CITY OF SANTA CRUZ

PUBLIC WORKS DEPARTMENT

RAIL TRAIL SEGMENT 7 PHASE 2

California Street to Pacific Avenue

BID SET CONSTRUCTION DOCUMENTS

PROJECT DESCRIPTION

CONSTRUCTION OF A MULTI-USE TRAIL LOCATED ALONG THE SANTA CRUZ BRANCH LINE RAILROAD BETWEEN LA BARRANCA PARK AT CALIFORNIA STREET AND THE ROUNDABOUT AT PACIFIC AVENUE.

PROJECT DIRECTORY

LEAD AGENCY
CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 CENTER ST, ROOM 201 PHONE: (831) 420 5160
SANTA CRUZ, CA 95060 FAX: (831) 420-5161
CONTACT: NATHAN NGUYEN

OWNER
SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION (SCCRTC)
1523 PACIFIC AVE PHONE: (831) 460-3200
SANTA CRUZ, CA 95060
CONTACT: GRACE BLAKESBEE

LANDSCAPE ARCHITECT
RRM DESIGN GROUP
32332 CAMINO CAPISTRANO, SUITE 105 PHONE: (949) 361-7950
SAN JUAN CAPISTRANO, CA 92675
CONTACT: MIKE SHERROD

CIVIL ENGINEER
RRM DESIGN GROUP
325 DAVIS STREET PHONE: (510) 751-4910
SAN LEANDRO, CA 94577
CONTACT: DARREN CHOY

ELECTRICAL ENGINEER
THOMA ELECTRIC
3562 EMPLEO ST. PHONE: (805) 548-2136
SAN LUIS OBISPO, CA
CONTACT: CHRIS PATCHIN

GEOTECHNICAL ENGINEER
PACIFIC CREST ENGINEERING
444 AIRPORT BLVD PHONE: (831) 722-9446
WATSONVILLE, CA 95076
CONTACT: ELIZABETH MITCHELL

STRUCTURAL ENGINEER
MESITI-MILLER ENGINEERING
224 WALNUT ST, SUITE B PHONE: (831) 426-3186
SANTA CRUZ, CA 95060
CONTACT: DALE HENDSBEE

URBAN FORESTER/ARBORIST
CITY OF SANTA CRUZ PHONE: (831) 420-5246
323 CHURCH ST
SANTA CRUZ, CA 95060
CONTACT: LESLIE KEEDY

VICINITY MAP

NOT TO SCALE

BID ALTERNATES

ALT #	TITLE	DESCRIPTION	DETAIL/SHEET REFERENCE
A	PRECAST CONCRETE LAGGING	REPLACE TIMBER LAGGING WITH PRECAST CONCRETE LAGGING FOR RETAINING WALLS DESIGNATED TYPE 1, TYPE 2, AND TYPE 3 (SOLDIER PILE RETAINING WALLS AND SOLDIER PILE WITH GROUND ANCHOR RETAINING WALLS).	WD-1.03 BID ALT DETAIL WD-1.00 - 1.02 WP-2.01 - 2.05

APPROVED BY:

R.C.E. NO. 079670
ASSISTANT DIRECTOR / CITY ENGINEER
CITY OF SANTA CRUZ

SHEET INDEX

1	TS-1.01	TITLE SHEET
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19	EC-2.09	TEMPORARY EROSION CONTROL DETAILS
20-27	CP-2.01 - 2.08	CONSTRUCTION KEYNOTE PLANS
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84	EP-1.02	ELECTRICAL SINGLE LINE DIAGRAM, DETAILS & PANEL SCHEDULE
85-92	EP-2.01 - 2.08	TRAIL LIGHTING SYSTEM
93	ED-3.01	FIXTURE SCHEDULE & ELECTRICAL DETAILS
94	ED-3.02	ELECTRICAL DETAILS

SHEET INDEX - BID ALTERNATE

95	WD-1.03	RETAINING DETAIL SHEET (BID ALT A)
96	CD-1.08	CONSTRUCTION DETAILS (BID ALT A)

BASIS OF BEARING & BENCH MARK

THE BASIS OF BEARINGS FOR THIS SURVEY IS BASED UPON THE CITY OF SANTA CRUZ GPS SURVEY CONTROL NETWORK, RECORDED IN BOOK 92 OF MAPS, AT PAGE 30, SANTA CRUZ COUNTY RECORDS, BETWEEN STATION SC-4 AND STATION DT-11 HAVING A GRID BEARING OF N60° 06' 08"E.

BENCH MARK
THE VERTICAL CONTROL FOR THIS PROJECT WAS ESTABLISHED FROM NGS BM PID GU1954 HAVING A PUBLISHED NAVD88 ELEVATION OF 57.50 FEET.

FEDERAL PROJECT NO.:HPPLU-5025(061)
STATE PROJECT NO.: 05150000041-N
CITY PROJECT NO.: c401413

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REFERENCES	DATE 1/28/22	SCALE AS SHOWN	
FIELD BOOK:	DRAWN KS/AV	TS-1.01	
DRAWING #:	DESIGN MS/DC	VAULT NO. 7079B	
	CHECKED MS/DC	SHEET 1 OF 96	

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

\\rrmdesign.com\rrm\Projects\Santa Cruz\SCCRTC - Rail Trail Segment 7 Phase 2\Drawings\Construction Documents\Bid Set\TS-1.01.dwg, 1/28/2022 7:49:39 AM, Mike Sherrod, Adobe PDF

CONSTRUCTION NOTES

1. Construction (including but not limited to construction activities, and materials and/or equipment storage) is prohibited outside of the defined construction, staging, and storage areas.

2. The construction site shall maintain good construction site housekeeping controls and procedures (e.g., clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain (including covering exposed piles of soil and wastes); dispose of all wastes properly, place trash receptacles on site for that purpose, and cover open trash receptacles during wet weather; remove all construction debris from the site; etc.).

3. All erosion and sediment controls shall be in place prior to the commencement of construction as well as at the end of each workday.

TREE NOTES

City Urban Forester/Arborist contact is Leslie Keedy (831) 420-5246

1. EXISTING TREE NOTES
Existing trees over 3-inches in diameter within the Limit of Work were field surveyed and numbered from 5901 to 5997. The construction documents employ the following tree number coding system:

- #59XX denotes an existing tree with a numbered metal forestry tag affixed to its trunk.
- (#59XX) denotes an existing tree with an assigned number, but with no metal forestry tag affixed to its trunk.
- #59XX* or (#59XX)* denotes an existing tree that qualifies as a Heritage Tree as defined by the City of Santa Cruz.

TREE ACTION SCHEDULE

TREE #	ACTION	TREE #	ACTION	TREE #	ACTION
5901*	PROTECT IN PLACE	5921*	REMOVE	5941	REMOVE
5902	REMOVE	5922*	PROTECT IN PLACE	5942	REMOVE
5903*	PROTECT IN PLACE	5923	PROTECT IN PLACE	5943	REMOVE
5904*	REMOVE	5924	REMOVE	5944*	REMOVE
5905	REMOVE	5925	PROTECT IN PLACE	5945	TAG NOT USED
5906*	REMOVE	5926	REMOVE	5946	REMOVE
5907	REMOVE	5927*	PROTECT IN PLACE	5947	REMOVE
5908*	REMOVE	5928*	REMOVE	5948	REMOVE
(5909)*	PROTECT IN PLACE	5929*	REMOVE	5949	REMOVE
(5910)*	PROTECT IN PLACE	5930*	REMOVE	5950	REMOVE
(5911)*	PROTECT IN PLACE	5931	REMOVE	5951	REMOVE
(5912)	REMOVE	5932	REMOVE	5952	REMOVE
(5913)	REMOVE	5933*	REMOVE	5953	REMOVE
(5914)*	REMOVE	5934*	REMOVE	5993*	PROTECT IN PLACE
5915	REMOVE	5935	REMOVE	5994*	PROTECT IN PLACE
(5916)	TAG NOT USED	5936	REMOVE	5995*	PROTECT IN PLACE
5917*	REMOVE	5937*	REMOVE	5996*	PROTECT IN PLACE
5918*	REMOVE	5938	REMOVE	5997*	TBD IN FIELD WITH URBAN FORESTER
5919*	REMOVE	5939	REMOVE		
5920	REMOVE DEAD TREE	5940	REMOVE		

TREE NUMBERS 5954-5992 ARE NOT INCLUDED IN THIS PROJECT

2. Place temporary high-visibility fence at the limits of disturbance for the project construction, preferable at tree drip lines. Work within the construction fencing must be authorized.

3. Remove temporary high-visibility tree protection fencing after all construction activities are complete, and written direction to remove fencing is provided by the engineer.

4. No trees, other than those indicated on the drawings, shall be removed without prior authorization.

5. No materials or equipment shall be stored within the dripline of any tree.

6. All heritage trees protected in place to receive ivy removal. Sever ivy stems at base of tree.

7. Root pruning for infrastructure construction:
7.1. Roots greater than 2" diameter to be professionally pruned under supervision of the City's Urban Forester/Arborist.
7.2. Roots less than 2" can be cut cleanly by Contractor.
7.3. Any pruned roots shall be draped and covered with burlap and kept moist.

GENERAL NOTES

1. Prior to start of construction and as necessary throughout the progress of the Work, contact the Underground Service Alert with minimum 48 hours notice, and have all underground utilities and facilities marked in the field. Also, prior to excavation, the contractor shall verify, by pot holing, the types, locations, sizes and/or depth of existing utilities within the work area. In the event existing utilities are discovered to be in conflict with the work required of the Contract Documents, immediately notify the Authorized Representative and the utility owner in the most expeditious means available and later confirm in writing. The Contractor shall determine exact locations of all utilities and facilities implement appropriate and effective measures to protect them.

2. Protect all existing monuments and other survey markers on the project site. Record the location of all monuments and other survey markers prior to the start of work. All such monuments or markers disturbed or destroyed during construction shall be replaced by a licensed surveyor at the Contractor's expense.

3. Removal and replacement limits of any existing feature shown on the Drawings are for general reference only. Actual limits shall be as required by the new work and shall be verified in the field with the City.

4. Contractor shall coordinate directly with Santa Cruz County Regional Transportation Commission (SCCRTC) and Progressive Rail prior to performing any work within the rail corridor.
SCCRTC
Contact: Riley Gerbrandt, PE, QSD/QSP — Phone: (831) 460-3215
Associate Transportation Engineer — Email: rgerbrandt@sccrtc.org

St. Paul & Pacific Railway, LLC (a subsidiary of Progressive Rail, Inc.)
Contact: Brenda K. Rivera, — Phone: (952) 495-0579
Director, Contract Compliance — Email: brivera@progressiverail.com

5. Existing utility data is depicted based on varying combinations of surface and subsurface investigations performed for this project, equivalent to level B and level C as defined in CI/ASCE 38-02 - Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data.

AGENCY/UTILITY CONTACTS

UTILITY	UTILITY COMPANY	CONTACT	EMAIL	PHONE
STORM WATER	SANTA CRUZ MUNICIPAL UTILITIES	RACHEL FATOOHI	RACHEL.FATOOHI@SANTACRUZCOUNTY.US	(831) 454-2815
SEWER/STORMDRAIN OPERATIONS	CITY OF SANTA CRUZ WASTEWATER MAINS DEPARTMENT	STEVE WOLFMAN	SWOLFMAN@CITYOFSANTACRUZ.COM	(831) 420-5428
WATER	CITY OF SANTA CRUZ WATER DEPARTMENT	JASON SEGAL	JSEGAL@CITYOFSANTACRUZ.COM	(831) 420-5173
SANITARY	SANTA CRUZ MUNICIPAL UTILITIES	ASHLEIGH TRUJILLO	ASHLEIGH.TRUJILLO@SANTACRUZCOUNTY.US	(831) 454-2384
GAS	PG&E GAS DIVISION	ROMANA MARTIN	R4M4@PGE.COM	(408) 510-1660
ELECTRIC	PG&E ELECTRICAL DIVISION	MATT BARTLETT	MFBV@PGE.COM	(831) 713-6019
CABLE/INTERNET/ TELECOMMUNICATIONS	COMCAST	MARK GIBLIN	MARK_GIBLIN@CABLE.COMCAST.COM	(831) 440-4023
CABLE/INTERNET/ TELECOMMUNICATIONS	AT&T	ROBIN BARNETT DEALVAREZ	RB6978@ATT.COM	(831) 728-5032
CABLE/INTERNET/ TELECOMMUNICATIONS	SPECTRUM (CHARTER COMMUNICATIONS) CONSTRUCTION DIVISION			(833) 487-4772
CABLE/INTERNET/ TELECOMMUNICATIONS	SONIC		SUPPORT@SONIC.COM	
EMERGENCY CONTACTS	EMERGENCY NUMBER	DISPATCH		
POLICE DEPARTMENT	CALL 911	(831) 471-1130		
FIRE DEPARTMENT	CALL 911	(831) 471-1170		

ABBREVIATIONS

AB	AGGREGATE BASE OR ANCHOR BOLT
ABV	ABOVE
AC	ASPHALTIC CONCRETE
ADJ	ADJACENT
ALT	ALTERNATE
APPROX/APPX	APPROXIMATE
BC/BOC	BACK OF CURB
BEL	BELOW
BF / BOF	BOTTOM OF FOOTING
BLDG	BUILDING
BLK	BLOCK
BOT	BOTTOM
BOW	BACK OF WALK
BR	BOTTOM OF RAMP
CAB	CITY AS-BUILT
CB	CATCH BASIN
CF	CUBIC FOOT
CIP	CAST IN PLACE
C/L	CENTERLINE
CL	CENTERLINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS, CONTINUE
CP	CENTER POINT
CR	CURB RETURN
CTR	CENTER
DET	DETAIL
DI	DRAIN INLET
DIA	DIAMETER
DIM	DIMENSION
DS	DOWN SPOUT
DWG	DRAWING
EA	EACH
ELECT	ELECTRICAL
ELEV	ELEVATION
ENCL	ENCLOSURE
EP	EDGE OF PAVEMENT
EQ	EQUAL
EX	EXISTING
EXIST	EXISTING
(E)	EXISTING
FC / FOC	FRONT OF CURB
FFE	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FL	FLOWLINE
FOW	FACE OF WALL
FND	FOUNDATION
FS	FINISHED SURFACE OF PAVING/SURFACING
FTG	FOOTING
FUT	FUTURE
FW	FIRE WATER
GA	GAUGE
GB	GRADE BREAK
GALV	GALVANIZED
GR	GRATE
HC	HANDICAPPED
HOR, HORZ	HORIZONTAL
HP	HIGH POINT
HT	HEIGHT
ID	INSIDE DIAMETER
INV	INVERT
IR, IRR, IRRG	IRRIGATION
L	LENGTH
LB	LAG BOLT
LOC	LOCATION, LOCATE
LIP	LIP OF GUTTER PAN
LF	LINEAR FEET
LP	LOW POINT
MAS	MASONRY
MAX	MAXIMUM
MFR	MANUFACTURE(R)
MIN	MINIMUM
MISC	MISCELLANEOUS
ML	MAINLINE
(N)	NEW
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPT	OPTIONAL
PA	PLANTING AREA
PC	POINT OF CURVE
PERF	PERFORATE (D)
PERP	PERPENDICULAR
PL	PROPERTY LINE
POB	POINT OF BEGINNING
POC	POINT OF CONNECTION
PRC	POINT OF REVERSE CURVE
PROP	PROPOSED
PT	POINT, POINT OF TANGENCY
PVMT/PVNG	PAVEMENT OR PAVING
R, RAD	RADIUS
REBAR	REINFORCING BAR
REF	REFERENCE
REM	REMOVE
REQ'D	REQUIRED
REV	REVISION(S), REVISED
ROW	RIGHT OF WAY
S	SLOPE
SCH	SCHEDULE
SD	STORM DRAIN
SF	SQUARE FEET
SHT	SHEET
SI	SUBTRONIC INVESTIGATION
SIM	SIMILAR
SL	SLOPE
SPEC	SPECIFICATION(S)
SQ	SQUARE
SS	SANITARY SEWER
S/S	STAINLESS STEEL
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
STRUC	STRUCTURE/ STRUCTURAL
SURF	SURFACE
SWCL	SIDEWALK CENTERLINE
SYS	SYSTEM
TBC	TOP BACK OF CURB
TC	TOP OF CURB
TCE	TEMPORARY CONSTRUCTION EASEMENT
TF / TOF	TOP OF FOOTING
TR	TOP OF RAMP
TW	TOP OF WALL
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VAR	VARIES
VERT	VERTICAL
W	WATER
W/	WITH
W/O	WITHOUT
WL	WATERLINE
@	AT
℄	CENTERLINE

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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REGISTERED LANDSCAPE ARCHITECT
MICHAEL S. SHERROD NO. 5250
11/30/23
1/28/22
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL

GENERAL NOTES & ABBREVIATIONS

REFERENCES
FIELD BOOK:

DRAWING #:
TS-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
RS-1.01
VAULT NO.
7079B

DIG ALERT
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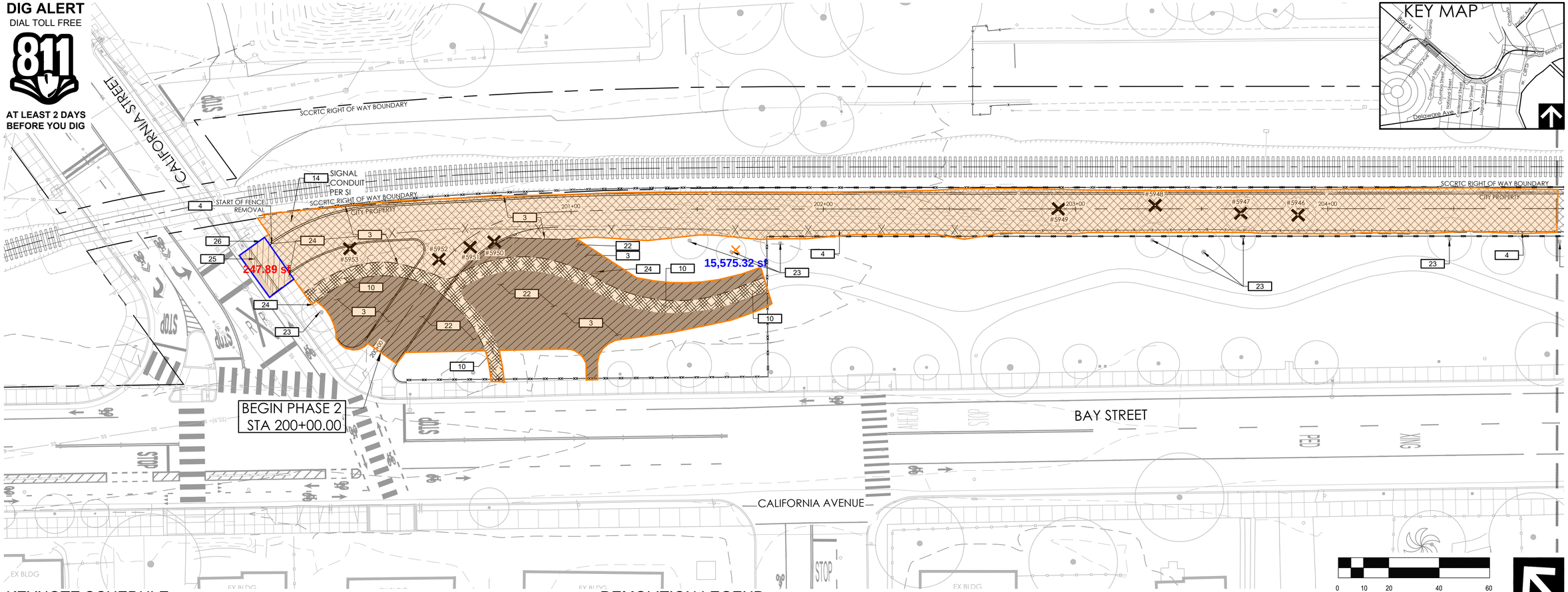

KEYNOTE SCHEDULE

SYMBOL	DESCRIPTION
1	PROTECT IN PLACE
2	SALVAGE AND RESET PER CP SHEETS
3	CLEAR AND GRUB
4	REMOVE FENCE
5	REMOVE EXISTING STRIPING
6	PROTECT RAILROAD SIGNAL IN PLACE
7	PROTECT FENCE IN PLACE
8	REMOVE LANE SEPARATION SYSTEM
9	SALVAGE AND RETURN TO OWNER
10	REMOVE EXISTING DECOMPOSED GRANITE PATH
11	PROTECT STORM DRAIN PIPE IN PLACE
12	PROTECT GAS LINE IN PLACE
13	PROTECT WATER LINE IN PLACE
14	PROTECT UTILITY IN PLACE
15	ADJUST MANHOLE RIM TO FINISH GRADE
16	CONTRACTOR TO VERIFY UNKNOWN UTILITY
17	PROTECT UTILITY VAULT IN PLACE
18	PROTECT EXISTING LIGHT IN PLACE
19	PROTECT EXISTING POSTS IN PLACE
20	CONTRACTOR TO REMOVE EXISTING UTILITY AND ASSOCIATED LOCATION POSTS
21	PROTECT SEWER LATERALS IN PLACE
22	REMOVE IRRIGATION SYSTEM
23	PROTECT TREE IN PLACE
24	PROTECT SIGN IN PLACE
25	REMOVE CONCRETE CURB & GUTTER AND BASE
26	REMOVE CONCRETE SIDEWALK AND BASE
27	URBAN FORESTER AND CONTRACTOR TO DETERMINE FEASIBILITY OF PROTECTING TREE IN PLACE IN FIELD
28	PROTECT IN PLACE. IF NECESSARY FOR GRADING, HAND PRUNE ROOTS UNDER SUPERVISION OF URBAN FORESTER
29	REMOVE EXISTING STORM DRAIN LINE.
30	CONTRACTOR TO LOCATE IN FIELD. PROTECT IN PLACE.
31	RELOCATED BY OTHERS
32	CONTRACTOR TO REMOVE CONFLICTING PORTIONS NEEDED TO INSTALL PROPOSED STORM DRAIN AND WALL

DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
(73)	EXISTING MAJOR CONTOUR
(73)	EXISTING MINOR CONTOUR
	EXISTING TREE
	PROPOSED TRAIL STATION LINE
	REMOVE EXISTING DECOMPOSED GRANITE PATH

SYMBOL	DESCRIPTION
	EXISTING FENCE
	REMOVE TREE
	CLEAR AND GRUB
	LIMIT OF RAILROAD BALLAST
	CLEAR & GRUB & REMOVE IRRIGATION
	REMOVE CONCRETE SIDEWALK & BASE
	REMOVE HMA PAVING & BASE
	REMOVE CONCRETE CURB & GUTTER & BASE
	SAWCUT PAVEMENT

DEMOLITION NOTES

1. ALL EXISTING UTILITIES WERE PLOTTED FROM RECORD INFORMATION AND FIELD TOPOGRAPHY. ACTUAL LOCATIONS MAY VARY AND ADDITIONAL CROSSINGS MAY EXIST IN THE FIELD. IT IS IMPERATIVE THAT "U.S.A. LOCATING SERVICES" LOCATE AND MARK EXISTING UTILITIES PRIOR TO THE START OF EXCAVATION
2. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN EXPOSING EXISTING UTILITY CROSSINGS AND SERVICES
3. ANY DAMAGE TO EXISTING UTILITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR
4. CONTRACTOR SHALL ENSURE IRRIGATION OUTSIDE OF REMOVAL AREA REMAINS OPERATIONAL.
5. SEE RS-1.01 FOR TREE ACTION SCHEDULE.

REGISTERED PROFESSIONAL ENGINEER
DOUGLAS M. G. CROW
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
33333 Camino Capistrano, Ste. 355
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
DEMOLITION PLAN

REFERENCES
FIELD BOOK:
DRAWING #: DM-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
DM-2.01
VAULT NO. 7079B
SHEET 3 OF 96

MATCHLINE, SEE SHEET DM-2.02

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: DEMOLITION PLAN, Images Planned.jpg: CA Coastal Trail Length by Segment-Alameda2CCPlanned-20172.png: BTC logo ● name 2013.jpg: SIGNS_CENTER_16x12 blank.jpg: , Prefix: 0193-01-HTR_PH2.dwg, Stamp_MostRecent.dwg, 0193-01-XB.dwg, 0193-01-XC.dwg, 0193-01-XD.dwg, 0193-01-XE.dwg, 0193-01-XF.dwg, SANTA CRUZ(ORIGINAL 8 1/2 11).ctb, By: Xrefs Attached: 0193-01-XC.dwg, 0193-01-XE.dwg, 0193-01-XF.dwg, Plotted: Jan 28, 2022 - 5:39pm
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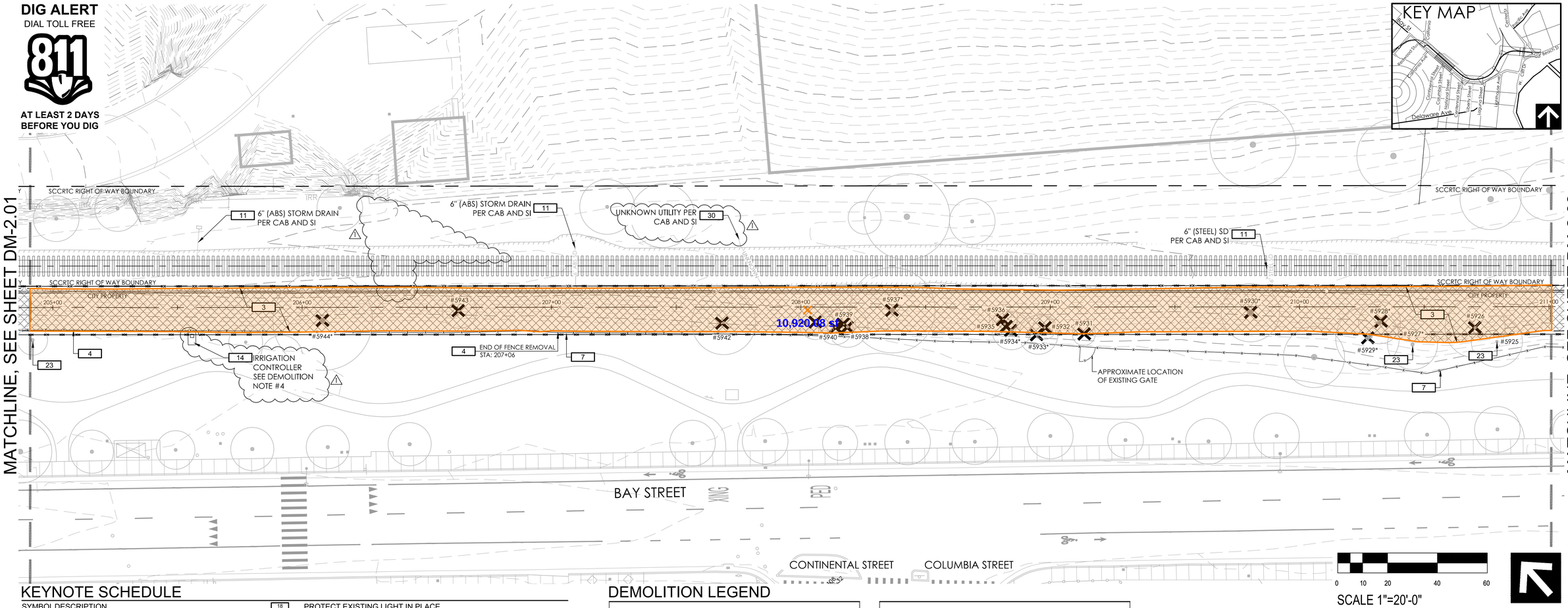

KEYNOTE SCHEDULE

SYMBOL	DESCRIPTION
1	PROTECT IN PLACE
2	SALVAGE AND RESET PER CP SHEETS
3	CLEAR AND GRUB
4	REMOVE FENCE
5	REMOVE EXISTING STRIPING
6	PROTECT RAILROAD SIGNAL IN PLACE
7	PROTECT FENCE IN PLACE
8	REMOVE LANE SEPARATION SYSTEM
9	SALVAGE AND RETURN TO OWNER
10	REMOVE EXISTING DECOMPOSED GRANITE PATH
11	PROTECT STORM DRAIN PIPE IN PLACE
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13	PROTECT WATER LINE IN PLACE
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21	PROTECT SEWER LATERALS IN PLACE
22	REMOVE IRRIGATION SYSTEM
23	PROTECT TREE IN PLACE
24	PROTECT SIGN IN PLACE
25	REMOVE CONCRETE CURB & GUTTER AND BASE
26	REMOVE CONCRETE SIDEWALK AND BASE
27	URBAN FORESTER AND CONTRACTOR TO DETERMINE FEASIBILITY OF PROTECTING TREE IN PLACE IN FIELD
28	PROTECT IN PLACE. IF NECESSARY FOR GRADING, HAND PRUNE ROOTS UNDER SUPERVISION OF URBAN FORESTER
29	REMOVE EXISTING STORM DRAIN LINE.
30	CONTRACTOR TO LOCATE IN FIELD. PROTECT IN PLACE.
31	RELOCATED BY OTHERS
32	CONTRACTOR TO REMOVE CONFLICTING PORTIONS NEEDED TO INSTALL PROPOSED STORM DRAIN AND WALL

DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
(73)	EXISTING MAJOR CONTOUR
(73)	EXISTING MINOR CONTOUR
	EXISTING TREE
	PROPOSED TRAIL STATION LINE
	REMOVE EXISTING DECOMPOSED GRANITE PATH

SYMBOL	DESCRIPTION
	EXISTING FENCE
	REMOVE TREE
	CLEAR AND GRUB
	LIMIT OF RAILROAD BALLAST
	CLEAR & GRUB & REMOVE IRRIGATION
	REMOVE CONCRETE SIDEWALK & BASE
	REMOVE CONCRETE CURB & GUTTER & BASE
	REMOVE HMA PAVING & BASE
	SAWCUT PAVEMENT

DEMOLITION NOTES

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REGISTERED PROFESSIONAL ENGINEER — DARREN M. C. COOK — 82708 — EXP. 9/30/22 — CIVIL — STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

1	BID ADDENDUM #3	04/13/2022

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF
SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
DEMOLITION PLAN

REFERENCES
FIELD BOOK:
DRAWING #: DM-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
DM-2.02
VAULT NO. 7079B

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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DIG ALERT
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811
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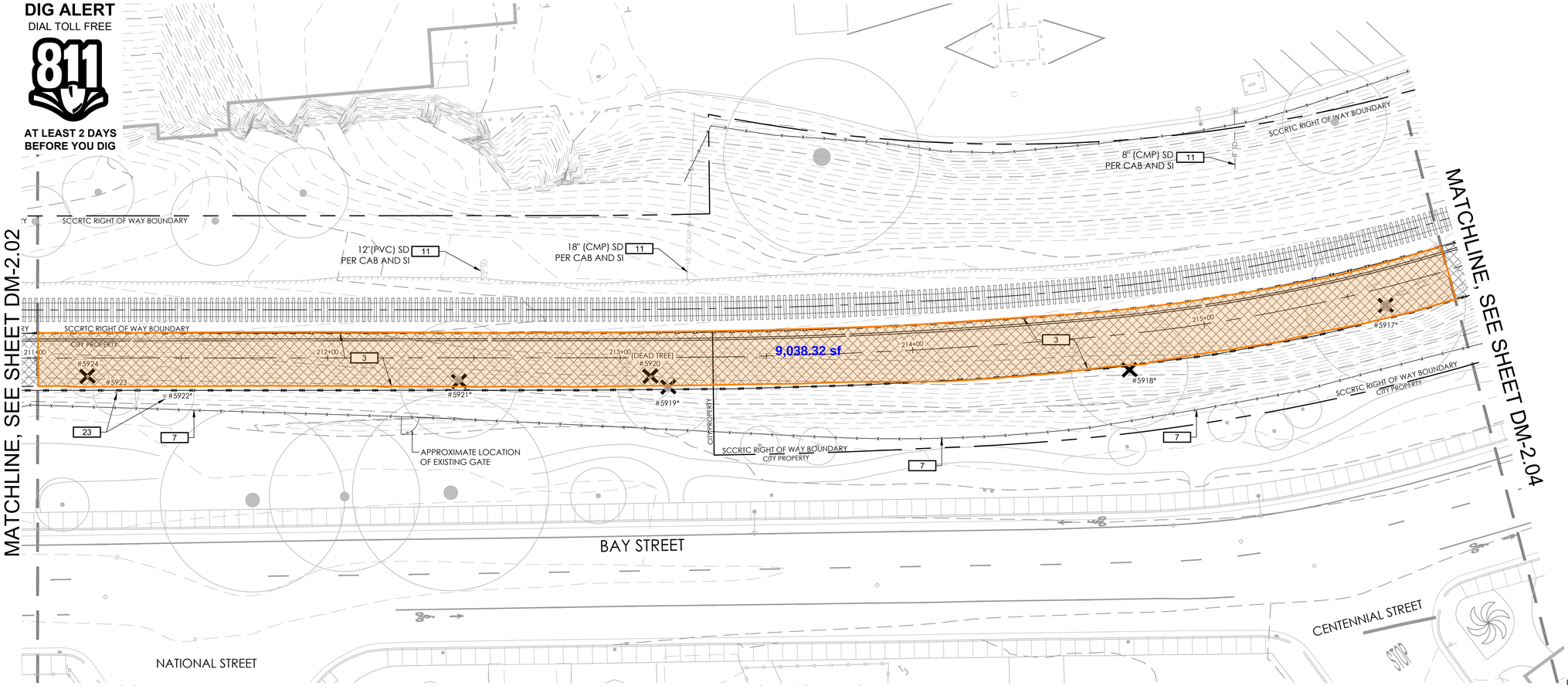
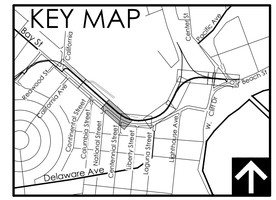
BEFORE YOU DIG





KEYNOTE SCHEDULE

SYMBOL	DESCRIPTION
1	PROTECT IN PLACE
2	SALVAGE AND RESET PER CP SHEETS
3	CLEAR AND GRUB
4	REMOVE FENCE
5	REMOVE EXISTING STRIPING
6	PROTECT RAILROAD SIGNAL IN PLACE
7	PROTECT FENCE IN PLACE
8	REMOVE LANE SEPARATION SYSTEM
9	SALVAGE AND RETURN TO OWNER
10	REMOVE EXISTING DECOMPOSED GRANITE PATH
11	PROTECT STORM DRAIN PIPE IN PLACE
12	PROTECT GAS LINE IN PLACE
13	PROTECT WATER LINE IN PLACE
14	PROTECT UTILITY IN PLACE
15	ADJUST MANHOLE RIM TO FINISH GRADE
16	CONTRACTOR TO VERIFY UNKNOWN UTILITY
17	PROTECT UTILITY VAULT IN PLACE
18	PROTECT EXISTING LIGHT IN PLACE
19	PROTECT EXISTING POSTS IN PLACE
20	CONTRACTOR TO REMOVE EXISTING UTILITY AND ASSOCIATED LOCATION POSTS
21	PROTECT SEWER LATERALS IN PLACE
22	REMOVE IRRIGATION SYSTEM
23	PROTECT TREE IN PLACE
24	PROTECT SIGN IN PLACE
25	REMOVE CONCRETE CURB & GUTTER AND BASE
26	REMOVE CONCRETE SIDEWALK AND BASE
27	URBAN FORESTER AND CONTRACTOR TO DETERMINE FEASIBILITY OF PROTECTING TREE IN PLACE IN FIELD
28	PROTECT IN PLACE. IF NECESSARY FOR GRADING, HAND PRUNE ROOTS UNDER SUPERVISION OF URBAN FORESTER
29	REMOVE EXISTING STORM DRAIN LINE.
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31	RELOCATED BY OTHERS
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DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
(73)	EXISTING MAJOR CONTOUR
(73)	EXISTING MINOR CONTOUR
	EXISTING TREE
	PROPOSED TRAIL STATION LINE
	REMOVE EXISTING DECOMPOSED GRANITE PATH

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EXISTING FENCE		
	REMOVE TREE		
	CLEAR AND GRUB		
	LIMIT OF RAILROAD BALLAST		
	CLEAR & GRUB & REMOVE IRRIGATION		
	REMOVE CONCRETE SIDEWALK & BASE		REMOVE HMA PAVING & BASE
	REMOVE CONCRETE CURB & GUTTER & BASE		SAWCUT PAVEMENT

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RAIL TRAIL SEGMENT 7 PHASE 2
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DEMOLITION PLAN

REFERENCES
FIELD BOOK:
DRAWING #:
DM-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
DM-2.03
VAULT NO.
7079B
SHEET 5 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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DIG ALERT
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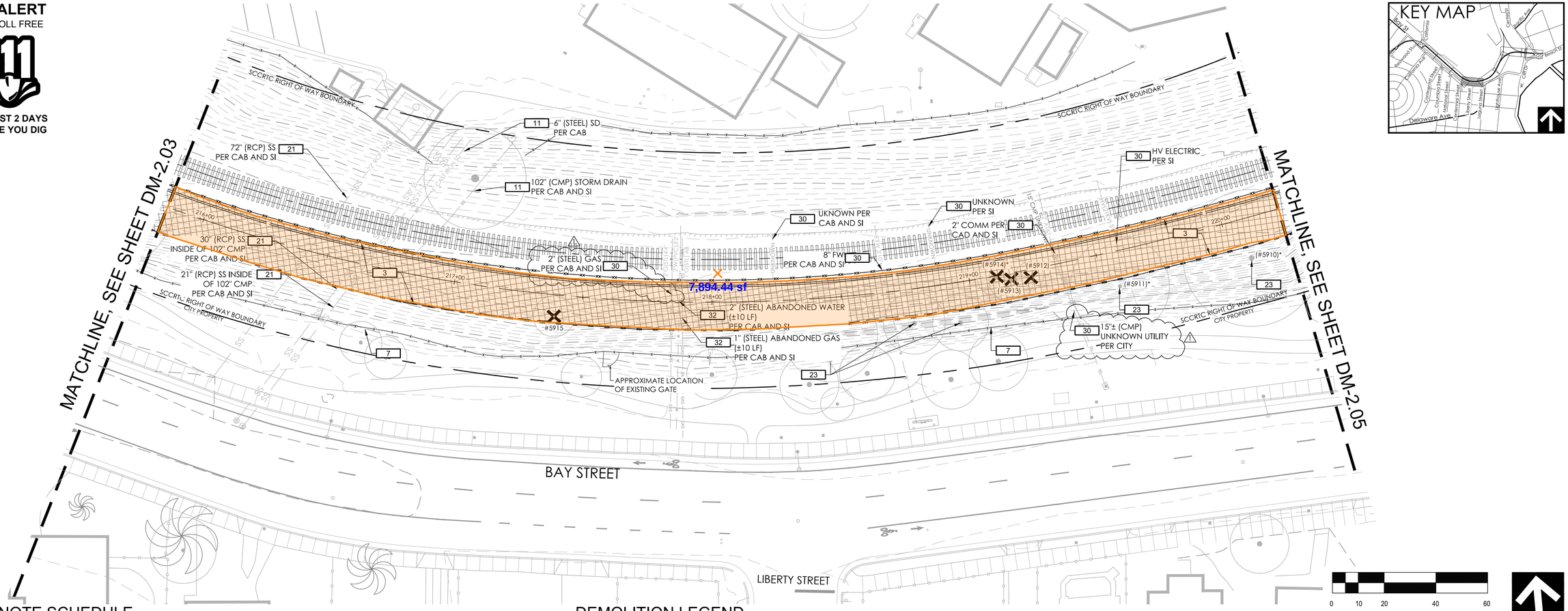

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SCALE 1"=20'-0"

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RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
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REFERENCES
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DM-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
DM-2.04
VAULT NO.
7079B

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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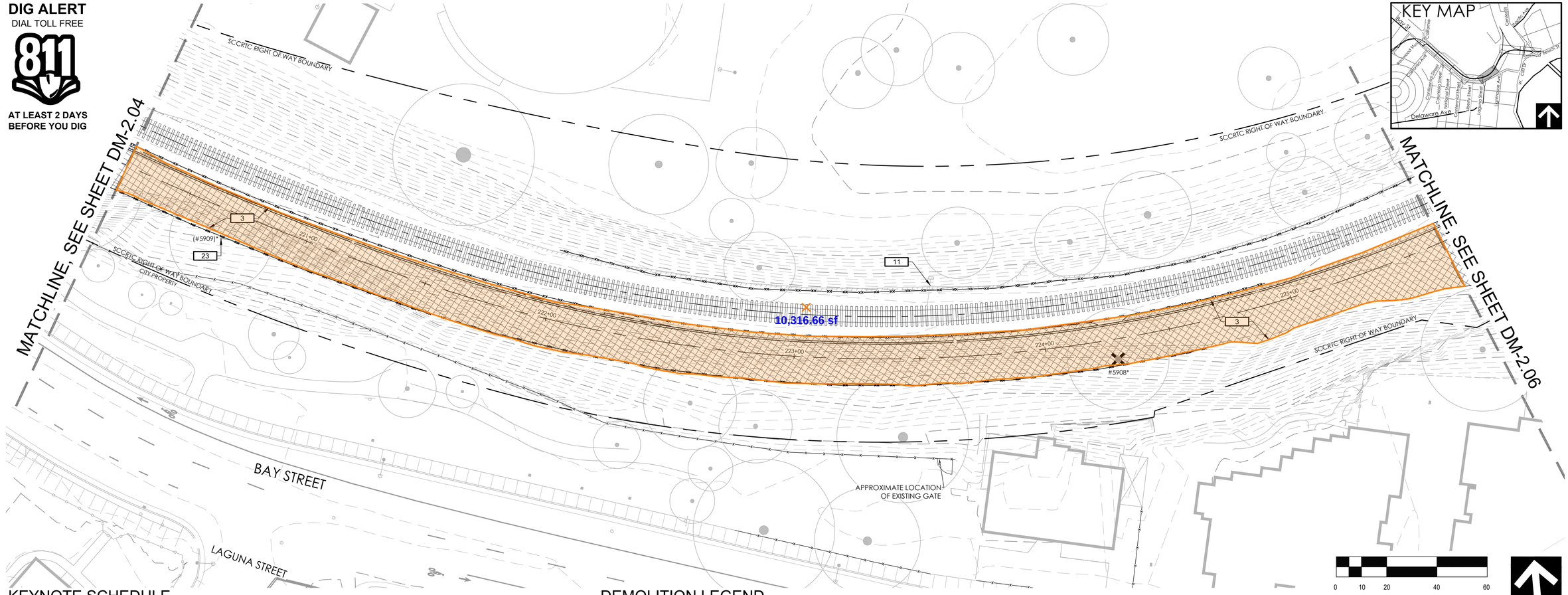

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DEMOLITION PLAN

REFERENCES
FIELD BOOK:
DRAWING #: DM-0193-01-RC15_2

DATE	1/28/22
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DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
DM-2.05
VAULT NO. 7079B
SHEET 7 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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DIG ALERT
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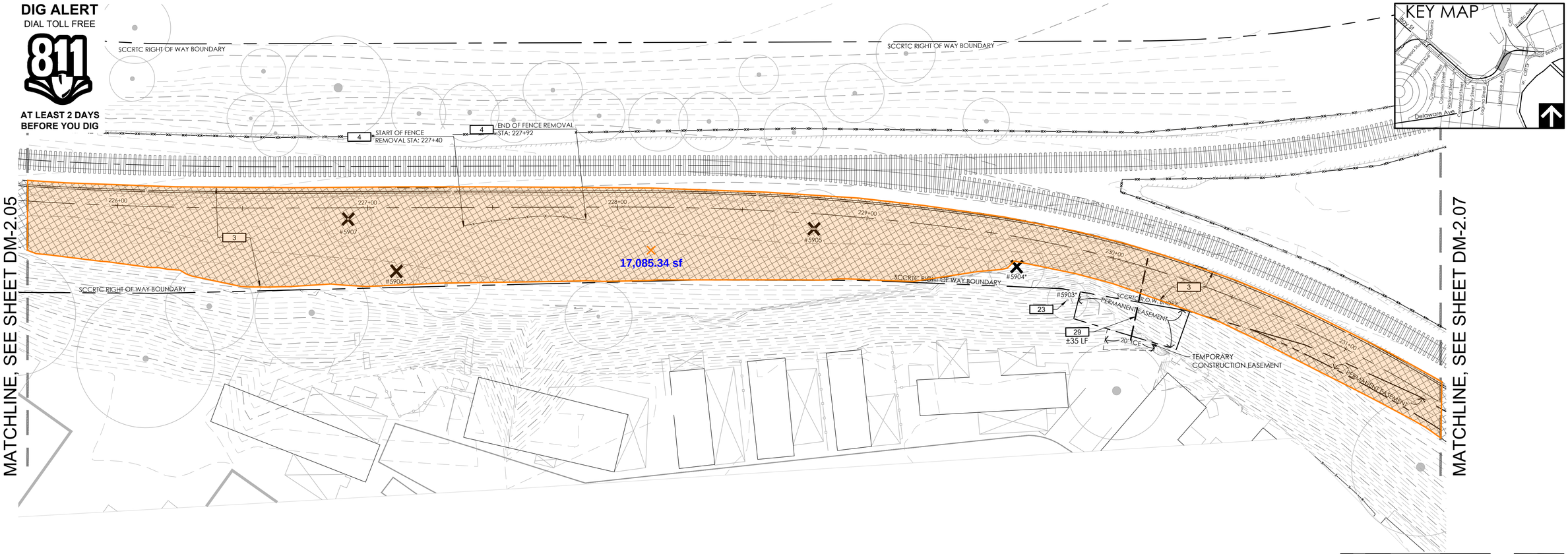

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FIELD BOOK:
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DATE	1/28/22
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DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
DM-2.06
VAULT NO. 7079B
SHEET 8 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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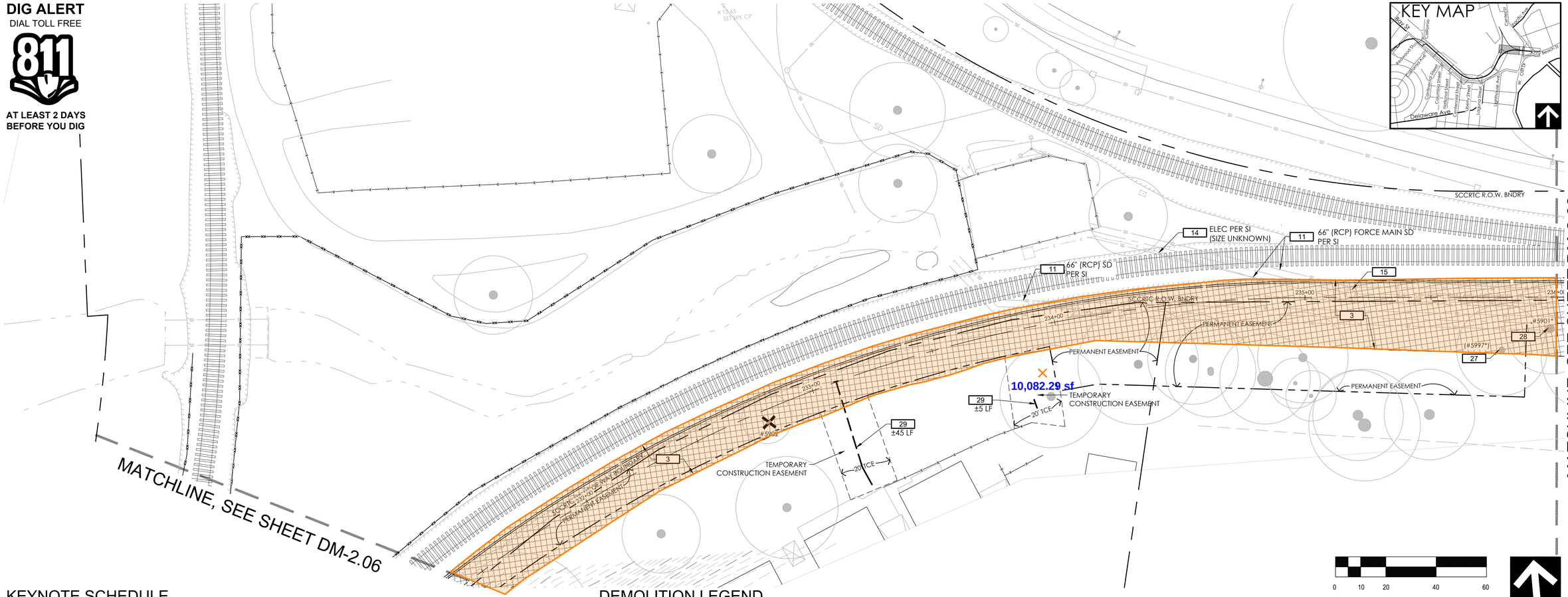

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	EXISTING FENCE
	REMOVE TREE
	CLEAR AND GRUB
	LIMIT OF RAILROAD BALLAST
	CLEAR & GRUB & REMOVE IRRIGATION
	REMOVE CONCRETE SIDEWALK & BASE
	REMOVE HMA PAVING & BASE
	REMOVE CONCRETE CURB & GUTTER & BASE
— — —	SAWCUT PAVEMENT

DEMOLITION NOTES

1. ALL EXISTING UTILITIES WERE PLOTTED FROM RECORD INFORMATION AND FIELD TOPOGRAPHY. ACTUAL LOCATIONS MAY VARY AND ADDITIONAL CROSSINGS MAY EXIST IN THE FIELD. IT IS IMPERATIVE THAT "U.S.A. LOCATING SERVICES" LOCATE AND MARK EXISTING UTILITIES PRIOR TO THE START OF EXCAVATION
2. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN EXPOSING EXISTING UTILITY CROSSINGS AND SERVICES
3. ANY DAMAGE TO EXISTING UTILITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR
4. CONTRACTOR SHALL ENSURE IRRIGATION OUTSIDE OF REMOVAL AREA REMAINS OPERATIONAL.
5. SEE RS-1.01 FOR TREE ACTION SCHEDULE.

REGISTERED PROFESSIONAL ENGINEER — DARREN M. C. CHUN — 82708 EXP 9/30/22 CIVIL — STATE OF CALIFORNIA

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CITY OF SANTA CRUZ
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809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
DEMOLITION PLAN

REFERENCES
FIELD BOOK:
DRAWING #: DM-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
DM-2.07
VAULT NO. 7079B
SHEET 9 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: DM-2.07, Images: Sharrow.jpg, CA Coastal Trail Logo.jpg, MetersNo-MinorImpSIGS-Fremont-20172.png, RTC logo + name 2013.jpg, SIGNS_CENTER_16x7.5, Mark.jpg, _Xrefs: 0193-01-XTB_PAVE.dwg, Stamp_sMedDiamond.dwg, 0193-01-XB.dwg, 0193-01-XC.dwg, 0193-01-XE.dwg, 0193-01-XEDGE.dwg, 0193-01-XT.dwg, SANTA CRUZ(Trail, 8 18 15.dwg
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DIG ALERT
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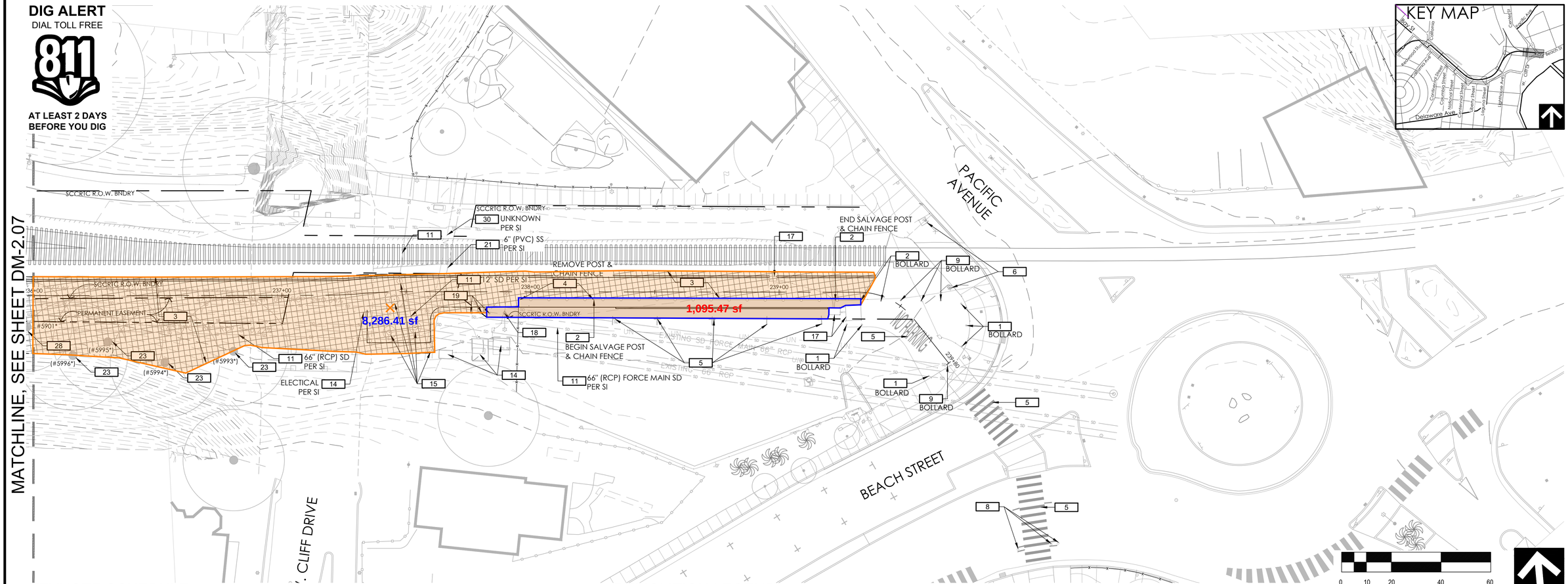

KEYNOTE SCHEDULE

SYMBOL	DESCRIPTION
1	PROTECT IN PLACE
2	SALVAGE AND RESET PER CP SHEETS
3	CLEAR AND GRUB
4	REMOVE FENCE
5	REMOVE EXISTING STRIPING
6	PROTECT RAILROAD SIGNAL IN PLACE
7	PROTECT FENCE IN PLACE
8	REMOVE LANE SEPARATION SYSTEM
9	SALVAGE AND RETURN TO OWNER
10	REMOVE EXISTING DECOMPOSED GRANITE PATH
11	PROTECT STORM DRAIN PIPE IN PLACE
12	PROTECT GAS LINE IN PLACE
13	PROTECT WATER LINE IN PLACE
14	PROTECT UTILITY IN PLACE
15	ADJUST MANHOLE RIM TO FINISH GRADE
16	CONTRACTOR TO VERIFY UNKNOWN UTILITY
17	PROTECT UTILITY VAULT IN PLACE
18	PROTECT EXISTING LIGHT IN PLACE
19	PROTECT EXISTING POSTS IN PLACE
20	CONTRACTOR TO REMOVE EXISTING UTILITY AND ASSOCIATED LOCATION POSTS
21	PROTECT SEWER LATERALS IN PLACE
22	REMOVE IRRIGATION SYSTEM
23	PROTECT TREE IN PLACE
24	PROTECT SIGN IN PLACE
25	REMOVE CONCRETE CURB & GUTTER AND BASE
26	REMOVE CONCRETE SIDEWALK AND BASE
27	URBAN FORESTER AND CONTRACTOR TO DETERMINE FEASIBILITY OF PROTECTING TREE IN PLACE IN FIELD
28	PROTECT IN PLACE. IF NECESSARY FOR GRADING, HAND PRUNE ROOTS UNDER SUPERVISION OF URBAN FORESTER
29	REMOVE EXISTING STORM DRAIN LINE.
30	CONTRACTOR TO LOCATE IN FIELD. PROTECT IN PLACE.
31	RELOCATED BY OTHERS
32	CONTRACTOR TO REMOVE CONFLICTING PORTIONS NEEDED TO INSTALL PROPOSED STORM DRAIN AND WALL

DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
(73)	EXISTING MAJOR CONTOUR
(73)	EXISTING MINOR CONTOUR
	EXISTING TREE
	PROPOSED TRAIL STATION LINE
	REMOVE EXISTING DECOMPOSED GRANITE PATH

SYMBOL	DESCRIPTION
	EXISTING FENCE
	REMOVE TREE
	CLEAR AND GRUB
	LIMIT OF RAILROAD BALLAST
	CLEAR & GRUB & REMOVE IRRIGATION
	REMOVE CONCRETE SIDEWALK & BASE
	REMOVE HMA PAVING & BASE
	REMOVE CONCRETE CURB & GUTTER & BASE
	SAWCUT PAVEMENT

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5. SEE RS-1.01 FOR TREE ACTION SCHEDULE.

REGISTERED PROFESSIONAL ENGINEER
DARREN M. C. COOK
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
DEMOLITION PLAN

REFERENCES
FIELD BOOK:
DRAWING #: DM-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
DM-2.08
VAULT NO. 7079B
SHEET 10 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: DM-2.08, Images: Shared.bpi, CA Coastal Trail Logo.jpg, Measure2Grow-March2022Cement-20172.png, RTC logo_v_name 2013.jpg, SSRK_CENTER_16-7.5_black.jpg, , Xrefs: 0193-01-xTB_PVC.dwg, Stamp_MidDiamond.dwg, 0193-01-xTB.dwg, 0193-01-xEC.dwg, 0193-01-xEC_PVC.dwg, 0193-01-xNT.dwg, SANTA CRUZ(Trail, 8 18 15.dwg
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DIG ALERT
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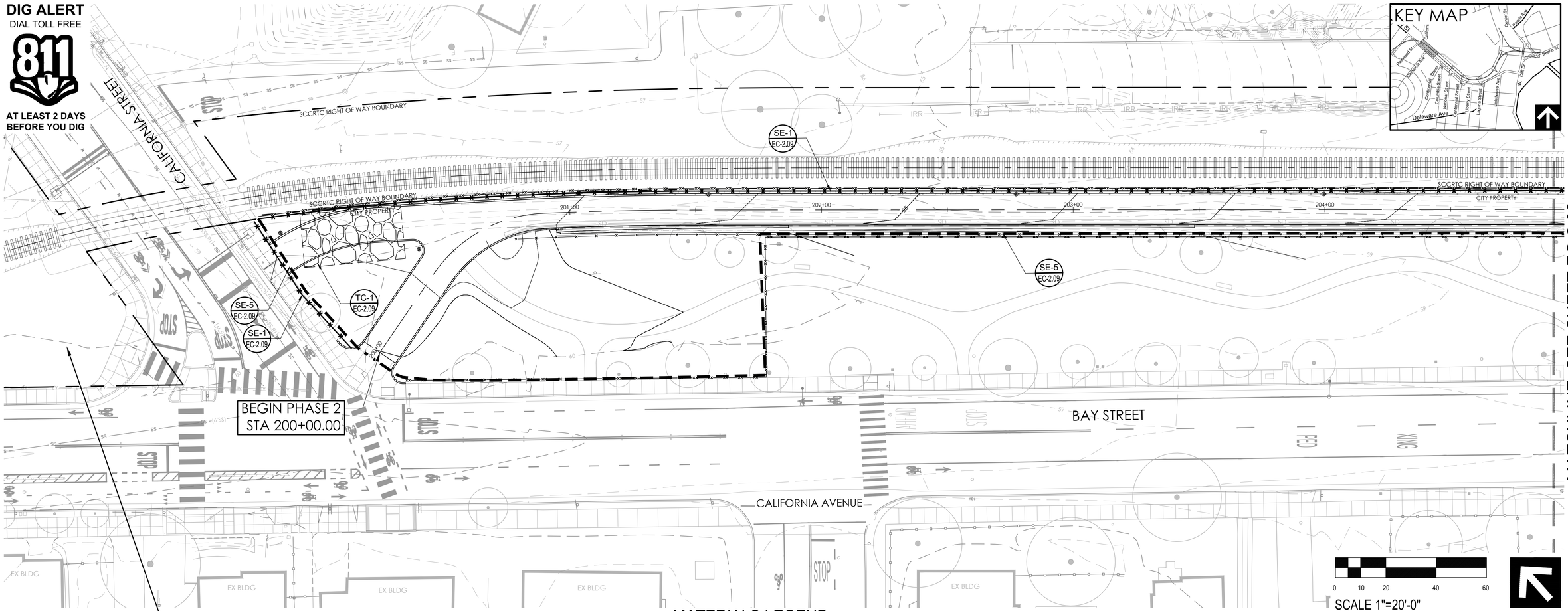

MATCHLINE, SEE SHEET EC-2.02

MATERIALS LEGEND

SYMBOL	BMP	DESCRIPTION	DETAIL
	SE-1	TEMPORARY SILT FENCE. SEE EC-2.09	SE-1 EC-2.09
	SE-5	TEMPORARY FIBER ROLLS SEE EC-2.09	SE-5 EC-2.09
	SE-10	TEMPORARY INLET PROTECTION SEE EC-2.09	SE-10 EC-2.09
	TC-1	TEMPORARY CONSTRUCTION ENTRANCE SEE EC-2.09	TC-1 EC-2.09
	WM-1	MATERIAL DELIVERY AND STORAGE	
	WM-2	MATERIAL USE	

SYMBOL	MATERIAL TYPE	DESCRIPTION	DETAIL
	WM-3	STOCKPILE MANAGEMENT	
	WM-8	TEMPORARY CONCRETE WASHOUT SEE EC-2.09	WM-8 EC-2.09
	N/A	TEMPORARY HIGH-VISIBILITY FENCE. SEE DM AND CP SHEETS	

REGISTERED PROFESSIONAL ENGINEER
DOUGREN M. C. CHOU
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TEMPORARY EROSION CONTROL PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
EC-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
EC-2.01
VAULT NO. 7079B
SHEET 11 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: EC-2.01, Images: SE-10.jpg, SE-1_Page_1.jpg, SE-1_Page_2.jpg, SE-5.jpg, TC-1.jpg, WM-8.jpg, Shared.jpg, CA Coastal Trail Logo.jpg, MetamorphicWorks(SCCRTC)-Primary-20172.png, RTC logo + name 2013.jpg, SSHS_CENTER_4to7.5 black.jpg , Xrefs: Stamp_MikeDiamond.dwg, 0193-01-xTBL_PH2.dwg, 0193-01-xTB.dwg, 0193-01-xTC.dwg, 0193-01-xSTAMP.dwg, 0193-01-XT.dwg
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DIG ALERT
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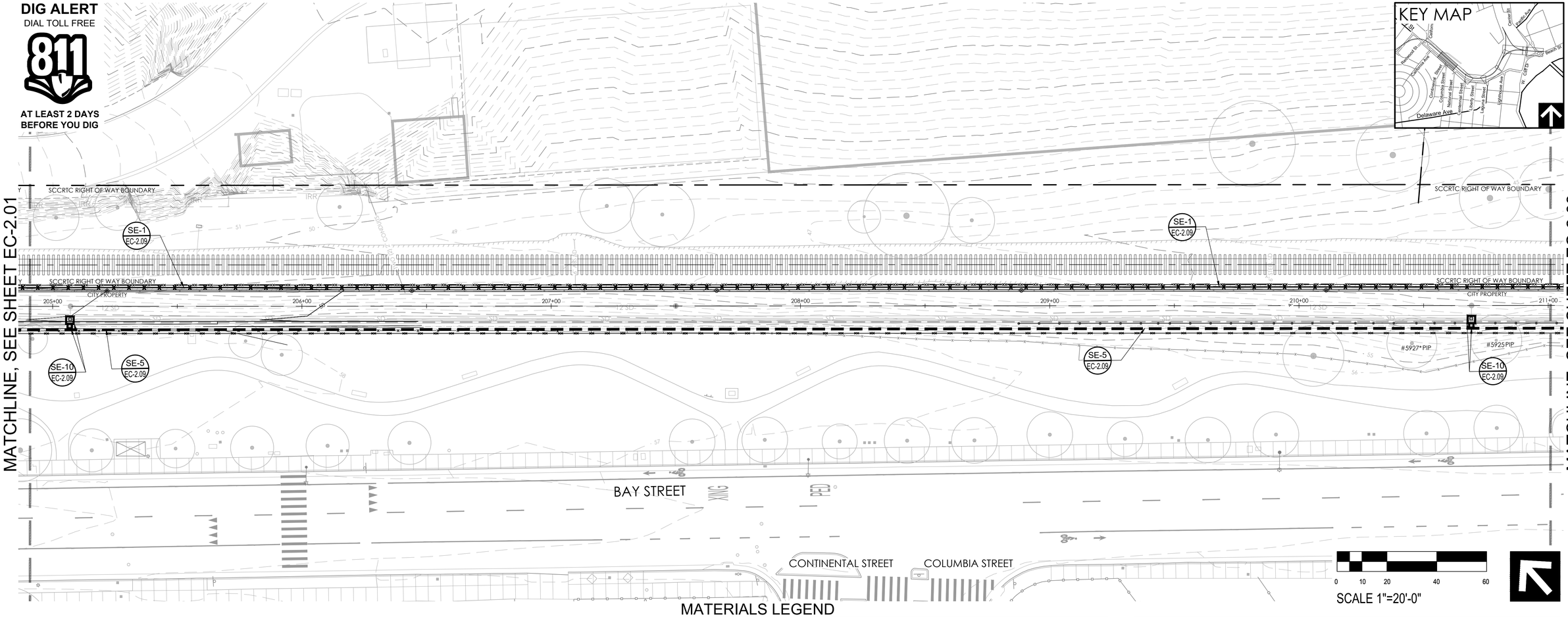

MATERIALS LEGEND

SYMBOL	BMP	DESCRIPTION	DETAIL
	SE-1	TEMPORARY SILT FENCE. SEE EC-2.09	SE-1 EC-2.09
	SE-5	TEMPORARY FIBER ROLLS SEE EC-2.09	SE-5 EC-2.09
	SE-10	TEMPORARY INLET PROTECTION SEE EC-2.09	SE-10 EC-2.09
	TC-1	TEMPORARY CONSTRUCTION ENTRANCE SEE EC-2.09	TC-1 EC-2.09
	WM-1	MATERIAL DELIVERY AND STORAGE	
	WM-2	MATERIAL USE	

SYMBOL	MATERIAL TYPE	DESCRIPTION	DETAIL
	WM-3	STOCKPILE MANAGEMENT	
	WM-8	TEMPORARY CONCRETE WASHOUT SEE EC-2.09	WM-8 EC-2.09
	N/A	TEMPORARY HIGH-VISIBILITY FENCE. SEE DM AND CP SHEETS	

REGISTERED PROFESSIONAL ENGINEER
DARREN M. CHUN
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

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CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TEMPORARY EROSION CONTROL PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
EC-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
EC-2.02
VAULT NO.
7079B
SHEET 12 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: EC-2.02, Images: SE-10.jpg, SE-1_Pipe_1.jpg, SE-1_Pipe_2.jpg, SE-5.jpg, TC-1.jpg, WM-8.jpg, Diamond.png, CA Coastal Trail Logo.jpg, Marquardt-Variety[SCCForward-2017].png, RTC logo + name 2013.jpg, SIGNS_CENTER_16x7.5 blank.jpg , , Xrefs: Stamp_MikeDiamond.dwg, 0193-01-xTTB_PH2.dwg, 0193-01-XB.dwg, 0193-01-XC.dwg, 0193-01-XETAP.dwg, 0193-01-XT.dwg
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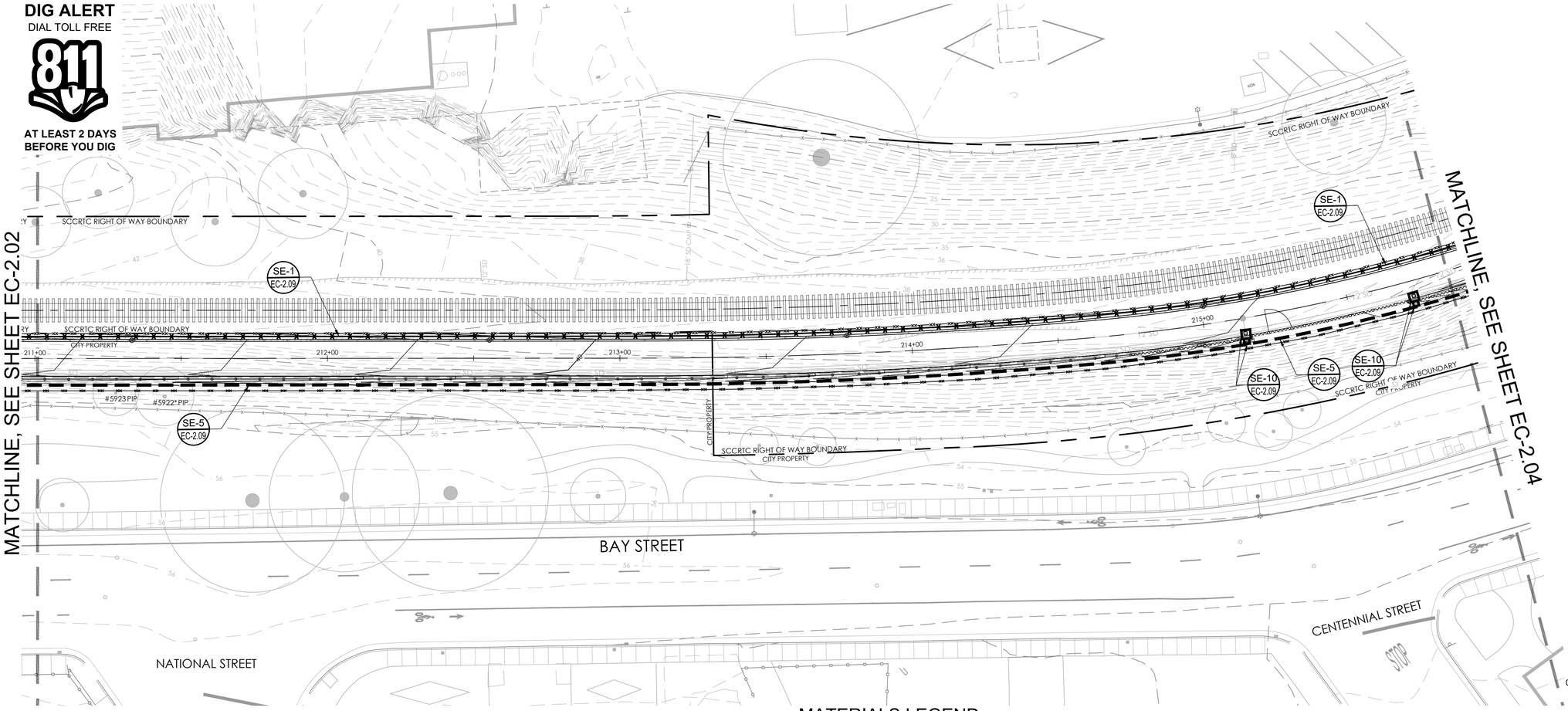

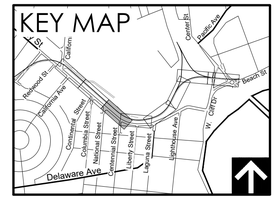

MATERIALS LEGEND

SYMBOL	BMP	DESCRIPTION	DETAIL
	SE-1	TEMPORARY SILT FENCE. SEE EC-2.09	SE-1 EC-2.09
	SE-5	TEMPORARY FIBER ROLLS SEE EC-2.09	SE-5 EC-2.09
	SE-10	TEMPORARY INLET PROTECTION SEE EC-2.09	SE-10 EC-2.09
	TC-1	TEMPORARY CONSTRUCTION ENTRANCE SEE EC-2.09	TC-1 EC-2.09
	WM-1	MATERIAL DELIVERY AND STORAGE	
	WM-2	MATERIAL USE	

SYMBOL	MATERIAL TYPE	DESCRIPTION	DETAIL
	WM-3	STOCKPILE MANAGEMENT	
	WM-8	TEMPORARY CONCRETE WASHOUT SEE EC-2.09	WM-8 EC-2.09
	N/A	TEMPORARY HIGH-VISIBILITY FENCE. SEE DM AND CP SHEETS	

REGISTERED PROFESSIONAL ENGINEER
DOMINIC M. CHOW
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

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CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TEMPORARY EROSION CONTROL PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
EC-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
EC-2.03
VAULT NO.
7079B
SHEET 13 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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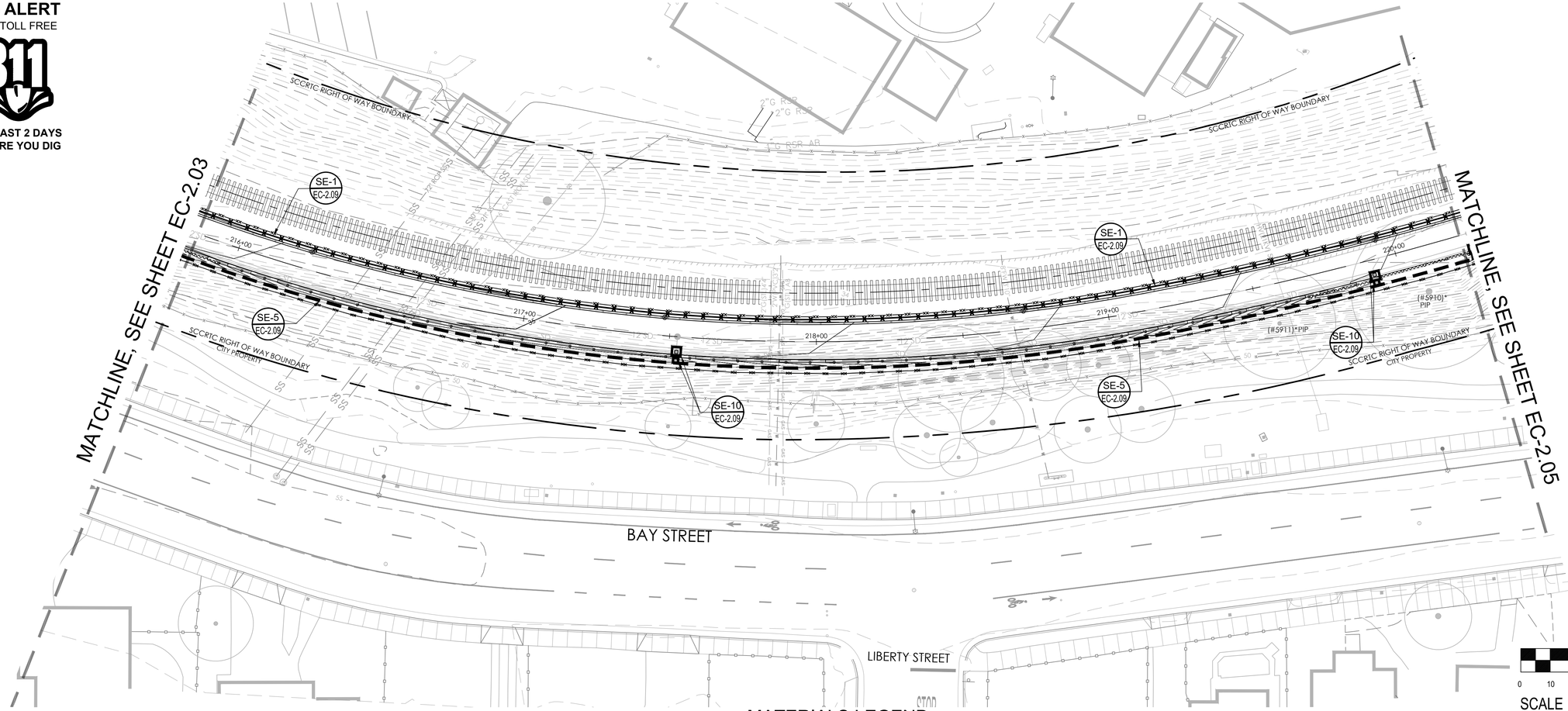

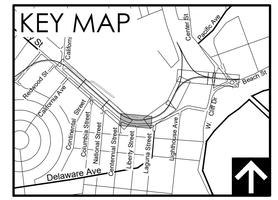

MATERIALS LEGEND

SYMBOL	BMP	DESCRIPTION	DETAIL
	SE-1	TEMPORARY SILT FENCE. SEE EC-2.09	SE-1 EC-2.09
	SE-5	TEMPORARY FIBER ROLLS SEE EC-2.09	SE-5 EC-2.09
	SE-10	TEMPORARY INLET PROTECTION SEE EC-2.09	SE-10 EC-2.09
	TC-1	TEMPORARY CONSTRUCTION ENTRANCE SEE EC-2.09	TC-1 EC-2.09
	WM-1	MATERIAL DELIVERY AND STORAGE	
	WM-2	MATERIAL USE	

SYMBOL	MATERIAL TYPE	DESCRIPTION	DETAIL
	WM-3	STOCKPILE MANAGEMENT	
	WM-8	TEMPORARY CONCRETE WASHOUT SEE EC-2.09	WM-8 EC-2.09
	N/A	TEMPORARY HIGH-VISIBILITY FENCE. SEE DM AND CP SHEETS	

