBILITY TO SUPPORT THE WATER MAIN AT ALL TIMES.
- USE EXTREME CARE WHEN EXCAVATING NEAR BENDS OR TEES ON WATER MAINS SO AS NOT TO DISTURB ANY THRUST BLOCKS. IF A THRUST BLOCK IS DISPLACED OR DISTURBED IT SHALL BE REPLACED BEFORE THE END OF THAT DAY'S WORK PERIOD.
- GROUND WATER CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR. GROUND WATER SHALL NOT BE DISCHARGED TO STORM DRAINS. WATER FROM TRENCH DEWATERING MAY BE DISCHARGED TO THE SANITARY SEWER PROVIDING ROCKS, GRAVEL, DEBRIS, DIRT, AND SILT HAVE BEEN REMOVED.
- ALL PAVEMENT, CURBS, GUTTERS AND SIDEWALKS DAMAGED BY THE WORK SHALL BE RESTORED PER THE SURFACE RESTORATION DETAILS. CURBS, GUTTERS AND SIDEWALKS SHALL BE REPLACED TO MATCH EXISTING DIMENSIONS AND CONFIGURATION.
- TRENCH WORK IN STREETS/PAVED AREAS INCLUDES:
 - TRENCHES FOR NEW GRAVITY SEWER MAINS AND FORCE MAINS
- CLEANOUT BOXES SHALL NOT BE INSTALLED ON PRIVATE PROPERTY UNLESS SPECIFICALLY DIRECTED BY THE CITY.
- USE OF " CUT BACK " ASPHALT FOR TEMPORARY TRENCH PAVING IN THE PUBLIC RIGHT OF WAY IS NOT PERMITTED. USE TRENCH PLATES OR HOT MIX ONLY.
- FOR PIPE BEDDING AND PIPE ZONE BACKFILL SEE TRENCH SECTION ON SHEET 7.

GENERAL TRAFFIC CONTROL REQUIREMENTS

- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL MEASURES INCLUDING CONTROL MEASURES FOR SIDEWALK PEDESTRIANS, BICYCLES, SKATERS, ETC. TRAFFIC CONTROL MEASURES SHALL INCLUDE SIGNS, DELINEATORS, BARRICADES, K RAILS, FLAGGERS, ETC. AS NECESSARY FOR SAFE MOVEMENT OF VEHICULAR AND PEDESTRIAN TRAFFIC PAST THE WORK AREA.
- BEFORE COMMENCING WORK, THE CONTRACTOR SHALL PREPARE A DETAILED TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHOWING ALL EXISTING SIGNAGE, PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES AND FOR SHOWING ALL PROPOSED TEMPORARY CONSTRUCTION SIGN PLACEMENT, PAVEMENT MARKINGS, FLAGGERS, ETC. ON THE TRAFFIC CONTROL PLAN. THE TRAFFIC CONTROL PLAN IS SUBJECT TO APPROVAL BY THE COUNTY OF MARIN
- ALL TRAFFIC CONTROL MEASURES AND TEMPORARY SIGNS, LIGHTS AND DEVICES SHALL BE IN ACCORDANCE WITH THE CALIFORNIA STATE DIVISION OF HIGHWAYS "MANUAL OF TRAFFIC CONTROL FOR CONSTRUCTION AND MAINTENANCE WORK ZONES", CURRENT EDITION.
- THE CONTRACTOR SHALL NOTIFY RESIDENTS AREGARDING PLANNED DETOURS AND PARKING RESTRICTIONS IN WRITING AT LEAST ONE (1) WEEK BEFORE THE START OF CONSTRUCTION AND 48 HOURS PRIOR TO ANY TRAFFIC CONTROL OR PARKING RESTRICTION.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ALLOW EMERGENCY VEHICLES TO PASS THROUGH THE CONSTRUCTION ZONES WITHOUT ANY DELAYS.
- DURING NON-WORKING HOURS, ALL TRENCHES SHALL EITHER BE BACKFILLED AND TEMPORARILY PAVED OR COVERED WITH STEEL PLATES, AND ALL STREETS AND DRIVEWAYS OPEN TO NORMAL TRAFFIC. ALL STEEL PLATES SHALL HAVE A NON-SKID SURFACE.
- UNLESS SPECIFIED OTHERWISE, WORKING HOURS IN PUBLIC STREETS SHALL BE BETWEEN 8 AM AND 5 PM. NO WORK IS PERMITTED ON EVENINGS, SATURDAYS, SUNDAYS OR HOLIDAYS WITHOUT SPECIAL APPROVAL.
- ALLOW ACCESS TO DRIVEWAYS AT ALL TIMES.
- THE SPEED LIMIT THRU ANY DELINEATED AREAS SHALL BE POSTED AS 15 MPH.
- THE COST OF ALL TRAFFIC CONTROL, INCLUDING ALL BARRICADES, DELINEATORS AND FLAGGERS, SHALL BE INCLUDED IN THE VARIOUS BID ITEMS FOR PUMP STATION CONSTRUCTION.

ABBREVIATIONS INCLUDE BUT ARE NOT LIMITED TO:

AC	ASPHALT CONCRETE	EL	ELEVATION	O/	OVER
APPROX	APPROXIMATE	ENGR	ENGINEER	OD	OUTSIDE DIAMETER
ALT	ALTERNATE	EQ	EQUAL	OH	OPPOSITE HAND
ALUM	ALUMINUM	EW	EACH WAY	OPNG	OPENING
ATR	ALL-THREAD ROD	EXPJT	EXPANSION JOINT	PCP	PUMP CONTROL PANEL
BFP	BACKFLOW PREVENTER	FCA	FLANGED COUPLING ADAPTER	PS	PUMP STATION
BLKG	BLOCKING	FDN	FOUNDATION	P/L	PROPERTY LINE
BM	BENCH MARK	FTG	FOOTING	PVC	POLYVINYL CHLORIDE
BTWN	BETWEEN	G	GAS	PT	PRESSURE TREATED
BOT	BOTTOM	GALV	GALVANIZED	RWD,RWD	REDWOOD
CBC	CALIFORNIA BUILDING CODE	GI	GALVANIZED IRON	REINF	REINFORCEMENT
CC	CENTER TO CENTER	GPM	GALLONS PER MINUTE	REQD	REQUIRED
CI	CAST IRON	GRTG	GRATING	RFC	RESTRAINED FLANGED COUPLING
CL	CENTER LINE	HDG	HOT DIP GALVANIZED	ADAPTER	
CLR	CLEAR	HDPE	HIGH DENSITY POLYETHYLENE	SOH	SCHEDULE
CO	CONCRETE	HGR	HANGER	SHT	SHEET
CONC	CONCRETE	ID	INSIDE DIAMETER	SIM	SIMILAR
CON	CONTINUOUS	INV	INVERT	SPECS	SPECIFICATIONS
CONN	CONNECT, CONNECTION	IPS	IRON PIPE SIZE	SQ	SQUARE
CPLG	COUPLING	JP	JOINT POLE	SS	STAINLESS STEEL
d	PENNY (NAIL SIZE)	JT	JOINT TRENCH	SSE	SANITARY SEWER EASEMENT
DI	DUCTILE IRON	LAT	LATERAL	STD	STANDARD
DIA	DIAMETER	L/C	LINED AND COATED	SYM	SYMMETRICAL
DIMS	DIMENSIONS	MANUF	MANUFACTURER	T&B	TOP AND BOTTOM
DBL	DOUBLE	MAX	MAXIMUM	T.B.M.	TEMPORARY BENCHMARK
DET	DETAIL	MB	MACHINE BOLT	TEL	TELEPHONE
DF	DOUGLAS FIR	MI	MALLEABLE IRON	THRD,THD	THREADED
DISCH	DISCHARGE	MIN	MINIMUM	TYP	TYPICAL
DP	DEEP	MH	MANHOLE	UON	UNLESS OTHERWISE NOTED
DRN	DRAIN	(N)	NEW	VC, VCP	VITRIFIED CLAY PIPE
DWG	DRAWING	N/A	NOT APPLICABLE	W/	WITH
DWY	DRIVEWAY	NO	NUMBER	WM	WATER METER
(E)	EXISTING	NTS	NOT TO SCALE	WS	WELDED STEEL
EA	EACH			#	SIZE OF REINFORCING BAR

LEGEND

	W	WATER LINE AND WATER VALVE
	G-OR-GAS	GAS LINE
	JT	JOINT TRENCH
	E	UNDERGROUND ELECTRIC
	OH	OVERHEAD ELECTRIC
	T-OR-TEL	UNDERGROUND TELEPHONE/FIBER OPTIC
	C	UNDERGROUND CABLE
	TS	TRAFFIC SIGNAL CONDUIT
	SS-OR	EXIST SEWER LINE
	SSFM	EXIST FORCE MAIN
		NEW SEWER MAIN
	SSFM	NEW SEWER FORCE MAIN
		STORM DRAIN
		EDGE OF PAVEMENT/PAVING HEADER
		PROPERTY LINE
	x	SILT FENCE
	///	ABANDONED LINE
	AND	JOINT POLE
	AND	FIRE HYDRANT
	LAT	NEW LATERAL W/CLEANOUT
		CATCH BASIN
		WATER METER
		IRRIGATION CONTROL VALVE
		ELECTRIC BOX
		MONUMENT
		NEW SEWER MANHOLE
		EXISTING SEWER MANHOLE
		STORM DRAIN MANHOLE
		TELEPHONE MANHOLE

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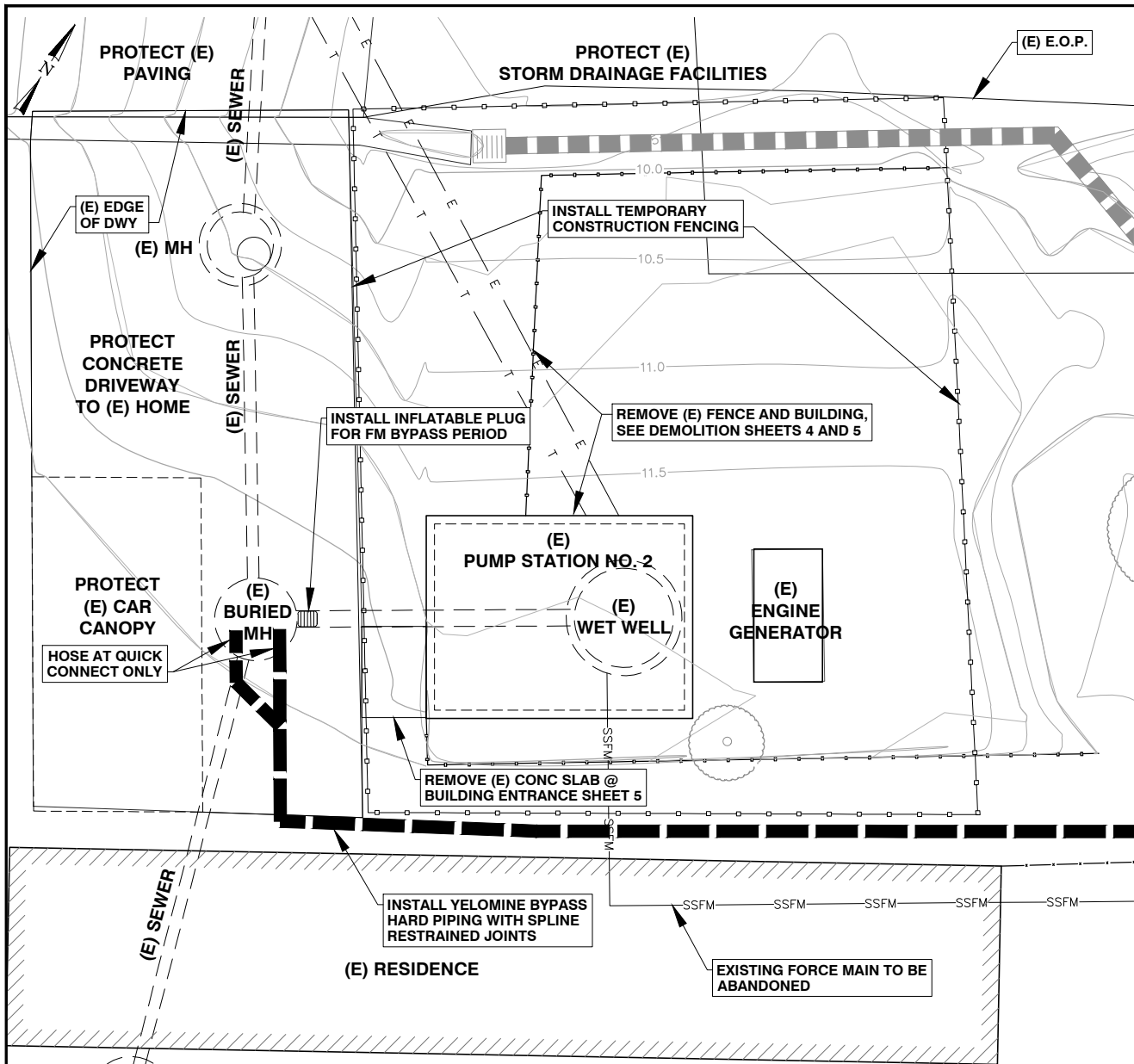
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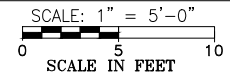


THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS
 MARIN VALLEY MOBILE COUNTRY CLUB
 PUMP STATION NO. 2 IMPROVEMENTS
 MARIN COUNTY CALIFORNIA
NOTES, LEGEND AND ABBREVIATIONS

CONTRACT NO.	19-302
DATE	5/15/2020
PROJECT	G02
SHEET	2 of 28

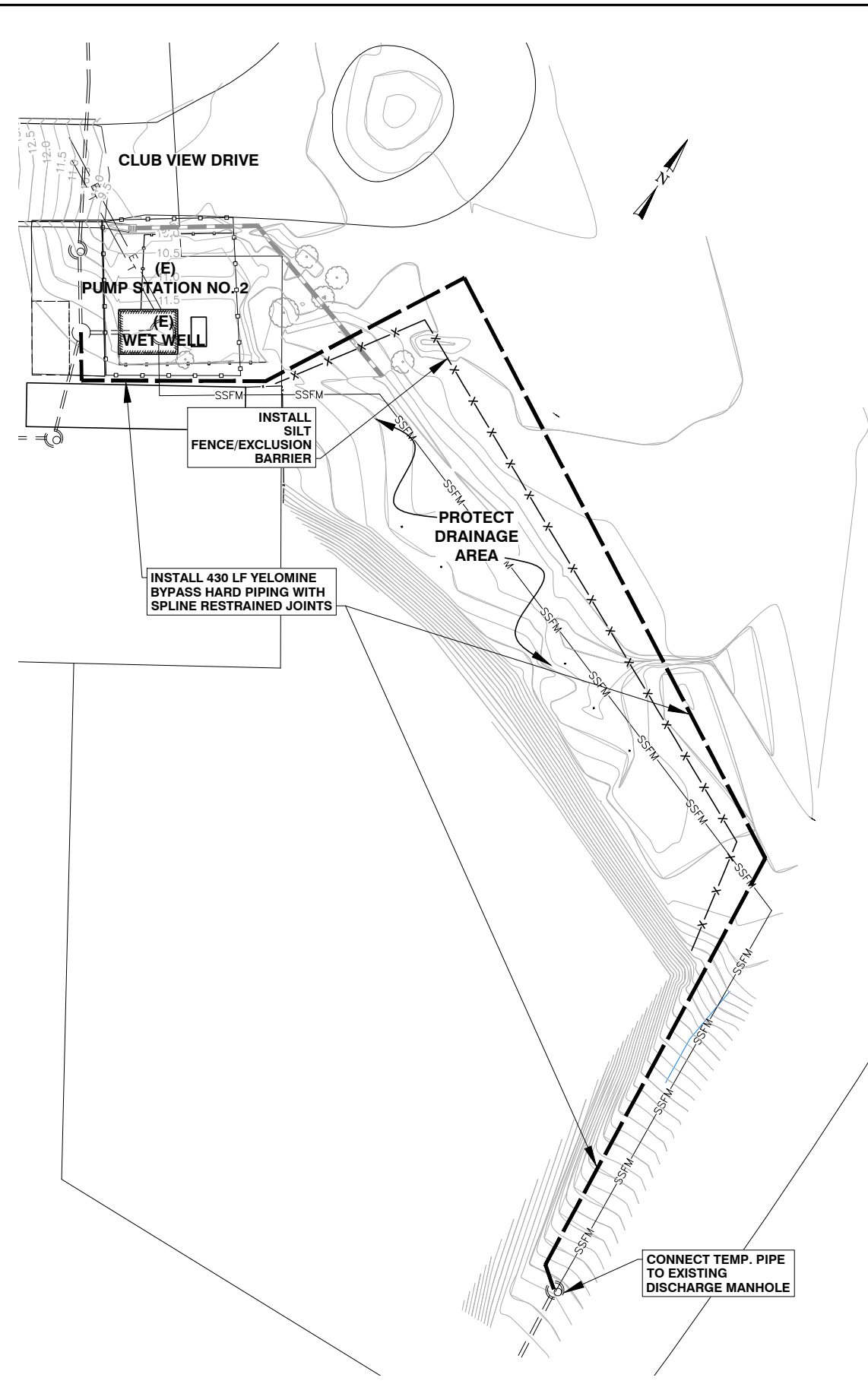


EXISTING CONDITION SITE PLAN

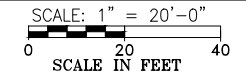


TEMPORARY PUMPING NOTES:

1. THE PUMP STATION IS AN OPERATING SEWAGE PUMP STATION. THE CONTRACTOR IS RESPONSIBLE FOR HIS ACTIONS OR HIS SUBCONTRACTOR'S ACTIONS THAT MAY DISRUPT THE OPERATION OF THE PUMP STATION. OWNER SHALL BE NOTIFIED 48 HOURS PRIOR TO THE CONTRACTOR COMMENCING HIS OPERATIONS ON THE SITE.
2. AS A FIRST ORDER OF BUSINESS, THE CONTRACTOR SHALL POTHOLE AND FIELD MEASURE EXISTING 6" DUCTILE IRON FORCE MAIN AT PUMP PIT STRUCTURE WALL, EXISTING BURIED INFLUENT MANHOLE AND CONNECTIONS WITH EXISTING MANHOLES, LOCATING ELBOWS AND CHANGES IN ELEVATIONS, AND ALL EXISTING UNDERGROUND UTILITY LOCATIONS. COORDINATE ALL EXCAVATION WITH REPRESENTATIVES OF THE UTILITY COMPANIES. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE THERETO. PREPARE AND SUBMIT A POT-HOLE LOG PRIOR TO ORDERING PIPING OR EQUIPMENT.
3. IN ORDER TO TAKE THE EXISTING PUMP STATION OUT OF OPERATION OR SEVER ANY UTILITY LINES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS PUMPING OF ALL SEWAGE. THE TEMPORARY PUMPING SYSTEM DESIGN SHALL BE SUBMITTED TO THE OWNER FOR REVIEW AT LEAST 1 WEEK PRIOR TO TAKING THE EXISTING PUMP STATION OUT OF SERVICE.
4. PRIOR TO TAKING THE EXISTING PUMP STATION OUT OF OPERATION, THE CONTRACTOR SHALL INSTALL AN INFLATABLE PLUG IN THE INFLUENT SEWER TO THE PUMP STATION AND TWO (2) TEMPORARY PUMPS IN THE EXISTING INFLUENT MANHOLE. INSTALL APPROXIMATELY 430 LF OF TEMPORARY BYPASS PIPING TO EXISTING FORCE MAIN DISCHARGE MANHOLE. A 6" TEE, VALVE AND BLIND FLANGE SHALL BE INSTALLED ON THE TEMPORARY DISCHARGE PIPING FOR CONNECTION OF A EMERGENCY PUMP IF NECESSARY.
5. THE CONTRACTOR SHALL INSTALL A TEMPORARY DUPLEX PUMPING SYSTEM IN THE INFLUENT MANHOLE, COMPLETE WITH MANIFOLD, CHECK VALVES, PUMP CONTROLLER, STANDBY POWER AND ATS, AN AUTO-DIALER AND ALARMS AS DESCRIBED BELOW, AND COMMENCE TEMPORARY PUMPING DURING PUMP STATION CONSTRUCTION. USE OF NEW PERMANENT SEWAGE PUMPS, (E) MCC AND (N) PCP IS PROHIBITED. THE EXISTING PUMP STATION CAN BE TAKEN OFF LINE ONLY AFTER COMPLETION AND SUCCESSFUL TESTING OF THE TEMPORARY PUMPING SYSTEM AND THE TEMPORARY STANDBY ENGINE GENERATOR.
6. THE CONTRACTOR SHALL INSTALL THE FOLLOWING ALARMS:
 HIGH WATER
 LOW WATER
 PUMP 1 FAIL
 PUMP 2 FAIL
 POWER FAILURE
 AUTOMATIC DIALER WITH A TELEPHONE LINE TO THE CONTRACTOR WHO SHALL RESPOND IN A TIMELY MANNER. CONTRACTOR MAY CALL MVMCCC MAINTENANCE STAFF IF NEEDED.
7. EACH TEMPORARY PUMP SHALL HAVE A CAPACITY OF 350 GPM @ 30 FT TDH.
8. ALL BYPASS EQUIPMENT MUST BE CONTAINED ON THE PUMP STATION SITE, DO NOT BLOCK THE ADJACENT DRIVEWAY AND CUL-DE-SAC. PROTECT DRIVEWAY AND PROVIDE ACCESS TO HOME AT ALL TIMES. BURY TEMPORARY PIPING IN VICINITY OF INFLUENT MANHOLE AS NECESSARY TO MAINTAIN EGRESS. PENETRATE MANHOLE AS REQUIRED AND REPAIR AFTER REMOVAL OF BYPASS PUMP SYSTEM



FORCE MAIN BYPASS PLAN



9. THE CONTRACTOR SHALL UTILIZE THE POWER FEEDS TO THE EXISTING PUMP STATION TO POWER THE TEMPORARY BYPASS PUMPING SYSTEM AND CONSTRUCTION SITE. THE CONTRACTOR MAY NOT USE THE (E) PUMP CONTROL PANEL FOR OPERATING HIS/HER TEMPORARY PUMPING SYSTEM. PG&E APPROVAL IS NOT REQUIRED FOR THIS PROJECT.
10. THE CONTRACTOR SHALL PROVIDE A TEMPORARY STANDBY PORTABLE ENGINE GENERATOR SET ("WHISPER QUIET", 68db @ 23 FEET) WITH AN AUTOMATIC TRANSFER SWITCH TO PROVIDE STANDBY POWER FOR HIS/HER TEMPORARY PUMPING SYSTEM.
11. IF RAW SEWAGE PUMPING CANNOT BE PROVIDED FOR ANY REASON, THE CONTRACTOR SHALL PROVIDE A TANK TRUCK TO PUMP OUT SEWAGE AND CONTAIN ANY SPILLS. DISCHARGE OF ANY RAW SEWAGE TO WATER COURSES IS STRICTLY PROHIBITED.
12. THE CONTRACTOR SHALL PROTECT THE DRAINAGE RUNOFF AREA WITH A SILT FENCE/EXCLUSION BARRIER AND SHALL NOT ENTER THE AREA EAST OF THE SILT BARRIER AT ANY TIME. THE CITY MAY REVISE THE LOCATION OF THE SILT BARRIER IN THE FIELD.
13. THE CONTRACTOR SHALL PROVIDE OWNER-APPROVED ODOR CONTAINMENT AT THE INFLUENT MANHOLE DURING CONSTRUCTION.
14. THE CONTRACTOR SHALL REPAIR ALL TEMPORARY MANHOLE PENETRATIONS AFTER REMOVAL OF FM BYPASS.

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NUTE ENGINEERING
 87 AMERSON AVE SAN RAFAEL, CA 94901
 415-453-8800 F: 415-453-0300

Not Approved
 For Construction

PREPARED FOR:
NUTE
 PROJECT #8827A

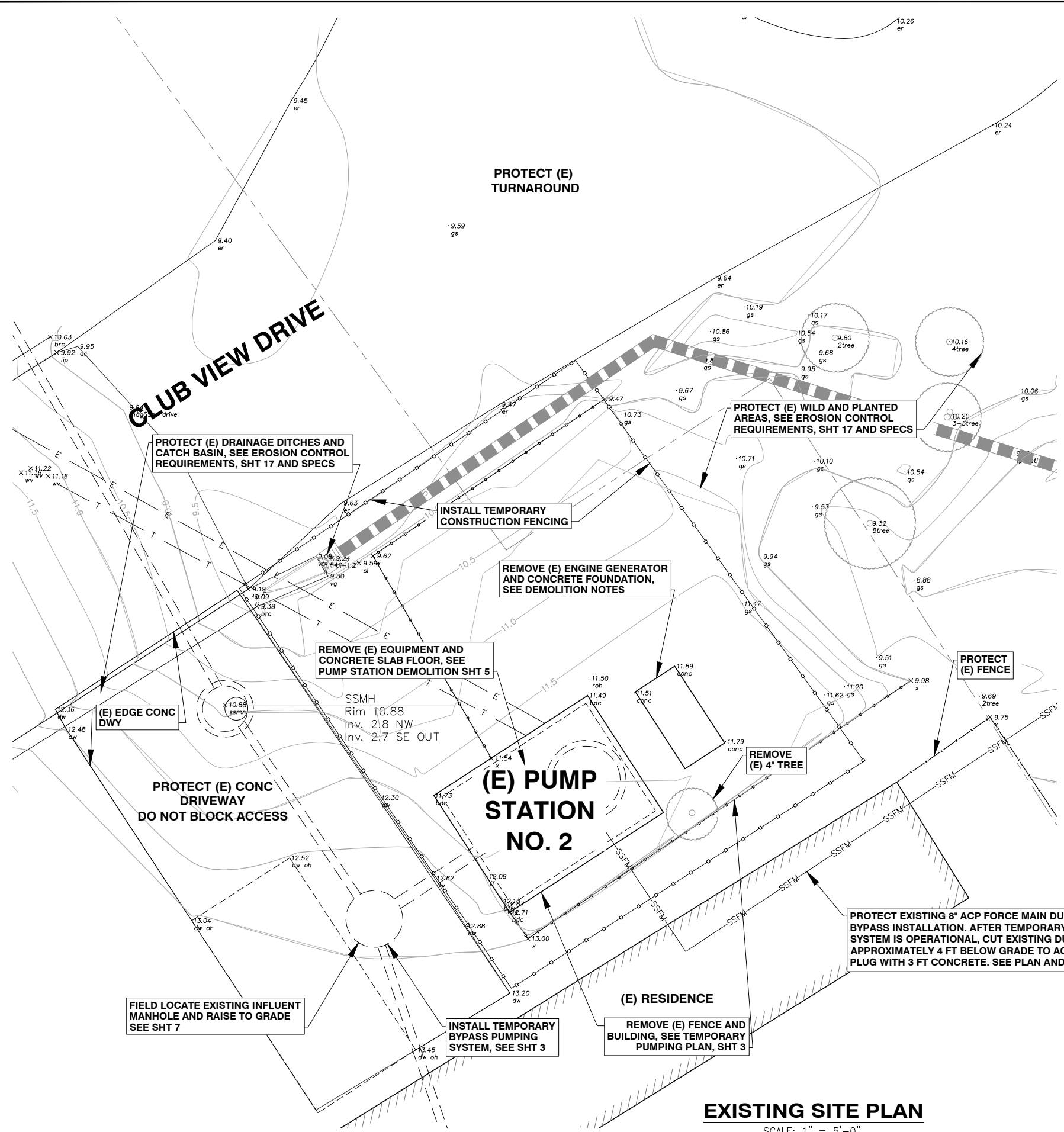
PREPARED FOR:
 THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS
 MARIN VALLEY MOBILE COUNTRY CLUB
 PUMP STATION NO. 2 IMPROVEMENTS
 CALIFORNIA

**CITY OF NOVATO
 CALIFORNIA**

**SITE
 PUMP STATION
 TEMPORARY PUMPING PLAN AND NOTES**

CONTRACT NO.: 19-302
 DATE: 5/15/2020
 SHEET: **C01**
 OF 28

Printed: May 15, 2020 9:49 AM
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EXISTING SITE PLAN
 SCALE: 1" = 5'-0"
 0 5 10
 SCALE IN FEET

DEMOLITION NOTES:

1. CONTRACTOR SHALL PROVIDE A DEMOLITION PLAN ONE WEEK BEFORE DEMOLITION BEGINS. (SEE SPECS)
2. AS A FIRST ITEM OF WORK, THE CONTRACTOR SHALL POTHOLE ALL EXISTING UNDERGROUND UTILITY LOCATIONS AND COORDINATE ALL EXCAVATION WITH REPRESENTATIVES OF THE UTILITY COMPANIES, AND SHALL BE RESPONSIBLE FOR DAMAGE THERETO.
3. THE CONTRACTOR SHALL CAREFULLY REMOVE ALL PUMP STATION EQUIPMENT INCLUDING MOTORS, PUMPS AND STANDS, VALVES, SLIDE GATES, STEEL LADDERS AND HANDRAILS, EXPOSED CONDUITS AND OTHER ELECTRICAL, MECHANICAL AND VENTILATION EQUIPMENT AND ALL PIPING. SEE PUMP STATION DEMOLITION SHEET 5.
4. THE CONTRACTOR SHALL COORDINATE REMOVAL ALL EQUIPMENT SELECTED FOR SALVAGE BY THE OWNER. CONTRACTOR SHALL DELIVER SALVAGED EQUIPMENT TO THE OWNER.
5. CONTACT MARK PIERCE FROM MVMCC MAINTENANCE STAFF AT 415-302-9137 TO COORDINATE DELIVERY OF SALVAGED EQUIPMENT.
6. UNSALVAGED EQUIPMENT AND DEMOLITION DEBRIS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT A LEGAL DISPOSAL SITE.
7. ANY ACP (ASBESTOS CEMENT PIPE) WHICH IS REMOVED SHALL BE PROPERLY BAGGED, SEALED AND DISPOSED OF AT A LEGAL DISPOSAL SITE.
8. THE CONTRACTOR SHALL CLEAN ALL SEWAGE, SCUM AND SLUDGE FROM THE EXISTING WET WELL AND DISPOSE OF IT AT A LEGAL FACILITY. DISCHARGE OF ANY RAW SEWAGE TO WATER COURSES OR THE BAY IS STRICTLY PROHIBITED.
9. REMOVE (E) ENGINE GENERATOR AND BASE FUEL STORAGE TANK PER NFPA REQUIREMENTS AND STANDARD OPERATING PROCEDURES, COUNTY OF MARIN, DEPARTMENT OF PUBLIC WORKS, WASTE MANAGEMENT DIVISION. CONTRACTOR SHALL CLEAN REMAINING DIESEL FUEL FROM THE SUB-BASE TANK AND DISPOSE OF FUEL AND TANK AT A LEGAL DISPOSAL SITE.
10. AFTER FOUNDATION BLOCK REMOVAL AND CERTIFICATION THAT THE SITE IS FREE OF CONTAMINATION, THE EXCAVATION FOR THE NEW FLOWMETER PIT MAY PROCEED, AND FOUNDATION AREA SHALL BE FILLED W/CLASS 2 AB AS A SUB-BASE FOR AC PAVING, SEE PAVING PLAN, SHT 9.
11. UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY. LANDSCAPING AND LANDSCAPE IRRIGATION PIPING IS NOT SHOWN.
12. THE CONTRACTOR SHALL RESTORE ALL LANDSCAPING AND LANDSCAPE IRRIGATION PIPING AND CONTROL WIRES WHICH IS DAMAGED BY THE WORK. REPLACE ALL SHRUBS AND TREES WHICH ARE DAMAGED BY THE WORK.
13. THE CONTRACTOR SHALL INSTALL EROSION CONTROL AROUND ANY DISTURBED SOIL IN THE WORK AREA. RESEED WITH MARIN MIX (OR APPROVED EQUAL) AND COVER WITH STRAW MULCH.
14. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND DISPOSED OF AFTER PROJECT COMPLETION.

