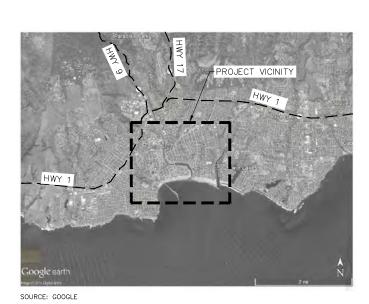
FIGURE 1

SAN LORENZO RIVER CULVERT

JANUARY 2021

CITY OF SANTA CRUZ, SANTA CRUZ COUNTY, CALIFORNIA



LOCATION MAP SCALE: 1"=1 MILE



SOURCE: GOOGLE

VICINITY MAP SCALE: 1"=1,500"

INDEX OF SHEETS				
SHEET NO.	DRAWING NO.	SHEET TITLE		
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C-11	14	INFILTRATION GALLERY AND JUNCTION BOX PROFILE VIEW		
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S-3.1	20	STRUCTURAL DETAILS - JUNCTION BOX FOUNDATION AND FACADE		
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S-3.3	22	STRUCTURAL DETAILS — INFILTRATION GALLERY		

DEFINITIONS

CITY OF SANTA CRUZ CONTACT: STEVE WOLFMAN, PE PH: (831) 420-5428 CONTACT: SCOTT RUBLE PH: (831) 420-5162

APPROVED BY:

PROJECT ENGINEER: ENVIRONMENTAL SCIENCE ASSOCIATES CONTACT: JEAN 0. TOILLIEZ, PE PH: (510) 267-7158



SAN LORENZO RIVER CULVERT





AS NOTED JANUARY 2021

G-1



LEGEND (CONT.)

24" STEEL PIPE

VALVES, CLEANOUT AND PIPELINE APPURTANCES

— (E) GRADE, SURVEYED BY IFLAND
(2018) AND ESA (2018)*
----------- (E) GRADE, SURVEYED BY ESA (2020)

(E) GRADE, EAST (BLUFF SIDE) TOP OF TRENCH (2018,2020)

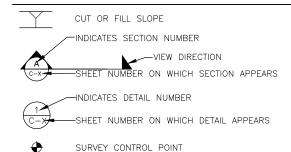
(E) GRADE, WEST (WATER SIDE) TOP OF TRENCH (2018,2020)

---- HARD BASEMENT LAYER, SURVEYED BY FOTH/CLE (2018)

---- HARD BASEMENT LAYER (NOT SURVEYED)

*IN 2018, AN ELEVATED SAND BERM (12+' NAVD88) COMPLETELY COVERED THE EXISTING TRENCH AFTER STA 6+50. THE 2016 LIDAR DATASET IS PROVIDED TO ESTIMATE TRENCH GEOMETRY AND ELEVATIONS DURING A LOW BERM PERIOD.

LEGEND (CONT.)



CORING AND BULK SAMPLE LOCATION

ABBREVIATIONS

APPROX	- APPROXIMATE
DG	 DESIGN GRADE
DIA	- DIAMETER
(E)	- EXISTING
EG	 EXISTING GRADE
EL	- ELEVATION
EOR	- ENGINEER OF RECORD
FOS	- FACTOR OF SAFETY
FT	- FEET
LF	 LINEAR FEET
MAX	- MAXIMUM
MIN	- MINIMUM
MISC	- MISCELLANEOUS
MSL	- MEAN SEA LEVEL
MHW	- MEAN HIGH WATER
MHHW	- MEAN HIGHER HIGH WATER
MLW	- MEAN LOW WATER

MLLW — MEAN LOWER LOW WATER
(N) — NEW

NAD83 — NORTH AMERICAN DATUM OF 1983

NAVD88 — NORTH AMERICAN VERTICAL DATUM OF 1988

NGVD29 — NATIONAL GEODETIC VERTICAL DATUM OF 1988

PIP - PROTECT IN PLACE

RCP - REINFORCED CONCRETE PIPE

SWL - SAFE WORKING LOAD

TBC - TO BE CONFIRMED

TYP - TYPICAL

VIF — VERIFY IN FIELD

TIDAL DATUMS

DATUM	ELEVATION (FT NAVD88)	ELEV. (FT CITY NGVD)
MHHW*	5.54	2.82
MHW	<u>4.85</u>	2.13
MSL*	2.99	0.27
MLW*	1.20	-1.52
MLLW*	0.10	-2.62

*WITH THE EXCEPTION OF MHW, WHICH WAS CALCULATED BY IFLAND SURVEY, ALL TIDAL DATUMS WERE INTERPOLATED USING AN INVERSE DISTANCE—WEIGHTED AVERAGE BETWEEN THE TIDAL DATUMS REPORTED AT PILLAR POINT, CA AND MONTEREY, CA TIDAL STATIONS.

NOTES

GENERAL

1. THESE NOTES HIGHLIGHT KEY REQUIREMENTS OF THE SPECIFICATIONS AND PROVIDE ADDITIONAL PROJECT INFORMATION. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS CONTAINED IN THE PLANS, SPECIFICATIONS, AND OTHER CONTRACT DOCUMENTS.

UTILITIES

- 2. IDENTIFY, LOCATE, AND PROTECT ALL EXISTING UTILITIES WITHIN THE LIMITS OF WORK AND ALONG ONSITE AND OFFSITE ACCESS ROUTES.
- IMITS OF WORK AND ALONG ONSITE AND OFFSITE ACCESS ROUTES.

