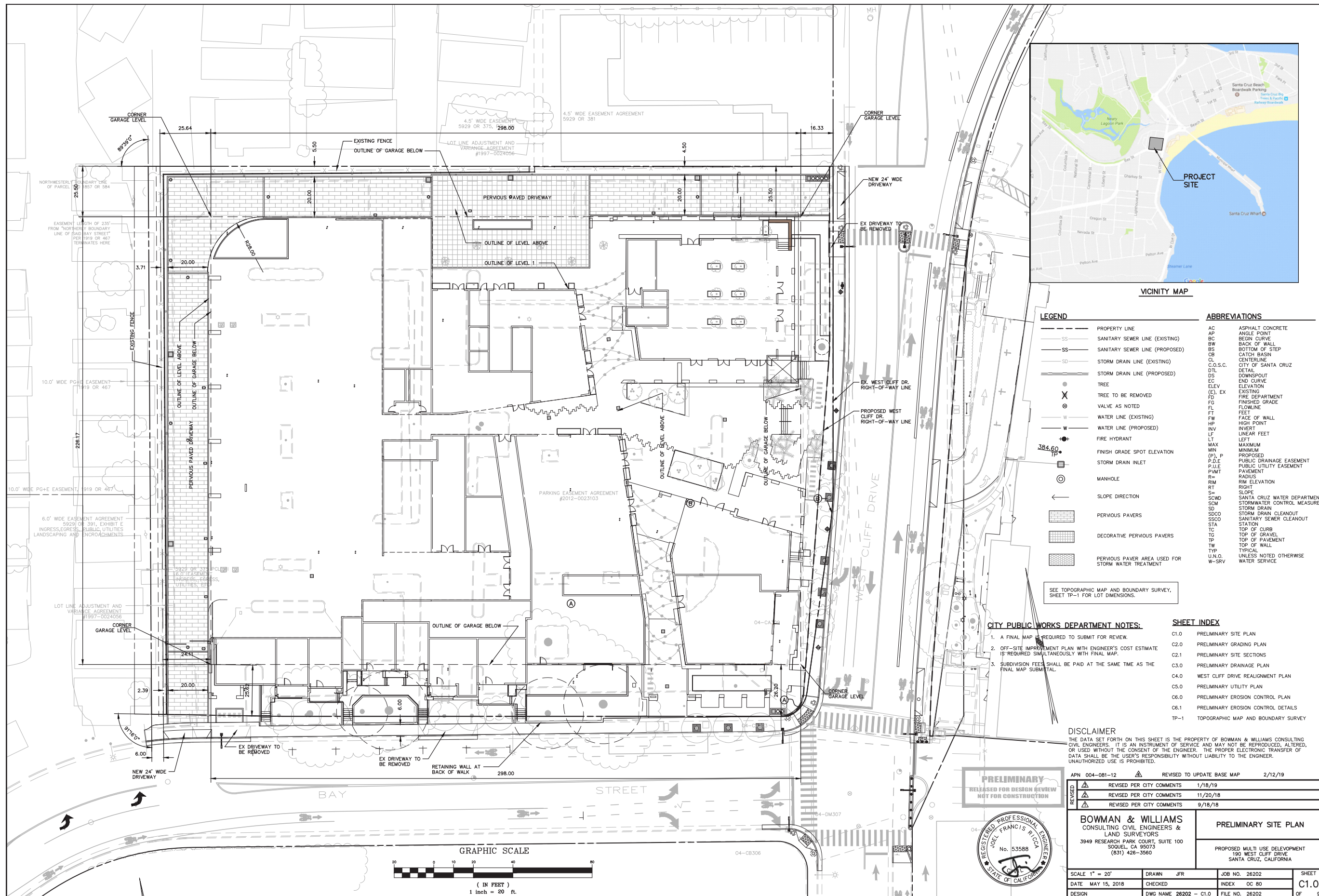


## 04 CIVIL

- A. PRELIMINARY SITE PLAN
- B. PRELIMINARY GRADING PLAN
- C. PRELIMINARY SITE SECTIONS
- D. PRELIMINARY DRAINAGE PLAN
- E. PRELIMINARY REALIGNMENT PLAN
- F. PRELIMINARY UTILITY PLAN
- G. PRELIMINARY EROSION CONTROL PLAN
- H. PRELIMINARY EROSION CONTROL DETAIL
- I. TOPOGRAPHY MAP & BOUNDARY SURVEY
- J. FIRE TRUCK TURNING - CLIFF DR./BAY ST. ROUNDABOUT PLAN
- K. 40 FOOT TRUCK TURNING - CLIFF DR./BAY ST. ROUNDABOUT PLAN
- L. 45 FOOT BUS TURNING - CLIFF DR./BAY ST. ROUNDABOUT PLAN
- M. 40 FOOT BUS TURNING - CLIFF DR./BAY ST. ROUNDABOUT PLAN
- N. TRACTOR TRAILER TURNING - CLIFF DR./BAY ST. ROUNDABOUT PLAN



LEGEND		ABBREVIATIONS	
---	PROPERTY LINE	AC	ASPHALT CONCRETE
SS	SANITARY SEWER LINE (EXISTING)	AP	ANGLE POINT
SS	SANITARY SEWER LINE (PROPOSED)	BC	BEGIN CURVE
SD	STORM DRAIN LINE (EXISTING)	BW	BACK OF WALL
SD	STORM DRAIN LINE (PROPOSED)	BS	BOTTOM OF STEP
---	TREE	CB	CATCH BASIN
⊗	TREE TO BE REMOVED	CL	CENTERLINE
⊗	VALVE AS NOTED	C.O.S.C.	CITY OF SANTA CRUZ
W	WATER LINE (EXISTING)	DTL	DETAIL
W	WATER LINE (PROPOSED)	DS	DOWNSPOUT
+	FIRE HYDRANT	EC	END CURVE
384.60	FINISH GRADE SPOT ELEVATION	ELEV	ELEVATION
⊕	STORM DRAIN INLET	(E), EX	EXISTING
⊙	MANHOLE	FD	FIRE DEPARTMENT
←	SLOPE DIRECTION	FG	FINISHED GRADE
▨	PERVIOUS PAVERS	FL	FLOWLINE
▨	DECORATIVE PERVIOUS PAVERS	FW	FACE OF WALL
▨	PERVIOUS PAVEMENT AREA USED FOR STORM WATER TREATMENT	HP	HIGH POINT
		INV	INVERT
		LF	LINEAR FEET
		LT	LEFT
		MAX	MAXIMUM
		MIN	MINIMUM
		(P), P	PROPOSED
		P.D.E	PUBLIC DRAINAGE EASEMENT
		P.U.E	PUBLIC UTILITY EASEMENT
		P.V.M.T	PAVEMENT
		R	RADIUS
		RIM	RIM ELEVATION
		RT	RIGHT
		S	SLOPE
		SCWD	SANTA CRUZ WATER DEPARTMENT
		SCM	STORMWATER CONTROL MEASURE
		SD	STORM DRAIN
		SDCO	STORM DRAIN CLEANOUT
		SSCO	SANITARY SEWER CLEANOUT
		STA	STATION
		TC	TOP OF CURB
		TG	TOP OF GRAVEL
		TP	TOP OF PAVEMENT
		TW	TOP OF WALL
		TYP	TYPICAL
		U.N.O.	UNLESS NOTED OTHERWISE
		W-SRV	WATER SERVICE

- CITY PUBLIC WORKS DEPARTMENT NOTES:**
1. A FINAL MAP IS REQUIRED TO SUBMIT FOR REVIEW.
  2. OFF-SITE IMPROVEMENT PLAN WITH ENGINEER'S COST ESTIMATE IS REQUIRED SIMULTANEOUSLY WITH FINAL MAP.
  3. SUBDIVISION FEES SHALL BE PAID AT THE SAME TIME AS THE FINAL MAP SUBMITTAL.

**SHEET INDEX**

C1.0	PRELIMINARY SITE PLAN
C2.0	PRELIMINARY GRADING PLAN
C2.1	PRELIMINARY SITE SECTIONS
C3.0	PRELIMINARY DRAINAGE PLAN
C4.0	WEST CLIFF DRIVE REALIGNMENT PLAN
C5.0	PRELIMINARY UTILITY PLAN
C6.0	PRELIMINARY EROSION CONTROL PLAN
C6.1	PRELIMINARY EROSION CONTROL DETAILS
TP-1	TOPOGRAPHIC MAP AND BOUNDARY SURVEY

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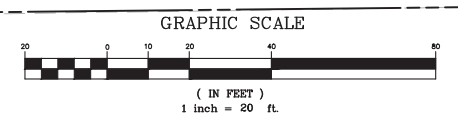
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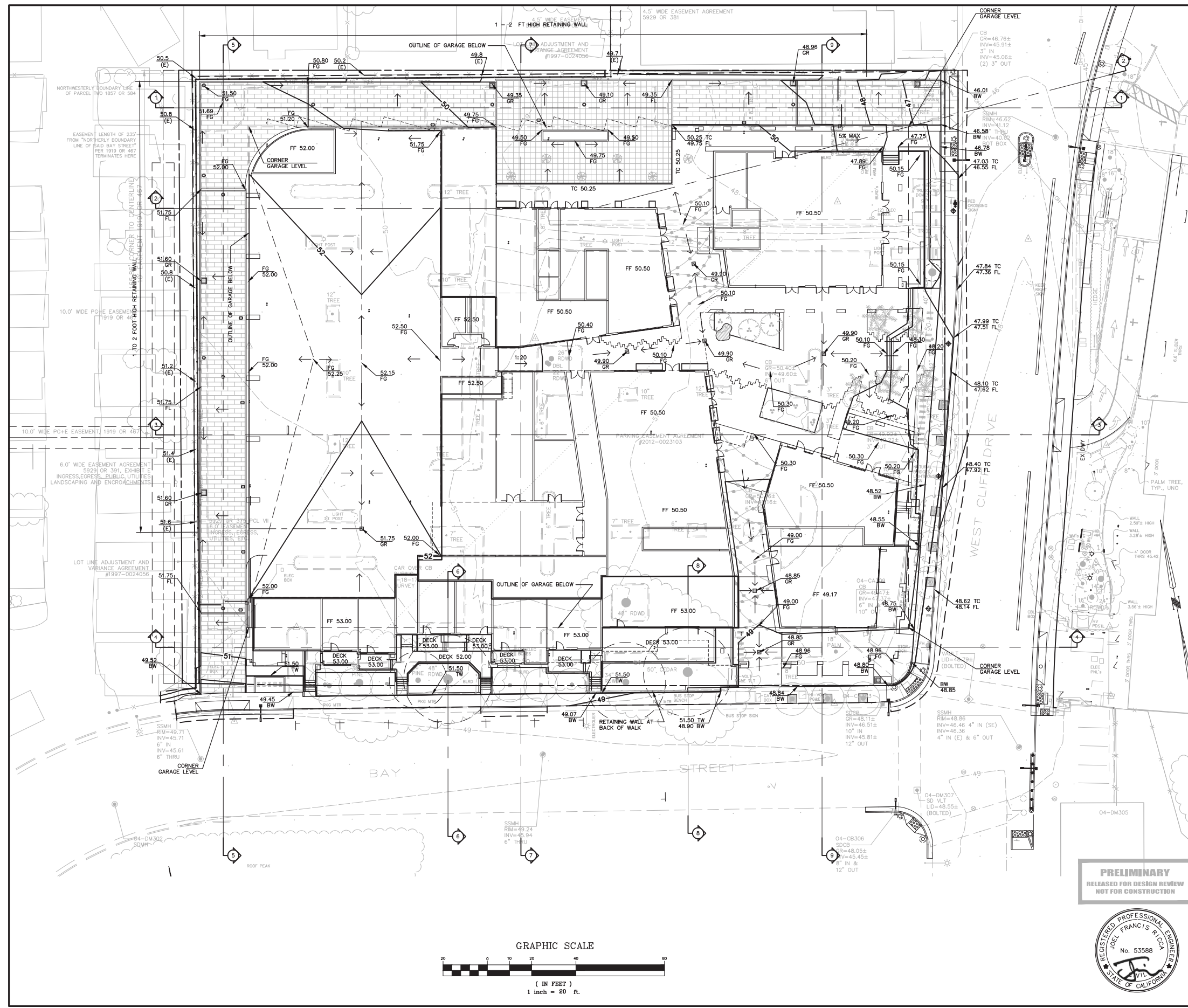


APN 004-081-12	REVISED TO UPDATE BASE MAP	2/12/19
REVISION	REVISION	DATE
△	REVISOR	DATE
△	REVISOR	DATE
△	REVISOR	DATE

**BOWMAN & WILLIAMS**  
CONSULTING CIVIL ENGINEERS &  
LAND SURVEYORS  
3949 RESEARCH PARK COURT, SUITE 100  
SANTA CRUZ, CA 95073  
(831) 426-3560

SCALE 1" = 20'	DRAWN JFR	JOB NO. 26202	SHEET
DATE MAY 15, 2018	CHECKED	INDEX OC 80	<b>C1.0</b>
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- BUILDING DIVISION NOTES**
1. A GEOTECHNICAL REPORT IS REQUIRED TO ADDRESS SOIL TYPE AND BEARING CAPACITY, LIQUEFACTION, SOIL SUBSIDENCE, FOUNDATION DESIGN AND SOIL MODIFICATIONS REQUIRED FOR CONSTRUCTION OF THE PROPOSED ADDITIONS. A LETTER COMPOSED BY THE SOILS ENGINEER SHALL BE PROVIDED AT PLAN SUBMITTAL WITH THE REPORT STATING THE FOUNDATION PLANS AND DETAILS HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE WITH THE STATED RECOMMENDATIONS OF THE SOILS REPORT.
  2. A GEOTECHNICAL INVESTIGATION REPORT WAS PREPARED BY GEOCON, INC. PROJECT NO. E8978-04-01, DATED MARCH 31, 2017.
  3. IF GRADING IS TO BE PERFORMED PRIOR TO ISSUANCE OF THE BUILDING PERMIT - A PERMIT APPLICATION WITH SEALED AND SIGNED PLANS BY A LICENSED CIVIL ENGINEER ALONG WITH A SEALED AND SIGNED GEOTECHNICAL REPORT SHALL BE SUBMITTED FOR REVIEW OF CODE COMPLIANCE PRIOR TO ISSUANCE OF A BUILDING PERMIT. ALSO SEE REQUIREMENTS OF SANTA CRUZ MUNICIPAL CODE CHAPTER 16.45 FOR GRADING ORDINANCE.

**EARTHWORK VOLUMES**

AREA	EXCAVATION (CY)	FILL (CY)	NET (CY)
SITE	55,800	2,600	53,200

ASSUMING AN ELEVATION OF 38 ± FOR THE SANDSTONE LAYER IDENTIFIED IN THE GEOTECHNICAL INVESTIGATION, THE EXCAVATION OF SANDSTONE WILL BE ABOUT 25,000 CUBIC YARDS.

EARTHWORK VOLUMES SHOWN ARE FOR PERMITTING PURPOSES. EARTHWORK VOLUMES SHOWN ON THESE PLANS ARE TAKEN AS THE DIFFERENCE BETWEEN EXISTING GRADE AS SHOWN ON THE TOPOGRAPHIC SURVEY AND THE FINISH GRADES SHOWN HEREON. ACTUAL EARTHWORK VOLUMES WILL VARY.

CONTRACTOR SHALL VERIFY THE EARTHWORK VOLUMES TO HIS SATISFACTION PRIOR TO CONSTRUCTION.

ALL EXCESS EXCAVATION (CUT) TO BE OFFHAULLED FROM SITE AND DISPOSED AT COUNTY LANDFILL OR APPROVED SITE.