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DRAWN BY	PM	
CHECKED BY	MTW	

THIS SCALE AND MEASUREMENTS ARE NOT TO SCALE

PREPARED BY: **NUTE ENGINEERING**
 871 MARIN AVENUE SAN RAFAEL, CA 94901
 415-452-8800 F: 415-452-8800 nute.biz
 PROJECT #8627A

Not Approved For Construction

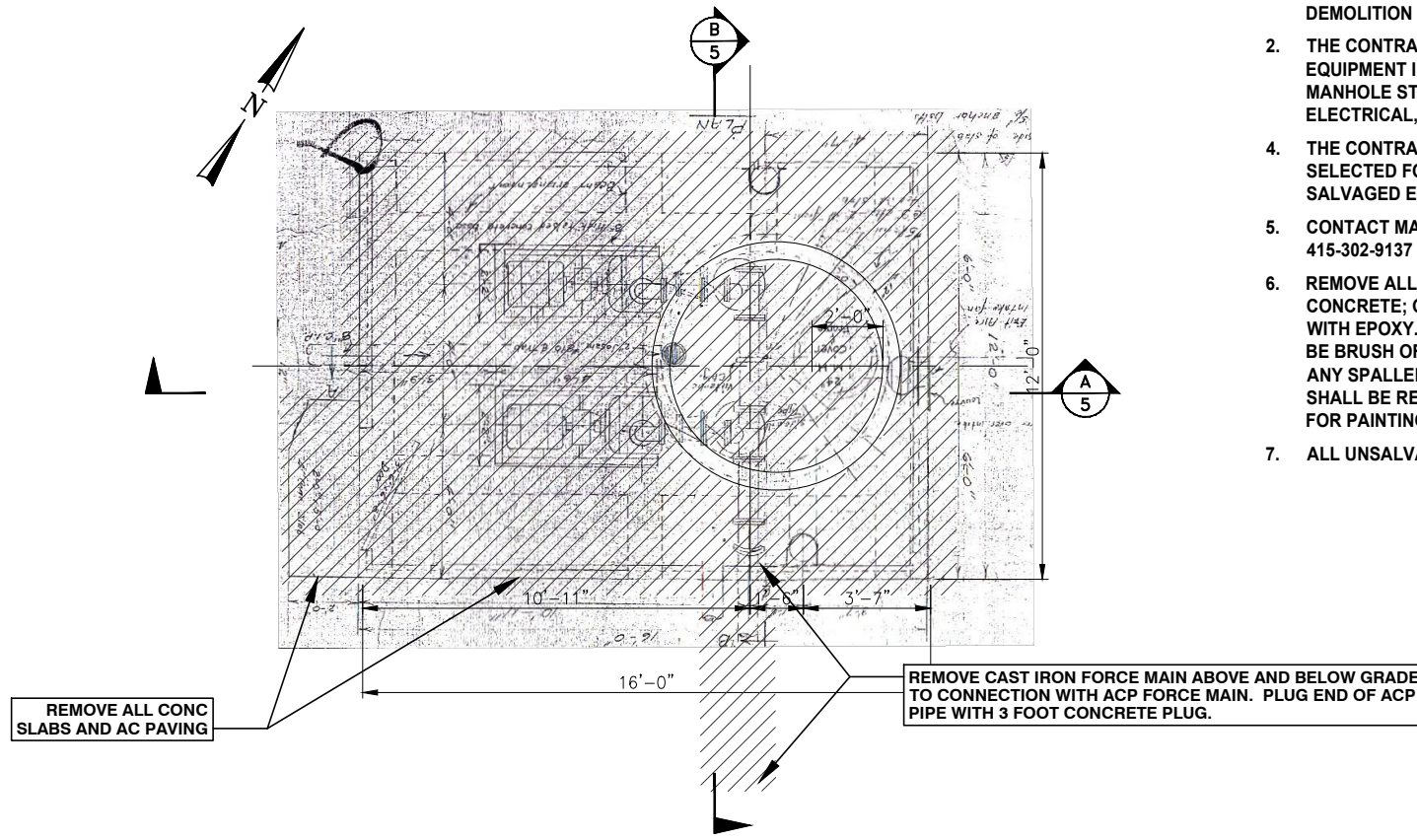
PREPARED FOR: **CITY OF NOVATO CALIFORNIA**

THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS
 MARIN VALLEY MOBILE COUNTRY CLUB
 PUMP STATION NO. 2 IMPROVEMENTS
 MARIN COUNTY CALIFORNIA

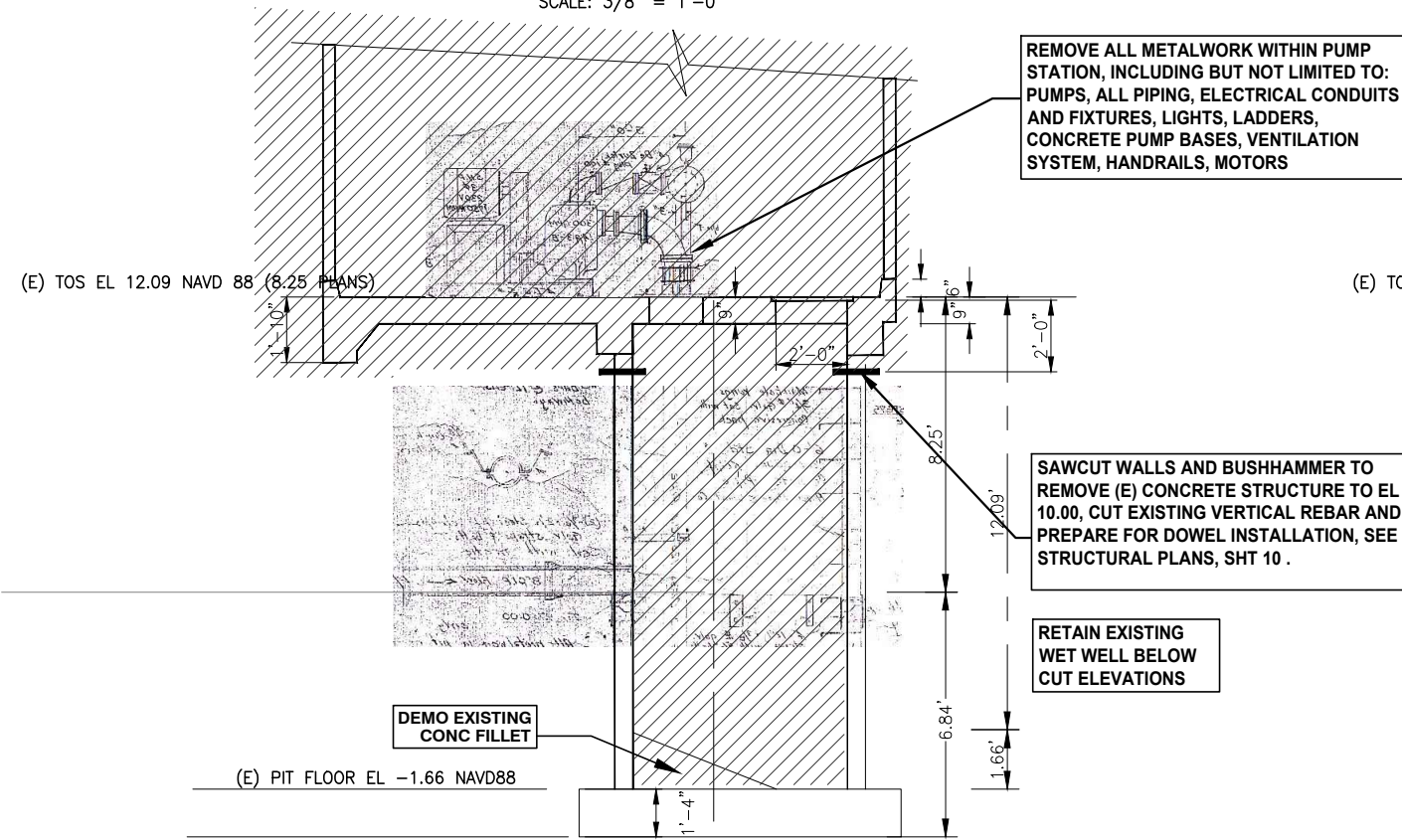
DEMOLITION EXISTING SITE PLAN

CONTRACT NO.	19-302
DATE	5/15/2020
SHEET	C02
TOTAL SHEETS	4 OF 28

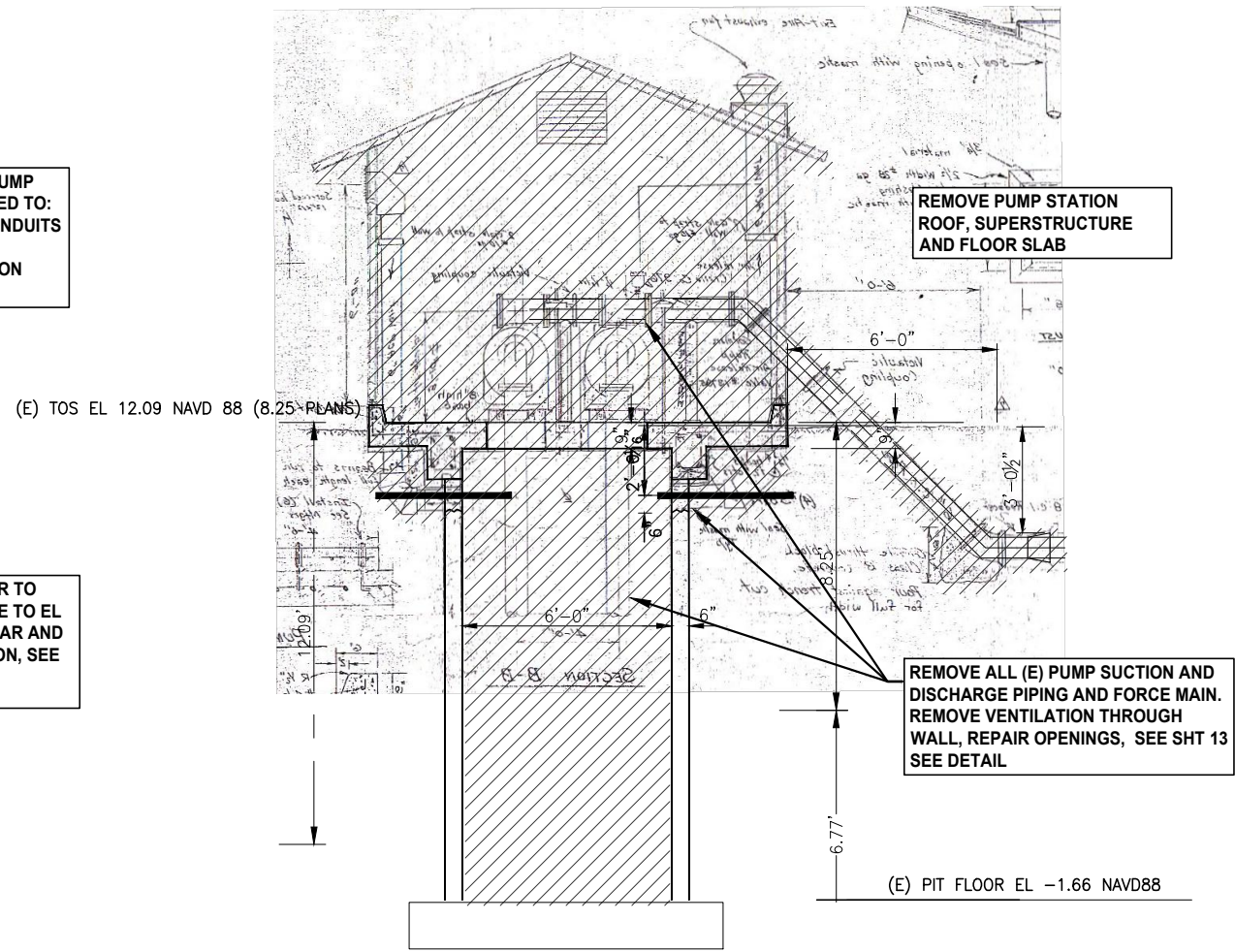
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GROUND LEVEL PLAN
 SCALE: 3/8" = 1'-0"



SECTION A
 SCALE: 3/8" = 1'-0"



SECTION B
 SCALE: 3/8" = 1'-0"

DEMOLITION NOTES:

1. CONTRACTOR SHALL PROVIDE A DEMOLITION PLAN ONE WEEK BEFORE DEMOLITION BEGINS.
2. THE CONTRACTOR SHALL CAREFULLY REMOVE ALL PUMP STATION EQUIPMENT INCLUDING MOTORS, PUMPS AND STANDS, VALVES, STEEL MANHOLE STEPS AND HANDRAILS, EXPOSED CONDUITS AND OTHER ELECTRICAL, MECHANICAL AND VENTILATION EQUIPMENT AND ALL PIPING.
3. THE CONTRACTOR SHALL COORDINATE REMOVAL ALL EQUIPMENT SELECTED FOR SALVAGE BY THE OWNER. CONTRACTOR SHALL DELIVER SALVAGED EQUIPMENT TO THE OWNER.
4. THE CONTRACTOR SHALL COORDINATE REMOVAL ALL EQUIPMENT SELECTED FOR SALVAGE BY THE OWNER. CONTRACTOR SHALL DELIVER SALVAGED EQUIPMENT TO THE OWNER.
5. CONTACT MARK PIERCE FROM MVMCC MAINTENANCE STAFF AT 415-302-9137 TO COORDINATE DELIVERY OF SALVAGED EQUIPMENT.
6. REMOVE ALL METAL BOLTS, ETC., PROJECTING FROM WET WELL INTERIOR CONCRETE; GRIND OR CHIP OUT BELOW CONCRETE SURFACE AND FILL WITH EPOXY. ALL EXISTING INTERIOR SURFACES OF THE WET WELL SHALL BE BRUSH OFF SAND BLASTED TO REMOVE THE EXISTING COATINGS AND ANY SPALLED CONCRETE. ALL BUG HOLES AND SPALLED CONCRETE SHALL BE REPAIRED WITH EPOXY FILLER AND THE SURFACE PREPARED FOR PAINTING. (SEE SPECS SECTION 09 96 00)
7. ALL UNSALVAGED EQUIPMENT AND DEMOLITION DEBRIS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT A LEGAL DISPOSAL SITE.
8. ANY ACP (ASBESTOS CEMENT PIPE) OR ASBESTOS DUCTING WHICH IS REMOVED SHALL BE PROPERLY BAGGED, SEALED AND DISPOSED OF AT A LEGAL DISPOSAL SITE.
9. THE CONTRACTOR SHALL CLEAN ALL SEWAGE, SCUM AND SLUDGE FROM THE EXISTING WET WELL AND DISPOSE OF IT AT A LEGAL FACILITY. DISCHARGE OF ANY RAW SEWAGE TO WATER COURSES OR THE BAY IS STRICTLY PROHIBITED.
10. REMOVE (E) ENGINE GENERATOR, FUEL TANK AND FUEL PIPING PER NFPA REQUIREMENTS AND STANDARD OPERATING PROCEDURES, COUNTY OF MARIN, DEPARTMENT OF PUBLIC WORKS, WASTE MANAGEMENT DIVISION. CONTRACTOR SHALL EXCAVATE AND REMOVE EXISTING CONCRETE FOUNDATION BLOCK.
11. AFTER REMOVAL OF BUILDING, ENGINE GENERATOR, PIPING, TANKS, REDWOOD WALLS/FENCE, AND GATE AND CERTIFICATION THAT THE SITE IS FREE OF CONTAMINATION, THE EXCAVATED AREA SHALL BE FILLED W/ CLASS 2 AGGREGATE BASE (SEE SPECS) AS A SUB-BASE FOR AC PAVING, SEE PAVING PLAN, SHT 9.
12. CONTRACTOR SHALL PROVIDE TEMPORARY CONSTRUCTION SECURITY FENCE AROUND WORK AREA.

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DESIGNED BY: DES
 DRAWN BY: PM
 CHECKED BY: MTW

IF THE LOCKING SYMBOLS ARE NOT TO SCALE

PREPARED BY: NUTE ENGINEERING
 8770 MARIN AVENUE, SAN RAFAEL, CA 94901
 415-453-5666 F: 415-453-5900 FAX

Not Approved For Construction

THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS
 MARIN COUNTY CALIFORNIA
 MARIN VALLEY MOBILE COUNTRY CLUB
 PUMP STATION NO. 2 IMPROVEMENTS

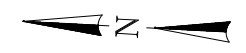
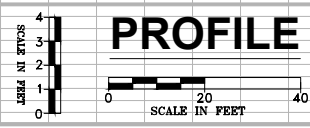
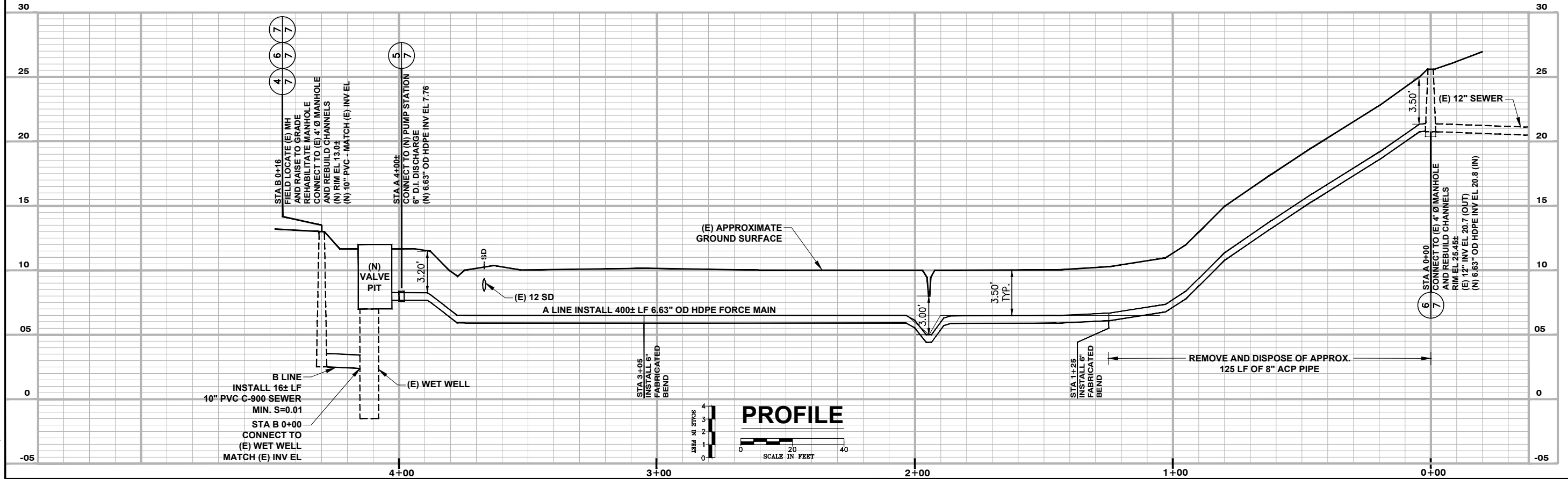
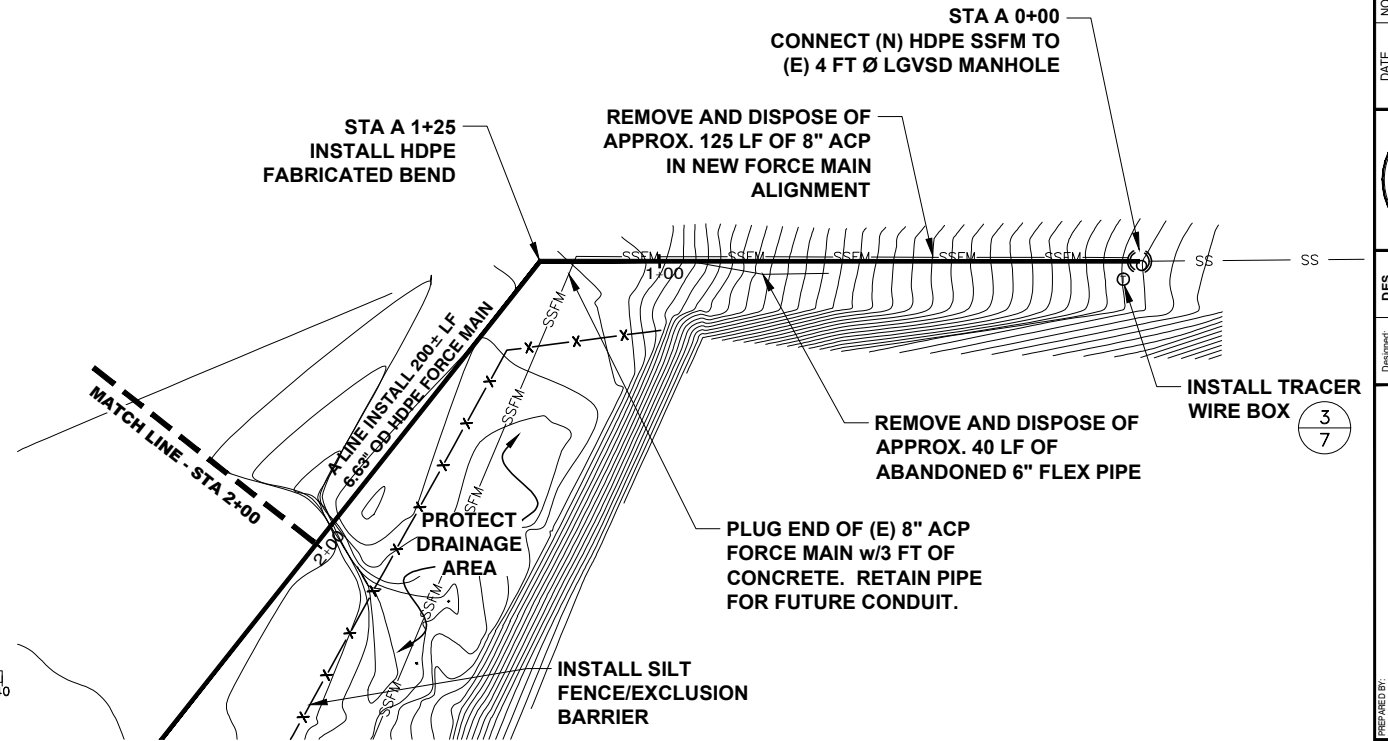
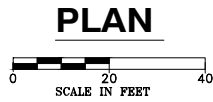
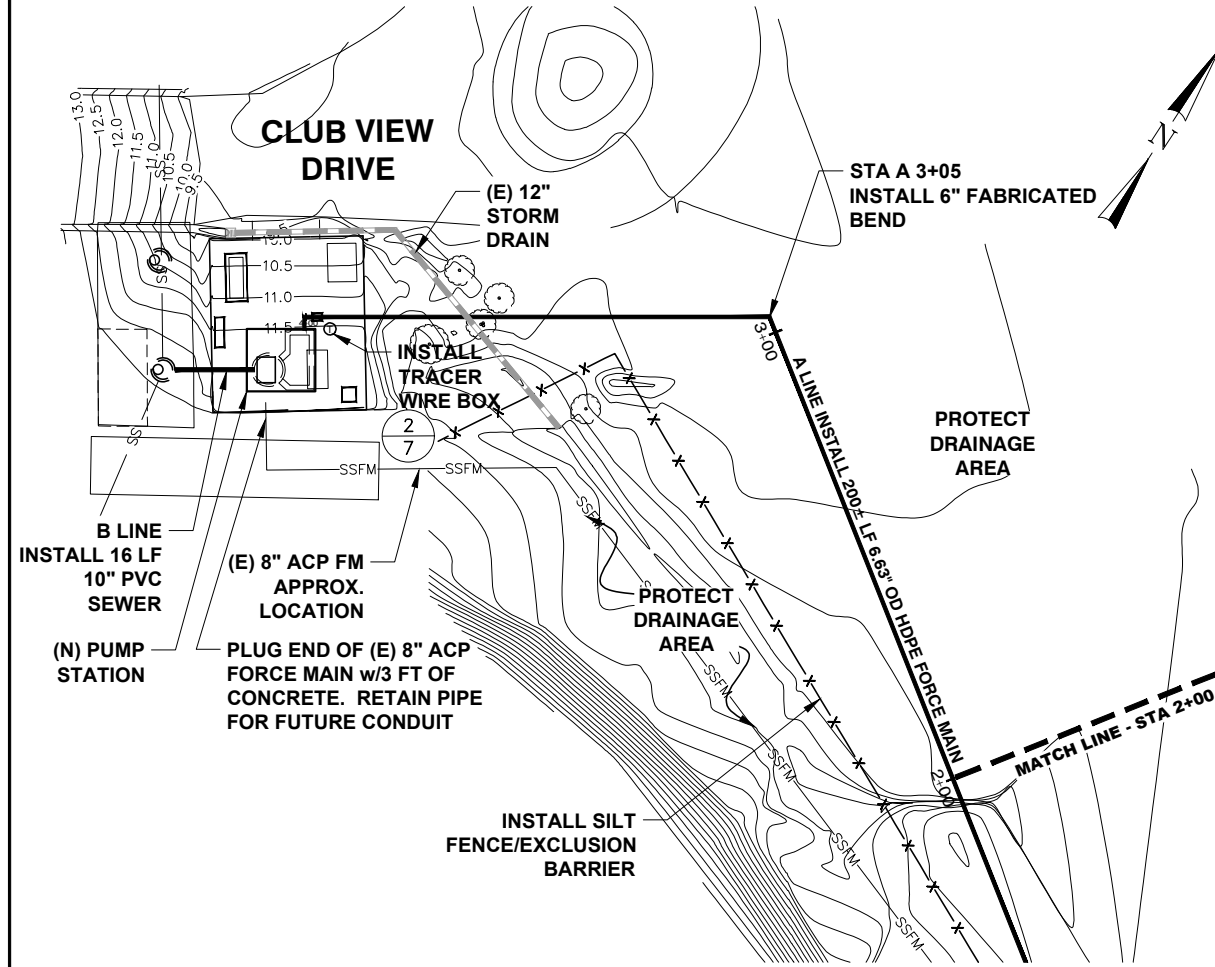
DEMOLITION PUMP STATION FLOOR PLAN AND SECTIONS

