

**CALIFORNIA STATE MAP**  
NOT TO SCALE

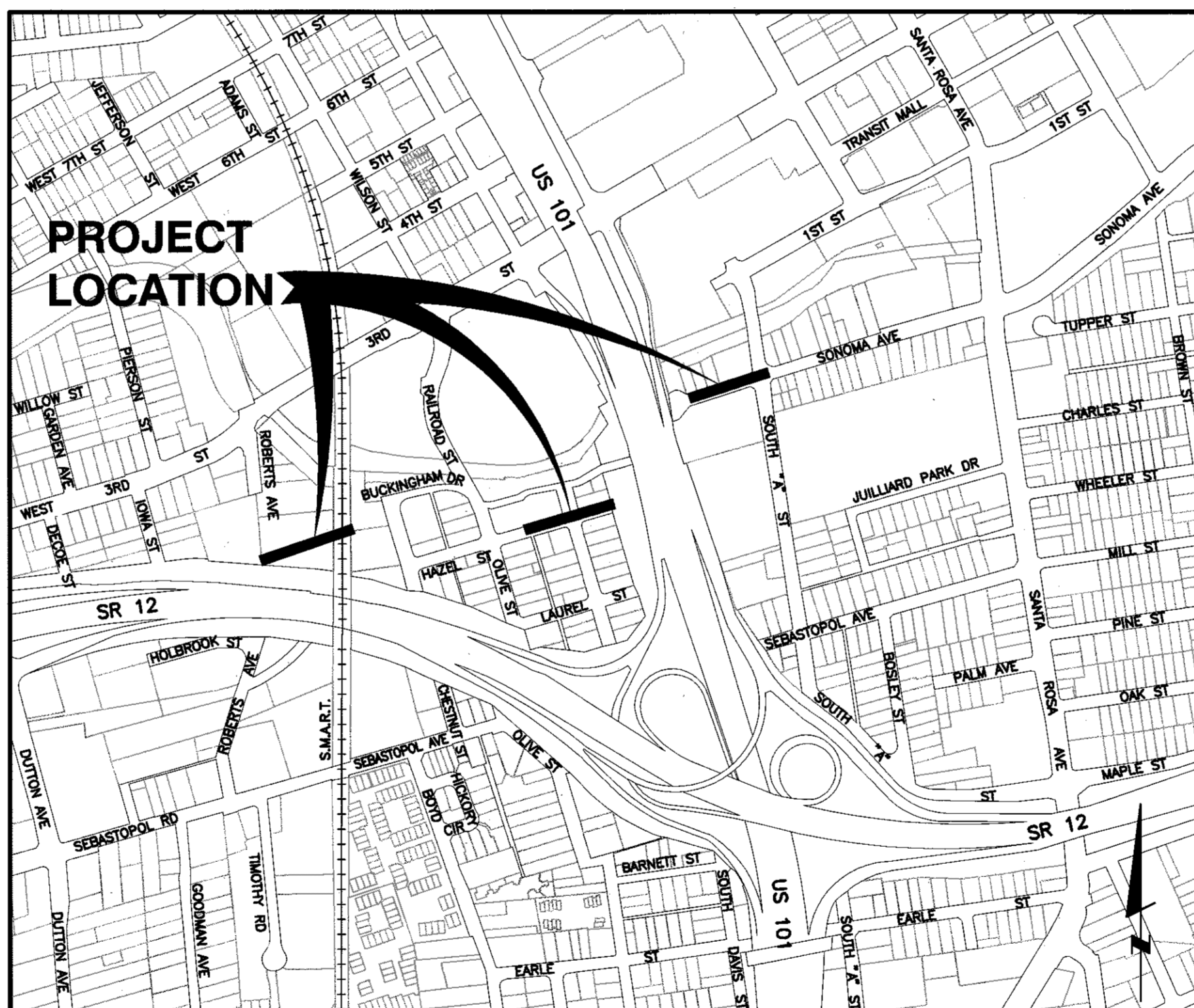
**CITY OF SANTA ROSA**  
IMPROVEMENT PLANS FOR

**CROSTOWN TRUNK LINING**  
**3 SEGMENTS**

CONTRACT NO. C02311  
MARCH 2022

**GENERAL NOTES**

- ALL WORKMANSHIP, MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CITY OF SANTA ROSA STANDARD PLANS, THE CONSTRUCTION SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, THE SPECIAL PROVISIONS FOR THIS PROJECT AND THE STATE STANDARD SPECIFICATIONS AND STANDARD PLANS. THE CONTRACTOR IS RESPONSIBLE FOR UNDERSTANDING ALL STANDARDS PERTAINING TO THIS PROJECT.
- THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (USA NORTH) AT 811 NO LESS THAN 2 WORKING DAYS PRIOR TO ANY EXCAVATION FOR MARK OUTS OF EXISTING UNDERGROUND FACILITIES IN ACCORDANCE WITH SECTION 5-1.36E OF THE SPECIAL PROVISIONS.
- THE LOCATIONS OF UNDERGROUND UTILITIES AND OTHER OBSTACLES SHOWN ON THE PLANS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL POTHOLE AND DETERMINE THE EXACT LOCATION OF ALL POTENTIAL CONFLICTS IN ACCORDANCE WITH U.S.A. LAWS AND THESE SPECIAL PROVISIONS AND THE STANDARD SPECIFICATIONS. IF ANY UNMARKED UTILITIES ARE ENCOUNTERED, OR IF UNABLE TO LOCATE A MARKED UTILITY AFTER POTHOLING, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OF THAT UTILITY AND THE ENGINEER.
- ALL SEWER MANHOLES, MAINLINE CLEANOUTS AND WATER VALVES THAT ARE ON ACTIVE SYSTEMS SHALL BE ACCESSIBLE TO CITY PERSONNEL AT ALL TIMES AND SHALL BE BROUGHT TO GRADE WITHIN 48 HOURS OF PAVING.
- THE CONTRACTOR SHALL PROTECT AND PRESERVE CITY MONUMENTS. THE CONTRACTOR SHALL COORDINATE WITH THE CITY ENGINEER 10 WORKING DAYS IN ADVANCE FOR REFERENCING OF EXISTING MONUMENTS TO BE DISTURBED. THE CONTRACTOR SHALL RECONSTRUCT DISTURBED MONUMENTS IN ACCORDANCE WITH CITY STANDARD 280.
- OVERHEAD UTILITY SERVICE DROPS ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL INVESTIGATE THE SITE AND BE AWARE OF LIMITED CLEARANCES UNDER OVERHEAD UTILITY LINES AND LOW HANGING TREE BRANCHES. THE CONTRACTOR'S TRUCKS AND EXCAVATION EQUIPMENT SHALL BE SIZED SO THAT OVERHEAD WIRES AND TREE BRANCHES ARE NOT DAMAGED.
- ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF AS GENERATED AND AT NO TIME SHALL THE CONTRACTOR PLACE EXCAVATED MATERIAL AT THE WORK SITE.
- THE CONTRACTOR SHALL ONLY REMOVE EXISTING TREES OR SHRUBS AS NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- FOR CLARITY OF EXISTING SUBSURFACE CONDITIONS, NOT ALL CROSSWALKS, STOP BARS, OR EXISTING PAVEMENT MARKINGS ARE SHOWN ON THE PLANS. TRAFFIC STRIPES, RAISED PAVEMENT MARKERS AND PAVEMENT MARKINGS DAMAGED DUE TO THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED PER CITY OF SANTA ROSA TRAFFIC STANDARDS PART III, TRAFFIC MARKINGS. PATCHING OF DAMAGED MARKINGS WILL NOT BE ALLOWED WITHOUT PRIOR APPROVAL FROM THE ENGINEER. ALL DAMAGED RAISED PAVEMENT (NON-REFLECTIVE) MARKERS MUST BE CERAMIC.



**LOCATION MAP**  
NOT TO SCALE

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1	COVER
2	ABBREVIATIONS, LEGEND & KEY MAP
3	SONOMA AVENUE UTILITY PLAN
4	HAZEL STREET UTILITY PLAN
5	CHESTNUT-ROBERTS UTILITY PLAN
6	BYPASS PLAN
7	TRAFFIC CONTROL PLAN AT BYPASS PUMPING LOCATION
8	TRAFFIC CONTROL PLAN AT BYPASS DISCHARGE LOCATION
9	TRUNK SEWER BYPASS PIPING DETAILS

**RECORD PLAN DATA**

PROJECT START: _____	WATER SERVICE TYPE: _____
PROJECT END: _____	MANUFACTURER: _____
GEN. CONTRACTOR: _____	FIRE HYDRANT TYPE: _____
SUPERINTENDENT: _____	MANUFACTURER: _____
UNDERGROUND CONTRACTOR: _____	INSPECTOR: _____
FOREMAN: _____	CONSTRUCTION MANAGER: _____
SEWER PIPE TYPE: _____	RECORD PLANS BY: _____
MANUFACTURER: _____	ADDITIONAL INFO: _____
SEWER FITTINGS MANUFACTURER: _____	_____
M.H. MANUFACTURER: _____	_____
WATER PIPE TYPE: _____	_____
MANUFACTURER: _____	_____
WATER VALVE MANUFACTURER: _____	_____
WATER FITTINGS MANUFACTURER: _____	_____

BEFORE EXCAVATING  
CALL U.S.A. NORTH  
UNDERGROUND SERVICE ALERT  
AT 811  
TWO WORKING DAYS BEFORE ALL  
PLANNED WORK OPERATIONS

DATE	BY	REVISION
3/17/22	DA	1
3/17/22	DA	2
3/17/22	DA	3
3/17/22	DA	4
3/17/22	DA	5
3/17/22	DA	6
3/17/22	DA	7
3/17/22	DA	8
3/17/22	DA	9

DATE: MARCH 2022  
CHK BY: SG & BB  
APPROVED: Deputy Director - Engineering  
Mike Prinz  
Date: 3/17/2022