REGISTERED PROFESSIONAL ENGINEER — DARREN M.S. CROWL — 82708 EXP 9/30/22 CIVIL — STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
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CITY OF
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PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TEMPORARY EROSION CONTROL PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
EC-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
EC-2.04
VAULT NO.
7079B
SHEET 14 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab: Name: EC-2.04, Images: SE-10.jpg, SE-1_Pipe_1.jpg, SE-1_Pipe_2.jpg, SE-5.jpg, TC-1.jpg, WM-8.jpg, Shamrock.jpg, CA Coastal Trail Link.jpg, Metadata=Metadata0005Forweb-230712.png, RTC logo + name 2013.jpg, SIGNS_CENTER_16x13 black.jpg , Xrefs: Stamp_MBA
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DIG ALERT
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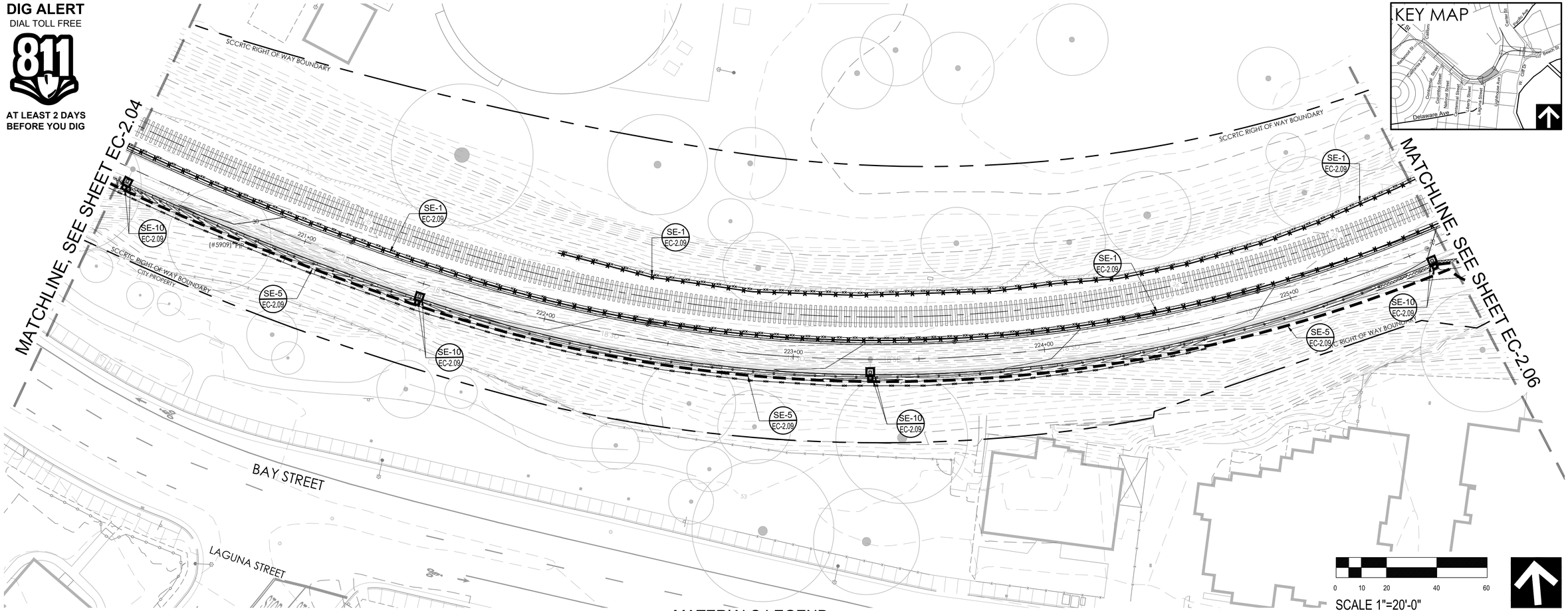

MATERIALS LEGEND

SYMBOL	BMP	DESCRIPTION	DETAIL
	SE-1	TEMPORARY SILT FENCE. SEE EC-2.09	SE-1 EC-2.09
	SE-5	TEMPORARY FIBER ROLLS SEE EC-2.09	SE-5 EC-2.09
	SE-10	TEMPORARY INLET PROTECTION SEE EC-2.09	SE-10 EC-2.09
	TC-1	TEMPORARY CONSTRUCTION ENTRANCE SEE EC-2.09	TC-1 EC-2.09
	WM-1	MATERIAL DELIVERY AND STORAGE	
	WM-2	MATERIAL USE	

SYMBOL	MATERIAL TYPE	DESCRIPTION	DETAIL
	WM-3	STOCKPILE MANAGEMENT	
	WM-8	TEMPORARY CONCRETE WASHOUT SEE EC-2.09	WM-8 EC-2.09
	N/A	TEMPORARY HIGH-VISIBILITY FENCE. SEE DM AND CP SHEETS	

REGISTERED PROFESSIONAL ENGINEER
DARREN M.S. JOHNSON
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TEMPORARY EROSION CONTROL PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
EC-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
EC-2.05
VAULT NO.
7079B
SHEET 15 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: EC-2.05, Images: SE-10.jpg, SE-1_Pipe_1.jpg, SE-1_Pipe_2.jpg, SE-5.jpg, TC-1.jpg, WM-8.jpg, Shamrock.jpg, CA Coastal Trail Large.jpg, MasterPc-Main\p5\Drawings\2017.dwg, RTC Logo + name 2013.jpg, SIGNS_CENTER_16x7.5 black.jpg, N:\2001\0193-01-RC15-Rail-Trail-Segment-7\Engineering\CivilDocs\Sheet Files\Phase 2\EC-0193-01-RC15_2.dwg, Plotted By: achin, Plotted: Jan 28, 2022 - 6:02pm

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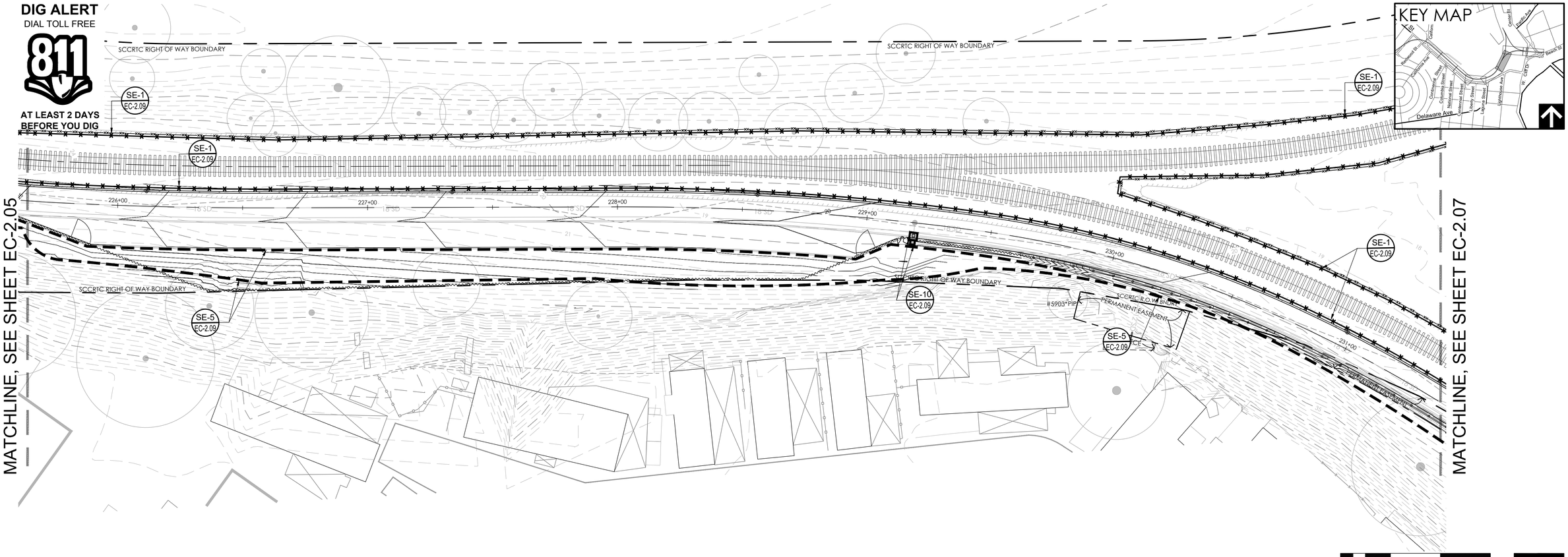

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MATERIALS LEGEND

SYMBOL	BMP	DESCRIPTION	DETAIL
	SE-1	TEMPORARY SILT FENCE. SEE EC-2.09	SE-1 EC-2.09
	SE-5	TEMPORARY FIBER ROLLS SEE EC-2.09	SE-5 EC-2.09
	SE-10	TEMPORARY INLET PROTECTION SEE EC-2.09	SE-10 EC-2.09
	TC-1	TEMPORARY CONSTRUCTION ENTRANCE SEE EC-2.09	TC-1 EC-2.09
	WM-1	MATERIAL DELIVERY AND STORAGE	
	WM-2	MATERIAL USE	

SYMBOL	MATERIAL TYPE	DESCRIPTION	DETAIL
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	WM-8	TEMPORARY CONCRETE WASHOUT SEE EC-2.09	WM-8 EC-2.09
	N/A	TEMPORARY HIGH-VISIBILITY FENCE. SEE DM AND CP SHEETS	

REGISTERED PROFESSIONAL ENGINEER
DOMINIC M. C. CHOW
82708
EXP 9/30/22
CIVIL
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rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
TEMPORARY EROSION CONTROL PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
EC-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
EC-2.06
VAULT NO.
7079B
SHEET 16 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab: Name: EC-2.06, Images: SE-1-0.jpg, SE-1_Page_1.jpg, SE-1_Page_2.jpg, SE-5.jpg, TC-1.jpg, WM-8.jpg, Shared.dwg, 0193-01-RTB_PH2.dwg, 0193-01-XC.dwg, 0193-01-XB.dwg, 0193-01-HDNAP.dwg, 0193-01-XT.dwg, \\Corp\vm\vm-sta\VOL01\0193-01-RC15-Rail-Trail-Segment-7\Civil\dwg\Corridors\Sheet Files\Phase 2\EC-0193-01-RC15_2.dwg, Plotted By: dmcvay, Plotted: Jan 28, 2022 - 5:40pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATERIALS LEGEND

SYMBOL	BMP	DESCRIPTION	DETAIL
	SE-1	TEMPORARY SILT FENCE. SEE EC-2.09	SE-1 EC-2.09
	SE-5	TEMPORARY FIBER ROLLS SEE EC-2.09	SE-5 EC-2.09
	SE-10	TEMPORARY INLET PROTECTION SEE EC-2.09	SE-10 EC-2.09
	TC-1	TEMPORARY CONSTRUCTION ENTRANCE SEE EC-2.09	TC-1 EC-2.09
	WM-1	MATERIAL DELIVERY AND STORAGE	
	WM-2	MATERIAL USE	

SYMBOL	MATERIAL TYPE	DESCRIPTION	DETAIL
	WM-3	STOCKPILE MANAGEMENT	
	WM-8	TEMPORARY CONCRETE WASHOUT SEE EC-2.09	WM-8 EC-2.09
	N/A	TEMPORARY HIGH-VISIBILITY FENCE. SEE DM AND CP SHEETS	

REGISTERED PROFESSIONAL ENGINEER — DARREN M. CHUN — 82708 — EXP 9/30/22 — CIVIL — STATE OF CALIFORNIA

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rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TEMPORARY EROSION CONTROL PLAN

REFERENCES
FIELD BOOK:
DRAWING #: EC-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
EC-2.07
VAULT NO. 7079B
SHEET 17 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: EC-2.07, Images: SE-10.jpg, SE-1_Pipe_1.jpg, SE-1_Pipe_2.jpg, SE-5.jpg, TC-1.jpg, WM-8.jpg, Diamond.jpg, CA Coastal Trail Logo.jpg, Marquardt-Variety(DOS Forward-220173.png, RTC logo + name 2013.jpg, SIGNS_CENTER_16x7.5 blank.jpg, , Xrefs: Stamp_MikeDiamond.dwg, 0193-01-xTBL_PH2.dwg, 0193-01-XB.dwg, 0193-01-XC.dwg, 0193-01-XENMP.dwg, 0193-01-XT.dwg
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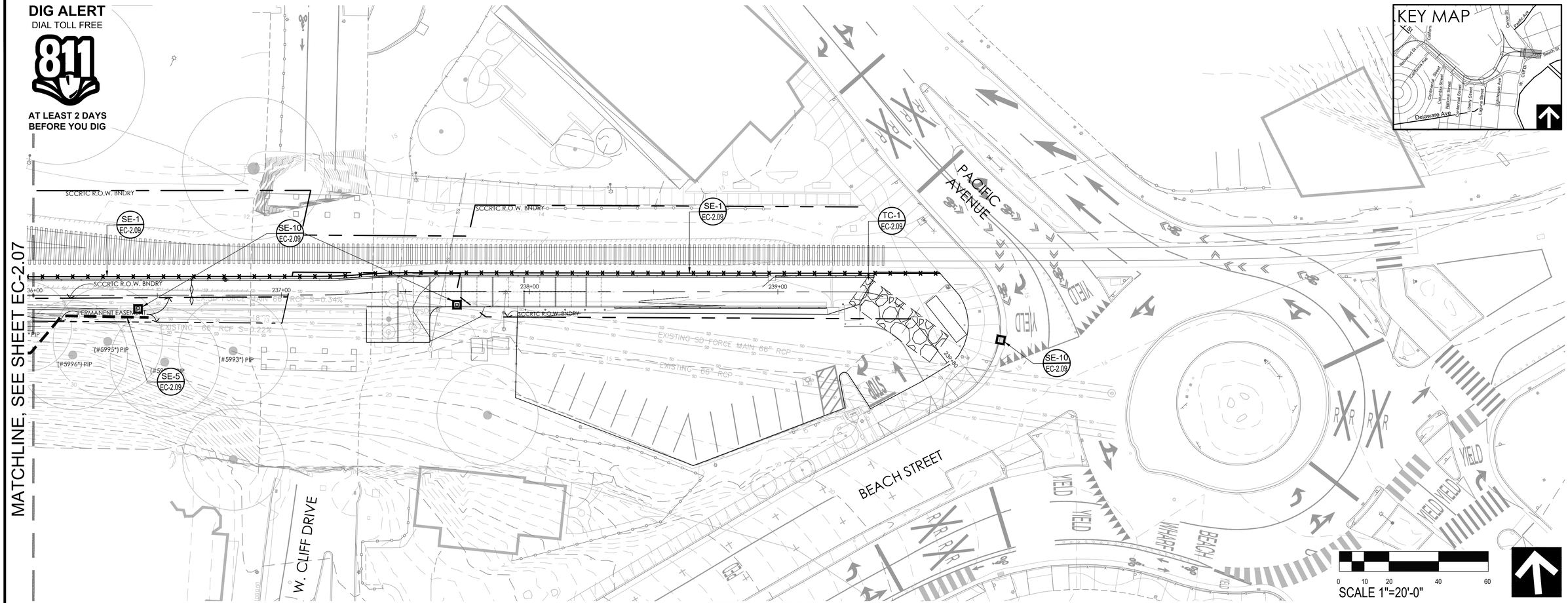

MATERIALS LEGEND

SYMBOL	BMP	DESCRIPTION	DETAIL
	SE-1	TEMPORARY SILT FENCE. SEE EC-2.09	SE-1 EC-2.09
	SE-5	TEMPORARY FIBER ROLLS SEE EC-2.09	SE-5 EC-2.09
	SE-10	TEMPORARY INLET PROTECTION SEE EC-2.09	SE-10 EC-2.09
	TC-1	TEMPORARY CONSTRUCTION ENTRANCE SEE EC-2.09	TC-1 EC-2.09
	WM-1	MATERIAL DELIVERY AND STORAGE	
	WM-2	MATERIAL USE	

SYMBOL	MATERIAL TYPE	DESCRIPTION	DETAIL
	WM-3	STOCKPILE MANAGEMENT	
	WM-8	TEMPORARY CONCRETE WASHOUT SEE EC-2.09	WM-8 EC-2.09
	N/A	TEMPORARY HIGH-VISIBILITY FENCE. SEE DM AND CP SHEETS	

REGISTERED PROFESSIONAL ENGINEER
DARREN M. C. COOK
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

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rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TEMPORARY EROSION CONTROL PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
EC-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
EC-2.08
VAULT NO.
7079B
SHEET 18 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: EC-2.08_Image; SE-10.jpg; SE-1_Pipe_1.jpg; SE-1_Pipe_2.jpg; SE-5.jpg; TC-1.jpg; WM-8.jpg; Diamond.jpg; CA Coastal Trail Logo.jpg; Measure9=Harvey@SCCounty=0.0172.pmp; RTC logo + name 2013.jpg; SIGNS_CENTER_16x7.5 blank.jpg; , Xrefs: Stamp_MikeDiamond.dwg; 0193-01-RTS_PH2.dwg; 0193-01-RC15_2.dwg; Plotted By: dmorby, Plotted: Jan 28, 2022 - 5:40pm
\\corp\rmm\on-site\2001\0193-01-RC15-Rail-Trail-Segment-7\Engineering\Construct\Sheet-Files\Phase 2\EC-0193-01-RC15_2.dwg, Plotted By: dmorby, Plotted: Jan 28, 2022 - 5:40pm

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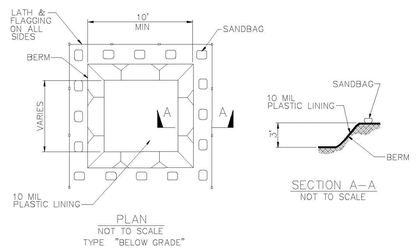
GENERAL EROSION AND SEDIMENT CONTROL NOTES

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CONTROL OF THE ENTIRE CONSTRUCTION OPERATIONS AND TO KEEP THE ENTIRE SITE IN COMPLIANCE WITH THE SOIL EROSION CONTROL PLAN.
- PLAN PREPARER: RRM DESIGN GROUP, 32332 CAMINO CAPISTRANO, STE 205 SAN JUAN CAPISTRANO, CA 92675, (949)361-7950.
- THIS PLAN IS INTENDED TO BE USED FOR INTERIM EROSION AND SEDIMENT CONTROL ONLY AND IS NOT TO BE USED FOR FINAL ELEVATIONS OR PERMANENT IMPROVEMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING EROSION AND SEDIMENT CONTROL MEASURES PRIOR, DURING AND AFTER STORM EVENTS. MONITORING INCLUDES MAINTAINING A FILE DOCUMENTING ON-SITE INSPECTIONS, PROBLEMS ENCOUNTERED, CORRECTIVE ACTIONS, AND NOTES AND A MAP OF REMEDIAL IMPLEMENTATION MEASURES.
- REASONABLE CARE SHALL BE TAKEN WHEN HAULING ANY EARTH, SAND, GRAVEL, STONE, DEBRIS OR ANY HAZARDOUS SUBSTANCE OVER ANY PUBLIC STREET, ALLEY OR OTHER PUBLIC PLACE. SHOULD ANY BLOW, SPILL, OR TRACK OVER AND UPON SAID PUBLIC OR ADJACENT PRIVATE PROPERTY, IMMEDIATE CLEAN-UP SHALL OCCUR.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. ALL CONSTRUCTION TRAFFIC ENTERING ONTO THE PAVED ROADS MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCEWAY.
- SANITARY FACILITIES SHALL BE MAINTAINED ON-SITE AS APPROPRIATE AND AWAY FROM THE STREET IN THE CASE OF A SPILL.
- DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. ALL EARTH STOCKPILES OVER 2.0 YDS SHALL BE COVERED BY A TARP AND RINGED WITH STRAW BALES OR SILT FENCING,. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM INCLUDING EXISTING DRAINAGE SWALES SAND WATERCOURSES.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE COMPLIED WITH.
- THE FACILITIES SHOWN ON THIS PLAN ARE DESIGNED TO CONTROL EROSION AND SEDIMENT DURING THE RAINY SEASON, OCTOBER 15TH TO APRIL 30TH. FACILITIES ARE TO BE OPERABLE PRIOR TO OCTOBER 15TH OF ANY YEAR. GRADING OPERATIONS DURING THE RAINY SEASON WHICH LEAVE DENUDED SLOPES SHALL BE PROTECTED WITH EROSION CONTROL MEASURES IMMEDIATELY FOLLOWING GRADING ON THE SLOPES.
- CONTRACTOR MAY REMOVE AND REPLACE THE TEMPORARY HI-VIS TREE PROTECTION FENCING AS NECESSARY TO ALLOW FOR CONSTRUCTION ACTIVITIES WHEN AUTHORIZED.
- CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING FROM SEDIMENT DISCHARGES FROM SITE.
- CONTRACTOR SHALL STABILIZE SITE AT END OF GRADING OPERATIONS, IF INACTIVE FOR GREATER THAN 14 DAYS, AND PRIOR TO A QUALIFYING RAIN EVENT.

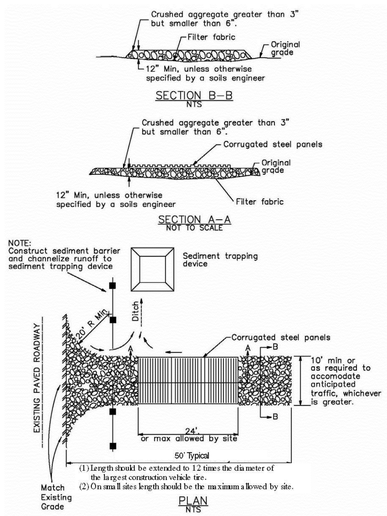
TEMPORARY CONCRETE WASHOUT — WM-8



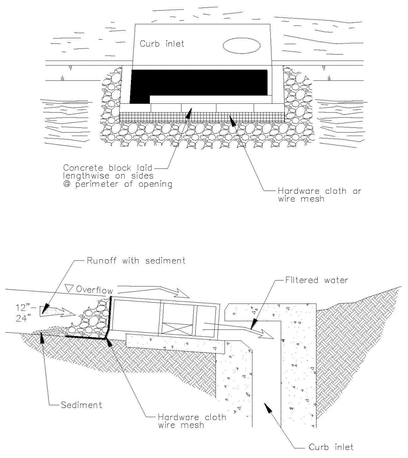
NOTES

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

TEMPORARY CONSTRUCTION ENTRANCE — TC-1

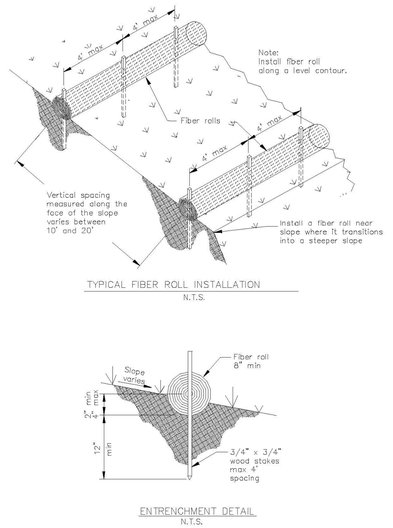


TEMPORARY INLET PROTECTION — SE-10

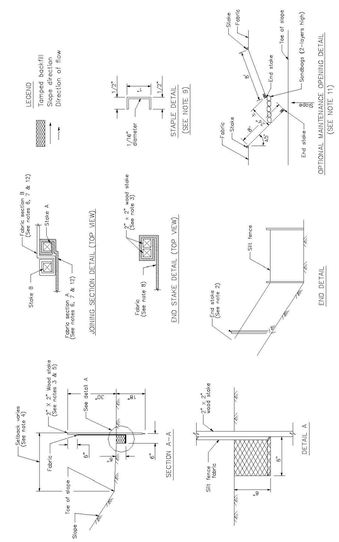


DI PROTECTION – TYPE 4
NOT TO SCALE

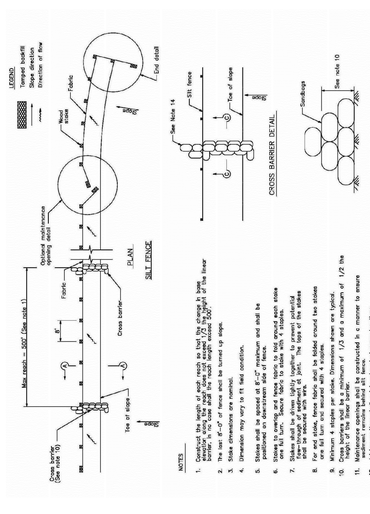
TEMPORARY FIBER ROLLS — SE-5



TEMPORARY SILT FENCE — SE-1



TEMPORARY SILT FENCE — SE-1



REGISTERED PROFESSIONAL ENGINEER — DARREN M.G. CROOM — 82708 EXP 9/30/22 CIVIL — STATE OF CALIFORNIA

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32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL

TEMPORARY EROSION CONTROL DETAILS

REFERENCES	DATE	1/28/22	SCALE AS SHOWN
FIELD BOOK:	DRAWN	AV	EC-2.09
	DESIGN	AV	VAULT NO.
DRAWING #: EC-0193-01-RC15_2	CHECKED	DC	7079B

SHEET 19 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Names: EC-2.09, Images: SE-10.jpg, SE-1_Page_1.jpg, SE-1_Page_2.jpg, SE-5.jpg, TC-1.jpg, WM-8.jpg, Stamped.jpg, CA Coastal Trail Logo.jpg, Measure-Identity2020.wmf, 20172.png, RTC logo + name 2017.jpg, SIGNS_CENTER_16x7.5 blank.jpg, \\corp\rrm\on-site\2007\0193-01-RC15-Rail-Trail-Segment-7\Engineering\CorrDocs\Sheet-Files\Phase 2\EC-0193-01-RC15_2.dwg, Plotted By: dmcroom, Plotted: Jan 28, 2022 - 5:40pm

DIG ALERT
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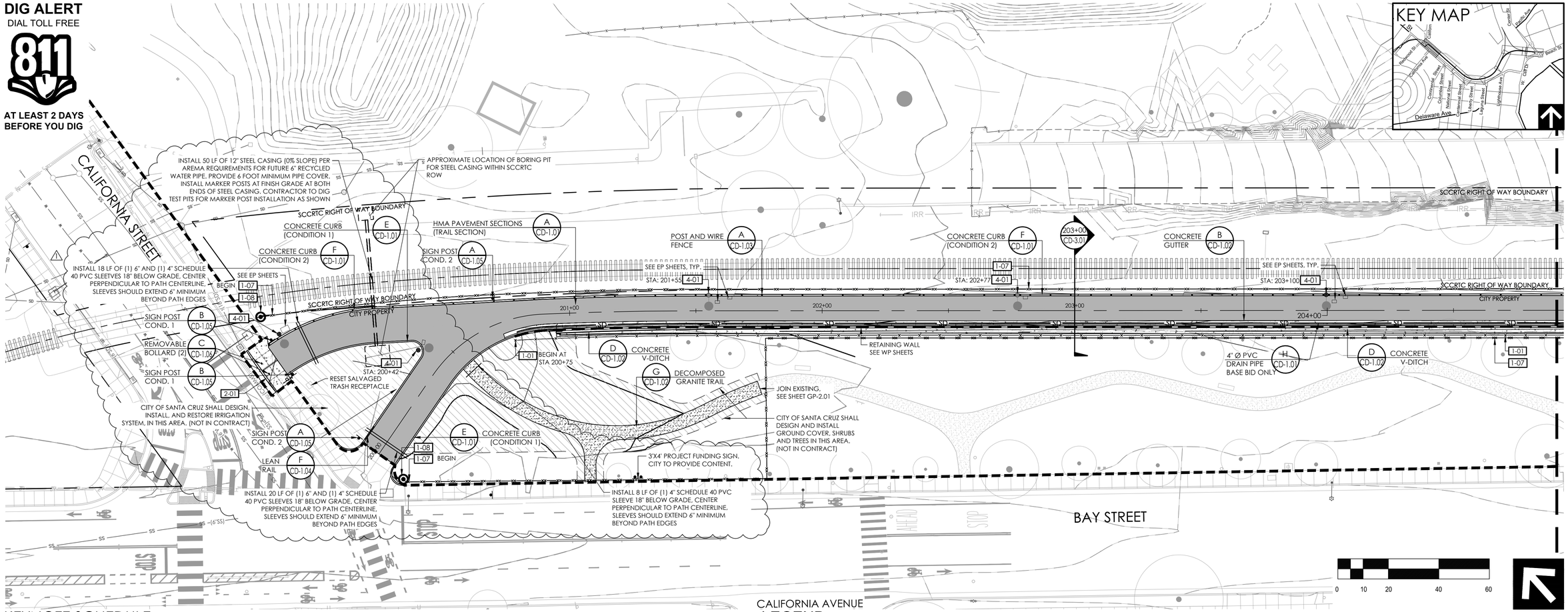

MATCHLINE, SEE SHEET CP-2.02

KEYNOTE SCHEDULE

SYMBOL	DESCRIPTION SITE FURNISHINGS AND EQUIPMENT	NOTES
1-01	CHAIN LINK FENCE COND. 1	6' HIGH WITH STANDARD MESH (BLACK) CALTRANS STD RSP A85A, RSP A85, A85B
1-02	CHAIN LINK FENCE COND. 2	HEIGHT VARIES WITH 3/8" MESH (GALV.) CALTRANS STD RSP A85A, RSP A85, A85B
1-03	CHAIN LINK GATE	6' HIGH, 8' WIDE WITH 3/8" MESH (GALV.) CALTRANS STD RSP A85A, RSP A85, A85B
1-04	INSTALL FENCE 3/8" MESH (GALV.) BETWEEN POSTS AT FENCE TRANSITION AT END OF WALL	
1-05	CABLE RAIL FENCE	CALTRANS STD B11-47. POST INSTALLED IN V-GUTTER PER SECTION A-A
1-06	SLIP RESISTANT MANHOLE COVER	
1-07	TEMPORARY HIGH-VISIBILITY FENCE	
1-08	CONTRACTOR TO MARK AND MAINTAIN BEGIN AND END OF CULTURAL RESOURCE AREA. MARKERS TO REMAIN UNTIL AFTER FINAL COMPLETION.	

SYMBOL	DESCRIPTION PEDESTRIAN AND TRAFFIC CONTROL	NOTES
2-01	MOUNTABLE CURB & GUTTER TYPE B	PER COUNTY DESIGN CRITERIA FIG ST-4A
2-02	CONCRETE CURB TYPE A1-8	PER CALTRANS STD A87A
	ELECTRICAL	
4-01	PROPOSED LIGHT	B/CD-1.03 FOR PLACEMENT EP SHEETS FOR INSTALLATION

JOINT LEGEND

SYMBOL	DESCRIPTION	DETAIL
	EXPANSION JOINT	B/CD-1.01
	CONTROL JOINT	B/CD-1.01

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
	EXISTING FENCE
	SAWCUT PAVEMENT
	TEMPORARY HIGH-VISIBILITY FENCE
	PROPOSED RETAINING WALL, SEE WP SHEETS
EXISTING RELOCATED PROPOSED	SIGNS
	NOT IN CONTRACT - CITY TO DESIGN AND INSTALLAT GROUND COVER, SHRUBS AND TREES IN IDENTIFIED AREA.

SYMBOL	DESCRIPTION
	CHAIN LINK FENCE CONDITION 1
	CHAIN LINK FENCE CONDITION 2
	POST AND WIRE FENCE
	CABLE RAIL FENCE
	CONCRETE PAVEMENT
	HMA PAVEMENT
	DECOMPOSED GRANITE
	AB PAVING

SYMBOL	DESCRIPTION
#59XX (#59XX) #59XX* OR (#59XX)*	EXISTING TREE DENOTES AN EXISTING TREE WITH A NUMBERED METAL FORESTRY TAG AFFIXED TO ITS TRUNK. DENOTES AN EXISTING TREE WITH AN ASSIGNED NUMBER, BUT WITH NO METAL FORESTRY TAG AFFIXED TO ITS TRUNK. DENOTES AN EXISTING TREE THAT QUALIFIES AS A HERITAGE TREE AS DEFINED BY THE CITY OF SANTA CRUZ.

REGISTERED LANDSCAPE ARCHITECT MICHAEL R. SHERROD NO. 4360 11/30/23 1/28/22 STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

1	BID ADDENDUM #3	04/13/2022

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF
SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CONSTRUCTION KEYNOTE PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-2.01
VAULT NO.
7079B

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab: Name: CP-2.01 | Xrefs: Planset Dgn: DL Dataset: Full | Dgn Dgn: Metric.dgn MetricSeed2D.dgn Planset: 2017.dgn DGN: CENTER_16.5 Mesh Dgn: Name: Stamp_MikeSherrod.dwg 0193-01-...RTR_PH2.dwg 0193-01-...PH2.dwg 0193-01-...NOTES_COMBINED 03.16.2017.dwg 0193-01-...TSDM 0193-01-...PH2.dwg 0193-01-...IT.dwg 0193-01-...NE.dwg Level=_TB_2x36-geotech.dwg XCALLS=0193-01-...PH2.dwg Level=_TB_2x36-survey.dwg Level=_TB_2x36.dwg 0193-01-...NE.dwg 0193-01-...NS P2_Alter Mode.dwg Level=_TB_2x36.dwg 0193-01-...NS.dwg 0193-01-...NETWORK.dwg 0193-01-...NE.dwg 0193-01-...NS P2_Alter Mode.dwg Level=_TB_2x36.dwg 0193-01-...NE.dwg Level=_TB_2x36-geotech.dwg XCALLS=0193-01-...PH2.dwg 0193-01-...IT.dwg 0193-01-...TSDM 0193-01-...PH2.dwg 0193-01-...NOTES_COMBINED 03.16.2017.dwg 0193-01-...RTR_PH2.dwg 0193-01-...PH2.dwg
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DIG ALERT
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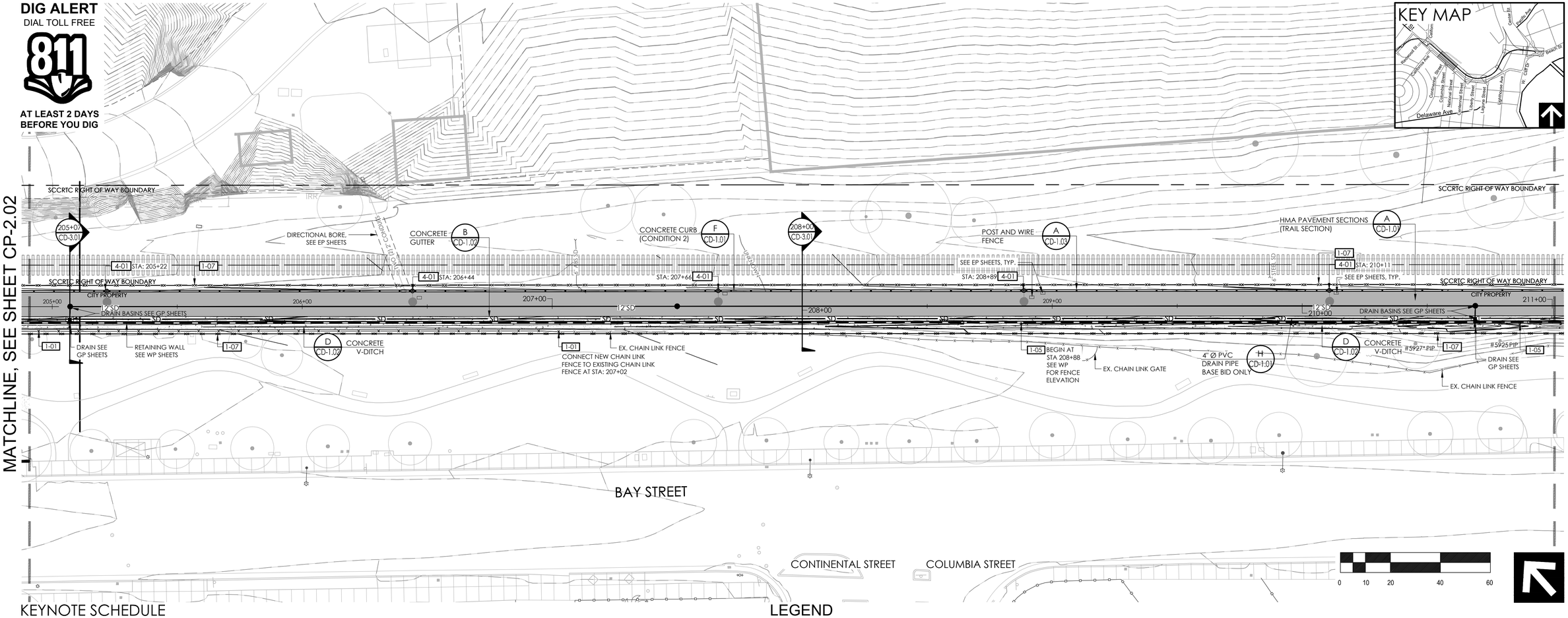
MATCHLINE, SEE SHEET CP-2.02



MATCHLINE, SEE SHEET CP-2.03

KEYNOTE SCHEDULE

SYMBOL	DESCRIPTION	NOTES
SITE FURNISHINGS AND EQUIPMENT		
1-01	CHAIN LINK FENCE COND. 1	6' HIGH WITH STANDARD MESH (BLACK) CALTRANS STD RSP A85A, RSP A85, A85B
1-02	CHAIN LINK FENCE COND. 2	HEIGHT VARIES WITH 3/8" MESH (GALV.) CALTRANS STD RSP A85A, RSP A85, A85B
1-03	CHAIN LINK GATE	6' HIGH, 8' WIDE WITH 3/8" MESH (GALV.) CALTRANS STD RSP A85A, RSP A85, A85B
1-04	INSTALL FENCE 3/8" MESH (GALV.) BETWEEN POSTS AT FENCE TRANSITION AT END OF WALL	
1-05	CABLE RAIL FENCE	CALTRANS STD B11-47. POST INSTALLED IN V-GUTTER PER SECTION A-A
1-06	SLIP RESISTANT MANHOLE COVER	
1-07	TEMPORARY HIGH-VISIBILITY FENCE	
1-08	CONTRACTOR TO MARK AND MAINTAIN BEGIN AND END OF CULTURAL RESOURCE AREA. MARKERS TO REMAIN UNTIL AFTER FINAL COMPLETION.	

SYMBOL	DESCRIPTION	NOTES
PEDESTRIAN AND TRAFFIC CONTROL		
2-01	MOUNTABLE CURB & GUTTER TYPE B	PER COUNTY DESIGN CRITERIA FIG ST-4A
2-02	CONCRETE CURB TYPE A1-8	PER CALTRANS STD A87A
ELECTRICAL		
4-01	PROPOSED LIGHT	B/CD-1.03 FOR PLACEMENT EP SHEETS FOR INSTALLATION

JOINT LEGEND

SYMBOL	DESCRIPTION	DETAIL
	EXPANSION JOINT	B/CD-1.01
	CONTROL JOINT	B/CD-1.01

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
	EXISTING FENCE
	SAWCUT PAVEMENT
	TEMPORARY HIGH-VISIBILITY FENCE
	PROPOSED RETAINING WALL, SEE WP SHEETS
EXISTING RELOCATED PROPOSED	SIGNS

SYMBOL	DESCRIPTION
	CHAIN LINK FENCE CONDITION 1
	CHAIN LINK FENCE CONDITION 2
	POST AND WIRE FENCE
	CABLE RAIL FENCE
	CONCRETE PAVEMENT
	HMA PAVEMENT
	DECOMPOSED GRANITE
	AB PAVING

SYMBOL	DESCRIPTION
	EXISTING TREE
#59XX	DENOTES AN EXISTING TREE WITH A NUMBERED METAL FORESTRY TAG AFFIXED TO ITS TRUNK.
(#59XX)	DENOTES AN EXISTING TREE WITH AN ASSIGNED NUMBER, BUT WITH NO METAL FORESTRY TAG AFFIXED TO ITS TRUNK.
#59XX* OR (#59XX)*	DENOTES AN EXISTING TREE THAT QUALIFIES AS A HERITAGE TREE AS DEFINED BY THE CITY OF SANTA CRUZ.

REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERWOOD NO. 4320 11/30/23 1/28/22 STATE OF CALIFORNIA

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rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CONSTRUCTION KEYNOTE PLAN

REFERENCES
FIELD BOOK:
DRAWING #: CP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-2.02
VAULT NO. 7079B
SHEET 21 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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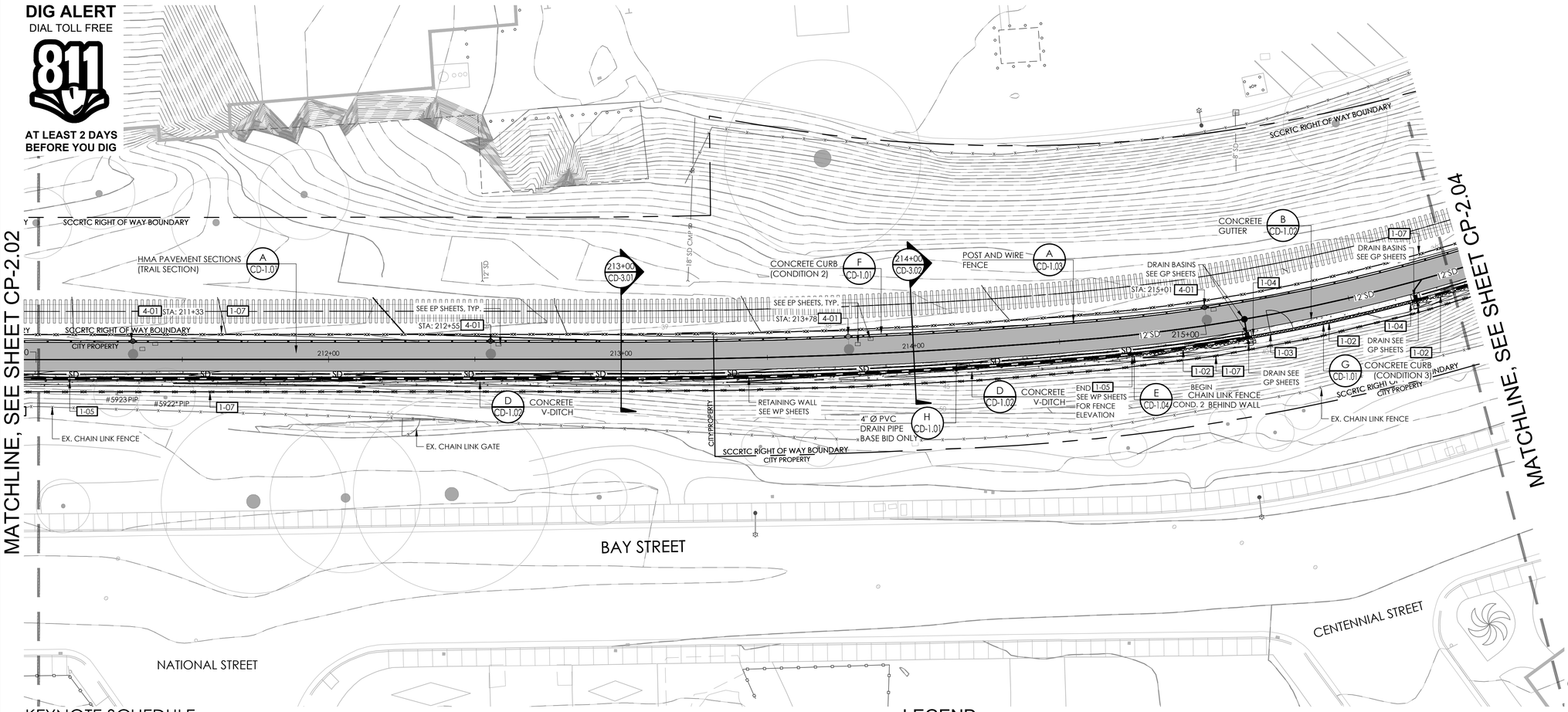
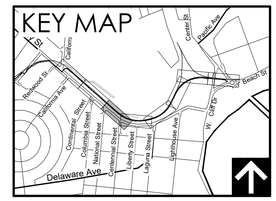
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG





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KEYNOTE SCHEDULE

SYMBOL	DESCRIPTION	NOTES
	SITE FURNISHINGS AND EQUIPMENT	
1-01	CHAIN LINK FENCE COND. 1	6' HIGH WITH STANDARD MESH (BLACK) CALTRANS STD RSP A85A, RSP A85, A85B
1-02	CHAIN LINK FENCE COND. 2	HEIGHT VARIES WITH 3/8" MESH (GALV.) CALTRANS STD RSP A85A, RSP A85, A85B
1-03	CHAIN LINK GATE	6' HIGH, 8' WIDE WITH 3/8" MESH (GALV.) CALTRANS STD RSP A85A, RSP A85, A85B
1-04	INSTALL FENCE 3/8" MESH (GALV.) BETWEEN POSTS AT FENCE TRANSITION AT END OF WALL	
1-05	CABLE RAIL FENCE	CALTRANS STD B11-47, POST INSTALLED IN V-GUTTER PER SECTION A-A
1-06	SLIP RESISTANT MANHOLE COVER	
1-07	TEMPORARY HIGH-VISIBILITY FENCE	
1-08	CONTRACTOR TO MARK AND MAINTAIN BEGIN AND END OF CULTURAL RESOURCE AREA. MARKERS TO REMAIN UNTIL AFTER FINAL COMPLETION.	

SYMBOL	DESCRIPTION	NOTES
	PEDESTRIAN AND TRAFFIC CONTROL	
2-01	MOUNTABLE CURB & GUTTER TYPE B	PER COUNTY DESIGN CRITERIA FIG ST-4A
2-02	CONCRETE CURB TYPE A1-8	PER CALTRANS STD A87A
	ELECTRICAL	
4-01	PROPOSED LIGHT	B/CD-1.03 FOR PLACEMENT EP SHEETS FOR INSTALLATION

JOINT LEGEND

SYMBOL	DESCRIPTION	DETAIL
	EXPANSION JOINT	B/CD-1.01
	CONTROL JOINT	B/CD-1.01

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
	EXISTING FENCE
	SAWCUT PAVEMENT
	TEMPORARY HIGH-VISIBILITY FENCE
	PROPOSED RETAINING WALL, SEE WP SHEETS
EXISTING RELOCATED PROPOSED	SIGNS

SYMBOL	DESCRIPTION
	CHAIN LINK FENCE CONDITION 1
	CHAIN LINK FENCE CONDITION 2
	POST AND WIRE FENCE
	CABLE RAIL FENCE
	CONCRETE PAVEMENT
	HMA PAVEMENT
	DECOMPOSED GRANITE
	AB PAVING

SYMBOL	DESCRIPTION
#59XX (#59XX)	EXISTING TREE DENOTES AN EXISTING TREE WITH A NUMBERED METAL FORESTRY TAG AFFIXED TO ITS TRUNK. DENOTES AN EXISTING TREE WITH AN ASSIGNED NUMBER, BUT WITH NO METAL FORESTRY TAG AFFIXED TO ITS TRUNK.
#59XX* OR (#59XX)*	DENOTES AN EXISTING TREE THAT QUALIFIES AS A HERITAGE TREE AS DEFINED BY THE CITY OF SANTA CRUZ.

REGISTERED LANDSCAPE ARCHITECT
MICHAEL S. SHERROD NO. 4310
11/30/23
1/28/22
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF
SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CONSTRUCTION KEYNOTE PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-2.03
VAULT NO.
7079B
SHEET 22 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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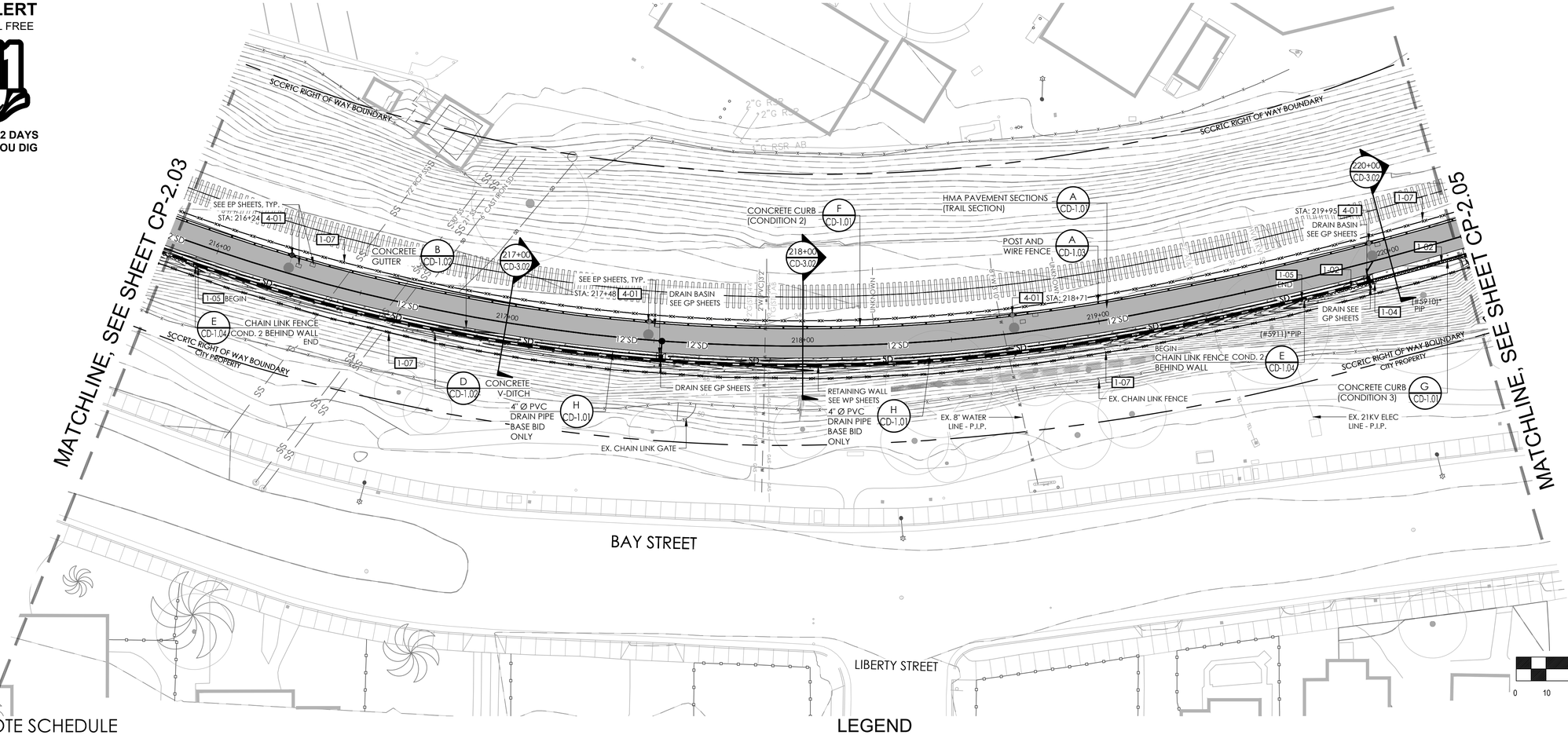
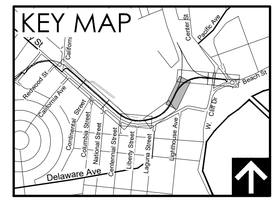
BEFORE YOU DIG





KEYNOTE SCHEDULE

SYMBOL	DESCRIPTION SITE FURNISHINGS AND EQUIPMENT	NOTES
1-01	CHAIN LINK FENCE COND. 1	6' HIGH WITH STANDARD MESH (BLACK) CALTRANS STD RSP A85A, RSP A85, A85B
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1-04	INSTALL FENCE 3/8" MESH (GALV.) BETWEEN POSTS AT FENCE TRANSITION AT END OF WALL	
1-05	CABLE RAIL FENCE	CALTRANS STD B11-47. POST INSTALLED IN V-GUTTER PER SECTION A-A
1-06	SLIP RESISTANT MANHOLE COVER	
1-07	TEMPORARY HIGH-VISIBILITY FENCE	
1-08	CONTRACTOR TO MARK AND MAINTAIN BEGIN AND END OF CULTURAL RESOURCE AREA. MARKERS TO REMAIN UNTIL AFTER FINAL COMPLETION.	

SYMBOL	DESCRIPTION PEDESTRIAN AND TRAFFIC CONTROL	NOTES
2-01	MOUNTABLE CURB & GUTTER TYPE B	PER COUNTY DESIGN CRITERIA FIG ST-4A
2-02	CONCRETE CURB TYPE A1-8	PER CALTRANS STD A87A
	ELECTRICAL	
4-01	PROPOSED LIGHT	B/CD-1.03 FOR PLACEMENT EP SHEETS FOR INSTALLATION

JOINT LEGEND

SYMBOL	DESCRIPTION	DETAIL
	EXPANSION JOINT	B/CD-1.01
	CONTROL JOINT	B/CD-1.01

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
	EXISTING FENCE
	SAWCUT PAVEMENT
	TEMPORARY HIGH-VISIBILITY FENCE
	PROPOSED RETAINING WALL, SEE WP SHEETS
EXISTING RELOCATED PROPOSED	SIGNS

SYMBOL	DESCRIPTION
	CHAIN LINK FENCE CONDITION 1
	CHAIN LINK FENCE CONDITION 2
	POST AND WIRE FENCE
	CABLE RAIL FENCE
	CONCRETE PAVEMENT
	HMA PAVEMENT
	DECOMPOSED GRANITE
	AB PAVING

SYMBOL	DESCRIPTION
	EXISTING TREE
#59XX	DENOTES AN EXISTING TREE WITH A NUMBERED METAL FORESTRY TAG AFFIXED TO ITS TRUNK.
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REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 4579 11/30/23 1/28/22 STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CONSTRUCTION KEYNOTE PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-2.04
VAULT NO.
7079B
SHEET 23 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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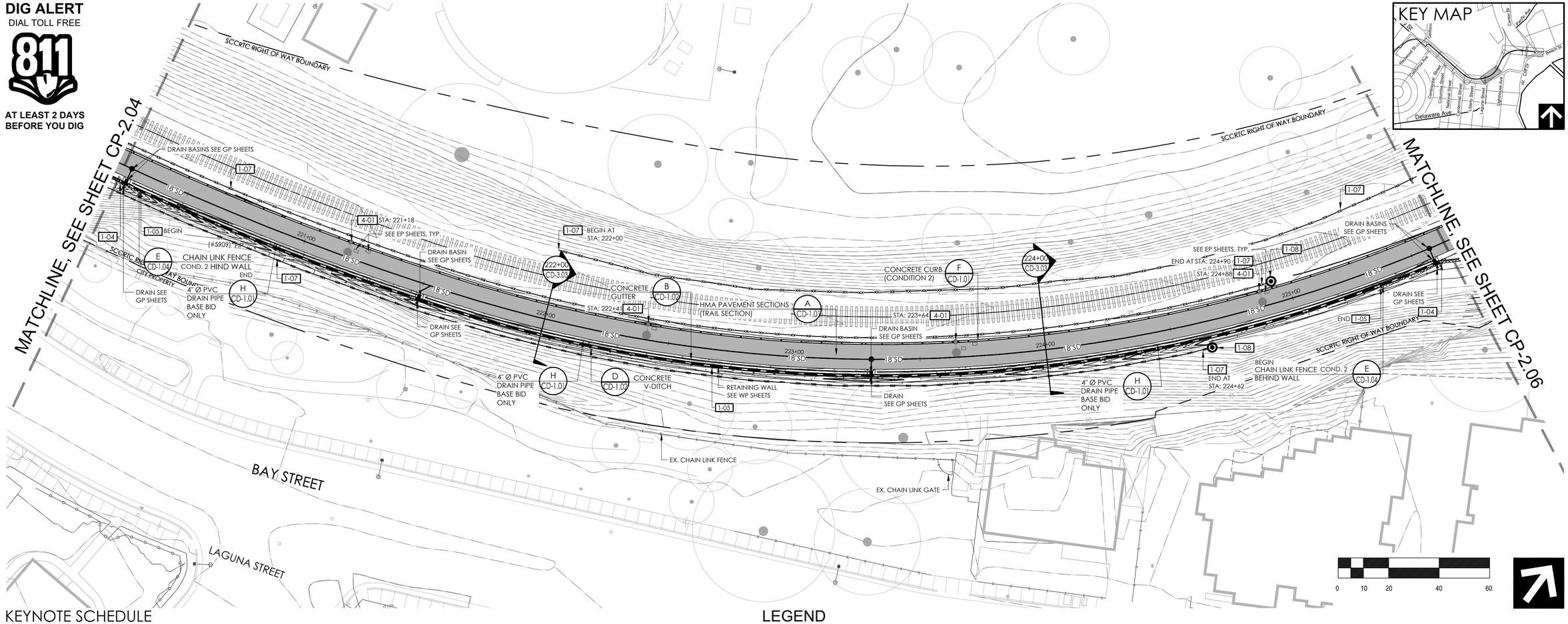

KEYNOTE SCHEDULE

SYMBOL	DESCRIPTION	NOTES
SITE FURNISHINGS AND EQUIPMENT		
1-01	CHAIN LINK FENCE COND. 1	6' HIGH WITH STANDARD MESH (BLACK) CALTRANS STD RSP A85A, RSP A85, A85B
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1-06	SLIP RESISTANT MANHOLE COVER	
1-07	TEMPORARY HIGH-VISIBILITY FENCE	
1-08	CONTRACTOR TO MARK AND MAINTAIN BEGIN AND END OF CULTURAL RESOURCE AREA. MARKERS TO REMAIN UNTIL AFTER FINAL COMPLETION.	

SYMBOL	DESCRIPTION	NOTES
PEDESTRIAN AND TRAFFIC CONTROL		
2-01	MOUNTABLE CURB & GUTTER TYPE B	PER COUNTY DESIGN CRITERIA FIG ST-4A
2-02	CONCRETE CURB TYPE A1-8	PER CALTRANS STD A87A
ELECTRICAL		
4-01	PROPOSED LIGHT	B/CD-1.03 FOR PLACEMENT EP SHEETS FOR INSTALLATION

JOINT LEGEND

SYMBOL	DESCRIPTION	DETAIL
	EXPANSION JOINT	B/CD-1.01
	CONTROL JOINT	B/CD-1.01

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
	EXISTING FENCE
	SAWCUT PAVEMENT
	TEMPORARY HIGH-VISIBILITY FENCE
	PROPOSED RETAINING WALL, SEE WP SHEETS
EXISTING RELOCATED PROPOSED	SIGNS

SYMBOL	DESCRIPTION
	CHAIN LINK FENCE CONDITION 1
	CHAIN LINK FENCE CONDITION 2
	POST AND WIRE FENCE
	CABLE RAIL FENCE
	CONCRETE PAVEMENT
	HMA PAVEMENT
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REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 5250 — 11/30/23 — 1/28/22 — STATE OF CALIFORNIA

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rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CONSTRUCTION KEYNOTE PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-2.05
VAULT NO. 7079B
SHEET 24 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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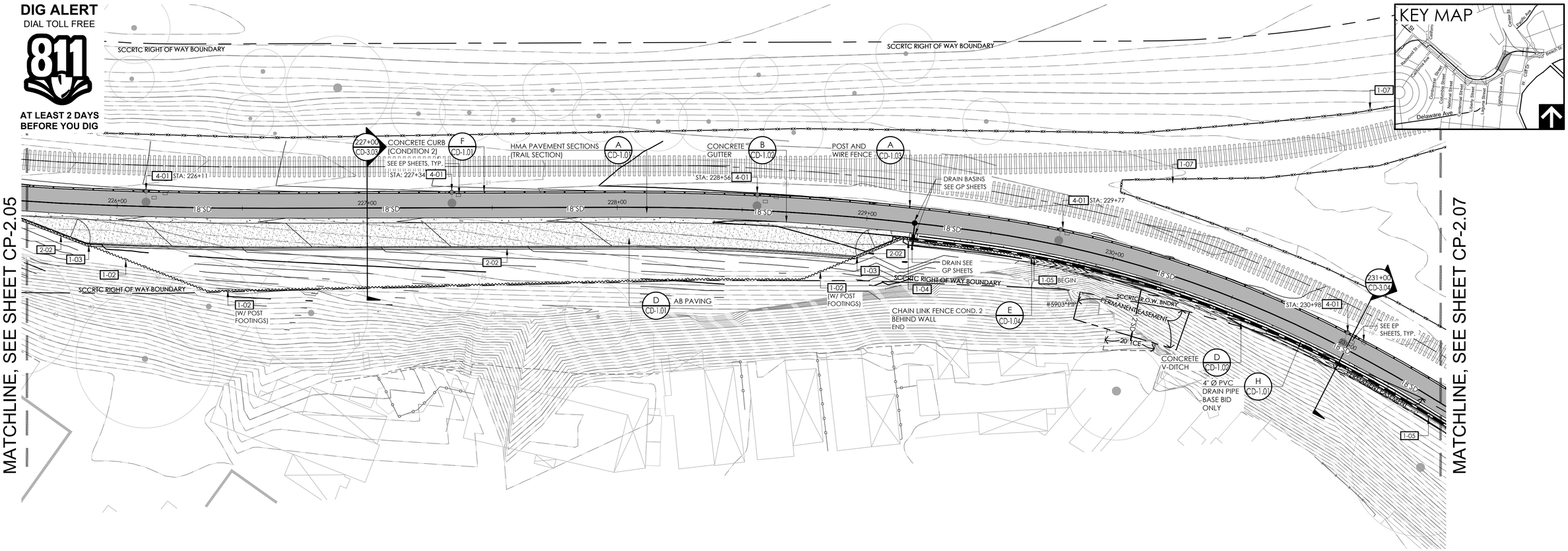
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET CP-2.05

MATCHLINE, SEE SHEET CP-2.07



KEYNOTE SCHEDULE

SYMBOL	DESCRIPTION SITE FURNISHINGS AND EQUIPMENT	NOTES
1-01	CHAIN LINK FENCE COND. 1	6' HIGH WITH STANDARD MESH (BLACK) CALTRANS STD RSP A85A, RSP A85, A85B
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1-06	SLIP RESISTANT MANHOLE COVER	
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1-08	CONTRACTOR TO MARK AND MAINTAIN BEGIN AND END OF CULTURAL RESOURCE AREA. MARKERS TO REMAIN UNTIL AFTER FINAL COMPLETION.	

SYMBOL	DESCRIPTION PEDESTRIAN AND TRAFFIC CONTROL	NOTES
2-01	MOUNTABLE CURB & GUTTER TYPE B	PER COUNTY DESIGN CRITERIA FIG ST-4A
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	ELECTRICAL	
4-01	PROPOSED LIGHT	B/CD-1.03 FOR PLACEMENT EP SHEETS FOR INSTALLATION

JOINT LEGEND

SYMBOL	DESCRIPTION	DETAIL
	EXPANSION JOINT	B/CD-1.01
	CONTROL JOINT	B/CD-1.01

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
	EXISTING FENCE
	SAWCUT PAVEMENT
	TEMPORARY HIGH-VISIBILITY FENCE
	PROPOSED RETAINING WALL, SEE WP SHEETS
EXISTING RELOCATED PROPOSED	SIGNS

SYMBOL	DESCRIPTION
	CHAIN LINK FENCE CONDITION 1
	CHAIN LINK FENCE CONDITION 2
	POST AND WIRE FENCE
	CABLE RAIL FENCE
	CONCRETE PAVEMENT
	HMA PAVEMENT
	DECOMPOSED GRANITE
	AB PAVING

SYMBOL	DESCRIPTION
#59XX (#59XX) #59XX* OR (#59XX)*	EXISTING TREE DENOTES AN EXISTING TREE WITH A NUMBERED METAL FORESTRY TAG AFFIXED TO ITS TRUNK. DENOTES AN EXISTING TREE WITH AN ASSIGNED NUMBER, BUT WITH NO METAL FORESTRY TAG AFFIXED TO ITS TRUNK. DENOTES AN EXISTING TREE THAT QUALIFIES AS A HERITAGE TREE AS DEFINED BY THE CITY OF SANTA CRUZ.

REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 5531 — 11/30/23 — 1/28/22 — STATE OF CALIFORNIA

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San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CONSTRUCTION KEYNOTE PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-2.06
VAULT NO.
7079B
SHEET 25 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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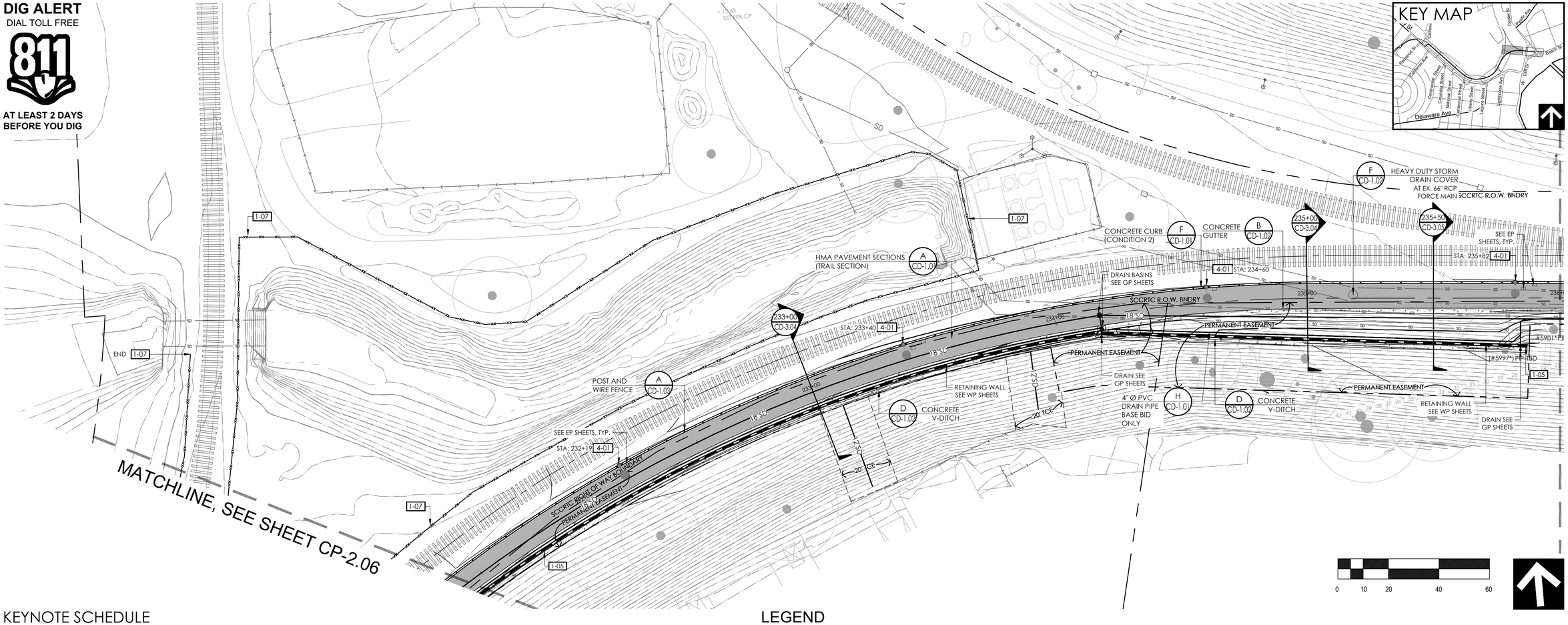

KEYNOTE SCHEDULE

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JOINT LEGEND

SYMBOL	DESCRIPTION	DETAIL
	EXPANSION JOINT	B/CD-1.01
	CONTROL JOINT	B/CD-1.01

LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
	EXISTING FENCE
	SAWCUT PAVEMENT
	TEMPORARY HIGH-VISIBILITY FENCE
	PROPOSED RETAINING WALL, SEE WP SHEETS
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SYMBOL	DESCRIPTION
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	CHAIN LINK FENCE CONDITION 2
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REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 4310 — 11/30/23 — 1/28/22 — STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CONSTRUCTION KEYNOTE PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
CP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-2.07
VAULT NO. 7079B
SHEET 26 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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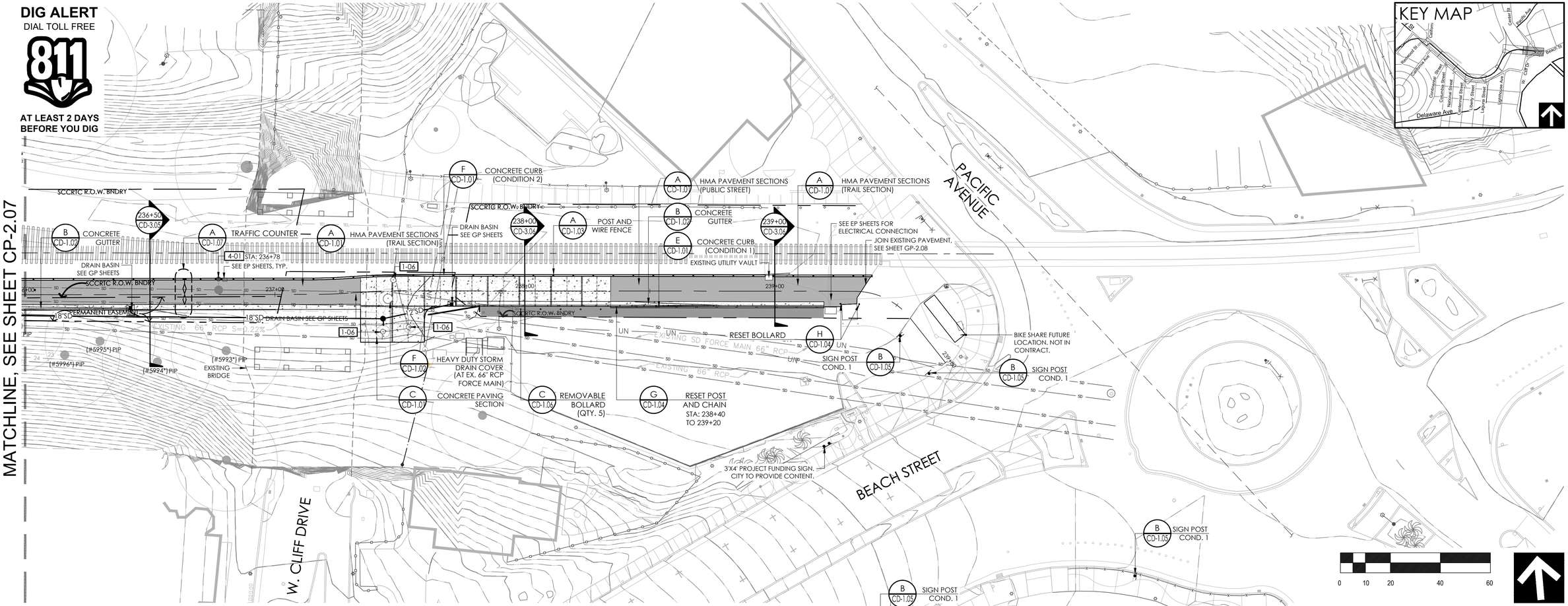
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET CP-2.07



LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
	EXISTING FENCE
	SAWCUT PAVEMENT
	TEMPORARY HIGH-VISIBILITY FENCE
	PROPOSED RETAINING WALL, SEE WP SHEETS
EXISTING RELOCATED PROPOSED	SIGNS

SYMBOL	DESCRIPTION
	CHAIN LINK FENCE CONDITION 1
	CHAIN LINK FENCE CONDITION 2
	POST AND WIRE FENCE
	CABLE RAIL FENCE
	CONCRETE PAVEMENT
	HMA PAVEMENT
	DECOMPOSED GRANITE
	AB PAVING

SYMBOL	DESCRIPTION
	EXISTING TREE
#59XX	DENOTES AN EXISTING TREE WITH A NUMBERED METAL FORESTRY TAG AFFIXED TO ITS TRUNK.
(#59XX)	DENOTES AN EXISTING TREE WITH AN ASSIGNED NUMBER, BUT WITH NO METAL FORESTRY TAG AFFIXED TO ITS TRUNK.
#59XX* OR (#59XX)*	DENOTES AN EXISTING TREE THAT QUALIFIES AS A HERITAGE TREE AS DEFINED BY THE CITY OF SANTA CRUZ.

KEYNOTE SCHEDULE

SYMBOL	DESCRIPTION	NOTES
SITE FURNISHINGS AND EQUIPMENT		
1-01	CHAIN LINK FENCE COND. 1	6' HIGH WITH STANDARD MESH CALTRANS STD RSP A85A, RSP A
1-02	CHAIN LINK FENCE COND. 2	HEIGHT VARIES WITH 3/8" MESH CALTRANS STD RSP A85A, RSP A
1-03	CHAIN LINK GATE	6' HIGH, 8' WIDE WITH 3/8" MESH CALTRANS STD RSP A85A, RSP A
1-04	INSTALL FENCE 3/8" MESH (GALV.) BETWEEN POSTS AT FENCE TRANSITION AT END OF WALL	
1-05	CABLE RAIL FENCE	CALTRANS STD B11-47. POST IN V-GUTTER PER SECTION A-A
1-06	SLIP RESISTANT MANHOLE COVER	
1-07	TEMPORARY HIGH-VISIBILITY FENCE	
1-08	CONTRACTOR TO MARK AND MAINTAIN BEGIN AND END OF CULTURAL RESOURCE AREA. MARKERS TO REMAIN UNTIL AFTER FINAL COMPLETION.	

REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 4579 11/30/23 1/28/22 STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CONSTRUCTION KEYNOTE PLAN

REFERENCES
FIELD BOOK:
DRAWING #: CP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CP-2.08
VAULT NO. 7079B
SHEET 27 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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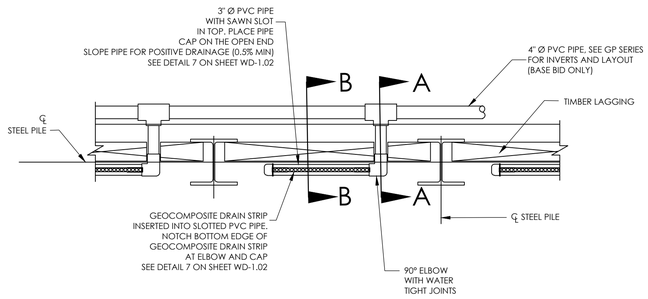
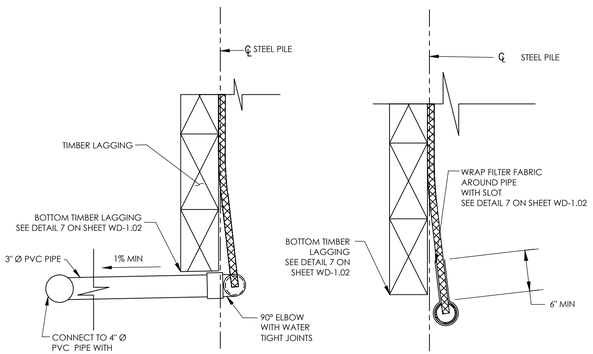


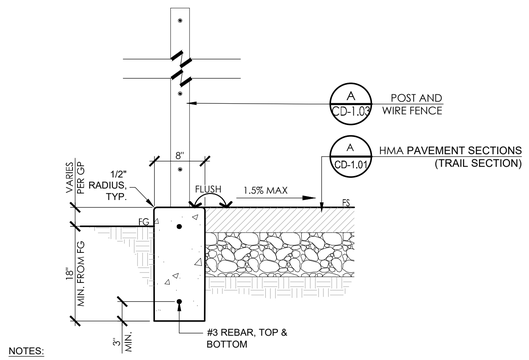


SECTION A-A

-NTS-

SECTION B-B

-NTS-

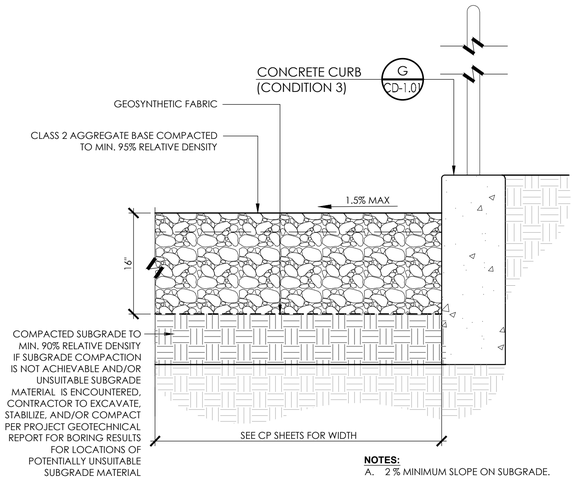


NOTES:

A. SEE DETAIL 8 ON CD-1.01 FOR CONCRETE JOINTING
B. EXPANSION JOINTS SHALL BE PLACED @ 20' O.C., TYPICAL.
C. TOOLED CONTROL JOINTS SHALL BE PLACED @ 10' O.C., TYPICAL.

