Item No: 12

Report to the City Council
Council Meeting of July 12, 2016

Agenda Section: **Consent**

Subject: **Consideration and proposed approval of a resolution authorizing the City Manager to execute a Utility Easement Deed and Agreement with Spring Mountain Hotel, LLC and Napa Valley Wine Train for a Sewer Force Main**

CEQA Status: **Mitigated Negative Declaration, adopted on August 24, 2010, and as amended on March 10, 2015, September 11, 2015, and February 29, 2016**

Prepared By: **Steven Palmer, PE, Director of Public Works/City Engineer**

Approved By: **Noah Housh, Acting City Manager/Planning and Community Improvement Director** NH

BACKGROUND

Spring Mountain Hotel, LLC is constructing the Las Alcobas Hotel on a 3.83 acre parcel located at 1915 Main Street. The Project is renovating the existing Acacia House single family dwelling, and constructing several separate structures to provide 70-hotel rooms and related facilities. The Project was approved by City Council in 2010.

One of the conditions of approval requires the Developer to construct a new 6-inch diameter sewer force main from the existing sewer lift station located at 1752 Crinella Drive (Crinella Lift Station), to the existing gravity sewer line at Fulton Lane at Railroad Avenue. The existing 4-inch diameter force main will be abandoned in place and replaced with this new 6-inch diameter force main.

DISCUSSION

The proposed sewer force main exits the existing lift station building at the rear of the lift station property at 1752 Crinella Drive, crosses the railroad tracks, and runs south along the Napa Valley Wine Trail property to Fulton Lane; ultimately connecting to the existing City sewer at the intersection of Fulton Lane and Railroad Avenue. In order to construct the sewer force main, the Developer must obtain City approval of the improvement plans, submit security for construction to the City, obtain an easement from the Napa Valley Wine Train on behalf of the City, and obtain an encroachment permit from the City.

The improvement plans have been reviewed and approved the City's Director of Public Works/City Engineer (Attachment 2). An encroachment permit will not be issued until the attached Utility Easement Deed and Agreement (Attachment 3) is executed by all parties, and the Developer submits security for the construction.

The Utility Easement Deed and Agreement grants an easement from the Napa Valley Wine Train to the City to maintain and operate the new sewer force main, and it specifies the conditions that the City must follow when maintaining the sewer line and working adjacent to the railroad. The agreement also states that Spring Mountain Hotel, LLC is responsible for paying for the easement and constructing the sewer force main.

FISCAL IMPACT

The easement and construction of the sewer force main will be funded and performed by Spring Mountain Hotel, LLC. Upon completion of the improvements and acceptance by the City, the City will be responsible for operation and maintenance of the sewer force main. The cost to operate and maintain the new force main is not anticipated to be significantly different than the cost to operate and maintain the existing force main that is being abandoned.

RECOMMENDED ACTION

Adopt attached resolution authorizing the City Manager to execute a Utility Easement Deed and Agreement with Spring Mountain Hotel, LLC and Napa Valley Wine Train

ATTACHMENTS

1. Resolution
2. Improvement Plans
3. Utility Easement and Agreement

ATTACHMENT 1

CITY OF ST. HELENA

RESOLUTION NO. 2016-

AUTHORIZE THE CITY MANAGER TO EXECUTE UTILITY EASEMENT DEED AND AGREEMENT WITH SPRING MOUNTAIN HOTEL, LLC AND NAPA VALLEY WINE TRAIN FOR A SEWER FORCE MAIN

RECITALS

A. Spring Mountain Hotel, LLC is constructing the Las Alcobas Hotel on a 3.83 acre parcel located at 1915 Main Street; and

B. The Project Conditions of Approval requires the Developer to construct a new 6-inch diameter force main from the existing sewer lift stated located at 1752 Crinella Drive to the existing gravity sewer line at Fulton Lane and Railroad Avenue; and

C. In order to construct the sewer force main, the Developer is required to obtain an easement from the Napa Valley Wine Train for the City to operate and maintain the sewer force main; and

D. The Utility Easement Deed and Agreement grants and easement from the Napa Valley Wine Train to the City; and

E. The Agreement specifies the conditions that the City must follow when maintain the sewer force main adjacent to the Napa Valley Wine Train; and

F. The Agreement specifies that Spring Mountain Hotel, LLC will pay for the easement and construct the sewer force main.

RESOLUTION

NOW, THEREFORE, the City Council of the City of St. Helena resolves as follows:

1. The City Manager is authorized to sign the Utility Easement Deed and Agreement with Spring Mountain Hotel, LLC and Napa Valley Wine Train for a sewer force main

Approved at a Regular Meeting of the St. Helena City Council on June 28, 2016 by the following vote:

Mayor Galbraith: _____

Vice Mayor White: _____

Councilmember Crull: _____

Councilmember Dohring: _____

Councilmember Pitts: _____

APPROVED: ATTEST:

_____ _____

Alan Galbraith, Mayor Cindy Black, City Clerk

ATTACHMENT 2

CIVIL IMPROVEMENT PLANS FOR

CRINELLA PUMP STATION FORCE MAIN

CITY OF ST. HELENA NAPA COUNTY CALIFORNIA

CUNNINGHAM ENGINEERING

JANUARY 2016

HORIZONTAL ALIGNMENT DATA			
POINT TYPE	STATION	NORTHING	EASTING
POB (NOTE 1)	0+50	5958.28	5232.94
PI	1+23.33	6007.37	5299.07
PI	7+15.55	5520.83	5620.70
PI	7+84.40	5466.93	5663.52
PI	9+75.97	5307.12	5769.17
PI	11+23.86	5160.35	5750.98
PI	11+31.66	5161.30	5743.24
PI	11+53.64	5142.36	5732.09
POE	13+37.72	4984.56	5633.80
POB	100+50.04	5380.37	5778.24
POE	102+01.75	5153.40	5750.12

NOTES:

1. POINT OF BEGINNING REPRESENTS BEGINNING OF ALIGNMENT ACCEPTANCE PIPING PE JUMPED FOR TIE-IN EXISTING. SEE DETAIL ON SHEET C9

SURVEY CONTROL			
POINT #	NORTHING	EASTING	ELEVATION
1	5509.34	5423.25	253.04
2	5257.74	5276.52	258.96
3	5300.83	5217.10	258.39
4	5414.56	5059.52	254.32
11	5707.39	4653.74	254.97

VICINITY MAP
NO SCALE

SHEET INDEX

C1 TITLE SHEET
C2 NOTES
C3 FORCE MAIN PLAN AND PROFILE
C4 FORCE MAIN PLAN AND PROFILE
C5 FORCE MAIN PLAN AND PROFILE
C6 BORE AND JACK PLAN AND PROFILE
C7 EROSION CONTROL SHEET
C8 DETAILS
C9 DETAILS
C10 SECTIONS
CP1 CATHODIC PROTECTION DETAILS & NOTES
CP2 CATHODIC PROTECTION DETAILS 2

CONTRACTOR:
TRICORP HEARN
TONY MCKAYED
11301 PYRITES WAY, SUITE A
GOLD RIVER, CALIFORNIA 95670

CIVIL ENGINEER:
CUNNINGHAM ENGINEERING CORPORATION
3840 SPAFFORD STREET, SUITE 300
DAVIS, CALIFORNIA 95618
(530) 750-3000

BOUNDARY NOTES
THE BOUNDARIES SHOWN HEREON ARE BASED UPON ACCESSOR PARCEL MAPS. THE INFORMATION SHOULD BE CONSIDERED APPROXIMATE.

BENCHMARK
STANDARD TABLET IN FIRST STEP ST. HELENA POST OFFICE STAMPED B TKM 1941-2011.
ELEVATION = 261.59' (NGVD 1929)

DRAWING STATUS:
- ● PLAN REVIEW
- ○ PERMIT SET
- ○ BID SET
- ○ CONSTRUCTION SET

APPROVED FOR CONFORMANCE TO CITY ROAD AND STREET STANDARDS, WATER SYSTEM STANDARDS, STORM DRAIN SYSTEM STANDARDS, AND APPURTENANT CONDITIONS OF APPROVAL.

STEVE PALMER, PE — DATE
DIRECTOR OF PUBLIC WORKS & CITY ENGINEER
CITY OF ST. HELENA

LEGEND:

	NEW / PROPOSED	EXISTING
SUBDIVISION BOUNDARY		N/A
LOT LINE		
MULTIPLE LOT LINE	N/A	
EASEMENT LINE		
RIDGE		N/A
SWALE, FLOWLINE		N/A
DRAIN LINE		
DIAMETER INCREASER		
WATER METER & BACKFLOW		N/A
BLOWOFF VALVE		N/A
SEWER LINE & MANHOLE		
SEWER LINE & FLUSHER BRANCH		N/A
DRAIN INLET		
CONCRETE CURB		
VERTICAL CURB & GUTTER		
SLOPE GRADE		N/A
FIRE HYDRANT		
ELEVATION		
STREET LIGHT	N/A	
FENCE		
TREE TO BE REMOVED	N/A	
REPLACEMENT OF STREET HORIZONTAL SIGNS	N/A	
SANITARY FLOWLINE		
CONCRETE PEDESTRIAN PATH		N/A
ASPHALT PEDESTRIAN PATH		N/A
CONCRETE [illegible]		N/A
DECOMPOSED GRANITE PATH		N/A
LANDING LIMITS		N/A
RIDGE		N/A
DRAINAGE FLOW DIRECTION		N/A

ABBREVIATIONS:

AB	AGGREGATE BASE	HOR	HORIZONTAL	PERF	PERFORATED
AC	ASPHALT CONCRETE	HP	HIGH POINT	PL	PROPERTY LINE
BOT	BOTTOM	HPI	HORIZONTAL POINT OF INTERSECTION	PUE	PUBLIC UTILITY EASEMENT
BOW	BOTTOM OF WALL	INTS	INTERSECTION	R	RIGHT, RADIUS
CL	CENTERLINE	INV	PIPE OR MANHOLE INVERT ELEVATION	R.C.	RELATIVE COMPACTION
CLR	CLEAR	IOD	IRREVOCABLE OFFER OF DEDICATION	RT	RIGHT
CO	CLEAN OUT	L	LEFT, LENGTH	R/W	RIGHT OF WAY
CR	CURB RETURN	LB	LANDSCAPE DRAIN	S/W	SIDEWALK
D	STORM DRAIN LINE	LF	LINEAR FEET	S	SANITARY SEWER, SOUTH
DI	DRAIN INLET	LP	LOW POINT	SCO	SANITARY SEWER CLEAN OUT
E	EAST	LT	LEFT	SMH	SANITARY SEWER MANHOLE
EG	EXISTING GRADE	MA	MATCH	STD	STANDARD
EP	EDGE OF PAVEMENT	MAX	MAXIMUM	T&G	TONGUE AND GROOVE
ESMT	EASEMENT	MH	MAINTENANCE HOLE	TC	TOP OF CURB
EX	EXISTING	MIN	MINIMUM	TI	TRAFFIC INDEX
FB	FLUSHER BRANCH	N	NORTH	TOW	TOP OF WALL
FF	FINISHED FLOOR ELEVATION	NTS	NOT TO SCALE	TYP	TYPICAL
FL	FLOW LINE ELEVATION	OC	ON CENTER	VERT	VERTICAL
GALV	GALVANIZED	OS	SURFACE DRAINAGE OVERLAND RELEASE	VPI	VERTICAL POINT OF INTERSECTION
GB	GRADE BREAK	P	PAD	W	WATER LINE, WEST
GE	GRADE ELEVATION	PCC	PORTLAND CEMENT CONCRETE		

SITE PLAN
NO SCALE

REVISIONS			
NO.	DATE	REVISIONS	APPD

REVIEWED BY ___ DATE ___
DESIGNED BY ___ DATE ___
DRAWN BY ___ DATE ___
SCALE: AS SHOWN

Project Planning • Civil Engineering • Landscape Architecture
Davis Office: 3840 Spafford Street, Suite 300, Davis, CA 95618, (530) 750-3000
Sacramento Office: 2120 Sunrise Blvd, Gold River, CA 95670, (916) 405-3000
CECW07.CDW

CRINELLA PUMP STATION FORCE MAIN
TITLE SHEET

ST. HELENA CALIFORNIA

SHEET C1 OF 12

DATE: 01/20/15

JOB NO: 1346.10.01

GENERAL NOTES

1. CONTRACTOR AGREES THAT HE 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. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS ONLY. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
2. ALL WORKMANSHIP AND MATERIALS FOR BOTH ON-SITE AND OFF-SITE IMPROVEMENTS SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF ST. HELENA "STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS" JUNE 1993 INCLUDING ALL ADDENDA, STANDARD PLAN REVISIONS, AND SPECIAL PROVISIONS.
3. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR BEING FAMILIAR WITH THE PROVISIONS AND REQUIREMENTS CONTAINED IN THE CITY OF ST. HELENA STANDARD SPECIFICATIONS. CONTRACTOR SHALL HAVE A COPY AVAILABLE AT THE JOB SITE AT ALL TIMES.
4. SHOULD ANY CONTRACTOR OR SUBCONTRACTOR FIND ANY DEFICIENCIES, ERRORS, CONFLICTS OR OMISSIONS IN THESE PLANS AND SPECIFICATIONS OR SHOULD HE BE IN DOUBT AS TO THEIR MEANING OR INTENT, HE SHALL NOTIFY THE OWNER AND ENGINEER FOR A WRITTEN CLARIFICATION. ADDENDUM ETC. SHOULD HE FAIL TO DO SO BEFORE SUBMITTING A PROPOSAL, HE CANNOT CLAIM ADDITIONAL COMPENSATION FOR WORK REQUIRED TO COMPLETE THE PROJECT.
5. ALL MATERIAL SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
6. IF THERE IS A CONFLICT BETWEEN WRITTEN DIMENSIONS AND SCALED DIMENSIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND OBTAIN A CLARIFICATION. NO DEVIATIONS OR SUBSTITUTIONS SHALL BE ALLOWED WITHOUT OBTAINING WRITTEN APPROVAL FROM THE OWNER.
7. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL SECURE CONSTRUCTION PERMITS FROM THE CITY OF ST. HELENA AND OTHER AGENCIES AS NECESSARY AND PAY ALL FEES INCLUDING INSPECTION FEES.
8. ONE WEEK PRIOR TO ANY EXCAVATION IN EXISTING STREET AREAS, THE CONTRACTOR SHALL CONTACT AND REQUEST CITY/COUNTY ENGINEER AND ALL OTHER UNDERGROUND UTILITY COMPANIES (WET AND DRY) TO MARK THE LOCATION OF THEIR RESPECTIVE FACILITIES. COSTS OF REPAIRING ANY FAILURES OR DAMAGES CAUSED BY THE CONTRACTOR SHALL BE BORNE BY THE CONTRACTOR. VARIOUS UNDERGROUND UTILITY LINES WERE PLOTTED ON THE PLANS FROM THE INFORMATION OBTAINED FROM VARIOUS SOURCES. THEREFORE, NO WARRANTY (EXPRESSED OR IMPLIED) IS MADE AS TO THE COMPLETENESS OR CORRECTNESS OF THEIR LOCATION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF ALL EXISTING UTILITIES IN THE FIELD.
9. CONTRACTOR SHALL CONFORM TO EXISTING STREETS, SURROUNDING LANDSCAPE AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, CURBS, GUTTERS, SIDEWALKS, GRADING, ETC., AND AVOID ANY ABRUPT OR APPARENT CHANGES IN GRADES OR CROSS SLOPES. LOW SPOTS OR HAZARDOUS CONDITIONS.
10. WORK DONE WITHIN THE RIGHT-OF-WAY OF ALL PUBLIC RIGHTS OF WAY SHALL BE DONE UNDER AN ENCROACHMENT PERMIT ISSUED BY THE CITY OF ST. HELENA.
11. ALL STATIONS SHOWN ON THE PLAN AND PROFILE ARE TAKEN ALONG CENTERLINE UNLESS OTHERWISE NOTED ON THE PLAN, AND SHOW MEASUREMENTS IN A HORIZONTAL PLANE.
12. CONTRACTOR TO COMPLY WITH THE CITY/COUNTY STANDARDS REGARDING PERMISSIBLE HOURS OF OPERATION.
13. FADED BACKGROUND REPRESENTS EXISTING TOPOGRAPHIC FEATURES.
14. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) AT 1-800-227-2600 PRIOR TO START OF ANY CONSTRUCTION.
15. TO REDUCE DISTURBANCE OF RESIDENTS IN THE PROJECT VICINITY, CONSTRUCTION ACTIVITIES WHICH GENERATE NOISE THAT CAN BE HEARD AT THE PROPERTY LINE OF ANY PARCEL OF REAL PROPERTY WITHIN THE CITY LIMITS SHALL BE LIMITED TO 8:00 A.M. TO 5:00 P.M. MONDAY THROUGH SATURDAY. DELIVERY OF MATERIAL/EQUIPMENT AND CLEANING AND SERVICING OF MACHINE/EQUIPMENT SHALL BE LIMITED TO 7:00 A.M. TO 6:00 P.M. EXCEPTIONS TO THESE TIME RESTRICTIONS MAY BE GRANTED BY THE PUBLIC WORKS DIRECTOR FOR ONE OF THE FOLLOWING REASONS: (1) INCLEMENT WEATHER AFFECTING WORK, (2) EMERGENCY WORK, OR (3) OTHER WORK, IF WORK AND EQUIPMENT WILL NOT CREATE NOISE THAT MAY BE UNREASONABLY OFFENSIVE TO NEIGHBORS AS TO CONSTITUTE A NUISANCE. THE CITY ENGINEER MUST BE NOTIFIED AND GIVE APPROVAL IN ADVANCE OF SUCH WORK. NO CONSTRUCTION ACTIVITIES SHALL OCCUR ON SUNDAYS OR FEDERAL OR LOCAL HOLIDAYS THAT GENERATE NOISE THAT CAN BE HEARD AT THE PROPERTY LINE OF ANY PARCEL OF REAL PROPERTY WITHIN THE CITY LIMITS.
16. CONTRACTOR SHALL NOTIFY CITY OF ST. HELENA DEPARTMENT OF PUBLIC WORKS (707-968-2889) AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
17. IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORM WATER CONTROL MEASURE(S) MAY BE REQUIRED AS DEEMED NECESSARY BY THE CITY OF ST. HELENA DEPARTMENT OF PUBLIC WORKS.
18. ANY EVIDENCE OF THE HISTORICAL PRESENCE OF MAN FOUND DURING CONSTRUCTION SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ST. HELENA PLANNING DEPARTMENT.
19. FOLLOWING EXCAVATION AND SUBSEQUENT INSTALLATION OF PIPELINE, ALL DISTURBED SURFACES SHOULD BE RETURNED TO PRE-PROJECT ELEVATIONS, COMPACTED, AND STABILIZED WITH EROSION CONTROL DEVICES IN ACCORDANCE WITH THE BMPS APPROVED FOR THIS PROJECT. FOR ADDITIONAL INFORMATION SEE BIOLOGICAL AND WETLAND EVALUATION DATED JULY 28, 2015.
20. SEE ARBORIST'S REPORT DATED JUNE 22, 2015 FOR ACTIVITIES NEAR EXISTING TREES.