03-17-22 Kiffizghi 46911.dwg 4691.00 COVER.dwg

**ABBREVIATIONS**

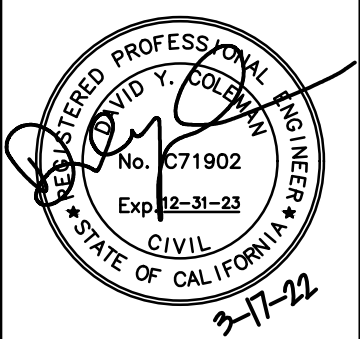
AB	AGGREGATE BASE	ELL	ELBOW	PUE	PUBLIC UTILITY EASEMENT
AC	ASPHALT CONCRETE	EP	EDGE OF PAVEMENT	RCP	REINFORCED CONCRETE PIPE
ACP	ASBESTOS CEMENT PIPE	ESMT	EASEMENT	RD	ROAD
ADA	AMERICANS WITH DISABILITIES ACT	EX	EXISTING	RT	RIGHT
AGG	AGGREGATE	FG	FINISHED GRADE	R/W	RIGHT OF WAY
AP	ANGLE POINT	FL	FLOWLINE	S	SOUTH
APN	ASSESSORS' PARCEL NUMBER	FM	FORCE MAIN (PRESSURE)	S	SLOPE
APPROX	APPROXIMATE	FT	FEET	SD	STORM DRAIN
AVE	AVENUE	GPM	GALLONS PER MINUTE	SDDI	STORM DRAIN DROP INLET
BLDG	BUILDING	GRD	GROUND	SE	SEWER EASEMENT
BLVD	BOULEVARD	HDPE	HIGH DENSITY POLYETHYLENE	SF	SQUARE FEET
BM	BENCHMARK	HWY	HIGHWAY	SS	SANITARY SEWER
BSW	BACK OF SIDEWALK	INV	INVERT	SSCO	SANITARY SEWER CLEANOUT
B&R	BRELIE & RACE	IPS	IRON PIPE SIZE	SSMH	SANITARY SEWER MANHOLE
CIPP	CAST-IN-PLACE PIPE	JP	JOINT POLE	ST	STREET
CL	CENTERLINE	L	LENGTH	STD	STANDARD
CL	CLASS	LF	LINEAL FEET	SVC	SERVICE
CO	CLEANOUT	LT	LEFT	S/W	SIDEWALK
CONC	CONCRETE	MAX	MAXIMUM	T	TEMPORARY CONSTRUCTION EASEMENT
CP	CONTROL POINT	MG	MILLION GALLONS	TW	TOP OF WALL
CPLG	COUPLING	MH	MANHOLE	TYP	TYPICAL
CTR	CENTER	MIN	MINIMUM	W	WEST
C&G	CURB AND GUTTER	MSL	MEAN SEA LEVEL	W	WATER
DI	DROP INLET	N	NORTH	&	AND
DIA	DIAMETER	NO.	NUMBER		
DR	DRIVE	OD	OUTSIDE DIAMETER		
DS	DOWNSTREAM	OH	OVERHEAD		
DWG	DRAWING	R	PROPERTY LINE		
D/W	DRIVEWAY	PP	POWER POLE		
E	EAST	PSI	POUND PER SQUARE INCH		
ECC	ECCENTRIC				
EFFL	EFFLUENT (SEWER)				
EG	EXISTING GROUND				
EL	ELEVATION				

**LEGEND**

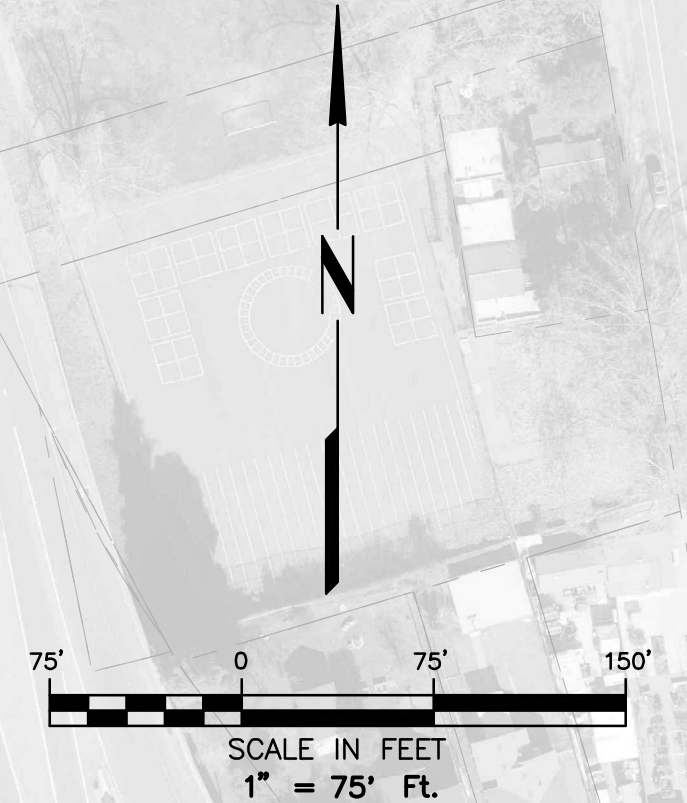
	APPROXIMATE PARCEL LINE		ABOVE GRADE TRUNK SEWER BYPASS PIPING
	TRUNK SEWER		UNDERGROUND TRUNK SEWER BYPASS PIPING
	COLLECTOR SEWER		WATER FILLED K-RAIL STYLE PLASTIC BARRIER
	TEMPORARY SEWER CONSTRUCTION EASEMENT		ASPHALT SURFACING
	SANTA ROSA CREEK		TEMPORARY TRAFFIC CONTROL SIGN

**SHEET NOTES**

- COLLECTOR SEWERS NOT SHOWN ON THIS SHEET FOR CLARITY PURPOSES. SEE UTILITY PLANS FOR ADDITIONAL INFORMATION.
- LOCATION OF PARCEL AND RIGHT-OF-WAY BOUNDARY LINES ARE APPROXIMATE.



City of Santa Rosa  
**Brelje & Race**  
 CONSULTING ENGINEERS  
 1775 MARKET STREET, SUITE 200, SANTA ROSA, CA 95403  
 www.breljeandrace.com

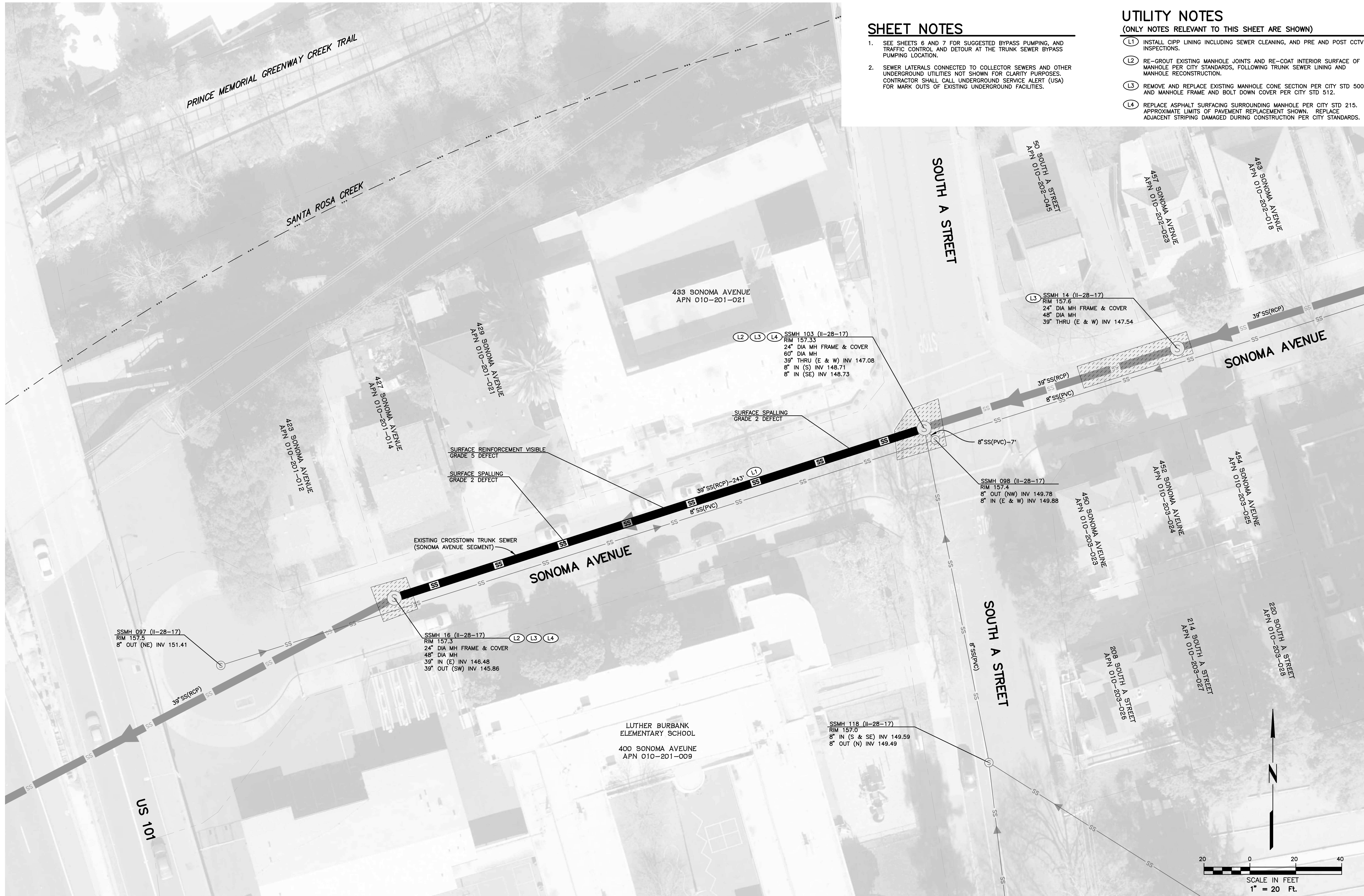


NO.	DATE	REVISION	BY

SCALE: AS SHOWN	DATE: MARCH 2022	CHK BY: SG & BB
DWN BY: PIT		

**CROSTOWN TRUNK LINING  
 3 SEGMENTS**  
**ABBREVIATIONS,  
 LEGEND & KEY MAP**

03-17-22 kiffighi \\4691\dwg\4691\_00\4691.00\_PLAN.dwg TAB: 2 KEY MAP

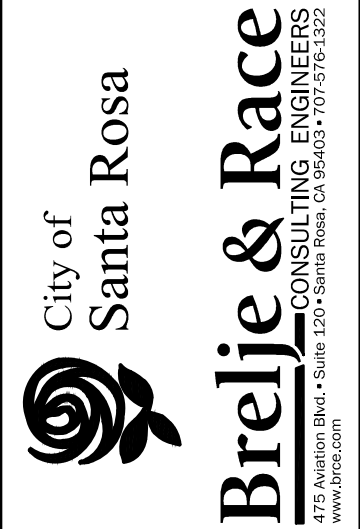
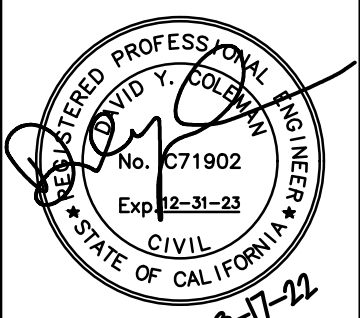


