

Appendix D – Storm Drainage Letter



BARGHAUSEN

March 16, 2020

Peter T Masson
Consultant
Antea Group
505 14th Street, Suite 900
Oakland, CA 94612

RE: Storm Drainage Letter
Valero Gas Station
1103 Curtner Avenue, San Jose, California 95125
CUP Application No. CP11-041 / Our Job No. 20800

Dear Peter:

This memo is in regards to the proposed improvements for the existing fueling facility located at 1103 Curtner Avenue, San Jose, California. Barghausen Consulting Engineers, Inc. is providing a cursory review of the plan set provided by Ackland International, Inc. dated September 15, 2019. The review has been performed solely for the purpose of understanding the proposed improvements. The subject site is currently being used as a fueling station and the site with proposed improvements will continue to serve as such.

It appears that improvements to the site frontage will provide an increase in pervious area. The increase in pervious area suggests that if the site, in its current condition, does not experience any flooding conditions, the proposed site will not either. Additionally, some on-site drainage is to be diverted to treatment control measures that will likely slow the release of stormwater from the site.

In its existing condition, it appears there are no stormwater treatment measures on site. The use of the site and quantity of fuel pumps is to remain the same; therefore, no additional pollutant load is expected to be introduced. The proposed site is to include two treatment control measures thus most likely providing an improvement in stormwater quality from the site.

We have not reviewed the plan set provided by Ackland International, Inc. for completeness or accuracy and we do not claim any responsibility for plans or project.

Sincerely,

Zereck Jones
Design Engineer

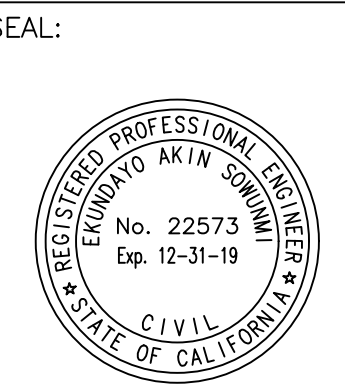
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enc: As Noted

BARGHAUSEN CONSULTING ENGINEERS, INC.

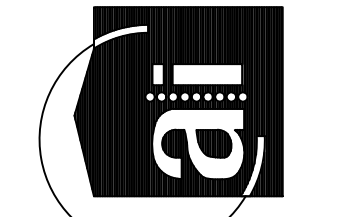
18215 72ND AVENUE SOUTH KENT, WA 98032 P) 425-251-6222 F) 425-251-8782
BRANCH OFFICES: TUMWATER, WA KLAMATH FALLS, OR LONG BEACH, CA ROSEVILLE, CA SAN DIEGO, CA
barghausen.com

STORMWATER CONTROL NOTES

TCM-1 (N) BIO-RETENTION BASIN (236 SF).
 TCM-2 (N) BIO-RETENTION BASIN (165 SF).



ACKLAND INTERNATIONAL, INC.
 333 Hegeberger Road, Suite 206
 Oakland, CA 94621
 510.564.4284 (tel)
 510.633.2431 (fax)



