CITY OF SANTA ROSA

IMPROVEMENT PLANS FOR

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1

(STREAMSIDE DRIVE TO ELAINE DRIVE)

CONTRACT NO. C01903

DECEMBER 2022

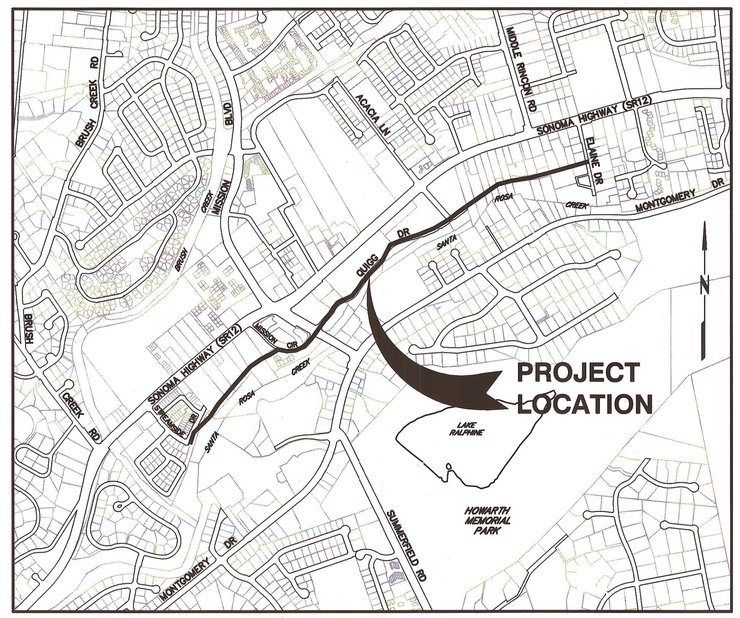
Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 120 • Santa Rosa, CA 95403 • 707-576-1322
www.brce.com

REGISTERED PROFESSIONAL ENGINEER DAVID Y. CREAU No. 1079902 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

CALIFORNIA STATE MAP
NOT TO SCALE

GENERAL NOTES

1. 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.
2. 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.
3. 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 POT HOLING, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OF THAT UTILITY AND THE CITY ENGINEER.
4. 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.
5. 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.
6. OVERHEAD UTILITY SERVICE DROPS MAY NOT BE 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.
7. ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF AS GENERATED AND AT NO TIME SHALL THE CONTRACTOR PLACE EXCAVATED MATERIAL AT THE WORK SITE.
8. THE CONTRACTOR SHALL ONLY REMOVE EXISTING TREES OR SHRUBS AS NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
9. 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 ENGINEERING. ALL DAMAGED RAISED PAVEMENT (NON-REFLECTIVE) MARKERS MUST BE CERAMIC.
10. THE CONTRACTOR SHALL KEEP A SET OF PLANS ON-SITE THAT IS CONTINUALLY AND LEGIBLY UPDATED AS THE PROJECT PROGRESSES. THIS SET OR AN EXACT COPY SHALL BE GIVEN TO THE ENGINEER AT THE END OF THE WORK.



LOCATION MAP
NOT TO SCALE

INDEX OF SHEETS

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

FINAL PAY ITEMS

ROADWAY EXCAVATION	1,030 CY

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:	

NO.	DATE	REVISION	BY	DEPT	SIGNATURE	DATE
				Design/Const		1/3/23
				Survey		1/4/23
				TPW Field Svc's		1/11/23
				Utilities Op's		1-11-23
				Traffic		1/11/23
				Storm Water		1/11/23
				Materials Lab		1/5/23

SCALE: AS SHOWN
DWN BY: PIT
DATE: DECEMBER 2022
CHK BY: BB
APPROVED: *Assistant City Manager*
By JASON NUTT Date 1/11/23

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

COVER

CONTRACT NO. C01903

SHEET 1 OF 33

FILE NO. 2018-0043

TAB: 01 COVER

12-07-22 Pathead \4247\dwg\4247 01\4247.01 COVER-NOTE-CONTROL.dwg

ABBREVIATIONS

AB	AGGREGATE BASE
ABAN	ABANDONED
AC	ASPHALT CONCRETE
ACP	ASBESTOS CEMENT PIPE
AD	ALGEBRAIC DIFFERENCE
ADA	AMERICANS WITH DISABILITIES ACT
ADPT	ADAPTER
AGG	AGGREGATE
ALUM	ALUMINUM
AP	ANGLE POINT
APN	ASSESSORS PARCEL NUMBER
APPROX	APPROXIMATE
ARV	AIR RELEASE VALVE
AVE	AVENUE
BC	BEGIN HORIZONTAL CURVE
BLDG	BUILDING
BLVD	BOULEVARD
BM	BENCHMARK
BO	BLOWOFF
BSL	BUILDING SETBACK LINE
BV	BUTTERFLY VALVE
BVC	BEGIN VERTICAL CURVE
BW	BOTTOM OF WALL
B&R	BRELJE & RACE
CAV	COMBINATION AIR & VACUUM RELEASE VALVE
CB	CATCH BASIN
CBC	CALIFORNIA BUILDING CODE
CDF	CONTROLLED DENSITY FILL
CHK	CHECK
CIP	CAST IRON PIPE
CIPP	CAST–IN–PLACE PIPE
℄	CENTERLINE
CL	CLASS
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CMPA	CORRUGATED METAL PIPE ARCH
CO	CLEANOUT
COAX	COAXIAL CABLE
COMM	COMMUNICATION
CONC	CONCRETE
COND	CONDUIT
COTG	CLEANOUT TO GRADE
CP	CONTROL POINT
CPLG	COUPLING
CR	CURB RETURN
CSP	CORRUGATED STEEL PIPE
CTR	CENTER
CY	CUBIC YARDS
C/C	CENTER TO CENTER
C&G	CURB AND GUTTER
DBL	DOUBLE
DCDC	DOUBLE CHECK DETECTOR CHECK
DDC	DOUBLE DETECTOR CHECK
DET	DETECTOR
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DS	DOWNSTREAM
DWG	DRAWING
D/W	DRIVEWAY
EC	END HORIZONTAL CURVE
ECC	ECCENTRIC
EFFL	EFFLUENT (SEWER)
EG	EXISTING GROUND
EL	ELEVATION
ELEC	ELECTRICAL
ELL	ELBOW
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EVC	END VERTICAL CURVE
EW	EACH WAY
EX	EXISTING
FC	FACE OF CURB
FCA	FLANGED COUPLING ADAPTER
FDC	FIRE DEPARTMENT CONNECTION
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
℄	FLOWLINE
FL	FLOW LINE
FLG	FLANGE
FLSO	FLOWLINE OF SIDE OPENING
FLEX	FLEXIBLE
FM	FORCE MAIN (PRESSURE)
FRP	FIBERGLASS REINFORCED PLASTIC
FT	FEET
FTG	FOOTING
GALV	GALVANIZED
GB	GRADE BREAK
GM	GAS METER
GPM	GALLONS PER MINUTE
GRD	GROUND
GSP	GALVANIZED STEEL PIPE
GV	GATE VALVE
HB	HEADER BOARD
HDG	HOT DIPPED GALVANIZED
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
HPG	HIGH PRESSURE GAS
HWY	HIGHWAY
ICV	IRRIGATION CONTROL VALVE
ID	INSIDE DIAMETER
INV	INVERT
IP	IRON PIPE
IPS	IRON PIPE SIZE
IRR	IRRIGATION
ISA	INTERNATIONAL SIGN ASSOCIATION
JP	JOINT POLE
JT	JOINT TRENCH
L	LENGTH
LBS	POUNDS
LF	LINEAL FEET
LG	LIP OF GARAGE
LP	LOW POINT
LT	LEFT
MAX	MAXIMUM
MBGR	METAL BEAM GUARD RAIL
MFR	MANUFACTURE
MG	MILLION GALLONS
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MSL	MEAN SEA LEVEL
N	NORTH
NO.	NUMBER
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NPT	NATIONAL PIPE THREAD
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OZ	OUNCE
PA	PLANTER AREA
PC	POINT OF CURVATURE
PCC	PORTLAND CEMENT CONCRETE
PD	PLANTER DRAIN
PE	PLAIN END
PG	PAD GRADE
PIV	POST INDICATOR VALVE
P̄	PROPERTY LINE
PN	PAVING NOTCH
POC	POINT OF CONNECTION
POS	PRIVATE OPEN SPACE
POT	POINT ON TANGENT
PP	POWER POLE
PRC	POINT OF REVERSE CURVATURE
PRV	PRESSURE REDUCING VALVE
PSI	POUND PER SQUARE INCH
PSV	PRESSURE SUSTAINING VALVE
PT	POINT OF TANGENCY
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PVT	PRIVATE
PWE	PUBLIC WATER EASEMENT
R	RADIUS
RAW	RAW WATER
RC	RELATIVE COMPACTION
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RED	REDUCER
REF	REFERENCE
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RSC	REMOTE SUPERVISORY CONTROL
RT	RIGHT
RW	RECYCLED WATER
RWL	RAIN WATER LEADER
R/W	RIGHT OF WAY
S	SLOPE
S.A.D.	SEE ARCHITECTURAL DRAWINGS
SCADA	SUPERVISORY CONTROL & DATA ACQUISITION
SCH	SCHEDULE
SD	STORM DRAIN
SDCB	STORM DRAIN CATCH BASIN
SDCO	STORM DRAIN CLEANOUT
SDDI	STORM DRAIN DROP INLET
SDE	STORM DRAIN EASEMENT
SDMH	STORM DRAIN MANHOLE
SE	SEWER EASEMENT
S.E.D.	SEE ELECTRICAL DRAWINGS
SF	SQUARE FEET
S.L.D.	SEE LANDSCAPE DRAWINGS
SOF	SLIP ON FLANGE
SO	SIDE OPENING (SD)
S.P.D.	SEE PLUMBING DRAWINGS
SPEC	SPECIFICATION
SST	STAINLESS STEEL
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
S.S.D.	SEE STRUCTURAL DRAWINGS
S.S.E.	SANITARY SEWER EASEMENT
SSMH	SANITARY SEWER MANHOLE
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
SVC	SERVICE
SWE	SIDEWALK EASEMENT
SY	SQUARE YARDS
S/W	SIDEWALK
TAN	TANGENT
TB	TOP OF BOX
TC	TOP OF CURB
TCE	TEMPORARY CONSTRUCTION EASEMENT
TD	TOP OF DIKE
TEL	TELEPHONE
TEMP	TEMPORARY
TF	TOP OF FOUNDATION
TG	TOP OF GRATE
THD	THREADED
TP	TREE PROTECTION
TS	TOP OF SLAB
TW	TOP OF WALL
TYP	TYPICAL
UFFG	UNDER FLOOR FINISHED GRADE
UNO	UNLESS NOTED OTHERWISE
VC	VERTICAL CURVE
W	WATER
WM	WATER METER
WNF	WELD NECK FLANGE
WS	WATER SERVICE
WT	WEIGHT
WV	WATER VALVE
°	DEGREES
'	MINUTES
"	SECONDS
Δ	DELTA
&	AND
@	AT
#	NUMBER
%	PERCENT

LEGEND

LINES

EXISTING BOUNDARY
EXISTING PARCEL
CENTER
EASEMENT

UTILITY & TOPOGRAPHY

	EXISTING	PROPOSED
DROP INLET		D
DROP INLET WITH SIDE OPENINGS		D
STORM DRAIN, MANHOLE & CATCH BASIN	24"SD SDMH	24"SD SDMH
STORM DRAIN MANHOLE (SURFACING PLAN)	SDMH	SDMH D
SEWER MAIN, MANHOLE & CLEAN OUT	SS CO SSMH	STD 505 STD 500 CO SSMH
SEWER MANHOLE & CLEAN OUT (SURFACING PLAN)	CO SSMH	CO SSMH WITH CONC COLLAR CO WITH CONC COLLAR SSMH
SEWER LATERAL & CLEANOUT	SS CO	STD 513 CO
IRRIGATION CONTROL VALVE BOX & SERVICE	IRR	IRR
FIRE HYDRANT & SERVICE ASSEMBLY	FH W W	STD 857 FH
WATER MAIN, GATE VALVE, CROSS & ELBOW	W W W	STD 877 GV
WATER MAIN, BLOWOFF, TEE, GATE VALVE, CROSS & BEND	W W W BO	BO STD 861 STD 877 GV
SINGLE WATER SERVICE (SEE PLANS FOR SIZE)		STD 863 & 889
DUAL WATER SERVICE (SEE PLANS FOR SIZE)		STD 864
TEMPORARY BLOWOFF, REDUCER & TIE–IN	3" BO STD 859 W	3" BO STD 859 W
END CAP OR PLUG	W	W
GAS MAIN, VALVE & SERVICE	GV G G	GV G G
ELECTRICAL MANHOLE	E	E
TELEPHONE MANHOLE	T	T
PACIFIC BELL TELEPHONE PULL BOX/VAULT	TEL	TEL
ELECTRICAL CONDUIT & BOX	E E	E E
STREET LIGHT CONDUIT & BOX	SL SL	SL SL
STREET LIGHT		
TRAFFIC SIGNAL		
TRAFFIC SIGNAL PULL BOX	TS	TS
JOINT POLE & GUY ANCHOR		
OVERHEAD UTILITY	OH	OH
STREET ADDRESS	500 "STREET NAME"	
STREET SIGN		
FENCE	X X	X X
PARKING METER	P	P
SURVEY CONTROL POINT	△	△
SURVEY MONUMENT	◉	◎
AC DIKE		
CURB & GUTTER		
TREE PROTECTION		TP
ABANDON EXISTING UTILITY		///
TREE TO BE SAVED/PROTECTED		△
TREE TO BE REMOVED		✕

POLYMER CONCRETE PRECAST MANHOLE BASE FABRICATION NOTES

1. GRADES INDICATED ON UTILITY PROFILES FOR PRECAST MANHOLE BASE FABRICATION SHALL NOT BE USED IN THE FIELD TO CONSTRUCT SEWER MAIN BETWEEN MANHOLES.
2. SHELF ELEVATIONS SHOWN ON UTILITY PROFILES INDICATES THE SHELF ELEVATION AT THE INSIDE EDGE OF THE MANHOLE BARREL. MANHOLE SHELF SHALL BE SLOPE INWARD AT A RATE OF 2–INCHES PER FOOT PER CITY STD 500.
3. DROP INLETS WILL BE REQUIRED FOR ANY SIDE SEWER WITH AN INVERT MORE THAN 2 FEET ABOVE THE CROWN OF THE OUTGOING SEWER. MANHOLE BASES SHALL BE FABRICATED WITH CHANNEL FOR DROP CONNECTIONS.
4. SHELF ELEVATIONS DETERMINED BASED ON A HEIGHT OF 2–INCHES ABOVE THE CROWN OF THE OUTGOING SEWER OR SPRINGLINE OF THE HIGHEST INCOMING (NON–DROP INLET) SEWER, WHICHEVER IS GREATER.

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C41806 Exp. 6-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

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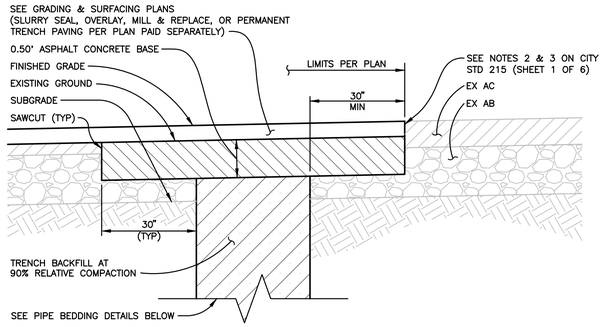
DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

ABBREVIATIONS, LEGEND & NOTES

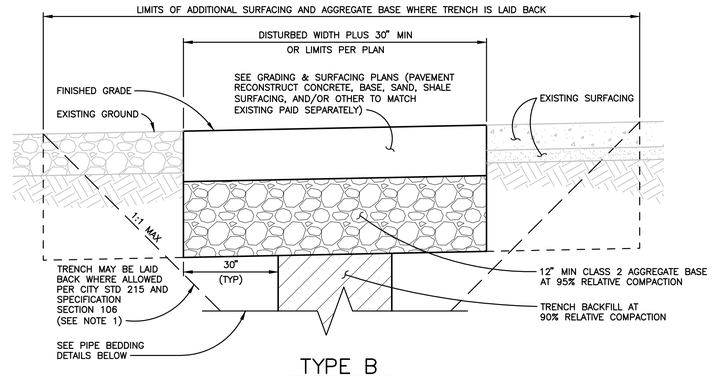
CONTRACT NO. C01903

FILE NO. 2018–0043



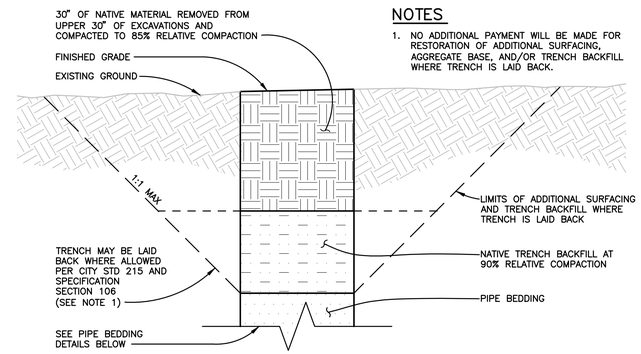
TYPE A

(PAVED AREAS)



TYPE B

(PAVEMENT RECONSTRUCT, GRAVEL, CONCRETE, AND MISCELLANEOUS AREAS)



TYPE C

(UNIMPROVED AND SHOULDER AREAS)

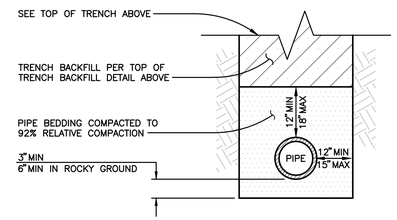
NOTES

1. NO ADDITIONAL PAYMENT WILL BE MADE FOR RESTORATION OF ADDITIONAL SURFACING, AGGREGATE BASE, AND/OR TRENCH BACKFILL WHERE TRENCH IS LAID BACK.

TOP OF TRENCH BACKFILL

BEDDING FOR UNSTABLE TRENCH PER CITY STD–215

UNSTABLE TRENCH



PIPE ø LARGER THAN 18"

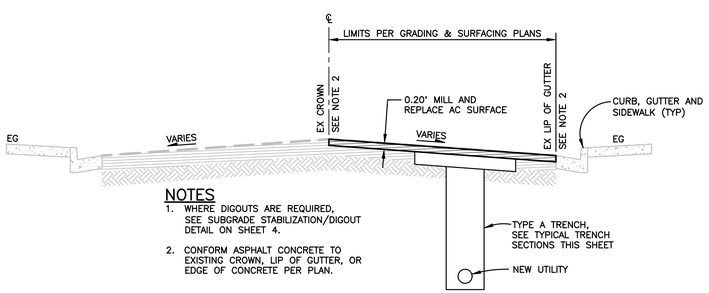
BEDDING FOR PIPE 18" AND SMALLER PER CITY STD–215

PIPE ø 18" AND SMALLER

PIPE BEDDING

TYPICAL TRENCH SECTIONS

NOT TO SCALE

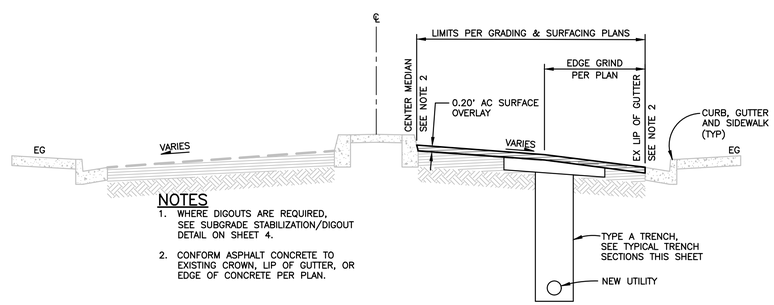


NOTES

1. WHERE DIGOUTS ARE REQUIRED, SEE SUBGRADE STABILIZATION/DIGOUT DETAIL ON SHEET 4.
2. CONFORM ASPHALT CONCRETE TO EXISTING CROWN, LIP OF GUTTER, OR EDGE OF CONCRETE PER PLAN.

PAVEMENT MILL AND REPLACE TYPICAL SECTION

NOT TO SCALE

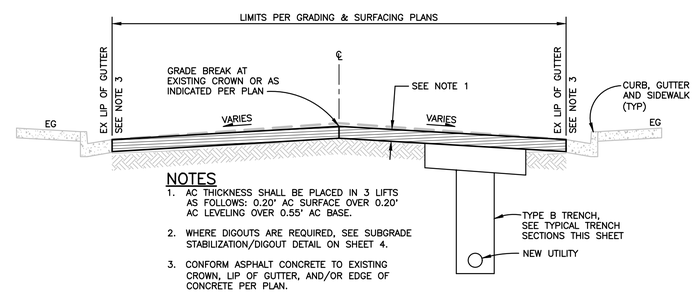


NOTES

1. WHERE DIGOUTS ARE REQUIRED, SEE SUBGRADE STABILIZATION/DIGOUT DETAIL ON SHEET 4.
2. CONFORM ASPHALT CONCRETE TO EXISTING CROWN, LIP OF GUTTER, OR EDGE OF CONCRETE PER PLAN.

OVERLAY TYPICAL SECTION

NOT TO SCALE

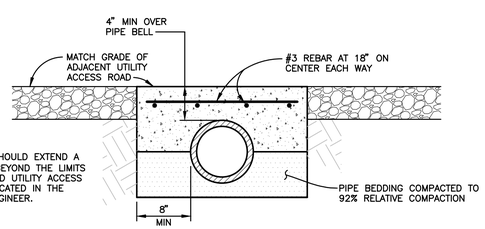


NOTES

1. AC THICKNESS SHALL BE PLACED IN 3 LIFTS AS FOLLOWS: 0.20' AC SURFACE OVER 0.20' AC LEVELING OVER 0.55' AC BASE.
2. WHERE DIGOUTS ARE REQUIRED, SEE SUBGRADE STABILIZATION/DIGOUT DETAIL ON SHEET 4.
3. CONFORM ASPHALT CONCRETE TO EXISTING CROWN, LIP OF GUTTER, AND/OR EDGE OF CONCRETE PER PLAN.

RECONSTRUCT TYPICAL SECTION

NOT TO SCALE

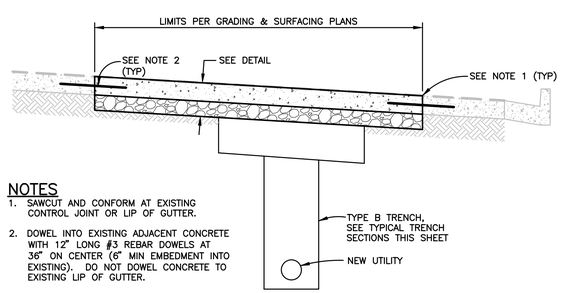


NOTES

1. CONCRETE CAP SHOULD EXTEND A MINIMUM OF 6" BEYOND THE LIMITS OF THE PROPOSED UTILITY ACCESS ROAD OR AS INDICATED IN THE FIELD BY THE ENGINEER.

STORM DRAIN WITH CONCRETE CAP

NOT TO SCALE

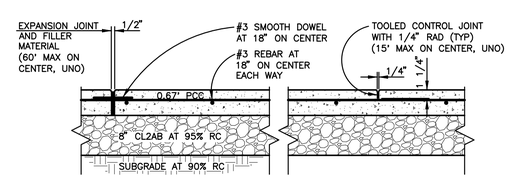


NOTES

1. SAWCUT AND CONFORM AT EXISTING CONTROL JOINT OR LIP OF GUTTER.
2. DOWEL INTO EXISTING ADJACENT CONCRETE WITH 12" LONG #3 REBAR DOWELS AT 36" ON CENTER (6" MIN EMBEDMENT INTO EXISTING). DO NOT DOWEL CONCRETE TO EXISTING LIP OF GUTTER.

REINFORCED CONCRETE DRIVEWAY TYPICAL SECTION

NOT TO SCALE



DETAIL

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COVERT No. C41906 Exp. 6-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

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LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

TYPICAL TRENCH & SURFACING DETAILS

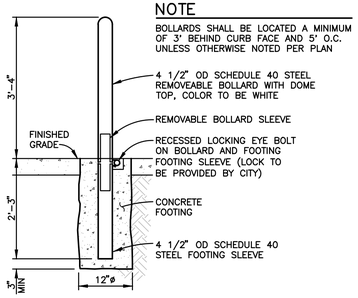
CONTRACT NO. C01903

SHEET 3 OF 33

FILE NO. 2018–0043

TAB: 03 TYPICAL TRENCH DETAILS

12–06–22 bryant \4247\dwg\4247 01\4247.01 DETAIL – Typical & Miscellaneous.dwg

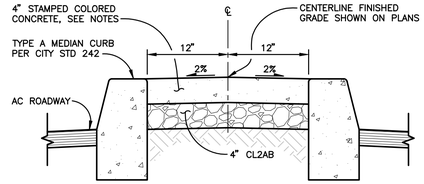


NOTE

BOLLARDS SHALL BE LOCATED A MINIMUM OF 3' BEHIND CURB FACE AND 5' O.C. UNLESS OTHERWISE NOTED PER PLAN

REMOVEABLE BOLLARD

NOT TO SCALE

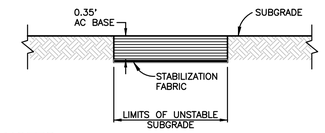


NOTES

1. CONCRETE SURFACE SHALL BE CROWNED TO DRAIN AWAY FROM CENTERLINE.
2. PROVIDE PREMOLDED EXPANSION JOINTS (FULL THICKNESS OF CONCRETE) AT 30" SPACING.
3. COLOR SHALL BE BOMANITE "FRENCH GREY" FLASHED WITH BOMANITE "SUNSET GREY" OR APPROVED EQUIVALENT TO MATCH EXISTING.
4. PATTERN SHALL BE BOMACRON "MEDIUM ASHLAR SLATE" BY BOMANITE OR APPROVED EQUIVALENT TO MATCH EXISTING.
5. PROVIDE A 2'x2' MOCK UP OF TEXTURED, COLORED CONCRETE FOR CITY APPROVAL PRIOR TO INSTALLATION.

CENTER MEDIAN TYPICAL SECTION

NOT TO SCALE

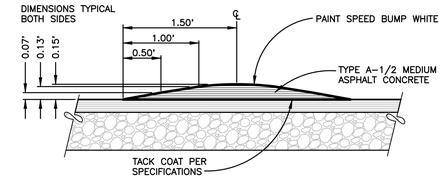


NOTES

1. SUBGRADE STABILIZATION/DIGOUTS ARE NOT SHOWN ON THE PLAN SHEETS. EXACT LOCATIONS SHALL BE MARKED IN THE FIELD BY THE ENGINEER.
2. SUBGRADE STABILIZATION/DIGOUTS SHALL BE PERFORMED AFTER ROADWAY EXCAVATION OR PAVEMENT MILLING IS COMPLETE AND PRIOR TO PLACING AC BASE AND STABILIZATION FABRIC.

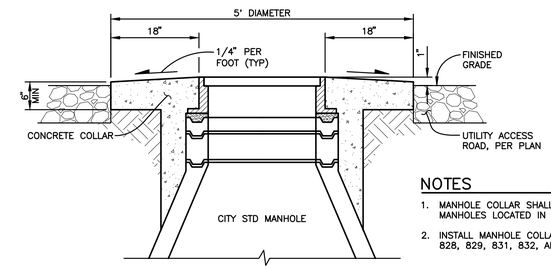
SUBGRADE STABILIZATION/DIGOUT

NOT TO SCALE



SPEED BUMP

NOT TO SCALE



NOTES

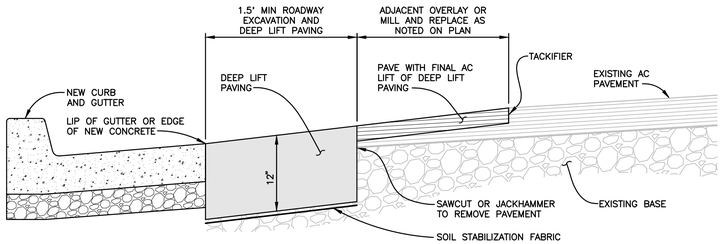
1. MANHOLE COLLAR SHALL BE INSTALLED AT ALL MANHOLES LOCATED IN UTILITY ACCESS ROADS.
2. INSTALL MANHOLE COLLAR AT NEW SSMH 826, 828, 829, 831, 832, AND EX SSMH 18.

MANHOLE COLLAR

NOT TO SCALE

NOTE

DEEP LIFT PAVING SHALL BE PLACED IN A MINIMUM OF 2 LIFTS (MAXIMUM LIFT THICKNESS OF 6") WITH THE TOP LIFT BEING PLACED WITH THE FINAL LIFT OF ADJACENT OVERLAY OR MILL AND REPLACE AC SURFACE PAVING WHERE APPLICABLE.

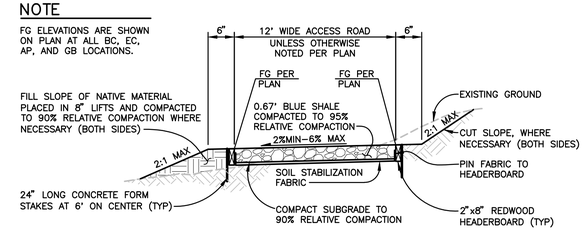


DEEP LIFT PAVING TYPICAL SECTION

NOT TO SCALE

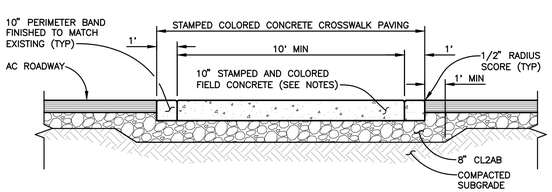
NOTE

FG ELEVATIONS ARE SHOWN ON PLAN AT ALL BC, EC, AP, AND GB LOCATIONS.



UTILITY ACCESS ROAD TYPICAL SECTION

NOT TO SCALE

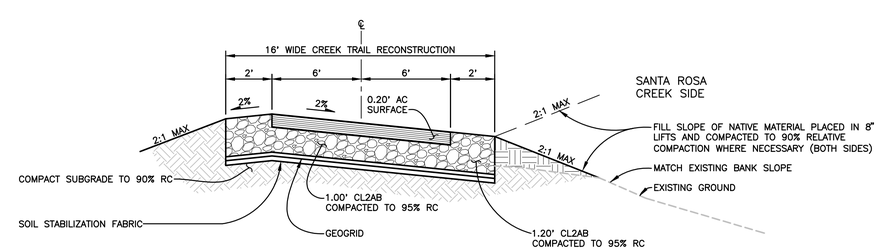


NOTES

1. PROVIDE WEAKENED PLANE JOINTS AT INTERVALS EQUAL TO FIELD WIDTH AND TO MATCH EXISTING.
2. FIELD CONCRETE PATTERN SHALL BE BOMANITE'S "BOMACRON MEDIUM ASHLAR SLATE." BASE COLOR TO BE BOMANITE "FRENCH GREY" FLASHED WITH "SUNSET GREY" OR APPROVED EQUIVALENT TO MATCH EXISTING.
3. PROVIDE A 2'x2' COLOR MOCK UP OF TEXTURED, COLORED CONCRETE FOR CITY APPROVAL PRIOR TO INSTALLATION.

STAMPED AND COLORED CONCRETE CROSSWALK TYPICAL SECTION

NOT TO SCALE



BIKE PATH TRAIL RECONSTRUCTION TYPICAL SECTION

NOT TO SCALE

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C51906 Exp. 6-30-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race CONSULTING ENGINEERS
475 Aviation Blvd.• Suite 220• Santa Rosa, CA 95403 • 707-576-1322
www.brce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

TYPICAL SURFACING DETAILS

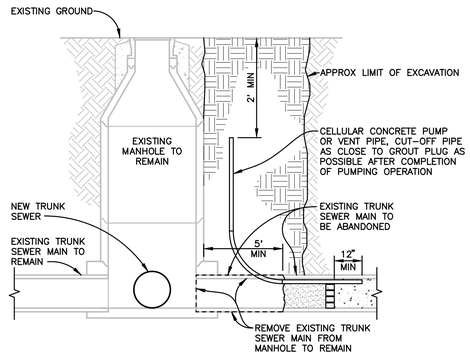
CONTRACT NO. C01903

SHEET 4 OF 33

FILE NO. 2018-0043

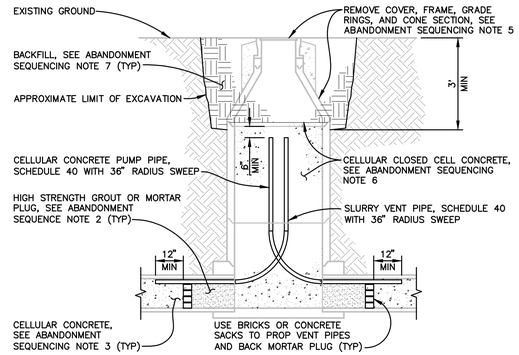
TAB: 04 TYPICAL SURFACING DETAILS

12-09-22 kilfizghi \4247\dwg\4247 01\4247.01 DETAIL - Typical & Miscellaneous.dwg



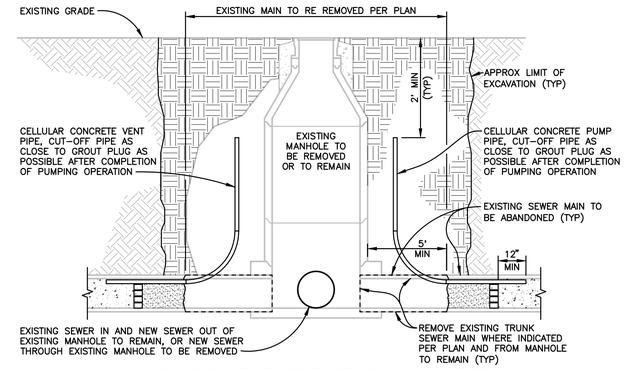
ABANDONMENT AT EXISTING MANHOLE TO REMAIN

TYPICAL AT EX SSMH 50 & 18



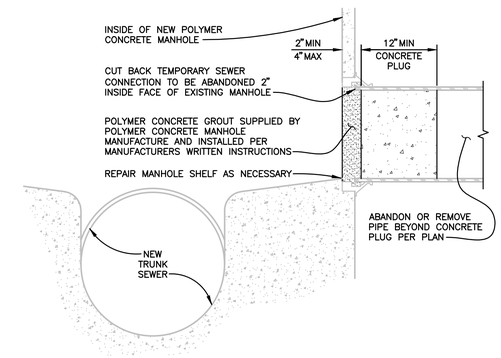
ABANDONMENT AT MANHOLE TO BE ABANDONED

TYPICAL AT EX SSMH 61, 29, 28, 26, 25, 24, 6, 23, 21, 99, 12, 13, 14, 15, 16, 17



ABANDONMENT AT EXISTING MANHOLE OR MAIN TO BE REMOVED OR MANHOLE TO REMAIN

TYPICAL AT EX SSMH 49, 110, 22, 88, 81, 60, 42, 61
SIMILAR AT NEW SSMH 801, 818, 825, &
SIMILAR AT EX SS NEAR STA 31+25, 32+60, 48+10, 48+60 & 49+55



ABANDONMENT OF TEMPORARY CONNECTION AT NEW POLYMER CONCRETE MANHOLE

TYPICAL AT NEW SSMH 806, 818 AND 830

ABANDONMENT NOTES

1. REMOVE ACCUMULATED SLUDGE AND DISCHARGE GROUNDWATER TO SANITARY SEWER COLLECTION SYSTEM WHILE PUMPING CELLULAR CLOSED CELL CONCRETE, IF NECESSARY.
2. REMOVE ALL INSIDE AND OUTSIDE SEWER DROPS AND PLUG SIDE SEWERS AND LATERALS PER CITY STD 507. INSTALL PUMP CONNECTION POINT IF SIDE SEWER OR LATERAL IS TO BE ABANDONED WITH CELLULAR CONCRETE AS INDICATED PER PLAN.
3. PROVIDE THRUST RESTRAINT FOR PUMP AND VENT PIPES AS NECESSARY.
4. CELLULAR CONCRETE SHALL BE A LOW STRENGTH MIXTURE OF HYDRAULIC CEMENT, WATER, AND CLOSED CELL PREFORMED-FOAM.
5. SURFACE RESTORATION AND BACKFILL SHALL BE PER TOP OF TRENCH BACKFILL DETAILS SHOWN ON SHEET 3 TO MATCH EXISTING ADJACENT SURFACING AND AS SHOWN ON GRADING AND SURFACING PLANS SHEET 21 THRU 27.

ABANDONMENT SEQUENCING

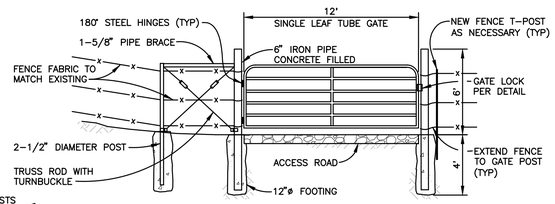
1. COMPLETE INSTALLATION OF NEW SEWER MAIN AND CONFIRM THAT ALL SERVICE LATERALS HAVE BEEN REROUTED AND CONNECTED TO THE NEW MAIN. REMOVE ALL CONNECTIONS BETWEEN EXISTING AND NEW SEWER PRIOR TO BEGINNING ANY ABANDONMENT OPERATIONS.
2. INSTALL VENT PIPES AND MORTAR PLUGS AT EACH MANHOLE OR PIPE END TO BE ABANDONED. ALLOW MORTAR PLUGS TO CURE FOR A MINIMUM OF 48 HRS.
3. STARTING AT MOST DOWNSTREAM PUMP CONNECTION POINT AND PROGRESSING UPSTREAM ONE PUMP CONNECTION AT A TIME, PUMP CELLULAR CONCRETE INTO THE PUMP CONNECTION AT EACH MANHOLE TO BE ABANDONED BEGINNING AT THE DOWNSTREAM END. COMPLETELY FILL THE PIPE BEING ABANDONED AND BRING THE HYDRAULIC GRADE LINE OF THE CELLULAR CONCRETE TO A LEVEL APPROXIMATELY 12" ABOVE THE UPPER END (VENT PIPE SIDE) OF THE FILLED PIPE CROWN.
4. REPLACE MANHOLE LIDS AND ALLOW CELLULAR CONCRETE MATERIAL TO CURE FOR A MINIMUM OF 12 HOURS.
5. REMOVE MANHOLE COVER, FRAME, GRADE RINGS, CONE SECTION, AND MANHOLE BARRELS TO A MINIMUM DEPTH OF 3' BELOW EXISTING GROUND.
6. FILL REMAINING MANHOLE BARREL WITH CELLULAR CONCRETE AND ALLOW MATERIAL TO CURE FOR A MINIMUM OF 12 HOURS.
7. FILL REMAINING VOID WITH NATIVE MATERIAL COMPACTED TO 90% RELATIVE COMPACTION AND RESTORE SURFACING TO MATCH EXISTING ADJACENT SURFACING.

ABANDONMENT DETAILS

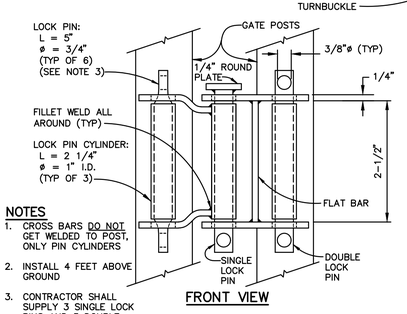
NOT TO SCALE

FENCE NOTES

1. FENCING SHALL MATCH ADJACENT EXISTING FENCING TO REMAIN.
2. FENCING DETAILS ARE SHOWN TO PROVIDE A MINIMUM STANDARD FOR CONSTRUCTION AND MAY NOT MATCH THE CONSTRUCTION OF EXISTING ADJACENT FENCING.



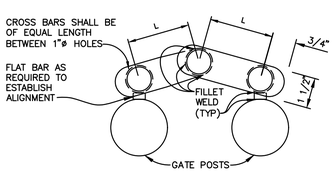
RANCH STYLE GATE



FRONT VIEW

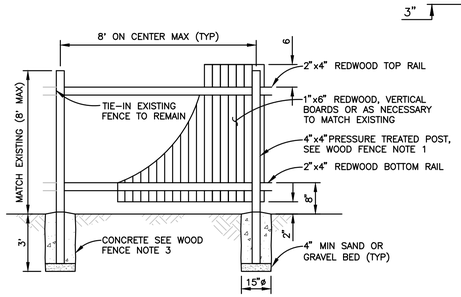
NOTES

1. CROSS BARS DO NOT GET WELDED TO POST, ONLY PIN CYLINDERS
2. INSTALL 4 FEET ABOVE GROUND
3. CONTRACTOR SHALL SUPPLY 3 SINGLE LOCK PINS AND 3 DOUBLE LOCK PINS



PLAN VIEW

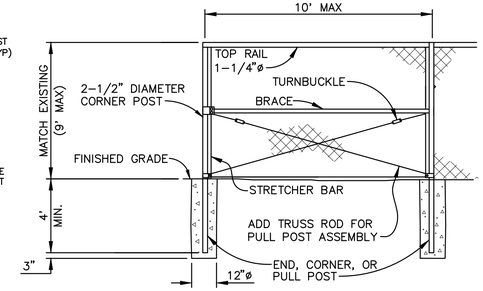
GATE LOCK DETAIL



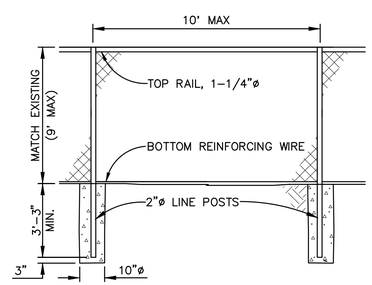
WOOD FENCE NOTES

1. ALL POSTS SHALL BE PRESSURED TREATED DOUGLAS FIR NUMBER 2 APPROVED FOR IN GROUND USE, UBC 25-12.
2. ALL NAILS, BOLTS, AND WASHERS SHALL BE HOT DIPPED GALVANIZED.
3. CONCRETE SHALL BE 4000 PSI AT 28 DAYS.
4. ALL WOOD SHALL BE KILN DRIED OR UNBUNDLED ON THE PROJECT SITE FOR AT LEAST THREE WEEKS PRIOR TO CONSTRUCTION TO AVOID SHRINKING.

TYPICAL WOOD FENCE DETAILS



CORNER OR END PANEL ASSEMBLY
PULL POST ASSEMBLY SIMILAR



TYPICAL LINE FENCE

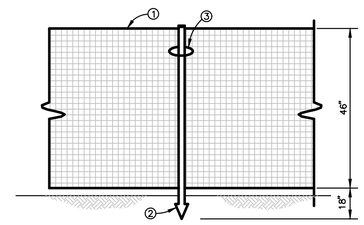
CHAIN LINK FENCE NOTES

1. CHAIN LINK FENCE MATERIALS SHALL MATCH EXISTING.
2. ALL POSTS, FRAMES, HARDWARE, AND FABRIC SHALL BE GALVANIZED.
3. CHAIN LINK FABRIC SHALL BE WOVEN TO EXISTING ADJACENT CHAIN LINK FABRIC TO REMAIN TO PROVIDE A SEAMLESS INSTALLATION.

TYPICAL CHAIN LINK FENCE DETAILS

TYPICAL FENCE DETAILS

NOT TO SCALE



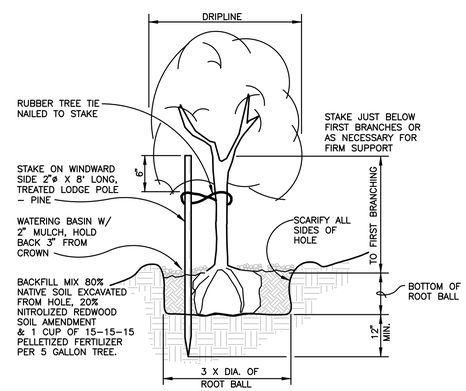
① FRASER-EDWARDS SPORTS FENCE – IT PLUS/PLASTIC FENCING, OR EQUAL COLOR-ORANGE OR RED.

② LIGHTWEIGHT 5-1/2' HEIGHT STANDARD FORM QUALITY "T-POST" PLACED AS NEEDED TO FORM DRIPLINE RADIUS. (POST SPACING 20' MAXIMUM).

③ SLIDE FABRIC OVER "T-POST" AND INSTALL METAL TIE WIRE AT TOP OF POST.