**SHEET NOTES**

- SEE SHEETS 6 AND 7 FOR SUGGESTED BYPASS PUMPING, AND TRAFFIC CONTROL AND DETOUR AT THE TRUNK SEWER BYPASS PUMPING LOCATION.
- SEWER LATERALS CONNECTED TO COLLECTOR SEWERS AND OTHER UNDERGROUND UTILITIES NOT SHOWN FOR CLARITY PURPOSES. CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (USA) FOR MARK OUTS OF EXISTING UNDERGROUND FACILITIES.

**UTILITY NOTES**

- (ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)
- INSTALL CIPP LINING INCLUDING SEWER CLEANING, AND PRE AND POST CCTV INSPECTIONS.
  - RE-GROUT EXISTING MANHOLE JOINTS AND RE-COAT INTERIOR SURFACE OF MANHOLE PER CITY STANDARDS, FOLLOWING TRUNK SEWER LINING AND MANHOLE RECONSTRUCTION.
  - REMOVE AND REPLACE EXISTING MANHOLE CONE SECTION PER CITY STD 500 AND MANHOLE FRAME AND BOLT DOWN COVER PER CITY STD 512.
  - REPLACE ASPHALT SURFACING SURROUNDING MANHOLE PER CITY STD 215. APPROXIMATE LIMITS OF PAVEMENT REPLACEMENT SHOWN. REPLACE ADJACENT STRIPING DAMAGED DURING CONSTRUCTION PER CITY STANDARDS.



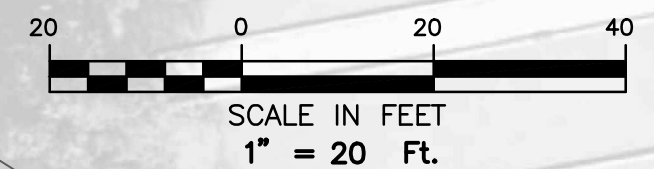
NO.	DATE	REVISION	BY

SCALE: AS SHOWN	DATE: MARCH 2022	CHK BY: SG & BB
DWN BY: PIT		

**CROSSTOWN TRUNK LINING  
3 SEGMENTS**

**SONOMA AVENUE  
UTILITY PLAN**

CONTRACT NO. C02311  
SHEET 3 OF 9  
FILE NO. 2022-0010







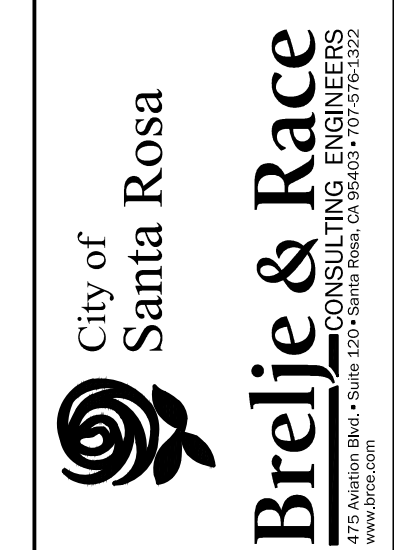
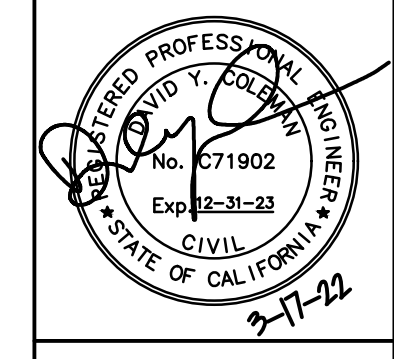
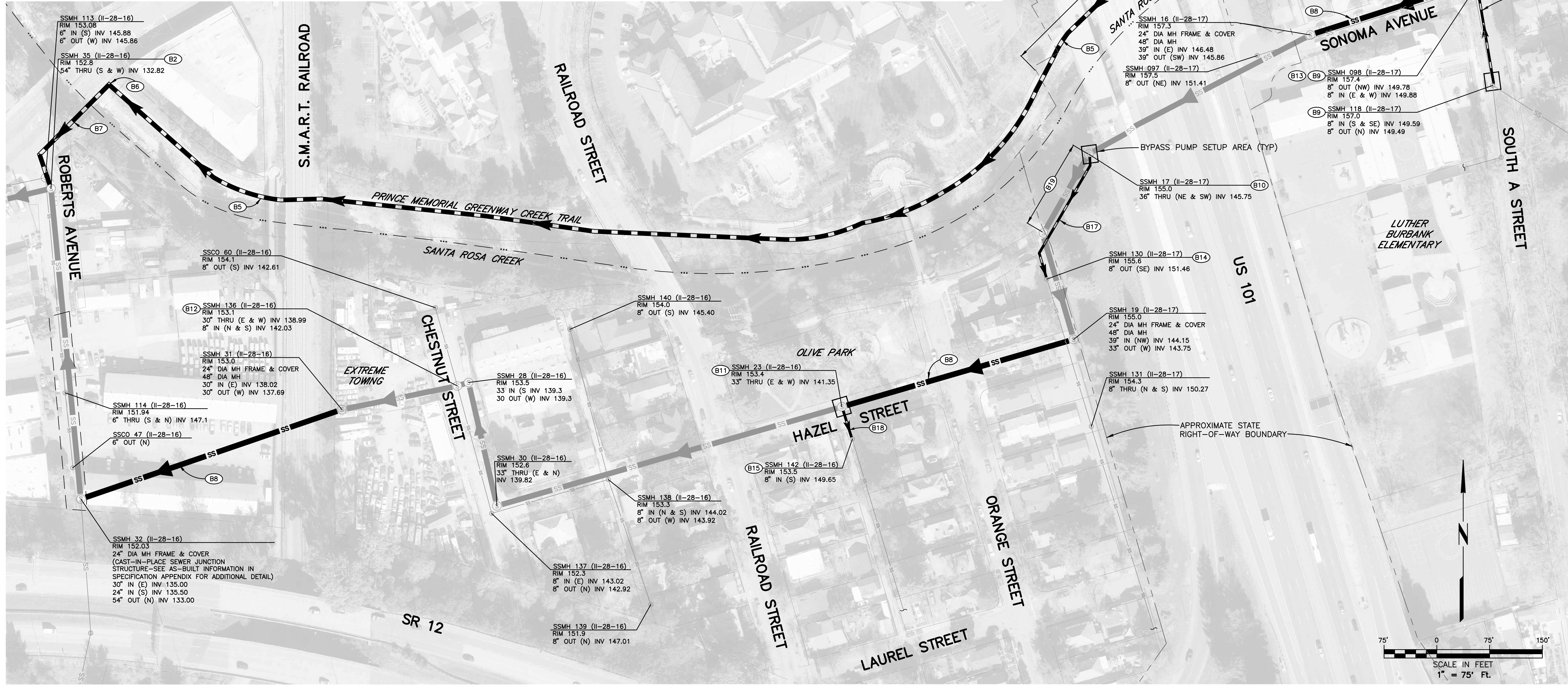
**BYPASS PUMPING CONSTRUCTION NOTES**