 3. USE EXTREME CAUTION WHEN PERFORMING WORK IN THE VICINITY OF OVERHEAD POWERLINES. COMPLY WITH ALL SAFETY REGULATIONS AND REQUIREMENTS
- PROTECT ALL EXISTING UTILITIES WHETHER SHOWN OR NOT SHOWN ON THE DRAWINGS.
- 5. OBTAIN BEST AVAILABLE CURRENT INFORMATION ON LOCATION, IDENTIFICATION AND MARKING OF EXISTING UTILITIES, PIPING AND CONDUITS AND OTHER UNDERGROUND FACILITIES BEFORE BEGINNING ANY EXCAVATION.
- 6. NOTIFY UNDERGROUND SERVICE ALERT AND COORDINATE WITH UTILITIES AND PRIVATE LANDOWNERS IN ADVANCE OF BEGINNING WORK

SITE ACCESS AND WATER MANAGEMENT

- 7. THE CONTRACTOR IS ADVISED OF THE PUBLIC USE OF THE BEACH AND OTHER NEARBY AREAS WHICH AFFECT CONSTRUCTION ACCESS AND CONSTRUCTION, AND SHALL COMPLY WITH PROJECT PERMITS AND COORDINATE WITH THE CITY OF SANTA CRUZ AND ENDEAVOR TO LIMIT RESTRICTIONS ON PUBLIC ACCESS OUTSIDE THE LIMITS OF CONSTRUCTION.
- 8. THE PROJECT SITE IS WITHIN THE SAN LORENZO RIVER ESTUARY LAGOON, WHICH EXPERIENCES THE EFFECT OF BOTH OCEAN TIDES AND RIVER FLOWS. CONSTRUCTION ACCESS WILL REQUIRE FLOATING EQUIPMENT AND WORKING AROUND HIGH WATER LEVELS, INCLUDING WORK BELOW WATER. THE WATER LEVELS IN THE LAGOON VARY FROM OCEAN TIDES SEE SPECIFICATIONS APPENDIX C LAGOON WATER LEVELS. THE CITY OF SANTA CRUZ WILL PROVIDE LIMITED MANIPULATION OF LAGOON WATER LEVELS VIA GRADING OF THE SAND BEACH BERM IN ORDER TO FACILITATE CONSTRUCTION. SEE

TOPOGRAPHIC DATA

- ELEVATIONS ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88). HORIZONTAL CONTROL IS CALIFORNIA STATE PLANE COORDINATE SYSTEM, ZONE 3, NORTH AMERICAN DATUM (NAD 83, 1992)
- 10. ALL ÉLEVATIONS AND HORIZONTAL COORDINATES ARE IN FEET.
- 11. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
- 12. SEE DRAWING G-2 FOR TABLE OF TIDAL DATUMS AND CROSS-REFERENCE WITH CITY OF SANTA CRUZ NGVD ELEVATIONS. THE FOLLOWING ARE TARGETED ELEVATIONS: A. CITY NGVD = + 2.72 FEET NAVD.
 - B. REQUIRED WEIR CREST ELEVATION RANGE IS 5.72 TO 8.22 FEET NAVD (3.0 TO 5.5 FEET CITY NGVD)
 - C. REQUIRED PIPELINE UPSTREAM INVERT (BOTH 24" AND 8" DIAMETER STEEL PIPE) = 5.72 FEET NAVD (3.0 FEET CITY
 - D. REQUIRED PIPELINE DOWNSTREAM INVERT = 4.72 FEET NAVD (2.0 FEET CITY NGVD)
 - E. INFILTRATION GALLERY EMBEDDED 1.5 FEET BELOW EXISTING LAGOON BED, ESTIMATED ELEVATION -1.0 TO -2.0 FEET NAVD (-3.72 TO 4.72 FEET CITY NGVD): VERIFY IN FIELD ELEVATIONS AND LOCATIONS PRIOR TO CONSTRUCTION.
- 13. SURVEY CONTROL IS PROVIDED ON DRAWING G-3.
- 14. EXISTING TOPOGRAPHY AND SURVEY CONTROL PROVIDED BY IFLAND SURVEY, 5300 SOQUEL AVENUE, #101, SANTA CRUZ, CA 95062, TEL 831.426.7941. BOUNDARY AND TOPOGRAPHIC SURVEY FOR SLR HEAD DRIVEN CULVERT, 06/27/2018, G17058
- 15. SUPPLEMENTAL TOPOGRAPHIC DATA PROVIDED BY:
 - A. ADDITIONAL SURVEY AND SUBSURFACE EXPLORATION BY FOTH —CLE FOTH INFRASTRUCTURE & ENVIRONMENT, LLC 384 BEL MARIN KEYS BOULEVARD SUITE 140 NOVATO CA 94949 PHONE: (415) 884—8011. SAN LORENZO RIVER BATHYMETRIC AND DEPTH—TO—BASEMENT SONAR SURVEYS METHODS, PROCEDURES AND RESULTS AUGUST 25, 2018
 - B. ESA, 2020 EXISTING CULVERT DOWNSTREAM OF SEABRIGHT CAVE

16. ELEVATION CONTOURS ARE APPROXIMATE AND PROVIDED FOR GENERAL REFERENCE ONLY. THE ACCURACY OF THE ELEVATION CONTOURS IS LIMITED STANDING WATER, INSTRUMENT ACCURACY, NATURAL VARIABILITY AND CHANGES SINCE SURVEYS. THE CONTRACTOR SHALL PERFORM SITE INVESTIGATIONS, ESTIMATE QUANTITIES AND INCLUDE SUFFICIENT CONTINGENCY IN ITS BID TO COVER TOPOGRAPHIC AND BATHYMETRIC VARIABILITY.

GEOTECHNICAL

17. GEOTECHNICAL ENGINEERING PROVIDED HARO KASUNICH AND ASSOCIATES INC. 116 EAST LAKE AVENUE □ WATSONVILLE, CALIFORNIA 95076 (831) 722-4175. GEOTECHNICAL INVESTIGATION SAN LORENZO RIVER LAGOON MANAGEMENT PROGRAM — PHASE 2, 30 APRIL 2019, PROJECT NO. SC11525