F CONCRETE CURB (CONDITION 2)

1" = 1'-0" 990404-20

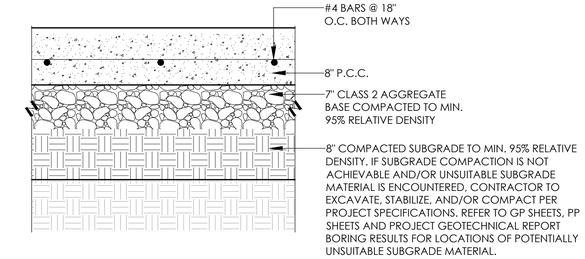


NOTES:

A. 2 % MINIMUM SLOPE ON SUBGRADE.

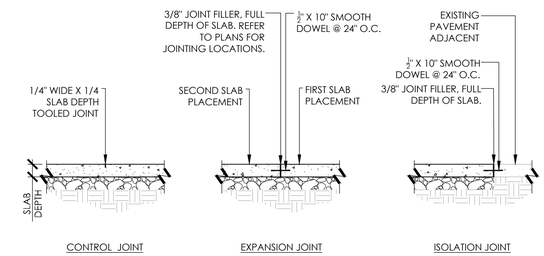
D AB PAVING

1" = 1'-0" 321516-60



C CONCRETE PAVING SECTION (TRAIL)

1" = 1'-0"



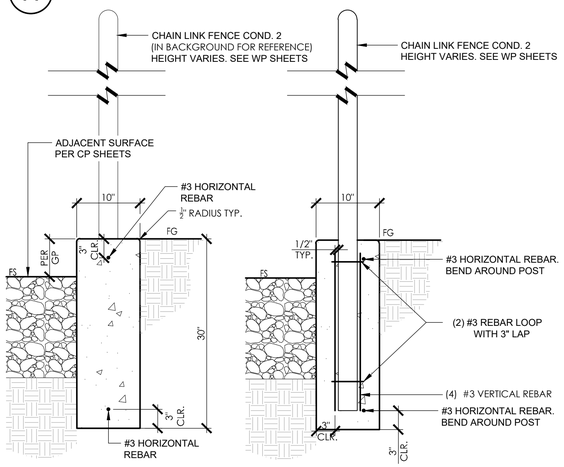
NOTES:

A. REFER TO PLANS FOR JOINTING LOCATIONS AND LAYOUT INFORMATION.
B. PROVIDE ISOLATION JOINT AGAINST PREVIOUSLY CONSTRUCTED, FIXED ELEMENTS.
C. INSTALL JOINT FILLER PER MANUFACTURER'S INSTRUCTIONS.
D. PROVIDE SEALANT ON ALL CONCRETE EXPANSION JOINTS.

B CONCRETE JOINTING

1/2" = 1'-0" 321313.14-22

H SOLDIER PILE WALL DRAIN

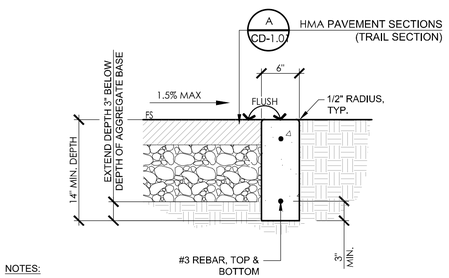


CONCRETE CURB COND. 3, TYPICAL

CONCRETE CURB, COND. 3 AT CHAIN LINK FENCE POST INSTALLATION

G CONCRETE CURB (CONDITION 3)

1" = 1'-0" 990404-08

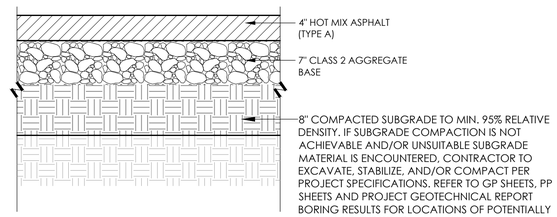


NOTES:

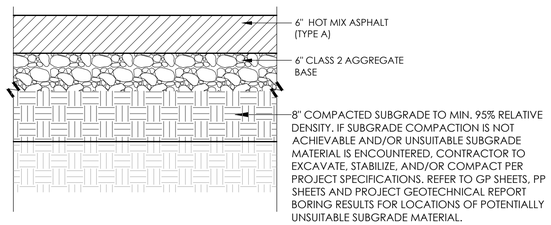
A. SEE DETAIL 8 ON CD-1.01 FOR CONCRETE JOINTING
B. EXPANSION JOINTS SHALL BE PLACED @ 20' O.C., TYPICAL.
C. TOOLED CONTROL JOINTS SHALL BE PLACED @ 10' O.C., TYPICAL.

E CONCRETE CURB (CONDITION 1)

1" = 1'-0" 990404-04



TRAIL SECTION



PUBLIC STREET SECTION

A HMA PAVEMENT SECTIONS

1" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER — DARREN M.C. DOLOVICH — 82708 EXP 9/30/22 CIVIL — STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF
SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL

CONSTRUCTION DETAILS

REFERENCES
FIELD BOOK:

DRAWING #:
CD-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

CD-1.01

VAULT NO. 7079B

SHEET 28 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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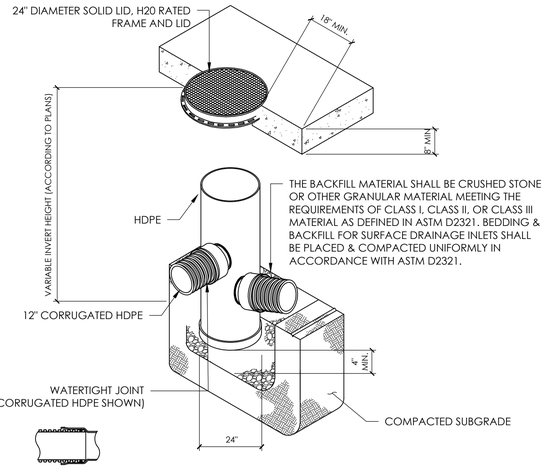
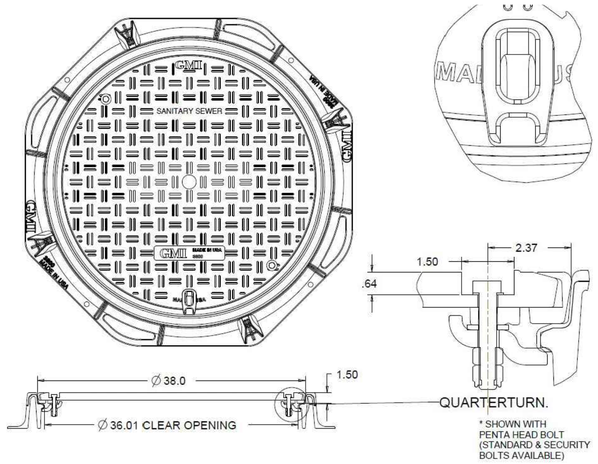
24" DRAIN BASIN WITH SOLID LID



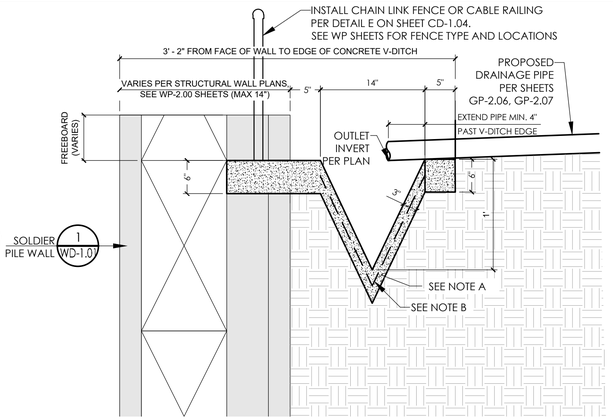
A. FRAME AND LID SHALL BE H20 RATED.
B. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS.
C. ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°.
D. SOLID COVER SHALL MEET H-20 LOAD RATING AND BE SLIP RESISTANT.
E. NUMBER OF CONNECTIONS, INVERT DEPTHS, AND DIRECTIONS PER PLANS.
F. FILL SUMP WITH MINOR CONCRETE AND SLOPE TOWARDS OUTLET AT 2% MINIMUM.

H 24" DRAIN BASIN AND SOLID LID



NOTES:
A. MANHOLE COVER SHALL BE SLIP RESISTANT.
B. FRAME AND COVER SHALL BE CAST IRON, H20 RATED.

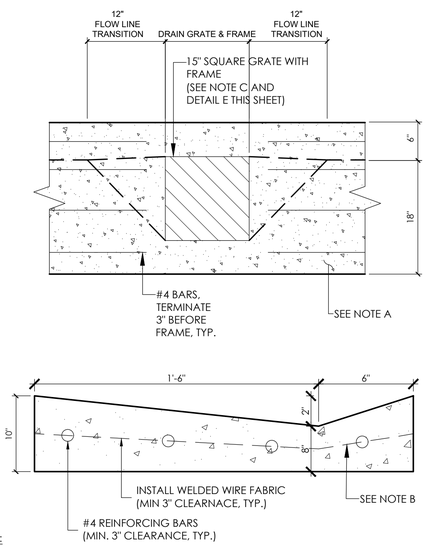
F HEAVY DUTY STORM DRAIN COVER



NOTES:

A. CONCRETE SHALL BE MINOR CONCRETE
B. REINFORCING SHALL BE 6" X 6" - W 1.4 X W 1.4 WELDED WIRE MESH OR APPROVED EQUAL

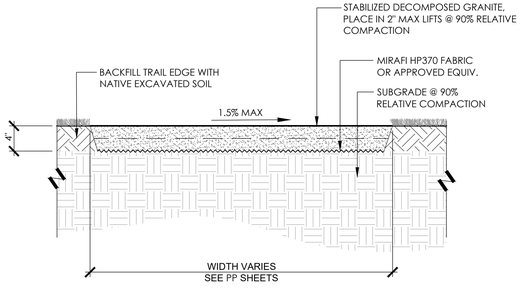
D CONCRETE V-DITCH



NOTES:

A. CONCRETE SHALL BE MINOR CONCRETE
B. REINFORCING SHALL BE 6" X 6" - W 1.4 X W 1.4 WELDED WIRE MESH OR APPROVED EQUAL
C. GRATE AND FRAME SHALL BE BICYCLE PROOF AND H-20 RATED
D. INSTALL GUTTER OVER 7" MIN CLASS 2 AB

B CONCRETE GUTTER

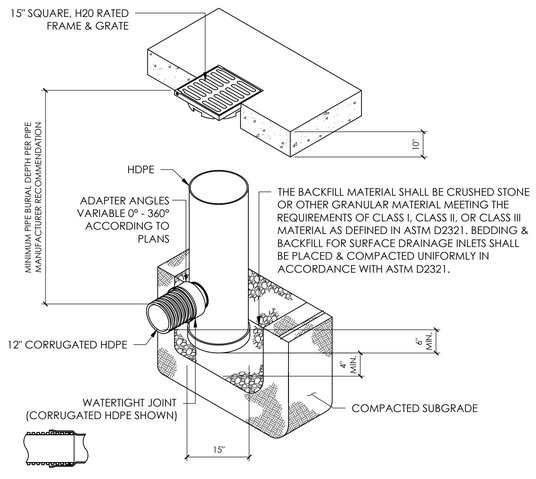


NOTES:
A. SUFFICIENT WATER SHALL BE ADDED TO DECOMPOSED GRANITE TO FACILITATE COMPACTION OF TRAIL WITH VIBRATORY ROLLER. FINAL COMPACTION DEPTH SHALL BE NO LESS THAN 4" DEEP.
B. 2 % MINIMUM SLOPE ON SUBGRADE.

G DECOMPOSED GRANITE TRAIL

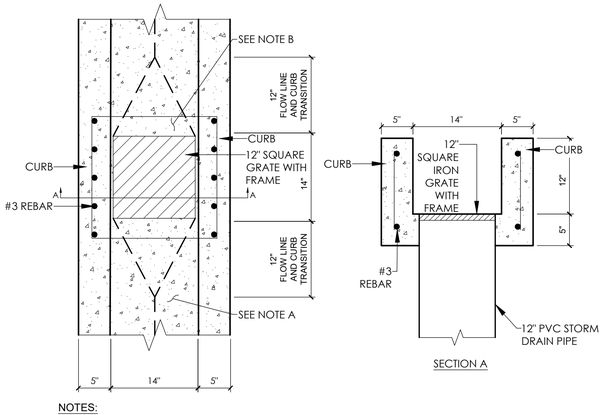
1" = 1'-0"

321516-54



NOTES:
A. GRATE AND FRAME SHALL BE H-20 RATED AND BICYCLE PROOF.
B. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS.
C. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE, N-12 HP, AND PVC SEWER.
D. ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°.
E. NUMBER OF CONNECTIONS, INVERT DEPTHS, AND DIRECTIONS PER PLANS.
F. INSTALL 12", 45° DUAL WALL HDPE FITTING DOWNSTREAM OF OUTLET AS SHOWN ON PLANS WHEN CONNECTING TO WYE.

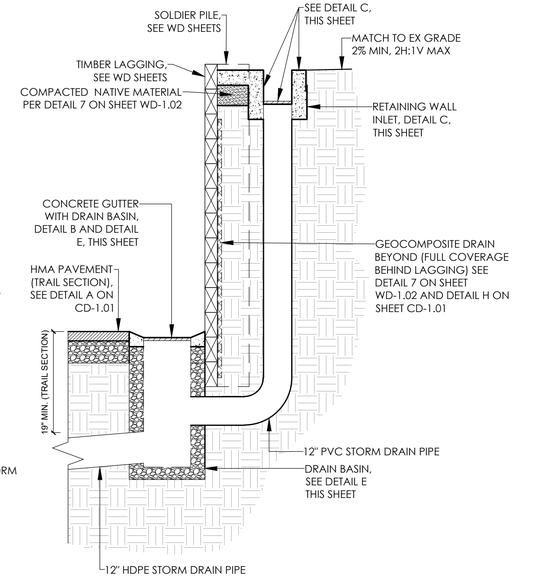
E 15" DRAIN BASIN AND GRATE



NOTES:

A. CONCRETE SHALL BE MINOR CONCRETE
B. AT END OF V-DITCH WRAP CURB. REBAR SIDE CURB PER THIS DETAIL.

C RETAINING WALL DOWNDRAIN INLET



THERE IS A BID ALTERNATE TO THIS DETAIL (DETAIL A / CD1.08) FOR RETAINING WALL DOWNDRAIN

A RETAINING WALL DOWNDRAIN

REGISTERED PROFESSIONAL ENGINEER — DARREN M.S. CHUN — 82708 — EXP 9/30/22 — CIVIL — STATE OF CALIFORNIA

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rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

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PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
CONSTRUCTION DETAILS

REFERENCES
FIELD BOOK:
DRAWING #: CD-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CD-1.02
VAULT NO. 7079B
SHEET 29 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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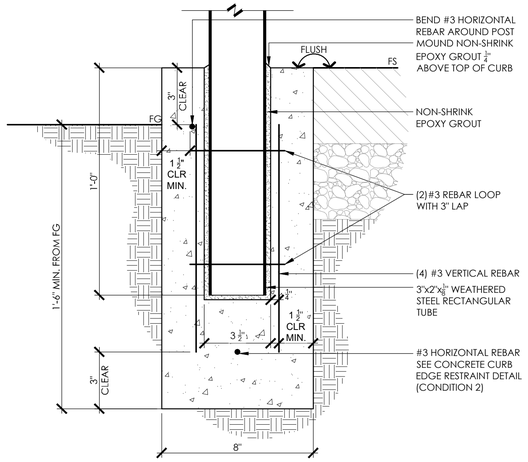
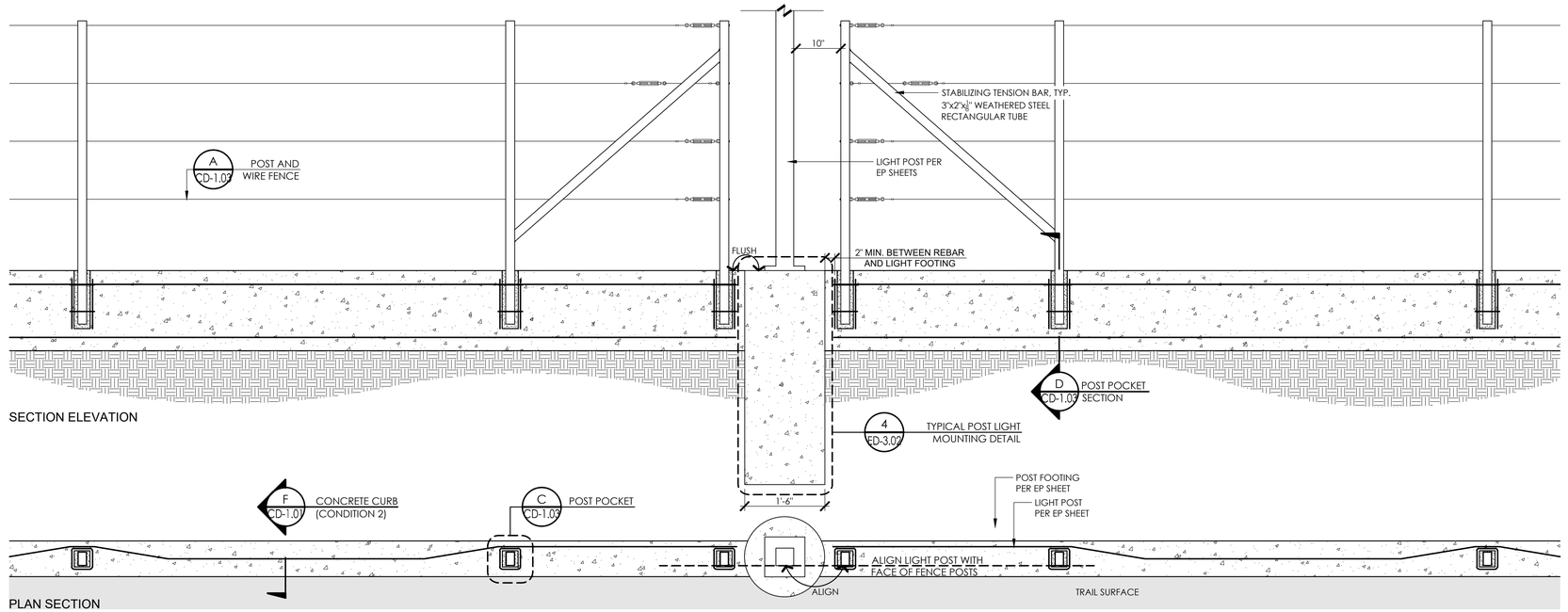


D POST POCKET SECTION

3" = 1'-0"

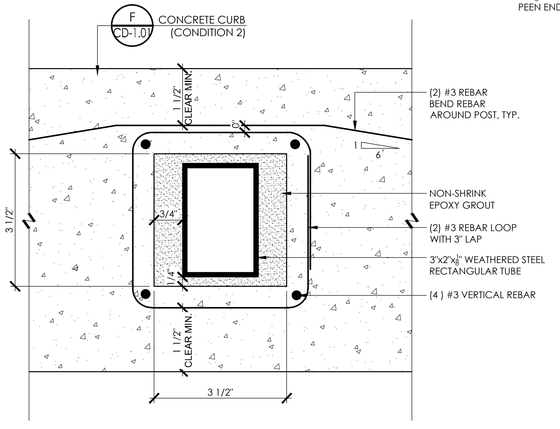
323126-08



B FENCE TERMINATION AT LIGHT

3/4" = 1'-0"

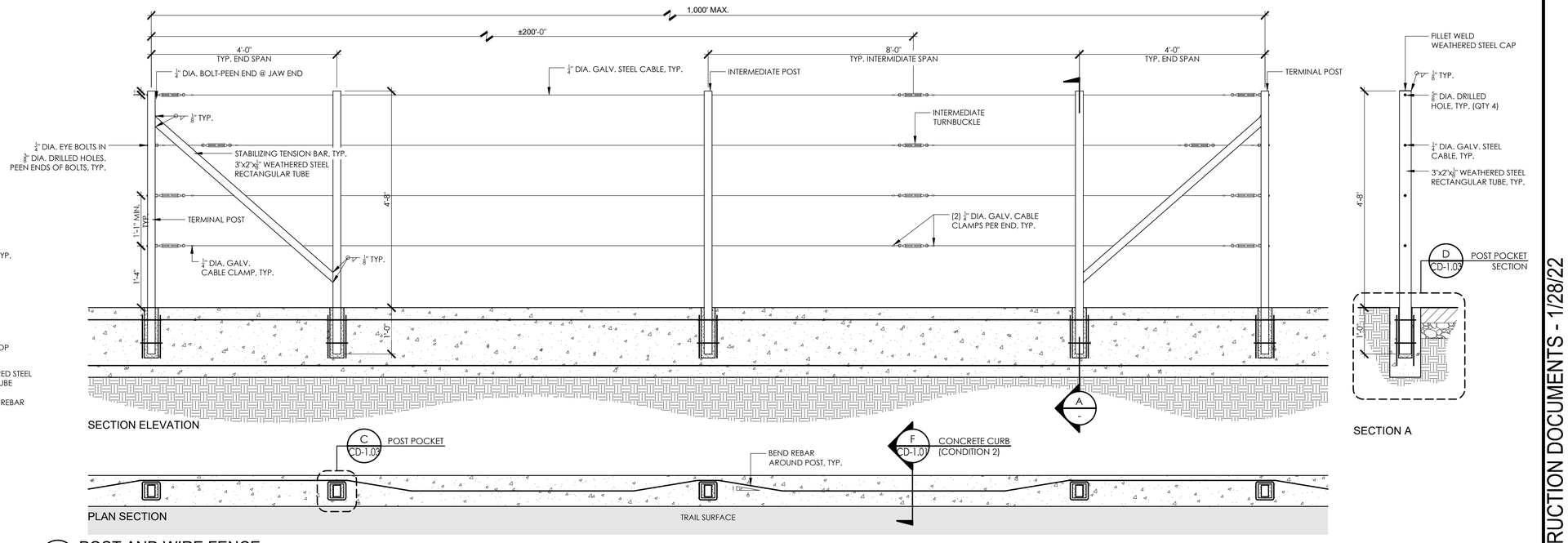
323126-12



C POST POCKET

6" = 1'-0"

323126-07



A POST AND WIRE FENCE

3/4" = 1'-0"

323126-11

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 4750 11/30/23 1/28/22 STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL

CONSTRUCTION DETAILS

REFERENCES
FIELD BOOK:

DRAWING #:
CD-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

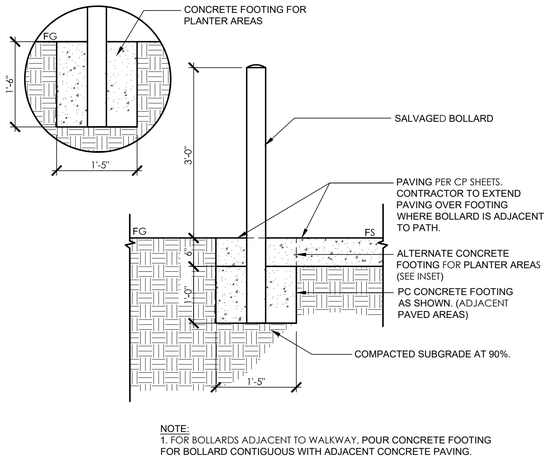
SCALE AS SHOWN

CD-1.03

VAULT NO. 7079B

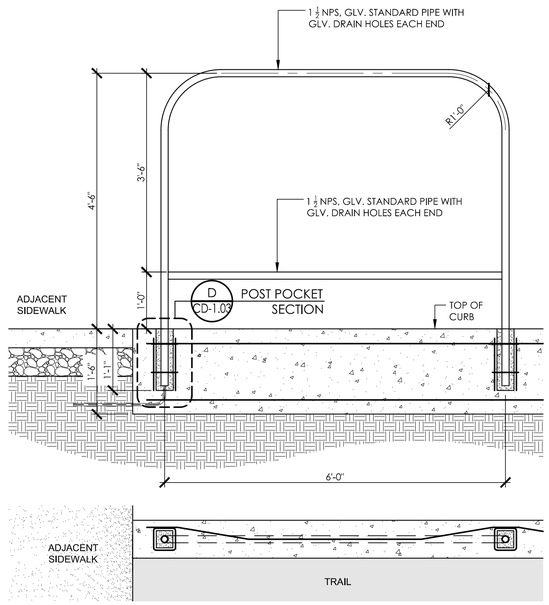
SHEET 30 OF 96

Layout Tab Name: CD-1.03 Images: Cal_Coastal_Trail_Loop.jpg; SIGN AND POST DETAIL.jpg; CityLogoBW.tif; FSImage_sPOST_Oval_Red_Byrd#163_BW.png; FSImage_sPOST_Oval_Red_Byrd#163_BW.png; MB537 Logo_2.jpg; MeasureD-MovingForSCForever-20173.png; RTC logo + name 2013.jpg; N:\2000\10193-01-rail\15-Rail-Trail\~Segment-7\Planning\ConstDocs\AutoCAD\Phase 2\CD-0193-01_PH2.dwg, Plotted By: MS(cadetek), Plotted: Jan 28, 2022 - 5:37pm

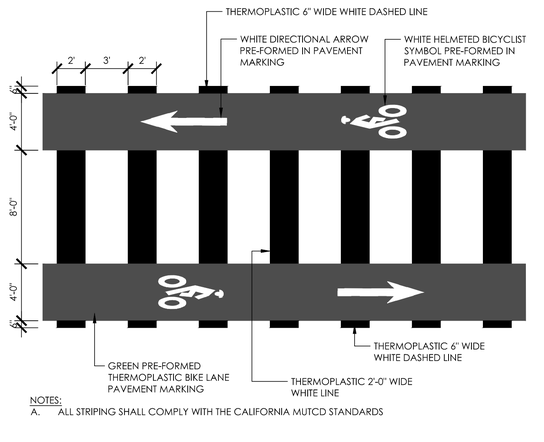


NOTE:
1. FOR BOLLARDS ADJACENT TO WALKWAY, POUR CONCRETE FOOTING FOR BOLLARD CONTIGUOUS WITH ADJACENT CONCRETE PAVING.

H RESET BOLLARD
3/4" = 1'-0" 129325-67

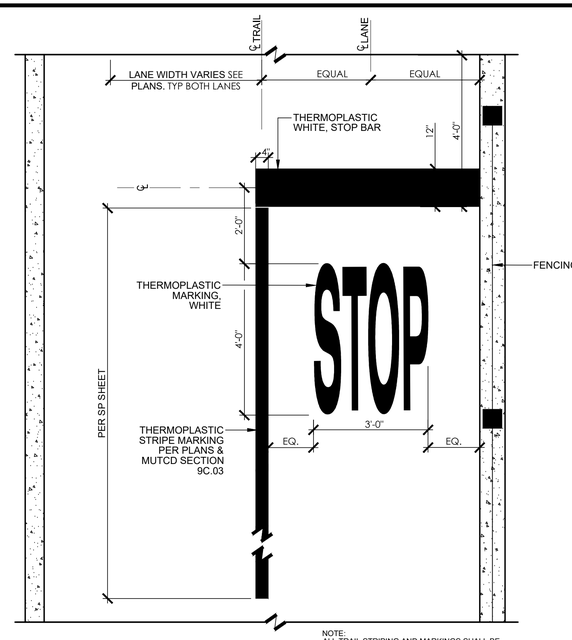


F LEAN RAIL
3/4" = 1'-0" 9904-12



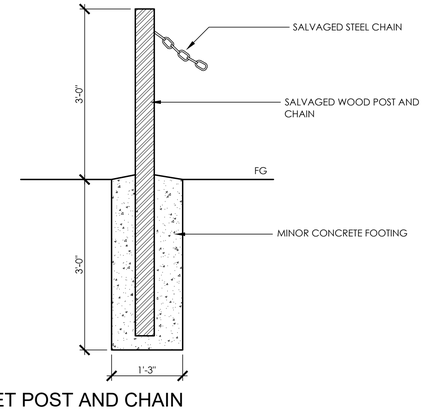
NOTES:
A. ALL STRIPING SHALL COMPLY WITH THE CALIFORNIA MUTCD STANDARDS

D CROSSWALK STRIPING
3/16" = 1'-0" 990405-26

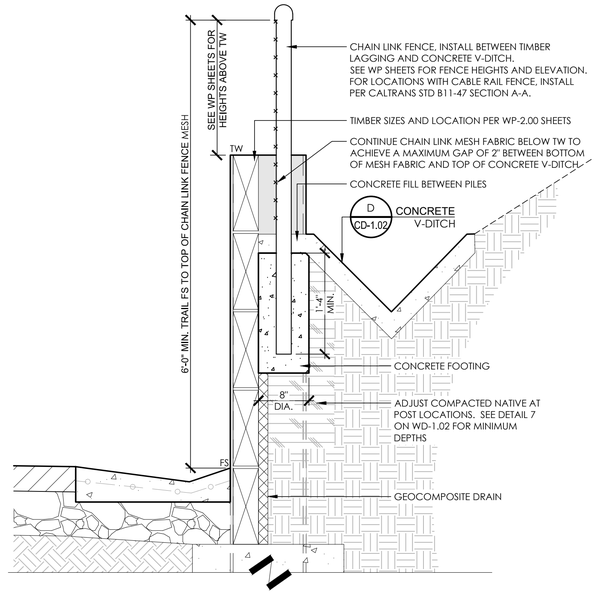


NOTE:
ALL TRAIL STRIPING AND MARKINGS SHALL BE THERMOPLASTIC AND CONFORM TO CHAPTER 1000 OF THE CALTRANS HIGHWAY DESIGN MANUAL

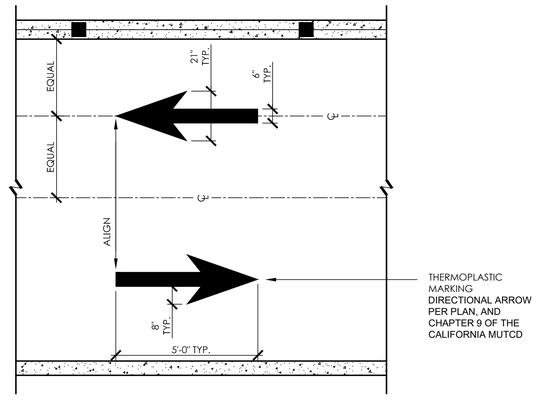
B TRAIL STOP MARKINGS
1/2" = 1'-0" 990405-16



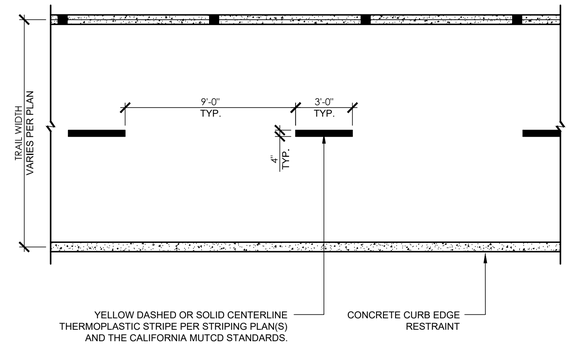
G RESET POST AND CHAIN
3/4" = 1'-0" 129325-66



E CHAIN LINK FENCE BEHIND WALL
1" = 1'-0" 323113-26



C THERMOPLASTIC DIRECTIONAL ARROW
3/8" = 1'-0" 990405-19



NOTE:
A. CENTERLINE STRIPING MAY NOT OCCUR IN ALL LOCATIONS. SEE PLAN FOR LOCATIONS OF STRIPING

A CENTERLINE STRIPING (TRAIL)
1/4" = 1'-0" 990405-17

REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 5501 11/30/23 1/28/22 STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF
SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

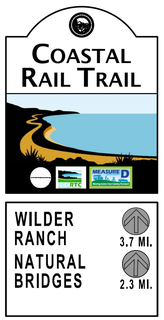
RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
CONSTRUCTION DETAILS

REFERENCES	DATE 1/28/22	SCALE AS SHOWN	
FIELD BOOK:	DRAWN KS	CD-1.04	
DRAWING #: CD-0193-01_PH2	DESIGN KS/MS	VAULT NO. 7079B	
	CHECKED MS		

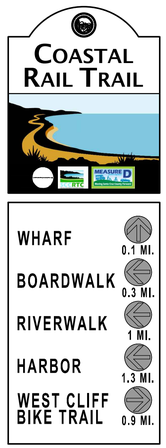
BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: CD-1.04, Images: CA Coastal Trail Logo.jpg, SIGN AND POST DETAIL.jpg, Chevron.JPG, Ellipse_HDPE_Oval_Rail_Mount150_BW.png, Ellipse_HDPE_Oval_Rail_Mount150_BW.png, MBSST Logo_2.jpg, MeasureD-MovingSCForward-2017.png, RTC logo + name 2013.jpg, SD Ltr nee Parking Ltd.JPG, SIGNS_CENTER_16x7.5 block.jpg, Diamond.jpg, , Xrefs: 0193-01-XTBL_PH2.dwg, Stamp_MikeSherrod.dwg
\\corp\rrm\sn-sta\2001\0193-01_RC15-Rail-Trail-Segment-7\Planning\Condocs\Multi-Use\Phase 2\CD-0193-01_PH2.dwg, Plotted By: mmistele, Plotted: Feb 28, 2022 - 4:51pm

WF-I1.1



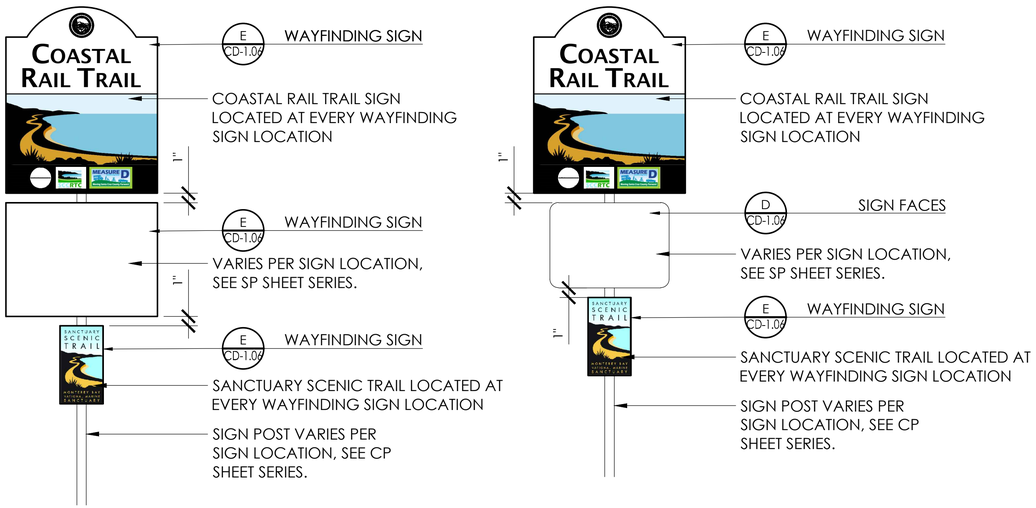
WF-I2.1



WF-R

WF-SL

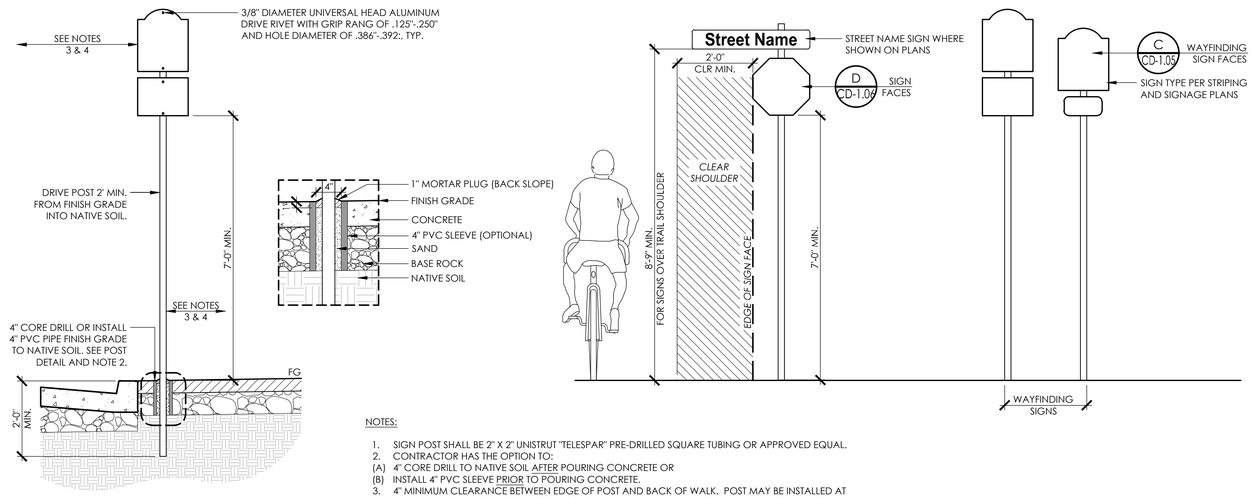
SIGN LAYOUT



C WAYFINDING SIGN FACES

1 1/2" = 1'-0"

990406-27



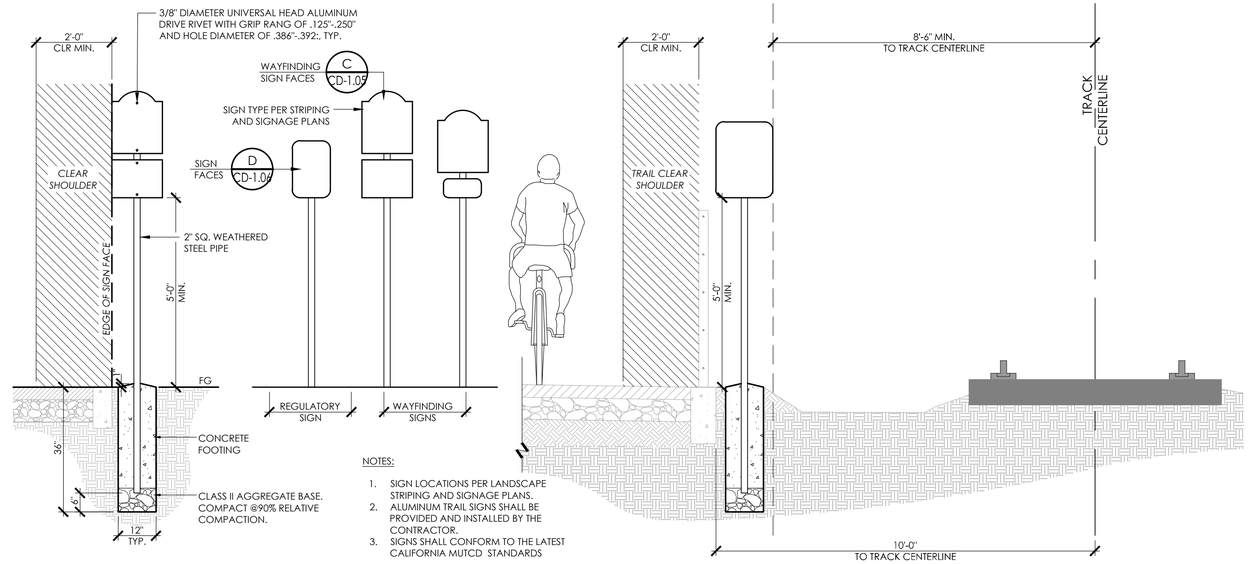
NOTES:

1. SIGN POST SHALL BE 2" X 2" UNISTRUT "TELESPAR" PRE-DRILLED SQUARE TUBING OR APPROVED EQUAL.
2. CONTRACTOR HAS THE OPTION TO:
   (A) 4" CORE DRILL TO NATIVE SOIL AFTER POURING CONCRETE OR
   (B) INSTALL 4" PVC SLEEVE PRIOR TO POURING CONCRETE.
3. 4" MINIMUM CLEARANCE BETWEEN EDGE OF POST AND BACK OF WALK. POST MAY BE INSTALLED AT BACK OF WALK IF 4' CLEARANCE CAN NO BE MET.
4. INSTALL POST SO THAT THE EDGE OF SIGN IS SET BACK 6" FROM FACE OF CURB. SIGN MAY BE MOUNTED OFF CENTER ON SIGN POST TO PROVIDE 4' POST CLEARANCE AND/OR 6" EDGE OF SIGN SET BACK.
5. SIGN LOCATIONS PER LANDSCAPE STRIPING AND SIGNAGE PLANS.
6. ALUMINUM TRAIL SIGNS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR.
7. SIGNS SHALL CONFORM TO THE LATEST CALIFORNIA MUTCD STANDARDS

B SIGN POST COND. 1

1/2" = 1'-0"

990406-37



NOTES:

1. SIGN LOCATIONS PER LANDSCAPE STRIPING AND SIGNAGE PLANS.
2. ALUMINUM TRAIL SIGNS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR.
3. SIGNS SHALL CONFORM TO THE LATEST CALIFORNIA MUTCD STANDARDS

A SIGN POST COND. 2

1/2" = 1'-0"

990406-38

REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 4757 11/30/23 1/28/22 STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL

CONSTRUCTION DETAILS

REFERENCES
FIELD BOOK:

DRAWING #:
CD-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN

CD-1.05

VAULT NO.
7079B

SHEET 32 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: CD-1.05, Images: CA Coastal Trail Large.jpg, SIGN AND POST DETAIL.jpg, ChipmunkBB.ttf, Fittings_sADPE_Dual_Rail_Brkt45.dll#.jpg, Fittings_sADPE_Dual_Rail_Brkt90.dll#.jpg, Fittings_sADPE_Dual_Rail_Brkt45&90_dll#.jpg, MB031 Logo_2.jpg, MeasureD-MovingSCForward-20172.png, RTC logo + name 2013.jpg, SD Ltr res Parking Ltd.JPG, SIGNS_CENTER_16x7.5 black.jpg, Diamond.jpg, , Xrefs: 0193-01-XTR_PH2.dwg, Stamp_MikeSherrod.dwg
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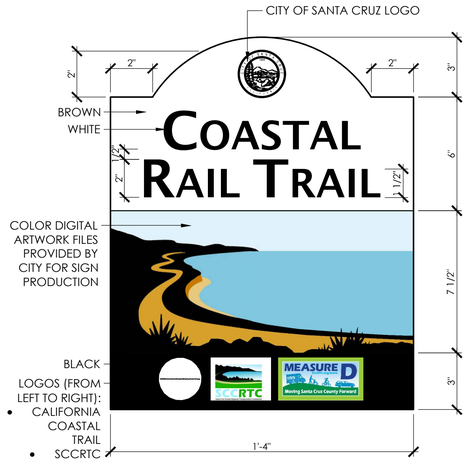
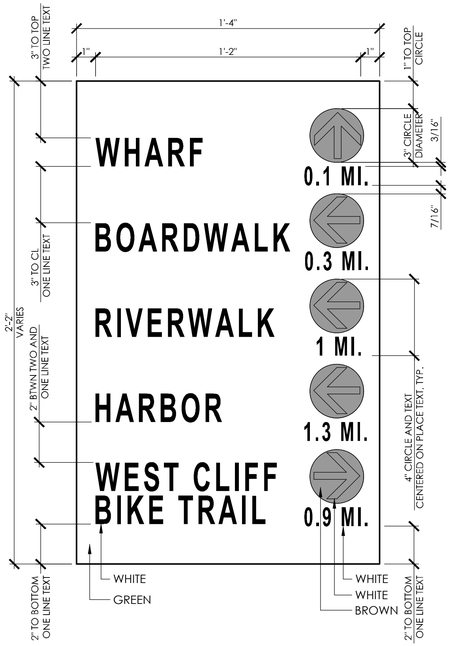
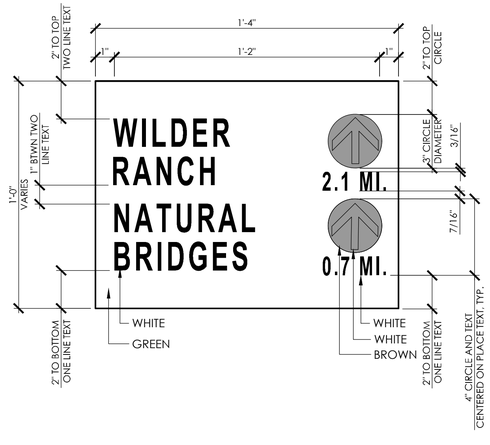
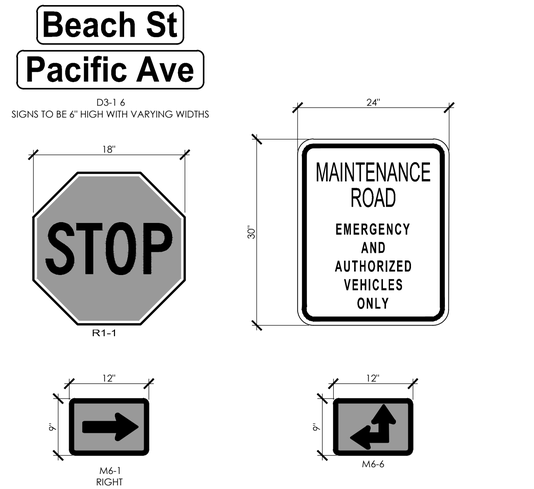


E WAYFINDING SIGN

3" = 1'-0" 990406-35



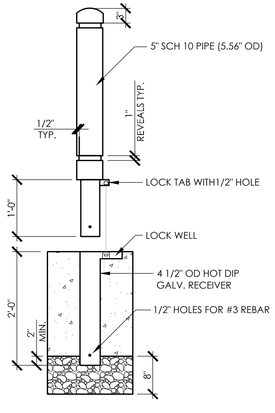




NOTES:
A. ALL ALUMINUM SIGNS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR.
B. ALL SIGNS SHALL CONFORM TO THE LATEST CALIFORNIA MUTCD STANDARDS.
C. SEE DETAIL A, THIS SHEET FOR SIGN PLACEMENT, MOUNTING & POST FOOTING DETAIL.

D SIGN FACES

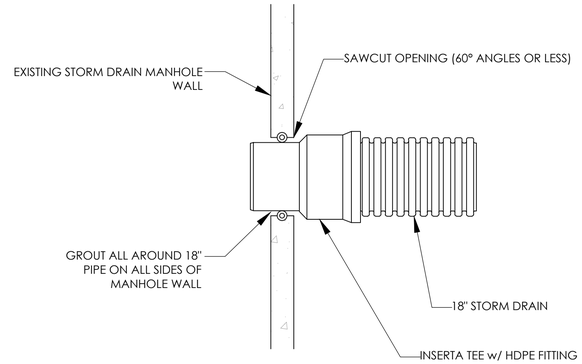
1" = 1'-0" 990406-19



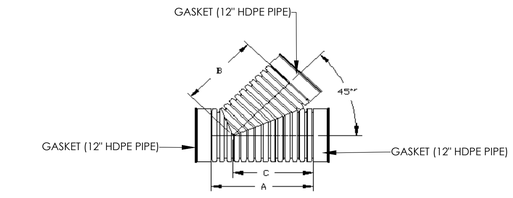
NOTES:
A. RECEIVER MUST BE INSTALLED IN DRAINAGE ROCK, NO CRUSHED ROCK OR MINUS ROCK

C REMOVABLE BOLLARD

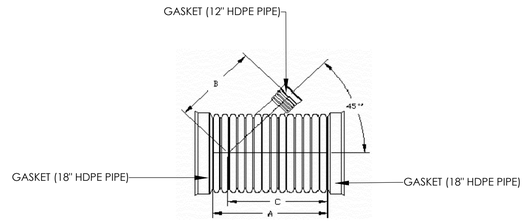
3/4" = 1'-0" 129325-65



B EXISTING STORM DRAIN MANHOLE PUNCH-IN



12" X 12" STANDARD WYE



18" X 12" REDUCING WYE

NOTES:

A. DIMENSION "A", "B", AND "C" VARY BASED ON MANUFACTURER SELECTED.
B. STANDARD AND REDUCING WYE FITTINGS SHALL BE DUAL WALL HDPE.

A STANDARD AND REDUCING WYE

REGISTERED PROFESSIONAL ENGINEER
DARREN M.C. CROWL
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL

CONSTRUCTION DETAILS

REFERENCES
FIELD BOOK:
DRAWING #: CD-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CD-1.06
VAULT NO. 7079B
SHEET 33 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: CD-1.06, Images: CA Coastal Trail Vector.jpg SIGN AND POST DETAIL.jpg, City Logo.jpg, SIGN_CENTER_16x7.5 black.jpg, Diamond.jpg , Vivek: 0193-01-WTR_PH2.dwg, Stamp_MikeDiamond.dwg
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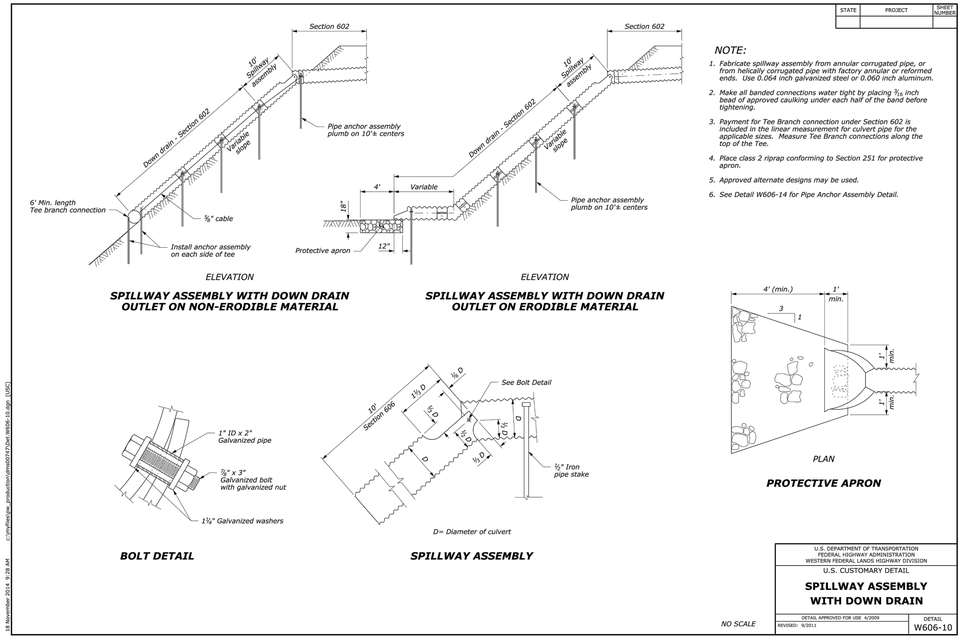


NOTE:

1. Fabricate spillway assembly from annular corrugated pipe, or from helically corrugated pipe with factory annular or reformed ends. Use 0.064 inch galvanized steel or 0.060 inch aluminum.
2. Make all banded connections water tight by placing 3/4 inch bead of approved caulking under each half of the band before tightening.
3. Payment for Tee Branch connection under Section 602 is included in the linear measurement for culvert pipe for the applicable sizes. Measure Tee Branch connections along the top of the Tee.
4. Place class 2 riprap conforming to Section 251 for protective apron.
5. Approved alternate designs may be used.
6. See Detail W606-14 for Pipe Anchor Assembly Detail.

STATE	PROJECT	SHEET NUMBER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
WESTERN FEDERAL LANDS HIGHWAY DIVISION

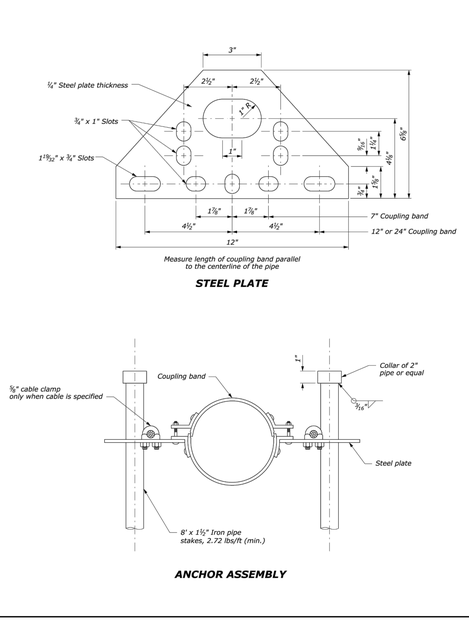
U.S. CUSTOMARY DETAIL

SPILLWAY ASSEMBLY WITH DOWN DRAIN

NO SCALE

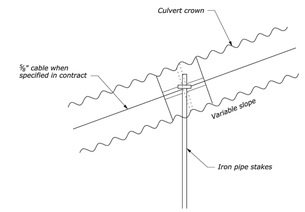
DETAIL APPROVED FOR USE 4/2009	DETAIL
REVISED: 9/2011	W606-10

18 November 2014 - 9:28 AM C:\Pwflex\pw_production\dms00747\Spillway_Down_W606-10.dgn [USC]



NOTE:

1. All pipe stakes and hardware to be galvanized after fabrication.
2. Approved alternative pipe anchor assemblies may be used.
3. Place slope anchor assemblies on 20' max. centers on slopes 20% or greater.
4. Plate material to be ASTM A36. Galvanize after fabrication.



STATE	PROJECT	SHEET NUMBER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
WESTERN FEDERAL LANDS HIGHWAY DIVISION

U.S. CUSTOMARY DETAIL

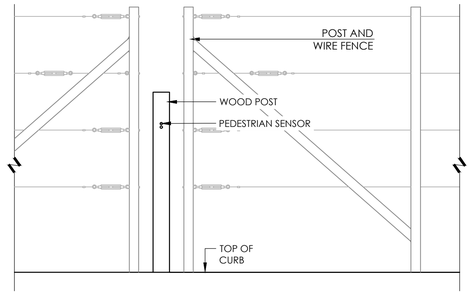
PIPE ANCHOR ASSEMBLY

NO SCALE

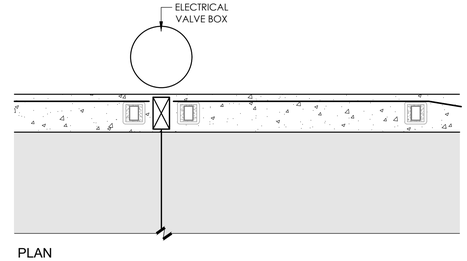
DETAIL APPROVED FOR USE 4/2009	DETAIL
REVISED: 5/2009	W606-14

18 November 2014 - 1:28 PM C:\Pwflex\pw_production\dms00747\Pipe_W606-14.dgn [USC]

B SLOPE PIPE ANCHOR ASSEMBLY



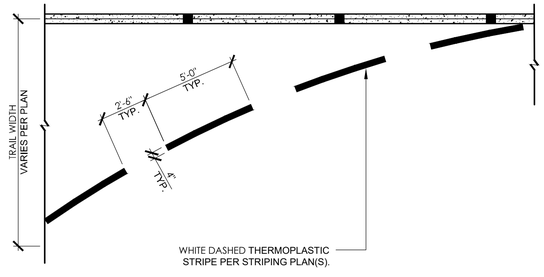
ELEVATION



PLAN

D TRAFFIC COUNTER ELEVATION

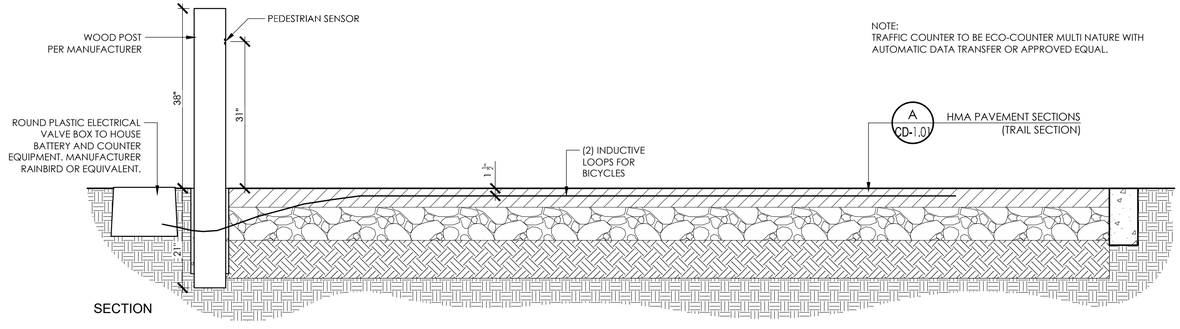
3/4" = 1'-0" 9904-16



NOTE:
A. SEE PLAN FOR LOCATIONS OF STRIPING

C WHITE DASHED STRIPING

1/4" = 1'-0" 990405-33



A TRAFFIC COUNTER

3/4" = 1'-0" 9904-15

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL

CONSTRUCTION DETAILS

REFERENCES
FIELD BOOK:

DRAWING #:
CD-0193-01_PH2

DATE	1/28/22	SCALE	AS SHOWN
DRAWN	KS		CD-1.07
DESIGN	KS/MS	VAULT NO.	7079B
CHECKED	MS	SHEET 34 OF 96	

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: CD-1.07 Images: CA Coastal Trail Loop.jpg SIGN AND POST DETAIL.jpg ChicagoBlock.jpg Fittings_sDR9_Dual_Wall_Ø4in160_Ø8in.png Fittings_sDR9_Dual_Wall_Ø4in160_Ø8in.png M8037 Logo_2.jpg MeasureDo-MovingDOTcrownch-20173.png RTC logo + name 2013.jpg SG Lid res Parking Lot.JPG SIGNS_CENTER_16x15 block.jpg Diamond.jpg , Xrefs: 0193-01-ATB_PH2.dwg, Stamp_MMdiamond.dwg
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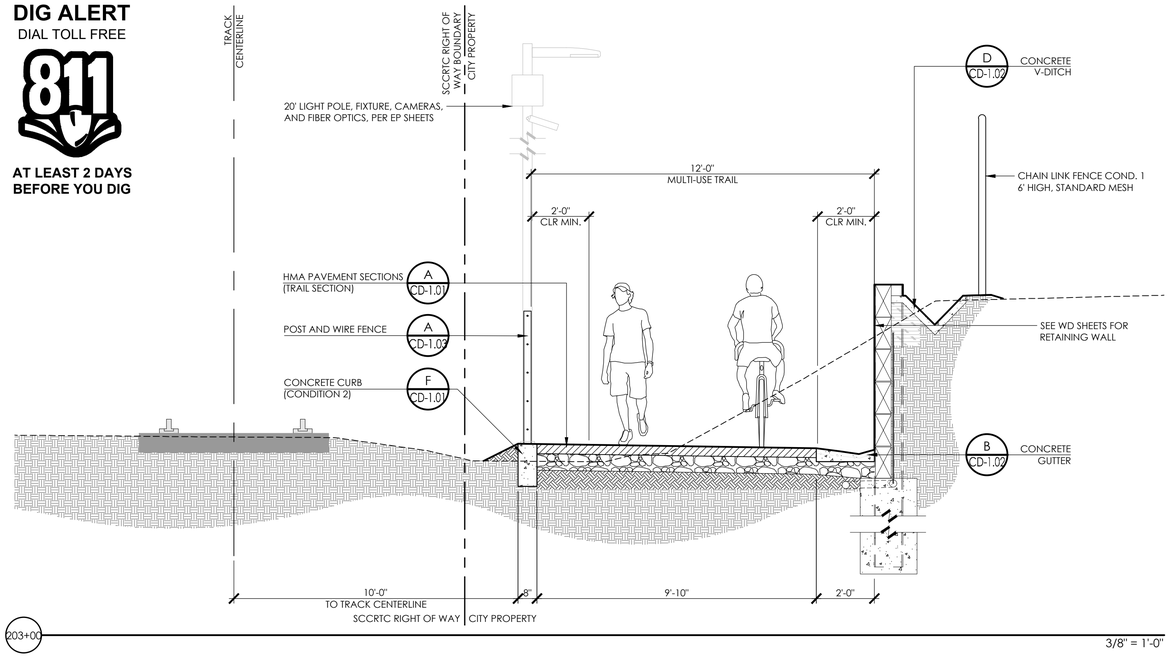
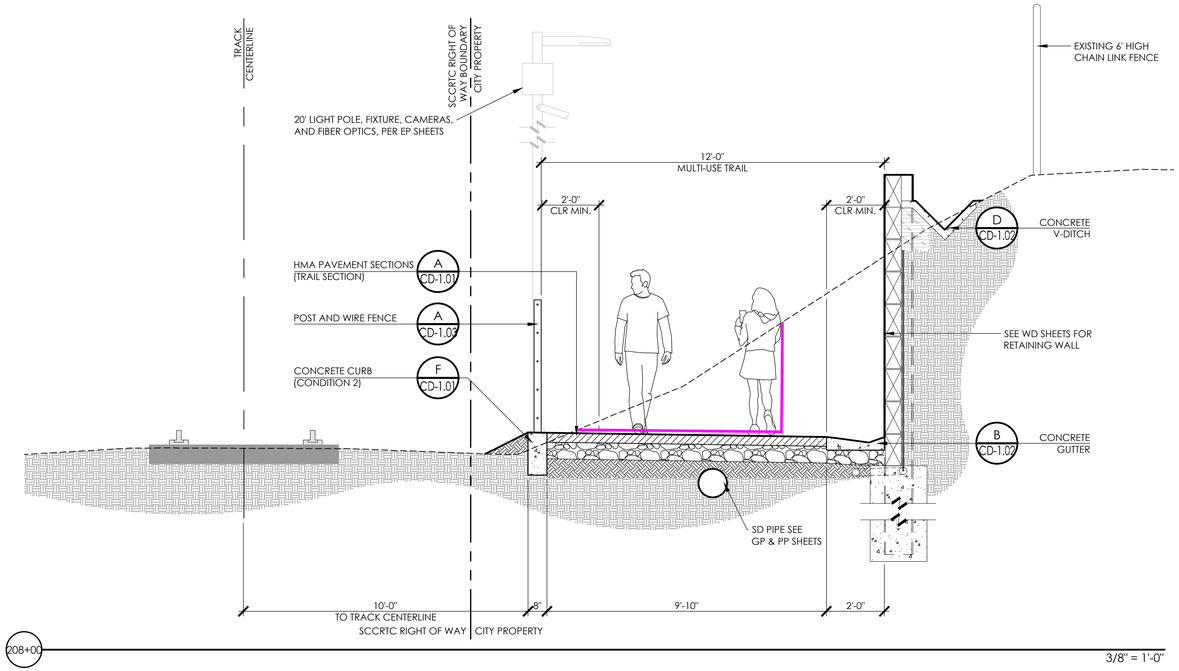
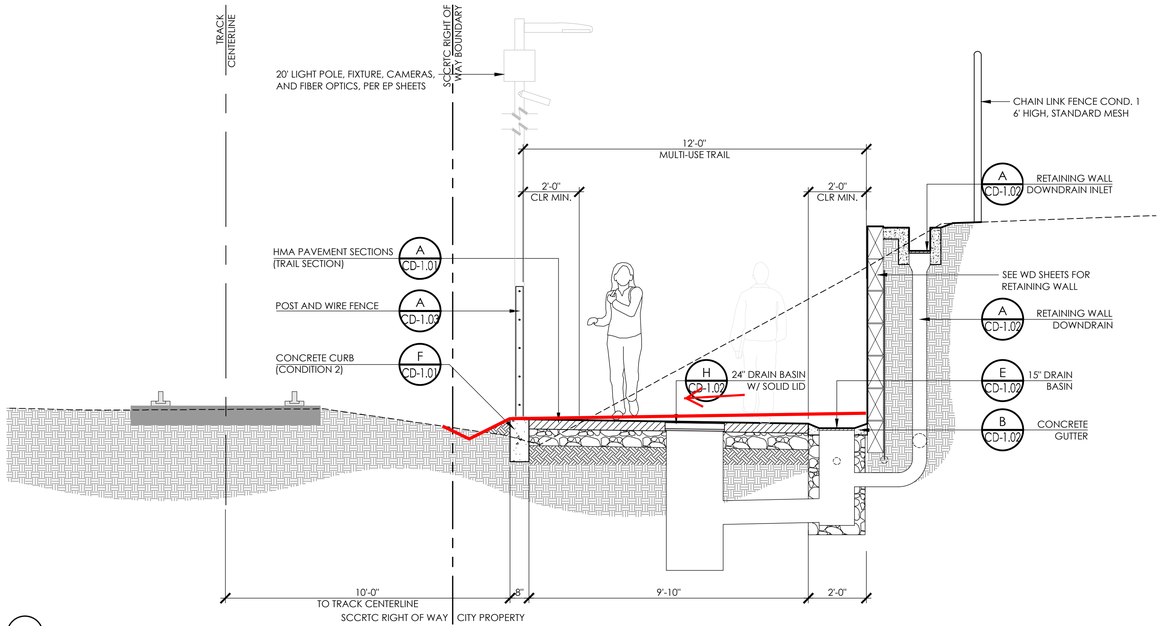
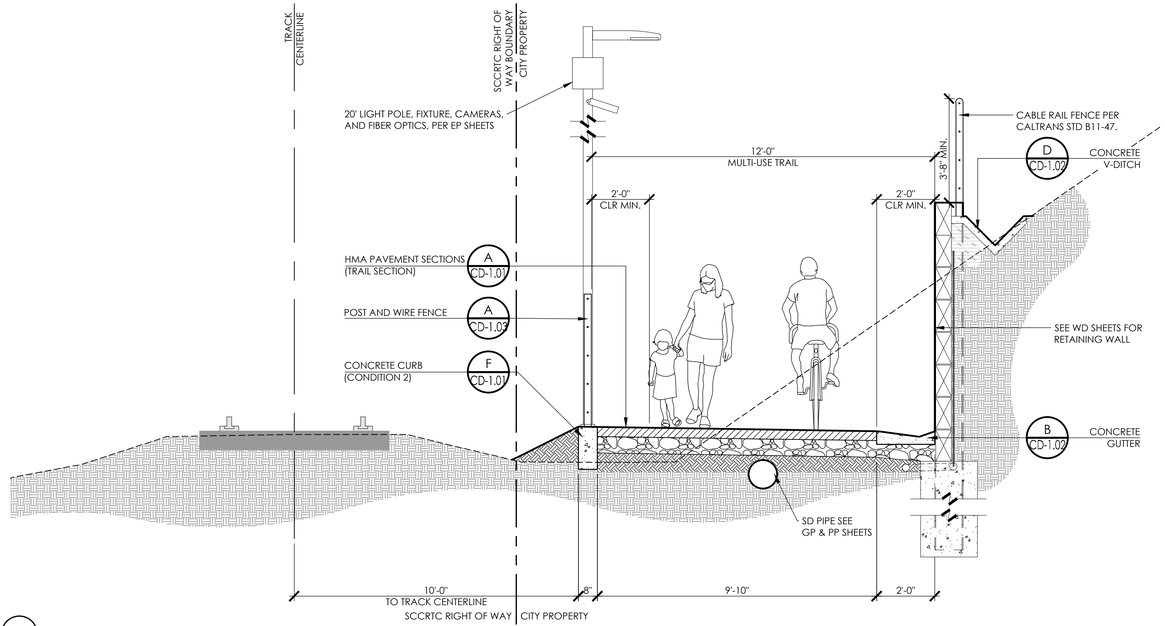
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG









REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 4750 11/30/23 STATE OF CALIFORNIA

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REVISIONS

CITY OF SANTA CRUZ PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TRAIL SECTIONS

REFERENCES
FIELD BOOK:
DRAWING #: SECS_0193-01_PH2

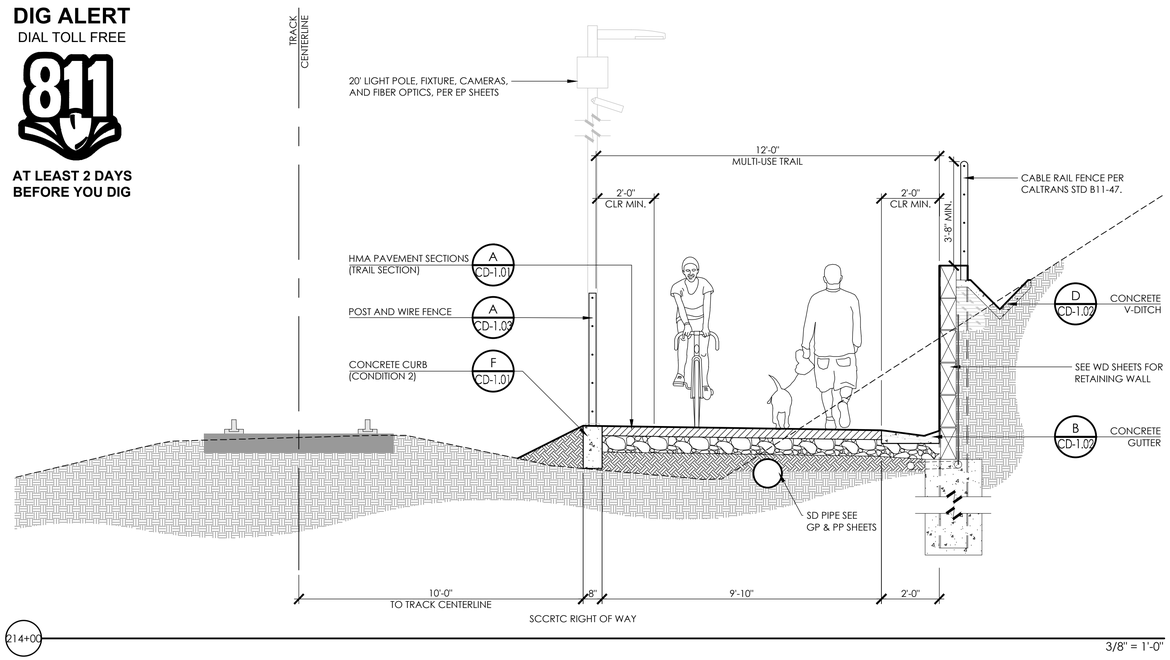
DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

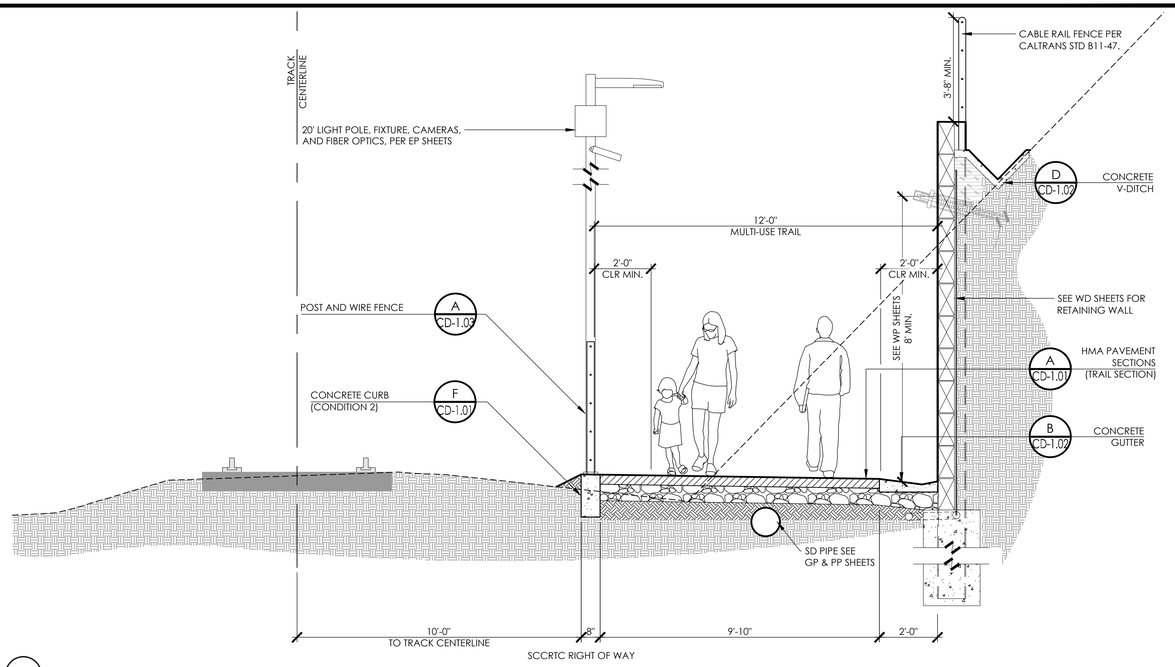
SCALE AS SHOWN
CD-3.01
VAULT NO. 7079B
SHEET 35 OF 96

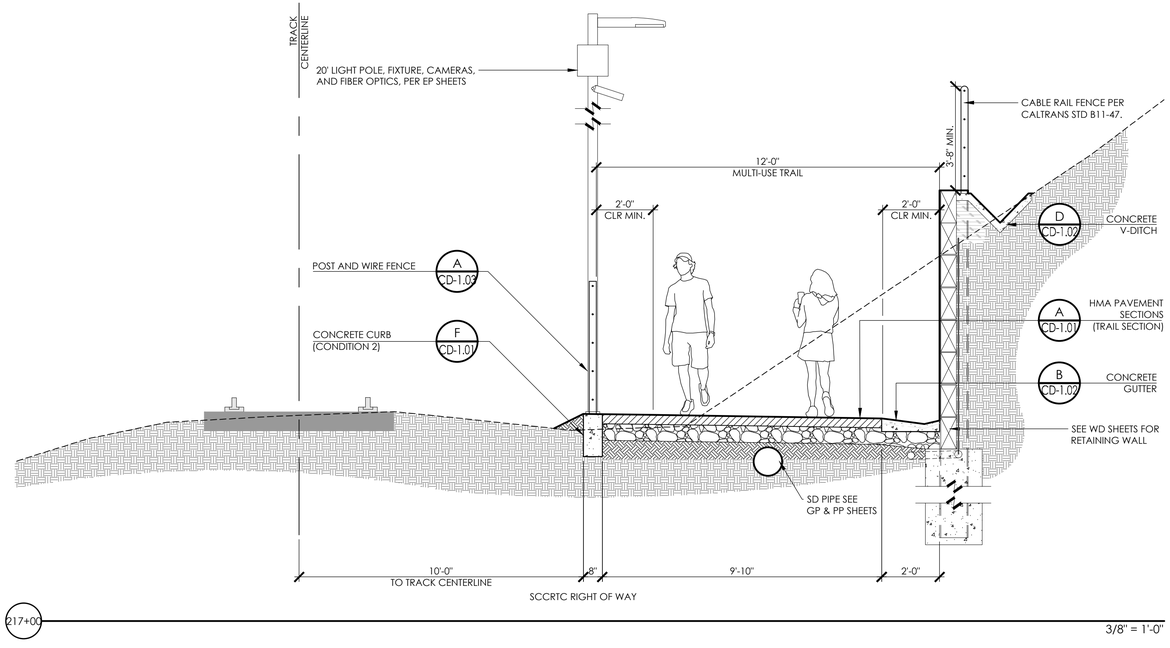
BID SET CONSTRUCTION DOCUMENTS - 1/28/22

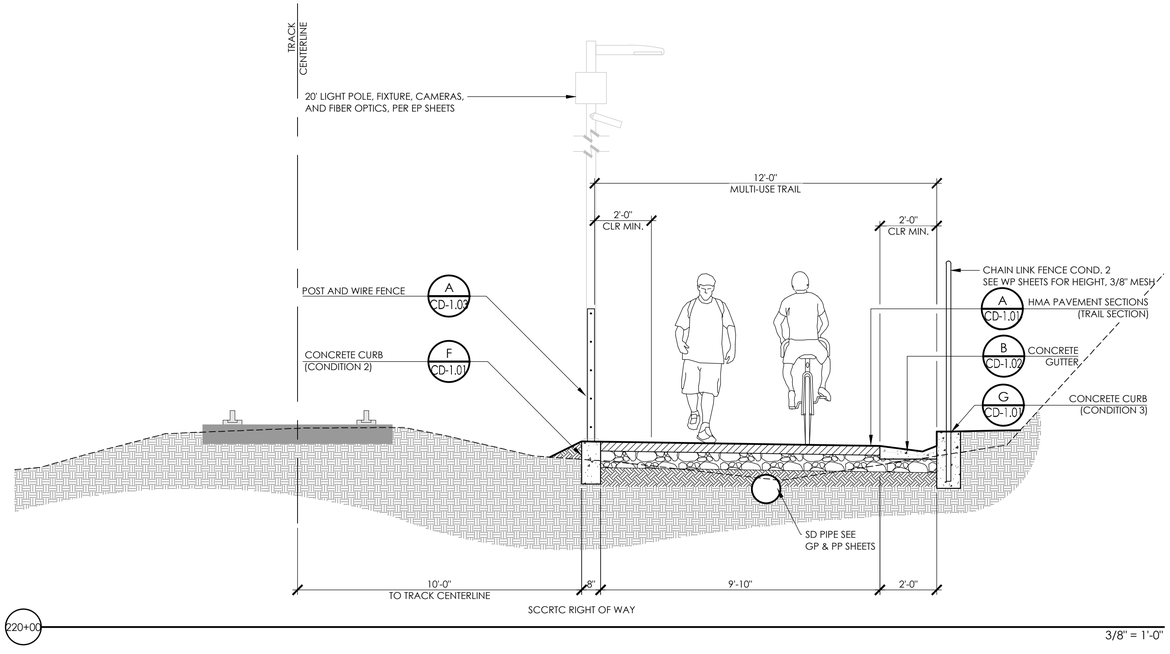
Layout Tab Name: CD-3.01, Images: Construction_2160612240 (002).jpg, IMG_4604(1).jpg, CA Coastal Trail Upcurb Mitered(1).jpg, Monarch Mound(2).jpg, 20172.jpg, PEC Sign + Frame 2013.jpg, SIGNS_CENTER_14x13 black.jpg, Stained.jpg , , Xrefs: 0193-01-XB.dwg, 0193-01-XT.dwg, 0193-01-N:\000\10\193-01-RH15-Rail-Trail\5-Segment-7\Planning\Corridors\AutoCAD\Phase 2\SECS_0193-01_PH2.dwg, Plotted By: KMDaSilva, Plotted: Jan 28, 2022 - 4:49pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG









REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 5531 11/30/23 1/28/22 DATE STATE OF CALIFORNIA

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PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