CONTRACT NO. 19-302
 DATE 5/15/2020
C03
 5 OF 28

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FORCE MAIN NOTES:

1. CONTRACTOR SHALL MINIMIZE GROUND DISTURBANCE OF UNIMPROVED AREAS DURING FORCE MAIN INSTALLATION.
2. THE CONTRACTOR SHALL PROTECT THE DRAINAGE RUNOFF AREA WITH A SILT FENCE/EXCLUSION BARRIER AND SHALL NOT ENTER THE AREA EAST OF THE SILT FENCE AT ANY TIME. THE CITY MAY REVISE THE LOCATION OF THE SILT BARRIER IN THE FIELD.
3. THE EXACT LOCATION OF THE EXISTING ACP FORCE MAIN IS UNKNOWN. ALL ACP FOUND IN THE ALIGNMENT OF THE NEW FORCE MAIN SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
4. THE FORCE MAIN CONNECTION TO THE MANHOLE AT STA A 0+00 SHALL COMPLY WITH ALL STANDARDS AND REQUIREMENTS OF THE LAS GALLINAS VALLEY SANITARY DISTRICT (LGVSD)



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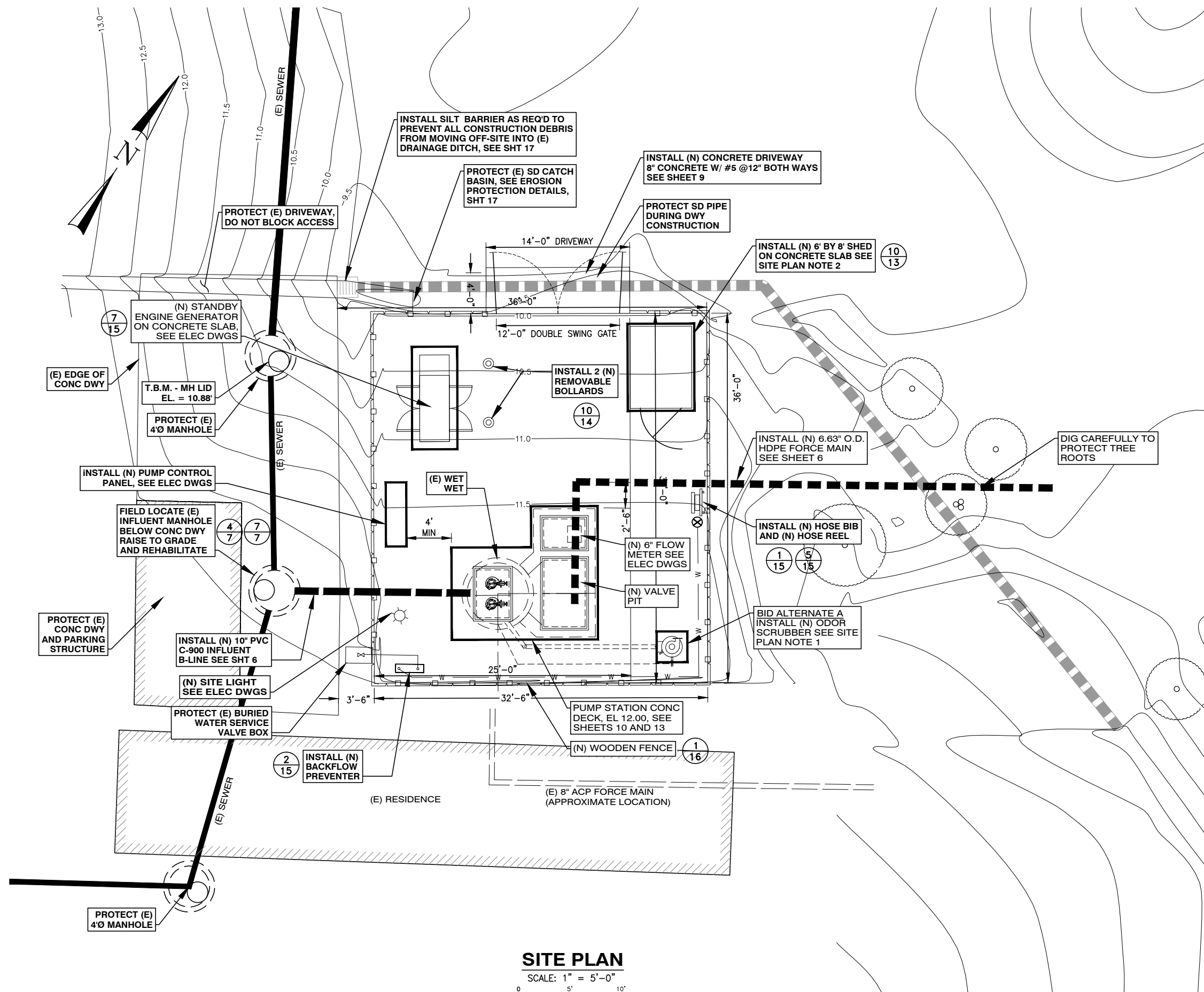
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CHECKED BY	MTW	

NUTE ENGINEERING
 8770 MARIN AVENUE, SAN RAFAEL, CA 94903
 415-453-6800 | F: 415-453-0300 | WWW.NUTE.COM
 PROJECT #8827A

Not Approved
For Construction

PREPARED FOR: **CITY OF NOVATO CALIFORNIA**
 THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS
 MARIN COUNTY CALIFORNIA
 MARIN COUNTY CALIFORNIA
 PUMP STATION NO. 2 IMPROVEMENTS
PLAN AND PROFILE
 STA A 0+00 TO STA A 4+00
 STA B 0+00 TO STA B 0+16

CONTRACT NO.	19-302
DATE	5/15/2020
SHEET	C04
SHEET	6 of 28



SITE PLAN
SCALE: 1" = 5'-0"
0 5' 10'

CONSTRUCTION SEQUENCE:

- PHASE 1**
- FIELD LOCATE BURIED INFLUENT MANHOLE AND RAISE TO GRADE.
 - INSTALL NEW 10" PVC INFLUENT SEWER - B LINE
 - CONTRACTOR SHALL IMPLEMENT HIS TEMPORARY PUMPING PLAN BY MODIFICATIONS OF THE (E) INFLUENT MANHOLE AND INSTALLING TEMPORARY PUMPS WITH TEMPORARY STANDBY POWER. (SEE TEMPORARY PUMPING NOTES) THE CONTRACTOR SHALL DRAIN THE FORCE MAIN BACK TO PUMP STATION WET WELL IF NEEDED.
 - THE CONTRACTOR MUST TEST THE TEMPORARY PUMPING SYSTEM WITH HIS STANDBY PORTABLE ENGINE GENERATOR PRIOR TO SHUTTING DOWN EXISTING PUMP STATION. CONTRACTOR MUST SCHEDULE AND COORDINATE WITH MVMCC STAFF FOR INSTALLATION OF TEMPORARY POWER TO THE TEMPORARY PUMPING SYSTEM .
 - REMOVE (E) PERMANENT ENGINE GENERATOR.
- PHASE 2**
- CONTINUE OPERATION OF THE CONTRACTOR'S TEMPORARY PUMPING SYSTEM.
 - DEMOLISH EXISTING DECK AT WET WELL AND PUMP STATION STRUCTURE. DEMOLISH EXISTING INFLUENT DECK. .
 - CONSTRUCT IMPROVEMENTS TO (E) PUMP STATION AND (N) FORCE MAIN.
 - PAVE SITE AND COMPLETE PROJECT.
 - CONTRACTOR SHALL CONTINUE TO MAINTAIN AND OPERATE THE PUMP STATION UNTIL FINAL ACCEPTANCE BY THE CITY.

SITE PLAN NOTES

- BID ADDITIVE ALTERNATE A INCLUDES THE PROCUREMENT AND COMPLETE INSTALLATION AND START-UP OF A CARBON ADSORBER ODOR SCRUBBER. THE BASE BID SHALL INCLUDE ALL STRUCTURAL WORK, ELECTRICAL WORK (EXCEPT WIRING BETWEEN THE PCP AND ODOR SCRUBBER), AND MECHANICAL WORK AS SHOWN ON THESE PLANS NECESSARY FOR THE INSTALLATION OF AN ODOR SCRUBBER.
- CONTRACTOR SHALL CONSTRUCT A CONCRETE SLAB FOR A NEW STORAGE SHED ON THE SITE. THE PROJECT INCLUDES A BID ALLOWANCE FOR THE SHED TO BE SPECIFIED BY MVMCC STAFF. ALL WORK NECESSARY FOR COMPLETE INSTALLATION OF THE SHED, EXCEPT FOR THE CONCRETE SLAB, SHALL BE PAID ON FORCE ACCOUNT AND COMPENSATED WITH THE BID ALLOWANCE THEREFOR.

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CHECKED BY	

THIS SCALE AND MEASUREMENTS ARE NOT TO SCALE

PREPARED BY: **NUITE ENGINEERING**
 8771 RIVINGTON AVE SAN FRANCISCO, CA 94101
 415-663-6800 F: 415-663-0000
 PROJECT #8827A

Not Approved For Construction

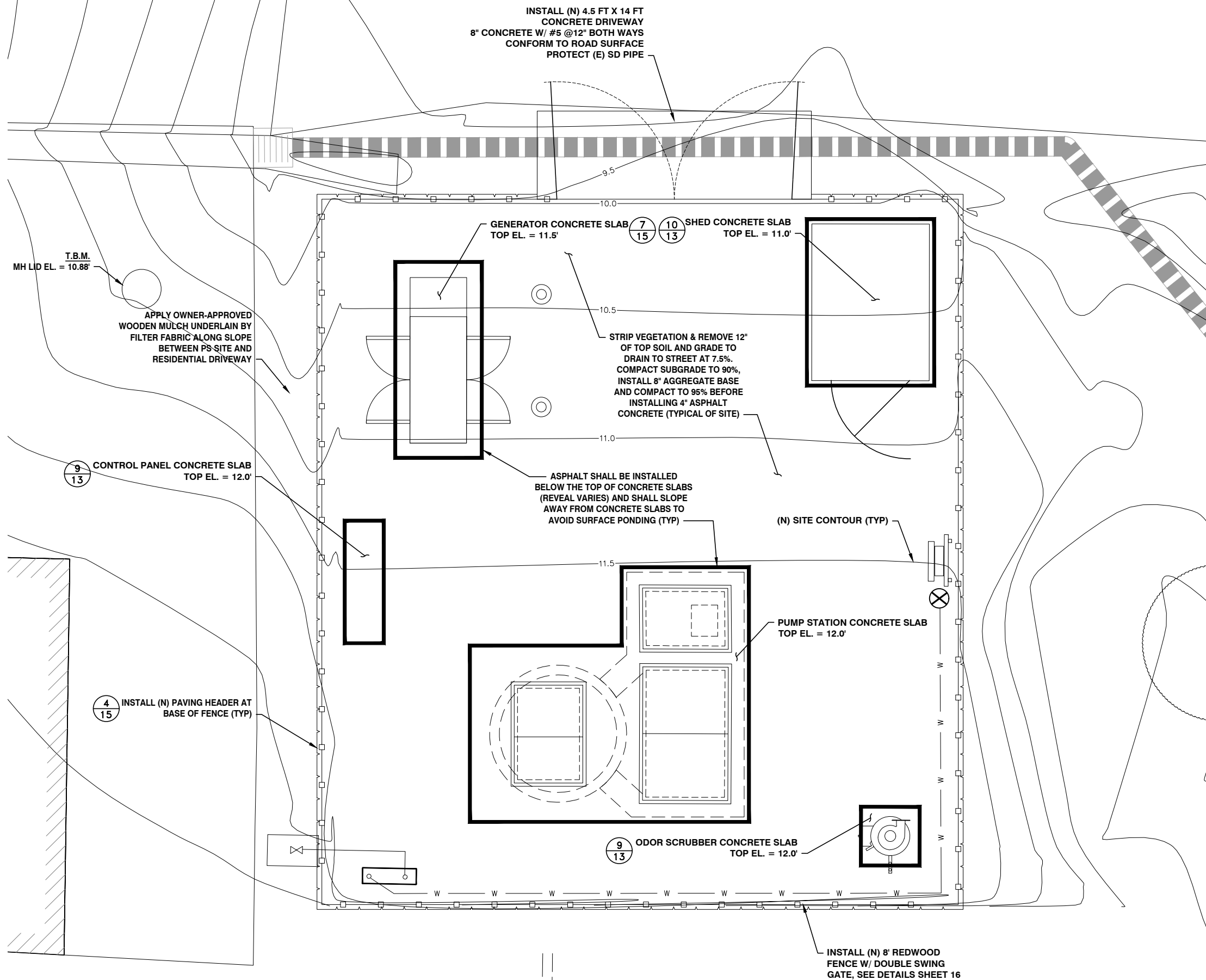
PREPARED FOR: **CITY OF NOVATO CALIFORNIA**

THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS
 MARIN VALLEY MOBILE COUNTRY CLUB
 PUMP STATION NO. 2 IMPROVEMENTS
 MARIN COUNTY CALIFORNIA

SITE CONSTRUCTION SITE PLAN

CONTRACT NO.	19-302
DATE	5/15/2020
SHEET	C06
TOTAL SHEETS	8 OF 28

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GRADING AND PAVING PLAN

SCALE: 3/8" = 1'-0"

CALL BEFORE

 YOU DIG
 MINIMUM TWO WORKING DAYS BEFORE DIGGING

UNDERGROUND SERVICE ALERT

CALL TOLL FREE
 811

INIT.	DES	NO.	DESCRIPTION	DATE
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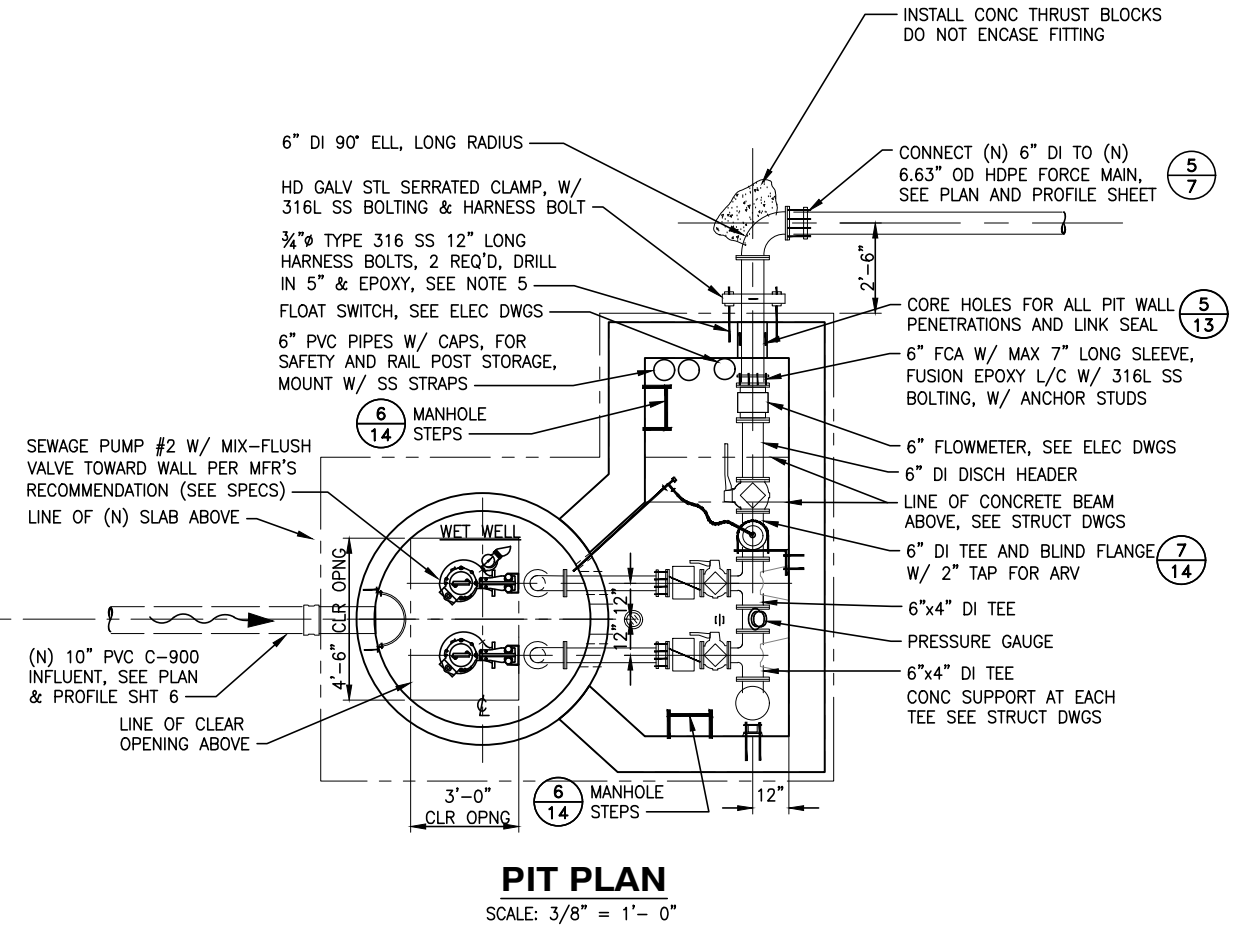
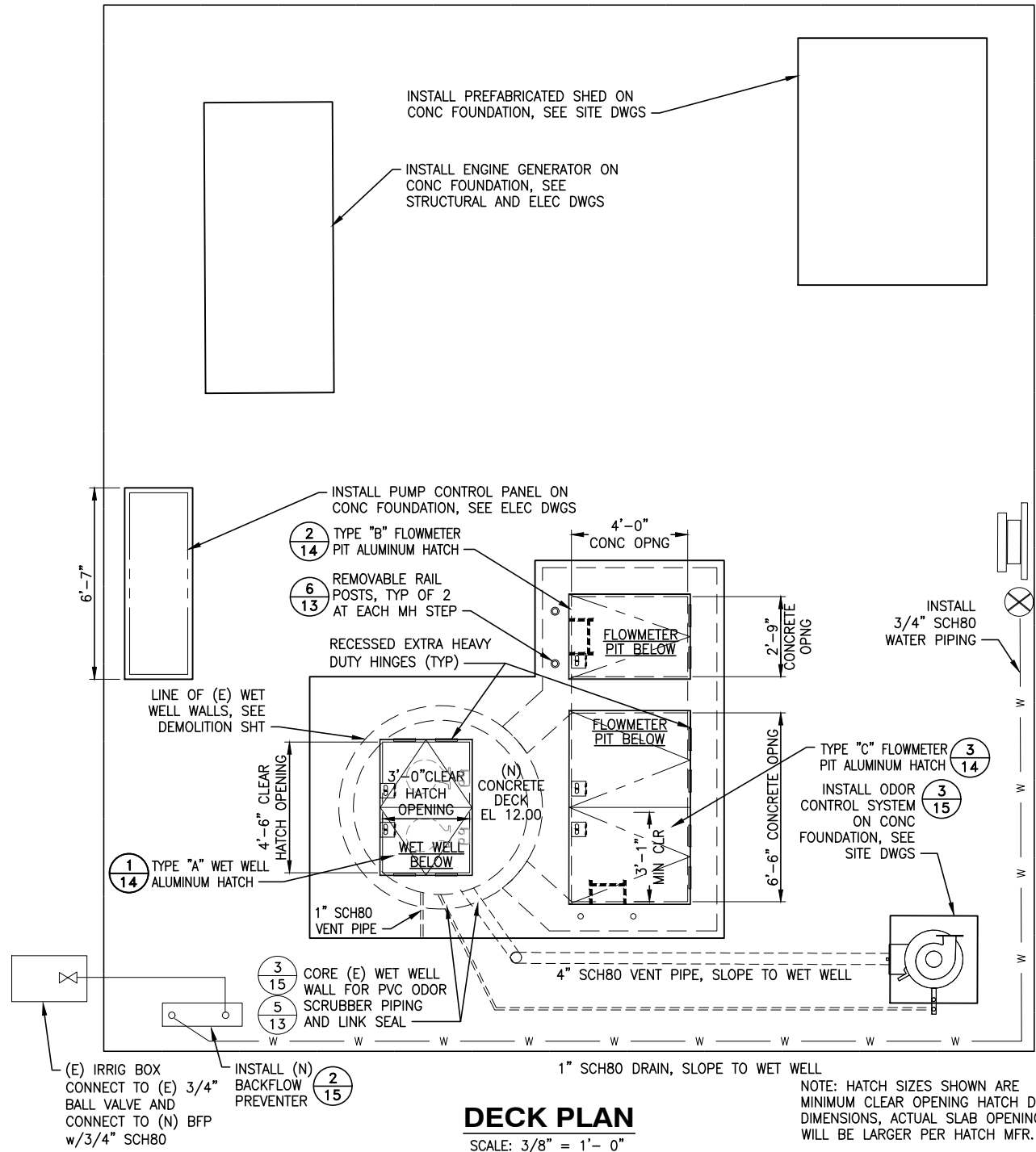
 PROFESSIONAL ENGINEER STATE OF CALIFORNIA LICENSE NO. 51111	NOT APPROVED For Construction
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PREPARED BY: NUTE NUTE ENGINEERING 1077 MARIN AVENUE, SUITE 100 T. 415.453.4800 F. 415.453.4833	 CITY OF NOVATO CALIFORNIA
--	----------------------------------

THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS MARIN VALLEY MOBILE COUNTRY CLUB PUMP STATION NO. 2 IMPROVEMENTS MARIN COUNTY CALIFORNIA	GRADING AND PAVING PLAN PUMP STATION
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CONTRACT NO.	19-302
DATE	5/15/2020
SHEET	C07
SHEET	9 OF 28

Printed: May 15, 2020 3:37 PM
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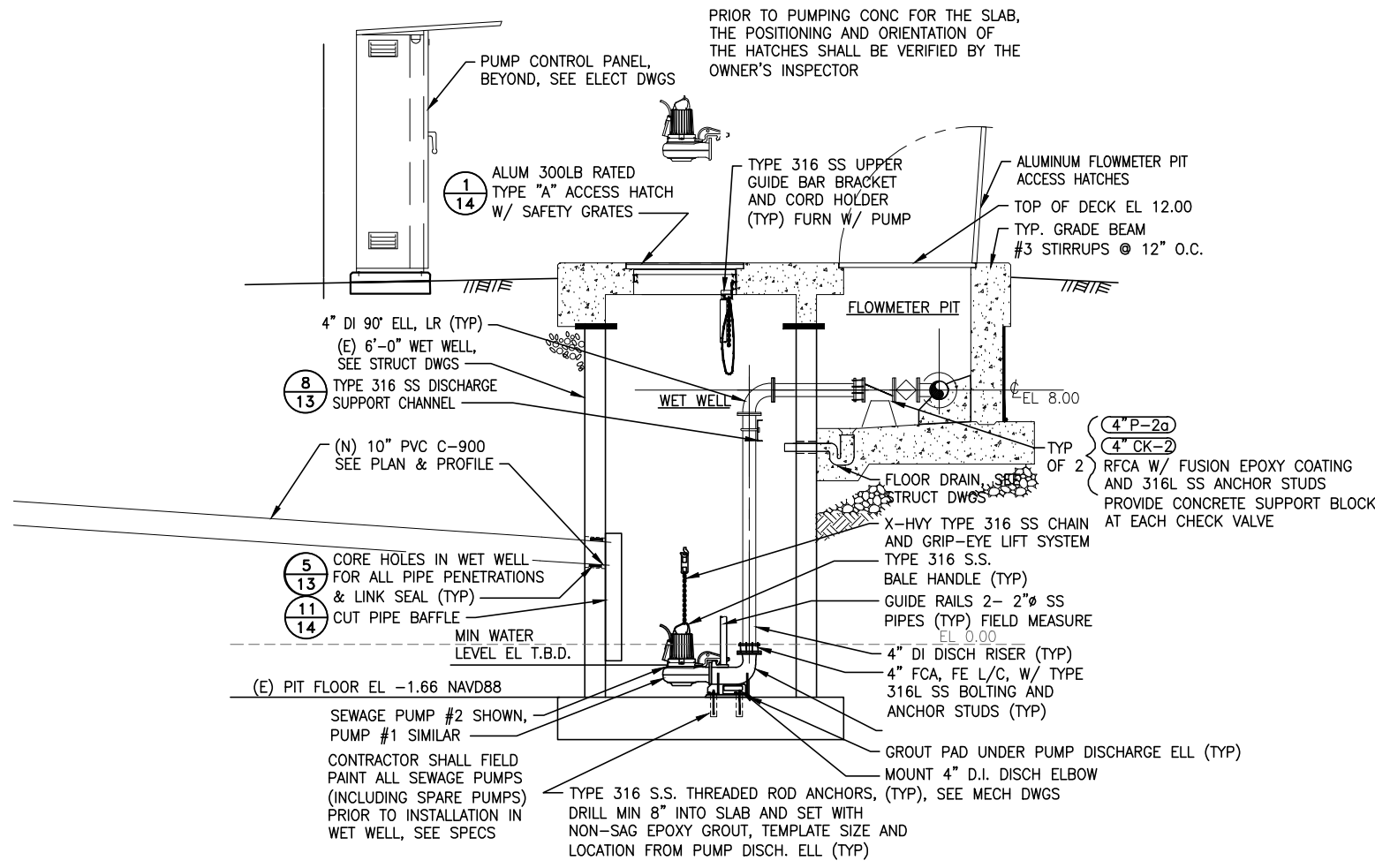


NOTES:

1. ALL BARE METAL SURFACES THAT ARE BURIED SHALL BE COATED W/ 50 MILS OF BITUMASTIC 50 AND WRAPPED WITH TWO LAYERS OF 35 MIL POLYETHYLENE TAPE, SEE SPECS.
2. COVER BURIED D.I. PIPE WITH 8 MIL POLYETHYLENE SHEETING IN ACCORDANCE WITH AWWA C-105, SEE SPECS.
3. ALL FASTENERS, BOLTS, NUTS AND WASHERS SHALL BE TYPE 316L STAINLESS STEEL. ALL STAINLESS STEEL SHALL BE TYPE 316L UNLESS OTHERWISE NOTED.