GRADING NOTES

1. ALL EARTHWORK OPERATIONS AND TESTING OF SOILS COMPACTION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING REPORT, PREPARED BY INSPECTION CONSULTANTS, INC., (ICI NO. 015-024) DATED MAY 8, 2013. COPIES OF THIS REPORT ARE AVAILABLE AT THE OFFICE OF THE ENGINEER. THE SOILS ENGINEER SHALL BE PRESENT DURING GRADING. RESULTS OF ALL SOILS TESTING SHALL BE SUBMITTED TO THE OWNER BY THE SOILS TESTING COMPANY UPON COMPLETION OF GRADING OPERATIONS.
2. SITE SHALL BE VISUALLY INSPECTED BY THE CONTRACTOR TO DETERMINE THE EXTENT OF CLEARING, GRUBBING AND GRADING WORK TO BE DONE.
3. SOIL STRIPPED AS DETAILED IN THE GEOTECHNICAL REPORT SHALL BE STOCKPILED FOR USE IN LANDSCAPED AREAS. CONTRACTOR SHALL COORDINATE WITH LANDSCAPE CONTRACTOR.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL USA (UNDERGROUND SERVICE ALERT) AT LEAST TWO WORKING DAYS PRIOR TO DIGGING HOLES, TRENCHES, ETC. 800-227-2600.
5. CONTRACTOR SHALL CONDUCT ALL GRADING OPERATIONS IN SUCH A MANNER AS TO PRECLUDE WIND BLOWN DIRT AND DUST AND RELATED DAMAGE TO NEIGHBORING PROPERTIES. SUFFICIENT WATERING TO CONTROL DUST IN REQUIRED AT ALL TIMES. CONTRACTOR SHALL ASSUME LIABILITY FOR CLAIMS RELATED TO WIND BLOWN MATERIAL. IF THE DUST CONTROL IS INADEQUATE AS DETERMINED BY THE PUBLIC WORKS DIRECTOR OR HIS DESIGNATED REPRESENTATIVE, THE CONSTRUCTION WORK SHALL BE TERMINATED UNTIL CORRECTIVE MEASURES ARE TAKEN.

PIPELINE NOTES

1. UNLESS OTHERWISE NOTED, PIPE ELEVATIONS SHOWN ARE CENTERLINE ELEVATIONS.
2. LAY PIPE TO UNIFORM GRADE BETWEEN VPI'S. SLOPES SHOWN IN THE DRAWINGS MAY BE ROUNDED AND ARE SHOWN FOR CONVENIENCE ONLY.
3. WHERE PIPELINE CROSSES EXISTING UTILITIES, CONTRACTOR SHALL PROVIDE ADEQUATE SUPPORT FOR EXISTING UTILITIES UNTIL BACKFILL HAS BEEN COMPLETED.
4. PROVIDE 12" MINIMUM VERTICAL CLEARANCE BETWEEN PIPELINE AND OTHER EXISTING UTILITIES EXCEPT WHERE OTHERWISE NOTED.

CONTAINMENT PIPE SYSTEM SPECIFICATIONS

CARRIER PIPE
CARRIER PIPE SHALL BE 6" SDR 11 HDPE, PRESSURE RATED TO 160 PSI. ALL FITTINGS SHALL BE INJECTION MOLDED HDPE AND SHALL HAVE THE SAME THICKNESS AND PRESSURE RATING AS THE PIPING. RESIN SHALL CONFORM TO PE 4710. CARRIER PIPE SHALL BE FUSION WELDED AT ALL JOINTS PROVIDING A FULLY RESTRAINED PIPE.

INNER PIPE SUPPORTS
ALL PIPE SHALL BE ALIGNED AND SUPPORTED WITHIN THE CASING WITH CENTERING SUPPORTS SPACED AT A DISTANCE NO GREATER THAN 10'0" ON CENTER. THE INNER PIPE SHALL BEAR DIRECTLY ON THE SUPPORT. THE SUPPORT SHALL BE DESIGNED AS TO PERMIT DRAINAGE AND FREE AIR PASSAGE. FOR INNER PIPE SUPPORT USE DUDCON HDPE CENTRALIZERS WITH 2" RUNNERS OR EQUIVALENT. CONTRACTOR TO PROVIDE MANUFACTURER WITH PIPE DIAMETERS, MATERIAL, AND THICKNESS TO CONFIRM COMPATIBILITY OF SUPPORTS WITH DESIGN. CONCRETE TYPE PIPE SUPPORTS WILL NOT BE ALLOWED.

OUTER CONTAINMENT CASING
OUTER CASING SHALL BE 10" INTERIOR DIAMETER IMPORT BLACK STEEL. MINIMUM WALL THICKNESS SHALL BE 0.165". CONTAINMENT PIPE AND CONNECTOR BANDS SHALL BE WELDED AT ALL JOINTS PROVIDING A FULLY RESTRAINED SYSTEM.

THE INTERIOR SURFACE SHALL BE SMOOTH TO PERMIT FREE MOISTURE DRAINAGE AND REMOVABILITY OF THE INNER ASSEMBLY. THE OUTER CASING SHALL BE SIZED TO PROVIDE AN ADEQUATE ANNULAR SPACE BETWEEN THE OUTER SURFACE OF THE INSULATION MATERIAL AND THE INTERIOR SURFACE OF THE CASING.

THE EXTERIOR SURFACE WILL BE COATED WITH A TWO COAT FUSION BONDED EPOXY SYSTEM. THE FIRST COAT WILL BE GREEN FINISH COAT WITH A MELTING POINT OF 302°F. NO GLASS/WRAP OR FILLER MATERIALS SHALL BE USED IN THE EPOXY. ALL EXTERIOR CONDUIT SURFACES SHALL BE SHOT-BLASTED PRIOR TO THE COATING BEING APPLIED. THE FUSION BONDED EPOXY SHALL CONFORM TO THESE ASTM STANDARDS:

ASTM D1763	DISCLOSURE OF PROPERTIES OF THE EPOXY SUB-COMPONENTS
ASTM G17	PENETRATION TEST
ASTM D4060	ABRASION RESISTANCE
ASTM D2370	TENSILE STRENGTH
ASTM G14	IMPACT TESTS
ASTM G8	SALT CROCK
ASTM D968	ABRASION TESTS
ASTM D1002	SHEER STRENGTH AND ADHESION
ASTM D695	COMPRESSIVE STRENGTH
ASTM D257	VOLUME RESISTIVITY
ASTM D1000	ELECTRIC STRENGTH
ASTM D53	WEATHERING
ASTM B117	SALT FOG

NO ASPHALT, NOVA COAT, COAL TAR COATING, FRP CASING OR ANY OTHER TYPE WILL BE ALLOWED.

THE SECOND LAYER WILL BE COMPATIBLE FUSION BONDED EPOXY COATING THAT WILL PROVIDE MECHANICAL PROTECTION TO THE FIRST LAYER. THE SECOND LAYER OF FUSION BONDED EPOXY WILL BE APPLIED NO LATER THAN 5 SECONDS AFTER THE FIRST LAYER HAS BEEN APPLIED SO THAT IT SECURELY BONDS TO THE FIRST LAYER AS BOTH LAYERS CURE. THE SECOND LAYER MUST HAVE AN IMPACT RESISTANCE OF AT LEAST 160 LBS. PER SQUARE INCH AS PER ASTM G14-72. THE FUSION BONDED EPOXY COATING WILL BE APPLIED IN A TOTAL THICKNESS OF NO LESS THAN 20 MILS.

OUTER CONDUIT CASING CLOSURES SHALL CONSIST OF THE SAME THICKNESS OF STEEL, SUITABLY AUSTROPROFED, AND SHALL BE FIELD WELDED-OVER ADJACENT UNITS.

AFTER TESTS ALL EXPOSED CLOSURES SHALL BE COVERED IN THE FIELD WITH A DOUBLE WRAP POLYETHYLENE HEAT SHRINK MATERIAL WITH MINIMUM THICKNESS OF 60 MILS EACH FOR A TOTAL OF 120 MILS.

BUTT-WELD CARRIER FITTINGS
ALL CHANGES IN DIRECTION SHALL BE MADE WITH BUTT-WELD FUSION FITTINGS. ALL WELD FITTINGS SHALL BE LONG RADIUS AND SHALL BE THE SAME WALL THICKNESS AS ADJACENT PIPING. CONTRACTOR TO SUPPLY BUTT FUSION REPORTS AND CONTAINMENT X-RAYS WITH CLOSE OUT DOCUMENTS.

END SEALS
TERMINATE ENDS INSIDE MANHOLES, PITS, OR BUILDING WALLS SHALL BE EQUIPPED WITH ENDIGLAND SEALS CONSISTING OF A STEEL BULKHEAD PLATE WELDED TO THE PIPE CONDUIT.

GLANDEND SEALS SHALL BE MADE OF 1/2" STEEL PLATE WITH DRAIN OR VENT OPENINGS LOCATED DIAMETRICALLY OPPOSITE ON THE VERTICAL CENTER LINE OF THE MOUNTING PLATE AND SHALL BE SHIPPED TO THE JOB SITE WITH PLUGS IN PLACE. TERMINATE ALL CONDUITS 3 INCHES BEYOND THE INSIDE FACE OF BUILDING WALLS. 6-8 MILS OF MOLTEN METAL RESULTING IN AN ANODIC METALLIC OVERLAY MUST BE APPLIED AFTER SHOT BLASTING STEEL TO NEAR WHITE SSPC-10 (EQUAL TO ROVANCO'S SILVERTIP). REPORTS DUE AT SUBMITTAL PROCESS FOR PROCEDURE.

FIELD TESTS
THE INNER PIPES OF THIS SYSTEM SHALL BE TESTED HYDROSTATICALLY TO 1-1/2 TIMES THE WORKING PRESSURE OF THE LINE. IF A LEAK IS FOUND, IT SHALL BE REPAIRED AND THE TEST REPEATED. THE OUTER CASING SHALL BE TESTED WITH AIR AT 15 PSIG AND A SOAP SOLUTION SHALL BE APPLIED TO THE FIELD JOINTS TO LOCATE LEAKS. IF LEAKS OCCUR THEY SHALL BE REPAIRED AND THE TEST REPEATED. AFTER APPROVED BY TEST, ALL FIELD JOINTS SHALL BE COATED BY THE CONTRACTOR BEFORE BACKFILLING. THE CONTRACTOR SHALL TEST THE CONDUIT COATING WITH AN ELECTRIC HOLIDAY DETECTOR. ANY BREAKS IN THE COATING SYSTEM WILL BE REPAIRED AND THE TEST REPEATED BY THE CONTRACTOR.

100% X-RAY/DYE PENETRATE ON ALL SHOP WELDS AND FIELD WELDS. BRASS OR STAINLESS STEEL TAGS INCLUDED. PE STAMP ON ALL SUBMITTAL DRAWINGS.

BACKFILL
INITIAL BACKFILL MATERIAL: BANK SAND, WASHED FREE OF SILT, CLAY, LOAM, FRIABLE OR SOLUBLE MATERIALS AND ORGANIC MATTER; GRADED AS FOLLOWS: SAND BEDDING SHALL HAVE A MINIMUM SAND EQUIVALENT OF 90 AND SHALL BE GRADED SUCH THAT 90-100 PERCENT PASS A NO. 4 SIEVE AND NOT MORE THAN 5 PERCENT PASS A NO. 200 SIEVE. INITIAL BACKFILL SHALL BE PLACED IN 6-INCH LIFTS AND SHALL BE COMPACTED TO 90% RELATIVE COMPACTION.

FINAL BACKFILL MATERIAL: IN UNDEVELOPED AREAS OF TRENCHING, FINAL BACKFILL MAY CONSIST OF NATIVE EXCAVATED MATERIAL THAT IS FREE OF ROCKS GREATER THAN 3 INCHES, RUBBISH AND DELETERIOUS DEBRIS AND ARE AT SUITABLE MOISTURE CONTENT CAPABLE OF ACHIEVING THE DESIRED DEGREE OF COMPACTION. IF REQUIRED COMPACTION CANNOT BE ACHIEVED USING NATIVE MATERIALS OR WITHIN AREAS OF PAVEMENTS, FINAL TRENCH BACKFILL SHALL CONSIST OF CLASS 2 AGGREGATE BASE AS SPECIFIED BY STATE OF CALIFORNIA (CALTRANS) STANDARD SPECIFICATIONS. FINAL BACKFILL SHALL BE PLACED IN 6-INCH LIFTS AND SHALL BE COMPACTED TO 90% RELATIVE COMPACTION IN UNDEVELOPED AREAS AND 95% RELATIVE COMPACTION IN PAVEMENT AREAS.

TWO-SACK SANDCEMENT SLURRY: TWO-SACK SANDCEMENT SLURRY BACKFILL SHALL BE A SAND AGGREGATE PORTLAND CEMENT CONCRETE OF TYPE I OR TYPE II PORTLAND CEMENT WITH TWO 94 POUND SACKS PER CUBIC YARD OF CONCRETE SAND AND SUFFICIENT WATER ADDED TO PROVIDE A FLUID, WORKABLE MIX THAT WILL FLOW AND CAN BE PUMPED WITHOUT SEPARATION OF MATERIALS WHILE BEING PLACED. UNLESS OTHERWISE NOTED THE MAXIMUM SLUMP SHALL BE 8 INCHES. MAXIMUM COMPRESSIVE STRENGTH SHALL BE 1000 PSI AND MINIMUM COMPRESSIVE STRENGTH SHALL BE 600 PSI. CONCRETE SAND SHALL MEET THE STATE OF CALIFORNIA (CALTRANS) STANDARD SPECIFICATIONS.

INSTALLATION
THE INSTALLATION SHALL BE MADE IN ACCORDANCE WITH PLANS AND SPECIFICATIONS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.

SANITARY SEWER INTERNAL COATING:

NEW SANITARY SEWER MANHOLES SHALL BE TREATED WITH HYDROGEN SULFIDE CORROSION MITIGATION. CORROSION MITIGATION SHALL BE PVC LINER (T-LOCK OR APPROVED EQUAL) OR ALIPHATIC POLYAMINE NOVOLAK (UROFLEX NON OR APPROVED EQUAL).

PVC LINER:

SURFACE PREPARATION
CONCRETE SURFACES MUST BE CLEAN, DRY AND FREE OF PREVIOUSLY APPLIED COATINGS AND DISINTEGRATED OR CHALKY MATERIAL. FORM RELEASE AGENTS, CONCRETE CURING COMPOUNDS OR HARDENERS MUST NOT BE SPECIFIED WHERE CEMENT GROUT IS TO BE APPLIED. T-LOCK SHALL BE PREFABRICATED MANHOLE BARREL SIZED SHEETS BY AMERON PROTECTIVE LINING PRODUCT OR ENGINEER APPROVED EQUAL.

APPLICATION OF AMERON T-LOCK SHEETS
HEAT THE SHEETS TO APPROXIMATELY 110°-120°F (USING INFRARED LAMP) IMMEDIATELY BEFORE PLACING THEM IN POSITION. CARE SHOULD BE TAKEN TO AVOID OVEREXPOSURE OF THE SHEET TO THIS TEMPERATURE, OR POOR BONDING MAY RESULT.
1. PLACE ONE EDGE OF THE AMERON T-LOCK SHEET IN POSITION ALONG THE EDGE OF THE CONCRETE SURFACE. PRESS DOWN FIRMLY, HOLDING THE REMAINDER OF THE SHEET UP AND AWAY FROM THE SURFACE.
2. WHEN THE EDGE HAS BEEN AFFIXED, ROLL THE REMAINDER OF THE SHEET INTO POSITION (USING A 4-INCH HARD RUBBER ROLLER). AVOID INCLUSION OF AIR POCKETS.
3. AFTER THE SHEET HAS BEEN ROLLED INTO POSITION, RUB THE SURFACE VIGOROUSLY WITH A SOFT CLOTH TO PRESS IT FIRMLY IN PLACE.
4. ON VERTICAL SURFACES APPLICATION SHOULD BE MADE FROM BOTTOM TO TOP. MECHANICAL ANCHORS ARE REQUIRED WHEN AMERON T-LOCK PLAIN SHEETS ARE INSTALLED ON VERTICAL SURFACES.

WELDING OF AMERON T-LOCK
5. INDIVIDUAL AMERON T-LOCK SHEETS ARE JOINED BY FUSING WELD STRIP OVER THE BUTT JOINTS. ON FLAT SURFACES, USE AMERON T-LOCK FLAT WELD STRIP WHERE SHEETS JOIN AT CORNERS OF CONCRETE STRUCTURES, USE AMERON T-LOCK 2" X 2" STRIP WITH 1" WELD STRIPS WHICH SHEETS JOIN AT CORNERS OF STEEL TANKS. USE INSIDE CORNER WELD STRIPS.

ALIPHATIC POLYAMINE NOVOLAK:

MANHOLE SURFACE SHALL BE CLEAN AND SOUND PRIOR TO APPLICATION OF COATING. PREPARE CONCRETE IN ACCORDANCE WITH SSPC-SP 13/NACE NO. 6 BY ABRASIVE BLASTING OR HIGH PRESSURE WATER CLEANING. ENSURE SURFACE IS FREE OF ALL DUST, CONTAMINANTS, GREASE, AND FOREIGN COMPOUNDS. COATING SHALL BE APPLIED WITH A MINIMUM OF TWO COATS. APPLY AT END OF DAY WHEN CONCRETE IS COOLING TO PREVENT APPLICATION WHILE CONCRETE IS OUTGASSING. MIX UROFLEX COMPONENTS FOR 5 MINUTES WITH A MECHANICAL MIXER AT 400-600 RPM UNTIL THE COLOR IS UNIFORM. APPLY BY ROLLER, BRUSH OR SPRAY. IF SPRAYING, USE A 0.027" ORIFICE SPRAY TIP OR GREATER, 64:1 RATIO SPRAY PUMP OR GREATER, 3/8" HOSES WITH 3/8" WAND.