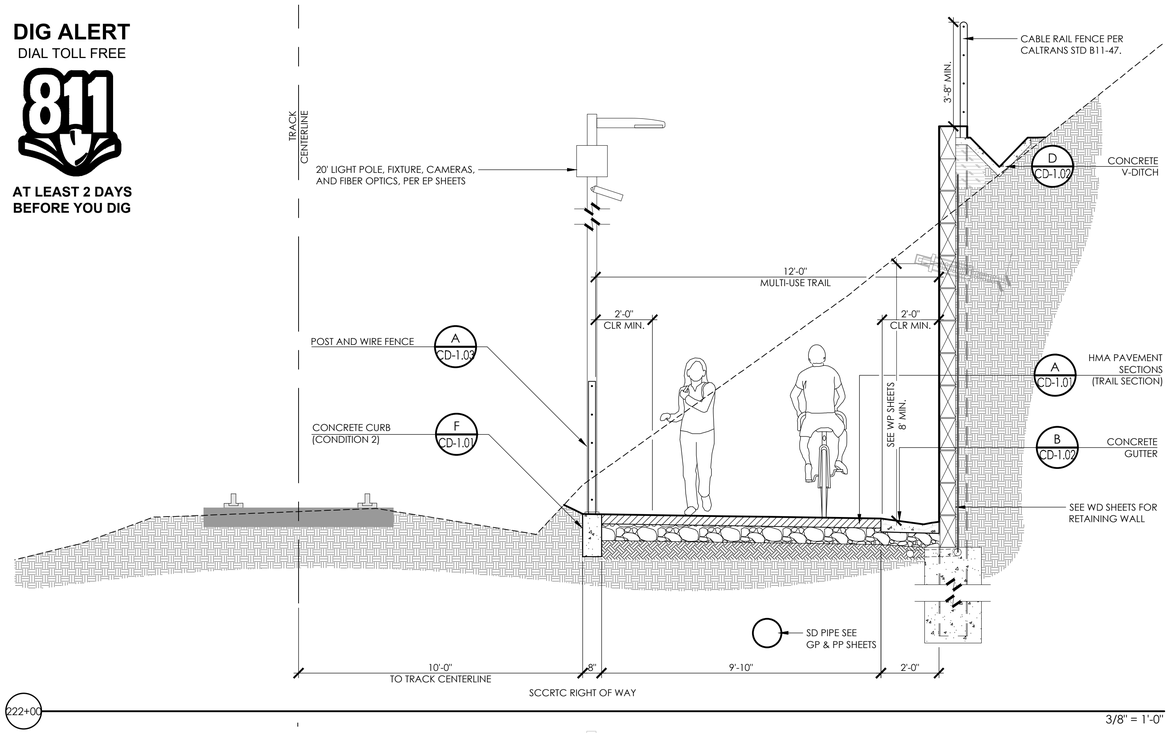
RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TRAIL SECTIONS

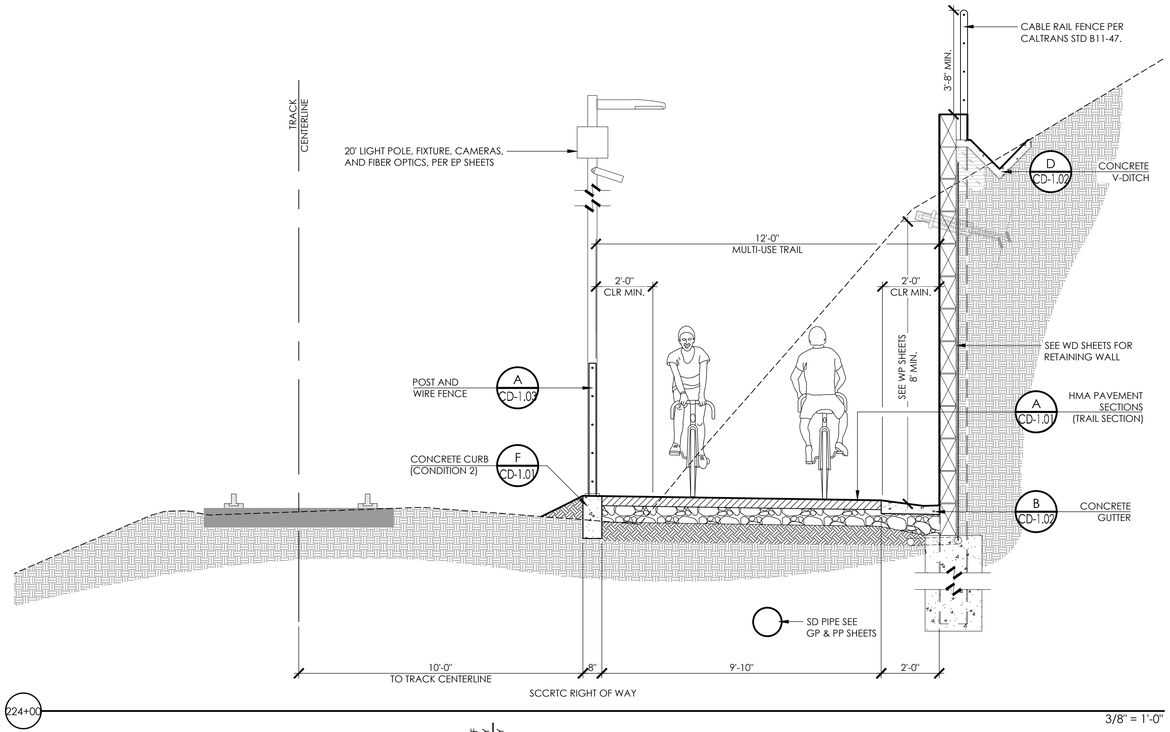
REFERENCES	DATE	1/28/22	SCALE AS SHOWN
FIELD BOOK:	DRAWN	KS	CD-3.02
DRAWING #: SECS_0193-01_PH2	DESIGN	KS/MS	VAULT NO. 7079B
	CHECKED	MS	SHEET 36 OF 96

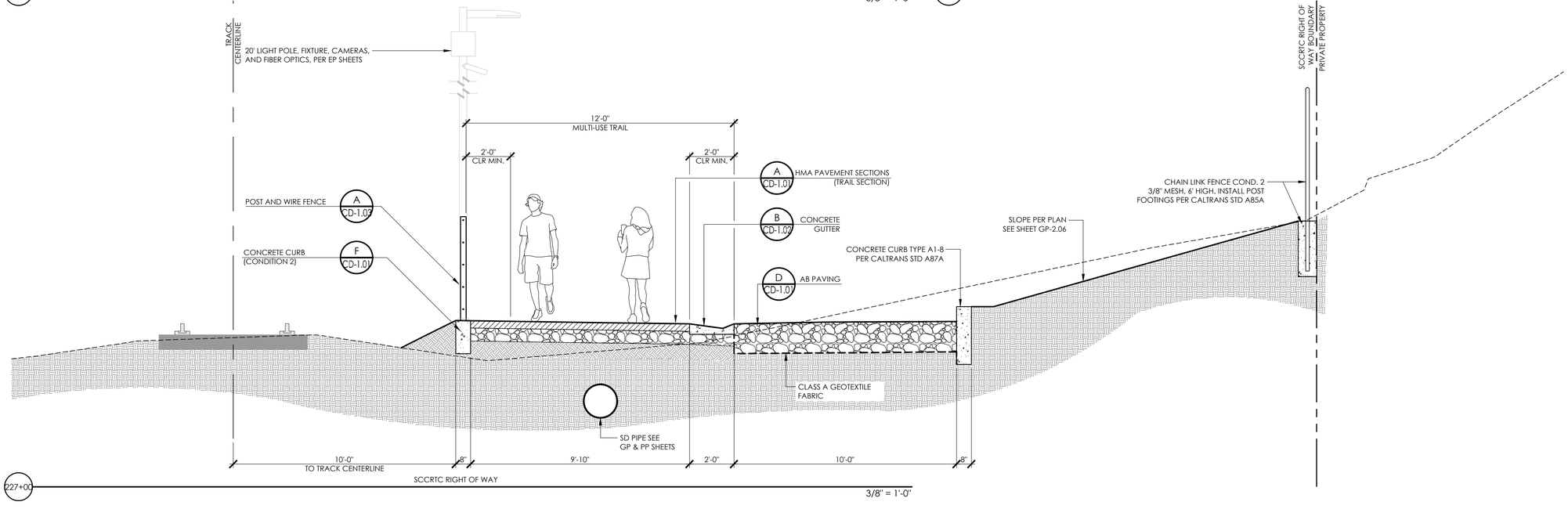
BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: CD-3.02, Xrefs: Synchronize_219501234A (002).dgn, Ref sketch.dgn, CA Coastal Trail Map.dgn, MarkerPt_MonuPtGPSPoints9-29-22.prj, PPC Map.dgn, Name 2013.dgn, SIGNS_CENTER_16x7.5 blank.dgn, Shermod.dgn, Xrefs: 0193-01-AB.dwg, 0193-01-AT.dwg, 0193-01-AU.dwg, 0193-01-AV.dwg, 0193-01-BC15-Rail-Trail-Segment-7\Planning\Corridors\AutoCAD\Phase 2\SECS_0193-01_PH2.dwg, Plotted By: KMSzabanski, Plotted: Jan 28, 2022 - 1:40pm
N:\000\10\93-01-BC15-Rail-Trail-Segment-7\Planning\Corridors\AutoCAD\Phase 2\SECS_0193-01_PH2.dwg

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG







BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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N:\000\01\0193-01-1ST.dwg, Layout Tab: CD-3.03, Plotted By: MSkolowski, Plotted: Jan 28, 2022 - 1:40pm

REVISIONS		

REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 5301 11/30/23 1/28/22 STATE OF CALIFORNIA

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Santa Cruz, CA 95060

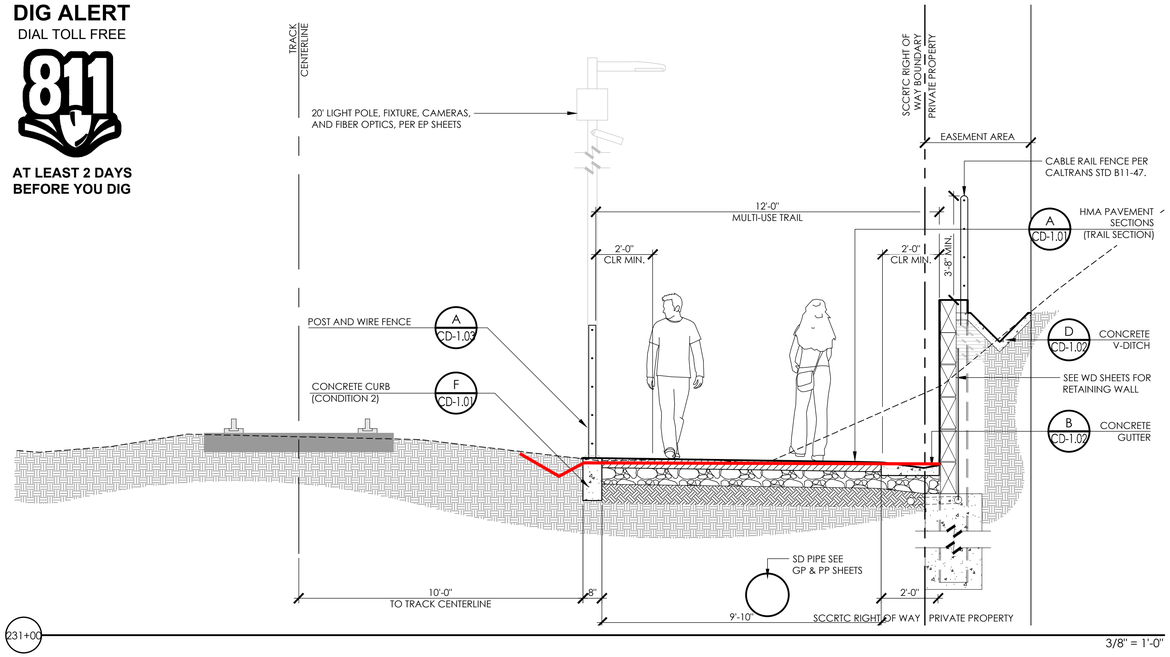
RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TRAIL SECTIONS

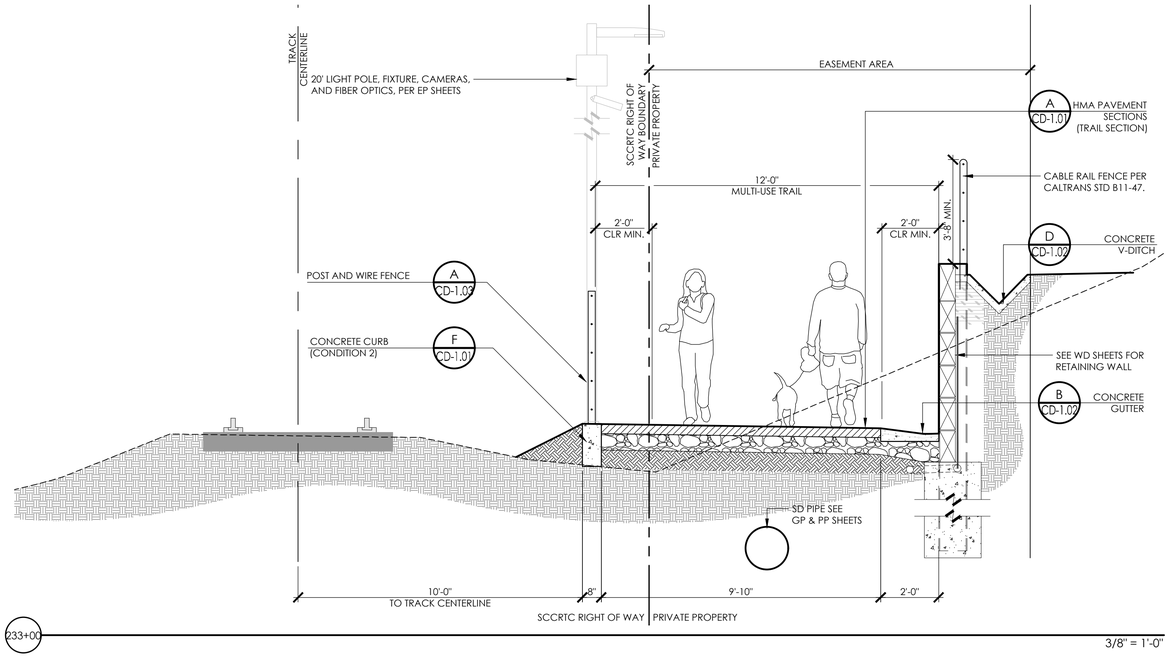
REFERENCES
FIELD BOOK:
DRAWING #: SECS_0193-01_PH2

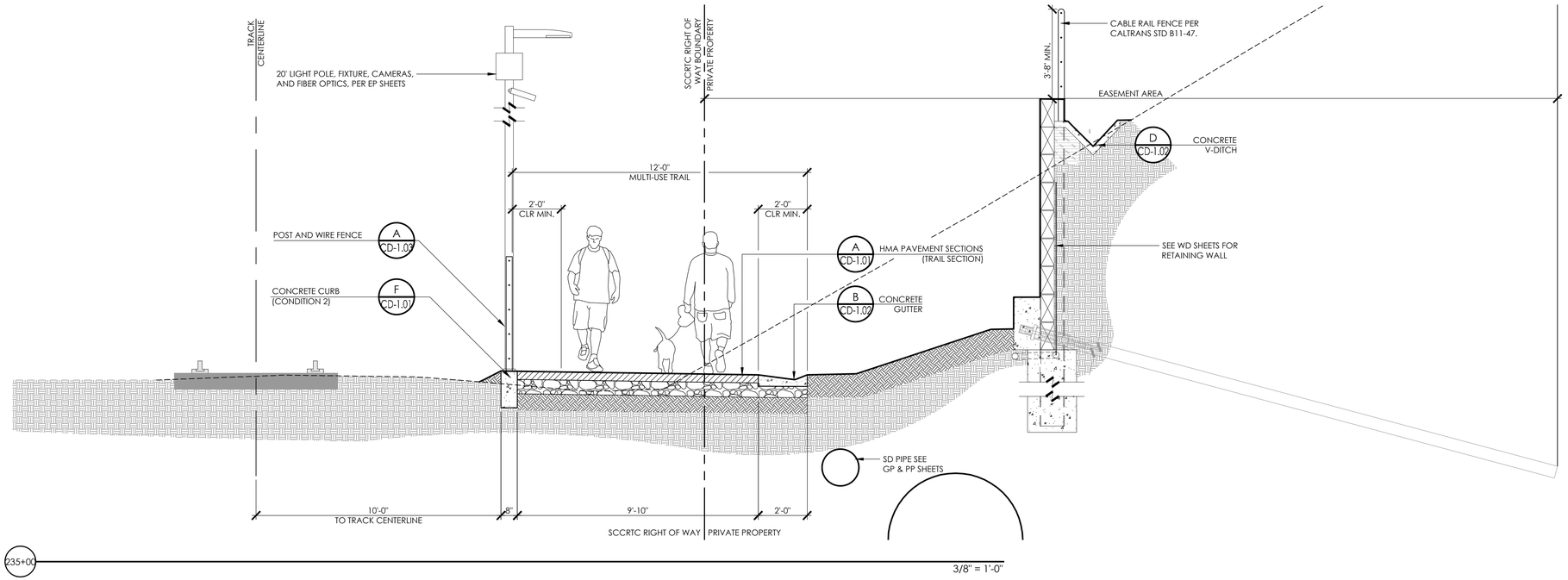
DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CD-3.03
VAULT NO. 7079B
SHEET 37 OF 96

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG







BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 4750 11/30/23 1/28/22 STATE OF CALIFORNIA

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TRAIL SECTIONS

REFERENCES
FIELD BOOK:

DRAWING #: SECS_0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CD-3.04
VAULT NO. 7079B
SHEET 38 OF 96

Layout Tab: Name: CD-3.04, Images: Construction_2160012240 (002).jpg, Bill: 6606x3pt, CA Coastal Trail Vector Artwork Mono@50%.png, 20172.png, PEC Type: • Name: 2013.ctb, SIGNS_CENTER_16x13 black.ctb, Shared.ctb , Xrefs: 0193-01-XB.dwg, 0193-01-XT.dwg, 0193-01-N:\000\0193-01-RH\To Rail-Trails-Segment-7\Planning\Corridors\AutoCAD\Phase 2\SECS_0193-01_PH2.dwg, Plotted By: KMDaniels, Plotted: Jan 28, 2022 - 1:40pm

DIG ALERT
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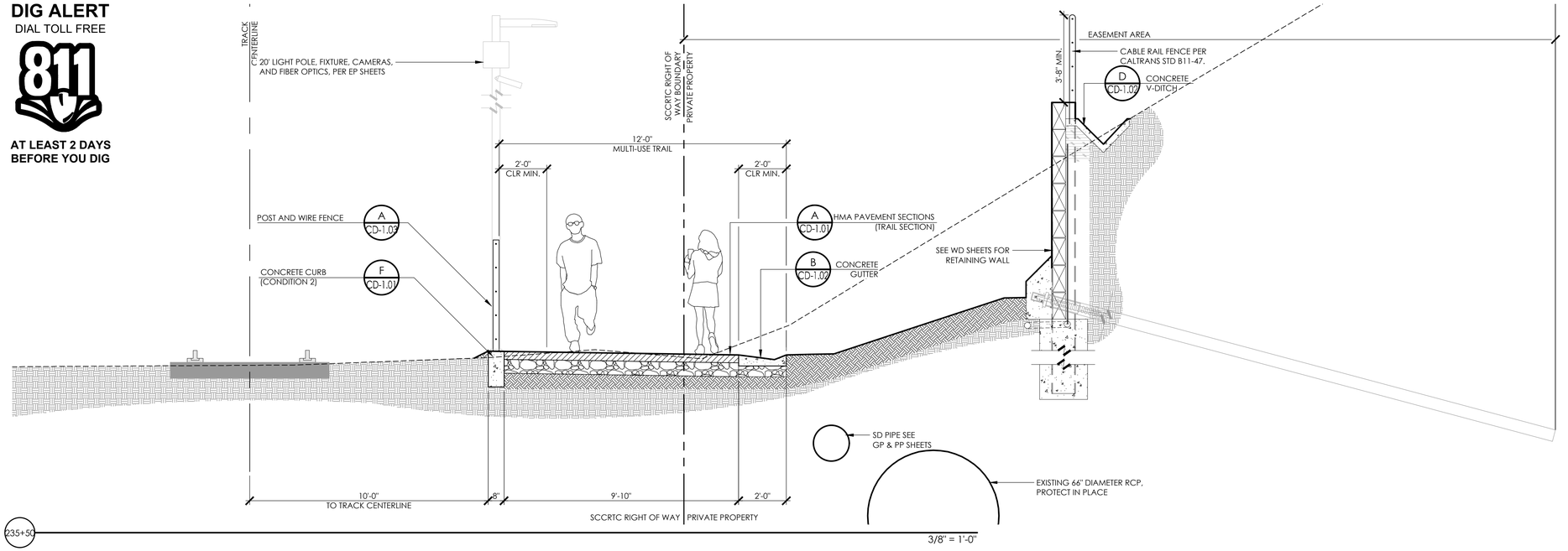
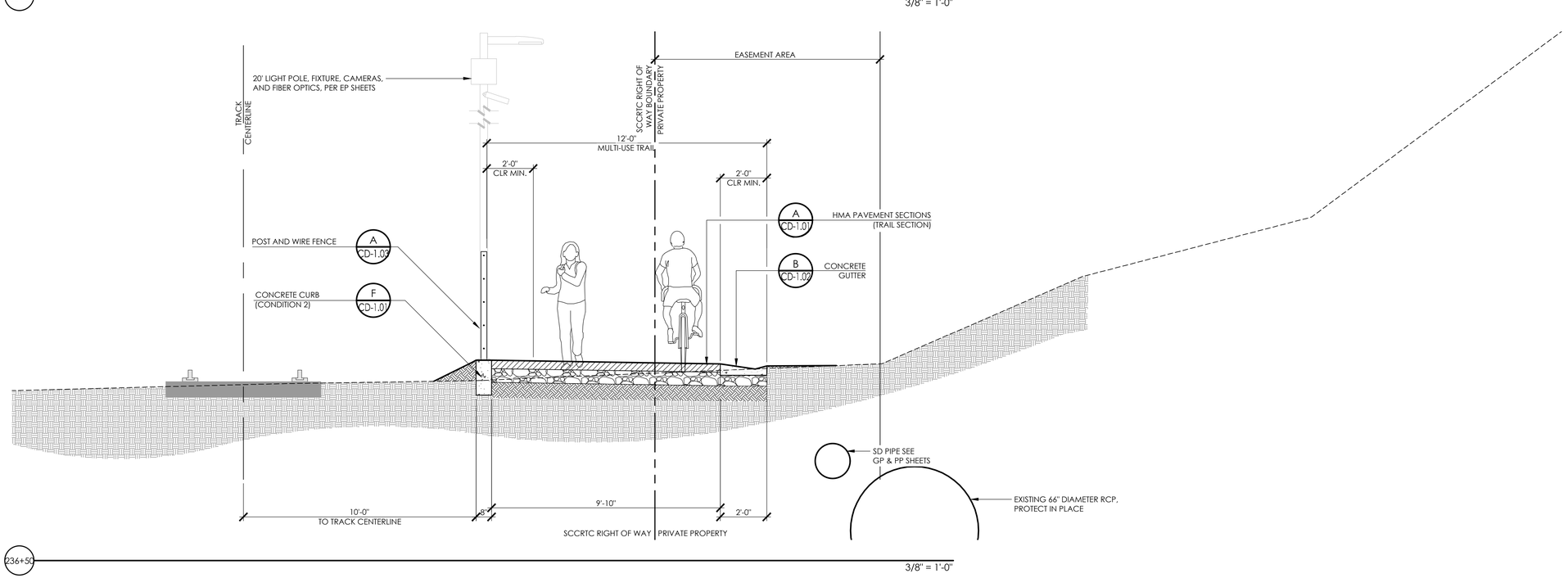
811
AT LEAST 2 DAYS BEFORE YOU DIG





BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 4750 11/30/23 1/28/22 STATE OF CALIFORNIA

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TRAIL SECTIONS

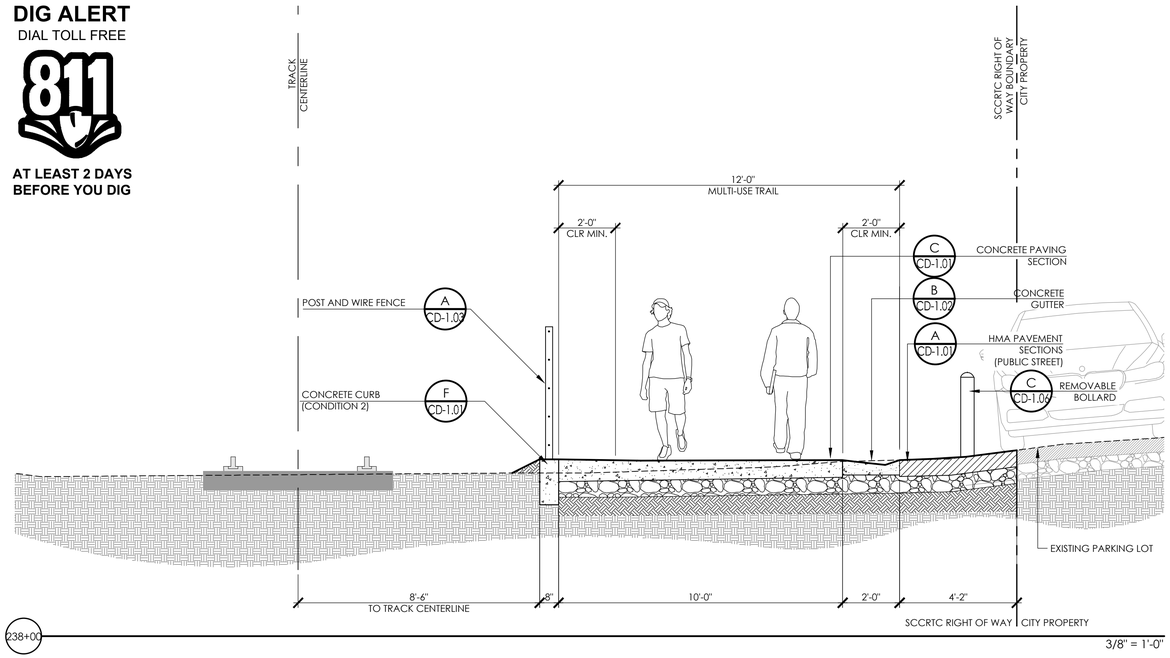
REFERENCES
FIELD BOOK:
DRAWING #: SECS_0193-01_PH2

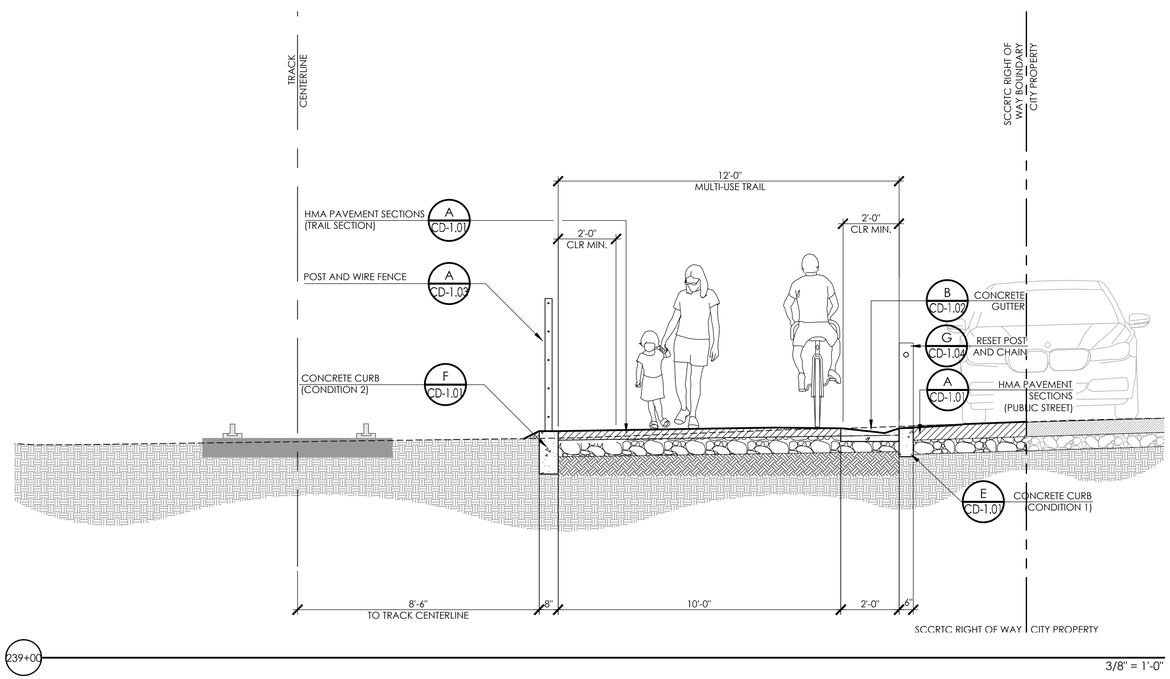
DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CD-3.05
VAULT NO. 7079B

Layout Tab Name: CD-3.05, Images: Construction_2160612240 (002).jpg, IMG_4604(1).jpg, CA Coastal Trail Upgrade Monarch Mound(002).mov-4-20172.png, PPC Type = Home 2013.ppc, SIGNS_CENTER_16x7.5 black.jpg, Shamrock.jpg , , Xrefs: 0193-01-XB.dwg, 0193-01-XT.dwg, 0193-01-N1(00).\0193-01-RH15-Rail-Trail-Segment-7\Planning\Corridors\AutoCAD\Phase 2\SECS_0193-01_PH2.dwg, Plotted By: KMDaniels, Plotted: Jan 28, 2022 - 1:40pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG





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N:\0001\0193-01-16\15-Rail-Trail-Segment-7\Planning\Corridors\AutoCAD\Phase 2\SECS_0193-01_PH2.dwg, Plotted By: KMSzabanek, Plotted: Jan 28, 2022 - 4:06pm

REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 5251 11/30/23 1/28/22 STATE OF CALIFORNIA

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REVISIONS

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF
SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TRAIL SECTIONS

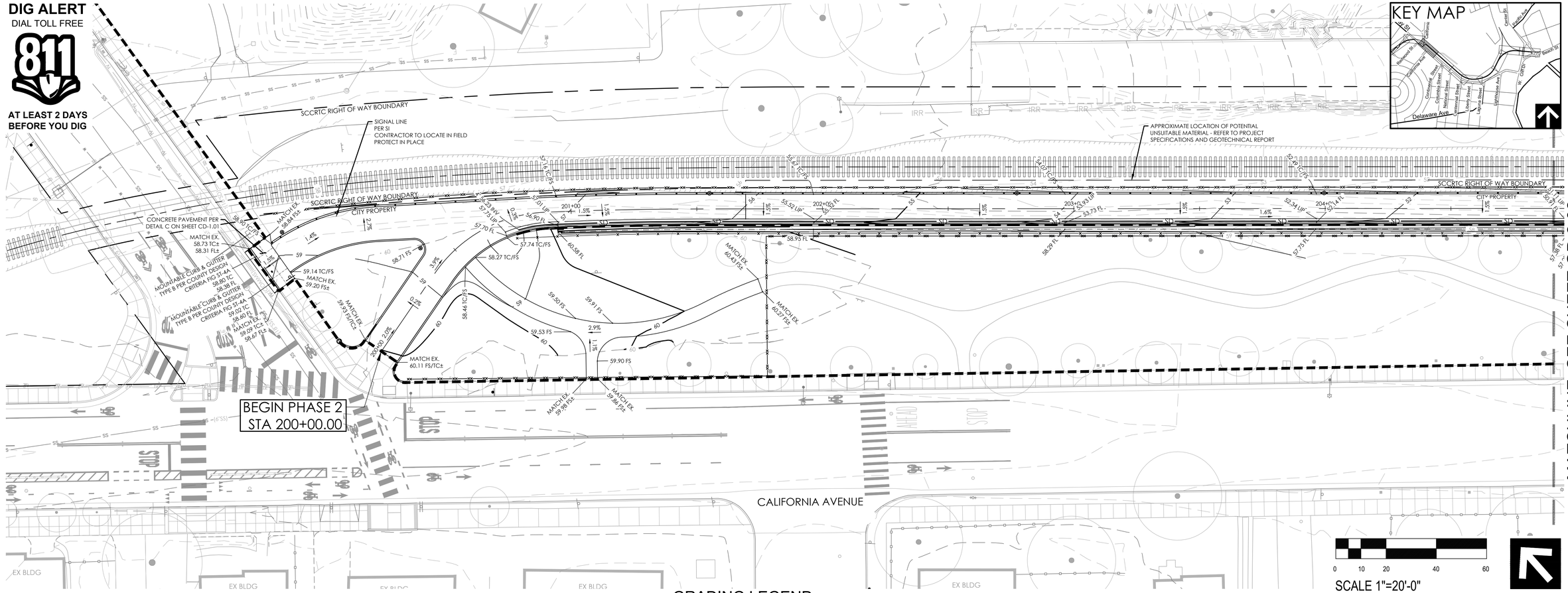
REFERENCES
FIELD BOOK:
DRAWING #: SECS_0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
CD-3.06
VAULT NO. 7079B
SHEET 40 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



MATCHLINE, SEE SHEET GP-2.02

GRADING LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
73	EXISTING MAJOR CONTOUR
73	EXISTING MINOR CONTOUR
73	PROPOSED MAJOR CONTOUR
73	PROPOSED MINOR CONTOUR
	PROPOSED FENCE, SEE CP SHEETS

SYMBOL	DESCRIPTION
	EXISTING FENCE
	EXISTING TREE
	PROPOSED TRAIL CENTERLINE
	LIMIT OF EXISTING RAILROAD BALLAST
	LIMIT OF WORK
	PROPOSED RETAINING WALL, SEE WP SHEETS

SEE SHEET RS-1.01 FOR UTILITY TABLE

REGISTERED PROFESSIONAL ENGINEER — DARREN M. C. CHUN — 82708 — EXP 9/30/22 — CIVIL — STATE OF CALIFORNIA

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REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
GRADING PLAN

REFERENCES
FIELD BOOK:
DRAWING #: GR-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
GP-2.01
VAULT NO. 7079B
SHEET 41 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: GRADING PLAN, Images: Sheets\Sign CA Coastal Trail Logo.jpg; Metric=C:\Working\GDS\Images\c-20172.png; RSC logo + name 2013.jpg; SIGNS_CONTEX_16x12 block.jpg; ; Xrefs: Stamp_MidSheets.dwg; 0193-01-XTBLPHD.dwg; \\corp\rmh\civil\2001\0193-01-RC15--Rail-Trail--Segment-7\Engineering\CorrDocs\Sheet-Files\Phase 2\GR-0193-01-RC15_2.dwg, Plotted By: dmckay, Plotted: Jan 28, 2022 - 5:41pm

DIG ALERT
DIAL TOLL FREE
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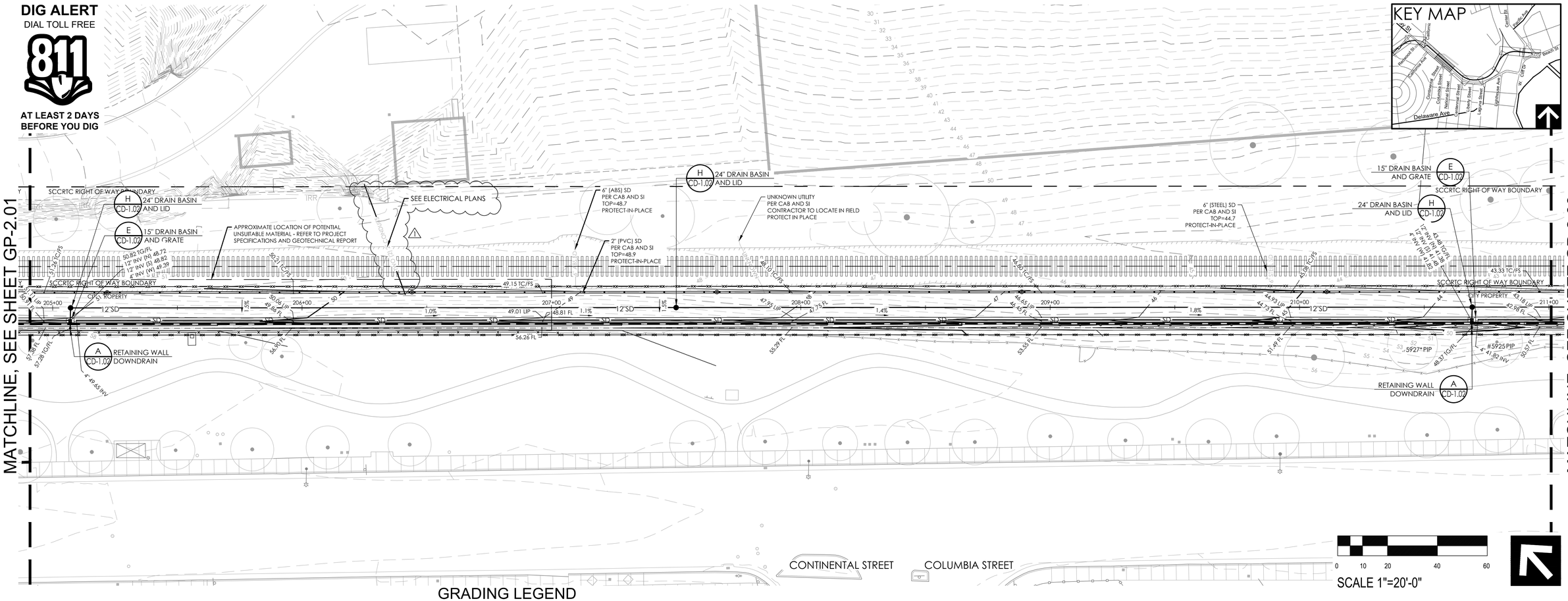
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET GP-2.01

MATCHLINE, SEE SHEET GP-2.03



GRADING LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
73	EXISTING MAJOR CONTOUR
73	EXISTING MINOR CONTOUR
73	PROPOSED MAJOR CONTOUR
73	PROPOSED MINOR CONTOUR
	PROPOSED FENCE, SEE CP SHEETS

SYMBOL	DESCRIPTION
	EXISTING FENCE
	EXISTING TREE
	PROPOSED TRAIL CENTERLINE
	LIMIT OF EXISTING RAILROAD BALLAST
	LIMIT OF WORK
	PROPOSED RETAINING WALL, SEE WP SHEETS

REGISTERED PROFESSIONAL ENGINEER
DARREN M. G. CRAY
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

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1	BID ADDENDUM #3	04/13/2022

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
GRADING PLAN

REFERENCES
FIELD BOOK:
DRAWING #: GR-0193-01-RC15_2

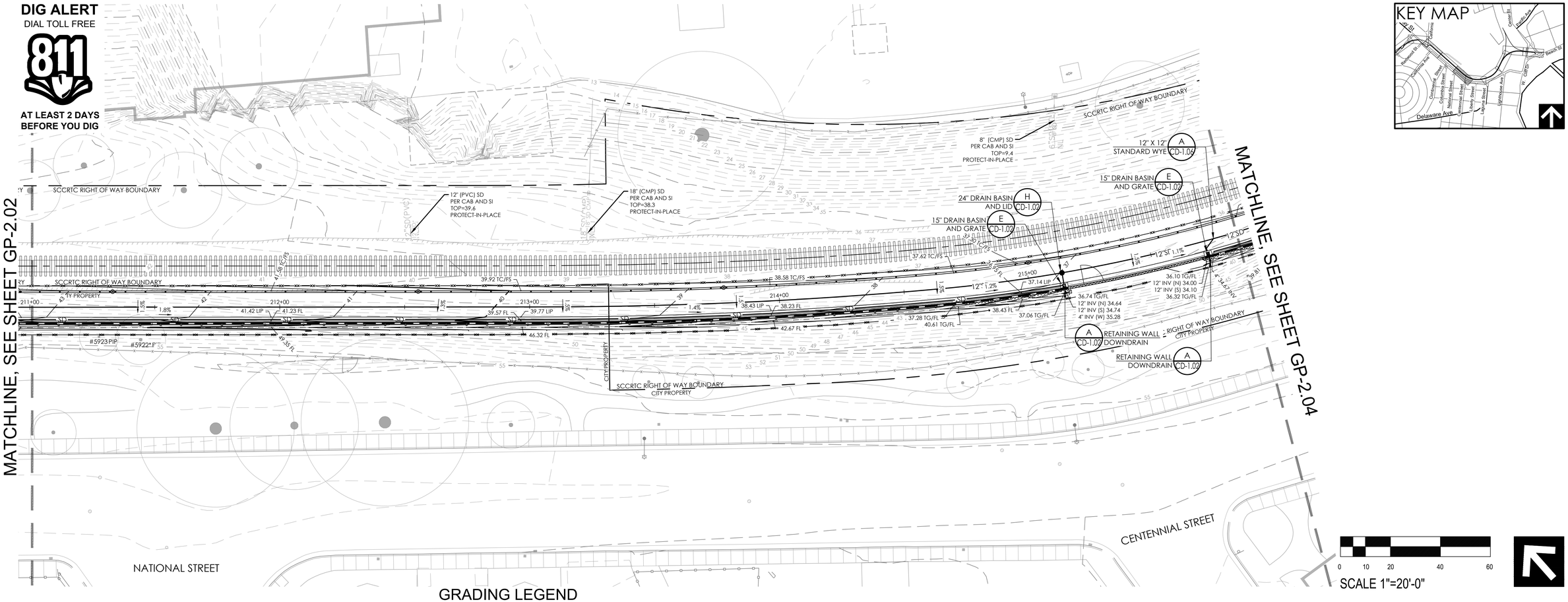
DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
GP-2.02
VAULT NO. 7079B

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: GP-2.02 Images Stamped App: CA Coastal Trail Login Job: Measure/D-Works/SCCP/project-20172.dwg RTC logo ■ xrefs: 20133.dgn SITMS_CENTER_16ft & blank.dgn ■ Xrefs: Stamp_MikeDiamond.dwg 0193-01-xSTB_PH2.dwg 0193-01-xSTB_PH2.dwg 0193-01-xSTB_PH2.dwg SCALE=0193-01-RT.dwg SCALE=0193-01-PHD.dwg SANTA CRUZ(TRAIL 5 18 15.dwg
\\corp\vm\vm-wbk\000\0193-01-RC15-R&R-Trail-Segment-7\Engineering\CivilDocs\Sheet Files\Phase 2\GR-0193-01-RC15_2.dwg Plotted By: dmcnay Plotted: Apr 13, 2022 - 5:53pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



GRADING LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
73	EXISTING MAJOR CONTOUR
73	EXISTING MINOR CONTOUR
73	PROPOSED MAJOR CONTOUR
73	PROPOSED MINOR CONTOUR
	PROPOSED FENCE, SEE CP SHEETS

SYMBOL	DESCRIPTION
	EXISTING FENCE
	EXISTING TREE
	PROPOSED TRAIL CENTERLINE
	LIMIT OF EXISTING RAILROAD BALLAST
	LIMIT OF WORK
	PROPOSED RETAINING WALL, SEE WP SHEETS

REGISTERED PROFESSIONAL ENGINEER
DOMINIC M. C. CHOW
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

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San Juan Capistrano, CA 92675

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Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
GRADING PLAN

REFERENCES
FIELD BOOK:
DRAWING #: GR-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
GP-2.03
VAULT NO. 7079B
SHEET 43 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: GP-2.03, Images Scanned (y/n): CA Coastal Trail Landline Mosaic.dwg|DOQ\orient-2013.jpg, RTC logo + name, 2013.jpg, SHORE_CENTER_16ft.5 black.jpg, Xrefs: Sloma_siteBdemolish.dwg, 0193-01-xrTB_PH2.dwg, 0193-01-XB.dwg, 0193-01-XC.dwg, 0193-01-xrCurves.dwg, 0193-01-xrEMWP.dwg, 0193-01-xrT.dwg, XCALLS-0193-01-PH2.dwg, SIMS_ORIENTNAL 8.18.15.dwg
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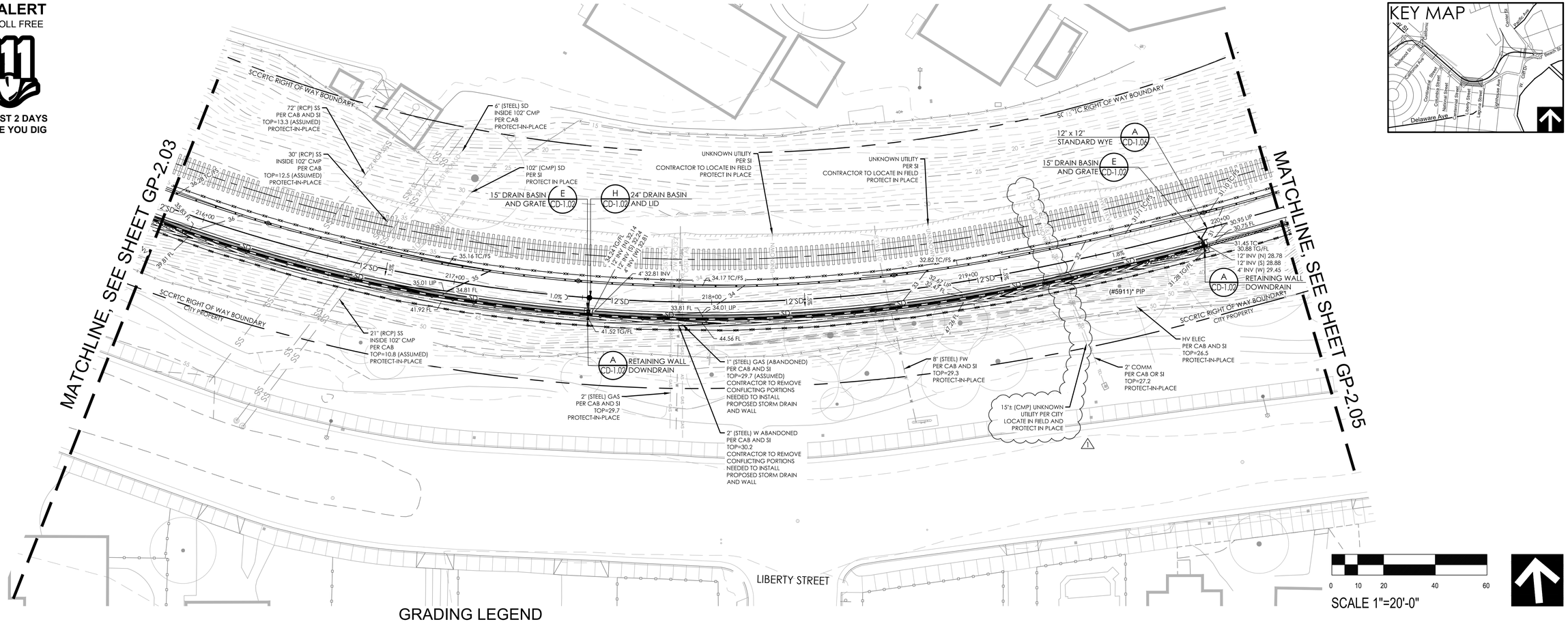
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



GRADING LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
73	EXISTING MAJOR CONTOUR
73	EXISTING MINOR CONTOUR
73	PROPOSED MAJOR CONTOUR
73	PROPOSED MINOR CONTOUR
	PROPOSED FENCE, SEE CP SHEETS

SYMBOL	DESCRIPTION
	EXISTING FENCE
	EXISTING TREE
	PROPOSED TRAIL CENTERLINE
	LIMIT OF EXISTING RAILROAD BALLAST
	LIMIT OF WORK
	PROPOSED RETAINING WALL, SEE WP SHEETS

REGISTERED PROFESSIONAL ENGINEER DARREN M. C. CRON 82708 EXP 9/30/22 CIVIL STATE OF CALIFORNIA

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REVISIONS

1	BID ADDENDUM #3	04/13/2022

CITY OF SANTA CRUZ PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
GRADING PLAN

REFERENCES
FIELD BOOK:
DRAWING #: GR-0193-01-RC15_2

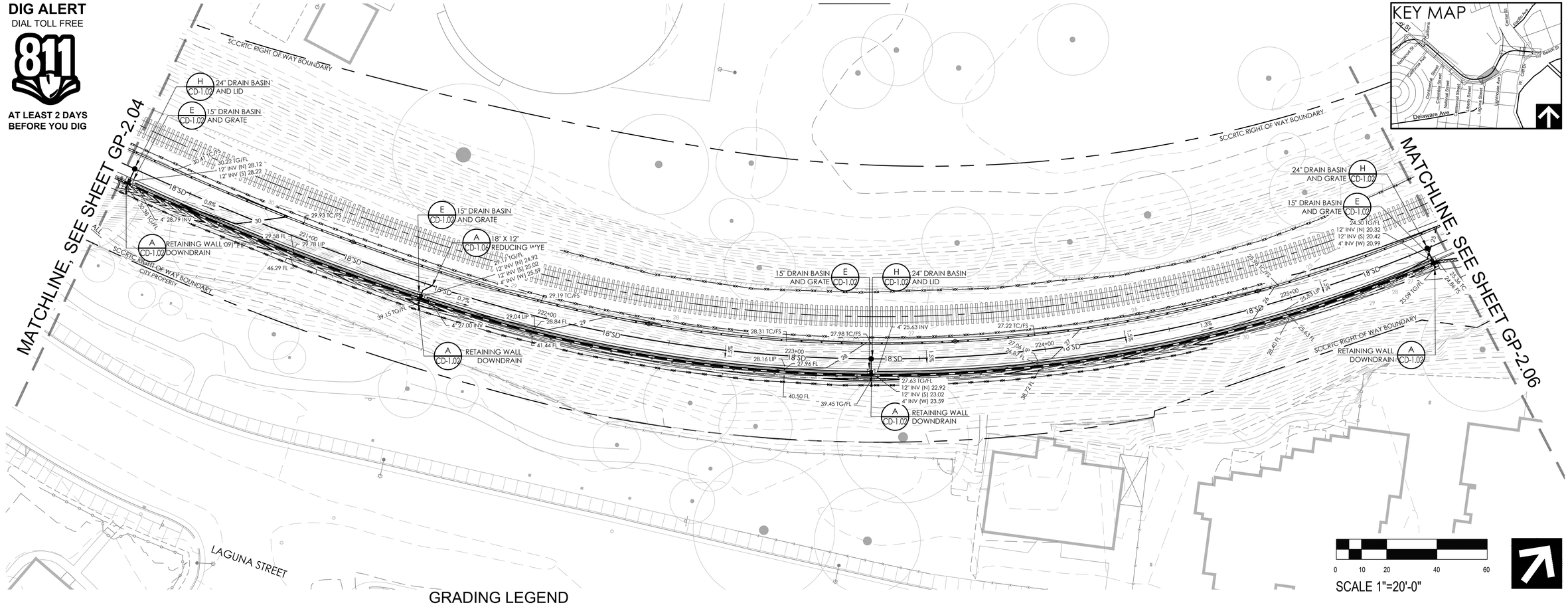
DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
GP-2.04
VAULT NO. 7079B

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: GP-2.04, Images: Shamrock.jpg; CA Coastal Trail Logo.jpg; MenuvaD-MenloJSDCFylayout-20172.dwg; RTC logo e xxxxx 2013.jpg; SSMS_CENTER_16x7.5 blank.jpg ; Xrefs: Stamp_MilkShamrock.dwg; 0193-01-YTB_PAD.dwg; 0193-01-VIS.dwg; 0193-01-VIC.dwg; 0193-01-RETWAP.dwg; 0193-01-RT.dwg; SCALE=0.0193-01-PHD.dwg; SMMS_OBLIQTRAIL 9_18_15.dwg
\\corp\rm\on-site\2001\0193-01-RC15-Rail-Trail-Segment-7\Engineering\CorrDocs\Sheet-Files\Phase 2\GR-0193-01-RC15_2.dwg, Plotted By: dmorby, Plotted: Apr 13, 2022 - 8:34am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



GRADING LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
73	EXISTING MAJOR CONTOUR
73	EXISTING MINOR CONTOUR
73	PROPOSED MAJOR CONTOUR
73	PROPOSED MINOR CONTOUR
	PROPOSED FENCE, SEE CP SHEETS

SYMBOL	DESCRIPTION
	EXISTING FENCE
	EXISTING TREE
	PROPOSED TRAIL CENTERLINE
	LIMIT OF EXISTING RAILROAD BALLAST
	LIMIT OF WORK
	PROPOSED RETAINING WALL, SEE WP SHEETS

REGISTERED PROFESSIONAL ENGINEER
DARREN M. CHUN
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
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REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
GRADING PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
GR-0193-01-RC15_2

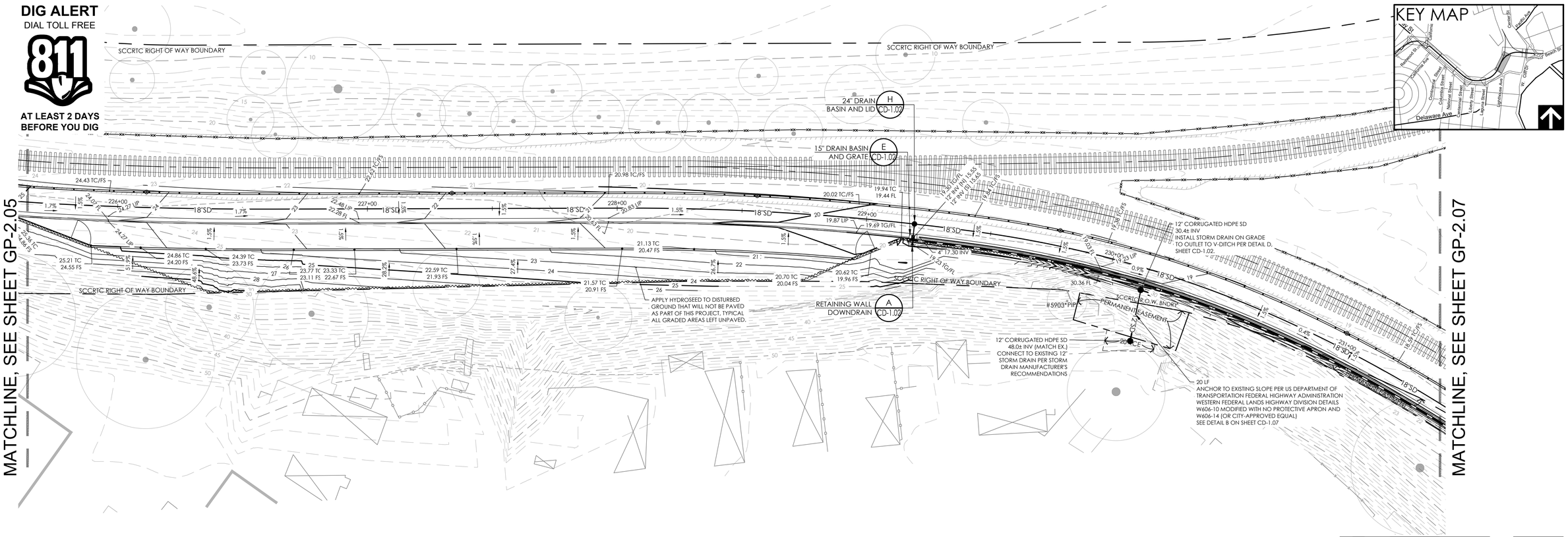
DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
GP-2.05
VAULT NO.
7079B
SHEET 45 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: GP-2.05, Images: Sharma.jpg, CA Coastal Trail Logo.jpg; Measure/D-Metric(ISO25)=metric-20172.dwg; RTC logo + name 2013.jpg; SSRR_CENTER_16x7.5 black.jpg; Xrefs: Signs_MidSharma.dwg, 0193-01-XTBL_PAVE.dwg, 0193-01-RBL.dwg, 0193-01-\\Corp\rrm\Jobs-misc\2001\01\193-01-RC15-Rail-Trail-Segment-7\Engineering\ConstDocs\Sheet-Files\Phase 2\GR-0193-01-RC15_2.dwg, Plotted By: dmorley, Plotted: Jan 28, 2022 - 5:43pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



GRADING LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
73	EXISTING MAJOR CONTOUR
73	EXISTING MINOR CONTOUR
73	PROPOSED MAJOR CONTOUR
73	PROPOSED MINOR CONTOUR
	PROPOSED FENCE, SEE CP SHEETS

SYMBOL	DESCRIPTION
	EXISTING FENCE
	EXISTING TREE
	PROPOSED TRAIL CENTERLINE
	LIMIT OF EXISTING RAILROAD BALLAST
	LIMIT OF WORK
	PROPOSED RETAINING WALL, SEE WP SHEETS

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REVISIONS

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PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
GRADING PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
GR-0193-01-RC15_2

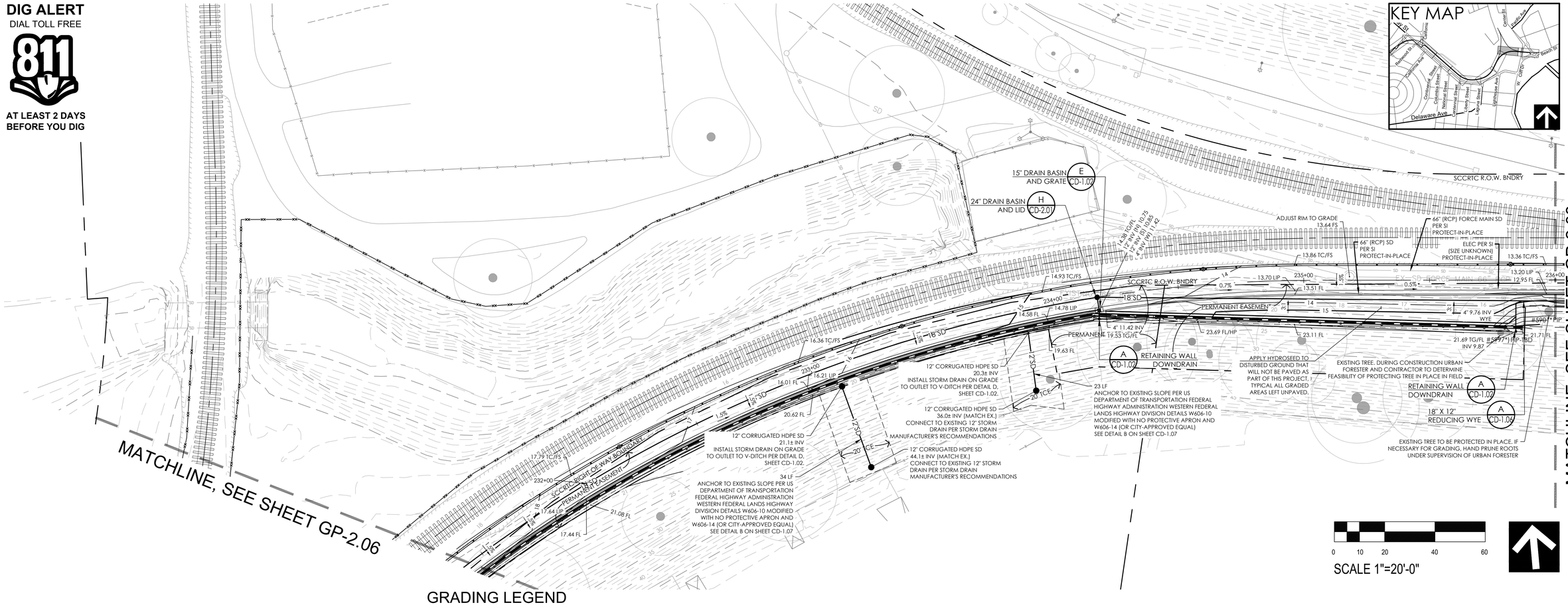
DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
GP-2.06
VAULT NO.
7079B
SHEET 46 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: GP-2.06, Images: Sharma.jpg, CA Coastal Trail Logo.jpg, Mariani2-Mindy2025Imperial-20172.png, RTC logo_e_inline_2013.jpg, SSRR_CENTER_16x7.5_black.jpg, Xrefs: Stamp_MikeSharma4.dwg, 0193-01-XTBL_PAVE.dwg, 0193-01-XTBL_RAIL.dwg, 0193-01-XC.dwg, 0193-01-XETMAP.dwg, 0193-01-XT.dwg, XCALLS-0193-01-PAVE.dwg, SSRR_CRUZTRAIL 8.18.15.dwg
\\corp\rrm\ca-sna\2001\018\d-01-RC15-R&D-Trail-Segment-7\Engineering\CivilDocs\Sheet-Files\Phase 2\GR-0193-01-RC15_2.dwg, Plotted By: dmorley, Plotted: Jan 28, 2022 - 5:43pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



GRADING LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
73	EXISTING MAJOR CONTOUR
73	EXISTING MINOR CONTOUR
73	PROPOSED MAJOR CONTOUR
73	PROPOSED MINOR CONTOUR
	PROPOSED FENCE, SEE CP SHEETS

SYMBOL	DESCRIPTION
	EXISTING FENCE
	EXISTING TREE
	PROPOSED TRAIL CENTERLINE
	LIMIT OF EXISTING RAILROAD BALLAST
	LIMIT OF WORK
	PROPOSED RETAINING WALL, SEE WP SHEETS

REGISTERED PROFESSIONAL ENGINEER — DARREN M.C. CROM — 82708 EXP 9/30/22 CIVIL — STATE OF CALIFORNIA

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rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
GRADING PLAN

REFERENCES
FIELD BOOK:
DRAWING #: GR-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

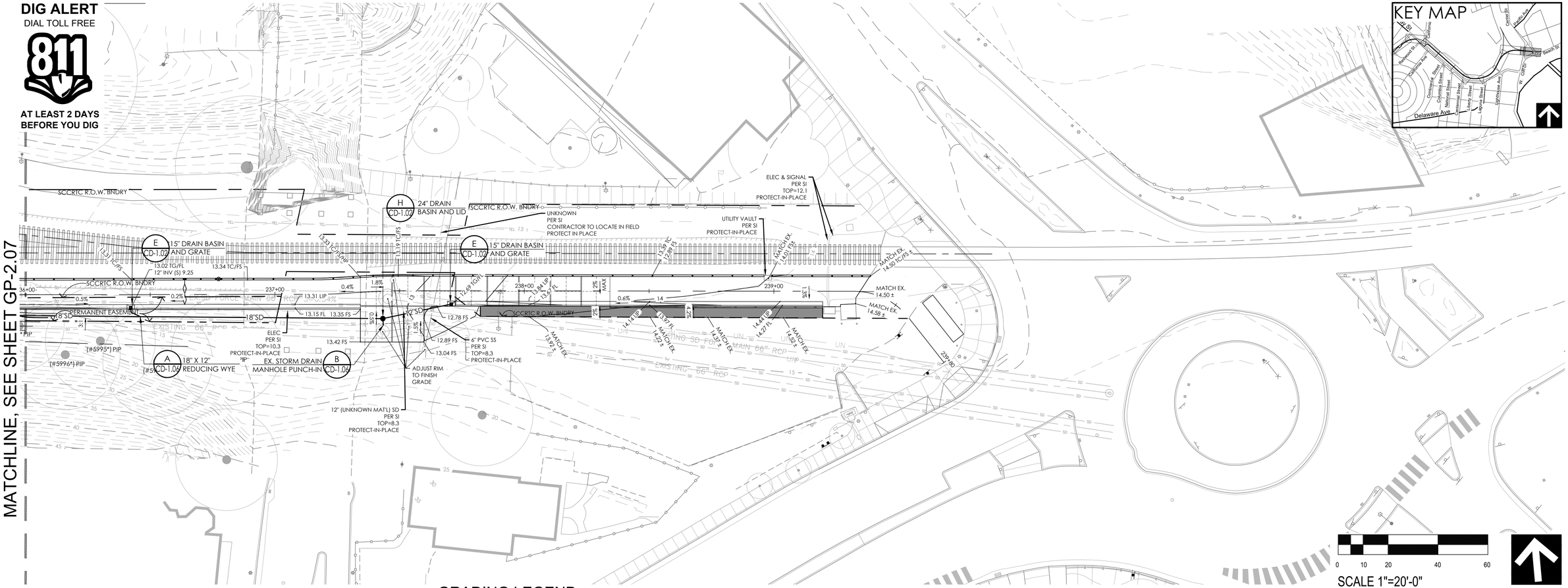
SCALE AS SHOWN
GP-2.07
VAULT NO. 7079B
SHEET 47 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: GP-2.07, Images: Shared.jpg, CA Coastal Trail Logo.jpg, MentorMo-MinnyDS05\Users\0-20172.proj, RTC logo_e_name 2013.jpg, SSRR_CENTER_16x7.5_blank.jpg, Xrefs: Stamp_AMaDiamond.dwg, 0193-01-HTR_PNC.dwg, 0193-01-HB.dwg, \\corp\rmm\un-ala\0001\0193-01_RC15_Rail-Trail-Segment-7\Engineering\Construction\Sheet-Files\Phase 2\GR-0193-01-RC15_2.dwg, Plotted By: dmckay, Plotted: Jan 28, 2022 - 5:43pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET GP-2.07



SCALE 1"=20'-0"

GRADING LEGEND

SYMBOL	DESCRIPTION
	EXISTING RAILROAD TRACKS
	RIGHT OF WAY
73	EXISTING MAJOR CONTOUR
73	EXISTING MINOR CONTOUR
73	PROPOSED MAJOR CONTOUR
73	PROPOSED MINOR CONTOUR
	PROPOSED FENCE, SEE CP SHEETS

SYMBOL	DESCRIPTION
	EXISTING FENCE
	EXISTING TREE
	PROPOSED TRAIL CENTERLINE
	LIMIT OF EXISTING RAILROAD BALLAST
	LIMIT OF WORK
	PROPOSED RETAINING WALL, SEE WP SHEETS

REGISTERED PROFESSIONAL ENGINEER
DARREN M.C. GROVE
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

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PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
GRADING PLAN

REFERENCES
FIELD BOOK:
DRAWING #: GR-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
GP-2.08
VAULT NO. 7079B
SHEET 48 OF 96

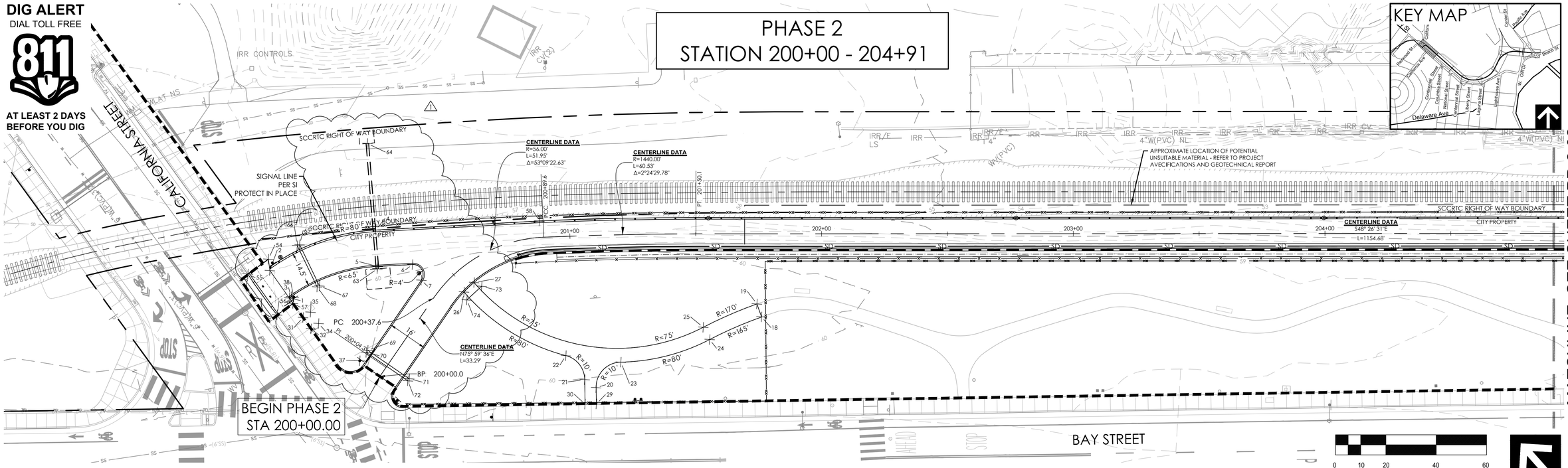
BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: GP-2.08, Images: Stamp.jpg; CA Coastal Trail Logo.jpg; Metsynth-Marker@SCCtransit-20172.png; RRC logo + name 2013.jpg; SIGNS_CENTER_16x7.5 black.jpg; , Prefix, Stamp_MikeDiamond.dwg, 0193-01-HTB_PH2.dwg, 0193-01-XB_PH2.dwg, 0193-01-XC.dwg, 0193-01-XC.dwg, 0193-01-XC.dwg, 0193-01-XT.dwg, XSCALE=0193-01-PH2.dwg, SWPPP_GRADING_PLAN_PH2.dwg, 0193-01-HETMAP.dwg, 0193-01-HETMAP.dwg, 0193-01-HETMAP

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

PHASE 2
STATION 200+00 - 204+91

KEY MAP



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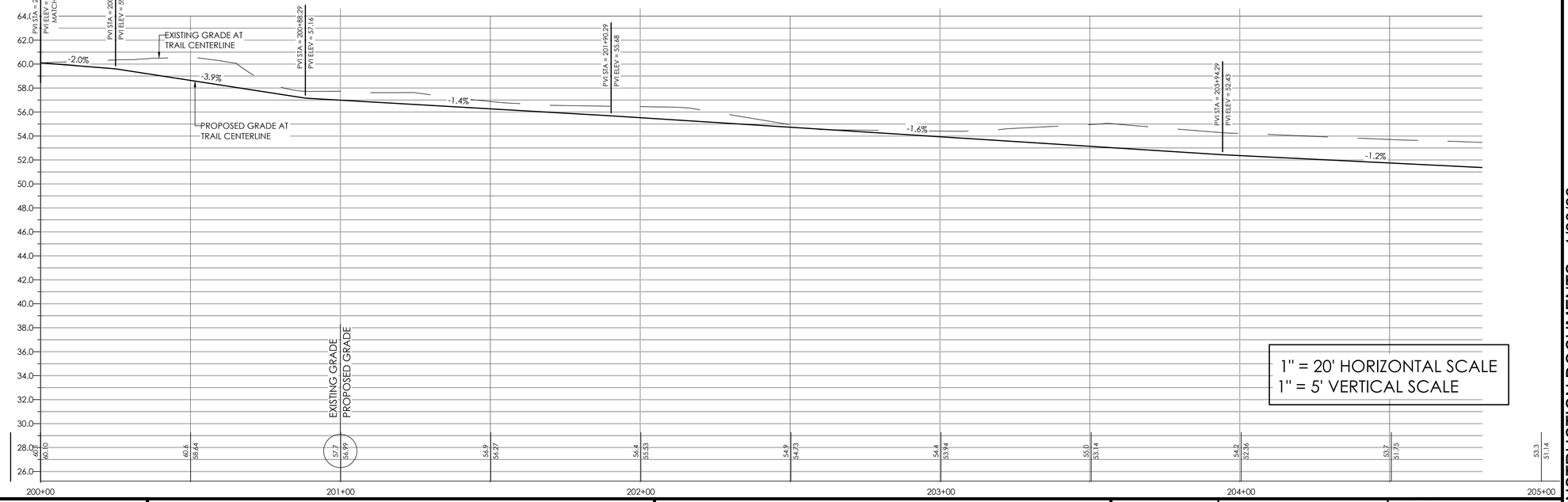

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED PROFESSIONAL ENGINEER DARREN M.S. CROWL 82708 EXP 9/30/22 CIVIL STATE OF CALIFORNIA

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30332 Camino Capistrano, Ste. 205
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REVISIONS

1	BID ADDENDUM #3	04/13/2022

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
PLAN AND PROFILE

REFERENCES
FIELD BOOK:
DRAWING #: PP-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
PP-2.01
VAULT NO. 7079B

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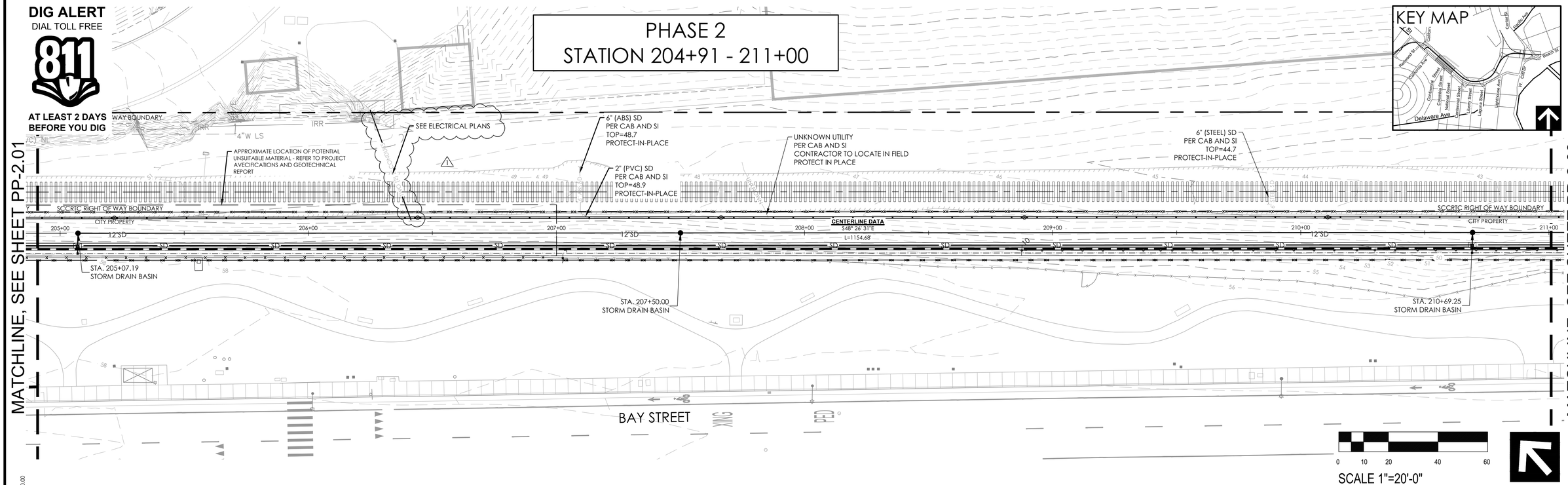
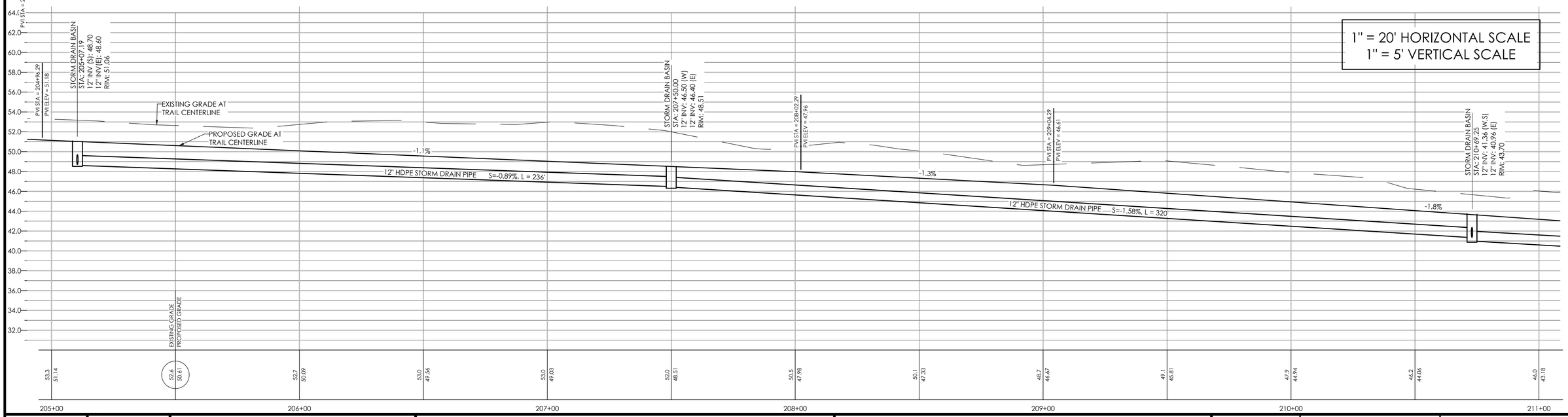
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

PHASE 2
STATION 204+91 - 211+00





REGISTERED PROFESSIONAL ENGINEER
DARREN W.C. CROWL
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

1	BID ADDENDUM #3	04/13/2022

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF
SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
PLAN AND PROFILE

REFERENCES
FIELD BOOK:

DRAWING #:
PP-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
PP-2.02
VAULT NO.
7079B