- B1** TRUNK SEWER BYPASS PUMPING SUCTION LOCATION. INSTALL TEMPORARY PLUGS IN OUTLET PIPE OF SUCTION LOCATION MANHOLE. BYPASS PUMPING SET-UP AND ABOVE GRADE BYPASS PIPING SHALL BE CONDUCTED TO MAINTAIN ACCESS TO ADJACENT DRIVEWAYS. REMOVE CONE SECTION OF MH14 (11-28-17) AND INSTALL UNDERGROUND SUCTION PIPING TO MAINTAIN ACCESS TO EXISTING DRIVEWAYS. PROVIDE ROAD PLATES OVER UNDERGROUND PIPING. BYPASS PUMPING EQUIPMENT, OPEN MANHOLES AND PIPING SHALL BE PROTECTED FROM VEHICULAR TRAFFIC USING WATER FILLED K-RAIL STYLE PLASTIC BARRIERS. OPEN TRENCHES AND MANHOLES SHALL BE COVERED WITH TRENCH PLATES OR SURROUNDED BY CHAIN LINK FENCING DURING NON-WORKING HOURS AND WHEN CONTRACTOR PERSONNEL IS NOT ON-SITE. CONTRACTOR MAY SUSPEND PARKING ALONG SONOMA AVENUE DURING TRUNK SEWER BYPASS PUMPING OPERATIONS. CONTRACTOR SHALL PROVIDE DETOUR AS NECESSARY TO MAINTAIN ONE-WAY WESTBOUND TRAFFIC ALONG SONOMA AVENUE EAST OF SOUTH A STREET. SEE SHEET 7 FOR LONG DURATION TRAFFIC CONTROL AND DETOUR PLAN AT THE TRUNK SEWER BYPASS PUMPING SUCTION LOCATION. TRUNK SEWER SHALL BE BYPASS PUMPED FROM THIS LOCATION DURING LINING OF SONOMA AVENUE, HAZEL STREET AND CHESTNUT-ROBERTS SEGMENTS.
- B2** TRUNK SEWER BYPASS PIPING DISCHARGE MANHOLE. EXTEND BYPASS PIPING TO TOP OF EXISTING MANHOLE SHELF. BYPASS PIPING SHALL BE PROTECTED FROM VEHICULAR TRAFFIC USING WATER FILLED K-RAIL STYLE PLASTIC BARRIERS. CONTRACTOR MAY SUSPEND PARKING ALONG ROBERTS AVENUE DURING BYPASS PUMPING OPERATIONS. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AROUND BYPASS PIPING AS NECESSARY TO MAINTAIN TWO WAY TRAFFIC ALONG ROBERTS AVENUE SOUTH OF WEST THIRD STREET. SEE SHEET 8 FOR LONG DURATION TRAFFIC CONTROL PLAN AT THE TRUNK SEWER BYPASS PUMPING DISCHARGE LOCATION.
- B3** ABOVE GRADE TRUNK SEWER BYPASS PIPING LOCATED IN EASTERN GUTTER OF SOUTH A STREET. TWO-WAY TRAFFIC SHALL BE MAINTAINED ALONG SOUTH A STREET. BYPASS PIPING SHALL BE PROTECTED FROM VEHICULAR TRAFFIC USING WATER FILLED K-RAIL STYLE PLASTIC BARRIERS. SEE LONG DURATION TEMPORARY TRAFFIC CONTROL PLAN-TRUNK SEWER BYPASS PUMPING SUCTION LOCATION ON SHEET 7 FOR ADDITIONAL DETAILS.
- B4** ABOVE GRADE TRUNK SEWER BYPASS PIPING TO BE ROUTED VERTICALLY FROM THE SOUTH A STREET BRIDGE TO THE PRINCE MEMORIAL GREENWAY CREEK TRAIL (APPROXIMATELY 18'-10" ELEVATION DIFFERENCE BETWEEN TRAIL PAVEMENT AND TOP OF GUARDRAIL). CONTRACTOR SHALL PROVIDE AN INDEPENDENT STRUCTURAL SUPPORT SYSTEM FOR THE BYPASS PIPING THAT DOES NOT DAMAGE EXISTING IMPROVEMENTS. STRUCTURAL SUPPORTS SHALL BE PREPARED BY A CALIFORNIA REGISTERED STRUCTURAL ENGINEER. A MINIMUM OF 7' CLEAR TRAIL WIDTH FOR TWO-WAY PEDESTRIAN AND BICYCLE TRAFFIC SHALL BE MAINTAINED ALONG THE TRAIL AND AROUND ALL BYPASS PIPING STRUCTURAL SUPPORTS. ANY DAMAGE TO THE BRIDGE, GUARDRAILS, OR PATHWAY SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE CITY. SEE SHEET 9 FOR BYPASS PIPING DETAILS ALONG PRINCE MEMORIAL GREENWAY CREEK TRAIL.
- B5** ABOVE GRADE TRUNK SEWER BYPASS PIPING TO BE LOCATED ALONG SOUTHERN EDGE OF TRAIL. A MINIMUM 7' CLEAR TRAIL WIDTH FOR TWO-WAY PEDESTRIAN AND BICYCLE TRAFFIC SHALL BE MAINTAINED ALONG THE TRAIL AT ALL TIMES. PEDESTRIAN AND BICYCLE TRAFFIC SHALL BE SEPARATED FROM THE BYPASS PIPING BY ADA COMPLIANT INTERLOCKING BARRICADES. ALL TRAIL ACCESS POINTS FROM THE NORTH SHALL BE MAINTAINED DURING CONSTRUCTION. ACCESS POINTS TO SANTA ROSA CREEK FROM THE SOUTH SIDE OF THE TRAIL MAY BE CLOSED DURING BYPASS PUMPING OPERATIONS. CONTRACTOR SHALL PROVIDE NOTIFICATION SIGNS REGARDING LIMITED TRAIL WIDTH AND MAXIMUM 5 MPH BICYCLE SPEED LIMIT AT EACH TRAIL ACCESS POINT BETWEEN SANTA ROSA AVENUE AND PIERSON STREET. DAMAGE TO EXISTING CREEK TRAIL GUARDRAIL SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY. SEE SHEET 9 FOR BYPASS PIPING DETAILS ALONG PRINCE MEMORIAL GREENWAY CREEK TRAIL.
- B6** ABOVE GRADE TRUNK SEWER BYPASS PIPING TO BE ROUTED VERTICALLY FROM THE PRINCE MEMORIAL GREENWAY CREEK TRAIL TO THE WEST THIRD STREET BRIDGE (APPROXIMATELY 20'-7" ELEVATION DIFFERENCE BETWEEN TRAIL PAVEMENT AND TOP OF GUARDRAIL). CONTRACTOR SHALL PROVIDE AN INDEPENDENT STRUCTURAL SUPPORT SYSTEM FOR THE BYPASS PIPING THAT DOES NOT DAMAGE EXISTING IMPROVEMENTS. STRUCTURAL SUPPORTS SHALL BE PREPARED BY A CALIFORNIA REGISTERED STRUCTURAL ENGINEER. A MINIMUM OF 7' CLEAR TRAIL WIDTH FOR TWO-WAY PEDESTRIAN AND BICYCLE TRAFFIC SHALL BE MAINTAINED ALONG THE TRAIL AND AROUND ALL BYPASS PIPING STRUCTURAL SUPPORTS. ANY DAMAGE TO THE BRIDGE, GUARDRAILS, OR PATHWAY SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE CITY. SEE SHEET 9 FOR BYPASS PIPING DETAILS ALONG PRINCE MEMORIAL GREENWAY CREEK TRAIL.
- B7** ABOVE GRADE TRUNK SEWER BYPASS PIPING LOCATED ALONG THE SOUTH SIDEWALK OF WEST THIRD STREET. TWO-WAY TRAFFIC SHALL BE MAINTAINED ALONG WEST THIRD STREET. BYPASS PIPING SHALL BE PROTECTED FROM VEHICULAR TRAFFIC USING WATER FILLED K-RAIL STYLE PLASTIC BARRIERS. TRAFFIC CONTROL SHALL BE PROVIDED TO MAINTAIN BIKE LANE ALONG THE SOUTH SIDE OF WEST THIRD STREET. THE SOUTH SIDEWALK OF WEST THIRD STREET BETWEEN ROBERTS AVENUE AND THE CREEK TRAIL MAY BE CLOSED DURING BYPASS PUMPING OPERATIONS. SEE LONG DURATION TEMPORARY TRAFFIC CONTROL PLAN-TRUNK SEWER BYPASS PUMPING DISCHARGE LOCATION ON SHEET 8 FOR ADDITIONAL DETAILS.
- B8** TRUNK SEWER SEGMENT TO BE LINED, SEE SHEETS 3 THRU 5 FOR ADDITIONAL DETAIL.
- B9** COLLECTOR SEWER BYPASS PUMPING SUCTION LOCATION. DOWNSTREAM COLLECTOR SEWER TO BE BYPASS PUMPED DURING LINING OF SONOMA AVENUE SEGMENT. INSTALL TEMPORARY PLUGS IN OUTLET PIPE OF SUCTION LOCATION MANHOLE.
- B10** COLLECTOR SEWER BYPASS PUMPING SUCTION LOCATION. INSTALL TEMPORARY PLUGS IN OUTLET PIPE OF SUCTION LOCATION MANHOLE. COLLECTOR SEWER TO BE BYPASS PUMPED DURING LINING OF HAZEL STREET SEGMENT.
- B11** COLLECTOR SEWER BYPASS PUMPING SUCTION LOCATION. COLLECTOR SEWER TO BE BYPASS PUMPED DURING LINING OF CHESTNUT-ROBERTS SEGMENT. INSTALL TEMPORARY PLUGS IN OUTLET PIPE OF SSMH 136 (11-28-16) PER NOTE B12.