**DISCLAIMER**

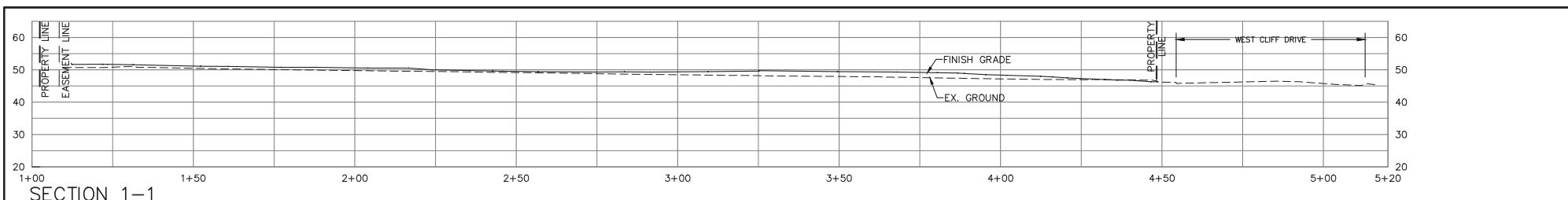
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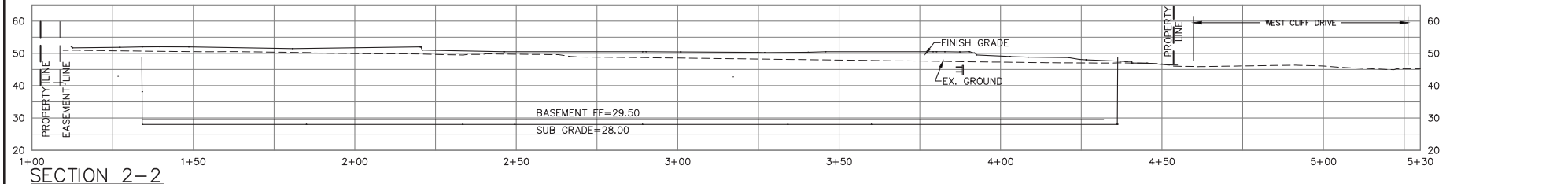


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△	REVISD PER CITY COMMENTS	1/18/19
△	REVISD PER CITY COMMENTS	11/20/18
△	REVISD PER CITY COMMENTS	9/18/18
<b>BOWMAN &amp; WILLIAMS</b> CONSULTING CIVIL ENGINEERS & LAND SURVEYORS 3949 RESEARCH PARK COURT, SUITE 100 SQUEL, CA 95073 (831) 426-3560		<b>PRELIMINARY GRADING PLAN</b>
SCALE 1" = 20'		PROPOSED MULTI USE DEVELOPMENT 190 WEST CLIFF DRIVE SANTA CRUZ, CALIFORNIA
DATE MAY 15, 2018	DRAWN JFR	JOB NO. 26202
DESIGN	CHECKED	INDEX OC 80
DWG NAME 26202 C2.0	FILE NO. 26202	SHEET C2.0
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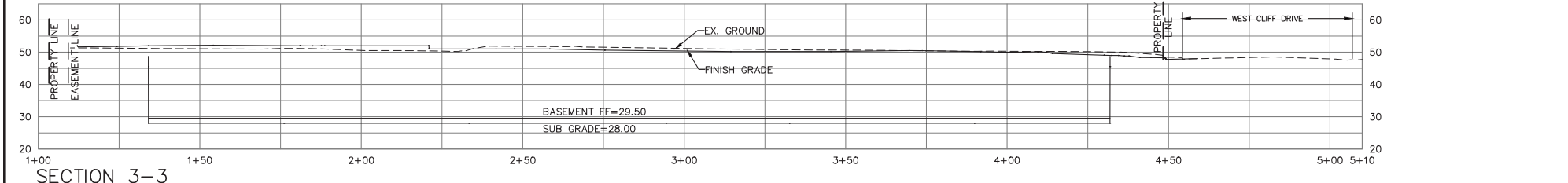




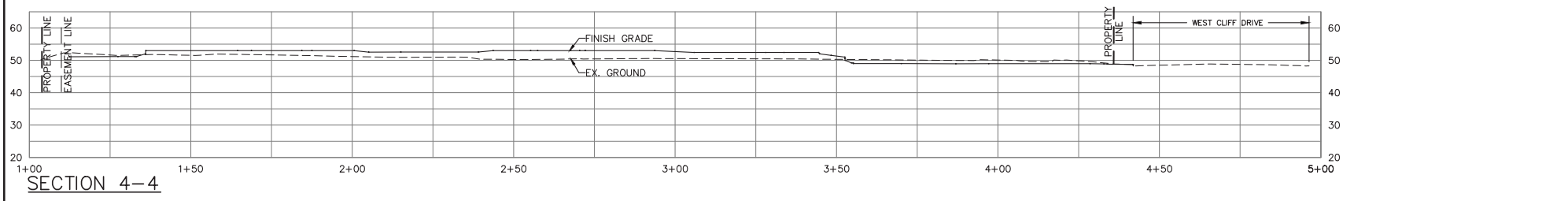
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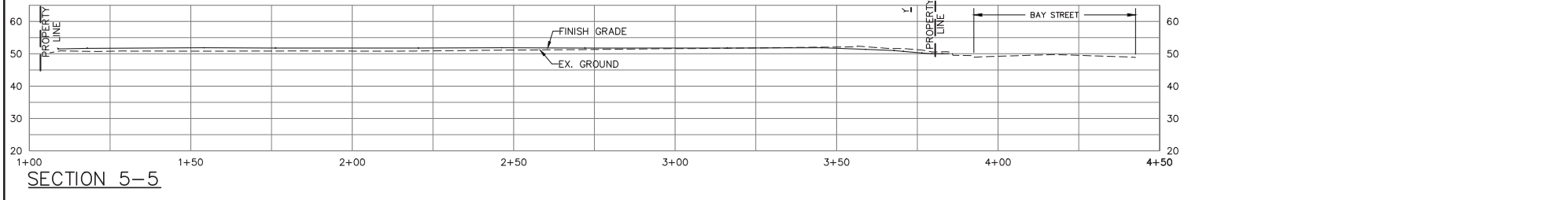
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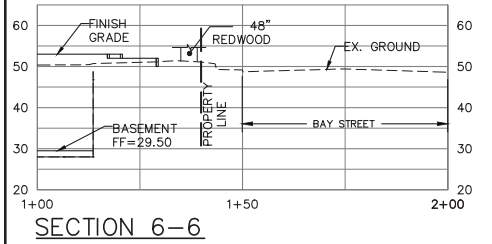
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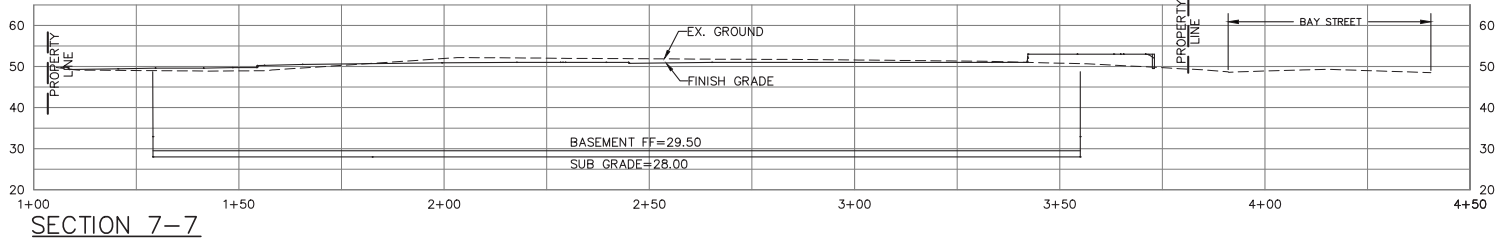
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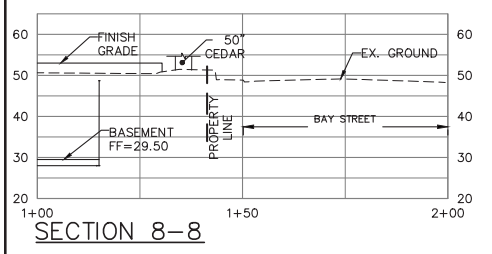
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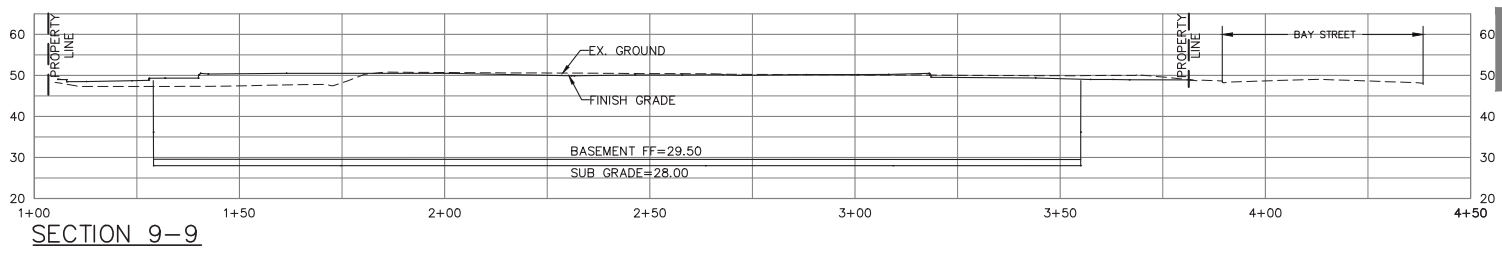
SECTION 6-6



SECTION 7-7



SECTION 8-8



SECTION 9-9

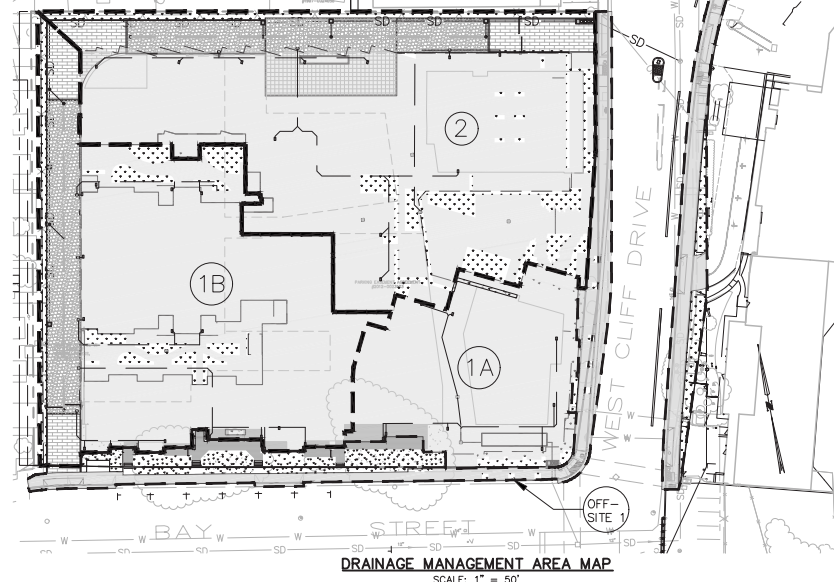
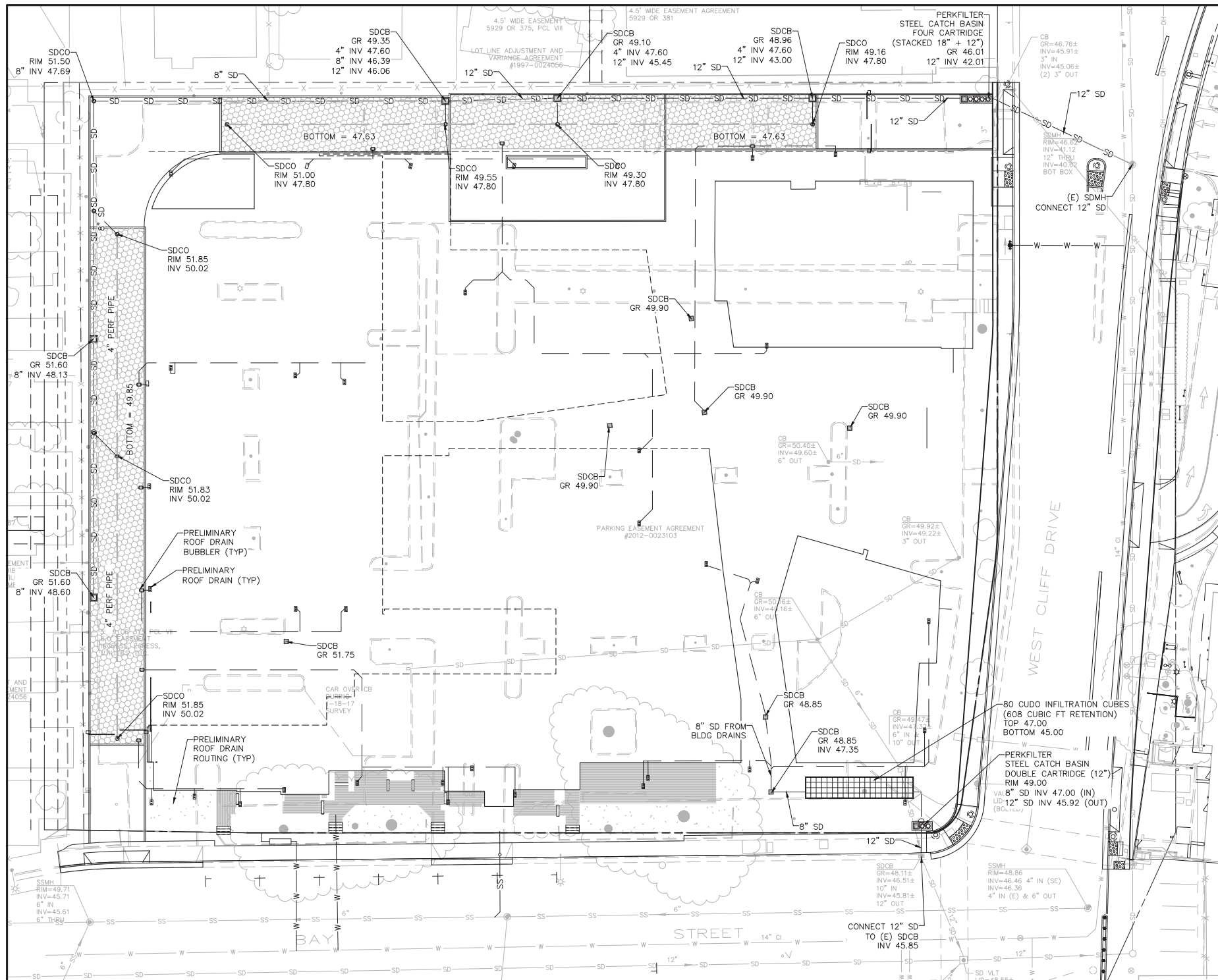
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BOWMAN & WILLIAMS CONSULTING CIVIL ENGINEERS & LAND SURVEYORS 3949 RESEARCH PARK COURT, SUITE 100 SANTA CRUZ, CA 95073 (831) 426-3560		PRELIMINARY SITE SECTIONS  PROPOSED MULTI USE DEVELOPMENT 190 WEST CLIFF DRIVE SANTA CRUZ, CALIFORNIA	
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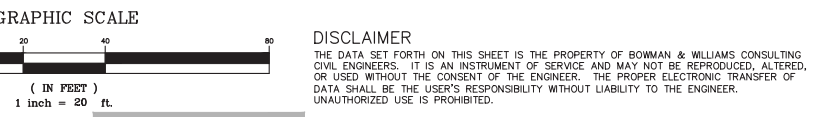


**INTERIOR STORM DRAIN CONNECTION**

- ALL ROOF STORM WATER FROM AREAS 1B AND 2 SHALL BE DIRECTED TO THE PERVIOUS PAVEMENT AREAS IN THE DRIVEWAY.
- ALL ROOF STORM WATER FROM AREA 1A SHALL BE DIRECTED TO THE RETENTION VESSEL.
- ROOF DRAIN ROUTING SHOWN HEREON IS SCHEMATIC. SEE ARCHITECTURE PLANS FOR INTERIOR STORM DRAIN CONNECTION. RETENTION VOLUMES SHALL BE REVISED AS NEEDED TO ACCOUNT FOR ROOF RECONFIGURATION, AND THERE IS 16-22% EXCESS VOLUME IN EACH PAVEMENT AREA, AND 6% EXCESS IN THE CUDO SYSTEM.