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: PP-2.02 Xrefs: Sheets.dwg; CA Coastal Trail Logo.jpg; MetesNDescriptionMap(GIS)Framed-20172.png; RTC logo + name 2013.jpg; SSHS_CENTER_15x7.5 blank.jpg; Xrefs: Stamp_AllInSheets.dwg; 0193-01-HTB_PND.dwg; 0193-01-HTB.dwg; 0193-01-HTB_PND.dwg; 0193-01-HC.dwg; 0193-01-HCMAP.dwg; 0193-01-RT.dwg; SANTA CRUZ(Final, 8 18 15.dwg
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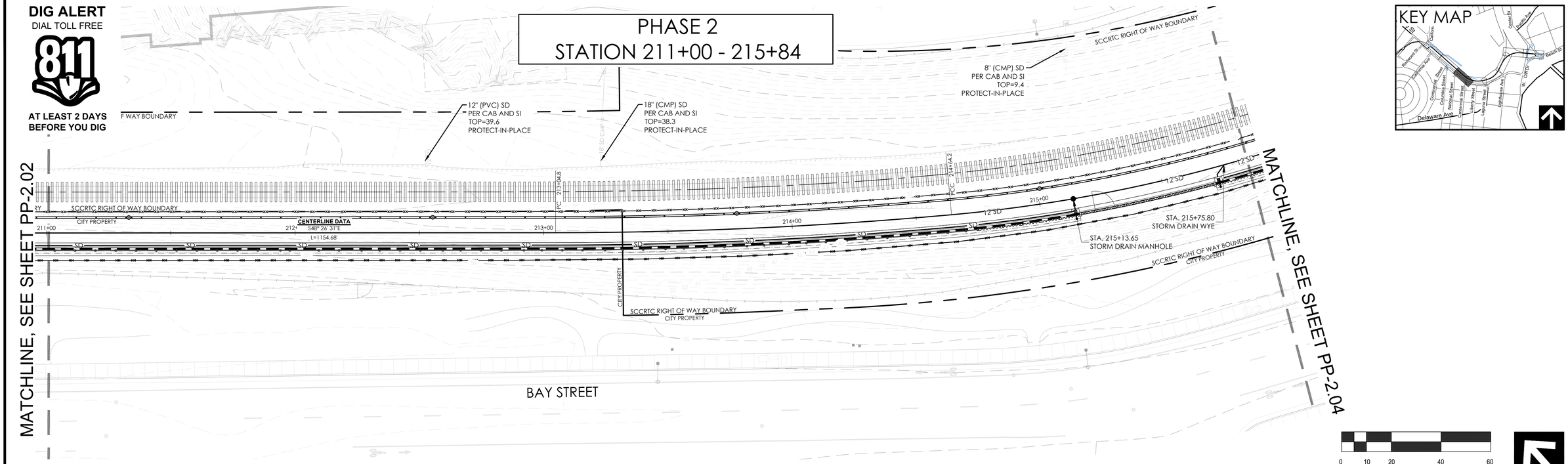
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

PHASE 2
STATION 211+00 - 215+84



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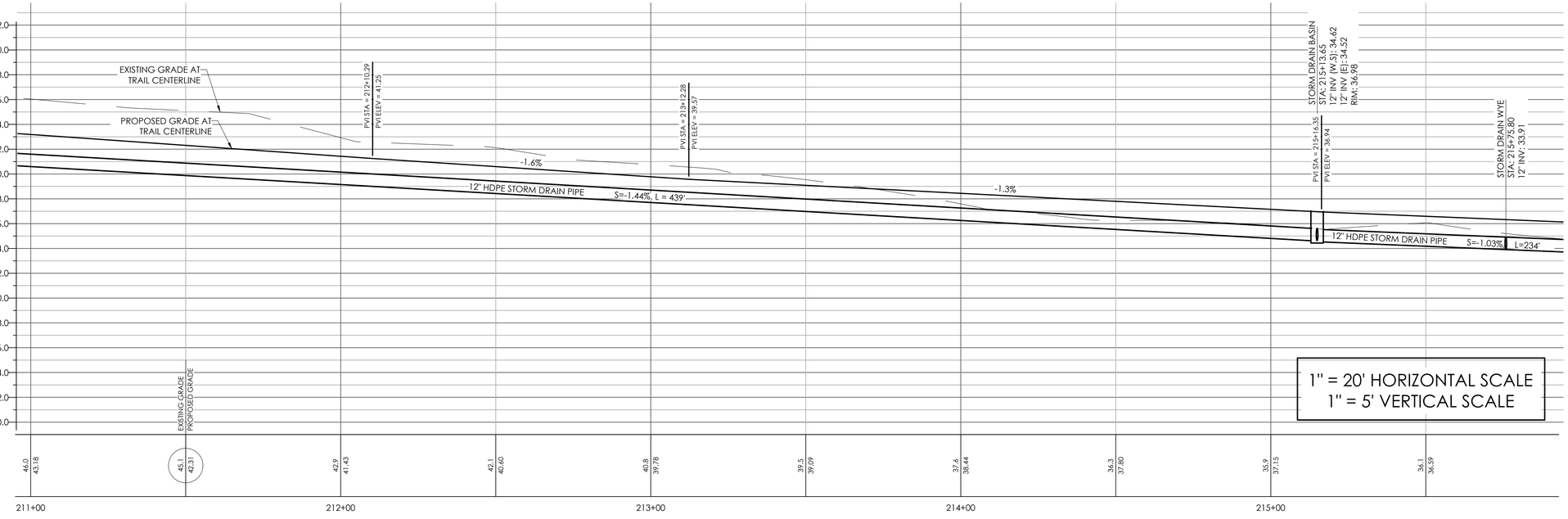

REGISTERED PROFESSIONAL ENGINEER
DOREEN M. C. CHO
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
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REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
PLAN AND PROFILE

REFERENCES
FIELD BOOK:
DRAWING #: PP-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
PP-2.03
VAULT NO. 7079B
SHEET 51 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: PP-2.03, Images Stamped.jpg, CA Coastal Trail Link.jpg, Monorail+Alevia@CCFramework 2013.png, RTC logo + name 2013.jpg, SIGNS_CENTER_16x7.5_blank.jpg, Xrefs: Stamp_AlleyDiamond.dwg, 0193-01-xTB_PH2.dwg, 0193-01-xTB.dwg, 0193-01-xBridge.dwg, 0193-01-xRC.dwg, 0193-01-xETMAP.dwg, 0193-01-xTT.dwg, SANTA CRUZ(TYPAL, 8 18 15.dwg
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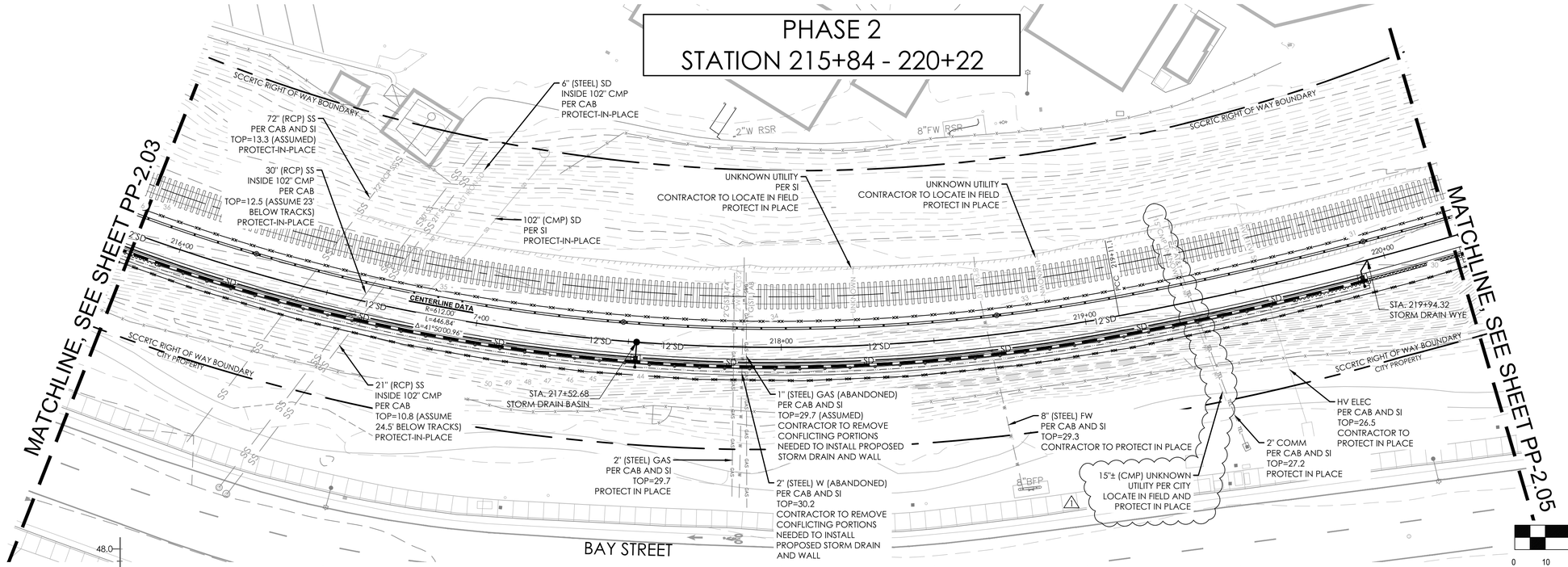
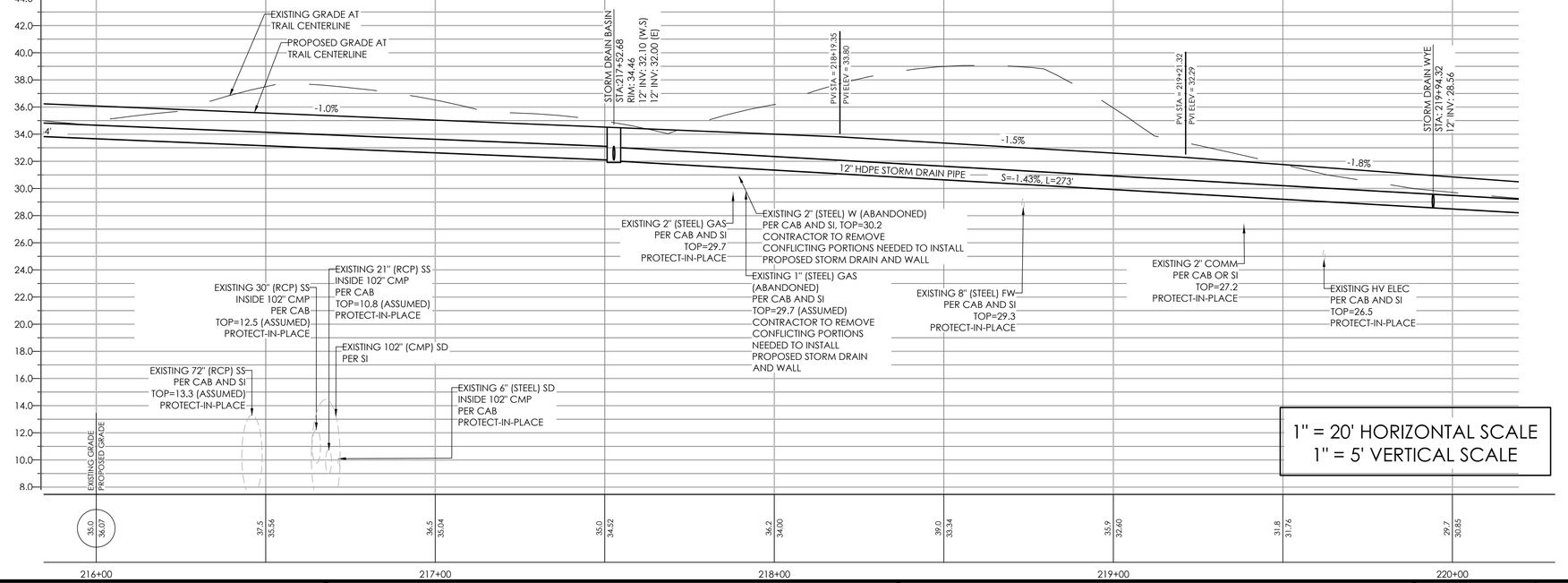
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

PHASE 2
STATION 215+84 - 220+22





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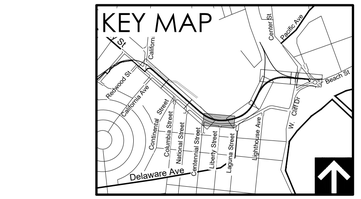
1" = 5' VERTICAL SCALE



0 10 20 40 60
SCALE 1"=20'-0"

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED PROFESSIONAL ENGINEER
DOUGREN M.C. CHOU
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

1	BID ADDENDUM #3	04/13/2022

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF
SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
PLAN AND PROFILE

REFERENCES
FIELD BOOK:
DRAWING #: PP-0193-01-RC15_2

DATE	1/28/22	SCALE	AS SHOWN
DRAWN	AV		PP-2.04
DESIGN	AV	VAULT NO.	7079B
CHECKED	DC		

Layout Tab Name: PP-2.04, Images Shared.jpg: Ok, Create Trail Longitudinal Materials=Metric|SCCForward-90173.prj, RTC logo + name 2013.jpg, SHORE_CENTER_16x7.5 black.jpg, Xrefs: Diana_MikeDiamond.dwg, 0193-01-HTB_PVI.dwg, 0193-01-RB.dwg, 0193-01-RC15_2.dwg, 0193-01-RC.dwg, 0193-01-RETWAP.dwg, 0193-01-RT.dwg, SANTA CRUZ(TRAIL 8 18 15.dwg
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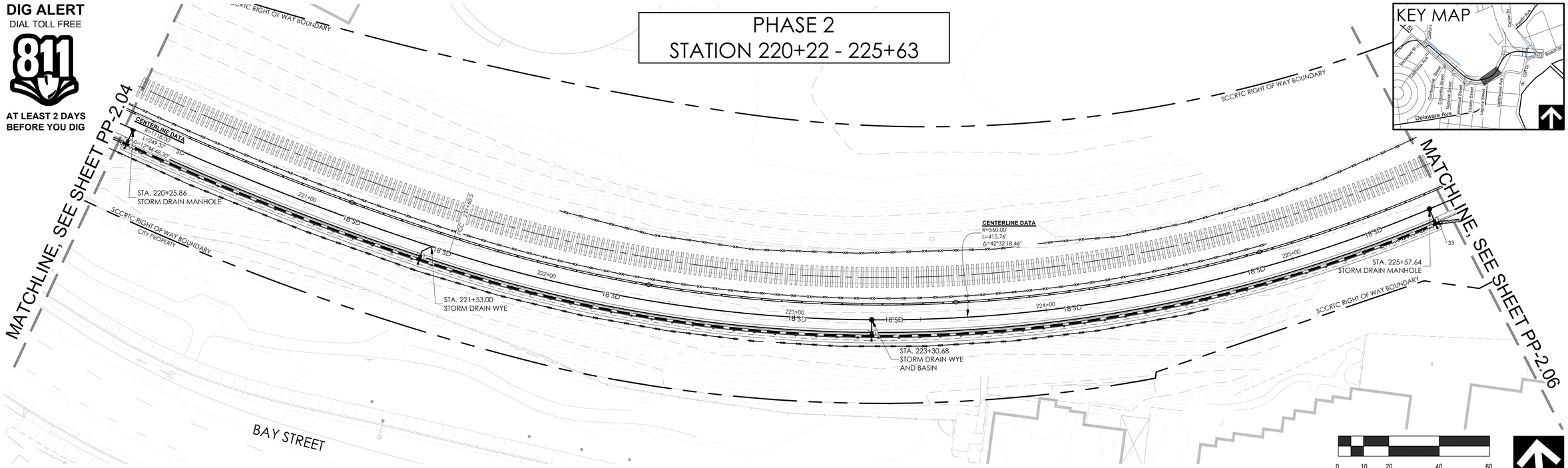
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

PHASE 2
STATION 220+22 - 225+63



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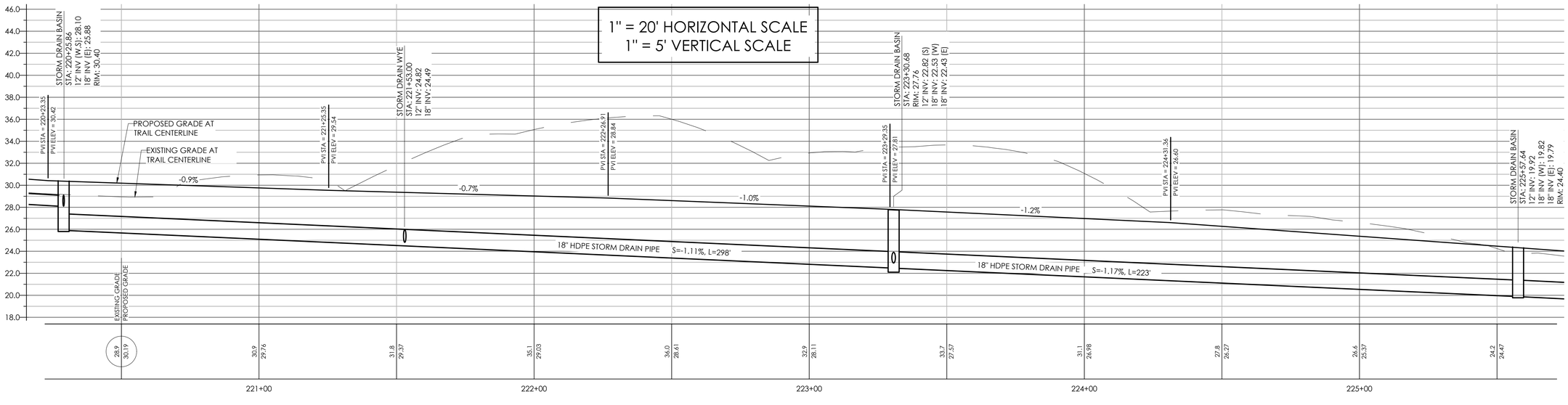
SCALE 1"=20'-0"



REGISTERED PROFESSIONAL ENGINEER
DARREN W.C. CROMEEN
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

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PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
PLAN AND PROFILE

REFERENCES
FIELD BOOK:

DRAWING #:
PP-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

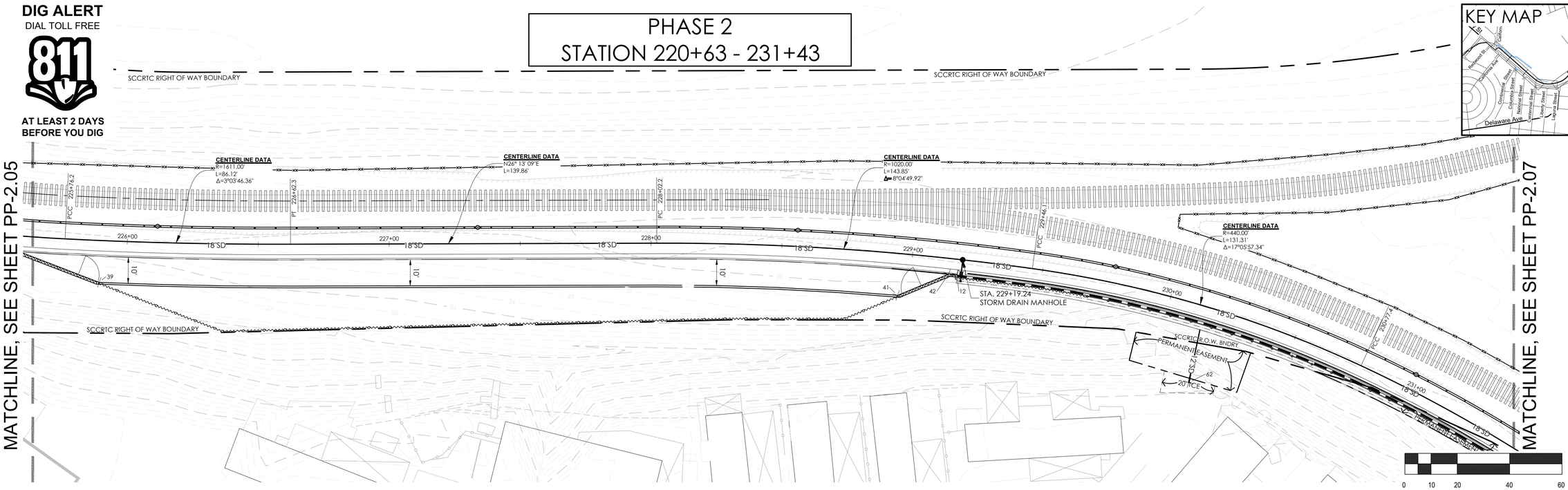
SCALE AS SHOWN
PP-2.05
VAULT NO.
7079B
SHEET 53 OF 96

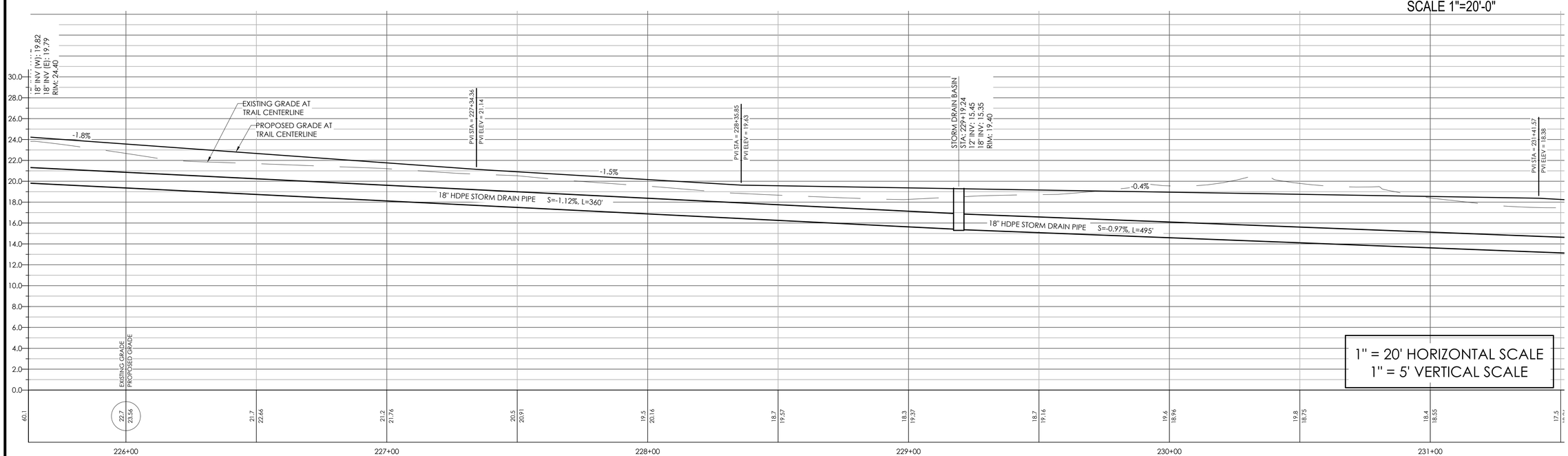
BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: PP-2.05, Images: Sheet.dgn, CA Coastal Trail Logo.jpg, MetersN-MinorInt(GIS)-new.tif-20172.png, RTC logo + name 2013.jpg, SSHS_CENTER_16x15, Mark.jpg, Xrefs: Stamp_MileSheet.dwg, 0193-01-HTRL_PH2.dwg, 0193-01-xtB.dwg, 0193-01-xC.dwg, 0193-01-HDWMP.dwg, 0193-01-xT.dwg, SANTA CRUZ(TM)_ft 18 15.dwg
\\corp\rmh\sn-sta\2001\0193-01-rc15-rail-trail-segment-7\Engineering Cad\Sheet Files\Phase 2\PP-0193-01-RC15_2.dwg, Plotted By: shahos, Plotted: Jan 28, 2022 - 5:44pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

PHASE 2
STATION 220+63 - 231+43





BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED PROFESSIONAL ENGINEER
DARREN M. CRIM
82708
EXP. 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
PLAN AND PROFILE

REFERENCES
FIELD BOOK:
DRAWING #:
PP-0193-01-RC15_2

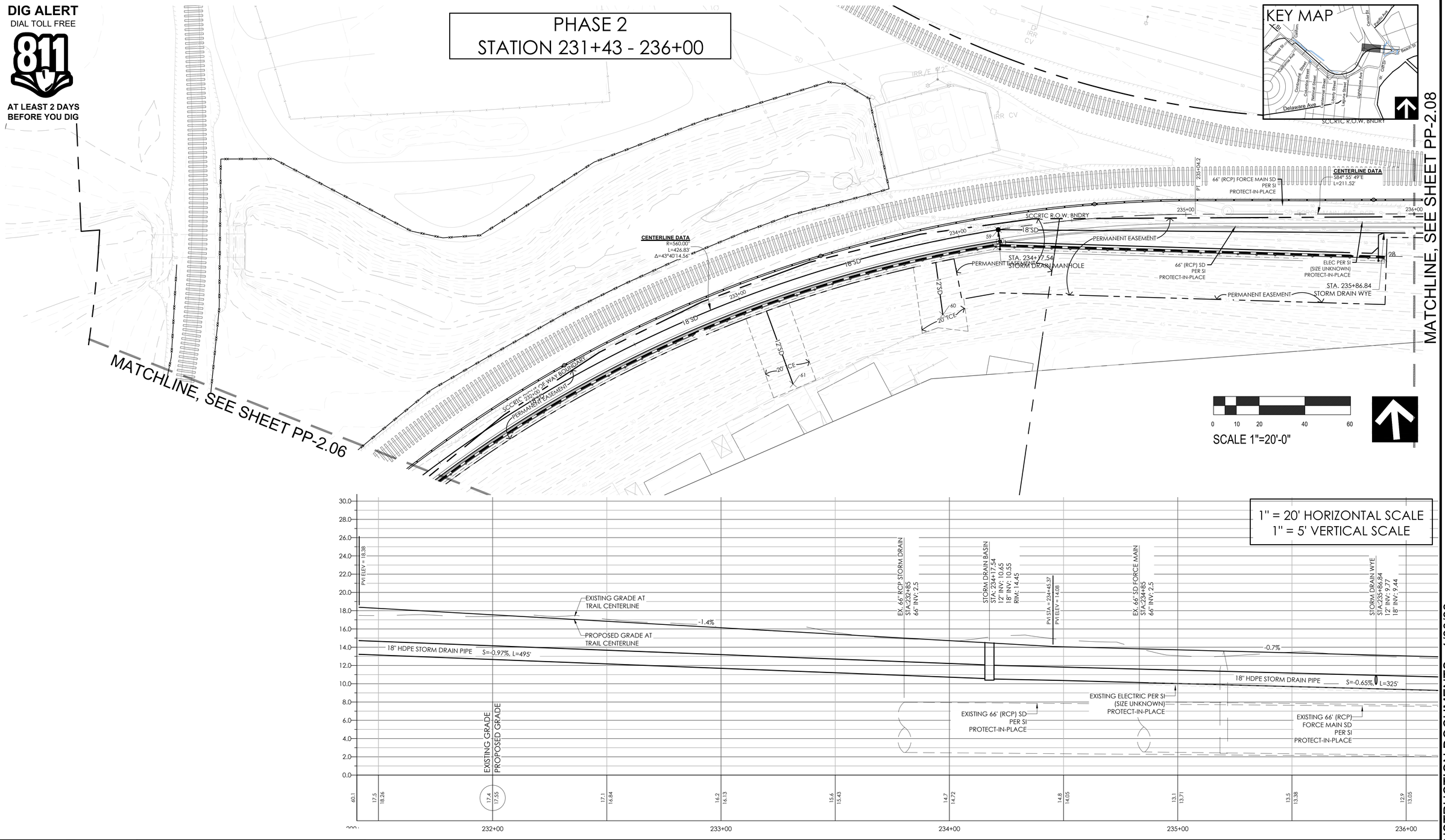
DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
PP-2.06
VAULT NO.
7079B
SHEET 54 OF 96

Layout Tab Name: PP-2.06, Images Shared.dgn C4 Coastal Trail Loop.dgn \\Mesa\Pw-Mesa\GIS\Transmit-20172.prj; RTC logo • name 2012.jpg; SIGNS_GENTER_18x15 Block.dgn Xrefs: Stamp_MilesDermot.dwg, 0193-01-VTB_PVE.dwg, 0193-01-108.dwg, 0193-01-VIC.dwg, 0193-01-KEYMAP.dwg, 0193-01-RT.dwg, SANTA CRUZ(TRAIL, 8, 18, 15.dwg
\\corp\vm\on-site\2021\0193-01-rc15-rail-trail-segment-7\Engineering\Cad\Sheet Files\Phase 2\PP-0193-01-RC15_2.dwg, Plotted By: ahicks, Plotted: Jan 28, 2022 - 5:44pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

PHASE 2
STATION 231+43 - 236+00



BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED PROFESSIONAL ENGINEER
DARREN M.G. GROH
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
PLAN AND PROFILE

REFERENCES			
FIELD BOOK:	DATE	1/28/22	SCALE AS SHOWN
	DRAWN	AV	PP-2.07
DRAWING #: PP-0193-01-RC15_2	DESIGN	AV	VAULT NO. 7079B
	CHECKED	DC	SHEET 55 OF 96

Layout Tab Name: PP-2.07 Images: Stamp.jpg CA Coastal Trail Logo.jpg Metsworth-MackayGDS Frame# 20172.png RTC logo + name 2013.jpg SGMS_CENTER_16x7.5 block.jpg - Xrefs: Stamp_MikeDiamond.dwg; 0193-01-rcTB_PHZ.dwg; 0193-01-rcTB_PHZ.dwg; 0193-01-rc15-rail-segment-7\Engineering\Condocs\1Sheet-Files\Phase 2\PP-0193-01-RC15_2.dwg, Plotted By: ahicks, Plotted: Jan 28, 2022 - 5:44pm
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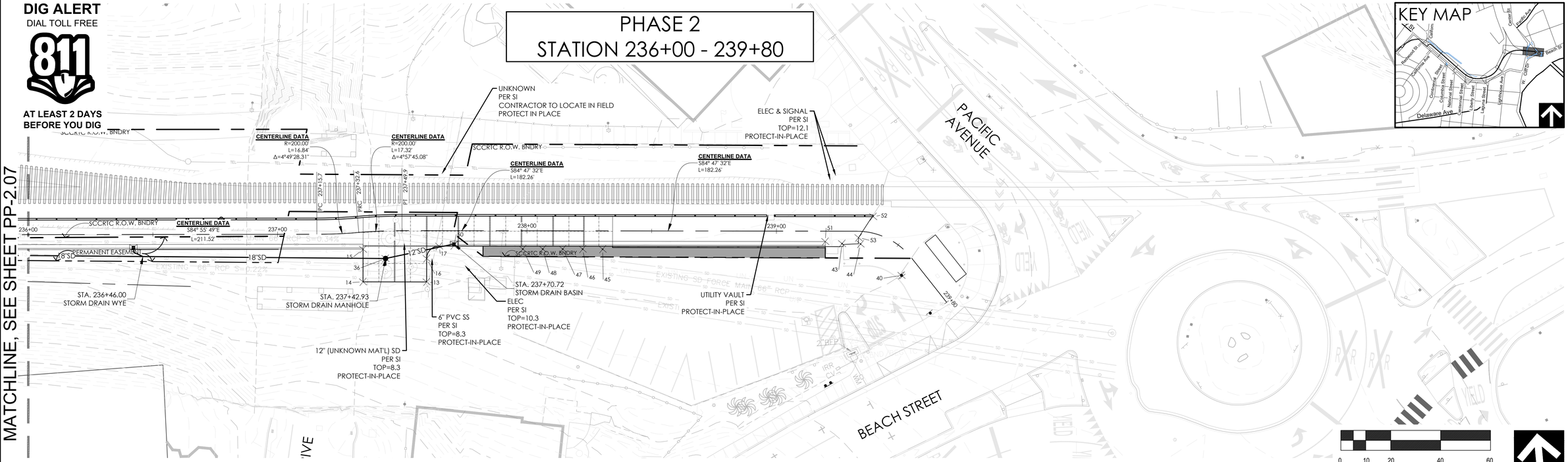
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

PHASE 2
STATION 236+00 - 239+80

MATCHLINE, SEE SHEET PP-2.07



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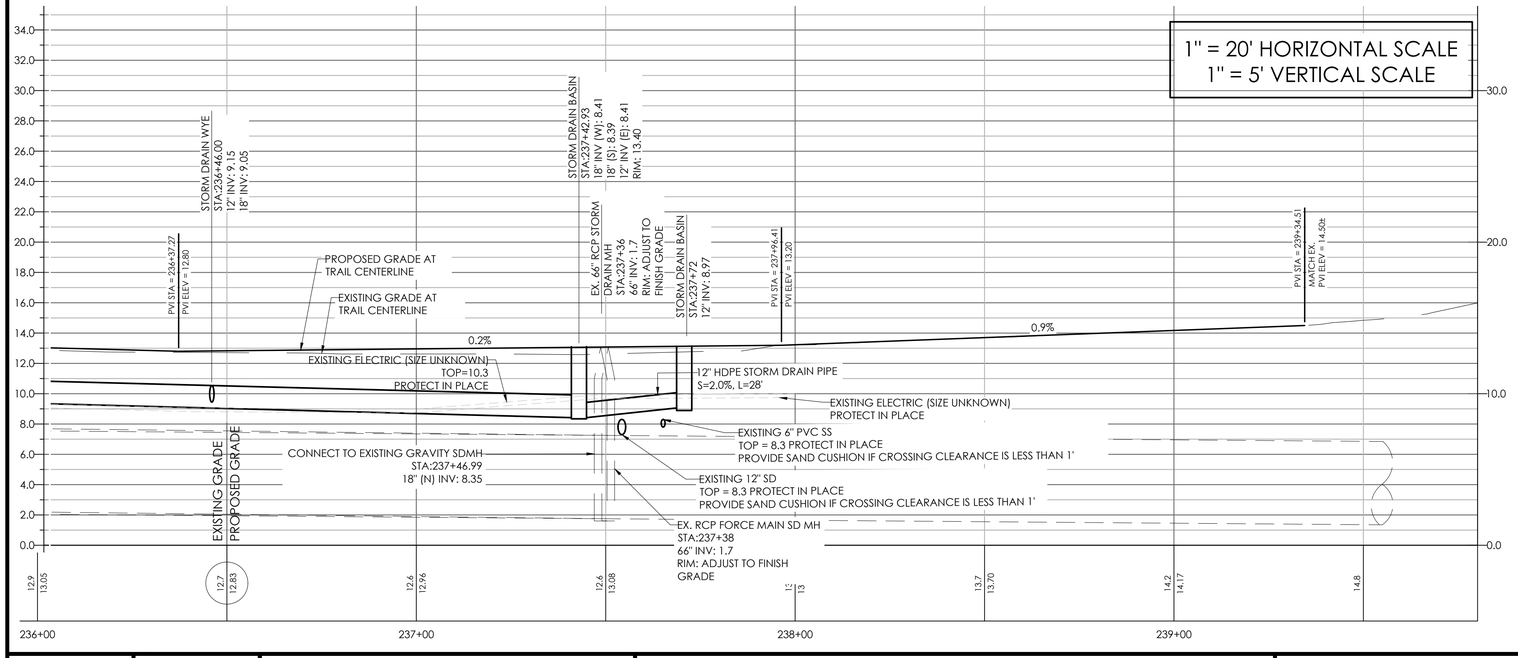


REGISTERED PROFESSIONAL ENGINEER
DARREN W.C. CROMEER
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
PLAN AND PROFILE

REFERENCES
FIELD BOOK:
DRAWING #:
PP-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
PP-2.08
VAULT NO.
7079B
SHEET 56 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: PP-2.08, Keywords: Sheet Key: CA Coastal Trail Logo.jpg MasterIN-MetaphaseDGN\rrmmk-20172.prog RTC logo + name 2013.jpg SSHS_CENTER_16x15 Mark.jpg Xrefs: Stamp_MikeShermoli.dwg 0193-01-HTB_PH2.dwg 0193-01-XB.dwg 0193-01-XC.dwg 0193-01-HDWMP.dwg 0193-01-RC15_2.dwg SANTA CRUZ(TRAIL 8 18 15.dwg
\\Users\rrm\on-site\2001\0193-01-rc15-rail-segment-7\Engineering\Civil\Sheet Files\Phase 2\PP-0193-01-RC15_2.dwg, Plotted By: shohn, Plotted: Jan 28, 2022 - 5:45pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

Point Table			
Point #	Raw Description	Northing	Easting
9	FENCE	1812408.3447	6113648.2154
65	DG	1812883.6762	6113120.8728
1	CURB	1812870.5509	6113103.7297
2	BSW	1812883.8410	6113105.2210
3	CURB	1812870.4565	6113104.6086
4	CURB	1812867.9978	6113147.3410
5	CURB	1812856.6395	6113138.3278
6	CURB	1812848.0189	6113149.1913
7	CURB	1812841.0045	6113147.6730
8	FENCE	1812821.1190	6113180.2907
10	FENCE	1812287.8626	6113788.6488
11	FENCE	1812643.7191	6115781.6786
12	CURB	1812407.1175	6115371.5527
13	PAD	1812608.3990	6116122.8039
14	PAD	1812610.7075	6116097.4085
15	PAD	1812623.7156	6116098.5909
16	PAD	1812617.7482	6116123.6537
17	PAD	1812622.2749	6116129.0870
18	DG	1812740.3967	6113239.0793
19	DG	1812745.4653	6113241.1319
20	DG	1812762.9705	6113171.2653
21	DG	1812768.3852	6113169.9910
22	DG	1812780.4692	6113170.7301
23	DG	1812764.0510	6113185.3301
24	DG	1812747.3438	6113217.6937
25	DG	1812752.6799	6113219.0265
26	DG	1812826.2627	6113157.2570
27	DG	1812826.4278	6113162.7610
28	FENCE	1812623.3846	6115950.2973
29	DG	1812758.0664	6113167.0392
30	CURB	1812761.0121	6113163.6206
31	DG	1812861.1183	6113102.6992
32	DG	1812855.6510	6113102.1006
33	CURB	1812090.2932	6115204.3820
34	DG	1812855.2527	6113105.7210
35	DG	1812860.7197	6113106.3225
36	SDMH	1812619.2354	6116107.2275
37	SIGN	1812833.3233	6113108.1219
38	SIGN	1812869.6524	6113105.3027
39	CURB	1812112.4663	6115228.5163
40	SIGN	1812593.9599	6116312.6292
41	CURB	1812383.3475	6115368.4455
42	CURB	1812404.4249	6115369.8206
43	BOLLARD	1812608.7800	6116290.0187
44	BOLLARD	1812607.9458	6116297.3909
45	BOLLARD	1812615.1433	6116194.2428
46	BOLLARD	1812615.8949	6116186.2782
47	BOLLARD	1812616.6191	6116178.3111
48	BOLLARD	1812617.3433	6116170.3439
49	BOLLARD	1812618.0676	6116162.3767
50	SD	1812621.9155	6116134.9970
51	LIP	1812610.2139	6116283.4131
52	CURB	1812618.4343	6116303.4289
53	TRAIL	1812610.5840	6116296.8130
54	BSW	1812887.6025	6113107.7651

Point Table			
Point #	Raw Description	Northing	Easting
55	CURB	1812888.6121	6113097.8036
56	CURB	1812868.7261	6113095.6887
57	BSW	1812867.9407	6113103.4285
58	CURB	1812827.4999	6113198.3751
59	SD	1812651.0415	6115783.4048
60	SD	1812616.2172	6115755.9173
61	SD	1812591.7798	6115687.8532
62	SD	1812468.1478	6115447.6809
63	STEEL CASING	1812856.0115	6113137.6385
64	STEEL CASING	1812895.9307	6113167.7460
66	PIPE SLEEVE	1812884.0090	6113119.9278
67	PIPE SLEEVE	1812866.1993	6113115.9160
68	PIPE SLEEVE	1812866.4796	6113114.9560
69	PIPE SLEEVE	1812834.3250	6113113.2457
70	PIPE SLEEVE	1812834.0830	6113112.2755
71	PIPE SLEEVE	1812814.9197	6113118.0864
72	PIPE SLEEVE	1812814.6777	6113117.1161
73	PIPE SLEEVE	1812823.3297	6113164.0037
74	PIPE SLEEVE	1812823.1562	6113156.0055

1

REGISTERED PROFESSIONAL ENGINEER
DARREN W.C. CHUN
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

1	BID ADDENDUM #3	04/13/2022

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
PLAN AND PROFILE

REFERENCES
FIELD BOOK:

DRAWING #:
PP-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

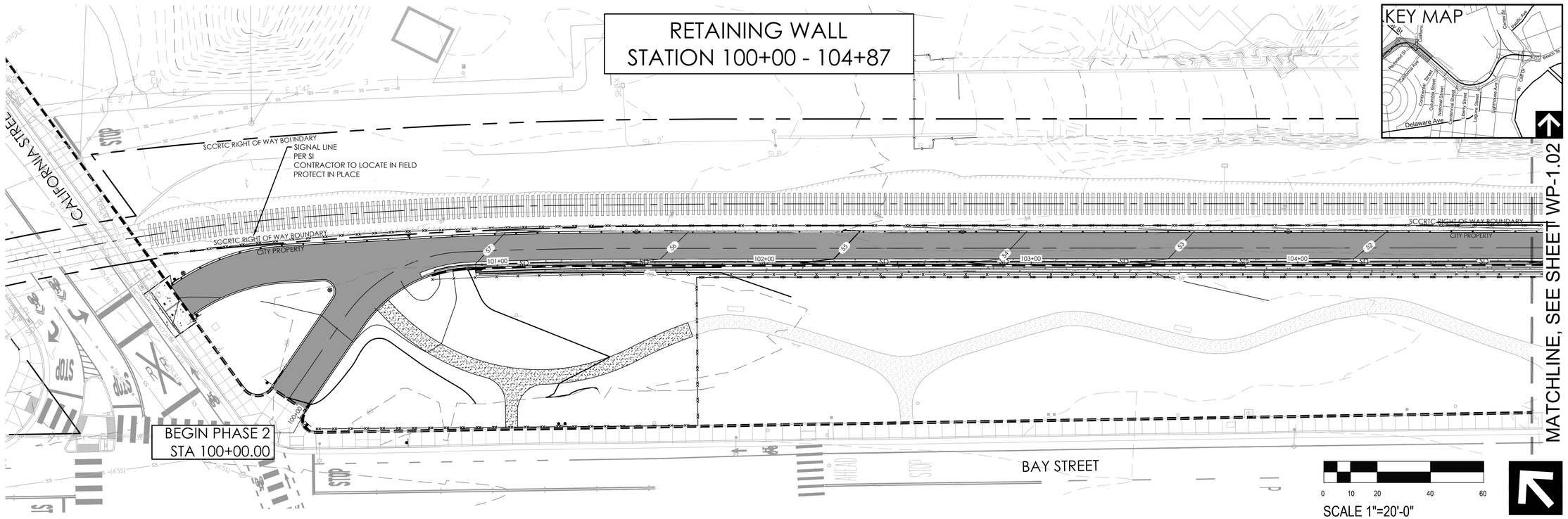
SCALE AS SHOWN
PP-2.09
VAULT NO.
7079B

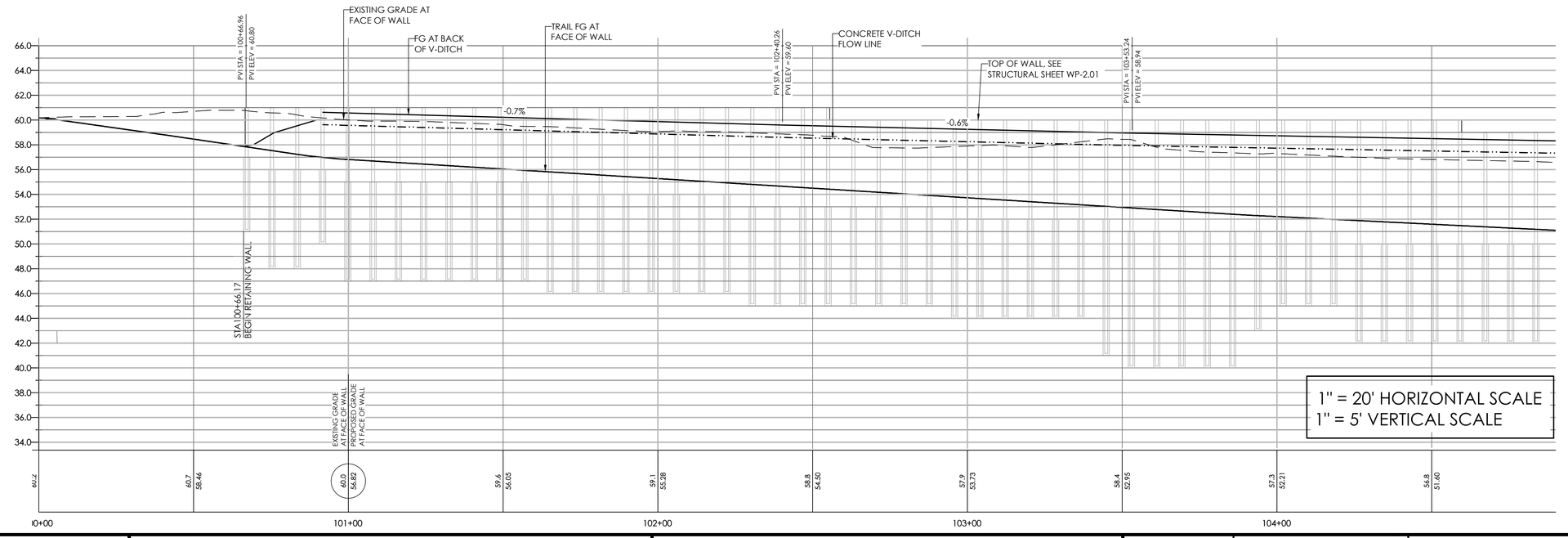
BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: PP-2.09, Images: Shared.jpg, CA Coastal Trail Logo.jpg, MasterMx-MixingDS5Forward-20172.png, RTC logo + name 2013.jpg, SSMS_CENTER_16x15 Mark.dgn , Xrefs: Stamp_MiscShared.dwg, 0193-01-HTR_PH2.dwg, 0193-01-XB.dwg, 0193-01-XC.dwg, 0193-01-XD.dwg, N:\000\0193-01-RC15-Rail-Trail-Segment-7\Engineering\CanDocs\Sheet-Files\Phase 2\PP-0193-01-RC15_2.dwg, Plotted By: jimchoy, Plotted: Apr 13, 2022 - 9:56pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

RETAINING WALL
STATION 100+00 - 104+87





BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED PROFESSIONAL ENGINEER
DARREN W.C. CROWELL
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
CITY OF
SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CIVIL RETAINING WALL PLAN AND PROFILE

REFERENCES	DATE	1/28/22	SCALE AS SHOWN
FIELD BOOK:	DRAWN	AV	WP-1.01
	DESIGN	AV	VAULT NO.
DRAWING #: WP-0193-01-RC15_2	CHECKED	DC	7079B

SHEET 58 OF 96

Layout Tab: Name: WP-1.01, Images: Sharrow.jpg, CA Coastal Trail Logo.jpg, MetersNS-WestofSOSPrimary-20172.png, RTC logo + name 2013.jpg, SIGNS_CONTOL_Rail 2 Work.jpg, Xrefs: Stamp_MileShermal.dwg, 0193-01-ATB_PMD.dwg, 0193-01-XB.dwg, 0193-01-XC.dwg, 0193-01-XE7MZ4MP.dwg, 0193-01-XT.dwg, 0193-01-XW.dwg
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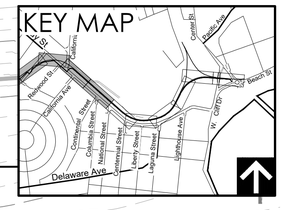
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

RETAINING WALL
STATION 104+87 - 110+97



MATCHLINE, SEE SHEET WP-1.01

MATCHLINE, SEE SHEET WP-1.03

SEE ELECTRICAL PLANS

6" (ABS) SD
PER CAB AND SI
TOP=48.7
PROTECT-IN-PLACE

2" (PVC) SD
PER CAB AND SI
TOP=48.9
PROTECT-IN-PLACE

UNKNOWN UTILITY
PER CAB AND SI
CONTRACTOR TO LOCATE IN FIELD
PROTECT IN PLACE

6" (STEEL) SD
PER CAB AND SI
TOP=44.7
PROTECT-IN-PLACE

SCCRTC RIGHT OF WAY BOUNDARY
CITY PROPERTY
12" SD
#5927* PIP
#5925 PIP
BAY STREET

0 10 20 40 60
SCALE 1"=20'-0"

PROPOSED DOWNDRAIN
(SEE GP SHEETS FOR INVERTS)

-0.5%

PVI STA = 106+34.18
PVI ELEV = 57.67

TOP OF WALL, SEE
STRUCTURAL SHEET WP-2.01

-0.8%

PVI STA = 107+71.12
PVI ELEV = 56.64

UNKNOWN UTILITY
PER SI
TOP=47.7
CONTRACTOR TO LOCATE IN FIELD
PROTECT IN PLACE

CABLE RAILING PER CALTRANS
STANDARD PLAN B11-47 (SECTION B-B)

-1.9%

8'-8" MIN

CONCRETE V-DITCH
FLOW LINE

FG AT BACK
OF V-DITCH

EXISTING GRADE AT
FACE OF WALL

TRAIL FG AT
FACE OF WALL

PVI STA = 109+57.45
PVI ELEV = 53.19

-2.0%

PVI STA = 110+14.23
PVI ELEV = 52.03

TOP OF WALL, SEE
STRUCTURAL SHEET WP-2.02

-5.3%

PVI STA = 110+66.40
PVI ELEV = 49.27

9.3%

PVI STA = 110+92.64
PVI ELEV = 51.70

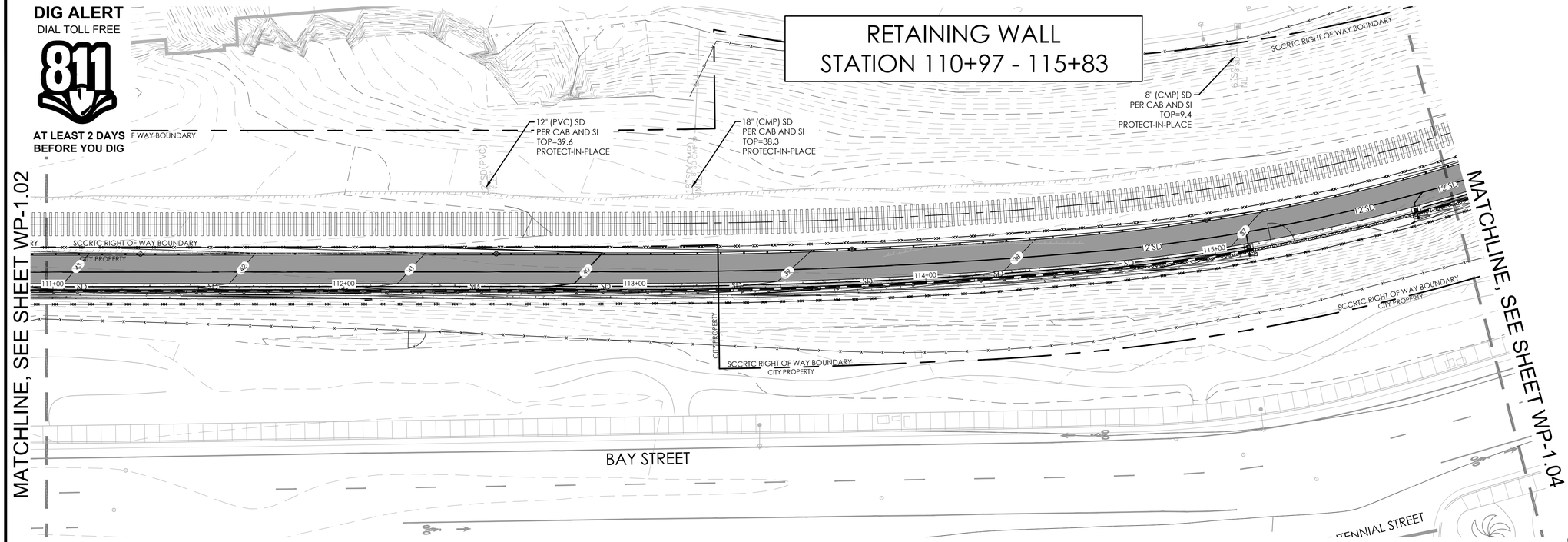
PROPOSED DOWNDRAIN
(SEE GP SHEETS FOR INVERTS)

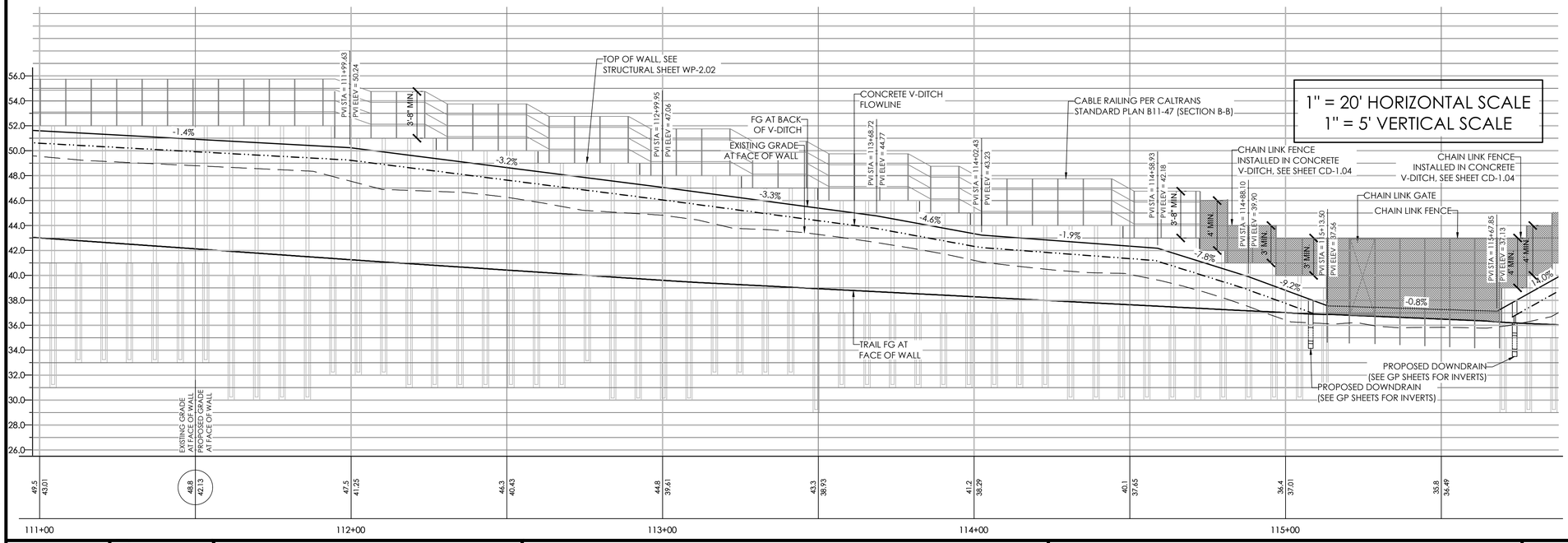
EXISTING GRADE AT FACE OF WALL
PROPOSED GRADE AT FACE OF WALL

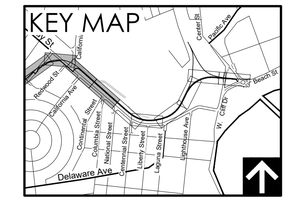
| | | |

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

RETAINING WALL
STATION 110+97 - 115+83







0 10 20 40 60
SCALE 1"=20'-0"

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED PROFESSIONAL ENGINEER
DARREN M. C. CHUN
82708
EXP 9/30/22
CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CIVIL RETAINING WALL PLAN AND PROFILE

REFERENCES
FIELD BOOK:
DRAWING #: WP-0193-01-RC15_2

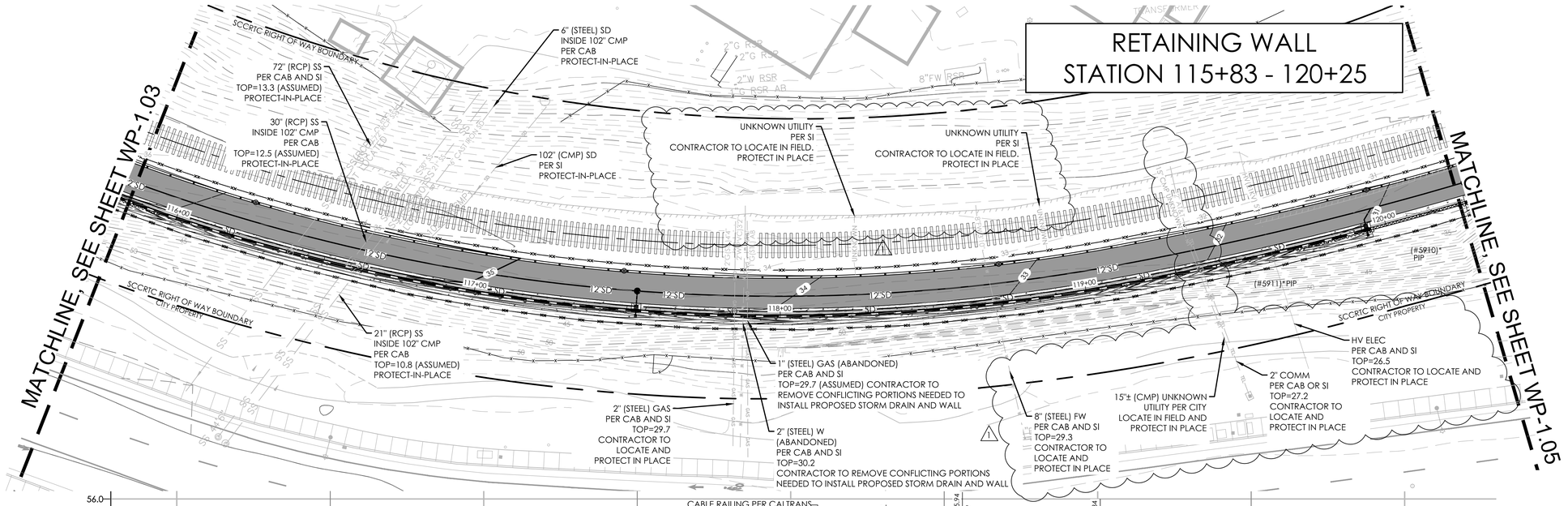
DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

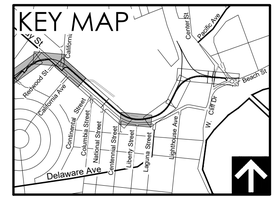
SCALE AS SHOWN
WP-1.03
VAULT NO. 7079B
SHEET 60 OF 96

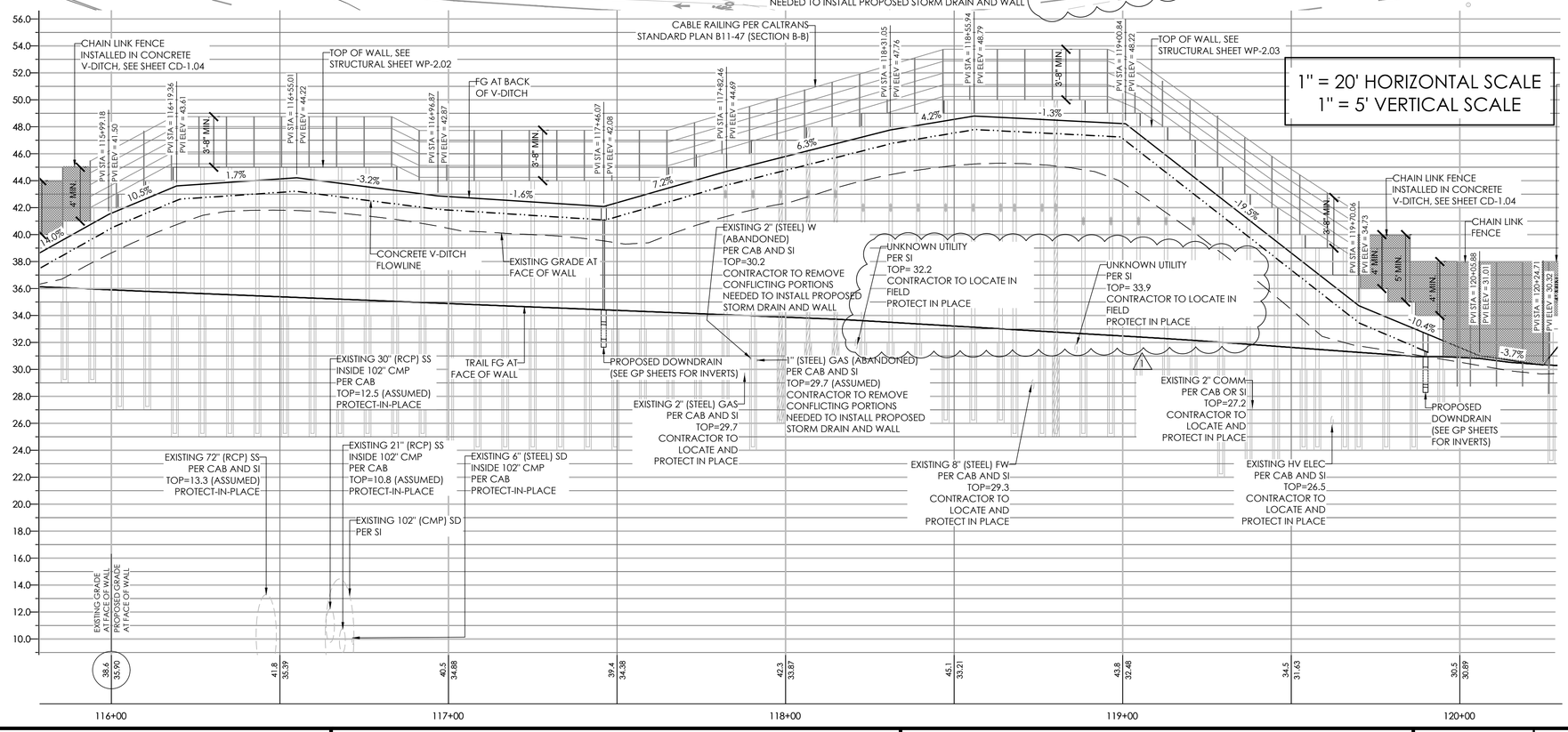
Layout Tab Name: WP-1.03, Images: Sheet.jpg; CA Coastal Trail Logo.jpg; MasterCity-HorizJPEG.jpg; Image2013.jpg; RRD logo + name 2013.jpg; SIGNS_CENTER_16x7.5_Mark.jpg; _Xrefs: Stamp_MilesSheets4.dwg; 0193-01-WTR_PKG.dwg; 0193-01-WB.dwg; 0193-01-WC.dwg; 0193-01-RETWAP.dwg; 0193-01-RC15_2.dwg; Plotted By: akhou, Plotted: Jan 28, 2022 - 5:35pm
\\corp\vm\un-sta\1000\10193-01-rc15--rail-segment--7\Engineering\CivilDocs\Sheet--Files\Phase 2\WP-0193-01-RC15_2.dwg

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

RETAINING WALL
STATION 115+83 - 120+25







1" = 20' HORIZONTAL SCALE
1" = 5' VERTICAL SCALE

0 10 20 40 60
SCALE 1"=20'-0"

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REVISIONS		
1	BID ADDENDUM #3	04/13/2022

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CIVIL RETAINING WALL PLAN AND PROFILE

REFERENCES
FIELD BOOK:
DRAWING #: WP-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
WP-1.04
VAULT NO. 7079B

REGISTERED PROFESSIONAL ENGINEER DARREN M. G. CRUDO 82708 EXP 9/30/22 CIVIL STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

Layout Tab: Notes: WP-1.04, Images: Planned.dgn, CA Coastal Trail Logo.jpg, Metsworth-Manley\SCC\Precast-20172.png, RTC logo + name 2013.jpg, SDMS_CENTER_14x7.5 Mark.jpg; , Prefix: Stamp_MileMarkers.dgn; 0193-01-MTB_PHZ.dgn; 0193-01-RB.dgn; 0193-01-RC15_1.dgn; 0193-01-RC15_2.dgn; 0193-01-RC15_3.dgn; 0193-01-RC15_4.dgn; 0193-01-RC15_5.dgn; 0193-01-RC15_6.dgn; 0193-01-RC15_7.dgn; 0193-01-RC15_8.dgn; 0193-01-RC15_9.dgn; 0193-01-RC15_10.dgn; 0193-01-RC15_11.dgn; 0193-01-RC15_12.dgn; 0193-01-RC15_13.dgn; 0193-01-RC15_14.dgn; 0193-01-RC15_15.dgn; 0193-01-RC15_16.dgn; 0193-01-RC15_17.dgn; 0193-01-RC15_18.dgn; 0193-01-RC15_19.dgn; 0193-01-RC15_20.dgn; 0193-01-RC15_21.dgn; 0193-01-RC15_22.dgn; 0193-01-RC15_23.dgn; 0193-01-RC15_24.dgn; 0193-01-RC15_25.dgn; 0193-01-RC15_26.dgn; 0193-01-RC15_27.dgn; 0193-01-RC15_28.dgn; 0193-01-RC15_29.dgn; 0193-01-RC15_30.dgn; 0193-01-RC15_31.dgn; 0193-01-RC15_32.dgn; 0193-01-RC15_33.dgn; 0193-01-RC15_34.dgn; 0193-01-RC15_35.dgn; 0193-01-RC15_36.dgn; 0193-01-RC15_37.dgn; 0193-01-RC15_38.dgn; 0193-01-RC15_39.dgn; 0193-01-RC15_40.dgn;

DIG ALERT
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811
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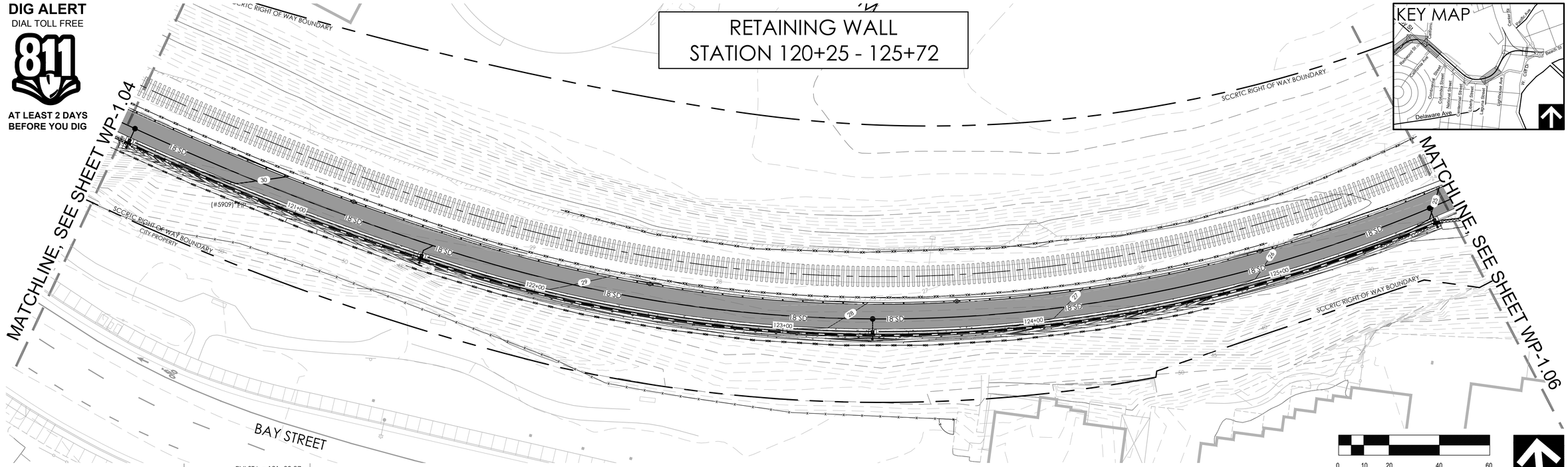
RETAINING WALL
STATION 120+25 - 125+72



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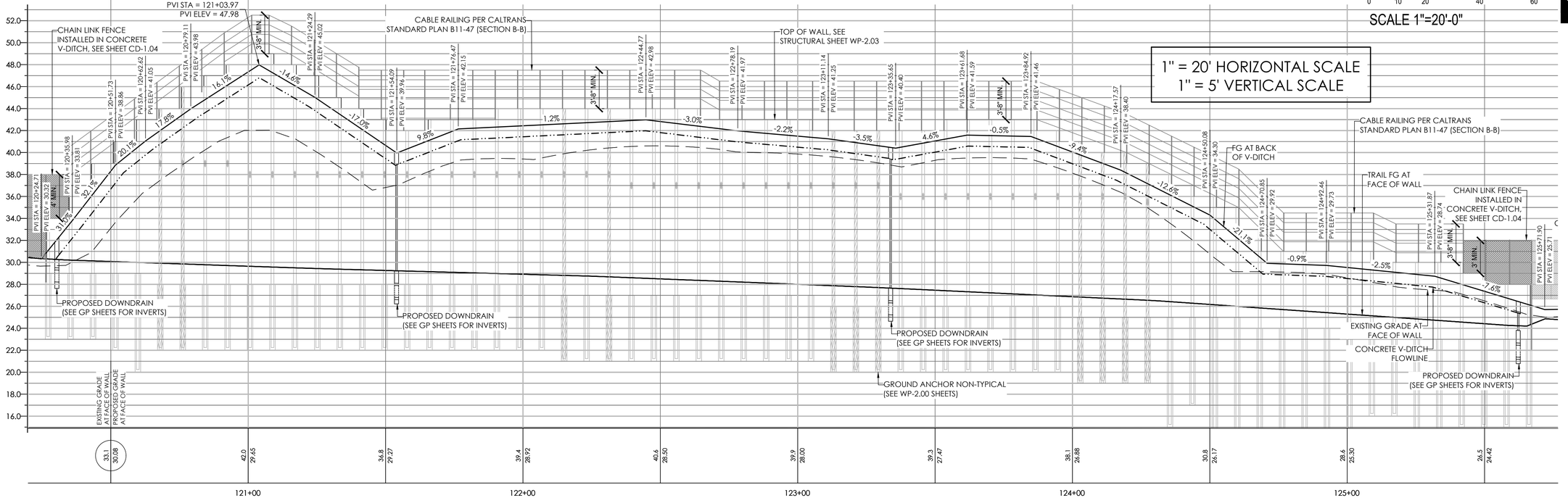
1" = 5' VERTICAL SCALE



REGISTERED PROFESSIONAL ENGINEER
DARREN M.G. GROH
82708 EXP 9/30/22 CIVIL
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CIVIL RETAINING WALL PLAN AND PROFILE

REFERENCES
FIELD BOOK:
DRAWING #: WP-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
WP-1.05
VAULT NO. 7079B
SHEET 62 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab: Name: WP-1.05, Images Stamped: jpg Ck Created: Tue, Layout By: Morgan.Allen@SCCFramework.2017.2.jpg, RTC Xrefs: xrefs: 2013.jpg, SIGNS_CENTER_16x7.5_Mask.jpg>, Xrefs: Stamp_AllenDarrell.dwg, 0193-01-HTB_PH2.dwg, 0193-01-1B.dwg, 0193-01-1C.dwg, 0193-01-HDNMP.dwg, 0193-01-RC15_2.dwg, Plotted By: mtotts, Plotted: Jan 28, 2022 - 5:36pm
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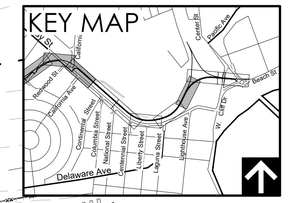
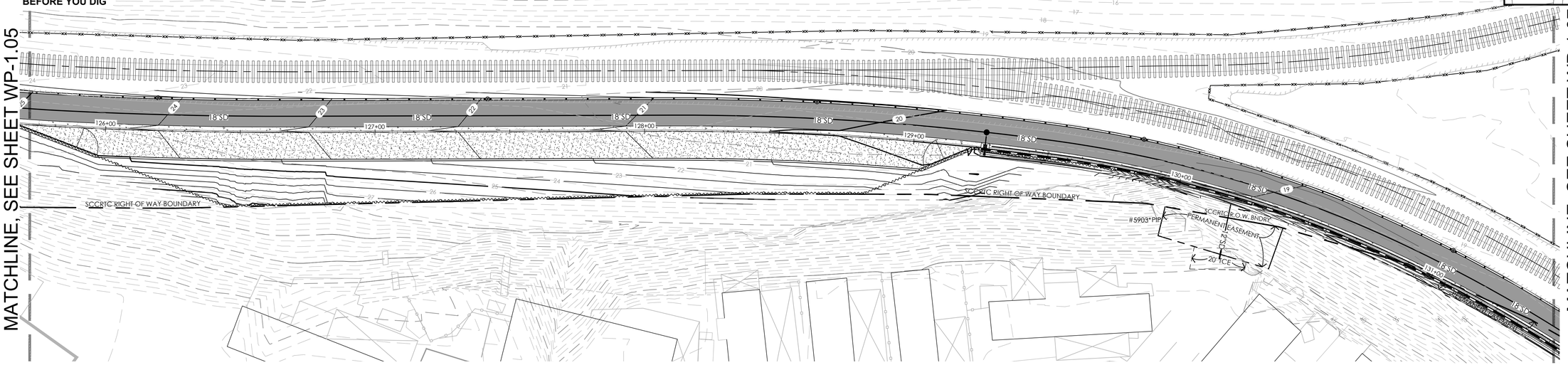
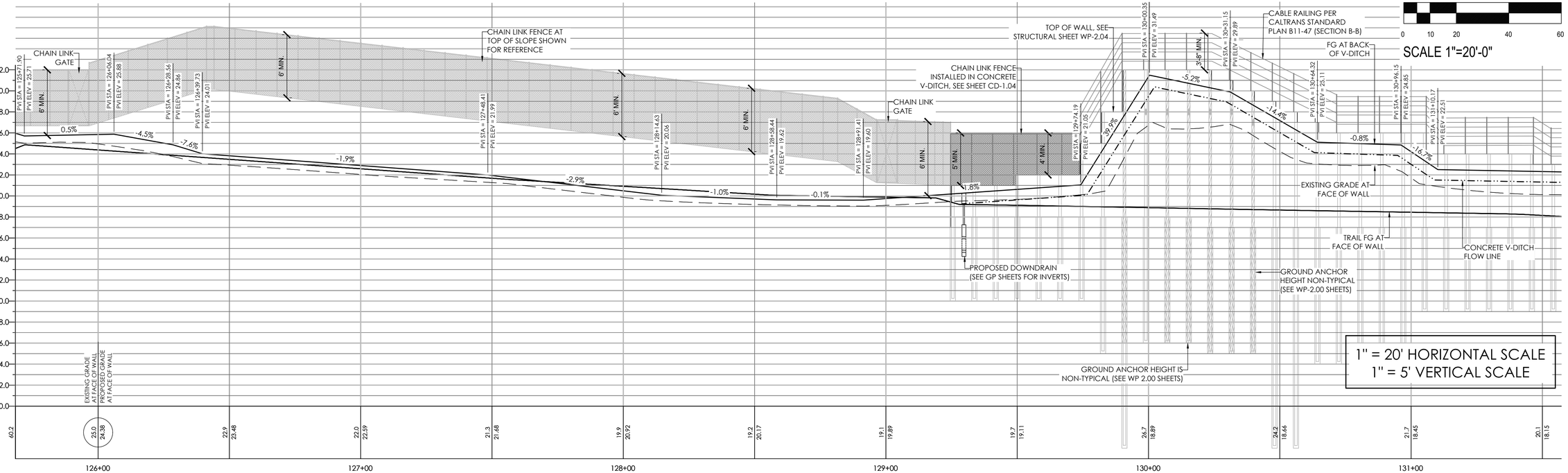
STATION 125+72 - 131+53

KEY MAP







0 10 20 40 60
SCALE 1"=20'-0"

1" = 20' HORIZONTAL SCALE
1" = 5' VERTICAL SCALE

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DARREN M. C. CRAY
82708
EXP 9/30/22
CIVIL
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rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

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CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CIVIL RETAINING WALL PLAN AND PROFILE

REFERENCES
FIELD BOOK:
DRAWING #:
WP-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
WP-1.06
VAULT NO.
7079B
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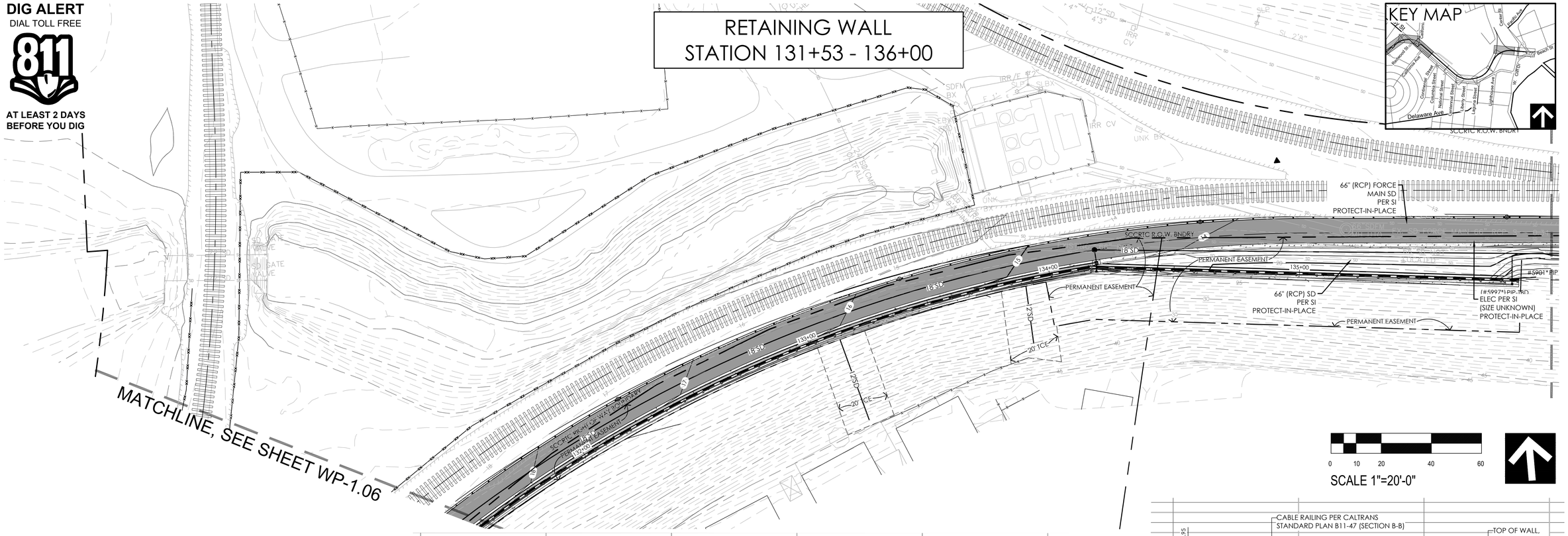