DATE SIGNED
THESE DRAWINGS ARE NOT COMPLETE UNTIL THE PROJECT ENGINEER HAS SIGNED AND DATED THE SEAL BELOW

NO.	DATE	REVISIONS	BY	APVD

DESIGNED BY ___ DRAWN BY ___ CHECKED BY ___ SCALE

CSW/ST2 Engineering
Project Planning • Civil Engineering • Landscape Architecture
• Sacramento Office: 7130 Folsom Blvd, Suite 203, Sacramento, CA 95826 (916) 362-2037
• Davis Office: 2840 Sunrise Blvd, Suite 3, Davis, CA 95616 (530) 750-2020

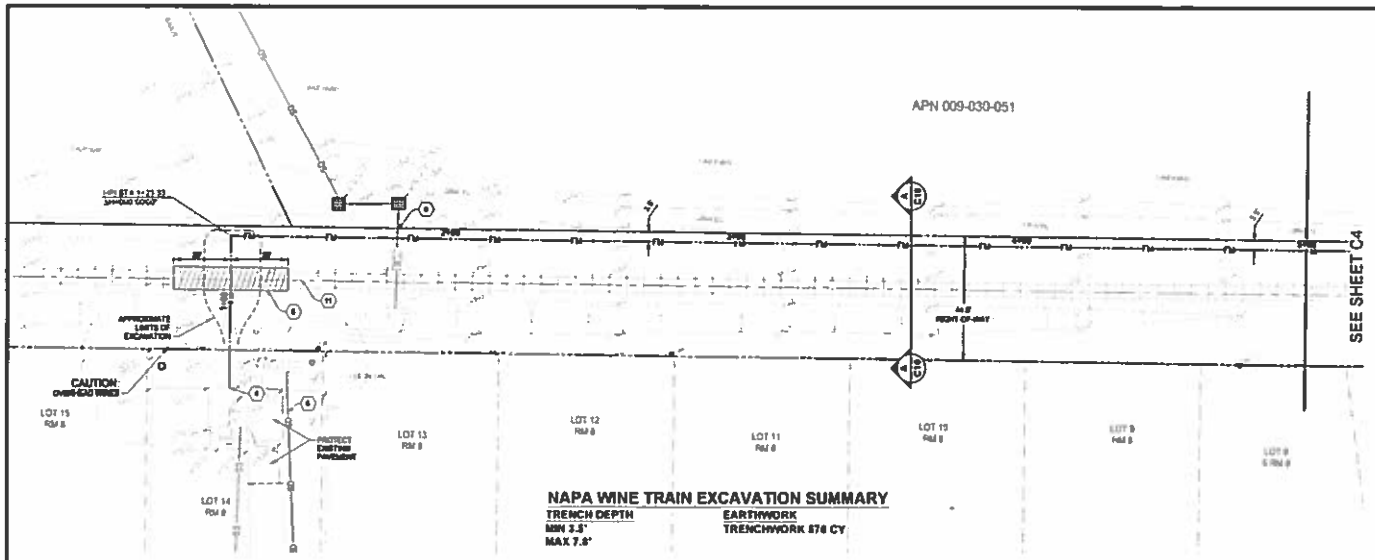
CRINELLA PUMP STATION FORCE MAIN NOTES

ST. HELENA CALIFORNIA

SHEET C2 OF 12

DATE 8/12/2015

JOB NO. 1240.10.01



NAPA WINE TRAIN EXCAVATION SUMMARY

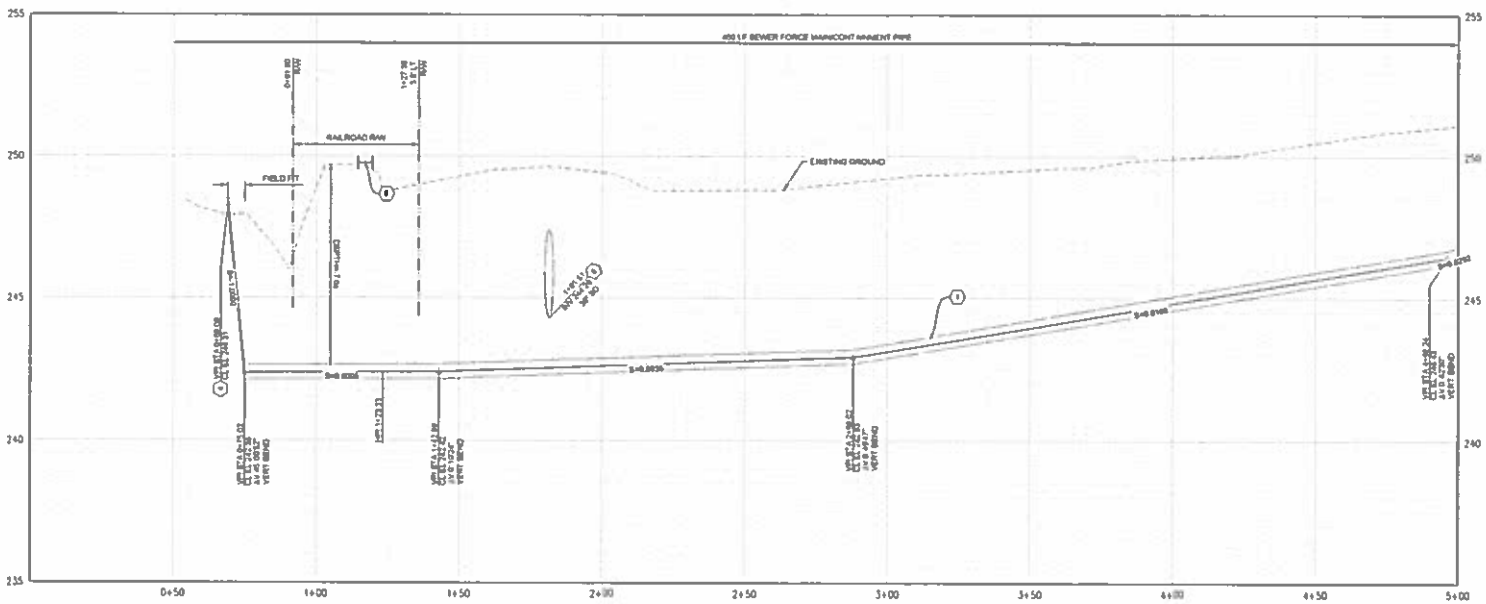
TRENCH DEPTH	EARTHWORK
MIN 3.5'	TRENCHWORK 878 CY
MAX 7.8'	

FORCE MAIN KEYNOTES

1. INSTALL SEWER FORCE MAIN PIPE AND CONTAINMENT PIPE. SEE NOTES ON SHEET C3 AND DETAILS ON SHEET C5
2. SEE CITY STANDARD DETAIL 4H FOR TRENCHING ADJACENT TO FULTON LANE
3. REMOVE EXISTING AC. SAWCUT TO NEAT AND STRAIGHT LINE AND REPLACE PAVEMENT PER DETAIL ON SHEET C5
4. LOCATE EXISTING SEWER FORCE MAIN AND CONNECT TO EXISTING PER DETAIL ON SHEET C5. MAINTAIN SERVICE TO EXISTING FORCE MAIN THROUGHOUT CONSTRUCTION. CONTRACTOR TO COORDINATE ANY SERVICE SHUT DOWNS WITH THE CITY. FIELD FIT AS REQUIRED.
5. REMOVE EXISTING TRACKS, RAIL, TIES AND BALLAST. REPLACE EXISTING BALLAST, RAIL, TIES AND TRACKS IN ACCORDANCE WITH RAILROAD OWNER REQUIREMENTS.
6. PROTECT EXISTING UTILITY IN PLACE. MAINTAIN 12" VERTICAL CLEARANCE BETWEEN UTILITIES.
7. BORE AND JACK 18" STEEL CASING. SEE DETAIL ON SHEET C5 FOR ADDITIONAL DETAILS.
8. REMOVE AND REPLACE EXISTING VERTICAL CURB TO NEAREST JOINT PER CITY STANDARD DRAWING 311
9. REMOVE AND REPLACE EXISTING CURB, GUTTER AND SIDEWALK AND ADA RAMP PER CITY STANDARD DETAIL 216, 217 AND 218.
10. INSTALL SANITARY SEWER MANHOLE PER CITY STANDARD DETAIL 301
11. PROTECT EXISTING TRACKS TO REMAIN.
12. PROTECT EXISTING WIRE TO REMAIN. SEE ARBORIST'S REPORT FOR ADDITIONAL DETAILS.
13. INSTALL CONTAINMENT LATERAL WYE PER DETAIL ON SHEET C5.
14. INSTALL CAP FOR FUTURE CONNECTION PER DETAIL ON SHEET C5.
15. CONTRACTOR TO POTHOLE UTILITY PRIOR TO CONSTRUCTION. IF CONFLICT IS FOUND CONTRACTOR SHALL COORDINATE WITH THE UTILITY PROVIDER TO RELOCATE THE EXISTING UTILITY AS REQUIRED.
16. CONNECT TO EXISTING PIPELINE PER DETAIL SHEET C16.
17. INSTALL CATHODIC PROTECTION TEST STATION AND ANODES PER LAYOUT 1 AND 2 ON SHEETS CP1 AND CP2

SCALE: 1" = 20'
HORIZONTAL

SCALE: 1" = 2'
VERTICAL



DATE SIGNED
THESE DRAWINGS ARE NOT COMPLETE UNTIL THE ENGINEER'S SEAL, SIGNATURE AND DATE HAVE BEEN ADDED

AS SHOWN

Powell Forestry + Civil Engineering + Landscape Architecture
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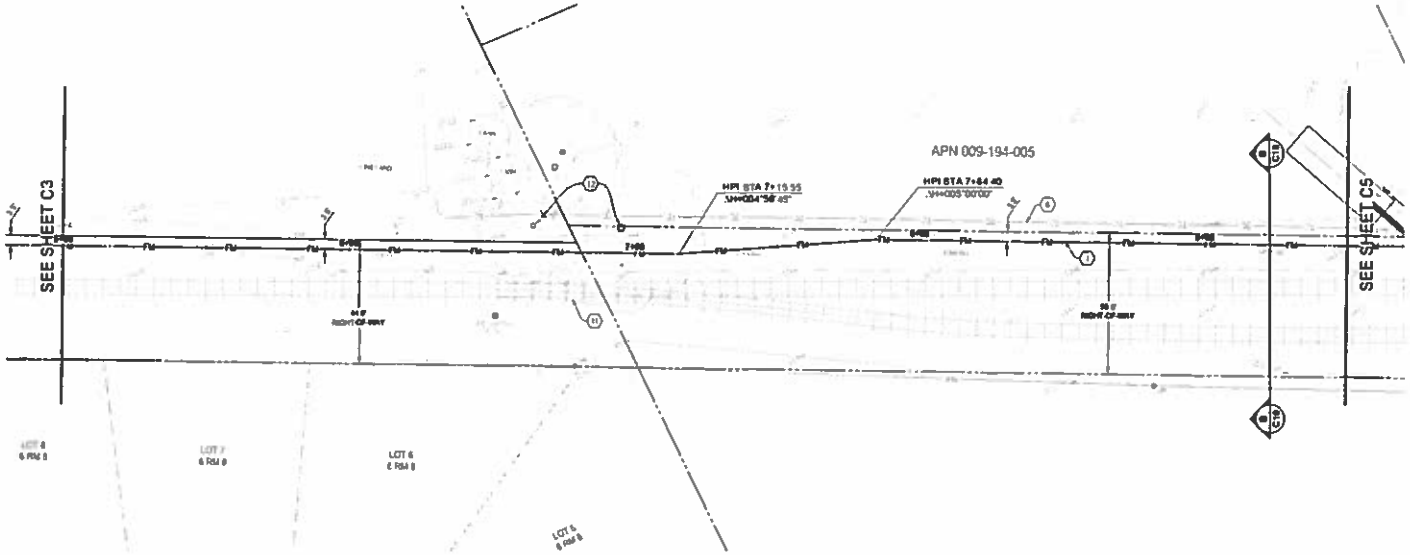
CRINELLA PUMP STATION FORCE MAIN
FORCE MAIN PLAN AND PROFILE

ST. HELENA CALIFORNIA

SHEET C3 OF 12

DATE 01/20/15

JOB NO 1348 10 01

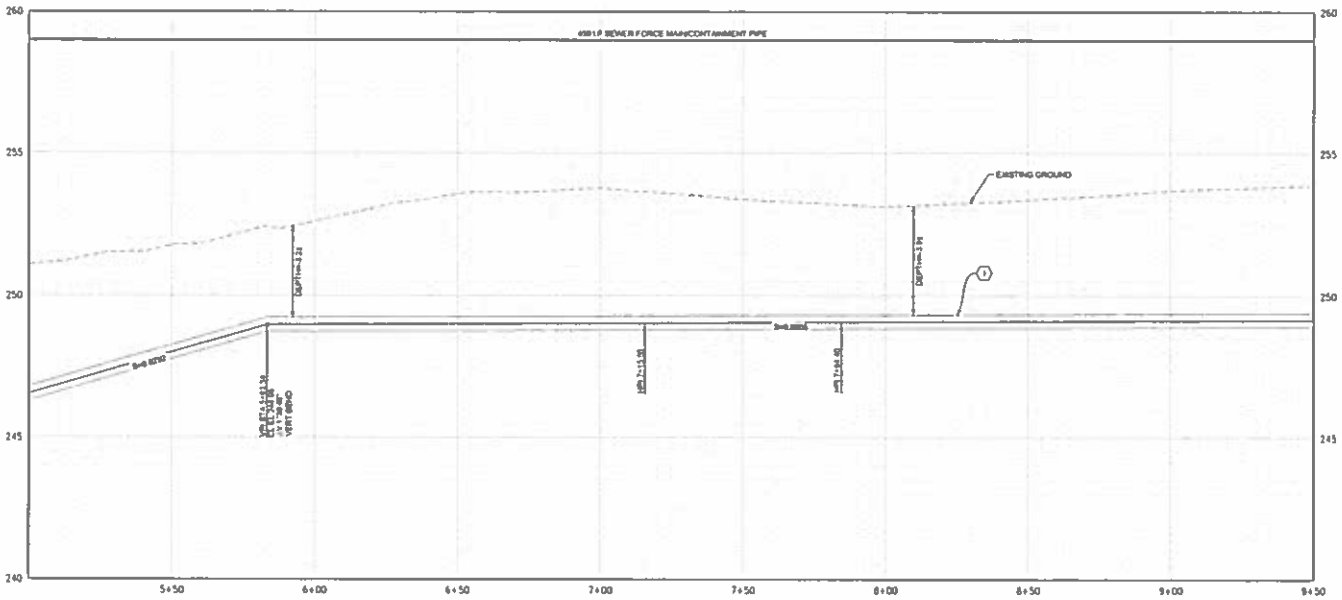


FORCE MAIN KEYNOTES

1. INSTALL SEWER FORCE MAIN PIPE AND CONTAINMENT PIPE. SEE NOTES ON SHEET C3 AND DETAILS ON SHEET C5
2. SEE CITY STANDARD DETAIL 401 FOR TRENCHING ADJACENT TO FULTON LANE
3. REMOVE EXISTING AC. SAWCUT TO NEAT AND STRAIGHT LINE AND REPLACE PAVEMENT PER DETAIL ON SHEET C5.
4. LOCATE EXISTING SEWER FORCE MAIN AND CONNECT TO EXISTING PER DETAIL ON SHEET C5. MAINTAIN SERVICE TO EXISTING FORCE MAIN THROUGHOUT CONSTRUCTION. CONTRACTOR TO COORDINATE ANY SERVICE SHUT DOWNS WITH THE CITY. FIELD FIT AS REQUIRED.
5. REMOVE EXISTING TRACKS, RAIL, TIES AND BALLAST. REPLACE EXISTING BALLAST, RAIL, TIES AND TRACKS IN ACCORDANCE WITH RAILROAD OWNER REQUIREMENTS.
6. PROTECT EXISTING UTILITY IN PLACE. MAINTAIN 12" VERTICAL CLEARANCE BETWEEN UTILITIES.
7. BORE AND JACK 16" STEEL CASING. SEE DETAIL ON SHEET C5 FOR ADDITIONAL DETAILS.
8. REMOVE AND REPLACE EXISTING VERTICAL CURB TO NEAREST JOINT PER CITY STANDARD DRAWING 211.
9. REMOVE AND REPLACE EXISTING CURB, GUTTER AND SIDEWALK AND ADA RAMP PER CITY STANDARD DETAIL 216, 217 AND 218.
10. INSTALL SANITARY SEWER MANHOLE PER CITY STANDARD DETAIL 201.
11. PROTECT EXISTING TRACKS TO REMAIN.
12. PROTECT EXISTING TREE TO REMAIN. SEE ARBORIST'S REPORT FOR ADDITIONAL DETAILS.
13. INSTALL CONTAINMENT LATERAL WYE PER DETAIL ON SHEET C5.
14. INSTALL CAP FOR FUTURE CONNECTION PER DETAIL ON SHEET C5.
15. CONTRACTOR TO POTHOLE UTILITY PRIOR TO CONSTRUCTION. IF CONFLICT IS FOUND CONTRACTOR SHALL COORDINATE WITH THE UTILITY PROVIDER TO RELOCATE THE EXISTING UTILITY AS REQUIRED.
16. CONNECT TO EXISTING PIPELINE PER DETAIL SHEET C5B
17. INSTALL CATHODIC PROTECTION TEST STATION AND ANODES PER LAYOUT 1 AND 2 ON SHEETS CP1 AND CP2

SCALE: 1" = 20'
HORIZONTAL

SCALE: 1" = 2'
VERTICAL



DATE SIGNED

THIS DESIGN HAS BEEN REVIEWED AND WITH CONSIDERED PROFESSIONAL JUDGMENT, THIS DESIGN IS IN SEAL BY LICENSED DESIGN ENGINEER AND DATED