ENVIRONMENTAL PROTECTION

- 18. CONSTRUCTION IS RESTRICTED TO WINDOWS OF TIME IDENTIFIED BY THE PROJECT PERMITS SEE SPECIFICATIONS.
- 19. THE CONTRACTOR IS ADVISED OF SENSITIVE HABITAT AND ENVIRONMENTAL RESTRICTIONS AFFECTING CONSTRUCTION, AND SHALL COMPLY WITH PROJECT PERMITS AND COORDINATE WITH THE CITY OF SANTA CRUZ AND ENDEAVOR TO PROTECT COASTAL RESOURCES FROM ADVERSE EFFECTS CAUSED BY CONSTRUCTION.
- 20. THE CITY OF SANTA CRUZ IS OBTAINING PERMITS FOR THE PROJECT.
 21 THE CONTRACTOR SHALL PREPARE AND IMPLEMENT A STORMWATER
- 21. THE CONTRACTOR SHALL PREPARE AND IMPLEMENT A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AS REQUIRED BY THE REGIONAL WATER RESOURCES CONTROL BOARD. INCORPORATE SEDIMENT CONTROL AND EROSION CONTROL BEST MANAGEMENT PRACTICES (BMPS) TO PREVENT EROSION, SEDIMENT AND HAZARDOUS MATERIALS RUNOFF FROM THE CONSTRUCTION SITE.
- 22. THE CONTRACTOR SHALL PROVIDE TEMPORARY EROSION AND SEDIMENT CONTROL THROUGHOUT CONSTRUCTION. LAGOON WATER MANAGEMENT WILL BE ACCOMPLISHED BY THE CITY OF SANTA CRUZ AS DESCRIBED IN SPECIFICATIONS.

EARTHWORK

- 23. CONSTRUCTION WILL REQUIRE EXCAVATION OF SEDIMENTARY ROCK ALONG SAN LORENZO POINT. THE CONTRACTOR SHALL ENDEAVOR TO MINIMIZE EXCAVATION BY CONSTRUCTION METHODS AND FABRICATION OF PIPE SEGMENTS THAT CONFORM TO AN EXISTING TRENCH TO THE EXTENT PRACTICABLE AS INDICATED IN THESE DRAWINGS. THE CONTRACTOR SHALL VERIFY IN FIELD THE EXISTING GEOMETRY, AND SUBMIT THE PROPOSED PIPE LINE ALIGNMENT, EXCAVATION LIMITS AND COMPUTED VOLUMES TO THE CITY FOR APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR LEGAL DISPOSAL OR BENEFICIAL REUSE OF ALL EXCAVATED SEDIMENT INCLUDING ANY SAMPLING, TESTING, DUMP FEES, TRANSPORT AND STAGING, EROSION CONTROL AND APPROVALS ASSOCIATED WITH OFF—SITE PLACEMENTS.
- 24. THE CONTRACTOR SHALL RESTRICT CONSTRUCTION MEANS AND METHODS TO AVOID DESTABILIZING THE SAN LORENZO POINT, PRIVATE PROPERTY AND RESIDENCES: SEE GEOTECHNICAL REPORT AND PROJECT PERMITS, AND MAINTAIN WORK WITHIN AND IN ACCORDANCE WITH EASEMENTS SECURED BY THE CITY OF SANTA CRUZ.

CITY OF SANTA CRUZ 809 CENTER STREET SANTA CRUZ, CA 95060

NOTES

AND

ABBREVIATIONS,

LEGEND,

RIV

LORENZO I CULVERT





	CALI
APPROVED	B. BATTALIO
DESIGNED	ESA

DRAWN H. SNOW
INCHARGE

J. TOILLIEZ

ALE AS NOTED

CALE AS NOTED EVISION

JANUARY 2021

G-2

NOTES:

- 1. DAYTIME REFUELING SHALL BE COORDINATED WITH THE CITY AND CITY LIFEGUARD.
- 2. BEACH STREET ACCESS IS LIMITED TO 06:00 AM TO 08:00 AM WEEKDAYS. SEE GENERAL NOTES.
- 3. CONTRACTOR SHALL WORK WITH THE CITY TO CONFIRM EXTENT, LOCATION, HOUR RESTRICTIONS, AND ACCESS TO REFUELING AND TEMPORARY NIGHT TIME STAGING AREAS.
- 4. NIGHT TIME STORAGE OF EQUIPMENT SHALL BE RESTRICTED TO EQUIPMENT REQUIRED TO INSTALL THE CULVERT, UNLESS DIRECTED OTHERWISE BY THE CITY OR THE EOR.
- 5. ACTUAL STAGING AREA (APPROX. 10,000 SQUARE FEET) WILL BE LOCATED WITHIN LOT 3 AREA. EXACT LOCATION, LAYOUT, AND EXTENT TO BE PROVIDED BY THE CITY.

SURVEY CONTROL POINT TABLE:

	NA	D 83 / NAV	D 88 POINT	TABLE	
POINT #	NAME	NORTHING	EASTING	NAVD88 ELEV	DESCRIPTION
91	SLR-M1	1814371.77	6119534.38	22.187	FD DISK SLR-M1
92	3B	1813611.29	6119518.91	15.267	CUT + ON CC
93	3A	1813495.37	6119544.65	19.119	SET DISC
94	2B	1812827.16	6119931.81	38.435	FD MAG NAIL TW
95	1A	1813610.86	6119809.60	9.931	SET DISC
96	1B	1813577.19	6119824.75	4.805	SET DISC
97	S-1237	1813539.01	6119545.39	26.815	FD DISK S1237
100	4	1813177.87	6119551.87	11.456	CENTER TARGET
102	2A	1812615.83	6119910.95	23.569	SET DISC



