

**Meeting of the Central Valley Flood Protection Board
December 16, 2016
Permit Staff Report
City of Roseville
Harding Boulevard to Royer Park Bike Trail, Placer County**

1.0 – ITEM

Consider approval of Permit No. 19139 (Attachment B)

2.0 – APPLICANT

City of Roseville

3.0 – PROJECT LOCATION

The project is located along the right bank of Dry Creek south of Linda Drive, between Lincoln Street and Folsom Road, in the City of Roseville. (Dry Creek, Placer County, see Attachment A)

4.0 – PROJECT DESCRIPTION

The City of Roseville proposes to construct a new Class 1 bike trail; to construct two new retaining walls; to construct a new gabion wall; to place vegetated rock slope protection; to install a new metal rail; to authorize an existing 24 inch diameter reinforced concrete drainage pipe; and to construct a new rock energy dissipater for the drainage pipe.

5.0 – AUTHORITY OF THE BOARD

California Water Code § 8534, 8590 – 8610.5, and 8700 – 8710

California Code of Regulations Title 23 (Title 23):

- § 6, Need for a Permit

- § 112, Streams Regulated and Nonpermissible Work Periods
- § 121, Erosion Control
- § 123, Pipelines, Conduits, and Utility Lines
- § 125, Retaining Walls
- § 126, Fences and Gates
- § 132, Bicycle Trails
- § 137, Miscellaneous Encroachments

6.0 – PROJECT ANALYSIS

The City of Roseville is proposing to construct a new 500 foot long, 10 foot wide Class 1 bike trail that will connect two existing bike trails along Dry Creek, which is a regulated stream. The proposed work includes the construction of two (2) new 6 foot tall modular concrete block retaining walls (each approximately 100 feet long), a new gabion wall with approximately 90 cubic yard of fill, placement of approximately 6 cubic yards of new vegetated rock slope protection adjacent to the new gabion wall on the upstream and downstream end, installation of an approximate 115 foot new metal rail, authorization of an existing 24 inch diameter reinforced concrete drainage pipe that will run perpendicular under the new bike trail, and construction of a new 3 cubic yard rock energy dissipater for the drainage pipe. All construction activities will be located along the right bank of Dry Creek in the City of Roseville. The proposed work complies with all applicable Title 23 standards.

6.1 – Hydraulic Analysis

The U.S. Army Corps of Engineers (USACE) Hydrologic Engineering Center's River Analysis System (HEC-RAS) model was used to assess the potential hydraulic impacts of the project at the 100 year event (12,760 cfs). The modeling results showed a global decrease in water surface elevation for the proposed project since a lower hydraulic roughness coefficient (N-value) was assumed for the bike trail and because the trail does not create any impediments to flow. Based on the analysis of the proposed

project, velocities in the channel will be slightly decreased due to the minor increase in flow area.

6.2 – Geotechnical Analysis

There is no deep earthwork involved with the project and there are no levees along Dry Creek. Therefore a geotechnical analysis was not required for this project.

7.0 – AGENCY COMMENTS AND ENDORSEMENTS

The comments and endorsements associated with this project, from all pertinent agencies are shown below:

- The USACE 33 U.S.C. 408 approval letter has been received for this application. The USACE Sacramento District Engineer approves the request to alter the Federal flood risk reduction project, subject to conditions. The letter is incorporated into the permit as Exhibit A.

8.0 – CEQA ANALYSIS

Board staff has prepared the following California Environmental Quality Act (CEQA) determination:

The Board, acting as a responsible agency under CEQA, has independently reviewed the Draft Environmental Impact Report (DEIR, SCH No. 2000122078, February 2004), Final Environmental Impact Report (FEIR, SCH No. 2000122078, June 2004), the Statement of Overriding Considerations, and the Mitigation Monitoring Program (MMP) for the Harding Boulevard to Royer Park Bikeway Project prepared by the lead agency, the City of Roseville. These documents, including project design, may be viewed or downloaded from the Central Valley Flood Protection Board (Board) website at: <http://cvfpcb.ca.gov/event/december-2016-board-meeting/> under the link for this agenda item. These documents are also available for review in hard copy at the Board and the City of Roseville, Office of the City Clerk.

The City of Roseville, as the lead agency, determined that the project described in the FEIR would have a significant effect on the environment and adopted Resolution No. 04-246 on July 7, 2004 and filed a Notice of Determination on July 8, 2004 with the City of Roseville City Clerk.

Based on its independent review of the FEIR, the Board finds that although the proposed project could have a potentially significant effect on the environment, revisions have been made to the project and/or agreed to by the project proponent that reduce the environmental impacts to less than significant. The Board finds that there are no direct or indirect environmental effects from the bike trail project which have not been previously addressed by the DEIR or FEIR. The City of Roseville found that significant and unavoidable cumulative impacts would result from the project; however these impacts are related to an incremental increase in cumulatively significant impacts when considering the City of Roseville's Bike Master Plan. Pursuant to CEQA, the Board as a responsible agency, is responsible for mitigating and avoiding only the direct and indirect environmental effects of those parts of the project which it decides to carry out, finance, or approve [CEQA Guidelines Section 15096(g); Public Resources Code § 21002.1(d)].

The project proponent has incorporated mandatory mitigation measures into the project plans to avoid identified impacts or to mitigate such impacts to a point where no significant impacts will occur. Moreover, such changes or alterations are within the responsibility and jurisdictions of another public agency, the City of Roseville, and such changes have been adopted by that agency. These mitigation measures are included in the project proponent's FEIR and address impacts to air quality, biological resources, cultural resources, geology, noise, traffic and circulation. The description of the mitigation measures are further described in the MMP and certified FEIR.

The documents and other materials which constitute the record of the Board's proceedings in this matter are in the custody of the Executive Officer, Central Valley Flood Protection Board, 3310 El Camino Ave., Ste. 170, Sacramento, California 95821.

9.0 – CALIFORNIA WATER CODE SECTION 8610.5 CONSIDERATIONS

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on facilities of the State Plan of Flood Control (SPFC), and consistency of the proposed project with the Central Valley Flood Protection Plan (CVFPP) as adopted by Board Resolution 2012-25 on June 29, 2012:

The proposed project involves minor surface earthwork and erosion protection. The project also decreases water surface elevations and is located more than 15 miles upstream any SPFC facilities; therefore, the proposed project is expected to result in no adverse effect on any SPFC facilities and is consistent with the CVFPP.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

The proposed project does not change the current hydraulic conditions significantly and will improve the hydraulic conditions of Dry Creek. Therefore, there are no expected adverse effects to the proposed project from reasonable projected future events.

10.0 – STAFF RECOMMENDATION

Staff Recommends that the Board:

Adopt:

- The CEQA findings:

Approve:

- Encroachment Permit No. 19139 in substantially the form provided; and

Direct:

- The Executive Officer to take the necessary actions to execute the permit and file a Notice of Determination pursuant to CEQA with the State Clearinghouse.

11.0 – LIST OF ATTACHMENTS

- A. Location Maps and Photos
- B. Draft Permit No. 19139 BD

C. Site Plan

Design Review:	Mike Thao
Environmental Review:	Ruth Darling, Senior Environmental Scientist Specialist
Document Review:	Gary W. Lemon, PE, Permitting Section Chief
	Michael Wright, PE, Acting Operations Branch Chief
	Mitra Emami, PE, Acting Chief Engineer
Legal Review:	Kanwarjit Dua, Board Counsel

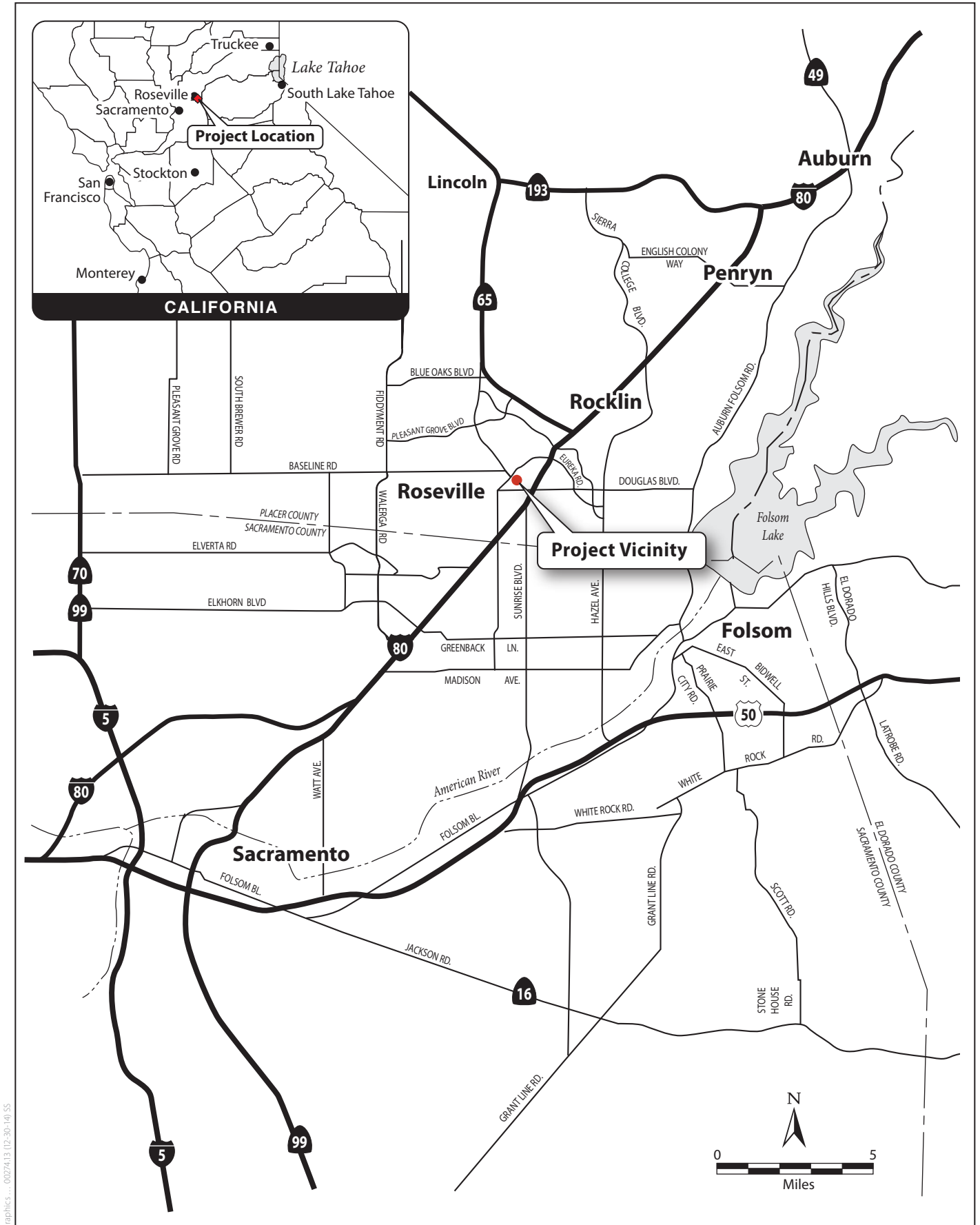


Figure 1
Regional Location

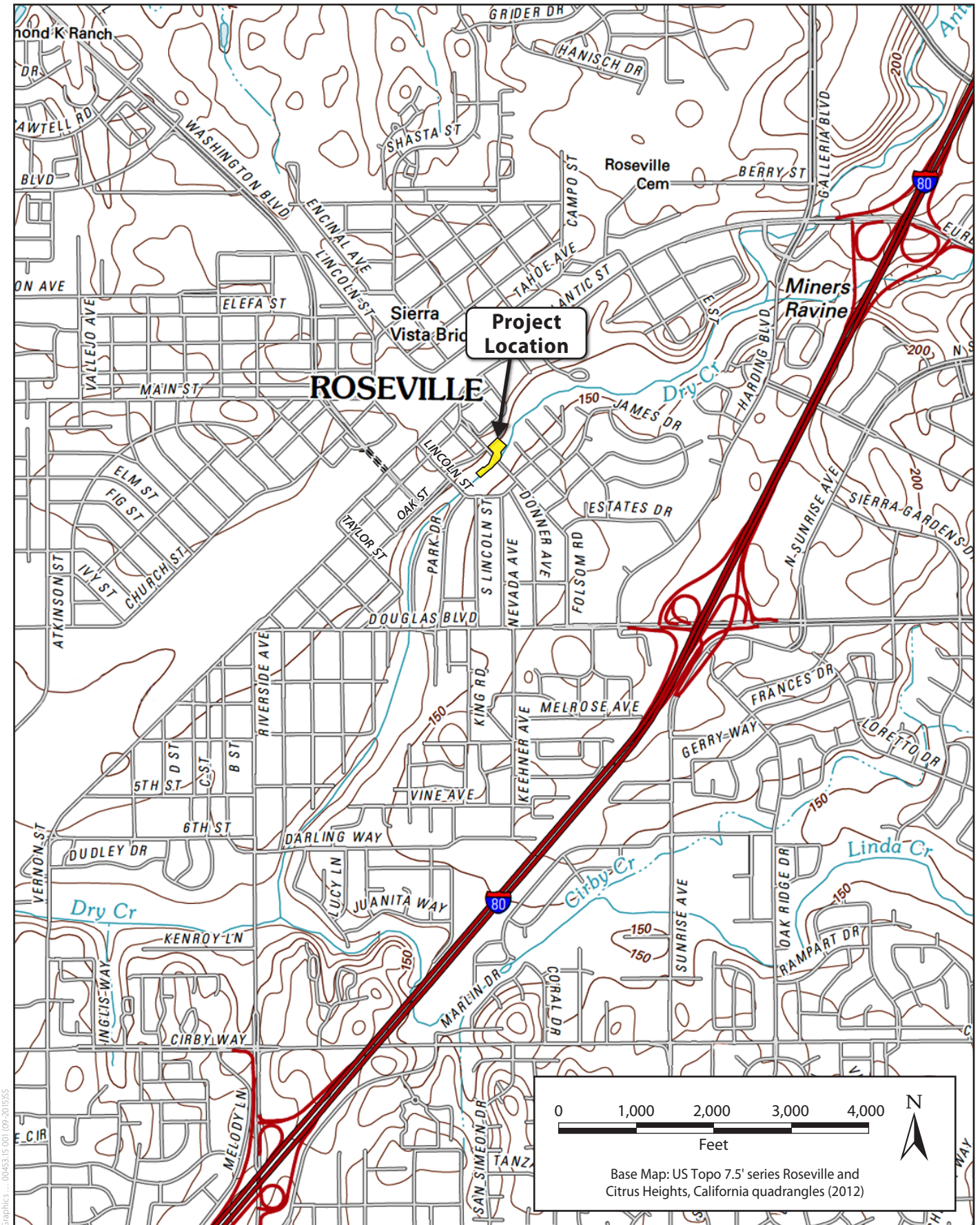


Figure 2
Project Location



Photo1. Looking North at Trail Alignment Northeast of Bridge



Photo 2. Looking Northeast at Connection Point to Existing Trail



Photo 3. Looking Northeast at Trail and Gabbion Wall (left side of tree)



Photo 4. Looking Southwest at Existing Road along Trail



Photo 5. Facing North at Existing Gabbion Wall under Folsom Rd Bridge

STATE OF CALIFORNIA
THE RESOURCES AGENCY
THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 19139 BD

This Permit is issued to:

City of Roseville
311 Vernon Street
Roseville, California 95678

To construct a new 10-foot wide Class 1 bike trail approximately 500-foot long connecting two existing bike trails; to construct two (2) new 6-foot tall modular concrete block retaining walls (each approximately 100-feet long); to construct approximately 90-cubic-yard of new gabion wall; to place approximately 6-cubic-yards of new vegetated rock slope protection adjacent to the new gabion wall on the upstream and downstream end; to install an approximate 115-foot new metal rail; to authorize an existing 24-inch diameter reinforced concrete drainage pipe that will run perpendicular under the new bike trail and to construct a new 3-cubic-yard rock energy dissipater for the drainage pipe. All construction activities will be located along the right bank of Dry Creek in the City of Roseville.