TREE PROTECTION NOTES

1. ALL TREES AND BUSHES NOT MARKED TO BE REMOVED SHALL BE SAVED.
2. TEMPORARY TREE PROTECTION FENCING SHALL BE ERECTED AT ALL LOCATIONS SHOWN ON THE PLANS AND AS DIRECTED IN THE FIELD BY THE ENGINEER.
3. TREES AND BUSHES MARKED TO BE REMOVED SHALL BE CUT AND REMOVED, INCLUDING ROOT BALL. BACKFILL AND COMPACT ROOT BALL HOLE WITH NATIVE MATERIAL TO RESTORE ORIGINAL GRADE.
4. FENCING SHALL GENERALLY BE INSTALLED OUTSIDE THE DRIPLINES OF PROTECTED TREES (AS SHOWN ON THE PLANS) PRIOR TO INITIATION OF ANY WORK. INSTALLATION OF FENCING WITHIN DRIPLINES SHALL BE APPROVED BY THE PROJECT ARBORIST, AND EVIDENCE OF FENCING INSPECTION SHALL BE FORWARDED BY THE PROJECT ARBORIST.
5. FENCING CAN ONLY BE RELOCATED FOR CONSTRUCTION OF NECESSARY IMPROVEMENTS UNDER REVIEW BY THE PROJECT ARBORIST.
6. NO ACTIVITY SHALL OCCUR WITHIN DRIPLINES OF PROTECTED TREES, EXCEPT AS INDICATED ON THE PROJECT PLANS.
7. THE PROJECT ARBORIST SHALL KEEP WRITTEN RECORDS OF SITE INSPECTIONS AND SHALL FORWARD A SUMMARY REPORT TO THE PLANNING DEPARTMENT OF ALL WORK AUTHORIZED WITHIN DRIPLINES, GENERAL COMPLIANCE TO TREE PRESERVATION RECOMMENDATIONS AND AND DAMAGE AFFECTING TREE SURVIVABILITY IN ACCORDANCE WITH CONDITIONS OF PROJECT APPROVAL. ANY REQUIRED REPORT SHALL BE RECEIVED PRIOR TO FINAL CLEARANCE OF IMPROVEMENTS AUTHORIZED BY THESE PLANS.
8. AT NO TIME WILL PARKING, STORAGE OR HANDLING OF MATERIALS, OR VEHICULAR ACCESS BE ALLOWED WITHIN THE DRIPLINES OF TREES WITHOUT THE WRITTEN APPROVAL OR PRESENCE OF THE PROJECT ARBORIST.
9. ANY PRUNING SHALL BE THE MINIMUM NECESSARY TO ACHIEVE HAZARD REDUCTION AND PUBLIC SAFETY, CONSTRUCTION CLEARANCE, AND TO IMPROVE TREE HEALTH.
10. ALL PRUNING SHALL BE DONE ACCORDING TO ISA OR NAA STANDARDS, BY QUALIFIED PERSONNEL. PRUNING SHALL BE DONE BY ISA CERTIFIED TREE WORKERS OR CERTIFIED ARBORISTS, OR UNDER THE DIRECT SUPERVISION OF A CERTIFIED ARBORIST.
11. PRUNING FOR HAZARD REDUCTION SHALL INCLUDE: THE REMOVAL OF DEAD BRANCHES OR STEMS 3 INCHES IN DIAMETER OR LARGER, BROKEN, WEAKLY-ATTACHED OR CROSSING BRANCHES. PRUNING FOR CONSTRUCTION CLEARANCE SHALL BE THE MINIMUM NECESSARY FOR THE SAFE OPERATION OF EQUIPMENT AND CONSTRUCTION ACTIVITIES. BRANCHES SHALL BE CUT BACK TO APPROPRIATE SIZED LATERALS OR THE PARENT STEM. NO STUBS, BROKEN ENDS, FLUSH CUTS, OR WOUNDS ON TRUNKS OR BRANCHES ARE ACCEPTABLE.
12. WHERE REPEATED OPERATION OF EQUIPMENT MUST OCCUR IMMEDIATELY ADJACENT TO PROTECTED TREES, THE SUPERVISING ARBORIST MAY REQUIRE THAT A 6-INCH LAYER OF WOOD CHIPS OR COARSE MULCH BE SPREAD TO PREVENT SOIL COMPACTION WITHIN TREE ROOTZONES.
13. IF ROOTS LARGER THAN 1 INCH IN DIAMETER ARE ENCOUNTERED DURING GRADING OR TRENCHING, THEY SHOULD BE CUT CLEANLY ACROSS THE FACE OF THE ROOT WITH A SHARP SAW, PAST ANY DAMAGED PORTION.
14. IN AREAS WHERE ROOTS ARE ENCOUNTERED AND BACKFILL WILL BE PLACED, ROOTS SHOULD BE LEFT EXPOSED AS SHORT A TIME AS POSSIBLE TO AVOID DRYING OUT.



NOTES

1. PLANT SO THAT TOP OF ROOT BALL IS 1" ABOVE FINISHED GRADE.
2. TREE SPECIES SHALL BE AND SHALL BE 15 GALLONS IN SIZE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THE HEALTH OF THE TREES FOR 1-YEAR FROM THE PROJECT COMPLETION DATE.
4. SATURATE EXCAVATED HOLE WITH WATER PRIOR TO PLANTING TREE.

TREE PLANTING

NOT TO SCALE

TEMPORARY TREE PROTECTION FENCE

NOT TO SCALE

REGISTERED PROFESSIONAL ENGINEER
DAVID Y. COLBERT
No. C51906
Exp. 6-31-23
CIVIL
STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
CONSULTING ENGINEERS
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www.brcec.com

DATE: DECEMBER 2022
CHK BY: BLB & BB
SCALE: AS SHOWN
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

MISCELLANEOUS DETAILS

CONTRACT NO. C01903

SHEET 5 OF 33

FILE NO. 2018-0043

TAB: 05 MISCELLANEOUS DETAILS

12-28-22 bryant \4247\dwg\4247 01\4247.01 DETAIL - Typical & Miscellaneous.dwg

CONTROL POINT COORDINATE TABLE

NO	NORTHING	EASTING	ELEVATION	TYPE
1	1928279.889	6367435.965	226.62	MON. WELL 3"in. Disk
2	1928170.812	6367589.885	227.64	MON. WELL 3"in. Disk
3	1928301.697	6367732.197	229.32	PK NAIL
4	1928454.703	6367810.069	230.05	CHISELED X
5	1928443.548	6367881.461	222.01	PK NAIL
6	1928714.934	6368077.210	224.25	PK NAIL
7	1928861.006	6368323.938	225.44	PK NAIL
8	1928901.858	6368551.047	227.09	PK NAIL
9	1929027.254	6368787.996	232.37	CHISELED X
10	1929122.832	6368738.428	229.19	CHISELED X
11	1929138.694	6368591.738	227.86	CHISELED X
12	1929264.823	6368958.384	232.41	CHISELED X
13	1929554.295	6369134.431	232.40	CHISELED X
14	1929740.108	6369378.189	233.56	CHISELED X
15	1929972.312	6369602.291	233.53	PK NAIL
16	1930285.212	6369823.493	241.54	CHISELED X
17	1930365.544	6370114.500	241.68	PK NAIL
18	1930515.197	6370419.985	242.48	PK NAIL
19	1930501.004	6370377.899	242.15	PK NAIL
20	1930640.945	6370572.971	243.83	PK NAIL
21	1930869.846	6371920.334	257.57	PK NAIL
22	1931134.032	6371873.453	257.66	PK NAIL
40	1929670.363	6380457.408	383.57	GPS 439/B264
41	1929793.922	6368353.367	0.00	GPS 433
42	1931862.360	6374572.814	295.78	GPS 120/B120
45	1931862.372	6374572.849	0.00	G-120
46	1929793.922	6368353.367	0.00	G-433
47	1929670.475	6380457.350	0.00	G-439
8002	1931430.714	6371447.916	277.71	SET PK NAIL
8003	1931211.831	6371517.544	263.31	SET PK NAIL
8006	1931456.464	6371544.323	278.08	SET PK NAIL
8007	1931306.428	6371485.106	269.56	SET PK NAIL
8008	1931288.288	6371605.603	266.27	SET PK NAIL
8010	1931651.849	6372038.979	283.71	SET HUB & TACK
8011	1931793.315	6372350.193	285.86	SET CUT X
8012	1931713.893	6372400.335	286.15	SET CUT X

BENCHMARK

ELEVATIONS WERE DETERMINED BY A LEVEL RUN FROM:

- BENCHMARK B-154 THRU BENCHMARK B-157 FOR CONTROL POINT# 1-20.
- BENCHMARK B-157 THRU BENCHMARK B-160 FOR CONTROL POINT #21-22.

ELEVATIONS ARE TIED TO THE CITY OF SANTA ROSA'S VERTICAL CONTROL NETWORK WHICH IS BASED ON THE NGVD OF 1929 (1992).

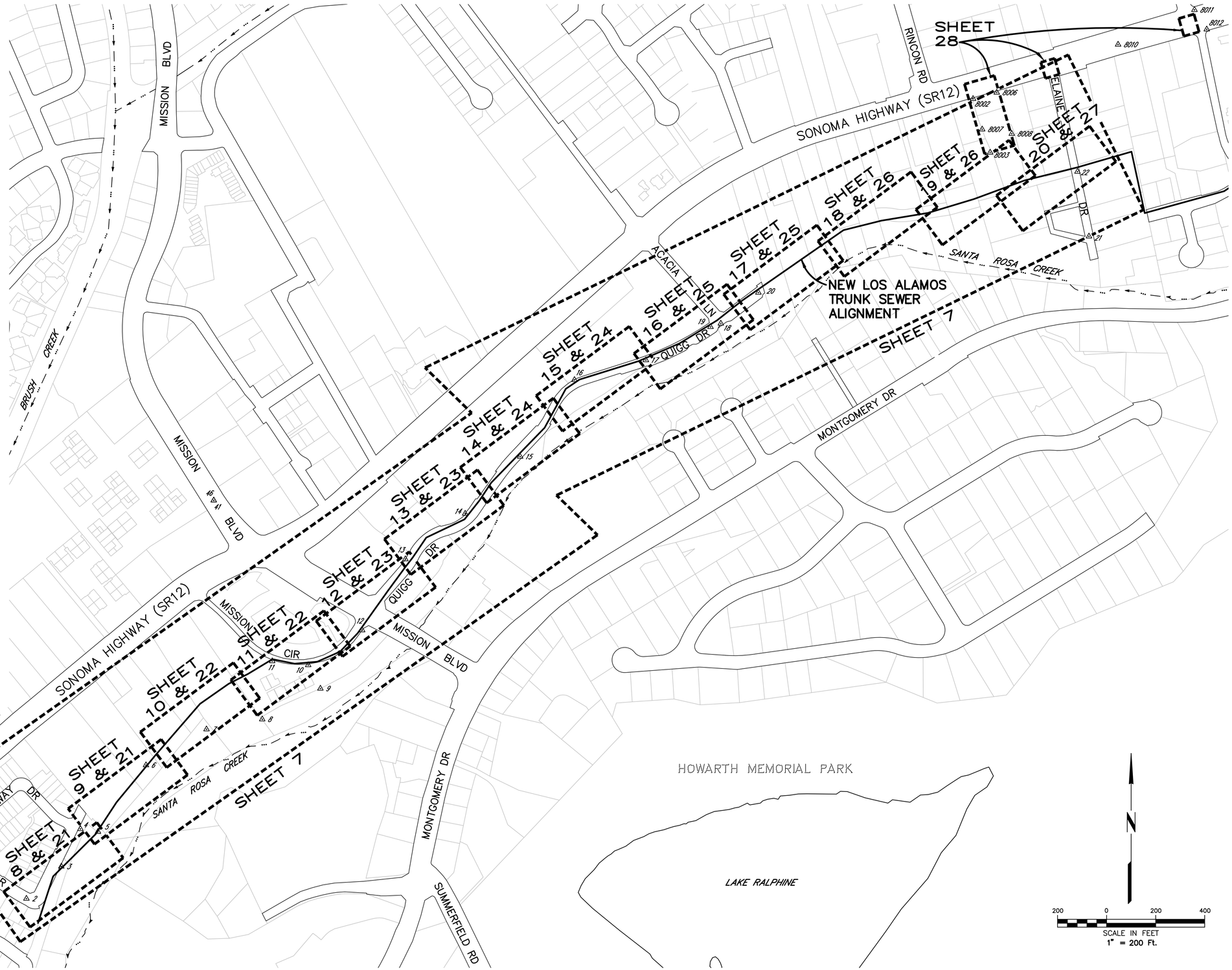
BASIS OF BEARING

BASIS OF BEARING IS N71°36'15"E BETWEEN CITY OF SANTA ROSA HORIZONTAL CONTROL NETWORK MONUMENTS G-433 AND G-120

BASIS OF BEARINGS ARE NAD83 IN FEET, EPOCH 1991.35.

SURVEY CONTROL WAS ESTABLISHED BY GPS ON 12/18/2014 FOR CONTROL POINTS# 1, 2, 19-22, & 40-42 WITH THE BASE STATION AT CASR-1.

CITY COORDINATE MONUMENTS G-433 AND G-120 WERE USED FOR LOCAL REFERENCE AND THE GPS CONTROL WAS MOVED TO G-433 AND ROTATED TO G-120. CONTROL POINT #3-18 WERE SET BY RUNNING A CLOSED TRAVERSE FROM 1 AND 2, AND CLOSING ON 19 AND 20.



SHEET LAYOUT AND SURVEY CONTROL DATA

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C51904 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race CONSULTING ENGINEERS
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www.br-rc.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

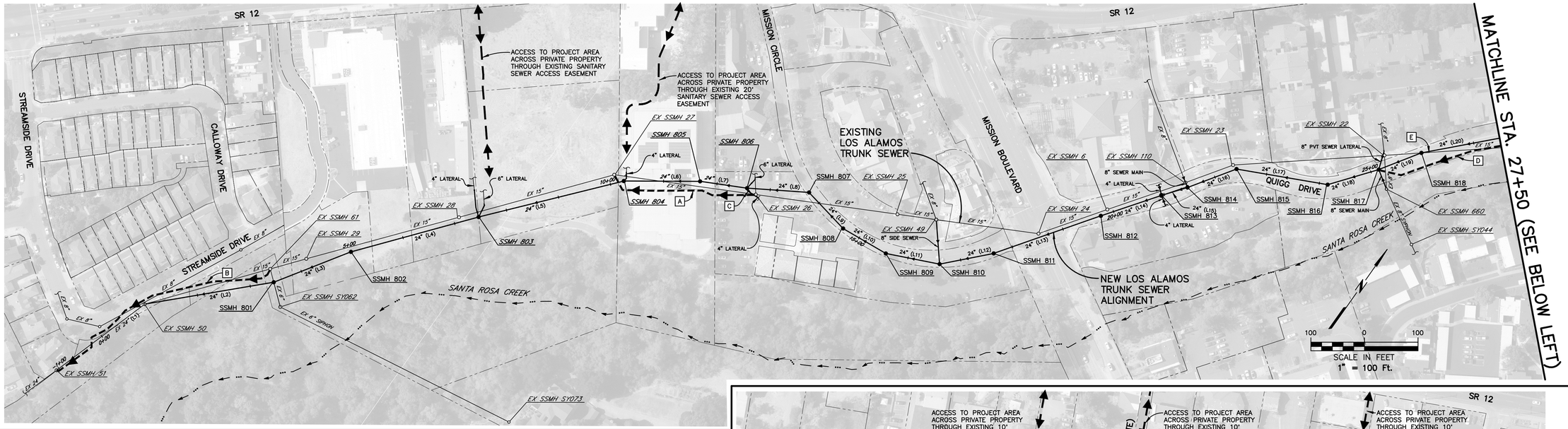
SHEET LAYOUT & SURVEY CONTROL DATA

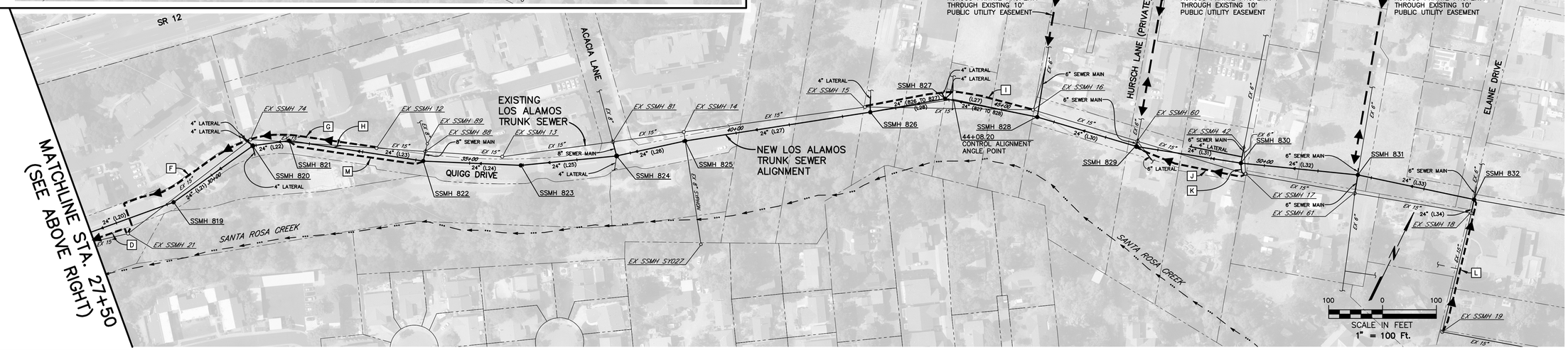
CONTRACT NO. C01903

SHEET 6 OF 33

FILE NO. 2018-0043

12-09-22 kiflizghi \4247\dwg\4247 01\4247.01 COVER-NOTE-CONTROL.dwg TAB: 06 SHEET LAYOUT AND CONTROL





NEW TRUNK SEWER MANHOLE STRUCTURE TABLE

SSMH NO.	STATION	NORTHING	EASTING
EX 50	1+00.00	1928261.568	6367698.756
801	3+44.43	1928433.876	6367872.116
802	4+99.39	1928563.343	6367957.282
803	7+46.48	1928753.871	6368114.604
804	10+25.66	1928964.902	6368297.378
805	11+68.13	1929046.505	6368414.164
806	12+56.81	1929086.712	6368493.208
807	13+72.80	1929146.808	6368592.414
808	14+65.26	1929128.466	6368683.043
809	15+57.73	1929136.302	6368775.177
810	16+60.05	1929177.942	6368868.639
811	17+63.06	1929252.483	6368939.737
812	19+74.99	1929425.008	6369062.820
813	20+94.56	1929521.534	6369133.389
814	21+45.30	1929561.514	6369164.635
815	22+43.11	1929642.480	6369219.501
816	24+15.80	1929716.635	6369375.462

SSMH NO.	STATION	NORTHING	EASTING
817	25+15.30	1929794.692	6369437.163
818	26+00.79	1929866.026	6369484.283
819	29+13.12	1930090.187	6369701.778
820	30+93.78	1930248.877	6369788.111
821	31+61.55	1930286.802	6369844.281
822	34+13.84	1930361.798	6370085.163
823	35+95.32	1930433.875	6370251.716
824	37+73.99	1930527.425	6370403.943
825	39+04.35	1930608.190	6370506.267
826	42+52.26	1930806.705	6370791.975
CONTROL ALIGNMENT ANGLE POINT (SEE NOTE)	44+08.20	1930895.687	6370920.041
827 (SEE NOTE)	43+93.40–3.18'L	1930889.856	6370906.068
828	45+67.59	1930934.181	6371074.708
829	47+59.80	1930965.580	6371264.339
830	49+56.03	1931022.482	6371452.140
831	51+74.39	1931097.864	6371657.081
832	53+94.94	1931151.106	6371871.103
EX 18	54+07.74	1931126.063	6371877.586

TRUNK SEWER AND CONTROL ALIGNMENT LAYOUT NOTE

TRUNK SEWER BETWEEN SSMH 826 AND SSMH 828 IS OFFSET FROM CONTROL ALIGNMENT. SEE SHEETS 17 AND 18 FOR ADDITIONAL DETAIL.

NEW TRUNK SEWER ALIGNMENT CONTROL LINE TABLE

LINE NO.	BEARING	LENGTH
EX 24" (L1)	N17°56'06"E	N/A
24" (L2)	N45°10'28"E	244.43'
24" (L3)	N33°20'16"E	154.97'
24" (L4)	N39°32'50"E	247.09'
24" (L5)	N40°53'45"E	279.18'
24" (L6)	N55°03'23"E	142.47'
24" (L7)	N63°02'20"E	88.68'
24" (L8)	N58°47'38"E	115.99'
24" (L9)	S78°33'32"E	92.47'
24" (L10)	N85°08'20"E	92.47'
24" (L11)	N65°59'07"E	102.32'
24" (L12)	N43°38'45"E	103.01'
24" (L13)	N35°30'17"E	211.93'
24" (L14)	N36°10'13"E	119.57'
24" (L15)	N38°00'35"E	50.74'
24" (L16)	N34°07'24"E	97.81'
24" (L17)	N64°34'12"E	172.69'
24" (L18)	N38°19'30"E	99.50'

LINE NO.	BEARING	LENGTH
24" (L19)	N33°26'48"E	85.49'
24" (L20)	N44°08'07"E	312.33'
24" (L21)	N28°32'52"E	180.65'
24" (L22)	N55°58'22"E	67.77'
24" (L23)	N72°42'24"E	252.29'
24" (L24)	N66°35'56"E	181.48'
24" (L25)	N58°25'40"E	178.67'
24" (L26)	N51°42'57"E	130.36'
24" (L27)	N55°12'28"E	347.90'
ALIGNMENT (L28)	N55°12'28"E	155.95
24" (826 to 827)	N53°54'56"E	141.18'
ALIGNMENT (L29)	N76°01'27"E	159.39'
24" (827 to 828)	N75°16'24"E	174.37'
24" (L30)	N80°35'54"E	192.21'
24" (L31)	N73°08'37"E	195.85'
24" (L32)	N69°48'40"E	218.74'
24" (L33)	N76°01'49"E	220.55'
24" (L34)	S13°35'38"E	12.04'

BYPASS PUMPING NOTES

A SUGGESTED BYPASS PUMPING CONFIGURATION FROM EXISTING SSMH 26 TO EXISTING SSMH 27 FOR CONSTRUCTION OF NEW TRUNK SEWER BETWEEN NEW SSMH 804 AND TEMPORARY CONNECTION TO EXISTING TRUNK SEWER IMMEDIATELY DOWNSTREAM OF EXISTING SSMH 26 DESCRIBED IN ITEM 'C'. BYPASS PUMPING TO REMAIN IN SERVICE UNTIL NEW TRUNK SEWER IS FULLY OPERATIONAL (INCLUDING ALL SIDE SEWER MAINS AND LATERALS) DOWNSTREAM OF TEMPORARY CONNECTION TO EXISTING TRUNK SEWER IMMEDIATELY DOWNSTREAM OF EXISTING SSMH 26 DESCRIBED IN ITEM 'C' AND DOWNSTREAM CONNECTION TO EXISTING SSMH 50 DESCRIBED IN ITEM 'B'. CONTRACTOR SHALL UNDERGROUND BYPASS PIPING AS NECESSARY TO MAINTAIN ACCESS TO STORAGE UNITS AND PARKING SPACES.

B SUGGESTED BYPASS PUMPING CONFIGURATION FROM EXISTING SSMH 61 TO EXISTING SSMH 51 FOR NEW TRUNK SEWER TIE–IN TO EXISTING SSMH 50. BYPASS PUMPING TO REMAIN IN SERVICE UNTIL NEW TRUNK SEWER IS FULLY OPERATIONAL (INCLUDING ALL SIDE SEWER MAINS AND LATERALS) DOWNSTREAM OF TEMPORARY CONNECTION TO EXISTING TRUNK SEWER IMMEDIATELY DOWNSTREAM OF EXISTING SSMH 26 DESCRIBED IN ITEM 'C'.

C TEMPORARY CONNECTION BETWEEN EXISTING TRUNK SEWER IMMEDIATELY DOWNSTREAM OF EXISTING SSMH 26 AND NEW SSMH 806. SEE SHEET 11 FOR ADDITIONAL DETAILS.

D SUGGESTED BYPASS PUMPING CONFIGURATION FROM EXISTING SSMH 21 TO NEW SSMH 817 FOR CONSTRUCTION OF NEW SEWER BETWEEN STA 25+75 AND 26+50 INCLUDING NEW SSMH 818 AND TEMPORARY CONNECTION BETWEEN EXISTING TRUNK SEWER AND NEW SSMH 818 AS DESCRIBED IN ITEM 'E'. BYPASS PUMPING TO REMAIN IN SERVICE UNTIL NEW TRUNK SEWER IS FULLY OPERATIONAL (INCLUDING ALL SIDE SEWER MANS AND LATERALS) DOWNSTREAM OF TEMPORARY CONNECTION BETWEEN EXISTING TRUNK SEWER AND NEW SSMH 818 DESCRIBED IN ITEM 'E'.

E TEMPORARY CONNECTION BETWEEN EXISTING TRUNK SEWER UPSTREAM OF NEW SSMH 818 AND NEW TRUNK SEWER SSMH 818. SEE SHEET 14 FOR ADDITIONAL DETAILS.

F SUGGESTED BYPASS PUMPING CONFIGURATION FROM EXISTING SSMH 74 TO EXISTING SSMH 21 FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS FROM CROSSING AT STA 28+75 TO APPROXIMATELY STA 29+40 INCLUDING NEW SSMH 819. SUPPORT OR REMOVE AND REPLACE EXISTING TRUNK SEWER AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS BETWEEN THESE LIMITS. BYPASS PUMPING TO REMAIN IN SERVICE UNTIL NEW TRUNK SEWER HAS BEEN CONSTRUCTED BETWEEN THESE LIMITS AND EXISTING TRUNK SEWER IS FULLY OPERATION UPSTREAM OF NEW SSMH 818 DESCRIBED IN ITEM 'E'.

G SUGGESTED BYPASS PUMPING CONFIGURATION FROM EXISTING SSMH 12 TO EXISTING SSMH 74 FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS BETWEEN NEW SSMH 820 AND TEMPORARY CONNECTION FROM EXISTING TRUNK SEWER UPSTREAM OF NEW SSMH 821 AT APPROXIMATELY STA 32+50 AS DESCRIBED IN ITEM 'H'. BYPASS PUMPING TO REMAIN IN SERVICE UNTIL NEW TRUNK SEWER IS FULLY OPERATIONAL (INCLUDING ALL SIDE SEWER MAINS AND LATERALS) DOWNSTREAM OF TEMPORARY CONNECTION FROM EXISTING TRUNK SEWER DESCRIBED IN ITEM 'H'.

H TEMPORARY CONNECTION BETWEEN EXISTING TRUNK SEWER AND NEW TRUNK SEWER BETWEEN EXISTING SSMH 12 AND NEW SSMH 821 AT APPROXIMATELY STA 32+50. SEE SHEET 15 FOR ADDITIONAL DETAILS.

I SUGGESTED BYPASS PUMPING CONFIGURATION FROM EXISTING SSMH 16 TO EXISTING SSMH 15 FOR CONSTRUCTION OF PROPOSED CROSSINGS AT STA 43+07 AND 44+98. SUPPORT OR REMOVE AND REPLACE EXISTING TRUNK SEWER AS NECESSARY TO CONSTRUCT PROPOSED CROSSINGS. BYPASS PUMPING TO REMAIN IN SERVICE UNTIL CROSSINGS HAVE BEEN COMPLETED.

J SUGGESTED BYPASS PUMPING CONFIGURATION FROM EXISTING SSMH 17 TO NEW SSMH 829 FOR CONSTRUCTION OF NEW SEWER BETWEEN NEW SSMH 829 AND TEMPORARY CONNECTION TO EXISTING TRUNK SEWER IMMEDIATELY DOWNSTREAM OF EXISTING SSMH 17 AS DESCRIBED IN ITEM 'K'. BYPASS PUMPING TO REMAIN IN SERVICE UNTIL NEW TRUNK SEWER IS FULLY OPERATIONAL (INCLUDING ALL SIDE SEWERS AND LATERALS) DOWNSTREAM OF TEMPORARY CONNECTION FROM EXISTING TRUNK SEWER DESCRIBED IN ITEM 'K'.

K TEMPORARY CONNECTION BETWEEN EXISTING TRUNK SEWER IMMEDIATELY DOWNSTREAM OF EXISTING SSMH 17 AND NEW TRUNK SEWER SSMH 830. SEE SHEET 19 FOR ADDITIONAL DETAILS.

L SUGGESTED BYPASS PUMPING CONFIGURATION FROM EXISTING SSMH 19 TO NEW SSMH 832 FOR NEW TIE–IN TO EXISTING SSMH 18. BYPASS PUMPING TO REMAIN IN SERVICE UNTIL NEW TRUNK SEWER IS FULLY OPERATIONAL (INCLUDING ALL SIDE SEWERS AND LATERALS).

M SUGGESTED BYPASS PUMPING CONFIGURATION FROM NEW SSMH 822 TO NEW SSMH 821 FOR REMOVAL OF TEMPORARY WYE NEAR STATION 32+50. SEE SHEET 15 FOR ADDITIONAL DETAILS.

SHEET NOTES

1. BYPASS PUMPING AND/OR DIVERSION SYSTEMS SHALL BE PROVIDED TO MAINTAIN SEWER SERVICE FOR SIDE SEWERS, LATERALS, AND OTHER MINOR INCOMING SEWERS WHERE NECESSARY.
2. SEE PLAN & PROFILE SHEETS 8 THROUGH 20 FOR ADDITIONAL DETAIL OF PROPOSED IMPROVEMENTS.
3. FOR CLARITY PURPOSES, EXISTING AND PROPOSED EASEMENTS ARE NOT SHOWN ON THIS SHEET.
4. SEE SPECIFICATION SECTION 131 BYPASS PUMPING FOR ADDITIONAL INFORMATION.
5. SEE NOTES ON SHEET 2 FOR ADDITIONAL INFORMATION REGARDING NEW TRUNK SEWER CONSTRUCTED BY OTHERS.
6. SEE DETAILS ON SHEET 5 FOR ABANDONMENT OF TEMPORARY CONNECTION AT NEW POLYMER CONCRETE MANHOLE.
7. SEE SPECIFICATION SECTION 10–7 FOR WORK PLAN REQUIREMENTS AND CONCEPTUAL ORDER OF WORK.

LEGEND

- PROPOSED LOS ALAMOS TRUNK SEWER ALIGNMENT
- EXISTING TRUNK SEWER LOCATION
- EXISTING PROPERTY OR RIGHT OF WAY LINE
- SUGGESTED BYPASS PUMPING CONFIGURATION
- SITE ACCESS CONFIGURATION

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C41904 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 220 • Santa Rosa, CA 95403 • 707-575-3322
www.b-rce.com

SCALE: AS SHOWN | DATE: DECEMBER 2022
DWN BY: PJT | CHK BY: BLB & BB

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

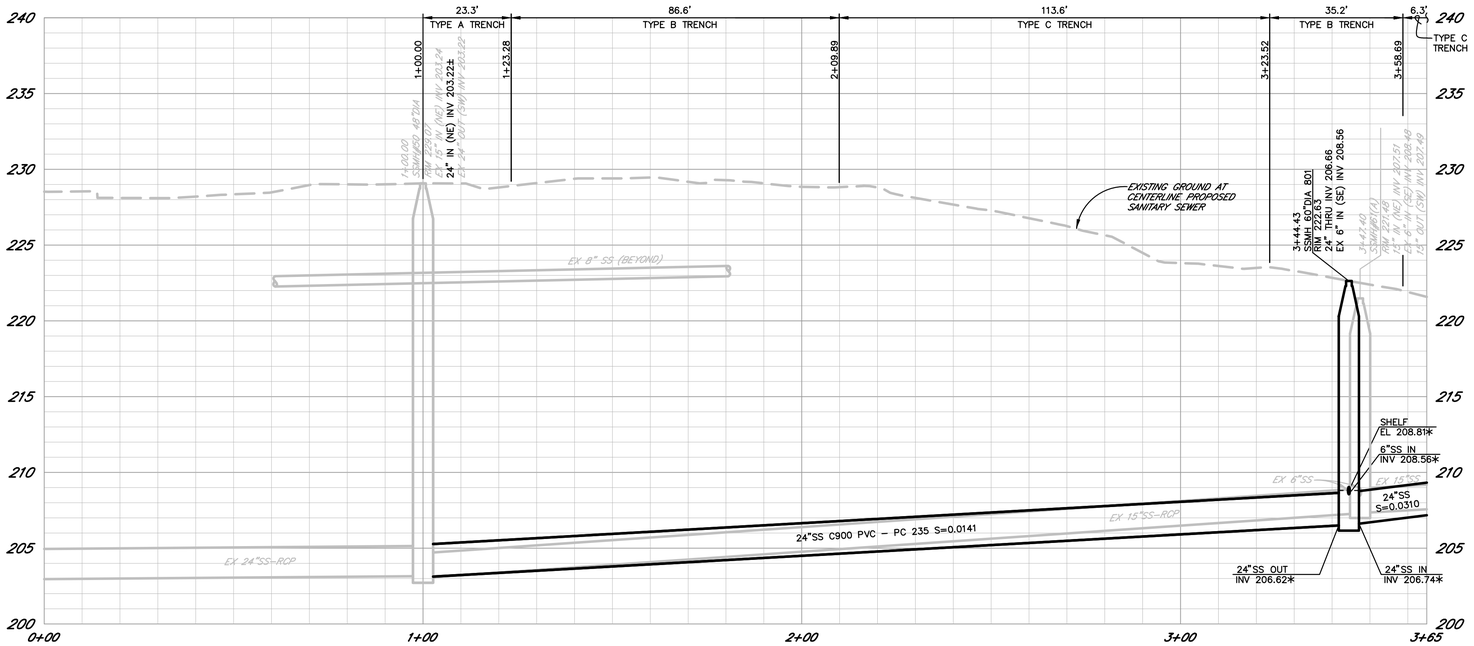
LAYOUT, CONCEPTUAL TRUNK SEWER BYPASS PUMPING & CONSTRUCTION ACCESS PLAN

CONTRACT NO. C01903

SHEET 7 OF 33

FILE NO. 2018–0043

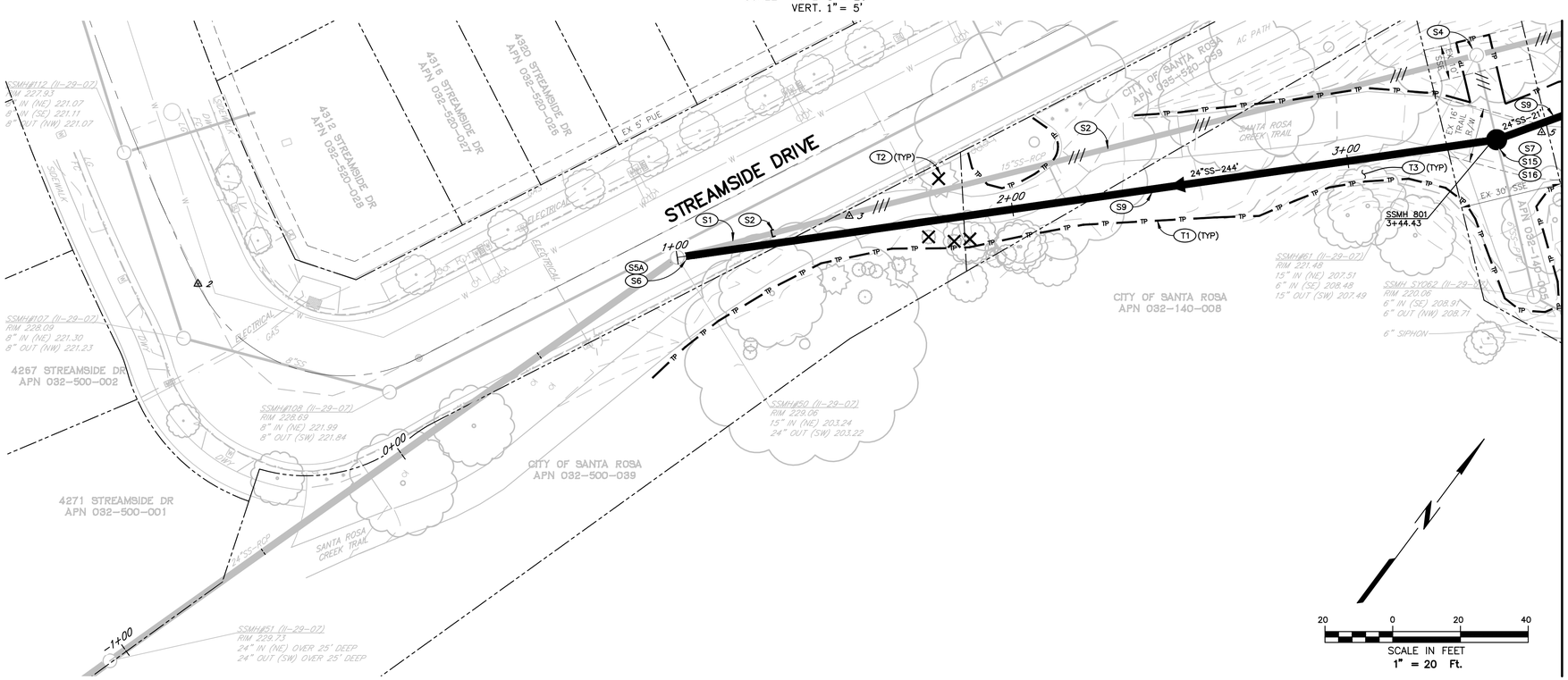
12–21–22 Patheal \4247\dwg\4247 01\4247.01 BASE–Overall & Bypass.dwg TAB: 07 OVERALL



PROFILE

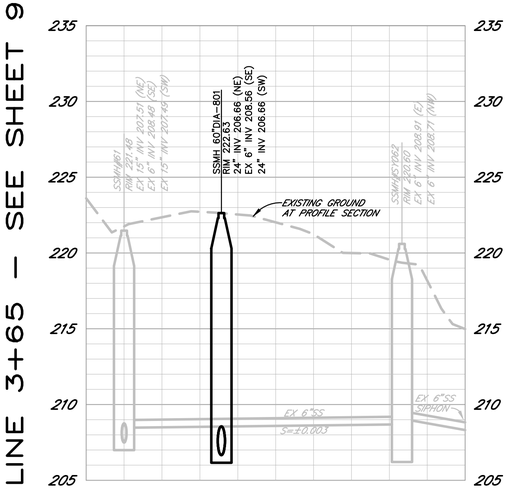
SCALE: HORZ. 1" = 20'
VERT. 1" = 5'

MATCHLINE 3+65 – SEE SHEET 9



PLAN

MATCHLINE 3+65 – SEE SHEET 9



SS PROFILE SECTION AT STA 3+44.43

SCALE: HORZ. 1"=20'
VERT. 1"=5'

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (S1) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MAIN WHERE ENCOUNTERED DURING EXCAVATION FOR THE NEW SANITARY SEWER MAIN.
- (S2) PLUG EXISTING SANITARY SEWER MAIN AND ABANDON WITH CELLULAR CONCRETE PER ABANDONMENT DETAILS ON SHEET 5. APPLICABLE TO EXISTING SANITARY SEWER MAIN NOT LOCATED WITHIN THE NEW SANITARY SEWER MAIN EXCAVATION.
- (S4) ABANDON IN PLACE EXISTING SANITARY SEWER MANHOLE SIMILAR TO CITY STANDARD 508 AND PER ABANDONMENT DETAILS ON SHEET 5.
- (S5A) CONNECT TO EXISTING MANHOLE. MODIFY EXISTING MANHOLE BASE FOR NEW SANITARY SEWER MAIN CONNECTION. PLUG NOTHERLY VOID TO BE ABANDONED WITH CONCRETE INCLUDING APPLICATION OF BONDING AGENT AFTER REMOVAL OF EXISTING 6" PVC PENETRATION. PERFORM WORK PER CITY CONSTRUCTION STANDARD SPECIFICATION 130-1.07A.
- (S6) TRUNK SEWER BYPASS PUMPING REQUIRED, SEE CONCEPTUAL TRUNK SEWER BYPASS PUMPING PLAN ON SHEET 7 FOR ADDITIONAL INFORMATION.
- (S7) INSTALL 60" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S9) INSTALL 24" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAILS PER SHEET 3 AND CITY STD 215.
- (S15) CONSTRUCT POURED-IN-PLACE CONCRETE MANHOLE BASE AROUND EXISTING SEWER, GROUT SMOOTH FLOW LINES FROM THE EXISTING SANITARY SEWER, CUT OUT EXISTING SANITARY SEWER MAIN ONCE NEW SANITARY SEWER MAIN DOWNSTREAM IS IN SERVICE. PLUG EXISTING SANITARY SEWER TO BE ABANDONED WITH CONCRETE PER CITY STANDARD 507 AND COAT MANHOLE BASE PER CITY CONSTRCTION STANDARD SPECIFICATION 130-1.07.
- (S16) POTHOLE PRIOR TO ANY INSTALLATION OF NEW SEWER.
- (T1) TREE PROTECTION FENCE PER DETAIL ON SHEET 5.
- (T2) TREE AND STUMP TO BE REMOVED. PROVIDE TWO (2) 15 GALLON LIVE OAKS AT LOCATIONS TO BE DETERMINED BY CITY INSPECTOR PER CITY STD 101A.
- (T3) CITY ARBORIST SHALL BE ON-SITE DURING EXCAVATION WITHIN THE ROOT ZONE OF EXISTING TREES. IF ROOTS LARGER THAN 2" DIAMETER ARE FOUND, THEY SHALL BE CLEANLY CUT ACROSS THE FACE OF THE ROOT AT THE DIRECTION OF THE ARBORIST.

SHEET NOTE

1. SURFACING NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION GRADING & SURFACE PLAN STA.1+00-STA.8+00 ON SHEET 21.