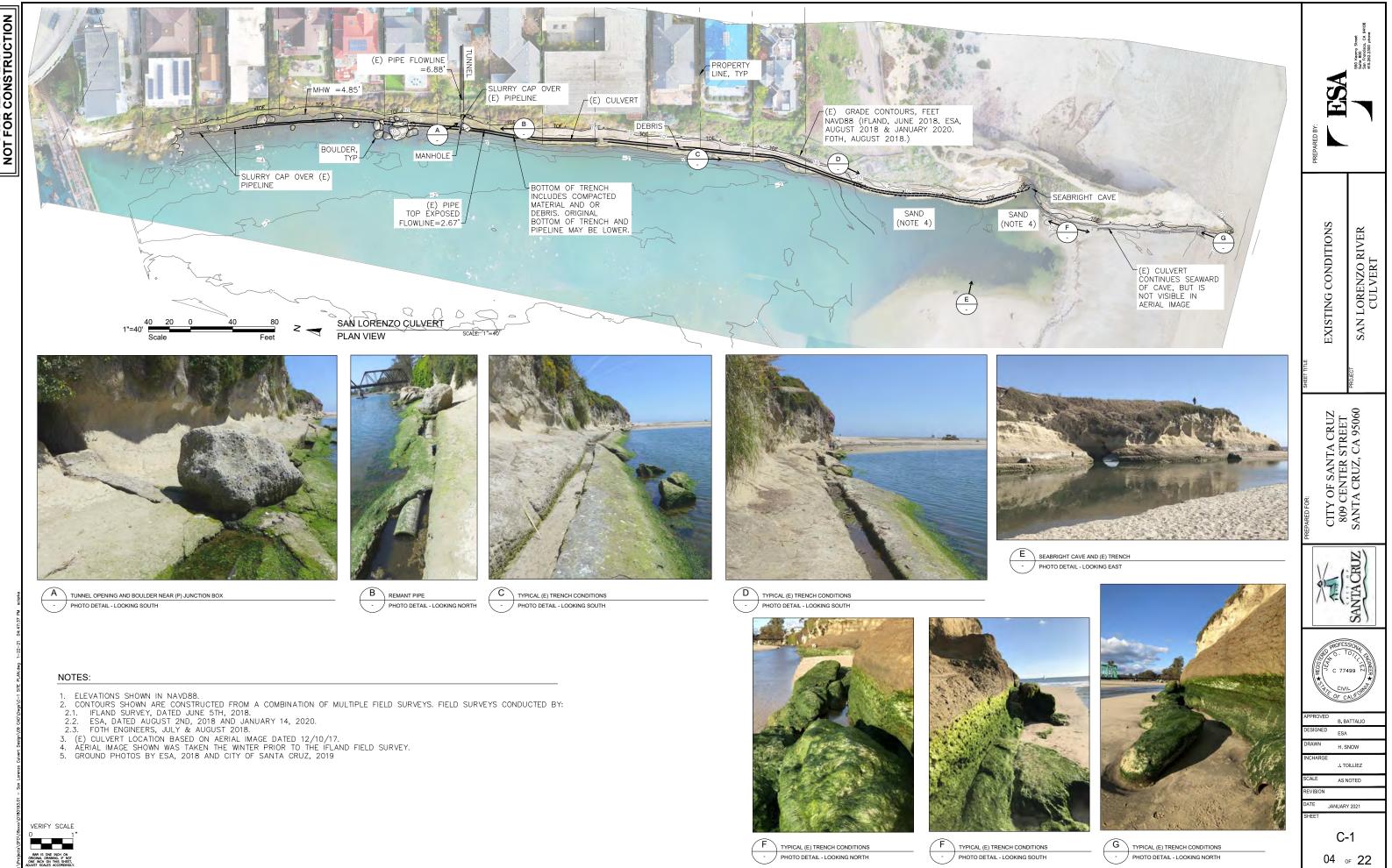
CONSTRUCTION ACCESS & STAGING AND SURVEY CONTROL SAN LORENZO RIVER CULVERT

CITY OF SANTA CRUZ 809 CENTER STREET SANTA CRUZ, CA 95060

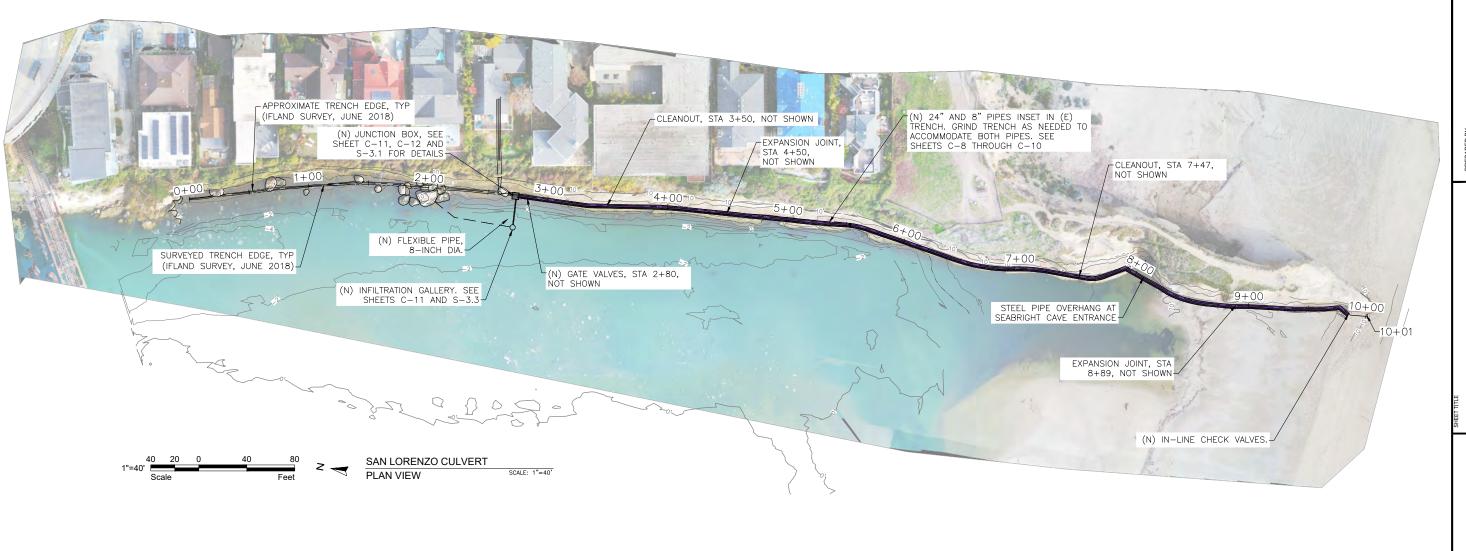


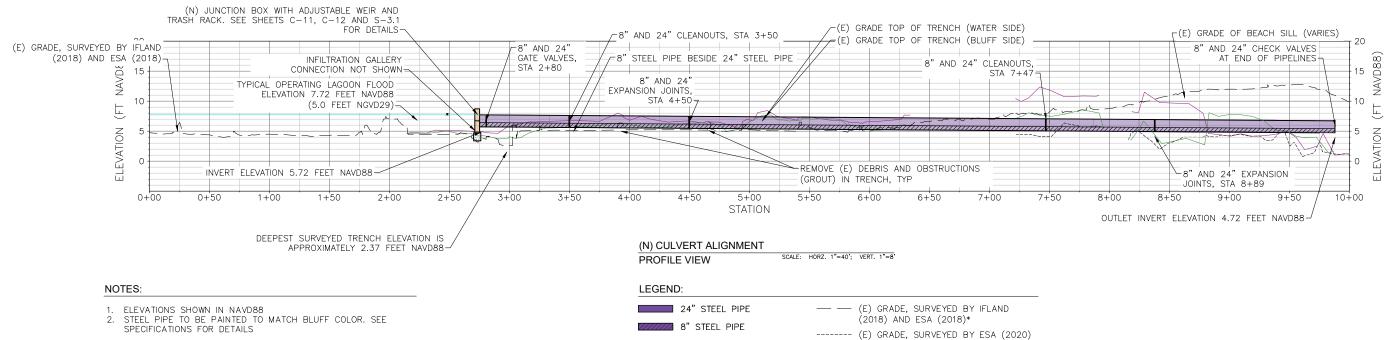
APPROVED	B. BATTALIO
DESIGNED	ESA
DRAWN	H. SNOW
INCHARGE	J. TOILLIEZ
SCALE	AS NOTED
REVISION	
DATE	IANUARY 2021

G-3



VERIFY SCALE





VALVES, CLEANOUT AND PIP

(E) GRADE, EAST (BLUFF SIDE) TOP OF TRENCH (2018,2020)

*IN 2018, AN ELEVATED SAND BERM (12+' NAVD88) COMPLETELY COVERED THE EXISTING TRENCH AFTER STA 6+50.

— (E) GRADE, WEST (WATER SIDE) TOP OF TRENCH (2018,2020)



SITE PLAN & PROFILE SAN LORENZO RIVER CULVERT

CITY OF SANTA CRUZ 809 CENTER STREET SANTA CRUZ, CA 95060





B. BATTALIO ESA H. SNOW

J. TOILLIEZ

AS NOTED

JANUARY 2021

C-2

(N) CULVERT LAYOUT

CURVE AND LINE TABLE

NUMBER	BEGIN STATION	BEGIN EASTING	BEGIN NORTHING	LINE BEARING	LINE DISTANCE	CURVE DISTANCE	CURVE RADIUS	DELTA ANGLE
L1	2+75	6119873.9	1813308.5	S1° 46' 48"E	58.75			
L2	3+33.75	6119875.7	1813249.8	S8° 27' 02"E	48.10			
L3	3+81.85	6119882.8	1813202.2	S7° 26' 03"E	15.39			
L4	3+97.24	6119884.8	1813187.0	S5° 24' 03"E	15.39	30.8	433.7	4° 03' 59"
L5	4+12.63	6119886.2	1813171.7	S3° 49' 50"E	59.66			
L6	4+72.29	6119890.2	1813112.1	S4° 11' 58"E	13.61			
L7	4+85.90	6119891.2	1813098.6	S4° 09' 11"E	13.61	27.2	16748.3	0° 05' 35"
L8	4+99.51	6119892.2	1813085.0	S3° 28' 27"E	23.47		650.0	4° 08' 18"
L9	5+22.98	6119893.6	1813061.6	S5° 32' 36"E	23.47	47.0		
L10	5+46.46	6119895.9	1813038.2	S3° 10' 39"E	11.60		71.5	18° 36' 41"