INIT.	DES
NO.	DESCRIPTION
DATE	
DESIGNED BY	DES
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CHECKED BY	MTW
<p>NUTE ENGINEERING 807 AMBROSIA AVE SAN RAFAEL, CA 94901 TEL: 415.453.8800 FAX: 415.453.8802</p>	
<p>Not Approved For Construction</p>	
<p>PREPARED FOR: CITY OF NOVATO CALIFORNIA</p>	
<p>THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS MARIN VALLEY MOBILE COUNTRY CLUB PUMP STATION NO. 2 IMPROVEMENTS MARIN COUNTY CALIFORNIA</p>	
<p>MECHANICAL DECK PLAN AND PIT PLAN</p>	
CONTRACT NO.	19-302
DATE	5/15/2020
SHEET	M01
<p>11 OF 28</p>	

Printed: May 15, 2020 3:40 PM
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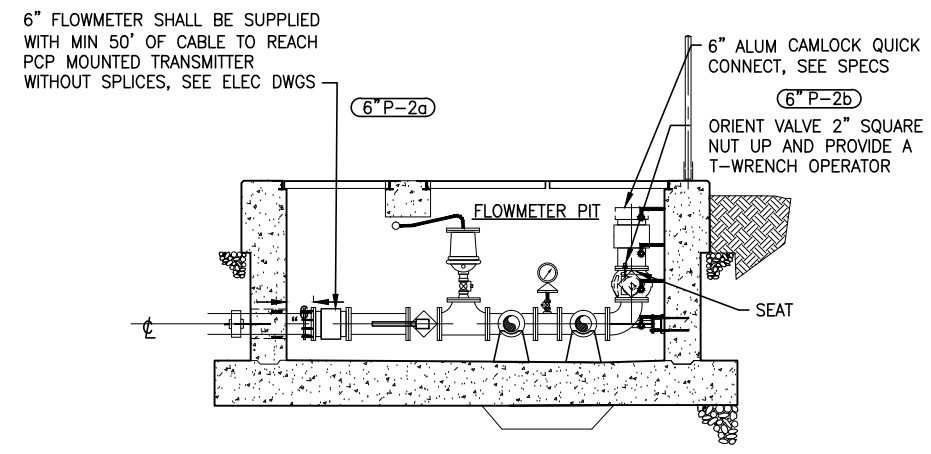
SECTION A
SCALE: 3/8" = 1'-0" 12

PROVIDE DI SPOOL PIECE TO SUIT NEW FLOWMETER LENGTH, DELIVER TO AGENCY LOOSE

ANSI BOLT PATTERN FLANGE DRILLING, TYP

PROVIDE A SET OF 2 MATCHING NEOPRENE GASKETS

SHIP LOOSE



SECTION B
SCALE: 3/8" = 1'-0" 12

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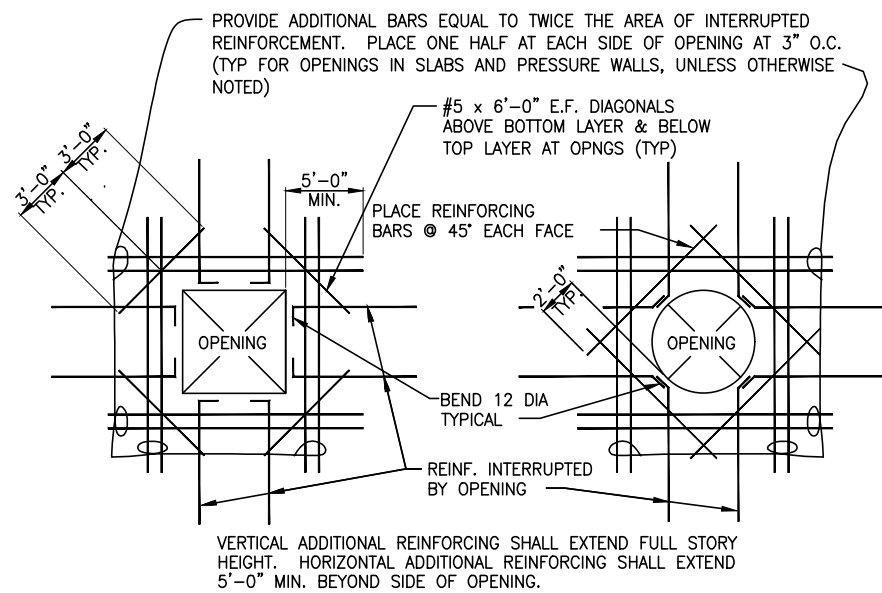
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<p>NUTE ENGINEERING 807 MERRILL AVE SAN RAFAEL, CA 94901 TEL: 415.462.4800 FAX: 415.462.0300</p>	<p>Not Approved For Construction</p>
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<p>THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS MARIN VALLEY MOBILE COUNTRY CLUB PUMP STATION NO. 2 IMPROVEMENTS</p>	<p>CITY OF NOVATO CALIFORNIA</p>
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CONTRACT NO.	19-302
DATE	5/15/2020
SHEET	M02
TOTAL SHEETS	12 OF 28

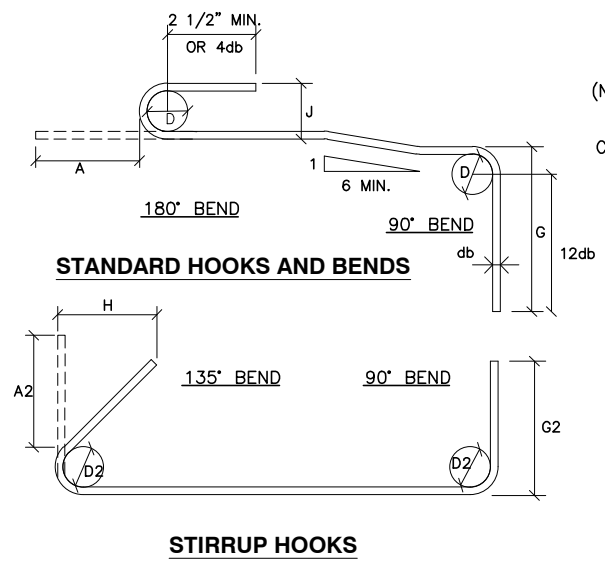
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ADDITIONAL REINFORCING STEEL AT OPENINGS IN SUBSTRUCTURE CONCRETE WALLS & SLABS

REINFORCING CLEAR COVER REQUIREMENTS:
 2" MINIMUM CLEAR COVER TYPICAL TO REINFORCING
 3" CLEAR COVER REQUIRED ON CONCRETE POURED AGAINST GROUND, i.e. SLABS AND FOUNDATIONS

ADDITIONAL REINFORCING @ OPENINGS 1
 N.T.S. 13



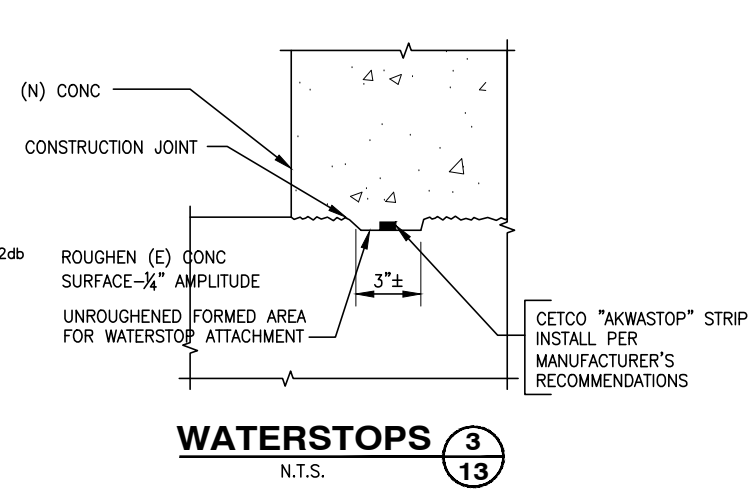
STIRRUP HOOK DETAILS

BAR SIZE	A2	G2	D2	H
#3	4 1/4"	4"	1 1/2"	3"
#4	4 1/2"	4 1/2"	2"	3"
#5	5 1/2"	6"	2 1/2"	3 3/4"
#6	7 3/4"	12"	4 1/2"	4 1/2"

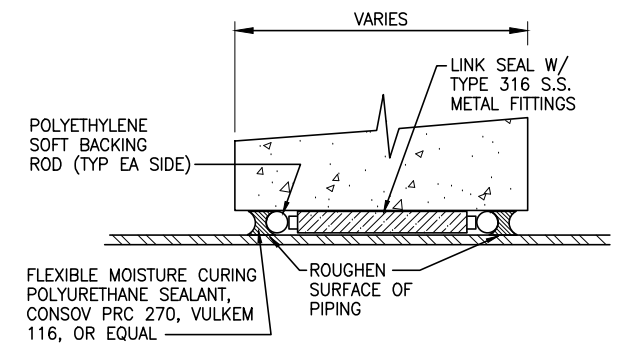
STANDARD HOOK DETAILS

BAR SIZE	A	J	D	G
#3	5"	3"	2 1/4"	6"
#4	6"	4"	3"	8"
#5	7"	5"	3 3/4"	10"
#6	8"	6"	4 1/2"	12"
#7	10"	7"	5 1/4"	14"
#8	11"	8"	6"	16"
#9	15"	11 3/4"	9 1/2"	19"

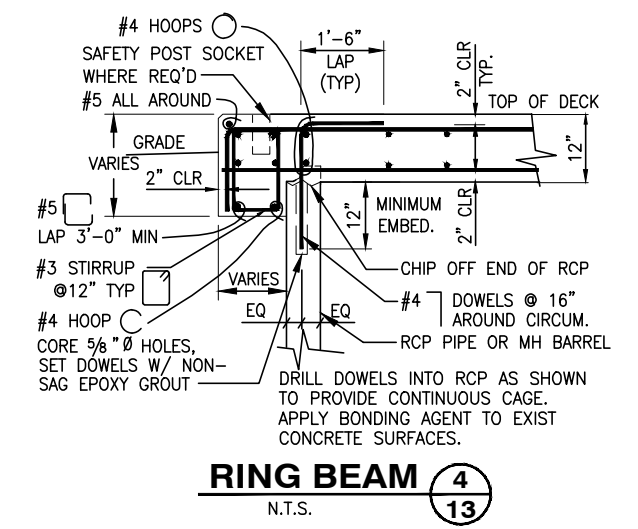
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 N.T.S. 13



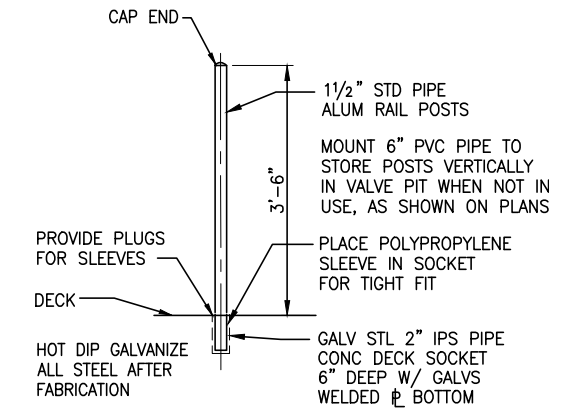
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 N.T.S. 13



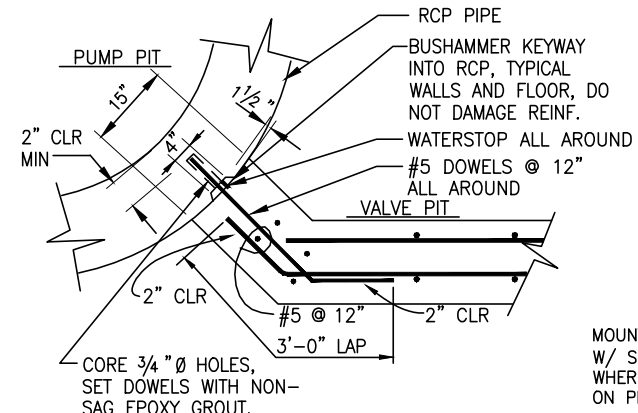
LINK SEAL THRU WALL 5
 N.T.S. 13



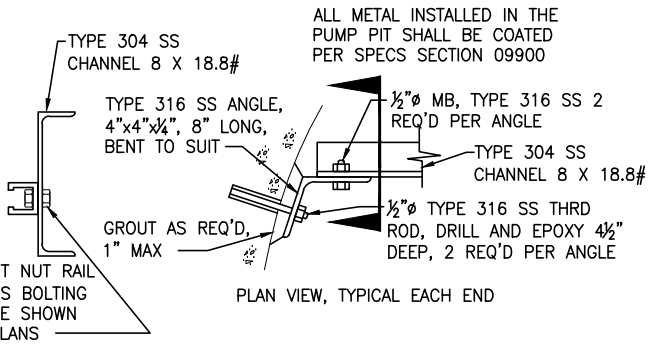
RING BEAM 4
 N.T.S. 13



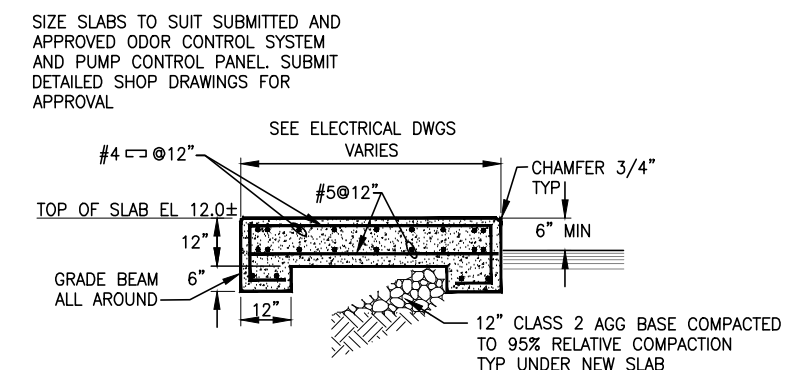
REMOVABLE RAIL POST 6
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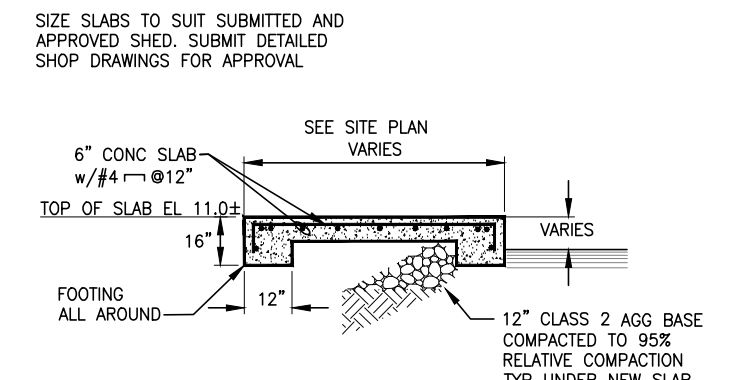
VALVE PIT CONNECTION 7
 N.T.S. 13



RISER SUPPORT CHANNEL 8
 N.T.S. 13



EQUIPMENT CONCRETE SLAB ON GRADE 9
 N.T.S. 13



SHED CONCRETE SLAB ON GRADE 10
 N.T.S. 13

INIT. DES. DATE NO. DESCRIPTION DATE NO. DESCRIPTION DATE NO. DESCRIPTION

DESIGNED BY: NUTE ENGINEERING
 DRAWN BY: MTW
 CHECKED BY: MTW

PROJECT #8827A
 807 AMERSON AVE SAN RAFAEL, CA 94901
 415-663-8800 F: 415-663-8800

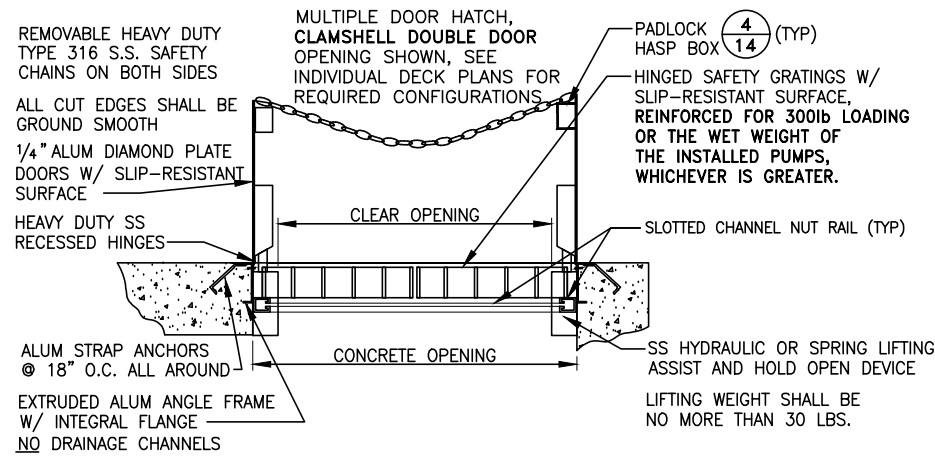
Not Approved For Construction

PREPARED FOR: CITY OF NOVATO CALIFORNIA

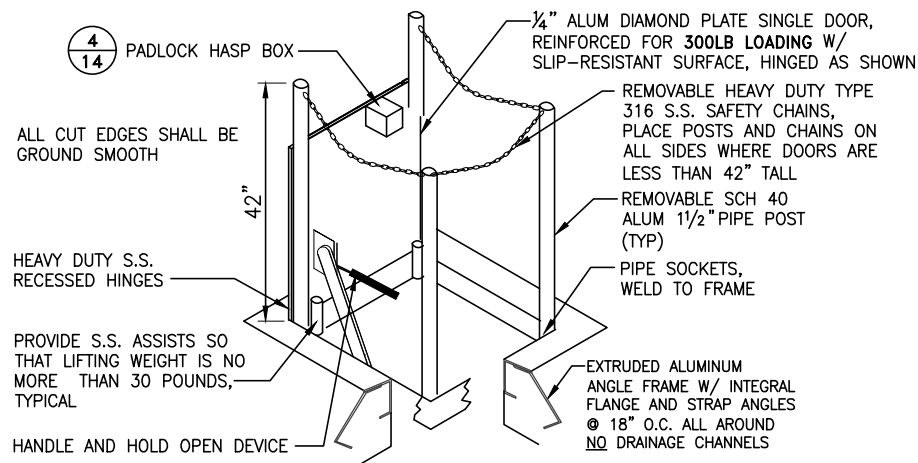
THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS
 MARIN COUNTY CALIFORNIA
 MARIN COUNTY CALIFORNIA
 PUMP STATION NO. 2 IMPROVEMENTS

CONTRACT NO. 19-302
 DATE 5/15/2020
 SHEET D01
 13 OF 28

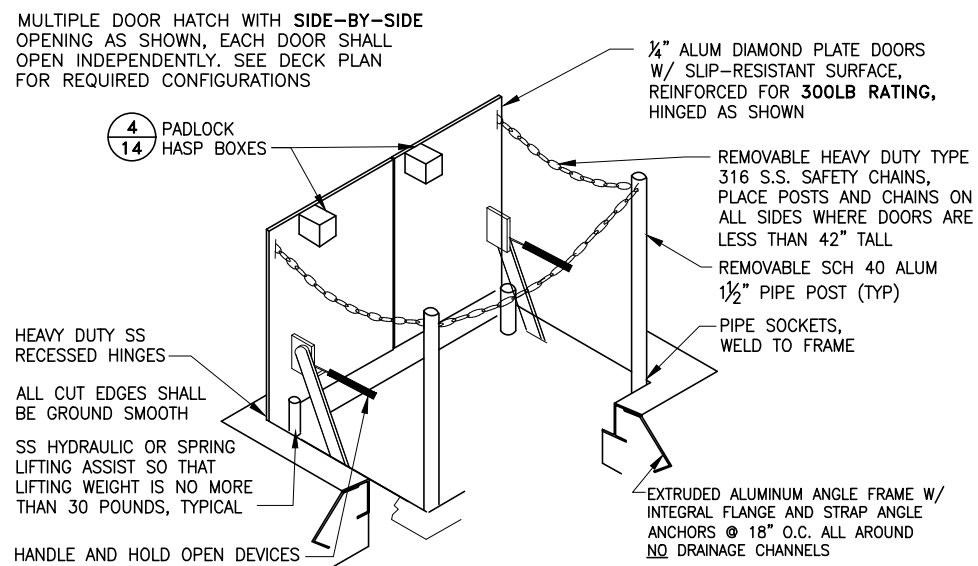
MISCELLANEOUS DETAILS - 1



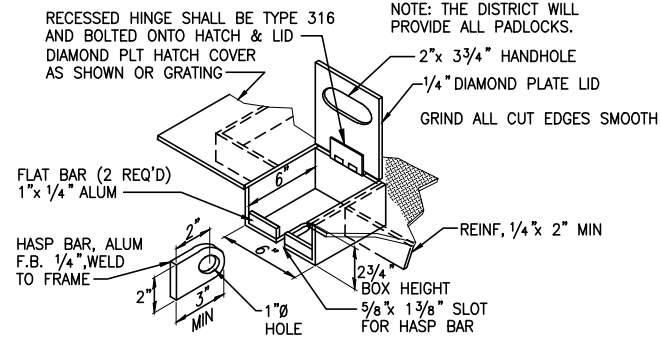
TYPE A HATCH (1/14)
N.T.S.



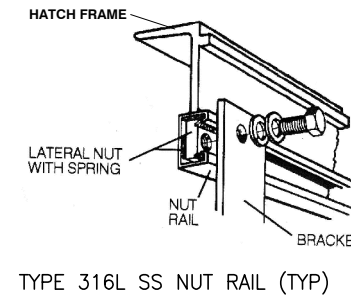
TYPE B HATCH (2/14)
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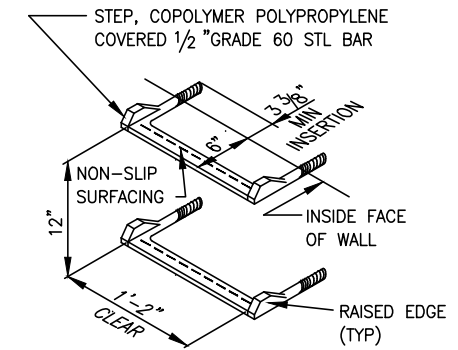
TYPE C HATCH (3/14)
N.T.S.



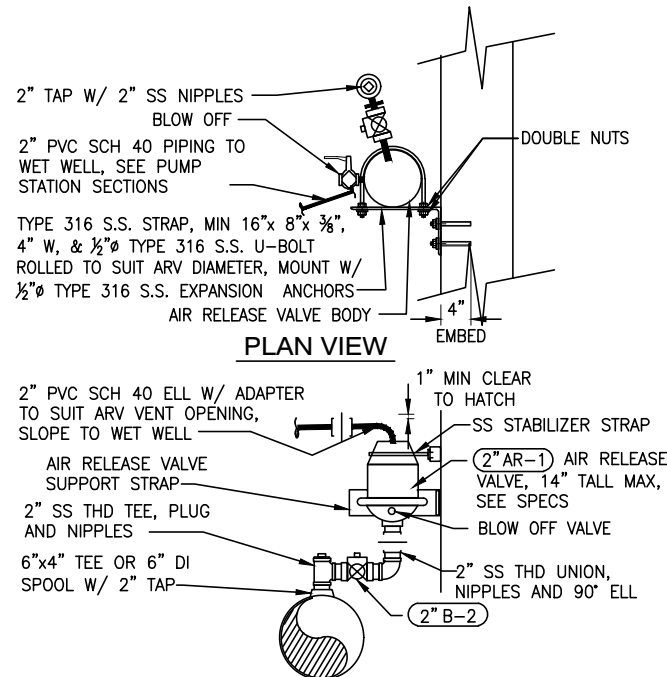
PADLOCK BOX (4/14)
N.T.S.



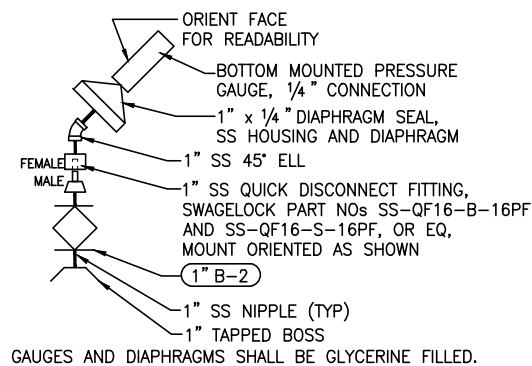
NUTRAIL (5/14)
N.T.S.



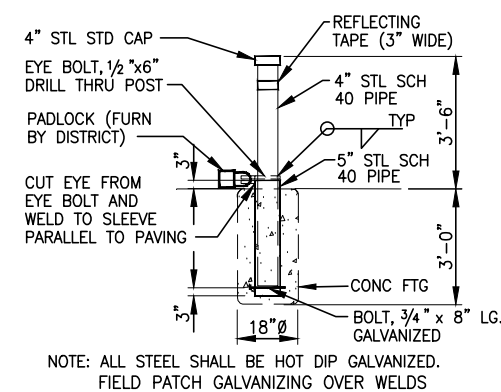
MANHOLE STEPS (6/14)
N.T.S.



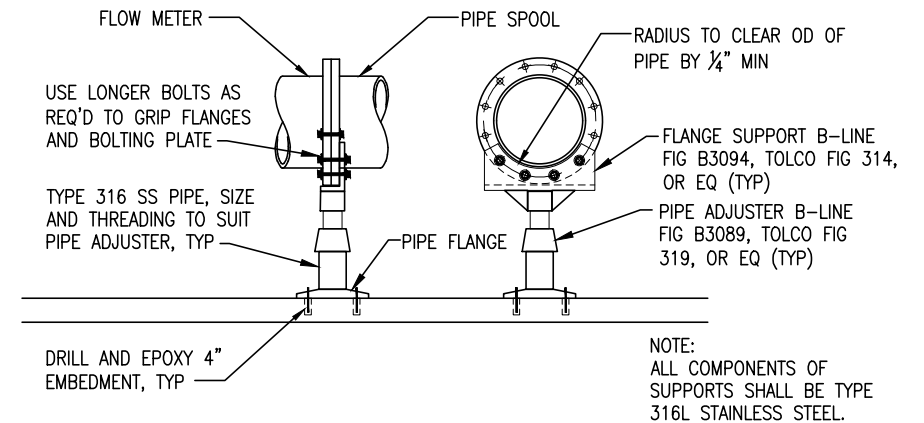
ARV MOUNTING (7/14)
N.T.S.



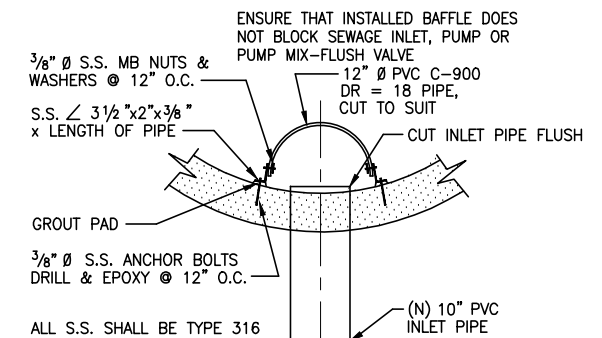
PRESSURE GAUGE (9/14)
N.T.S.



PIPE BOLLARD - REMOVABLE (10/14)
N.T.S.



FLOW METER SUPPORTS (8/14)
N.T.S.



CUT PIPE BAFFLE (11/14)
N.T.S.