The project is located south of Linda Drive, between Lincoln Street and Folsom Road, in the City of Roseville, at 38.74900°N -121.28100°W, Dry Creek, Placer County, CA.

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated: _____

Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 19139 BD

LIABILITY AND INDEMNIFICATION

THIRTEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board (Board) and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

FOURTEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Board and the State, safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

FIFTEEN: The Board and Department of Water Resources shall not be held liable for any damages to the permitted encroachment(s) resulting from releases of water from reservoirs, flood fight, operation, maintenance, inspection, or emergency repair.

AGENCY CONDITIONS

SIXTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Board.

SEVENTEEN: Permittee shall pay to the Board, an inspection fee(s) to cover inspection cost(s), including staff and/or consultant time and expenses, for any inspections before, during, post-construction, and regularly thereafter as deemed necessary by the Board.

EIGHTEEN: The permittee shall be responsible for the repair of any damages to the project levee, channel, banks, floodway, or other flood control facilities due to construction, operation, or maintenance of the proposed project.

NINETEEN: The permittee shall comply with all conditions set forth in the letter from the Department of the Army (U.S. Army Corps of Engineers, Sacramento District) dated November 22, 2016, which is attached to this permit as Exhibit A and is incorporated by reference.

TWENTY: The Board reserves the right to add additional, or modify existing, conditions when there is a change in ownership and/or maintenance responsibility of the work authorized under this permit.

PRE-CONSTRUCTION

TWENTY-ONE: Upon receipt of a signed copy of the issued permit the permittee shall contact the Board by telephone at (916) 574-0609, and submit the enclosed postcard, to schedule a preconstruction conference with the inspector that is assigned to your project. Failure to do so at least 10 working days prior to start of work may result in a delay of the project.

CONSTRUCTION

TWENTY-TWO: No construction work of any kind shall be done during the flood season from November 1 to April 15 without prior approval of the Board. Failure to submit a Time Variance Request to the Board at least 10 working days prior to November 1 may result in a delay of the project.

TWENTY-THREE: Pipelines, conduits, and utility lines installed below the low-water channel shall be buried with a minimum of 5 feet of cover.

TWENTY-FOUR: Pipelines, conduits, and utility lines installed within the overflow area shall be buried with a minimum of 2 feet of cover.

TWENTY-FIVE: Open-trench backfill to cover pipelines, conduits, and utility lines shall be backfilled and compacted to a density equal to that of the adjacent undisturbed material.

TWENTY-SIX: Retaining walls greater than three (3) feet in height must be designed by a licensed civil engineer.

TWENTY-SEVEN: If, in the opinion of the Board, the fence and gate become unnecessary due to changes in location of public access points or construction of other gated fences, the permittee agrees to remove the fence and gate at the request of the Board and at permittee's cost and expense.

TWENTY-EIGHT: Repair and/or replacement of the bicycle trail, should it become damaged due to emergency flood fight, levee or floodway maintenance, or necessary improvement activities on the flood control project feature, shall be made by and at the sole expense of the permittee, or in accordance with the agreement for maintenance between the permittee and the public agency.

TWENTY-NINE: The Board and local flood control maintaining agency retain the right to temporarily close the bicycle trail for improvement, maintenance, and emergency flood fight activities.

THIRTY: Maintenance of the bicycle trail shall be the responsibility of the permittee unless the permittee submits evidence of an agreement by which a public agency has assumed the responsibility of maintaining the bicycle trail. The trail shall be maintained to a level that is safe for bicycle traffic and acceptable to the local flood control maintaining agency and the Board.

POST-CONSTRUCTION

THIRTY-ONE: All debris generated by this project shall be properly disposed of outside the floodway.

THIRTY-TWO: The project area shall be restored to at least the condition that existed prior to commencement of work.

OPERATIONS AND MAINTENANCE

THIRTY-THREE: After each period of high water, debris that accumulates at the site shall be completely removed from the floodway.

THIRTY-FOUR: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Board, Department of Water Resources, or any other agency responsible for maintenance and shall, at all times, allow officials from these agencies to access the levee, levee slope, and any adjacent areas as necessary for flood control.

THIRTY-FIVE: The permitted encroachment(s) shall not interfere with operation and maintenance of the flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation or maintenance of the flood control project to interfere, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Board or Department of Water Resources. If the permittee does not comply, the Board may modify or remove the encroachment(s) at the permittee's expense.

PROJECT ABANDONMENT / CHANGE IN PLAN OF FLOOD CONTROL

THIRTY-SIX: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Board at the permittee's or successor's cost and expense.

THIRTY-SEVEN: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if in the discretion of the Board the removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if the project is not maintained or is damaged by any cause. If the permittee does not comply, or in the event of an emergency, the Board may remove the encroachment(s) at the permittee's expense.

END OF CONDITIONS



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

Flood Protection and Navigation Section (19139)

NOV 22 2016

Ms. Leslie M. Gallagher
Executive Officer
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 151
Sacramento, CA 95821

Dear Ms. Gallagher:

We have reviewed permit application number 19139 submitted by City of Roseville. This project includes constructing a new 10 foot wide Class 1 bike trail approximately 500 foot long connecting two existing bike trails; constructing two (2) new 6 foot tall modular concrete block retaining walls (each approximately 100 feet long); constructing approximately 90 cubic yards of new gabion wall; placing approximately 6 cubic yards of new vegetated rock slope protection adjacent to the new gabion wall on the upstream and downstream ends; installing approximately 115 feet of new metal rail; to authorize an existing 24 inch diameter reinforced concrete drainage pipe that will run perpendicular under the new bike trail; and constructing a new 3 cubic yard rock energy dissipater for the drainage pipe. The project is located along the right bank of Dry Creek south of Linda Drive, between Lincoln Street and Folsom Road, in the City of Roseville, at 38.7490°N 121.2810°W NAD83, Placer County, CA.

The District Engineer has no comments or recommendations regarding flood control because the proposed work does not affect a federally constructed project.

A Section 10 and/or Section 404 permit (SPK-2007-00047) has been issued for this work.

A copy of this letter is being furnished to Mr. Don Rasmussen, Chief, Flood Project Integrity and Inspection Branch, 3310 El Camino Avenue, Suite 200, Sacramento, CA 95821.

Sincerely,

A handwritten signature in dark ink, appearing to read "Ryan M. Larson", is written over a printed name.

Pol Ryan Larson, P.E.

Chief, Flood Protection and Navigation Section

INDEX OF SHEETS

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6-7	C-1 TO C-2	CONSTRUCTION DETAILS
8	SS-1	SIGNING AND STRIPING
9-10	R-1 TO R-2	RETAINING WALLS
11	TR-1	OAK TREE REMOVAL AND PRESERVATION PLAN