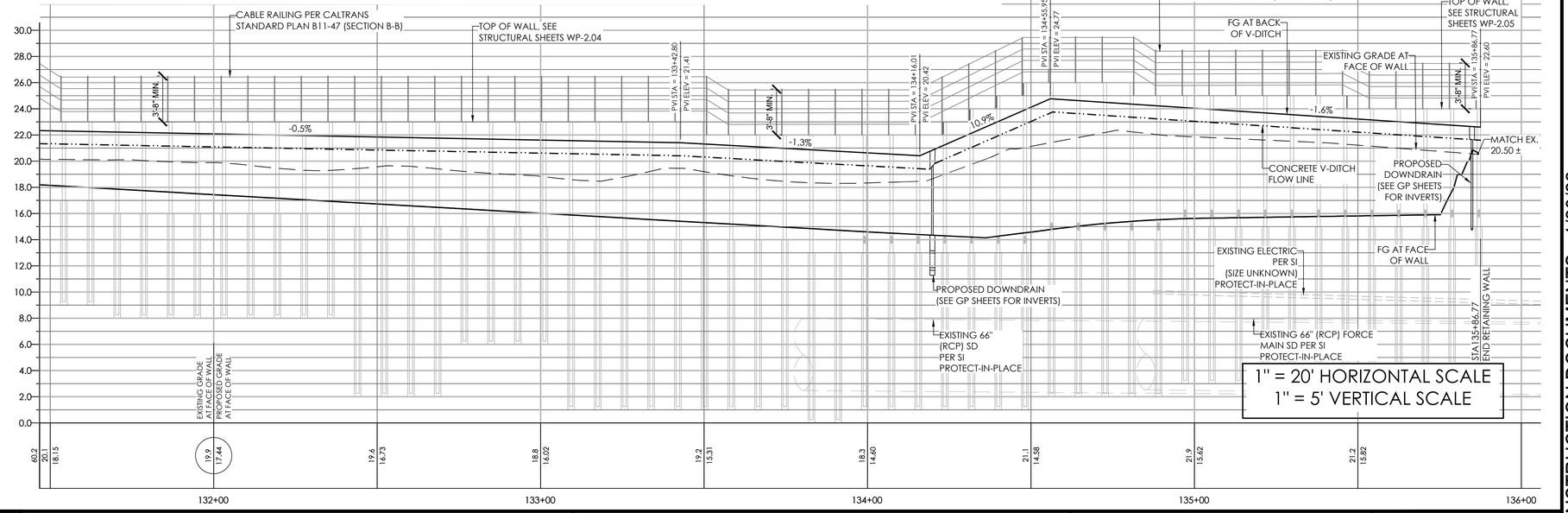

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DORREN W.C. CHOY
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rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

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CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
CIVIL RETAINING WALL PLAN AND PROFILE

REFERENCES
FIELD BOOK:

DRAWING #:
WP-0193-01-RC15_2

DATE	1/28/22
DRAWN	AV
DESIGN	AV
CHECKED	DC

SCALE AS SHOWN
WP-1.07
VAULT NO.
7079B
SHEET 64 OF 96

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TYPE 1 WALL (SOLDIER PILE RETAINING WALLS) (1 WD101)

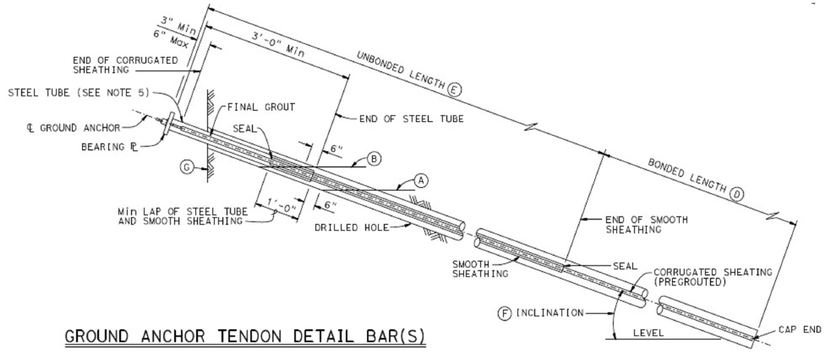
SCHEDULE 'A'						
BACKSLOPE	RETAINED SOIL	BEARING SOIL	MAXIMUM RETAINED HEIGHT (H)	PIER DIAMETER	PIER DEPTH	SOLDIER PILE SIZE
LEVEL	Terrace Deposits	Terrace Deposits	4'-0"	2'-0"	6'-0"	W10x33
LEVEL	Terrace Deposits	Terrace Deposits	6'-0"	2'-0"	8'-0"	W10x33
LEVEL	Terrace Deposits	Terrace Deposits	8'-0"	2'-0"	11'-0"	W12x40
LEVEL	Terrace Deposits	Terrace Deposits	10'-0"	2'-0"	14'-0"	W14x53
2:1	Terrace Deposits	Terrace Deposits	4'-0"	2'-0"	6'-0"	W10x33
2:1	Terrace Deposits	Terrace Deposits	6'-0"	2'-0"	9'-0"	W10x33
2:1	Terrace Deposits	Terrace Deposits	8'-0"	2'-0"	12'-0"	W12x40
1.5:1	Terrace Deposits	Terrace Deposits	4'-0"	2'-0"	7'-0"	W10x33
1.5:1	Terrace Deposits	Terrace Deposits	6'-0"	2'-0"	10'-0"	W10x33
1.5:1	Terrace Deposits	Terrace Deposits	8'-0"	2'-0"	13'-0"	W14x43
SCHEDULE 'B'						
BACKSLOPE	RETAINED SOIL	BEARING SOIL	MAXIMUM RETAINED HEIGHT (H)	PIER DIAMETER	PIER DEPTH	SOLDIER PILE SIZE
LEVEL	Terrace Deposits	Purisima Bedrock	4'-0"	2'-0"	6'-0"	W10x33
LEVEL	Terrace Deposits	Purisima Bedrock	6'-0"	2'-0"	6'-0"	W10x33
LEVEL	Terrace Deposits	Purisima Bedrock	8'-0"	2'-0"	8'-0"	W10x33
LEVEL	Terrace Deposits	Purisima Bedrock	10'-0"	2'-0"	9'-0"	W14x43
2:1	Terrace Deposits	Purisima Bedrock	4'-0"	2'-0"	6'-0"	W10x33
2:1	Terrace Deposits	Purisima Bedrock	6'-0"	2'-0"	6'-0"	W10x33
2:1	Terrace Deposits	Purisima Bedrock	8'-0"	2'-0"	8'-0"	W12x40
2:1	Terrace Deposits	Purisima Bedrock	10'-0"	2'-0"	10'-0"	W14x53
1.5:1	Terrace Deposits	Purisima Bedrock	4'-0"	2'-0"	6'-0"	W10x33
1.5:1	Terrace Deposits	Purisima Bedrock	6'-0"	2'-0"	7'-0"	W10x33
1.5:1	Terrace Deposits	Purisima Bedrock	8'-0"	2'-0"	9'-0"	W12x40
SCHEDULE 'C'						
BACKSLOPE	RETAINED SOIL	BEARING SOIL	MAXIMUM RETAINED HEIGHT (H)	PIER DIAMETER	PIER DEPTH	SOLDIER PILE SIZE
1.5:1	Purisima Bedrock	Purisima Bedrock	4'-0"	2'-0"	6'-0"	W10x33
1.5:1	Purisima Bedrock	Purisima Bedrock	6'-0"	2'-0"	6'-0"	W10x33
1.5:1	Purisima Bedrock	Purisima Bedrock	8'-0"	2'-0"	8'-0"	W12x40
1.5:1	Purisima Bedrock	Purisima Bedrock	10'-0"	2'-0"	10'-0"	W14x53
SCHEDULE 'D'						
BACKSLOPE	RETAINED SOIL	BEARING SOIL	MAXIMUM RETAINED HEIGHT (H)	PIER DIAMETER	PIER DEPTH	SOLDIER PILE SIZE
2:1	Basin Deposits	Basin Deposits	4'-0"	2'-0"	8'-0"	W10x33
2:1	Basin Deposits	Basin Deposits	6'-0"	2'-0"	11'-0"	W10x33
2:1	Basin Deposits	Basin Deposits	8'-0"	2'-0"	18'-0"	W14x48
1.5:1	Basin Deposits	Basin Deposits	4'-0"	2'-0"	8'-0"	W10x33
1.5:1	Basin Deposits	Basin Deposits	6'-0"	2'-0"	13'-0"	W10x33
1.5:1	Basin Deposits	Basin Deposits	8'-0"	2'-0"	21'-0"	W14x61

TYPE 2 WALL (SOLDIER PILE WITH GROUND ANCHOR RETAINING WALLS) (2 WD101)

SCHEDULE 'B'													
BACKSLOPE	RETAINED SOIL	BEARING SOIL	MAXIMUM RETAINED HEIGHT (H)	TIEBACK HEIGHT	SOLDIER PILE SIZE	PIER DIAMETER	PIER DEPTH	TIEBACK TENDON	MIN UNBONDED LENGTH	MIN BONDED LENGTH	TIEBACK REACTION LOAD CASE: H +E	TIEBACK REACTION LOAD CASE: H	TEST LOAD 133% LOAD CASE 'H+E'	LOCK OFF LOAD 85% LOAD CASE 'H'
1.5:1	Terrace Deposits	Purisima Bedrock	10'-0"	10'-0"	W12x40	2'-0"	6'-0"	1"	10'-0"	15'-0"	45 k	38 k	60 k	32 k
1.5:1	Terrace Deposits	Purisima Bedrock	INTENTIONALLY LEFT BLANK											
1.5:1	Terrace Deposits	Purisima Bedrock	12'-0"	10'-0"	W12x45	2'-0"	6'-0"	1"	10'-0"	18'-0"	56 k	47 k	74 k	40 k
1.5:1	Terrace Deposits	Purisima Bedrock	14'-0"	10'-0"	W14x61	2'-0"	6'-0"	1.25"	10'-0"	27'-0"	82 k	69 k	109 k	58 k
SCHEDULE 'C'														
BACKSLOPE	RETAINED SOIL	BEARING SOIL	MAXIMUM RETAINED HEIGHT (H)	TIEBACK HEIGHT	SOLDIER PILE SIZE	PIER DIAMETER	PIER DEPTH	TIEBACK TENDON	MIN UNBONDED LENGTH	MIN BONDED LENGTH	TIEBACK REACTION LOAD CASE: H +E	TIEBACK REACTION LOAD CASE: H	TEST LOAD 133% LOAD CASE 'H+E'	LOCK OFF LOAD 85% LOAD CASE 'H'
1.5:1	Purisima Bedrock	Purisima Bedrock	11'-0"	10'-0"	W12x40	2'-0"	6'-0"	1"	10'-0"	12'-0"	35 k	28 k	46 k	24 k
1.5:1	Purisima Bedrock	Purisima Bedrock	12'-0"	10'-0"	W12x40	2'-0"	6'-0"	1"	10'-0"	14'-0"	43 k	34 k	57 k	29 k
1.5:1	Purisima Bedrock	Purisima Bedrock	14'-0"	10'-0"	W12x40	2'-0"	6'-0"	1"	10'-0"	21'-0"	64 k	51 k	85 k	43 k
SCHEDULE 'D'														
BACKSLOPE	RETAINED SOIL	BEARING SOIL	MAXIMUM RETAINED HEIGHT (H)	TIEBACK HEIGHT	SOLDIER PILE SIZE	PIER DIAMETER	PIER DEPTH	TIEBACK TENDON	MIN UNBONDED LENGTH	MIN BONDED LENGTH	TIEBACK REACTION LOAD CASE: H +E	TIEBACK REACTION LOAD CASE: H	TEST LOAD 133% LOAD CASE 'H+E'	LOCK OFF LOAD 85% LOAD CASE 'H'
1.5:1	Basin Deposits	Basin Deposits	11'-0"	10'-0"	W12x40	2'-0"	12'-0"	1"	10'-0"	16'-0"	48 k	40 k	63 k	34 k
1.5:1	Basin Deposits	Basin Deposits	12'-0"	10'-0"	W12x50	2'-0"	12'-0"	1"	10'-0"	19'-0"	59 k	49 k	78 k	41 k

TYPE 3 WALL (SOLDIER PILE WITH GROUND ANCHOR RETAINING WALLS) (3 WD101)

SCHEDULE 'D'													
BACKSLOPE	RETAINED SOIL	BEARING SOIL	MAXIMUM RETAINED HEIGHT (H)	TIEBACK HEIGHT	SOLDIER PILE SIZE	PIER DIAMETER	PIER DEPTH	TIEBACK TENDON	MIN UNBONDED LENGTH	MIN BONDED LENGTH	TIEBACK REACTION LOAD CASE: H +E	TIEBACK REACTION LOAD CASE: H	TEST LOAD 133% LOAD CASE H +E	LOCK OFF LOAD 85% LOAD CASE H
1.5:1	Basin Deposits	Basin Deposits	4'-0"	1'-0"	W12x40	2'-0"	6'-0"	1"	10'-0"	12'-0"	8 k	6 k	10 k	5 k
1.5:1	Basin Deposits	Basin Deposits	6'-0"	1'-6"	W12x40	2'-0"	12'-0"	1"	10'-0"	12'-0"	19 k	15 k	25 k	13 k
1.5:1	Basin Deposits	Basin Deposits	8'-0"	1'-6"	W12x40	2'-0"	12'-0"	1"	10'-0"	12'-0"	36 k	28 k	48 k	24 k
1.5:1	Basin Deposits	Basin Deposits	10'-0"	1'-6"	W12x40	2'-0"	12'-0"	1"	10'-0"	19'-0"	58 k	46 k	77 k	39 k



GROUND ANCHOR TENDON DETAIL BAR(S)

NOTES:

(A) Level of initial grouting for drilled hole 6" in diameter or smaller

(B) Level of secondary grouting

(C) Level of initial grouting inside corrugated sheathing

(D) Bonded length shall be determined by the contractor

(E) For unbonded length, see SCHEDULES

(F) For inclination, see SCHEDULES

(G) Face of Wall Excavation

NOTES:

1. Anchorage enclosure shall only be used when anchor head assembly is not enclosed in concrete.
2. Anchorage enclosure shall have provisions to allow injecting grout at low end and venting at high end. Galvanize after fabrication.
3. Silicone sealant to cover full width of flange.
4. Steel tube (Min thickness = ¼") welded to bearing plate. Galvanize assembly after fabrication
5. Steel tube welded to bearing plate. Inside diameter of steel tube (Min thickness = ¼") to be 1" greater than outside diameter of smooth sheathing.
6. Galvanize assembly after fabrication.
7. For other wall details, see PROJECT PLANS.

GENERAL DESIGN NOTES

GROUND ANCHOR WALL SOIL PARAMETERS:
- MARINE TERRACE DEPOSITS: Ka = 0.36 LEVEL, 0.48 2:1 and 0.61 1.5:1; Kp = 2.8, DENSITY = 125 pcf
- PURISIMA BEDROCK: Ka = 0.23 LEVEL, 0.35 2:1 and 0.44 1.5:1; Kp = 4.6, DENSITY = 130 pcf
- BASIN DEPOSITS: Ka = 0.40 LEVEL, 0.54 2:1 and 0.70 1.5:1; Kp = 1.8, DENSITY = 110 pcf

CANTILEVER WALL SOIL PARAMETERS:
- MARINE TERRACE DEPOSITS: Pa = 45 psf/ft LEVEL, 60 psf/ft 2:1 and 77 psf/ft 1.5:1; Pp = 350 psf/ft acting on 1.5 pier diameters
- PURISIMA BEDROCK: Pa = 30 psf/ft LEVEL, 46 psf/ft 2:1 and 57 psf/ft 1.5:1; Pp = 600 psf/ft acting on 2.0 pier diameters
- BASIN DEPOSITS: Pa = 45 psf/ft LEVEL, 60 psf/ft 2:1 and 77 psf/ft 1.5:1; Pp = 200 psf/ft acting on 1.5 pier diameters

SEISMIC LOADING:
- GROUND ANCHOR WALL: $14H^2$ lbs. ACTING AT 0.33H
- CANTILEVER WALL: $10H^2$ lbs. ACTING AT 0.33H

NOTE REGARDING LOAD COMBINATIONS:
ALL LOADS PROVIDED IN TABLES ABOVE ARE SERVICE LEVEL LOADS.
LOAD COMBINATIONS PROVIDED IN TABLES ABOVE REPRESENT:
"LOAD CASE H" SOIL PRESSURE ONLY
"LOAD CASE H+E" SOIL PRESSURE AND SEISMIC SURCHARGE

CONCRETE BACKFILL
f'c = 3,600 psi

GROUND ANCHOR (BAR TENDON)
ASTM A722 GRADE 150

STRUCTURAL STEEL PILES
Fy = 50,000 psi

HOLLOW STRUCTURAL STEEL (HSS)
Fy = 46,000 psi

STRUCTURAL TIMBER
TREATED DOUGLAS FIR, GRADE No. 1
TIMBER TO BE S4S
FULL HEIGHT FOR WALLS RETAINING 6'-0" AND LESS: TIMBER LAGGING SIZE: 4X12 (3½ x 11¼)
FULL HEIGHT FOR WALLS RETAINING MORE THAN 6'-0": TIMBER LAGGING SIZE: 6X12 (5½ x11½)

GROUND ANCHOR BONDED ZONE:
MINIMUM BONDED ZONE ANCHORAGE LENGTHS ARE BASED ON 8" MINIMUM DIAMETER GROUTED BOND ZONE AND BOND FRICTION OF 1,500 PSF. ULTIMATE TRANSFER LOADS THAT ACTUALLY DEVELOP BETWEEN THE BOND LENGTH AND THE SOIL OR BEDROCK WILL DEPEND ON SEVERAL FACTORS INCLUDING THE EMBEDMENT MATERIALS, THE DIAMETER AND LENGTH OF THE TIEBACK HOLES, THE ROUGHNESS OF THE HOLES, GROUTING TECHNIQUE, GROUT STRENGTH, AND OTHER CONSTRUCTION FACTORS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT TIEBACKS THAT DEVELOP THE REQUIRED STRENGTHS.

MME
CIVIL+STRUCTURAL ENGINEERING
224 Walnut Ave, Suite B Santa Cruz, CA 95060
Phone (831) 426-3186

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REVISIONS

CITY OF SANTA CRUZ PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

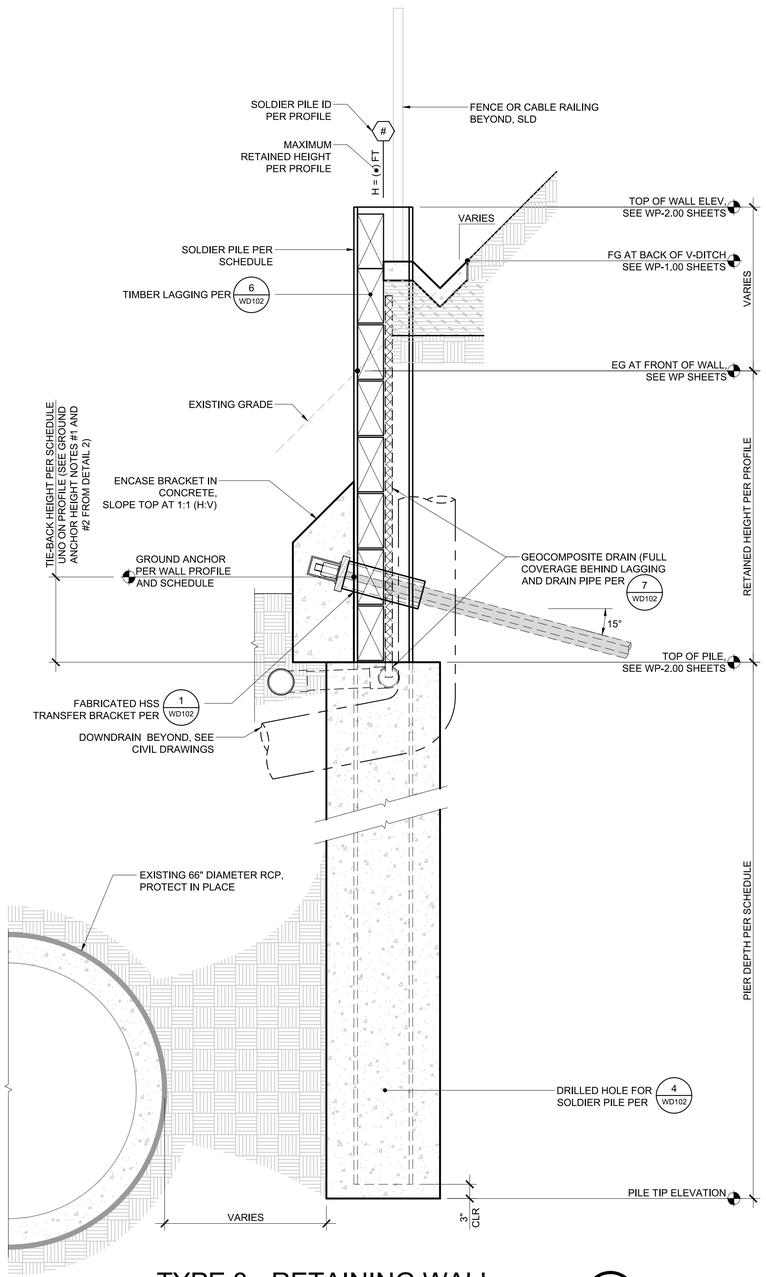
RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
RETAINING DETAIL SHEET

REFERENCES
FIELD BOOK:
DRAWING #:

DATE	1/28/22
DRAWN	PD/ED
DESIGN	PD
CHECKED	DH

SCALE AS SHOWN
WD-1.00
VAULT NO.
7079B
SHEET 65 OF 96

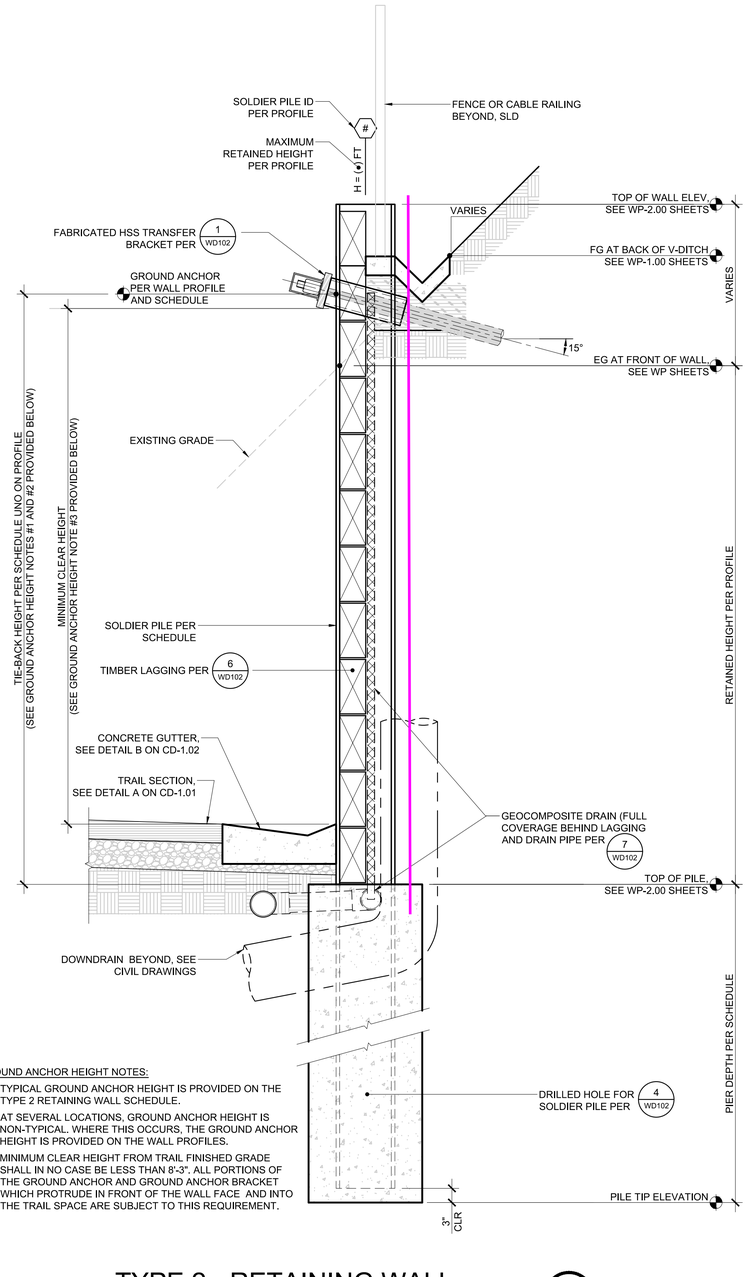
BID SET CONSTRUCTION DOCUMENTS - 1/28/22



TYPE 3 - RETAINING WALL

SCALE: 3/4" = 1'-0"

3



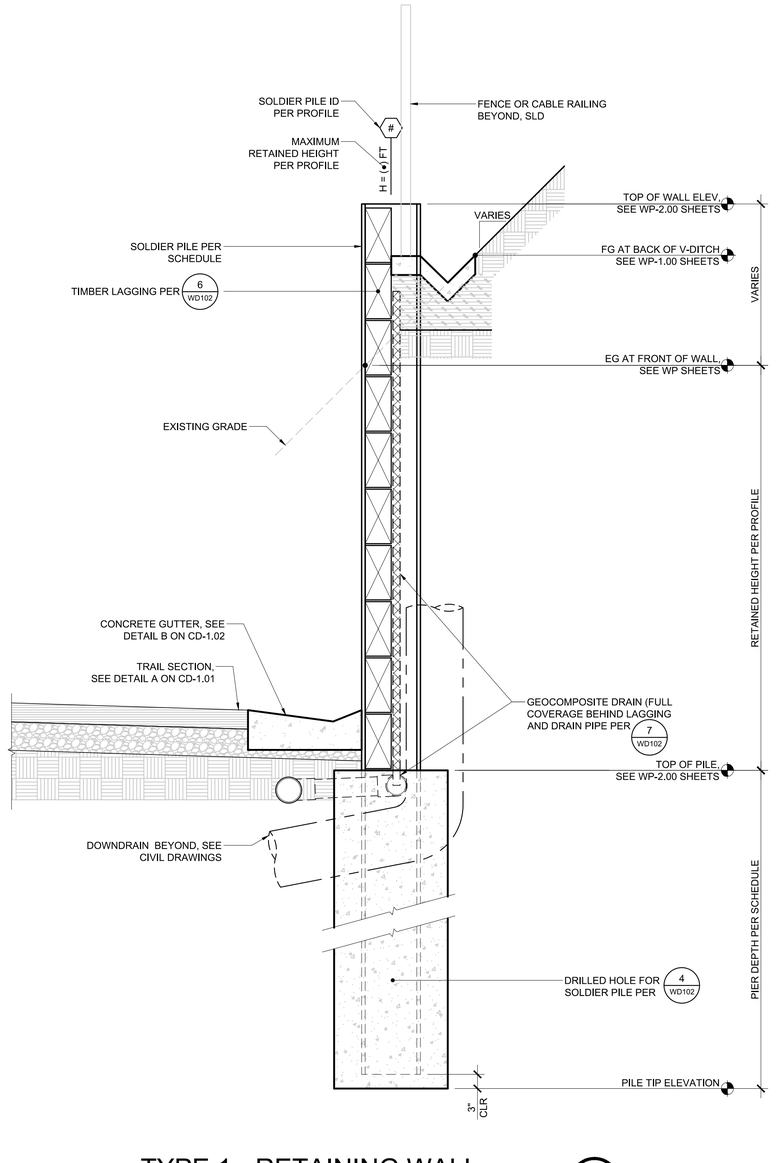
GROUND ANCHOR HEIGHT NOTES:

1. TYPICAL GROUND ANCHOR HEIGHT IS PROVIDED ON THE TYPE 2 RETAINING WALL SCHEDULE.
2. AT SEVERAL LOCATIONS, GROUND ANCHOR HEIGHT IS NON-TYPICAL. WHERE THIS OCCURS, THE GROUND ANCHOR HEIGHT IS PROVIDED ON THE WALL PROFILES.
3. MINIMUM CLEAR HEIGHT FROM TRAIL FINISHED GRADE SHALL IN NO CASE BE LESS THAN 8'-3". ALL PORTIONS OF THE GROUND ANCHOR AND GROUND ANCHOR BRACKET WHICH PROTRUDE IN FRONT OF THE WALL FACE AND INTO THE TRAIL SPACE ARE SUBJECT TO THIS REQUIREMENT.

TYPE 2 - RETAINING WALL

SCALE: 3/4" = 1'-0"

2



TYPE 1 - RETAINING WALL

SCALE: 3/4" = 1'-0"

1

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

MME
CIVIL+STRUCTURAL ENGINEERING
224 Walnut Ave, Suite B Santa Cruz, CA 95060
Phone (831) 426-3186

REGISTERED PROFESSIONAL ENGINEER DALE A. HENDSBEE No. S3549 STRUCTURAL STATE OF CALIFORNIA

REVISIONS

CITY OF SANTA CRUZ 1866 CALIFORNIA

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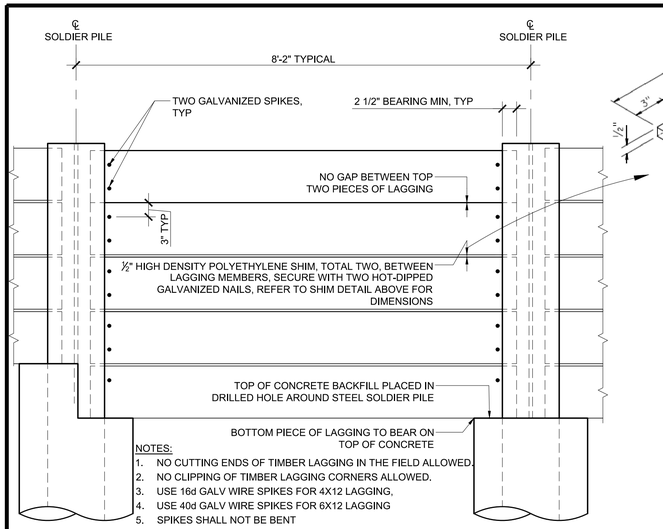
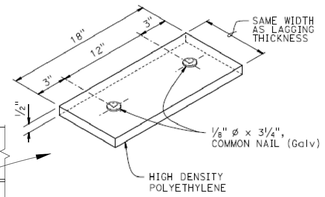


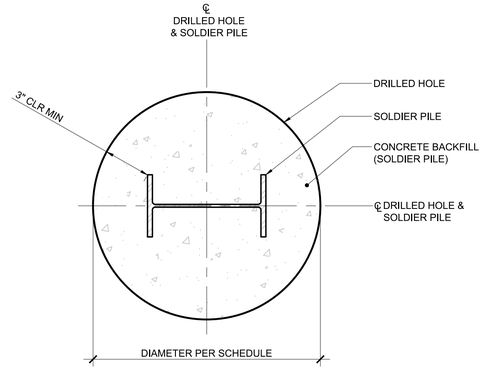
LAGGING ELEVATION 6

SCALE: 3/4" = 1'-0"



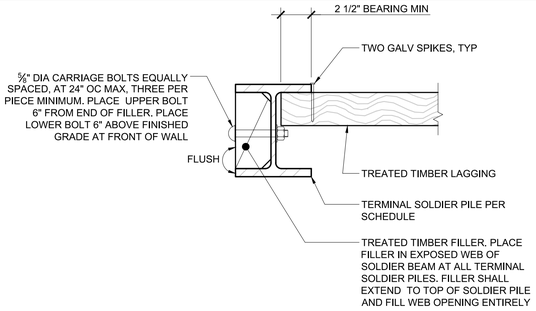
SHIM DETAIL

NO SCALE

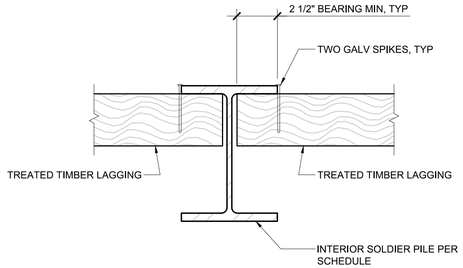


DRILLED HOLE / SOLDIER PILE 4

SCALE: 1 1/2" = 1'-0"



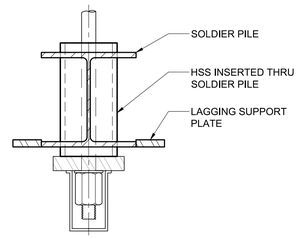
TERMINAL SOLDIER PILE(S)



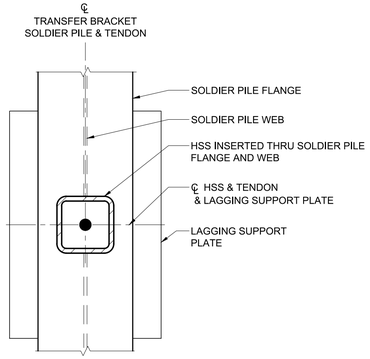
INTERIOR SOLDIER PILE(S)

TIMBER LAGGING DETAIL 2

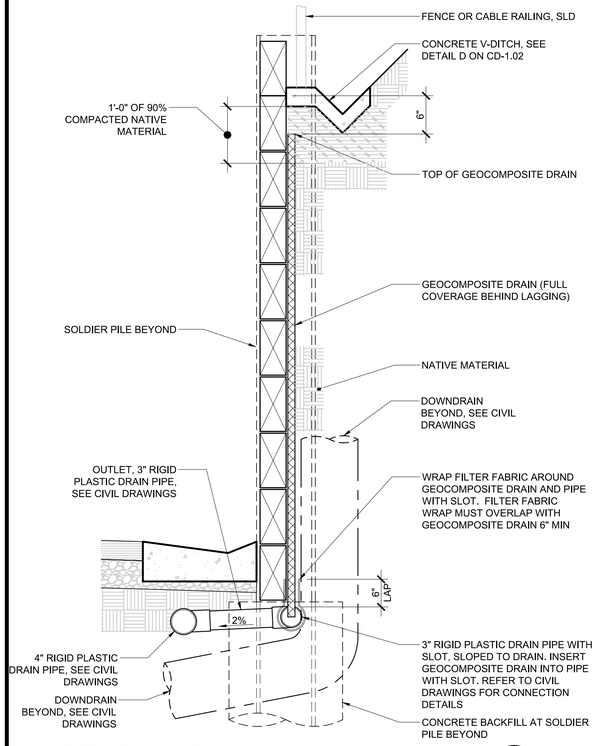
SCALE: 1 1/2" = 1'-0"



TOP VIEW

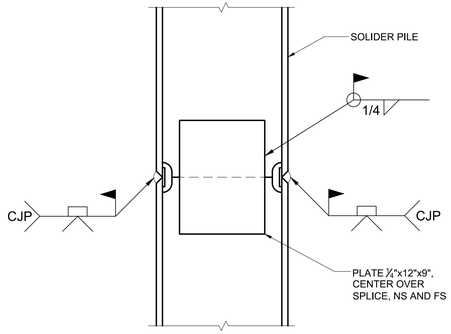


FRONT VIEW



SOLDIER PILE WALL DRAIN 7

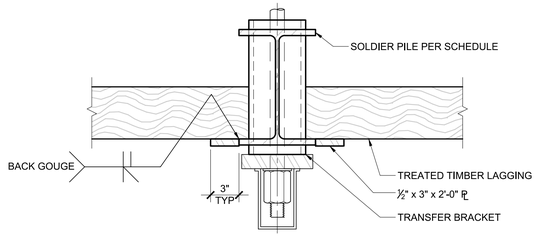
SCALE: 3/4" = 1'-0"



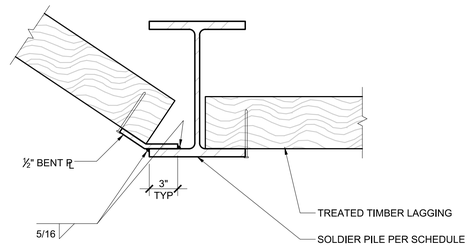
NOTE: LOCATIONS OF FIELD SPLICES, IF REQUIRED, SHALL BE DETAILED ON THE STEEL SHOP DRAWINGS AND SUBJECT TO APPROVAL BY ENGINEER

PILE WELDING DET - BUTT JOINT 5

SCALE: NTS



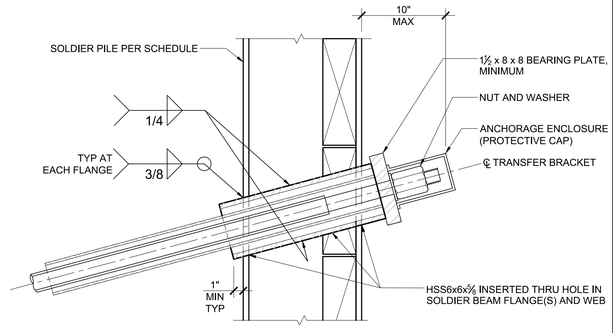
LAGGING SUPPORT AT TRANSFER BRACKET



LAGGING SUPPORT AT SKEW

LAGGING SUPPORT 3

SCALE: 1 1/2" = 1'-0"



SIDE VIEW

HSS TRANSFER BRACKET 1

SCALE: 1 1/2" = 1'-0"

MME
CIVIL+STRUCTURAL ENGINEERING
224 Walnut Ave, Suite B Santa Cruz, CA 95060
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REGISTERED PROFESSIONAL ENGINEER — DALE A. HENDRICKS — No. S3549 — STRUCTURAL — STATE OF CALIFORNIA

REVISIONS

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DRAWING #:

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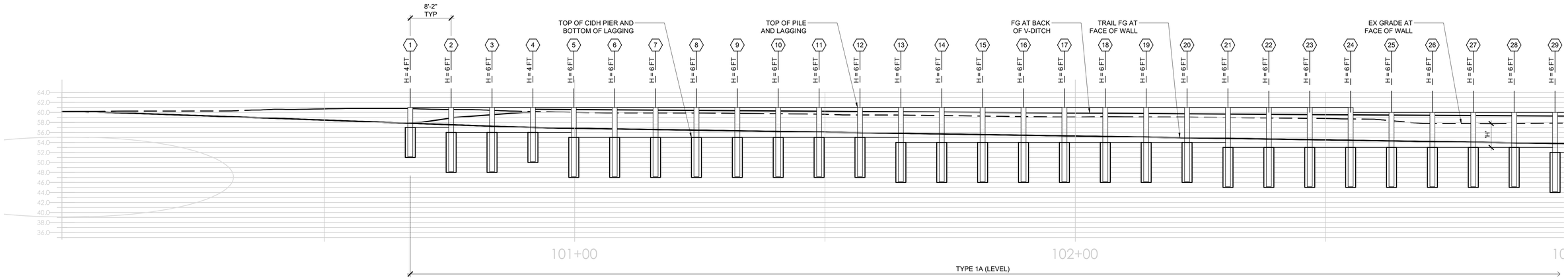
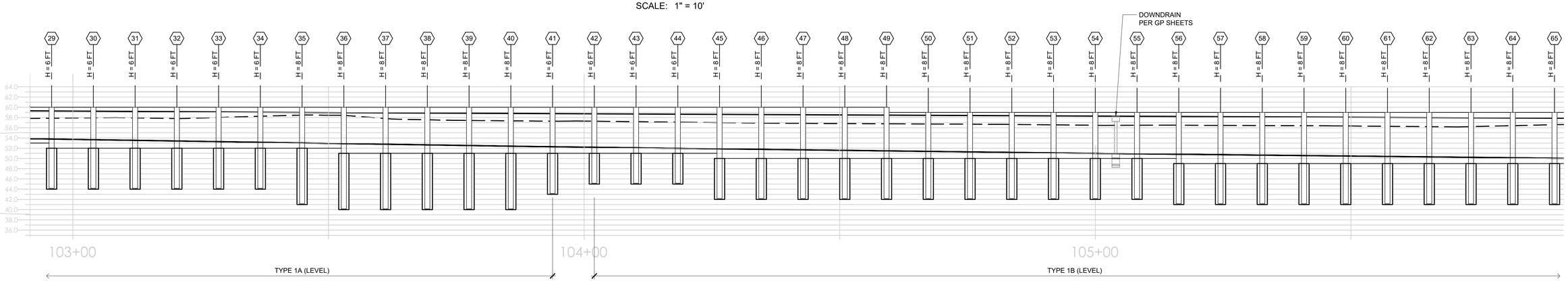
DESIGN	PD	VAULT NO.	
CHECKED	DH	7079B	SHEET 67 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22



WALL PROFILE

SCALE: 1" = 10'



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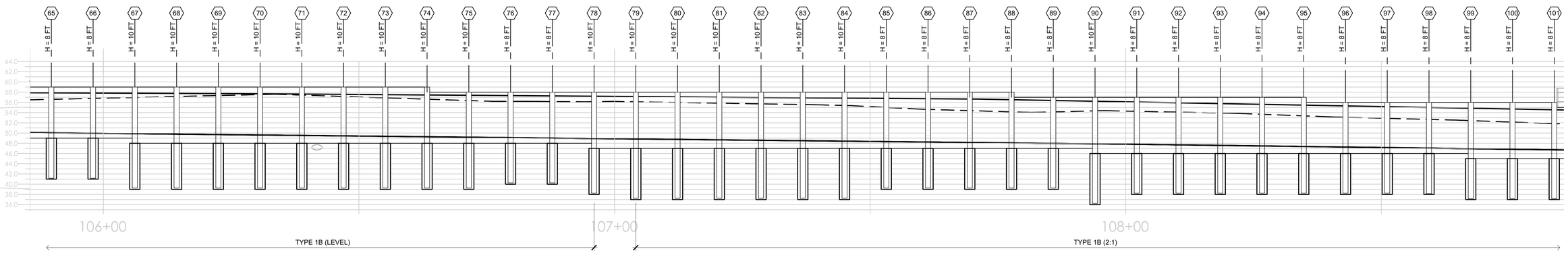

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SHEET 68 OF 96

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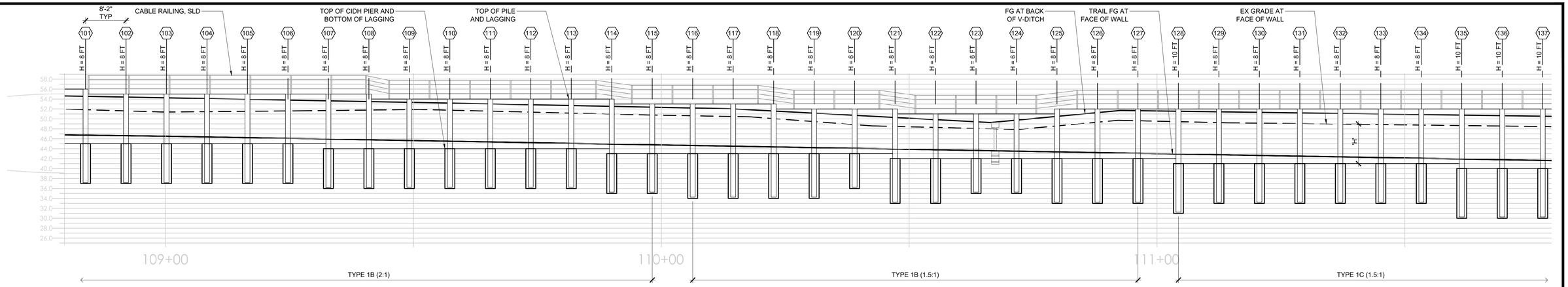

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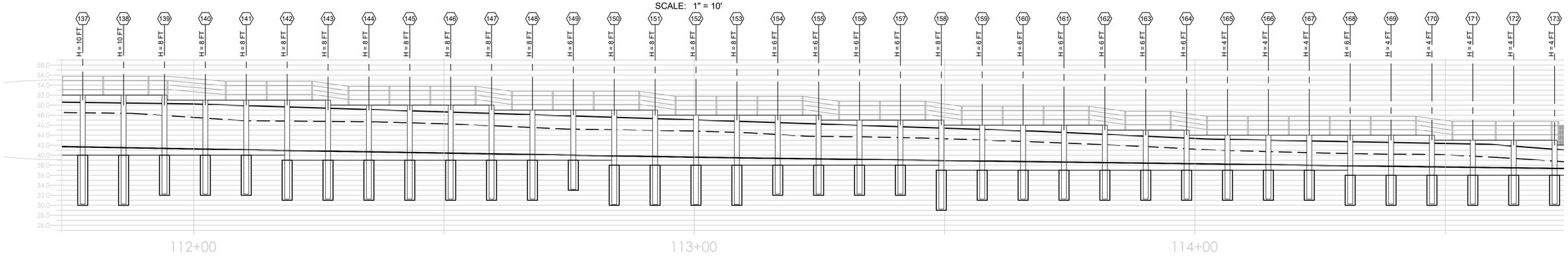

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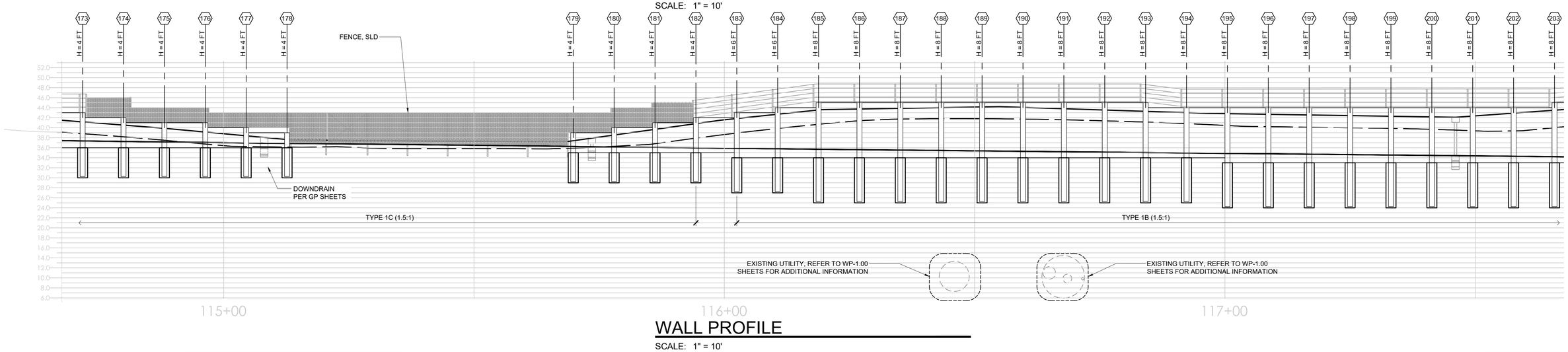

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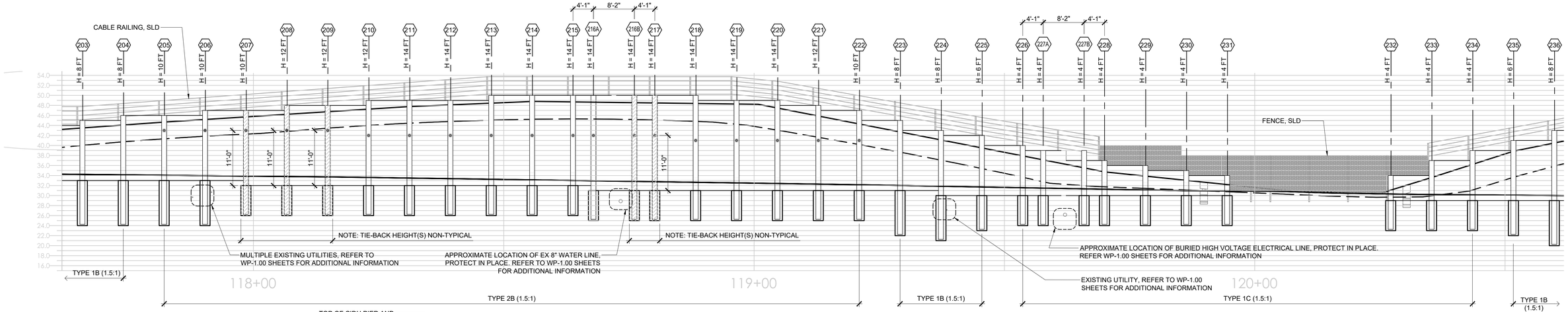

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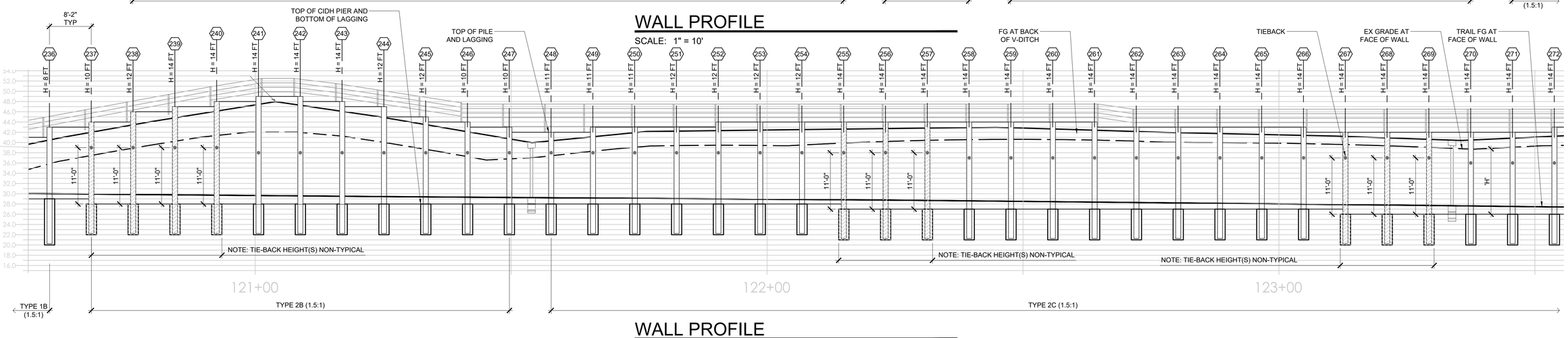

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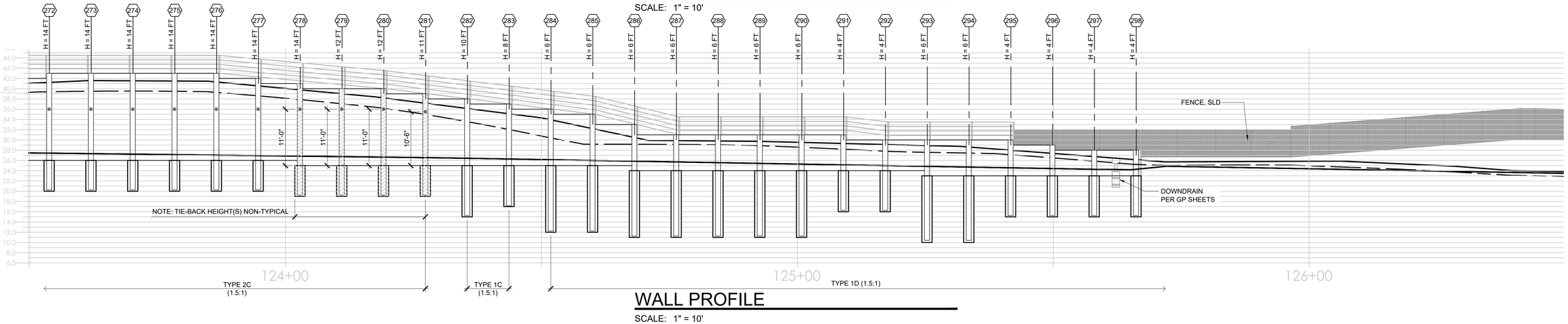

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7079B

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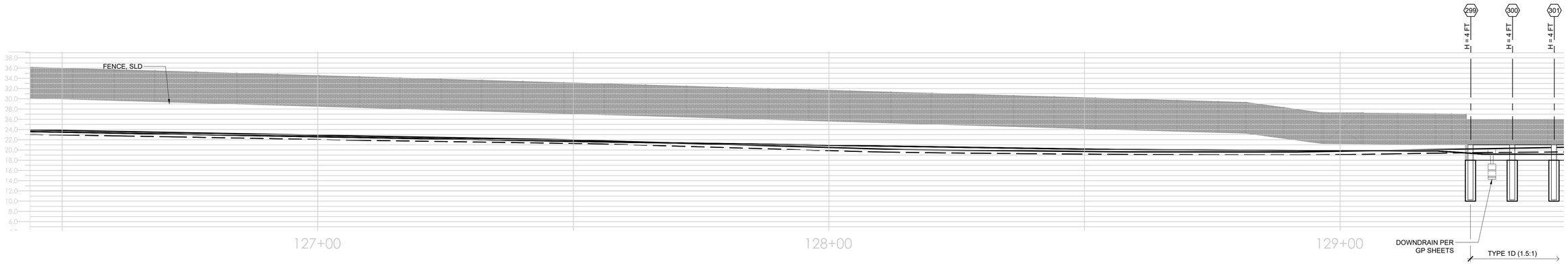

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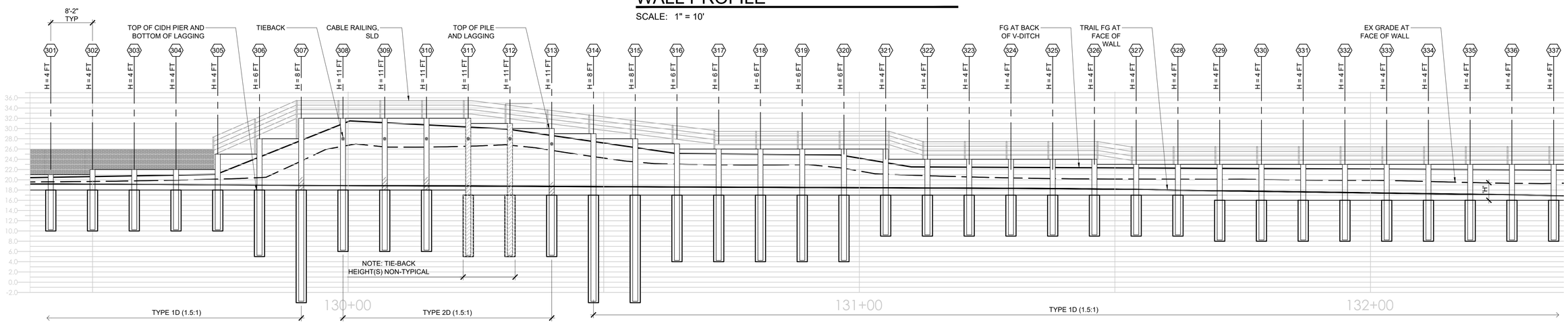

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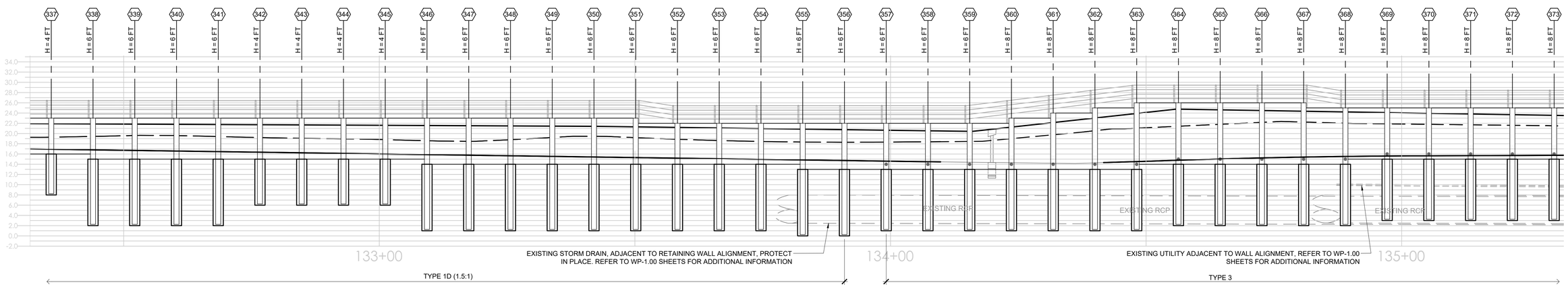

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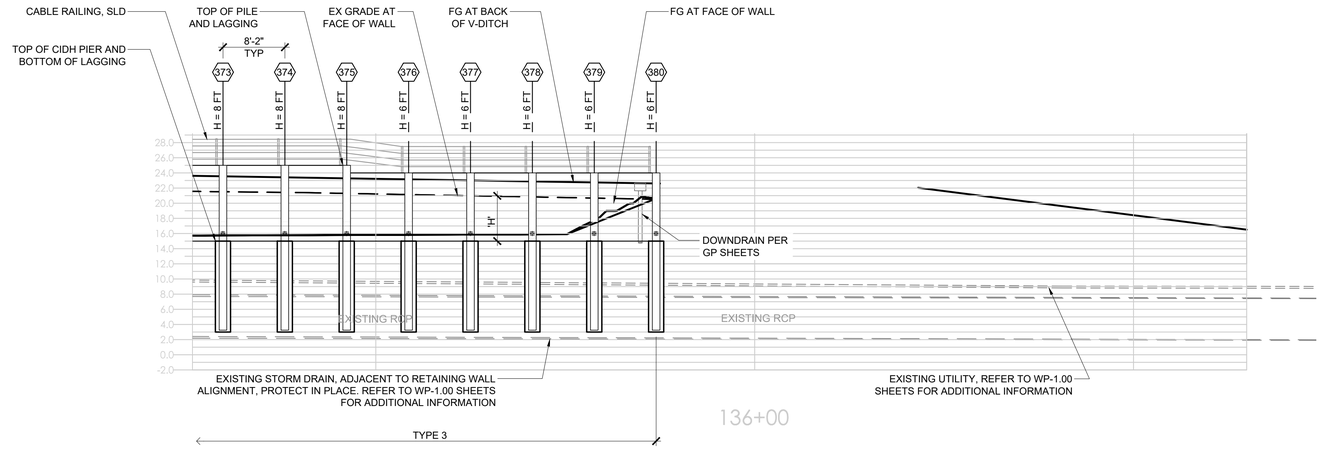

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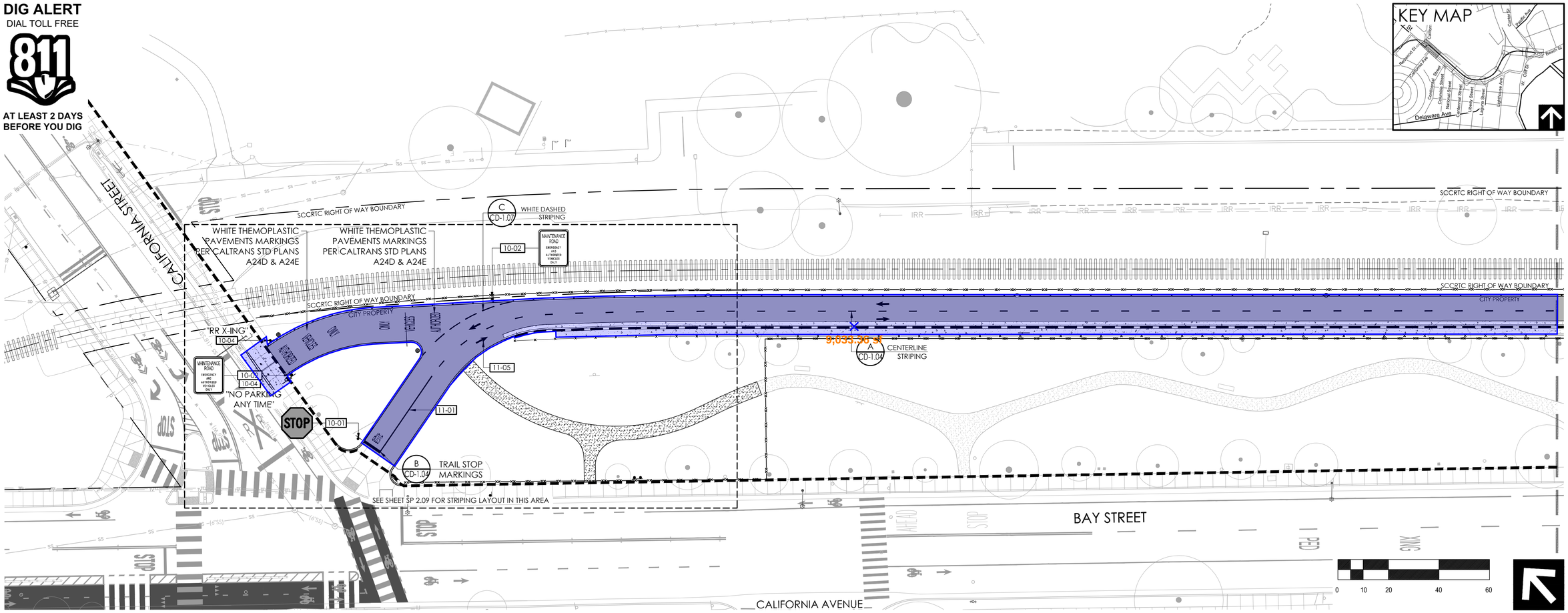
DRAWING #:	DESIGN	PD	VAULT NO.
	CHECKED	DH	7079B

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



SYMBOL SIGNAGE	DESCRIPTION	NOTES
1-01	RELOCATED ROAD SIGN	B/CD-1.05
10-01	R1-1 STOP	B/CD-1.05
10-02	CUSTOM MAINTENANCE ROAD SIGN	A&B/CD-1.05
10-03	W11-15 BIKE/PEDESTRIAN, W16-7P ARROW	B/CD-1.05
	STRIPING AND PAVEMENT MARKINGS	
11-01	4" YELLOW THERMOPLASTIC SOLID BIKE PATH CENTERLINE MARKING	
11-02	4" WHITE THERMOPLASTIC SOLID TRAFFIC STRIPE	
11-03	THERMOPLASTIC BIKE LANE PAVEMENT MARKING	
11-04	BIKE LANE SYMBOL WITH PERSON	D/CD-1.04
11-05	BIKE LANE ARROW	C/CD-1/04
11-06	4" WHITE THERMOPLASTIC DASHED LINE	C/CD-1.07

SYMBOL WAYFINDING SIGNAGE	DESCRIPTION
WF-R	RIGHT
WF-L	LEFT
WF-S	STRAIGHT
WF-I1	INFORMATIONAL
WF-I2	INFORMATIONAL

NOTE: PAVEMENT MARKINGS PER CALTRANS STANDARDS SEE SPECIFICATIONS FOR PLAN LIST, STRIPING AS SHOWN.

MATCHLINE, SEE SHEET SP-2.01

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED LANDSCAPE ARCHITECT
MICHAEL S. SHERROD NO. 4320
11/30/23
1/28/22
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

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RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
STRIPING AND SIGNAGE PLAN

REFERENCES
FIELD BOOK:
DRAWING #: SP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

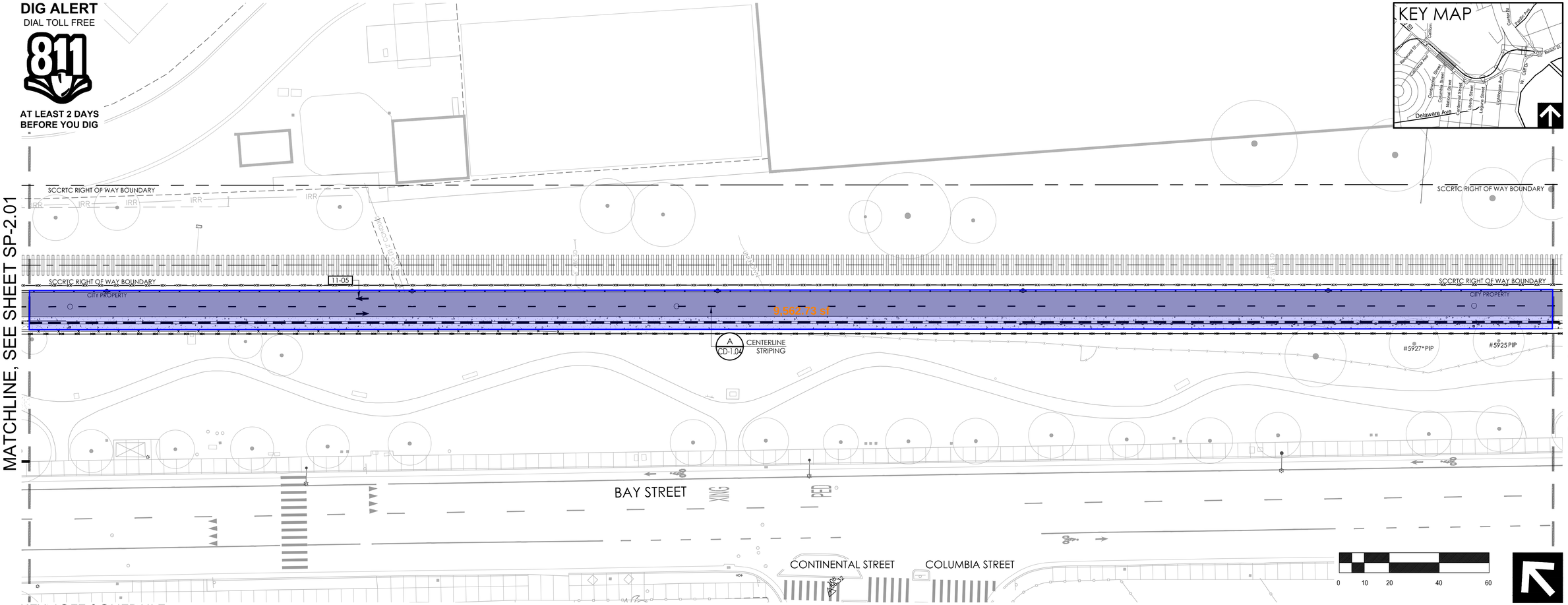
SCALE AS SHOWN
SP-2.01
VAULT NO. 7079B
SHEET 73 OF 96

Layout Tab Name: SP-2.01 , Images: CA Coastal Trail Loop.jpg; Metsure2-Moving\2021\event-20172.prg; RFI: logo = none 2013.jpg; SIGNS_CENTER_16x7.5 black.jpg; . Xrefs: Stamp_MikeSherrod.dwg; 0193-01-XTB_PH2.dwg; 0193-01-08.dwg; 0193-01-XBLOCK.dwg; 0193-01-REF.dwg; 0193-01-15.dwg; 0193-01-REF.dwg; 0193-01-07.dwg; 0193-01-XH.dwg; N:\2001\0193-01-RC15-Rail-Trail-Segment-7\Planning\Cordova\Xuts\CAD\Phase 2\SP-0193-01_PH2.dwg, Plotted By: KMSkalinski, Plotted: Jan 20, 2022 - 7:56am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET SP-2.01

MATCHLINE, SEE SHEET SP-2.03



KEYNOTE SCHEDULE

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10-01	R1-1 STOP	B/CD-1.05
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11-04	BIKE LANE SYMBOL WITH PERSON	D/CD-1.04
11-05	BIKE LANE ARROW	C/CD-1/04
11-06	4" WHITE THERMOPLASTIC DASHED LINE	C/CD-1.07

SYMBOL	DESCRIPTION
WAYFINDING SIGNAGE	
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WF-L	LEFT
WF-S	STRAIGHT
WF-I1	INFORMATIONAL
WF-I2	INFORMATIONAL

NOTE: PAVEMENT MARKINGS PER CALTRANS STANDARDS SEE SPECIFICATIONS FOR PLAN LIST, STRIPING AS SHOWN.

REGISTERED LANDSCAPE ARCHITECT
MICHAEL S. SHERWOOD NO. 4310
11/30/23
STATE OF CALIFORNIA
1/28/22

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
STRIPING AND SIGNAGE PLAN

REFERENCES
FIELD BOOK:
DRAWING #: SP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
SP-2.02
VAULT NO. 7079B
SHEET 74 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: SP-2.02, Images: CA Coastal Trail Logo.jpg; Measure2-Meters@20Scale-20172.dwg; RTC logo + name 2013.jpg; SIGNS_CENTER_16x7.5 black.jpg; , Xrefs: Stamp_MikeSherrod.dwg; 0193-01-XTR_PH2.dwg; 0193-01-08.dwg; 0193-01-XSTMAP.dwg; SCCS_0193-01-REV5.dwg; 0193-01-XSC.dwg; 0193-01-XE.dwg; 0193-01-XT.dwg; 0193-01-XH.dwg
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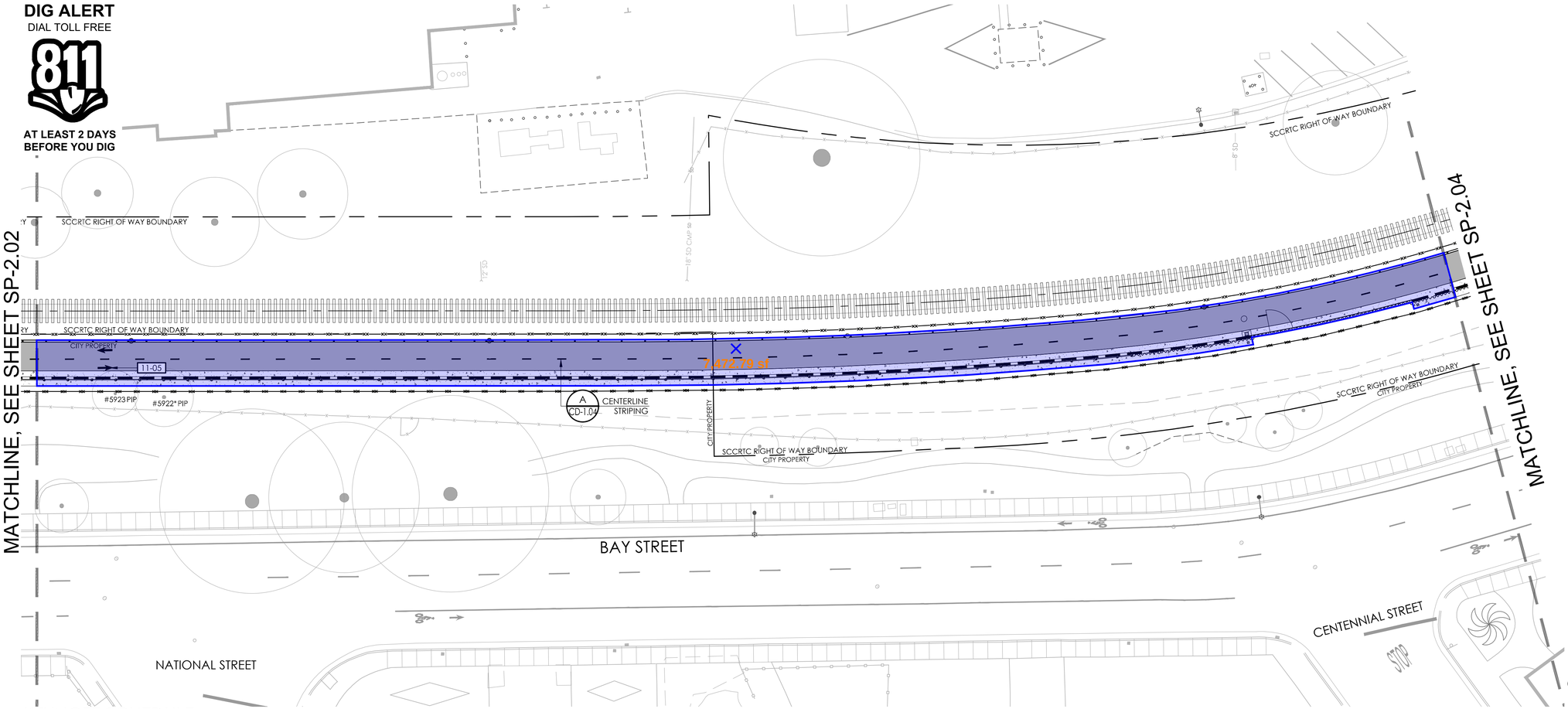
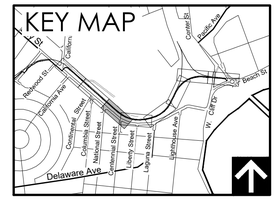
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG





KEYNOTE SCHEDULE

SYMBOL	DESCRIPTION	NOTES
SIGNAGE		
1-01	RELOCATED ROAD SIGN	B/CD-1.05
10-01	R1-1 STOP	B/CD-1.05
10-02	CUSTOM MAINTENANCE ROAD SIGN	A&B/CD-1.05
10-03	W11-15 BIKE/PEDESTRIAN, W16-7P ARROW	B/CD-1.05
STRIPING AND PAVEMENT MARKINGS		
11-01	4" YELLOW THERMOPLASTIC SOLID BIKE PATH CENTERLINE MARKING	
11-02	4" WHITE THERMOPLASTIC SOLID TRAFFIC STRIPE	
11-03	THERMOPLASTIC BIKE LANE PAVEMENT MARKING	
11-04	BIKE LANE SYMBOL WITH PERSON	D/CD-1.04
11-05	BIKE LANE ARROW	C/CD-1/04
11-06	4" WHITE THERMOPLASTIC DASHED LINE	C/CD-1.07

SYMBOL	DESCRIPTION
WAYFINDING SIGNAGE	
WF-R	RIGHT
WF-L	LEFT
WF-S	STRAIGHT
WF-I1	INFORMATIONAL
WF-I2	INFORMATIONAL

NOTE: PAVEMENT MARKINGS PER CALTRANS STANDARDS SEE SPECIFICATIONS FOR PLAN LIST, STRIPING AS SHOWN.