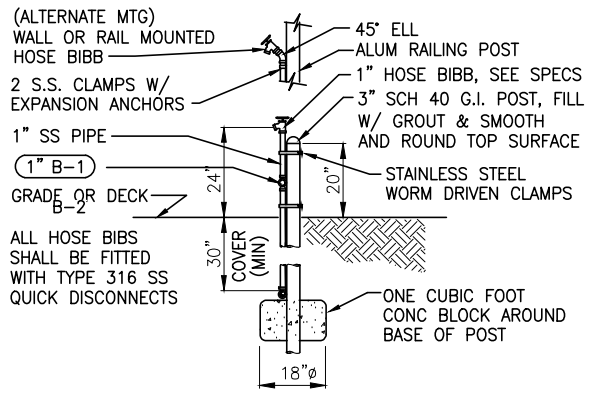
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DESIGNED BY	DES	DATE
DRAWN BY	PM	
CHECKED BY	MTW	
1" = 1'-0" UNLESS OTHERWISE NOTED # THIS SIDE IS NOT TO SCALE # OTHER SIDE IS NOT TO SCALE		

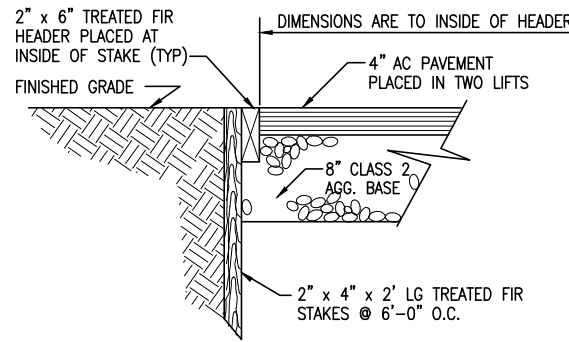
NUTE ENGINEERING 8710 MARIN AVENUE, SAN RAFAEL, CA 94903 415-452-8800 F: 415-452-8800 PROJECT #0874	Not Approved For Construction
PREPARED FOR CITY OF NOVATO CALIFORNIA	

THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS MARIN VALLEY MOBILE COUNTRY CLUB PUMP STATION NO. 2 IMPROVEMENTS MARIN COUNTY CALIFORNIA	DETAILS MISCELLANEOUS DETAILS - 2
CONTRACT NO. 19-302 DATE 5/15/2020 SHEET D02 14 OF 28	

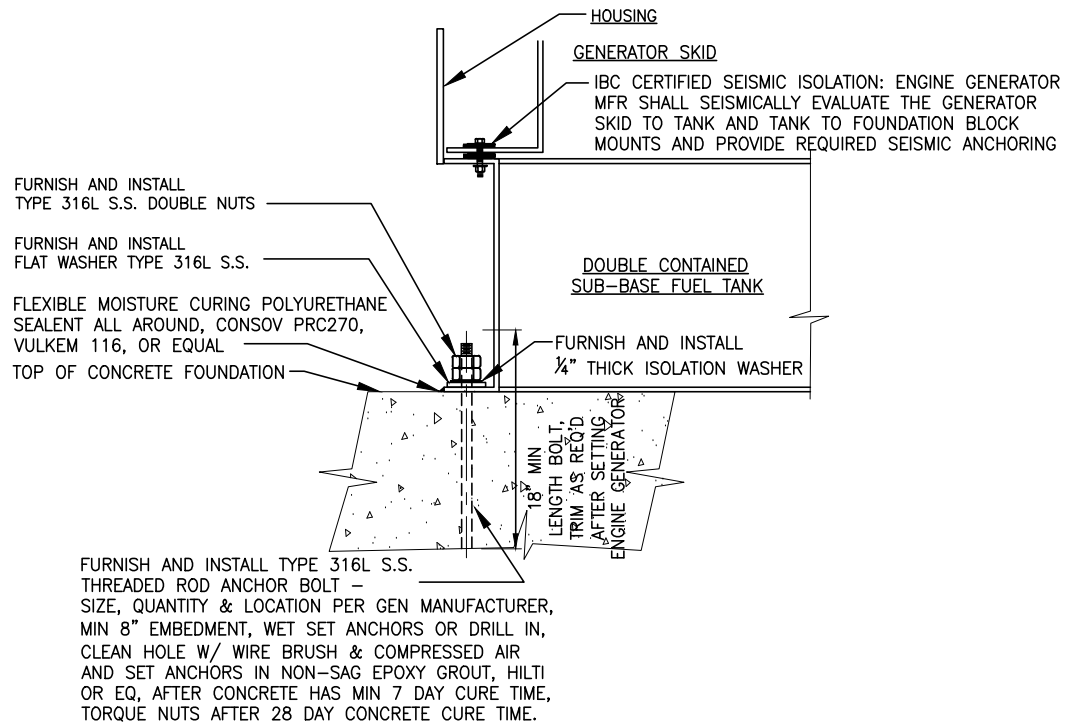
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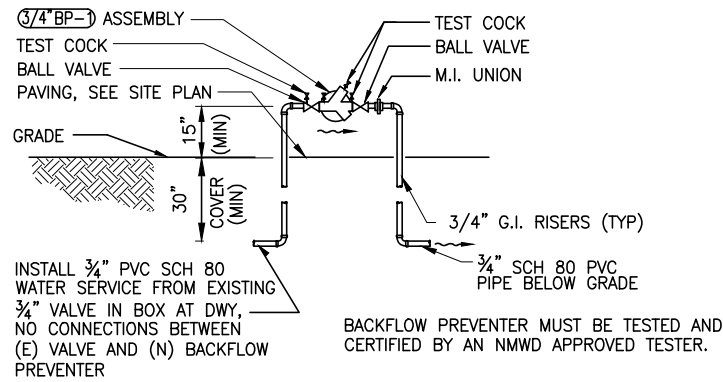
HOSEBIBB MOUNTING 1
N.T.S. 15



PAVING HEADER 4
N.T.S. 15

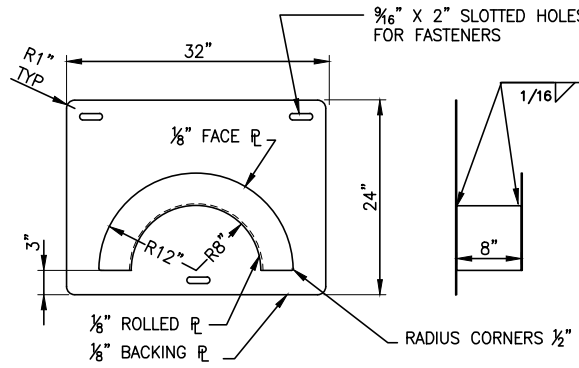


ENGINE GENERATOR MOUNTING 6
N.T.S. 15

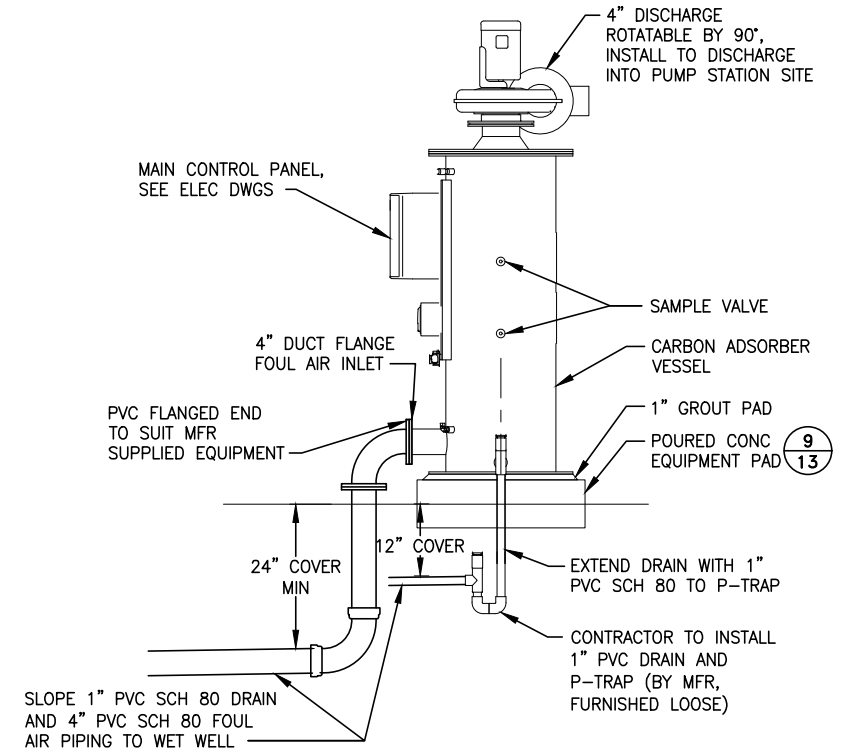


BACKFLOW PREVENTER 2
N.T.S. 15

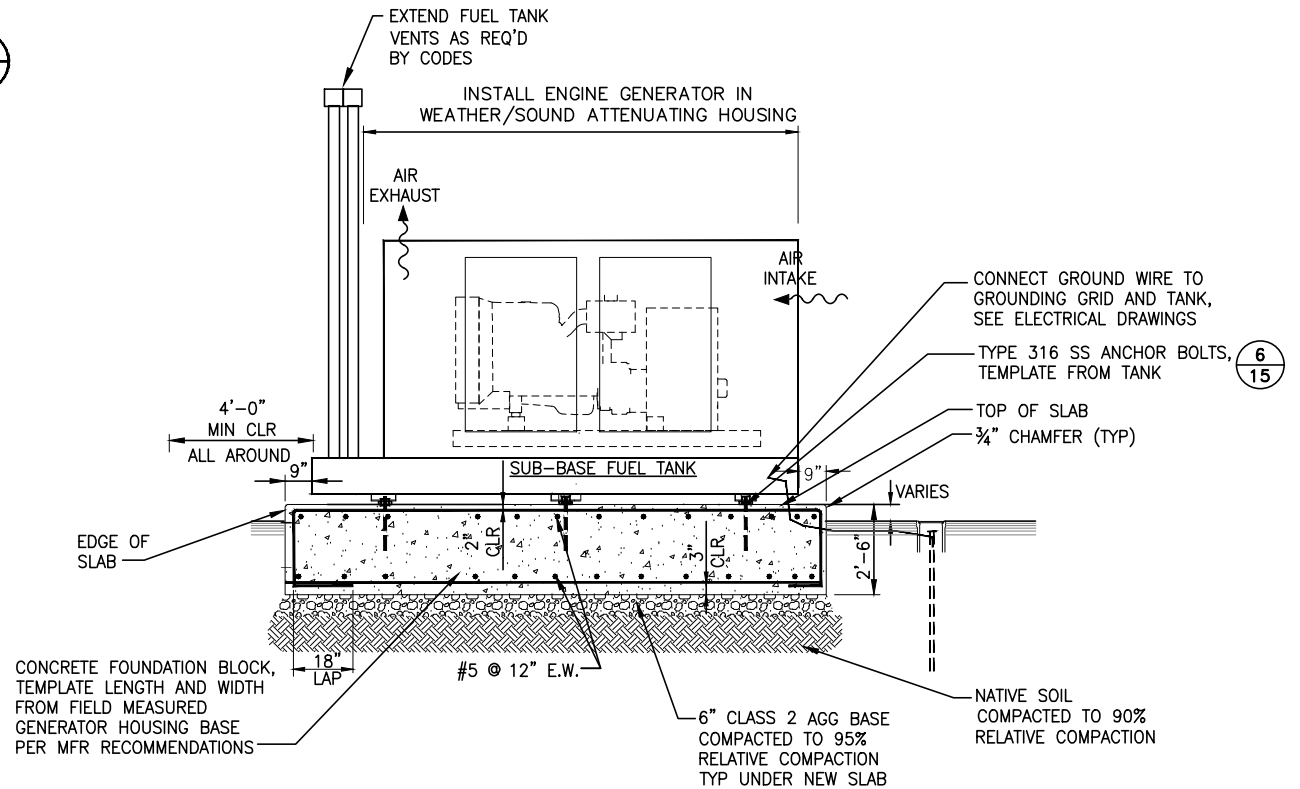
1. THE HOSE RACKS SHALL BE FABRICATED FROM 1/8" TYPE 316 STAINLESS STEEL PLATE.
2. PROVIDE SHOP DRAWINGS PRIOR TO FABRICATION OF RACKS.
3. MOUNT HOSE RACKS TO WALL W/ 1/2" Ø SS THREADED RODS, NUTS AND WASHERS, DRILL & EPOXY IN.
4. MOUNT TO FENCE POST W/ SS316 UNISTRUT w/ 1/2" Ø X 3" SS316 LAGS



HOSE RACK 5
N.T.S. 15



ODOR CONTROL CONNECTIONS 3
N.T.S. 15



ENGINE GENERATOR FOUNDATION 7
N.T.S. 15

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DESIGNED BY: [Signature]
DRAWN BY: [Signature]
CHECKED BY: [Signature]

DATE: 5/15/2020

PROJECT: #827

SCALE: 1" = 1'-0"

IF THIS SCALE AND DIMENSIONS DO NOT MATCH, THE DIMENSIONS SHALL GOVERN.

PREPARED BY: NUTE ENGINEERING
807 AMERSON AVE SAN FRANCISCO, CA 94101
TEL: 415-685-8800 FAX: 415-685-8800

NOT APPROVED FOR CONSTRUCTION

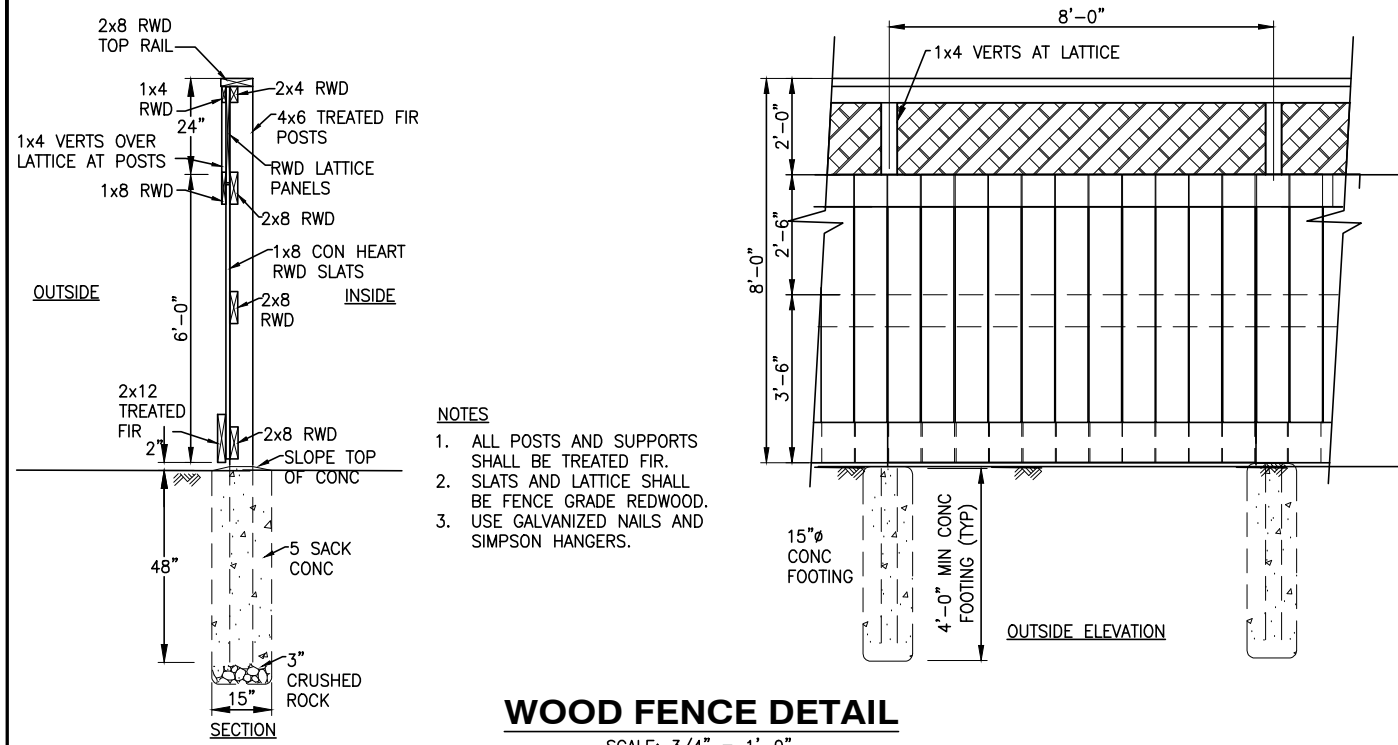
CITY OF NOVATO CALIFORNIA

THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS
MARIN COUNTY CALIFORNIA
MARIN COUNTY CALIFORNIA
PUMP STATION NO. 2 IMPROVEMENTS

DETAILS
MISCELLANEOUS DETAILS - 3

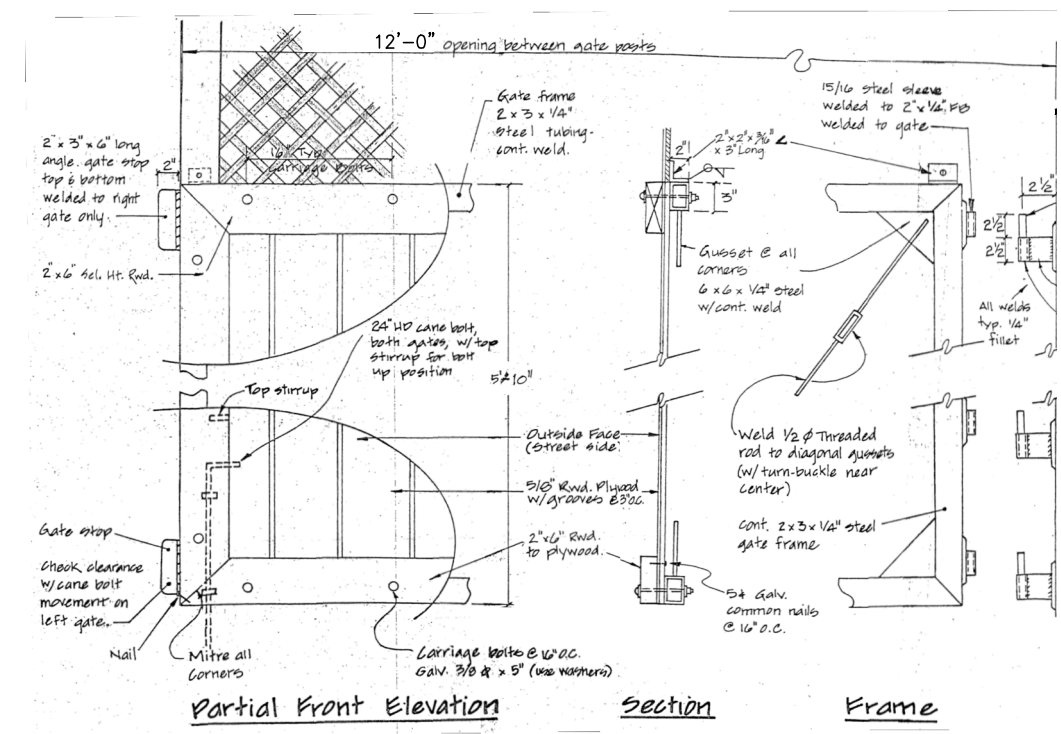
CONTRACT NO.: 19-302
DATE: 5/15/2020
SHEET: D03
15 OF 28

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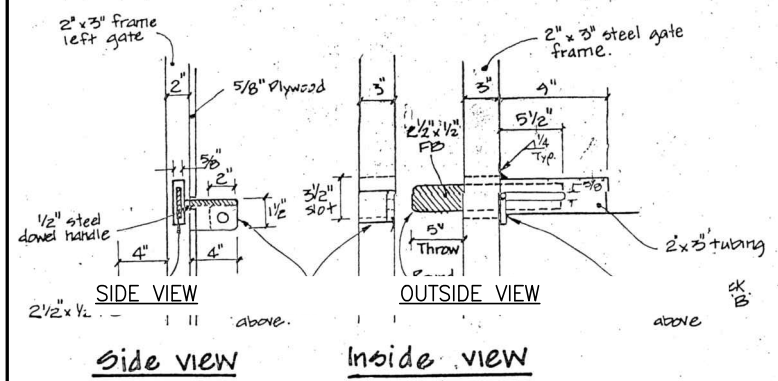


- NOTES**
1. ALL POSTS AND SUPPORTS SHALL BE TREATED FIR.
 2. SLATS AND LATTICE SHALL BE FENCE GRADE REDWOOD.
 3. USE GALVANIZED NAILS AND SIMPSON HANGERS.

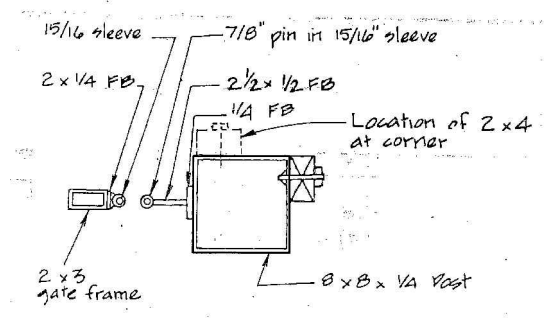
WOOD FENCE DETAIL
SCALE: 3/4" = 1'-0"



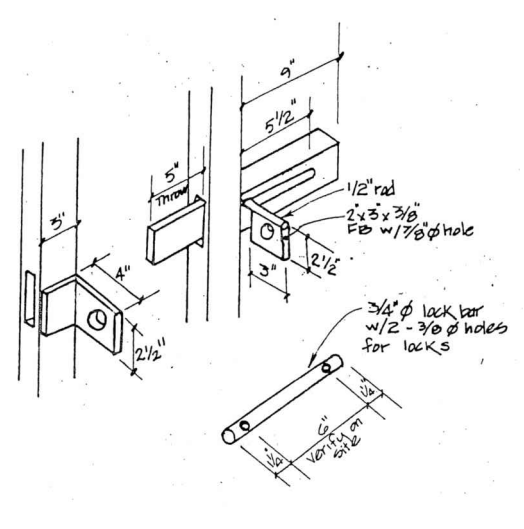
GATE FRAME DETAILS
SCALE: 3/4" = 1'-0"



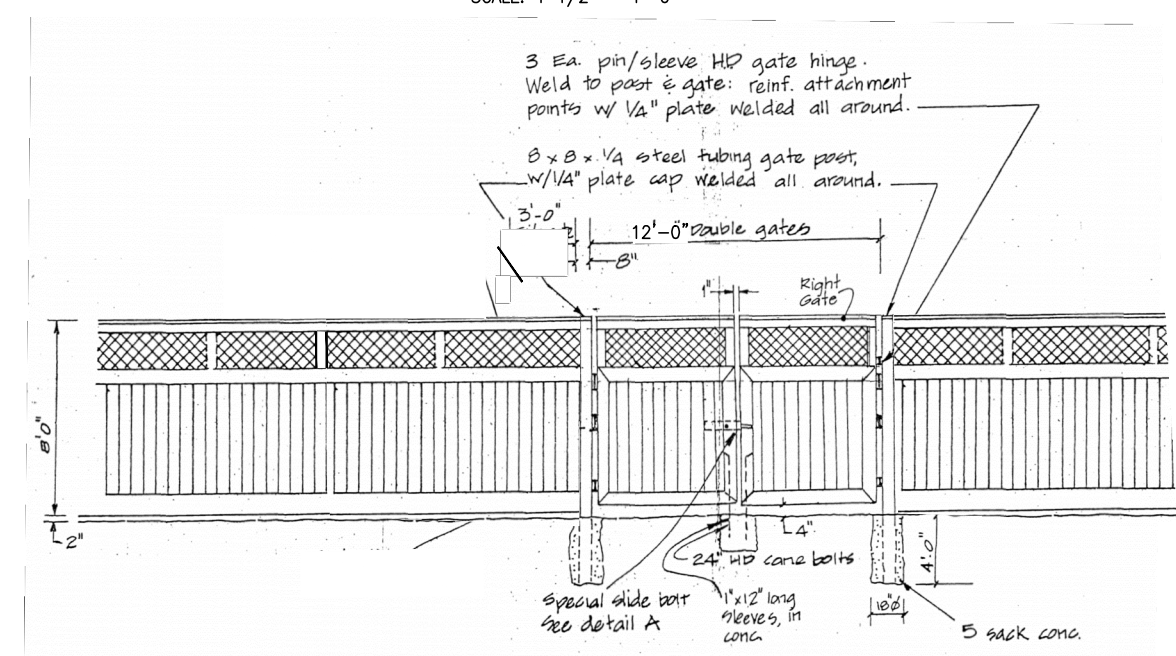
DOUBLE GATE SLIDE BOLT
SCALE: 1 1/2" = 1'-0"



GATE HINGE DETAIL
SCALE: 1 1/2" = 1'-0"



SLIDE BOLT LOCKING BAR
SCALE: 1 1/2" = 1'-0"



GATES ELEVATION
SCALE: 1/4" = 1'-0"

FENCE CONSTRUCTION NOTES

1. **EXCAVATION/GRADING**
EXCAVATE FOR NEW FOUNDATIONS AS REQUIRED. PS SITE IS SLOPED TO CLUB VIEW DRIVE, STEP DOWN FENCE PANELS AS NECESSARY TO MATCH DESIGN SLOPE.
2. **CONCRETE**
FIVE SACK, CLASS B MIX STANDARD SPEC. FOR POST/COLUMN FOOTINGS AND SETTING MISCELLANEOUS SLEEVES. - DAMPEN EXCAVATIONS PRIOR TO POUR; VIBRATE. TOP OF CONCRETE SHALL BE TROWELLED SMOOTH AND SLOPE AWAY FROM POSTS AT 1/2" PER FOOT.
3. **MISCELLANEOUS METAL**
INCLUDES STEEL TUBE COLUMNS, GATE HARDWARE, AND RELATED ACCESSORIES AND OTHER AS SPECIFIED.
STEEL: ASTM A-36-GALVANIZE HINGE CONTACT PARTS AND MOVING PARTS OF GATE LOCKS ONLY. WELD PER AWS SPEC; GRIND WELD SMOOTH WHERE EXPOSED; FABRICATION TO BE FREE OF BURRS OR ROUGH EDGES WHERE SUBJECT TO HUMAN CONTACT. PUNCH FOR BOLTS; FURNISH ATTACHED ANCHORS.
VERIFY DIMENSIONS AT SITE PRIOR TO FABRICATIONS. FURNISH SHOP DRAWINGS FOR REVIEW. SHOP PRIME AFTER THOROUGH CLEANING WITH FULLER 621-04 "BLOX RUST" ALKYD. NO FINISH ON GALVANIZED PARTS. TOUCH UP ABRASIONS AFTER ERECTION. NO PAINT WHERE STEEL IS EMBEDDED IN CONCRETE.
4. **CARPENTRY**
INCLUDES THE FURNISHING AND INSTALLATION OF ALL WOOD AND RELATED MATERIALS.
MATERIALS:
TOP RAIL, TRIM, FENCE BOARDS, MISCELLANEOUS ... REDWOOD CON HEART, OR SELECT HEART, ROUGH.
LATTICE ... REDWOOD-CLEAR ALL HEART.
WOOD POSTS, RAILS ... DOUGLAS FIR #2, BROWN COLORED, PRESSURE PRESERVATIVE TREAT WITH WATER-BORNE MATERIAL CONFORMING TO AWPA STD P-5; APPLY IN ACCORDANCE WITH AWPA STD. C-14 FOR A MINIMUM RETENTION OF 0.5#/CUBIC FOOT FOR ACA. EACH PIECE TO BEAR AWPB QUALITY MARK FOR LP-22 EXPOSURE. BRUSH TREAT FIELD CUTS WITH SAME MATERIAL.
5. **INSTALLATION/WORKMANSHIP**
TRIM ALL LUMBER TO SQUARE ENDS; CUT OUT UNSOUND KNOTS. UNLESS OTHERWISE SHOWN, BUTT ALL RUNNING JOINTS WITH UNIFORM MARGINS. WORK TO BE PLUMB, SQUARE, LEVEL. AVOID OVERCUTS. BRACE ALL COLUMNS AND POSTS TO REMAIN PLUMB UNTIL CONCRETE HAS SET.
FASTENERS --
ALL FASTENERS SHALL BE OF HOT DIPPED GALVANIZED STEEL OR 304 OR 316 STAINLESS STEEL. ALL GALVANIZED FASTENERS INTO PRESSURE TREATED WOOD SHALL BE EPOXY COATED.
NAILS: GENERAL 2 NAILS PER JT PER MEMBER; 8D FOR MATERIAL TO 1"; 16D FOR MATERIAL TO 1 1/2". DRIVE FLUSH - NO HAMMER MARKS.
BOLTS: DRILL SMOOTH UNIFORM HOLE (USING HIGH-SPEED DRILL) 1/32 TO 1/16" LARGER THAN BOLT DIAMETER.
LAG SCREWS: DRILL LEAD HOLE 60-75% OF DIAMETER OF THREADED PORTION "FASTAP" OR OTHER APPROVED TO PENETRATE 5 DIAMETERS MINIMUM.
6. **PAINTING**
INCLUDES THE FINISHING OF ALL STEEL TUBE COLUMNS, STEEL GATE FRAMES AND ACCESSORIES. SHOP PRIMED WITH FULLER 621-04.
7. **STAINING**
INCLUDES ALL REDWOOD MATERIALS. APPLY 1 COAT OF PRESERVA-WOOD "NATURAL FINISH FOR REDWOOD" STAIN OR EQ.