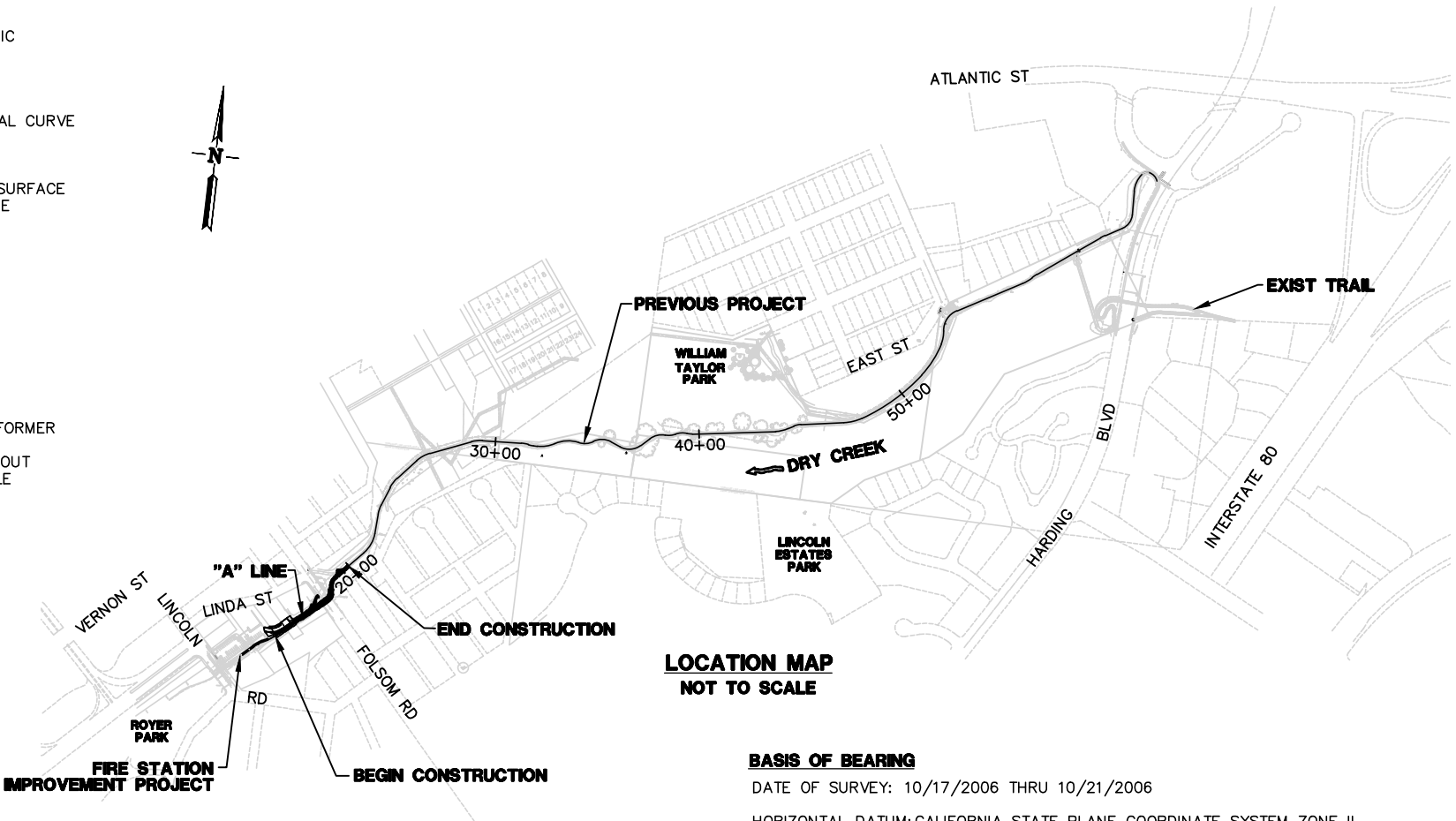
ABBREVIATIONS

AB - AGGREGATE BASE	LAND - LANDSCAPE
AC - ASPHALT CONCRETE	LT - LEFT
AHD - AHEAD	LP - LOW POINT
ARV - AIR RELEASE VALVE	MAX - MAXIMUM
BB - BEGIN BRIDGE	MBGR - METAL BEAM GUARD RAIL
BC - BEGIN CURVE	MH - MANHOLE
BEG - BEGIN	MIN - MINIMUM
BK - BACK	OD - OUTSIDE DIAMETER
BVC - BEG VERTICAL CURVE	OG - ORIGINAL GROUND
BOW - BOTTOM OF WALL	OH - OVERHEAD UTILITY
BW - BACK OF WALK	PCC - PORTLAND CEMENT CONCRETE
C - TOP OF CUT	P&C - POST AND CABLE
C-C - CENTER TO CENTER	PG - PROFILE GRADE
C&G - CURB AND GUTTER	PG&E - PACIFIC GAS AND ELECTRIC
CATVB - CABLE TELEVISION BOX	P - PROPERTY LINE
CB - CATCH BASIN	POC - POINT ON CURVE
CCP - STEEL CYLINDER CONCRETE PIPE	PP - POWER POLE
CL - CENTER LINE	PRC - POINT OF REVERSE CURVE
CL - CLASS	PRVC - POINT OF REVERSE VERTICAL CURVE
CLF - CHAIN LINK FENCE	PT - POINT
CMP - CORRUGATED METAL PIPE	PUE - PUBLIC UTILITY EASEMENT
CONC - CONCRETE	PVC - POLYVINYL CHLORIDE
CONST - CONSTRUCTION	Q100 - 100 YEAR FLOOD WATER SURFACE
CR - CURB RETURN	RCP - REINFORCED CONCRETE PIPE
CST - CONSTRUCTION STANDARDS	RED - ROCK ENERGY DISSIPATOR
DI - DRAIN INLET	RP - RADIUS POINT
DWY - DRIVEWAY	RSP - ROCK SLOPE PROTECTION
E - ELECTRIC LINE	RT - RIGHT
EB - END BRIDGE	R/W - RIGHT OF WAY
EC - END CURVE	LOL - LAYOUT LINE
ELEV, EL - ELEVATION	SE - SLOPE EASEMENT
EP - EDGE OF PAVEMENT	SD - STORM DRAIN
ES - EDGE OF SHOULDER	SDMH - STORM DRAIN MANHOLE
ESA - ENVIRONMENTALLY SENSITIVE AREA	SE - SLOPE EASEMENT
ESMT - EASEMENT	SHLD - SHOULDER
ETW - EDGE OF TRAVELWAY	SL - STREET LIGHT
EVC - END VERTICAL CURVE	SMT - SURFACE MOUNTED TRANSFORMER
EXIST, EX - EXISTING	SS - SANITARY SEWER LINE
F - TOE OF FILL	SSCO - SANITARY SEWER CLEAN-OUT
FC - FACE OF CURB	SSMH - SANITARY SEWER MANHOLE
FES - FLARED END SECTION	STD - STANDARD
FG - FINISH GRADE	SW - SIDEWALK
FL - FLOW LINE	T - TELEPHONE LINE
G - GAS LINE	TBC - TOP BACK OF CURB
GB - GRADE BREAK	TCE - TEMP CONST EASEMENT
GM - GAS METER	TEMP - TEMPORARY
GP - GUARD POST	TG - TOP OF GRATE
GV - GAS VALVE	TP - TELEPHONE POLE
HCR - HANDICAP RAMP	TW - TOP OF WALL
HP - HIGH POINT	TRANS - TRANSITION
HMA - HOT MIX ASPHALT	UG - UNDERGROUND UTILITY
ID - INSIDE DIAMETER	VC - VERTICAL CURVE
INV - INVERT	VG - VALLEY GUTTER
IRR - IRRIGATION BOX	YR - YEAR
JT - JOINT TRENCH	W - WATER MAIN

NOTE:

UNLESS OTHERWISE RESTRICTED BY THE PROJECT SPECIFICATIONS, CONSTRUCTION SHALL BE RESTRICTED TO THE HOURS BETWEEN 7:00 A.M. AND 7:00 P.M. MONDAY THROUGH FRIDAY, AND BETWEEN THE HOURS OF 8:00 A.M. AND 8:00 P.M. SATURDAY AND SUNDAY. ALL CONSTRUCTION EQUIPMENT SHALL BE FITTED WITH FACTORY INSTALLED MUFFLING DEVICES AND THAT ALL CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED IN GOOD WORKING ORDER.

CITY OF ROSEVILLE
IMPROVEMENT PLANS FOR
ROYER PARK TO HARDING BLVD.
BIKE TRAIL
SEGMENT 3



LOCATION MAP
NOT TO SCALE

BASIS OF BEARING

DATE OF SURVEY: 10/17/2006 THRU 10/21/2006

HORIZONTAL DATUM: CALIFORNIA STATE PLANE COORDINATE SYSTEM ZONE II
NAD83(1991.35) CA HPGN

VERTICAL DATUM: NGVD29 BASED ON CITY OF ROSEVILLE BENCH MARK NO. 68.
3-1/4" BRASS CAP STAMPED LS4796, JAN 1995, LOCATED AT THE SW SIDE OF LINCOLN ST., AT THE NW CORNER OF LINCOLN ST. BRIDGE. ELEV. 148.78
N 2035343.34 E 6766534.72

ALL PROPERTY LINES SHOWN ARE APPROXIMATE AND NEED TO BE VERIFIED BY FIELD SURVEY.

ORIGINAL FIELD SURVEYS WERE COMPLETED BETWEEN NOVEMBER 1994 AND JULY 1995.
ADDITIONAL DENSIFICATION FIELD SURVEY ALONG TRAIL COMPLETED IN OCT 2000 AND JUNE 2011.

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	STORM DRAIN	
	SANITARY SEWER	
	WATER	
	MANHOLE	
	ROADSIDE SIGN	
	MONUMENT	
	POWER POLE/JOINT POLE	
	UTILITY VAULT	
	STREET LIGHT	
	FENCE	
	BARRICADE	
	CURB LINE	
	EASEMENT LINE	
	TREE	
	SLOPE & DIRECTION	
	SPOT ELEVATION	
	EARTH DITCH	
	TYPE III BARRICADE	
	CUT LINE	
	FILL LINE	
	HINGE	

CITY AND UTILITY CONTACT INFORMATION

CONTACT	UTILITY	REPRESENTATIVES	PHONE
-	U.S.A.	U.S.A.	800-642-2444
-	POLICE	CITY OF ROSEVILLE	(916) 774-5000
PATRICK CHEW	FIRE	CITY OF ROSEVILLE	(916) 774-5823
JOE MCKINNEY	ELECTRIC	CITY OF ROSEVILLE	(916) 774-5691
JERRY DANKBAR	DRAINAGE	CITY OF ROSEVILLE	(916) 774-5790
KEN GLOTZBACH	ENVIRONMENTAL UTILITIES/SEWER	CITY OF ROSEVILLE	(916) 746-1820
JIM MULLIGAN	ENVIRONMENTAL UTILITIES/WATER	CITY OF ROSEVILLE	(916) 774-5668
LARRY MONTGOMERY	TELECOM	CONSOLIDATED COMMUNICATIONS	(916) 786-1217
SUSAN SMITH	GAS, ELECTRIC	PG&E	(530) 889-3261
STEVE ABELIA	CABLE T.V.	COMCAST	(916) 830-6757

APPROVAL RECOMMENDED BY:

JASON SHYKOWSKI
PRINCIPAL ENGINEER
CITY OF ROSEVILLE

APPROVED BY:

RHON L. HERNDON
DIRECTOR OF PUBLIC WORKS
CITY OF ROSEVILLE

APPROVED BY:

DALE OLSEN
PRINCIPAL ENGINEER
CITY OF ROSEVILLE ENVIRONMENTAL UTILITIES DEPT.

SUBMITTED BY:

MATTHEW KORVE
ENGINEER IN RESPONSIBLE CHARGE
URS CORP.

PROGRESS PRINT

NO.	REVISIONS	BY	DATE	BENCH MARK ELEVATION _____ DATUM _____ DESCRIPTION _____	DESIGN BY : MJK DRAWN BY : CJ CHECKED BY : SK SCALE : NOT TO SCALE DATE : 10-26-16 PROJ NO. : 27560620	DATE	URS ENGINEERING • PLANNING • SURVEYING 2020 L STREET, SUITE 400 SACRAMENTO, CA 95811 (916) 414-5800	CITY OF ROSEVILLE CALIFORNIA	ROYER PARK TO HARDING BLVD. BIKE TRAIL	TITLE SHEET	1 OF 11
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CITY OF ROSEVILLE PUBLIC IMPROVEMENTS REQUIREMENTS
GENERAL NOTES

1. THE CITY OF ROSEVILLE IS A MEMBER OF THE UNDERGROUND SERVICE ALERT (U.S.A.) ONE-CALL SYSTEM. THE CONTRACTORS SHALL NOTIFY THE U.S.A. CENTER 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK BY CALLING 811.
2. THE CONTRACTOR SHALL MARK IN WHITE PAINT ALL AREAS TO BE EXCAVATED PRIOR TO CONTACTING U.S.A. ANY AREAS NOT MARKED WILL NOT BE SUBJECT TO U.S.A., AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM EXCAVATION.
3. THE CONTRACTOR SHALL EXPOSE AND VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION OF THE NEW IMPROVEMENTS CONNECTING TO OR IN THE VICINITY OF THE SAME.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS ON THE JOB SITE.
5. HOT MIX ASPHALT SURFACE SHALL BE CUT TO A NEAT, STRAIGHT LINE PARALLEL WITH THE STREET CENTERLINE AND THE EXPOSED EDGE SHALL BE TACKED WITH EMULSION PRIOR TO PAVING. THE EXPOSED BASE MATERIAL SHALL BE GRADED, RECOMPACTED, AND RESEALED PRIOR TO PAVING.
6. ANY EXISTING CONCRETE SURFACE TO BE REMOVED SHALL BE SAW CUT TO A NEAT, STRAIGHT LINE.
7. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN THAT SHALL BE APPROVED BY ENGINEERING DIVISION BEFORE START OF WORK IN RIGHT-OF-WAY AND SHALL BE IN ACCORDANCE WITH 2012 CALIFORNIA MUTCD. AT LEAST ONE LANE IN EACH DIRECTION SHALL REMAIN OPEN TO TRAFFIC UNLESS OTHERWISE SHOWN ON THE PLANS. TRAFFIC CONTROL HOURS ARE SUBJECT TO LIMITATION BY THE CITY. TRAFFIC CONTROL WITH LANE CLOSURES THAT AFFECT TRAFFIC FLOW MAY REQUIRE NIGHT WORK. IF, AS A PART OF TRAFFIC CONTROL MEASURES, A ROADWAY CLOSURE HAS BEEN APPROVED, THE CONTRACTOR SHALL NOTIFY ENGINEERING DIVISION 72 HOURS IN ADVANCE OF SETTING UP THIS CLOSURE.
8. DRAIN INLETS NOT WITHIN A PAVED AREA SHALL HAVE A 12" WIDE COLLAR OF 6" THICK P.C.C.
9. ALL UNDERGROUND UTILITIES WITHIN EXISTING OR PROPOSED CITY OF ROSEVILLE EASEMENTS SHALL REQUIRE A MINIMUM OF 90% COMPACTION ON THE TRENCH BACKFILL. COMPACTION OF BACKFILL BY JETTING IS NOT PERMITTED IN CITY OF ROSEVILLE RIGHT OF WAY AREAS OR WITHIN DEDICATED RECLAIMED WATER, STORM, SEWER OR WATER EASEMENTS AND MAINS.
10. THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION MEETING ONE-WEEK PRIOR TO STARTING WORK. MEMBERS OF THE CITY OF ROSEVILLE ENGINEERING DIVISION, ENVIRONMENTAL UTILITIES DEPARTMENT AND ALL OTHER UTILITY REPRESENTATIVES SHALL BE NOTIFIED BY THE CONTRACTOR AS TO THE DATE AND LOCATION OF THE MEETING.
11. PRIOR TO EXCAVATION OF TRENCHES 5 FEET OR DEEPER, THE CONTRACTOR SHALL SUBMIT TO THE PUBLIC WORKS DEPARTMENT OR ENVIRONMENTAL UTILITIES DEPARTMENT INSPECTOR A COPY OF THE COMPANY'S ANNUAL CALOSHA TRENCHING PERMIT AND A COPY OF THE COMPANY'S LETTER INFORMING CALOSHA OF THE TIME THE TRENCHING IS COMMENCING AND THE LOCATION OF THE WORK.
12. ALL TRAFFIC STRIPES, ARROWS, AND PAVEMENT MARKINGS WITHIN THE PUBLIC RIGHT OF WAY SHALL BE CONSTRUCTED WITH THERMOPLASTIC MATERIAL TO THE SPECIFICATIONS SET FORTH IN THE 2012 CALIFORNIA MUTCD. NON-REFLECTIVE PAVEMENT MARKERS SHALL CONSIST OF CERAMIC MARKERS ONLY CONFORMING TO THE 2012 CALIFORNIA MUTCD.
13. THE CONTRACTOR SHALL TAKE EXTREME CARE TO PROTECT EXISTING SITE AND ADJACENT IMPROVEMENTS FROM DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR MAKE REPLACEMENT OF ALL CRACKED AND OTHERWISE PRE-EXISTING DAMAGED PUBLIC IMPROVEMENTS ALONG THE FRONTAGE OF THE PROJECT SITE AND ANY DAMAGE RESULTING FROM CONSTRUCTION TO CURRENT CITY STANDARDS AND AT THEIR OWN EXPENSE. THE EXTENT OF THE REPAIRS SHALL BE DETERMINED BY THE PUBLIC WORKS INSPECTOR AND SHALL BE COMPLETED PRIOR TO THE CITY ACCEPTANCE OF THE IMPROVEMENTS.

TREE PRESERVATION

- 1.GRADING AROUND TREES TO BE LIMITED TO OUTSIDE THE DRIPLINE. ANY TREE WELL GRADED SHOULD BE DRAINED TO SOME OUTFALL OR SWALE.
- 2.THE FOLLOWING CONDITIONS SHALL APPLY TO ENSURE THE PRESERVATION OF TREES:
- A. EACH TREE OR GROUP OF TREES TO BE SAVED SHALL BE FENCED BY A TEMPORARY FENCE (TYPE ESA) PRIOR TO ANY GRADING OR MOVEMENT OF HEAVY EQUIPMENT OR ISSUANCE OF ANY PERMITS.
- B. FENCING SHALL BE LOCATED ONE FOOT (1') OUTSIDE THE DRIPLINE OF THE TREE OR TREES AS SHOWN ON PLANS.
- C. SIGNS SHALL BE POSTED ON ALL SIDES OF SAID FENCES STATING:

WARNING:
THIS FENCE SHALL NOT BE REMOVED
OR RELOCATED WITHOUT WRITTEN
AUTHORIZATION FROM THE
PLANNING DEPARTMENT

- 3.THE GRADING PLAN FOR THE PROJECT HAS BEEN DESIGNED FOR NO GRADING TO OCCUR WITHIN THE DRIPLINE OF ANY OAK TREE UNLESS SPECIFICALLY APPROVED BY PLANNING DEPARTMENT AND SHOWN ON THESE PLANS. NO GRADES SHALL BE MODIFIED WITHOUT THE APPROVAL OF THE CIVIL ENGINEER AND THE CITY OF ROSEVILLE.
- 4.NO TRENCHING SHALL OCCUR BENEATH THE DRIPLINE OF ANY OAK TREE TO BE SAVED UNLESS STATED ON THESE PLANS "TRENCHING UNDER THIS TREE IS APPROVED".
- 5.PARKING OF VEHICLES AND EQUIPMENT OR STORAGE OF MATERIALS UNDER THE DRIPLINE OF TREES SHALL NOT OCCUR AT ANY TIME.