**PRIOR TO OBTAINING A BUILDING PERMIT:**

- STORM WATER CONTROL PLAN (SWCP): THE SWCP SHALL BE SUBMITTED WITH PLAN DESIGNS DEMONSTRATING THAT THE PROJECT MEETS THE APPLICABLE MANDATORY LOW IMPACT DEVELOPMENT REQUIREMENTS IN CHAPTER 6B OF THE CITY'S BEST MANAGEMENT PRACTICES MANUAL. STORM WATER BMPs FOR PRIVATE AND PUBLIC DEVELOPMENT PROJECTS. THE SWCP SHALL FOLLOW THE OUTLINE IN APPENDIX B OF CHAPTER 6B. A DRAFT SWCP SHALL BE SUBMITTED WITH PLANS FOR DEVELOPMENT APPROVAL (RECEIVED). A FINAL SWCP SHALL BE SUBMITTED AS PART OF THE PROJECT'S BUILDING PERMIT APPLICATION. THE SWCP SHALL ALSO BE SUBMITTED IN AN 8 1/2 X 11 INCH REPORT FORMAT. AN ELECTRONIC COPY OF THE SWCP MAY BE EMAILED TO SUZANNE HEALY, ENVIRONMENTAL PROJECTS ANALYST AT SHEALY@CITYOF SANTACRUZ.COM.
- OPERATIONS AND PLAN (O&M PLAN): THE O&M PLAN SHOULD INCLUDE AT A MINIMUM:
  - SITE PLAN SHOWING THE LOCATION OF DRAINAGE STRUCTURES AND STRUCTURAL CONTROL MEASURES.
  - O&M PROCEDURES, TIMING, AND FREQUENCY FOR MAINTENANCE OF LID FEATURES AND DRAINAGE SYSTEMS, AND INCLUDE APPLICABLE BMPs FROM CHAPTER 6B OF THE CITY'S BEST MANAGEMENT PRACTICES MANUAL. STORM WATER BMPs FOR PRIVATE AND PUBLIC DEVELOPMENT PROJECTS.
  - COST ESTIMATES FOR MAINTENANCE. A FINAL O&M PLAN SHALL BE SUBMITTED AS PART OF THE PROJECT'S BUILDING PERMIT APPLICATION. THE O&M PLAN SHOULD BE SUBMITTED IN AN 8 1/2 X 11 INCH REPORT FORMAT, AND CAN BE INCLUDED AS A SWCP APPENDIX. THE SIGNED MAINTENANCE AGREEMENT SHOULD BE INCLUDED IN THE O&M PLAN AS AN ATTACHMENT. AN ELECTRONIC COPY OF THE SWCP MAY BE EMAILED TO SUZANNE HEALY, ENVIRONMENTAL PROJECTS ANALYST AT SHEALY@CITYOF SANTACRUZ.COM.
- MAINTENANCE AGREEMENT: PRIOR TO ISSUANCE OF THE BUILDING PERMIT, THE PROPERTY OWNER SHALL SIGN AND SUBMIT A BMP MAINTENANCE AGREEMENT ENSURING THAT THEY WILL PROVIDE LONG-TERM OPERATION AND MAINTENANCE OF STRUCTURAL STORM WATER CONTROL MEASURES. THE O&M PLAN SHALL BE ATTACHED TO THE SIGNED MAINTENANCE AGREEMENT. A COPY OF THE SIGNED MAINTENANCE AGREEMENT MAY BE EMAILED TO SUZANNE HEALY, ENVIRONMENTAL PROJECTS ANALYST, AT: SHEALY@CITYOF SANTACRUZ.COM.
- PLANS SUBMITTED AS PART OF THE BUILDING PERMIT APPLICATION SHOULD INCLUDE APPLICABLE POLLUTION PREVENTION MEASURES TO BE IMPLEMENTED DURING CONSTRUCTION INCLUDING BUT NOT LIMITED TO: MATERIAL STORAGE AND STOCKPILES, PAINT AND CHEMICAL STORAGE, DUMPSTERS, SOIL STOCKPILES, DRAG-OUT AT SITE ENTRANCES AND EXITS, PORTA-POTTIES, PROTECTION OF NEARBY/DOWNSTREAM STORM DRAIN INLETS AND CATCH BASINS, AND ANY ADDITIONAL WET WEATHER BMPs.
- CONSTRUCTION DE-WATERING OPERATIONS: THERE ARE SEVERAL OPTIONS FOR CONSTRUCTION DE-WATERING DISCHARGES THAT CAN'T BE MANAGED ON SITE. ONE POTENTIAL OPTION IS DISCHARGE UNDER A PERMIT FROM THE STATE WATER BOARD/REGIONAL WATER QUALITY CONTROL BOARD (E.G. LOW-THREAT DISCHARGE PERMITS, HIGHLY TREATED GROUNDWATER DISCHARGE PERMIT, ETC.). PLEASE CONTACT THE CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD FOR MORE INFORMATION AT 805-549-3147 OR REFER TO THEIR WEBSITE AT: [HTTP://WWW.WATERBOARDS.CA.GOV/CENTRALCOAST/](http://www.waterboards.ca.gov/centralcoast/)  
ANOTHER POTENTIAL OPTION IS DISCHARGE TO THE SANITARY SEWER SYSTEM UNDER A PERMIT FROM THE CITY. FOR MORE INFORMATION ABOUT THIS PERMIT, INCLUDING THE APPLICATION PROCESS, REQUIREMENTS AND FEES, PLEASE CONTACT A CITY PUBLIC WORKS ENVIRONMENTAL COMPLIANCE INSPECTOR AT 831-420-5160.
- STATE CONSTRUCTION GENERAL PERMIT: IF THE PROJECT WILL DISTURB ONE ACRE OR MORE OF SOIL (OR IS LESS THAN ONE ACRE BUT PART OF A LARGER DEVELOPMENT), A NOTICE OF INTENT (NOI) MUST BE FILED WITH THE STATE WATER RESOURCE CONTROL BOARD (SWRCB) TO OBTAIN COVERAGE UNDER THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES (CONSTRUCTION GENERAL PERMIT) PRIOR TO COMMENCING WORK. THE APPLICANT IS RESPONSIBLE FOR FILING A NOTICE OF INTENT AND FOR DEVELOPING A STORM WATER POLLUTION PREVENTION PLAN (SWPPP). PRIOR TO ISSUANCE OF A BUILDING PERMIT, THE APPLICANT SHALL PROVIDE THE CITY WITH PROOF OF COVERAGE UNDER THE STATE CONSTRUCTION GENERAL PERMIT, INCLUDING A COPY OF THE LETTER OF RECEIPT AND WASTE DISCHARGER IDENTIFICATION (WDI) NUMBER ISSUED BY THE SWRCB THAT ACKNOWLEDGES THE PROPERTY OWNER'S SUBMITTAL OF A COMPLETE NOTICE OF INTENT (NOI) PACKAGE. FOR MORE INFORMATION ON THE CONSTRUCTION GENERAL PERMIT, PLEASE SEE THE STATE WATER BOARD WEBSITE: [HTTP://WWW.WATERBOARDS.CA.GOV/WATER\\_ISSUES/PROGRAMS/STORMWATER/CONSTRUCTION.SHTM](http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtm)



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**BOWMAN & WILLIAMS**  
CONSULTING CIVIL ENGINEERS &  
LAND SURVEYORS  
3949 RESEARCH PARK COURT, SUITE 100  
SANTA CRUZ, CA 95073  
(831) 426-3560

**PRELIMINARY DRAINAGE PLAN**  
PROPOSED MULTI USE DEVELOPMENT  
190 WEST CLIFF DRIVE  
SANTA CRUZ, CALIFORNIA

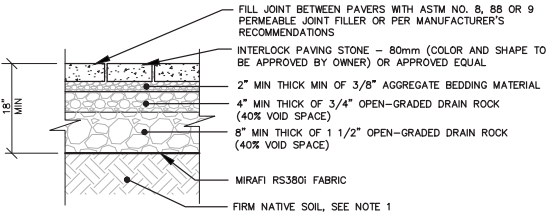
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**PERVIOUS/IMPERVIOUS SURFACES**

AREA DESCRIPTION	PRE DEVELOPMENT, SF	POST DEVELOPMENT, SF
OTHER PERVIOUS/LANDSCAPING	20,257	13,787
PERVIOUS PAVEMENT	0	11,722
IMPERVIOUS	84,572	79,320
TOTAL	104,829	104,829
TOTAL (OFFSITE)	14,710	14,710

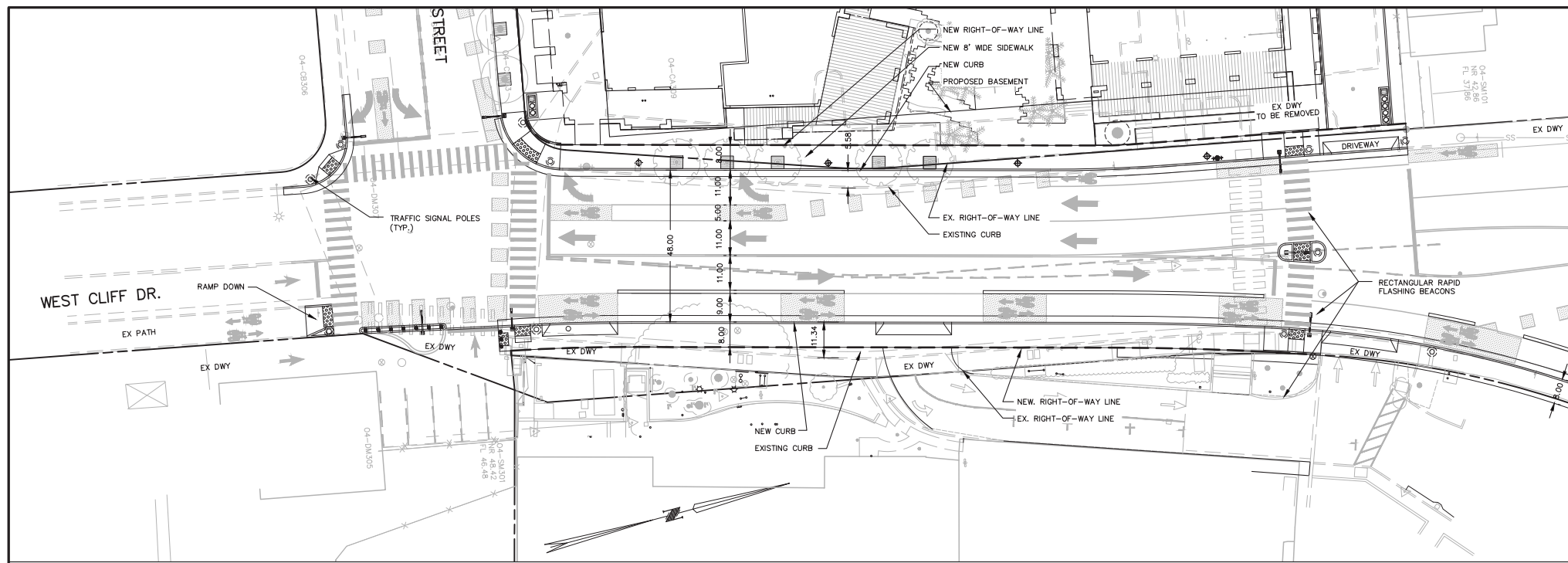


**PERMEABLE PAVER SECTION**  
SCALE: 3/4" = 1'-0"

**STORM DRAIN INSPECTION & MAINTENANCE NOTES:**

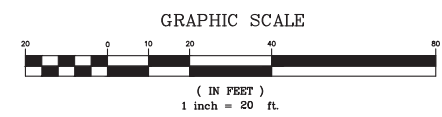
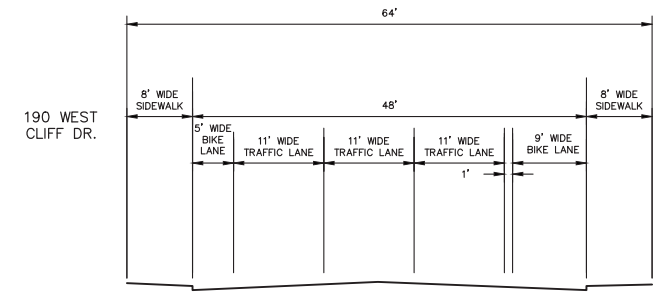
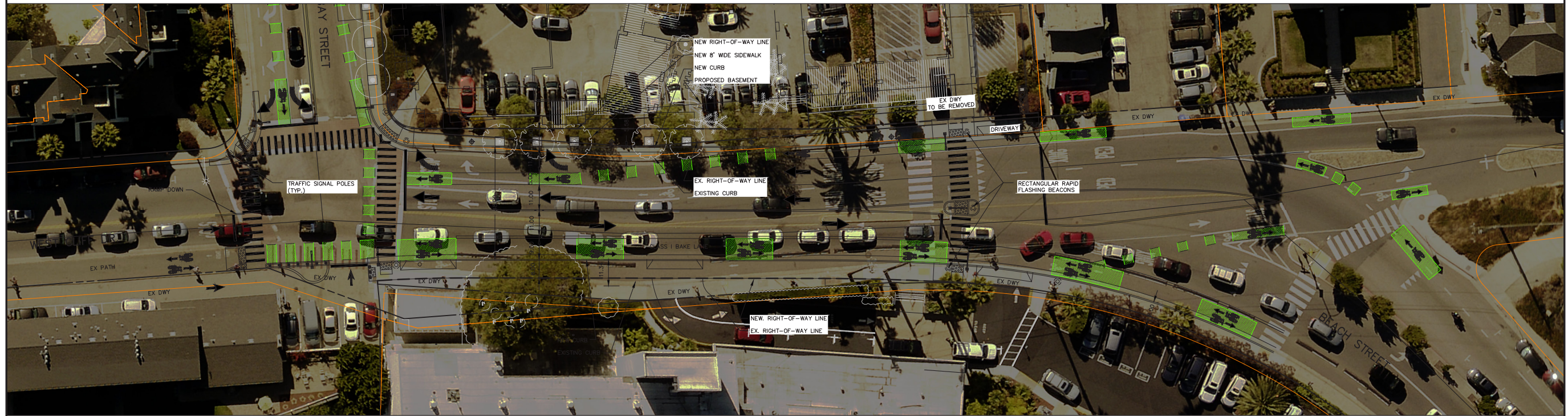
- AT THE PROJECT COMPLETION, THE CONTRACTOR SHALL ENSURE THAT ALL INLET CATCH BASINS AND DRAINAGE STRUCTURES ARE CLEAN AND FREE OF DIRT AND DEBRIS.
- EVERY YEAR, THE OWNERS SHALL INSPECT ALL DRAINAGE STRUCTURES AT THE PROJECT SITE. AT MINIMUM, INSPECTIONS WILL BE CONDUCTED AS FOLLOWS:
  - ONCE BEFORE WINTER SEASON (SEPTEMBER)
  - ONCE AFTER THE WINTER SEASON (MAY)
  - VISUALLY INSPECT FOR ANY SEDIMENT AND DEBRIS TRAPPED IN THE STRUCTURES.
  - INSPECT AND CLEAR THE ORIFICE BEFORE AND AFTER EVERY WINTER SEASON.
  - REMOVE COLLECTED DEBRIS AND SEDIMENT.
  - REPAIR DAMAGED PERVIOUS PAVEMENT.
- THE POROUS PAVEMENT SHALL BE VACUUM SWEEPED ONCE EVERY YEAR.
- THE OWNER(S) TO RECORD ALL INSPECTIONS, MAINTENANCE AND REPAIRS PERFORMED, ANNUALLY.
- THE OWNER SHALL SUBMIT A MAINTENANCE AGREEMENT, SIGNED AND NOTARIZED BY THE PROPERTY OWNER, FOR ALL STRUCTURAL BEST MANAGEMENT PRACTICES (BMPs), INCLUDING BUBBLERS, OIL AND SEDIMENT TRAPS AND STORM WATER DETENTION CONTROL STRUCTURE) BY DECEMBER 1ST OF EACH YEAR. A COPY OF THE MAINTENANCE AGREEMENT IS ATTACHED IN THE STORMWATER MANAGEMENT REPORT.