DESIGNED BY
DRAWN BY
CHK'D BY
SCALE: AS SHOWN

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Sacramento Office
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Davis, CA 95618
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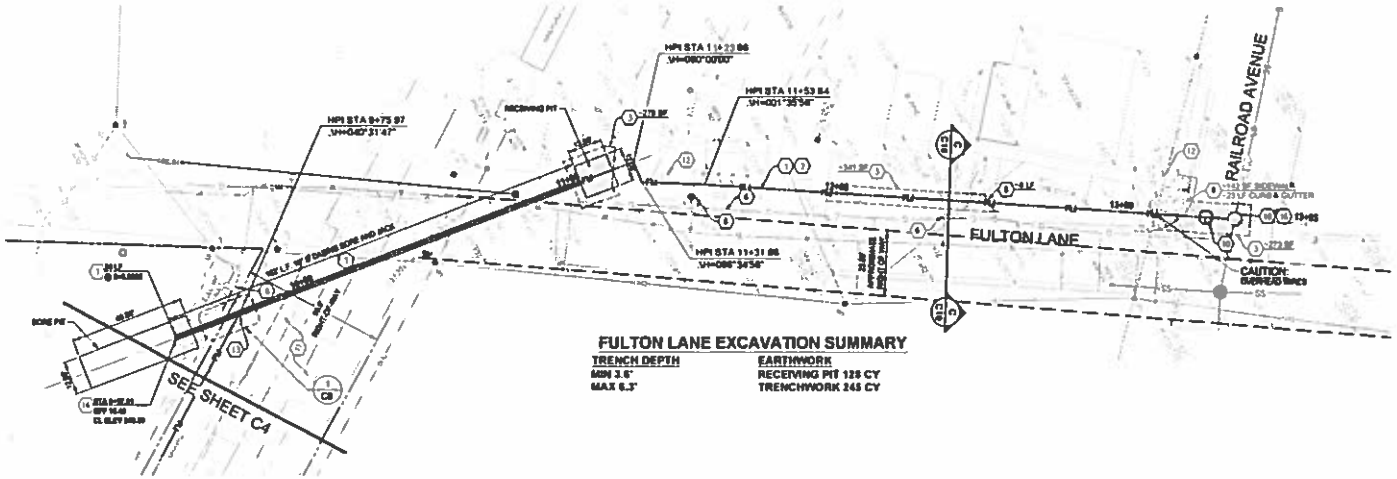
CRINELLA PUMP STATION FORCE MAIN
FORCE MAIN PLAN AND PROFILE

ST HELENA CALIFORNIA

SHEET C4 OF 12

DATE 01/02/15

JOB NO 1248.10.01

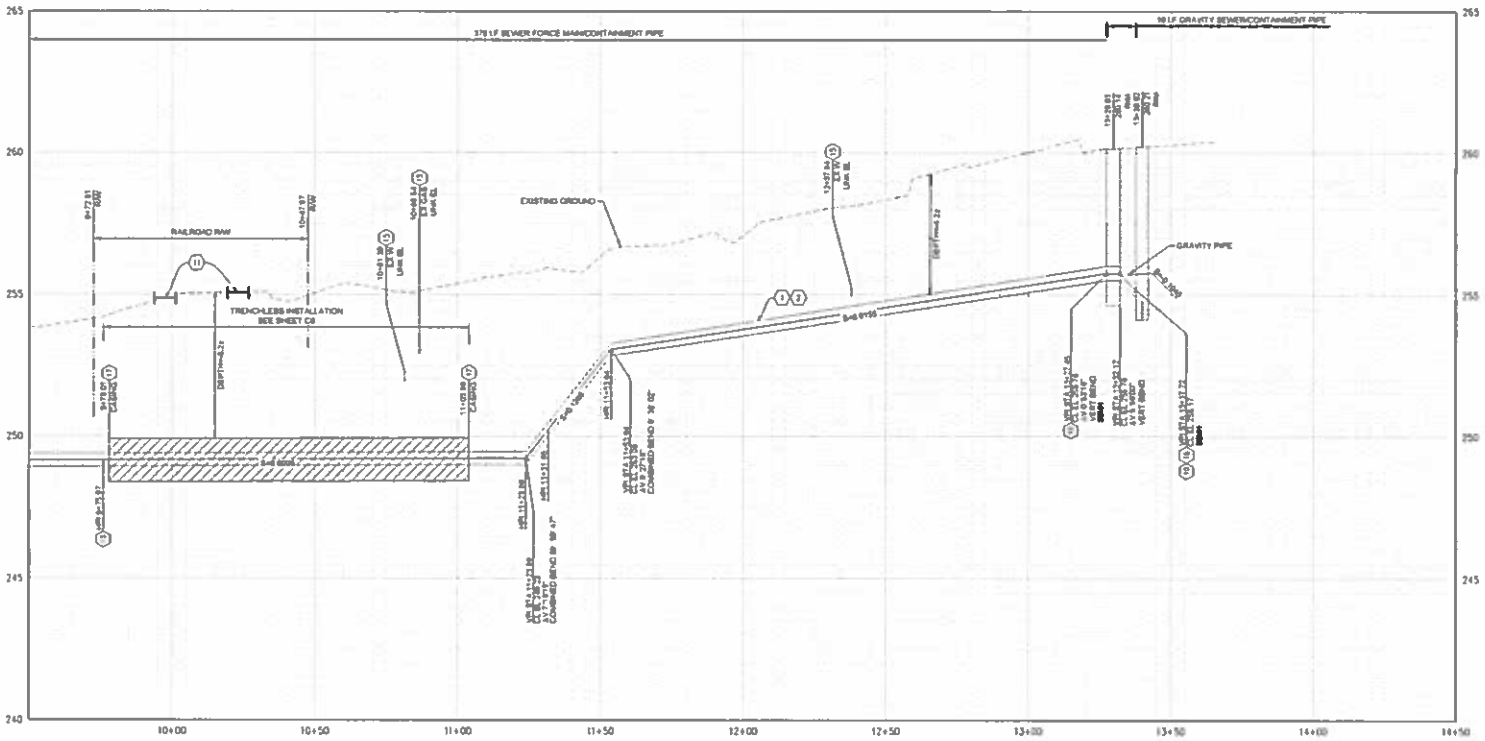


FULTON LANE EXCAVATION SUMMARY

TRENCH DEPTH	EARTHWORK
MIN 3.6'	RECEIVING PIT 128 CY
MAX 6.3'	TRENCHWORK 245 CY

FORCE MAIN KEYNOTES

1. INSTALL SEWER FORCE MAIN PIPE AND CONTAINMENT PIPE. SEE NOTES ON SHEET C2 AND DETAILS ON SHEET C9.
2. SEE CITY STANDARD DETAIL 401 FOR TRENCHING ADJACENT TO FULTON LANE.
3. REMOVE EXISTING AC. SAWCUT TO NEAT AND STRAIGHT LINE AND REPLACE PAVEMENT PER DETAIL ON SHEET C9.
4. LOCATE EXISTING SEWER FORCE MAIN AND CONNECT TO EXISTING PER DETAIL ON SHEET C9. MAINTAIN SERVICE TO EXISTING FORCE MAIN THROUGHOUT CONSTRUCTION. CONTRACTOR TO COORDINATE ANY SERVICE SHUT DOWNS WITH THE CITY. FIELD FIT AS REQUIRED.
5. REMOVE EXISTING TRACKS, RAIL, TIES AND BALLAST. REPLACE EXISTING BALLAST, RAIL TIES AND TRACKS IN ACCORDANCE WITH RAILROAD OWNER REQUIREMENTS.
6. PROTECT EXISTING UTILITY IN PLACE. MAINTAIN 12" VERTICAL CLEARANCE BETWEEN UTILITIES.
7. BORE AND JACK 18" STEEL CASING. SEE DETAIL ON SHEET C9 FOR ADDITIONAL DETAILS.
8. REMOVE AND REPLACE EXISTING VERTICAL CURB TO NEAREST JOINT PER CITY STANDARD DRAWING 311.
9. REMOVE AND REPLACE EXISTING CURB, GUTTER AND SIDEWALK AND ADA RAMP PER CITY STANDARD DETAIL 316, 317 AND 318.
10. INSTALL SANITARY SEWER MANHOLE PER CITY STANDARD DETAIL 201.
11. PROTECT EXISTING TRACKS TO REMAIN.
12. PROTECT EXISTING TREE TO REMAIN. SEE ARBORIST'S REPORT FOR ADDITIONAL DETAILS.
13. INSTALL CONTAINMENT LATERAL WYE PER DETAIL ON SHEET C9.
14. INSTALL CAP FOR FUTURE CONNECTION PER DETAIL ON SHEET C9.
15. CONTRACTOR TO POTHOLE UTILITY PRIOR TO CONSTRUCTION. IF CONFLICT IS FOUND CONTRACTOR SHALL COORDINATE WITH THE UTILITY PROVIDER TO RELOCATE THE EXISTING UTILITY AS REQUIRED.
16. CONNECT TO EXISTING PIPELINE PER DETAIL SHEET C10.
17. INSTALL CATHODIC PROTECTION TEST STATION AND ANODES PER LAYOUT 1 AND 2 ON SHEETS CP1 AND CP2.



SCALE: 1" = 20'
HORIZONTAL

SCALE: 1" = 2'
VERTICAL

DATE SIGNED

THESE DRAWINGS AND NOTE EXCEPTED FROM Public, which, THE ENGINEER'S SEAL BELOW HAS BEEN SIGNED AND DATED

REV.	DATE	DESCRIPTION	BY	APPR.

DS SIGNED BY ___ 97
DRAWN BY ___ 50
CHK DRAWN BY ___ 97
SCALE AS SHOWN

CERTIFICATE

Project Planning • Civil Engineering • Landscape Architecture

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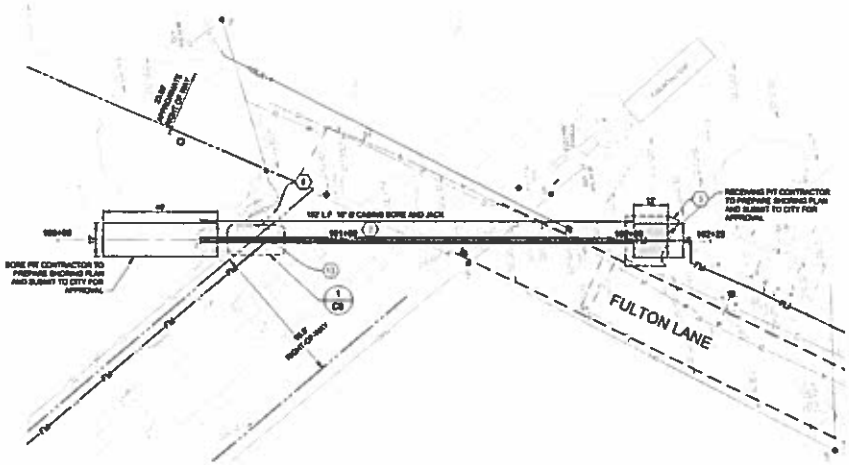
CRINELLA PUMP STATION FORCE MAIN
FORCE MAIN PLAN AND PROFILE

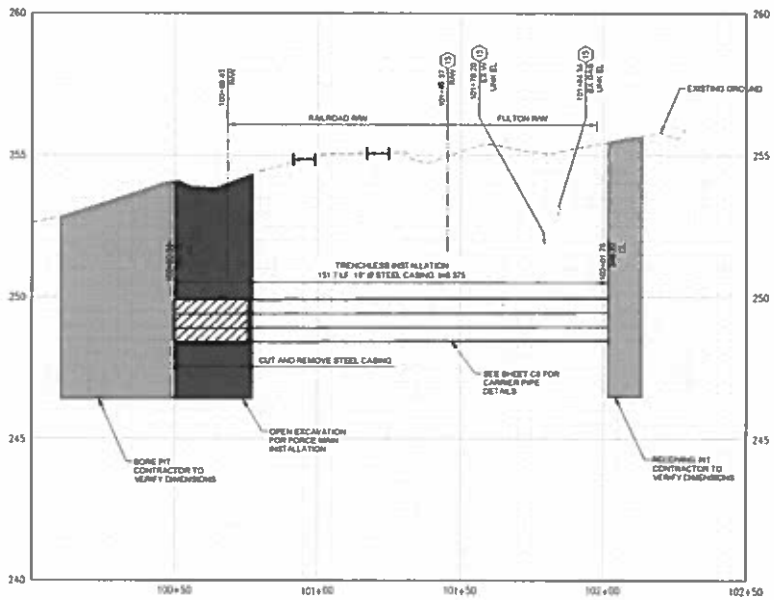
ST HELENA CALIFORNIA

SHEET C5 OF 12

DATE 8/12/2019

JOB NO 1248 10 01





FORCE MAIN KEYNOTES

1. INSTALL SEWER FORCE MAIN PIPE AND CONTAINMENT PIPE. SEE NOTES ON SHEET C2 AND DETAILS ON SHEET C8
2. SEE CITY STANDARD DETAIL 401 FOR TRENCHING ADJACENT TO FULTON LANE
3. REMOVE EXISTING AC. SAWCUT TO NEAT AND STRAIGHT LINE AND REPLACE PAVEMENT PER DETAIL ON SHEET C8
4. LOCATE EXISTING SEWER FORCE MAIN AND CONNECT TO EXISTING PER DETAIL ON SHEET C8. MAINTAIN SERVICE TO EXISTING FORCE MAIN THROUGHOUT CONSTRUCTION. CONTRACTOR TO COORDINATE ANY SERVICE SHUT DOWNS WITH THE CITY. FIELD FIT AS REQUIRED.
5. REMOVE EXISTING TRACKS, RAIL TIES AND BALLAST. REPLACE EXISTING BALLAST, RAIL TIES AND TRACKS IN ACCORDANCE WITH RAILROAD OWNER REQUIREMENTS.
6. PROTECT EXISTING UTILITY IN PLACE. MAINTAIN 12" VERTICAL CLEARANCE BETWEEN UTILITIES.
7. BORE AND JACK 16" STEEL CASING. SEE DETAIL ON SHEET C8 FOR ADDITIONAL DETAILS.
8. REMOVE AND REPLACE EXISTING VERTICAL CURB TO NEAREST JOINT PER CITY STANDARD DRAWING 311.
9. REMOVE AND REPLACE EXISTING CURB, GUTTER AND SIDEWALK AND ADA RAMP PER CITY STANDARD DETAIL 216, 217 AND 218.
10. INSTALL SANITARY SEWER MANHOLE PER CITY STANDARD DETAIL 201.
11. PROTECT EXISTING TRACKS TO REMAIN.
12. PROTECT EXISTING TREE TO REMAIN. SEE ARBORIST'S REPORT FOR ADDITIONAL DETAILS.
13. INSTALL CONTAINMENT LATERAL WYE PER DETAIL ON SHEET C8.
14. INSTALL CAP FOR FUTURE CONNECTION PER DETAIL ON SHEET C8.
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16. CONNECT TO EXISTING PIPELINE PER DETAIL SHEET C10.
17. INSTALL CATHODIC PROTECTION TEST STATION AND ANODES PER LAYOUT 1 AND 2 ON SHEETS CP1 AND CP2

SCALE: 1" = 20'
HORIZONTAL

SCALE: 1" = 2'
VERTICAL

DATE SIGNED
THESE DRAWINGS ARE NOT EXPIRED PER PGE&E UN-75. THE DRAWING IS A REAL DESIGN AND MEW SIGNED AND DATED.

NO.	DATE	REVISIONS	BY	APPD

DESIGNED BY ____ BY
DRAWN BY ____ CD
CHECKED BY ____ DF
SCALE AS SHOWN

Project Planning • Civil Engineering • Landscape Architecture
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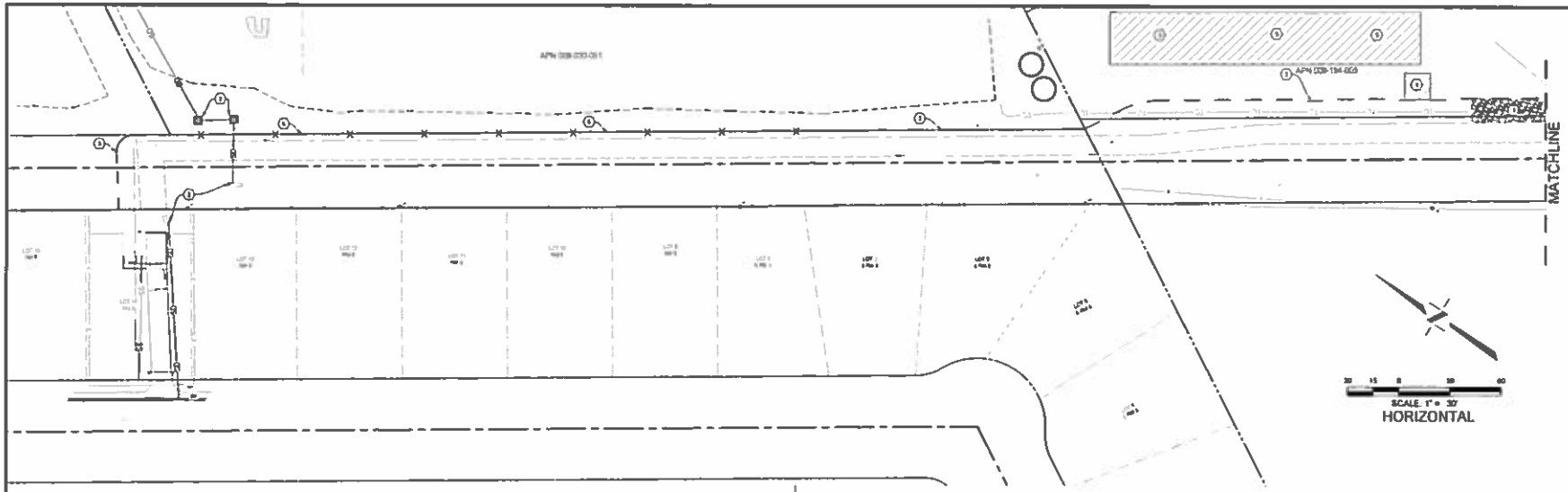
CRINELLA PUMP STATION FORCE MAIN BORE AND JACK PLAN AND PROFILE

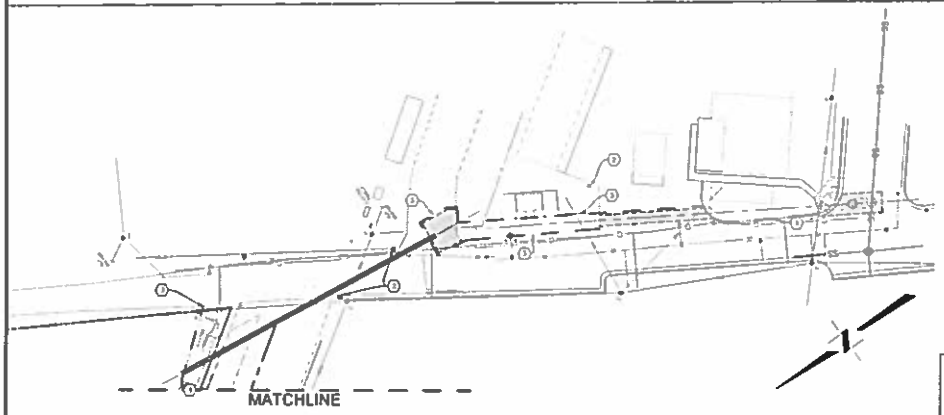
ST. HELENA CALIFORNIA

SHEET C6 OF 12

DATE 01/23/15

JOB NO. 1248.16.01





EROSION CONTROL NOTES

GENERAL NOTES

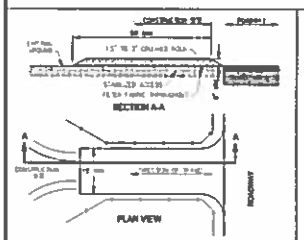
1. GRADING ON THE SITE SHALL BE LIMITED TO THE AREA SHOWN ON THE PLAN
2. CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN TO MEET FIELD CONDITIONS SHALL BE MADE ONLY WITH THE APPROVAL OF/OR AT THE DIRECTION OF CUNNINGHAM ENGINEERING
3. THE CONTRACTOR SHALL INFORM ALL CONSTRUCTION SITE WORKERS ABOUT THE MAJOR PROVISIONS OF THE EROSION AND SEDIMENT CONTROL PLAN AND SEEK THEIR COOPERATION IN AVOIDING THE DISTURBANCE OF THESE EROSION CONTROL MEASURES