EROSION CONTROL

1. THE STATE'S GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY 2009-0009-DWQ REQUIRES THE PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR SITES WITH SOIL DISTURBANCES GREATER THAN OR EQUAL TO ONE ACRE, OR FROM SITES SMALLER THAN ONE ACRE IF THE CONSTRUCTION ACTIVITY IS PART OF A LARGER PLAN OF DEVELOPMENT OR SALE THAT DISTURBS ONE ACRE OR MORE. CONSTRUCTION ACTIVITY SHALL NOT COMMENCE, NOR A PRE-CONSTRUCTION MEETING PERMITTED TO BE SCHEDULED, PRIOR TO THE SWPPP BEING ACCEPTED BY THE CITY. FOR MORE INFORMATION SEE: http://www.roseville.ca.us/gov/development_services/stormwater_management
2. A COPY OF THE SWPPP SHALL BE KEPT AT THE PROJECT SITE AT ALL TIMES.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED AS SPECIFIED IN THE SWPPP AND/OR AS DIRECTED BY CITY INSPECTOR.
4. NO GRADING OR TRENCHING, EXCEPT AS REQUIRED FOR EROSION OR SEDIMENT CONTROL, SHALL OCCUR WITHIN 35 FEET FROM THE CENTERLINE OF PERENNIAL AND INTERMITTENT DRAINAGE SWALES BETWEEN OCTOBER 15 AND APRIL 15 EXCEPT AS APPROVED BY THE DEPARTMENT OF FISH AND GAME.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN ACCORDANCE WITH THE SWPPP
6. THE CONTRACTOR SHALL ESTABLISH A SPECIFIC SITE WITHIN THE DEVELOPMENT FOR MAINTENANCE AND STORAGE OF EQUIPMENT OR ANY OTHER ACTIVITY THAT MAY ADVERSELY CONTRIBUTE TO THE WATER QUALITY OF THE RUNOFF IN ACCORDANCE WITH THE SWPPP.

GRADING

1. GRADING SHALL CONFORM TO THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEERING REPORT BY FUGRO WEST, INC. (APRIL 2008)
2. NON-POTABLE WATER SHALL BE SPRAYED ON ALL EXPOSED EARTH SURFACES DURING CLEARING GRADING, EARTH MOVING, AND OTHER SITE PREPARATION ACTIVITIES. THE EXPOSED EARTH SHALL BE WATERED THROUGHOUT THE DAY (TWICE MINIMUM) TO MINIMIZE DUST.
3. APPLY APPROVED CELLULOSE-BASED SOIL STABILIZERS ACCORDING TO MANUFACTURERS' SPECIFICATIONS TO ALL INACTIVE CONSTRUCTION AREAS (PREVIOUSLY GRADED AREAS THAT REMAIN UNDISTURBED FOR 96 HOURS).
4. TARPULINS OR OTHER EFFECTIVE COVERS SHALL BE USED ON ALL STOCKPILED EARTH MATERIAL AND ON HAUL TRUCKS TO MINIMIZE DUST.
5. CONSTRUCTION TRAFFIC SPEEDS ON ALL UNPAVED SURFACES SHALL BE LIMITED TO NO MORE THAN 15 MPH.
6. THE CITY SHALL HAVE THE AUTHORITY TO STOP ALL GRADING OPERATIONS, IF, IN OPINION OF CITY STAFF, INADEQUATE DUST CONTROL MEASURES ARE BEING PRACTICED OR EXCESSIVE WIND CONDITIONS (SUSTAINED WINDS OF 15 MPH OR INSTANTANEOUS GUSTS IN EXCESS OF 25 MPH) CONTRIBUTE TO FUGITIVE DUST EMISSIONS.
7. ADJACENT STREET FRONTAGES SHALL BE SWEEPED AT LEAST ONCE A DAY TO REMOVE SILT AND OTHER DIRT WHICH IS EVIDENT FROM CONSTRUCTION ACTIVITIES. REFER TO SCHEDULES WITHIN SWPPP.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING CONSTRUCTION VEHICLES LEAVING THE SITE ON A DAILY BASIS TO PREVENT DUST, SILT AND DIRT FROM BEING RELEASED OR TRACKED OFFSITE. REFER TO SWPPP FOR SPECIFIC REQUIREMENTS.
9. CONSTRUCTION SHALL STOP IF CULTURAL RESOURCES ARE SUSPECTED. IT IS POSSIBLE THAT PREVIOUS ACTIVITIES HAVE OBSCURED SURFACE EVIDENCE OF CULTURAL RESOURCES. IF SIGNS OF AN ARCHEOLOGICAL SITE, SUCH AS ANY UNUSUAL AMOUNTS OF STONE, BONE, OR SHELL, ARE UNCOVERED DURING GRADING OR OTHER CONSTRUCTION ACTIVITIES, WORK SHALL BE HALTED WITHIN 100 FEET OF THE FIND AND THE ROSEVILLE COMMUNITY DEVELOPMENT DEPARTMENT SHALL BE NOTIFIED. A QUALIFIED ARCHEOLOGIST SHALL BE CONSULTED FOR AN ON-SITE EVALUATION. THE ARCHEOLOGIST MAY REQUIRE ADDITIONAL MITIGATION.
10. SHOULD GRADING OPERATIONS UNCOVER HAZARDOUS MATERIALS, OR WHAT APPEARS TO BE HAZARDOUS MATERIALS, THE FIRE DEPARTMENT SHALL BE CONTACTED IMMEDIATELY AT (916) 774-5821. THE AREA, WHICH CONTAINS THE HAZARDOUS MATERIALS, SHALL BE MARKED OFF UNTIL AN INVESTIGATION BY A MEMBER OF THE FIRE DEPARTMENT IS CONDUCTED.

PROGRESS PRINT

GN-1

NO.	REVISIONS	BY	DATE
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BENCH MARK
ELEVATION _____ DATUM _____
DESCRIPTION _____

DESIGN BY : MJK
DRAWN BY : CJ
CHECKED BY : SK
SCALE : NOT TO SCALE
DATE : 10-26-16
PROJ NO. : 27560620

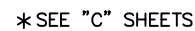
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2020 L STREET, SUITE 400
SACRAMENTO, CA 95811 (916) 414-5800

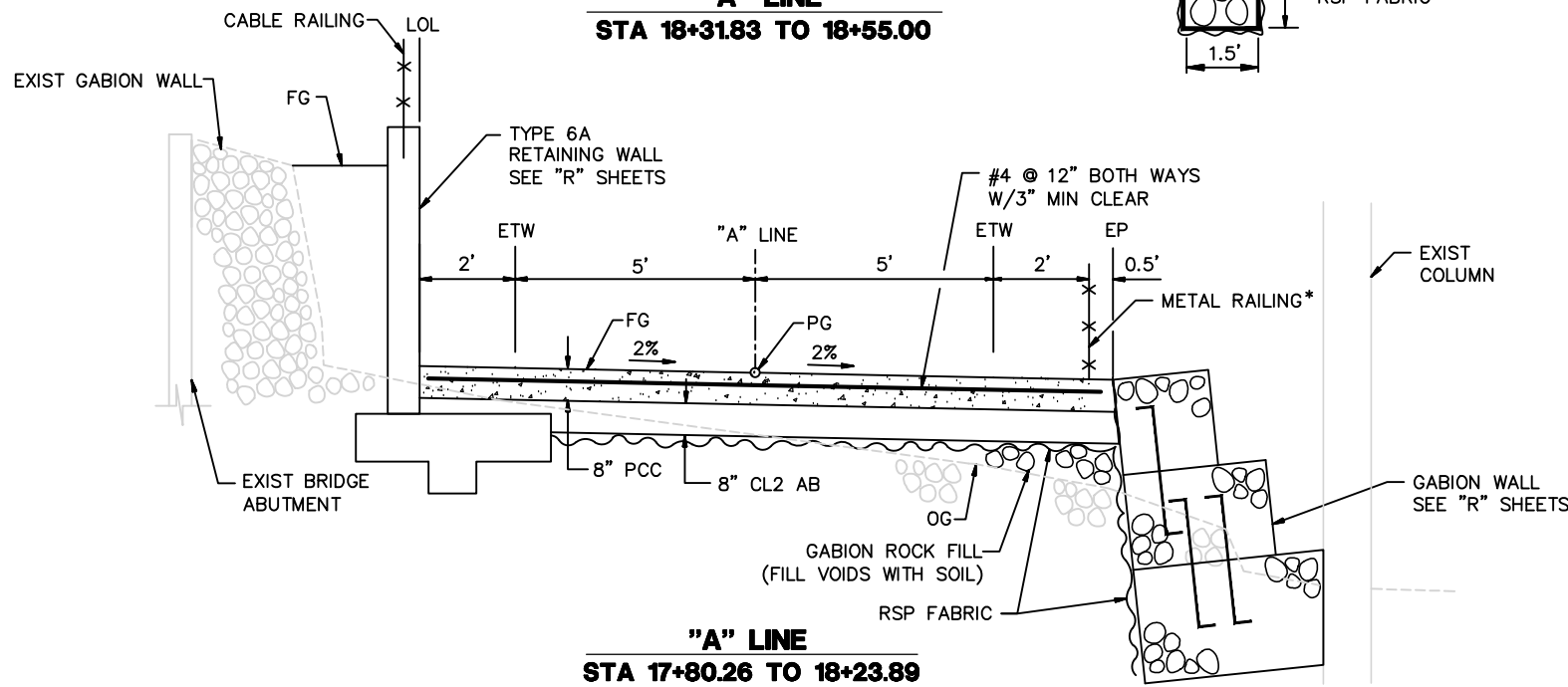
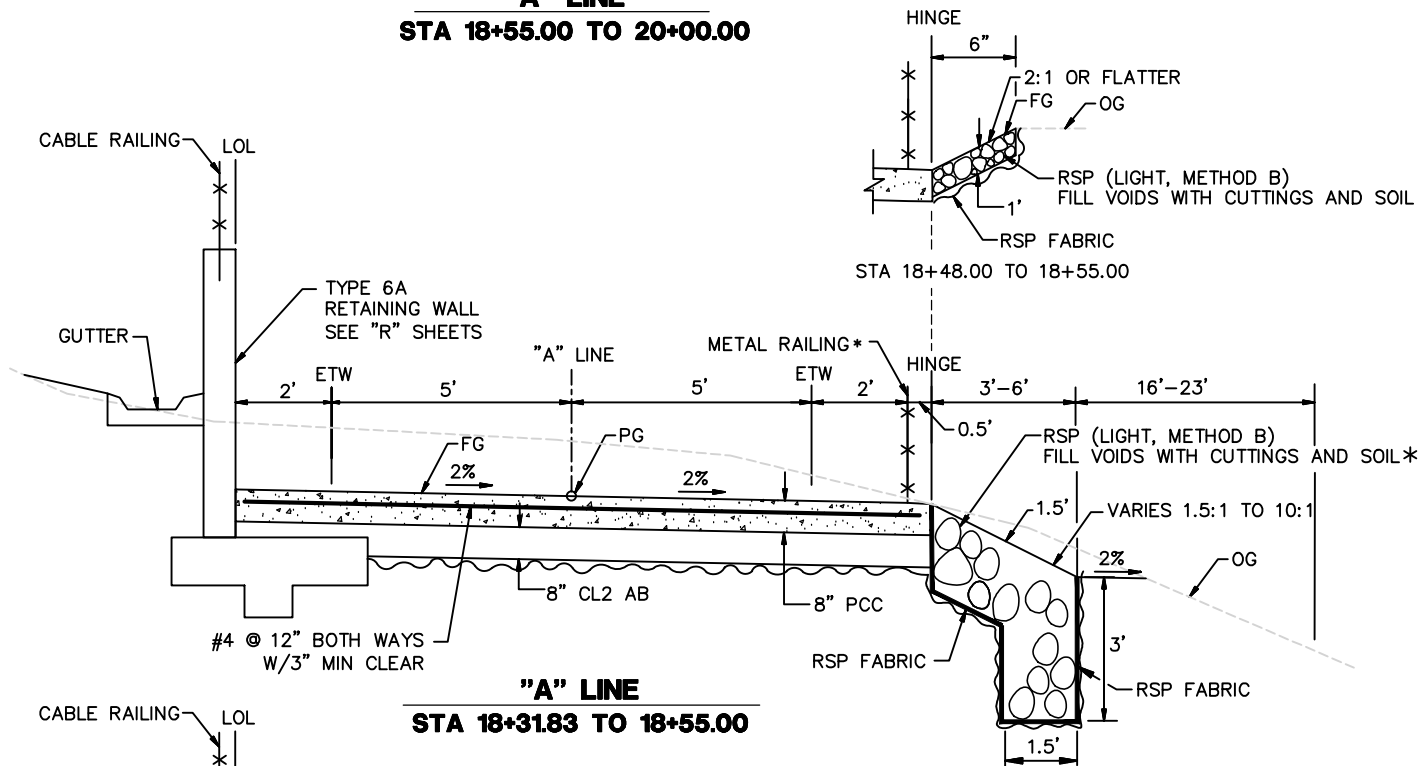
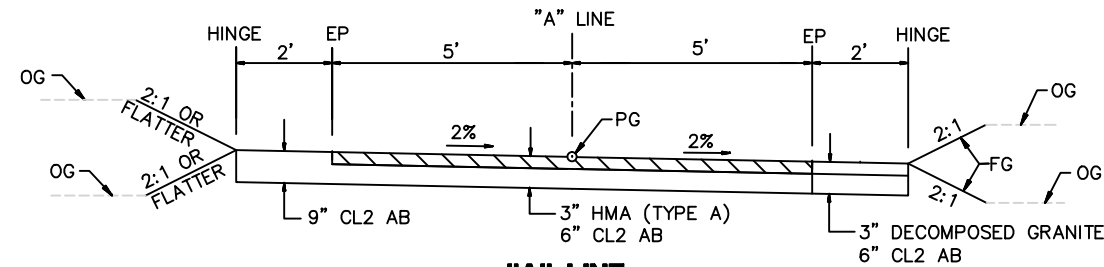
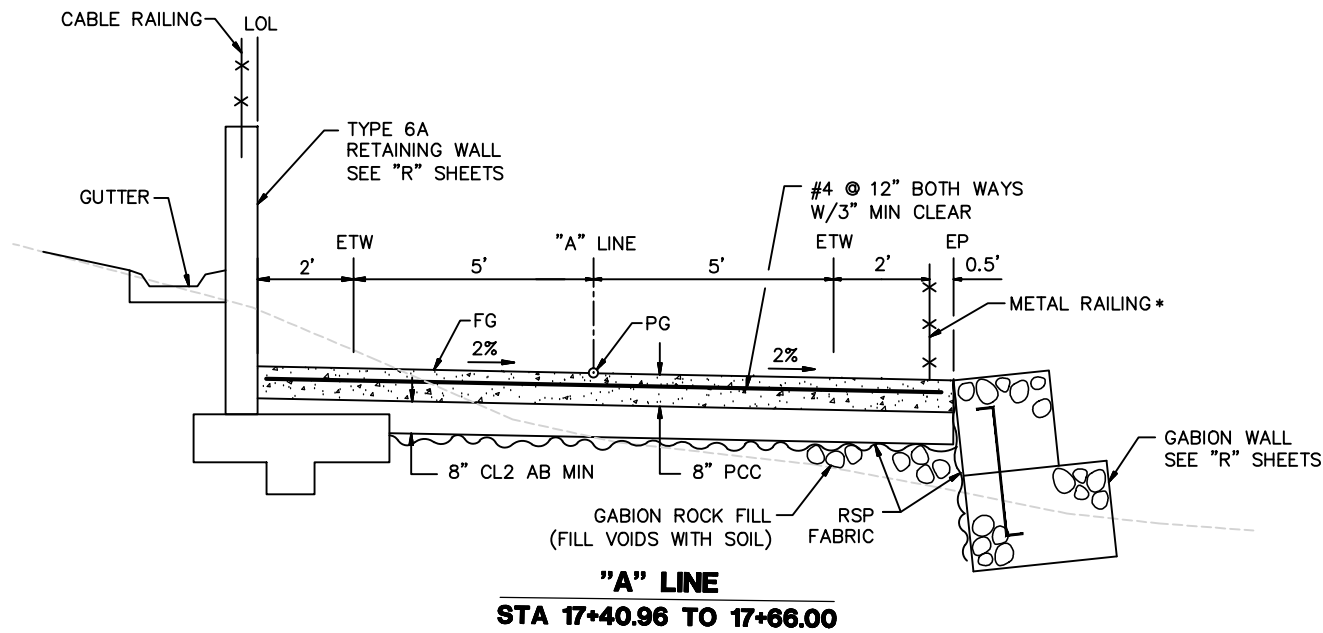
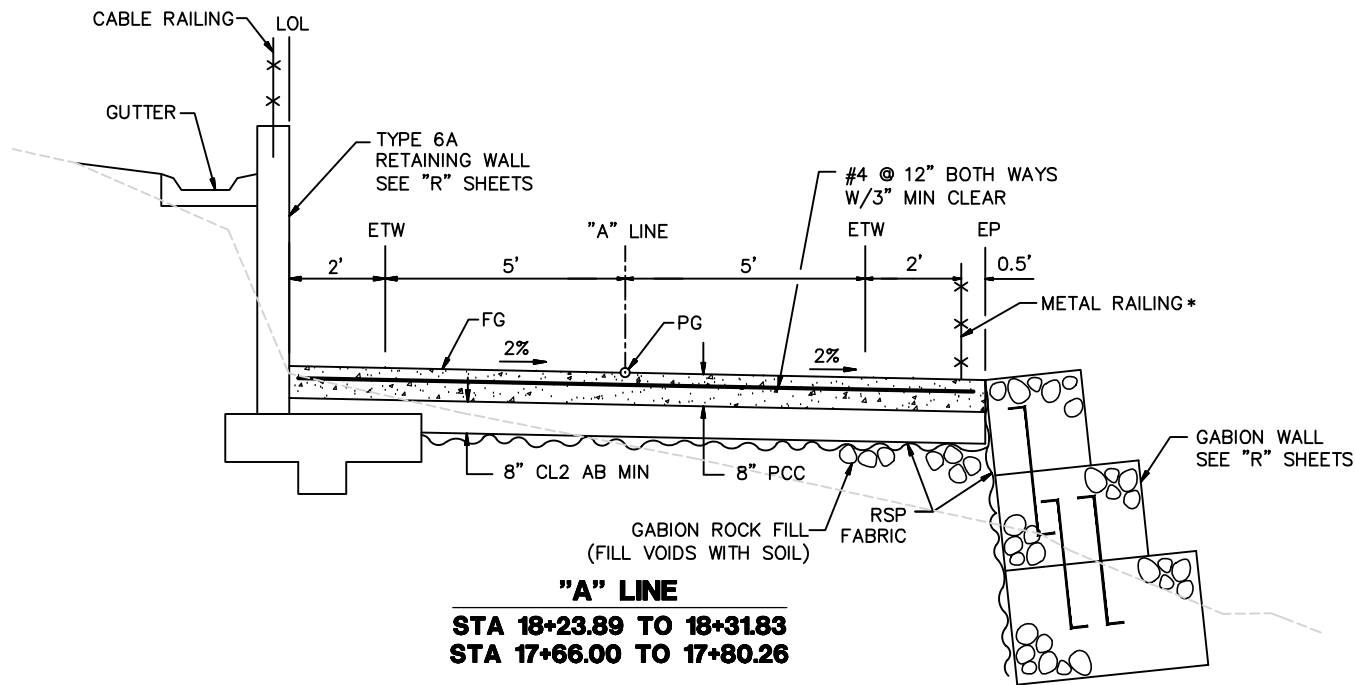