REGISTERED PROFESSIONAL ENGINEER
DAVID Y. COLBERT
No. C41906
Exp. 12-31-23
CIVIL
STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
CONSULTING ENGINEERS
4775 Aviation Blvd. • Suite 120 Santa Rosa, CA 95403 • 707-575-1322
www.brce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

UTILITY PLAN & PROFILE STA.1+00-STA.3+65

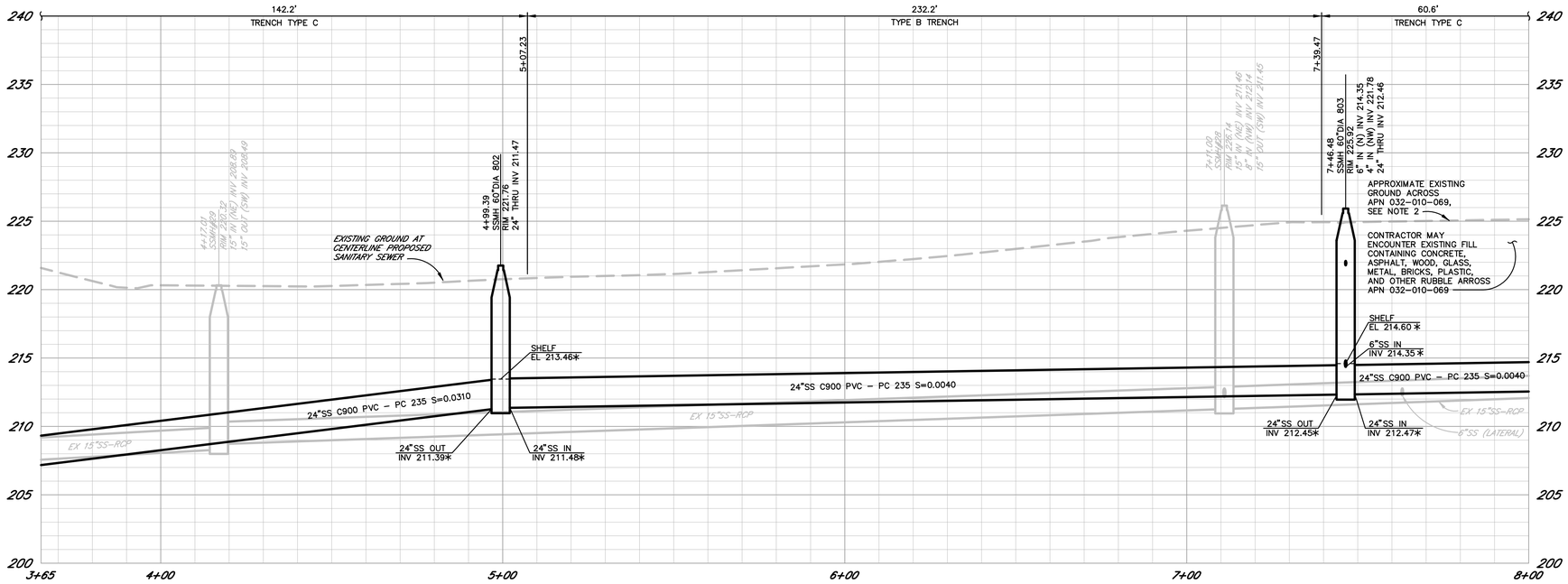
CONTRACT NO. C01903

SHEET 8 OF 33

FILE NO. 2018-0043

12-06-22 Patheol \4247\dwg\4247 01\4247.01 BASE-Plan and Profile.dwg TAB: 8 P&P

MATCHLINE 3+65 – SEE SHEET 8

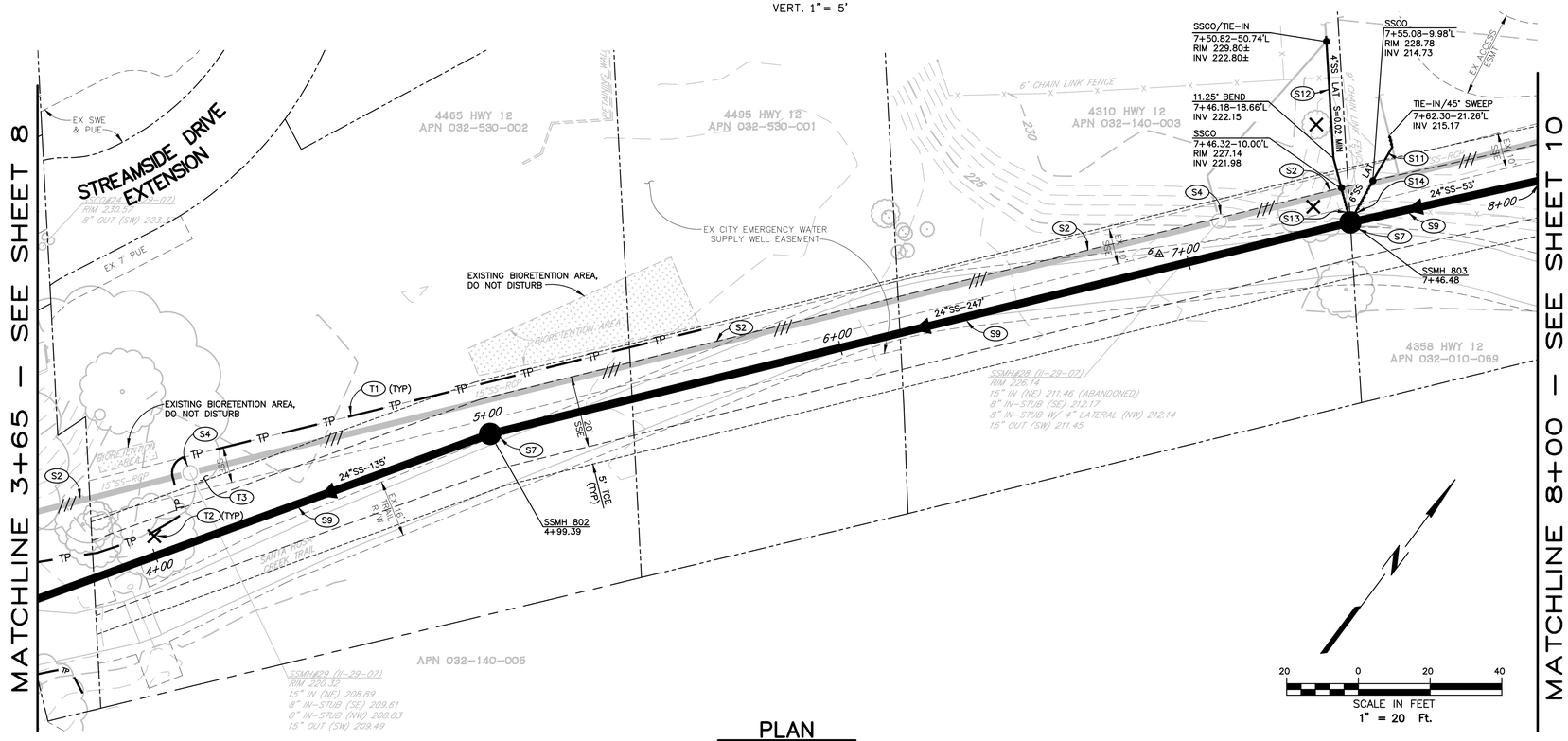


PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 5'

MATCHLINE 8+00 – SEE SHEET 10

MATCHLINE 3+65 – SEE SHEET 8



PLAN

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (S2) PLUG EXISTING SANITARY SEWER MAIN AND ABANDON WITH CELLULAR CONCRETE PER ABANDONMENT DETAILS ON SHEET 5. APPLICABLE TO EXISTING SANITARY SEWER MAIN NOT LOCATED WITHIN THE NEW SANITARY SEWER MAIN EXCAVATION.
- (S4) ABANDON IN PLACE EXISTING SANITARY SEWER MANHOLE SIMILAR TO CITY STANDARD 508 AND PER ABANDONMENT DETAILS ON SHEET 5.
- (S7) INSTALL 60" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S9) INSTALL 24" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAILS PER SHEET 3 AND CITY STD 215.
- (S11) INSTALL 6" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. REMOVE OR ABANDON A PORTION OF EXISTING LATERAL PER CITY STD 507. CLEANOUT BOXES IN ROADWAY OR UNIMPROVED AREAS SHALL BE CHRISTY MODEL G5 WITH LID LABELED "SEWER" AND CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (S12) INSTALL 4" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. REMOVE OR ABANDON A PORTION OF EXISTING LATERAL PER CITY STD 507. CLEANOUT BOXES IN ROADWAY OR UNIMPROVED AREAS SHALL BE CHRISTY MODEL G5 WITH LID LABELED "SEWER" AND CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (S13) CONNECT TO NEW MANHOLE WITHIN INSIDE DROP PER CITY STD 503.
- (S14) CONNECT TO NEW POLYMER CONCRETE MANHOLE BASE AT THE PRECAST FABRICATION BASE INVERT ELEVATION INDICATED ON THE PROFILE. INVERT SHALL BE LOCATED AT OR ABOVE THE INVERT OF THE OUTLET PIPE CROWN PER CITY STD.
- (T1) TREE PROTECTION FENCE PER DETAIL ON SHEET 5.
- (T2) TREE AND STUMP TO BE REMOVED. PROVIDE TWO (2) 15 GALLON LIVE OAKS AT LOCATIONS TO BE DETERMINED BY CITY INSPECTOR PER CITY STD 101A.
- (T3) CITY ARBORIST SHALL BE ON-SITE DURING EXCAVATION WITHIN THE ROOT ZONE OF EXISTING TREES. IF ROOTS LARGER THAN 2" DIAMETER ARE FOUND, THEY SHALL BE CLEANLY CUT ACROSS THE FACE OF THE ROOT AT THE DIRECTION OF THE ARBORIST.

SHEET NOTES

1. SURFACING NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION GRADING & SURFACE PLAN STA.1+00-STA.8+00 ON SHEET 21.
2. APN 032-010-069 IS CURRENTLY BEING DEVELOPED AND THE EXISTING GROUND SURFACE SHOWN ACROSS THIS PROPERTY MAY NOT REFLECT THE CURRENT CONDITIONS. CONTRACTOR SHALL REVIEW SITE CONDITIONS AND COORDINATE WORK WITH THE PROPERTY OWNER AND PRIVATE DEVELOPMENT CONTRACTORS.

* DENOTES GRADES FOR PRECAST BASE FABRICATION ONLY. SEE POLYMER CONCRETE PRECAST MANHOLE BASE FABRICATION NOTES ON SHEET 2.

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLLADAY No. C51904 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race CONSULTING ENGINEERS
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www.brce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

UTILITY PLAN & PROFILE STA.3+65-STA.8+00

CONTRACT NO. C01903

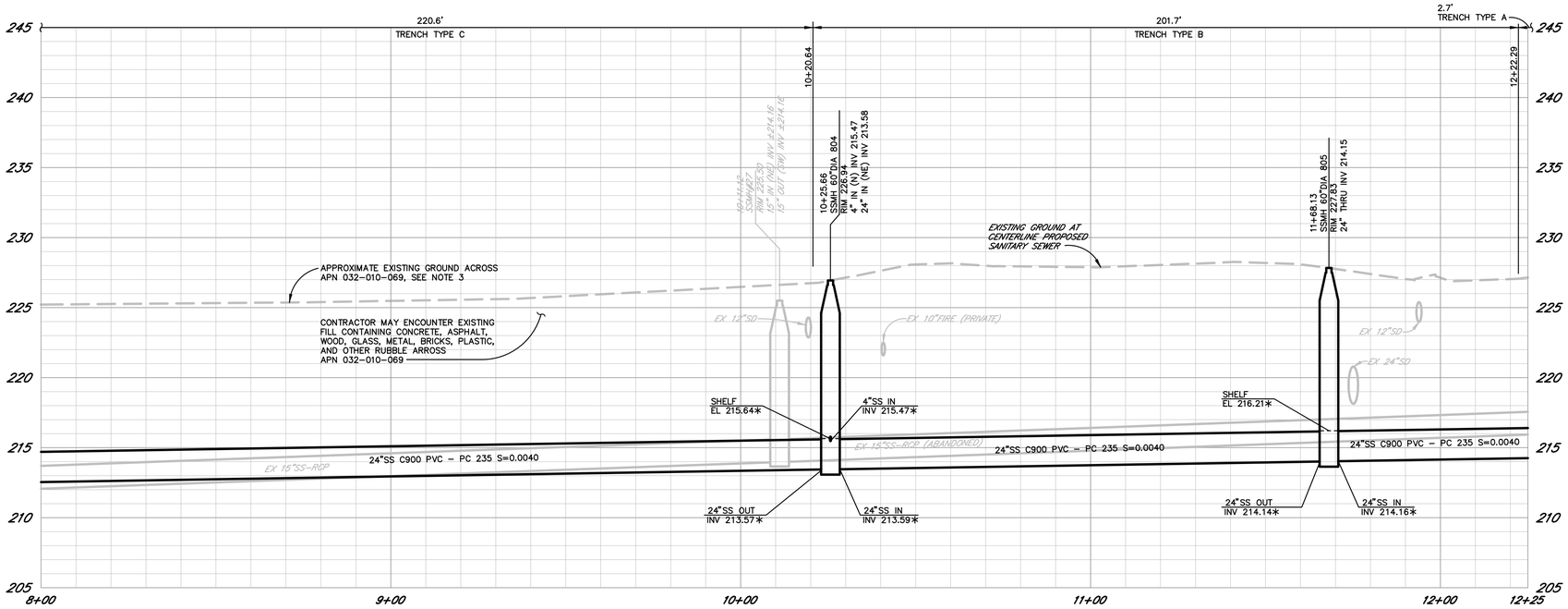
SHEET 9 OF 33

FILE NO. 2018-0043

TAB: 9 P&P

02-09-23 kiflizghi \4247\dwg\4247 01\4247.01 BASE-Plan and Profile.dwg

MATCHLINE 8+00 – SEE SHEET 9

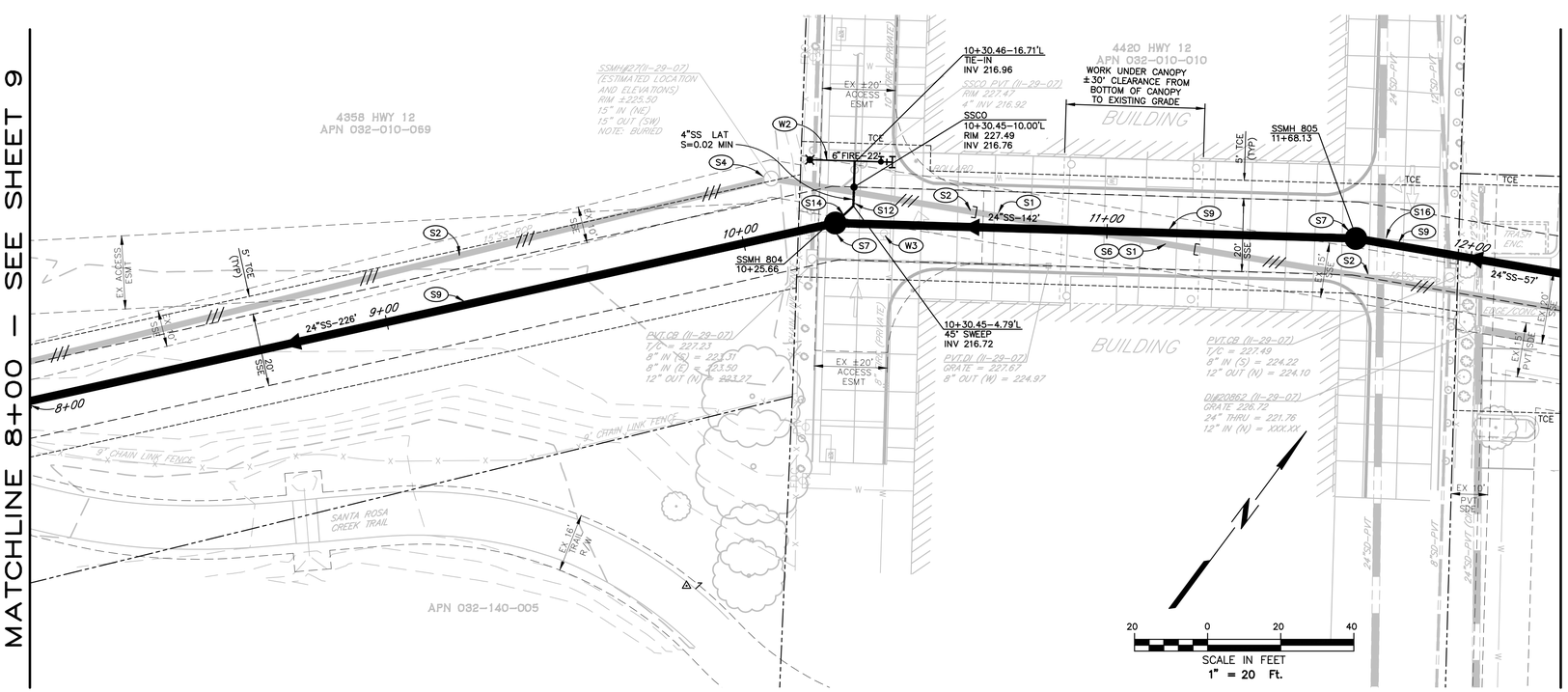


PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 5'

MATCHLINE 12+25 – SEE SHEET 11

MATCHLINE 8+00 – SEE SHEET 9



PLAN

MATCHLINE 12+25 – SEE SHEET 11

MATCHLINE 8+00 – SEE SHEET 9

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (S1) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MAIN WHERE ENCOUNTERED DURING EXCAVATION FOR THE NEW SANITARY SEWER MAIN.
- (S2) PLUG EXISTING SANITARY SEWER MAIN AND ABANDON WITH CELLULAR CONCRETE PER ABANDONMENT DETAILS ON SHEET 5. APPLICABLE TO EXISTING SANITARY SEWER MAIN NOT LOCATED WITHIN THE NEW SANITARY SEWER MAIN EXCAVATION.
- (S4) ABANDON IN PLACE EXISTING SANITARY SEWER MANHOLE SIMILAR TO CITY STANDARD 508 AND PER ABANDONMENT DETAILS ON SHEET 5.
- (S6) TRUNK SEWER BYPASS PUMPING REQUIRED, SEE CONCEPTUAL TRUNK SEWER BYPASS PUMPING PLAN ON SHEET 7 FOR ADDITIONAL INFORMATION.
- (S7) INSTALL 60" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S9) INSTALL 24" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAILS PER SHEET 3 AND CITY STD 215.
- (S12) INSTALL 4" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. REMOVE OR ABANDON A PORTION OF EXISTING LATERAL PER CITY STD 507. CLEANOUT BOXES IN ROADWAY OR UNIMPROVED AREAS SHALL BE CHRISTY MODEL C5 WITH LID LABELED "SEWER" AND CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (S14) CONNECT TO NEW POLYMER CONCRETE MANHOLE BASE AT THE PRECAST FABRICATION BASE INVERT ELEVATION INDICATED ON THE PROFILE. INVERT SHALL BE LOCATED AT OR ABOVE THE INVERT OF THE OUTLET PIPE CROWN PER CITY STD.
- (S16) POTHOLE PRIOR TO ANY INSTALLATION OF NEW SEWER.
- (W2) INSTALL PRIVATE FIRE HYDRANT, LATERAL, VALVE, AND TAPPING SLEEVE PER CITY STD 857. RE-USE EXISTING FIRE HYDRANT. LOCATION SHOWN IS APPROXIMATE. CONTRACTOR SHALL COORDINATE WITH THE PROPERTY OWNER ON INSTALLATION LOCATION.
- (W3) ABANDON EXISTING FIRE HYDRANT LATERAL PER CITY STDS BY CAPPING EXISTING TEE. REMOVE AND RE-USE EXISTING HYDRANT.

SHEET NOTES

1. SURFACING NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION GRADING & SURFACE PLAN STA.8+00–STA.16+75 ON SHEET 22.
2. ALL WORK, EXCEPT BYPASS PUMPING, BETWEEN STA 10+20 TO STA 19+25 SHALL BE PERFORMED AS NIGHT WORK BETWEEN THE HOURS OF 8 P.M. AND 5 A.M.
3. APN 032-010-069 IS CURRENTLY BEING DEVELOPED AND THE EXISTING GROUND SURFACE SHOWN ACROSS THIS PROPERTY MAY NOT REFLECT THE CURRENT CONDITIONS. CONTRACTOR SHALL REVIEW SITE CONDITIONS AND COORDINATE WORK WITH THE PROPERTY OWNER AND PRIVATE DEVELOPMENT CONTRACTORS.

* DENOTES GRADES FOR PRECAST BASE FABRICATION ONLY.

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C51906 Exp. 6-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 120 Santa Rosa, CA 95403 • 707-576-1322
www.brce.com

SCALE: AS SHOWN
DATE: DECEMBER 2022
DWN BY: PIT
CHK BY: BLB & BB

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

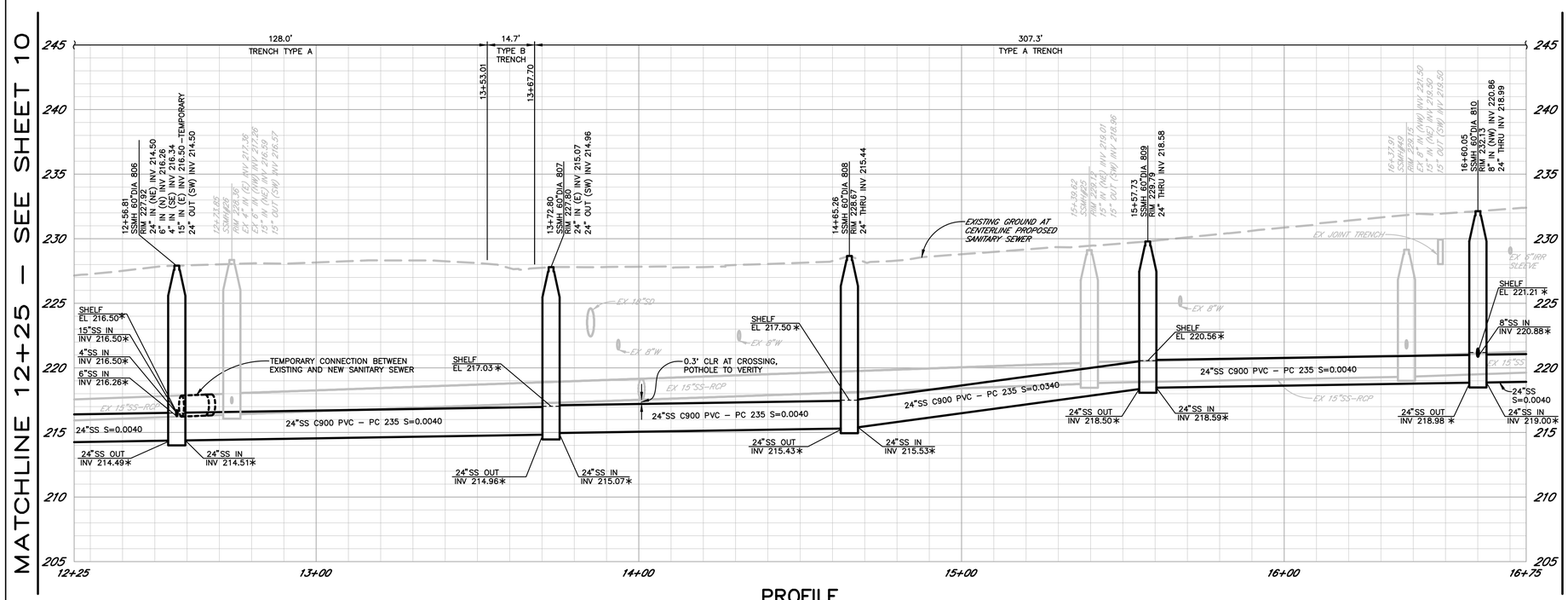
UTILITY PLAN & PROFILE STA.8+00-STA.12+25

CONTRACT NO. C01903

SHEET 10 OF 33

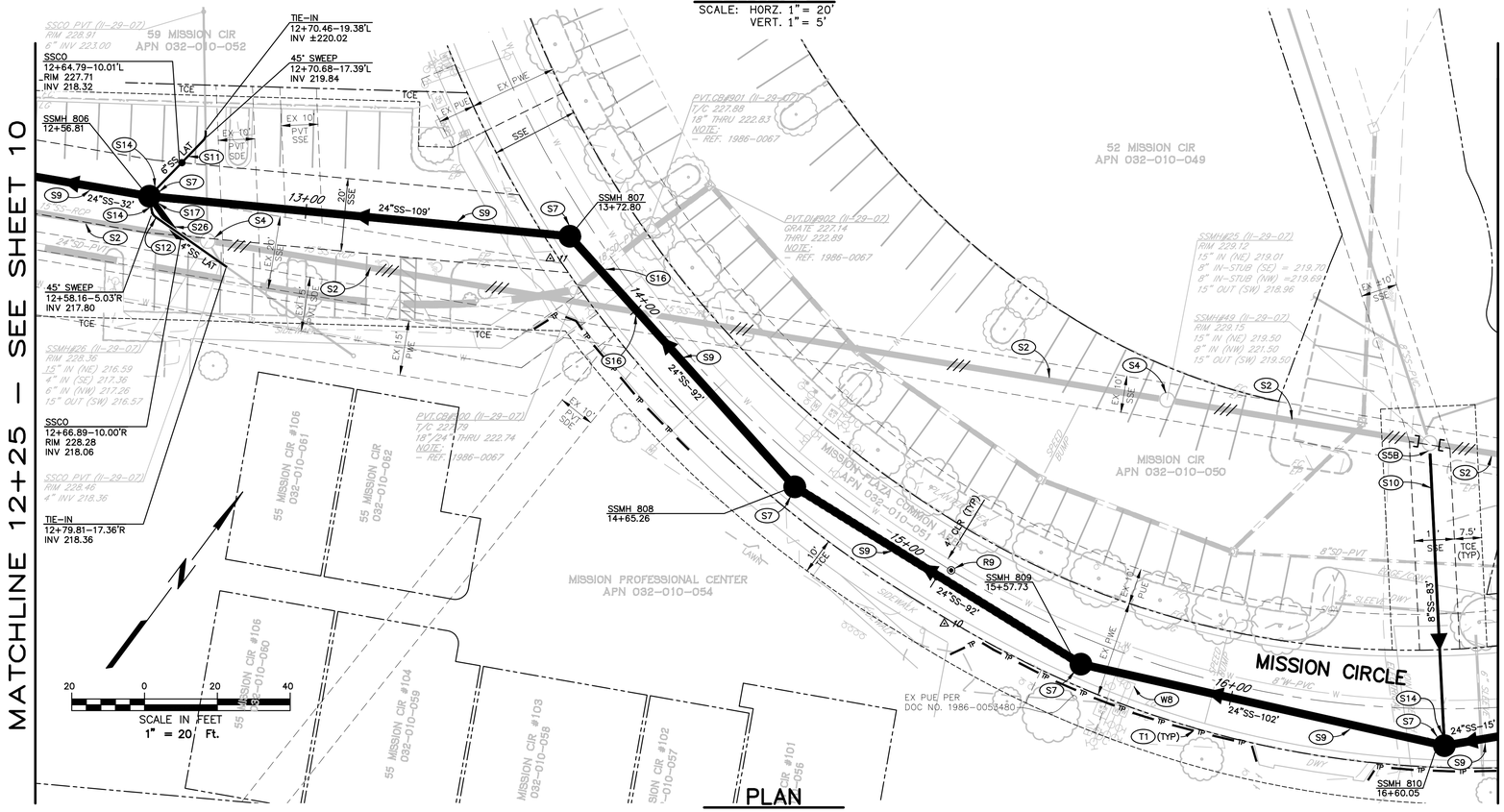
FILE NO. 2018-0043

02-09-23 kiflizghi \4247\dwg\4247 01\4247.01 BASE-Plan and Profile.dwg TAB: 10 P&P



PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 5'



PLAN

CONSTRUCTION NOTES

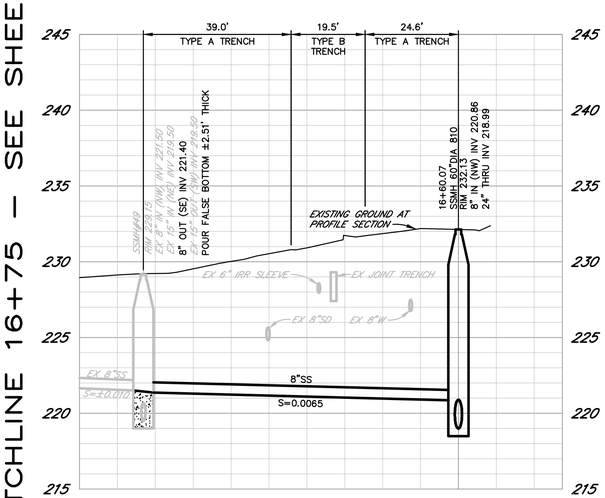
(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (S2) PLUG EXISTING SANITARY SEWER MAIN AND ABANDON WITH CELLULAR CONCRETE PER ABANDONMENT DETAILS ON SHEET 5. APPLICABLE TO EXISTING SANITARY SEWER MAIN NOT LOCATED WITHIN THE NEW SANITARY SEWER MAIN EXCAVATION.
- (S4) ABANDON IN PLACE EXISTING SANITARY SEWER MANHOLE SIMILAR TO CITY STANDARD 508 AND PER ABANDONMENT DETAILS ON SHEET 5.
- (S5B) CONNECT TO EXISTING MANHOLE. MODIFY EXISTING MANHOLE BASE FOR NEW SANITARY SEWER MAIN CONNECTION. PLUG WESTERLY AND EASTERLY VOIDS TO BE ABANDONED WITH CONCRETE INCLUDING APPLICATION OF BONDING AGENT AFTER REMOVAL OF EXISTING 15" PIPE PENETRATIONS. PERFORM WORK PER CITY CONSTRUCTION STANDARD SPECIFICATION 130–1.07A.
- (S7) INSTALL 60" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S9) INSTALL 24" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAILS PER SHEET 3 AND CITY STD 215.
- (S10) INSTALL 8" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAIL PER PLAN AND CITY STD 215.
- (S11) INSTALL 6" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. REMOVE OR ABANDON A PORTION OF EXISTING LATERAL PER CITY STD 507. CLEANOUT BOXES IN ROADWAY OR UNIMPROVED AREAS SHALL BE CHRISTY MODEL G5 WITH LID LABELED "SEWER" AND CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (S12) INSTALL 4" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. REMOVE OR ABANDON A PORTION OF EXISTING LATERAL PER CITY STD 507. CLEANOUT BOXES IN ROADWAY OR UNIMPROVED AREAS SHALL BE CHRISTY MODEL G5 WITH LID LABELED "SEWER" AND CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (S14) CONNECT TO NEW POLYMER CONCRETE MANHOLE BASE AT THE PRECAST FABRICATION BASE INVERT ELEVATION INDICATED ON THE PROFILE. INVERT SHALL BE LOCATED AT OR ABOVE THE INVERT OF THE OUTLET PIPE CROWN PER CITY STD.
- (S16) POTHOLE PRIOR TO ANY INSTALLATION OF NEW SEWER.
- (S17) FOLLOWING COMPLETION OF NEW UPSTREAM TRUNK SEWER, REMOVE AND ABANDON TEMPORARY CONNECTION TO NEW TRUNK SEWER MANHOLE PER DETAIL ON SHEET 5. SEE CONCEPTUAL BYPASS PUMPING PLAN ON SHEET 7 FOR ADDITIONAL INFORMATION.
- (S26) INSTALL TEMPORARY 15" SANITARY SEWER MAIN, 45° SWEEP, COUPLINGS, AND CONNECTION BETWEEN EXISTING SANITARY SEWER MAIN AND NEW SEWER MANHOLE. SEE CONCEPTUAL BYPASS PUMPING PLAN ON SHEET 7 FOR ADDITIONAL INFORMATION.
- (W8) SUPPORT OR REMOVE AND REPLACE EXISTING WATER MAIN PER CITY STDS AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS.
- (T1) TREE PROTECTION FENCE PER DETAIL ON SHEET 5.
- (R9) REPLACE CITY MONUMENT PER CITY STD 280. NOTIFY CITY SURVEY DEPARTMENT BEFORE CONSTRUCTION FOR CORNER RECORD SURVEY.

SHEET NOTES

1. SURFACING NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION GRADING & SURFACE PLAN STA.8+00–STA.16+75 ON SHEET 22.
2. ALL WORK, EXCEPT BYPASS PUMPING, BETWEEN STA 10+20 TO STA 19+25 SHALL BE PERFORMED AS NIGHT WORK BETWEEN THE HOURS OF 8 P.M. AND 5 A.M.

* DENOTES GRADES FOR PRECAST BASE FABRICATION ONLY. SEE POLYMER CONCRETE PRECAST MANHOLE BASE FABRICATION NOTES ON SHEET 2.



SS PROFILE SECTION AT STA 16+60.05

SCALE: HORZ. 1" =20'
VERT. 1" =5'

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C51904 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd.• Suite 220• Santa Rosa, CA 95403 707-579-5322
www.dbrce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

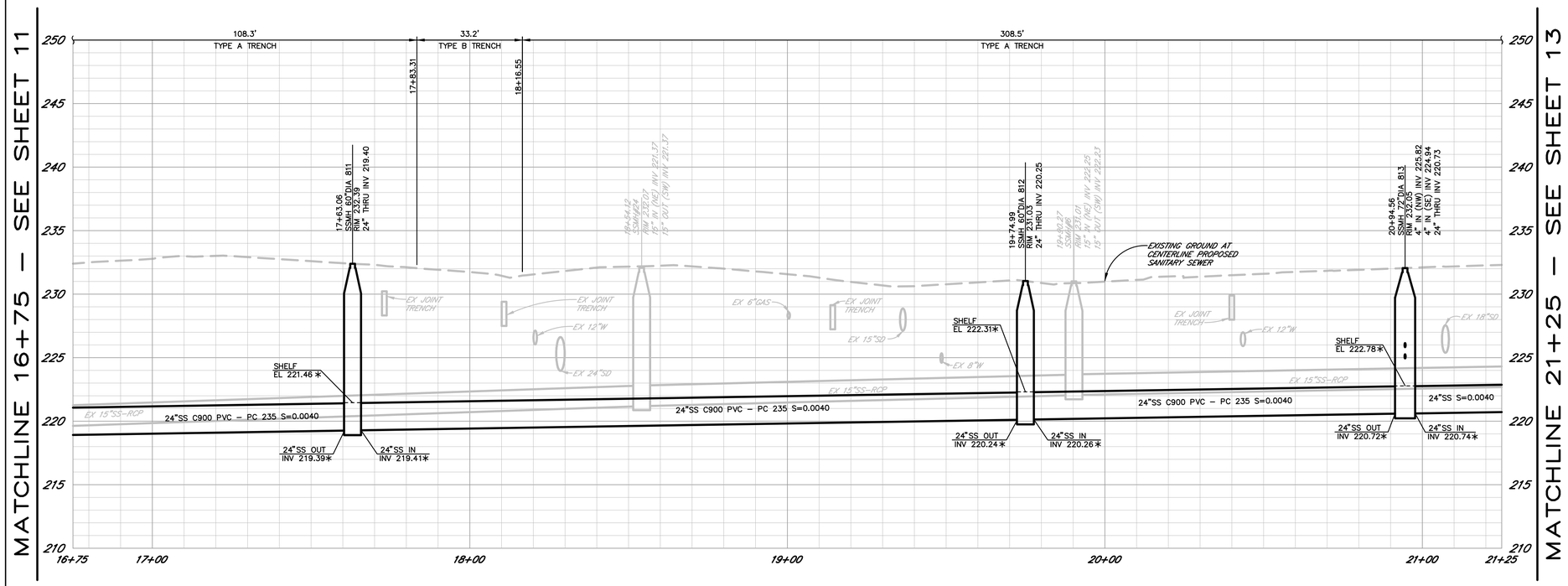
UTILITY PLAN & PROFILE STA.12+25-STA.16+75

CONTRACT NO. C01903

SHEET 11 OF 33

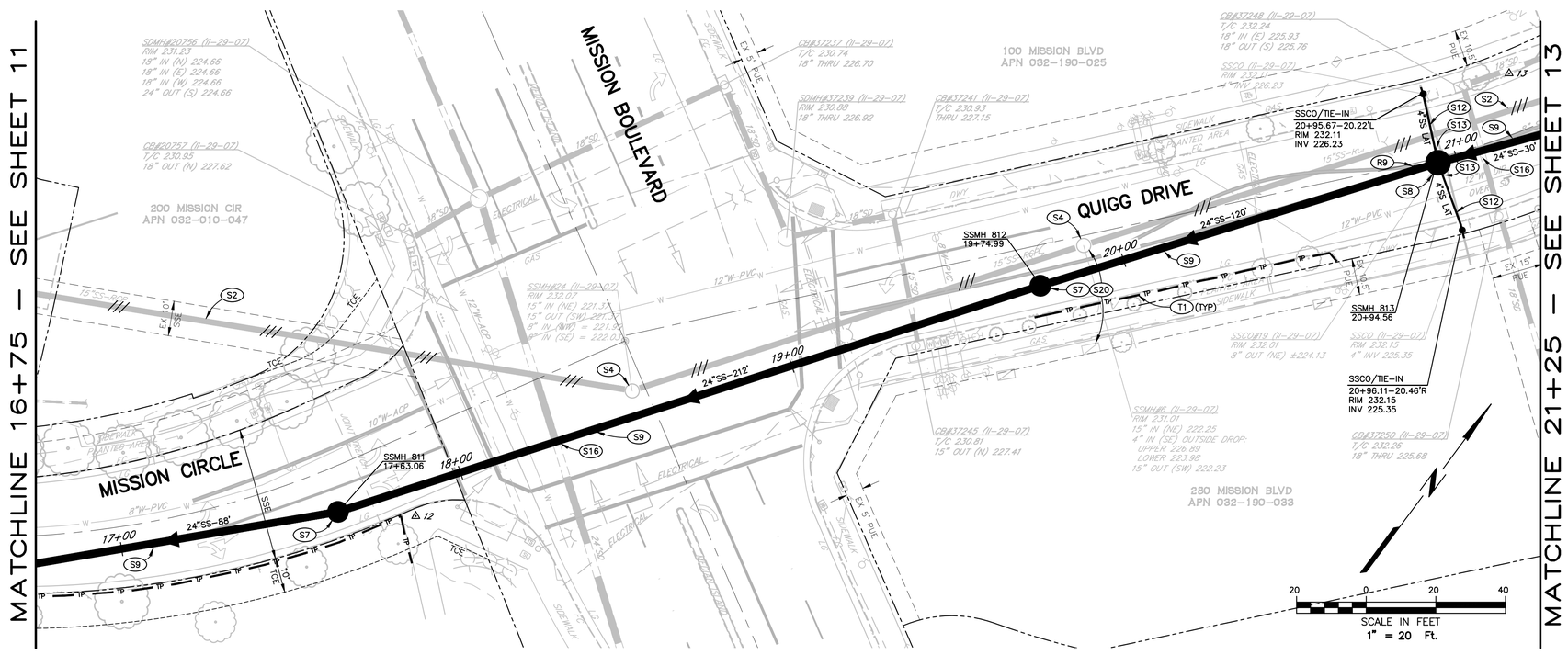
FILE NO. 2018–0043

02–09–23 kilfizghi \4247\dwg\4247 01\4247.01 BASE–Plan and Profile.dwg TAB: 11 P&P



PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 5'



PLAN

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (S2) PLUG EXISTING SANITARY SEWER MAIN AND ABANDON WITH CELLULAR CONCRETE PER ABANDONMENT DETAILS ON SHEET 5. APPLICABLE TO EXISTING SANITARY SEWER MAIN NOT LOCATED WITHIN THE NEW SANITARY SEWER MAIN EXCAVATION.
- (S4) ABANDON IN PLACE EXISTING SANITARY SEWER MANHOLE SIMILAR TO CITY STANDARD 508 AND PER ABANDONMENT DETAILS ON SHEET 5.
- (S7) INSTALL 60" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S8) INSTALL 72" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S9) INSTALL 24" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAILS PER SHEET 3 AND CITY STD 215.
- (S12) INSTALL 4" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. REMOVE OR ABANDON A PORTION OF EXISTING LATERAL PER CITY STD 507. CLEANOUT BOXES IN ROADWAY OR UNIMPROVED AREAS SHALL BE CHRISTY MODEL G5 WITH LID LABELED "SEWER" AND CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (S13) CONNECT TO NEW MANHOLE WITHIN INSIDE DROP PER CITY STD 503.
- (S16) POTHOLE PRIOR TO ANY INSTALLATION OF NEW SEWER.
- (S20) REMOVE AND SALVAGE EXISTING FLOW MONITORING DEVICE FROM EXISTING MANHOLE PRIOR TO ANY INSTALLATION OF NEW SEWER AND REINSTALL IN NEW MANHOLE FOLLOWING COMPLETION OF TRUNK SEWER CONSTRUCTION. INTERCEPT AND REROUTE CONDUITS FROM EXISTING CONTROLLER TO NEW MANHOLE.
- (T1) TREE PROTECTION FENCE PER DETAIL ON SHEET 5.
- (R9) REPLACE CITY MONUMENT PER CITY STD 280. NOTIFY CITY SURVEY DEPARTMENT BEFORE CONSTRUCTION FOR CORNER RECORD SURVEY.

SHEET NOTES

1. SURFACING NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION GRADING & SURFACE PLAN STA.16+75–STA.25+75 ON SHEET 23.
2. ALL WORK BETWEEN STA 10+20 TO STA 19+25 SHALL BE PERFORMED AS NIGHT WORK BETWEEN THE HOURS OF 8 P.M. AND 5 A.M.

* DENOTES GRADES FOR PRECAST BASE FABRICATION ONLY. SEE POLYMER CONCRETE PRECAST MANHOLE BASE FABRICATION NOTES ON SHEET 2.

TRAFFIC SIGNAL INERCONNECT NOTES

1. ALL LOOP DETECTION DAMAGED BY CONSTRUCTION TO BE REPLACED.
2. WHERE CAMERA DETECTION IS USED AT INTERSECTIONS, ALL ADVANCED LOOP DETECTION MUST BE REPLACED IF DAMAGED.
3. T/S INTERCONNECT WHERE LOCATED BY USA CAN BE VERY SHALLOW. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE WHERE LOCATED. ANY REPAIR TO TC OR ELECTRICAL SHALL BE INSPECTED BY THE CITY OF SANTA ROSA PUBLIC WORKS ELECTRICAL DEPARTMENT. IF DAMAGED, THE ENTIRE RUN OF SIC SHALL BE REPLACED WITHOUT SPLICES, CONTROLLER TO CONTROLLER.

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C51904 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 120 • Santa Rosa, CA 95403 • 707-575-5322
www.brace.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

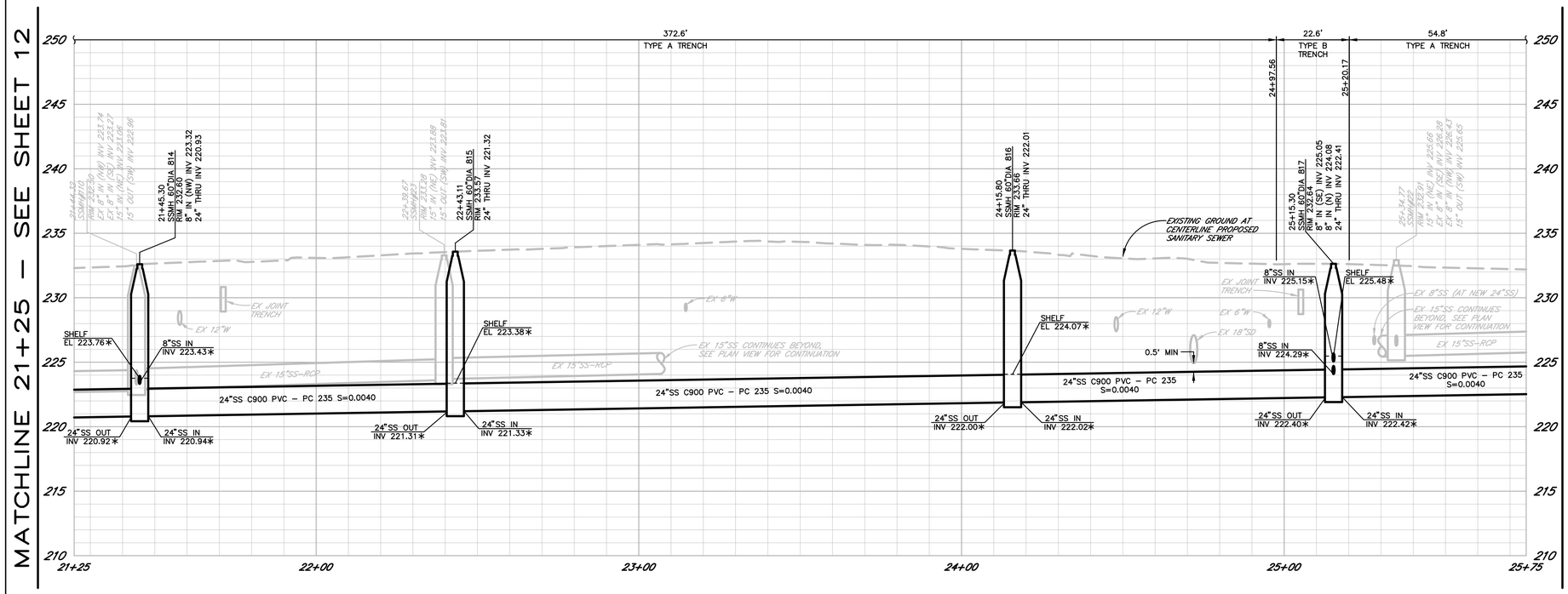
LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

UTILITY PLAN & PROFILE STA.16+75-STA.21+25

CONTRACT NO. C01903

FILE NO. 2018-0043

02-09-23 kilfizghi \4247\dwg\4247 01\4247.01 BASE-Plan and Profile.dwg TAB: 12 P&P



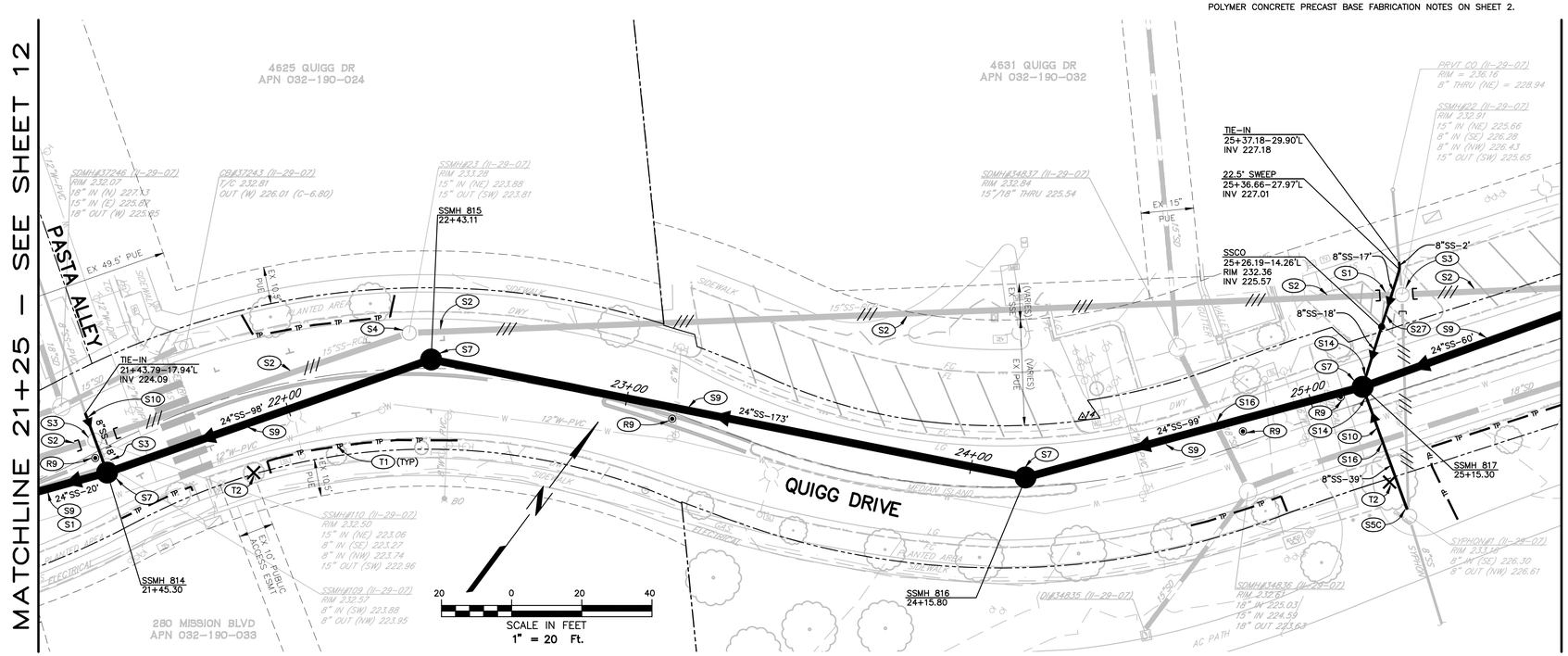
PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 5'

SHEET NOTES

1. SURFACING NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION GRADING & SURFACE PLAN STA.16+75–STA.25+75 ON SHEET 23.