**ITEMS TO BE ADDRESSED AT THE BUILDING PERMIT PHASE:**

1. DRIVEWAY (TYPE C) - INSTALL A TYPE "C" DRIVEWAY APPROACHES WITH A MINIMUM WIDTH OF 16 FEET, A MAXIMUM SLOPE OF 12 PERCENT, AND A FOUR-FOOT ADA ACCESS WAY AROUND THE BACK OF THE APPROACH PER CITY STANDARD DETAIL 9 OF 20 ON THE PLANS.
2. DRIVEWAY REMOVAL - REMOVE EXISTING DRIVEWAY APPROACHES AND REPLACE WITH CURB, GUTTER, AND SIDEWALK PER CITY STANDARD DETAIL 8 OF 20 ON THE PLANS.
3. GREASE STORAGE - FOOD SERVICE FACILITIES ARE REQUIRED TO STORE THEIR GREASE IN PROPER STORAGE CONTAINERS. GREASE STORAGE CONTAINERS SHALL NOT BE LOCATED INSIDE OF THE TRASH ENCLOSURE ALONGSIDE REFUSE AND RECYCLING CONTAINERS. PROVIDE A SEPARATE PARTITIONED ROOM INSIDE THE ENCLOSURE, AN ATTACHED EXTERIOR ROOM, OR A SEPARATE GREASE ROOM INSIDE OF THE RESTAURANT. SHOW THE PROPOSED GREASE STORAGE LOCATION ON THE PLANS.
4. GREASE TRAP - PRIOR TO BEGINNING ANY NEW FOOD SERVICE OPERATIONS, COMPLETE AND SUBMIT A WASTEWATER DISCHARGE QUESTIONNAIRE TO THE CITY OF SANTA CRUZ WASTEWATER TREATMENT FACILITY AT 110 CALIFORNIA STREET, SANTA CRUZ, CA 95060. THE QUESTIONNAIRE REQUESTS INFORMATION ABOUT THE PROPOSED FOOD SERVICE FACILITY, INCLUDING THE HOURS OF OPERATION, SEATING CAPACITY, AND THE TYPES OF EQUIPMENT TO BE USED. THE INFORMATION WILL BE USED TO DETERMINE THE SIZE OF THE GREASE INTERCEPTOR OR TRAP THAT MUST BE INSTALLED.
5. INSPECTION FEE - AN INSPECTION FEE EQUAL OF THE ESTIMATED COST TO CONSTRUCT THE OFF-SITE IMPROVEMENTS TO BE INSPECTED SHALL BE PAID TO THE PUBLIC WORKS DEPARTMENT PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
6. SEWER CLEANOUT - INDICATE LOCATION OF THE SANITARY SEWER LATERAL ON THE PLANS. LATERAL SHALL BE SDR 26 FROM PROPERTY LINE TO THE MAIN PER CITY STANDARD LATERAL AND TRENCH DETAILS. PROVIDE SEWER CLEANOUT CAPPED WITH A POPPER IN THE SIDEWALK FOR SANITARY SEWER LATERAL PER CITY STANDARD DETAIL 20 OF 20.
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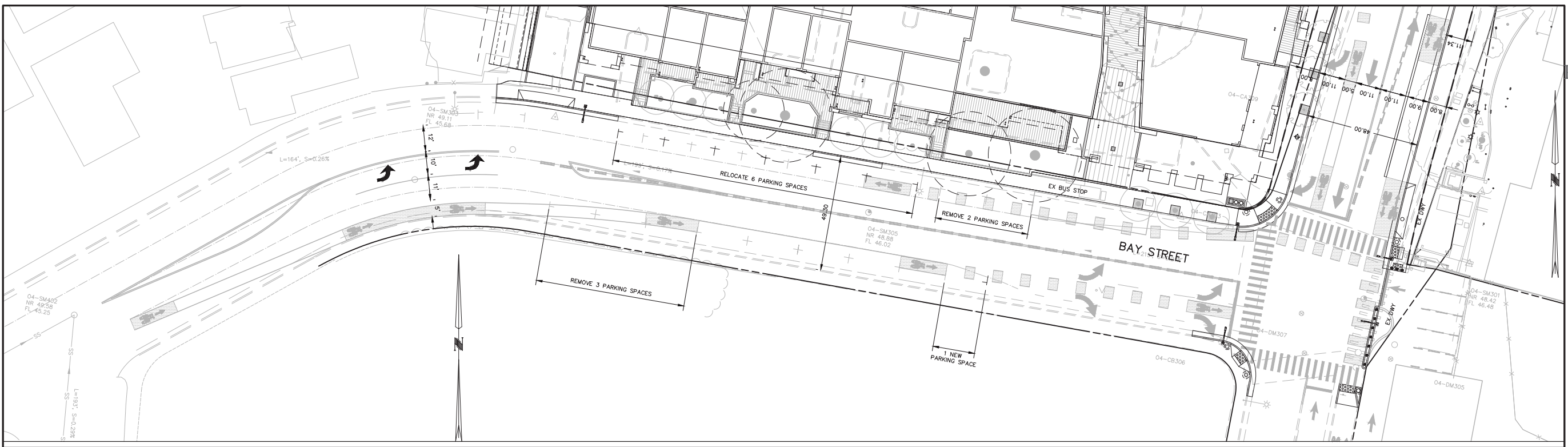
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<b>BOWMAN &amp; WILLIAMS</b> CONSULTING CIVIL ENGINEERS & LAND SURVEYORS 3949 RESEARCH PARK COURT, SUITE 100 SPOKANE, WA 99013 (831) 426-3560		<b>WEST CLIFF DR. REALIGNMENT PLAN</b> <b>SIGNALIZED INTERSECTION</b>
SCALE 1" = 20'		PROPOSED MULTI USE DEVELOPMENT 190 WEST CLIFF DRIVE SANTA CRUZ, CALIFORNIA
DATE MAY 15, 2018	DRAWN JFR	JOB NO. 26202
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**CIVIL**  
Preliminary  
Realignment  
Plan  
-Signalized  
Intersection



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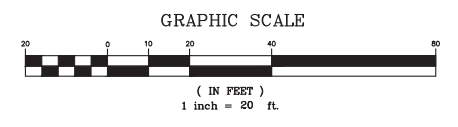


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SANTA CRUZ, CA 95073  
(831) 426-3560

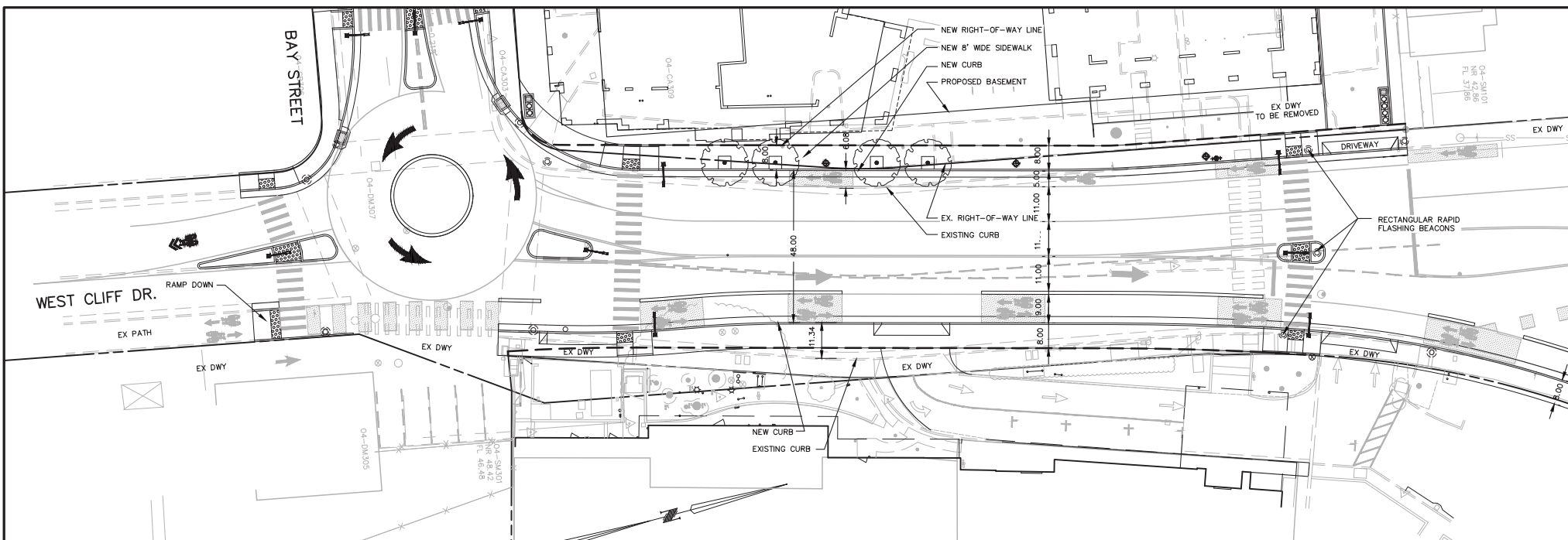
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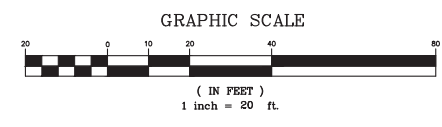
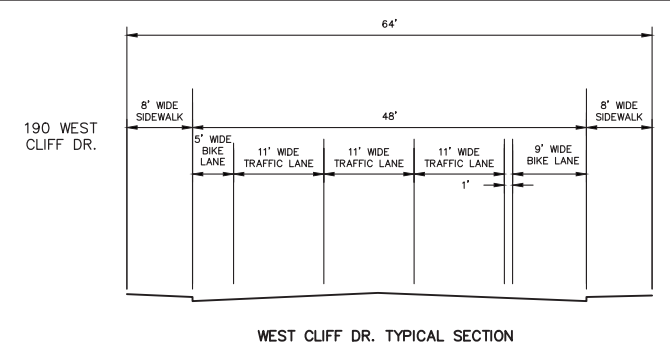
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**ITEMS TO BE ADDRESSED AT THE BUILDING PERMIT PHASE:**

1. DRIVEWAY (TYPE C) - INSTALL A TYPE "C" DRIVEWAY APPROACHES WITH A MINIMUM WIDTH OF 16 FEET, A MAXIMUM SLOPE OF 12 PERCENT, AND A FOUR-FOOT ADA ACCESS WAY AROUND THE BACK OF THE APPROACH PER CITY STANDARD DETAIL 9 OF 20 ON THE PLANS.
2. DRIVEWAY REMOVAL - REMOVE EXISTING DRIVEWAY APPROACHES AND REPLACE WITH CURB, BUTTER, AND SIDEWALK PER CITY STANDARD DETAIL 8 OF 20 ON THE PLANS.
3. GREASE STORAGE - FOOD SERVICE FACILITIES ARE REQUIRED TO STORE THEIR GREASE IN PROPER STORAGE CONTAINERS. GREASE STORAGE CONTAINERS SHALL NOT BE LOCATED INSIDE OF THE TRASH ENCLOSURE ALONGSIDE REFUSE AND RECYCLING CONTAINERS. PROVIDE A SEPARATE PARTITIONED ROOM INSIDE THE ENCLOSURE, AN ATTACHED EXTERIOR ROOM, OR A SEPARATE GREASE ROOM INSIDE OF THE RESTAURANT. SHOW THE PROPOSED GREASE STORAGE LOCATION ON THE PLANS.
4. GREASE TRAP - PRIOR TO BEGINNING ANY NEW FOOD SERVICE OPERATIONS, COMPLETE AND SUBMIT A WASTEWATER DISCHARGE QUESTIONNAIRE TO THE CITY OF SANTA CRUZ WASTEWATER TREATMENT FACILITY AT 110 CALIFORNIA STREET, SANTA CRUZ, CA 95060. THE QUESTIONNAIRE REQUESTS INFORMATION ABOUT THE PROPOSED FOOD SERVICE FACILITY, INCLUDING THE HOURS OF OPERATION, SEATING CAPACITY, AND THE TYPES OF EQUIPMENT TO BE USED. THE INFORMATION WILL BE USED TO DETERMINE THE SIZE OF THE GREASE INTERCEPTOR OR TRAP THAT MUST BE INSTALLED.
5. INSPECTION FEE - AN INSPECTION FEE EQUAL OF THE ESTIMATED COST TO CONSTRUCT THE OFF-SITE IMPROVEMENTS TO BE INSPECTED SHALL BE PAID TO THE PUBLIC WORKS DEPARTMENT PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
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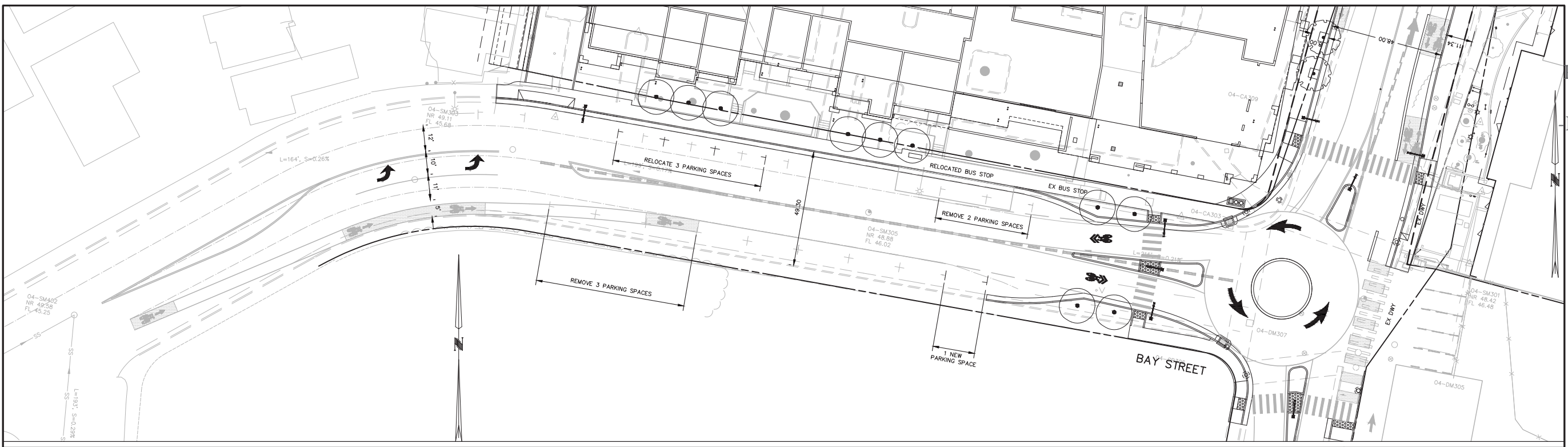
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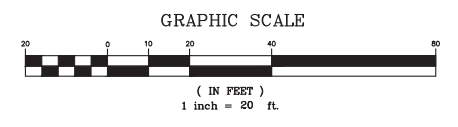


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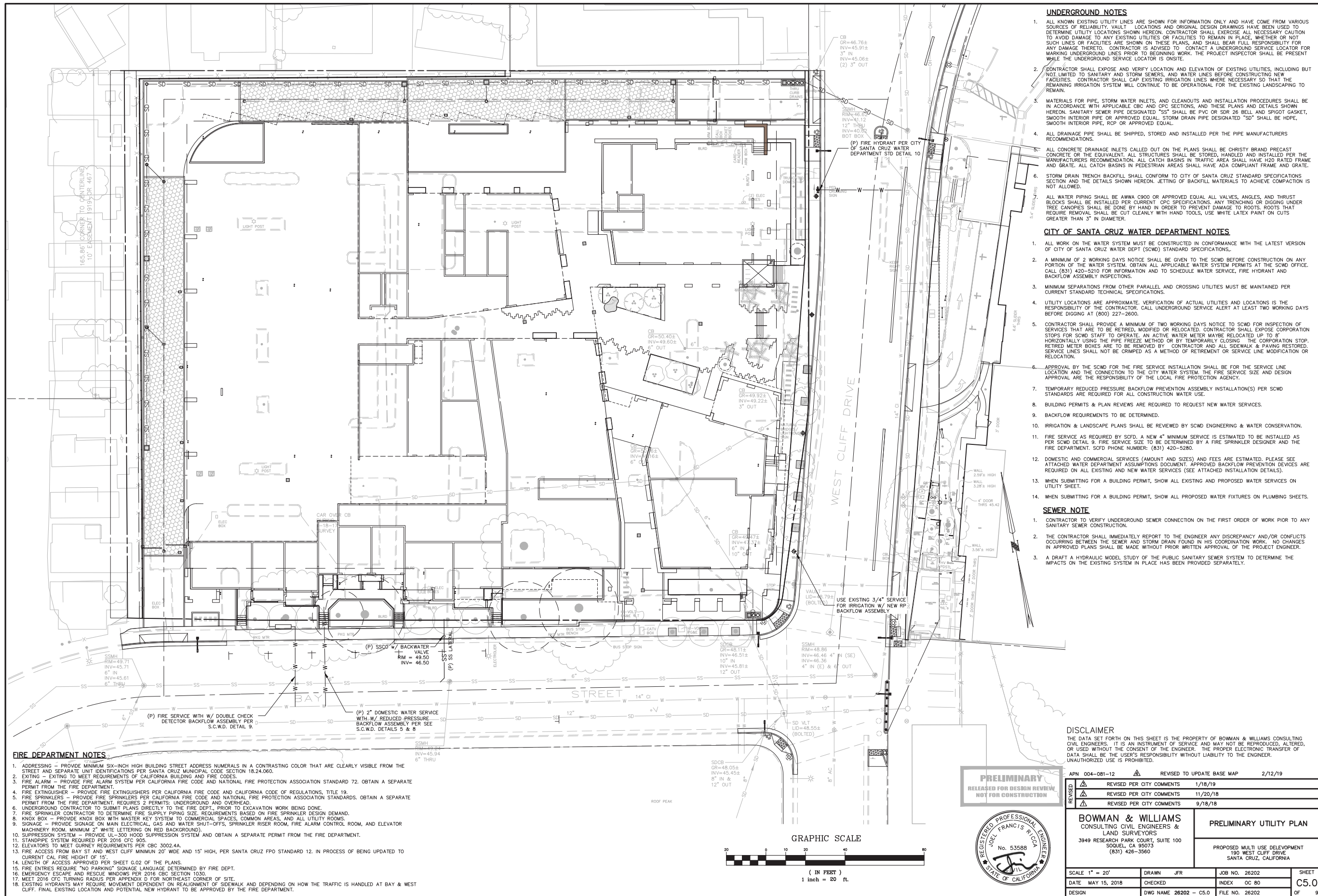
**WEST CLIFF DR. REALIGNMENT  
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PROPOSED MULTI USE DEVELOPMENT  
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**UNDERGROUND NOTES**