ROYER PARK TO HARDING BLVD. BKE TRAIL
GENERAL NOTES
CITY OF ROSEVILLE CALIFORNIA



X-1

NO.		REVISIONS		BY	DATE	BENCH MARK		DESIGN BY : MJK			 URS ENGINEERING • PLANNING • SURVEYING 2020 L STREET, SUITE 400 SACRAMENTO, CA 95811 (916) 414-5800		ROYER PARK TO HARDING BLVD. BIKE TRAIL		<div>3</div> <div>OF</div> <div>11</div>
						ELEVATION _____ DATUM _____		DRAWN BY : CJ					CITY OF ROSEVILLE		
						DESCRIPTION _____		CHECKED BY : SK					TYPICAL SECTIONS		
						_____		SCALE : NOT TO SCALE					CALIFORNIA		
						_____		DATE : 10-26-16							
						_____		PROJ NO. : 27560620							
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*SEE "C" SHEETS

PROGRESS PRINT

X-2

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BENCH MARK	DATE
ELEVATION	
DESCRIPTION	

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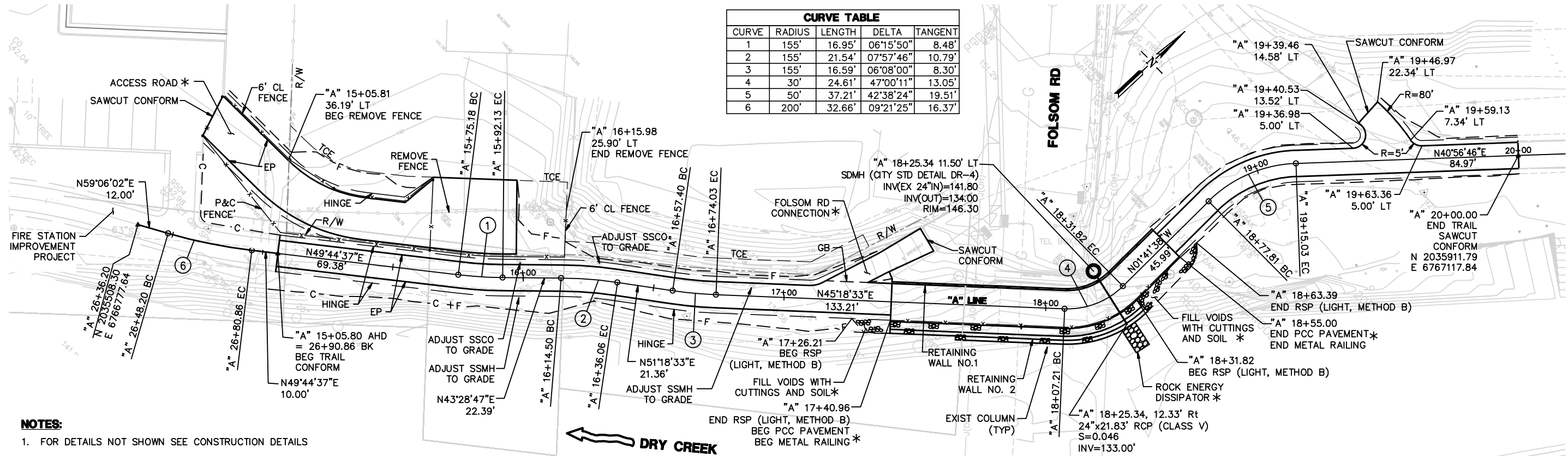
DATE

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SACRAMENTO, CA 95811 (916) 414-5800

CITY OF ROSEVILLE
CALIFORNIA

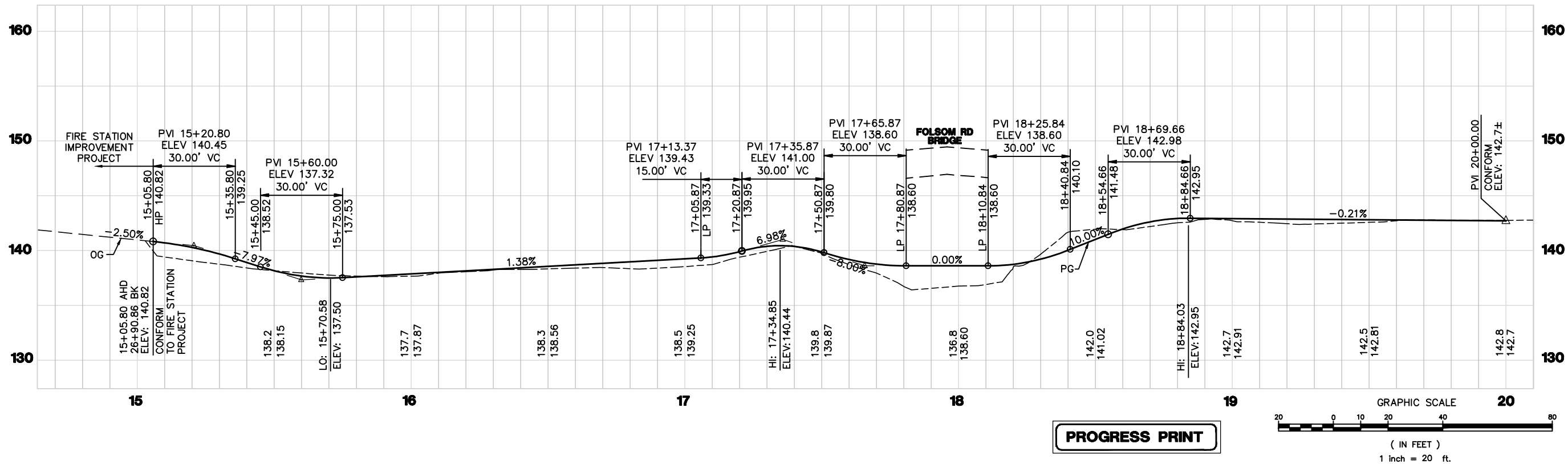
ROYER PARK TO HARDING BLVD. BIKE TRAIL
TYPICAL SECTIONS
CITY OF ROSEVILLE
CALIFORNIA

4
OF
11



- NOTES:**
1. FOR DETAILS NOT SHOWN SEE CONSTRUCTION DETAILS
 2. FOR 6' CHAIN LINK FENCE (CL) AND GATE DETAILS, SEE CITY STANDARD DETAIL PK-40
 3. FOR POST AND CABLE FENCE (P&C), SEE CITY STANDARD DETAIL PK-41

*SEE CONSTRUCTION DETAILS



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DRAWN BY : SA
CHECKED BY : SK
SCALE : H: 1"=20' V: 1"=5'
DATE : 10-26-16
PROJ NO. : 27560620