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DESIGNED BY	DATE	DESIGNED BY	DATE	DESIGNED BY	DATE
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CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE

NUTE ENGINEERING
 877 AMERICAN AVE. SAN FRANCISCO, CA 94101
 TEL: 415.683.4800 FAX: 415.683.4800

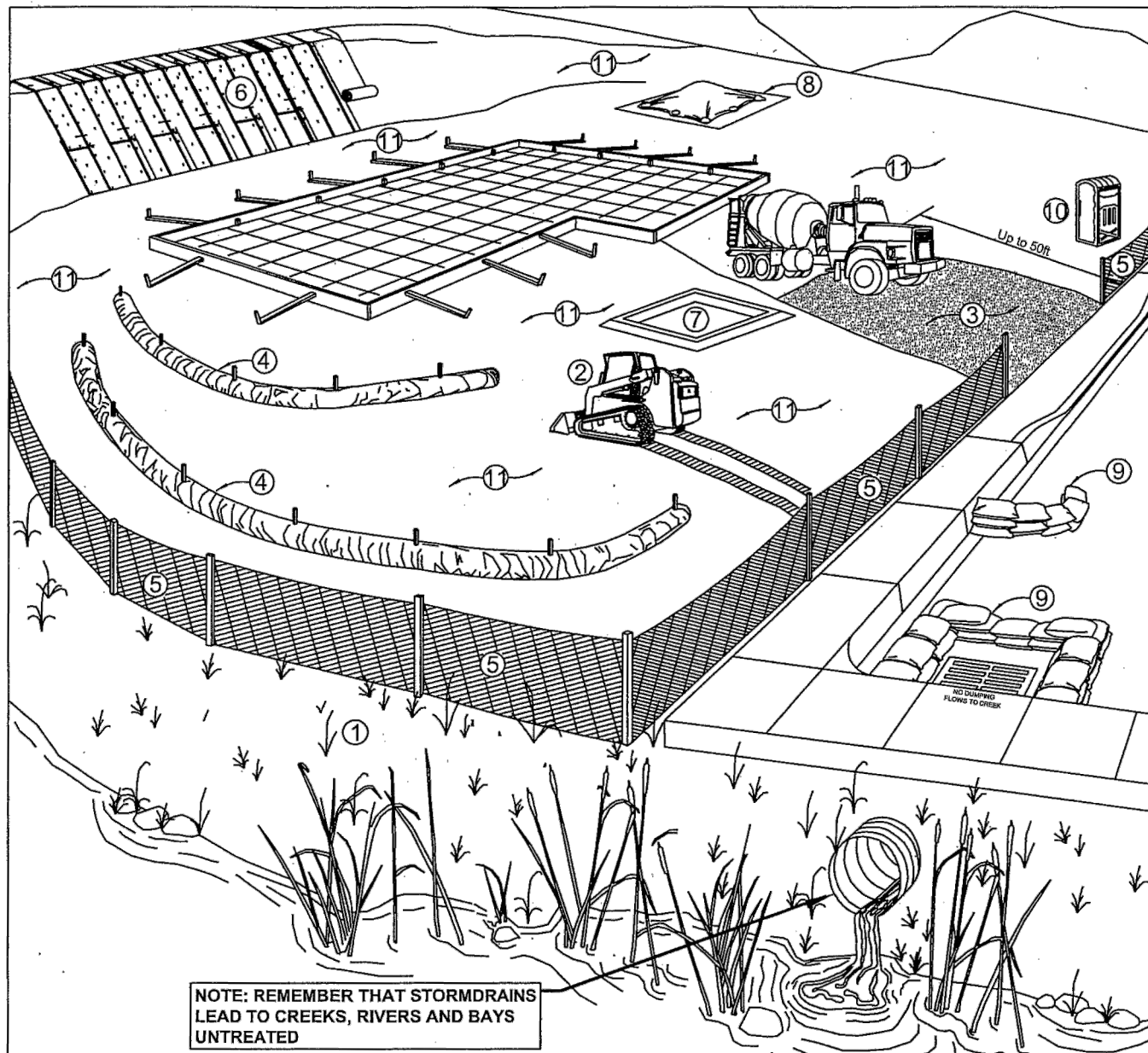
Not Approved For Construction

PREPARED FOR:
CITY OF NOVATO CALIFORNIA

THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS
 MARIN VALLEY MOBILE COUNTRY CLUB
 PUMP STATION NO. 2 IMPROVEMENTS
 MARIN COUNTY CALIFORNIA

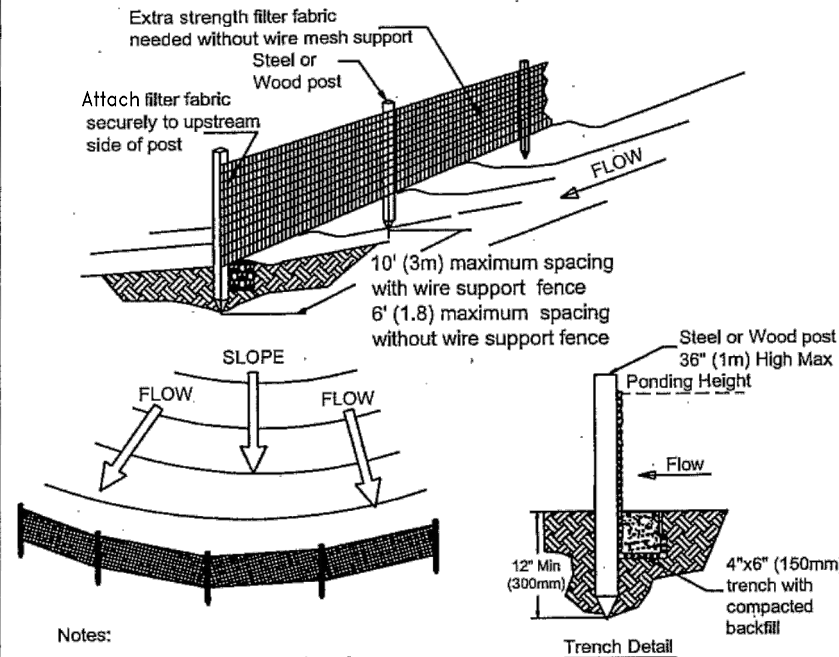
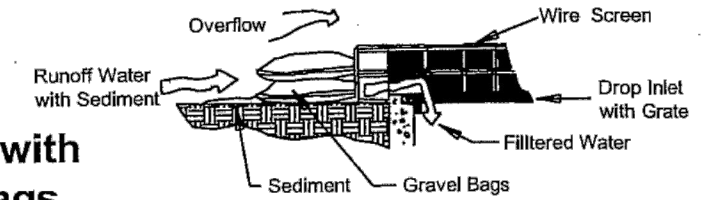
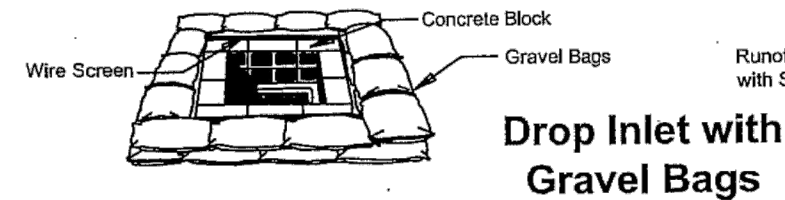
DETAILS
FENCE AND GATE DETAILS

CONTRACT NO.: 19-302
 DATE: 5/15/2020
 SHEET: **D04**
 OF 28



- ① Check with Marin County Planning Department or Flood Control District for creek set-back requirements.
- ② During grading phase, track-walk up and down slopes, not parallel.
- ③ *Stabilize site entrance and temp driveway with 3" crushed rock up to 50' to prevent tracking soil off site.
- ④ *Install straw wattles along contour at or > 2:1 slope, keyed into ground at least 3" in deep (25' to 50' apart).
- ⑤ *Install silt fence as secondary measure along contours to keep sediment onsite and to minimize vehicle and foot traffic beyond limits of site disturbance.
- ⑥ *Install erosion blankets on any disturbed area at or > than a 2:1 slope.
- ⑦ *Construct a concrete washout site adjacent to stabilized entrance. Clean as needed and remove at end of project.
- ⑧ Cover all stock piles-stockpile and landscape materials, keep behind silt fence, and away from water bodies.
- ⑨ *Use pea-gravel bags around drain inlets located both onsite and within gutter as a last line of defense.
- ⑩ Place port-a-potty near stabilized site entrance and away from storm drain inlets and water bodies.
- ⑪ Cover all exposed soil with straw or straw/tackifier.

Note: Sediment and erosion control shall be continually maintained throughout the local rainy season and to remain effective during construction phase. Continue inspection and maintenance of BMPs before and after rain events.

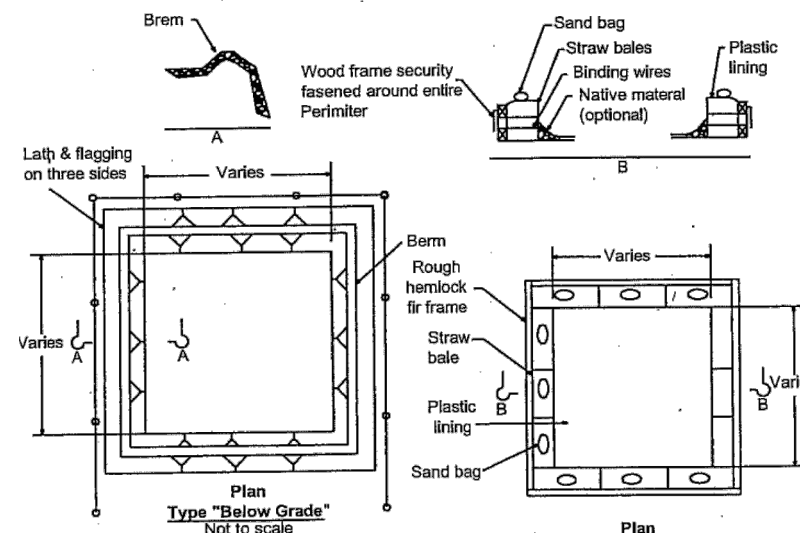


Notes:

1. Silt fence shall be placed on slope contours to maximize ponding efficiency. Inspect and repair fence after each storm event and remove sediment when necessary 9" (225mm) maximum recommended storage height.
2. Removed sediment shall be deposited to an area that will not contribute sediment off-site and can be permanently stabilized.

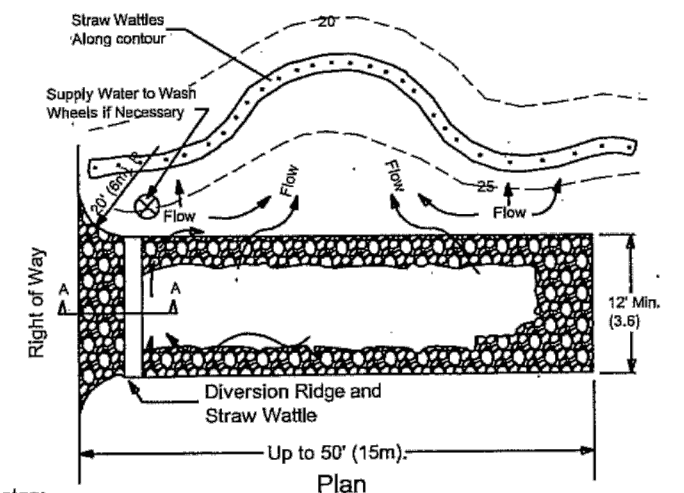
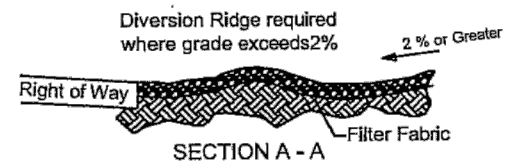
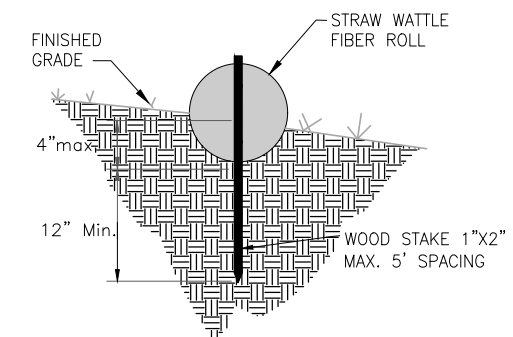
Silt Fence

NOT TO SCALE



Note: Actual layout determined in field

Concrete Washout



Notes:

1. The entrance shall be maintained to prevent sediment tracking or flowing onto public right-of-ways. This may require top dressing, repair and/or cleanout or other measures that trap sediment.
2. When necessary, wheels shall be cleaned prior to entering public right-of-way.
3. When washing is required, it shall be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin.

Site Entrance

INIT.	DES				
NO.	DESCRIPTION	DATE	NO.	DESCRIPTION	DATE
1			1		
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DESIGNED BY	MTW		CHECKED BY	MTW	
DRAWN BY					
<p>PREPARED FOR: NUTE ENGINEERING, 8718 MARIN AVENUE, SAN RAFAEL, CA 94903, TEL: 415-453-8440, FAX: 415-453-8440, WWW.NUTE.COM</p> <p>Not Approved For Construction</p>					
<p>PROJECT: CITY OF NOVATO, CALIFORNIA, PUMP STATION NO. 2 IMPROVEMENTS</p>					
<p>CONTRACT NO.: 19-302</p>					
<p>DATE: 5/15/2020</p>					
<p>SHEET: D05</p>					
<p>TOTAL SHEETS: 17 OF 28</p>					

ABBREVIATIONS

A	AMPERES	OL	OVERLOAD
AFF	ABOVE FINISHED FLOOR	PCP	PUMP CONTROL PANEL
AFG	ABOVE FINISHED GRADE	PLC	PROGRAMMABLE LOGIC CONTROLLER
ATS	AUTOMATIC TRANSFER SWITCH	PS	PRESSURE SWITCH
BCW	BARE COPPER WIRE	PR	PAIR
C	CONDUIT	R	RUN RELAY
CO	CONDUIT ONLY	RTU	REMOTE TERMINAL UNIT
CPT	CONTROL POWER TRANSFORMER	S	START RELAY
CU	COPPER	SHD	SHIELDED
FS	FLOAT SWITCH	SPD	SURGE PROTECTION DEVICE
GND	GROUND	SSTL	STAINLESS STEEL
GFI	GROUND FAULT CIRCUIT INTERRUPTER	SV	SOLENOID VALVE
GRS	GALVANIZED RIGID STEEL	T	TELEPHONE
HOA	HAND-OFF-AUTO	TC	TIME CLOCK
HMI	HUMAN-MACHINE INTERFACE	TDC	TIME DELAY CLOSING
LIT	LEVEL INDICATOR/TRANSMITTER	TDO	TIME DELAY OPENING
LS	LOCKOUT STOP	TR	TIME RELAY
LS	LIMIT SWITCH	TS	TEMPERATURE SWITCH
MCC	MOTOR CONTROL CENTER	TSP	TWISTED SHIELDED PAIR(S)
MCP	MOTOR CIRCUIT PROTECTOR	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
MFM	MULTI FUNCTION METER	U.O.N.	UNLESS OTHERWISE NOTED
MTS	MANUAL TRANSFER SWITCH	V	VOLTS
NC	NORMALLY CLOSED	VFD	VARIABLE FREQUENCY DRIVE
NEC	NATIONAL ELECTRICAL CODE	W	WIRE
NO	NORMALLY OPEN	WP	WEATHER PROOF
NTS	NOT TO SCALE		

GENERAL NOTES:

- NOT ALL EQUIPMENT INTERCONNECTIONS ARE SHOWN ON THE PLANS. REFER TO ALL DETAILS, SCHEMATIC DIAGRAMS, CONTROL DIAGRAMS, SINGLE LINE DIAGRAMS AND SPECIFICATIONS FOR ADDITIONAL FIELD WIRING REQUIRED.
- ALL POWER CONDUIT RUNS SHALL CONTAIN A SEPARATE EQUIPMENT GROUNDING CONDUCTOR. IF NOT SHOWN ON THE PLANS, SIZE PER NEC.
- COORDINATE ALL CONDUIT STUB-UP LOCATIONS INTO ELECTRICAL EQUIPMENT WITH ACCEPTED VENDOR DRAWINGS.
- COORDINATE ALL NEW UNDERGROUND ELECTRICAL DUCTBANK RUNS WITH NEW AND EXISTING UNDERGROUND PIPING AND UTILITIES.
- INSTALL 1/2" PULLTAPE IN ALL SPARE CONDUIT RUNS.
- ALL OUTDOOR ENCLOSURES SHALL BE NEMA 3R, 316 STAINLESS STEEL UNLESS NOTED OTHERWISE.
- THE CONDUIT ROUTES SHOWN ARE SCHEMATIC IN NATURE AND ARE INTENDED TO BE USED AS A GUIDE.
- CONDUITS SHALL BE ROUTED TO AVOID INTERFERENCES WITH NEW AND EXISTING PROCESS PIPING, CONDUITS, STRUCTURES ETC.
- SEAL ALL CONDUITS IN UNDERGROUND PULLBOXES AND CONDUITS THAT STUB-UP INTO THE BOTTOM OF ELECTRICAL EQUIPMENT USING PUTTY-TYPE DUCT SEAL, INCLUDING SPARE CONDUITS.
- CONTRACTOR REQUIRED TO PROVIDE ALL WORK NECESSARY FOR COMPLETE AND OPERABLE SEWAGE PUMP STATION WITH STANDBY EMERGENCY GENERATOR AND ODOR CONTROL SYSTEM.
- WORK TO BE PER 2014 NEC AND LATEST EDITION OF NFPA 820.

LEGEND

	NEW EMBEDDED OR ENCASED HOMERUN WITH DESTINATION INDICATED
	NEW EXPOSED HOMERUN WITH DESTINATION INDICATED
	NEW CONDUIT IN DUCTBANK, SLAB OR BELOW GRADE
	NEW EXPOSED CONDUIT
	CONDUIT BENDS TOWARD OBSERVER
	CONDUIT BENDS AWAY FROM OBSERVER
	EXISTING EXPOSED CONDUIT
	EXISTING CONDUIT IN DUCTBANK, SLAB OR BELOW GRADE
	CONDUIT CHANGE IN ELEVATION
	CONDUIT STUBBED-OUT AND CAPPED
	CONDUIT ENDS WITH INSULATED BUSHING UNLESS OTHERWISE NOTED
	FLEXIBLE CONDUIT
	SUBMERSIBLE CABLE
	SOFTWARE OR DATA LINK
	MOTOR STARTER
	AUTOMATIC TRANSFER SWITCH
	MOTOR CIRCUIT PROTECTOR WITH CURRENT RATING
	CIRCUIT BREAKER WITH TRIP RATING INDICATED
	TRANSFORMER
	DIGITAL METER PACKAGE
	POWER MULTI FUNCTION METER
	CURRENT TRANSFORMER (QUANTITY INDICATED)
	AMMETER
	VOLTMETER
	MOTOR-NUMBER INDICATES HORSEPOWER
	ELECTRIC GENERATOR
	MOTOR SPACE HEATER
	VARIABLE FREQUENCY DRIVE
	KIRK-KEY INTERLOCK
	SURGE PROTECTION DEVICE
	SOLID STATE TRIP UNIT
	VOLTAGE SURGE SUPPRESSOR
	RELAY DEVICE (NUMBER REFERS TO ANSI/IEEE STD C37.2 DEVICE DESCRIPTION)
	UTILITY COMPANY METER
	BIMETALLIC THERMAL OVERLOAD RELAY
	INDICATES DEVICE LOCATED IN FIELD AT OR NEAR LOAD

	FUSE		PENDANT OR CEILING MOUNTED LIGHTING FIXTURE
	FUSE WITH BLOWN FUSE INDICATOR		WALL MOUNTED LIGHTING FIXTURE
	GROUND CONNECTION		POLE OR STANCHION MOUNTED LIGHTING FIXTURE
	CONTROL RELAY		DUAL HEAD EMERGENCY LIGHTING UNIT WITH BATTERY PACK
	TIME DELAY RELAY		EXIT LIGHTING FIXTURE-DARKENED QUADRANT INDICATES ILLUMINATED FACE; ARROW INDICATES DIRECTION
	ALARM RELAY		PENDANT OR CEILING MOUNTED LIGHTING FIXTURE
	NORMALLY OPEN CONTACT, RELAY COIL INDICATED		PENDANT OR CEILING MOUNTED LIGHTING FIXTURE (UNSWITCHED) WITH EMERGENCY POWER PACK
	NORMALLY CLOSED CONTACT, RELAY COIL INDICATED		DISCONNECT SWITCH
	PLC DISCRETE OUTPUT CONTACT		SINGLE POLE SWITCH
	TIME DELAY RELAY CONTACT (NORMALLY OPEN WITH TIME DELAYED CLOSING UPON COIL ENERGIZATION)		THREE WAY SWITCH
	TIME DELAY RELAY CONTACT (NORMALLY CLOSED WITH TIME DELAYED OPENING UPON COIL ENERGIZATION)		MANUAL STARTER
	TIME DELAY RELAY CONTACT (NORMALLY CLOSED WITH TIME DELAYED CLOSING UPON COIL DE-ENERGIZATION)		LOCALLY MTD STARTER OR CONTROLLER
	TIME DELAY RELAY CONTACT (NORMALLY OPEN WITH TIME DELAYED OPENING UPON COIL DE-ENERGIZATION)		LOCAL CONTROL STATION
	DOOR LIMIT SWITCH		MOTORIZED VALVE
	MOTOR STARTER COIL (SCHEMATIC DIAGRAMS ONLY)		CABLE TRAY
	MOISTURE DETECTOR		ALARM BEACON
	SOLENOID VALVE		FIRE ALARM HORN, WITH STROBE
	THERMOSTAT		SMOKE DETECTOR
	PHOTOCELL		FIRE ALARM MANUAL PULL STATION
	TIMER		HEAT DETECTOR
	LIMIT OR POSITION SWITCH		FIRE ALARM CONTROL PANEL
	PRESSURE SWITCH		DUCT MOUNTED SMOKE DETECTOR
	FLOW SWITCH		INTERCOM SPEAKER
	TEMPERATURE SWITCH		RELAY
	LEVEL FLOAT SWITCH		END-OF-LINE RESISTOR
	START PUSHBUTTON		COMPUTER OUTLET
	STOP OR RESET PUSHBUTTON		TELEPHONE OUTLET
	STOP PUSHBUTTON WITH LOCKOUT		SIMPLEX RECEPTACLE
	SELECTOR SWITCH		DUPLEX RECEPTACLE
	INDICATING LIGHT-LETTER DENOTES COLOR (SCHEMATIC OR ELEVATION ONLY) A=AMBER, R=RED, W=WHITE, G=GREEN		RECEPTACLE 250 VOLT
	CONDUCTOR CONNECTED		RECEPTACLE, RATING INDICATED
	CONDUCTOR NOT CONNECTED		JUNCTION BOX
	RUNNING TIME METER		EXPOSED GROUNDING CABLE

CALL BEFORE UNDERGROUND SERVICE ALERT

CALL TOLL FREE 811

YOU DIG

MINIMUM TWO WORKING DAYS BEFORE DIGGING



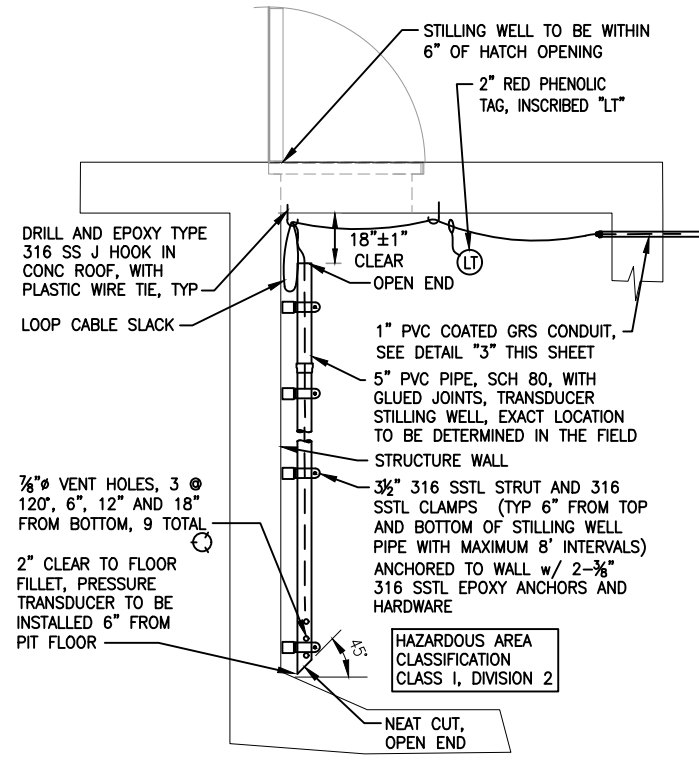
J Calton Engineering

INIT. DES	
NO. DESCRIPTION	CONFORMED PER ADDENDA
DATE	4/19/2019
JCC	DES
DESIGNED BY	CHKD BY
DRAWN BY	CHKD BY
CHECKED BY	CHKD BY
<p>NOT APPROVED FOR CONSTRUCTION</p>	
<p>CITY OF NOVATO CALIFORNIA</p>	
<p>THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS MARIN VALLEY MOBILE COUNTRY CLUB PUMP STATION NO. 2 IMPROVEMENTS</p>	
CONTRACT NO.	19-302
DATE	5/15/2020
SHEET	E01
SHEET	18 OF 28

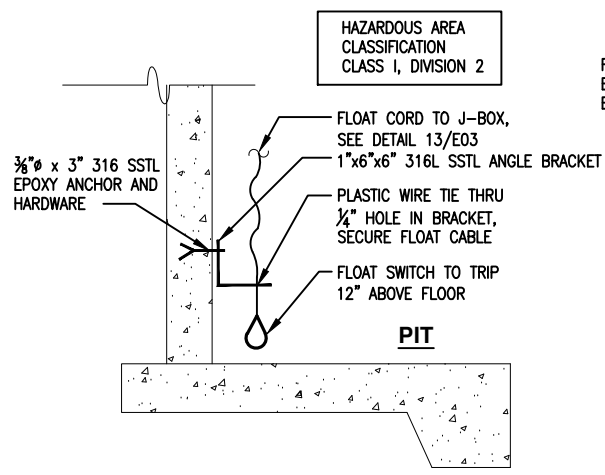
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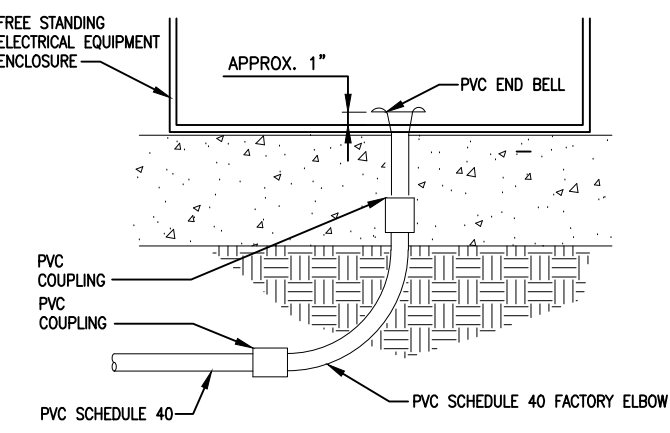
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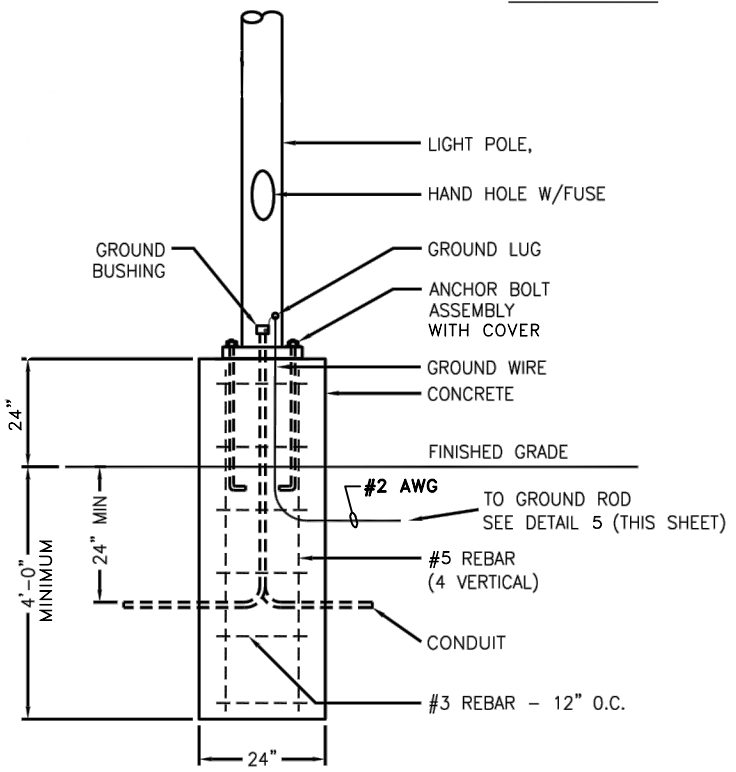
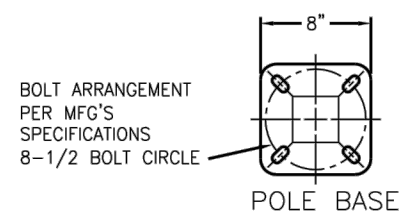
1 DETAIL - LEVEL TRANSDUCER STILLING WELL
 ref. scale: none