* DENOTES GRADES FOR PRECAST BASE FABRICATION ONLY, SEE POLYMER CONCRETE PRECAST BASE FABRICATION NOTES ON SHEET 2.

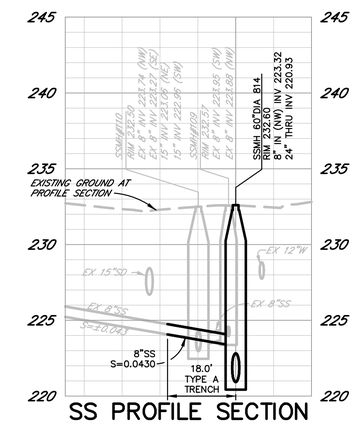


PLAN

CONSTRUCTION NOTES

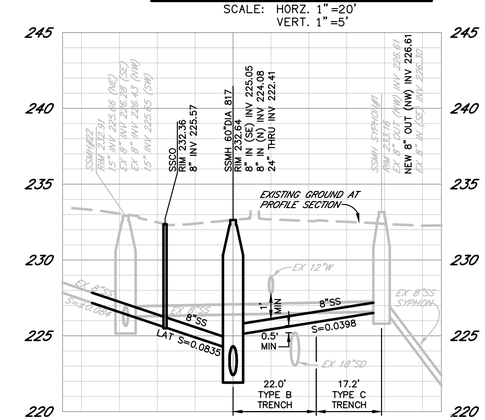
(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (S1) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MAIN WHERE ENCOUNTERED DURING EXCAVATION FOR THE NEW SANITARY SEWER MAIN.
- (S2) PLUG EXISTING SANITARY SEWER MAIN AND ABANDON WITH CELLULAR CONCRETE PER ABANDONMENT DETAILS ON SHEET 5. APPLICABLE TO EXISTING SANITARY SEWER MAIN NOT LOCATED WITHIN THE NEW SANITARY SEWER MAIN EXCAVATION.
- (S3) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MANHOLE.
- (S4) ABANDON IN PLACE EXISTING SANITARY SEWER MANHOLE SIMILAR TO CITY STANDARD 508 AND PER ABANDONMENT DETAILS ON SHEET 5.
- (S5C) CONNECT TO EXISTING MANHOLE. MODIFY EXISTING MANHOLE BASE FOR NEW SANITARY SEWER MAIN CONNECTION. PLUG NORTHERLY VOID TO BE ABANDONED WITH CONCRETE INCLUDING APPLICATION OF BONDING AGENT AFTER REMOVAL OF EXISTING 8" ACP PENETRATION. PERFORM WORK PER CITY CONSTRUCTION STANDARD SPECIFICATION 130–1.07A.
- (S7) INSTALL 60" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S9) INSTALL 24" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAILS PER SHEET 3 AND CITY STD 215.
- (S10) INSTALL 8" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAIL PER PLAN AND CITY STD 215.
- (S14) CONNECT TO NEW POLYMER CONCRETE MANHOLE BASE AT THE PRECAST FABRICATION BASE INVERT ELEVATION INDICATED ON THE PROFILE. INVERT SHALL BE LOCATED AT OR ABOVE THE INVERT OF THE OUTLET PIPE CROWN PER CITY STD.
- (S16) POTHOLE PRIOR TO ANY INSTALLATION OF NEW SEWER.
- (S27) INSTALL 8" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. CLEANOUT BOX SHALL BE CHRISTY MODEL G–12 WITH CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (T1) TREE PROTECTION FENCE PER DETAIL ON SHEET 5.
- (T2) TREE AND STUMP TO BE REMOVED. PROVIDE TWO (2) 15 GALLON LIVE OAKS AT LOCATIONS TO BE DETERMINED BY CITY INSPECTOR PER CITY STD 101A.
- (R9) REPLACE CITY MONUMENT PER CITY STD 280. NOTIFY CITY SURVEY DEPARTMENT BEFORE CONSTRUCTION FOR CORNER RECORD SURVEY.



SS PROFILE SECTION AT STA 21+45.30

SCALE: HORZ. 1" =20'
VERT. 1" =5'



SS PROFILE SECTION AT STA 25+15.30

SCALE: HORZ. 1" =20'
VERT. 1" =5'

REGISTERED PROFESSIONAL ENGINEER
DAVID Y. COLBERT
No. C71896
Exp. 12-31-23
CIVIL
STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
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www.dbrce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

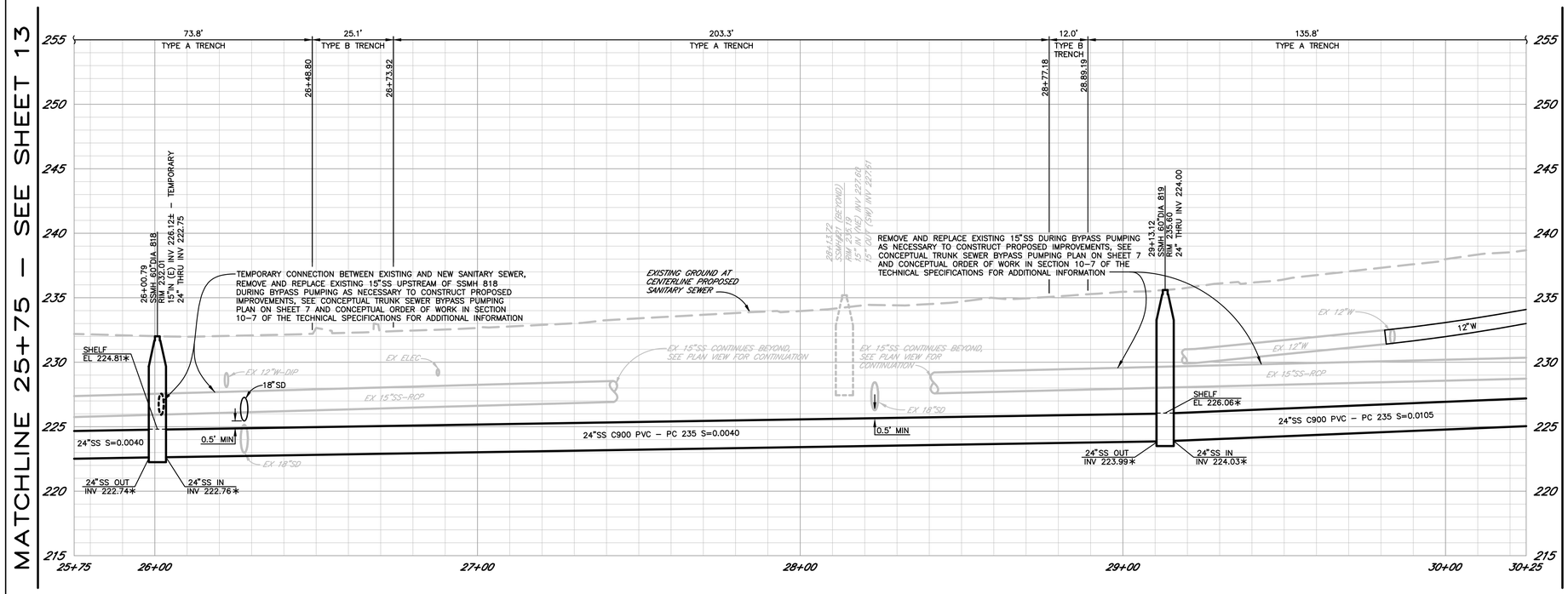
UTILITY PLAN & PROFILE STA.21+25-STA.25+75

CONTRACT NO. C01903

SHEET 13 OF 33

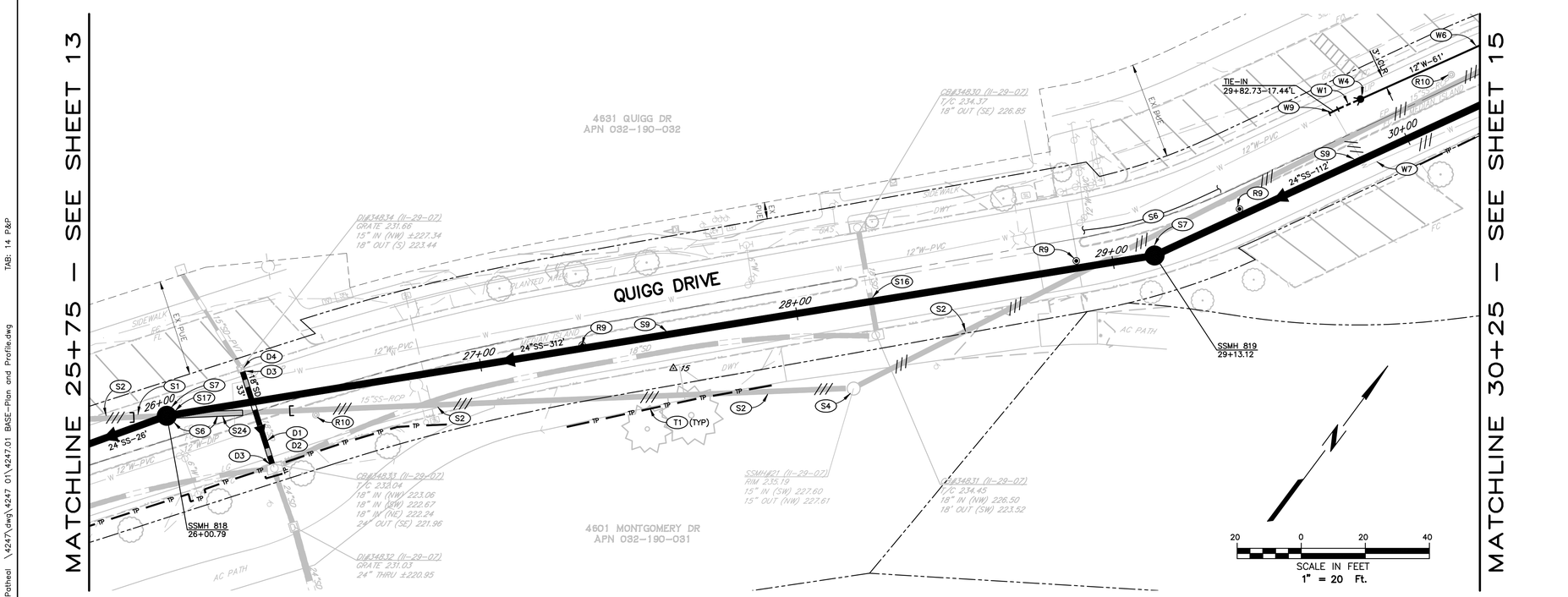
FILE NO. 2018–0043

12–07–22 Patheal \4247\dwg\4247 01\4247.01 BASE–Plan and Profile.dwg TAB: 13 P&P

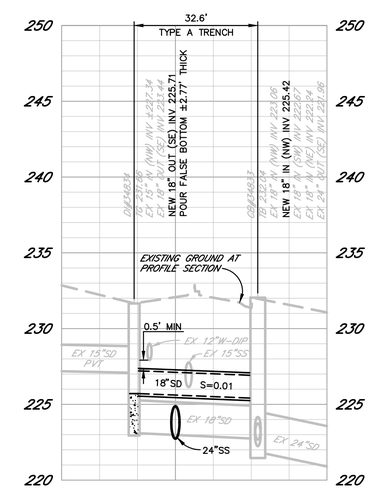


PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 5'



PLAN



SD PROFILE SECTION DI#34834 TO CB#34833

SCALE: HORZ. 1" =20'
VERT. 1" =5'

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- S1 REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MAIN WHERE ENCOUNTERED DURING EXCAVATION FOR THE NEW SANITARY SEWER MAIN.
- S2 PLUG EXISTING SANITARY SEWER MAIN AND ABANDON WITH CELLULAR CONCRETE PER ABANDONMENT DETAILS ON SHEET 5. APPLICABLE TO EXISTING SANITARY SEWER MAIN NOT LOCATED WITHIN THE NEW SANITARY SEWER MAIN EXCAVATION.
- S4 ABANDON IN PLACE EXISTING SANITARY SEWER MANHOLE SIMILAR TO CITY STANDARD 508 AND PER ABANDONMENT DETAILS ON SHEET 5.
- S6 TRUNK SEWER BYPASS PUMPING REQUIRED, SEE CONCEPTUAL TRUNK SEWER BYPASS PUMPING PLAN ON SHEET 7 FOR ADDITIONAL INFORMATION.
- S7 INSTALL 60" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- S9 INSTALL 24" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAILS PER SHEET 3 AND CITY STD 215.
- S16 POTHOLE PRIOR TO ANY INSTALLATION OF NEW SEWER.
- S17 FOLLOWING COMPLETION OF NEW UPSTREAM TRUNK SEWER, REMOVE AND ABANDON TEMPORARY CONNECTION TO NEW TRUNK SEWER MANHOLE PER DETAIL ON SHEET 5. SEE CONCEPTUAL BYPASS PUMPING PLAN ON SHEET 7 FOR ADDITIONAL INFORMATION.
- S24 INSTALL TEMPORARY 15" SDR 26 PVC SANITARY SEWER MAIN AND COUPLINGS. INSTALL MISSON COUPLING MODEL MR061515ARC AT CONNECTION BETWEEN NEW TEMPORARY AND EXISTING SANITARY SWER MAIN. SEE CONCEPTUAL BYPASS PUMPING PLAN ON SHEET 7 FOR ADDITIONAL INFORMATION.
- W1 UPON SATISFACTORY COMPLETION OF WATER MAIN TESTING, MAKE WATER MAIN TIE IN AS A SINGLE OPERATION UNDER AUTHORIZED CITY INSPECTION. INSTALL FITTINGS AND COUPLINGS AS NECESSARY TO MAKE GRADE OR ALIGNMENT TRANSITION. RESTRAIN ALL JOINTS.
- W4 INSTALL TEMPORARY BLOWOFF PER CITY STD 859.
- W6 INSTALL 12" PVC WATER MAIN PER CITY STDS WITH BELL RESTRAINTS.
- W7 REMOVE EXISTING WATER MAIN WHERE ENCOUNTERED DURING EXCAVATION FOR NEW SEWER. ABANDON EXISTING WATER MAIN PER CITY STD 507 WHERE EXISTING WATER MAIN EXTENDS BEYOND EXCAVATION LIMITS.
- W9 POTHOLE PRIOR TO ANY INSTALLATION OF NEW WATER.
- D1 CONSTRUCT 18" HDPE STORM DRAIN PER CITY STDS, TRENCH DETAIL PER PLAN AND CITY STD 215.
- D2 REMOVE AND PROPERLY DISPOSE OF EXISTING STORM DRAIN PIPE.
- D3 CORE HOLE AND CONNECT TO EXISTING STORM DRAIN STRUCTURE. MODIFY EXISTING STORM DRAIN STRUCTURE SIMILAR TO CITY SEWER CONSTRUCTION STD 130-1.07A.
- D4 POUR FALSE BOTTOM IN EXISTING STORM DRAIN STRUCTURE.
- T1 TREE PROTECTION FENCE PER DETAIL ON SHEET 5.
- R9 REPLACE CITY MONUMENT PER CITY STD 280. NOTIFY CITY SURVEY DEPARTMENT BEFORE CONSTRUCTION FOR CORNER RECORD SURVEY.
- R10 PROTECT IN PLACE EXISTING CITY MONUMENT DURING CONSTRUCTION. ADJUST EXISTING MONUMENT COVER TO FINISHED GRADE.

SHEET NOTES

1. SURFACING NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION GRADING & SURFACE PLAN STA.25+75–STA.34+50 ON SHEET 24.

* DENOTES GRADES FOR PRECAST BASE FABRICATION ONLY. SEE POLYMER CONCRETE PRECAST MANHOLE BASE FABRICATION NOTES ON SHEET 2.

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C41806 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race CONSULTING ENGINEERS
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www.brce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

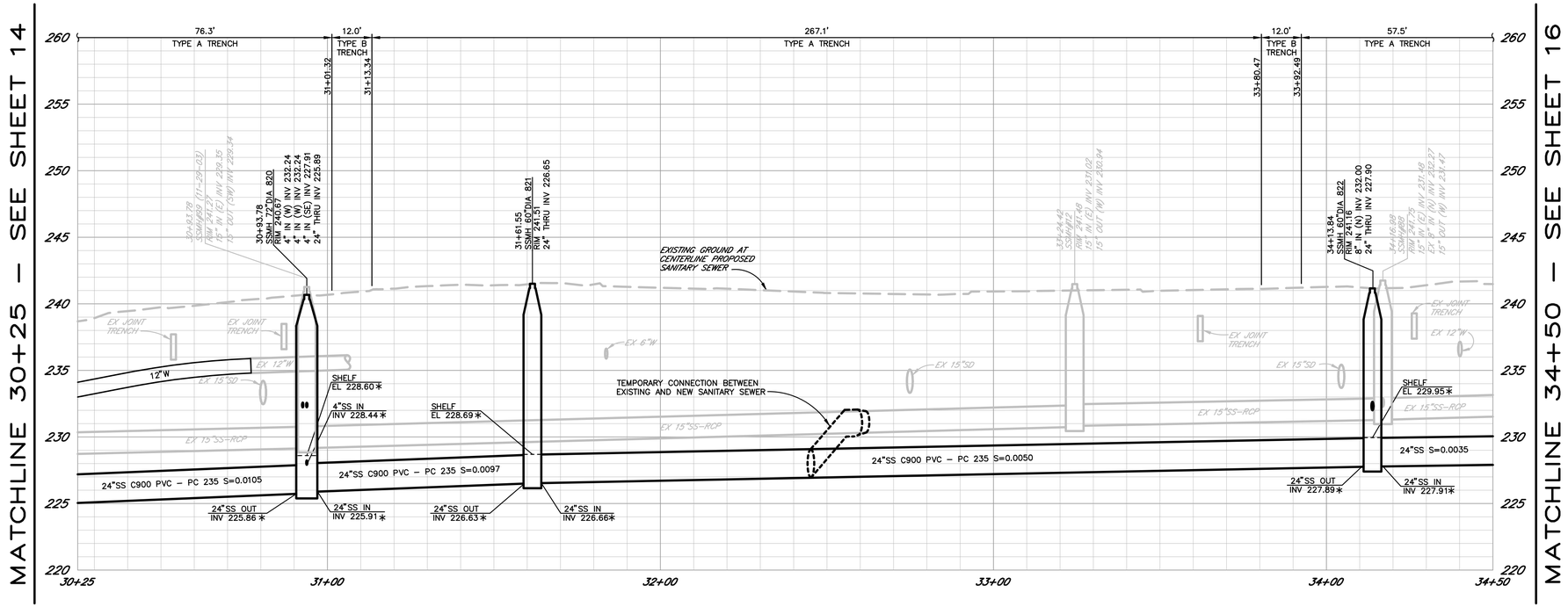
UTILITY PLAN & PROFILE STA.25+75-STA.30+25

CONTRACT NO. C01903

SHEET 14 OF 33

FILE NO. 2018-0043

12-07-22 Patheal \4247\dwg\4247 01\4247.01 BASE-Plan and Profile.dwg TAB: 14 P&P



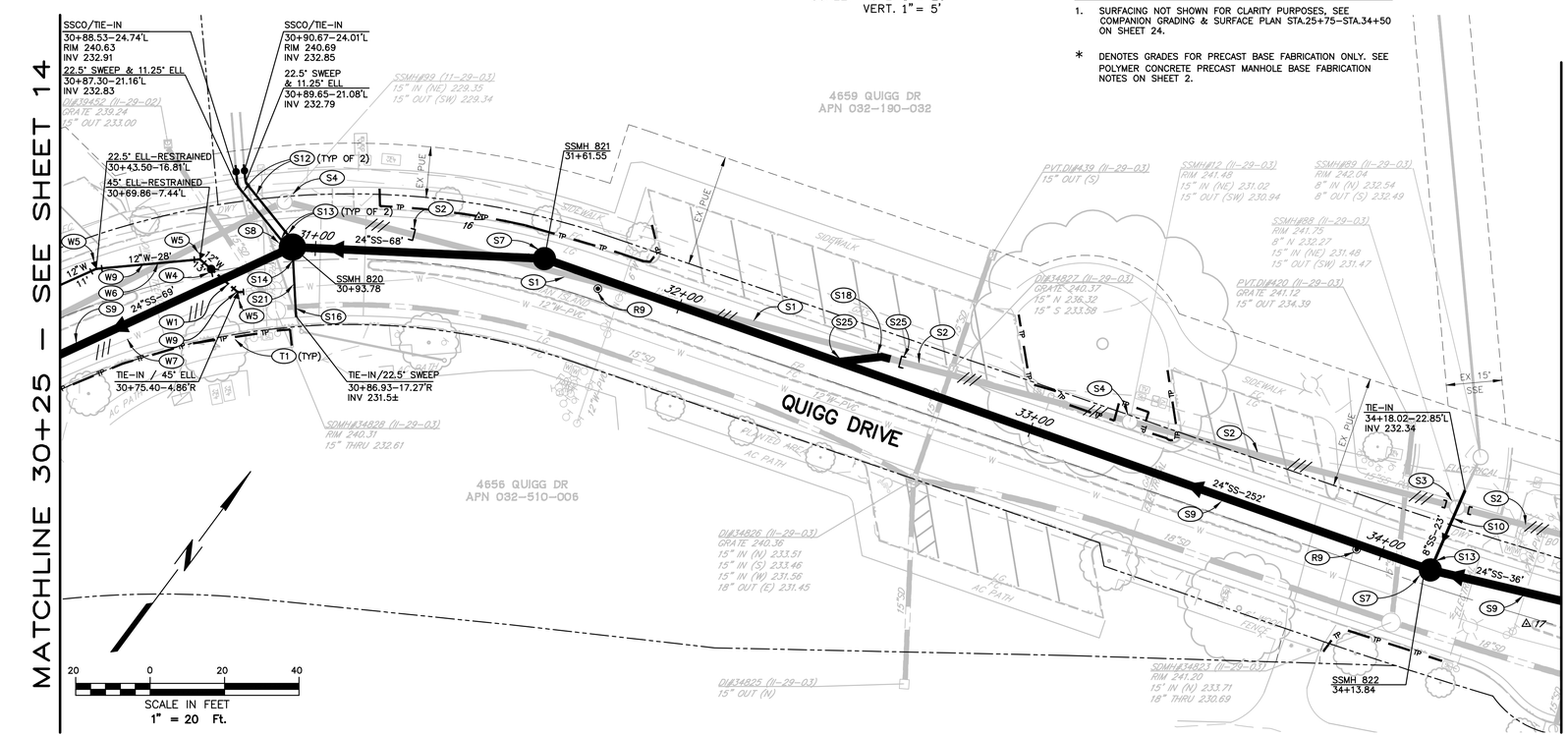
PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 5'

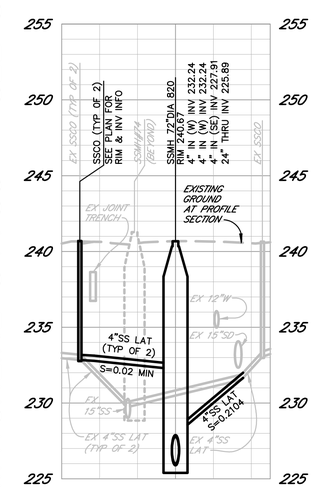
SHEET NOTES

1. SURFACING NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION GRADING & SURFACE PLAN STA.25+75–STA.34+50 ON SHEET 24.

* DENOTES GRADES FOR PRECAST BASE FABRICATION ONLY. SEE POLYMER CONCRETE PRECAST MANHOLE BASE FABRICATION NOTES ON SHEET 2.

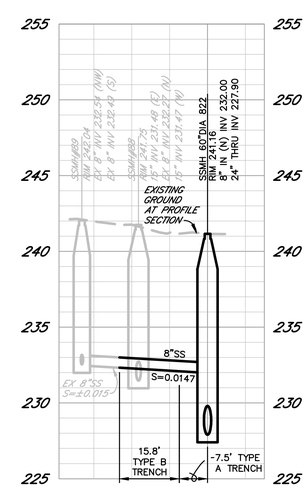


PLAN



SS PROFILE SECTION AT STA 30+93.78

SCALE: HORZ. 1" =20'
VERT. 1" =5'



SS PROFILE SECTION AT STA 34+13.84

SCALE: HORZ. 1" =20'
VERT. 1" =5'

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (S1) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MAIN WHERE ENCOUNTERED DURING EXCAVATION FOR THE NEW SANITARY SEWER MAIN.
- (S2) PLUG EXISTING SANITARY SEWER MAIN AND ABANDON WITH CELLULAR CONCRETE PER ABANDONMENT DETAILS ON SHEET 5. APPLICABLE TO EXISTING SANITARY SEWER MAIN NOT LOCATED WITHIN THE NEW SANITARY SEWER MAIN EXCAVATION.
- (S3) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MANHOLE.
- (S4) ABANDON IN PLACE EXISTING SANITARY SEWER MANHOLE SIMILAR TO CITY STANDARD 508 AND PER ABANDONMENT DETAILS ON SHEET 5.
- (S7) INSTALL 60" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S8) INSTALL 72" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S9) INSTALL 24" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAILS PER SHEET 3 AND CITY STD 215.
- (S10) INSTALL 8" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAIL PER PLAN AND CITY STD 215.
- (S12) INSTALL 4" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. REMOVE OR ABANDON A PORTION OF EXISTING LATERAL PER CITY STD 507. CLEANOUT BOXES IN ROADWAY OR UNIMPROVED AREAS SHALL BE CHRISTY MODEL G5 WITH LID LABELED "SEWER" AND CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (S13) CONNECT TO NEW MANHOLE WITHIN INSIDE DROP PER CITY STD 503.
- (S14) CONNECT TO NEW POLYMER CONCRETE MANHOLE BASE AT THE PRECAST FABRICATION BASE INVERT ELEVATION INDICATED ON THE PROFILE. INVERT SHALL BE LOCATED AT OR ABOVE THE INVERT OF THE OUTLET PIPE CROWN PER CITY STD.
- (S16) POTHOLE PRIOR TO ANY INSTALLATION OF NEW SEWER.
- (S18) INSTALL TEMPORARY 15" SANITARY SEWER MAIN, 45° SWEEP, 15"x24" REDUCER COUPLING, 24" WYE AND COUPLINGS. INSTALL MISSON COUPLING MODEL MR061515ARC AT CONNECTION BETWEEN NEW TEMPORARY AND EXISTING SANITARY SEWER MAIN. SEE CONCEPTUAL BYPASS PUMPING PLAN ON SHEET 7 FOR ADDITIONAL INFORMATION.
- (S21) INSTALL 4" SANITARY SEWER LATERAL SIMILAR TO CITY STD 513A AND CONNECT TO EXISTING LATERAL NEAR LIP OF GUTTER. REMOVE OR ABANDON EXISTING LATERAL PER CITY STD 507.
- (S25) FOLLOWING COMPLETION OF NEW UPSTREAM TRUNK SEWER, REMOVE TEMPORARY 24" SANITARY SEWER WYE, INSTALL PIPE SECTION WITH FULL SLIP PVC COUPLINGS FOR C-900. PLUG EXISTING SANITARY SEWER AND ABANDON PER NOTE S2.
- (W1) UPON SATISFACTORY COMPLETION OF WATER MAIN TESTING, MAKE WATER MAIN TIE IN AS A SINGLE OPERATION UNDER AUTHORIZED CITY INSPECTION. INSTALL FITTINGS AND COUPLINGS AS NECESSARY TO MAKE GRADE OR ALIGNMENT TRANSITION. RESTRAIN ALL JOINTS.
- (W4) INSTALL TEMPORARY BLOWOFF PER CITY STD 859.
- (W5) INSTALL THRUST BLOCK PER CITY STD 854.
- (W6) INSTALL 12" PVC WATER MAIN PER CITY STDS WITH BELL RESTRAINTS.
- (W7) REMOVE EXISTING WATER MAIN WHERE ENCOUNTERED DURING EXCAVATION FOR NEW SEWER. ABANDON EXISTING WATER MAIN PER CITY STD 507 WHERE EXISTING WATER MAIN EXTENDS BEYOND EXCAVATION LIMITS.
- (W9) POTHOLE PRIOR TO ANY INSTALLATION OF NEW WATER.
- (T1) TREE PROTECTION FENCE PER DETAIL ON SHEET 5.
- (R9) REPLACE CITY MONUMENT PER CITY STD 280. NOTIFY CITY SURVEY DEPARTMENT BEFORE CONSTRUCTION FOR CORNER RECORD SURVEY.

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C51806 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 120 • Santa Rosa, CA 95403 • 707-576-1322
www.brce.com

DATE: DECEMBER 2022
CHK BY: BLB & BB
SCALE: AS SHOWN
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

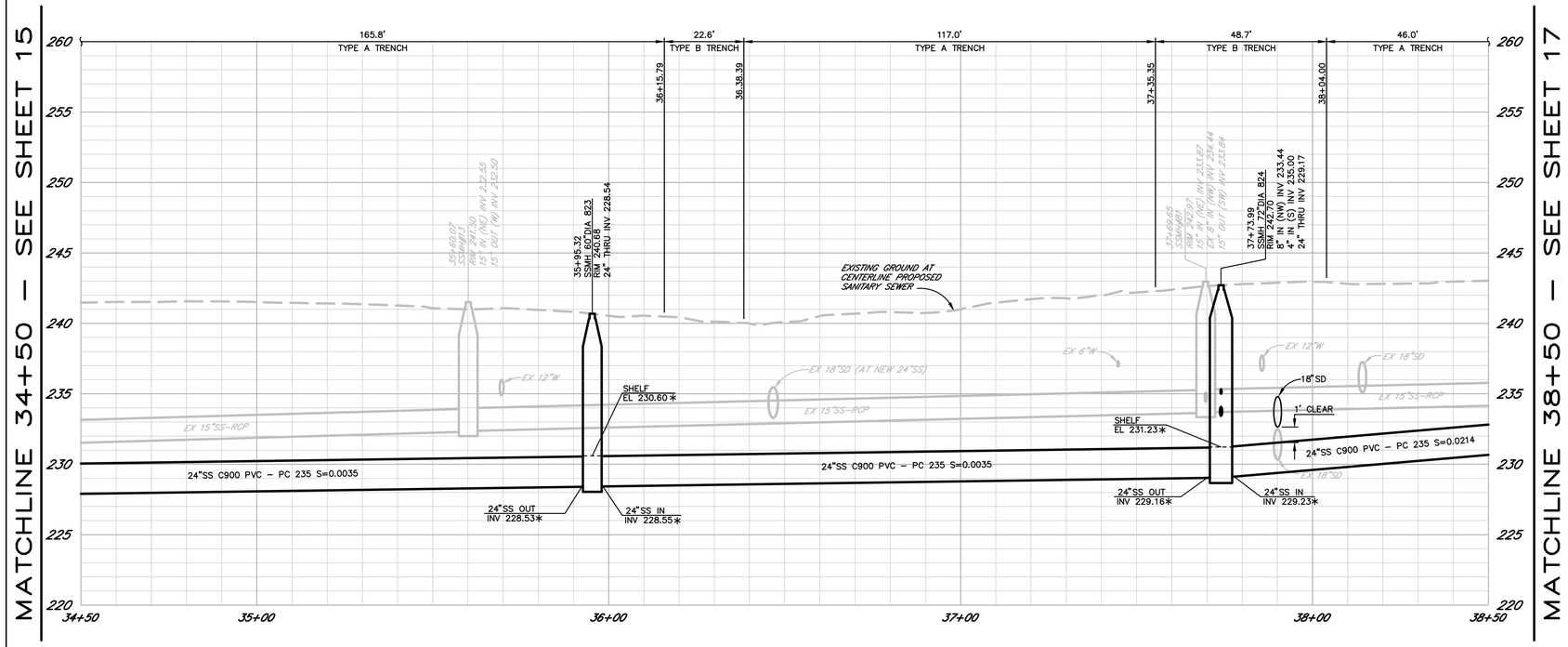
UTILITY PLAN & PROFILE STA.30+25-STA.34+50

CONTRACT NO. C01903

SHEET 15 OF 33

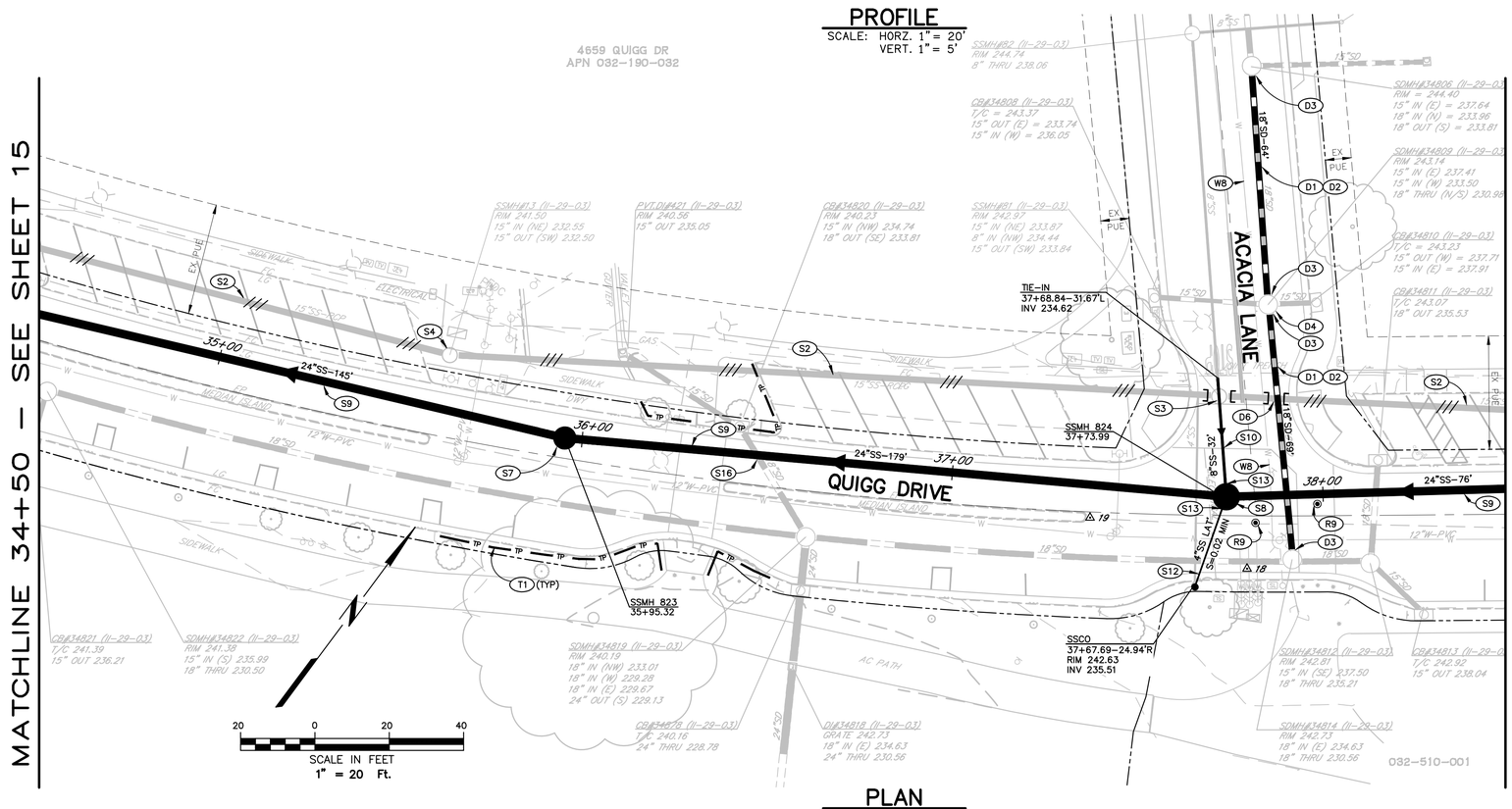
FILE NO. 2018-0043

12-07-22 Patheal \4247\dwg\4247 01\4247.01 BASE-Plan and Profile.dwg TAB: 15 P&P

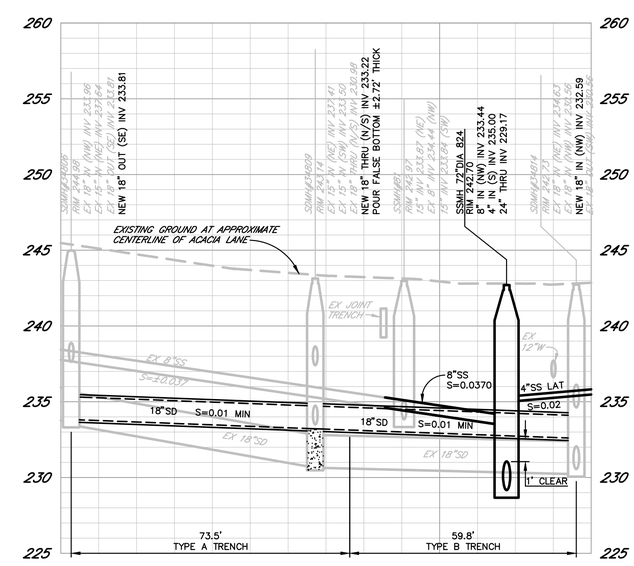


PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 5'



PLAN



SD AND SS PROFILE AT APPROXIMATE CENTERLINE OF ACACIA LANE

SCALE: HORZ. 1"=20'
VERT. 1"=5'

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (S1) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MAIN WHERE ENCOUNTERED DURING EXCAVATION FOR THE NEW SANITARY SEWER MAIN.
- (S2) PLUG EXISTING SANITARY SEWER MAIN AND ABANDON WITH CELLULAR CONCRETE PER ABANDONMENT DETAILS ON SHEET 5. APPLICABLE TO EXISTING SANITARY SEWER MAIN NOT LOCATED WITHIN THE NEW SANITARY SEWER MAIN EXCAVATION.
- (S3) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MANHOLE.
- (S4) ABANDON IN PLACE EXISTING SANITARY SEWER MANHOLE SIMILAR TO CITY STANDARD 508 AND PER ABANDONMENT DETAILS ON SHEET 5.
- (S7) INSTALL 60" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S8) INSTALL 72" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S9) INSTALL 24" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAILS PER SHEET 3 AND CITY STD 215.
- (S10) INSTALL 8" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAIL PER PLAN AND CITY STD 215.
- (S12) INSTALL 4" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. REMOVE OR ABANDON A PORTION OF EXISTING LATERAL PER CITY STD 507. CLEANOUT BOXES IN ROADWAY OR UNIMPROVED AREAS SHALL BE CHRISTY MODEL G5 WITH LID LABELED "SEWER" AND CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (S13) CONNECT TO NEW MANHOLE WITHIN INSIDE DROP PER CITY STD 503.
- (S16) POTHOLE PRIOR TO ANY INSTALLATION OF NEW SEWER.
- (D1) CONSTRUCT 18" HDPE STORM DRAIN PER CITY STDS, TRENCH DETAIL PER PLAN AND CITY STD 215.
- (D2) REMOVE AND PROPERLY DISPOSE OF EXISTING STORM DRAIN PIPE.
- (D3) CORE HOLE AND CONNECT TO EXISTING STORM DRAIN STRUCTURE. MODIFY EXISTING STORM DRAIN STRUCTURE SIMILAR TO CITY SEWER CONSTRUCTION STD 130–1.07A.
- (D4) POUR FALSE BOTTOM IN EXISTING STORM DRAIN STRUCTURE.
- (D6) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MAIN WHERE ENCOUNTERED DURING EXCAVATION FOR THE NEW STORM DRAIN.
- (W8) SUPPORT OR REMOVE AND REPLACE EXISTING WATER MAIN PER CITY STDS AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS.
- (T1) TREE PROTECTION FENCE PER DETAIL ON SHEET 5.
- (R9) REPLACE CITY MONUMENT PER CITY STD 280. NOTIFY CITY SURVEY DEPARTMENT BEFORE CONSTRUCTION FOR CORNER RECORD SURVEY.

SHEET NOTES

1. SURFACING NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION GRADING & SURFACE PLAN STA.34+50–STA.43+00 ON SHEET 25.

* DENOTES GRADES FOR PRECAST BASE FABRICATION ONLY. SEE POLYMER CONCRETE PRECAST MANHOLE BASE FABRICATION NOTES ON SHEET 2.