MAINTENANCE NOTES

1. FIBER ROLLS OR STRAW BALE SEDIMENT BARRIERS OUTSIDE OF THE GRADED AREA SHALL BE INSTALLED PRIOR TO ANY GRADING AND WILL BE OPERABLE DURING THE RAINY SEASON OCTOBER 15 TO APRIL 1
2. DURING THE RAINY SEASON (OCTOBER 15 TO APRIL 1) ALL SEDIMENT BARRIERS SHALL BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY AND, IN ADDITION, AFTER EACH STORM
3. DURING PROJECT DURATION ALL PAVED AREAS SHALL BE KEPT CLEAR OF DIRT, SEDIMENT AND DEBRIS THE PROJECT AREA WILL BE MAINTAINED SO THAT A MINIMUM OF SEDIMENT-LADEN RUNOFF LEAVES THE SITE. PROJECT LIMITS SHALL BE SWEPT DAILY AND AS DEEMED BY THE CITY ENGINEER
4. THE DISTURBED AREAS SHALL BE PREPARED, RESEEDED AND MULCHED AS SOON AS POSSIBLE AFTER BEING DAMAGED
5. MAINTAIN AN UNBROKEN, TEMPORARY MULCHED GROUND COVER THROUGHOUT THE PERIOD OF CONSTRUCTION WHEN THE SOILS ARE NOT BEING REWORKED. HYDRAULIC MULCH AND HYDROSEEDING SHOULD BE USED TO STABILIZE SOIL

KEYNOTES

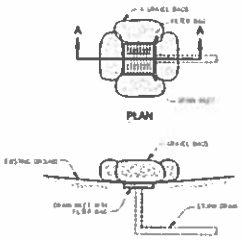
1. INSTALL STABILIZED CONSTRUCTION ENTRANCE PER DETAIL 3/C5 SHEET
2. INSTALL STORM DRAIN INLET SEDIMENT CONTROL AND FILTER BAG PER DETAIL 3/C5 SHEET
3. INSTALL FIBER ROLLS (AND WEIGHTED ROLLS ON PAVEMENT) PER DETAIL 3/C5 SHEET
4. INSTALL CONCRETE WASHOUT PER DETAIL 3/C5 SHEET
5. STOCKPILE MANAGEMENT AREA LIMITS
6. INSTALL TEMPORARY FILTER FABRIC FENCE ON R/W LINE



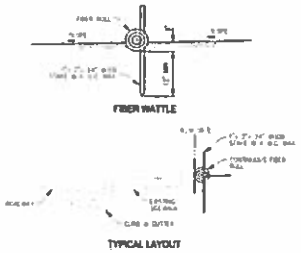
NOTES:

1. STABILIZED CONSTRUCTION ENTRANCE SHALL BE 15' IN 3" CRUSHED ROCK OVERLAIN, SHALL BE PLACED ON A GRADED BASE WITH A 4" [illegible]
2. LENGTH OF ENTRANCE SHALL BE A MINIMUM LENGTH OF 50 FEET. ADDITIONAL BASE A MINIMUM OF 15 FEET UP AND OVER A RESIDENTIAL ZONE IF ALL [illegible]
3. THE ENTRANCE SHALL BE KEPT IN GOOD CONDITION BY REGULARIZING, TOP DRESSING.
4. [illegible] SHALL REPAIR CONSTRUCTION ENTRANCE WHENEVER AND WHEN [illegible]

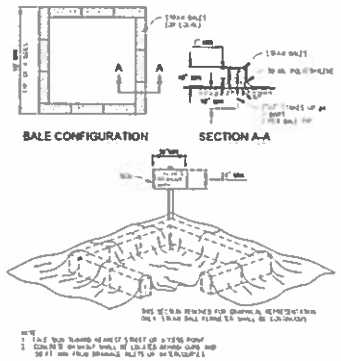
CONSTRUCTION SITE ACCESS



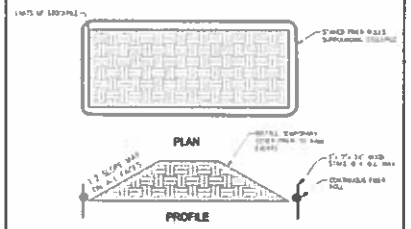
AREA DRAIN PROTECTION



FIBER ROLL



CONCRETE WASHOUT



STOCKPILE MANAGEMENT

DATE SIGNED

THESE DRAWINGS ARE NOT CONSIDERED STAMPED UNTIL THE DRAWINGS HAVE BEEN SIGNED AND DATED

CRINELLA PUMP STATION FORCE MAIN
EROSION CONTROL SHEET

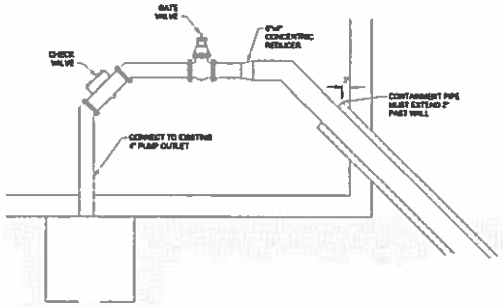
ST HELENA CALIFORNIA

SHEET C7 OF 12

DATE 8/4/2015

JOB NO. 1340.10.01

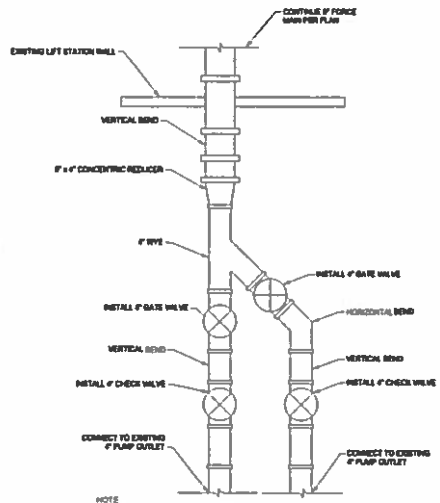
AS SHOWN



PROFILE

CONNECTION TO EXISTING FORCE MAIN

NTS

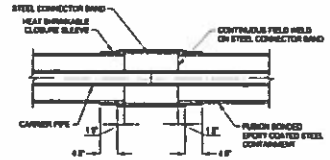


NOTE
1 EXISTING PUMPS WILL NEED TO BE ROTATED 90° SUCH THAT THE OUTLETS POINT TO THE NORTHEAST WALL
2 SUBMIT SHOP DRAWINGS FOR CONNECTION TO THE CITY ENGINEER FOR APPROVAL 5 WORKING DAYS PRIOR TO ORDERING PARTS
3 SERVICE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION COORDINATE ANY SHUT DOWNS WITH CITY

PLAN

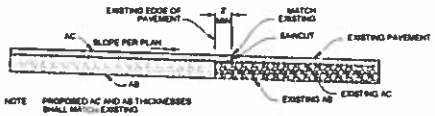
CONNECTION TO EXISTING FORCE MAIN

NTS



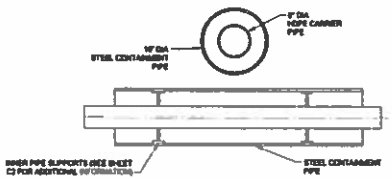
STEEL CONTAINMENT FIELD JOINT DETAIL

NTS



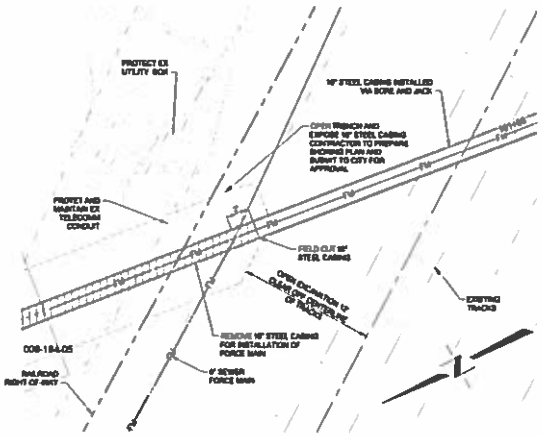
SAWCUT & MATCH PAVEMENT DETAIL

NTS



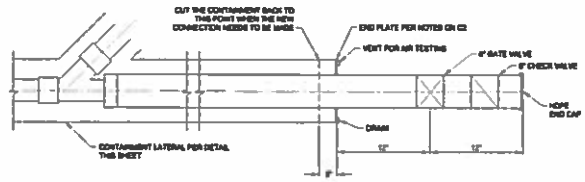
CONTAINMENT PIPE DETAIL

NTS



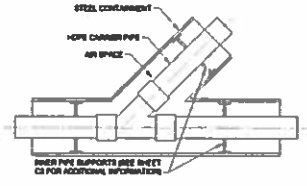
1 C8 BORE AND JACK DETAIL

SCALE : 1"=5'



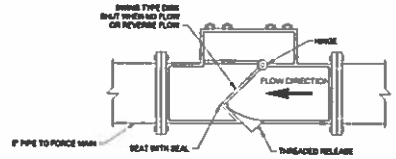
CONTAINMENT CAP FOR FUTURE DETAIL

NTS



CONTAINMENT LATERAL DETAIL

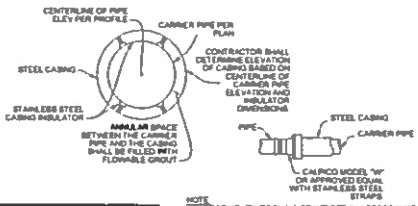
NTS



SWING CHECK VALVE

NTS

NOTE
1 ALL DUCTILE IRON WING TYPE CHECK VALVE
2 COMPLIES WITH MSS SP 110 AND NSF 61/372 LF
3 MANUFACTURERS AND PRODUCTS
3.1 VALMATIC SURGEBUSTER CHECK VALVE
3.2 FLOMATIC MODEL 746
3.3 MUELLER FLEXIBLE DISC CHECK VALVE

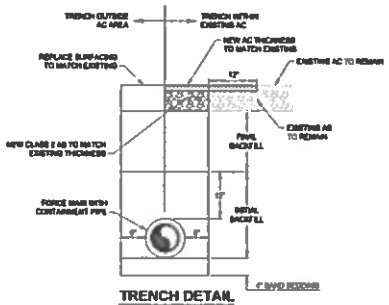


NOTE
1 CASING JOINTS SHALL BE WELDED IN ACCORDANCE WITH AWWA STANDARD C 206
2 ALL CASINGS SHALL HAVE A MINIMUM THICKNESS AS SHOWN ON PLAN AND PROFILE SHEETS
3 CARRIER PIPE SHALL BE AS SHOWN ON PLAN AND PROFILE SHEETS
4 ENDS OF BORE HOLE SHALL BE SEALED TO PREVENT ENTRANCE OF FILL MATERIAL WITH END SEAL AS SHOWN OR SUBMITTED
5 CASING SPACERS SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS

BORE AND JACK SUMMARY						
RAILROAD PATH		CASING		BORING PIPE		FILL
	Station	Length	Diameter (inch)	Diameter (inch)	Length	Length

BORE AND JACK PIPE CASING DETAIL

NTS



TRENCH DETAIL

NTS

DATE SIGNED
THESE DRAWINGS ARE NOT COMPLETE UNTIL THE DRAWER'S SEAL BELOW HAS BEEN SIGNED AND DATED

DAVID A. PRIMBS
No. 55844
REGISTERED PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA

NO.	DATE	REVISIONS	BY	NOTE

DESIGNED BY
DRAWN BY
CHK'D BY
AS SHOWN

CSCW027.C08

Project Planning • Civil Engineering • Landscape Architecture
• Sacramento Office 708 25th Street, Suite 100 Sacramento, CA 95816 (916) 448-3300
• Davis Office 3440 Buckeye Street, Suite 200 Davis, CA 95616 (530) 756-3300

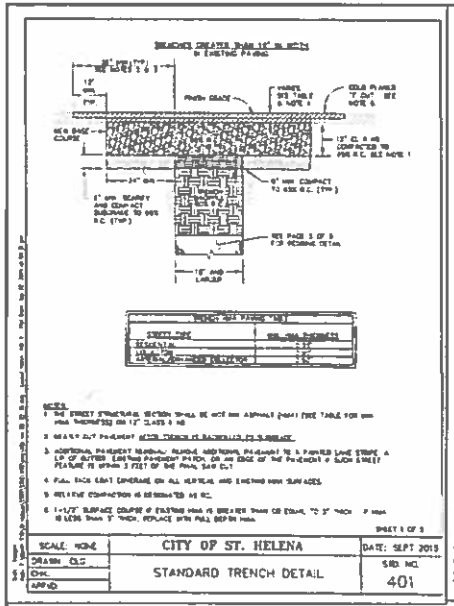
CRINELLA PUMP STATION FORCE MAIN DETAILS

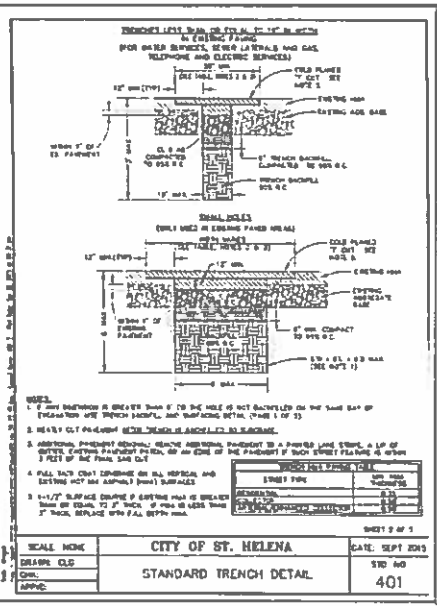
ST HELENA CALIFORNIA

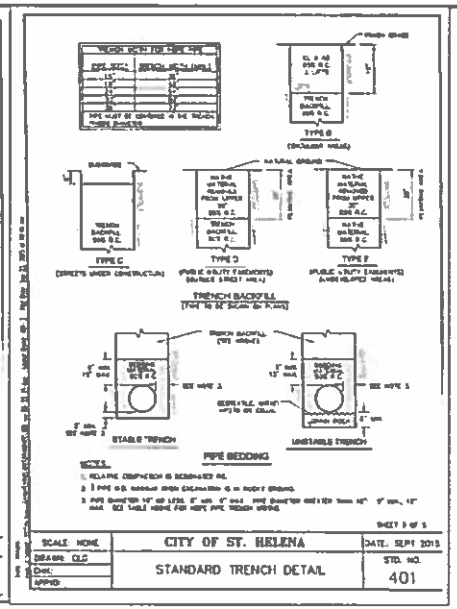
SHEET C8 OF 12

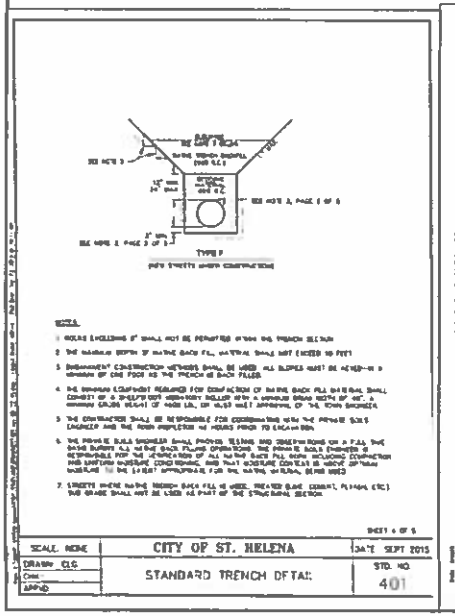
DATE 9/4/2015

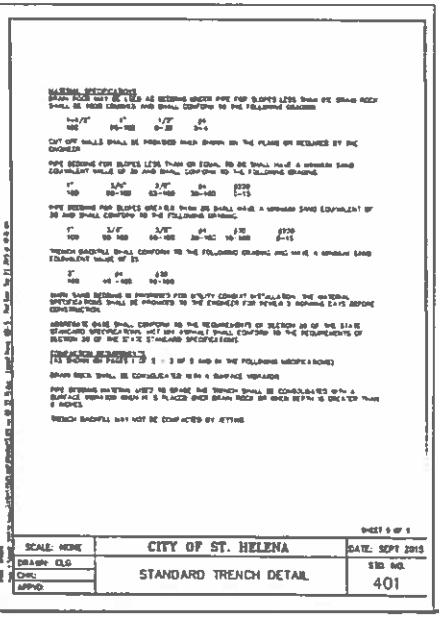
JOB NO 1246.16.01











DATE SIGNED
THESE DRAWINGS ARE NOT CONSIDERED FINAL UNTIL THE ENGINEER'S SEAL IS LOCATED AND BEEN SIGNED AND DATED

NO.	DATE	REVISIONS	BY	APPD

DESIGNED BY ___ BY
DRAWN BY ___ BY
CHECKED BY ___ BY
SCALE: AS SHOWN

CERTIFICATE

Project Planning • Civil Engineering • Landscape Architecture

• Sacramento Office
2120 20th Street, Suite 100
Sacramento, CA 95811
(916) 448-2223

• Davis Office
2840 Spafford Street, Suite 200
Davis, CA 95618
(530) 758-3223

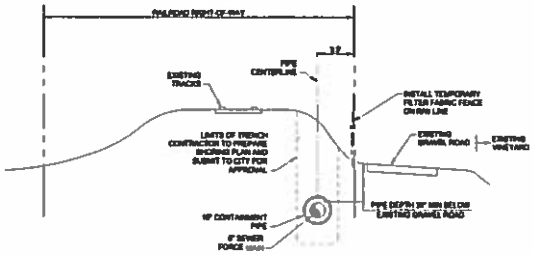
CRINELLA PUMP STATION FORCE MAIN DETAILS