- ALL KNOWN EXISTING UTILITY LINES ARE SHOWN FOR INFORMATION ONLY AND HAVE COME FROM VARIOUS SOURCES OF RELIABILITY. VAULT LOCATIONS AND ORIGINAL DESIGN DRAWINGS HAVE BEEN USED TO DETERMINE UTILITY LOCATIONS SHOWN HEREON. CONTRACTOR SHALL EXERCISE ALL NECESSARY CAUTION TO AVOID DAMAGE TO ANY EXISTING UTILITIES OR FACILITIES TO REMAIN IN PLACE, WHETHER OR NOT SUCH LINES OR FACILITIES ARE SHOWN ON THESE PLANS, AND SHALL BEAR FULL RESPONSIBILITY FOR ANY DAMAGE THERETO. CONTRACTOR IS ADVISED TO CONTACT AN UNDERGROUND SERVICE LOCATOR FOR MARKING UNDERGROUND LINES PRIOR TO BEGINNING WORK. THE PROJECT INSPECTOR SHALL BE PRESENT WHILE THE UNDERGROUND SERVICE LOCATOR IS ON SITE.
- CONTRACTOR SHALL EXPOSE AND VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES, INCLUDING BUT NOT LIMITED TO SANITARY AND STORM SEWERS, AND WATER LINES BEFORE CONSTRUCTING NEW FACILITIES. CONTRACTOR SHALL CAP EXISTING IRRIGATION LINES WHERE NECESSARY SO THAT THE REMAINING IRRIGATION SYSTEM WILL CONTINUE TO BE OPERATIONAL FOR THE EXISTING LANDSCAPING TO REMAIN.
- MATERIALS FOR PIPE, STORM WATER INLETS, AND CLEANOUTS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH APPLICABLE CBC AND CPC SECTIONS, AND THESE PLANS AND DETAILS SHOWN HEREON. SANITARY SEWER PIPE DESIGNATED "SS" SHALL BE PVC OR SDR 26 BELL AND SPIGOT GASKET, SMOOTH INTERIOR PIPE OR APPROVED EQUAL. STORM DRAIN PIPE DESIGNATED "SD" SHALL BE HOPE, SMOOTH INTERIOR PIPE, RCP OR APPROVED EQUAL.
- ALL DRAINAGE PIPE SHALL BE SHIPPED, STORED AND INSTALLED PER THE PIPE MANUFACTURERS RECOMMENDATIONS.
- ALL CONCRETE DRAINAGE INLETS CALLED OUT ON THE PLANS SHALL BE CHRISTY BRAND PRECAST CONCRETE OR THE EQUIVALENT. ALL STRUCTURES SHALL BE STORED, HANDLED AND INSTALLED PER THE MANUFACTURERS RECOMMENDATION. ALL CATCH BASINS IN TRAFFIC AREA SHALL HAVE H20 RATED FRAME AND GRATE. ALL CATCH BASINS IN PEDESTRIAN AREAS SHALL HAVE ADA COMPLIANT FRAME AND GRATE.
- STORM DRAIN TRENCH BACKFILL SHALL CONFORM TO CITY OF SANTA CRUZ STANDARD SPECIFICATIONS SECTION AND THE DETAILS SHOWN HEREON. JETTING OF BACKFILL MATERIALS TO ACHIEVE COMPACTION IS NOT ALLOWED.
- ALL WATER PIPING SHALL BE AWWA C900 OR APPROVED EQUAL ALL VALVES, ANGLES, AND THRUST BLOCKS SHALL BE INSTALLED PER CURRENT CPC SPECIFICATIONS. ANY TRENCHING OR DIGGING UNDER TREE CANOPIES SHALL BE DONE BY HAND IN ORDER TO PREVENT DAMAGE TO ROOTS. ROOTS THAT REQUIRE REMOVAL SHALL BE CUT CLEANLY WITH HAND TOOLS, USE WHITE LATEX PAINT ON CUTS GREATER THAN 3" IN DIAMETER.

**CITY OF SANTA CRUZ WATER DEPARTMENT NOTES**

- ALL WORK ON THE WATER SYSTEM MUST BE CONSTRUCTED IN CONFORMANCE WITH THE LATEST VERSION OF CITY OF SANTA CRUZ WATER DEPT (SCWD) STANDARD SPECIFICATIONS.
- A MINIMUM OF 2 WORKING DAYS NOTICE SHALL BE GIVEN TO THE SCWD BEFORE CONSTRUCTION ON ANY PORTION OF THE WATER SYSTEM. OBTAIN ALL APPLICABLE WATER SYSTEM PERMITS AT THE SCWD OFFICE. CALL (831) 420-5210 FOR INFORMATION AND TO SCHEDULE WATER SERVICE, FIRE HYDRANT AND BACKFLOW ASSEMBLY INSPECTIONS.
- MINIMUM SEPARATIONS FROM OTHER PARALLEL AND CROSSING UTILITIES MUST BE MAINTAINED PER CURRENT STANDARD TECHNICAL SPECIFICATIONS.
- UTILITY LOCATIONS ARE APPROXIMATE. VERIFICATION OF ACTUAL UTILITIES AND LOCATIONS IS THE RESPONSIBILITY OF THE CONTRACTOR. CALL UNDERGROUND SERVICE ALERT AT LEAST TWO WORKING DAYS BEFORE DIGGING AT (800) 227-2600.
- CONTRACTOR SHALL PROVIDE A MINIMUM OF TWO WORKING DAYS NOTICE TO SCWD FOR INSPECTION OF SERVICES THAT ARE TO BE RETIRED, MODIFIED OR RELOCATED. CONTRACTOR SHALL EXPOSE CORPORATION STOPS FOR SCWD STAFF TO OPERATE. AN ACTIVE WATER METER MAYBE RELOCATED UP TO 8' HORIZONTALLY USING THE PIPE FREEZE METHOD OR BY TEMPORARILY CLOSING THE CORPORATION STOP. RETIRED METER BOXES ARE TO BE REMOVED BY CONTRACTOR AND ALL SIDEWALK & PAVING RESTORED. SERVICE LINES SHALL NOT BE CRIMPED AS A METHOD OF RETIREMENT OR SERVICE LINE MODIFICATION OR RELOCATION.
- APPROVAL BY THE SCWD FOR THE FIRE SERVICE INSTALLATION SHALL BE FOR THE SERVICE LINE LOCATION AND THE CONNECTION TO THE CITY WATER SYSTEM. THE FIRE SERVICE SIZE AND DESIGN APPROVAL ARE THE RESPONSIBILITY OF THE LOCAL FIRE PROTECTION AGENCY.
- TEMPORARY REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY INSTALLATION(S) PER SCWD STANDARDS ARE REQUIRED FOR ALL CONSTRUCTION WATER USE.
- BUILDING PERMITS & PLAN REVIEWS ARE REQUIRED TO REQUEST NEW WATER SERVICES.
- BACKFLOW REQUIREMENTS TO BE DETERMINED.
- IRRIGATION & LANDSCAPE PLANS SHALL BE REVIEWED BY SCWD ENGINEERING & WATER CONSERVATION.
- FIRE SERVICE AS REQUIRED BY SCWD. A NEW 4" MINIMUM SERVICE IS ESTIMATED TO BE INSTALLED AS PER SCWD DETAIL 9. FIRE SERVICE SIZE TO BE DETERMINED BY A FIRE SPRINKLER DESIGNER AND THE FIRE DEPARTMENT. SCWD PHONE NUMBER: (831) 420-5280.
- DOMESTIC AND COMMERCIAL SERVICES (AMOUNT AND SIZES) AND FEES ARE ESTIMATED. PLEASE SEE ATTACHED WATER DEPARTMENT ASSUMPTIONS DOCUMENT. APPROVED BACKFLOW PREVENTION DEVICES ARE REQUIRED ON ALL EXISTING AND NEW WATER SERVICES (SEE ATTACHED INSTALLATION DETAILS).
- WHEN SUBMITTING FOR A BUILDING PERMIT, SHOW ALL EXISTING AND PROPOSED WATER SERVICES ON UTILITY SHEET.
- WHEN SUBMITTING FOR A BUILDING PERMIT, SHOW ALL PROPOSED WATER FIXTURES ON PLUMBING SHEETS.

**SEWER NOTE**

- CONTRACTOR TO VERIFY UNDERGROUND SEWER CONNECTION ON THE FIRST ORDER OF WORK PRIOR TO ANY SANITARY SEWER CONSTRUCTION.
- THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY DISCREPANCY AND/OR CONFLICTS OCCURRING BETWEEN THE SEWER AND STORM DRAIN FOUND IN HIS COORDINATION WORK. NO CHANGES IN APPROVED PLANS SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE PROJECT ENGINEER.
- A DRAFT A HYDRAULIC MODEL STUDY OF THE PUBLIC SANITARY SEWER SYSTEM TO DETERMINE THE IMPACTS ON THE EXISTING SYSTEM IN PLACE HAS BEEN PROVIDED SEPARATELY.

**FIRE DEPARTMENT NOTES**

- ADDRESSING - PROVIDE MINIMUM SIX-INCH HIGH BUILDING STREET ADDRESS NUMERALS IN A CONTRASTING COLOR THAT ARE CLEARLY VISIBLE FROM THE STREET AND SEPARATE UNIT IDENTIFICATIONS PER SANTA CRUZ MUNICIPAL CODE SECTION 18.24.060.
- EXITING - EXITING TO MEET REQUIREMENTS OF CALIFORNIA BUILDING AND FIRE CODES.
- FIRE ALARM - PROVIDE FIRE ALARM SYSTEM PER CALIFORNIA FIRE CODE AND NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 72. OBTAIN A SEPARATE PERMIT FROM THE FIRE DEPARTMENT.
- FIRE EXTINGUISHER - PROVIDE FIRE EXTINGUISHERS PER CALIFORNIA FIRE CODE AND CALIFORNIA CODE OF REGULATIONS, TITLE 19.
- FIRE SPRINKLERS - PROVIDE FIRE SPRINKLERS PER CALIFORNIA FIRE CODE AND NATIONAL FIRE PROTECTION ASSOCIATION STANDARDS. OBTAIN A SEPARATE PERMIT FROM THE FIRE DEPARTMENT. REQUIRES 2 PERMITS: UNDERGROUND AND OVERHEAD.
- UNDERGROUND CONTRACTOR TO SUBMIT PLANS DIRECTLY TO THE FIRE DEPT., PRIOR TO EXCAVATION WORK BEING DONE.
- FIRE SPRINKLER CONTRACTOR TO DETERMINE FIRE SUPPLY PIPING SIZE REQUIREMENTS BASED ON FIRE SPRINKLER DESIGN DEMAND.
- KNOX BOX - PROVIDE KNOX BOX WITH MASTER KEY SYSTEM TO COMMERCIAL SPACES, COMMON AREAS, AND ALL UTILITY ROOMS.
- SIGNAGE - PROVIDE SIGNAGE ON MAIN ELECTRICAL, GAS AND WATER SHUT-OFFS, SPRINKLER RISER ROOM, FIRE ALARM CONTROL ROOM, AND ELEVATOR MACHINERY ROOM. MINIMUM 2" WHITE LETTERING ON RED BACKGROUND.
- SUPPRESSION SYSTEM - PROVIDE UL-300 HOOD SUPPRESSION SYSTEM AND OBTAIN A SEPARATE PERMIT FROM THE FIRE DEPARTMENT.
- STANDPIPE SYSTEM REQUIRED PER 2016 CFC 905.
- ELEVATORS TO MEET GURNEY REQUIREMENTS PER CBC 3002.44.
- LENGTH OF ACCESS APPROVED PER SHEET C.02 OF THE PLANS.
- FIRE ENTRIES REQUIRE "NO PARKING" SIGNAGE LANGUAGE DETERMINED BY FIRE DEPT.
- EMERGENCY ESCAPE AND RESCUE WINDOWS PER 2016 CBC SECTION 1030.
- MEET 2016 CPC TURNING RADIUS PER APPENDIX D FOR NORTHEAST CORNER OF SITE.
- EXISTING HYDRANTS MAY REQUIRE MOVEMENT DEPENDENT ON REALIGNMENT OF SIDEWALK AND DEPENDING ON HOW THE TRAFFIC IS HANDLED AT BAY & WEST CLIFF. FINAL EXISTING LOCATION AND POTENTIAL NEW HYDRANT TO BE APPROVED BY THE FIRE DEPARTMENT.