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C51904 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 220 • Santa Rosa, CA 95403 • 707-576-1322
www.brce.com

SCALE: AS SHOWN
DATE: DECEMBER 2022
DWN BY: PIT
CHK BY: BLB & BB

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

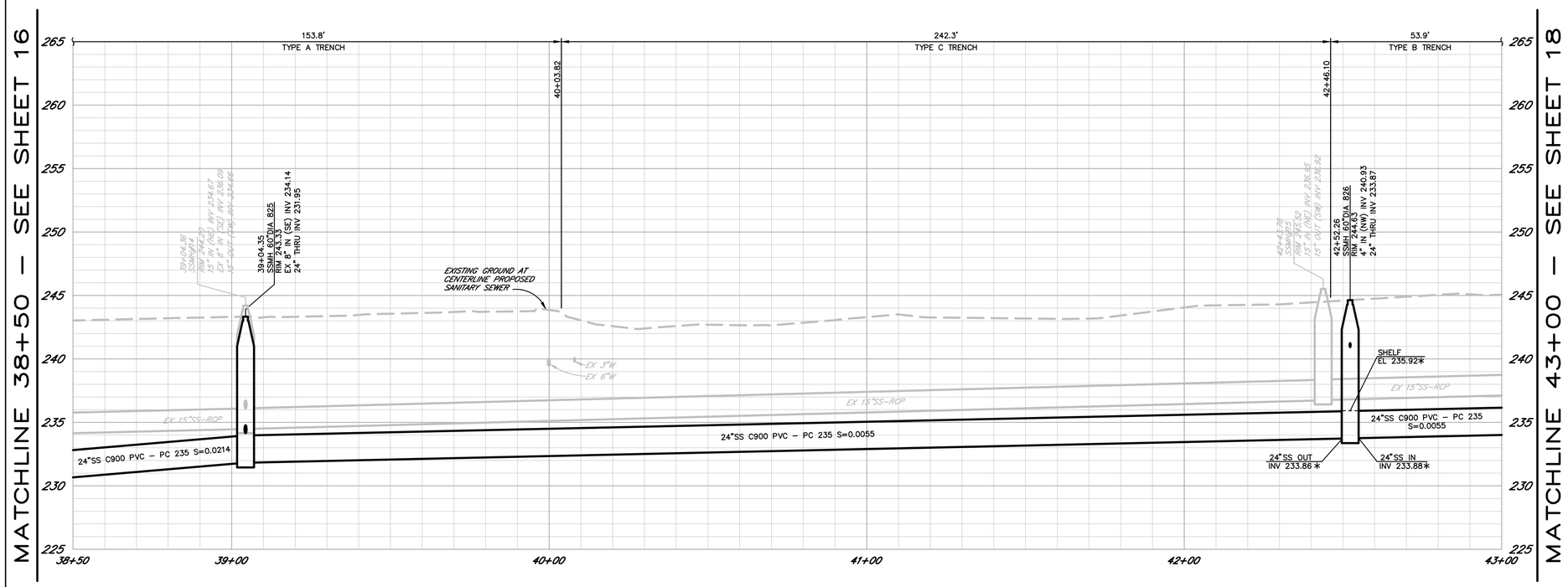
UTILITY PLAN & PROFILE STA.34+50-STA.38+50

CONTRACT NO. C01903

SHEET 16 OF 33

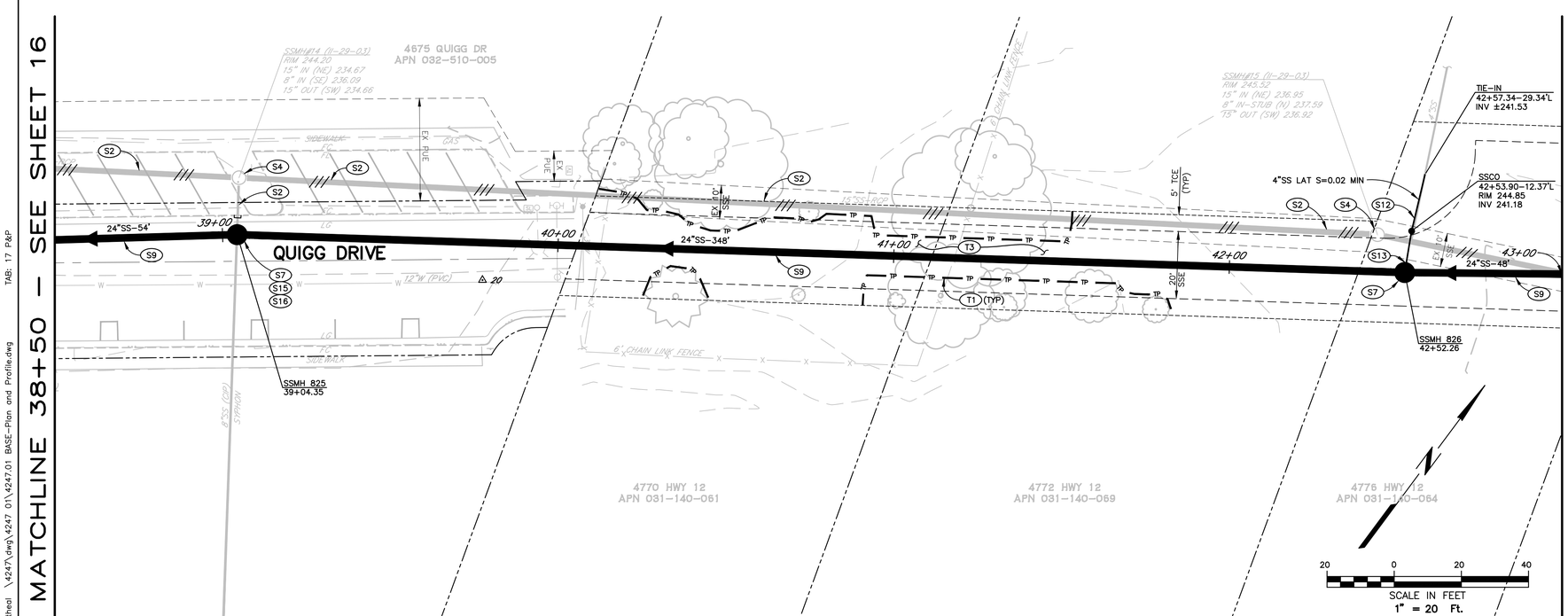
FILE NO. 2018–0043

12–09–22 Patheal \4247\dwg\4247 01\4247.01 BASE–Plan and Profile.dwg TAB: 16 P&P

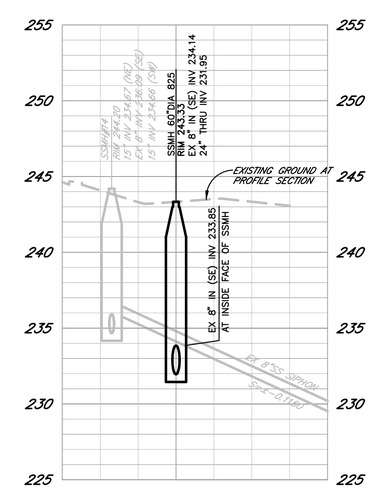


PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 5'



PLAN



SS PROFILE SECTION AT STA 39+04.35

SCALE: HORZ. 1" =20'
VERT. 1" =5'

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (S2) PLUG EXISTING SANITARY SEWER MAIN AND ABANDON WITH CELLULAR CONCRETE PER ABANDONMENT DETAILS ON SHEET 5. APPLICABLE TO EXISTING SANITARY SEWER MAIN NOT LOCATED WITHIN THE NEW SANITARY SEWER MAIN EXCAVATION.
- (S4) ABANDON IN PLACE EXISTING SANITARY SEWER MANHOLE SIMILAR TO CITY STANDARD 508 AND PER ABANDONMENT DETAILS ON SHEET 5.
- (S7) INSTALL 60" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S9) INSTALL 24" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAILS PER SHEET 3 AND CITY STD 215.
- (S12) INSTALL 4" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. REMOVE OR ABANDON A PORTION OF EXISTING LATERAL PER CITY STD 507. CLEANOUT BOXES IN ROADWAY OR UNIMPROVED AREAS SHALL BE CHRISTY MODEL G5 WITH LID LABELED "SEWER" AND CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (S13) CONNECT TO NEW MANHOLE WITHIN INSIDE DROP PER CITY STD 503.
- (S15) CONSTRUCT POURED-IN-PLACE CONCRETE MANHOLE BASE AROUND EXISTING SEWER, GROUT SMOOTH FLOW LINES FROM THE EXISTING SANITARY SEWER, CUT OUT EXISTING SANITARY SEWER MAIN ONCE NEW SANITARY SEWER MAIN DOWNSTREAM IS IN SERVICE. PLUG EXISTING SANITARY SEWER TO BE ABANDONED WITH CONCRETE PER CITY STANDARD 507 AND COAT MANHOLE BASE PER CITY CONSTRCTION STANDARD SPECIFICATION 130-1.07.
- (S16) POTHOLE PRIOR TO ANY INSTALLATION OF NEW SEWER.
- (T1) TREE PROTECTION FENCE PER DETAIL ON SHEET 5.
- (T3) CITY ARBORIST SHALL BE ON-SITE DURING EXCAVATION WITHIN THE ROOT ZONE OF EXISTING TREES. IF ROOTS LARGER THAN 2" DIAMETER ARE FOUND, THEY SHALL BE CLEANLY CUT ACROSS THE FACE OF THE ROOT AT THE DIRECTION OF THE ARBORIST.

SHEET NOTES

1. SURFACING NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION GRADING & SURFACE PLAN STA.34+50-STA.43+00 ON SHEET 25.
2. TRUNK SEWER BETWEEN SSMH 826 AND SSMH 827 IS OFFSET FROM CONTROL ALIGNMENT. SEE LAYOUT ON SHEET 7.

* DENOTES GRADES FOR PRECAST BASE FABRICATION ONLY. SEE POLYMER CONCRETE PRECAST MANHOLE BASE FABRICATION NOTES ON SHEET 2.

REGISTERED PROFESSIONAL ENGINEER
DAVID Y. COLLADAY
No. C51906
Exp. 12-31-23
CIVIL
STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 220 • Santa Rosa, CA 95403 • 707-575-1322
www.brce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

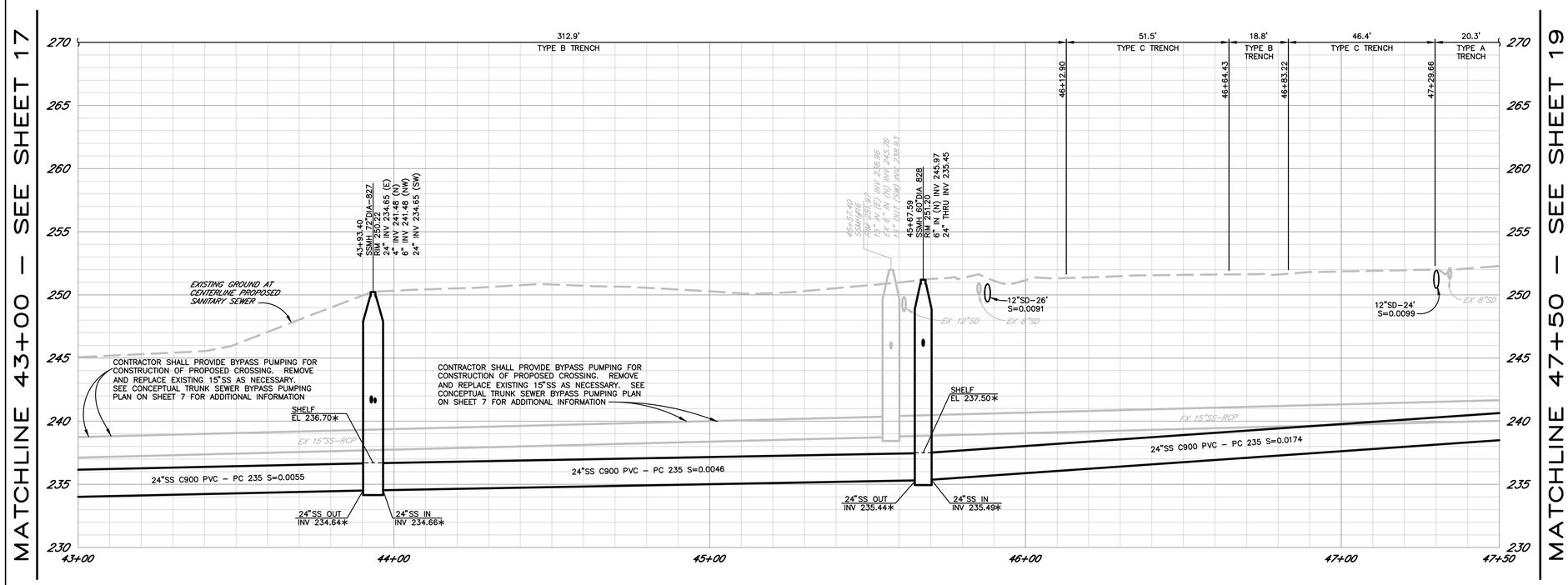
UTILITY PLAN & PROFILE STA.38+50-STA.43+00

CONTRACT NO. C01903

SHEET 17 OF 33

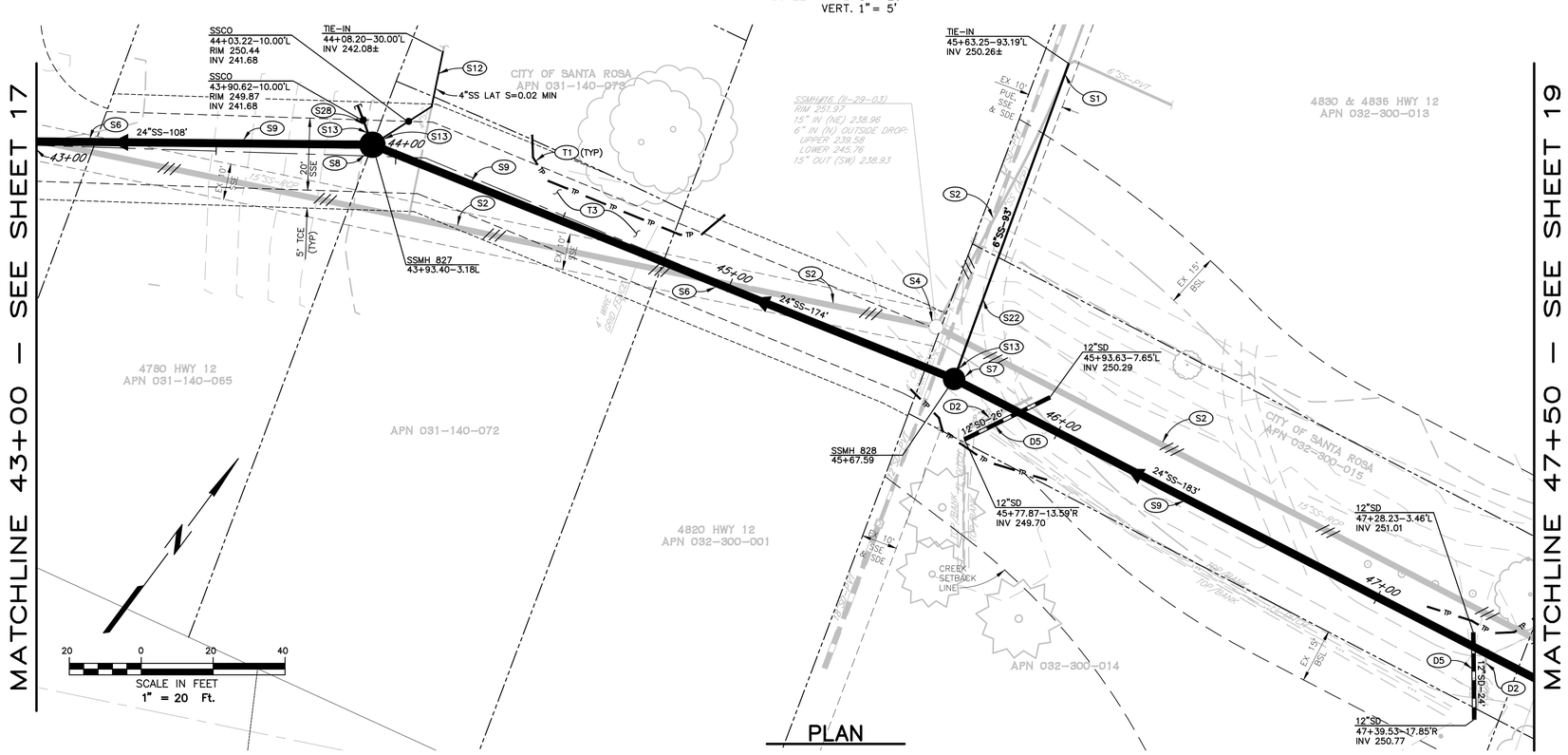
FILE NO. 2018-0043

12-07-22 Patheal \424?\dwg\4247 01\4247.01 BASE-Plan and Profile.dwg TAB: 17 P&P

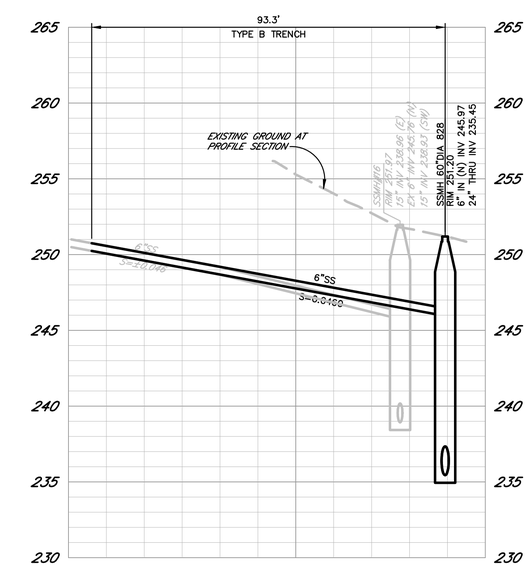


PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 5'



PLAN



SS PROFILE SECTION AT STA 45+67.59

SCALE: HORZ. 1" =20'
VERT. 1" =5'

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (S1) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MAIN WHERE ENCOUNTERED DURING EXCAVATION FOR THE NEW SANITARY SEWER MAIN.
- (S2) PLUG EXISTING SANITARY SEWER MAIN AND ABANDON WITH CELLULAR CONCRETE PER ABANDONMENT DETAILS ON SHEET 5. APPLICABLE TO EXISTING SANITARY SEWER MAIN NOT LOCATED WITHIN THE NEW SANITARY SEWER MAIN EXCAVATION.
- (S4) ABANDON IN PLACE EXISTING SANITARY SEWER MANHOLE SIMILAR TO CITY STANDARD 50B AND PER ABANDONMENT DETAILS ON SHEET 5.
- (S6) TRUNK SEWER BYPASS PUMPING REQUIRED, SEE CONCEPTUAL TRUNK SEWER BYPASS PUMPING PLAN ON SHEET 7 FOR ADDITIONAL INFORMATION.
- (S7) INSTALL 60" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S8) INSTALL 72" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S9) INSTALL 24" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAILS PER SHEET 3 AND CITY STD 215.
- (S12) INSTALL 4" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. REMOVE OR ABANDON A PORTION OF EXISTING LATERAL PER CITY STD 507. CLEANOUT BOXES IN ROADWAY OR UNIMPROVED AREAS SHALL BE CHRISTY MODEL G5 WITH LID LABELED "SEWER" AND CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (S13) CONNECT TO NEW MANHOLE WITHIN INSIDE DROP PER CITY STD 503.
- (S22) INSTALL 6" SANITARY SEWER MAIN PER CITY STD. TRENCH DETAIL PER PLAN AND CITY STD 215.
- (S28) INSTALL 6" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. CAP LATERAL AT EDGE OF EASEMENT FOR FUTURE USE. CLEANOUT BOX SHALL BE CHRISTY MODEL G5 WITH LID LABELED "SEWER" AND CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (D2) REMOVE AND PROPERLY DISPOSE OF EXISTING STORM DRAIN PIPE.
- (D5) INSTALL 12" CLASS V RCP STORM DRAIN WITH CONCRETE CAP PER DETAIL SHEET 3.
- (T1) TREE PROTECTION FENCE PER DETAIL ON SHEET 5.
- (T3) CITY ARBORIST SHALL BE ON-SITE DURING EXCAVATION WITHIN THE ROOT ZONE OF EXISTING TREES. IF ROOTS LARGER THAN 2" DIAMETER ARE FOUND, THEY SHALL BE CLEANLY CUT ACROSS THE FACE OF THE ROOT AT THE DIRECTION OF THE ARBORIST.

SHEET NOTES

1. SURFACING NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION GRADING & SURFACE PLAN STA.43+00–STA.51+00 ON SHEET 26.
2. TRUNK SEWER BETWEEN SSMH 826 AND SSMH 827 IS OFFSET FROM CONTROL ALIGNMENT. SEE LAYOUT ON SHEET 7.

* DENOTES GRADES FOR PRECAST BASE FABRICATION ONLY. SEE POLYMER CONCRETE PRECAST MANHOLE BASE FABRICATION NOTES ON SHEET 2.

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLLADAY No. C41806 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 120 • Santa Rosa, CA 95403 • 707-575-1322
www.brce.com

SCALE: AS SHOWN
DATE: DECEMBER 2022
DWN BY: PIT
CHK BY: BLB & BB

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

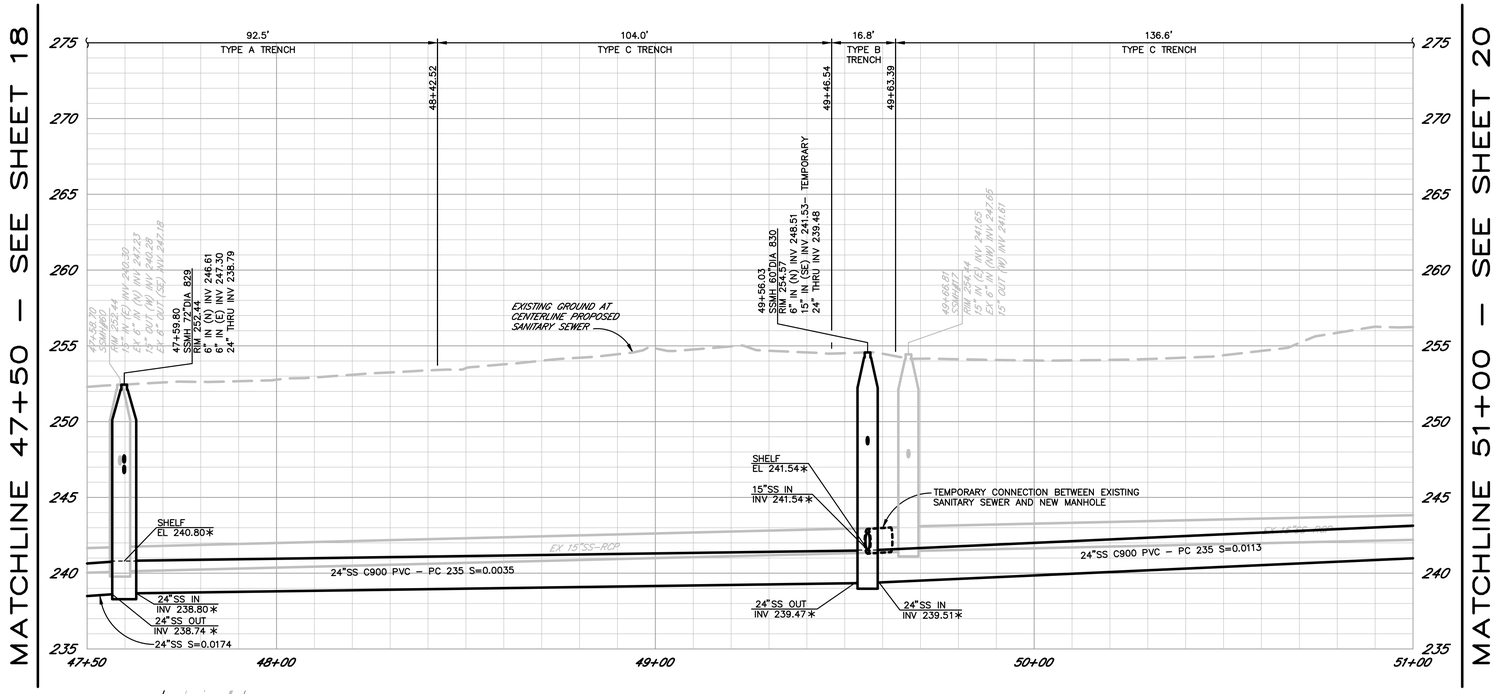
UTILITY PLAN & PROFILE STA.43+00-STA.47+50

CONTRACT NO. C01903

SHEET 18 OF 33

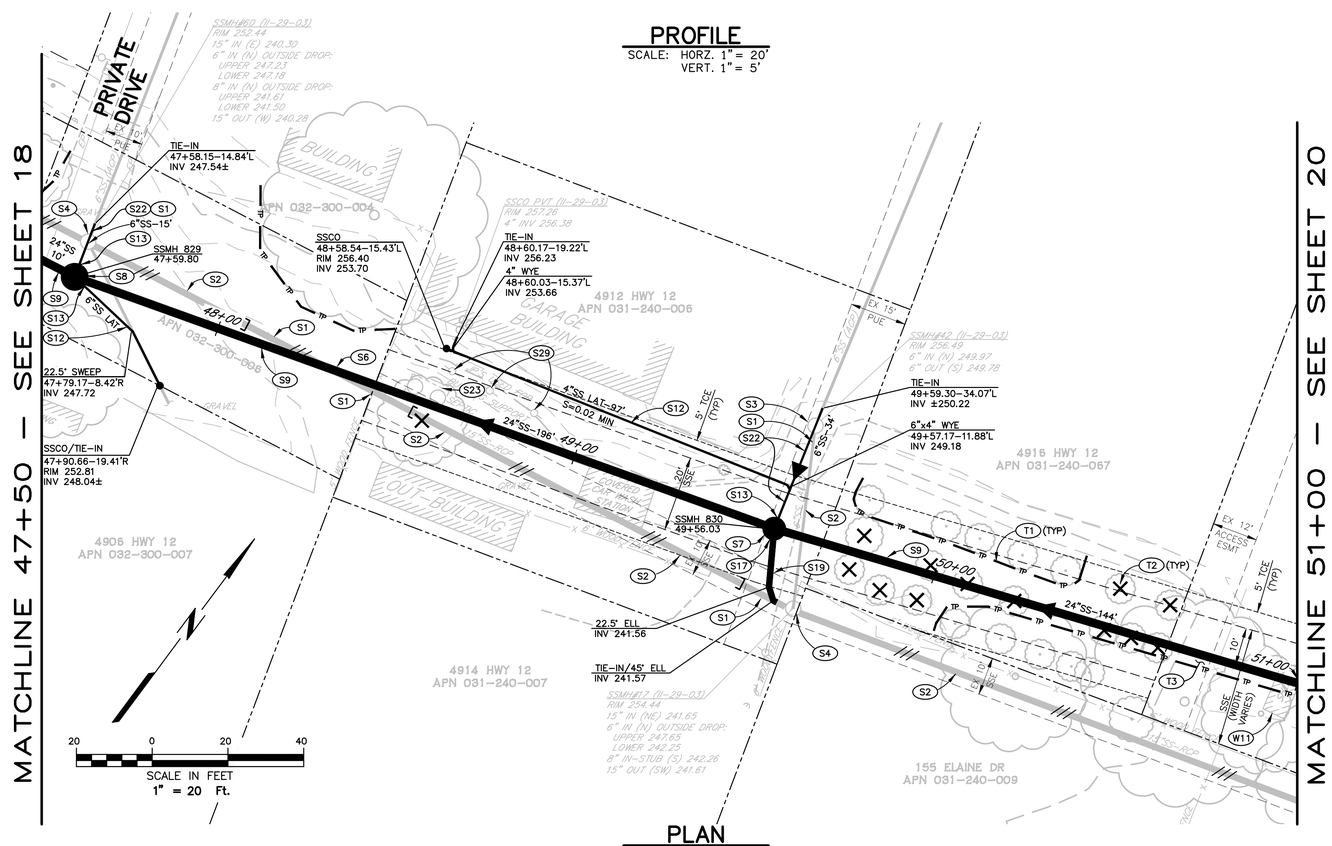
FILE NO. 2018-0043

12-07-22 Patheol \424\dwg\4247 01\4247.01 BASE-Plan and Profile.dwg TAB: 18 P&P



PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 5'

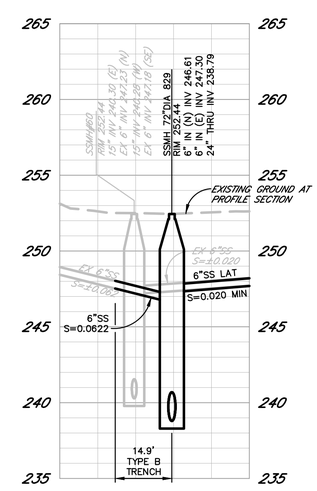


PLAN

SHEET NOTE

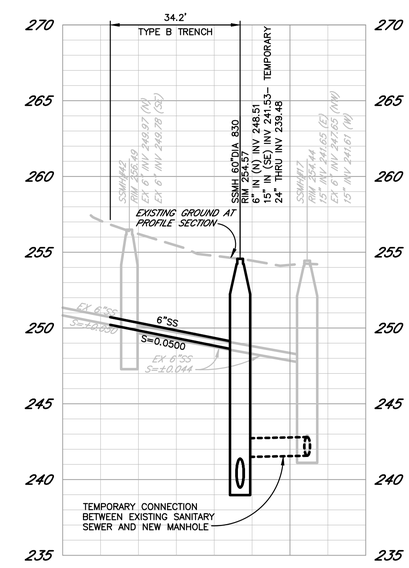
1. SURFACING NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION GRADING & SURFACE PLAN STA.43+00–STA.51+00 ON SHEET 26.

* DENOTES GRADES FOR PRECAST BASE FABRICATION ONLY. SEE POLYMER CONCRETE PRECAST MANHOLE BASE FABRICATION NOTES ON SHEET 2.



SS PROFILE SECTION AT STA 47+59.80

SCALE: HORZ. 1"=20'
VERT. 1"=5'



SS PROFILE SECTION AT STA 49+56.03

SCALE: HORZ. 1"=20'
VERT. 1"=5'

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (S1) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MAIN WHERE ENCOUNTERED DURING EXCAVATION FOR THE NEW SANITARY SEWER MAIN.
- (S2) PLUG EXISTING SANITARY SEWER MAIN AND ABANDON WITH CELLULAR CONCRETE PER ABANDONMENT DETAILS ON SHEET 5. APPLICABLE TO EXISTING SANITARY SEWER MAIN NOT LOCATED WITHIN THE NEW SANITARY SEWER MAIN EXCAVATION.
- (S3) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MANHOLE.
- (S4) ABANDON IN PLACE EXISTING SANITARY SEWER MANHOLE SIMILAR TO CITY STANDARD 508 AND PER ABANDONMENT DETAILS ON SHEET 5.
- (S6) TRUNK SEWER BYPASS PUMPING REQUIRED, SEE CONCEPTUAL TRUNK SEWER BYPASS PUMPING PLAN ON SHEET 7 FOR ADDITIONAL INFORMATION.
- (S7) INSTALL 60" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S8) INSTALL 72" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S9) INSTALL 24" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAILS PER SHEET 3 AND CITY STD 215.
- (S12) INSTALL 4" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. REMOVE OR ABANDON A PORTION OF EXISTING LATERAL PER CITY STD 507. CLEANOUT BOXES IN ROADWAY OR UNIMPROVED AREAS SHALL BE CHRISTY MODEL G5 WITH LID LABELED "SEWER" AND CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (S13) CONNECT TO NEW MANHOLE WITHIN INSIDE DROP PER CITY STD 503.
- (S17) FOLLOWING COMPLETION OF NEW UPSTREAM TRUNK SEWER, REMOVE AND ABANDON TEMPORARY CONNECTION TO NEW TRUNK SEWER MANHOLE PER DETAIL ON SHEET 5. SEE CONCEPTUAL BYPASS PUMPING PLAN ON SHEET 7 FOR ADDITIONAL INFORMATION.
- (S19) INSTALL TEMPORARY 15" SANITARY SEWER MAIN, 45° SWEEP, 22.5° SWEEP, COUPLINGS, AND CONNECTION BETWEEN EXISTING SANITARY SEWER MAIN AND NEW SANITARY SEWER MANHOLE. SEE CONCEPTUAL BYPASS PUMPING PLAN ON SHEET 7 FOR ADDITIONAL INFORMATION.
- (S22) INSTALL 6" SANITARY SEWER MAIN PER CITY STD. TRENCH DETAIL PER PLAN AND CITY STD 215.
- (S23) REMOVE AND DISPOSE OF EXISTING SEPTIC TANK. CONTRACTOR SHALL OBTAIN AND FOLLOW THE REQUIREMENTS OF A WLS–002 SEPTIC TANK DESTRUCTION PERMIT FROM THE COUNTY OF SONOMA.
- (S29) CONTRACTOR SHALL PROVIDE A POSITIVE PRESSURE SHORING SYSTEM PER SECTION 106 OF THE TECHNICAL SPECIFICATIONS DURING TRUNK SEWER CONSTRUCTION ADJACENT TO EXISTING WOODEN POLES SUPPORTING EXISTING BUILDINGS.
- (T1) TREE PROTECTION FENCE PER DETAIL ON SHEET 5.
- (T2) TREE AND STUMP TO BE REMOVED. PROVIDE TWO (2) 15 GALLON LIVE OAKS AT LOCATIONS TO BE DETERMINED BY CITY INSPECTOR PER CITY STD 101A.
- (T3) CITY ARBORIST SHALL BE ON–SITE DURING EXCAVATION WITHIN THE ROOT ZONE OF EXISTING TREES. IF ROOTS LARGER THAN 2" DIAMETER ARE FOUND, THEY SHALL BE CLEANLY CUT ACROSS THE FACE OF THE ROOT AT THE DIRECTION OF THE ARBORIST.
- (W11) DEMOLISH EXISTING WELL HOUSE BUILDING AND ABANDON EXISTING WELL. WELL ABANDONMENT AND DESTRUCTION SHALL BE PERFORMED BY A C–57 WELL DRILLING CONTRACTOR. CONTRACTOR SHALL COMPLETE WATER SYSTEM WORK INDICATED ON SHEET 28 PRIOR TO ANY WORK WITHIN 50 FEET OF THE EXISTING WELL. CONTRACTOR SHALL OBTAIN A WELL ABANDONMENT PERMIT FROM THE COUNTY OF SONOMA AND FOLLOW THE REQUIREMENTS OF SECTION 25B–7 OF THE SONOMA COUNTY CODE.

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C51906 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 120 • Santa Rosa, CA 95403 • 707-576-3322
www.brce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

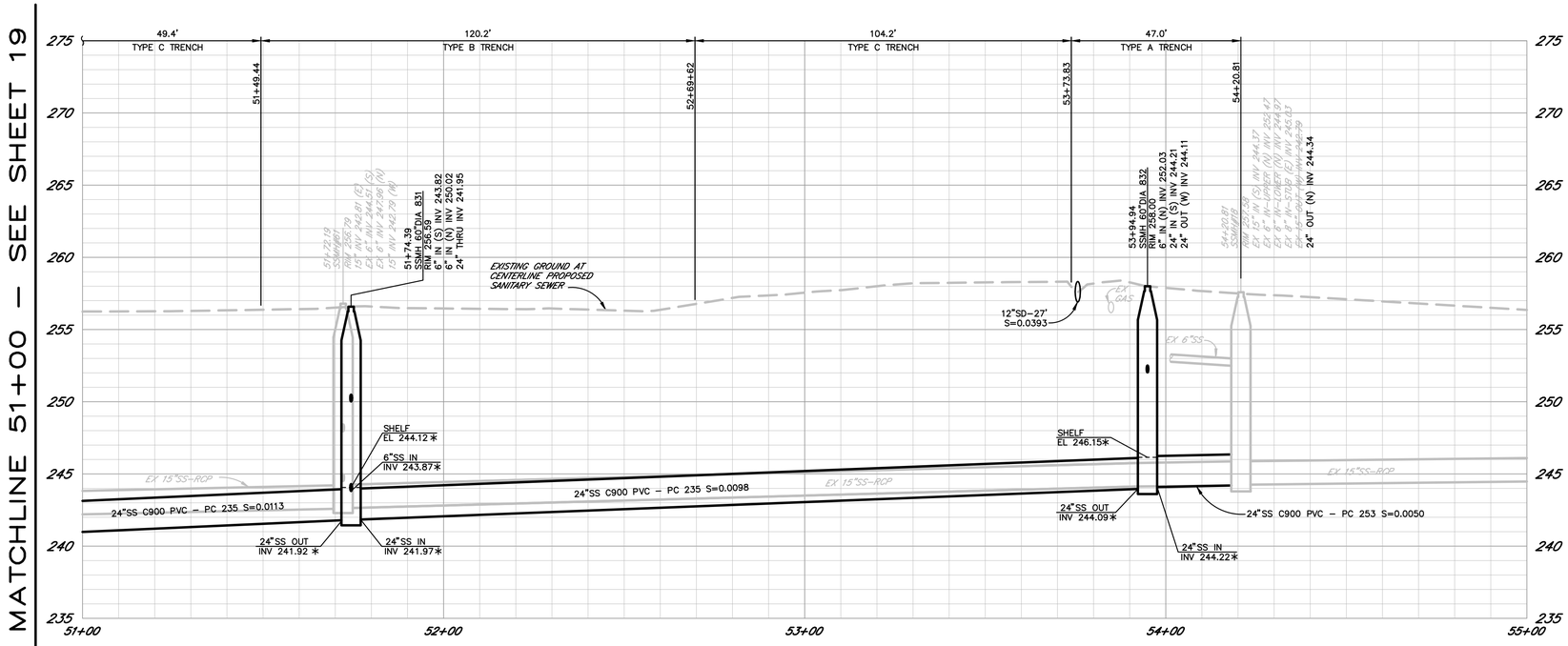
UTILITY PLAN & PROFILE STA.47+50-STA.51+00

CONTRACT NO. C01903

SHEET 19 OF 33

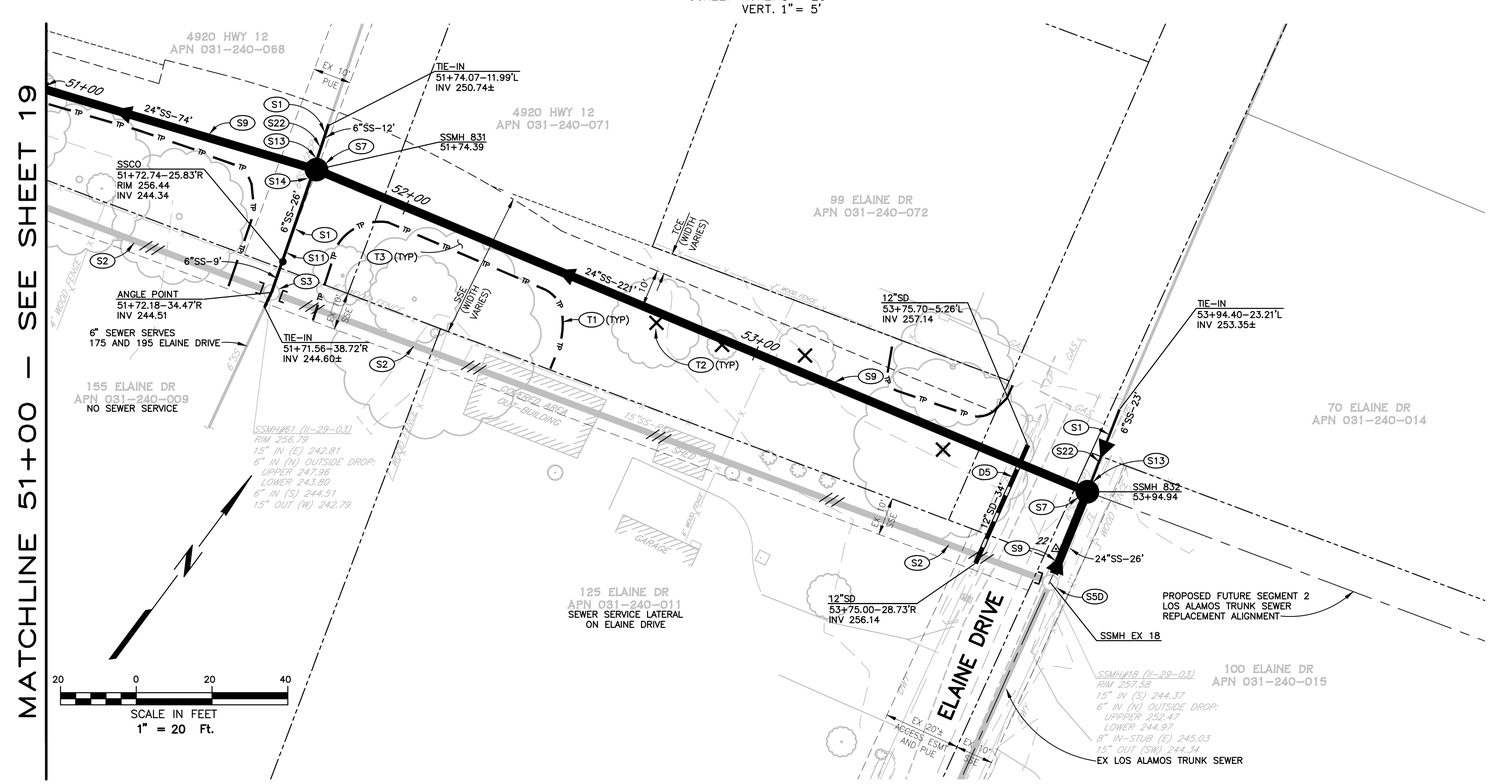
FILE NO. 2018–0043

12-07-22 Patheal \4247\dwg\4247 01\4247.01 BASE-Plan and Profile.dwg TAB: 19 P&P

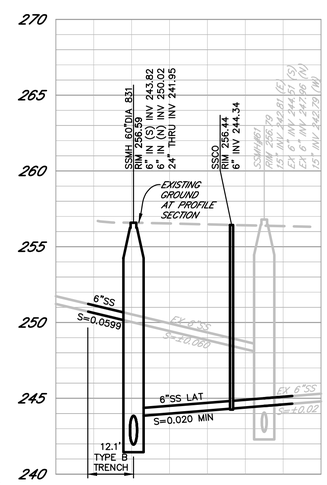


PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 5'

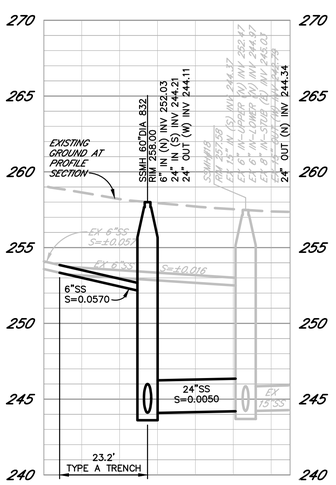


PLAN



SS PROFILE SECTION AT STA 51+74.39

SCALE: HORZ. 1" =20'
VERT. 1" =5'



SS PROFILE SECTION AT STA 53+94.94

SCALE: HORZ. 1" =20'
VERT. 1" =5'

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (S1) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MAIN WHERE ENCOUNTERED DURING EXCAVATION FOR THE NEW SANITARY SEWER MAIN.
- (S2) PLUG EXISTING SANITARY SEWER MAIN AND ABANDON WITH CELLULAR CONCRETE PER ABANDONMENT DETAILS ON SHEET 5. APPLICABLE TO EXISTING SANITARY SEWER MAIN NOT LOCATED WITHIN THE NEW SANITARY SEWER MAIN EXCAVATION.
- (S3) REMOVE AND PROPERLY DISPOSE OF EXISTING SANITARY SEWER MANHOLE.
- (S5D) CONNECT TO EXISTING MANHOLE. MODIFY EXISTING MANHOLE BASE FOR NEW SANITARY SEWER MAIN CONNECTION. PLUG WESTERLY VOID TO BE ABANDONED AND REBUILD SHELF WITH CONCRETE INCLUDING APPLICATION OF BONDING AGENT AFTER REMOVAL OF EXISTING 15" RCP PENETRATION. PERFORM WORK PER CITY CONSTRUCTION STANDARD SPECIFICATION 130–1.07A.
- (S7) INSTALL 60" POLYMER CONCRETE SANITARY SEWER MANHOLE PER CITY STD 500 EXCEPT NO COATING REQUIRED, WITH BOLT DOWN LID PER CITY STD 512.
- (S9) INSTALL 24" SANITARY SEWER MAIN PER CITY STANDARDS, TRENCH DETAILS PER SHEET 3 AND CITY STD 215.
- (S11) INSTALL 6" SANITARY SEWER LATERAL AND CLEANOUT SIMILAR TO CITY STD 513A. REMOVE OR ABANDON A PORTION OF EXISTING LATERAL PER CITY STD 507. CLEANOUT BOXES IN ROADWAY OR UNIMPROVED AREAS SHALL BE CHRISTY MODEL G5 WITH LID LABELED "SEWER" AND CONCRETE COLLAR SIMILAR TO CITY STD 877.
- (S13) CONNECT TO NEW MANHOLE WITHIN INSIDE DROP PER CITY STD 503.
- (S14) CONNECT TO NEW POLYMER CONCRETE MANHOLE BASE AT THE PRECAST FABRICATION BASE INVERT ELEVATION INDICATED ON THE PROFILE. INVERT SHALL BE LOCATED AT OR ABOVE THE INVERT OF THE OUTLET PIPE CROWN PER CITY STD.
- (S22) INSTALL 6" SANITARY SEWER MAIN PER CITY STD. TRENCH DETAIL PER PLAN AND CITY STD 215.
- (D5) INSTALL 12" CLASS V RCP STORM DRAIN WITH CONCRETE CAP PER DETAIL SHEET 3.
- (T1) TREE PROTECTION FENCE PER DETAIL ON SHEET 5.
- (T2) TREE AND STUMP TO BE REMOVED. PROVIDE TWO (2) 15 GALLON LIVE OAKS AT LOCATIONS TO BE DETERMINED BY CITY INSPECTOR PER CITY STD 101A.
- (T3) CITY ARBORIST SHALL BE ON–SITE DURING EXCAVATION WITHIN THE ROOT ZONE OF EXISTING TREES. IF ROOTS LARGER THAN 2" DIAMETER ARE FOUND, THEY SHALL BE CLEANLY CUT ACROSS THE FACE OF THE ROOT AT THE DIRECTION OF THE ARBORIST.

SHEET NOTES

1. SURFACING NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION GRADING & SURFACE PLAN STA.51+00–STA.54+50 ON SHEET 27.

* DENOTES GRADES FOR PRECAST BASE FABRICATION ONLY. SEE POLYMER CONCRETE PRECAST MANHOLE BASE FABRICATION NOTES ON SHEET 2.