ST. HELENA CALIFORNIA

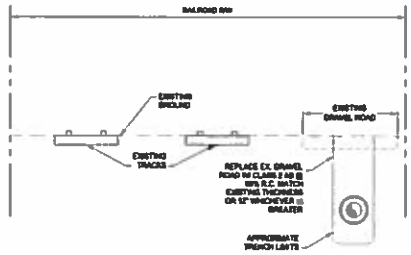
SHEET C9 OF 12

DATE 01/2015

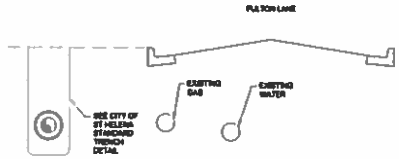
JOB NO. 1246.1001



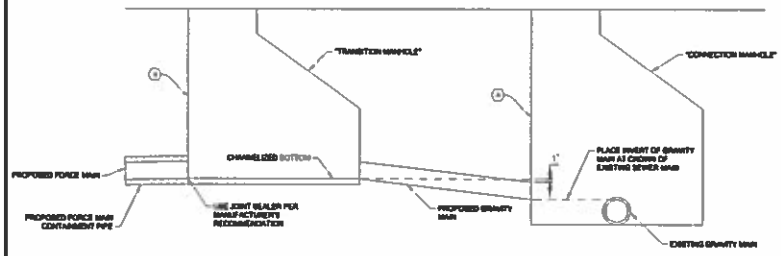
SECTION A-A
(RAILROAD R/W)
STA: 1+32.38 TO 5+50
NTS



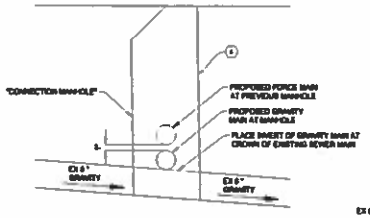
SECTION B-B
(RAILROAD R/W)
STA: 6+00 TO 9+76.01
NTS



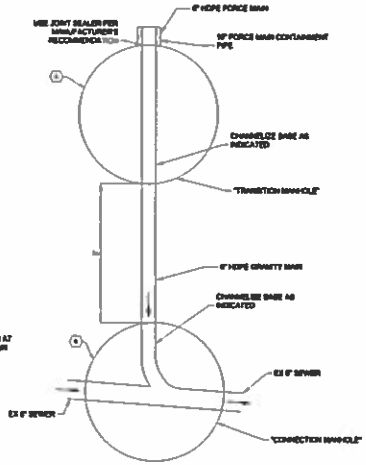
SECTION C-C
(FULTON LANE)
STA 11+05.91 TO 13+31.58
NTS



ELEVATION AT PROPOSED SEWER



ELEVATION AT EXISTING SEWER



PLAN

CONNECTION TO EXISTING MANHOLE

NTS

(6) INSTALL SANITARY SEWER MANHOLE PER CITY STANDARD DETAIL 201. CORROSION MITIGATION SHALL BE PVC LINER OR ALIPHATIC POLYMARE NOVOLAC. SEE SPECIFICATIONS ON SHEET C3 FOR ADDITIONAL INFORMATION

DATE SIGNED
THIS 60 DRAWINGS ARE NOT CONSIDERED A 6 Mark WHEN THE SEAL BELOW HAS BEEN SIGNED AND DATED

No.	DATE	REVISIONS	BY	APPD

SEQUENCED BY ___ BY
DRAWN BY ___ YR
CHECKED BY ___ OF
SCALE

CEDERBERT CIVIL
Project Planning • Civil Engineering • Landscape Architecture
Davis Office
3840 Bullard Street, Suite 20
Davis, CA 95618
(916) 756-3600

CRINELLA PUMP STATION FORCE MAIN SECTIONS

ST. HELENA CALIFORNIA

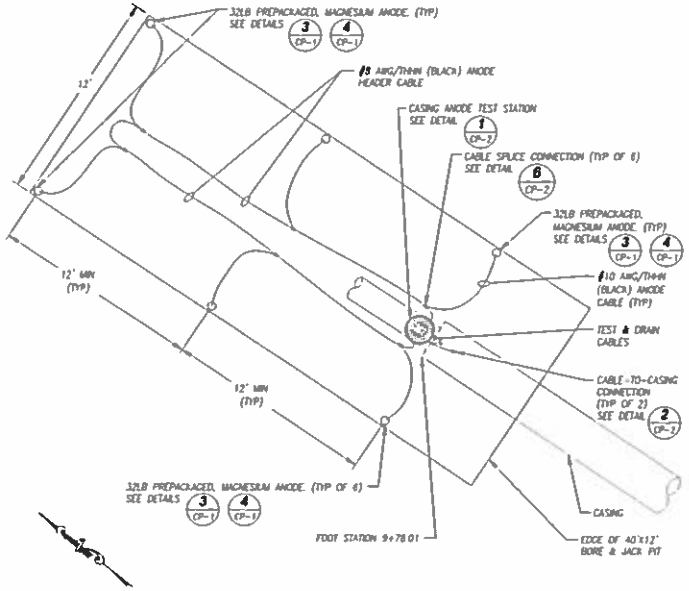
SHEET C10 OF 12

DATE 8/12/2015

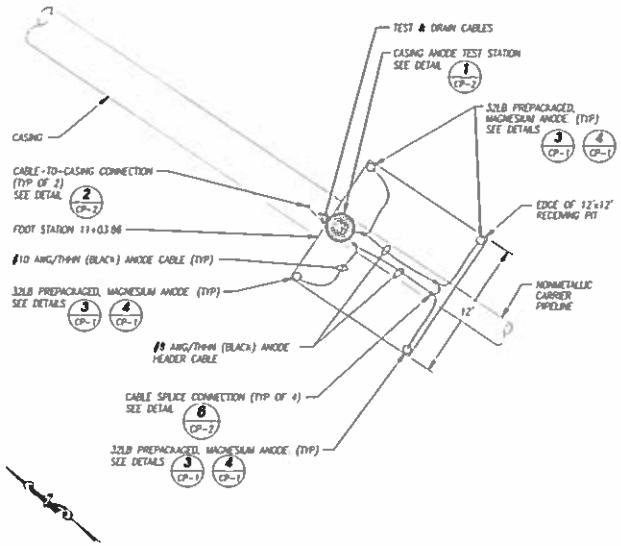
JOB NO 1246.10.01

CATHODIC PROTECTION GENERAL NOTES

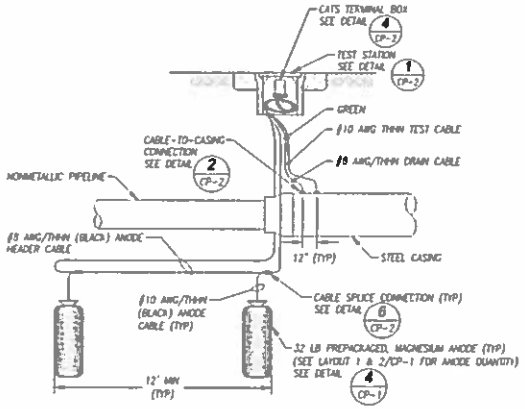
1. THE CASING WHICH IS THE SUBJECT OF THIS CATHODIC PROTECTION SYSTEM IS THE 18" STEEL CASING FOR THE SANITARY SEWER FORCE MAIN OF THE CRINELLA PUMP STATION FORCE MAIN PROJECT IN ST HELENA, CA
2. CATHODIC PROTECTION FOR THE STEEL CASING SHALL CONSIST OF HIGH POTENTIAL MAGNESIUM ANODES. THE ANODES SHALL BE INSTALLED ON EACH END OF THE CASING. THE ANODE SIZE IS INDICATED IN LAYOUT 1 & 2 ON SHEET CP-1
3. TEST STATIONS ARE REQUIRED FOR ANODE LOCATIONS AT EACH END OF THE CASING.
4. ALL ANODES INSTALLED SHALL BE DOCUMENTED AND REPORT PROVIDED TO THE ENGINEER
5. THE CASING PIPE SHALL BE ELECTRICALLY ISOLATED FROM CARRIER PIPE, REBAR, GROUNDING WIRES, FOREIGN PIPELINES, EXISTING PIPELINES, AND OTHER METALLIC STRUCTURES
6. AFTER COMPLETION THE SYSTEM SHALL BE TESTED BY A PROJECT CORROSION ENGINEER (JDH CORROSION CONSULTANT, INC (925)927-6630)



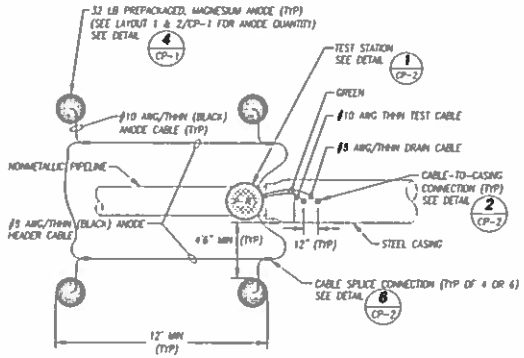
1 CP-1 CASING CATHODIC PROTECTION LAYOUT 1 - STATION 9+78.01
NOT TO SCALE



2 CP-1 CASING CATHODIC PROTECTION LAYOUT 2 - STATION 11+03.86
NOT TO SCALE



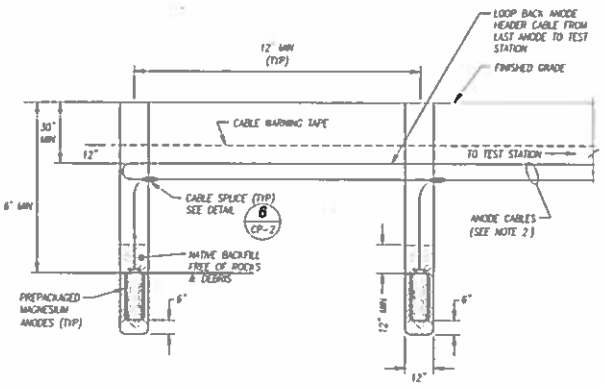
PROFILE: (ANODES SHOWN ONLY ON ONE SIDE OF CASING FOR CLARITY)



PLAN

NOTES:
1. THE ANODES SHALL BE INSTALLED A MINIMUM OF 4.5 FEET OFF THE EDGE OF THE CASING
2. INSTALL CATS AT EACH END OF CASING.
3. LOOP BACK ANODE HEADER CABLE TO TEST STATION
4. CONDUIT OMITTED FOR CLARITY. INSTALL ANODE HEADER CABLES AND TEST CABLES IN 1" ø PVC CONDUIT
5. CASING SHALL BE COATED WITH AN ABRASION RESISTANT COATING

3 CP-1 CATS - CASING ANODE TEST STATION W/ANODES
NOT TO SCALE



NOTES:
1. INSTALL ANODES PARALLEL TO THE PIPELINE AND A MINIMUM OF 5 FEET OFF THE CASING
2. ROUTE ANODE CABLES ALONG WITH TEST & DRAIN CABLES IN PVC CONDUIT TO TEST STATION

4 CP-1 PROFILE - VERTICAL ANODE INSTALLATION
NOT TO SCALE

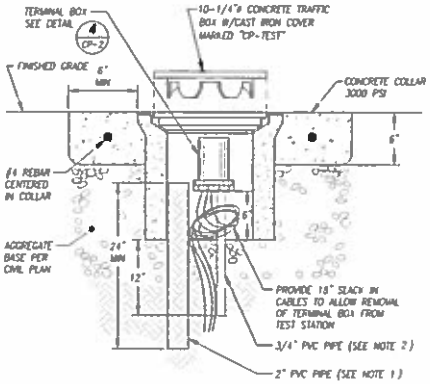
4" ENG 1" ARCH 2"
SCALE: AS SHOWN

REV	DATE	ENG	CHK	DESCRIPTION
0	12/11/2015	TN	JDH	ISSUED FOR REVIEW

CATHODIC PROTECTION
TRICORP CONSTRUCTION
CRINELLA PUMP STATION FORCE MAIN CASING
CATHODIC PROTECTION SYSTEM
CATHODIC PROTECTION DETAILS & NOTES
ENG DK CAD TN CHK JDH DATE 12/11/2015 JOB 15107 FILE 15107

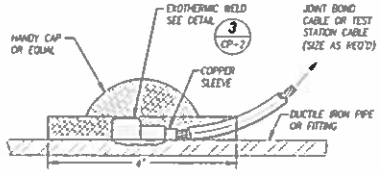
jdh corrosion
1100 Willow Pass Court
Concord, CA 94520
(925)927-6630
FAX (925)927-6634
WWW.JDHCORROSION.COM

CP-1
SHEET 1 OF 2

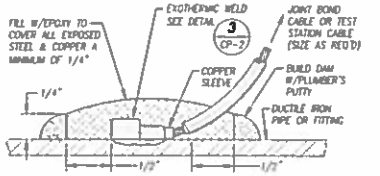


NOTES:
1. INSTALL 2" PVC PIPE IN CLEAN NATIVE SOIL. FILL PIPE WITH CLEAN SOIL, FREE FROM ROCKS & DEBRIS.
2. INSTALL 18" LENGTH OF 3/4" PVC PIPE TO ENSURE THAT THE TERMINAL BOX WILL REMAIN IN THE UPRIGHT POSITION. POSITION THE PIPE SO THAT THE TERMINAL BOX WILL BE AS HIGH AS POSSIBLE WITH THE CAST IRON LID STILL CLOSING PROPERLY.

1 (CP-2) FLUSH MOUNTED TEST STATION CONCRETE BOX
NOT TO SCALE



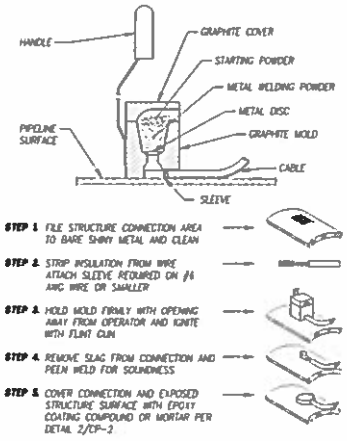
HANDY CAP



EPOXY COATING COMPOUND

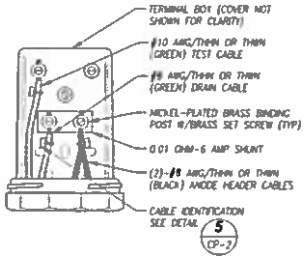
NOTES:
1. EACH EXOTHERMIC WELD CONNECTION SHALL CONTAIN NO MORE THAN ONE WIRE END. EXOTHERMIC WELD CONNECTIONS SHALL BE AT LEAST 6 INCHES CLEAR OF THE NEAREST EXOTHERMIC WELD.
2. DO NOT USE EXOTHERMIC WELDS ON STAINLESS STEEL OR COPPER PIPING

2 (CP-2) CABLE-TO-CASING CONNECTION
NOT TO SCALE



NOTE
PROCEDURE SHOWN ABOVE IS TO BE USED AS A GENERAL GUIDE ONLY. CONSULT MANUFACTURER'S LITERATURE FOR SPECIFIC INSTALLATION INSTRUCTIONS

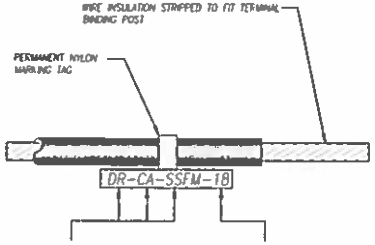
3 (CP-2) EXOTHERMIC WELD PROCEDURE
NOT TO SCALE



CATS TERMINAL BOX

NOTES
1. IDENTIFY ALL CABLES PER DETAIL 5/CP-2
2. UTILIZE HEAVY DUTY SOLDERED RING TERMINALS FOR ALL CABLE TERMINATIONS

4 (CP-2) TERMINAL BOX
NOT TO SCALE



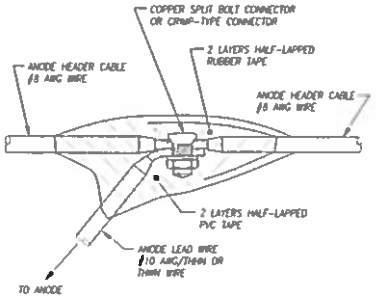
ABBREVIATIONS

AN = ANODE
CA = CASING
DR = DRAIN CABLE
SSFM = SANITARY SEWER FORCE MAIN
TT = TEST CABLE

NUMBER

PIPE DIA (INCHES)
ANODE NUMBER

5 (CP-2) CABLE IDENTIFICATION
NOT TO SCALE



6 (CP-2) SPLICE CONNECTION
NOT TO SCALE

SCALE AS SHOWN

REV	DATE	DESCRIPTION
0	12/11/2015	ISSUED FOR REVIEW

DWG DK CAD TH CHK JDH DATE 12/11/2015 JOB 15197 FILE 15197

CATHODIC PROTECTION
TRICORP CONSTRUCTION
CRINELLA PUMP STATION FORCE MAIN CASING
CATHODIC PROTECTION SYSTEM
CATHODIC PROTECTION DETAILS 2

jdh corrosion consultants
1100 Willow Pass Court
Concord, CA 94520
(925)927-6630
FAX (925)927-6634
www.JDHCORROSION.COM

CP-2
SHEET 2 OF 2

RECORDING REQUESTED BY AND RETURN TO:

[BUSINESS NAME]
[ADDRESS]
[CITY, STATE, ZIP]

Location: City/Uninc_____
Recording Fee $_____
Document Transfer Tax $ _____
[ ] This is a conveyance where the consideration and Value is less than $100.00 (R&T 11911).
[ ] Computed on Full Value of Property Conveyed, or
[ ] Computed on Full Value Less Liens & Encumbrances Remaining at Time of Sale

_____
Signature of declarant or agent determining tax

(SPACE ABOVE FOR RECORDER'S USE ONLY)

UNDERGROUND UTILITY EASEMENT DEED AND AGREEMENT

M.P. 87.67-87.83 – UX

NAPA VALLEY WINE TRAIN, LLC, a California limited liability company, hereinafter the "Grantor," for valuable consideration, the receipt whereof is hereby acknowledged, and in consideration of the agreements herein set forth, does hereby grant to the CITY OF ST. HELENA, a municipal corporation, hereinafter referred to as the "Grantee," the permanent easement and right of way to construct, operate, use, maintain, alter, add to, reconstruct, enlarge, repair, renew, replace, inspect, improve, relocate, and/or remove, at any time and from time to time, such facilities as Grantee deems necessary for an underground six-inch (6") force main pipe and accompanying containment pipe, and all associated infrastructure, conduit, equipment and wiring, connecting the Crinella Pump Station to the sewer system located at the intersection of Railroad Avenue and Fulton Avenue in St. Helena, California, herein collectively referred to as "Facilities", in that certain real property, situated in the county of NAPA, state of California, herein referred to as "Easement", depicted on Exhibit "A" attached hereto and by this reference incorporated herein and made a part hereof.