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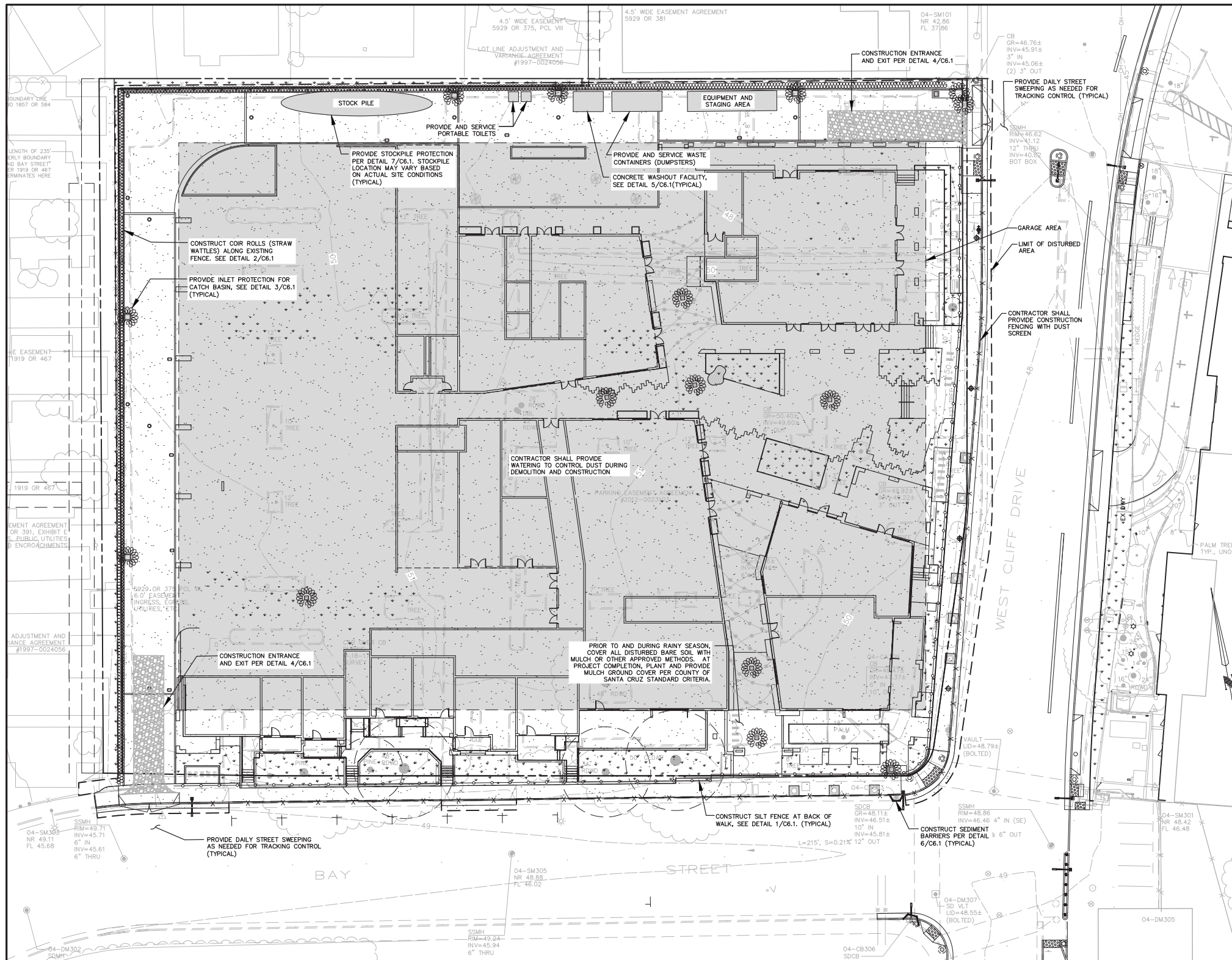
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TEMPORARY EROSION CONTROL MEASURES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING SITE EROSION CONTROL AT ALL TIMES.
2. EROSION IS TO BE CONTROLLED AT ALL TIMES ALTHOUGH SPECIFIC MEASURES SHOWN ARE TO BE IMPLEMENTED AT A MINIMUM BETWEEN OCTOBER 15TH AND APRIL 15TH, BETWEEN OCTOBER 15TH AND APRIL 15TH HAY BALES, FILTER BERMS, SILT FENCES OR OTHER MEANS SHALL BE EMPLOYED TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING ANY WATERCOURSE.
3. RUNOFF FROM THE CONSTRUCTION SITE MUST NOT BE ALLOWED TO FLOW OVER ANY FILL SLOPES.
4. RUNOFF SHALL BE DIRECTED TOWARDS THE NEAREST CATCH BASIN WITH TEMPORARY EARTHEN BERM.
5. SILT BARRIERS SHALL BE CONSTRUCTED ALONG THE BOTTOM OF ALL GRADED SLOPES.
6. CATCH BASINS SHALL BE ENCLOSED BY A SILT BARRIER ON ALL FOUR SIDES. USE GRAVEL FILLED SANDBAGS OR STRAW BALE INLET BARRIER.
7. ON ALL FINISH GRADED SLOPES, ON- AND OFF-SITE, EXPOSED DURING CONSTRUCTION ACTIVITIES, IF NOT PERMANENTLY LANDSCAPED PER PLAN, SHALL BE PROTECTED BY EROSION CONTROL BLANKET OR PLASTIC SHEETING.
8. UNNECESSARY GRADING AND DISTURBING OF SOIL SHALL BE AVOIDED.
9. DURING CONSTRUCTION, NO TURBID WATER SHALL BE PERMITTED TO ENTER THE CHANNEL OR STORM DRAIN SYSTEM. USE OF SILT AND GREASE TRAPS, FILTER BERMS, HAY BALES OR SILT FENCES SHALL BE USED TO PREVENT SUCH DISCHARGE.
10. ALL EXCAVATED MATERIAL NOT SUITABLE FOR FILL OR REUSE SHALL BE REMOVED TO AN APPROVED DISPOSAL SITE OR DISPOSED OF ON-SITE IN A MANNER THAT WILL NOT CAUSE EROSION.
11. ANY MATERIAL STOCKPILED ON-SITE SHALL BE COVERED WITH PLASTIC, ESPECIALLY DURING THE WINTER MONTHS OR DURING PERIODS OF RAIN.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ADDITIONAL MEASURES, NECESSARY TO CONTROL SITE EROSION AND PREVENT SEDIMENT TRANSPORT OFF-SITE ARE IMPLEMENTED.

GENERAL OPERATION NOTES:

1. PERIMETER SITE FENCING SHALL BE INSTALLED SO AS NOT TO OBSTRUCT DRAINAGE/RUNOFF PATH OF TRAVEL.
2. STOCKPILE MANAGEMENT SHALL BE IMPLEMENTED YEAR ROUND.
  - A. PROVIDE A SEDIMENT BARRIER AROUND STOCKPILES FOR REGULAR USAGE DURING THE DRY SEASON. IMPLEMENT WIND EROSION CONTROL PRACTICES SUCH AS WATERING AS NECESSARY TO KEEP DUST LEVEL DOWN.
  - B. STOCKPILES NOT TO BE USED WITHIN 24 HOURS SHALL BE PROTECTED AND COVERED IMMEDIATELY WITH 10 MIL PVC PLASTIC SHEETING.
  - C. ALL ACTIVE STOCKPILES SHALL BE COVERED WITH 10 MIL PVC PLASTIC SHEETING PRIOR TO THE ONSET OF PRECIPITATION.
  - D. DURING WINTER SEASON, PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING SEDIMENT BARRIERS AND PLASTIC SHEETING.
3. IMMEDIATELY REVEGETATE OR COVER DISTURBED AREAS. APPLY WEED-FREE MULCH OR REVEGETATE ALL SOIL EXPOSED BEFORE OCTOBER 15TH OF EACH YEAR.
4. DISCONTINUE THE APPLICATION OF ANY ERODIBLE LANDSCAPE MATERIAL WITHIN 2 DAYS BEFORE A FORECASTED RAIN EVENT OR DURING PERIODS OF PRECIPITATION.
5. GRAVEL BAG & COIR/FIBER ROLL PRODUCTS MAY BE SUBSTITUTED WITH OTHER APPROVED SEDIMENT BARRIER/CONTROL MANUFACTURED DEVICES.
6. DO NOT WASH DOWN PAVEMENT OR SURFACES WHERE SILT HAS BEEN DEPOSITED OR MATERIALS HAVE SPILLED. USE DRY CLEAN METHODS.
7. AVOID CONTAMINATING CLEAN RUN-OFF FROM AREAS ADJACENT TO YOUR SITE BY USING BERMS AND/OR TEMPORARY OR PERMANENT DRAINAGE DITCHES TO DIVERT WATER FLOW AROUND THE SITE.
8. PLACE TRASH CANS AROUND THE SITE TO REDUCE POTENTIAL LITTER. DISPOSE OF NON-HAZARDOUS CONSTRUCTION WASTE IN COVERED DUMPSTERS OR RECYCLING RECEPTACLES. RECYCLE LEFTOVER MATERIALS WHENEVER POSSIBLE.
9. DISPOSE OF ALL WASTE PROPERLY. MATERIALS THAT CAN NOT BE REUSED OR RECYCLED MUST BE TAKEN TO AN APPROPRIATE LANDFILL OR DISPOSED OF AS HAZARDOUS WASTE, AS APPROPRIATE.
10. TRAIN YOUR EMPLOYEES AND INFORM CONTRACTORS AND SUBCONTRACTORS ABOUT STORM WATER MANAGEMENT REQUIREMENTS AND THEIR RESPONSIBILITIES FOR COMPLIANCE.

INSPECTION & MAINTENANCE NOTES:

1. THE CONTRACTOR SHALL PERFORM AND MAKE A WRITTEN RECORD OF ALL SITE INSPECTIONS TO ENSURE ADEQUATE DEPLOYMENT OF BMP'S.
2. DURING INSPECTIONS, IDENTIFY AND RECORD BMP'S THAT NEED MAINTENANCE TO OPERATE EFFECTIVELY AND THAT HAVE FAILED, OR THAT COULD FAIL TO OPERATE AS INTENDED.
3. REPAIR TO BMP'S SHALL BEGIN AS SOON AS POSSIBLE AND THE CHANGES COMPLETED AS SOON AS POSSIBLE.
4. CONDUCT INSPECTIONS DURING BUSINESS HOURS ONLY.
5. AT A MINIMUM, INSPECTIONS WILL BE CONDUCTED AS FOLLOWS:
  - WEEKLY
  - PRE STORM EVENT
  - DURING STORM EVENT
  - POST STORM EVENT
6. VISUALLY INSPECT FOR ANY SPILLS, LEAKS, STORMWATER RUN-OFF, EROSION, SHEEN ON THE SURFACE, TURBIDITY, OODRS, AND SOURCE OF ANY OBSERVED POLLUTANTS.
7. AT THE END OF EACH WORK DAY, 4 VISUAL INSPECTIONS SHALL BE CONDUCTED:
  - A. COVER ALL TRASH AND TRASH CONTAINERS.
  - B. COVER CONCRETE WASHOUT FACILITY
  - C. COVER ALL OTHER CHEMICAL/WASTE CONTAINERS
  - D. LOCK ACCESS GATE TO PREVENT UNAUTHORIZED ACCESS

RAIN EVENT MEASURES

1. 48 HOURS PRIOR TO A PREDICTED RAIN EVENT, IN ADDITION TO THE INSTALLED BMP'S, THE CONTRACTOR SHALL COVER ANY DISTURBED BARE SOILS WITH MULCH OR EROSION CONTROL BLANKETS.
2. A PREDICTED RAIN EVENT IS A FORECAST HAVING A 50% OR GREATER PROBABILITY OF PRODUCING PRECIPITATION IN THE PROJECT AREA PER THE NATIONAL WEATHER SERVICE (NOAA) AT WWW.NOAA.GOV.
3. COVER ALL TRASH CONTAINERS, CONCRETE WASHOUT FACILITY, AND OTHER CHEMICAL/WASTE CONTAINERS FROM PRECIPITATION.

DISCLAIMER

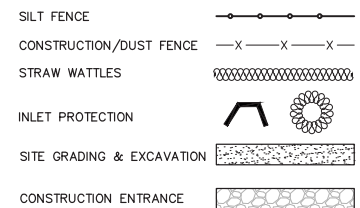
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APN 004-081-12	REVISED TO UPDATE BASE MAP	2/12/19
REVISION	REVISION	DATE
1	REVISED PER CITY COMMENTS	1/18/19
2	REVISED PER CITY COMMENTS	11/20/18
3	REVISED PER CITY COMMENTS	9/18/18
<b>BOWMAN &amp; WILLIAMS</b> CONSULTING CIVIL ENGINEERS & LAND SURVEYORS 3949 RESEARCH PARK COURT, SUITE 100 SANTA CRUZ, CA 95073 (831) 426-3560		<b>PRELIMINARY EROSION CONTROL PLAN</b>
SCALE 1" = 20'		SHEET
DATE MAY 15, 2018	CHECKED	INDEX OC 80
DESIGN	DWG NAME 26202 C6.0	FILE NO. 26202
DRAWN JFR		JOB NO. 26202
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PRIOR TO OBTAINING A BUILDING PERMIT:

1. CONSTRUCTION DE-WATERING OPERATIONS: THERE ARE SEVERAL OPTIONS FOR CONSTRUCTION DE-WATERING DISCHARGES THAT CAN'T BE MANAGED ON SITE. ONE POTENTIAL OPTION IS DISCHARGE UNDER A PERMIT FROM THE STATE WATER BOARD/REGIONAL WATER QUALITY CONTROL BOARD (E.G. LOW-THREAT DISCHARGE PERMITS, HIGHLY TREATED GROUNDWATER DISCHARGE PERMIT, ETC.). PLEASE CONTACT THE CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD FOR MORE INFORMATION AT 805-549-3147 OR REFER TO THEIR WEBSITE AT: HTTP://WWW.WATERBOARDS.CA.GOV/CENTRALCOAST/
2. STATE CONSTRUCTION GENERAL PERMIT: IF THE PROJECT WILL DISTURB ONE ACRE OR MORE OF SOIL (OR IS LESS THAN ONE ACRE BUT PART OF A LARGER DEVELOPMENT), A NOTICE OF INTENT (NOI) MUST BE FILED WITH THE STATE WATER RESOURCE CONTROL BOARD (SWRCB) TO OBTAIN COVERAGE UNDER THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES (CONSTRUCTION GENERAL PERMIT) PRIOR TO COMMENCING WORK. THE APPLICANT IS RESPONSIBLE FOR FILING A NOTICE OF INTENT AND FOR DEVELOPING A STORM WATER POLLUTION PREVENTION PLAN (SWPPP). PRIOR TO ISSUANCE OF A BUILDING PERMIT, THE APPLICANT SHALL PROVIDE THE CITY WITH PROOF OF COVERAGE UNDER THE STATE CONSTRUCTION GENERAL PERMIT, INCLUDING A COPY OF THE LETTER OF RECEIPT AND WASTE DISCHARGE IDENTIFICATION (WDID) NUMBER ISSUED BY THE SWRCB THAT ACKNOWLEDGES THE PROPERTY OWNER'S SUBMITTAL OF A COMPLETE NOTICE OF INTENT (NOI) PACKAGE. FOR MORE INFORMATION ON THE CONSTRUCTION GENERAL PERMIT, PLEASE SEE THE STATE WATER BOARD WEBSITE: HTTP://WWW.WATERBOARDS.CA.GOV/WATER\_ISSUES/PROGRAMS/STORMWATER/CONSTRUCTION.SHT

LEGEND

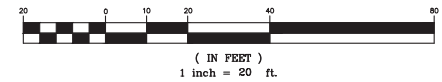


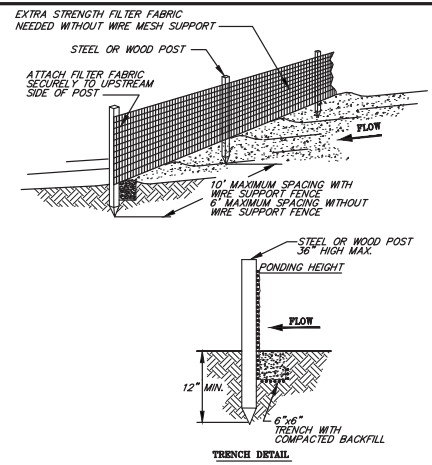
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DISTURBED AREA  
= 99,212 SF  
(2.28 AC)

GRAPHIC SCALE

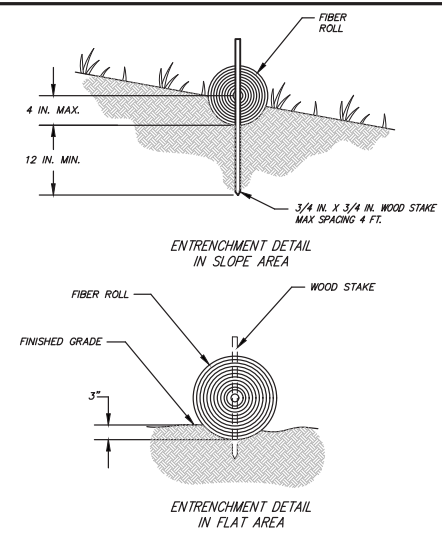




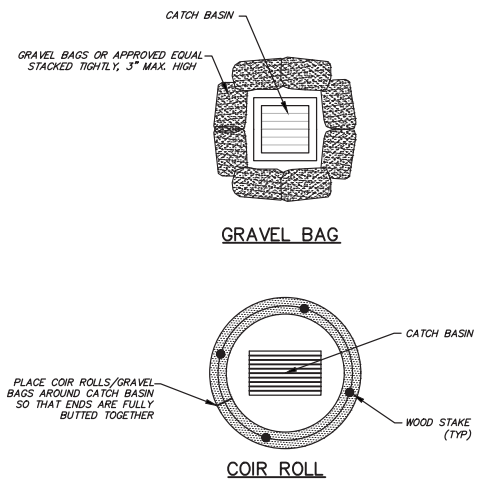
NOTES:

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

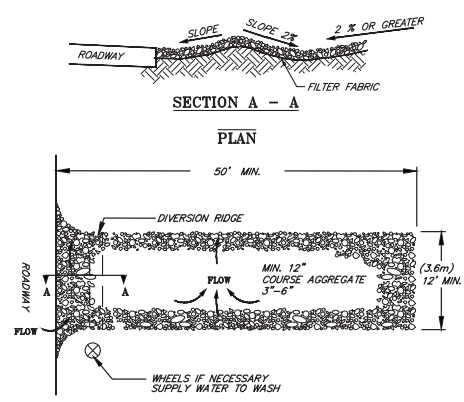
1 SILT FENCE  
SCALE: NTS



2 COIR/FIBER ROLLS (STRAW WATTLES)  
SCALE: NTS



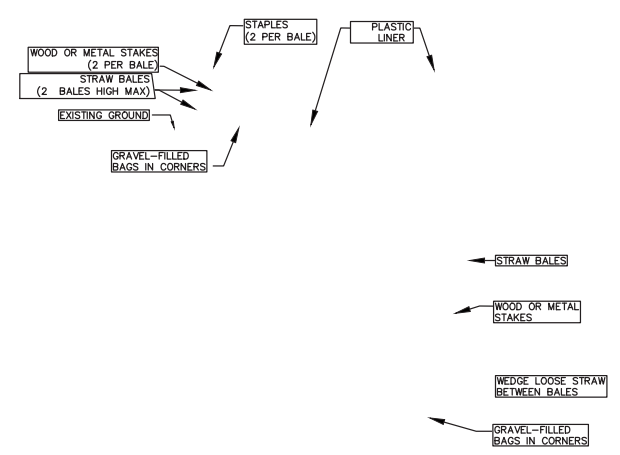
3 STORM DRAIN PROTECTION  
SCALE: NTS



NOTES:

1. Properly grade entrance to prevent runoff from construction site. Entrance elevation should be lower than street.
2. Inspect routinely for damage and repair as needed.
3. Require that all employees, subcontractors and suppliers utilize the stabilized construction entrance.
4. Service sediment trapping devices regularly.