REGISTERED LANDSCAPE ARCHITECT
MICHAEL S. SHERROD NO. 4539
11/30/23
1/28/22
DATE
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF
SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
STRIPING AND SIGNAGE PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
SP-0193-01_PH2

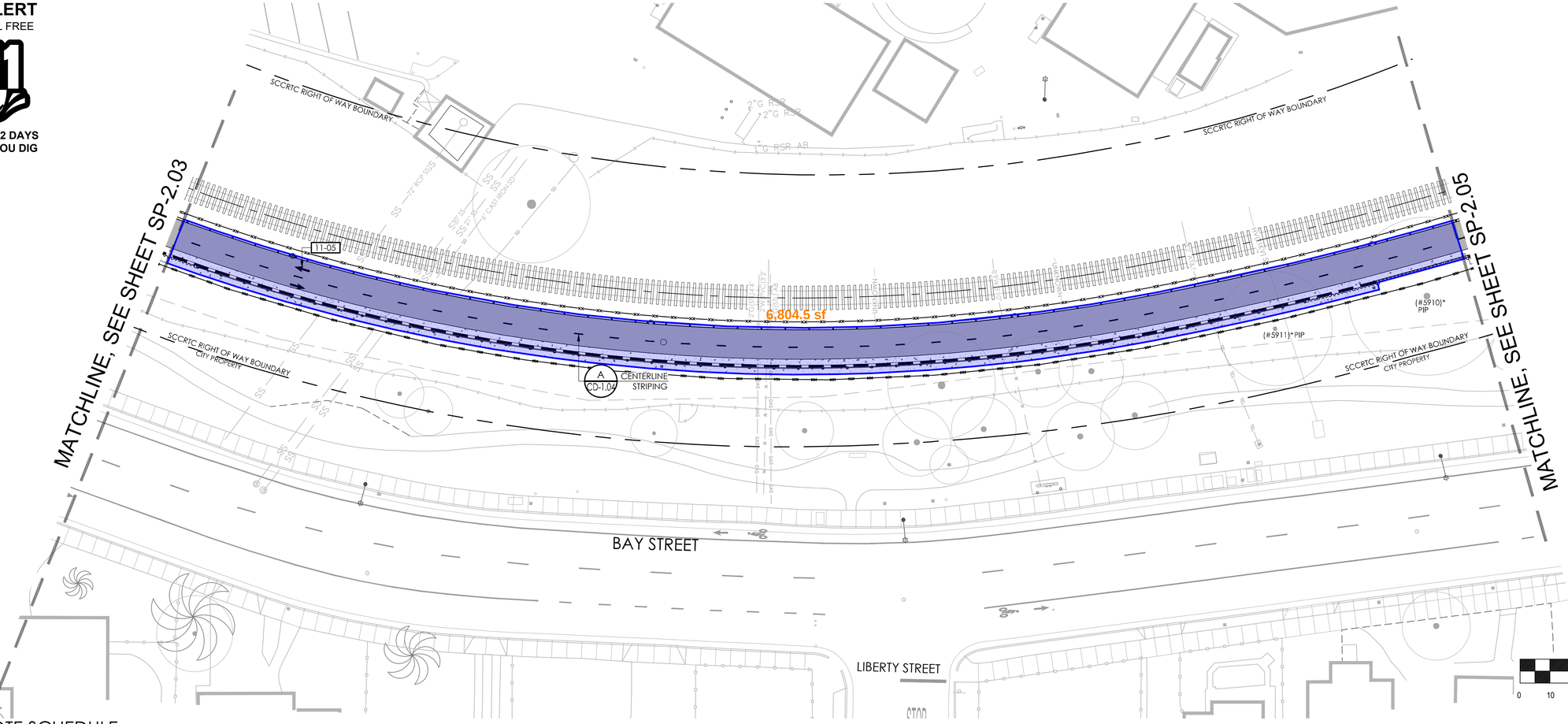
DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

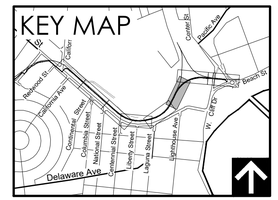
SCALE AS SHOWN
SP-2.03
VAULT NO.
7079B
SHEET 75 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab: Name: SP-2.03, Images: CA_Coastal_Trail_Line.jpg, Measure=N:\Survey\SCC\Harvest-20172.prp, RTC Logo + name 2013.jpg, SIGNS_CENTER_16x7.5 blank.jpg, Shamrod.jpg, CA_Coastal_Trail_Logo.jpg, Measure=N:\Survey\SCC\Harvest-20172.prp, RTC Logo + name 2013.jpg, SIGNS_CENTER_16x7.5 blank.jpg, Shamrod.jpg, SCCS_0193-01-REV5.dwg, 0193-01-SIDEWALK.dwg, SCCS_0193-01-REV5.dwg, 0193-01-SIDEWALK.dwg, 0193-01-SIDEWALK.dwg, 0193-01-STRIPING.dwg, 0193-01-SIDEWALK.dwg, 0193-01-SIDEWALK.dwg, 0193-01-SIDEWALK

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG





KEYNOTE SCHEDULE

SYMBOL SIGNAGE	DESCRIPTION	NOTES
1-01	RELOCATED ROAD SIGN	B/CD-1.05
10-01	R1-1 STOP	B/CD-1.05
10-02	CUSTOM MAINTENANCE ROAD SIGN	A&B/CD-1.05
10-03	W11-15 BIKE/PEDESTRIAN, W16-7P ARROW	B/CD-1.05
STRIPING AND PAVEMENT MARKINGS		
11-01	4" YELLOW THERMOPLASTIC SOLID BIKE PATH CENTERLINE MARKING	
11-02	4" WHITE THERMOPLASTIC SOLID TRAFFIC STRIPE	
11-03	THERMOPLASTIC BIKE LANE PAVEMENT MARKING	
11-04	BIKE LANE SYMBOL WITH PERSON	D/CD-1.04
11-05	BIKE LANE ARROW	C/CD-1/04
11-06	4" WHITE THERMOPLASTIC DASHED LINE	C/CD-1.07

SYMBOL WAYFINDING SIGNAGE	DESCRIPTION
WF-R	RIGHT
WF-L	LEFT
WF-S	STRAIGHT
WF-I1	INFORMATIONAL
WF-I2	INFORMATIONAL

NOTE: PAVEMENT MARKINGS PER CALTRANS STANDARDS SEE SPECIFICATIONS FOR PLAN LIST, STRIPING AS SHOWN.

REGISTERED LANDSCAPE ARCHITECT
MICHAEL S. SHERROD NO. 4757
11/30/23
1/28/22
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
30332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
STRIPING AND SIGNAGE PLAN

REFERENCES
FIELD BOOK:
DRAWING #: SP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
SP-2.04
VAULT NO. 7079B
SHEET 76 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: SP-2.04, Images: C4 Coastal Trail Large.jpg; Measure0=Merrill2DDFeet=.20172.prp; RTC logo • name: 2013.jpg; SIGNS_CENTER_16x7.5 blank.jpg; . Xrefs: Stamp_MMDiamond.dwg; 0193-01-XTB_PH2.dwg; 0193-01-08.dwg; 0193-01-MSTAMP.dwg; SECS_0193-01-REV5.dwg; 0193-01-05.dwg; 0193-01-06.dwg; 0193-01-07.dwg; 0193-01-09.dwg
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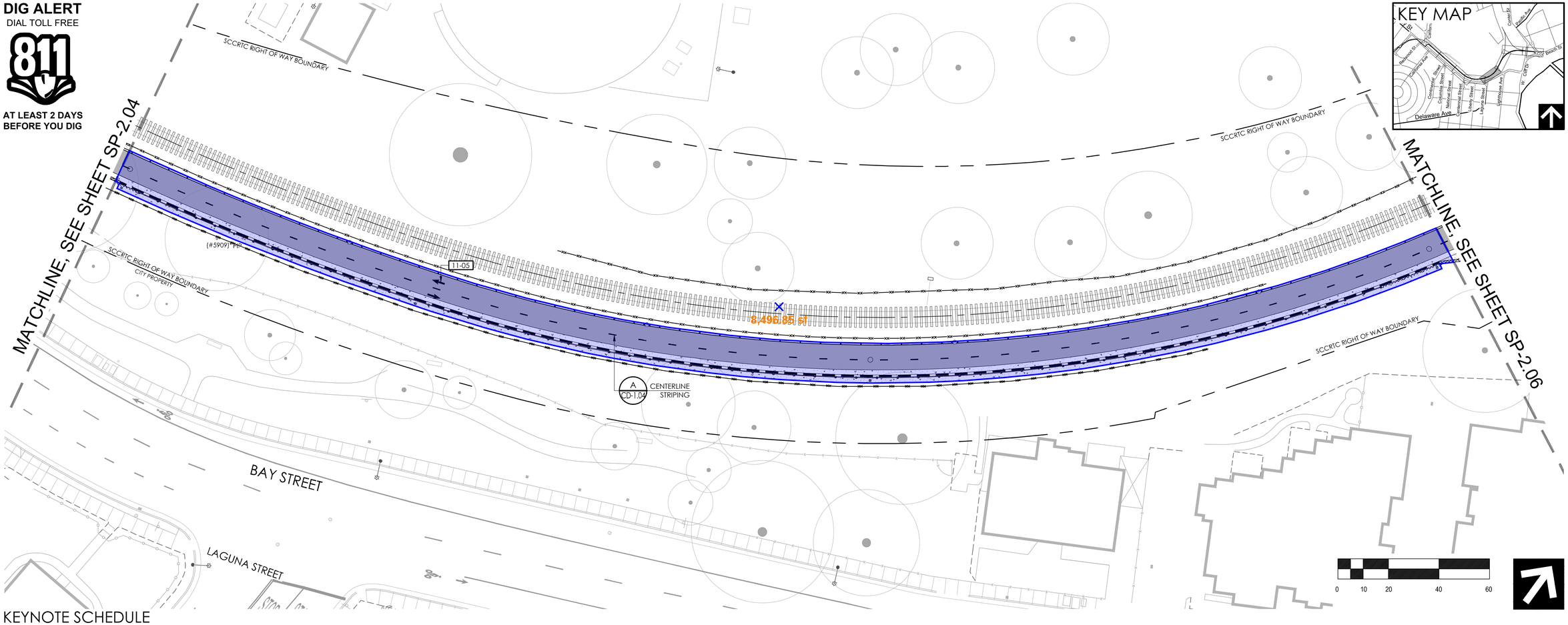
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG



KEYNOTE SCHEDULE

SYMBOL SIGNAGE	DESCRIPTION	NOTES
1-01	RELOCATED ROAD SIGN	B/CD-1.05
10-01	R1-1 STOP	B/CD-1.05
10-02	CUSTOM MAINTENANCE ROAD SIGN	A&B/CD-1.05
10-03	W11-15 BIKE/PEDESTRIAN, W16-7P ARROW	B/CD-1.05
STRIPING AND PAVEMENT MARKINGS		
11-01	4" YELLOW THERMOPLASTIC SOLID BIKE PATH CENTERLINE MARKING	
11-02	4" WHITE THERMOPLASTIC SOLID TRAFFIC STRIPE	
11-03	THERMOPLASTIC BIKE LANE PAVEMENT MARKING	
11-04	BIKE LANE SYMBOL WITH PERSON	D/CD-1.04
11-05	BIKE LANE ARROW	C/CD-1/04
11-06	4" WHITE THERMOPLASTIC DASHED LINE	C/CD-1.07

SYMBOL WAYFINDING SIGNAGE	DESCRIPTION
WF-R	RIGHT
WF-L	LEFT
WF-S	STRAIGHT
WF-I1	INFORMATIONAL
WF-I2	INFORMATIONAL

NOTE: PAVEMENT MARKINGS PER CALTRANS STANDARDS SEE SPECIFICATIONS FOR PLAN LIST, STRIPING AS SHOWN.

REGISTERED LANDSCAPE ARCHITECT
MICHAEL S. SHERROD NO. 4520
11/30/23
1/28/22
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
STRIPING AND SIGNAGE PLAN

REFERENCES
FIELD BOOK:
DRAWING #: SP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
SP-2.05
VAULT NO. 7079B
SHEET 77 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: SP-2.05, Images: CA Coastal Trail Logo.jpg; Measure\Mowing\GIS\Layouts\2017.png; RRS logo + name 2013.jpg; SCRTC_CENTER_16x7.5 black.jpg; ; Xrefs: Stamp_MMS\Stamped.dwg; 0193-01-XTR_PH2.dwg; 0193-01-08.dwg; 0193-01-XSTAMP.dwg; SCCS_0193-01-REF5.dwg; 0193-01-XREF.dwg; 0193-01-XT.dwg; 0193-01-XH.dwg
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DIG ALERT
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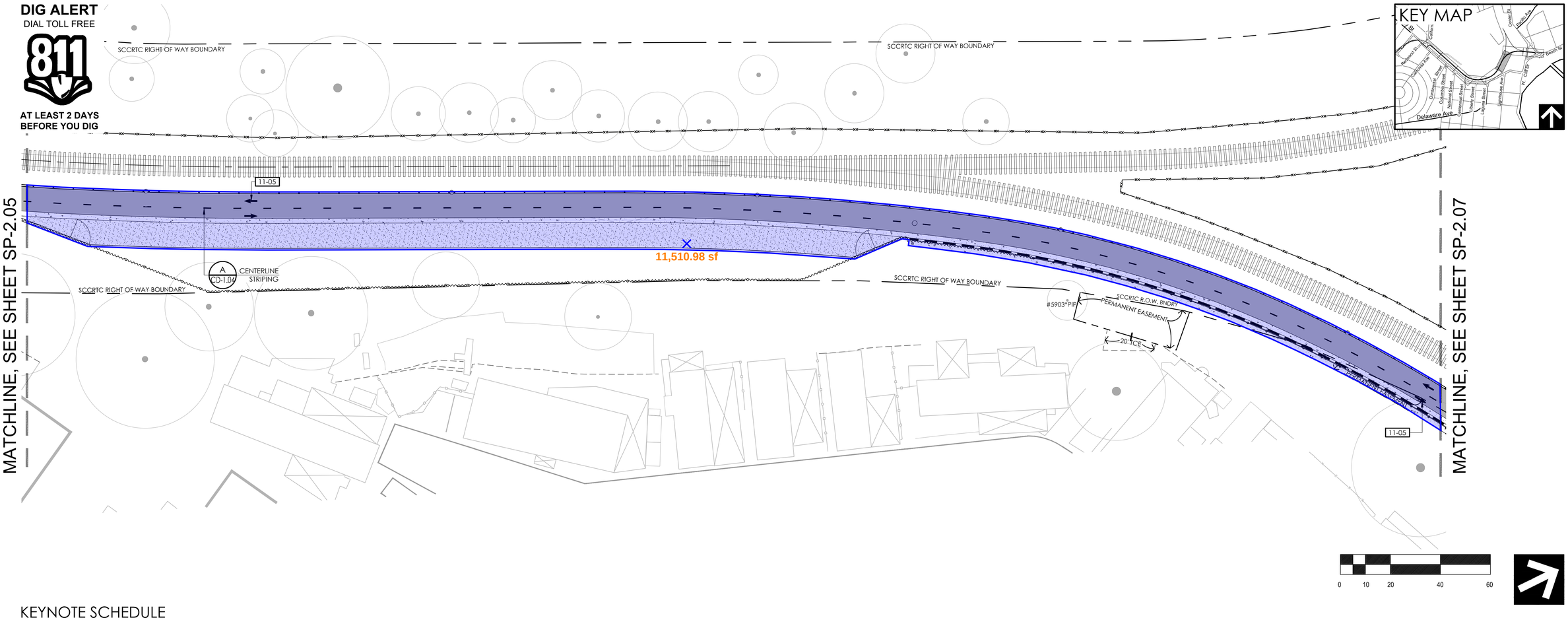


KEYNOTE SCHEDULE

SYMBOL SIGNAGE	DESCRIPTION	NOTES
1-01	RELOCATED ROAD SIGN	B/CD-1.05
10-01	R1-1 STOP	B/CD-1.05
10-02	CUSTOM MAINTENANCE ROAD SIGN	A&B/CD-1.05
10-03	W11-15 BIKE/PEDESTRIAN, W16-7P ARROW	B/CD-1.05
STRIPING AND PAVEMENT MARKINGS		
11-01	4" YELLOW THERMOPLASTIC SOLID BIKE PATH CENTERLINE MARKING	
11-02	4" WHITE THERMOPLASTIC SOLID TRAFFIC STRIPE	
11-03	THERMOPLASTIC BIKE LANE PAVEMENT MARKING	
11-04	BIKE LANE SYMBOL WITH PERSON	D/CD-1.04
11-05	BIKE LANE ARROW	C/CD-1/04
11-06	4" WHITE THERMOPLASTIC DASHED LINE	C/CD-1.07

SYMBOL WAYFINDING SIGNAGE	DESCRIPTION
WF-R	RIGHT
WF-L	LEFT
WF-S	STRAIGHT
WF-I1	INFORMATIONAL
WF-I2	INFORMATIONAL

NOTE: PAVEMENT MARKINGS PER CALTRANS STANDARDS SEE SPECIFICATIONS FOR PLAN LIST, STRIPING AS SHOWN.

REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 4520 — 1/30/22 — 1/28/22 — STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
STRIPING AND SIGNAGE PLAN

REFERENCES
FIELD BOOK:
DRAWING #: SP-0193-01_PH2

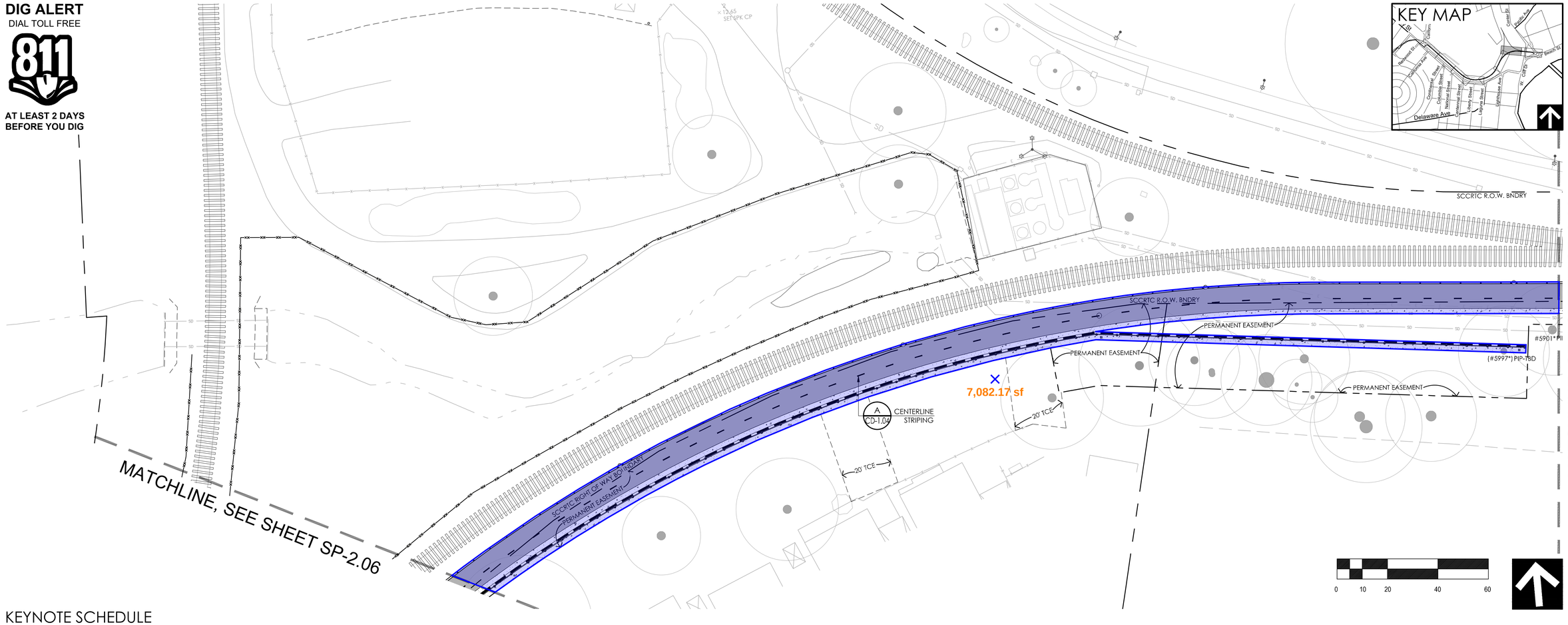
DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
SP-2.06
VAULT NO. 7079B
SHEET 78 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: SP-2.06, Images: CA Coastal Trail Logo.jpg; M:\work\Working\SCS\current-20172.prj; RTC logo + name 2013.jpg; SIGNS_CENTER_16x7.5 black.jpg; , Xrefs: Stamp_MikeSherrod.dwg; 0193-01-XTBL_PH2.dwg; 0193-01-08.dwg; 0193-01-KEYMAP.dwg; SCCS_0193-01-REV5.dwg; 0193-01-16C.dwg; 0193-01-16E.dwg; 0193-01-17.dwg; 0193-01-XH.dwg; N:\000\0193-01-RC15-Rail-Trail-Segment-7\Working\Grades\AutoCAD\Phase 2\SP-0193-01_PH2.dwg, Plotted By: KMZuzalek, Plotted: Jan 20, 2022 - 7:56am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG



KEYNOTE SCHEDULE

SYMBOL SIGNAGE	DESCRIPTION	NOTES
1-01	RELOCATED ROAD SIGN	B/CD-1.05
10-01	R1-1 STOP	B/CD-1.05
10-02	CUSTOM MAINTENANCE ROAD SIGN	A&B/CD-1.05
10-03	W11-15 BIKE/PEDESTRIAN, W16-7P ARROW	B/CD-1.05
STRIPING AND PAVEMENT MARKINGS		
11-01	4" YELLOW THERMOPLASTIC SOLID BIKE PATH CENTERLINE MARKING	
11-02	4" WHITE THERMOPLASTIC SOLID TRAFFIC STRIPE	
11-03	THERMOPLASTIC BIKE LANE PAVEMENT MARKING	
11-04	BIKE LANE SYMBOL WITH PERSON	D/CD-1.04
11-05	BIKE LANE ARROW	C/CD-1/04
11-06	4" WHITE THERMOPLASTIC DASHED LINE	C/CD-1.07

SYMBOL WAYFINDING SIGNAGE	DESCRIPTION
WF-R	RIGHT
WF-L	LEFT
WF-S	STRAIGHT
WF-I1	INFORMATIONAL
WF-I2	INFORMATIONAL

NOTE: PAVEMENT MARKINGS PER CALTRANS STANDARDS SEE SPECIFICATIONS FOR PLAN LIST, STRIPING AS SHOWN.

REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 4510 11/30/23 1/28/22 STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
STRIPING AND SIGNAGE PLAN

REFERENCES
FIELD BOOK:
DRAWING #: SP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
SP-2.07
VAULT NO. 7079B
SHEET 79 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: SP-2.07 | Images: CA Coastal Trail Logo.jpg; Measure-Moving\GIS\Layout-20172.png; RTC logo + name 2013.jpg; SIGNS_CENTER_16x7.5 black.jpg; . Xrefs: Stamp_MikeSherrod.dwg; 0193-01-XTB_PH2.dwg; 0193-01-08.dwg; 0193-01-XSTRMAP.dwg; SECS_0193-01-REV5.dwg; 0193-01-XSC.dwg; 0193-01-XSE.dwg; 0193-01-XT.dwg; 0193-01-XH.dwg
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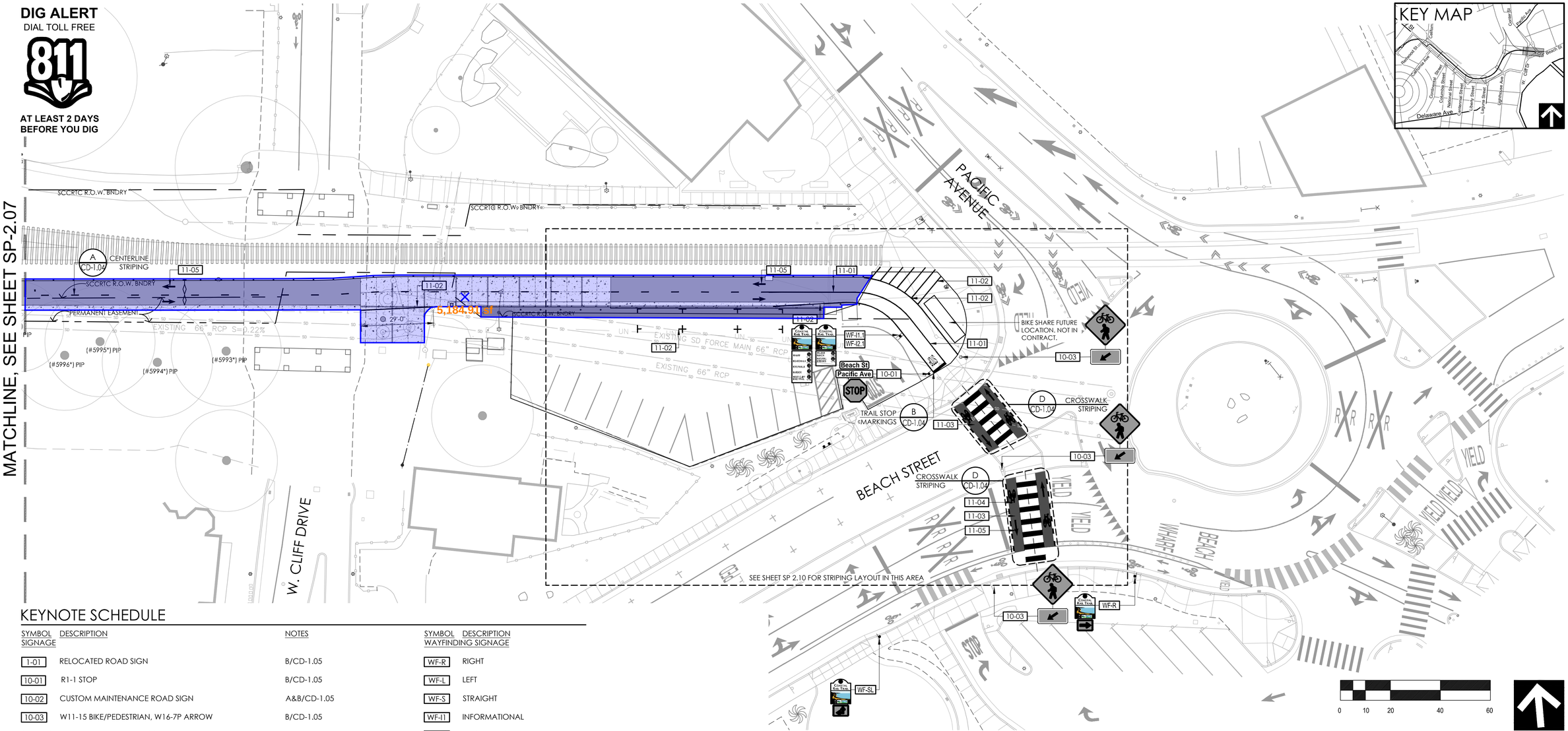
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

MATCHLINE, SEE SHEET SP-2.07



KEYNOTE SCHEDULE

SYMBOL	DESCRIPTION	NOTES
SIGNAGE		
1-01	RELOCATED ROAD SIGN	B/CD-1.05
10-01	R1-1 STOP	B/CD-1.05
10-02	CUSTOM MAINTENANCE ROAD SIGN	A&B/CD-1.05
10-03	W11-15 BIKE/PEDESTRIAN, W16-7P ARROW	B/CD-1.05
STRIPING AND PAVEMENT MARKINGS		
11-01	4" YELLOW THERMOPLASTIC SOLID BIKE PATH CENTERLINE MARKING	
11-02	4" WHITE THERMOPLASTIC SOLID TRAFFIC STRIPE	
11-03	THERMOPLASTIC BIKE LANE PAVEMENT MARKING	
11-04	BIKE LANE SYMBOL WITH PERSON	D/CD-1.04
11-05	BIKE LANE ARROW	C/CD-1/04
11-06	4" WHITE THERMOPLASTIC DASHED LINE	C/CD-1.07

SYMBOL	DESCRIPTION
WAYFINDING SIGNAGE	
WF-R	RIGHT
WF-L	LEFT
WF-S	STRAIGHT
WF-I1	INFORMATIONAL
WF-I2	INFORMATIONAL

NOTE: PAVEMENT MARKINGS PER CALTRANS STANDARDS SEE SPECIFICATIONS FOR PLAN LIST, STRIPING AS SHOWN.

REGISTERED LANDSCAPE ARCHITECT MICHAEL S. SHERROD NO. 4750 11/30/23 1/28/22 STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ 1866 CALIFORNIA

CITY OF
SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
STRIPING AND SIGNAGE PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
SP-0193-01_PH2

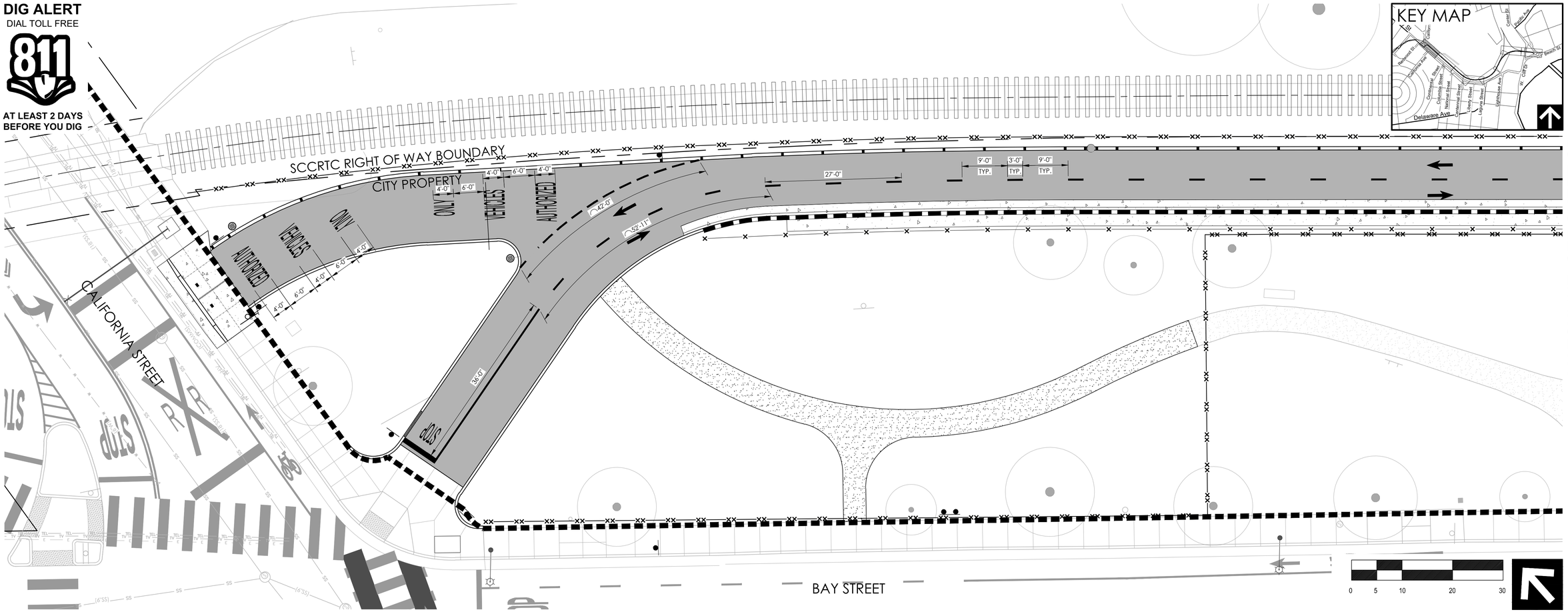
DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
SP-2.08
VAULT NO. 7079B
SHEET 80 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Layout Tab Name: SP-2.08, Images: CA Coastal Trail Logo.jpg ; Measure By-Memo\SCCForward-20172.prp; RTC logo + name 2013.jpg; SIGNS_CENTER_16x7.5 black.jpg ; Xrefs: Stamp_MMDiamond.dwg ; 0193-01-xrTitle_PH2.dwg ; 0193-01-xrBase.dwg ; 0193-01-xrBENCHMAP.dwg ; SCCS_0193-01-REV5.dwg ; 0193-01-xrEsmt.dwg ; 0193-01-xrTie.dwg ; 0193-01-xrNew.dwg
N:\2000\0193-01-REV5-Rail-Trail-Segment-7\Planning\ConstDocs\AutoCAD\Phase 2\SP-0193-01_PH2.dwg, Plotted By: MMSobleski, Plotted: Jan 26, 2022 - 7:58am

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG



MATCHLINE, SEE SHEET SP-2.01

A TRAIL STRIPING ENLARGEMENT AT CALIFORNIA STREET AND BAY STREET
1" = 10'-0"

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED LANDSCAPE ARCHITECT
MICHAEL S. SHERROD NO. 4539
11/30/23
1/28/22
Date
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
STRIPING AND SIGNAGE PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
SP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
SP-2.09
VAULT NO.
7079B
SHEET 81 OF 96

Layout Tab Name: SP-2.09, Images: CA_Coastal_Trail_Large.jpg; Measure0-Marking\SDCFramework-20172.png; RFC logo + name 2013.jpg; SIGNS_CENTER_16x7.5 blank.jpg; Stamp1.jpg; CA_Coastal_Trail_Logo

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

MATCHLINE, SEE SHEET SP-2.07

SCCRTC R.O.W. BNDRY

SCCRTC R.O.W. BNDRY

EXISTING SD FORCE MAIN 66" RCP

EXISTING 66" RCP

PACIFIC AVENUE

BEACH STREET

YIELD

YIELD

WHARF

STOP

KEY MAP

Delaware Ave.

A TRAIL AND CROSSWALK STRIPING ENLARGEMENT AT BEACH STREET
1" = 10'-0"

0 5 10 20 30

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED LANDSCAPE ARCHITECT
MICHAEL S. SHERROD NO. 4757
11/30/23
1/28/22
DATE
STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
1866
CALIFORNIA

CITY OF
SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
STRIPING AND SIGNAGE PLAN

REFERENCES
FIELD BOOK:

DRAWING #:
SP-0193-01_PH2

DATE	1/28/22
DRAWN	KS
DESIGN	KS/MS
CHECKED	MS

SCALE AS SHOWN
SP-2.10
VAULT NO.
7079B
SHEET 82 OF 96

Layout Tab Name: SP-2.10, Images: CA Coastal Trail Logo.jpg, N:\com\Projects\Active\SCCTransmit-20172.prj, RFC logo + name 2013.jpg, SIGNS_CENTER_16x7.5 block.jpg, Diamond.jpg, CA Coastal Trail Logo.jpg, Metsorth-MorningS

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

GENERAL NOTES

1. CODE COMPLIANCE: ALL WORK SHALL CONFORM TO AND BE PERFORMED IN ACCORDANCE WITH CODES, STANDARDS, AND ORDINANCES AS SET FORTH BY THE AUTHORITIES HAVING JURISDICTION AND THEIR LATEST ADOPTED EDITIONS (IN EFFECT AT TIME OF BUILDING PERMIT APPLICATION) OF THE FOLLOWING PUBLICATIONS:

   A. CALIFORNIA CODE OF REGULATIONS TITLE 24; INCLUDES 2016 CALIFORNIA ELECTRICAL CODE, 2016 CALIFORNIA FIRE CODE, 2016 CALIFORNIA BUILDING CODE, ETC. WITH LOCAL AMENDMENTS AS APPLICABLE.

   B. AMERICANS WITH DISABILITIES ACT (ADA).

2. SAFETY: THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL EQUIPMENT IN A SAFE AND RESPONSIBLE MANNER. KEEP DEAD FRONT EQUIPMENT IN PLACE WHILE EQUIPMENT IS ENERGIZED. CONDUCT ALL CONSTRUCTION OPERATIONS IN A SAFE MANNER FOR EMPLOYEES AS WELL AS OTHER WORKPERSONS OR ANYONE VISITING THE JOB SITE. PROVIDE BARRIERS, FLAGS, TAPE, ETC. AS REQUIRED FOR SAFETY. THE CONTRACTOR SHALL HOLD ALL PARTIES HARMLESS OF NEGLIGENT SAFETY PRACTICES, WHICH MAY CAUSE INJURY TO OTHERS ON OR NEAR THE JOB SITE.

4. LABEL PANELS, CABINETS, BACKBOARDS, MAIN DEVICES, SAFETY SWITCHES, CONTACTORS AND OTHER SPECIFICALLY DESIGNATED EQUIPMENT SHOWN ON PLANS. USE ENGRAVED LAMINATED PLASTIC NAMEPLATES ATTACHED BY SCREWS OR RIVETS. FOR FEEDERS, NEATLY AND INDELIBLY LABEL CONDUIT DESTINATIONS ON BOTH VISIBLE ENDS OF CONDUIT RUNS WHERE CONDUITS TERMINATE AT DESIGNATED ENCLOSURES, STRUCTURES OR EQUIPMENT (INCLUDING PULL AND SPLICE BOXES).

5. EQUIPMENT ANCHORAGE NOTE
   ALL MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE ANCHORED OR BRACED TO MEET THE HORIZONTAL AND VERTICAL FORCES PRESCRIBED IN THE 2016 CBC, SECTIONS 1613A AND 1616A AND ASCE 7-10 SECTIONS 13.3, 13.4 & 13.6.

   THE ATTACHMENT OF THE FOLLOWING ITEMS SHALL BE DESIGNED TO RESIST THE FORCES PRESCRIBED ABOVE, BUT NEED NOT BE DETAILED ON THE PLANS PER 2016 CBC SECTION 1616A.1.18:

   A. TEMPORARY OR MOVABLE EQUIPMENT WITH EXCEPTIONS NOTED IN 2016 CBC SECTION 1616A.1.18 ITEM 2.
   B. ARCHITECTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS IN SEISMIC DESIGN CATEGORIES D, E, OR F
      THAT MEET ALL OF THE CRITERIA LISTED IN 2016 SECTION 1616A.1.18 ITEM 3.
   C. EQUIPMENT WEIGHING LESS THAN 20 POUNDS SUPPORTED BY VIBRATION ISOLATORS.

   FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE MECHANICAL/ELECTRICAL ENGINEER.

   ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

   ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO RESIST THE FORCES PRESCRIBED IN ASCE 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-10 SECTION 13.6.8, 13.6.7, AND 13.6.5.5, ITEM 6, RESPECTIVELY.

   THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

6. PULLTAPE: ANY RACEWAY WITHOUT CABLE OR WIRE SHALL BE INSTALLED WITH MINIMUM 200 POUND TEST PULL LINE AND LARGER IF REQUIRED.

GENERAL SITE PLAN NOTES

A. UTILITY COMPANY CONTACTS: BEFORE CONSTRUCTION, COORDINATE & VERIFY ALL UTILITY COMPANY REQUIREMENTS:

   JERRY WEN
   PG&E
   831-444-1089
   J7WG@PGE.COM OR JERRY.WEN@PGE.COM

B. TRENCHING AND BACKFILLING FOR ALL CONDUIT SYSTEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL CONDUITS SHALL HAVE MINIMUM COVER REQUIREMENTS AS SPECIFIED IN CEC 300-5. MORE STRINGENT DEPTH REQUIREMENTS MAY BE IMPOSED BY UTILITY COMPANY AND / OR THIS SPECIFICATION. JOINT TRENCHING MAY BE UTILIZED WHERE PRACTICABLE AND WERE PERMITTED BY THIS SPECIFICATION.

C. LOCATIONS OF EXISTING UNDERGROUND (UG) UTILITY SYSTEMS SHALL BE DETERMINED BY CALLING UNDERGROUND SERVICE ALERT (USA). WHEN PLANNING UNDERGROUND WORK, AND BEFORE YOU DIG, CONTACT UNDERGROUND SERVICE ALERT (USA) AT LEAST 48 HOURS PRIOR TO EXCAVATION (WEEKENDS EXCLUDED) FOR THE LOCATION OF UNDERGROUND GAS AND ELECTRIC LINES OR EQUIPMENT.

D. MAINTAIN REQUIRED CLEARANCES FROM ALL SANITARY SEWER, WATER AND STORM DRAIN PIPING. REFER TO CIVIL PLANS FOR EXACT LOCATIONS AND DEPTHS OF PIPING.

E. ALL SITE UTILITY WORK SHALL BE INSTALLED PER THE UTILITY COMPANY ISSUED CONSTRUCTION DRAWINGS AND SPECIFICATIONS SPECIFIC TO THIS PROJECT. ANY UTILITY WORK PERFORMED WITHOUT PRIOR UTILITY COMPANY APPROVAL SHALL BE DONE AT THE CONTRACTOR'S RISK.

F. THOMA HAS CONTACTED EACH OF THE ABOVE UTILITIES IN AN EFFORT TO REFLECT THE UTILITY WORK THAT WILL BE REQUIRED AS PART OF THIS PROJECT. WHERE A UTILITY PLAN HAS BEEN MARKED UP AND SENT BACK TO OUR OFFICE WITH A UTILITY REQUIREMENT, IT HAS BEEN REFLECTED ON THE PLANS. IF PLANS WERE NOT RECEIVED BACK FROM A UTILITY, WE HAVE INDICATED OUR BEST ESTIMATION OF THEIR REQUIREMENTS. THE UTILITY WORK SHOWN ON THE CONSTRUCTION DOCUMENT IS:

ELECTRIC UTILITY (PG&E)

☒ AN ESTIMATE ONLY

☐ BASED ON PLAN RECEIVED ON _____.

LEGEND

NOTE: INTERPRET IN CONTEXT

LIGHT FIXTURES

- CEILING SURFACEMOUNT
- WALL SURFACEMOUNT
- PENDANT MOUNT
- RECESSED DOWNLIGHT
- RECESSED WALLWASH
- RECESSED FLUOR.
- SURFACE FLUOR.
- FLUOR. STRIP UON
- TRACK LIGHT
- DIRECTIONAL FLOOD
- EMERGENCY FIXTURE
- POLE LIGHT
- CAM POLE LIGHT WITH CAMERA
- POLE LIGHT- DECORATIVE
- UPLIGHT- FLUSH IN GRADE
- BOLLARD
- TANDEM-WIRED LAMPS
- UNDERCABINET LIGHT
- WALL SURFACEMOUNT LINEAR TYPE
- PENDANT LINEAR FLUOR.
- RECESSED WALLMOUNT
- WALLPACK
- EXIT LIGHT- WALL
- EXIT LIGHT- CEILING (ARROW INDICATES DIRECTION)
- A LETTER ADJACENT INDICATES FIXTURE TYPE

SWITCHES

- SPST
- 2 DPST
- 3 3-WAY
- 4 4-WAY
- D DIMMER
- TIMER SWITCH
- T W/THERMAL OVERLOAD
- P W/PILOT LIGHT
- K KEY OPERATED
- DUAL LEVEL SWITCHING
- a SWITCHLEG DESIGNATION
- OS OCCUPANCY SENSOR

POWER/COMM.

- SINGLE RECEPT.
- DUPLEX RECEPT.
- DUPLEX- HALF SWITCHED
- DOUBLE DUPLEX
- SPECIAL CONFIGURATION
- FLOORMOUNT 208V, 1Ø RECEPT
- DUPLEX- FLOOR OUTLET
- GFCI GROUND FAULT CIRCUIT INTERRUPT
- MOUNTED ABOVE COUNTER
- J JUNCTION BOX
- TELEPHONE OUTLET
- DATA OUTLET
- PHONE/DATA COMBO OUTLET
- MOUNTED ABOVE COUNTER
- TV TELEVISION OUTLET
- SAFETY DISCONNECT
- J DROP CORD RECEPT
- JC ABOVE-CLGMOUNT J-BOX
- TV TV OUTLET-FLOORMOUNT
- TELEPHONE FLOOR OUTLET
- DATA FLOOR OUTLET
- PHONE/DATA COMBO FLOOR OUTLET

MISCELLANEOUS

- MOTOR
- T THERMOSTAT
- CIRCUIT BREAKER
- FUSIBLE SWITCH
- GROUND
- Ø PHASE
- CLOCK
- CLOCK/SPEAKER COMBINATION
- WALL MOUNTED CLOCK
- PUSHBUTTON
- FLUSHMOUNT PANEL
- SURFACEMOUNT PANEL
- FLUSHMOUNT CABINET
- SURFACEMOUNT CABINET
- DAMPER MOTOR
- H HUMIDISTAT
- M MAGNETIC CONTACTOR
- COMBINATION STARTER

CONDUIT/WIRE

- NEW
- UNDERGROUND
- NEW POWER HOMERUN (3 HOTS & NEUT SHOWN)
- ISOLATED GROUND
- EXISTING TO REMAIN
- (E) POWER HOMERUN
- WIRE LINE- CONTINUES
- 3 • CONDUIT STUB (W/MARKER)
- VERTICAL CONDUIT RUN
- CONDUIT SEAL
- FLEXIBLE CONNECTION
- LOW VOLTAGE
- SURFACEMOUNT RACEWAY
- INDICATES LINE CONTINUES
- CORD W/PLUG

SOUND

- S SPEAKER- CLG FLUSHMOUNT
- S SPEAKER- WALLMOUNT
- M MICROPHONE INPUT
- A AUXILIARY INPUT
- HS HEADSET OUTLET
- V VOLUME CONTROL
- VS SPEAKER- CLG FLUSHMOUNT VANDAL-RESISTANT
- S CLOCK/SPEAKER WALLMOUNT SEMI-FLUSH

CONVENTIONS

- X NUMBERED SHEET NOTES: REFERS TO NOTES ON SAME SHEET AS REFERENCE
- 1 / - DETAIL REFERENCE: -DETAIL DESIGNATION -SHEET NUMBER REFERENCE
- 3103 FEEDER SCHEDULE DESIGNATION (EXAMPLE: 3103 = 310 AMPERE, 600V, 3 CURRENT CARRYING CONDUCTORS, PREFIXES: 'M' INDICATES MEDIUM VOLTAGE, 'CO14' INDICATES CONDUIT ONLY, QUANTITY (1) AND SIZE (4")))

ABBREVIATIONS

A	AMPERE	FACP	FIRE ALARM CONTROL PANEL	OCP	OVERCURRENT PROTECTION
AB	AMP BREAKER	FAT	FIRE ALARM TERMINAL	OD	OUTSIDE DIAMETER
ABAND	ABANDONED	FAU	FORCED AIR UNIT	OH	OVERHEAD
ABV	ABOVE	FBO	FURNISHED BY OTHERS	OSA	OFFICE of the STATE ARCHITECT
AC	ALTERNATING CURRENT	FC-#	FAN COIL	OSHPD	OFFICE of STATEWIDE HEALTH
AC-#	AIR CONDITIONER	FLA	FULL LOAD AMPS		PLANNING & DEVELOPMENT
ADJ	ADJACENT	FLR	FLOOR	OVLD	OVERLOAD
AF	AMP FUSE, AMP FRAME	FLUOR	FLUORESCENT	P	POLE
AFF	ABOVE FINISH FLOOR	FS	FUSIBLE SWITCH	PA	PUBLIC ADDRESS
AFG	ABOVE FINISH GRADE	FVNR	FULL VOLTAGE NON-REVERSING	PB	PULLBOX
AIC	AMPERES INTERRUPTING CAPACITY	G	GROUNDING CONDUCTOR	PC	PULL CHAIN
AI	ALUMINUM	GC	GENERAL CONTRACTOR	PC	PHOTOCELL
AS	AMP SWITCH RATING	GD	GARBAGE DISPOSAL	PC	PLUMBING CONTRACTOR
ATS	AUTOMATIC TIME SWITCH	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	ph	PHASE
ATS	AUTOMATIC TRANSFER SWITCH	GFI	GROUND FAULT CIRCUIT INTERRUPTER	PNL	PANEL
AV	AUDIBLE/AUDIO VISUAL	GND	GROUND	POC	POINT OF CONNECTION
AWG	AMERICAN WIRE GAGE	GRS	GALVANIZED RIGID STEEL	-PP-	POWER PRIMARY
BFG	BELOW FINISH GRADE	GWS	GANG WITH SWITCH	-PS-	POWER SECONDARY
BIL	BASIC IMPULSE LEVEL	H	HEIGHT, HIGH	PV	PHOTOVOLTAIC
BLDG	BUILDING	HACR	HEATING, AC & REFRIG	(R)	RELOCATE(D)
C	CONDUIT	HID	HIGH INTENSITY DISCHARGE	RECEPT	RECEPTACLE
-C-	CATV CONDUIT	HO	HIGH OUTPUT	REF	REFRIGERATOR
CAB'T	CABINET	HOA	HAND-OFF-AUTO	REQ'D	REQUIRED
CATV	CABLE TELEVISION	hp	HORSEPOWER	RLA	RATED LOAD AMPS
CB	CIRCUIT BREAKER, CODE BLUE	HPF	HIGH POWER FACTOR	RM	ROOM
CBC	CA. BUILDING CODE	HPS	HIGH PRESSURE SODIUM	RMC	RIGID METAL CONDUIT
CEC	CA. ELECTRICAL CODE	IC	INTERCOM	RMV	REMOVE
	CA. ENERGY COMMISSION	ID	IDENTIFICATION	RPLC	REPLACE
CF	COMPACT FLUORESCENT	IF	INSIDE FROST	RS	RAPID START
CFC	CALIFORNIA FIRE CODE	IG	ISOLATED GROUND	SC	SIGNAL CABINET
CLG	CEILING	J-BOX	JUNCTION BOX	SCC	SHORT CKT CURRENT
CL	CENTER LINE	k	QUANTITY 1000	SFM	STATE FIRE MARSHAL
CKT	CIRCUIT	kVA	KILOVOLTAMPS	SHT	SHEET
CNT'R	CONTRACTOR	kW	KILOWATT	SL	SLIMLINE, SWITCH LEG
C.O.	CONDUIT ONLY (W/PULLROPE)	LC	LIGHTING CONTACTOR	SPEC	SPECIFICATION
COND	CONDUIT, CONDUCTOR	LPS	LOW PRESSURE SODIUM	SPST	SINGLE POLE SINGLE THROW
CR	CRITICAL BRANCH	LRA	LOCKED ROTOR AMPS	SQ	SQUARE
CSFM	CALIFORNIA SFM	LS	LIFE SAFETY BRANCH	STR'G	STORAGE
CT	CURRENT TRANSFORMER	LT	LIGHT	SURF	SURFACE
Cu	COPPER	LTG	LIGHTING	SVC	SERVICE
CU-#	CONDENSING UNIT	LV	LOW VOLTAGE	SW	SWITCH
D	DEPTH	MC	MECHANICAL CONTRACTOR	T	TRANSFORMER, TERMINAL
DC	DIRECT CURRENT	MCA	MINIMUM CKT AMPS	-T-	TELEPHONE CONDUIT
DF	DRINKING FOUNTAIN	MCB	MAIN CIRCUIT BREAKER	(TBR)	TO BE REMOVED
DIA	DIAMETER	MCTB	MAIN CATV TERMINAL BOARD	TC	TIME CLOCK
DISC	DISCONNECT	MCTC	MAIN CATV TERMINAL CABINET	TEL	TELEPHONE
DIST	DISTRIBUTION	MECH	MECHANICAL	TELCO	TELEPHONE COMPANY
DPST	DOUBLE POLE SINGLE THROW	MFR	MANUFACTURER	TS	TIME SWITCH
DW	DISHWASHER	MFS	MAIN FUSIBLE SWITCH	TSO	TIME SWITCH OVERRIDE
EM	EMERGENCY	MH	METAL HALIDE	TSP	TWISTED SHIELDED PAIR
(E)	EXISTING	MLO	MAIN LUGS ONLY	TTB	TELEPHONE TERMINAL BOARD
EA	EACH	MOCP	MAXIMUM OCP	TTC	TELEPHONE TERMINAL CABINET
EB	ELECTRONIC BALLAST	MSB	MAIN SWITCHBOARD	TX	TRANSFORMER
EC	ELECTRICAL CONTRACTOR	MT	MOUNT	TYP	TYPICAL
EC-#	EVAPORATIVE COOLER	MT HT	MOUNTING HEIGHT	TYP SIM	TYPICAL SIMILAR
EF-#	EXHAUST FAN	MTS	MANUAL TRANSFER SWITCH	UC	UNDERCABINET, UNDERCOUNTER
EL	EVENING LIGHT	MTTB	MAIN TELEPHONE TERMINAL BOARD	UG	UNDERGROUND
ELEC	ELECTRICAL	MTTC	MAIN TELEPHONE TERMINAL CABINET	UGPS	UNDERGROUND PULL SECTION
EM	EMERG BATTERY BACKUP	MW	MICROWAVE	UL	UNDERWRITERS LABORATORIES
EMB	EMERGENCY BALLAST	N	NEUTRAL (GROUNDED CONDUCTOR)	UON	UNLESS OTHERWISE NOTED
EMERG	EMERGENCY	(N)	NEW	USA	UG SVC ALERT 800-642-2444
EOL	END OF LINE	N3R	NEMA 3R	V	VOLT
EQUIP'T	EQUIPMENT	NC	NORMALLY CLOSED	VA	VOLT AMPERES
ES	ENERGY SAVING	NEC	NATIONAL ELECTRICAL CODE	VAC	VOLT ALTERNATING CURRENT
(EXN)	(E) IN (N) LOCATION	NEMA	NAT'L ELEC MANUFACTURER'S ASSOC	VHO	VERY HIGH OUTPUT
(EXR)	(E) TO BE (R)	NIC	NOT IN CONTRACT	VOLT	VOLTAGE
EXT	EXTERIOR	NL	NIGHT LIGHT	VR	VANDAL-RESISTANT
F	FLUORESCENT	NO	NORMALLY OPEN	W	WIDTH, WATT, WIRE
(F)	FUTURE	NPF	NORMAL POWER FACTOR	WH-#	WATER HEATER
F-#	FURNACE	NTS	NOT TO SCALE	WP	WEATHERPROOF (NEMA 3R)
FA	FIRE ALARM	OC	ON CENTER	XFMR	TRANSFORMER
				+48	INDICATES MOUNTING HEIGHT AFF

REGISTERED PROFESSIONAL ENGINEER WILLIAM A. PRAM NO. 19757 ELECTRICAL STATE OF CALIFORNIA
EXP. 06/30/23 REF. #15-8069

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
ELECTRICAL GENERAL NOTES

REFERENCES
FIELD BOOK:
DRAWING #: EP-1.01

DATE	1/28/22
DRAWN	J. MINKEL
DESIGN	C. PATCHIN
CHECKED	J. DEAN

SCALE NONE
EP-1.01
VAULT NO. 7079B
SHEET 83 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Jan 28, 2022 - 4:32pm Plotted By: jmartin, Plotted: Jan 28, 2022 - 4:32pm K:\2021\21015-Santa Cruz Rail Trail Segment 7 Phase 2\Drawings\Electrical\EP-1.02_EP.dwg

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

WARNING

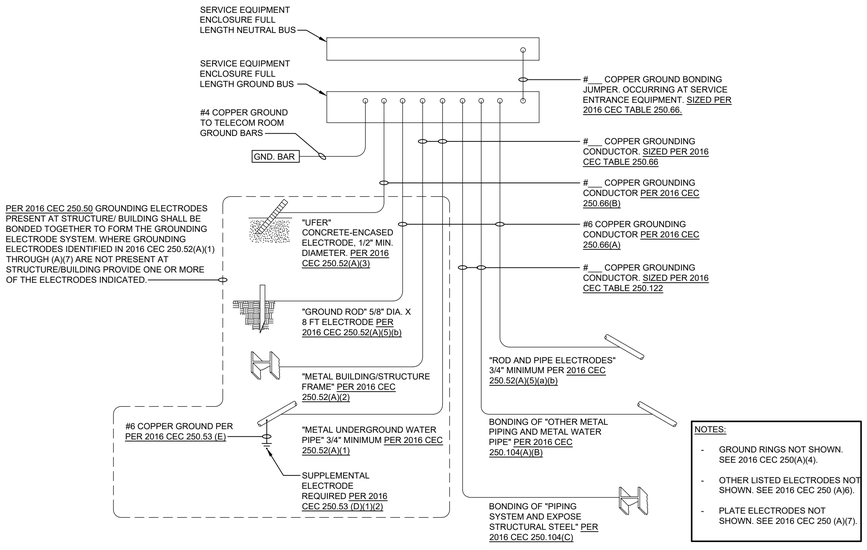
POTENTIAL ARC FLASH HAZARD
Appropriate PPE and Tools Required when working on this equipment

"PPE" REFERS TO "PERSONAL PROTECTIVE EQUIPMENT".

NOTE:
IN ACCORDANCE WITH CEC 110.16. PROVIDE ARC FLASH PROTECTION WARNING LABELS ON EACH SWITCHBOARD, PANELBOARD, AND TRANSFORMER. LABELS SHALL BE PER ANSI Z535.4 GUIDELINES.

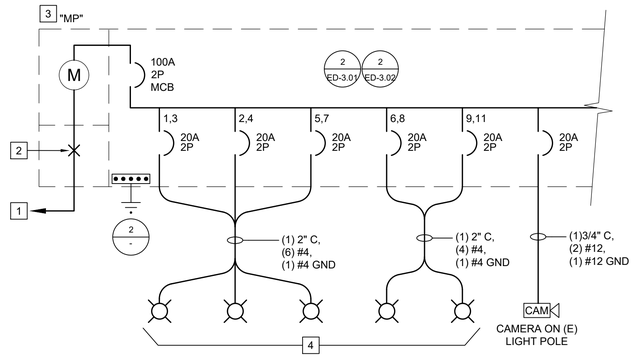
1 ARC FLASH SIGNAGE

NTS



2 GROUND/BOND DETAIL

NTS



SINGLE LINE DIAGRAM NOTES

A. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT AND COORDINATE WITH THE SERVING UTILITY TO ENSURE ALL SERVING UTILITY REQUIREMENTS ARE MET.

B. SERVICE ENTRANCE EQUIPMENT SHALL BE IN ACCORDANCE WITH THE SERVING ELECTRIC UTILITY COMPANY'S REQUIREMENTS.

C. FOR SERIES RATED EQUIPMENT; IN ADDITION TO ALL FACTORY APPLIED, CODE REQUIRED MARKING AND SPECIFIED LABELING OF THE ELECTRICAL PANELBOARD AND THEIR COMPONENTS, ADDITIONAL MARKING AND LABELING IDENTIFYING THE SERIES RATED SYSTEM SHALL BE PROVIDED AS FOLLOWS:

   a. THE SERIES COMBINATION INTERRUPTING RATING, AS INDICATED ABOVE, SHALL BE MARKED ON THE EQUIPMENT BY THE MANUFACTURER AS REQUIRED BY NEC 240-83(C).

   b. WHEN USED, THE CONTRACTOR SHALL USE A "SERIES RATED SYSTEM" LABEL INDICATING SERIES RATING WARNINGS, COMPLYING WITH NEC 110-22 AND SHALL BE FURNISHED BY MANUFACTURER. THE LABEL SHALL BE PERMANENTLY AFFIXED TO THE INTERIOR OF PANELBOARD'S TRIM WHERE IT CAN BE READILY SEEN BY SERVICE PERSONNEL. THE COMPLETED LABEL SHALL READ:

   CAUTION!
   SERIES COMBINATION SYSTEM RATED SYSTEM [XX,XXX]A. IDENTIFIED REPLACEMENT COMPONENT REQUIRED. ANY ADDITIONS OR REPLACEMENTS SHALL BE WITH IDENTICAL COMPONENTS. FAILURE TO DO SO COULD RESULT IN ELECTRICAL EXPLOSION AND FIRE.

   SERIES RATINGS SHALL NOT BE USED WHERE MOTORS ARE CONNECTED ON THE LOAD SIDE OF THE HIGHER-RATED OVERCURRENT DEVICE AND ON THE LINE SIDE OF THE LOWER-RATED OVERCURRENT DEVICE, WHEN THE SUM OF THE MOTOR FULL-LOAD CURRENTS EXCEEDS 1 PERCENT OF THE INTERRUPTING RATING OF THE LOWER-RATED CIRCUIT BREAKER PER NEC 240-86(B).

D. ALL CONDUCTORS SHALL BE COPPER WITH TYPE [THHN/THWN] INSULATION UNLESS OTHERWISE NOTED.

E. ALL SWITCHES, CIRCUIT BREAKERS AND OTHER EQUIPMENT, AS SPECIFIED, SHALL HAVE TERMINATION PROVISIONS LISTED AND IDENTIFIED FOR USE WITH 75 DEG. CONDUCTORS, AND ALL FEEDER CONDUCTORS, AND CONDUITS, ARE SIZE BASED ON USE OF 75 DEG. C COPPER WIRES TYPE THWN/THHN.

F. SEE CAL TRANS SPECIFICATION ELECTRICAL SYSTEMS - SERVICE EQUIPMENT AND WIRING DIAGRAMS, PLAN No. ES-2D.

G. ALL EQUIPMENT SHALL HAVE AN APPROVED TESTING LABORATORY LABEL ATTACHED [UL, CSA, ETC.] (CEC 110-2).

H. REFER TO PANEL SCHEDULES FOR INDIVIDUAL BRANCH CIRCUIT VOLTAGE DROP AND/OR SINGLE LINE DIAGRAM FOR FEEDER VOLTAGE DROP CALCULATIONS.

I. BRANCH CIRCUIT/FEEDER DISTANCE IS SHOWN FOR REVERENCE ONLY AS THE BASIS OF VOLTAGE DROP CALCULATIONS. CONDUCTOR DISTANCE AS INDICATED SHALL NOT BE USED FOR BIDDING/CONSTRUCTION PURPOSES. SHOULD THE FEEDER DISTANCE EXCEED THE LENGTH NOTED PER INSTALLATION CONDITIONS, NOTIFY THE ENGINEER. TYPICAL.

☐ REFERENCE NOTES (SINGLE LINE DIAGRAM)

1. PG&E SECONDARY SERVICE (REFER TO HANDOUT PACKAGE).
2. UNDERGROUND PULL SECTION AND TERMINATION PROVISIONS PER PG&E REQUIREMENTS.
3. NEW 100 AMP, 120/240V, 1Ø, UTILITY APPROVED, NEMA 3R METER/MAIN WITH MINIMUM 20 CIRCUIT LOAD CENTER. CAL TRANS ES-2D.
4. SEE SHEET ED-3.01, DETAIL 4 FOR FIXTURE SCHEDULE. PROVIDE WATERPROOF, FUSED TAP TO #12 AWG IN (N) U.G. PULL BOX LOCATED AT EACH LIGHT POLE.

SINGLE LINE DIAGRAM

(NOTE: ALL WORK SHOWN SHALL BE PROVIDED BY CONTRACTOR AS NEW UNLESS OTHERWISE NOTED)

BUS RATING: 100 120/240V, 1PH, 3W
MAIN: 100 MAIN CIRCUIT BREAKER
SPACES: 20 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 22 KAIC PANEL

(N) PANEL
MP

PEDESTAL MOUNT, NEMA 3R
LOCATION: NEAR ROUNDABOUT PARKING LOT
WITH EQUIPMENT GND BUS

CONNECTED VA

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	PHASE A	PHASE B	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
2.27%	1950		L	1	POST LIGHTS & CAMERAS	20	2	4	545		4	2	20	POST LIGHTS & CAMERAS	2	L		1975	2.07%
									489										
2.27%	1950		L	3	-	-	-	4		545	4	-	-	-	4	L		1975	2.07%
										489									
1.84%	1763		L	5	POST LIGHTS & CAMERAS	20	2	4	489		4	2	20	POST LIGHTS & CAMERAS	6	L		1835	1.92%
									489										
1.84%	1763		L	7	-	-	-	4		489	4	-	-	-	8	L		1825	1.91%
										489									
1.97%	1888		L	9	POST LIGHTS & CAMERAS	20	2	4	489		12	2	15	CAMERAS ON (E) POLE	10	C		50	0.03%
									50										
1.97%	1888		L	11	-	-	-	4		489	12	-	-	-	12	C		50	0.03%
										50									
				13										(USE INDIVIDUAL PC'S ON LIGHT) NO LIGHTING CONTROLS	14				
				15											16				
				17											18				
				19											20				
								CON:	2551	2551									
								25% :	503	503									
								SUB:	0	0									
								TOT:	3054	3054									
								AMPS	25	25									

PANEL NOTES:

LOAD (VA)	LOAD TYPE LEGEND	
0	R	RECEPTACLE
5002	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
0	M	MECHANICAL
0	K	KITCHEN APPLIANCE
0	N	NON-CONTINUOUS MISC.
100	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

REGISTERED PROFESSIONAL ENGINEER
WILLIAM A. [illegible]
No. 19757
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rrm design group
rrmdesign.com | (949) 361-7950
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San Juan Capistrano, CA 92675

REVISIONS

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PUBLIC WORKS DEPARTMENT
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Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
ELECTRICAL SINGLE LINE DIAGRAM, DETAILS & PANEL SCHEDULE

REFERENCES
FIELD BOOK:

DRAWING #:
EP-1.02

DATE	1/28/22	SCALE	NONE
DRAWN	J. MINKEL		EP-1.02
DESIGN	C. PATCHIN	VAULT NO.	7079A
CHECKED	J. DEAN		SHEET 84 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

K:\DWG\2019\19-0809\Working\19-0809_ELEC-SINGLE-LINE-DETAILS-SCHEDULE_F1.02_P2.dwg
Jan 26, 2022 - 4:52pm, Plotted by: jessica, Plotted on: Jan 28, 2022 - 4:53pm

DIG ALERT
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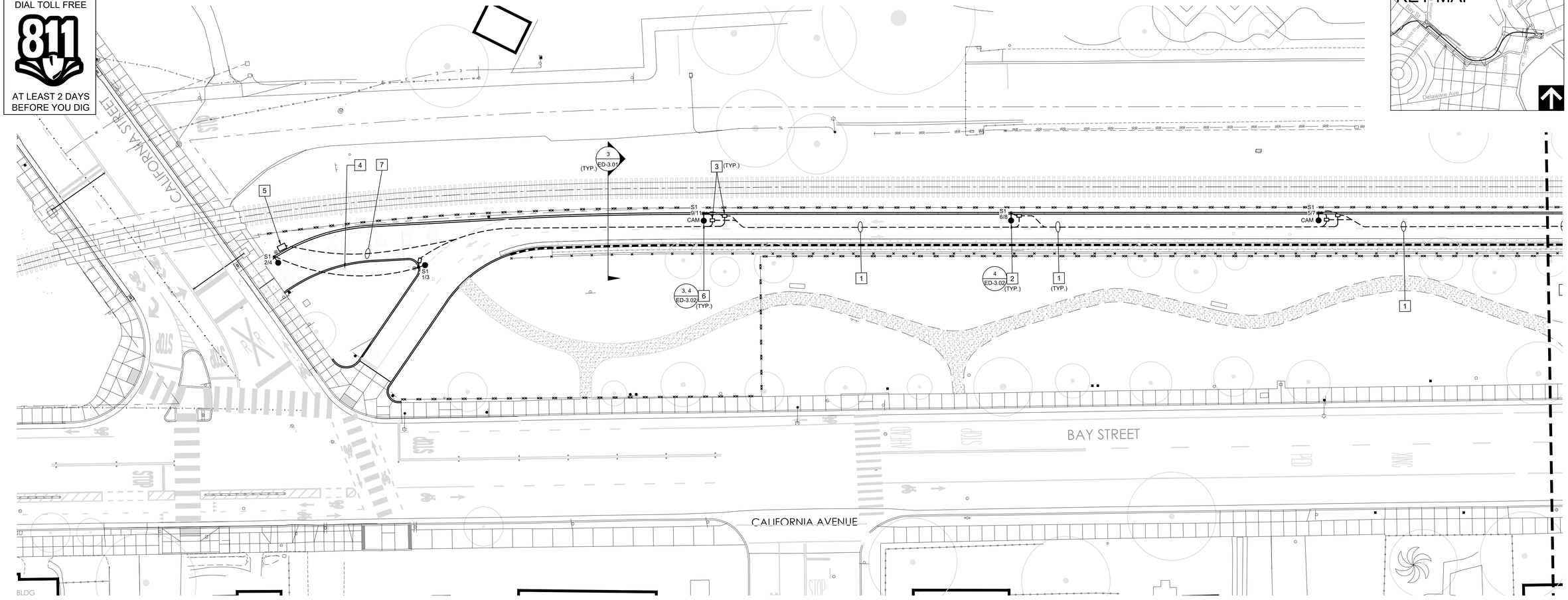
811
AT LEAST 2 DAYS
BEFORE YOU DIG



REFERENCE NOTES

(NOTE: ALL WORK SHOWN SHALL BE PROVIDED BY CONTRACTOR AS NEW UNLESS OTHERWISE NOTED)

1. PROVIDE NEW UNDERGROUND DUCTBANK WITH (3) 2" CONDUIT(S) FOR LIGHTING CIRCUITS AND (3) 2" CONDUITS FOR FIBER OPTICS CABLES. SEE SINGLE LINE DIAGRAM FOR CONDUCTOR SIZE (SHEET EP-1.02)AND CAMERA DIAGRAM FOR FIBER OPTIC CABLE REQUIREMENTS (SHEET ED-3.02).
2. PROVIDE TYPICAL POST LIGHT. REFER TO SHEET ED-3.02, DETAIL 4 FOR POST BASE DETAIL.
3. N36 FLUSH IN GRADE PULL BOXES (MIN. 18" DEEP). PROVIDE ONE PER POLE FOR LIGHTING. PROVIDE ONE EVERY OTHER POLE AS SHOWN FOR FIBER OPTIC CABLES. LABEL LIGHTING COVER "ELECTRICAL" AND FIBER OPTIC COVER "COMMUNICATIONS".
4. TREE TO BE REMOVED PER DM SHEETS.
5. CONTRACTOR TO PROVIDE AND INSTALL (N) FREE STANDING, PADMOUNT, NEMA 4X TELECOM TERMINATION CABINET WITH MINIMUM EQUIPMENT DEPTH OF 25". CABINET SHALL BE ABLE TO ACCOMMODATE A MINIMUM OF 48 RACK MOUNTED UNITS, ACCESSIBLE FROM THE FRONT AND REAR OF EQUIPMENT MOUNTING AREA. CONTRACTOR TO PROVIDE (N) RACK MOUNTED FIBER OPTIC SPLICE TRAY AND BULKHEADS, COORDINATE WITH CITY REPRESENTATIVE FOR BULKHEAD AND FIBER TERMINATION CONNECTOR STYLE AND REQUIREMENTS. FIBER SHALL BE FUSION SPLICED AND FACTORY TERMINATED PIGTAILS AND TESTED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES AND PROVIDE TEST RESULTS TO OWNER'S REPRESENTATIVE. CONTRACTOR TO PROVIDE ADDITIONAL EQUIPMENT REQUIRED FOR A FULLY FUNCTIONING SYSTEM. COORDINATE EXACT LOCATION WITH CITY REPRESENTATIVE.
6. PROVIDE TYPICAL POST LIGHT WITH CAMERA BOX AND TWO CAMERAS. SEE SHEET ED-3.02, DETAIL 3.
7. PROVIDE NEW (2) 2"C FOR FIBER OPTIC CABLES. ONE CONDUIT WITH 72 STRAND CABLE FROM "CALIFORNIA STREET" FIBER OPTIC TERMINATION CABINET TO "ROUNDABOUT" FIBER OPTIC TERMINATION ENCLOSURE. ONE 2"C SPARE.

0 10 20 40 60

REGISTERED PROFESSIONAL ENGINEER
WILLIAM A. PRAM
No. 19757
ELECTRICAL
STATE OF CALIFORNIA
EXP. 06/30/23
REF. #15-8069

rrm design group
rrmdesign.com | (949) 361-7950
31332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

PUBLIC WORKS DEPARTMENT

CITY OF SANTA CRUZ
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TRAIL LIGHTING SYSTEM

REFERENCES
FIELD BOOK:

DRAWING #:
EP-2.01

DATE	1/28/22	SCALE	1" = 20'
DRAWN	J. MINKEL		EP-2.01
DESIGN	C. PATCHIN	VAULT NO.	7079B
CHECKED	J. DEAN		SHEET 85 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Jan 28, 2022 - 4:33pm - J:\Projects\15-8069\Design\Plans\Sheets\15-8069 EP-2.01 TRAIL LIGHTING.dwg 0193-01-XB.dwg 0193-01-XT.dwg 0193-01-XH.dwg
K:\DOCS\2015\15-8069\15-8069-2-2016-2-BID_Plotted By: jminkel, Plotted: Jan 28, 2022 - 4:33pm

DIG ALERT
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811
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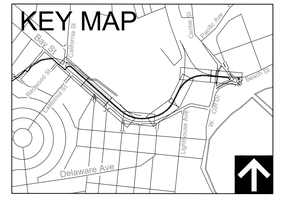
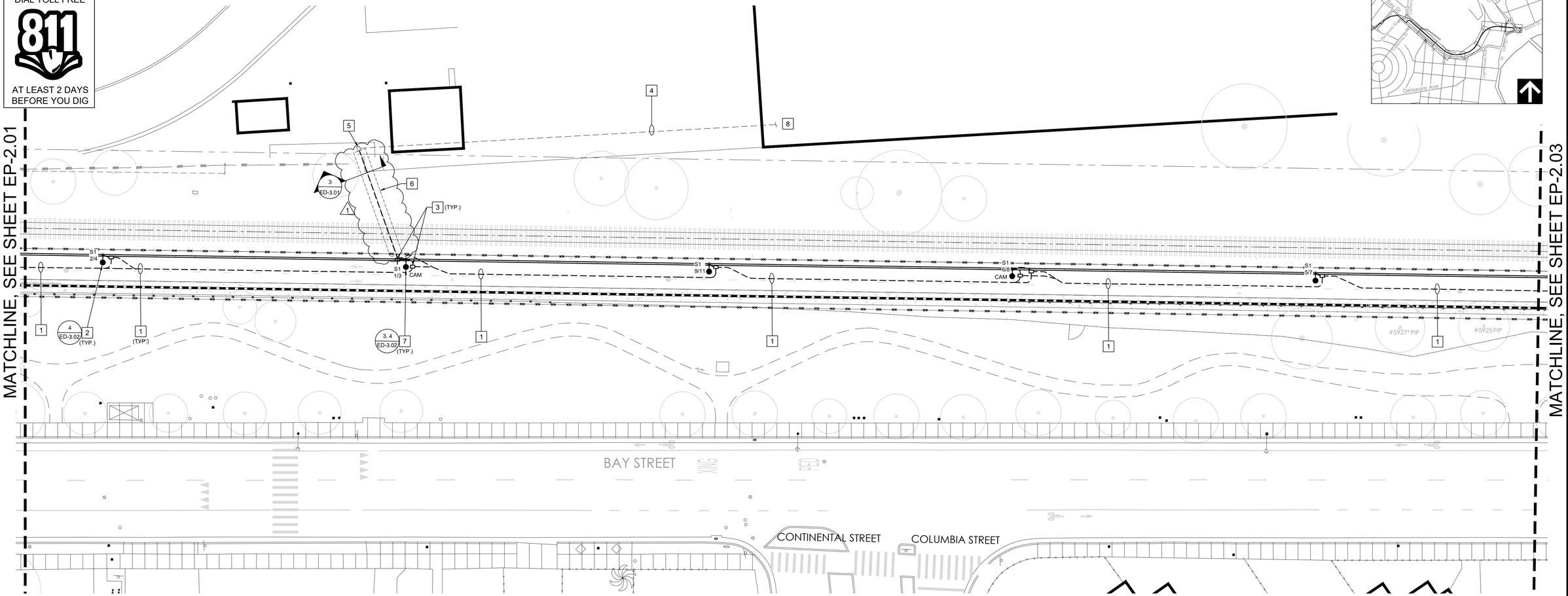
BEFORE YOU DIG

KEY MAP



MATCHLINE, SEE SHEET EP-2.01

MATCHLINE, SEE SHEET EP-2.03



REFERENCE NOTES

(NOTE: ALL WORK SHOWN SHALL BE PROVIDED BY CONTRACTOR AS NEW UNLESS OTHERWISE NOTED)

1. PROVIDE NEW UNDERGROUND DUCTBANK WITH (3) 2" CONDUIT(S) FOR LIGHTING CIRCUITS AND (3) 2" CONDUITS FOR FIBER OPTICS CABLES. SEE SINGLE LINE DIAGRAM FOR CONDUCTOR SIZE (SHEET EP-1.02)AND CAMERA DIAGRAM FOR FIBER OPTIC CABLE REQUIREMENTS (SHEET ED-3.02).
2. PROVIDE TYPICAL POST LIGHT. REFER TO SHEET ED-3.02, DETAIL 4 FOR POST BASE DETAIL.
3. N36 FLUSH IN GRADE PULL BOXES (MIN. 18" DEEP). PROVIDE ONE PER POLE FOR LIGHTING. PROVIDE ONE EVERY OTHER POLE AS SHOWN FOR FIBER OPTIC CABLES. LABEL LIGHTING COVER "ELECTRICAL" AND FIBER OPTIC COVER "COMMUNICATIONS".
4. PROVIDE (2) 6 STRAND FIBER OPTIC CABLES IN (E) 2"C FROM WASTE WATER TREATMENT PLANT ADMINISTRATION BUILDING. CLEAN (E) CONDUIT AS REQUIRED PRIOR TO INSTALLING CABLES. PROVIDE FIBER OPTIC TERMINATIONS IN WWTP ADMINISTRATION BUILDING. COORDINATE WITH CITY REPRESENTATIVE FINAL TERMINATION LOCATION AND LENGTH OF RUN.
5. (E) U.G. CONCRETE PULL BOX.
6. PROVIDE (2) 2"C FROM (E) U.G. PULL BOX TO (N) U.G. PULL BOX AT RAIL TRAIL. DIRECTIONAL DRILL UNDER RAILROAD TRACKS AND INSTALL EITHER (2) 2"C OR INSTALL A MINIMUM OF (2) 2" INNERDUCTS IN BORE CASING. COORDINATE LOCATION, DIRECTION AND LENGTH OF DIRECTIONAL DRILLING WITH CITY REPRESENTATIVE AND RAILROAD COMPANY. CONSTRUCT PER AREMA REQUIREMENTS. CASING SHALL HAVE 6' (MINIMUM) GROUND COVER AND BE 2" (MINIMUM) GREATER THAN THE LARGEST OUTSIDE DIAMETER OF THE CARRIER PIPE. (1)
7. PROVIDE TYPICAL POST LIGHT WITH CAMERA BOX AND TWO CAMERAS. SEE SHEET ED-3.02, DETAIL 3.
8. TRANSITION TO INDOOR RATED CABLE WITHIN THE FIRST 50' OF ENTERING THE ADMINISTRATION BUILDING AS PER CODE (IF REQUIRED).