Grantor further grants to Grantee:

(a) the right of ingress to and egress from the real property in which the Easement is located (the "Easement Area") over and across Grantor's lands by means of existing roads and lanes, if such there be, otherwise by such route or routes as shall occasion the least practicable damage and inconvenience to Grantor, provided, that such right of ingress and egress shall not extend to any portion of said lands which is isolated from the Easement by any public road or highway now crossing or hereafter crossing said lands;

(b) the right to install, maintain, and use gates in all fences which now cross or shall hereafter cross the Easement Area;

(c) the right, from time to time, to trim and to cut down and clear away any and all trees and brush now or hereafter on the Easement Area that interfere with the Facilities and shall have the further right, from time to time, to trim and to cut down and clear away any trees on the Easement Area which now or hereafter, in the opinion of the Grantee, may be a hazard to the Facilities by reason of the danger of falling thereon, provided, however, that all trees which Grantee removes shall be removed from Grantor's premises by Grantee at Grantee's sole expense; and

(d) the right to mark the Easement Area by suitable markers, but said markers, when set in the ground, shall be placed in fences, to the extent practicable, or other locations which will not interfere with Grantor's use of the Easement Area.

The Easement is subject to the terms, conditions, limitations and covenants contained in Exhibit "B", entitled TERMS, CONDITIONS, LIMITATIONS AND GRANTEE'S COVENANTS RUNNING WITH EASEMENT, which is attached and incorporated herein, which shall run with the Easement herein granted, and Grantee, its successors and assigns, by acceptance of this Easement Deed and Agreement, and in consideration of the agreements herein set forth, agrees to observe each and all said terms, limitations and conditions, and to perform each and all said covenants.

The Easement is further subject to the terms, conditions, limitations and covenants contained in Exhibit "C", entitled CONSTRUCTION PLAN, which is attached and incorporated herein, which shall run with the Easement herein granted, and Grantee, its successors and assigns, by acceptance of this Easement Deed and Agreement, and in consideration of the agreements herein set forth, agrees to observe each and all said terms, limitations and conditions, and to perform each and all said covenants.

The Grantor and the Grantee all agree to be bound by this Easement Deed and Agreement, consisting of this instrument and Exhibits "A," "B," and "C" attached hereto and incorporated herein.

IN WITNESS WHEREOF, the Grantor and Grantee have caused this instrument to be duly executed as of the _____ day of _____, 20_____.

NAPA VALLEY WINE TRAIN, LLC
a California limited liability company

By _____
Anthony J. Giaccio, CEO / CFO

CITY OF ST. HELENA, a municipal corporation

By _____
[AUTHORIZED NAME, TITLE]

[Signautures continue on next page]

Solely for purposes of Section 2, 3 and 11 of Exhibit B to this Agreement.

SPRING MOUNTAIN HOTEL LLC,
a Delaware limited liability company

By: TPC St. Helena Partners LLC,
a Delaware limited liability company,
its Manager

By: TPC St. Helena Investors LLC,
a Delaware limited liability company,
its Manager

By: The Presidio Companies LLC,
a Delaware limited liability company,
its Manager

By: _____
Sushil Patel, Manager

By: Venustus Hotel, LLC,
a Delaware limited liability company,
its Manager

By: _____
Samuel Leizorek, Manager

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, _____, before me, _____
(here insert name and title of the officer)

personally appeared Anthony J. Giaccio, as CEO/CFO of NAPA VALLEY WINE TRAIN, LLC, a California limited liability company, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature

(Seal)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, _____, before me, _____
(here insert name and title of the officer)

personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature

(Seal)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, _____, before me, _____
(here insert name and title of the officer)

personally appeared _____,

who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature

(Seal)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, _____, before me, _____
(here insert name and title of the officer)

personally appeared _____,

who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature

(Seal)

EXHIBIT "A"
CITY OF ST. HELENA
CRINELLA FORCE MAIN EASEMENT

CRINELLA FORCE MAIN PIPE ENCUMBRANCE – DESCRIPTION

All that real property situated in the County of Napa, State of California, being a portion of the Napa Valley Wine Train Property ("Railroad Property"), being more particularly described as follows:

Commencing at the northeast corner of Lot 14, Book 6 of Maps, Page 8 and 9 "Crinella Terrace Unit No. 1"; thence along the easterly line of Lot 14, South 33°28'00" East, 28.96 feet to the **True Point of Beginning**; thence the following seventeen (17) courses:

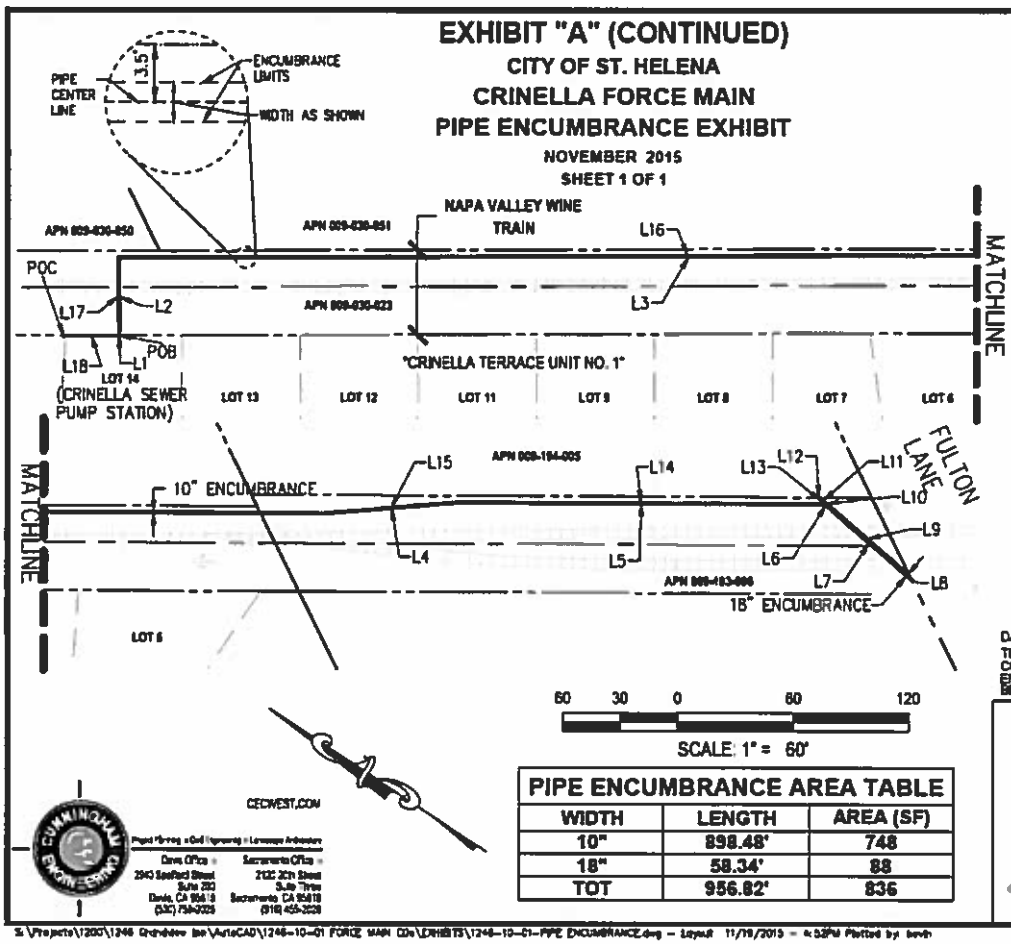
1) Along said easterly line of Lot 14, South 33° 28' 00" East, 0.83 feet;
2) Thence leaving Lot 14, North 56° 31' 45" East, 40.04 feet;
3) Thence South 33° 28' 15" East, 591.83 feet;
4) Thence South 38° 28' 00" East, 68.84 feet;
5) Thence South 33° 28' 00" East, 191.20 feet;
6) Thence North 82° 56' 13" West, 0.20 feet;
7) Thence South 07° 03' 47" West, 60.11 feet, to a point on the northerly Right of Way of Fulton Lane;
8) Thence, along said northerly Right of Way, North 30° 06' 26" East, 3.83 feet;
9) Thence, leaving said Right of Way, North 07° 03' 47" East, 56.58 feet;
10) Thence North 82° 56' 13" West, 0.33 feet;
11) Thence North 07° 03' 47" East, 4.90 feet to a point on the easterly boundary of the Railroad Property;
12) Thence, along said easterly boundary, North 33° 28' 00" West, 1.28 feet;
13) Thence, leaving said boundary, South 07° 03' 47" West, 4.74 feet;
14) Thence North 33° 28' 00" West, 190.46 feet;
15) Thence North 38° 28' 00" West, 68.84 feet;
16) Thence North 33° 28' 15" West, 592.63 feet;
17) Thence South 56° 31' 45" West, 40.87 feet to the **Point of Beginning**.

Said property contains 836 Sq. Ft. (0.02 Ac.), more or less.

EXHIBIT "A" (CONTINUED)

CITY OF ST. HELENA
CRINELLA FORCE MAIN
PIPE ENCUMBRANCE EXHIBIT

NOVEMBER 2015
SHEET 1 OF 1



LINE DATA		
LINE	BEARING	LENGTH
L1	S33°28'00"E	0.83'
L2	N56°31'45"E	40.04'
L3	S33°28'15"E	591.83'
L4	S38°28'00"E	68.84'
L5	S33°28'00"E	191.20'
L6	N82°56'13"W	0.20'
L7	S07°03'47"W	60.11'
L8	N30°06'26"E	3.63'
L9	N07°03'47"E	56.58'
L10	N82°56'13"W	0.33'
L11	N07°03'47"E	4.90'
L12	N33°28'00"W	1.28'
L13	S07°03'47"W	4.74'
L14	N33°28'00"W	190.46'
L15	N38°28'00"W	68.84'
L16	N33°28'15"W	592.63'
L17	S56°31'45"W	40.87'
L18	S33°28'00"E	28.96'

DATE SIGNED: _____

THESE DRAWINGS ARE NOT CONSIDERED FINAL UNTIL THE ENGINEER'S SEAL BELOW HAS BEEN SIGNED AND DATED.

REGISTERED PROFESSIONAL ENGINEER
CHARLES W. CUNNINGHAM
No. 53039
CIVIL
STATE OF CALIFORNIA
PRELIMINARY

CECWEST.COM

CUNNINGHAM ENGINEERING INC

Davis Office
2943 Seaford Street
Suite 200
Davis, CA 95618
(530) 758-3225

Sacramento Office
2122 20th Street
Suite Three
Sacramento CA 95818
(916) 455-2228

PIPE ENCUMBRANCE AREA TABLE		
WIDTH	LENGTH	AREA (SF)
10"	898.48'	748
18"	58.34'	88
TOT	956.82'	836

S:\Projects\1200\1246 Grindstone Inn\AutoCAD\1246-10-01 FORCE MAIN CDs\EXHIBITS\1246-10-01-PIPE ENCUMBRANCE.dwg – Layout 11/19/2015 – 4:52PM Plotted by: kevin

EXHIBIT "B"
TERMS, CONDITIONS, LIMITATIONS AND GRANTEE'S
COVENANTS RUNNING WITH EASEMENT

Section 1. LIMITATIONS AND RESERVATIONS.

(a) This grant is subject and subordinate to the prior and continuing right and obligation of Grantor, its successors and assigns, to use all the property described herein in the performance of its business as a common carrier, and for that purpose there is reserved unto Grantor, its successors and assigns, the right to construct, reconstruct, maintain and use existing and future railroad tracks, facilities and appurtenances and existing and future transportation, communication and pipeline facilities and appurtenances in, upon, over, under, across and along said Easement Area, provided that any of such uses installed or changed after the date of execution of this Easement do not interfere with the rights granted to Grantee herein.

(b) The rights hereby granted are subject to any existing encumbrances and rights (whether public or private), recorded or not, and also to any renewals thereof, and Grantor makes no covenant or warranty of title, for quiet possession or against any existing encumbrances. The Grantee shall not damage, destroy or interfere with the property or rights of third parties in, upon or relating to the Grantor's remaining property, unless the Grantee, at its own expense, settles with and obtains releases from such nonparties.

(c) The Grantor reserves the right to use and to grant to others the right to use the Easement Area in any manner and for any purpose which does not unreasonably interfere with or diminish the Easement herein conveyed to Grantee, including, but not by way of limitation, the right to construct, install, reconstruct, maintain, operate, repair, alter, renew and replace tracks, facilities, appurtenances, signal, fiber optic, communication, or power lines and all kinds of equipment, provided that Grantor shall not erect or construct any building or other structure, or drill or operate any well, or construct any reservoir or other obstruction on said Easement Area, or diminish or substantially add to the ground cover within said Easement Area without having first obtained Grantee's consent thereto, which consent shall not be unreasonably withheld.

(d) The Grantee shall not use or permit use of the Easement for any purposes other than those described in this Easement. No third party shall be admitted by the Grantee to use or occupy any part of the Easement Area without the Grantor's written consent which consent shall not be unreasonably withheld, other than Spring Mountain Hotel LLC ("Spring Mountian") and its contractors and representatives in connection with the initial construction of the Facilities pursuant to this Agreement.

Section 2. CONSIDERATION.

In consideration for the 836 square foot Easement, Spring Mountain agrees to pay to Grantor, in immediately available funds, prior to or concurrently with Grantor's execution and delivery of this Easement Deed and Agreement, $43,472.00 calculated as follows, $52.00 per square foot of land.

Section 3. CONSTRUCTION, MAINTENANCE AND OPERATION.

(a) Spring Mountain shall install and Grantee shall maintain all underground Facilities no less than the minimum depth below the bottom of the existing rails or surface of the lands of Grantor, each minimum distance as defined and required by General Order 128 (underground) of the Public Utility Commission of the State of California, which by this reference are incorporated herein and made a part hereof. Markers in form and size satisfactory to the parties hereto shall be installed and reasonably maintained by Grantee at Grantor's property lines. The Facilities shall be

constructed, operated, maintained, repaired, renewed, modified, relocated and/or reconstructed in strict conformity with such other additional railroad safety standards as Grantor, in its reasonable discretion, elects to require, including, without limitation, American Railway Engineering and Maintenance-of-Way Association ("AREMA") standards and guidelines (collectively, "Railroad Additional Requirements"), and all applicable railroad safety laws, rules and regulations ("Laws"). If there is any conflict between the requirements of any Laws and the Railroad Additional Requirements, the most restrictive shall apply.

(b) Any contractor or subcontractor performing work in the Easement Area relating to any construction, maintenance, repair, renewal, modification, relocation, reconstruction or removal of the Facilities shall, for the purpose of this Agreement, and particularly for the purposes of Section 11 of this EXHIBIT "B", be conclusively deemed to be the servant and agent of Grantee acting on behalf and within the scope of such contractor's or subcontractor's employment for Grantee. Upon completion of construction or other work, the Grantee and/or its contractor(s) or subcontractor(s) will leave the Easement Area in good condition.

(c) Spring Mountain (with respect to the Initial Construction Work, defined below) and Grantee (with respect to all other work) shall cooperate with Grantor to ensure the safety of its track or tracks during the time of construction, maintenance, repair, renewal, modification, relocation, reconstruction or removal of the Facilities, and in the event the Grantor provides any support or assistance to Spring Mountain or Grantee, as applicable, Spring Mountain or Grantee, as applicable, shall pay to the Grantor, within thirty (30) days after bills shall have been rendered therefore, all reasonable expense incurred by the Grantor in connection therewith. Prior to the commencement of any work in connection with the construction, maintenance, repair, renewal, modification, relocation, reconstruction or removal of the Facilities where they pass underneath the roadbed and track or tracks of the Grantor, Spring Mountain or the Grantee, as applicable, shall submit to the Grantor plans setting out the method and manner of handling the work, including the shoring and cribbing, if any, required to protect the Grantor's operations, and shall not proceed with the work until such plans have been approved by the Grantor's CFO, or his authorized representative, and then the work shall be done to the satisfaction of the Grantor's CFO or his authorized representative. The Grantor shall have the right, if it so elects, to provide such support as it may deem necessary for the safety of its track or tracks during the time of construction, maintenance, repair, renewal, modification, relocation, reconstruction or removal of the Facilities, and, in the event the Railroad provides such support, Spring Mountain or the Grantee, as applicable, shall pay to the Grantor, within thirty (30) days after bills shall have been rendered therefore, all expenses incurred by the Grantor in connection therewith, which expenses shall include all assignable costs, including but not limited to supervisorial, consulting and labor expenses, train delay, derail damage and repair expenses, damages and associated expenses to land, track, train and passengers, including but not limited to accommodations, reimbursements and compensations. Spring Mountain or Grantee, as applicable, shall keep and maintain the soil over the Facilities thoroughly compacted and the grade even with the adjacent surface of the ground.

(d) All initial construction work with respect to the Facilities by Spring Mountain (the "Initial Construction Work") shall be performed be in accordance with EXHIBITS "B" and "C," shall be commenced within two years and shall be performed diligently and completed within a reasonable time, and in any event within one year from the beginning of construction, or within such further period of time as may be permitted in writing by the Grantor, which permission shall not be unreasonably withheld. It is understood that the Grantor's tracks at and in the vicinity of the work will be in constant or frequent use during progress of the work, and that movement or stoppage of trains, engines or cars may cause delays in the Initial Construction Work. Spring Mountain hereby assumes the risk of any such delays and agrees that no claims for damage on account of such delay shall be made against the Grantor. Spring Mountain shall perform the Initial Construction Work in accordance with this Agremeent and shall comply with all requirements, terms and conditions of this Easement Deed and Agreement in connection with such Initial Construction Work. With resepct to

such Initial Construction Work, all references to Spring Mountain shall include Spring Mountain and its respective contractors, subcontractors, officers, agents and employees.

Section 4. NOTICE OF COMMENCEMENT OF WORK.

If an emergency should arise requiring immediate attention, the Grantee shall provide as much notice as practicable to Grantor before commencing any work. In all other situations, the Grantee shall notify the Grantor at least 48 hours (or such other time as the Grantor may allow) in advance of the commencement of any work within the Easement Area in connection with the construction, repair, renewal, modification, reconstruction, relocation or removal of the Facilities, excepting only periodic inspection and routine maintenance of the Facilities. Grantee shall also give at least 24 hours advance notice to Grantor of proposed performance of any work by the Grantee in which any person or equipment will be within 25 feet of any track, or will be near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach to within 25 feet of any track. Upon receipt of such notice, the Grantor will determine and inform the Grantee whether a flagman need be present and whether the Grantee need implement any special protective or safety measures. If any flagmen or other special protective or safety measures are performed by the Grantor, such services will be provided at Grantee's expense with the understanding that if the Grantor provides any flagging or other services the Grantee shall not be relieved of any of its responsibilities or liabilities set forth herein.