- B12** INSTALL TEMPORARY PLUGS IN OUTLET PIPE OF MANHOLE FOR BYPASS PUMPING FROM SSMH 23 (11-28-16) PER B11. CONTRACTOR SHALL MONITOR AND LIMIT SURCHARGING OF THIS MANHOLE TO SPECIFICATION REQUIREMENTS DURING COLLECTOR SEWER BYPASS PUMPING OPERATIONS.
- B13** COLLECTOR SEWER BYPASS PIPING DISCHARGE LOCATION. COLLECTOR SEWER TO BE BYPASS PUMPED DURING LINING OF SONOMA AVENUE SEGMENT.
- B14** COLLECTOR SEWER BYPASS PIPING DISCHARGE LOCATION. COLLECTOR SEWER TO BE BYPASS PUMPED DURING LINING OF HAZEL STREET SEGMENT.
- B15** COLLECTOR SEWER BYPASS PIPING DISCHARGE LOCATION. COLLECTOR SEWER TO BE BYPASS PUMPED DURING LINING OF CHESTNUT-ROBERTS SEGMENT.
- B16** ABOVE GRADE COLLECTOR SEWER BYPASS PIPING TO BE ROUTED IN THE WESTERN GUTTER OF SOUTH A STREET AND CENTER OF SONOMA AVENUE. COLLECTOR SEWER BYPASS PIPING SHALL BE FLEXIBLE HOSE TYPE AND RATED TO WITHSTAND VEHICULAR TRAFFIC. CONTRACTOR MAY CLOSE SOUTH A STREET TO THRU TRAFFIC DURING NORMAL WORKING HOURS BETWEEN DRIVEWAY FOR 433 SONOMA AVENUE AND SONOMA AVENUE FOR COLLECTOR SEWER BYPASS PUMPING OPERATIONS DURING LINING OF SONOMA AVENUE SEGMENT. ACCESS TO PRIVATE DRIVEWAYS AND ONE WAY WEST-BOUND TRAFFIC SHALL BE MAINTAINED ALONG SONOMA AVENUE AND SOUTH A STREET SOUTH OF SONOMA AVENUE.
- B17** ABOVE GRADE COLLECTOR SEWER BYPASS PIPING TO BE ROUTED ALONG SOUTH SIDE OF THE PRINCE MEMORIAL GREENWAY CREEK TRAIL AND CENTER OF ALLEYWAY. COLLECTOR SEWER BYPASS PIPING SHALL BE FLEXIBLE HOSE TYPE AND RATED TO WITHSTAND VEHICULAR TRAFFIC. ALLEYWAY MAY BE CLOSED TO THRU TRAFFIC DURING NORMAL WORKING HOURS BETWEEN THE PRINCE MEMORIAL GREENWAY CREEK TRAIL AND HAZEL STREET FOR COLLECTOR SEWER BYPASS PUMPING OPERATIONS DURING LINING OF HAZEL STREET SEGMENT. ACCESS TO PRIVATE DRIVEWAYS SHALL BE MAINTAINED.
- B18** ABOVE GRADE COLLECTOR SEWER BYPASS PIPING TO BE ROUTED ACROSS HAZEL STREET. COLLECTOR SEWER BYPASS PIPING SHALL BE FLEXIBLE HOSE TYPE AND RATED TO WITHSTAND VEHICULAR TRAFFIC. CONTRACTOR MAY CLOSE HAZEL STREET TO THRU TRAFFIC DURING NORMAL WORKING HOURS BETWEEN OLIVE STREET AND ORANGE STREET FOR COLLECTOR SEWER BYPASS PUMPING OPERATIONS DURING LINING OF CHESTNUT-ROBERTS SEGMENT. ACCESS TO PRIVATE DRIVEWAYS SHALL BE MAINTAINED.
- B19** BYPASS PIPING SHALL BE ENCASED INSIDE A CONTINUOUS HDPE CASING WITHIN THE STATE RIGHT-OF-WAY. CONTRACTOR MAY REDUCE THE SIZE OF THE TRUNK SEWER BYPASS PIPING ALONG THE PRINCE MEMORIAL GREENWAY CREEK TRAIL WITHIN THE CALTRANS RIGHT-OF-WAY. VELOCITY WITHIN THIS SEGMENT OF THE BYPASS PIPING MAY BE INCREASED UP TO 7.5 FEET PER SECOND. TRANSITIONS IN PIPE SIZES SHALL OCCUR GRADUALLY USING CONCENTRIC REDUCERS. THE LENGTH OF TRANSITIONS BETWEEN PIPE DIAMETERS SHALL BE 12' MINIMUM.

**SHEET NOTES**

1. ALL DROP INLETS ADJACENT TO A TRUNK SEWER OR COLLECTOR SEWER BYPASS PUMPING SUCTION OR DISCHARGE LOCATION SHALL BE PROTECTED WITH SANDBAGS.
2. CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE DRIVEWAYS DURING BYPASS PUMPING OPERATIONS. ACCESS TO PRIVATE DRIVEWAYS MAY BE RESTRICTED DURING NORMAL WORKING HOURS.
3. SEE TRAFFIC CONTROL PLANS AND DETAILS ON SHEETS 7 THRU 9 FOR TRAFFIC CONTROL AND DETOUR REQUIREMENTS TO BE FOLLOWED DURING TRUNK SEWER BYPASS PUMPING OPERATIONS OUTSIDE OF NORMAL WORKING HOURS. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANS FOR ALL RESTRICTIONS, REDUCTIONS IN NORMAL WIDTH AND/OR CLOSURES TO STREETS, SIDEWALKS, PATHWAYS, OR TRAILS DURING NORMAL WORKING HOURS PER TECHNICAL SPECIFICATIONS.