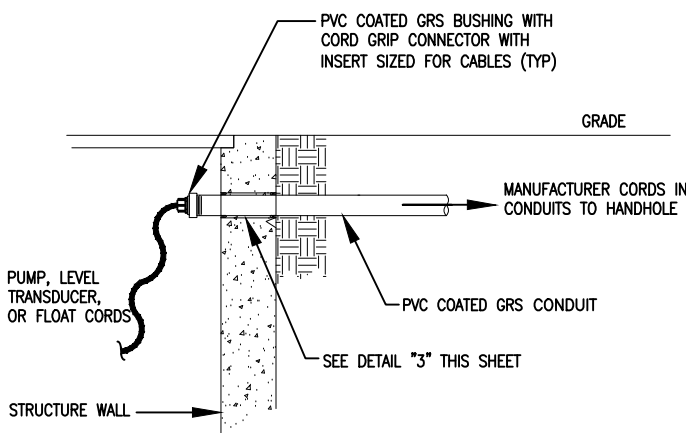
4 FLOWMETER PIT FLOAT - DETAIL
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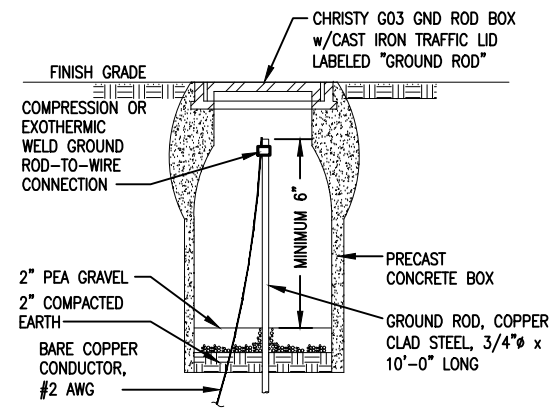
7 CONCEALED CONDUIT STUB-UP DETAIL
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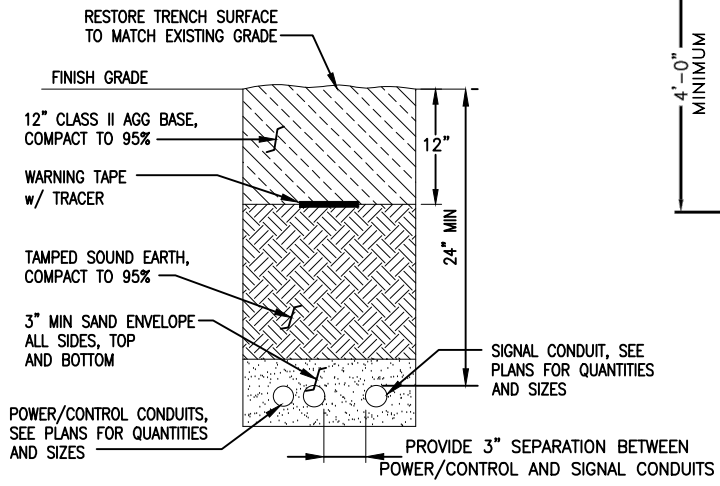
10 LIGHT FIXTURE MOUNTING
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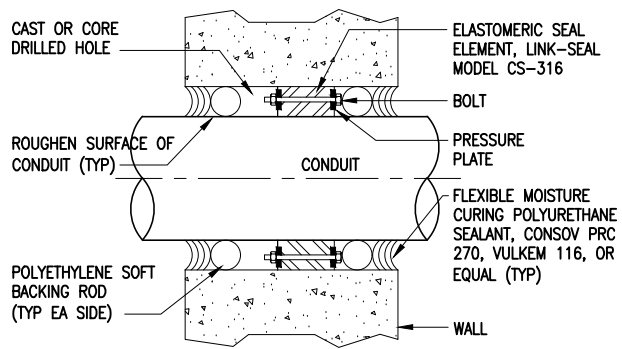
2 CONDUIT PENETRATION DETAIL
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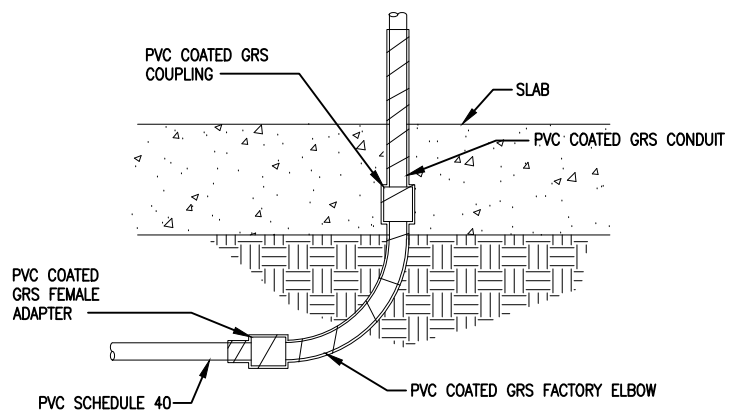
5 GROUND ROD BOX - DETAIL
 ref. scale: none



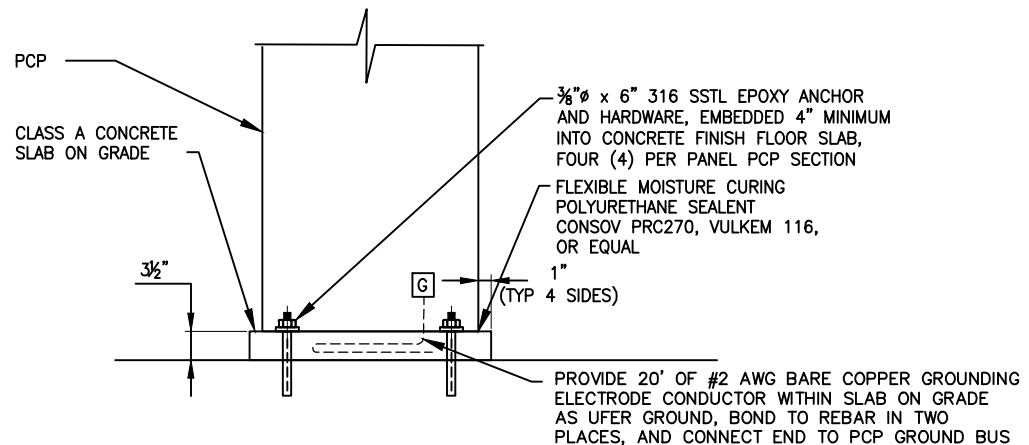
8 UNDERGROUND CONDUIT DETAIL
 ref. scale: none



3 LINK SEAL THRU WALL DETAIL
 ref. scale: none



6 EXPOSED CONDUIT STUB-UP DETAIL
 ref. scale: none



9 PUMP CONTROL PANEL ANCHORING AND UFER DETAIL
 ref. scale: none

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INIT. DES					
NO. DESCRIPTION	CONFORMED PER ADDENDA				
DATE	4/19/2019				
DESIGNED BY	MTW				
DRAWN BY	MTW				
CHECKED BY					
DATE					
PROJECT NO.	19-302				
PROJECT NAME	MARIN VALLEY MOBILE COUNTRY CLUB PUMP STATION NO. 2 IMPROVEMENTS				
CITY	MARIN COUNTY				
STATE	CALIFORNIA				
CONTRACT NO.	19-302				
DATE	5/15/2020				
SHEET	E02				
TOTAL SHEETS	19 OF 28				

PREPARED BY: NUTE ENGINEERING
 9771 E. 14th St., Suite 100, Hayward, CA 94541
 (510) 885-1100
 PROJECT #8827A

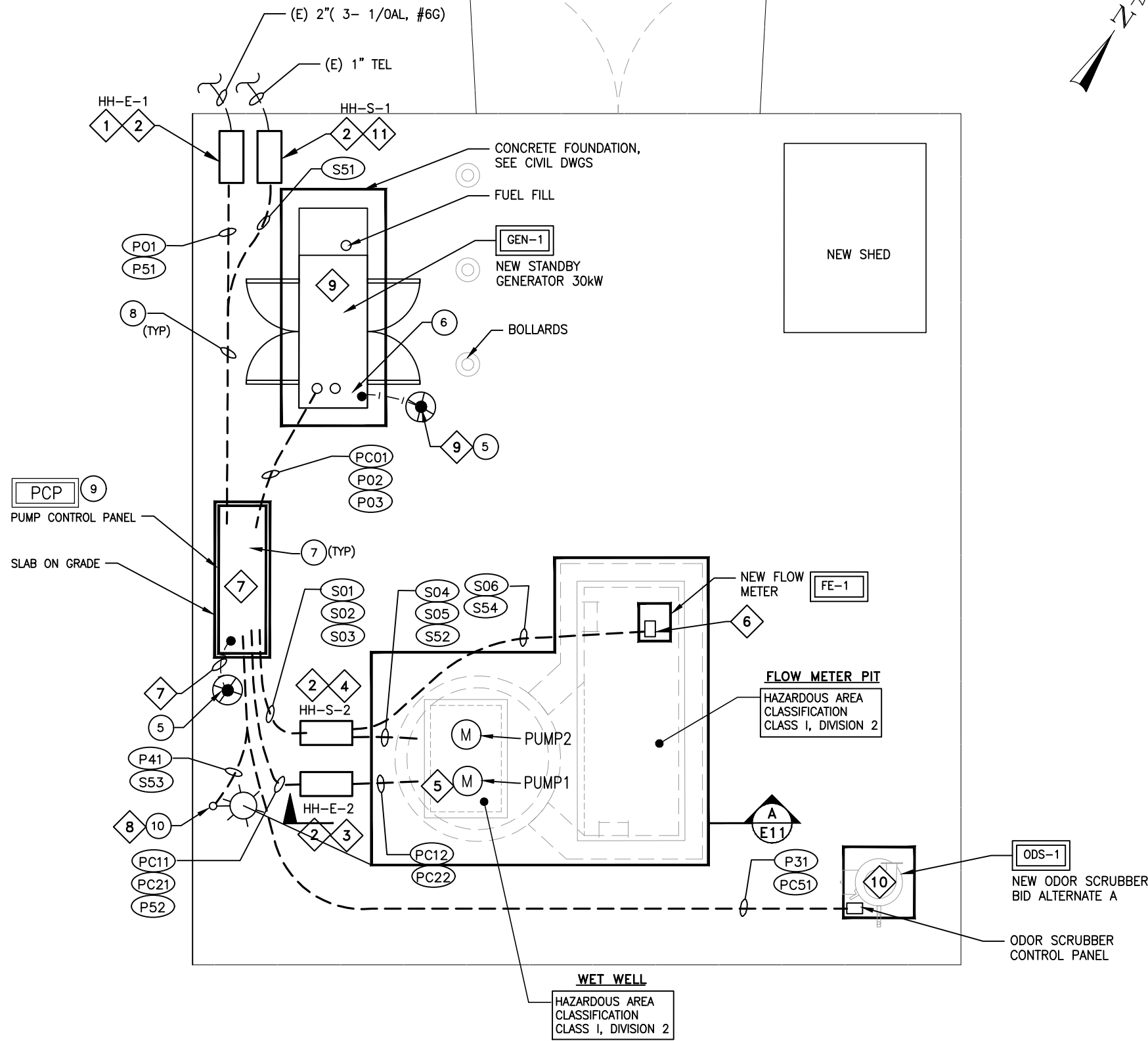
Not Approved For Construction

CITY OF NOVATO
 CALIFORNIA

THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS
 MARIN VALLEY MOBILE COUNTRY CLUB
 PUMP STATION NO. 2 IMPROVEMENTS
 MARIN COUNTY

ELECTRICAL
 DETAILS - 1

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GENERAL NOTES:

1. WET WELL AND FLOW METER PIT INTERIORS ARE CONSIDERED CLASS 1 DIVISION 2.
2. CONDUIT AND CABLE SIZES SHOWN ON CONDUIT AND CABLE SCHEDULE E11, ARE MINIMUM. ACTUAL SIZES MAYBE LARGER BASED ON SUBMITTED AND APPROVED EQUIPMENT, AT NO EXTRA COSTS.
3. FIELD LOCATE ELECTRICAL PANELS TO MAXIMIZE WORKING CLEARANCES AS REQUIRED PER CALIFORNIA ELECTRICAL CODE (CEC). LOCATIONS OF PANELS AND CONDUIT ROUTING SHOWN ARE APPROXIMATE. FINAL LOCATIONS SHALL BE APPROVED IN FIELD.
4. ALL HARDWARE, STRUT, STRAPS AND ANCHORS SHALL BE 316 STAINLESS STEEL.
5. CONDUITS TO BE 24" BELOW FINAL GRADE, REFER TO DETAIL 8. STUB-UPS SHALL BE PER DETAILS 6 OR 7.
6. PROVIDE NAMEPLATES ON ALL EQUIPMENT AND INSTRUMENTS. PROVIDE TAGS ON ALL CONDUITS AND LABELS ON ALL CABLES.
7. WALL PENETRATIONS PER DETAILS 2 AND 3.
8. FIXTURE SCHEDULE ON E06.

KEY NOTES:

1. INTERCEPT EXISTING 2" PVC SCH 40 CONDUIT WITH 3- 1/0 AL CONDUCTORS. INSTALL HANDHOLE HH-E-1. SPLICE TO 3- #1 CU CONDUCTORS. SPLICE GROUNDING CONDUCTORS.
2. INSTALL SOLID BOTTOM, TRAFFIC RATED HANDHOLES, WITH HOT DIPPED GALVANIZED BOLT-DOWN COVERS. SIZE PER HANDHOLE SCHEDULE ON E11. REFER TO DETAIL 11. INSCRIBE COVER WITH TYPE AND HANDHOLE IDENTIFIER ("ELECTRICAL HH-E-1", "SIGNAL HH-S-1", ETC.) AS SHOWN.
3. INSTALL NEW SEAL OFF FITTINGS WITHIN ELECTRICAL HANDHOLE. SPLICE PUMP POWER CONDUCTORS IN HANDHOLE TO XHHW-2 CONDUCTORS, WITH WATER PROOF SPLICE KITS.
4. INSTALL NEW SEAL OFF FITTINGS WITHIN SIGNAL HANDHOLE. ROUTE FLOW TUBE, LEVEL TRANSDUCER AND FLOAT SWITCH CABLES COMPLETE FROM INSTRUMENTS TO PUMP CONTROL PANEL, NO SPLICES ALLOWED. PROVIDE 24" OF MANUFACTURER CABLES COILED IN SIGNAL HANDHOLE.
5. FIELD COORDINATE LOCATION OF WET WELL INSTRUMENTS (LEVEL TRANSDUCER AND FLOAT SWITCHES) AND PUMP CABLES WITH OWNER FOR EASE OF MAINTENANCE AND REPLACEMENT. LOCATE AND INSTALL CABLE HOOKS PER OWNER. LABEL THE CABLES WITH RED ENGRAVED PHENOLIC TAGS. REFER TO DETAILS 1 AND 12.
6. PROVIDE J-BOX ON WALL OF FLOW METER PIT. REFER TO DETAILS 4, 13 AND 14.
7. PROVIDE #2 AWG BARE COPPER GROUNDING ELECTRODE CONDUCTOR FROM GROUND ROD TO PUMP CONTROL PANEL GROUND BUS. BURY GROUNDING ELECTRODE CONDUCTOR 36" BELOW FINAL GRADE. PROVIDE 20' OF #2 AWG BARE COPPER GROUNDING ELECTRODE CONDUCTOR WITHIN SLAB ON GRADE AS UFER GROUND, BOND TO REBAR IN TWO PLACES AND CONNECT END TO PUMP CONTROL PANEL GROUND BUS AND FRAME.
8. ROUTE CONDUIT S53 UP THRU SITE LIGHT BASE FOR FUTURE USE.
9. PROVIDE AND INSTALL GROUND ROD, REFER TO DETAIL 5, AT GENERATOR. ROUTE #2 AWG BARE COPPER GROUNDING ELECTRODE CONDUCTOR FROM GROUND ROD TO STANDBY GENERATOR NEUTRAL. PROVIDE 20' OF #2 AWG BARE COPPER GROUNDING ELECTRODE CONDUCTOR WITHIN SLAB ON GRADE AS UFER GROUND, BOND TO REBAR IN TWO PLACES, AND CONNECT END TO GENERATOR GROUND BUS AND FRAME.
10. PROVIDE ALL ELECTRICAL WORK REQUIRED FOR ODOR CONTROL SYSTEM. COORDINATE WITH SUPPLIER OF SYSTEM.
11. INTERCEPT EXISTING 1" SCH 40 PVC CONDUIT. INSTALL HANDHOLE HH-S-1, FOR FUTURE TELEPHONE SERVICE.

SITE PLAN
 SCALE: 3/8" = 1'-0"

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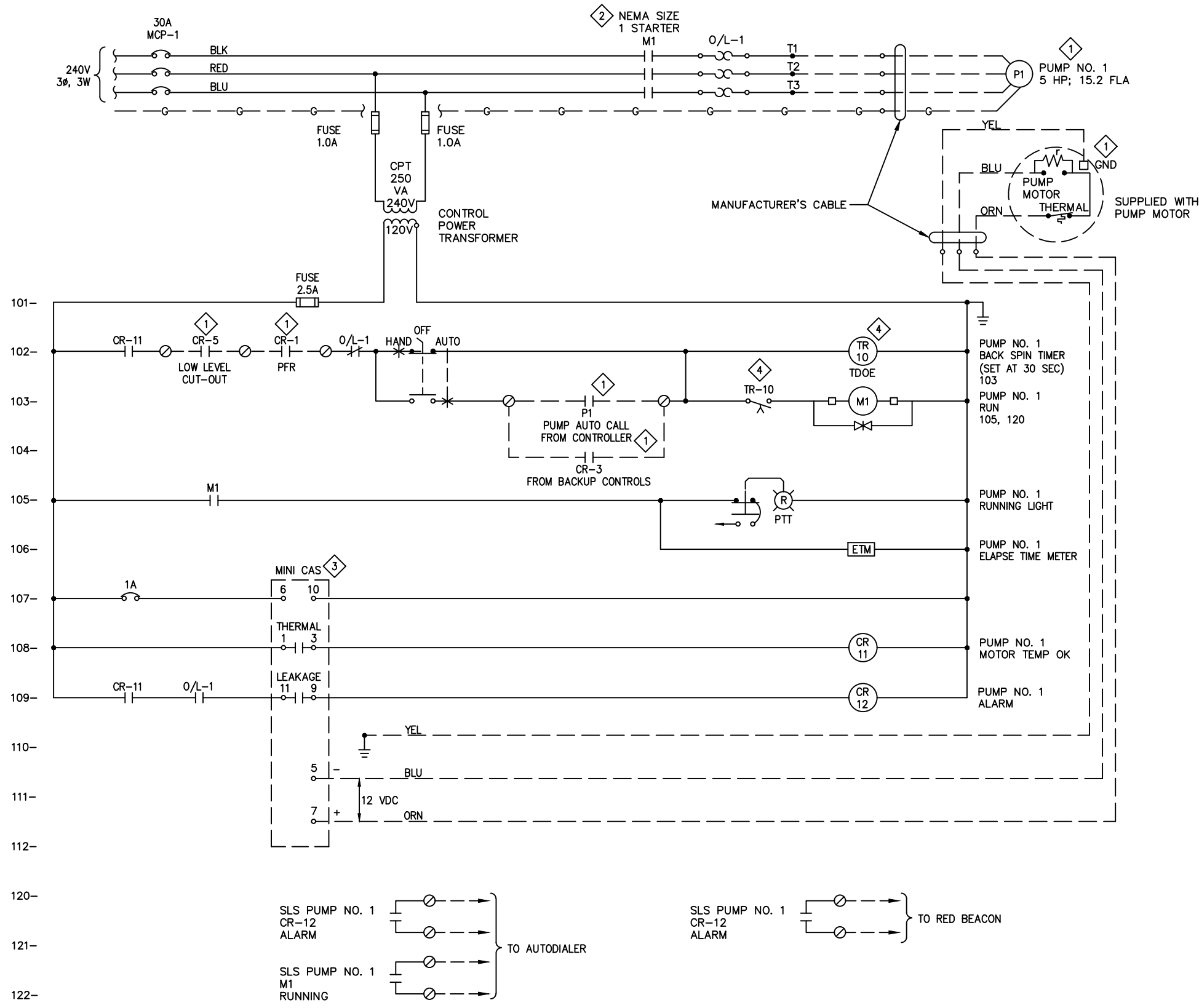


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 California

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DATE	4/19/2019	NO.	DESCRIPTION	CONFORMED PER ADDENDA	
DESIGNED BY	JCC	DRAWN BY	pm	MTW	
CHECKED BY		CHECKED BY			
<p>THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS MARIN VALLEY MOBILE COUNTRY CLUB PUMP STATION NO. 2 IMPROVEMENTS MARIN COUNTY CALIFORNIA</p> <p>ELECTRICAL SITE PLAN</p>					
CONTRACT NO.	19-302	DATE	5/15/2020	PROJECT NO.	E05
<p>22 of 28</p>					

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**PUMP NO. 1 CONTROL SCHEMATIC DIAGRAM
(SIMILAR FOR PUMP NO. 2)**

- KEY NOTES:**
- ① REMOTE DEVICE.
 - ② STARTER AND CONTROLS AND MPR AT PUMP CONTROL PANEL.
 - ③ PROVIDE POWER SUPPLY FOR MPR AS REQUIRED. WIRING TERMINALS SHOWN FOR FLYGT MINI-CAS UNIT.
 - ④ TDOE-TIME DELAY ON ENERGIZE.

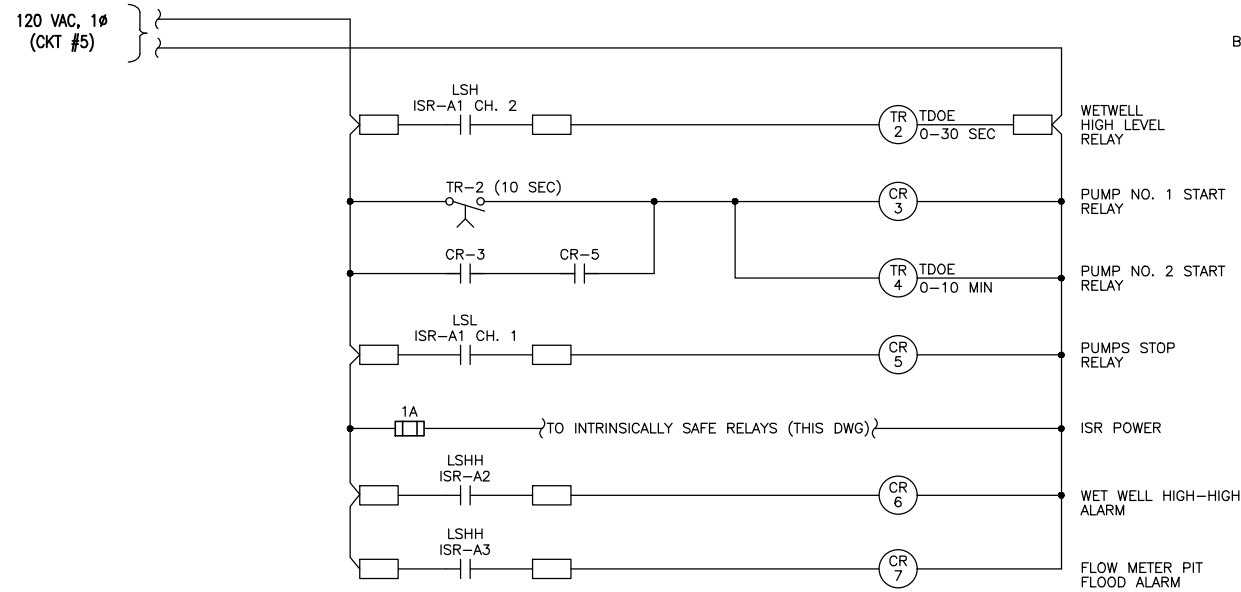


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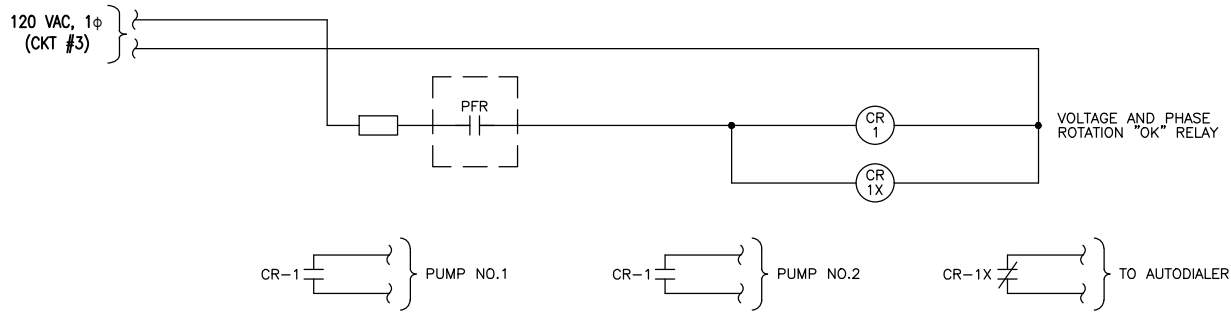
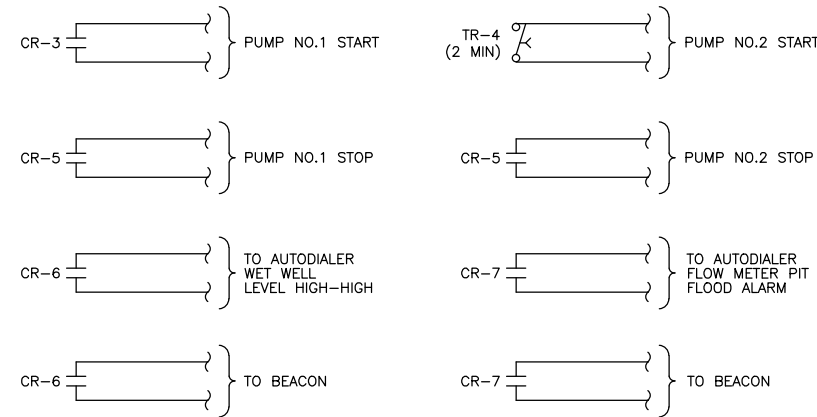