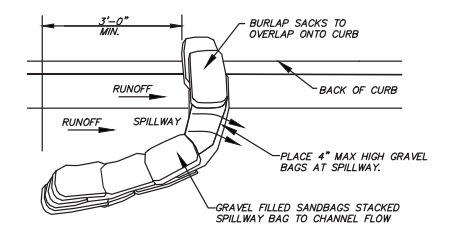
4 CONSTRUCTION ENTRANCE  
SCALE: NTS



NOTE

CONTRACTOR MAY PROVIDE PORTABLE CONCRETE WASHOUT OR CONDUCT CONCRETE WASHING OFF-SITE AT AN APPROVED FACILITY.

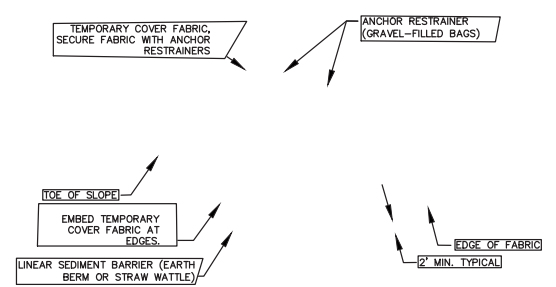
5 CONCRETE WASHOUT FACILITY  
SCALE: NTS



NOTES

1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. GRAVEL/SANDBAGS OF EITHER BURLAP OR WOVEN 'GEOTEXTILE' FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
3. LEAVE ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

6 SEDIMENT BARRIER  
SCALE: NTS



7 TEMPORARY STOCKPILE  
SCALE: NTS

DISCLAIMER

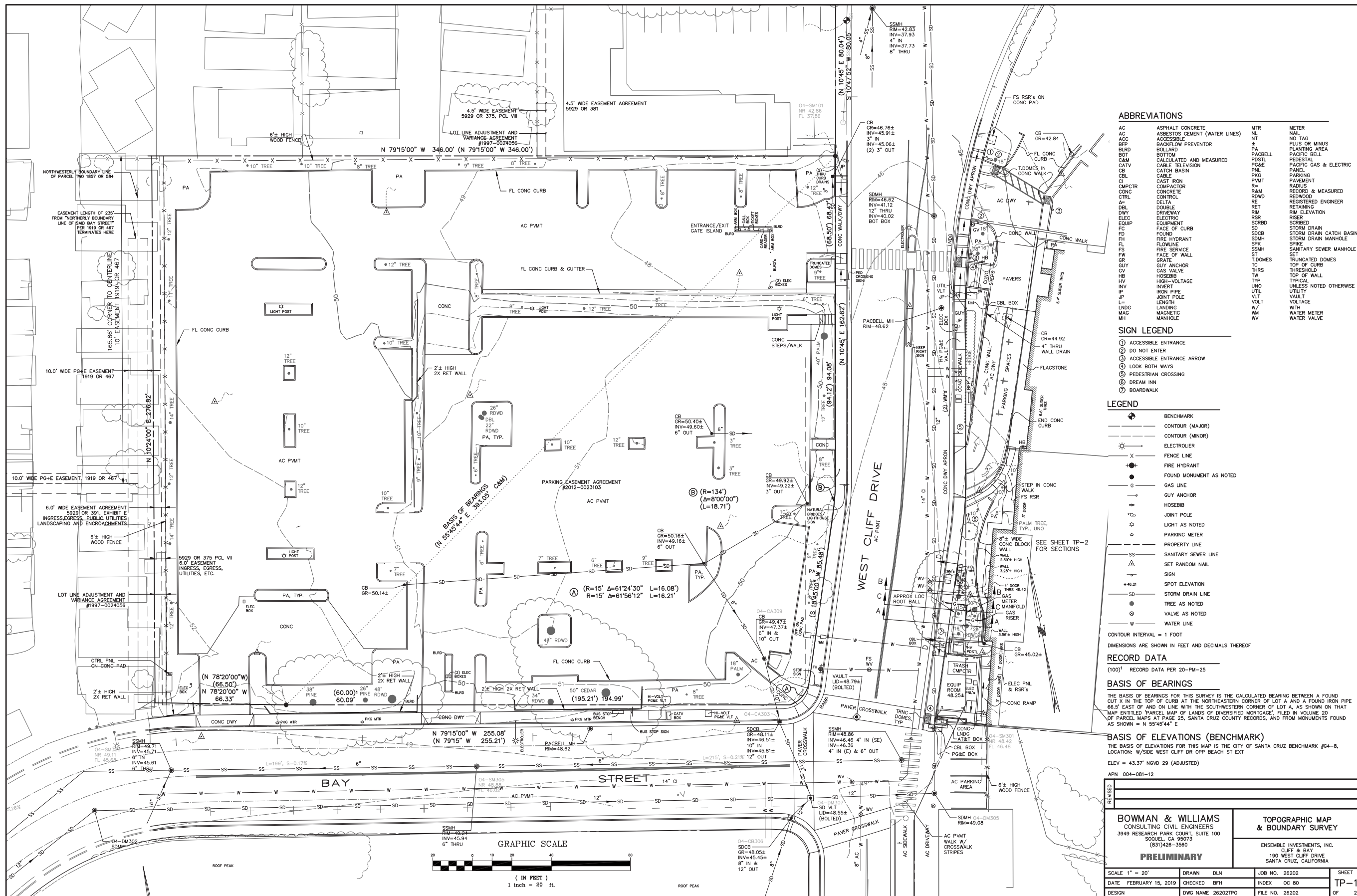
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<b>BOWMAN &amp; WILLIAMS</b> CONSULTING CIVIL ENGINEERS & LAND SURVEYORS 3949 RESEARCH PARK COURT, SUITE 100 SOQUEL, CA 95073 (831) 426-3560		<b>PRELIMINARY EROSION CONTROL DETAIL</b>  PROPOSED MULTI USE DEVELOPMENT 190 WEST CLIFF DRIVE SANTA CRUZ, CALIFORNIA	
SCALE 1" = 20'	DRAWN JFR	JOB NO. 26202	SHEET
DATE MAY 15, 2018	CHECKED	INDEX OC 80	C6.1
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**ABBREVIATIONS**

AC	ASPHALT CONCRETE	MTR	METER
ACC	ACCESSIBLE	NL	NAIL
BFP	BACKFLOW PREVENTOR	NT	NO TAG
BLRD	BOLLARD	PA	PLANTING AREA
BOT	BOTTOM	PACBELL	PACIFIC BELL
CAM	CALCULATED AND MEASURED	PDSTL	PEDESTAL
CATV	CABLE TELEVISION	PG&E	PARKING GAS & ELECTRIC
CB	CATCH BASIN	PNL	PANEL
CBL	CABLE	PKG	PARKING PAVEMENT
CI	CAST IRON	R	RADIUS
CMPCTR	COMPACTOR	R&M	RECORD & MEASURED
CONC	CONCRETE	RWD	REDWOOD
CTRL	CONTROL	RE	REGISTERED ENGINEER
DBL	DOUBLE	RET	RETAINING
DWY	DRIVEWAY	RIM	RIM ELEVATION
ELEC	ELECTRIC	RISR	RISER
EQIP	EQUIPMENT	SCRBD	SCORBED
FD	FACE OF CURB	SD	STORM DRAIN
FH	FIRE HYDRANT	SDCB	STORM DRAIN CATCH BASIN
FL	FLOWLINE	SDMH	STORM DRAIN MANHOLE
FS	FIRE SERVICE	SPK	SPRINKLER
FSR	FACE OF WALL	SSMH	SANITARY SEWER MANHOLE
GR	GRATE	ST	SET
GUY	GUY ANCHOR	T.DOMES	TRUNCATED DOMES
GV	GAS VALVE	TC	TOP OF CURB
HB	HOSEBIB	THRS	THRESHOLD
HV	HIGH-VOLTAGE	TW	TYPICAL
INV	INVERT	TYP	TYPICAL UNLESS NOTED OTHERWISE
IRN	IRON PIPE	UNO	UTILITY
JPT	JOINT POLE	VLT	VAULT
L	LENGTH	VW	VOLT WITH
LNDG	LANDING	WM	WATER MANHOLE
MAG	MAGNETIC	WV	WATER VALVE
MH	MANHOLE		

**SIGN LEGEND**

①	ACCESSIBLE ENTRANCE
②	DO NOT ENTER
③	ACCESSIBLE ENTRANCE ARROW
④	LOOK BOTH WAYS
⑤	PEDESTRIAN CROSSING
⑥	DREAM INN
⑦	BOARDWALK

**LEGEND**

⊕	BENCHMARK
—	CONTOUR (MAJOR)
- - -	CONTOUR (MINOR)
⚡	ELECTROLIER
X	FENCE LINE
●	FIRE HYDRANT
○	FOUND MONUMENT AS NOTED
—	GAS LINE
—	GUY ANCHOR
—	HOSEBIB
⊕	JOINT POLE
⊙	LIGHT AS NOTED
○	PARKING METER
—	PROPERTY LINE
SS	SANITARY SEWER LINE
△	SET RANDOM NAIL
—	SIGN
+48.21	SPOT ELEVATION
—	STORM DRAIN LINE
●	TREE AS NOTED
⊕	VALVE AS NOTED
—	WATER LINE

CONTOUR INTERVAL = 1 FOOT  
DIMENSIONS ARE SHOWN IN FEET AND DECIMALS THEREOF

**RECORD DATA**  
(100)' RECORD DATA PER 20-PM-25

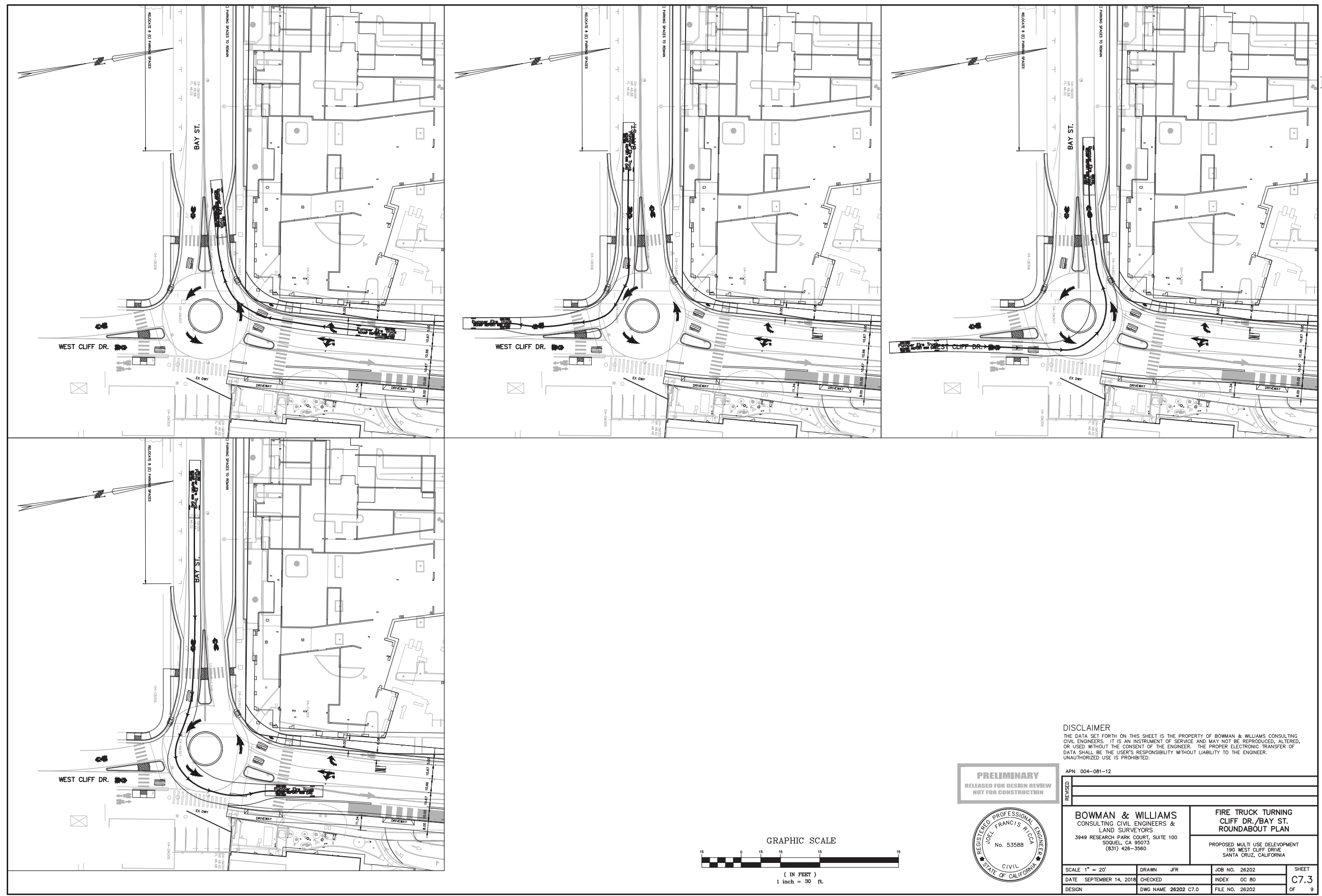
**BASIS OF BEARINGS**  
THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALCULATED BEARING BETWEEN A FOUND CUT X IN THE TOP OF CURB AT THE NORTHEASTERN CORNER OF LOT A AND A FOUND IRON PIPE 66.5' EAST OF AND ON LINE WITH THE SOUTHWESTERN CORNER OF LOT A, AS SHOWN ON THAT MAP ENTITLED "PARCEL MAP OF LANDS OF DIVERSIFIED MORTGAGE", FILED IN VOLUME 20 OF PARCEL MAPS AT P.P. 25, SANTA CRUZ COUNTY RECORDS, AND FROM MONUMENTS FOUND AS SHOWN = N 55°45'44" E

**BASIS OF ELEVATIONS (BENCHMARK)**  
THE BASIS OF ELEVATIONS FOR THIS MAP IS THE CITY OF SANTA CRUZ BENCHMARK #04-8, LOCATION: W/SIDE WEST CLIFF DR OPP BEACH ST EXT  
ELEV = 43.37' NGVD 29 (ADJUSTED)  
APN 004-081-12