BLP	DATE	BY

NO.	DATE	CHK BY	REVISION

**CROSTOWN TRUNK LINING 3 SEGMENTS**

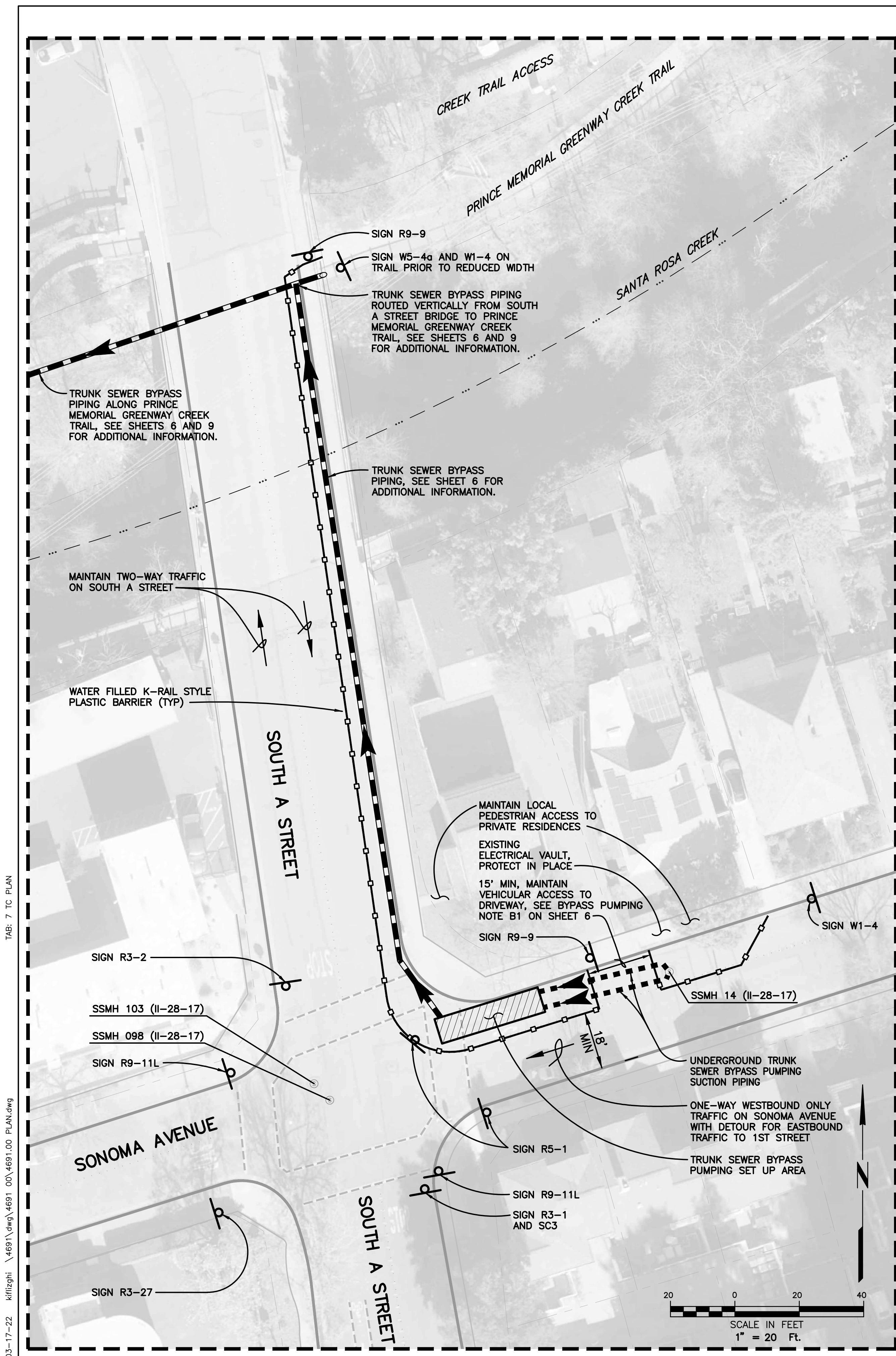
**BYPASS PLAN**

CONTRACT NO. C02311

SHEET 6 OF 9

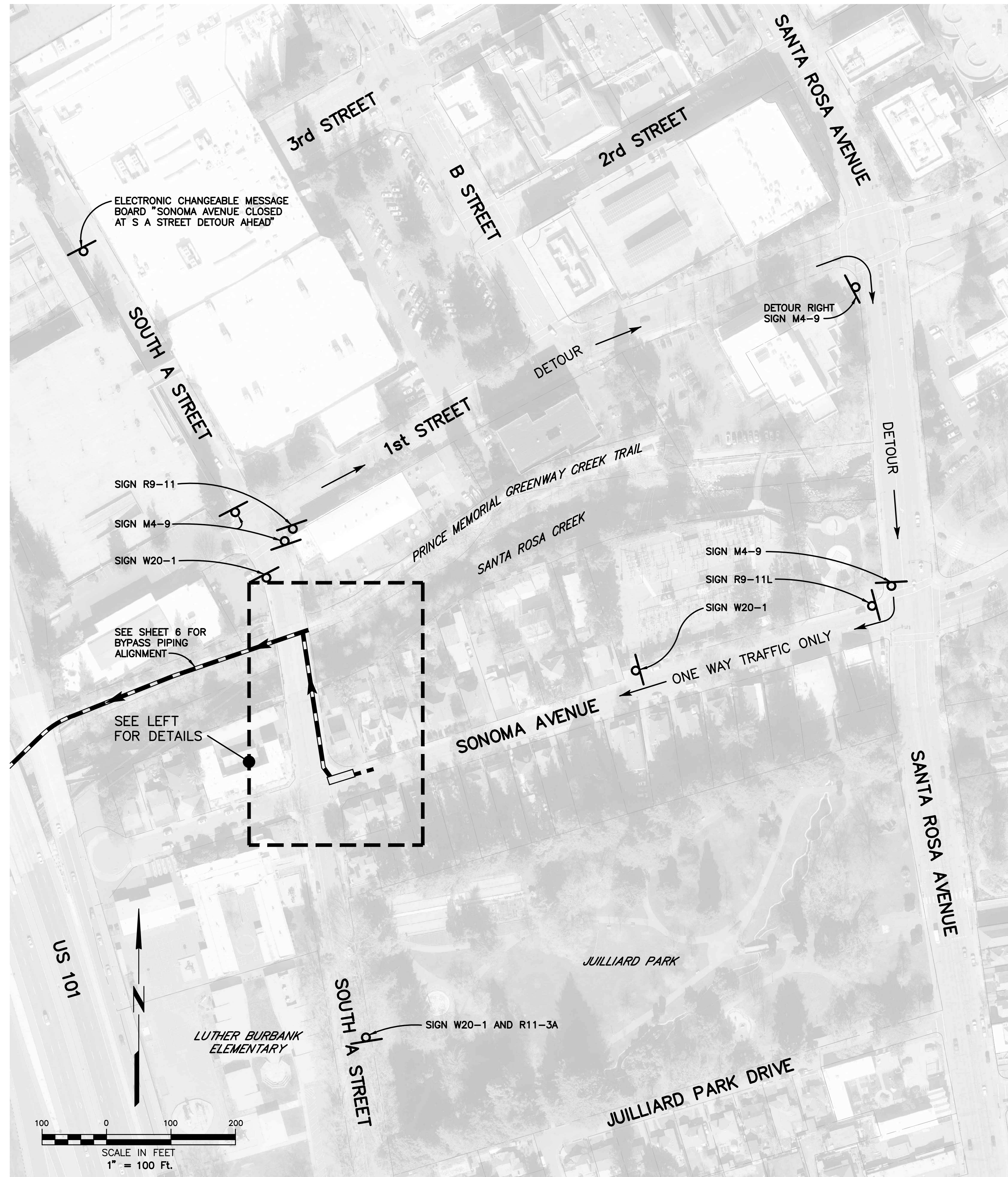
FILE NO. 2022-0010

03-22-22 Petrel 4691.dwg 4691.00 PLAN.dwg TAB. 6 BYPASS PLAN

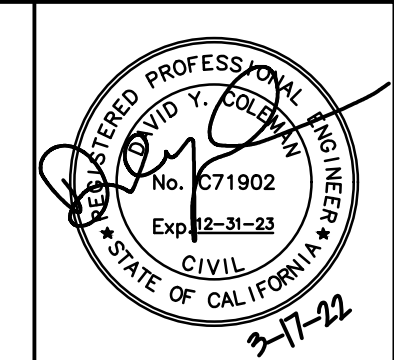


**SHEET NOTES**

1. THIS SHEET DEPICTS THE MINIMUM TRAFFIC CONTROL AND DETOUR REQUIREMENTS TO BE FOLLOWED WHILE TRUNK SEWER BYPASS PUMPING FACILITIES ARE IN PLACE DURING WORKING AND NON-WORKING HOURS.
2. TRAFFIC CONTROL REQUIRED FOR SET-UP OF TRUNK SEWER BYPASS PUMPING FACILITIES, COLLECTOR SEWER BYPASS PUMPING, LINING, UTILITY, AND RESURFACING OPERATIONS SHALL BE SUBMITTED BY THE CONTRACTOR FOR REVIEW AND APPROVAL BY THE ENGINEER.
3. COLLECTOR SEWER BYPASS, LINING, UTILITY, AND RESURFACING WORK ARE NOT SHOWN ON THIS SHEET FOR CLARITY PURPOSES.
4. CONTRACTOR MAY SUSPEND PARKING ALONG SOUTH A STREET AND SONOMA AVENUE ADJACENT TO THE WORK AREA.
5. CONTRACTOR MAY RESTRICT PEDESTRIAN ACCESS ALONG THE NORTH SIDE OF SONOMA AVENUE BETWEEN SANTA ROSA AVENUE AND SOUTH A STREET AND ALONG THE EAST SIDE OF SOUTH A STREET BETWEEN THE CREEK TRAIL ACCESS AND SONOMA AVENUE.
6. AFFECTED RESIDENTS AND BUSINESSES SHALL HAVE ACCESS TO THEIR DRIVEWAYS AT ALL TIMES AND SHALL BE NOTIFIED 72 HOURS IN ADVANCE WITH 24/7 CONTRACTOR CONTACT INFORMATION AVAILABLE.
7. SIGNS TO BE PER CA MUTCD IN TERMS OF SIZE, COLOR AND IN GOOD CONDITION, PROFESSIONALLY MADE. NO PAPER SIGNS WILL BE ALLOWED.
8. DETOUR SIGNS MUST BE PLACED AS SHOWN ON THE PLAN AND CONSTANTLY MAINTAINED THROUGHOUT THE DURATION OF CLOSURE AND AS REQUIRED BY THE ENGINEER.
9. ANY CHANGE TO THE CLOSURE OR DETOUR IS SUBJECT TO THE REVIEW AND APPROVAL BY THE ENGINEER.
10. IN ADDITION TO THE TRAFFIC CONTROL SIGNS INDICATED ON THIS PLAN, THE CONTRACTOR SHALL PROVIDE CHANGEABLE MESSAGE BOARDS AND SIGNS INDICATING THAT THE WIDTH OF THE PRINCE MEMORIAL GREENWAY CREEK TRAIL HAS BEEN REDUCED AS INDICATED IN THE SPECIFICATIONS.



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City of Santa Rosa  
**Brelje & Race**  
 CONSULTING ENGINEERS  
 1775 Market Street, Suite 200, Santa Rosa, CA 95403  
 www.brre.com