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NO. DESCRIPTION	CONFORMED PER ADDENDA			
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DRAWN BY	DES			
CHECKED BY				
<p>THIS DOES NOT MEASURE OR VERIFY THE QUALITY OF THE WORK OR THE ACCURACY OF THE INFORMATION PROVIDED TO US.</p>				
<p>PREPARED BY: NUTE ENGINEERING 10777 S. 24th Street, Suite 100, San Jose, CA 95128 Tel: 408.253.4400 Fax: 408.253.4400 NUTE Not Approved For Construction</p>				
<p>THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS MARIN COUNTY CALIFORNIA MARIN VALLEY MOBILE COUNTRY CLUB PUMP STATION NO. 2 IMPROVEMENTS ELECTRICAL PUMP SCHEMATIC DIAGRAMS</p>				
CONTRACT NO.	19-302			
DATE	5/15/2020			
SHEET	E07			
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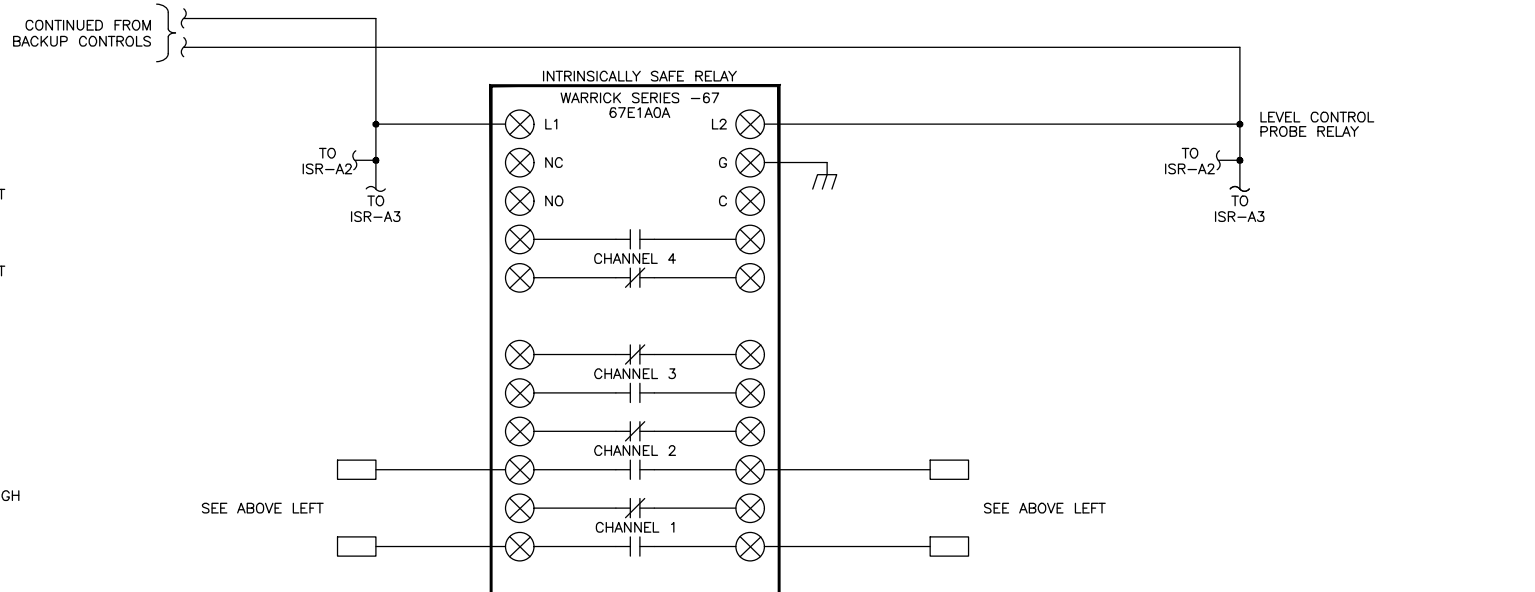
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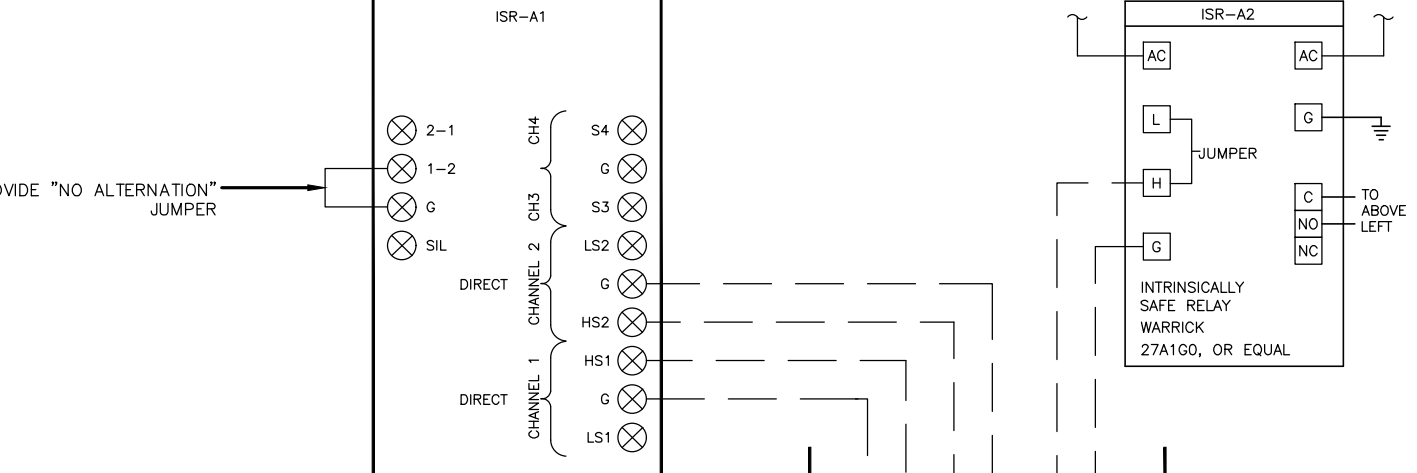
BACK-UP FLOAT CONTROLS, HIGH ALARMS



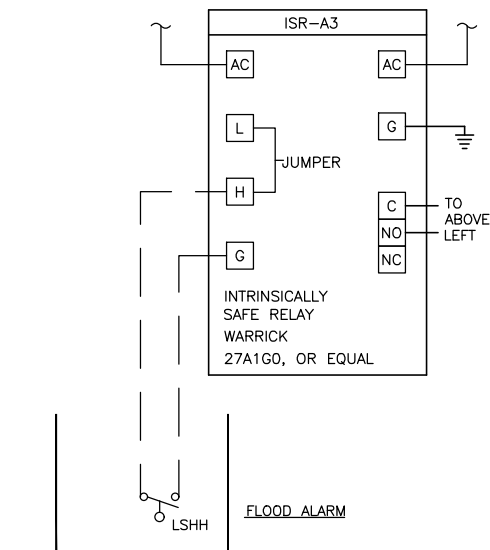
UTILITY POWER FAIL RELAY



PROVIDE "NO ALTERNATION" JUMPER



WET WELL



FLOW METER PIT

BACK-UP FLOAT CONTROLS

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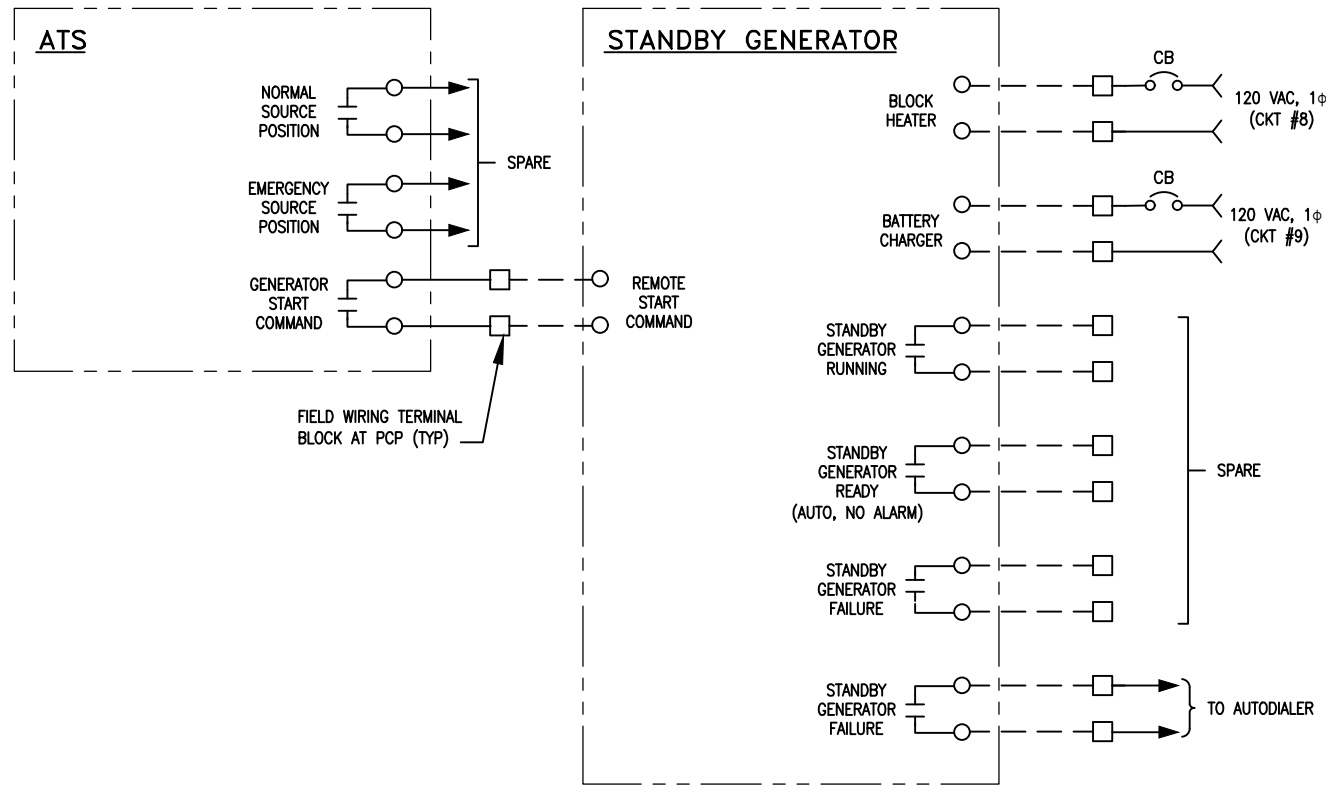


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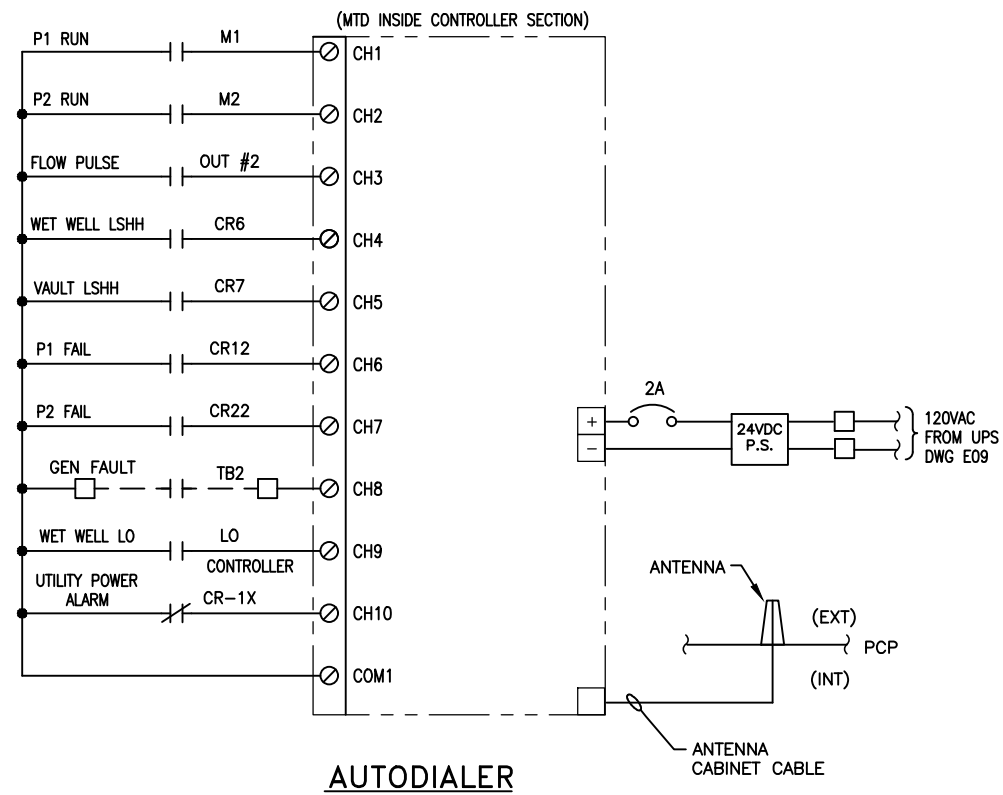


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DATE	4/19/2019	NO. DESCRIPTION	CONFORMED PER ADDENDA		
DESIGNED BY		DRAWN BY	CHECKED BY		
PROJECT NO.		JCC	pm	MTW	
NUTE ENGINEERING 997 Folsom Street, Suite 200 San Francisco, CA 94103 Tel: 415.435.4400 Fax: 415.435.4401 Not Approved For Construction					
PREPARED BY: NUTE ENGINEERING PROJECT #8827A Not Approved For Construction					
THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS MARIN VALLEY MOBILE COUNTRY CLUB PUMP STATION NO. 2 IMPROVEMENTS MARIN COUNTY CALIFORNIA ELECTRICAL BACKUP FLOAT, POWER FAIL SCHEMATICS					
CONTRACT NO.	19-302	DATE	5/15/2020	SHEET	E08
					25 OF 28

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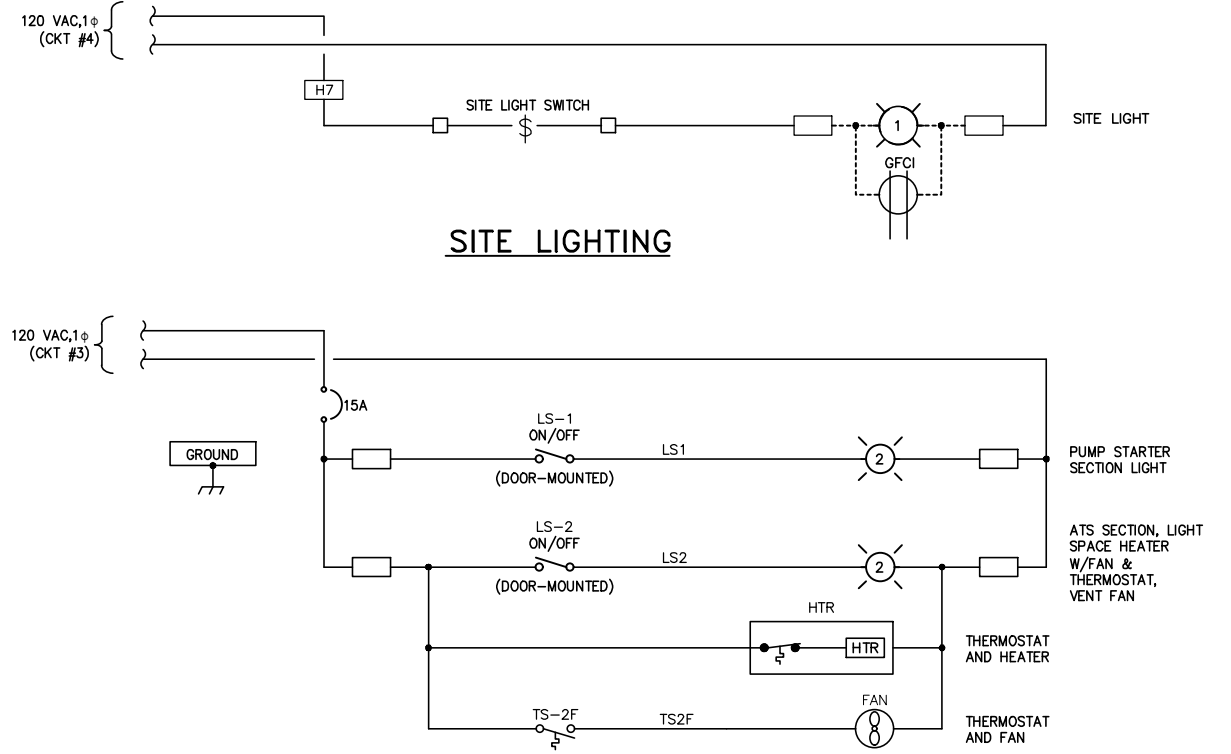


STANDBY POWER SYSTEM

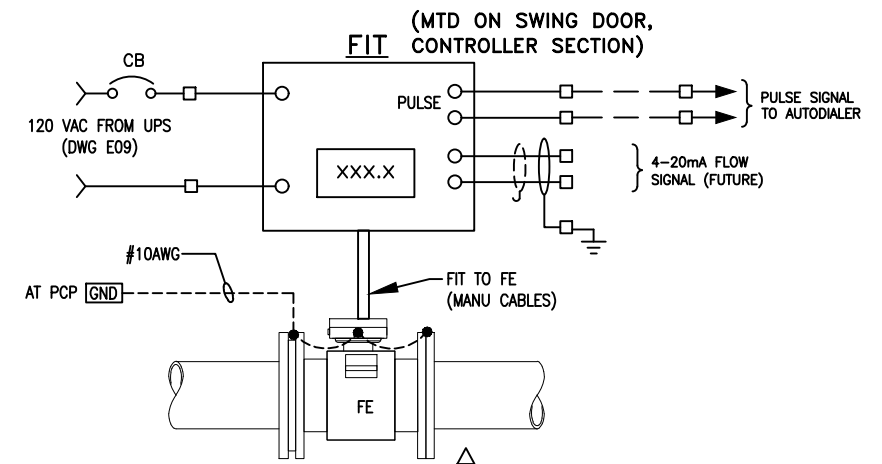


AUTODIALER

- NOTES:**
- DIGITAL INPUT WIRING TO BE #16 AWG.
 - BASED ON ROW ALARM AGENT TEMPLATE #2. SUBJECT TO CHANGE BASED ON APPROVED AUTODIALER.



PUMP CONTROL PANEL HEATERS, FANS, LIGHTS WIRING DIAGRAM



FLOW TRANSMITTER

IF THIS DOES NOT MEASURE ONE INCH, THESE PLANS ARE NOT TO SCALE.

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DATE	4/19/2019
DESCRIPTION	CONFORMED PER ADDENDA
JCC	pm
DES	
DESIGNED BY	
DRAWN BY	
CHECKED BY	
PROJECT #	
SCALE	1"
NOTES	# THIS DOES NOT MEASURE ONE INCH TO SCALE

PREPARED BY: **NUTE ENGINEERING**
 NUTE ENGINEERING
 997 Folsom Blvd., Suite 200
 San Francisco, CA 94103
 (415) 424-2400
 www.nute.com

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THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS
 MARIN VALLEY MOBILE COUNTRY CLUB
 PUMP STATION NO. 2 IMPROVEMENTS
 MARIN COUNTY CALIFORNIA

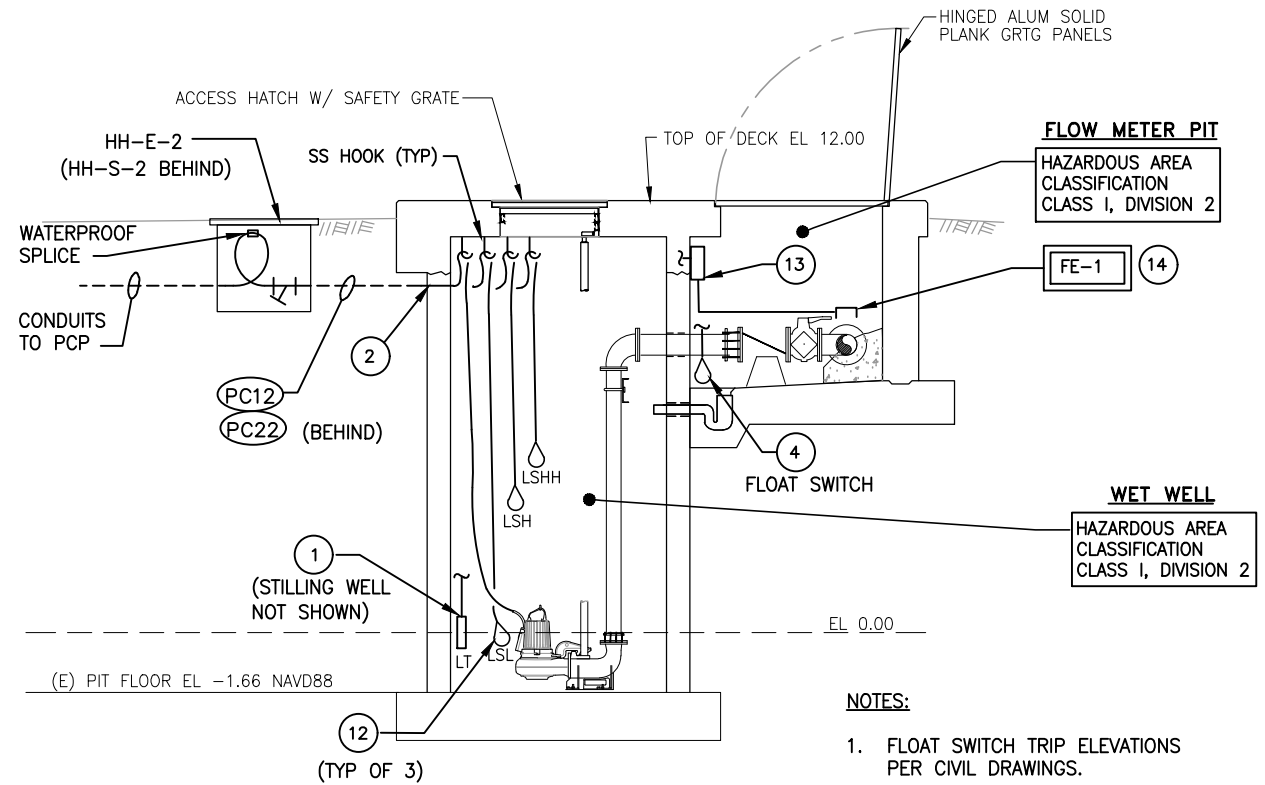
ELECTRICAL MISCELLANEOUS CONTROL SCHEMATICS

CONTRACT No. 19-302
 DATE: 5/15/2020
 SHEET: **E10**
 OF 28

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CONDUIT AND CABLE SCHEDULE					
CONDUIT NO.	SIZE	CABLE SIZE AND QUANTITY	FROM	TO	REMARKS
P01	2"	3-#1, #6G	HH-E1	PCP - ATS (N) SECTION	240V UTILITY POWER, SPLICE IN HH-E1
P02	1 1/2"	3-#2, #6G	STANDBY GENERATOR	PCP - ATS (E) SECTION	240V STANDBY POWER
P03	1"	2-#12, 2-#12N, #12G	PCP - CONTROL PANEL SECTION	STANDBY GENERATOR	120V TO GEN HTR AND BATT CHARGER
P31	1"	3-#10, #10G	PCP - STARTER SECTION	ODOR CONTROL PANEL	240V, 3 POLE BREAKER
P41	1"	#12, #12N, #12G	PCP - CONTROL PANEL SECTION	SITE LIGHT	120V FROM SITE LIGHT SWITCH
P51	1"	PULLTAPE	PCP - STARTER SECTION	HH-E1	SPARE CONDUIT, DUCT SEAL BOTH ENDS
P52	1"	PULLTAPE	PCP - STARTER SECTION	HH-E2	SPARE CONDUIT, DUCT SEAL BOTH ENDS
PC01	1"	10-#14, #14G	PCP - ATS	STANDBY GENERATOR	GEN CONTROLS, ALARMS, SPARES
PC11	1 1/2"	3-#10, 4-#14, #10G	PCP - STARTER SECTION	HH-E2	240V FROM STARTER AND MINICAS
PC12	1 1/2"	MANU CABLE (POWER, TS, MS)	HH-E2	SLS PUMP 1	MAEYS FITTING IN HH-E2
PC21	1 1/2"	3-#10, 4-#14, #10G	PCP - STARTER SECTION	HH-E2	240V FROM STARTER AND MINICAS
PC22	1 1/2"	MANU CABLE (POWER, TS, MS)	HH-E2	SLS PUMP 2	MAEYS FITTING IN HH-E2
PC51	1"	PULLTAPE	PCP - CONTROL PANEL SECTION	ODOR CONTROL PANEL	SPARE CONDUIT, DUCT SEAL BOTH ENDS
S01	1 1/2"	LT MANU CABLE, LSL MANU CABLE	PCP - CONTROL PANEL SECTION	HH-S2	LT AND LSL CABLES, NO SPLICES
S02	1 1/2"	LSH MANU CABLE, LSHH MANU CABLE	PCP - CONTROL PANEL SECTION	HH-S2	LSH AND LSHH CABLES, NO SPLICES
S03	1 1/2"	FE MANU CABLES, LSHH MANU CABLE, #10G	PCP - CONTROL PANEL SECTION	HH-S2	FLOW TUBE AND LSHH CABLES, NO SPLICES
S04	1 1/2"	LT MANU CABLE, LSL MANU CABLE	HH-S2	WET WELL	MAEYS FITTING IN HH-S2
S05	1 1/2"	LSH MANU CABLE, LSHH MANU CABLE	HH-S2	WET WELL	MAEYS FITTING IN HH-S2
S06	1 1/2"	FE MANU CABLES, LSHH MANU CABLE, #10G	HH-S2	FLOW PIT J-BOX	MAEYS FITTING IN HH-S2
S51	1"	PULLTAPE	PCP - CONTROL PANEL SECTION	HH-S1	SPARE CONDUIT, DUCT SEAL BOTH ENDS
S52	1"	PULLTAPE	PCP - CONTROL PANEL SECTION	HH-S2	SPARE CONDUIT, DUCT SEAL BOTH ENDS
S53	1"	PULLTAPE	PCP - CONTROL PANEL SECTION	SITE LIGHT	SPARE CONDUIT, DUCT SEAL BOTH ENDS
S54	1"	PULLTAPE	HH-S2	FLOW PIT J-BOX	SPARE CONDUIT, DUCT SEAL BOTH ENDS

HANDHOLE SCHEDULE									
IDENTIFIER NUMBER	MIN. INTERIOR DIMENSIONS			BOTTOM SLAB	LOADING H-20	COVER			REMARKS
	WIDTH	LENGTH	DEPTH			GALV STEEL	BOLTED		
HH-E1	13"	24"	36"	X	X	X	X	X	COVER INSCRIBED "ELECTRICAL HH-E1", PENTA GALVANIZED BOLTS
HH-E2	13"	24"	36"	X	X	X	X	X	COVER INSCRIBED "ELECTRICAL HH-E2", PENTA GALVANIZED BOLTS
HH-S1	13"	24"	36"	X	X	X	X	X	COVER INSCRIBED "SIGNAL HH-S1", PENTA GALVANIZED BOLTS
HH-S2	17"	30"	36"	X	X	X	X	X	COVER INSCRIBED "SIGNAL HH-S2", PENTA GALVANIZED BOLTS



A
E05 SECTION THROUGH PUMP STATION
 SCALE: 3/8" = 1'-0"

- NOTES:**
1. FLOAT SWITCH TRIP ELEVATIONS PER CIVIL DRAWINGS.

INIT. DES.	
NO. DESCRIPTION	CONFORMED PER ADDENDA
DATE	4/19/2019
JCC	pm
Drawn:	MTW
Checked:	
PROFESSIONAL ENGINEER STATE OF CALIFORNIA No. 21499 Exp. 6-30-21	
NUTE ENGINEERING Callie S. Sandoz, Credentials No. 48340, No. 48340, No. 48340 PROJECT #8827A	
Not Approved For Construction	
PREPARED BY: NUTE	
THE CITY OF NOVATO DEPARTMENT OF PUBLIC WORKS MARIN VALLEY MOBILE COUNTRY CLUB PUMP STATION NO. 2 IMPROVEMENTS MARIN COUNTY CALIFORNIA	
ELECTRICAL PUMP STATION SECTION AND SCHEDULES	
CONTRACT NO.	19-302
DATE	5/15/2020
SHEET	E11
SHEET	28 OF 28



Construction contractor agrees that in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours, and construction contractor further agrees to defend, indemnify and hold design professional harmless from any and all liability, real or alleged, in connection with the performance of work on this project, except for liability arising from the sole negligence of design professional.

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