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C51896 Exp. 12–31–23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race CONSULTING ENGINEERS
475 Aviation Blvd.• Suite 120• Santa Rosa, CA 95403 707-575-3322
www.b-r-e.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

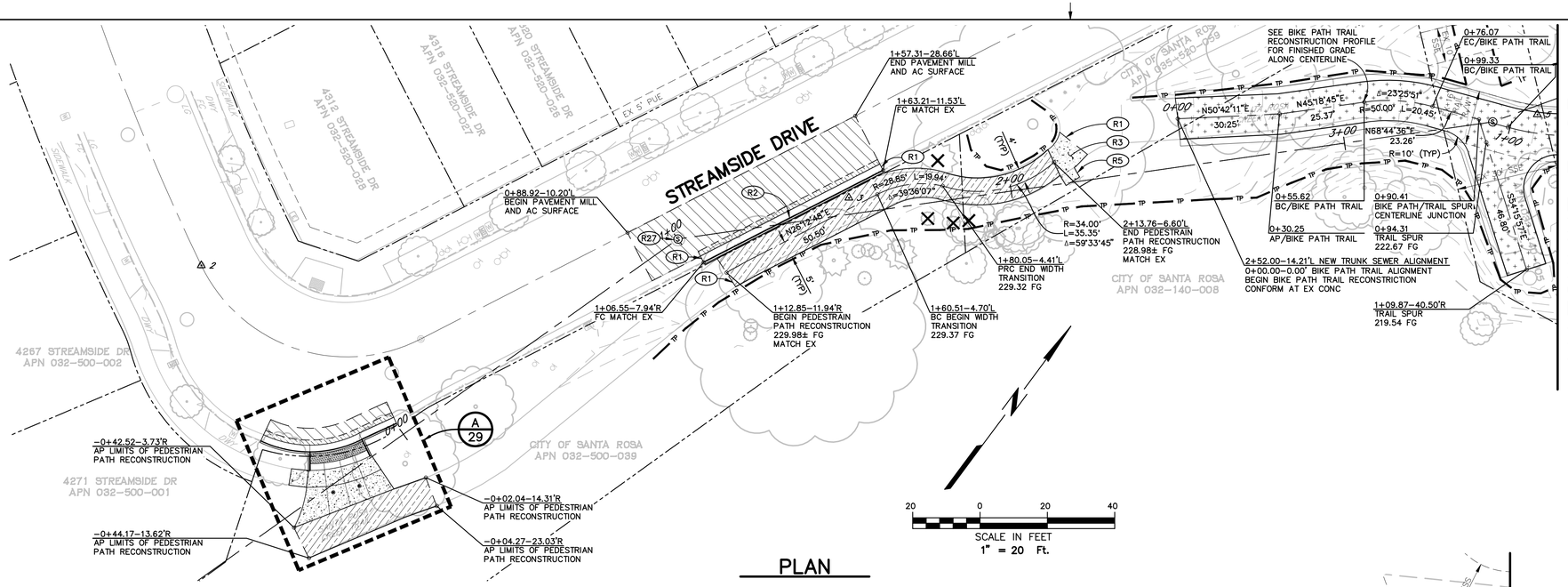
UTILITY PLAN & PROFILE STA.51+00-STA.54+50

CONTRACT NO. C01903

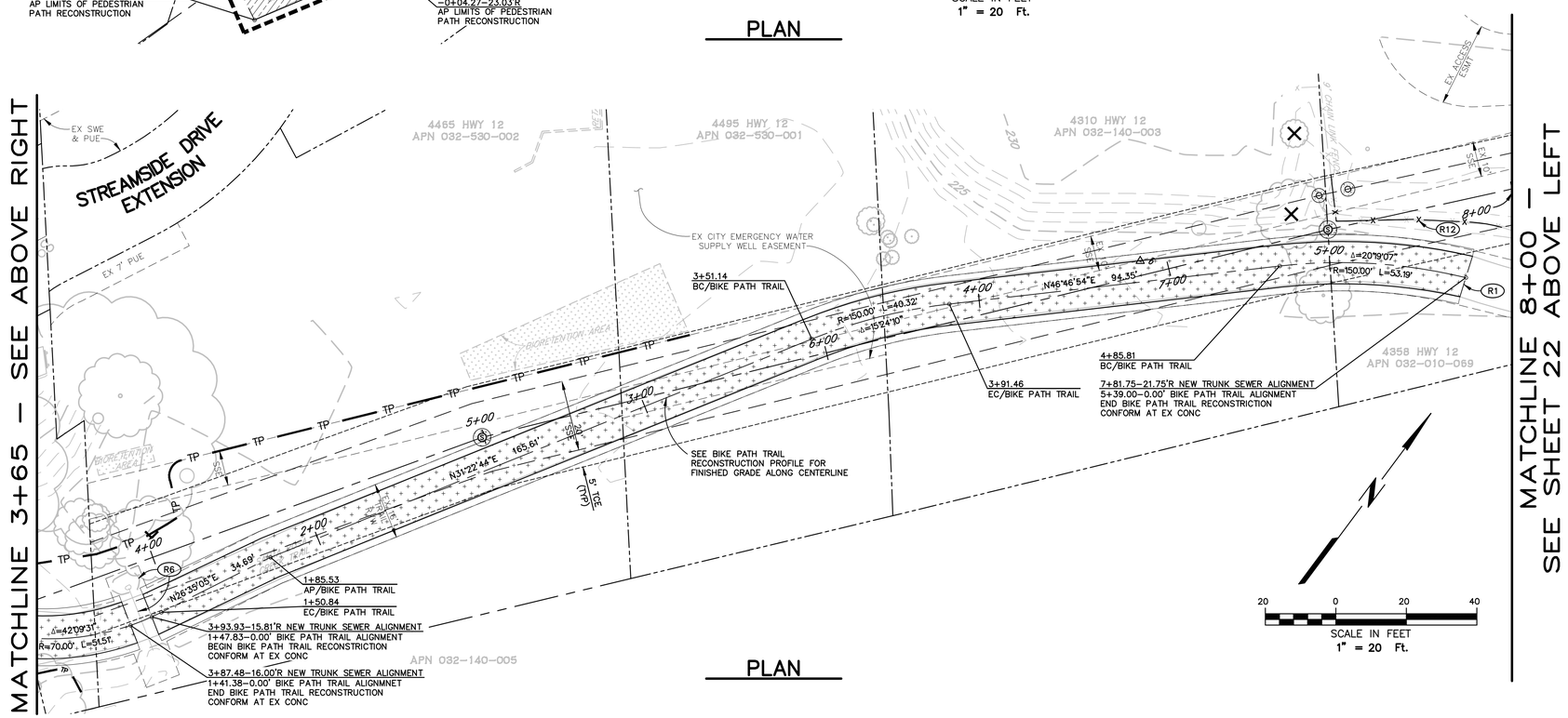
SHEET 20 OF 33

FILE NO. 2018–0043

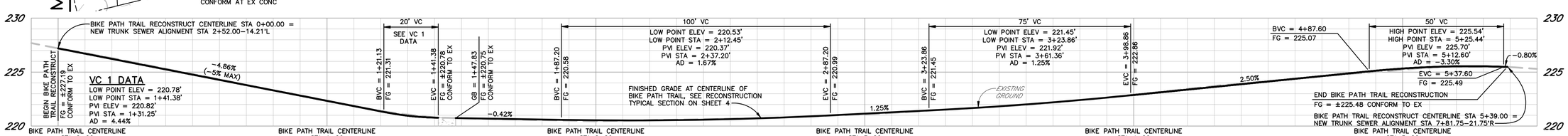
12–07–22 Patheal \4247\dwg\4247 01\4247.01 BASE–Plan and Profile.dwg TAB: 20 P&P



PLAN



PLAN



BIKE PATH TRAIL RECONSTRUCTION PROFILE

SCALE: HORZ. 1" = 20'
VERT. 1" = 4'

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (R1) SAWCUT AND CONFORM TO EXISTING.
- (R2) REMOVE AND REPLACE CURB AND GUTTER PER CITY STANDARD 241. MATCH EXISTING GRADES AT SAWCUT LOCATIONS AND PROVIDE CONTINUOUS SLOPE IN DIRECTION OF DRAINAGE.
- (R3) REMOVE AND REPLACE 5' MINIMUM OF EXISTING SIDEWALK TO NEAREST SCORE MARK PER CITY STANDARD 237. MATCH EXISTING GRADES AND TRANSITION 1.5% MAX FINISHED GRADE CROSS SLOPE (UNLESS SHOWN OTHERWISE) TO MATCH EXISTING SAWCUT CONFORM LOCATIONS.
- (R5) REMOVE, SALVAGE, PROTECT AND REINSTALL EXISTING INFORMATIONAL SIGN. REPLACE EXISTING REDWOOD POSTS AND HARDWARE AS NECESSARY.
- (R6) REMOVE AND REPLACE OVERSIZED RIPRAP AT STORM DRAIN INLET. PROTECT EXISTING STORM DRAIN AND CONCRETE CAP DURING CONSTRUCTION.
- (R12) REMOVE AND REPLACE EXISTING CHAIN LINK FENCE AND GATE(S) FROM POST TO POST AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS. MATCH EXISTING ADJACENT FENCING TO REMAIN AND CONSTRUCT NEW FENCING PER DETAILS ON SHEET 5. RE–WEAVE CHAIN LINK FABRIC AS NECESSARY TO PROVIDE SEAMLESS INSTALLATION. PROVIDE TEMPORARY SECURE FENCING DURING CONSTRUCTION.
- (R27) ADJUST EXISTING MANHOLE FRAME AND COVER TO FINISHED GRADE.

SHEET NOTE

UTILITIES NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION UTILITY PLAN AND PROFILE SHEETS 8 – 20 FOR UTILITY WORK.

SURFACING LEGEND

- LIMITS OF 0.20' PAVEMENT MILL AND AC SURFACE
- LIMITS OF 0.20' AC SURFACE OVERLAY OVER CALTRANS CLASS II PAVING GRID OVER NON–TRACKING TACK
- LIMITS OF 1.00' DEEP LIFT PAVING PER DETAIL ON SHEET 4. PLACE IN A MINIMUM OF 2 LIFTS WITH TOP LIFT PERFORMED DURING ADJACENT AC SURFACING WHERE APPLICABLE
- LIMITS OF 4" PCC SIDEWALK OVER 2" SAND PER CITY STD 235 AND 237
- LIMITS OF 0.67' REINFORCED CONCRETE DRIVEWAY OVER 0.50' CL2AB PER DETAIL ON SHEET 3.
- LIMITS OF SLURRY SEAL, APPLY CRACK SEAL PRIOR TO SLURRY SEAL APPLICATION
- 6" PCC DRIVEWAY APRON AND ADJACENT SIDEWALK PER CITY STD 250A, 250B, 251 AND 237.
- 10" STAMPED AND COLORED CONCRETE SIDEWALK OVER 8" CL2AB PER DETAIL ON SHEET 4.
- LIMITS OF 8" COMPACTED BLUE SHALE UTILITY ACCESS ROAD PER CITY STD 216 AND DETAIL ON SHEET 4.
- LIMITS OF BIKE PATH TRAIL RECONSTRUCTION – 0.20' AC SURFACE OVER 1.00' CL2AB OVER GEOGRID AND STABILIZATION FABRIC PER DETAIL ON SHEET 4.
- LIMITS OF PEDESTRIAN PATH RECONSTRUCTION – 0.25' AC SURFACE OVER 0.50' CL2AB (1.5% MAX FINISHED GRADE CROSS SLOPE).
- LIMITS OF 6" CONCRETE VALLEY GUTTER OVER 6" CL2AB PER CITY STD 243.
- LIMITS OF ROAD RECONSTRUCTION – 0.95' AC PER DETAIL ON SHEET 3

REGISTERED PROFESSIONAL ENGINEER
DAVID Y. COLBERT
No. C71896
Exp. 12-31-23
CIVIL
STATE OF CALIFORNIA

City of Santa Rosa

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www.brce.com

DATE: DECEMBER 2022
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CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER
REPLACEMENT SEGMENT 1
(STREAMSIDE DRIVE TO ELAINE DRIVE)

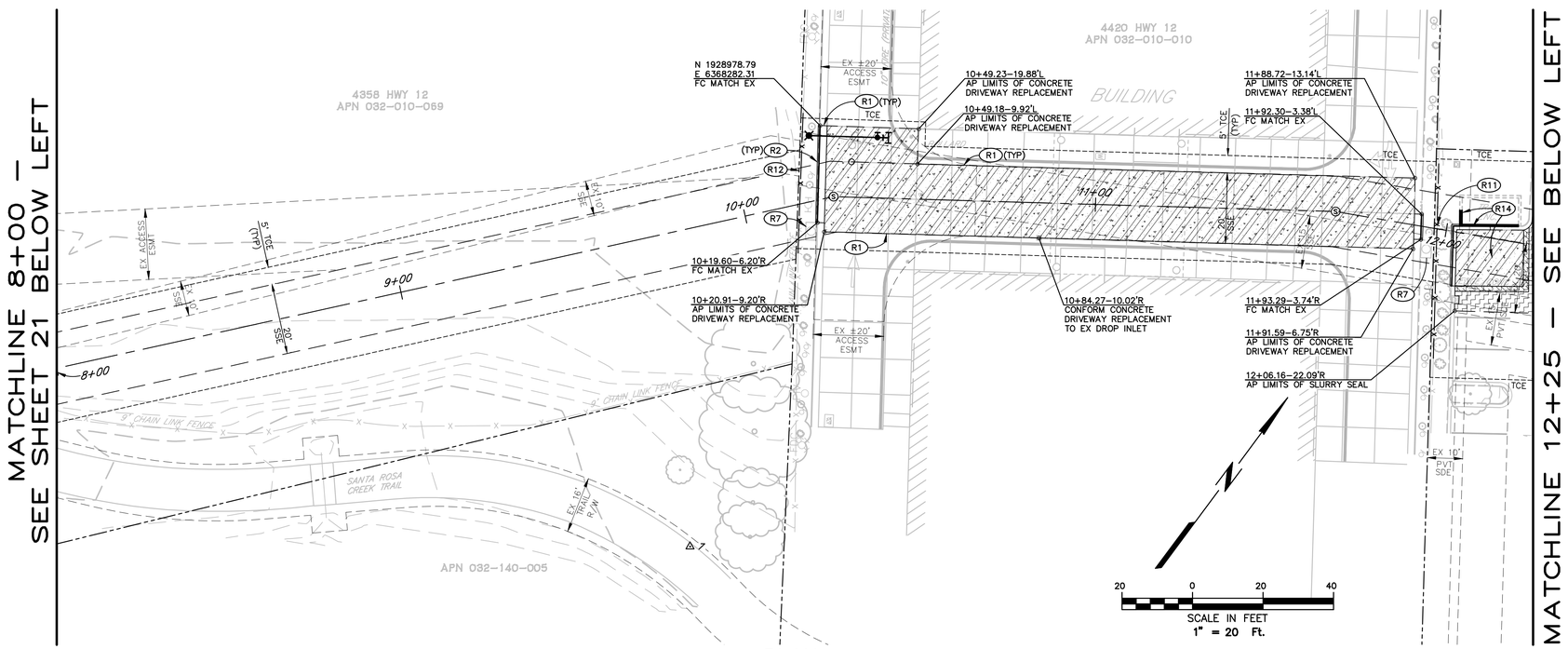
GRADING & SURFACE PLAN
STA.1+00-STA.8+00

CONTRACT NO.
C01903

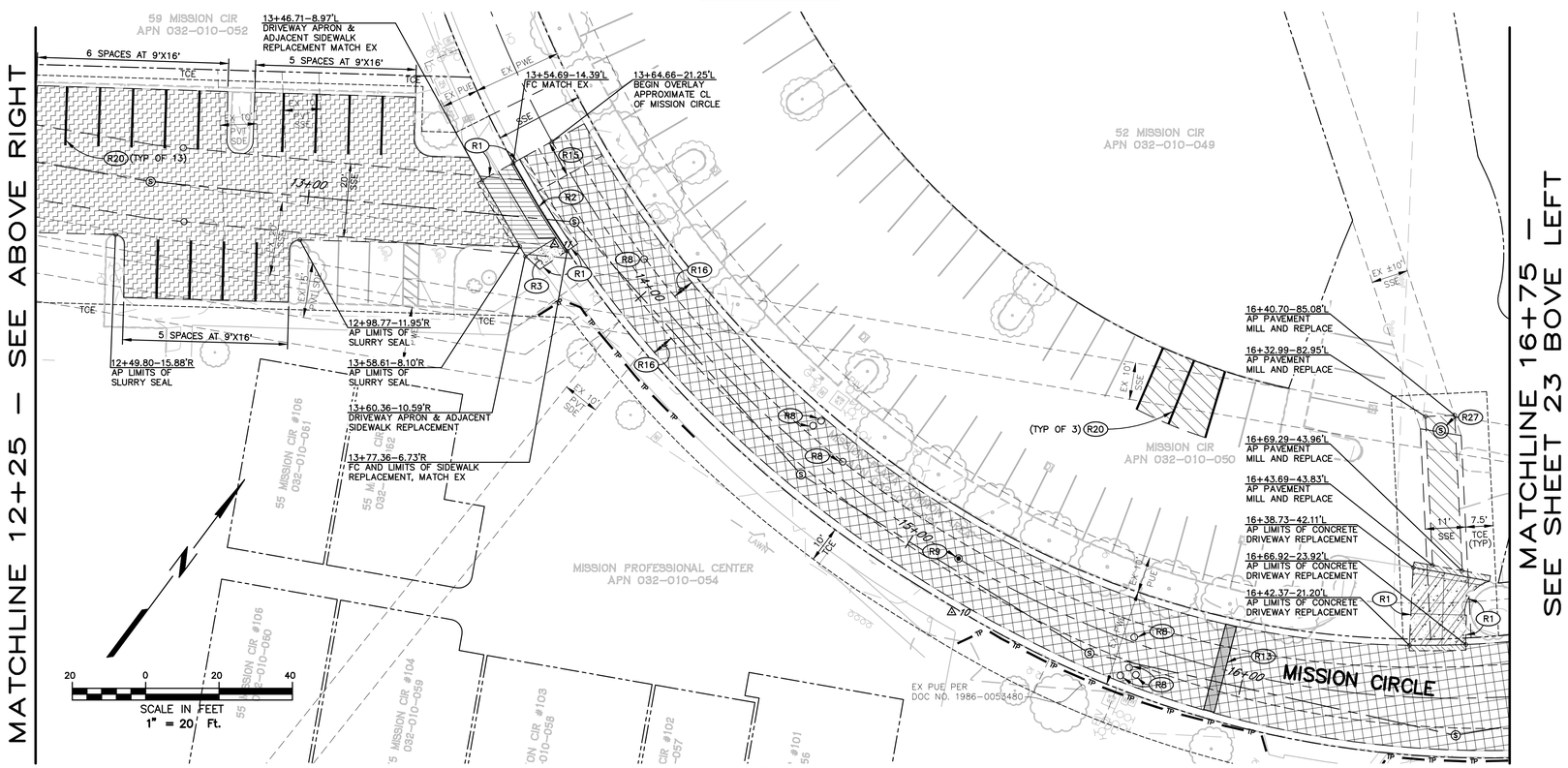
SHEET 21 OF 33

FILE NO. 2018–0043

02–09–23 kifizghi \4247\dwg\4247 01\4247.01 BASE–Grading and Pavement.dwg TAB: 21–PAVEMENT



PLAN



PLAN

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (R1) SAWCUT AND CONFORM TO EXISTING.
- (R2) REMOVE AND REPLACE CURB AND GUTTER PER CITY STANDARD 241. MATCH EXISTING GRADES AT SAWCUT LOCATIONS AND PROVIDE CONTINUOUS SLOPE IN DIRECTION OF DRAINAGE.
- (R3) REMOVE AND REPLACE 5' MINIMUM OF EXISTING SIDEWALK TO NEAREST SCORE MARK PER CITY STANDARD 237. MATCH EXISTING GRADES AND TRANSITION 1.5% MAX FINISHED GRADE CROSS SLOPE (UNLESS SHOWN OTHERWISE) TO MATCH EXISTING SAWCUT CONFORM LOCATIONS.
- (R7) EXISTING CATCH BASIN TO REMAIN. PROTECT IN PLACE AND SUPPORT AS NECESSARY DURING CONSTRUCTION.
- (R8) ADJUST EXISTING VALVE BOX TO FINISHED GRADE.
- (R9) REPLACE CITY MONUMENT PER CITY STD 280. NOTIFY CITY SURVEY DEPARTMENT BEFORE CONSTRUCTION FOR CORNER RECORD SURVEY.
- (R11) REMOVE AND REPLACE WOOD FENCE FROM POST TO POST AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS. MATCH EXISTING ADJACENT FENCING TO REMAIN AND CONSTRUCT NEW FENCING PER DETAILS ON SHEET 5. SUPPORT AND TIE–IN EXISTING ADJACENT FENCING TO REMAIN. PROVIDE TEMPORARY SECURE FENCING DURING CONSTRUCTION.
- (R12) REMOVE AND REPLACE EXISTING CHAIN LINK FENCE AND GATE(S) FROM POST TO POST AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS. MATCH EXISTING ADJACENT FENCING TO REMAIN AND CONSTRUCT NEW FENCING PER DETAILS ON SHEET 5. RE–WEAVE CHAIN LINK FABRIC AS NECESSARY TO PROVIDE SEAMLESS INSTALLATION. PROVIDE TEMPORARY SECURE FENCING DURING CONSTRUCTION.
- (R13) REPLACE SPEED BUMP PER DETAIL ON SHEET 4.
- (R14) REMOVE AND REPLACE EXISTING REINFORCED CMU TRASH ENCLOSURE IN KIND AS NECESSARY TO CONSTRUCT PROPOSED UTILITY IMPROVEMENTS. SALVAGE, PROTECT, AND REINSTALL EXISTING TRASH ENCLOSURE DOORS.
- (R15) 10' CONFORM GRIND 0.20' AT LIMITS OF OVERLAY TO 0.00' DEEP SIMILAR TO CITY STD 208.
- (R16) 6' EDGE GRIND 0.20' AT LIP OF GUTTER OR EDGE OF CONCRETE TO 0.00' DEEP SIMILAR TO CITY STD 209.
- (R20) REMOVE AND REPLACE 6" WIDE PAINTED (NON–THERMOPLASTIC) PARKING SPACE STRIPE (LENGTH TO MATCH EXISTING).
- (R27) ADJUST EXISTING MANHOLE FRAME AND COVER TO FINISHED GRADE.

SHEET NOTE

UTILITIES NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION UTILITY PLAN AND PROFILE SHEETS 8 – 20 FOR UTILITY WORK.

SURFACING LEGEND

- LIMITS OF 0.20' PAVEMENT MILL AND AC SURFACE
- LIMITS OF 0.20' AC SURFACE OVERLAY OVER CALTRANS CLASS II PAVING GRID OVER NON–TRACKING TACK
- LIMITS OF 1.00' DEEP LIFT PAVING PER DETAIL ON SHEET 4. PLACE IN A MINIMUM OF 2 LIFTS WITH TOP LIFT PERFORMED DURING ADJACENT AC SURFACING WHERE APPLICABLE
- LIMITS OF 4" PCC SIDEWALK OVER 2" SAND PER CITY STD 235 AND 237
- LIMITS OF 0.67' REINFORCED CONCRETE DRIVEWAY OVER 0.50' CL2AB PER DETAIL ON SHEET 3.
- LIMITS OF SLURRY SEAL, APPLY CRACK SEAL PRIOR TO SLURRY SEAL APPLICATION
- 6" PCC DRIVEWAY APRON AND ADJACENT SIDEWALK PER CITY STD 250A, 250B, 251 AND 237.
- 10" STAMPED AND COLORED CONCRETE SIDEWALK OVER 8" CL2AB PER DETAIL ON SHEET 4.
- LIMITS OF 8" COMPACTED BLUE SHALE UTILITY ACCESS ROAD PER CITY STD 216 AND DETAIL ON SHEET 4.
- LIMITS OF BIKE PATH TRAIL RECONSTRUCTION – 0.20' AC SURFACE OVER 1.00' CL2AB OVER GEOGRID AND STABILIZATION FABRIC PER DETAIL ON SHEET 4.
- LIMITS OF PEDESTRIAN PATH RECONSTRUCTION – 0.25' AC SURFACE OVER 0.50' CL2AB (1.5% MAX FINISHED GRADE CROSS SLOPE).
- LIMITS OF 6" CONCRETE VALLEY GUTTER OVER 6" CL2AB PER CITY STD 243.
- LIMITS OF ROAD RECONSTRUCTION – 0.95' AC PER DETAIL ON SHEET 3

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C41904 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
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www.brce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

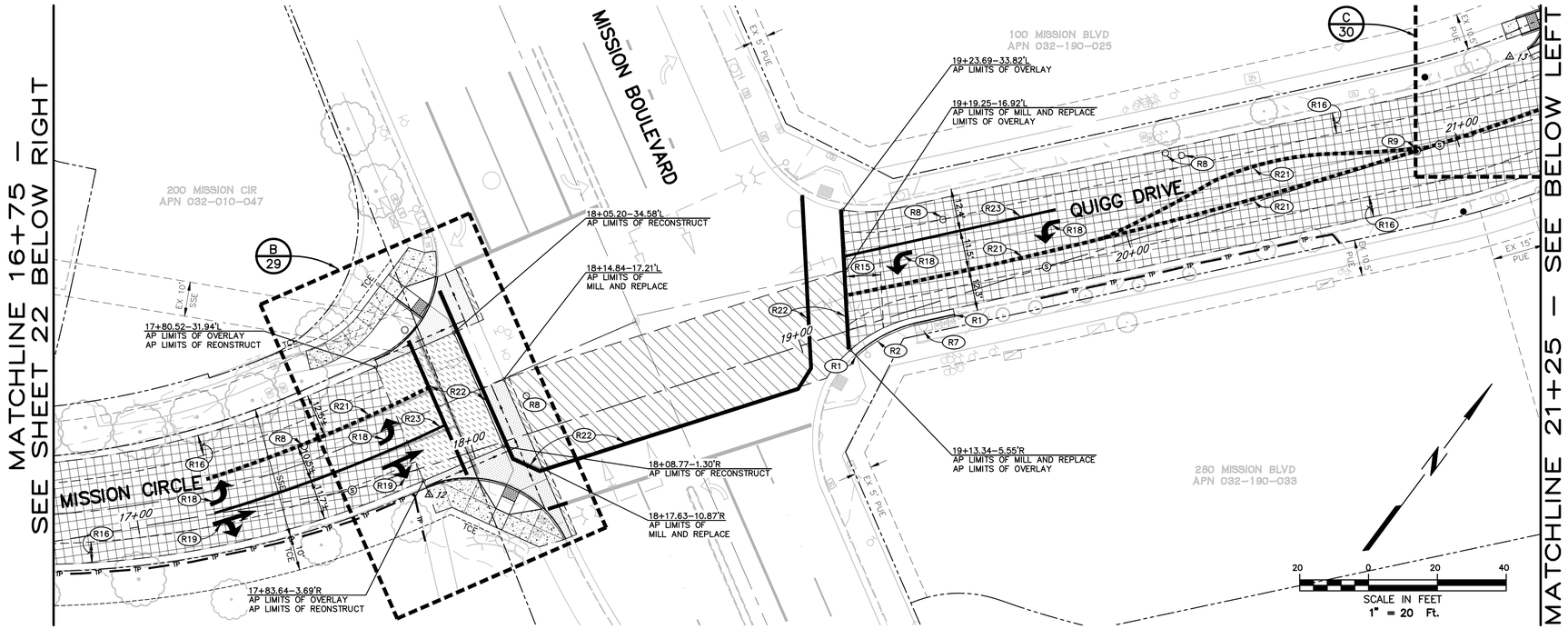
GRADING & SURFACE PLAN STA.8+00-STA.16+75

CONTRACT NO. C01903

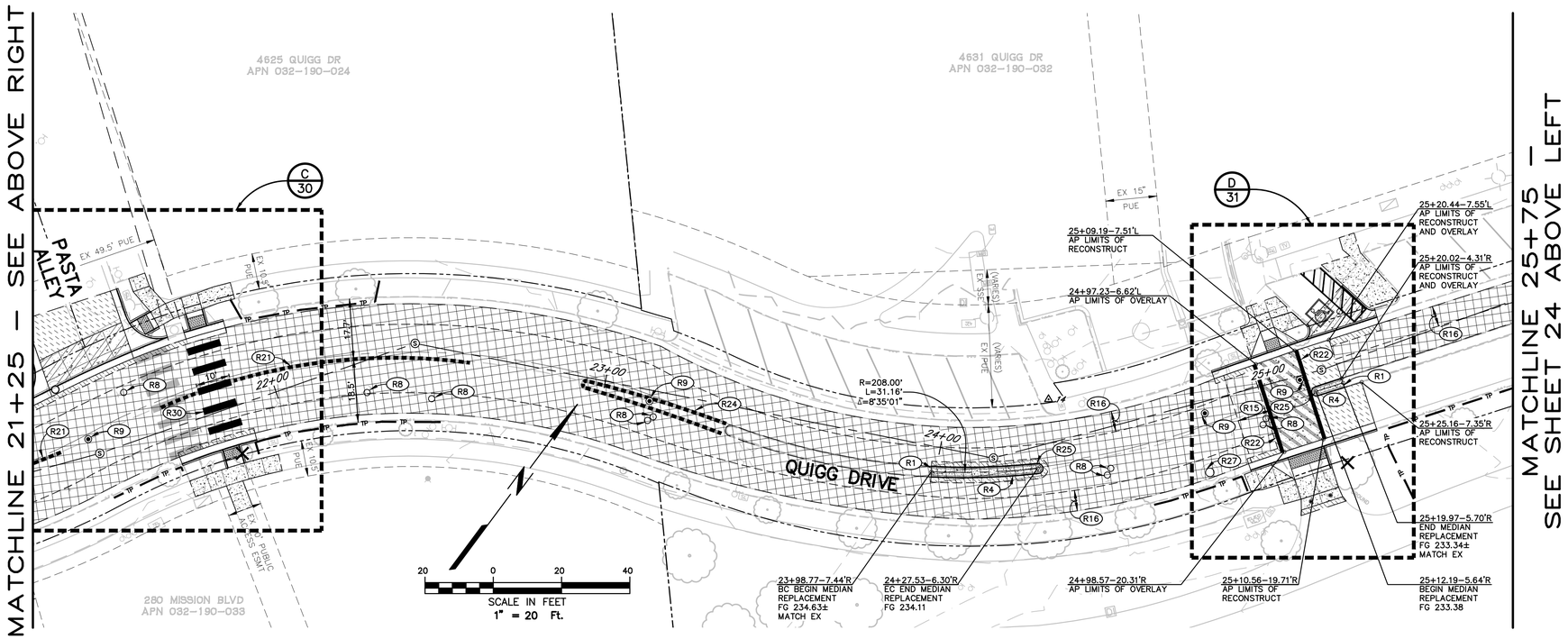
SHEET 22 OF 33

FILE NO. 2018–0043

02–09–23 kiflizghi \4247\dwg\4247 01\4247.01 BASE–Grading and Pavement.dwg TAB: 22–PAVEMENT



PLAN



PLAN

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- R1 SAWCUT AND CONFORM TO EXISTING.
- R2 REMOVE AND REPLACE CURB AND GUTTER PER CITY STANDARD 241. MATCH EXISTING GRADES AT SAWCUT LOCATIONS AND PROVIDE CONTINUOUS SLOPE IN DIRECTION OF DRAINAGE.
- R4 REMOVE AND REPLACE MEDIAN CURBS AND MEDIAN ISLAND PAVING PER CITY STANDARD 242 AND CENTER MEDIAN TYPICAL SECTION ON SHEET 4.
- R7 EXISTING CATCH BASIN TO REMAIN. PROTECT IN PLACE AND SUPPORT AS NECESSARY DURING CONSTRUCTION.
- R8 ADJUST EXISTING VALVE BOX TO FINISHED GRADE.
- R9 REPLACE CITY MONUMENT PER CITY STD 280. NOTIFY CITY SURVEY DEPARTMENT BEFORE CONSTRUCTION FOR CORNER RECORD SURVEY.
- R15 10' CONFORM GRIND 0.20' AT LIMITS OF OVERLAY TO 0.00' DEEP SIMILAR TO CITY STD 208.
- R16 6' EDGE GRIND 0.20' AT LIP OF GUTTER OR EDGE OF CONCRETE TO 0.00' DEEP SIMILAR TO CITY STD 209.
- R18 REMOVE EXISTING AND INSTALL WHITE THERMOPLASTIC TYPE IV (L) ARROW PER CALTRANS STANDARD PLAN A24A.
- R19 REMOVE EXISTING AND INSTALL WHITE THERMOPLASTIC TYPE VII (R) ARROW PER CALTRANS STANDARD PLAN A24A.
- R21 REMOVE EXISTING AND INSTALL YELLOW CENTERLINE PAVEMENT MARKINGS PER 2010 CALTRANS STANDARD PLAN A20A DETAIL 23.
- R22 REMOVE EXISTING AND INSTALL 12" WHITE THERMOPLASTIC CROSSWALK LINE.
- R23 REMOVE EXISTING AND INSTALL 8" WHITE THERMOPLASTIC CHANGING LANE LINE LINE WITH ADJACENT TYPE B MARKERS AT 4' ON CENTER SIMILAR TO CALTRANS STANDARDS A20D DETAIL 38.
- R24 REMOVE EXISTING AND INSTALL TYPE AY YELLOW NON–REFLECTIVE PAVEMENT MARKERS AT 4' ON CENTER.
- R25 MEDIAN ISLAND TREATMENT PER CITY STD 721.
- R27 ADJUST EXISTING MANHOLE FRAME AND COVER TO FINISHED GRADE.
- R30 INSTALL 24" WHITE THERMOPLASTIC CONTINENTAL CROSSWALK STRIPING PER CALTRANS STD PLAN A24F.

SHEET NOTE

UTILITIES NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION UTILITY PLAN AND PROFILE SHEETS 8 – 20 FOR UTILITY WORK.

SURFACING LEGEND

- LIMITS OF 0.20' PAVEMENT MILL AND AC SURFACE
- LIMITS OF 0.20' AC SURFACE OVERLAY OVER CALTRANS CLASS II PAVING GRID OVER NON–TRACKING TACK
- LIMITS OF 1.00' DEEP LIFT PAVING PER DETAIL ON SHEET 4. PLACE IN A MINIMUM OF 2 LIFTS WITH TOP LIFT PERFORMED DURING ADJACENT AC SURFACING WHERE APPLICABLE
- LIMITS OF 4" PCC SIDEWALK OVER 2" SAND PER CITY STD 235 AND 237
- LIMITS OF 0.67' REINFORCED CONCRETE DRIVEWAY OVER 0.50' CL2AB PER DETAIL ON SHEET 3.
- LIMITS OF SLURRY SEAL, APPLY CRACK SEAL PRIOR TO SLURRY SEAL APPLICATION
- 6" PCC DRIVEWAY APRON AND ADJACENT SIDEWALK PER CITY STD 250A, 250B, 251 AND 237.
- 10" STAMPED AND COLORED CONCRETE SIDEWALK OVER 8" CL2AB PER DETAIL ON SHEET 4.
- LIMITS OF 8" COMPACTED BLUE SHALE UTILITY ACCESS ROAD PER CITY STD 216 AND DETAIL ON SHEET 4.
- LIMITS OF BIKE PATH TRAIL RECONSTRUCTION – 0.20' AC SURFACE OVER 1.00' CL2AB OVER GEOGRID AND STABILIZATION FABRIC PER DETAIL ON SHEET 4.
- LIMITS OF PEDESTRIAN PATH RECONSTRUCTION – 0.25' AC SURFACE OVER 0.50' CL2AB (1.5% MAX FINISHED GRADE CROSS SLOPE).
- LIMITS OF 6" CONCRETE VALLEY GUTTER OVER 6" CL2AB PER CITY STD 243.
- LIMITS OF ROAD RECONSTRUCTION – 0.95' AC PER DETAIL ON SHEET 3

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLLADAY No. C41904 Exp. 6-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

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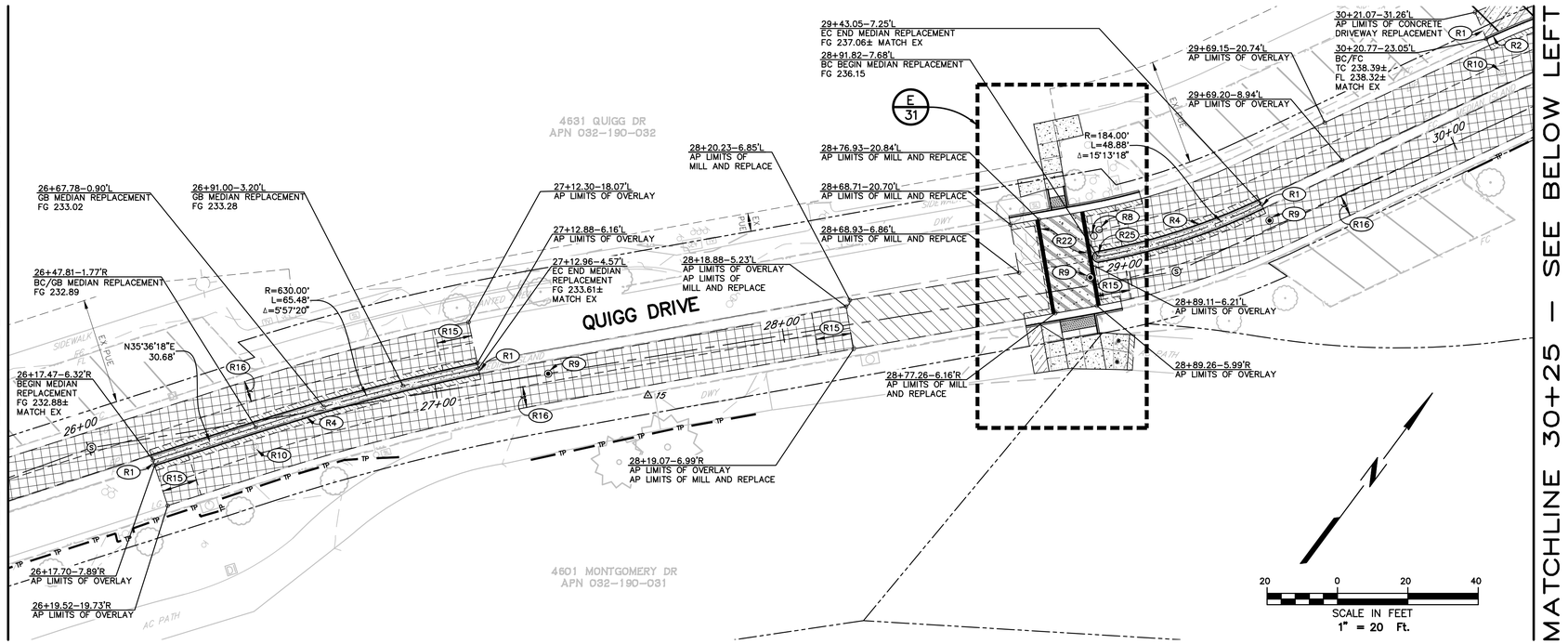
LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

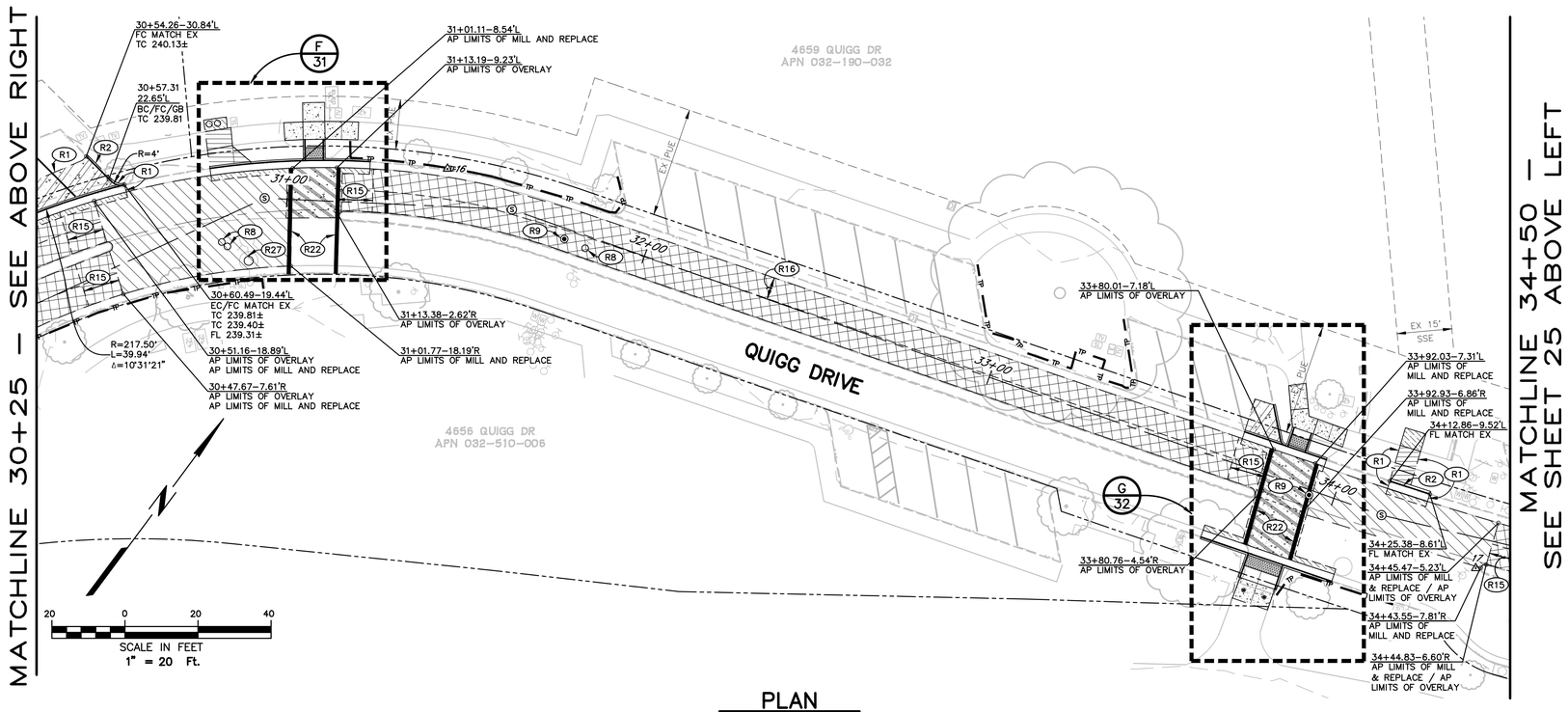
GRADING & SURFACE PLAN STA.16+75-STA.25+75

CONTRACT NO. C01903

FILE NO. 2018–0043



PLAN



PLAN

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- R1 SAWCUT AND CONFORM TO EXISTING.
- R2 REMOVE AND REPLACE CURB AND GUTTER PER CITY STANDARD 241. MATCH EXISTING GRADES AT SAWCUT LOCATIONS AND PROVIDE CONTINUOUS SLOPE IN DIRECTION OF DRAINAGE.
- R4 REMOVE AND REPLACE MEDIAN CURBS AND MEDIAN ISLAND PAVING PER CITY STANDARD 242 AND CENTER MEDIAN TYPICAL SECTION ON SHEET 4.
- R8 ADJUST EXISTING VALVE BOX TO FINISHED GRADE.
- R9 REPLACE CITY MONUMENT PER CITY STD 280. NOTIFY CITY SURVEY DEPARTMENT BEFORE CONSTRUCTION FOR CORNER RECORD SURVEY.
- R10 PROTECT IN PLACE EXISTING CITY MONUMENT DURING CONSTRUCTION. ADJUST EXISTING MONUMENT COVER TO FINISHED GRADE.
- R15 10' CONFORM GRIND 0.20' AT LIMITS OF OVERLAY TO 0.00' DEEP SIMILAR TO CITY STD 208.
- R16 6' EDGE GRIND 0.20' AT LIP OF GUTTER OR EDGE OF CONCRETE TO 0.00' DEEP SIMILAR TO CITY STD 209.
- R22 REMOVE EXISTING AND INSTALL 12" WHITE THERMOPLASTIC CROSSWALK LINE.
- R25 MEDIAN ISLAND TREATMENT PER CITY STD 721.
- R27 ADJUST EXISTING MANHOLE FRAME AND COVER TO FINISHED GRADE.

SHEET NOTE

UTILITIES NOT SHOWN FOR CLARITY PURPOSES. SEE COMPANION UTILITY PLAN AND PROFILE SHEETS 8 – 20 FOR UTILITY WORK.