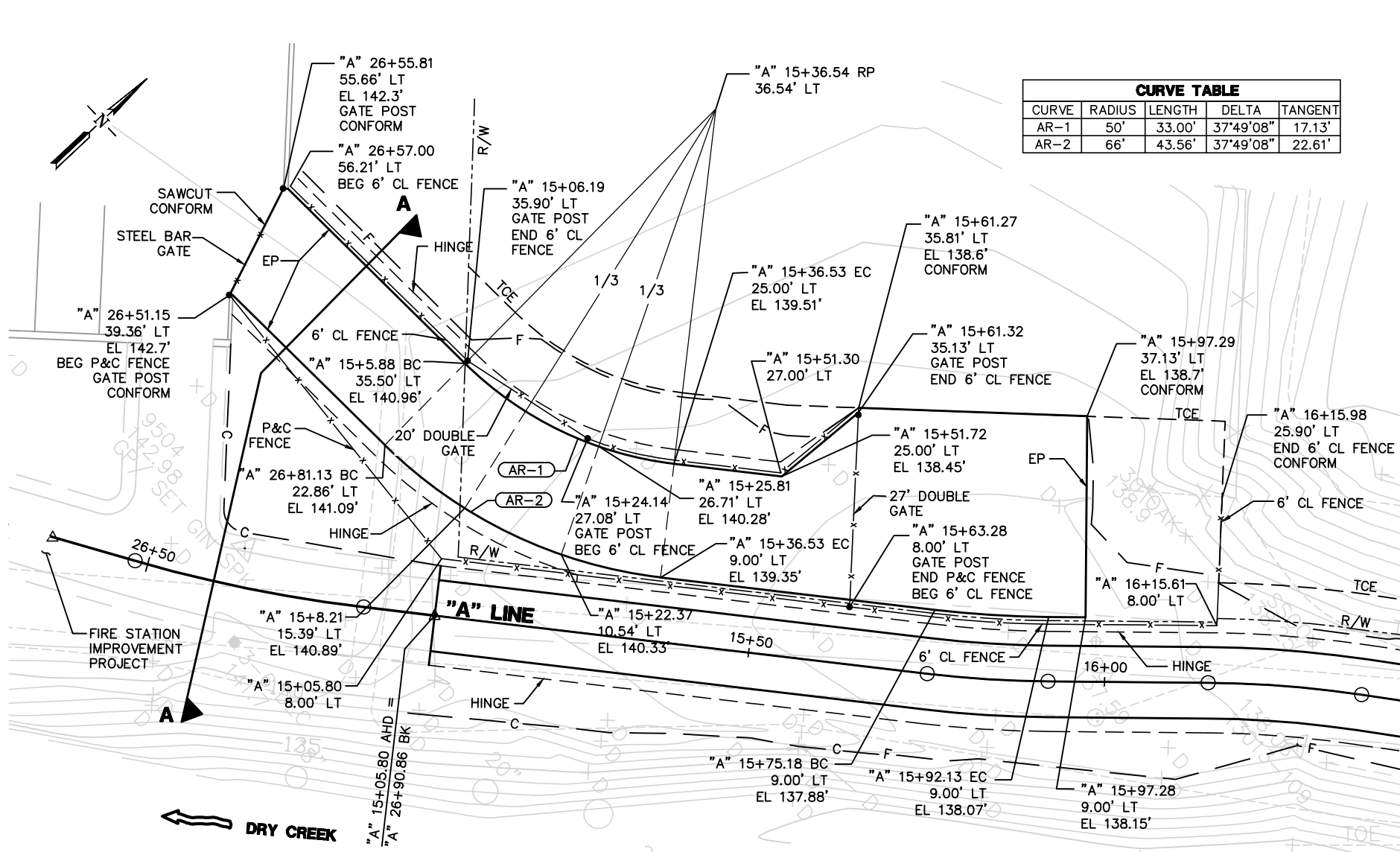
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SACRAMENTO, CA 95811 (916) 414-5800



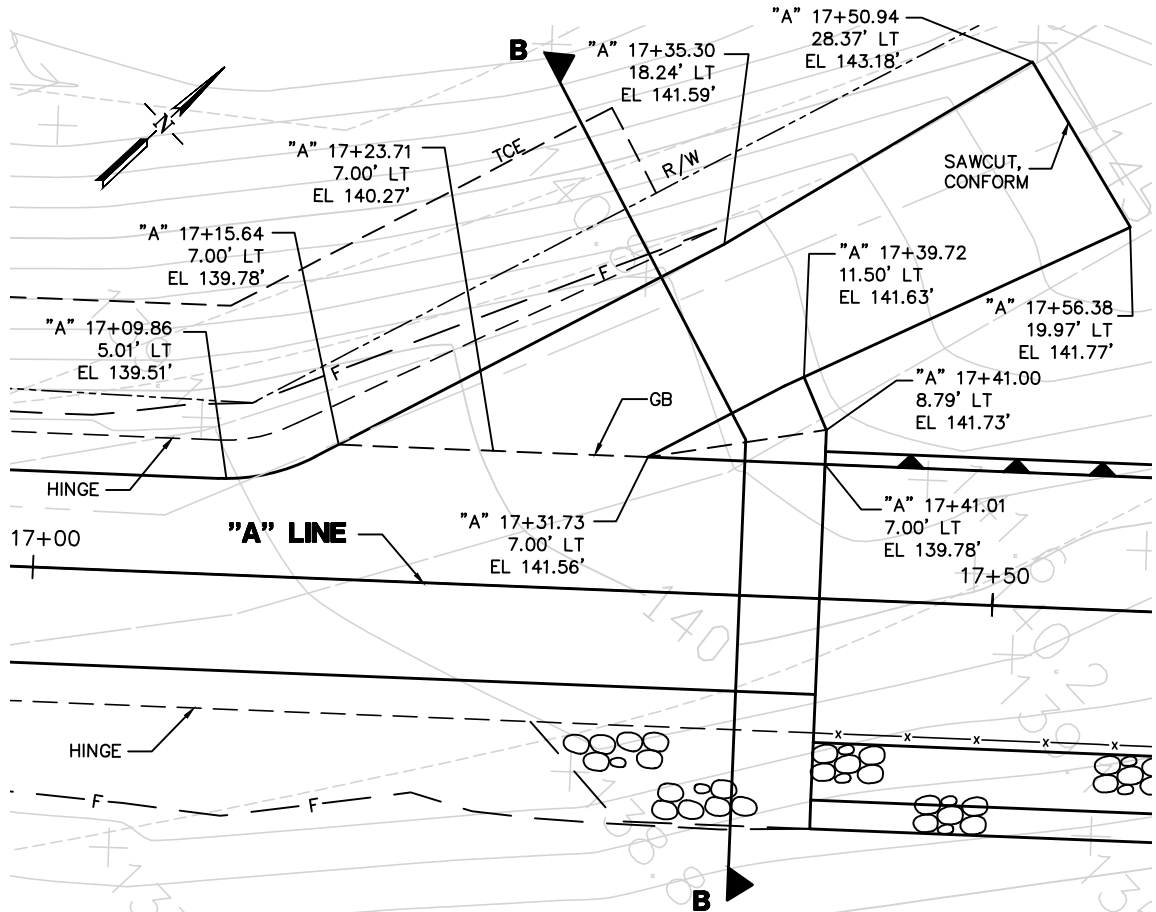
ROYER PARK TO HARDING BLVD. BIKE TRAIL

PLAN AND PROFILE

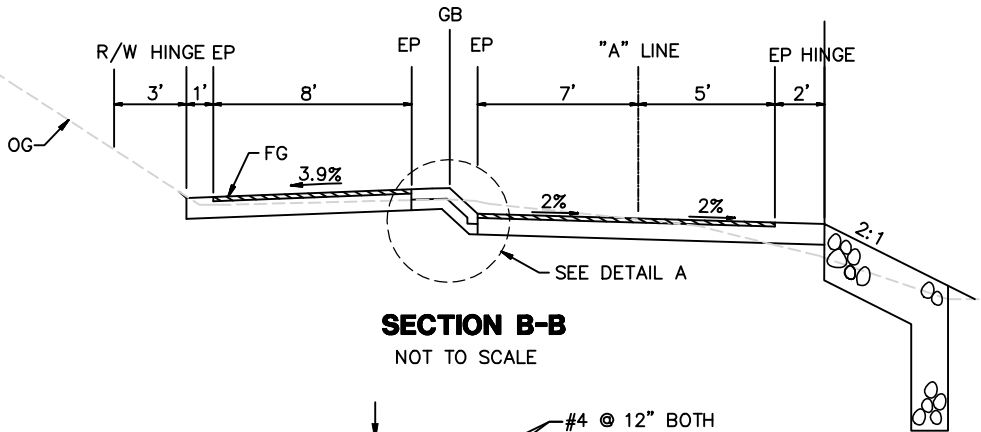
CITY OF ROSEVILLE CALIFORNIA



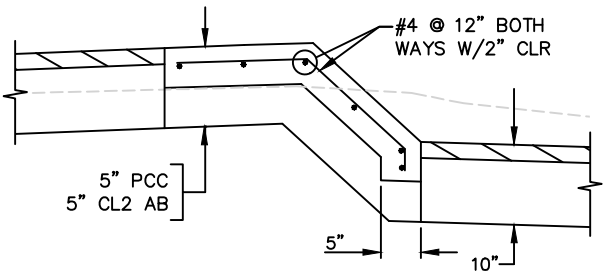
CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
AR-1	50'	33.00'	37°49'08"	17.13'
AR-2	66'	43.56'	37°49'08"	22.61'



FOLSOM RD CONNECTION
SCALE: 1" = 5'



SECTION B-B
NOT TO SCALE



DETAIL A
NOT TO SCALE

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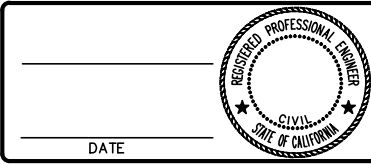
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BENCH MARK	DATUM
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DESIGN BY : MJK
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CHECKED BY : SK
SCALE : AS SHOWN
DATE : 10-26-16
PROJ NO. : 27560620



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ROYER PARK TO HARDING BLVD. BIKE TRAIL
CONSTRUCTION DETAILS
CITY OF ROSEVILLE CALIFORNIA



HYDROSEED ACROSS ALL DISTURBED SURFACES

BACKFILL WITH NATIVE SOIL

FG

RSP

6"

10"-12"

RSP FABRIC

UNDISTURBED SOIL

PLACE LIVE WILLOW CUTTING SPACED APPROXIMATELY 4' APART

The diagram illustrates a cross-section of a slope stabilization technique. A diagonal line represents the boundary between 'UNDISTURBED SOIL' at the base and a disturbed surface above. A layer of 'RSP FABRIC' is laid over the disturbed surface. 'HYDROSEED ACROSS ALL DISTURBED SURFACES' is applied to the fabric. 'BACKFILL WITH NATIVE SOIL' is placed over the fabric. 'FG' (likely Fertilizer Granules) are also applied. 'RSP' (likely Rooting Stimulant Powder) is applied in a 6-inch layer. 'LIVE WILLOW CUTTINGS' are placed vertically, spaced approximately 4 feet apart. The cuttings are shown with roots extending into the fabric and soil. A vertical dimension of 10"-12" is indicated for the soil layer above the fabric.

Technical drawing of a handrail assembly, showing side and end views with dimensions and material specifications.

Side View Dimensions and Labels:

- Overall height: 4'-6"
- Vertical spacing between rail sections: 1'-1 1/2" (repeated four times)
- Horizontal spacing between slip fittings: 3" MIN. (Stagger Slip Fittings), 15'-0" C-C (Install Slip Fittings)
- Labels: END POST, TYPICAL; 1/4" TYP. (pointing to a hole); 2" WIDE YELLOW RETROREFLECTIVE TAPE (TYP.) (pointing to a vertical strip); 3" PIPE SLEEVE (TYP.) (pointing to the base sleeve); 1/2" (pointing to a weld); TACK WELD 1.5" PIPE INSIDE ONE SIDE OF 2" PIPE TO FORM SLIP FITTING; 2" Ø SCHED. 40 STEEL PIPE, GALVANIZE AFTER FABRICATION; 6'-0" C-C MAX. (center-to-center spacing of posts)

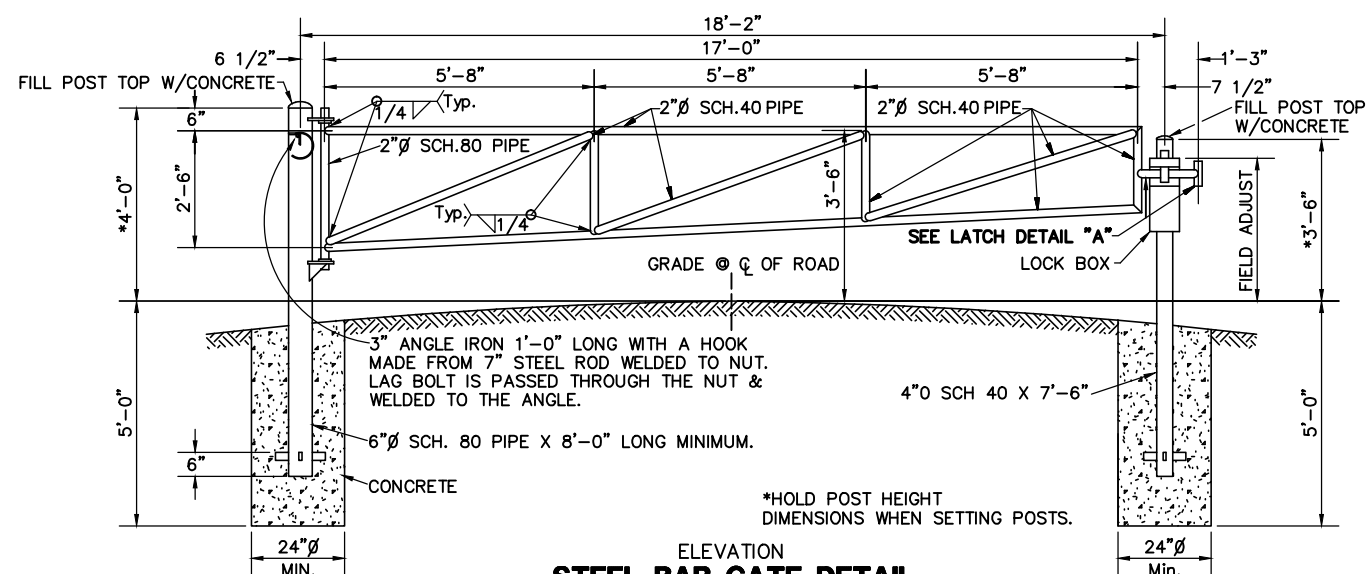
End View Dimensions and Labels:

- Overall width: 1'-6"
- Vertical dimensions: 1'-6" (total), 1'-3" (lower section)
- Labels: SET 3" DIA. GALVANIZED PIPE SLEEVE FOR HANDRAIL BLOCK-OUT (pointing to the base sleeve); CONCRETE (pointing to the base)

PLAN

18'-2"

4'-1/2"

**PROGRESS PRINT**

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DESIGN BY : MJK
DRAWN BY : CJ
CHECKED BY : SK
SCALE : NOT TO SCALE
DATE : 10-26-16
PROJ NO. : 27560620