Section 5. RELOCATION OF FACILITIES.

Grantee covenants and agrees that upon written request of Grantor, Grantee will, with all due diligence, relocate all or any portion of the Facilities to such new location as Grantor may reasonably designate. Grantor shall not unreasonably require Grantee to remove or relocate its Facilities, and Grantor must provide to Grantee, in exchange for the relocation, a replacement Easement, over and across Grantor's property, in the new alignment which shall be as close as practicable to the present alignment. All the terms, conditions and stipulations herein expressed with reference to the Facilities on the lands of the Grantor in the location hereinbefore described shall, so far as the Facilities remains on the property, apply to the Facilities as modified, changed or relocated within the contemplation of this section.

If the Grantor requests relocation, the relocation shall be at the sole cost of Grantor, with Grantee endeavoring to keep such cost reasonable.

Section 6. GRANTEE TO BEAR ENTIRE EXPENSE.

Subject to the provisions of Section 5, the Grantee shall bear the entire cost and expense incurred in connection with the construction, maintenance, repair and renewal and any and all modification, improvement, revision, expansion, relocation, removal or reconstruction of the Facilities, including any expense which may be incurred by the Grantor in connection therewith except (a) the cost for repair, replacement, or reconstruction incurred by Grantee as a result of the negligence of Grantor, or (b) as provided in the last sentence of Section 5.

Section 7. INTERFERENCE.

In the operation and maintenance of the Facilities the Grantee shall take all precautions required to prevent any interference with the constant, continuous and uninterrupted use of the tracks, property and facilities of the Grantor or its existing tenants, including but not limited to the operation of any existing signal, communication lines or other installations or facilities of the Grantor or its existing tenants; and if, at any time, the operation or maintenance of the Facilities

results in any electrostatic effects which causes interference with the operation of the signal, communication lines, or other installations or facilities, as such facilities now exist, Grantee shall, at the sole expense of the Grantee, immediately take such reasonable action as may be necessary to eliminate such interference.

Section 8. PROTECTION OF FIBER OPTIC CABLE SYSTEMS.

Fiber optic cable systems may be buried on the Grantor's property. Excepting only emergencies, Grantee shall contact Grantor to determine if fiber optic cable is buried prior to any excavation by the Grantee. If Grantor informs Grantee that it is, Grantee will telephone the telecommunications company(ies) involved, arrange for a cable locator, and make arrangements for relocation or other protection of the fiber optic cable prior to beginning any work on the Grantor's premises. In addition to other indemnity provisions in this Agreement, Grantee shall indemnify, defend and hold harmless the Grantor from and against all costs, liability and expense whatsoever (including, without limitation, attorneys' fees, court costs and expenses) arising out of or caused in any way by Grantee's failure to comply with the provisions of this paragraph, such as damage to or destruction of the fiber optic cable system or injury to or death of any person employed by or on behalf of any fiber optic cable company whose system is buried on Grantor's property.

Section 9. CLAIMS AND LIENS FOR LABOR AND MATERIAL; TAXES.

(a) The Grantee shall not permit or suffer any mechanic's or materialman's lien of any kind or nature to be enforced against the property for any work done or materials furnished thereon at the insistence or request or on behalf of the Grantee excepting only those liens that may result from work required to cure negligent acts of Grantor.

(b) The Grantee shall not permit any taxes, charges and assessments to be levied upon Grantor or Grantor's property with respect to, or on account of, the Facilities.

(c) Grantee will not permit encumbrances of Easement or Facilities save and except blanket encumbrances given to secure the indebtedness evidenced by bonds or other debt instruments issued by Grantee.

Section 10. RESTORATION OF GRANTOR'S PROPERTY.

If the Grantee, in connection with the construction, maintenance, repair, renewal, modification or reconstruction of the Facilities, or in the performance of any work contemplated by this Easement or by the failure to do or perform anything for which the Grantee is responsible under the provisions of this Easement, shall injure, damage or destroy any property of the Grantor or of any other person lawfully occupying or using the property of the Grantor, such property shall be replaced or repaired by the Grantee, to the reasonable satisfaction of the Grantor, at the Grantee's own expense, or by the Grantor, pursuant to the default provisions set forth in Section 13, at the expense of the Grantee.

Section 11. INDEMNITY.

(a) Grantee agrees to indemnify, defend and hold harmless the Grantor from any and all loss which is due to or arises from:

1. The prosecution of any work contemplated by this Agreement by or on behalf of Grantee, including the construction, maintenance, repair, renewal, modification, reconstruction, relocation, or removal of the Facilities or any part thereof;

2. The presence, operation, or use of the Facilities or products conducted through or escaping there from; or

3. Grantee's breach of this Agreement,

except to the extent that the loss is caused by the negligence of the Grantor.

(b) Spring Mountain agrees to indemnify, defend and hold harmless the Grantor from any and all loss which is due to or arises from:

1. The prosecution of any work contemplated by this Agreement by or on behalf of Spring Mountain, including the Initial Construction Work; or

2. Spring Mountain's breach of this Agreement,

except to the extent that the loss is caused by the negligence of the Grantor.

Section 12. REMOVAL OF FACILITIES UPON ABANDONMENT.

If the Grantee should abandon the Easement, Grantee shall, at Grantee's sole expense, remove the Facilities from the lands of Grantor and shall restore such lands to as good a condition as they were before the construction of the Facilities, provided, however, any portion of the Facilities which is located, underneath Grantor's roadbed and track or tracks shall be abandoned in place. If the Grantee fails to do the foregoing, the Grantor may do such work of removal and restoration at the cost and expense of the Grantee. In the event of the removal by the Grantor of the property of the Grantee and of the restoration of the roadbed and lands as herein provided, the Grantor shall in no manner be liable to the Grantee for any damage sustained by the Grantee for or on account thereof, such removal and restoration shall in no manner prejudice or impair any right of action for damages, or otherwise, that the Grantor may have against the Grantee.

Section 13. REMEDIES FOR ABANDONMENT OR BREACH.

(a) If the Grantee abandons the rights herein granted, the Grantor may, at its option, forthwith immediately terminate this Easement. Grantee shall relinquish any claims to title of said property upon abandonment of the rights herein granted.

(b) If the Grantee shall fail, refuse or neglect to perform and abide by the covenants in the Easement, the Grantor may file a notice of default. Grantee shall be responsible to either cure the default or notify Grantor within a reasonable time of such reasons as there may be why the condition is not in default. Notice of default may be served personally upon the Grantee or by mailing to the last known address of the Grantee.

(c) The Grantee agrees that abandonment or termination of the Easement shall not affect any rights, obligations or liabilities of the parties, accrued or otherwise, which may have arisen prior to such abandonment or termination.

Section 14. WAIVER OF BREACH.

The waiver by any party to this Agreement of the breach of any condition, covenant or agreement herein contained to be kept, observed and performed by the other party shall in no way impair the right of the waiving party to avail itself of any subsequent breach thereof.

Section 15. OTHER RAILROADS.

All protective and indemnifying covenants of this Easement shall inure to the benefit of the Grantor and any other railroad company lawfully using the Grantor's property or facilities as a common carrier.

Section 16. SUCCESSOR AND ASSIGNS.

This Easement shall be binding upon and inure to the benefit of the parties hereto, their successors and assigns, provided, however, that Grantee shall not assign this Agreement without the prior written consent of the Grantor, and no such assignment shall be effective without Grantor's consent.

Section 17. SAFETY MEASURES.

It is understood and recognized that safety and continuity of the Grantor's operations and communications are of the utmost importance; and in order that the same may be adequately safeguarded, protected and assured, and in order that accidents may be prevented and avoided, the Grantee shall require all its work be performed in a safe manner and in conformity with the following standards:

(a). **Definitions.** All references to the Grantee shall include Grantee and its respective contractors, subcontractors, officers, agents and employees, and others acting under its or their authority (other than with respect to insurance requirements); and all references to work of the Grantee shall include work both within and adjacent to the Grantor's property.

(b). **Compliance With Laws.** The Grantee shall comply with all applicable federal, state and local laws, regulations and enactments affecting the work, including but not limited to compliance with the Federal Railroad Administration's Roadway Worker Protection regulations – 49 CFR Part 214, Subpart C, Roadway Worker Protection. The Grantee is responsible for the training of their employees under 49 CFR Part 214. The Grantee shall use only such methods as are consistent with safety, both as concerns the Grantee, the Grantee's agents and employees, the officers, agents, employees and property of the Grantor and the public in general. The Grantee (without limiting the generality of the foregoing) shall comply with all applicable state and federal occupational safety and health acts and regulations.

(c). **Supervision.** The Grantee, at its own expense, shall adequately police and supervise all work to be performed by the Grantee, and shall not inflict injury to persons or damage to property for the safety of whom or of which the Grantor may be responsible, or to property of the Grantor. The responsibility of the Grantee for safe conduct and adequate policing and supervision of its work shall not be lessened or otherwise affected by the Grantor's approval of plans and specifications, or by the Grantor's collaboration in performance of any work, or by the presence at the work site of the Grantor's representatives, or by compliance by the Grantee with any requests or recommendations

made by such representatives. If a representative of the Grantor is assigned to the job site, the Grantee will give due consideration to suggestions and recommendations made by such representative for the safety and protection of the Grantor's property and operations.

(d). **Removal of Debris.** The Grantee shall not cause, suffer or permit material or debris to be deposited or cast upon, or to slide or fall upon any property or facilities of the Grantor; and any such material and debris shall be promptly removed from the Grantor's property by the Grantee at the Grantee's own expense or by the Grantor at the expense of the Grantee.

(e). **Explosives.** The Grantee shall not discharge any explosives on or in the vicinity of the Grantor's property.

(f). **Excavation.** The Grantee shall not excavate from existing slopes nor construct new slopes which are excessive and may create hazards of slides or falling rock, or impair or endanger the clearance between existing or new slopes and the tracks of the Grantor. The Grantee shall not do or cause to be done any work which will or may disturb the stability of any area or adversely affect the Grantor's tracks or facilities. The Grantee, at its own expense, shall install and maintain adequate shoring and cribbing for all excavation and/or trenching performed by the Grantee in connection with construction, maintenance or other work.

(g). **Drainage.** The Grantee, at the Grantee's own expense, shall provide adequate passageway for the waters of any streams, bodies of water and drainage facilities (either natural or artificial), so that said waters may not, because of any facilities or work of the Grantee, be impeded, obstructed, diverted or caused to back up, overflow or damage the property of the Grantor or any part thereof, or property of others. The Grantee shall not obstruct or interfere with existing ditches or drainage facilities.

(h). **Safety-Premises.** The Grantee shall keep the job site free from safety and health hazards and ensure that its employees are competent and adequately trained in all safety and health aspects of the job. The Grantee shall have proper first aid supplies available on the job site so that prompt first aid services can be provided to any person that may be injured on the job site. The Grantee shall have a non-delegable duty to control its employees, while they are on the job site or any other property of the Grantor to be certain they do not use, be under the influence of, or have in their possession any alcoholic beverage or illegally obtained drug, narcotic or other substance. The Grantee shall ensure that all waste is properly disposed of in accordance with applicable federal and state regulations. All work performed by the Grantee that could be considered track work must meet the minimum safety requirements established by the Federal Railroad Administration's Track Safety Standards at 49 CFR Part 213.

(i). **Safety-Personal.** Grantee must assure that all its employees comply with the following safety procedures when working around any railroad track: (i) always be on the alert for moving equipment and always expect movement on any track, any time, in either direction; (ii) do not step or walk on the top of the rail, frog, switches, guard rails, or other track components; (iii) in passing around the ends of standing cars, engines, roadway machines or work equipment, leave at least 20 feet between oneself and the end of the equipment and do not go between pieces of equipment if the opening is less than one car length (50 feet); (iv) avoid walking or standing on a track; (v) before stepping over or crossing tracks, look in both directions first; and (vi) do not sit on, lie under, or cross between cars, except as required in the performance of duties and then only when

track and equipment have been protected against movement. The Grantee shall ensure that employees of the Grantee shall be suitably dressed to perform their duties safely and in a manner that will not interfere with their vision, hearing or free use of their hands or feet. Only waist length shirts with sleeves and trousers that cover the entire leg are to be worn. If flare-legged trousers are worn, the trouser bottoms must be tied to prevent catching. The employees should wear sturdy and protective footwear. Employees shall not wear boots (other than work boots), sandals, canvas-type shoes or other shoes that have thin soles or heels that are higher than normal. In addition, the Grantee shall require its employees to wear personal protective equipment as specified by all applicable laws rules, regulations or Grantor officials overlooking the work at the job site. In particular, the protective equipment to be worn shall be:

1. Protective head gear that meets American National Standard-Z89.1-latest revision. It is suggested that all hardhats be affixed with Grantee's or contractor's or subcontractor's company logo or name.

2. Eye protection that meets American National Standard for occupational and educational eye and face protection, Z87.1-latest revision. Additional eye protection must be provided to meet specific job situations such as welding, grinding, burning, etc.; and

3. Hearing protection which affords enough attenuation to give protection from noise levels that will be occurring on the job site.

(j). **Equipment and Safety-Devices.** It is the responsibility of the Grantee to ensure that all equipment used by or on behalf of Grantee is in a safe condition to operate. In addition, Grantee must ensure that the operators of all equipment are properly trained and competent in the safe operation of the equipment. All self-propelled equipment must be equipped with a first-aid kid, fire extinguisher, and audible back-up warning device, and operators instructed in how to use them. All equipment must be parked a minimum of twenty-five (25) feet from any track. Before leaving any equipment unattended, the operator must stop the engine and properly secure the equipment against movement. Cranes must be equipped with three orange cones that will be used to mark the working area of the crane and the minimum clearances to overhead power lines. All heavy equipment provided or leased by the Grantee shall be equipped with audible back-up warning devices. If in the opinion of the Grantor any of Grantee's or any of its subcontractor's equipment is unsafe for use on the Grantor's right-of-way, the Grantee, at the request of the Grantor, shall remove such equipment from the Grantor's right-of-way.

Section 18. INSURANCE.

Grantee shall, at its sole cost and expense, procure and maintain during the course of the Easement and until all Easement work on Grantor's property has been completed and the Grantee has removed all equipment and materials from the Grantor's property and has cleaned and restored Grantor's property to Grantor's satisfaction, the following insurance coverage:

A. **Commercial General Liability** insurance. Commercial general liability (CGL) with a limit of not less than $1,000,000 each occurrence and an aggregate limit of not less than $1,000,000. CGL insurance must be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage).

The policy must also contain the following endorsement, which must be stated on the certificate of

insurance:

- Contractual Liability Railroads ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "Napa Valley Wine Train Property" as the Designated Job Site.

B. **Business Automobile Coverage** insurance. Business auto coverage written on ISO form CA 00 01 (or a substitute form providing equivalent liability coverage) with a combined single limit of not less $1,000,000 for each accident.

The policy must contain the following endorsements, which must be stated on the certificate of insurance:

- Coverage For Certain Operations In Connection With Grantors ISO form CA 20 70 10 01 (or substitute form providing equivalent coverage) showing "Napa Valley Wine Train Property" as the Designated Job Site.
- Motor Carrier Act Endorsement – Hazardous materials clean up (MCS-90) if required by law.

C. **Workers Compensation and Employers Liability** insurance. Coverage must include but not be limited to:

- Grantee's statutory liability under the workers' compensation laws of the state(s) affected by this Agreement.
- Employers' Liability (Part B) with limits of at least $1,000,000 each accident, $1,000,000 disease policy limit $1,000,000 each employee.

If Grantee is self-insured, evidence of state approval and excess workers compensation coverage must be provided. Coverage must include liability arising out of the U.S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.

The policy must contain the following endorsement, which must be stated on the certificate of insurance:

- Alternate Employer endorsement ISO form WC 00 03 01 A (or a substitute form providing equivalent coverage) showing Grantor in the schedule as the alternate employer (or a substitute form providing equivalent coverage).

D. **Railroad Protective Liability Insurance**. Grantee must maintain Railroad Protective Liability insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of Grantor as named insured, with a limit of not less than $2,000,000 per occurrence and an aggregate of $6,000,000. A binder stating the policy is in place must be submitted to Grantor before the work may be commenced and until the original policy is forwarded to Grantor.

E. **Umbrella or Excess Insurance**. If Grantee utilizes umbrella or excess policies, these policies must "follow form" and afford no less coverage than the primary policy.

F. **Pollution Liability Insurance**. Pollution liability coverage must be written on ISO form Pollution Liability Coverage Form Designated Sites CG 00 39 12 04 (or a substitute form providing equivalent liability coverage), with limits of at least $3,000,000 per occurrence and an aggregate limit of $3,000,000.

If the scope of work as defined in this Agreement includes the disposal of any hazardous or non-hazardous materials from the job site, Grantee must furnish to Grantor evidence of pollution legal liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting the materials, with coverage in minimum amounts of $1,000,000 per loss, and an annual aggregate of $2,000,000.

G. Other Requirements. All policy(ies) required above (except worker's compensation and employers liability) must include Grantor as "Additional Insured" using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage). The coverage provided to Grantor as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26, and CA 20 48 provide coverage for Grantor's negligence whether sole or partial, active or passive, and shall not be limited by Grantee's liability under the indemnity provisions of this Agreement.

H. Punitive damages exclusion, if any, must be deleted (and the deletion indicated on the certificate of insurance), unless the law governing this Agreement prohibits all punitive damages that might arise under this Agreement.

I. Grantee waives all rights of recovery, and its insurers also waive all rights of subrogation of damages against Grantor and its agents, officers, directors and employees. This waiver must be stated on the certificate of insurance.

J. Prior to commencing the work, Grantee shall furnish Grantor with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements in this Agreement.

K. All insurance policies must be written by a reputable insurance company acceptable to Grantor or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the work is to be performed.

L. The fact that insurance is obtained by Grantee or by Grantor on behalf of Grantee will not be deemed to release or diminish the liability of Grantee, including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Grantor from Grantee or any third party will not be limited by the amount of the required insurance coverage.

EXHIBIT "C"
CONTRUCTION PLAN

Those certain Crinella Pump Station Force Main civil improvement plans prepared by Cunningham Engineering and approved by the City of St. Helena Department of Public Works.

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