0 10 20 40 60

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED PROFESSIONAL ENGINEER
WILLIAM A. [illegible]
No. 16757
ELECTRICAL
STATE OF CALIFORNIA
EXP. 06/30/23 REF. #15-8069

rrm design group
rrmdesign.com | (949) 361-7950
32932 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS		
1	BID ADDENDUM #3	04/13/2022

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TRAIL LIGHTING SYSTEM

REFERENCES
FIELD BOOK:

DRAWING #:
EP-2.02

DATE	1/28/22	SCALE	1" = 20'
DRAWN	J. MINKEL		EP-2.02
DESIGN	C. PATCHIN	VAULT NO.	7079B
CHECKED	J. DEAN		

Apr 13, 2022 - 12:28pm J:\PROJECTS\15-8069\DESIGN\CAD\15-8069-EP-2.02.dwg 0193-01-01.dwg 0193-01-02.dwg 0193-01-03.dwg
K:\CNTY\2015-8069\DESIGN\CAD\15-8069_E-2.01-E-2.03.dwg Plotted By: Jimmie Minkel Apr 13, 2022 - 12:28pm

DIG ALERT
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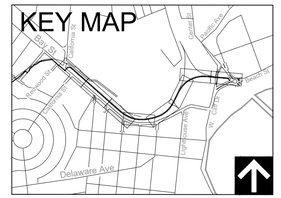
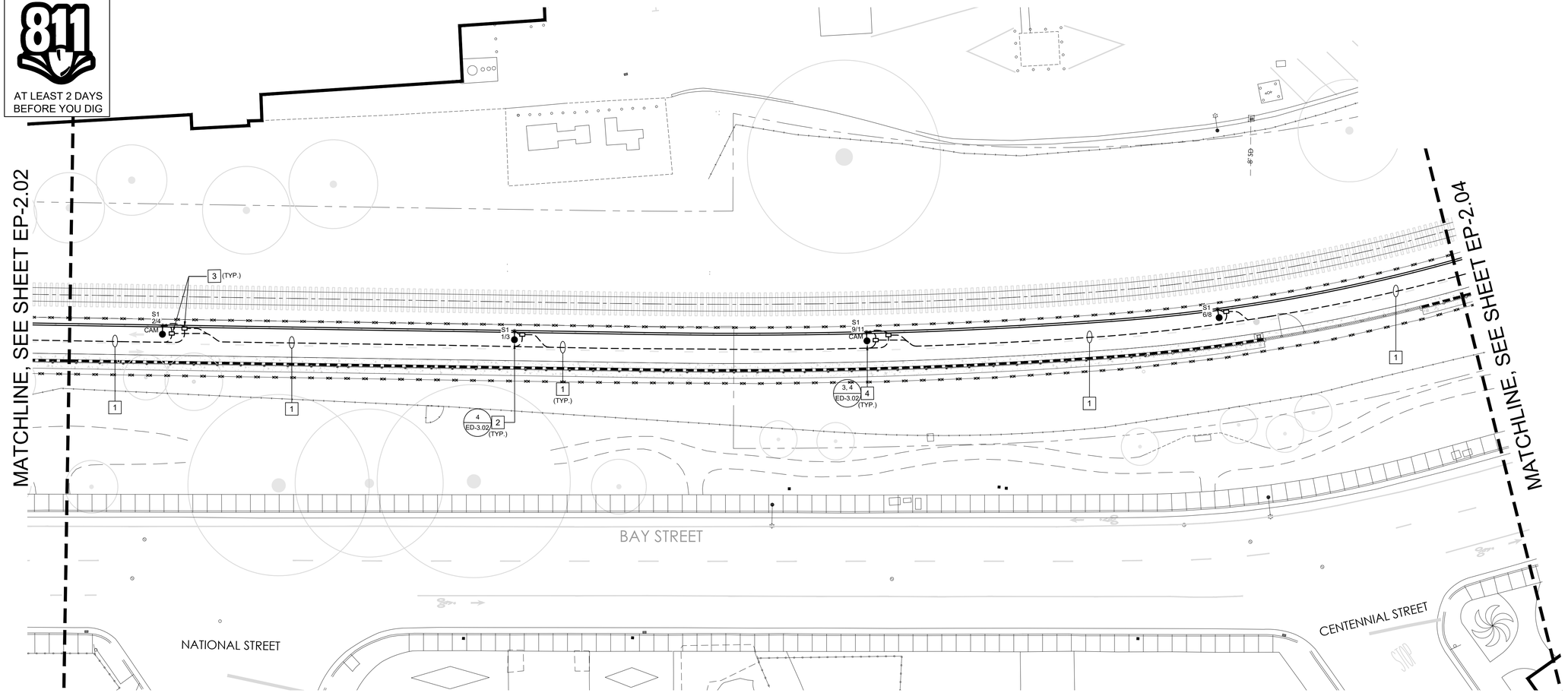
811
AT LEAST 2 DAYS
BEFORE YOU DIG

KEY MAP





☐ REFERENCE NOTES

(NOTE: ALL WORK SHOWN SHALL BE PROVIDED BY CONTRACTOR AS NEW UNLESS OTHERWISE NOTED)

1. PROVIDE NEW UNDERGROUND DUCTBANK WITH (3) 2" CONDUIT(S) FOR LIGHTING CIRCUITS AND (3) 2" CONDUITS FOR FIBER OPTICS CABLES. SEE SINGLE LINE DIAGRAM FOR CONDUCTOR SIZE (SHEET EP-1.02)AND CAMERA DIAGRAM FOR FIBER OPTIC CABLE REQUIREMENTS (SHEET ED-3.02).
2. PROVIDE TYPICAL POST LIGHT. REFER TO SHEET ED-3.02, DETAIL 4 FOR POST BASE DETAIL.
3. N36 FLUSH IN GRADE PULL BOXES (MIN. 18" DEEP). PROVIDE ONE PER POLE FOR LIGHTING. PROVIDE ONE EVERY OTHER POLE AS SHOWN FOR FIBER OPTIC CABLES. LABEL LIGHTING COVER "ELECTRICAL" AND FIBER OPTIC COVER "COMMUNICATIONS".
4. PROVIDE TYPICAL POST LIGHT WITH CAMERA BOX AND TWO CAMERAS. SEE SHEET ED-3.02, DETAIL 3.

0 10 20 40 60

REGISTERED PROFESSIONAL ENGINEER
WILLIAM A. PATCHIN
No. 16757
ELECTRICAL
STATE OF CALIFORNIA
EXP. 06/30/23
REF. #15-8069

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

PUBLIC WORKS DEPARTMENT

CITY OF SANTA CRUZ
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TRAIL LIGHTING SYSTEM

REFERENCES
FIELD BOOK:

DRAWING #:
EP-2.03

DATE	1/28/22
DRAWN	J. MINKEL
DESIGN	C. PATCHIN
CHECKED	J. DEAN

SCALE 1" = 20'
EP-2.03
VAULT NO. 7079B
SHEET 87 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Jan 28, 2022 - 4:32pm J:\PROJECTS\7079B_RAIL TRAIL SEGMENT 7 PHASE 2\DESIGN\15-8069\LAYOUT\8069_EP-2.03.dwg 0183-01-XR.dwg 0183-01-XT.dwg 0183-01-XX.dwg
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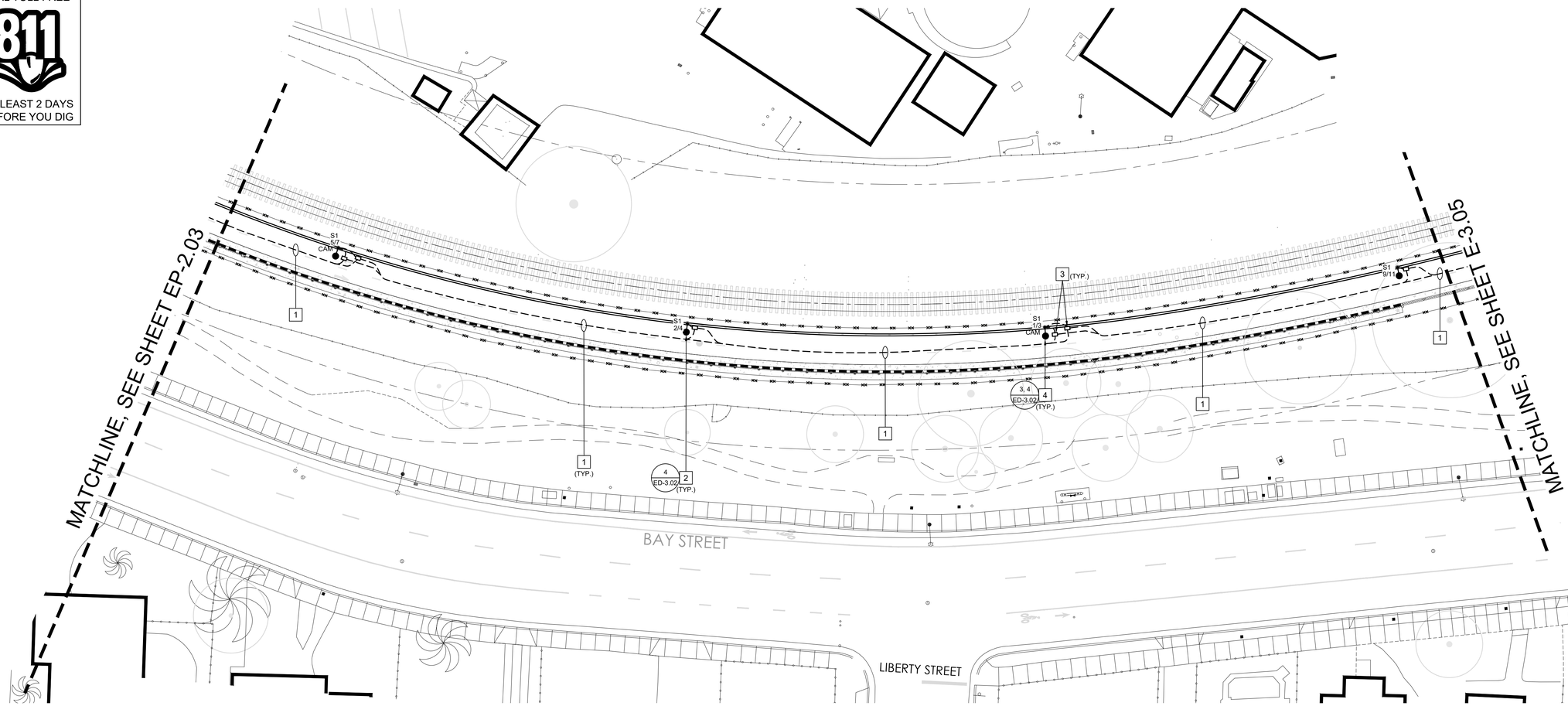
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

KEY MAP



REFERENCE NOTES

(NOTE: ALL WORK SHOWN SHALL BE PROVIDED BY CONTRACTOR AS NEW UNLESS OTHERWISE NOTED)

1. PROIVDE NEW UNDERGROUND DUCTBANK WITH (3) 2" CONDUIT(S) FOR LIGHTING CIRCUITS AND (3) 2" CONDUITS FOR FIBER OPTICS CABLES. SEE SINGLE LINE DIAGRAM FOR CONDUCTOR SIZE (SHEET EP-1.02)AND CAMERA DIAGRAM FOR FIBER OPTIC CABLE REQUIREMENTS (SHEET ED-3.02).
2. PROVIDE TYPICAL POST LIGHT. REFER TO SHEET ED-3.02, DETAIL 4 FOR POST BASE DETAIL.
3. N36 FLUSH IN GRADE PULL BOXES (MIN. 18" DEEP). PROVIDE ONE PER POLE FOR LIGHTING. PROVIDE ONE EVERY OTHER POLE AS SHOWN FOR FIBER OPTIC CABLES. LABEL LIGHTING COVER "ELECTRICAL" AND FIBER OPTIC COVER "COMMUNICATIONS".
4. PROVIDE TYPICAL POST LIGHT WITH CAMERA BOX AND TWO CAMERAS. SEE SHEET ED-3.02, DETAIL 4.

0 10 20 40 60

REGISTERED PROFESSIONAL ENGINEER
WILLIAM A. MACKIE
No. 16757
ELECTRICAL
STATE OF CALIFORNIA
EXP. 06/30/23 REF. #15-8069

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

PUBLIC WORKS DEPARTMENT

CITY OF SANTA CRUZ
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TRAIL LIGHTING SYSTEM

REFERENCES
FIELD BOOK:

DRAWING #:
EP-2.04

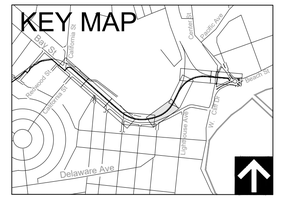
DATE	1/28/22	SCALE	1" = 20'
DRAWN	J. MINKEL		EP-2.04
DESIGN	C. PATCHIN	VAULT NO.	7079B
CHECKED	J. DEAN	SHEET 88 OF 96	

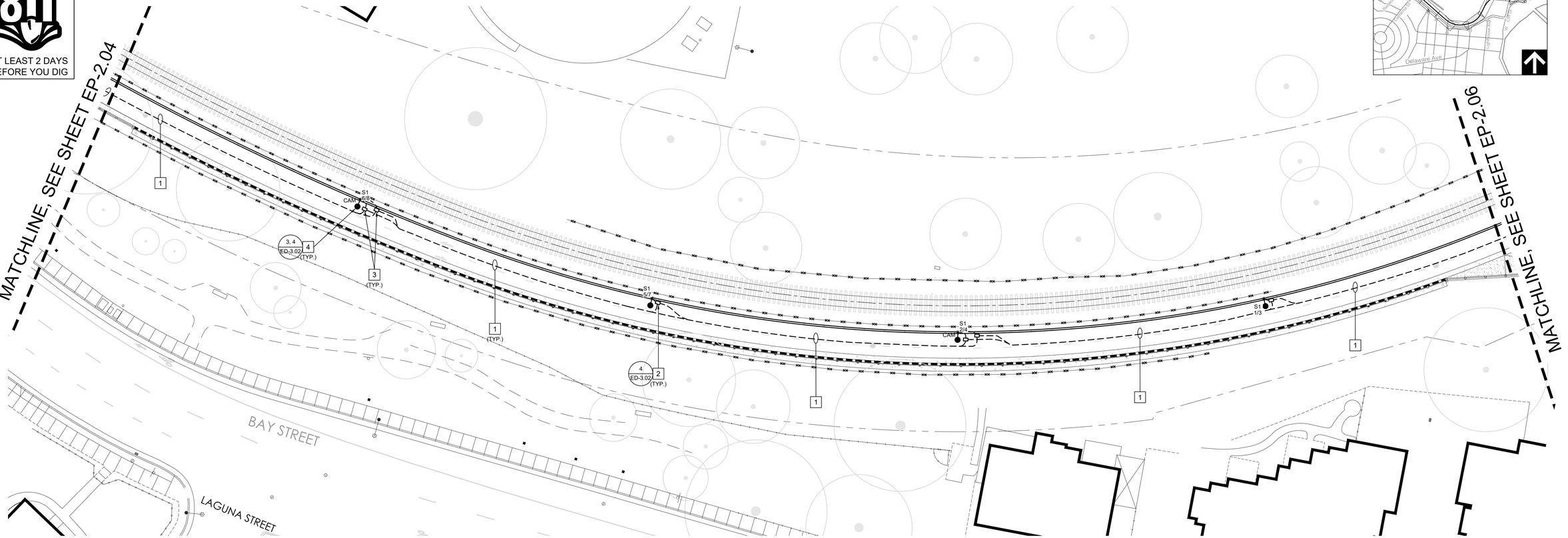
BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Jan 28, 2022 - 4:32pm J:\PROJECTS\7079\Electrical\Drawings\Plans\7079B_EP-2.04.dwg, Plotted By: jminkel, Plotted: Jan 28, 2022 - 4:32pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

KEY MAP





REFERENCE NOTES

(NOTE: ALL WORK SHOWN SHALL BE PROVIDED BY CONTRACTOR AS NEW UNLESS OTHERWISE NOTED)

1. PROVIDE NEW UNDERGROUND DUCTBANK WITH (3) 2" CONDUIT(S) FOR LIGHTING CIRCUITS AND (3) 2" CONDUITS FOR FIBER OPTICS CABLES. SEE SINGLE LINE DIAGRAM FOR CONDUCTOR SIZE (SHEET EP-1.02)AND CAMERA DIAGRAM FOR FIBER OPTIC CABLE REQUIREMENTS (SHEET ED-3.02).
2. PROVIDE TYPICAL POST LIGHT. REFER TO SHEET ED-3.02, DETAIL 4 FOR POST BASE DETAIL.
3. N36 FLUSH IN GRADE PULL BOXES (MIN. 18" DEEP). PROVIDE ONE PER POLE FOR LIGHTING. PROVIDE ONE EVERY OTHER POLE AS SHOWN FOR FIBER OPTIC CABLES. LABEL LIGHTING COVER "ELECTRICAL" AND FIBER OPTIC COVER "COMMUNICATIONS".
4. PROVIDE TYPICAL POST LIGHT WITH CAMERA BOX AND TWO CAMERAS. SEE SHEET ED-3.02, DETAIL 3.

0 10 20 40 60

REGISTERED PROFESSIONAL ENGINEER
WILLIAM A. KNAUF
NO. 16757
ELECTRICAL
STATE OF CALIFORNIA
EXP. 06/30/23
REF. #15-8069

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TRAIL LIGHTING SYSTEM

REFERENCES
FIELD BOOK:

DRAWING #:
EP-2.05

DATE	1/28/22
DRAWN	J. MINKEL
DESIGN	C. PATCHIN
CHECKED	J. DEAN

SCALE 1" = 20'
EP-2.05
VAULT NO. 7079B
SHEET 89 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Jan 28, 2022 - 4:23pm J:\PROJECTS\15-8069 SANTA CRUZ RAIL TRAIL SEGMENT 7 PHASE 2\CONSTRUCTION\15-8069_EP-2.05.dwg, Plotted By: jminkel, Plotted: Jan 28, 2022 - 4:23pm

DIG ALERT
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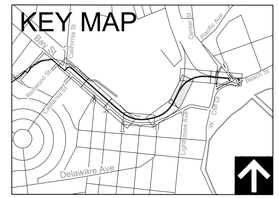
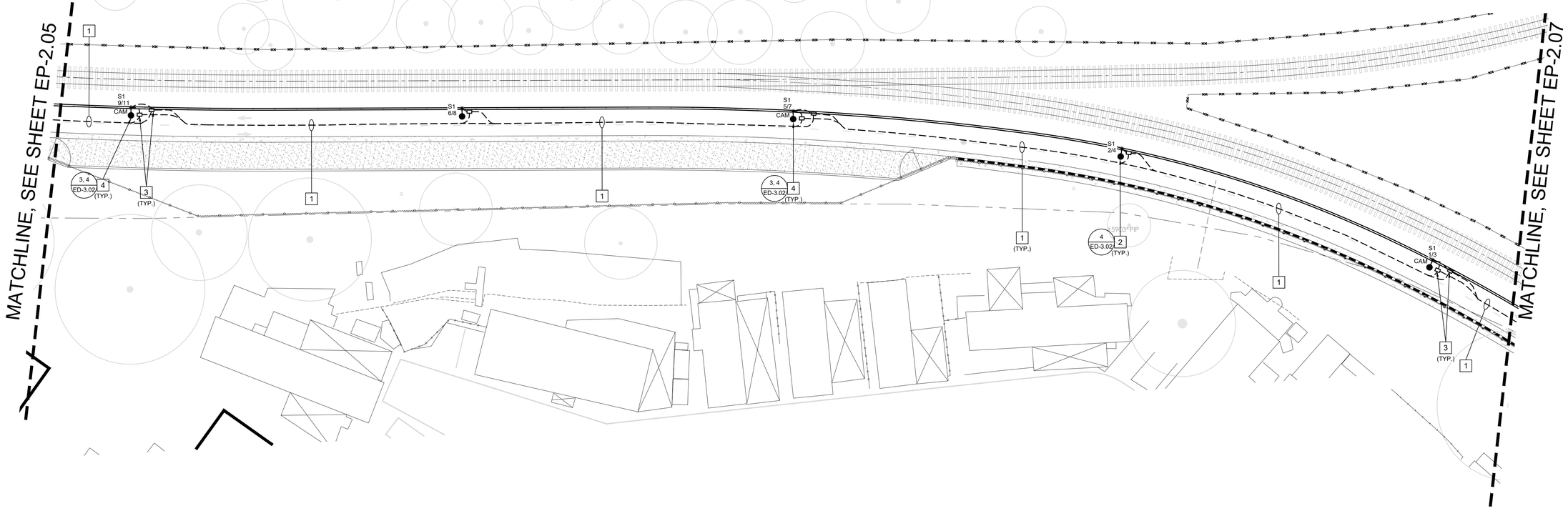
KEY MAP





☐ REFERENCE NOTES

(NOTE: ALL WORK SHOWN SHALL BE PROVIDED BY CONTRACTOR AS NEW UNLESS OTHERWISE NOTED)

1. PROVIDE NEW UNDERGROUND DUCTBANK WITH (3) 2" CONDUIT(S) FOR LIGHTING CIRCUITS AND (3) 2" CONDUITS FOR FIBER OPTICS CABLES. SEE SINGLE LINE DIAGRAM FOR CONDUCTOR SIZE (SHEET EP-1.02)AND CAMERA DIAGRAM FOR FIBER OPTIC CABLE REQUIREMENTS (SHEET ED-3.02).
2. PROVIDE TYPICAL POST LIGHT. REFER TO SHEET ED-3.02, DETAIL 4 FOR POST BASE DETAIL.
3. N36 FLUSH IN GRADE PULL BOXES (MIN. 18" DEEP). PROVIDE ONE PER POLE FOR LIGHTING. PROVIDE ONE EVERY OTHER POLE AS SHOWN FOR FIBER OPTIC CABLES. LABEL LIGHTING COVER "ELECTRICAL" AND FIBER OPTIC COVER "COMMUNICATIONS".
4. PROVIDE TYPICAL POST LIGHT WITH CAMERA BOX AND TWO CAMERAS. SEE SHEET ED-3.02, DETAIL 3.

0 10 20 40 60

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED PROFESSIONAL ENGINEER
WILLIAM A. [illegible]
No. 18757
ELECTRICAL
STATE OF CALIFORNIA
EXP. 06/30/23 REF. #15-8069

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 203
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
TRIAL LIGHTING SYSTEM

REFERENCES
FIELD BOOK:
DRAWING #: EP-2.06

DATE	3/8/21
DRAWN	J. MINKEL
DESIGN	C. PATCHIN
CHECKED	J. DEAN

SCALE 1" = 20'
EP-2.06
VAULT NO. 7079B
SHEET 90 OF 96

Jan 28, 2022 - 4:32pm Plotted by: jmonkel Plotted on: Fri, Jan 28, 2022 - 4:32pm
K:\Civil\2015\15-8069_S-7\2-EP\15-8069_S-7_2-EP-2.dwg Xrefs: 0193-01-Base.dwg 0193-01-Xr-Dwg 0193-01-Xr-Dwg

DIG ALERT
DIAL TOLL FREE
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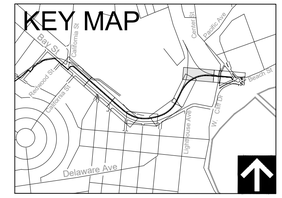
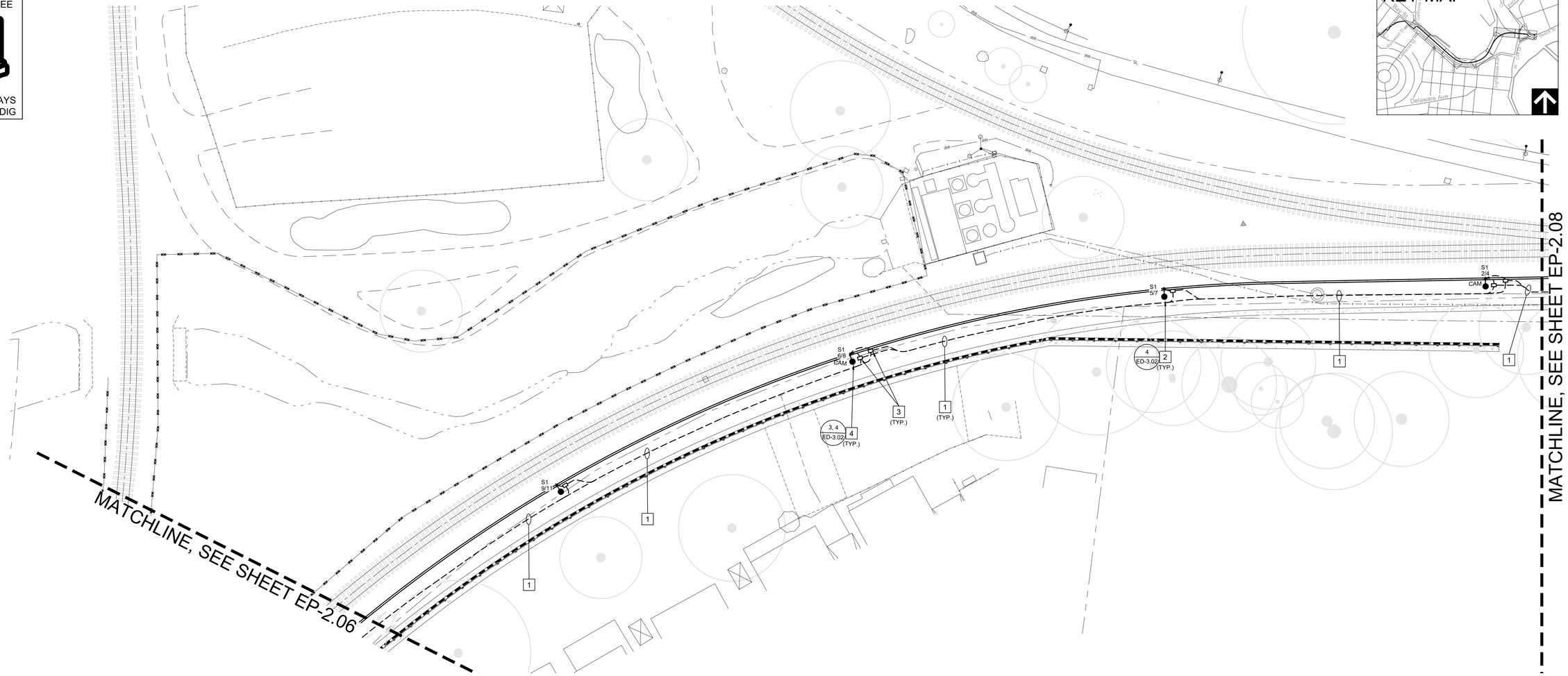
BEFORE YOU DIG





☐ REFERENCE NOTES

(NOTE: ALL WORK SHOWN SHALL BE PROVIDED BY CONTRACTOR AS NEW UNLESS OTHERWISE NOTED)

1. PROVIDE NEW UNDERGROUND DUCTBANK WITH (3) 2" CONDUIT(S) FOR LIGHTING CIRCUITS AND (3) 2" CONDUITS FOR FIBER OPTICS CABLES. SEE SINGLE LINE DIAGRAM FOR CONDUCTOR SIZE (SHEET EP-1.02)AND CAMERA DIAGRAM FOR FIBER OPTIC CABLE REQUIREMENTS (SHEET ED-3.02).
2. PROVIDE TYPICAL POST LIGHT. REFER TO SHEET ED-3.02, DETAIL 4 FOR POST BASE DETAIL.
3. N36 FLUSH IN GRADE PULL BOXES (MIN. 18" DEEP). PROVIDE ONE PER POLE FOR LIGHTING. PROVIDE ONE EVERY OTHER POLE AS SHOWN FOR FIBER OPTIC CABLES. LABEL LIGHTING COVER "ELECTRICAL" AND FIBER OPTIC COVER "COMMUNICATIONS".
4. PROVIDE TYPICAL POST LIGHT WITH CAMERA BOX AND TWO CAMERAS. SEE SHEET ED-3.02, DETAIL 3.

0 10 20 40 60

REGISTERED PROFESSIONAL ENGINEER
WILLIAM A. MINKEL
No. 16757
ELECTRICAL
STATE OF CALIFORNIA
EXP. 06/30/23
REF. #15-8069

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

PUBLIC WORKS DEPARTMENT

CITY OF SANTA CRUZ
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
TRAIL LIGHTING SYSTEM

REFERENCES
FIELD BOOK:

DRAWING #:
EP-2.07

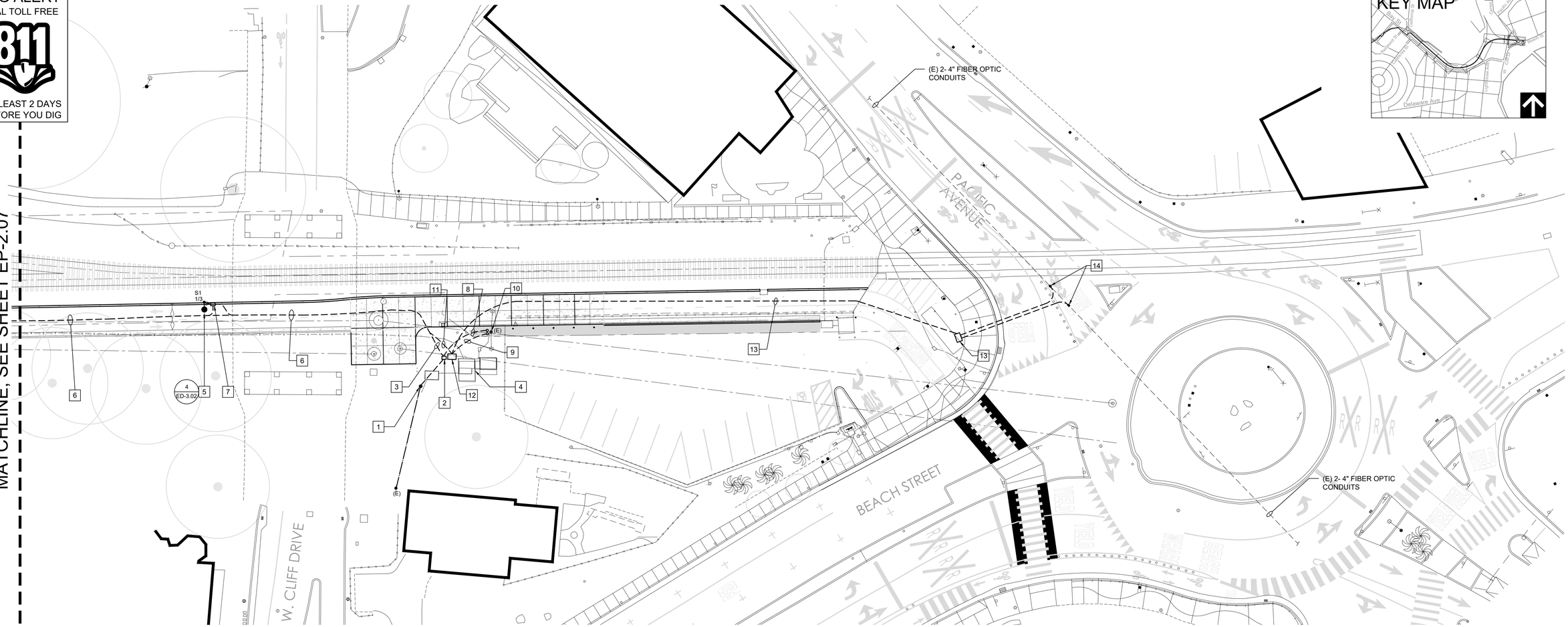
DATE	1/28/22	SCALE	1" = 20'
DRAWN	J. MINKEL		EP-2.07
DESIGN	C. PATCHIN	VAULT NO.	7079B
CHECKED	J. DEAN		SHEET 91 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Jan 28, 2022 - 4:32pm J:\PROJECTS\7079\Design\Electrical\Sheets\EP-2.07.dwg
K:\DWG\2015\15-8069\Electrical\Sheets\EP-2.07.dwg Plotted By: jminkel, Plotted Jan 28, 2022 - 4:32pm

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG

MATCHLINE, SEE SHEET EP-2.07



REFERENCE NOTES

(NOTE: ALL WORK SHOWN SHALL BE PROVIDED BY CONTRACTOR AS NEW UNLESS OTHERWISE NOTED)

1. (N) PG&E POWER POLE WITH SERVICE DROP TO (N) METER/MAIN PEDESTAL "MP". POWER POLE PROVIDED BY PG&E, (N) METER/MAIN SHALL BE PROVIDED BY CONTRACTOR. PROVIDE SECONDARY SERVICE CONDUIT PER PG&E HANDOUT PACKAGE. PG&E APPLICATION #113728535. CONTRACTOR SHALL COORDINATE WITH PG&E AND THE OWNER FOR SCHEDULING OF ALL WORK.
2. CONTRACTOR TO PROVIDE NEW METER PEDESTAL "MP". REFER TO SINGLE LINE DIAGRAM AND DETAIL 2/E-3.01. COORDINATE EXACT LOCATION WITH CITY REPRESENTATIVE AND PG&E.
3. PROVIDE NEW UNDERGROUND DUCTBANK WITH (3) 2" CONDUIT(S) FOR LIGHTING CIRCUITS. SEE SINGLE LINE DIAGRAM FOR CONDUCTOR SIZE.
4. (E) PG&E TRANSFORMER (FOR REFERENCE ONLY).
5. PROVIDE TYPICAL POST LIGHT. REFER TO SHEET ED-3.02, DETAIL 4 FOR POST BASE DETAIL.
6. PROVIDE NEW UNDERGROUND DUCTBANK WITH (3) 2" CONDUIT(S) FOR LIGHTING CIRCUITS AND (3) 2" CONDUITS FOR FIBER OPTICS CABLES. SEE SINGLE LINE DIAGRAM FOR CONDUCTOR SIZE (SHEET EP-1.02) AND CAMERA DIAGRAM FOR FIBER OPTIC CABLE REQUIREMENTS (SHEET ED-3.02).
7. N36 FLUSH IN GRADE PULL BOXES (MIN. 18" DEEP). PROVIDE ONE PER POLE FOR LIGHTING. PROVIDE ONE EVERY OTHER POLE AS SHOWN FOR FIBER OPTIC CABLES. LABEL LIGHTING COVER "ELECTRICAL" AND FIBER OPTIC COVER "COMMUNICATIONS".
8. (2) #12 THHN/THWN, (1) #12 GND, 3/4"C. PANEL 'MP' CIRCUIT 10/12 FOR CAMERA BOX ON (E) LIGHT POLE. PROVIDE RGS CONDUIT FOR ELBOW AND UP POLE. TAPE WRAP ALL RGS CONDUIT BELOW GRADE AND TO 12" ABOVE GRADE. PROVIDE GALVANIZED HARDWARE FOR ALL CONDUIT SUPPORT MATERIAL. SUBMIT CONDUIT SUPPORT METHOD AND MATERIAL TO CITY REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION.
9. (2) 6 STRAND, UV RATED FIBER OPTIC CABLES IN 3/4"C. ROUTE CONDUIT AND FIBER OPTICS UP TO POLE TO CAMERA BOX. PROVIDE RGS CONDUIT FOR ELBOW AND UP POLE. TAPE WRAP ALL RGS CONDUIT BELOW GRADE AND TO 12" ABOVE GRADE. PROVIDE GALVANIZED HARDWARE FOR ALL CONDUIT SUPPORT MATERIAL. SUBMIT CONDUIT SUPPORT METHOD AND MATERIAL TO CITY REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION.
10. (E) LIGHT POLE WITH DUAL HEADS. PROVIDE CAMERA BOX, TWO CAMERAS (PROVIDED BY OTHERS), POWER CIRCUIT AND FIBER OPTIC CIRCUIT ON POLE. COORDINATE CAMERA BOX MOUNTING HEIGHT, POWER CONDUIT AND FIBER OPTIC CIRCUIT MOUNTING HARDWARE WITH CITY REPRESENTATIVE. SEE SHEET ED-3.02, DETAIL 3 FOR CAMERA BOX REQUIREMENTS.
11. (2) 2"C FOR FIBER OPTIC CABLES. ONE CONDUIT WITH 72 STRAND CABLE FROM "CALIFORNIA STREET" FIBER OPTIC TERMINATION CABINET TO "ROUNDABOUT" FIBER OPTIC TERMINATION CABINET. ONE 2"C WITH (2) 6 STRAND FIBER OPTIC CABLES. ONE 2"C SPARE.
12. CONTRACTOR TO PROVIDE AND INSTALL (N) FREE STANDING, PADMOUNT, NEMA 4X TELECOM TERMINATION CABINET WITH MINIMUM EQUIPMENT DEPTH OF 25". CABINET SHALL BE ABLE TO ACCOMMODATE A MINIMUM OF 48 RACK MOUNTED UNITS, ACCESSIBLE FROM THE FRONT AND REAR OF EQUIPMENT MOUNTING AREA. CONTRACTOR TO PROVIDE (N) RACK MOUNTED FIBER OPTIC SPLICE TRAY AND BULKHEADS, COORDINATE WITH CITY REPRESENTATIVE FOR BULKHEAD AND FIBER TERMINATION CONNECTOR STYLE AND REQUIREMENTS. ALL FIBER SHALL BE FUSION SPLICED AND FACTORY TERMINATED PIGTAILS AND TESTED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES AND PROVIDE TEST RESULTS TO OWNER'S REPRESENTATIVE. CONTRACTOR TO PROVIDE ADDITIONAL EQUIPMENT REQUIRED FOR A FULLY FUNCTIONING SYSTEM. COORDINATE EXACT LOCATION WITH CITY REPRESENTATIVE.
13. (N) N48 UNDERGROUND PULL BOX. PROVIDE (2) 4"C.O. UNDERGROUND FROM (N) PULL BOX TO (N) TERMINATION PAD MOUNT CABINET. PROVIDE 4 - 4" C.O. UNDERGROUND FROM (N) N48 PULL BO X TO INTERCEPT POINT IN STREET.
14. INTERCEPT (E) 2 - 4" FIBER OPTIC CONDUITS (CURRENTLY EMPTY). PROVIDE 4 - 4" SWEEPS AND CONDUITS FROM INTERCEPT POINTS TO (N) UNDERGROUND PULL BOX. PATCH AND PAVE PER SPECIFICATIONS. COORDINATE LOCATION OF INTERCEPTS WITH CITY REPRESENTATIVE PRIOR TO START OF WORK.

0 10 20 40 60

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

REGISTERED PROFESSIONAL ENGINEER
WILLIAM A. KRAL
No. 16757
ELECTRICAL
STATE OF CALIFORNIA
EXP. 06/30/23 REF. #15-8069

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 203
San Juan Capistrano, CA 92675

REVISIONS

PUBLIC WORKS

CITY OF SANTA CRUZ
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL

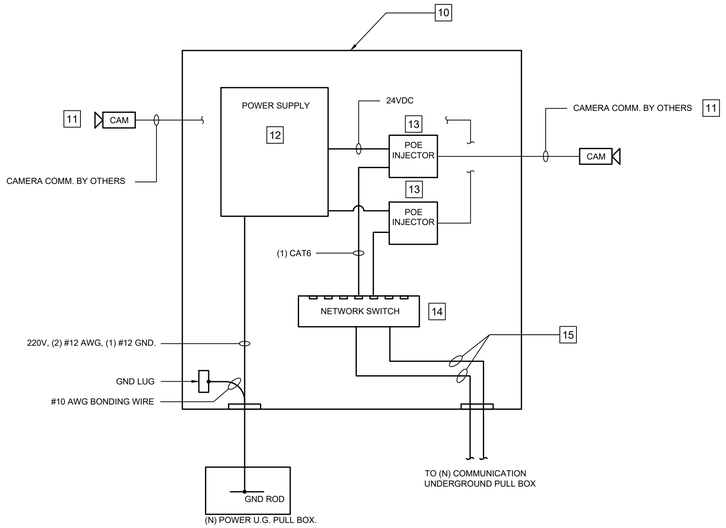
TRAIL LIGHTING SYSTEM - PARTIAL SITE PLAN

REFERENCES
FIELD BOOK:
DRAWING #: EP-2.08

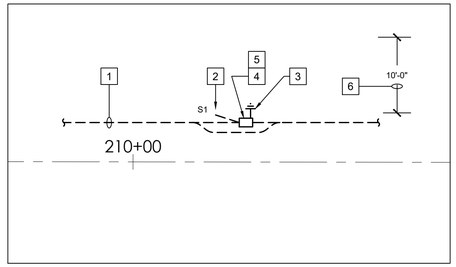
DATE	1/28/22	SCALE	1" = 20'
DRAWN	J. MINKEL		EP-2.08
DESIGN	C. PATCHIN	VAULT NO.	7079B
CHECKED	J. DEAN		SHEET 92 OF 96

Jan 28, 2022 - 4:33pm
K:\Dwg\2019\19-0005\19-0005_EP-2.08_Plan.dwg, Plotted By: Jimmie, Plotted: Jan 28, 2022 - 4:33pm

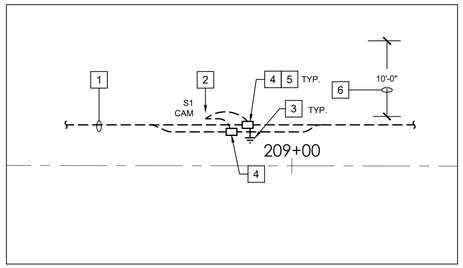
DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS
BEFORE YOU DIG



5 TYPICAL CAMERA BOX DETAIL



POST LIGHT W/O CAMERA



POST LIGHT WITH CAMERA

1 TYPICAL PLAN VIEW AT POST LIGHTS

SCALE: 3/16"=1'-0"

REFERENCE NOTES

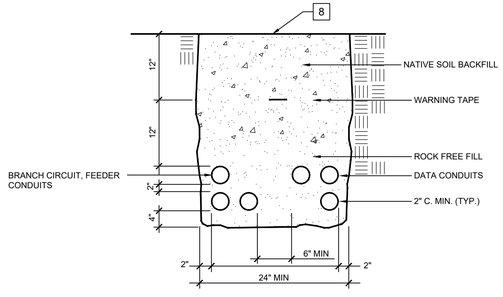
(NOTE: ALL WORK SHOWN SHALL BE PROVIDED BY CONTRACTOR AS NEW UNLESS OTHERWISE NOTED)

1. 2" BRANCH CIRCUIT CONDUIT(S) FROM METER PEDESTAL AND BETWEEN PULL BOXES. (TYPICAL)
2. TYPICAL POST LIGHT. REFER TO DETAIL 3/E-3.02.
3. INSTALL NEW 5/8 INCH DIAMETER COPPER CLAD GROUND ROD IN UNDERGROUND PULL BOX AT ALL LIGHT POLES THAT HAVE CAMERAS MOUNTED TO THEM. CONNECT ALL GROUND WIRES TO GROUND ROD. SEE SHEET ED-3.02 DETAIL 2.
4. NEW 17" X 30" X 18" MINIMUM DEPTH CONCRETE UNDERGROUND PULL BOX WITH BOLTED COVER. LABEL COVER "ELECTRICAL" OR "COMMUNICATION" ACCORDINGLY.
5. PROVIDE WATERPROOF, FUSED #4 AWG TO #12 AWG WIRE TAP IN U.G. PULL BOX. SIZE FUSE BASED ON 1 AMP FOR LIGHT FIXTURE PLUS LOAD FOR CAMERA BOX POWER.
6. 10' NO VERTICAL OBSTRUCTIONS ZONE FROM CENTERLINE OF RAILROAD TRACKS AND 2' VERTICAL OBSTRUCTION BUFFER ZONE FROM EDGE OF PATHWAY. COORDINATE LOCATION OF LIGHT POLES, UNDERGROUND PULL BOXES AND CONDUIT ROUTING WITH ARCHITECT AND CIVIL ENGINEER PRIOR TO INSTALLATION.
7. 2" C.O. SPARE FOR FUTURE USE. STUB OUT AND CAP SPARE UNDERGROUND CONDUIT 3' FROM EDGE OF CONCRETE. COORDINATE DIRECTION OF STUB-OUT WITH THE ARCHITECT AND CITY REPRESENTATIVE.
8. RESTORE SURFACING TO ORIGINAL CONDITION.
9. FIELD SET AUTO DIMMING SUCH THAT UPON MOTION DETECTION THE FIXTURE GOES TO FULL LIGHT OUTPUT WITH A TIME DELAY OF FIVE MINUTES. FACTORY DEFAULT SETTING IS FOR THE LIGHT TO TURN OFF AFTER FIVE MINUTES OF NO ACTIVITY. CHANGE SETTING SUCH THAT THE LIGHT REMAINS ON AT A LOWER OUTPUT LEVEL.
10. CONTRACTOR SHALL PROVIDE (N) NEMA 4X ENCLOSURE (WITH LOCKABLE HINGED DOOR) WITH INTEGRATED 220V POWER SUPPLY, POWER OVER ETHERNET INJECTOR(S), NETWORK SWITCH, POLE OR WALL MOUNT AND EQUIPMENT RATED FOR OPERATION BETWEEN -25 DEGREES CELSIUS TO +60 DEGREES CELSIUS.
11. CAMERA AND CAMERA CABLE PROVIDED AND INSTALLED BY OTHERS. COORDINATE CAMERA REQUIREMENTS WITH CITY REPRESENTATIVE AND CAMERA PROVIDER.
12. PROVIDE (N) 220V TO LOW VOLTAGE (24VDC OR 48VDC) AS REQUIRED FOR POWERING POE INJECTORS AND NETWORK SWITCH. COORDINATE WITH CITY REPRESENTATIVE AND CAMERA PROVIDER.
13. PROVIDE (N) POE INJECTOR COMPATIBLE WITH CAMERA REQUIREMENTS AND POWER SUPPLY. COORDINATE WITH CITY REPRESENTATIVE AND CAMERA PROVIDER.
14. PROVIDE (N) NETWORK SWITCH COMPATIBLE WITH POE INJECTORS, POWER SUPPLY AND CAMERA FIBEROPTIC NETWORK. COORDINATE WITH CITY REPRESENTATIVE AND CAMERA PROVIDER.
15. (N) 6 STRAND FIBEROPTIC CABLE. TERMINATE TWO STRANDS FROM INCOMING FIBER (RX/TX) AND TWO STRANDS FROM OUTGOING FIBER (RX/TX). SEE SPECIFICATIONS FOR FIBEROPTICS CABLE, TERMINATING AND TESTING REQUIREMENTS.

LIGHTING FIXTURE SCHEDULE

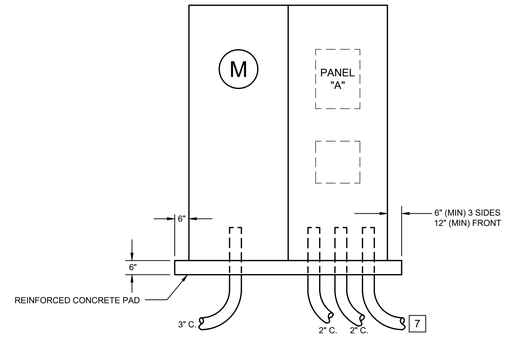
TYPE	ILLUSTRATION	MANUFACTURER	CATALOG NO.	VOLTAGE	MAX. VA.	LAMPING	MOUNTING	DESCRIPTION
S1		COOPER LIGHTING	GLEON AF 02 LED E1 SL2 BZ 2L 8030 MS-L20 OA/RA 1016	240V	51W	LED	POLE P1 (3 / ED-3.02)	POLE MOUNTED FIXTURE WITH LED LIGHTS, MOTION SENSOR AND PHOTOCELL [9]
P1		SQUARE STRAIGHT ALUMINUM POLES	SSA4T20WX	N/A	N/A	N/A	N/A (3 / ED-3.02)	20' TALL ALUMINUM LIGHT POLE WITH ONE OR TWO HANDHOLES AS REQUIRED.

4 FIXTURE SCHEDULE



3 TYPICAL TRENCH DETAIL

SCALE: NTS



2 ELEVATION AT METER PEDESTAL "MP"

SCALE: NTS

REGISTERED PROFESSIONAL ENGINEER WILLIAM A. PRAM NO. 19757 ELECTRICAL STATE OF CALIFORNIA
EXP. 06/30/23 REF. #15-8069

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL

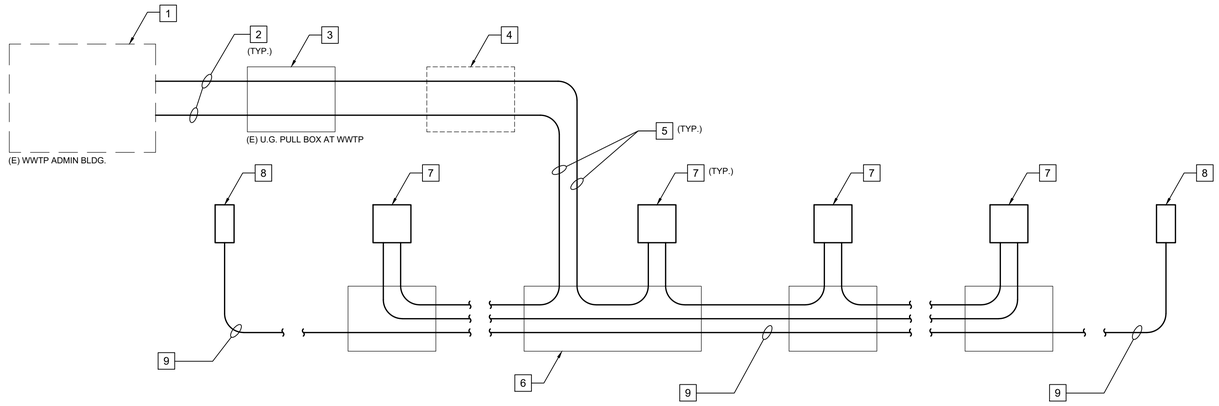
FIXTURE SCHEDULE & ELECTRICAL DETAILS

REFERENCES	DATE	1/28/22	SCALE AS SHOWN
FIELD BOOK:	DRAWN	J. MINKEL	ED-3.01
DRAWING #: ED-3.01	DESIGN	C. PATCHIN	VAULT NO. 7079B
	CHECKED	J. DEAN	SHEET 93 OF 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Jan 28, 2022 - 4:53pm - Plotted By: jpalmer, Plotted: Jan 28, 2022 - 4:53pm
K:\DOT\2019\19-0003\19-0003_2-101-E-3.01_ED-3.01.dwg, 019-01-XC.dwg, 019-01-XT.dwg, 019-01-XX.dwg, Z-XREF-TB.dwg

DIG ALERT
DIAL TOLL FREE
811
AT LEAST 2 DAYS BEFORE YOU DIG

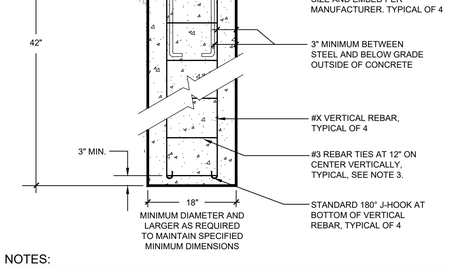


1 FIBER OPTICS CABLE CONNECTION DIAGRAM

☐ REFERENCE NOTES

(NOTE: ALL WORK SHOWN SHALL BE PROVIDED BY CONTRACTOR AS NEW UNLESS OTHERWISE NOTED)

1. (E) WWTP ADMINISTRATION BUILDING. TRANSITION TO INTERIOR RATED FIBEROPTIC CABLE WITHIN 50' OF ENTERING THE BUILDING PER CODE REQUIREMENTS (IF REQUIRED). PROVIDE ALL REQUIRED EQUIPMENT FOR TRANSITION. COORDINATE WITH CITY REPRESENTATIVE FOR LOCATION OF TRANSITION AND FINAL CABLE TERMINATION LOCATION.
2. PROVIDE (N) 6 STRAND, SINGLE MODE, OUTDOOR, LASER RATED FIBEROPTIC CABLE IN (E) CONDUIT. SEE SPECIFICATION FOR ADDITIONAL CABLE REQUIREMENTS. 2 STRANDS IN EACH CABLE WILL BE USED FOR THE CAMERA SELF HEALING NETWORK.
3. (E) U.G. PULL BOX LOCATED AT WWTP. PROVIDE (2) 2" CONDUITS FROM (E) PULL BOX TO (N) PULL BOX AT RAIL TRIAIL. ONE CONDUIT FOR FIBEROPTICS CABLES AND ONE SPARE CONDUIT.
4. PROVIDE (N) DIRECTIONAL DRILLING UNDER RAILROAD TRACKS. PROVIDE (2) 2" CONDUITS OR (2) 2" INNERDUCTS DEPENDING ON THE BORE CASING SIZE. COORDINATE LOCATION AND LENGTH OF DRILLING WITH CITY REPRESENTATIVE AND RAILROAD COMPANY.
5. PROVIDE (N) 6 STRAND,SINGLE MODE, OUTDOOR, LASER RATED FIBEROPTIC CABLE IN (N) 2" CONDUIT. SEE SPECIFICATION FOR ADDITIONAL CABLE REQUIREMENTS. 2 STRANDS IN EACH CABLE WILL BE USED FOR THE CAMERA SELF HEALING NETWORK.
6. PROVIDE (N) N36 U.G. PULL BOX WITH BOLTED COVER AT RAIL TRAIL.
7. PROVIDE (N) POLE MOUNTED CAMERA BOX AND EQUIPMENT. SEE SHEET ED-3.02, DETAIL 3 FOR ADDITIONAL REQUIREMENTS.
8. PROVIDE (N) TELECOM TERMINATION PAD MOUNT CABINET. SEE SHEET EP-2.01 NOTE 5 AND SHEET EP-2.08 NOTE 12 FOR PAD MOUNT CABINET AND HARDWARE REQUIREMENTS.
9. PROVIDE (N) 72 STRAND, SINGLE MODE, OUTDOOR, LASER RATED FIBEROPTIC CABLE BETWEEN (N) TELECOM TERMINATION PAD MOUNT CABINETS. CABLE SHALL BE CONTINUOUS BETWEEN TERMINATION PAD MOUNT CABINETS. CONTRACTOR SHALL PROVIDE TERMINATIONS AND TEST CABLE. SEE SPECIFICATIONS FOR ADDITIONAL CABLE, PATCH CORDS AND TESTING REQUIREMENTS.
10. PROVIDE (N) POLE MOUNTED CAMERA BOX AND EQUIPMENT. SEE SHEET ED-3.01 DETAIL 5 FOR ENCLOSURE AND EQUIPMENT REQUIREMENTS. COORDINATE MOUNTING HEIGHT WITH CITY REPRESENTATIVE AND CAMERA PROVIDER/INSTALLER.
11. TWO (N) CAMERAS AND CABLES PROVIDED AND INSTALLED BY OTHERS.
12. PROVIDE TWO (N) ¾" LIQUIDTIGHT FLEXIBLE CONDUITS CONDUITS FROM HANDHOLE TO (N) CAMERA BOX FOR POWER AND FIBEROPTICS CABLES.
13. TAP (N) #12 LIGHTING POWER AND GROUND CONDUCTOR WITH (N) #12 THHN/THWN FOR CAMERA BOX POWER (220V) IN LIGHT POLE.
14. PROVIDE GROUND ROD IN POWER U.G. PULL BOX AT ALL LIGHT POLES WITH CAMERAS. SEE DETAIL 2 THIS SHEET. PROVIDE (1) 10 THHN/THWN BONDING WIRE FROM GROUND ROD TO CAMERA BOX BONDING LUG. SEE SHEET ED-3.01 DETAIL 5.
15. COORDINATE HEIGHT OF HANDHOLE WITH CITY REPRESENTATIVE AND CAMERA PROVIDER PRIOR TO ORDERING LIGHT POLE.
16. #4 GND WIRE FOR LIGHTING CIRCUITS. EXOTHERMICALLY WELD GROUND WIRE TO COPPER CLAD GROUND ROD.
17. #12 GND WIRE FOR LIGHT FIXTURE POWER CIRCUIT AND #10 GND WIRE FOR CAMERA BOX BONDING. LIGHTING CIRCUIT #12 POWER WIRES NOT SHOWN FOR CLARITY.
18. SEE CD SHEETS AND COORDINATE WITH CITY REPRESENTATIVE FOR EXACT LOCATION AND ALIGNMENT OF LIGHT POST AND THE TRAIL FENCING.

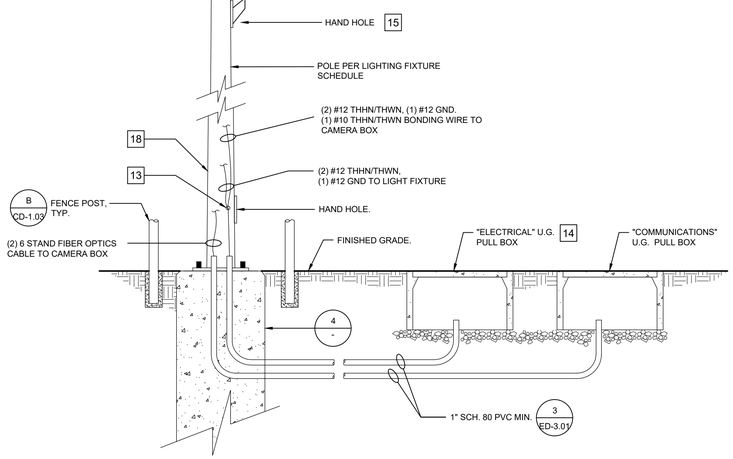


NOTES:

1. PROVIDE AND COORDINATE INSTALLATION OF GALV. ANCHOR BOLTS & TEMPLATE.
2. CONDUIT SHALL BE 1" MINIMUM SIZE AND MINIMUM 24" BELOW FINISH GRADE.
3. TIES SHALL HAVE AT EACH END A 135 DEGREE HOOK BEND WITH A SIX-BAR DIAMETER, BUT NOT LESS THAN 3 INCH, EXTENSION THAT ENGAGES THE LONGITUDINAL REINFORCEMENT AND PROJECTS INTO THE INTERIOR OF THE STIRRUP OR HOOP.

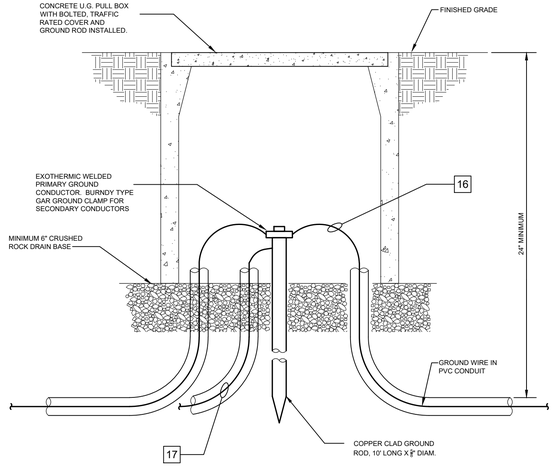
4 TYPICAL POST LIGHT MOUNTING DETAIL

SCALE: NTS



3 TYPICAL LIGHT POLE WITH CAMERA DETAIL

SCALE: NTS



2 TYPICAL U.G. PULL BOX WITH GROUND ROD

SCALE: NTS

REGISTERED PROFESSIONAL ENGINEER
WILLIAM A. MACNA
No. M9757
ELECTRICAL
STATE OF CALIFORNIA
EXP. 06/30/23
REF. #15-8069

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

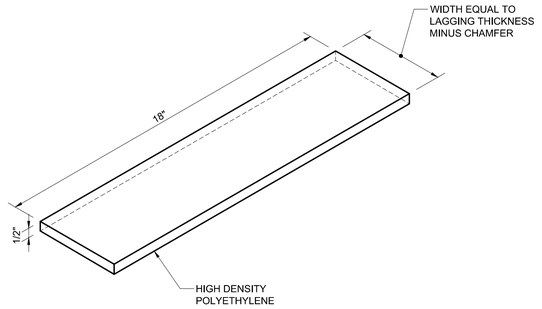
CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL
ELECTRICAL DETAILS

REFERENCES	DATE	1/28/22	SCALE AS SHOWN
FIELD BOOK:	DRAWN	J. MINKEL	ED-3.02
DRAWING #: ED-3.02	DESIGN	C. PATCHIN	VAULT NO.
	CHECKED	J. DEAN	SHEET 94 OF 96

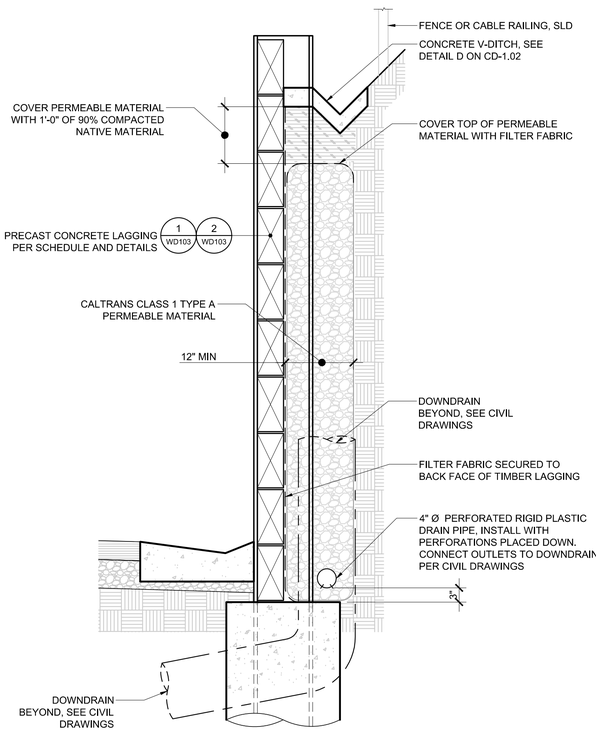
BID SET CONSTRUCTION DOCUMENTS - 1/28/22

Jan 26, 2022 - 4:39pm - mjohnson - K:\SCW\2019\15-0009\15-0009-1-3D\15-0009-1-3D-ED_2.dwg - Plotted By: jmohnson - Jan 28, 2022 - 4:43pm



SHIM DETAIL (BID ALT A) 3

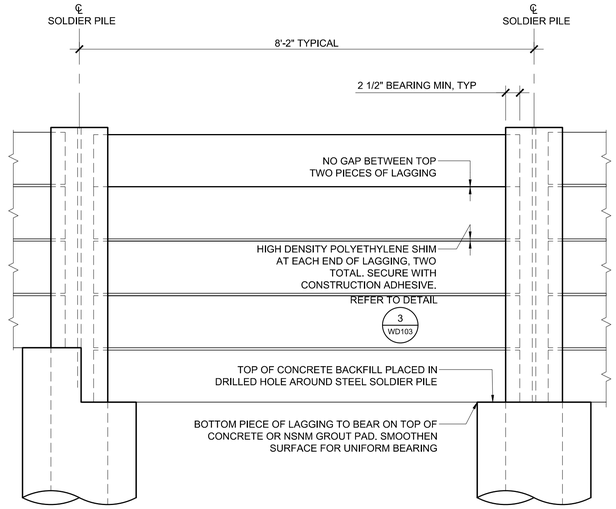
SCALE: 3" = 1'-0"



THIS IS THE ALTERNATE TO DETAIL 7/WD1.02 FOR PRECAST CONCRETE LAGGING (BID ALT A)

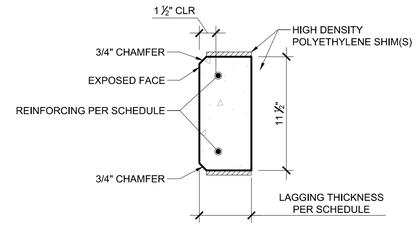
SOLDIER PILE WALL BACKDRAIN 7

SCALE: 3/4" = 1'-0"



PRECAST CONCRETE LAGGING ELEVATION (BID ALT A) 1

SCALE: 3/4" = 1'-0"



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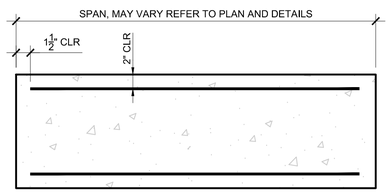


ELEVATION

PRECAST CONCRETE LAGGING UNIT (BID ALT A) 2

SCALE: 1 1/2" = 1'-0"

GENERAL DESIGN NOTES

SOIL PARAMETERS:

ACTIVE PRESSURE: Pa = 77 psf/ft 1.5:1 (cantilever walls)

APPARENT EARTH PRESSURE: P = 77H psf 1.5:1 (ground anchor walls)

SEISMIC LOADING: $10H^2$ lbs. acting at 0.33H (seismic loading is non-concurrent with live load)

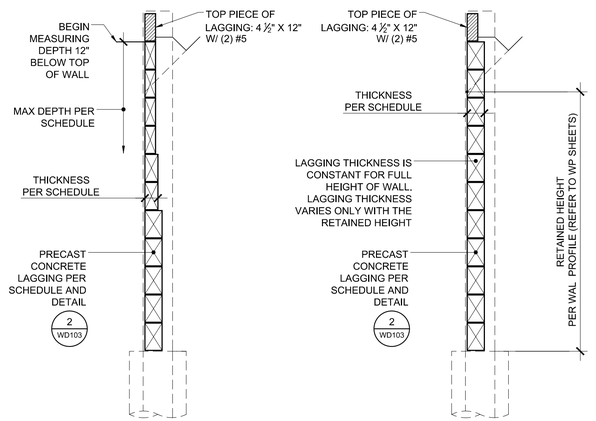
CONCRETE LAGGING:
f'c = 5,000 psi
Fy = 60,000 psi

COLOR AND FORM FINISH:
REFER TO SPECIAL PROVISIONS FOR COLOR AND FORM FINISH REQUIREMENTS.

(BID ALT A)
PRECAST CONCRETE LAGGING SCHEDULE

(1) WALL TYPE	H per profile	MAX DEPTH	MAX SPAN	LAGGING THICKNESS	REINFORCING
TYPE 1	N/A	4'-0"	8'-0"	4 ½"	(2) #5
TYPE 1	N/A	6'-0"	8'-0"	5 ½"	(2) #5
TYPE 1	N/A	8'-0"	8'-0"	7 ¼"	(2) #5
TYPE 1	N/A	10-0"	8'-0"	7 ¼"	(2) #5
TYPE 2	10-0"	ALL DEPTHS	8'-0"	7 ¼"	(2) #5
TYPE 2	12'-0"	ALL DEPTHS	8'-0"	9 ¼"	(2) #5
TYPE 2	14-0"	ALL DEPTHS	8'-0"	9 ¼"	(2) #5
-	-	-	-	-	-
TYPE 3	N/A	4'-0"	8'-0"	4 ½"	(2) #5
TYPE 3	N/A	6'-0"	8'-0"	5 ½"	(2) #5
TYPE 3	N/A	8'-0"	8'-0"	7 ¼"	(2) #5
TYPE 3	N/A	10-0"	8'-0"	9 ¼"	(2) #5

NOTES :
(1) PER WALL PROFILE. REFER TO WP SHEETS.
(2) REBAR SUPPORTS, CHAIRS, BOLSTERS OR DOBIES WHICH CONTACT THE EXPOSED FACE OF THE PRECAST CONCRETE LAGGING ARE NOT ALLOWED.



LAGGING FIGURE - TYPE 1 & 3 WALL

LAGGING FIGURE - TYPE 2 WALL

MME
CIVIL+STRUCTURAL ENGINEERING
224 Walnut Ave, Suite B Santa Cruz, CA 95060
Phone (831) 426-3186

REGISTERED PROFESSIONAL ENGINEER
DALE A. HENDRICKS
No. S3549
STRUCTURAL
STATE OF CALIFORNIA

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2
MULTI-USE TRAIL
PRECAST CONC. LAGGING DETAIL SHEET (BID ALTERNATE A)

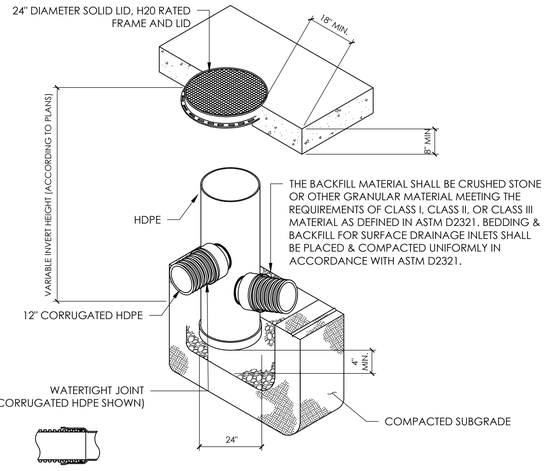
REFERENCES
FIELD BOOK:
DRAWING #:

DATE	1/28/22
DRAWN	PD/ED
DESIGN	PD
CHECKED	DH

SCALE AS SHOWN
WD-1.03
VAULT NO.
7079B
SHEET 95 OF 96

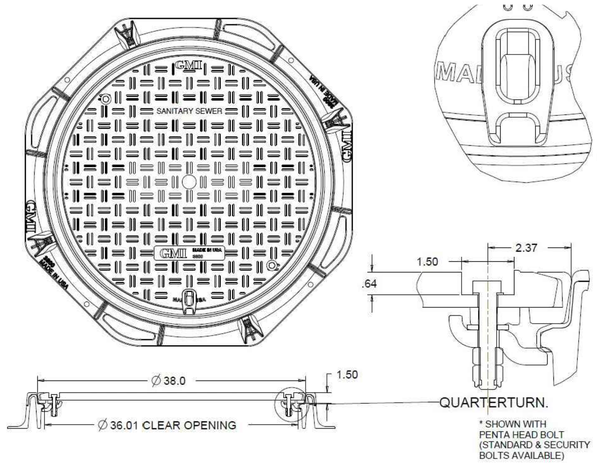
BID SET CONSTRUCTION DOCUMENTS - 1/28/22

24" DRAIN BASIN WITH SOLID LID



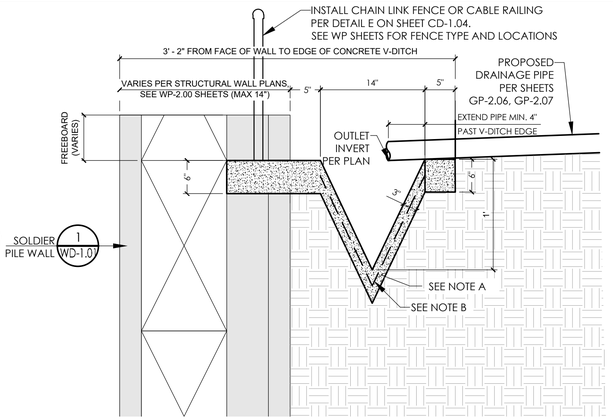
A. FRAME AND LID SHALL BE H20 RATED.
B. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS.
C. ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°.
D. SOLID COVER SHALL MEET H-20 LOAD RATING AND BE SLIP RESISTANT.
E. NUMBER OF CONNECTIONS, INVERT DEPTHS, AND DIRECTIONS PER PLANS.
F. FILL SUMP WITH MINOR CONCRETE AND SLOPE TOWARDS OUTLET AT 2% MINIMUM.

H 24" DRAIN BASIN AND SOLID LID



NOTES:
A. MANHOLE COVER SHALL BE SLIP RESISTANT.
B. FRAME AND COVER SHALL BE CAST IRON, H20 RATED.

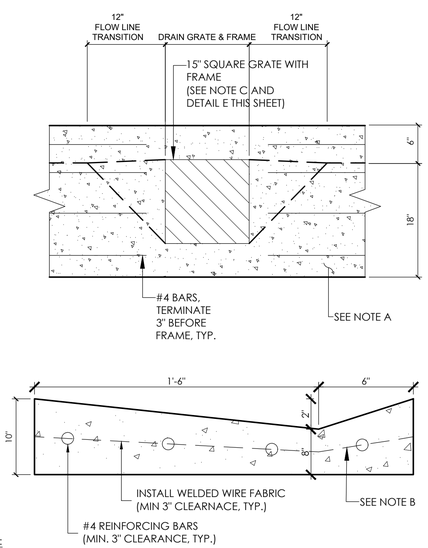
F HEAVY DUTY STORM DRAIN COVER



NOTES:

A. CONCRETE SHALL BE MINOR CONCRETE
B. REINFORCING SHALL BE 6" X 6" - W 1.4 X W 1.4 WELDED WIRE MESH OR APPROVED EQUAL

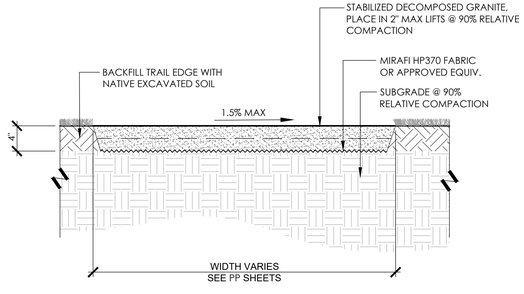
D CONCRETE V-DITCH



NOTES:

A. CONCRETE SHALL BE MINOR CONCRETE
B. REINFORCING SHALL BE 6" X 6" - W 1.4 X W 1.4 WELDED WIRE MESH OR APPROVED EQUAL
C. GRATE AND FRAME SHALL BE BICYCLE PROOF AND H-20 RATED
D. INSTALL GUTTER OVER 7" MIN CLASS 2 AB

B CONCRETE GUTTER



NOTES:
A. SUFFICIENT WATER SHALL BE ADDED TO DECOMPOSED GRANITE TO FACILITATE COMPACTION OF TRAIL WITH VIBRATORY ROLLER. FINAL COMPACTION DEPTH SHALL BE NO LESS THAN 4" DEEP.
B. 2 % MINIMUM SLOPE ON SUBGRADE.

G DECOMPOSED GRANITE TRAIL

1" = 1'-0"

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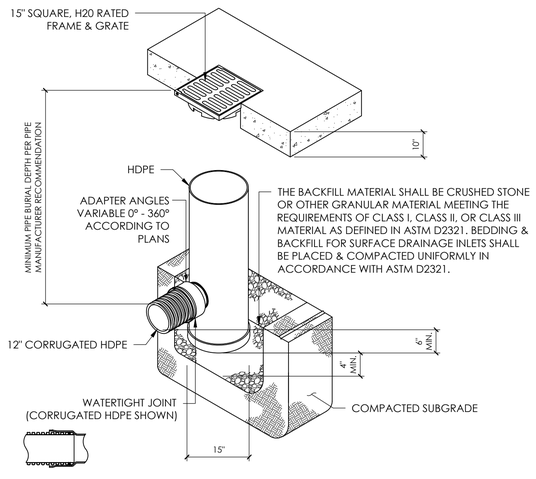
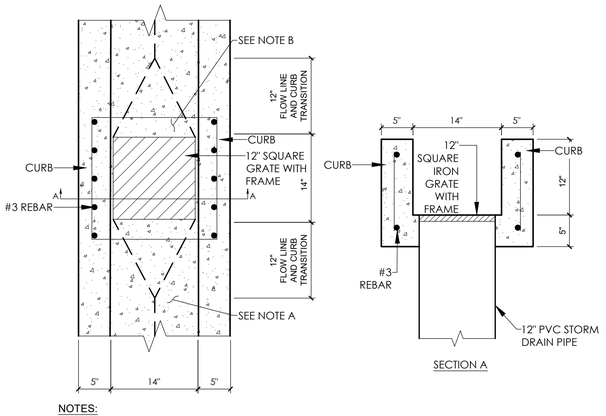


NOTES:
A. GRATE AND FRAME SHALL BE H-20 RATED AND BICYCLE PROOF.
B. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS.
C. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE, N-12 HP, AND PVC SEWER.
D. ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°.
E. NUMBER OF CONNECTIONS, INVERT DEPTHS, AND DIRECTIONS PER PLANS.
F. INSTALL 12", 45° DUAL WALL HDPE FITTING DOWNSTREAM OF OUTLET AS SHOWN ON PLANS WHEN CONNECTING TO WYE.

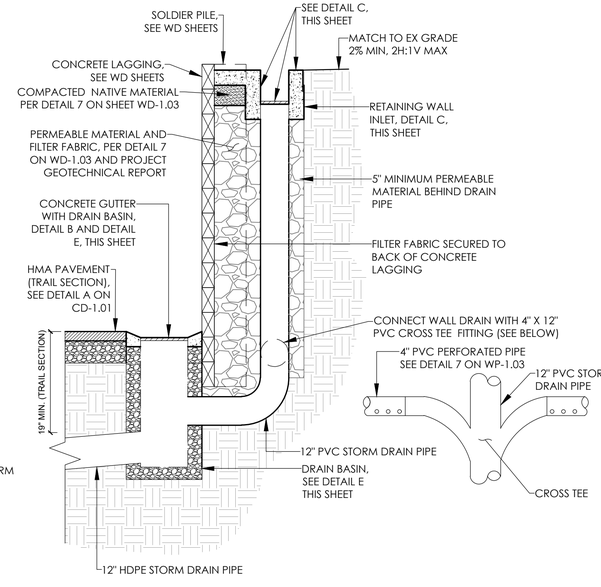
E 15" DRAIN BASIN AND GRATE



NOTES:

A. CONCRETE SHALL BE MINOR CONCRETE
B. AT END OF V-DITCH WRAP CURB. REBAR SIDE CURB PER THIS DETAIL.

C RETAINING WALL DOWNDRAIN INLET



THIS IS THE ALTERNATE TO DETAIL A / CD1.02 FOR RETAINING WALL DOWNDRAIN (BID ALT A)

A RETAINING WALL DOWNDRAIN

REGISTERED PROFESSIONAL ENGINEER — DARREN M.C. CHOW — 82708 — EXP 9/30/22 — CIVIL — STATE OF CALIFORNIA

rrm design group
rrmdesign.com | (949) 361-7950
32332 Camino Capistrano, Ste. 205
San Juan Capistrano, CA 92675

REVISIONS

CITY OF SANTA CRUZ
PUBLIC WORKS DEPARTMENT
809 Center Street, Room 201
Santa Cruz, CA 95060

RAIL TRAIL SEGMENT 7 PHASE 2 MULTI-USE TRAIL

CONSTRUCTION DETAILS (BID ALTERNATE A)

REFERENCES			
FIELD BOOK:	DATE	1/28/22	SCALE AS SHOWN
	DRAWN	KS	CD-1.08
DRAWING #: CD-0193-01_PH2	DESIGN	KS/MS	VAULT NO. 7079B
	CHECKED	DC	SHEET 96 of 96

BID SET CONSTRUCTION DOCUMENTS - 1/28/22

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