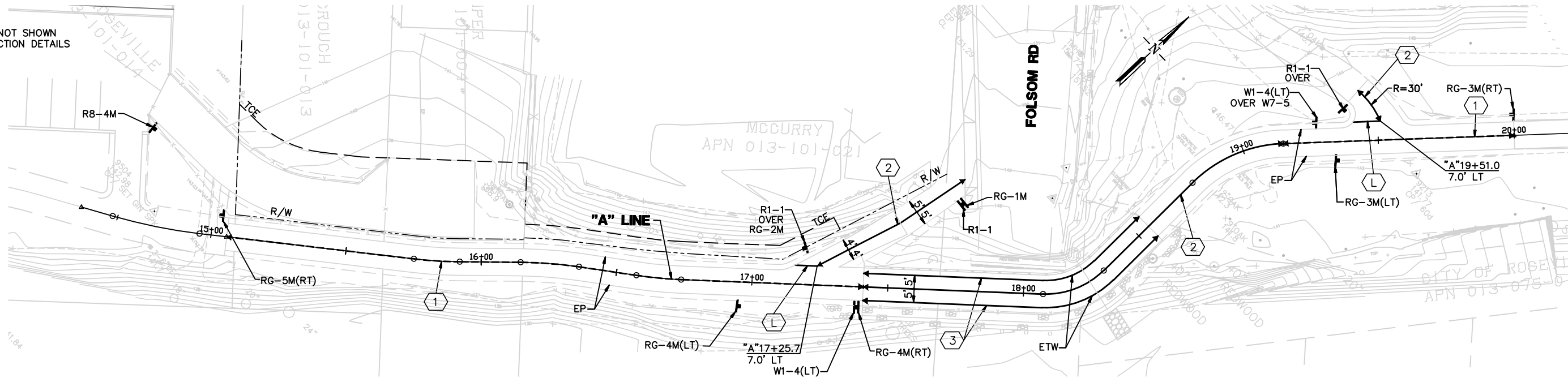
SR. PROJECT ENGINEER

PLANS APPROVAL DATE



<p align="center">ROYER PARK TO HARDING BLVD. BIKE TRAIL</p>	
<p align="center">CONSTRUCTION DETAILS</p>	
<p>CITY OF ROSEVILLE</p>	<p align="right">CALIFORNIA</p>

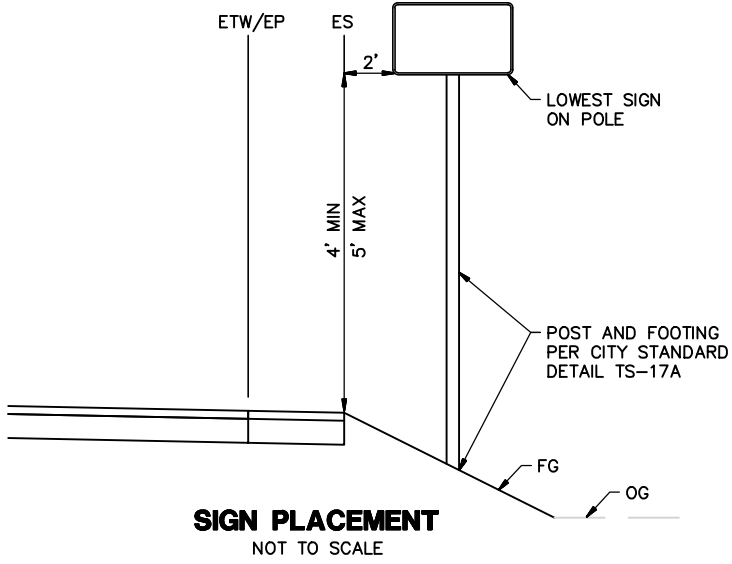
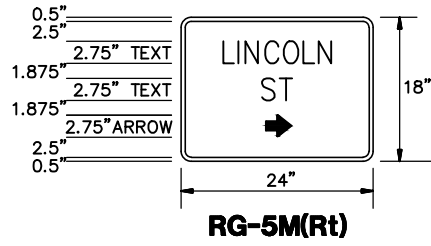
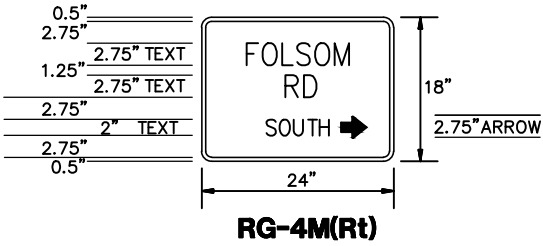
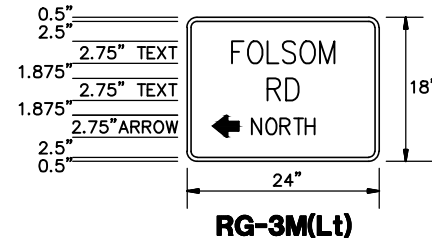
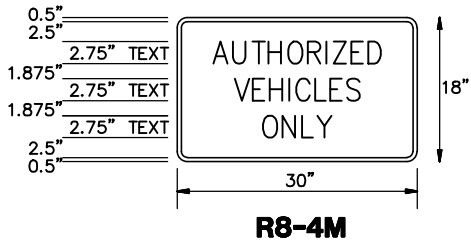
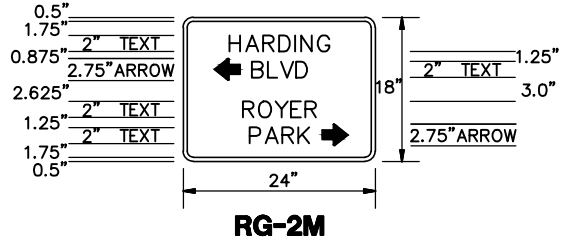
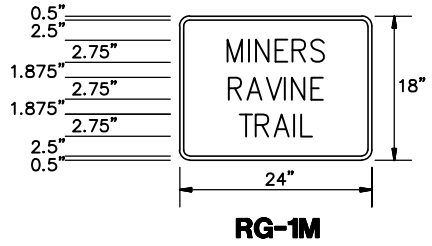
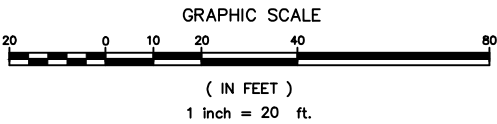
NOTE:
FOR DETAILS NOT SHOWN
SEE CONSTRUCTION DETAILS



STRIPE LEGEND

DETAIL ①	4"YELLOW STRIPE	
DETAIL ②	4"YELLOW STRIPE	
DETAIL ③	4"WHITE STRIPE	
DETAIL L	12" WHITE LIMIT LINE	
	CHANGE IN STRIPE DETAIL	

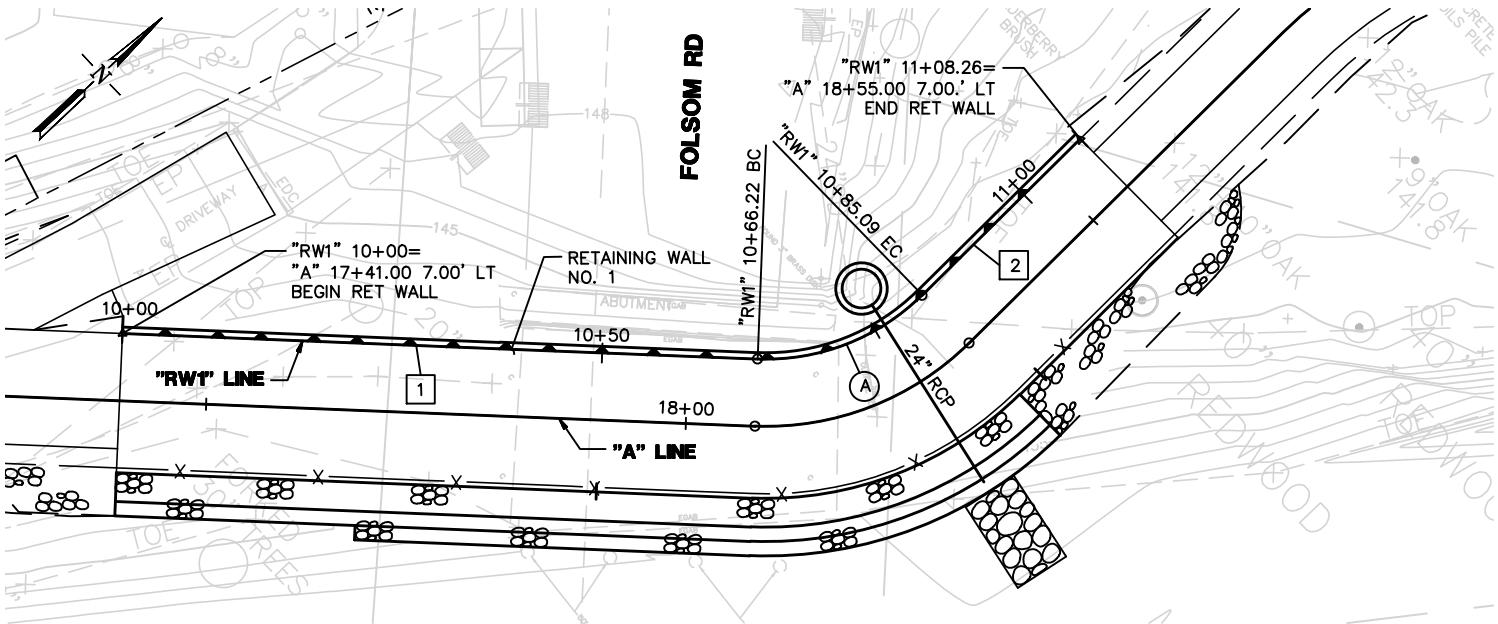
- NOTES:**
1. ALL "RG" DESIGNATED SIGNS SHALL HAVE WHITE BORDER AND LETTERING ON A BROWN BACKGROUND.
 2. ALL SIGNS SHALL BE THE SHARED USE PATH SIZE SHOWN PER TABLE 9B-1 OF THE 2014 CA MUTCD UNLESS OTHERWISE SHOWN.
 3. WHERE Rt OR Lt DIRECTIONAL ARROW SHOWN, OPPOSITE DIRECTION SIMILAR.
 4. PLACE ONE (39"x12") W12-2a "8 FT 0 IN" ON FOLSOM RD BRIDGE SOFIT IN EACH DIRECTION CENTERED OVER TRAIL.



PROGRESS PRINT

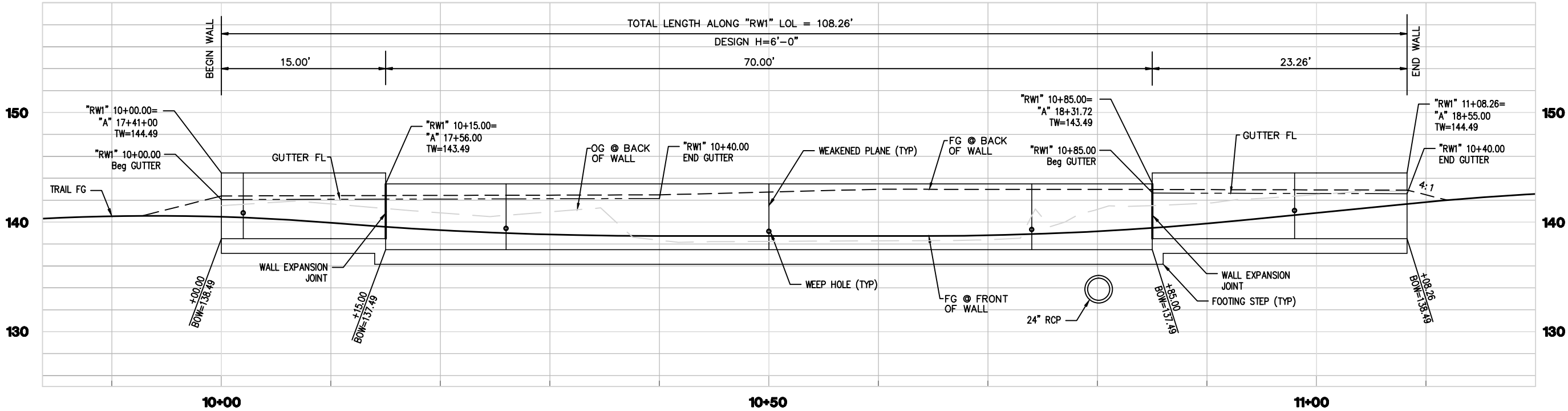
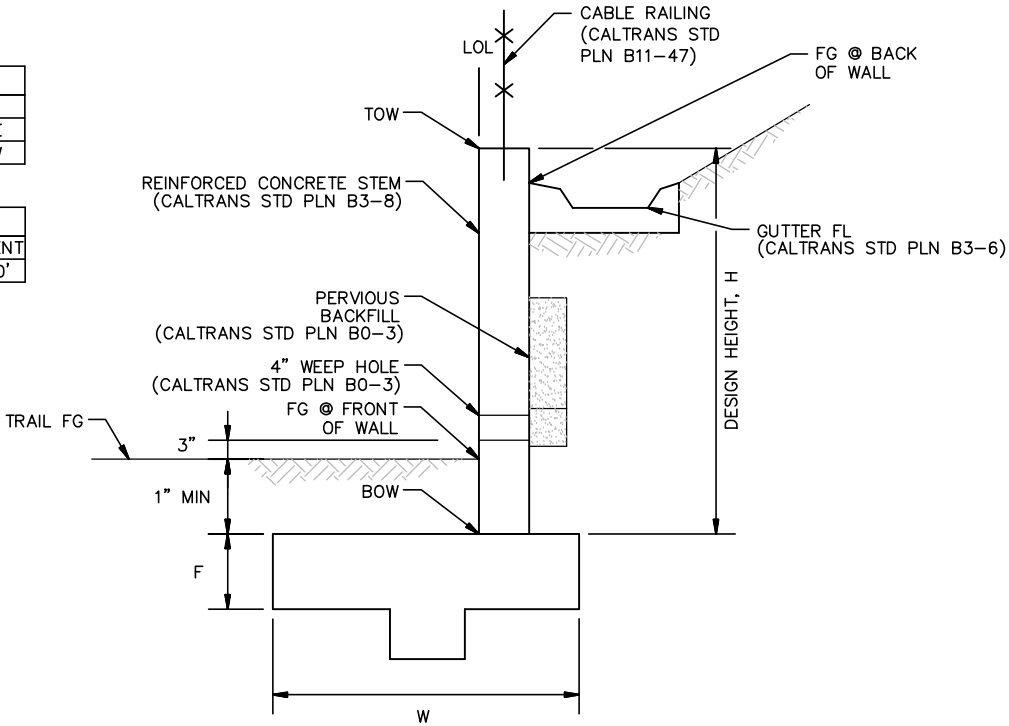
SS-1