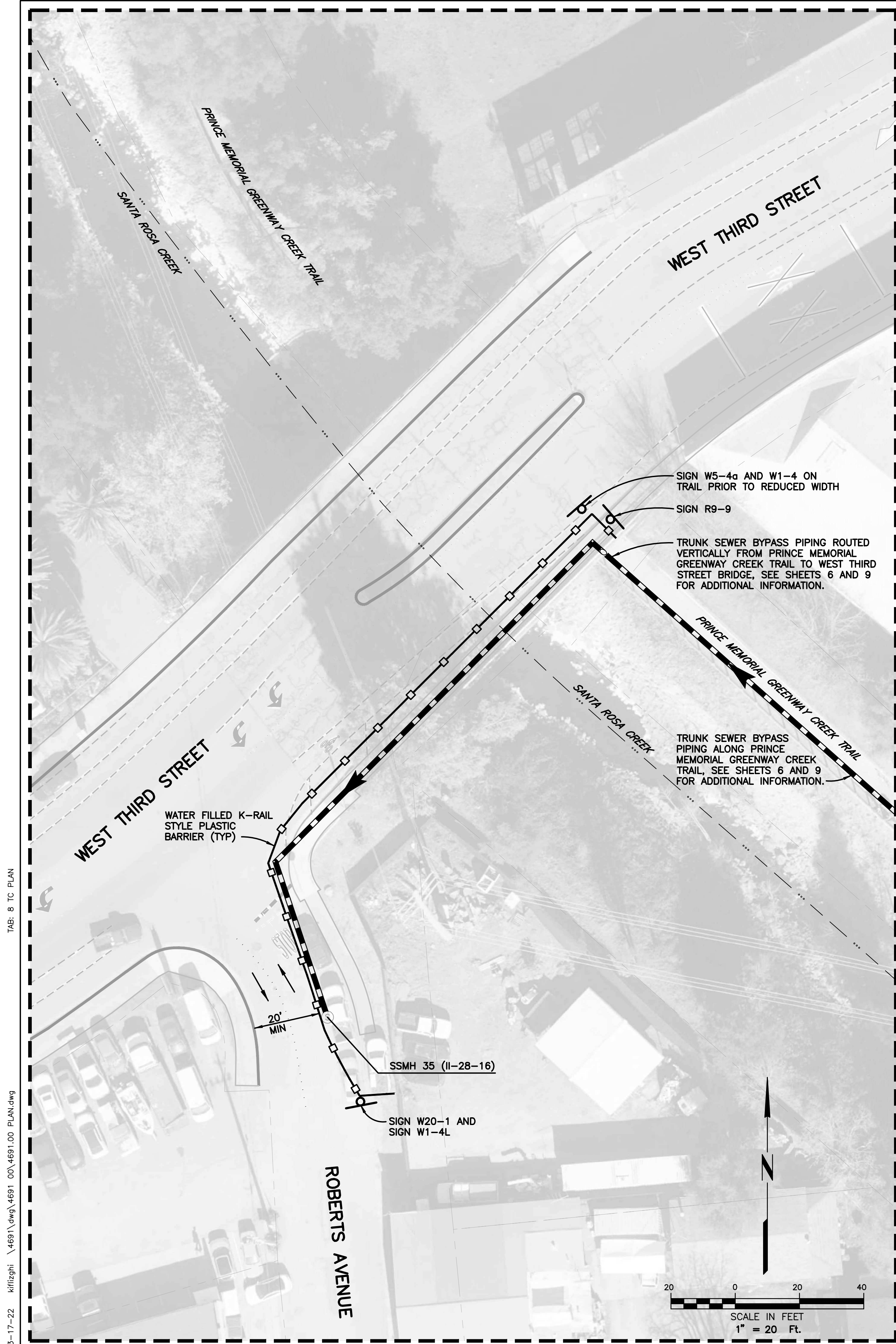
NO.	DATE	CHK BY:	SG & BB	REVISION	BY

SCALE: AS SHOWN	DATE: MARCH 2022	CHK BY: SG & BB
DWN BY: PIT		

**CROSTOWN TRUNK LINING  
 3 SEGMENTS**

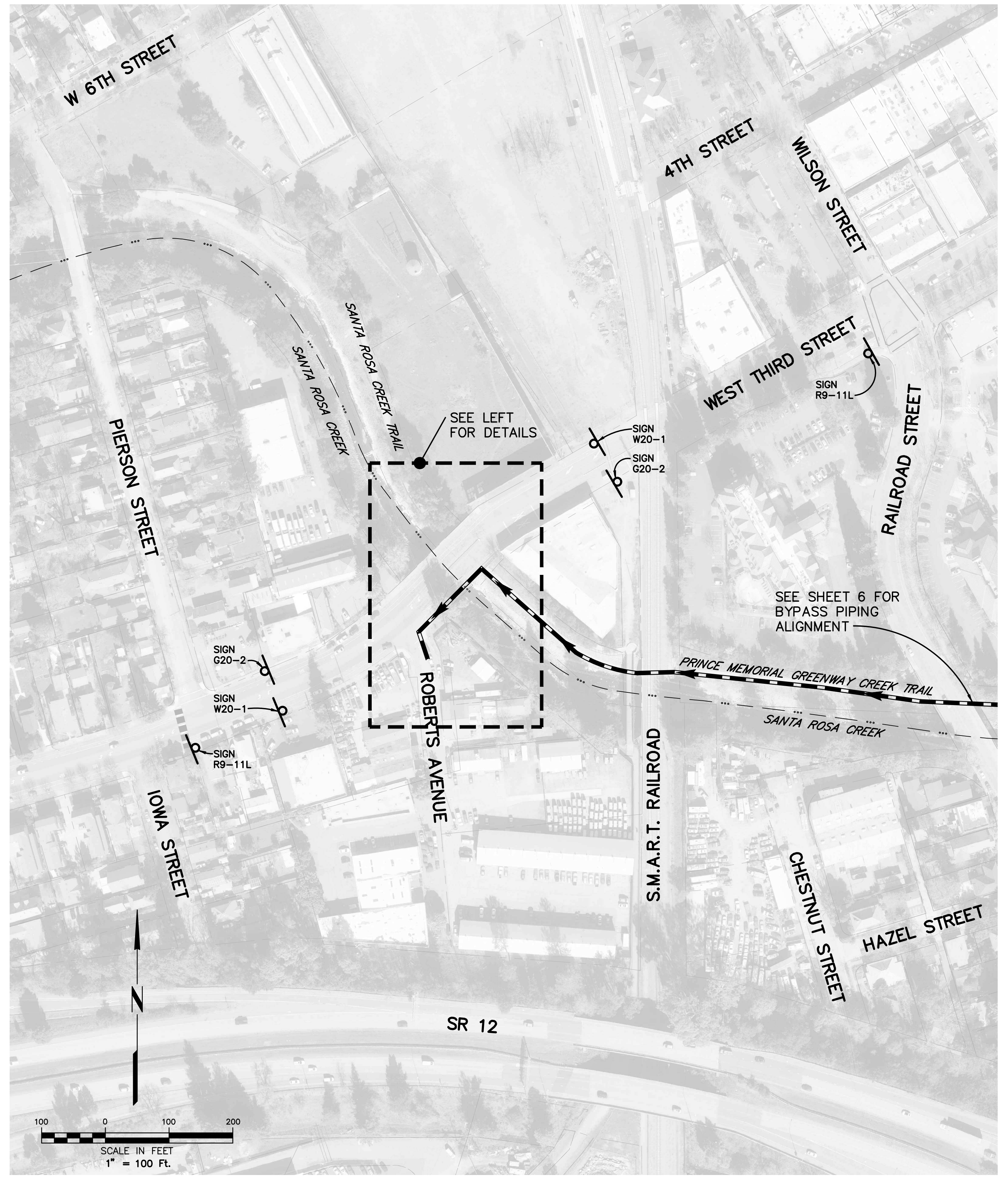
**TRAFFIC CONTROL PLAN AT  
 BYPASS PUMPING LOCATION**

CONTRACT NO. C02311  
 SHEET 7 OF 9  
 FILE NO. 2022-0010

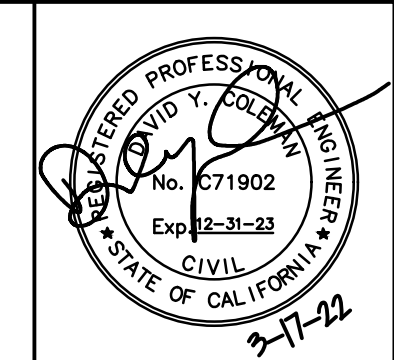


### SHEET NOTES

- THIS SHEET DEPICTS THE MINIMUM TRAFFIC CONTROL AND DETOUR REQUIREMENTS TO BE FOLLOWED WHILE TRUNK SEWER BYPASS PUMPING FACILITIES ARE IN PLACE DURING WORKING AND NON-WORKING HOURS.
- TRAFFIC CONTROL REQUIRED FOR SET-UP OF TRUNK SEWER BYPASS PUMPING FACILITIES, COLLECTOR SEWER BYPASS PUMPING, LINING, UTILITY, AND RESURFACING OPERATIONS SHALL BE SUBMITTED BY THE CONTRACTOR FOR REVIEW AND APPROVAL BY THE ENGINEER.
- COLLECTOR SEWER BYPASS, LINING, UTILITY, AND RESURFACING WORK ARE NOT SHOWN ON THIS SHEET FOR CLARITY PURPOSES.
- CONTRACTOR MAY SUSPEND PARKING ALONG ROBERTS AVENUE AND WEST THIRD STREET ADJACENT TO THE WORK AREA.
- CONTRACTOR MAY RESTRICT PEDESTRIAN ACCESS ALONG THE SOUTH SIDE OF WEST THIRD STREET BETWEEN PIERSON STREET AND RAILROAD STREET.
- AFFECTED RESIDENTS AND BUSINESSES SHALL HAVE ACCESS TO THEIR DRIVEWAYS AT ALL TIMES AND SHALL BE NOTIFIED 72 HOURS IN ADVANCE WITH 24/7 CONTRACTOR CONTACT INFORMATION AVAILABLE.
- SIGNS TO BE PER CA MUTCD IN TERMS OF SIZE, COLOR AND IN GOOD CONDITION, PROFESSIONALLY MADE. NO PAPER SIGNS WILL BE ALLOWED.
- DETOUR SIGNS MUST BE PLACED AS SHOWN ON THE PLAN AND CONSTANTLY MAINTAINED THROUGHOUT THE DURATION OF CLOSURE AND AS REQUIRED BY THE ENGINEER.
- ANY CHANGE TO THE CLOSURE OR DETOUR IS SUBJECT TO THE REVIEW AND APPROVAL BY THE ENGINEER.
- IN ADDITION TO THE TRAFFIC CONTROL SIGNS INDICATED ON THIS PLAN, THE CONTRACTOR SHALL PROVIDE CHANGEABLE MESSAGE BOARDS AND SIGNS INDICATING THAT THE WIDTH OF THE PRINCE MEMORIAL GREENWAY CREEK TRAIL HAS BEEN REDUCED AS INDICATED IN THE SPECIFICATIONS.



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**CROSTOWN TRUNK LINING  
3 SEGMENTS**

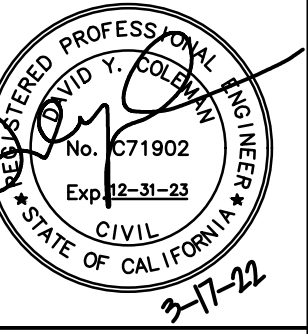
**TRAFFIC CONTROL PLAN AT  
BYPASS DISCHARGE LOCATION**

CONTRACT NO.  
C02311

SHEET 8 OF 9

FILE NO. 2022-0010



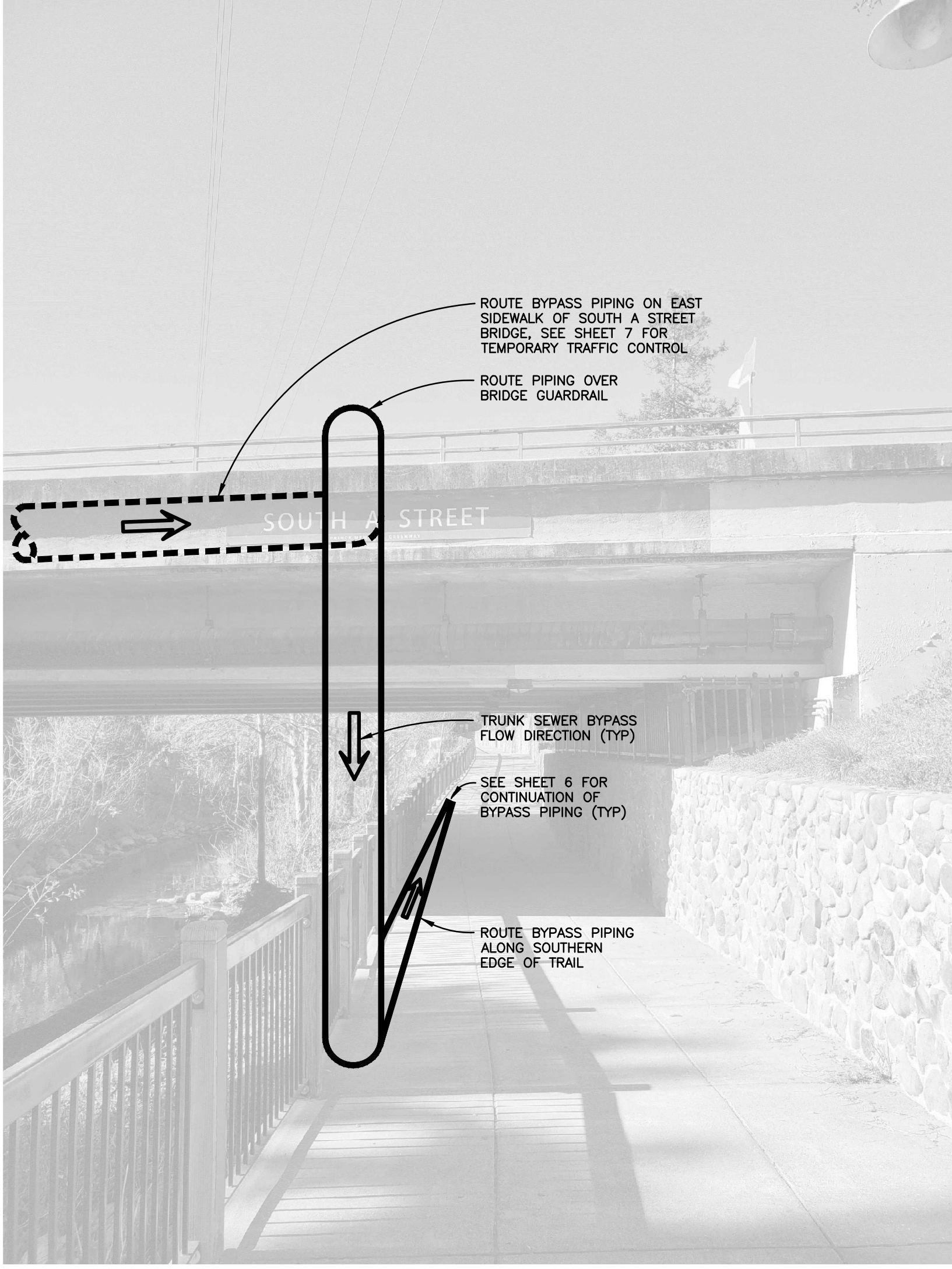


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**CROSTOWN TRUNK LINING  
 3 SEGMENTS  
 TRUNK SEWER BYPASS PIPING  
 DETAILS**