<b>BOWMAN &amp; WILLIAMS</b> CONSULTING CIVIL ENGINEERS 3949 RESEARCH PARK COURT, SUITE 100 SOQUEL, CA 95073 (831)426-3560 <b>PRELIMINARY</b>		<b>TOPOGRAPHIC MAP &amp; BOUNDARY SURVEY</b>  ENSEMBLE INVESTMENTS, INC. CLIFF & BAY 190 WEST CLIFF DRIVE SANTA CRUZ, CALIFORNIA	
SCALE 1" = 20'	DRAWN DLN	JOB NO. 26202	SHEET
DATE FEBRUARY 15, 2019	CHECKED BFH	INDEX OC 80	TP-1
DESIGN	DWG NAME 26202TPO	FILE NO. 26202	OF 2

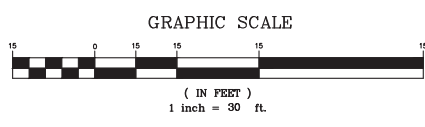


Fire Truck Turning - Roundabout Plan



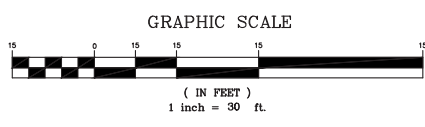
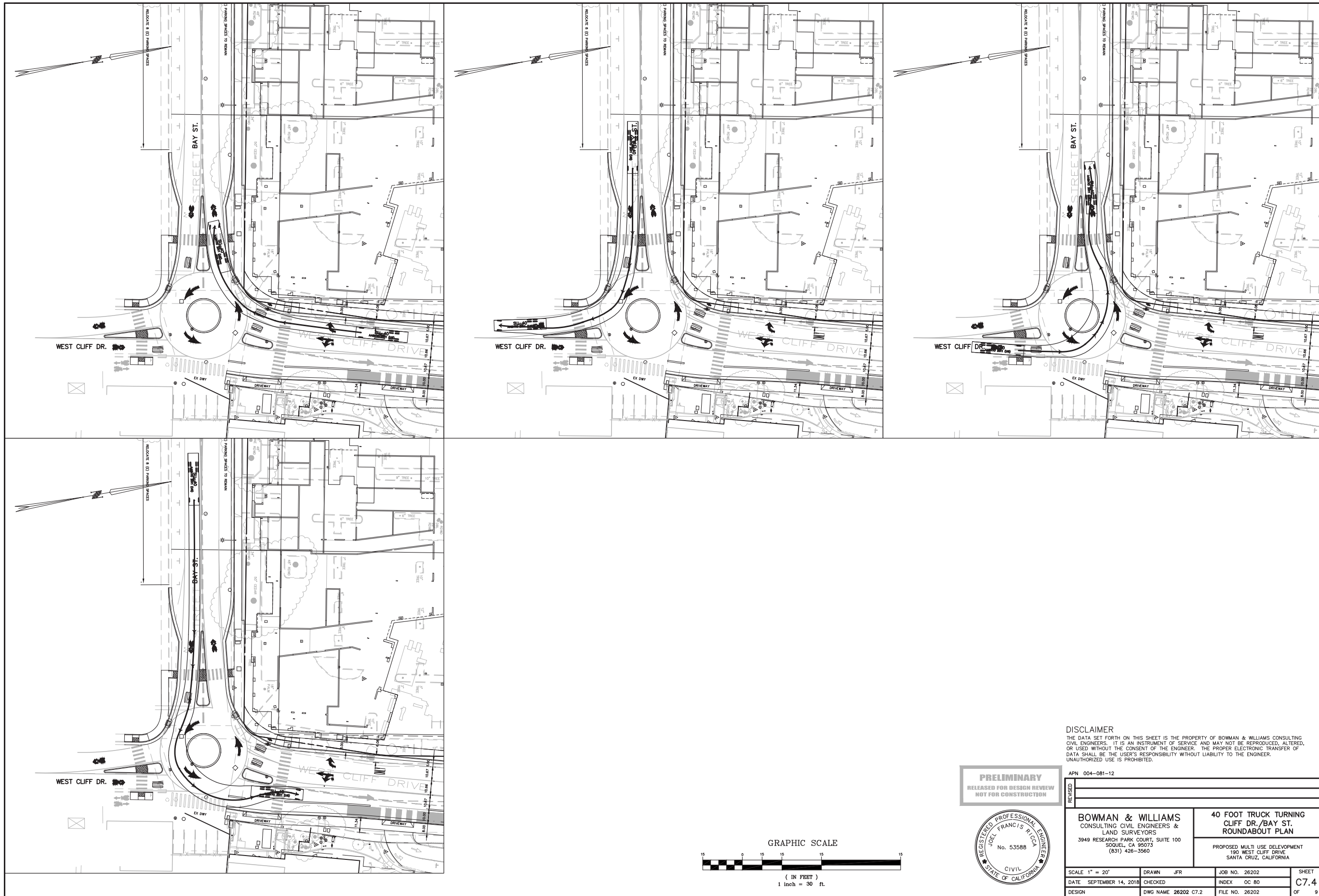
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BOWMAN & WILLIAMS CONSULTING CIVIL ENGINEERS & LAND SURVEYORS 3949 RESEARCH PARK COURT, SUITE 100 SANTA CRUZ, CA 95073 (831) 426-3560		FIRE TRUCK TURNING CLIFF DR./BAY ST. ROUNDBOUT PLAN	
PROPOSED MULTI USE DEVELOPMENT 190 WEST CLIFF DRIVE SANTA CRUZ, CALIFORNIA		SCALE 1" = 20'	DRAWN JFR
DATE SEPTEMBER 14, 2018	CHECKED	JOB NO. 26202	SHEET C7.3
DESIGN	DWG NAME 26202 C7.0	FILE NO. 26202	OF 9

40 Foot Truck Turning - Roundabout Plan



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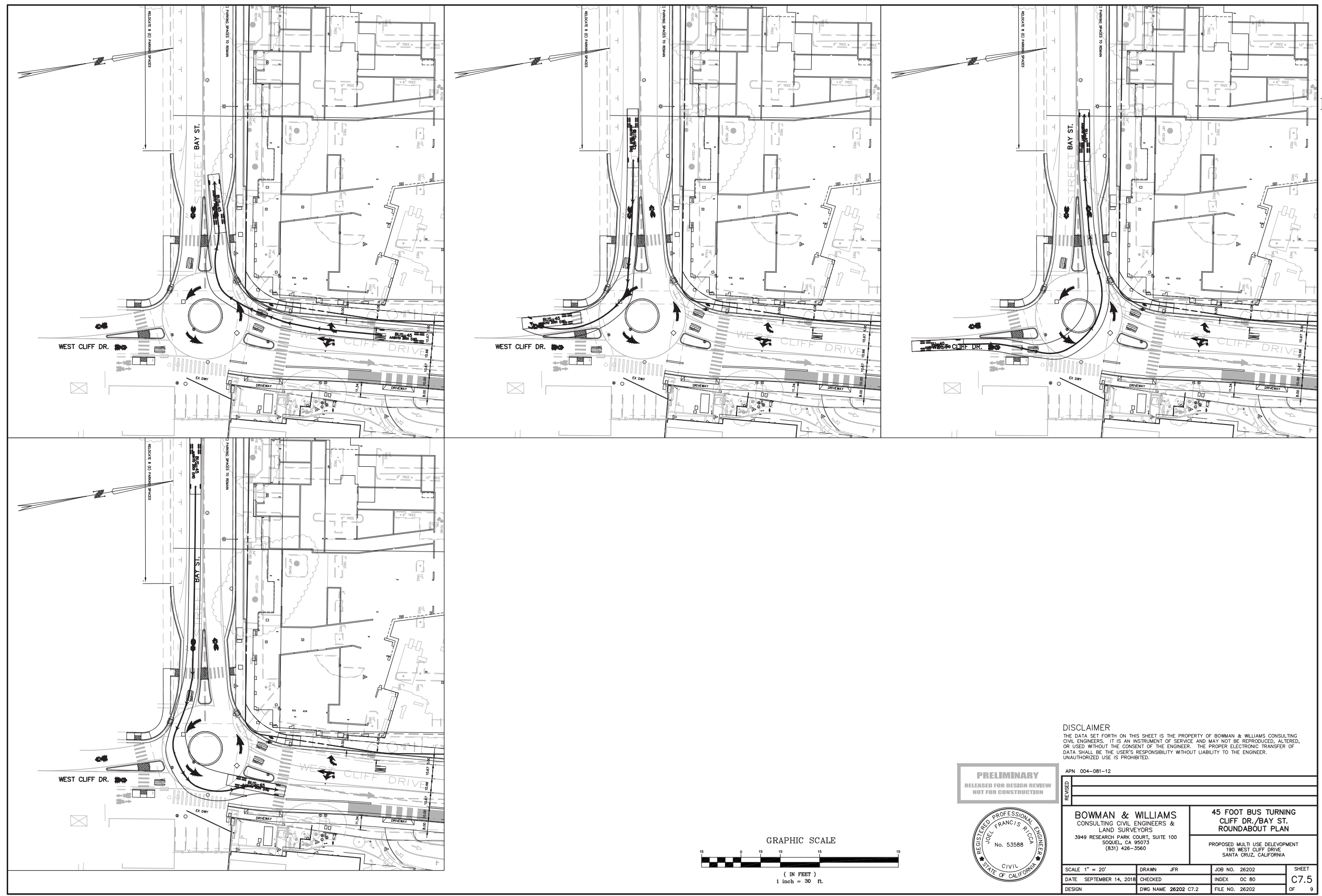


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<b>BOWMAN &amp; WILLIAMS</b> CONSULTING CIVIL ENGINEERS & LAND SURVEYORS 3949 RESEARCH PARK COURT, SUITE 100 SQUIGEL, CA 95073 (831) 426-3560		<b>40 FOOT TRUCK TURNING CLIFF DR./BAY ST. ROUNDBOUT PLAN</b>	
PROPOSED MULTI USE DEVELOPMENT 190 WEST CLIFF DRIVE SANTA CRUZ, CALIFORNIA		SCALE 1" = 20'	DRAWN JFR
DATE SEPTEMBER 14, 2018	CHECKED	JOB NO. 26202	SHEET C7.4
DESIGN	DWG NAME 26202 C7.2	FILE NO. 26202	OF 9

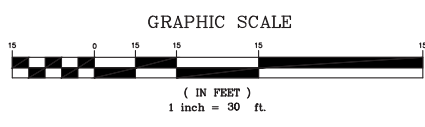


45 Foot Truck Turning - Roundabout Plan



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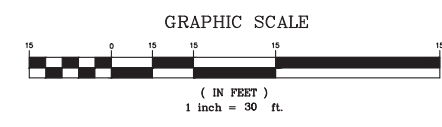
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PROPOSED MULTI USE DEVELOPMENT 190 WEST CLIFF DRIVE SANTA CRUZ, CALIFORNIA		SCALE 1" = 20'	DRAWN JFR
DATE SEPTEMBER 14, 2018	CHECKED	JOB NO. 26202	SHEET C7.5
DESIGN	DWG NAME 26202 C7.2	FILE NO. 26202	OF 9



40 Foot Bus Turning - Roundabout Plan



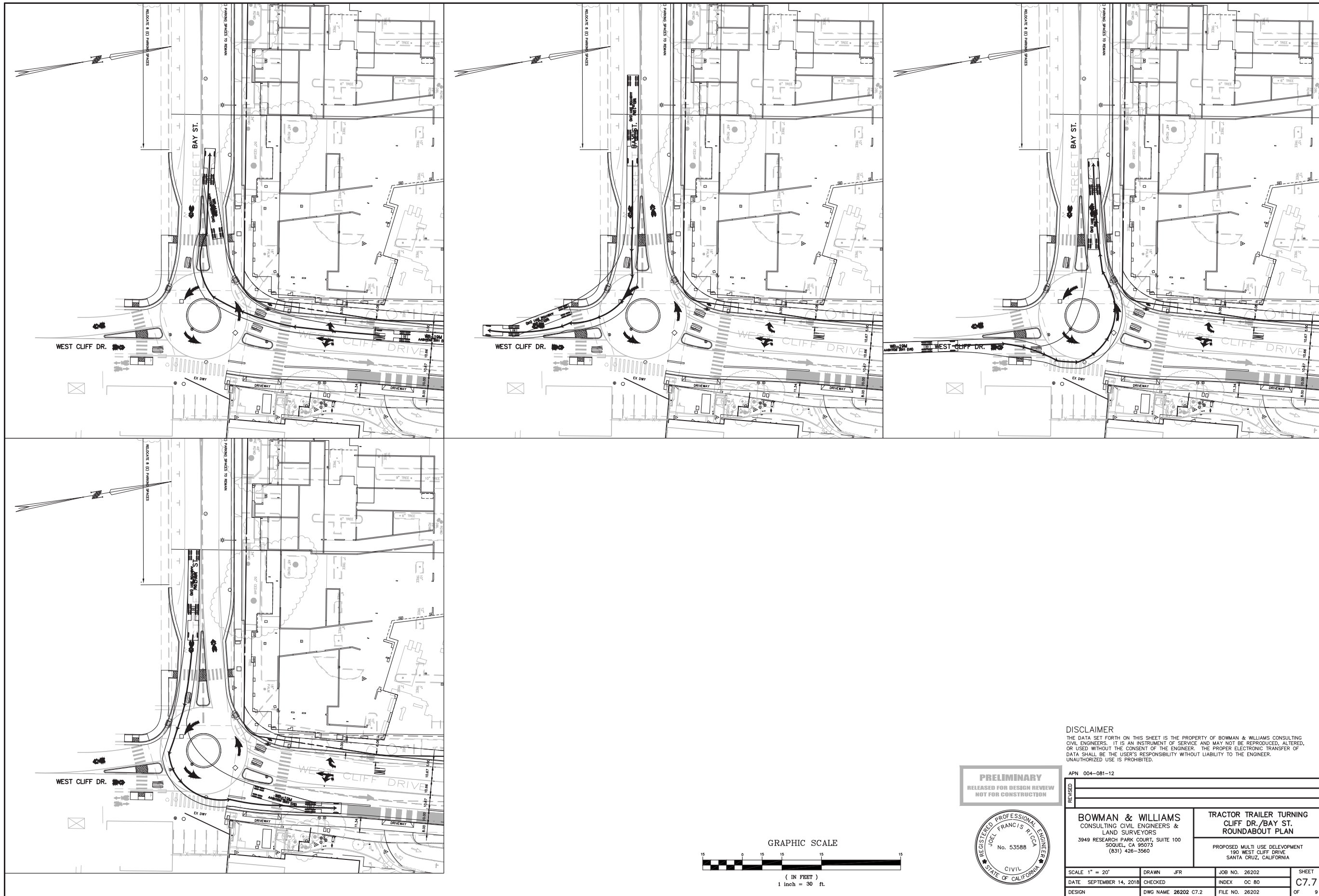
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APN 004-081-12			
<b>BOWMAN &amp; WILLIAMS</b> CONSULTING CIVIL ENGINEERS & LAND SURVEYORS 3949 RESEARCH PARK COURT, SUITE 100 SQUEL, CA 95073 (831) 426-3560		<b>40 FOOT BUS TURNING CLIFF DR./BAY ST. ROUNDBOUT PLAN</b>	
PROPOSED MULTI USE DEVELOPMENT 190 WEST CLIFF DRIVE SANTA CRUZ, CALIFORNIA			
SCALE 1" = 20'	DRAWN JFR	JOB NO. 26202	SHEET
DATE SEPTEMBER 14, 2018	CHECKED	INDEX OC 80	<b>C7.6</b>
DESIGN	DWG NAME 26202 C7.0	FILE NO. 26202	OF 9

Tractor Trailer Turning - Roundabout Plan



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REVISION			
<b>BOWMAN &amp; WILLIAMS</b> CONSULTING CIVIL ENGINEERS & LAND SURVEYORS 3949 RESEARCH PARK COURT, SUITE 100 SOQUEL, CA 95073 (831) 426-3560		<b>TRACTOR TRAILER TURNING</b> <b>CLIFF DR./BAY ST.</b> <b>ROUNDABOUT PLAN</b>	
PROPOSED MULTI USE DEVELOPMENT 190 WEST CLIFF DRIVE SANTA CRUZ, CALIFORNIA		SCALE 1" = 20'	DRAWN JFR
DATE SEPTEMBER 14, 2018	CHECKED	JOB NO. 26202	SHEET C7.7
DESIGN	DWG NAME 26202 C7.2	FILE NO. 26202	OF 9