L11	5+58.06	6119896.5	1813026.6	S6° 07' 41"W	11.60	23.2		
L12	5+69.65	6119895.3	1813015.1	S9° 07' 34"W	53.17			
L13	6+22.83	6119886.9	1812962.6	S9° 44' 13"W	21.43			
L14	6+44.25	6119883.2	1812941.5	S7° 17' 24"W	12.33			
L15	6+56.58	6119881.7	1812929.2	S2° 23' 47"W	12.33	24.7	144.4	9° 47' 15"
L16	6+68.91	6119881.2	1812916.9	S2° 52' 12"E	13.27		134.9	11° 16' 40"
L17	6+82.18	6119881.8	1812903.7	S8° 30' 32"E	13.27	26.5		
L18	6+95.45	6119883.8	1812890.5	S8° 41' 07"E	13.34		144.7	10° 34' 20"
L19	7+08.79	6119885.8	1812877.4	S3° 23' 57"E	13.34	26.7		
L20	7+22.13	6119886.6	1812864.0	S0° 31' 22"W	32.30			
L21	7+54.43	6119886.3	1812831.7	S5° 58' 27"E	8.65		28.1	35° 22' 59"
L22	7+63.08	6119887.2	1812823.1	S23° 39' 57"E	8.65	17.4		
L23	7+71.74	6119890.7	1812815.2	S31° 19' 25"E	18.11			
L24	7+89.85	6119900.1	1812799.7	S19° 23' 13"W	35.00			
L25	8+24.85	6119888.5	1812766.7	S25° 10' 09"W	3.76		70 -	00 001 0
L26	8+28.61	6119886.9	1812763.3	S22° 07' 04"W	3.76	7.5	70.7	6° 06' 09'
L27	8+32.37	6119885.5	1812759.8	S11° 27' 41"W	15.14	00.0	0.3 89.4	19° 24' 58"
L28	8+47.51	6119882.4	1812745.0	S1° 45' 12"W	15.14	30.3		
L29	8+62.64	6119882.0	1812729.9	S4° 01' 53"E	22.43			
L30	8+85.07	6119883.6	1812707.5	S9° 11' 29"E	15.50			
L31	9+00.57	6119886.0	1812692.2	S6° 30' 36"E	37.56			
L32	9+38.13	6119890.3	1812654.9	S9° 50' 14"E	24.56			
L33	9+62.69	6119894.5	1812630.7	S14° 58' 52"E	11.60			
C1	9+74.29	6119897.5	1812619.5			2.99	4.26	40° 12' 16
L34	9+77.28	6119897.2	1812616.6	S30° 02' 17"W	7.99			

VERIFY SCALE

O 1"

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET.