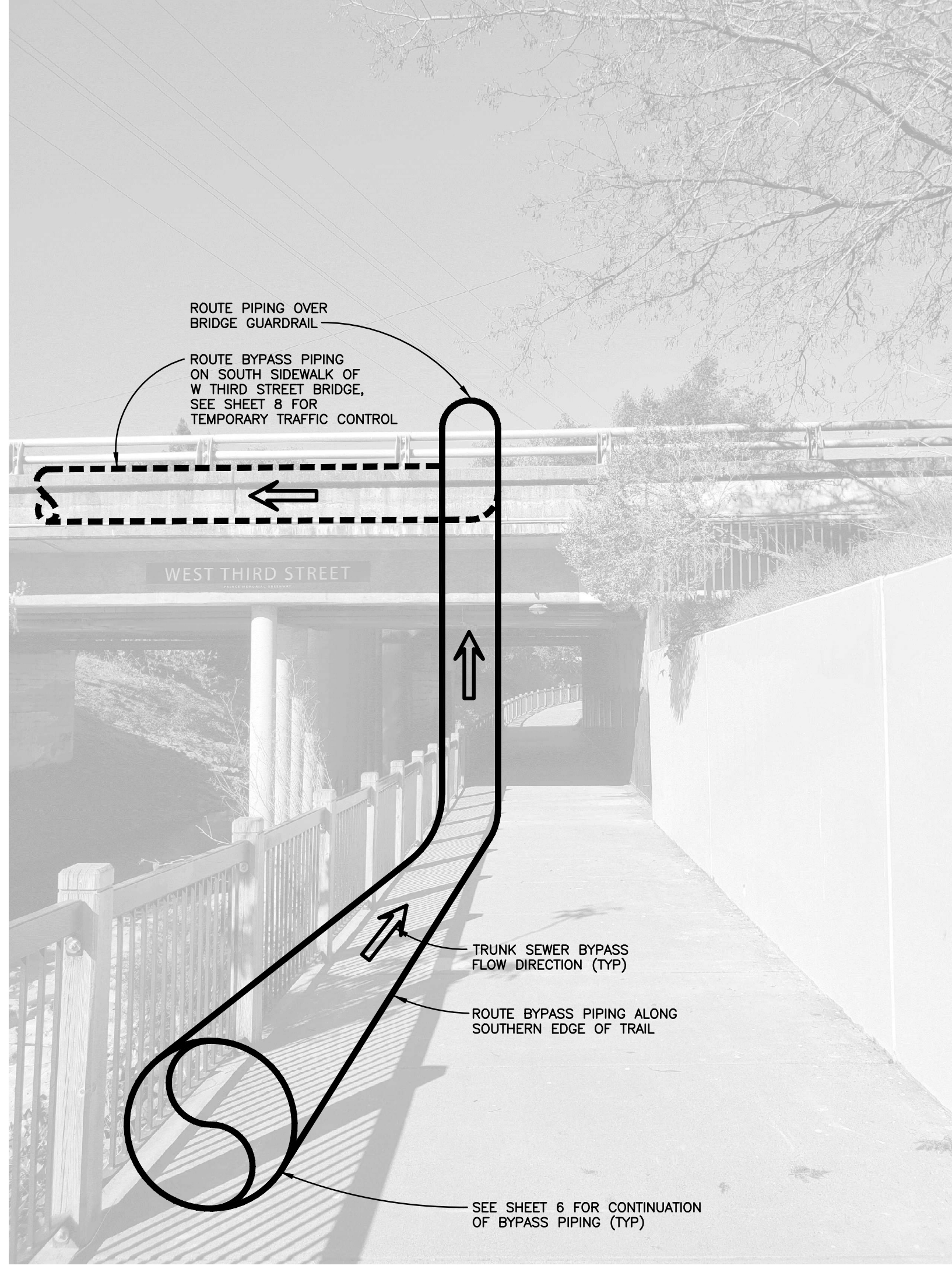
- NOTES**
1. TRAFFIC CONTROL SIGNS, PEDESTRIAN BARRICADE AND STRUCTURAL SUPPORT SYSTEM NOT SHOWN FOR CLARITY PURPOSES. SEE TYPICAL BYPASS PIPING ALONG PRINCE MEMORIAL GREENWAY CREEK TRAIL DETAIL ON THIS SHEET AND NOTES B4 AND B5 ON SHEET 6 FOR ADDITIONAL DETAIL.
  2. SEE SHEET 7 AND TECHNICAL SPECIFICATIONS FOR TRAFFIC CONTROL REQUIREMENTS ALONG THE PRINCE MEMORIAL GREENWAY CREEK TRAIL.



VIEW FACING WEST FROM  
 PRINCE MEMORIAL GREENWAY CREEK TRAIL

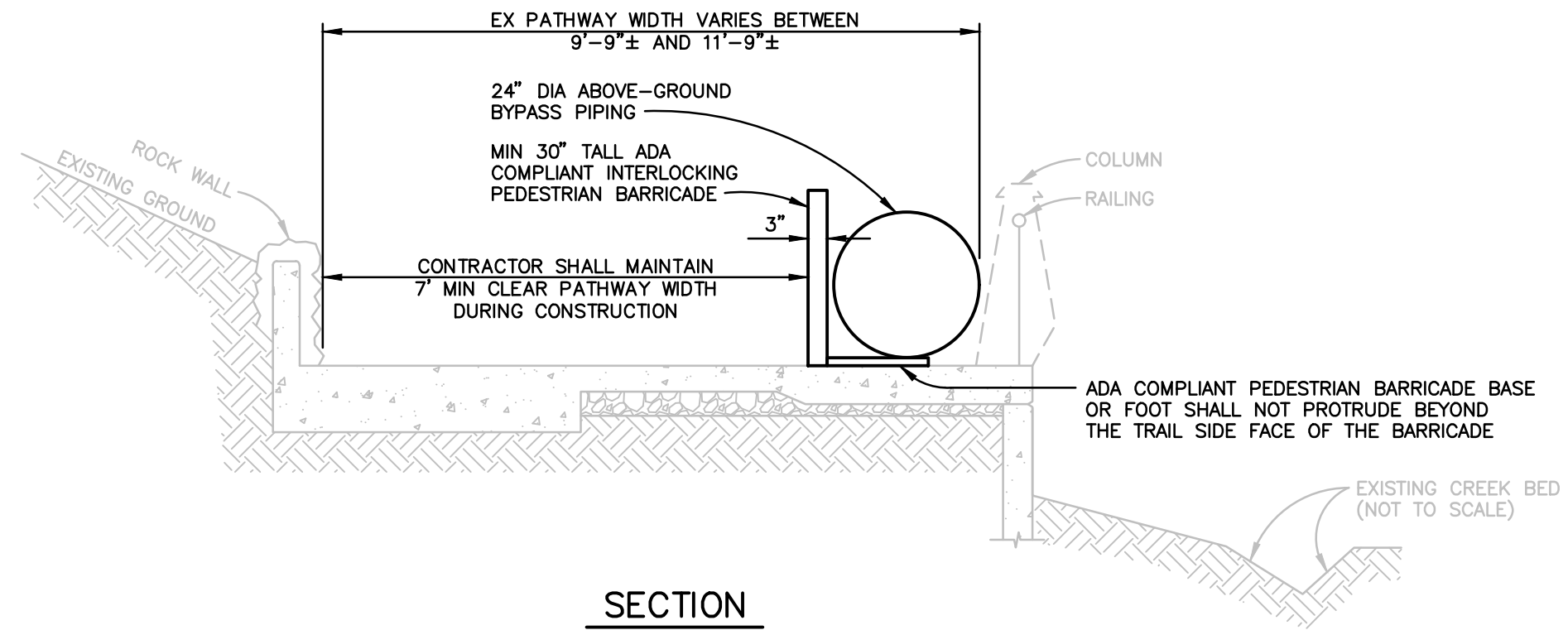
**BYPASS PIPING  
 VERTICAL ROUTING FROM SOUTH A STREET**  
 NOT TO SCALE

- NOTES**
1. TRAFFIC CONTROL, PEDESTRIAN BARRICADE AND STRUCTURAL SUPPORT SYSTEM NOT SHOWN FOR CLARITY PURPOSES. SEE TYPICAL BYPASS PIPING ALONG PRINCE MEMORIAL GREENWAY CREEK TRAIL DETAIL ON THIS SHEET AND NOTES B5 AND B6 ON SHEET 6 FOR ADDITIONAL DETAIL.
  2. SEE SHEET 8 AND TECHNICAL SPECIFICATIONS FOR TRAFFIC CONTROL REQUIREMENTS ALONG THE PRINCE MEMORIAL GREENWAY CREEK TRAIL.



VIEW FACING WEST FROM  
 PRINCE MEMORIAL GREENWAY CREEK TRAIL

**BYPASS PIPING  
 VERTICAL ROUTING TO WEST THIRD STREET**  
 NOT TO SCALE



SECTION

**TYPICAL BYPASS PIPING ALONG  
 PRINCE MEMORIAL GREENWAY CREEK TRAIL**  
 NOT TO SCALE

03-17-22 kiffeghi \4691\dwg\4691\_00\4691\_00 DETAIL.dwg TAB: 9 DETAIL