SURFACING LEGEND

- LIMITS OF 0.20' PAVEMENT MILL AND AC SURFACE
- LIMITS OF 0.20' AC SURFACE OVERLAY OVER CALTRANS CLASS II PAVING GRID OVER NON-TRACKING TACK
- LIMITS OF 1.00' DEEP LIFT PAVING PER DETAIL ON SHEET 4. PLACE IN A MINIMUM OF 2 LIFTS WITH TOP LIFT PERFORMED DURING ADJACENT AC SURFACING WHERE APPLICABLE
- LIMITS OF 4" PCC SIDEWALK OVER 2" SAND PER CITY STD 235 AND 237
- LIMITS OF 0.67' REINFORCED CONCRETE DRIVEWAY OVER 0.50' CL2AB PER DETAIL ON SHEET 3.
- LIMITS OF SLURRY SEAL, APPLY CRACK SEAL PRIOR TO SLURRY SEAL APPLICATION
- 6" PCC DRIVEWAY APRON AND ADJACENT SIDEWALK PER CITY STD 250A, 250B, 251 AND 237.
- 10" STAMPED AND COLORED CONCRETE SIDEWALK OVER 8" CL2AB PER DETAIL ON SHEET 4.
- LIMITS OF 8" COMPACTED BLUE SHALE UTILITY ACCESS ROAD PER CITY STD 216 AND DETAIL ON SHEET 4.
- LIMITS OF BIKE PATH TRAIL RECONSTRUCTION – 0.20' AC SURFACE OVER 1.00' CL2AB OVER GEOGRID AND STABILIZATION FABRIC PER DETAIL ON SHEET 4.
- LIMITS OF PEDESTRIAN PATH RECONSTRUCTION – 0.25' AC SURFACE OVER 0.50' CL2AB (1.5% MAX FINISHED GRADE CROSS SLOPE).
- LIMITS OF 6" CONCRETE VALLEY GUTTER OVER 6" CL2AB PER CITY STD 243.
- LIMITS OF ROAD RECONSTRUCTION – 0.95' AC PER DETAIL ON SHEET 3

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C41896 Exp. 6-30-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 220 • Santa Rosa, CA 95403 • 707-576-1322
www.b-r-ce.com

SCALE: AS SHOWN | DATE: DECEMBER 2022
DWN BY: PIT | CHK BY: BLB & BB

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

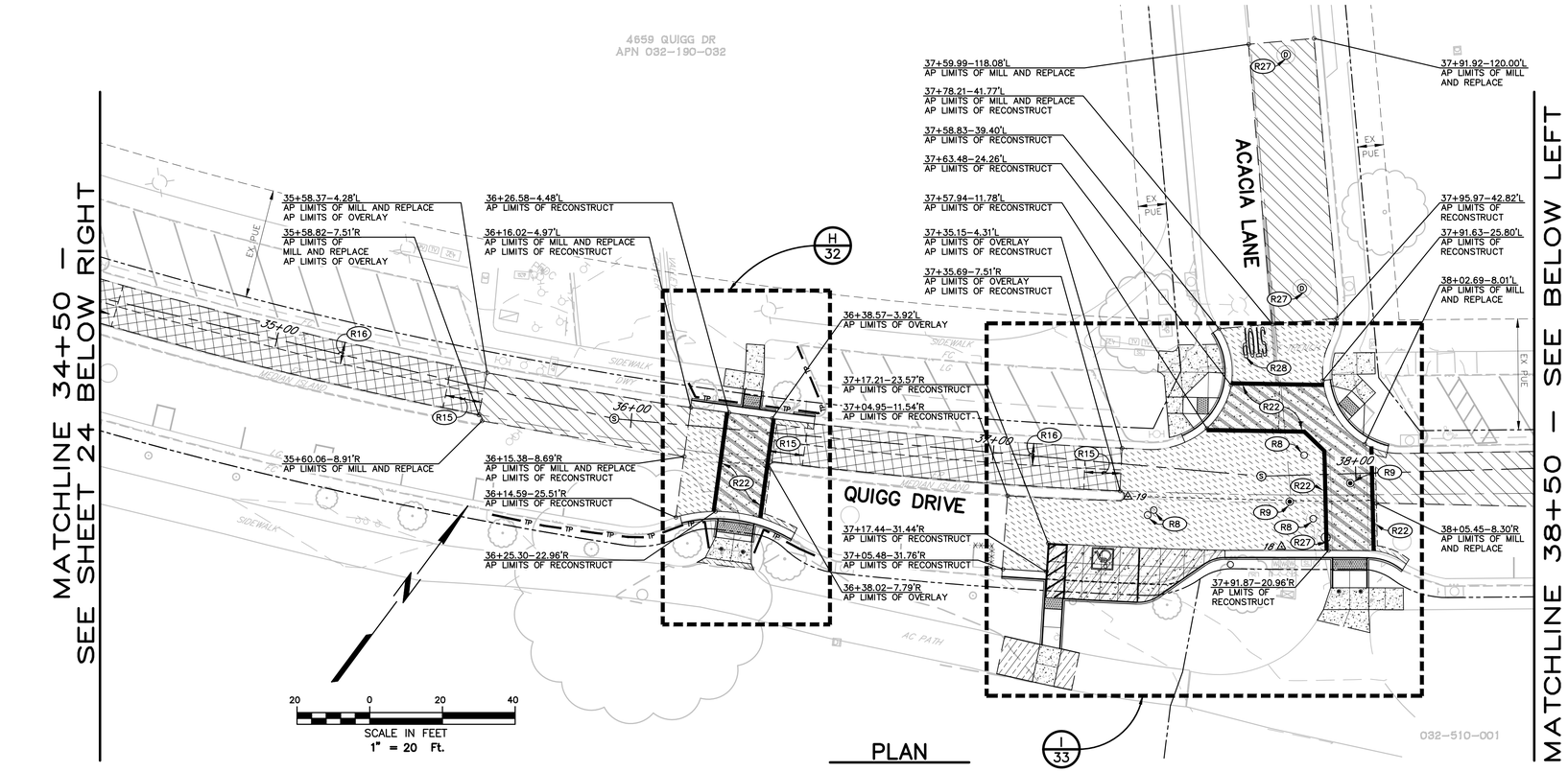
GRADING & SURFACE PLAN STA.25+75-STA.34+50

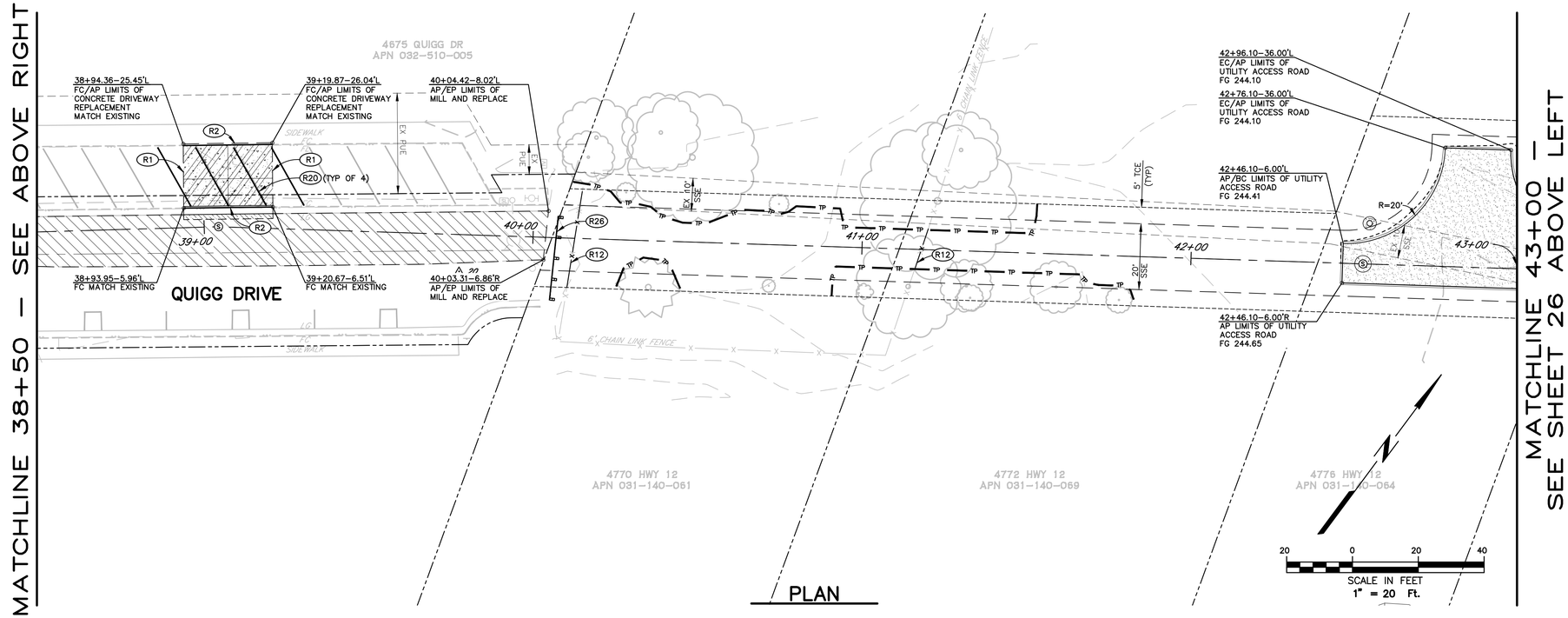
CONTRACT NO. C01903

SHEET 24 OF 33

FILE NO. 2018-0043

12-09-22 Patheal \4247\dwg\4247 01\4247.01 BASE-Grading and Pavement.dwg TAB: 24-PAVEMENT





CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- R1 SAWCUT AND CONFORM TO EXISTING.
- R2 REMOVE AND REPLACE CURB AND GUTTER PER CITY STANDARD 241. MATCH EXISTING GRADES AT SAWCUT LOCATIONS AND PROVIDE CONTINUOUS SLOPE IN DIRECTION OF DRAINAGE.
- R8 ADJUST EXISTING VALVE BOX TO FINISHED GRADE.
- R9 REPLACE CITY MONUMENT PER CITY STD 280. NOTIFY CITY SURVEY DEPARTMENT BEFORE CONSTRUCTION FOR CORNER RECORD SURVEY.
- R12 REMOVE AND REPLACE EXISTING CHAIN LINK FENCE AND GATE(S) FROM POST TO POST AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS. MATCH EXISTING ADJACENT FENCING TO REMAIN AND CONSTRUCT NEW FENCING PER DETAILS ON SHEET 5. RE–WEAVE CHAIN LINK FABRIC AS NECESSARY TO PROVIDE SEAMLESS INSTALLATION. PROVIDE TEMPORARY SECURE FENCING DURING CONSTRUCTION.
- R15 10' CONFORM GRIND 0.20' AT LIMITS OF OVERLAY TO 0.00' DEEP SIMILAR TO CITY STD 208.
- R16 6' EDGE GRIND 0.20' AT LIP OF GUTTER OR EDGE OF CONCRETE TO 0.00' DEEP SIMILAR TO CITY STD 209.
- R20 REMOVE AND REPLACE 6" WIDE PAINTED (NON–THERMOPLASTIC) PARKING SPACE STRIPE (LENGTH TO MATCH EXISTING).
- R22 REMOVE EXISTING AND INSTALL 12" WHITE THERMOPLASTIC CROSSWALK LINE.
- R26 REMOVE AND REPLACE EXISTING METAL BEAM STREET BARRICADE PER CITY 211.
- R27 ADJUST EXISTING MANHOLE FRAME AND COVER TO FINISHED GRADE.
- R28 REMOVE EXISTING AND INSTALL WHITE THERMOPLASTIC "STOP" PAVEMENT MARKING PER CALTRANS STANDARD A24D.

SHEET NOTE

UTILITIES NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION UTILITY PLAN AND PROFILE SHEETS 8 – 20 FOR UTILITY WORK.

SURFACING LEGEND

- LIMITS OF 0.20' PAVEMENT MILL AND AC SURFACE
- LIMITS OF 0.20' AC SURFACE OVERLAY OVER CALTRANS CLASS II PAVING GRID OVER NON–TRACKING TACK
- LIMITS OF 1.00' DEEP LIFT PAVING PER DETAIL ON SHEET 4. PLACE IN A MINIMUM OF 2 LIFTS WITH TOP LIFT PERFORMED DURING ADJACENT AC SURFACING WHERE APPLICABLE
- LIMITS OF 4" PCC SIDEWALK OVER 2" SAND PER CITY STD 235 AND 237
- LIMITS OF 0.67' REINFORCED CONCRETE DRIVEWAY OVER 0.50' CL2AB PER DETAIL ON SHEET 3.
- LIMITS OF SLURRY SEAL, APPLY CRACK SEAL PRIOR TO SLURRY SEAL APPLICATION
- 6" PCC DRIVEWAY APRON AND ADJACENT SIDEWALK PER CITY STD 250A, 250B, 251 AND 237.
- 10" STAMPED AND COLORED CONCRETE SIDEWALK OVER 8" CL2AB PER DETAIL ON SHEET 4.
- LIMITS OF 8" COMPACTED BLUE SHALE UTILITY ACCESS ROAD PER CITY STD 216 AND DETAIL ON SHEET 4.
- LIMITS OF BIKE PATH TRAIL RECONSTRUCTION – 0.20' AC SURFACE OVER 1.00' CL2AB OVER GEOGRID AND STABILIZATION FABRIC PER DETAIL ON SHEET 4.
- LIMITS OF PEDESTRIAN PATH RECONSTRUCTION – 0.25' AC SURFACE OVER 0.50' CL2AB (1.5% MAX FINISHED GRADE CROSS SLOPE).
- LIMITS OF 6" CONCRETE VALLEY GUTTER OVER 6" CL2AB PER CITY STD 243.
- LIMITS OF ROAD RECONSTRUCTION – 0.95' AC PER DETAIL ON SHEET 3

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLLADAY No. C51906 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 220 • Santa Rosa, CA 95403-1070 • 707-576-1322
www.bcce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

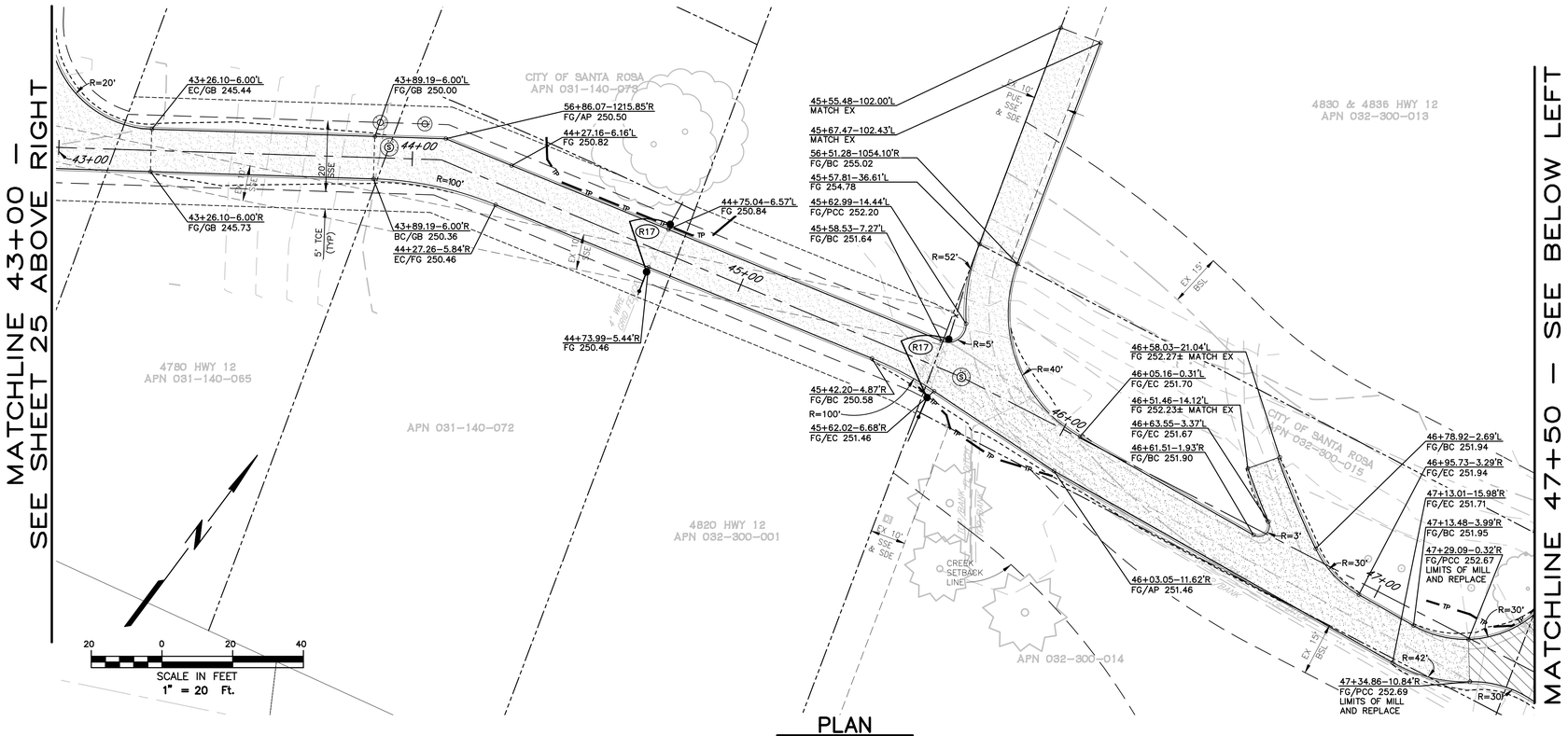
GRADING & SURFACE PLAN STA.34+50-STA.43+00

CONTRACT NO. C01903

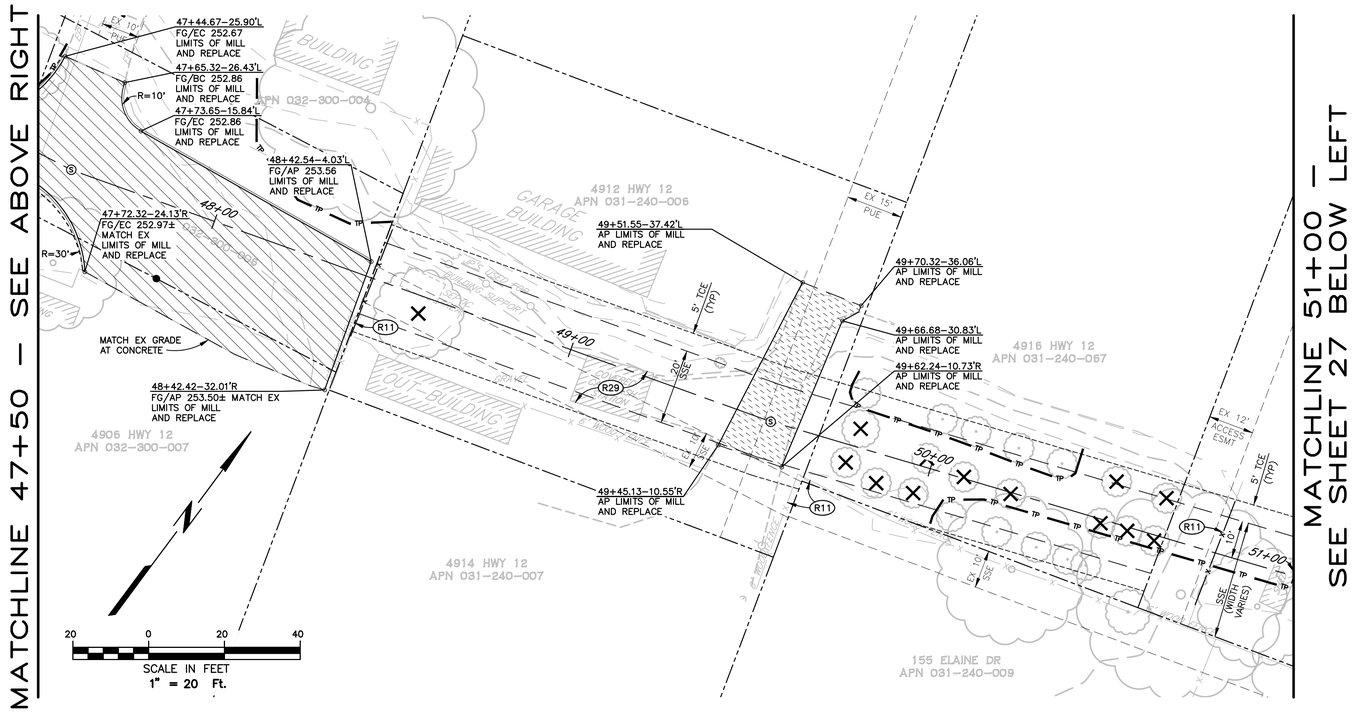
SHEET 25 OF 33

FILE NO. 2018–0043

12–08–22 Patheal \4247\dwg\4247 01\4247.01 BASE–Grading and Pavement.dwg TAB: 25–PAVEMENT



PLAN



CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

(R11) REMOVE AND REPLACE WOOD FENCE FROM POST TO POST AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS. MATCH EXISTING ADJACENT FENCING TO REMAIN AND CONSTRUCT NEW FENCING PER DETAILS ON SHEET 5. SUPPORT AND TIE–IN EXISTING ADJACENT FENCING TO REMAIN. PROVIDE TEMPORARY SECURE FENCING DURING CONSTRUCTION.

(R17) REMOVE AND MODIFY EXISTING FENCE AND INSTALL NEW RANCH GATE PER DETAIL SHEET 5.

(R29) REMOVE AND DISPOSE OF EXISTING WOODEN AND CONCRETE CARPORT STRUCTURE.

SHEET NOTE

UTILITIES NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION UTILITY PLAN AND PROFILE SHEETS 8 – 20 FOR UTILITY WORK.

SURFACING LEGEND

- LIMITS OF 0.20' PAVEMENT MILL AND AC SURFACE
- LIMITS OF 0.20' AC SURFACE OVERLAY OVER CALTRANS CLASS II PAVING GRID OVER NON–TRACKING TACK
- LIMITS OF 1.00' DEEP LIFT PAVING PER DETAIL ON SHEET 4. PLACE IN A MINIMUM OF 2 LIFTS WITH TOP LIFT PERFORMED DURING ADJACENT AC SURFACING WHERE APPLICABLE
- LIMITS OF 4" PCC SIDEWALK OVER 2" SAND PER CITY STD 235 AND 237
- LIMITS OF 0.67' REINFORCED CONCRETE DRIVEWAY OVER 0.50' CL2AB PER DETAIL ON SHEET 3.
- LIMITS OF SLURRY SEAL, APPLY CRACK SEAL PRIOR TO SLURRY SEAL APPLICATION
- 6" PCC DRIVEWAY APRON AND ADJACENT SIDEWALK PER CITY STD 250A, 250B, 251 AND 237.
- 10" STAMPED AND COLORED CONCRETE SIDEWALK OVER 8" CL2AB PER DETAIL ON SHEET 4.
- LIMITS OF 8" COMPACTED BLUE SHALE UTILITY ACCESS ROAD PER CITY STD 216 AND DETAIL ON SHEET 4.
- LIMITS OF BIKE PATH TRAIL RECONSTRUCTION – 0.20' AC SURFACE OVER 1.00' CL2AB OVER GEOGRID AND STABILIZATION FABRIC PER DETAIL ON SHEET 4.
- LIMITS OF PEDESTRIAN PATH RECONSTRUCTION – 0.25' AC SURFACE OVER 0.50' CL2AB (1.5% MAX FINISHED GRADE CROSS SLOPE).
- LIMITS OF 6" CONCRETE VALLEY GUTTER OVER 6" CL2AB PER CITY STD 243.
- LIMITS OF ROAD RECONSTRUCTION – 0.95' AC PER DETAIL ON SHEET 3

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C51904 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 120 • Santa Rosa, CA 95403 • 707-576-1322
www.brce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

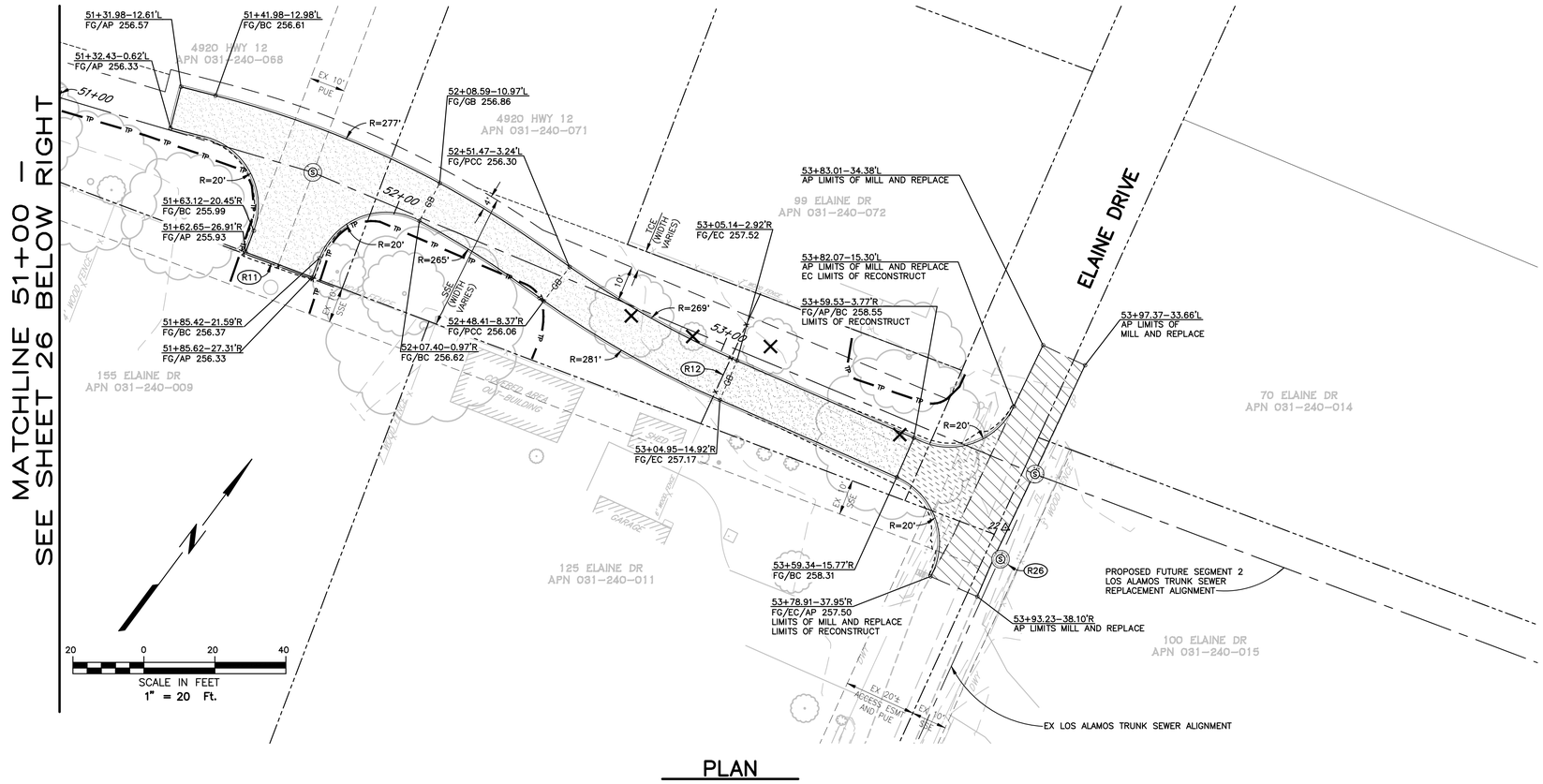
GRADING & SURFACE PLAN STA.43+00-STA.51+00

CONTRACT NO. C01903

SHEET 26 OF 33

FILE NO. 2018–0043

12–08–22 Patheal \4247\dwg\4247 01\4247.01 BASE–Grading and Pavement.dwg TAB: 26–PAVEMENT



PLAN

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

(R11) REMOVE AND REPLACE WOOD FENCE FROM POST TO POST AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS. MATCH EXISTING ADJACENT FENCING TO REMAIN AND CONSTRUCT NEW FENCING PER DETAILS ON SHEET 5. SUPPORT AND TIE–IN EXISTING ADJACENT FENCING TO REMAIN. PROVIDE TEMPORARY SECURE FENCING DURING CONSTRUCTION.

(R12) REMOVE AND REPLACE EXISTING CHAIN LINK FENCE AND GATE(S) FROM POST TO POST AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS. MATCH EXISTING ADJACENT FENCING TO REMAIN AND CONSTRUCT NEW FENCING PER DETAILS ON SHEET 5. RE–WEAVE CHAIN LINK FABRIC AS NECESSARY TO PROVIDE SEAMLESS INSTALLATION. PROVIDE TEMPORARY SECURE FENCING DURING CONSTRUCTION.

(R26) ADJUST EXISTING SSMH TO FINISHED GRADE.

SHEET NOTE

UTILITIES NOT SHOWN FOR CLARITY PURPOSES, SEE COMPANION UTILITY PLAN AND PROFILE SHEETS 8 – 20 FOR UTILITY WORK.

SURFACING LEGEND

- LIMITS OF 0.20' PAVEMENT MILL AND AC SURFACE
- LIMITS OF 0.20' AC SURFACE OVERLAY OVER CALTRANS CLASS II PAVING GRID OVER NON–TRACKING TACK
- LIMITS OF 1.00' DEEP LIFT PAVING PER DETAIL ON SHEET 4. PLACE IN A MINIMUM OF 2 LIFTS WITH TOP LIFT PERFORMED DURING ADJACENT AC SURFACING WHERE APPLICABLE
- LIMITS OF 4" PCC SIDEWALK OVER 2" SAND PER CITY STD 235 AND 237
- LIMITS OF 0.67' REINFORCED CONCRETE DRIVEWAY OVER 0.50' CL2AB PER DETAIL ON SHEET 3.
- LIMITS OF SLURRY SEAL, APPLY CRACK SEAL PRIOR TO SLURRY SEAL APPLICATION
- 6" PCC DRIVEWAY APRON AND ADJACENT SIDEWALK PER CITY STD 250A, 250B, 251 AND 237.
- 10" STAMPED AND COLORED CONCRETE SIDEWALK OVER 8" CL2AB PER DETAIL ON SHEET 4.
- LIMITS OF 8" COMPACTED BLUE SHALE UTILITY ACCESS ROAD PER CITY STD 216 AND DETAIL ON SHEET 4.
- LIMITS OF BIKE PATH TRAIL RECONSTRUCTION – 0.20' AC SURFACE OVER 1.00' CL2AB OVER GEOGRID AND STABILIZATION FABRIC PER DETAIL ON SHEET 4.
- LIMITS OF PEDESTRIAN PATH RECONSTRUCTION – 0.25' AC SURFACE OVER 0.50' CL2AB (1.5% MAX FINISHED GRADE CROSS SLOPE).
- LIMITS OF 6" CONCRETE VALLEY GUTTER OVER 6" CL2AB PER CITY STD 243.
- LIMITS OF ROAD RECONSTRUCTION – 0.95' AC PER DETAIL ON SHEET 3

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLLADAY No. C51904 Exp. 6-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 220 • Santa Rosa, CA 95403 707-576-1322
www.dbrce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER
REPLACEMENT SEGMENT 1
(STREAMSIDE DRIVE TO ELAINE DRIVE)

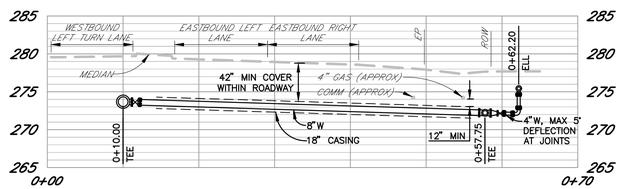
GRADING & SURFACE PLAN
STA.51+00-STA.54+50

CONTRACT NO.
C01903

SHEET 27 OF 33

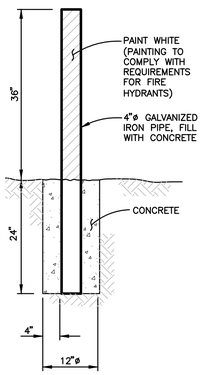
FILE NO. 2018–0043

12–09–22 Patheal \4247\dwg\4247 01\4247.01 BASE–Grading and Pavement.dwg TAB: 27–PAVEMENT



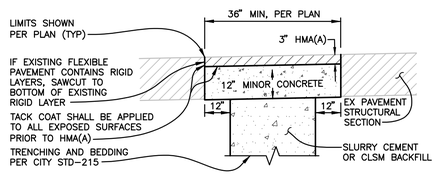
WATER MAIN PROFILE ACROSS HIGHWAY 12

SCALE: 1" = 10'



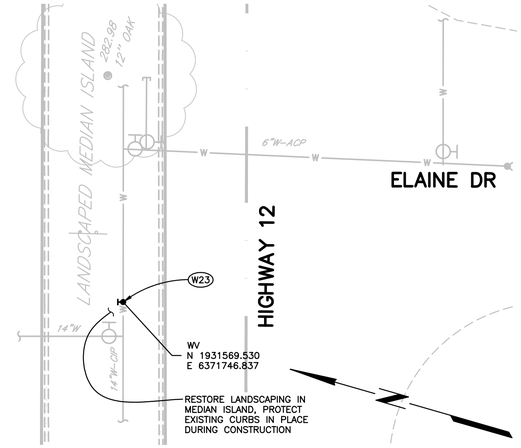
BOLLARD

NOT TO SCALE



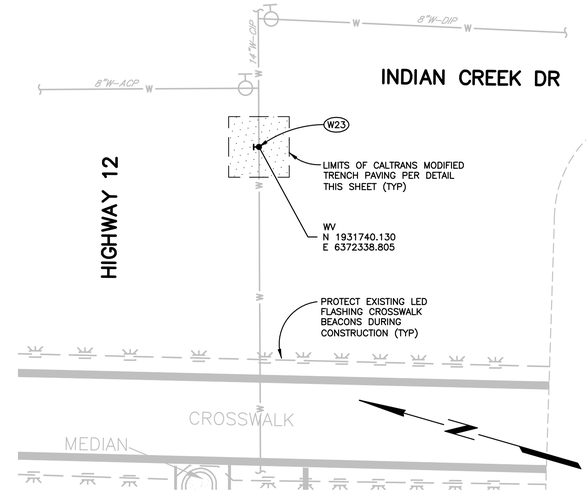
CALTRANS MODIFIED TRENCH PAVING DETAIL

NOT TO SCALE



HIGHWAY 12 AT ELAINE DR PLAN

SCALE: 1" = 10'



HIGHWAY 12 AT INDIAN CREEK DR PLAN

SCALE: 1" = 10'

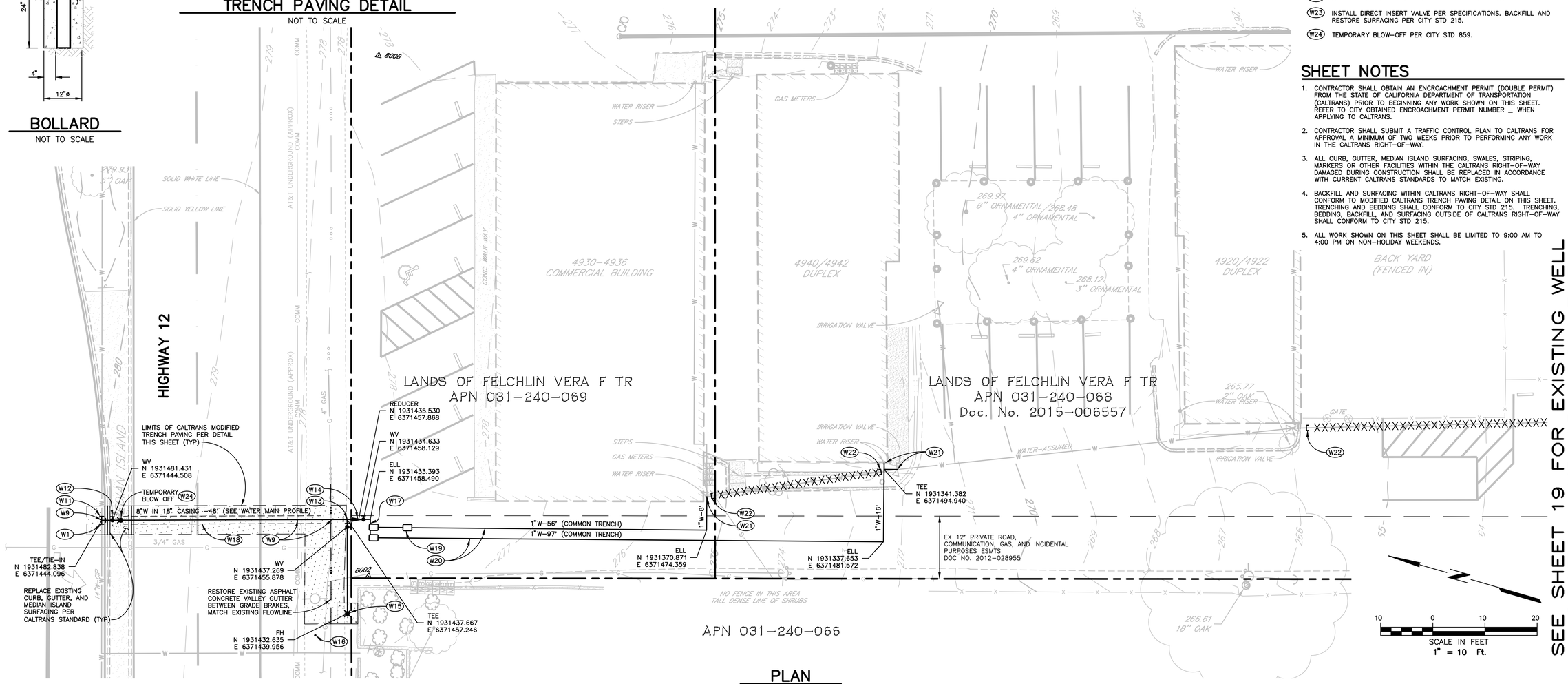
CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- W1 UPON SATISFACTORY COMPLETION OF WATER MAIN TESTING, MAKE WATER MAIN TIE IN AS A SINGLE OPERATION UNDER AUTHORIZED CITY INSPECTION. INSTALL FITTINGS AND COUPLINGS AS NECESSARY TO MAKE GRADE OR ALIGNMENT TRANSITION. RESTRAIN ALL JOINTS.
- W9 POTHOLE PRIOR TO ANY INSTALLATION OF NEW WATER.
- W11 CUT IN 14"X8" FLG TEE.
- W12 INSTALL 8" GATE VALVE PER CITY STD 877. INSTALL FITTINGS AND COUPLINGS AS NECESSARY TO MAKE GRADE OR ALIGNMENT TRANSITION.
- W13 INSTALL 8"X6" FLG TEE. INSTALL FITTINGS AND COUPLINGS AS NECESSARY TO MAKE GRADE TRANSITION.
- W14 INSTALL 8"X4" FLG CONCENTRIC REDUCER AND 4" FLG X MJ GATE VALVE PER CITY STD 877.
- W15 INSTALL FIRE HYDRANT, LATERAL, AND VALVE PER CITY STD 857.
- W16 INSTALL BOLLARD PER DETAIL THIS SHEET.
- W17 INSTALL 4" DUCTILE IRON MULTI-SERVICE MANIFOLD SIMILAR TO CITY STD 887. INSTALL TWO (2) 1" HDPE WATER SERVICES AND METERS PER CITY STD 863A.
- W18 INSTALL 8" PVC WATER MAIN IN 18" STEEL CASING PER CITY STD 872, 215, AND PER CALTRANS MODIFIED TRENCH PAVING DETAIL.
- W19 INSTALL BELOW GROUND DOUBLE CHECK VALVE BACKFLOW DEVICE PER CITY STD 875 WITH CHRISTY B1324 TRAFFIC RATED BOX.
- W20 INSTALL 1" HDPE PRIVATE WATER LATERAL PER SPECIFICATIONS.
- W21 CONNECT TO EXISTING WATER RISER WITH FITTINGS AND COUPLINGS AS NEEDED TO CONNECT TO EXISTING PIPE MATERIAL. UPON COMPLETION OF THE CONNECTION, VERIFY THE EXISTING WELL IS NO LONGER PROVIDING SERVICE AND THAT CITY WATER IS AVAILABLE AT ALL EXISTING FIXTURES AND IS PROVIDED THROUGH THE DESIGNATED METER FOR EACH PARCEL.
- W22 CAP AND ABANDON EXISTING PRIVATE WATER PIPING.
- W23 INSTALL DIRECT INSERT VALVE PER SPECIFICATIONS. BACKFILL AND RESTORE SURFACING PER CITY STD 215.
- W24 TEMPORARY BLOW-OFF PER CITY STD 859.

SHEET NOTES

1. CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT (DOUBLE PERMIT) FROM THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) PRIOR TO BEGINNING ANY WORK SHOWN ON THIS SHEET. REFER TO CITY OBTAINED ENCROACHMENT PERMIT NUMBER _ WHEN APPLYING TO CALTRANS.
2. CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO CALTRANS FOR APPROVAL A MINIMUM OF TWO WEEKS PRIOR TO PERFORMING ANY WORK IN THE CALTRANS RIGHT-OF-WAY.
3. ALL CURB, GUTTER, MEDIAN ISLAND SURFACING, SWALES, STRIPING, MARKERS OR OTHER FACILITIES WITHIN THE CALTRANS RIGHT-OF-WAY DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN ACCORDANCE WITH CURRENT CALTRANS STANDARDS TO MATCH EXISTING.
4. BACKFILL AND SURFACING WITHIN CALTRANS RIGHT-OF-WAY SHALL CONFORM TO MODIFIED CALTRANS TRENCH PAVING DETAIL ON THIS SHEET. TRENCHING AND BEDDING SHALL CONFORM TO CITY STD 215. TRENCHING, BEDDING, BACKFILL, AND SURFACING OUTSIDE OF CALTRANS RIGHT-OF-WAY SHALL CONFORM TO CITY STD 215.
5. ALL WORK SHOWN ON THIS SHEET SHALL BE LIMITED TO 9:00 AM TO 4:00 PM ON NON-HOLIDAY WEEKENDS.



PLAN

SEE SHEET 19 FOR EXISTING WELL LOCATION AND ABANDONMENT

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLLADAY No. C51806 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 220 • Santa Rosa, CA 95403 • 707-575-3322
www.brce.com

DATE: DECEMBER 2022
CHK BY: BLB & BB
SCALE: AS SHOWN
DWN BY: PJT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

HIGHWAY 12 WATER MAIN UTILITY & SURFACING PLAN, PROFILE & DETAILS

CONTRACT NO. C01903

SHEET 28 OF 33

FILE NO. 2018-0043

12-07-22 Patheel \4247\dwg\4247 01\4247.01 BASE-Hwy 12 Water Main.dwg TAB: 28 HIGHWAY 12 WATER MAIN UTILITY PLAN PROFILE & DETAILS

SHEET NOTE

SEE GRADING AND SURFACING PLANS ON SHEETS 21 THRU 27 FOR STRIPING, AND PAVEMENT RESURFACING AND REHABILITATION WORK BEYOND THE LIP OF GUTTER OR EDGE OF CONCRETE.