DUIST SCALES ACCORDINGLY.

ESA Series

CULVERT LAYOUT
SAN LORENZO RIVER
CULVERT

CITY OF SANTA CRUZ 809 CENTER STREET SANTA CRUZ, CA 95060





APPROVED	B. BATTALIO
DESIGNED	ESA
DDAMAI	

DRAWN S. SMITH

RGE J. TOILLIEZ

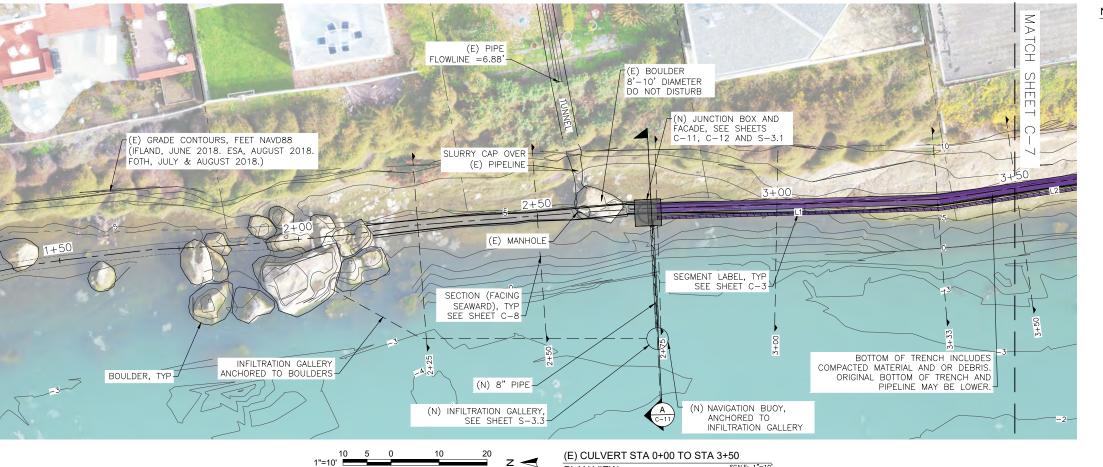
ALE AS NOTED

JANUARY 2021 ET

C-3 06 of 22

1+50

2+00



PLAN VIEW

NOTES:

- ELEVATIONS PROVIDED IN NAVD88.
- CONTOURS SHOWN ARE CONSTRUCTED FROM A COMBINATION OF
- MULTIPLE FIELD SURVEYS. FIELD SURVEYS CONDUCTED BY:
 1. IFLAND SURVEY, DATED JUNE 5TH, 2018.
 2. ESA, DATED AUGUST 2ND, 2018 & JANUARY 14TH, 2020
- FOTH ENGINEERS, JULY & AUGUST 2018.
- (E) CULVERT LOCATION BASED ON AERIAL IMAGE DATED 12/10/17.
- AERIAL IMAGE SHOWN WAS TAKEN THE WINTER PRIOR TO THE 2018 IFLAND FIELD SURVEY.
 SEE SHEET S-2 FOR PIPELINE FOUNDATION PLAN.

DETAIL PLAN & PROFIL) STA 1+50 TO 3+50 SAN LORENZO RIVER CULVERT

CITY OF SANTA CRUZ 809 CENTER STREET SANTA CRUZ, CA 95060

SANTACRUZ



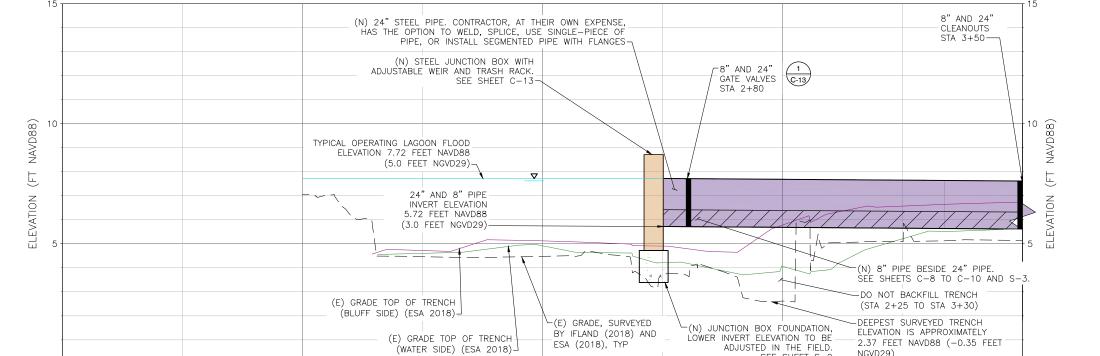
ESA H. SNOW

J. TOILLIEZ

AS NOTED

JANUARY 2021

07 or 22



2+50

STATION

(E) CULVERT STA 0+00 TO STA 3+50

PROFILE VIEW

LEGEND:

NGVD29)

3+50

SEE SHEET S-2

3+00

HORZ: 1"=10' VERT: 1" = 2'

24" STEEL PIPE

8" STEEL PIPE

VALVES, CLEANOUT AND PIPELINE APPURTANCES

(E) GRADE, SURVEYED BY IFLAND

(2018) AND ESA (2018)*

---- (E) GRADE, SURVEYED BY ESA (2020)

(E) GRADE, EAST (BLUFF SIDE) TOP OF TRENCH (2018,2020)

(E) GRADE, WEST (WATER SIDE) TOP OF TRENCH (2018,2020)

*IN 2018, AN ELEVATED SAND BERM (12+' NAVD88) COMPLETELY COVERED THE EXISTING TRENCH AFTER STA 6+50.