NO.	REVISIONS	BY	DATE	BENCH MARK	DESIGN BY : MJK	REGISTERED PROFESSIONAL ENGINEER	URS	CITY OF ROSEVILLE	ROYER PARK TO HARDING BLVD. BIKE TRAIL	8
1				ELEVATION _____ DATUM _____	DRAWN BY : CJ	CIVIL	ENGINEERING • PLANNING • SURVEYING			OF
2				DESCRIPTION _____	CHECKED BY : SK	STATE OF CALIFORNIA	2020 L STREET, SUITE 400		SIGNING AND STRIPING PLAN	11
3					SCALE : H: 1"=20' V: 1"=5'		SACRAMENTO, CA 95611 (916) 414-5800			
4					DATE : 10-26-16					
5					PROJ NO. : 27560620				CITY OF ROSEVILLE	CALIFORNIA
6					DATE _____					



LINE TABLE			
LINE	LENGTH	BEARING	
1	66.22'	N 45°17'60" E	
2	23.18'	N 01°41'38" W	

CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
(A)	23.00'	18.86'	46°59'38"	10.00'



PROGRESS PRINT

NO.	REVISIONS	BY	DATE
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BENCH MARK
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REGISTERED PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA

DATE _____

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2020 L STREET, SUITE 400
SACRAMENTO, CA 95811 (916) 414-5800

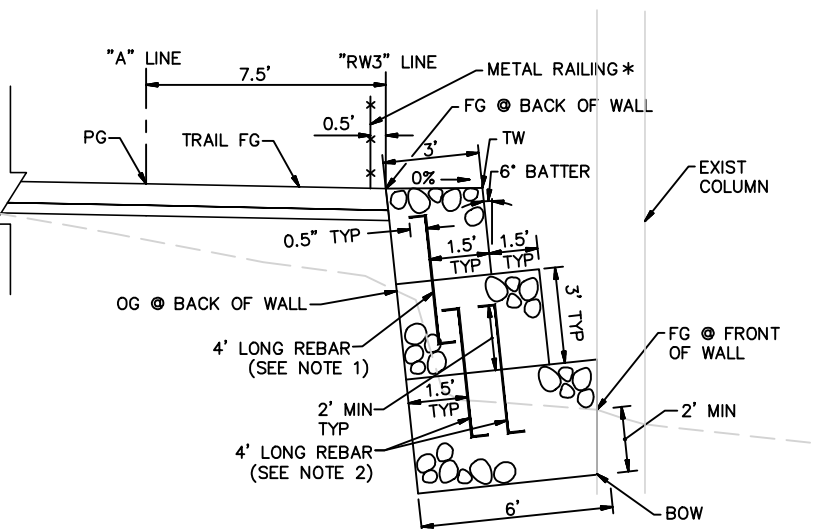
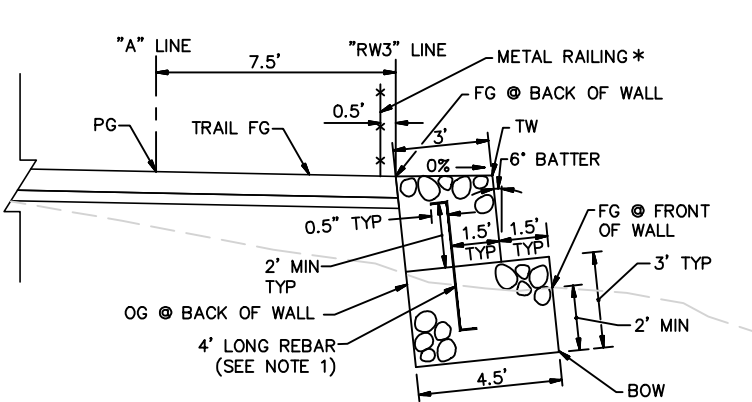
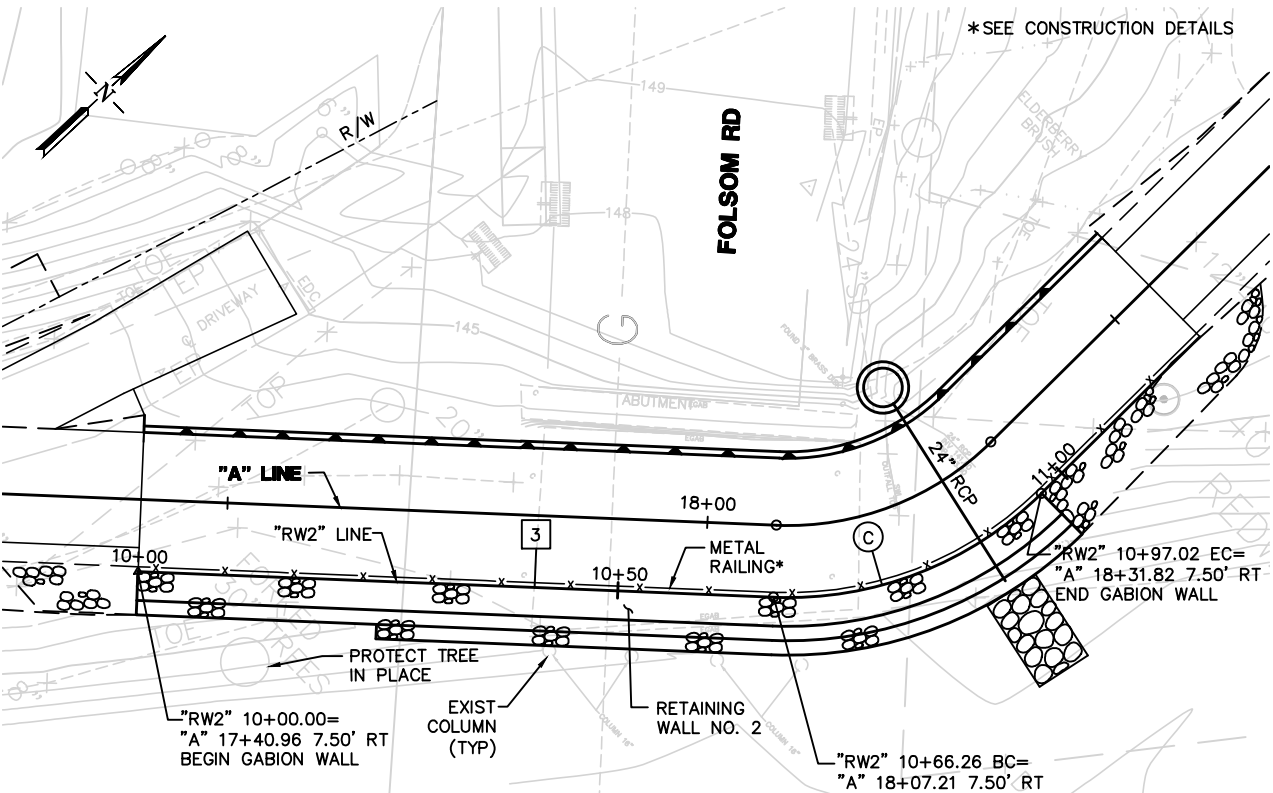
CITY OF ROSEVILLE
CALIFORNIA

ROYER PARK TO HARDING BLVD. BIKE TRAIL
RETAINING WALL NO. 1
CITY OF ROSEVILLE CALIFORNIA

9

OF

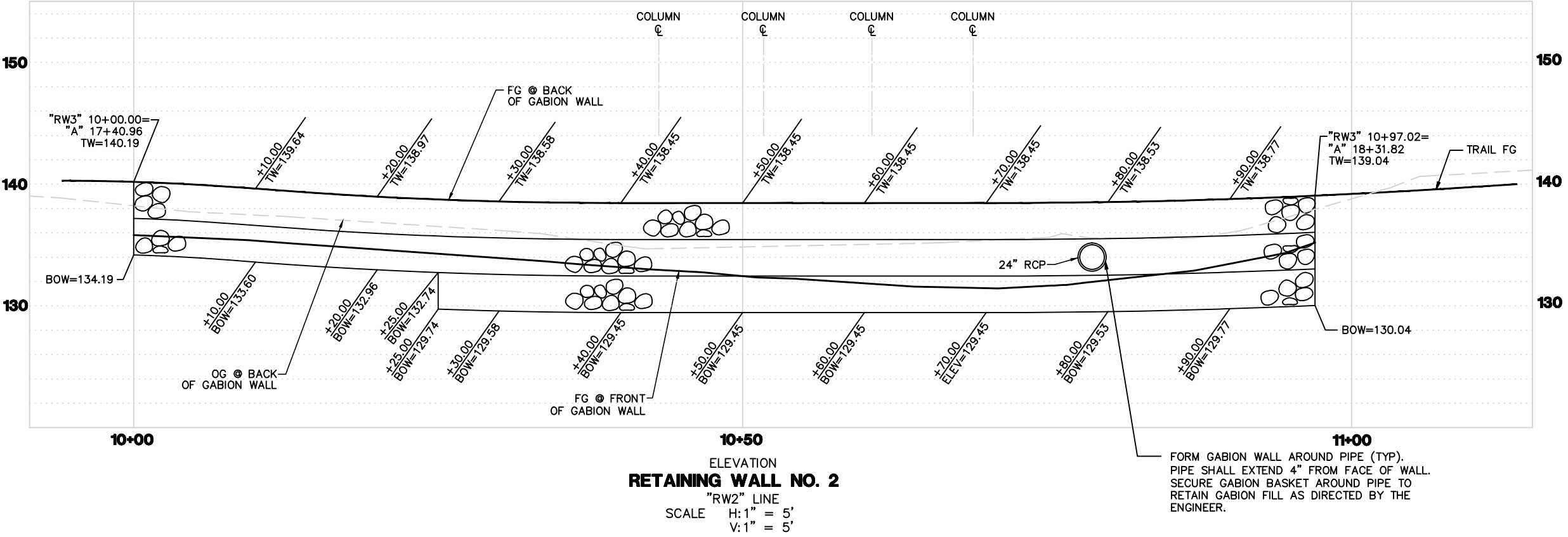
11



LINE TABLE		
LINE	LENGTH	BEARING
3	26.96'	S45°18'33"W

CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
©	37.50'	30.76'	47°00'11"	16.31'

- NOTES :**
- 1. NO. 6 REBAR @ 4' O.C.
 - 2. NO. 6 REBAR @ 4' O.C. 2' OFFSET FROM OTHER ROWS



PROGRESS PRINT

NO.	REVISIONS	BY	DATE
1			
2			
3			
4			
5			

BENCH MARK	
ELEVATION	DATUM
DESCRIPTION	

DESIGN BY : MJK
DRAWN BY : CJ
CHECKED BY : SK
SCALE : AS SHOWN
DATE : 10-26-16
PROJ NO. : 27560620

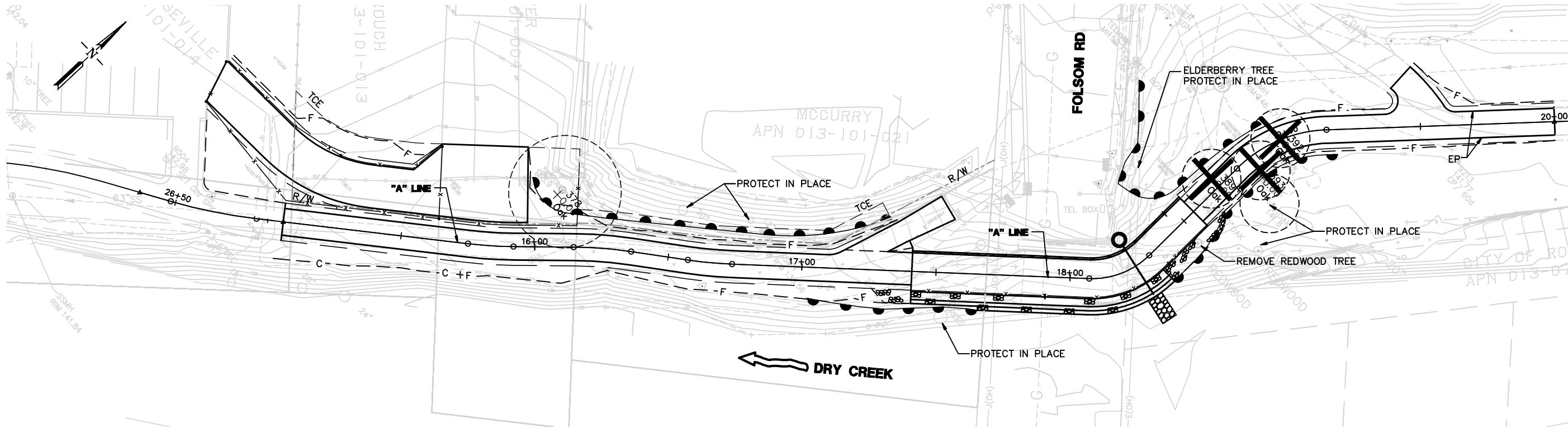
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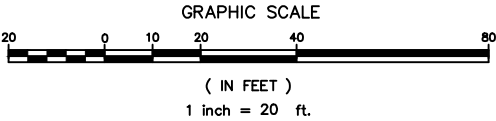
ROYER PARK TO HARDING BLVD. BIKE TRAIL
RETAINING WALL NO. 2

10
OF
11



LEGEND

- TEMPORARY FENCE (TYPE ESA)
- OAK TREE TO BE REMOVED
- PROTECTED ZONE RADIUS (PZR)



PROGRESS PRINT

TR-1

NO.		REVISIONS		BY	DATE	BENCH MARK		DESIGN BY : MJK					ROYER PARK TO HARDING BLVD. BIKE TRAIL		11
						ELEVATION _____ DATUM _____		DRAWN BY : CJ					TREE REMOVAL AND PRESERVATION PLAN		
								CHECKED BY : SK							11
								SCALE : H: 1"=20' V: 1"=5'							
								DATE : 10-26-16							
								PROJ NO. : 27560620		DATE _____		CITY OF ROSEVILLE		CALIFORNIA	