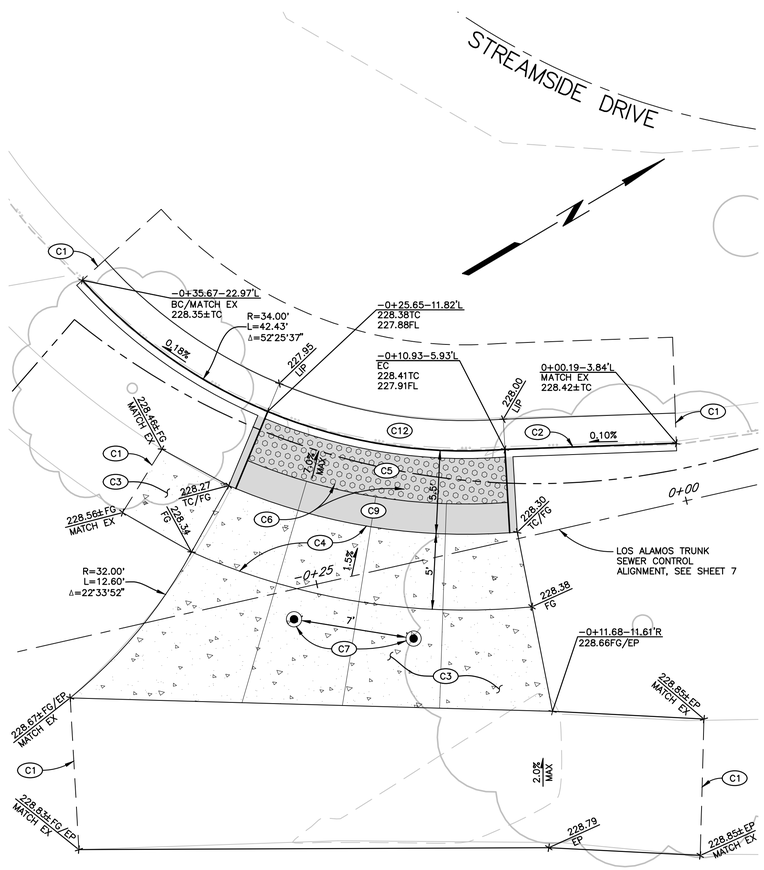
CURB RAMP LEGEND

- SIDEWALK
- DETECTABLE WARNING SURFACE
- CURB RAMP
- VALLEY GUTTER

CONSTRUCTION NOTES

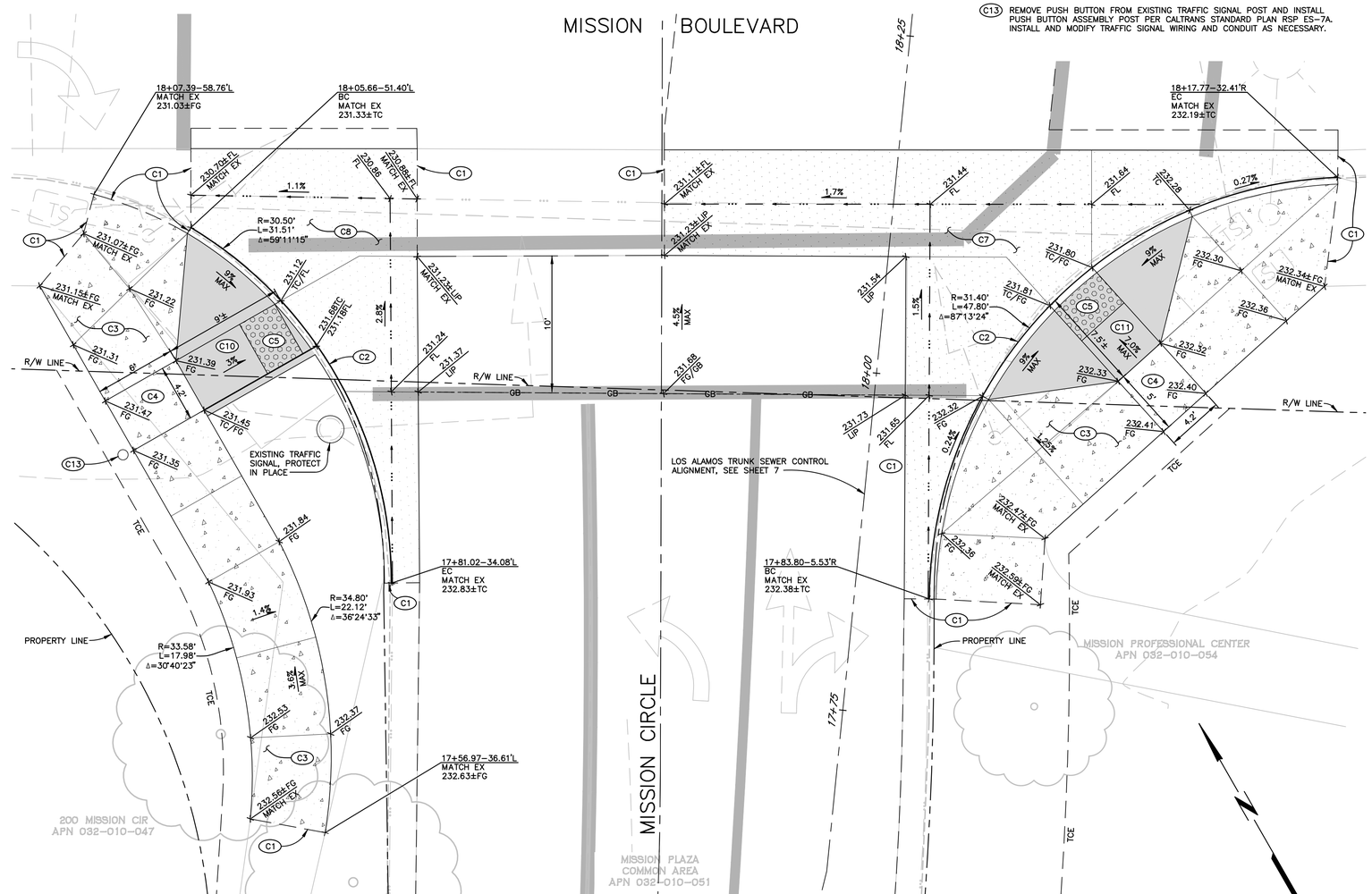
(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- C1 SAWCUT AND CONFORM TO EXISTING.
- C2 REMOVE AND REPLACE CURB AND GUTTER PER CITY STD 241. MATCH EXISTING GRADES AT SAWCUT LOCATIONS AND PROVIDE CONTINUOUS SLOPE IN DIRECTION OF DRAINAGE.
- C3 REMOVE AND REPLACE 5' MINIMUM OF EXISTING SIDEWALK TO NEAREST SCORE MARK PER CITY STD 237. MATCH EXISTING GRADES AND TRANSITION 1.5% MAX FINISHED GRADE CROSS SLOPE (UNLESS SHOWN OTHERWISE) TO MATCH EXISTING SAWCUT CONFORM LOCATIONS.
- C4 RAMP LANDING DRIVE TURNING AREA – MAX CROSS SLOPE <2.0% IN ANY DIRECTION OR AS INDICATED. CONFORM TO EXISTING ADJACENT RAMP BOTTOM OR ENTRY ELEVATIONS WHERE THEY OCCUR.
- C5 INSTALL EMBEDDED DETECTABLE WARNING SURFACE. WARNING SURFACE SHALL EXTEND 36" BEHIND THE BACK OF THE CURB AND BE ORIENTED IN THE DIRECTION OF TRAVEL. WARNING SURFACE SHALL COVER FULL WIDTH OF RAMP WITH 2" MAX SEPARATION ON EACH SIDE.
- C6 REMOVE AND DISPOSE OF EXISTING BOLLARD.
- C7 INSTALL REMOVABLE BOLLARD PER DETAIL SHEET 4
- C8 REMOVE AND REPLACE EXISTING CONCRETE VALLEY GUTTER SIMILAR TO CITY STD 243.
- C9 INSTALL 'CASE F' CURB RAMP PER CALTRANS STANDARD PLAN RSP A88A.
- C10 INSTALL 'CASE G' CURB RAMP PER CALTRANS STANDARD PLAN RSP A88A.
- C11 INSTALL 'CASE A' CURB RAMP PER CALTRANS STANDARD PLAN RSP A88A.
- C12 GUTTER COUNTER SLOPE IMMEDIATELY ADJACENT TO CURB RAMP SHALL NOT BE STEEPER THAN 5% MAX. INSTALL MINIMUM 3' LONG GUTTER SLOPE TRANSITION ON EACH SIDE OF CURB RAMP.
- C13 REMOVE PUSH BUTTON FROM EXISTING TRAFFIC SIGNAL POST AND INSTALL PUSH BUTTON ASSEMBLY POST PER CALTRANS STANDARD PLAN RSP ES–7A. INSTALL AND MODIFY TRAFFIC SIGNAL WIRING AND CONDUIT AS NECESSARY.



STREAMSIDE DRIVE CURB RAMP (A / 21)

SCALE: 1"=5'



MISSION CIRCLE/MISSION BOULEVARD CURB RAMPS (B / 23)

SCALE: 1"=5'

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C51896 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 120 • Santa Rosa, CA 95403 • 707-575-3322
www.brce.com

DATE: DECEMBER 2022
CHK BY: BLB & BB
SCALE: AS SHOWN
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

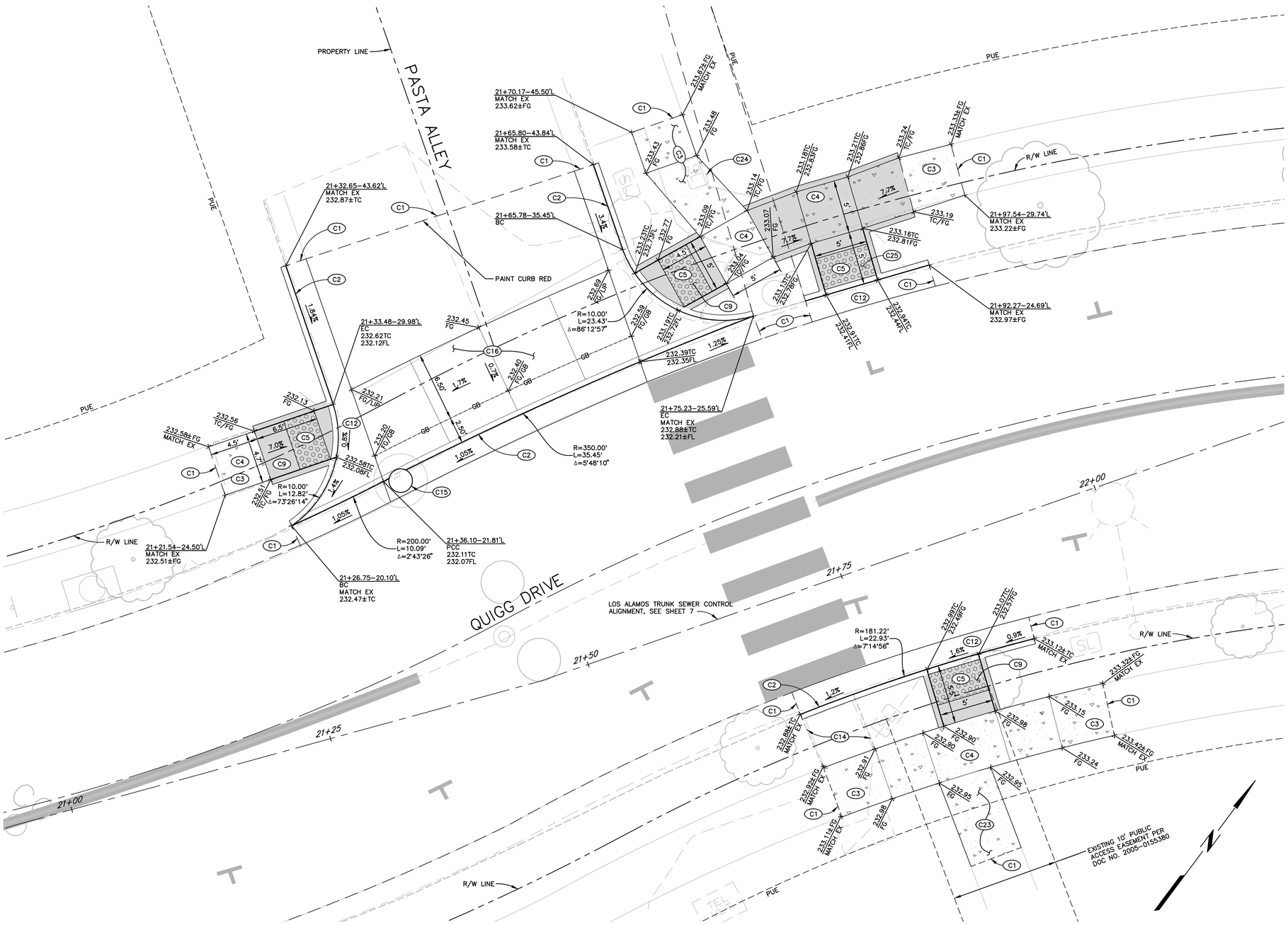
CURB RAMP DETAILS 1

CONTRACT NO. C01903

SHEET 29 OF 33

FILE NO. 2018–0043

12–09–22 kilfizghi \4247\dwg\4247 01\4247.01 DETAIL–Curb Ramps.dwg TAB: 29 CURB RAMP DETAILS 1



QUIGG DRIVE/PASTA ALLEY CURB RAMP

C 23

SCALE: 1"=5'

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- C1 SAWCUT AND CONFORM TO EXISTING.
- C2 REMOVE AND REPLACE CURB AND GUTTER PER CITY STD 241. MATCH EXISTING GRADES AT SAWCUT LOCATIONS AND PROVIDE CONTINUOUS SLOPE IN DIRECTION OF DRAINAGE.
- C3 REMOVE AND REPLACE 5' MINIMUM OF EXISTING SIDEWALK TO NEAREST SCORE MARK PER CITY STD 237. MATCH EXISTING GRADES AND TRANSITION 1.5% MAX FINISHED GRADE CROSS SLOPE (UNLESS SHOWN OTHERWISE) TO MATCH EXISTING SAWCUT CONFORM LOCATIONS.
- C4 RAMP LANDING DRIVE TURNING AREA – MAX CROSS SLOPE <2.0% IN ANY DIRECTION OR AS INDICATED. CONFORM TO EXISTING ADJACENT RAMP BOTTOM OR ENTRY ELEVATIONS WHERE THEY OCCUR.
- C9 INSTALL 'CASE F' CURB RAMP PER CALTRANS STANDARD PLAN RSP A88A.
- C5 INSTALL EMBEDDED DETECTABLE WARNING SURFACE. WARNING SURFACE SHALL EXTEND 36" BEHIND THE BACK OF THE CURB AND BE ORIENTED IN THE DIRECTION OF TRAVEL. WARNING SURFACE SHALL COVER FULL WIDTH OF RAMP WITH 2" MAX SEPARATION ON EACH SIDE.
- C12 GUTTER COUNTER SLOPE IMMEDIATELY ADJACENT TO CURB RAMP SHALL NOT BE STEEPER THAN 5% MAX. INSTALL MINIMUM 3' LONG GUTTER SLOPE TRANSITION ON EACH SIDE OF CURB RAMP.
- C14 REMOVE AND DISPOSE OF EXISTING CONCRETE TO LIMITS INDICATED. SAWCUT AS NECESSARY TO PRESERVE AND PROTECT EXISTING ADJACENT CONCRETE AND IMPROVEMENTS TO REMAIN.
- C15 CAST STORM DRAIN MANHOLE RIM INTO NEW CONCRETE CURB AND GUTTER. ADJUST RIM AS NECESSARY TO PROVIDE UNOBSTRUCTED CONTINUATION OF FLOWLINE.
- C16 CONSTRUCT COMMERCIAL DRIVEWAY SIMILAR TO CITY STD 250C.
- C23 RECONSTRUCT CONCRETE PATHWAY. CONFORM TO EXISTING.
- C24 ADJUST EXISTING UTILITY BOX TO GRADE.
- C25 INSTALL CURB RAMP SIMILAR TO 'CASE B' CURB RAMP PER CALTRANS STANDARD PLAN RSP A88A.

SHEET NOTE

SEE GRADING AND SURFACING PLANS ON SHEETS 21 THRU 27 FOR STRIPING, AND PAVEMENT RESURFACING AND REHABILITATION WORK BEYOND THE LIP OF GUTTER OR EDGE OF CONCRETE.

CURB RAMP LEGEND

- SIDEWALK
- DETECTABLE WARNING SURFACE
- CURB RAMP
- VALLEY GUTTER

REGISTERED PROFESSIONAL ENGINEER
DAVID Y. COLBERT
No. C41906
Exp. 6-31-23
CIVIL
STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 220 • Santa Rosa, CA 95403 • 707-576-1322
www.b-r-e.com

DATE: DECEMBER 2022
CHK BY: BLB & BB
SCALE: AS SHOWN
DWN BY: PJT

LOS ALAMOS TRUNK SEWER
REPLACEMENT SEGMENT 1
(STREAMSIDE DRIVE TO ELAINE DRIVE)

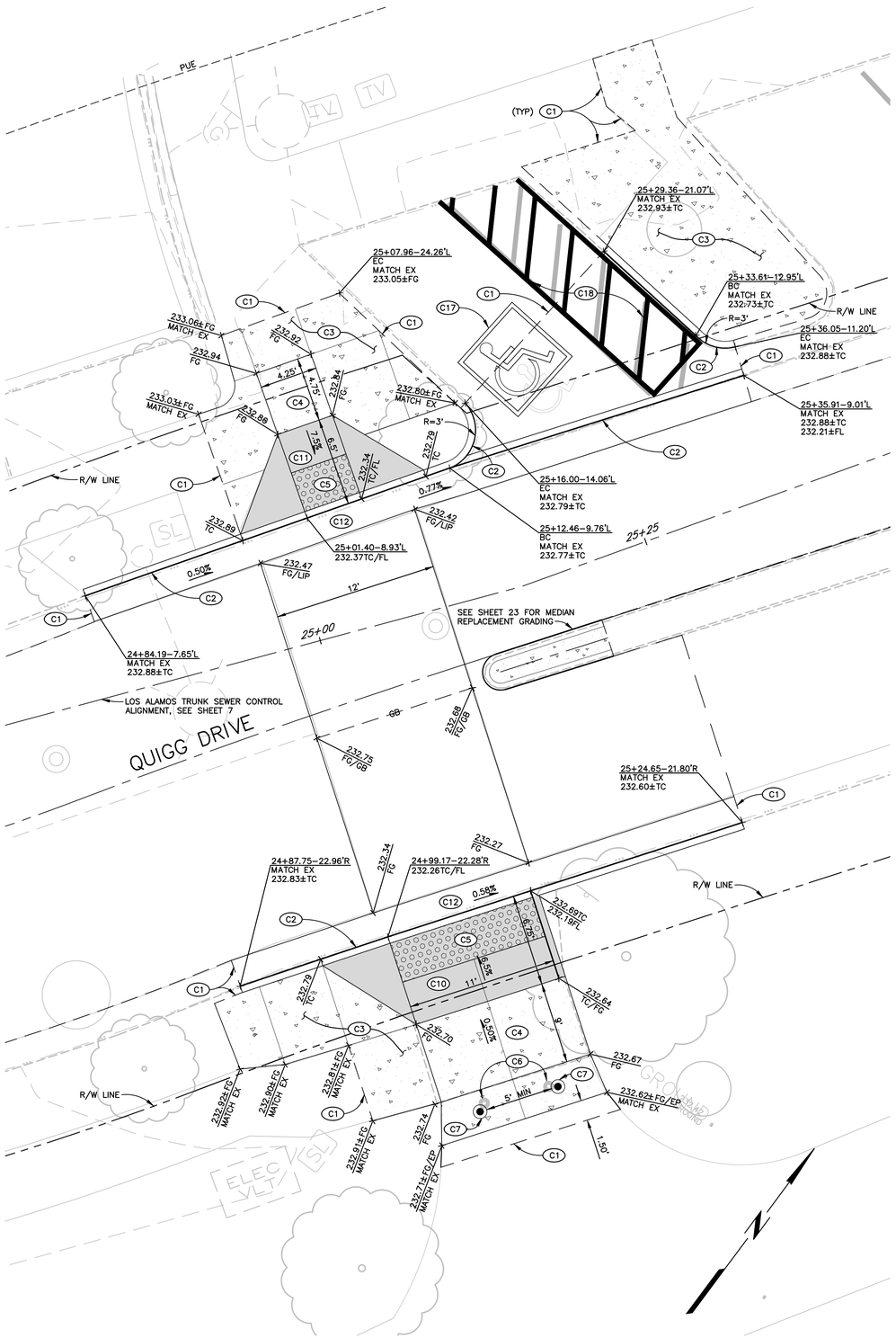
CURB RAMP DETAILS 2

CONTRACT NO.
C01903

SHEET 30 OF 33

FILE NO. 2018-0043

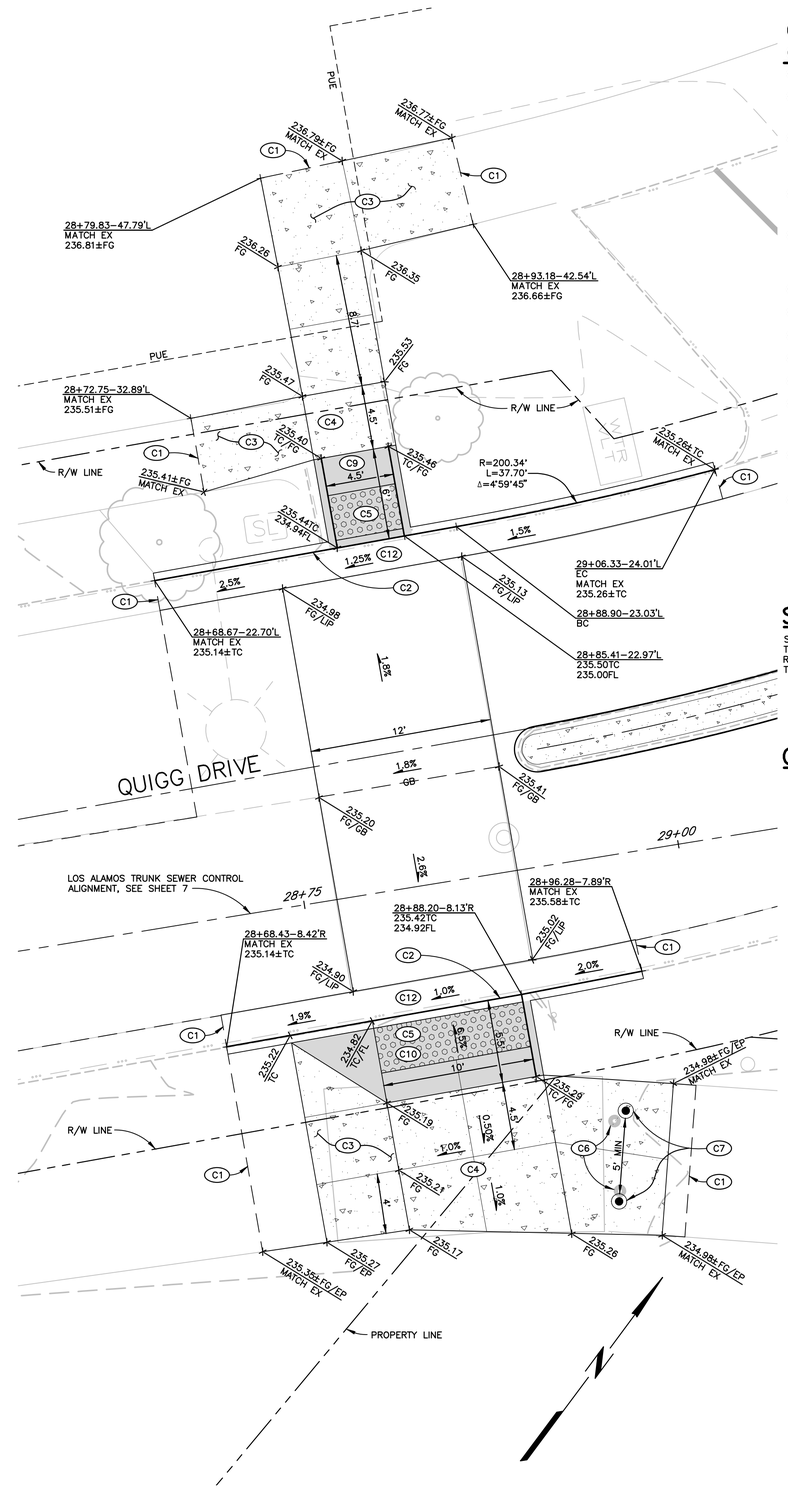
12-09-22 kiflizghi \4247\dwg\4247 01\4247.01 DETAIL-Curb Ramps.dwg TAB: 30 CURB RAMP DETAILS 2



QUIGG DRIVE MID–BLOCK CURB RAMP

D
23

SCALE: 1"=5'



QUIGG DRIVE MID–BLOCK CURB RAMP

E
24

SCALE: 1"=5'

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- C1 SAWCUT AND CONFORM TO EXISTING.
- C2 REMOVE AND REPLACE CURB AND GUTTER PER CITY STD 241. MATCH EXISTING GRADES AT SAWCUT LOCATIONS AND PROVIDE CONTINUOUS SLOPE IN DIRECTION OF DRAINAGE.
- C3 REMOVE AND REPLACE 5' MINIMUM OF EXISTING SIDEWALK TO NEAREST SCORE MARK PER CITY STD 237. MATCH EXISTING GRADES AND TRANSITION 1.5% MAX FINISHED GRADE CROSS SLOPE (UNLESS SHOWN OTHERWISE) TO MATCH EXISTING SAWCUT CONFORM LOCATIONS.
- C4 RAMP LANDING DRIVE TURNING AREA – MAX CROSS SLOPE <2.0% IN ANY DIRECTION OR AS INDICATED. CONFORM TO EXISTING ADJACENT RAMP BOTTOM OR ENTRY ELEVATIONS WHERE THEY OCCUR.
- C5 INSTALL EMBEDDED DETECTABLE WARNING SURFACE. WARNING SURFACE SHALL EXTEND 36" BEHIND THE BACK OF THE CURB AND BE ORIENTED IN THE DIRECTION OF TRAVEL. WARNING SURFACE SHALL COVER FULL WIDTH OF RAMP WITH 2" MAX SEPARATION ON EACH SIDE.
- C6 REMOVE AND DISPOSE OF EXISTING BOLLARD.
- C7 INSTALL REMOVABLE BOLLARD PER DETAIL SHEET 4
- C9 INSTALL 'CASE F' CURB RAMP PER CALTRANS STANDARD PLAN RSP A88A.
- C10 INSTALL 'CASE G' CURB RAMP PER CALTRANS STANDARD PLAN RSP A88A.
- C11 INSTALL 'CASE A' CURB RAMP PER CALTRANS STANDARD PLAN RSP A88A.
- C12 GUTTER COUNTER SLOPE IMMEDIATELY ADJACENT TO CURB RAMP SHALL NOT BE STEEPER THAN 5% MAX. INSTALL MINIMUM 3' LONG GUTTER SLOPE TRANSITION ON EACH SIDE OF CURB RAMP.
- C17 INSTALL PAINTED SQUARE WHITE INTERNATIONAL SYMBOL OF ACCESSIBILITY PAVEMENT SYMBOL ON BLUE BACKGROUND PER CBC 11B–502.6.4 AND CALTRANS STD A90A AND A24C (AREA = 23 SF).
- C18 INSTALL PAINTED BLUE STRIPING BORDER AT UNLOADING AREA WITH WHITE HATCH STRIPING AND 12" HIGH WHITE "NO PARKING" LETTERS PER CALTRANS STD A90A AND A24E. REMOVE EXISTING STRIPING AS NECESSARY.

SHEET NOTE

SEE GRADING AND SURFACING PLANS ON SHEETS 21 THRU 27 FOR STRIPING, AND PAVEMENT RESURFACING AND REHABILITATION WORK BEYOND THE LIP OF GUTTER OR EDGE OF CONCRETE.

CURB RAMP LEGEND

- SIDEWALK
- DETECTABLE WARNING SURFACE
- CURB RAMP
- VALLEY GUTTER

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLBERT No. C41906 Exp. 6-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 120 • Santa Rosa, CA 95403 • 707-576-1322
www.b-rce.com

DATE: DECEMBER 2022
CHK BY: BLB & BB
SCALE: AS SHOWN
DWN BY: PIT

LOS ALAMOS TRUNK SEWER
REPLACEMENT SEGMENT 1
(STREAMSIDE DRIVE TO ELAINE DRIVE)

CURB RAMP DETAILS 3

CONTRACT NO.
C01903

FILE NO. 2018–0043

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

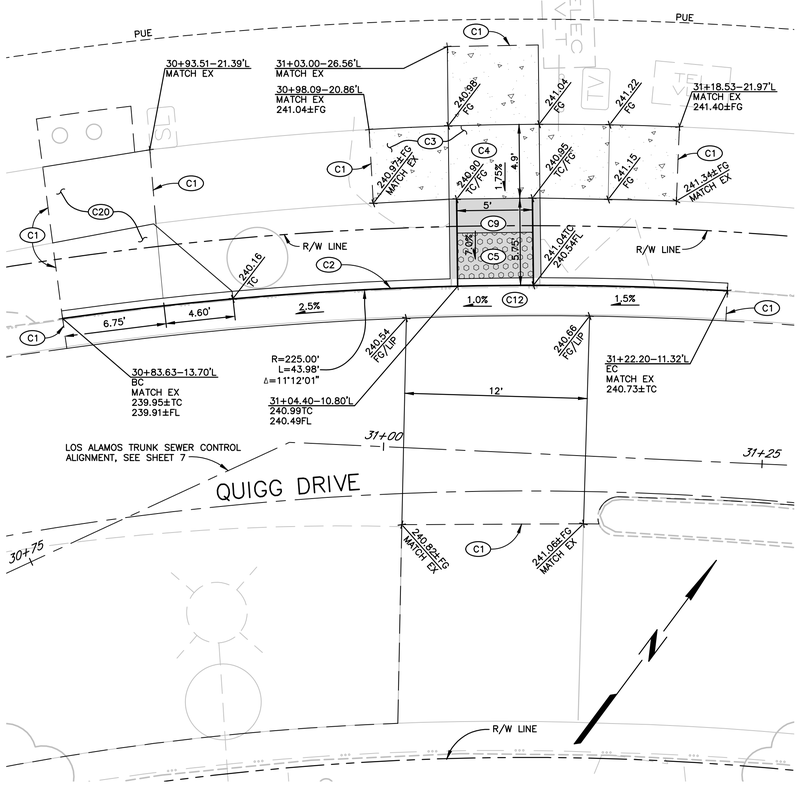
- (C1) SAWCUT AND CONFORM TO EXISTING.
- (C2) REMOVE AND REPLACE CURB AND GUTTER PER CITY STD 241. MATCH EXISTING GRADES AT SAWCUT LOCATIONS AND PROVIDE CONTINUOUS SLOPE IN DIRECTION OF DRAINAGE.
- (C3) REMOVE AND REPLACE 5' MINIMUM OF EXISTING SIDEWALK TO NEAREST SCORE MARK PER CITY STD 237. MATCH EXISTING GRADES AND TRANSITION 1.5% MAX FINISHED GRADE CROSS SLOPE (UNLESS SHOWN OTHERWISE) TO MATCH EXISTING SAWCUT CONFORM LOCATIONS.
- (C4) RAMP LANDING DRIVE TURNING AREA – MAX CROSS SLOPE <2.0% IN ANY DIRECTION OR AS INDICATED. CONFORM TO EXISTING ADJACENT RAMP BOTTOM OR ENTRY ELEVATIONS WHERE THEY OCCUR.
- (C5) INSTALL EMBEDDED DETECTABLE WARNING SURFACE. WARNING SURFACE SHALL EXTEND 36" BEHIND THE BACK OF THE CURB AND BE ORIENTED IN THE DIRECTION OF TRAVEL. WARNING SURFACE SHALL COVER FULL WIDTH OF RAMP WITH 2" MAX SEPARATION ON EACH SIDE.
- (C6) REMOVE AND DISPOSE OF EXISTING BOLLARD.
- (C7) INSTALL REMOVABLE BOLLARD PER DETAIL SHEET 4
- (C8) REMOVE AND REPLACE EXISTING CONCRETE VALLEY GUTTER SIMILAR TO CITY STD 243.
- (C9) INSTALL 'CASE F' CURB RAMP PER CALTRANS STANDARD PLAN RSP A88A.
- (C12) GUTTER COUNTER SLOPE IMMEDIATELY ADJACENT TO CURB RAMP SHALL NOT BE STEEPER THAN 5% MAX. INSTALL MINIMUM 3' LONG GUTTER SLOPE TRANSITION ON EACH SIDE OF CURB RAMP.
- (C20) REMOVE AND REPLACE EXISTING 6" PCC DRIVEWAY APRON AND ADJACENT SIDEWALK PER CITY STD 250A, 250B, 251 AND 237.

SHEET NOTE

SEE GRADING AND SURFACING PLANS ON SHEETS 21 THRU 27 FOR STRIPING, AND PAVEMENT RESURFACING AND REHABILITATION WORK BEYOND THE LIP OF GUTTER OR EDGE OF CONCRETE.

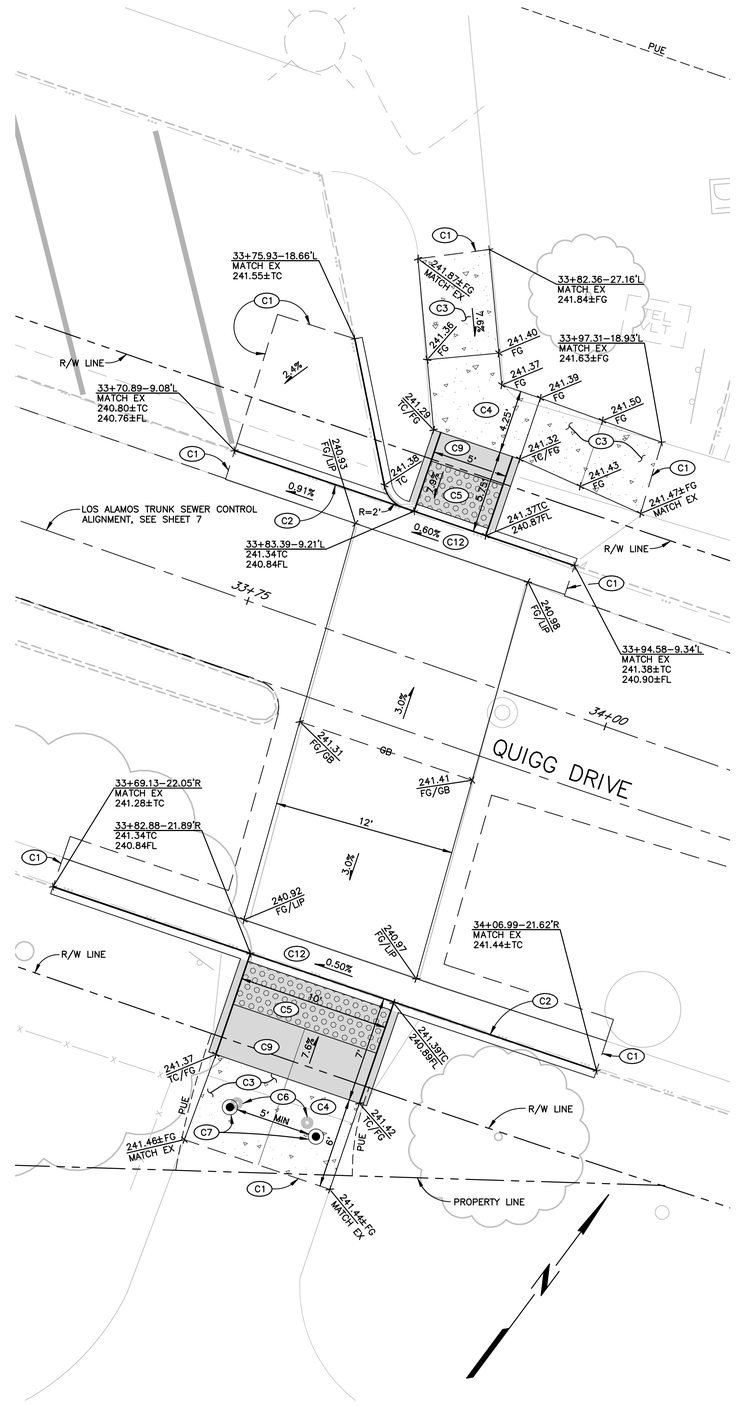
CURB RAMP LEGEND

- SIDEWALK
- DETECTABLE WARNING SURFACE
- CURB RAMP
- VALLEY GUTTER



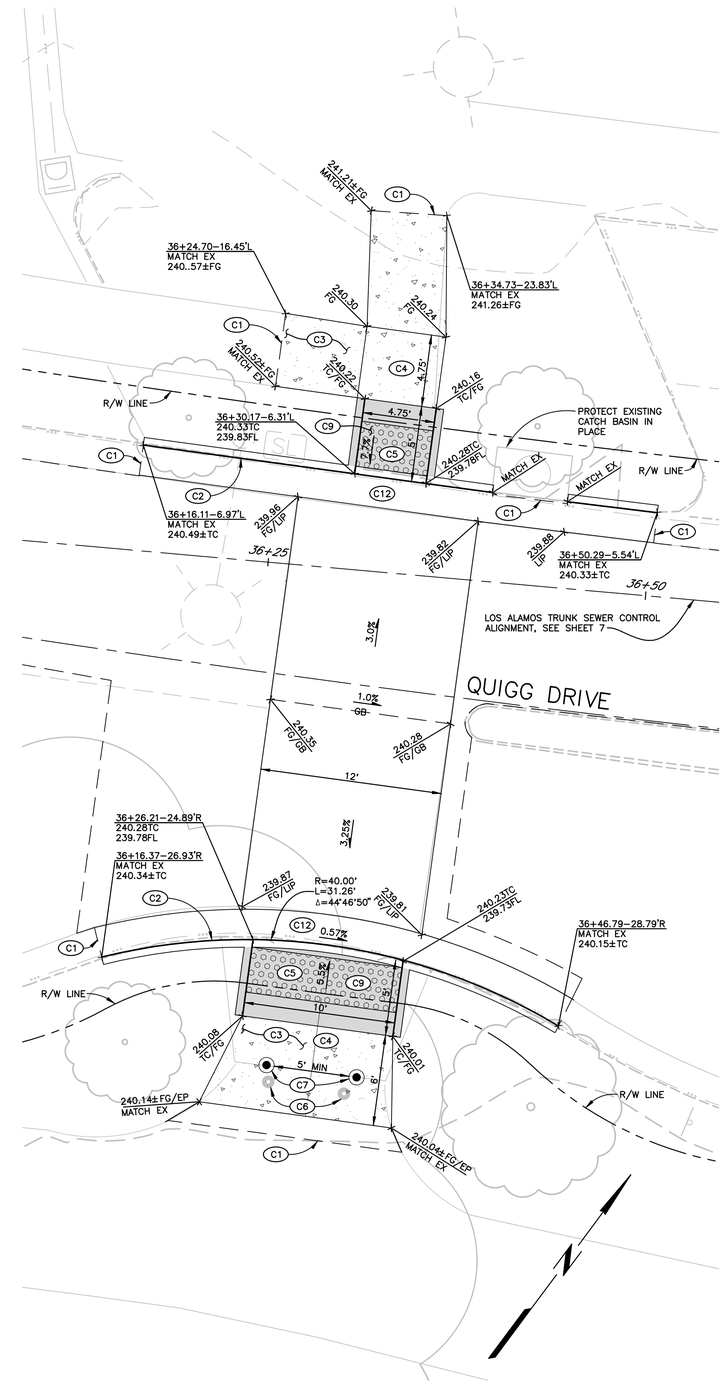
QUIGG DRIVE MID–BLOCK CURB RAMP (F/24)

SCALE: 1"=5'



QUIGG DRIVE MID–BLOCK CURB RAMP (G/24)

SCALE: 1"=5'



QUIGG DRIVE MID–BLOCK CURB RAMP (H/25)

SCALE: 1"=5'

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COLVIN No. C51896 Exp. 6-30-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

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475 Aviation Blvd. • Suite 220 • Santa Rosa, CA 95403 • 707-576-1322
www.b-r-ce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

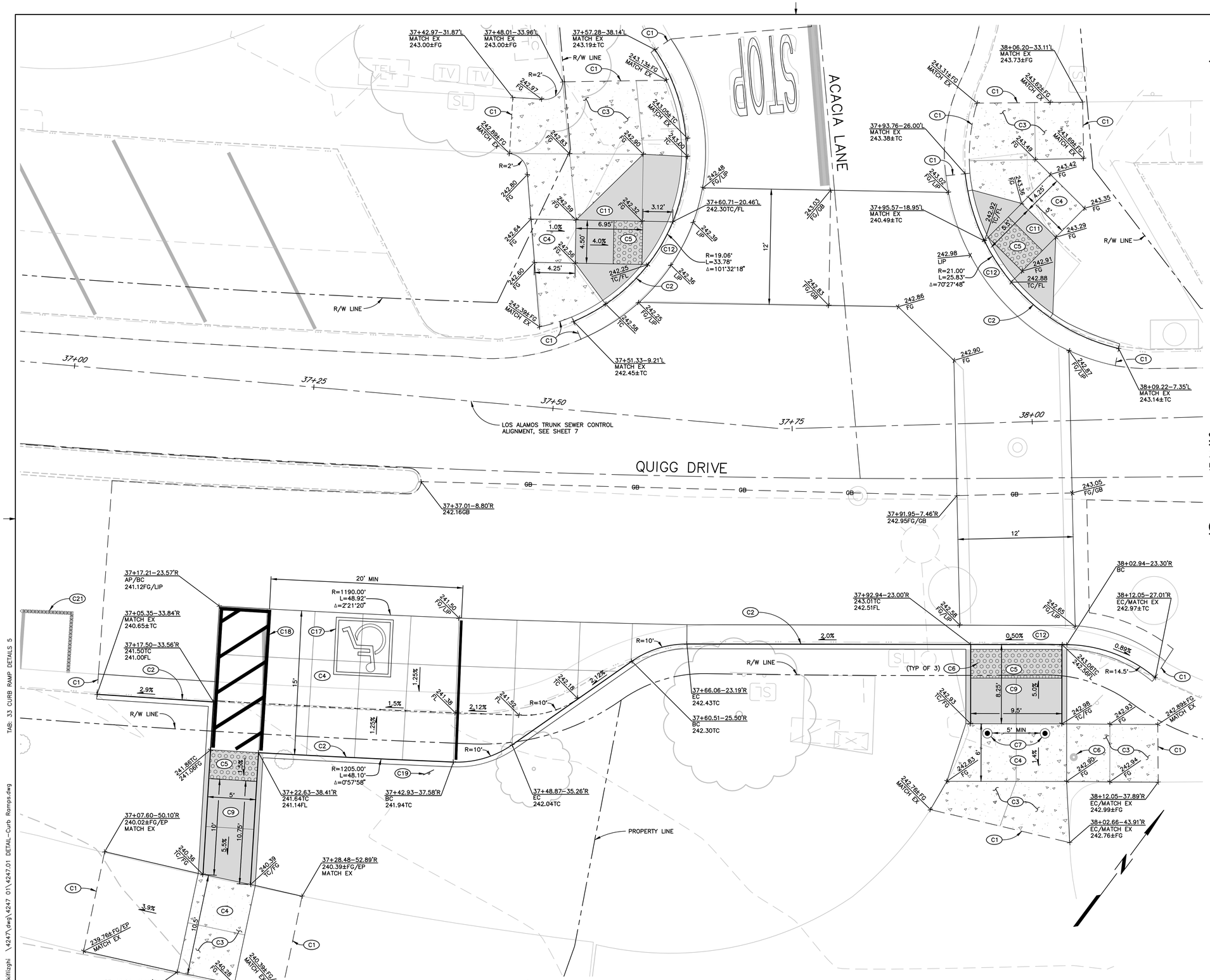
CURB RAMP DETAILS 4

CONTRACT NO. C01903

SHEET 32 OF 33

FILE NO. 2018–0043

12–09–22 kiflizghi \4247\dwg\4247 01\4247.01 DETAIL–Curb Ramps.dwg TAB: 32 CURB RAMP DETAILS 4



QUIGG DRIVE/ACACIA LANE CURB RAMPS (1/25)

SCALE: 1"=5'

CONSTRUCTION NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- (C1) SAWCUT AND CONFORM TO EXISTING.
- (C2) REMOVE AND REPLACE CURB AND GUTTER PER CITY STD 241. MATCH EXISTING GRADES AT SAWCUT LOCATIONS AND PROVIDE CONTINUOUS SLOPE IN DIRECTION OF DRAINAGE.
- (C3) REMOVE AND REPLACE 5' MINIMUM OF EXISTING SIDEWALK TO NEAREST SCORE MARK PER CITY STD 237. MATCH EXISTING GRADES AND TRANSITION 1.5% MAX FINISHED GRADE CROSS SLOPE (UNLESS SHOWN OTHERWISE) TO MATCH EXISTING SAWCUT CONFORM LOCATIONS.
- (C4) RAMP LANDING DRIVE TURNING AREA – MAX CROSS SLOPE <2.0% IN ANY DIRECTION OR AS INDICATED. CONFORM TO EXISTING ADJACENT RAMP BOTTOM OR ENTRY ELEVATIONS WHERE THEY OCCUR.
- (C5) INSTALL EMBEDDED DETECTABLE WARNING SURFACE. WARNING SURFACE SHALL EXTEND 36" BEHIND THE BACK OF THE CURB AND BE ORIENTED IN THE DIRECTION OF TRAVEL. WARNING SURFACE SHALL COVER FULL WIDTH OF RAMP WITH 2" MAX SEPARATION ON EACH SIDE.
- (C6) REMOVE AND DISPOSE OF EXISTING BOLLARD.
- (C7) INSTALL REMOVABLE BOLLARD PER DETAIL SHEET 4
- (C9) INSTALL 'CASE F' CURB RAMP PER CALTRANS STANDARD PLAN RSP A88A.
- (C11) INSTALL 'CASE A' CURB RAMP PER CALTRANS STANDARD PLAN RSP A88A.
- (C12) GUTTER COUNTER SLOPE IMMEDIATELY ADJACENT TO CURB RAMP SHALL NOT BE STEEPER THAN 5% MAX. INSTALL MINIMUM 3' LONG GUTTER SLOPE TRANSITION ON EACH SIDE OF CURB RAMP.
- (C17) INSTALL PAINTED SQUARE WHITE INTERNATIONAL SYMBOL OF ACCESSIBILITY PAVEMENT SYMBOL ON BLUE BACKGROUND PER CBC 11B–502.6.4 AND CALTRANS STD A90A AND A24C (AREA = 23 SF).
- (C18) INSTALL PAINTED BLUE STRIPING BORDER AT UNLOADING AREA WITH WHITE HATCH STRIPING AND 12" HIGH WHITE "NO PARKING" LETTERS PER CALTRANS STD A90A AND A24E. REMOVE EXISTING STRIPING AS NECESSARY.
- (C19) INSTALL 75 SQUARE INCH "INTERNATIONAL SYMBOL OF ACCESSIBILITY" PARKING SIGN PER CBC 11B–502.6 AND CALTRANS STD A90A.
- (C21) REMOVE EXISTING PAINTED STRIPE AS NECESSARY TO CREATE ADDITIONAL PARKING STALL.

SHEET NOTE

SEE GRADING AND SURFACING PLANS ON SHEETS 21 THRU 27 FOR STRIPING, AND PAVEMENT RESURFACING AND REHABILITATION WORK BEYOND THE LIP OF GUTTER OR EDGE OF CONCRETE.

CURB RAMP LEGEND

- SIDEWALK
- DETECTABLE WARNING SURFACE
- CURB RAMP
- VALLEY GUTTER

REGISTERED PROFESSIONAL ENGINEER DAVID Y. COGEN C 72902 Exp. 12-31-23 CIVIL STATE OF CALIFORNIA

City of Santa Rosa

NO.	DATE	REVISION	BY

Brelje & Race CONSULTING ENGINEERS
475 Aviation Blvd., Suite 220 Santa Rosa, CA 95403 707-576-1322
www.brce.com

DATE: DECEMBER 2022
SCALE: AS SHOWN
CHK BY: BLB & BB
DWN BY: PIT

LOS ALAMOS TRUNK SEWER REPLACEMENT SEGMENT 1 (STREAMSIDE DRIVE TO ELAINE DRIVE)

CURB RAMP DETAILS 5

CONTRACT NO. C01903

SHEET 33 OF 33

FILE NO. 2018–0043

TAB: 33 CURB RAMP DETAILS 5

12–09–22 killizghi \4247\dwg\4247 01\4247.01 DETAIL–Curb Ramps.dwg