CITY OF SANTA CRUZ 809 CENTER STREET SANTA CRUZ, CA 95060



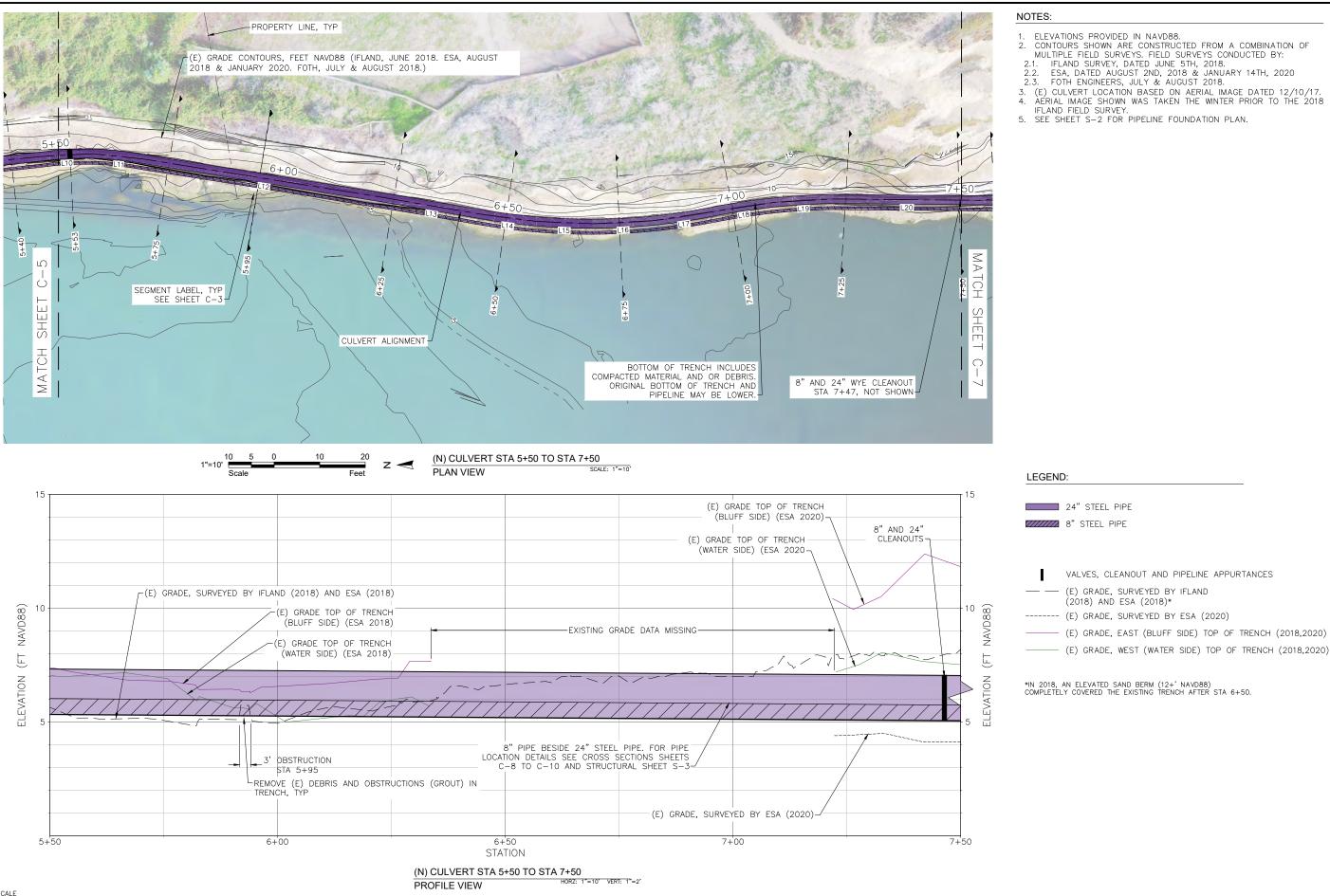


H. SNOW

J. TOILLIEZ

AS NOTED

JANUARY 2021



CONTOURS SHOWN ARE CONSTRUCTED FROM A COMBINATION OF

DETAIL PLAN & PROFIL) STA 5+50 TO 7+50 SAN LORENZO RIVER CULVERT

CITY OF SANTA CRUZ 809 CENTER STREET SANTA CRUZ, CA 95060

SANTACRUZ



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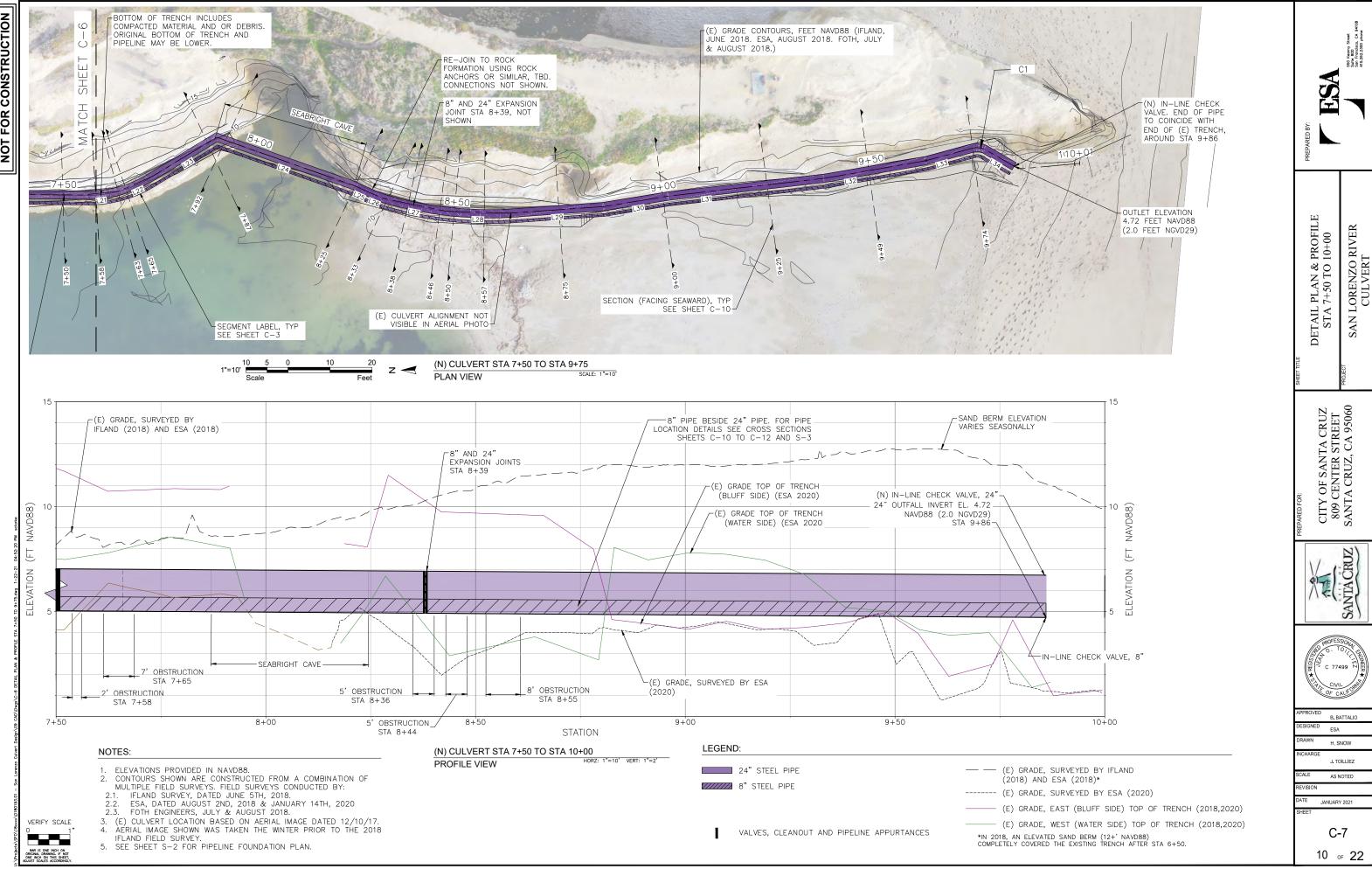
H. SNOW

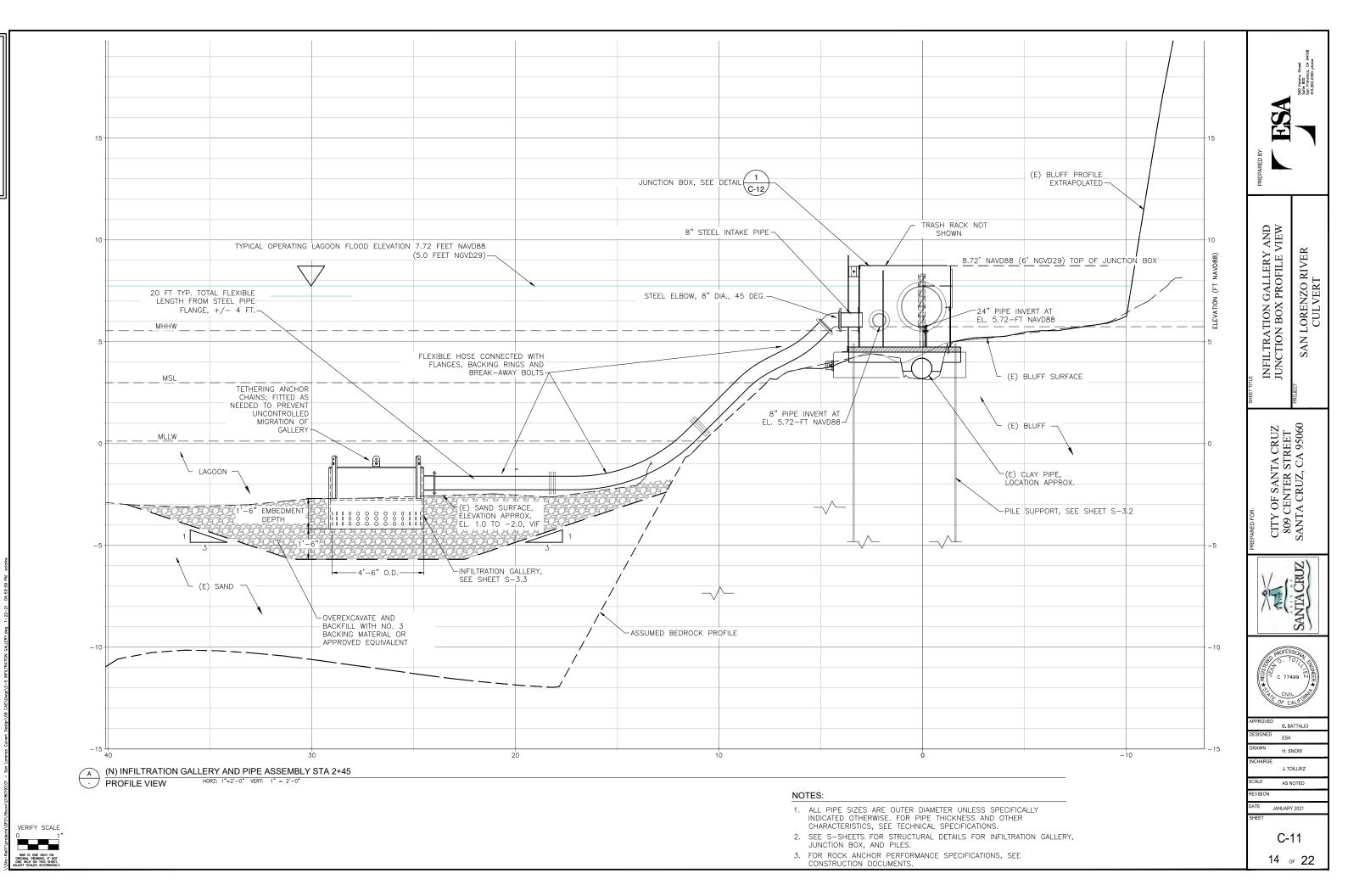
J. TOILLIEZ

AS NOTED

JANUARY 2021

C-6







San Lorenzo River Culvert Project (Corps File No. SPN-2014-00434)