PROJECT NAME:
 FUELING FACILITY
 1103 CURTNER AVENUE
 SAN JOSE, CA

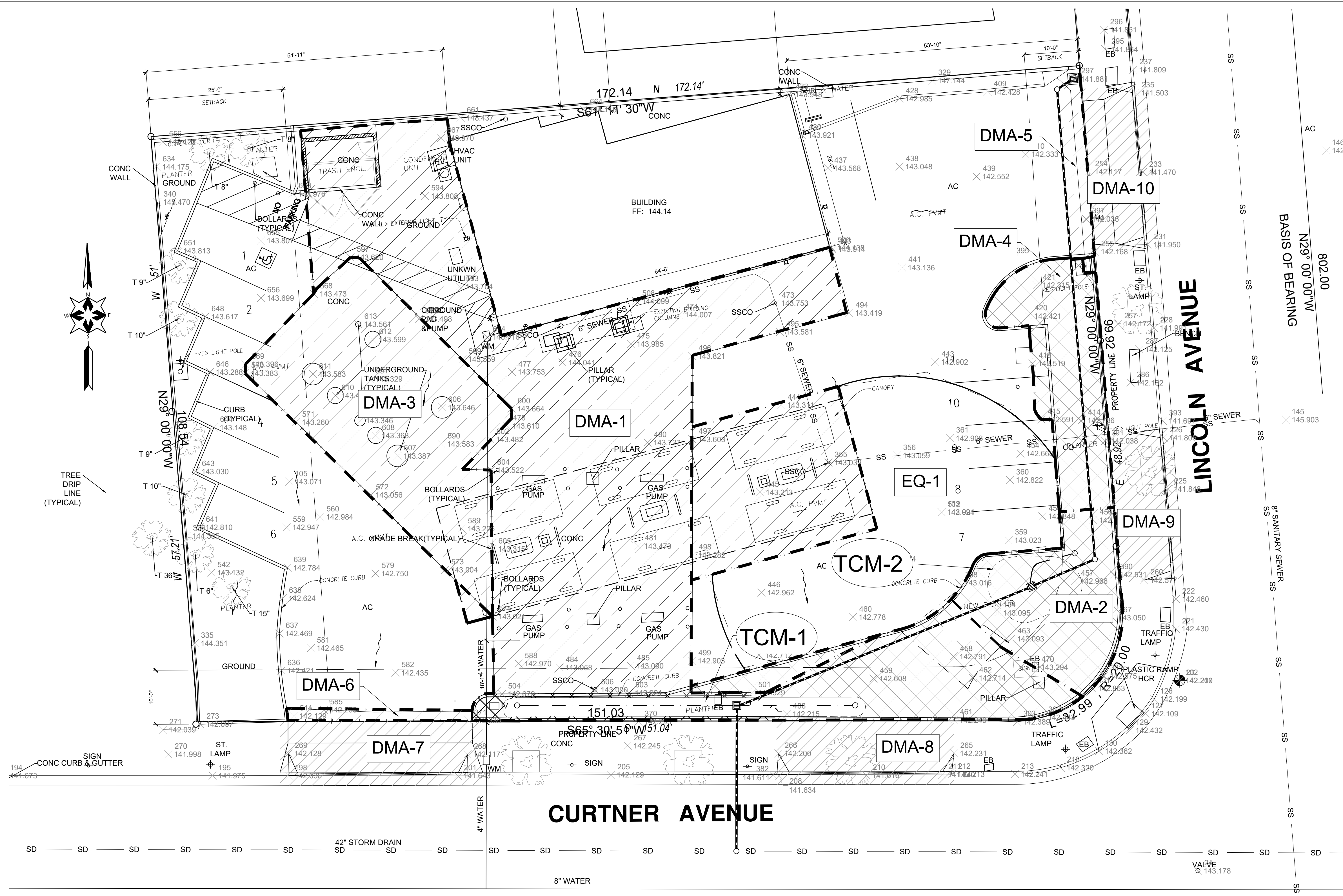
CLIENT NAME & ADDRESS:
 SALKHI PETROLEUM
 2145 MENDOCINO AVENUE
 SANTA ROSA, CA 95401

NO.	DATE	DESCRIPTION	BY
1	10/09/19	PERMIT APPLICATION	DS
		REVISION	

SHEET TITLE
 STORMWATER CONTROL PLAN

PROJECT NO. S19030
DRAWN BY: DS
CHECKED BY: ES
SCALE: AS SHOWN
DATE: 09/15/2019
SHEET NO.
C3.1
 of 7

PERMIT #ES15000435



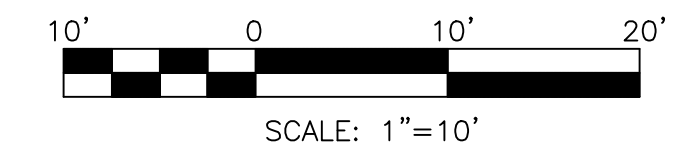
STORMWATER CONTROL PLAN

SCALE: 1" = 10'-0"

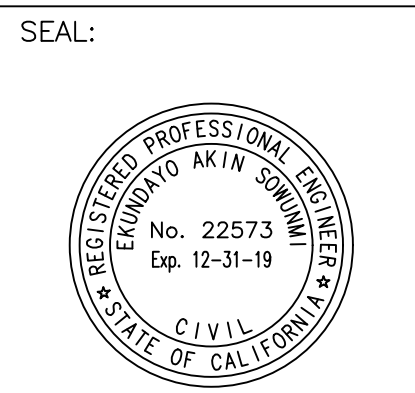
1

DMA #	TCM #	Location	Treatment Type	LID or Non-LID	Sizing Method	Drainage Area (s.f.)	Impervious Area (s.f.)	Area (Permeable Pavement) (s.f.)	Area (Other) (s.f.)	Treated by LID or Non-LID TCM	Area Required (s.f.)	Bioretention Area Provided (s.f.)	Overflow Riser Height (in)	Depth Required (ft)	Depth Provided (ft)	# of Cartridges Required	# of Cartridges Provided	Media Type	Cartridge Height (inches)	# of Credit Trees	Treatment Credit (s.f.)	Comments
1	1	Onsite	Bioretention unlined w/ underdrain	LID	2C. Flow: 4% Method **	5,715	4,843		872	54.19%	194	236										
2		Onsite	Self-treating areas	LID		661			661	6.27%												
3		Onsite	Untreated ****	Non-LID		1,516	1,516		0	14.37%												Being equivalently treated by EQ-1
4		Onsite	Self-treating areas	LID		591			591	5.60%												
5		Onsite	Untreated ****	Non-LID		152	152			1.44%												Being equivalently treated by EQ-1
6		Onsite	Untreated ****	Non-LID		71	71			0.67%												Being equivalently treated by EQ-1
7		Offsite	Maintenance							-												
8		Offsite	Maintenance							-												
9		Offsite	Maintenance							-												
10		Offsite	Maintenance							-												
EQ-1****	2	Onsite		Non-LID	2C. Flow: 4% Method **	1,841	1,841			17.46%												Equivalent Treatment for DMA 3, 5 and 6
Totals:						10,547	8,423	0	2,124	100.00%												

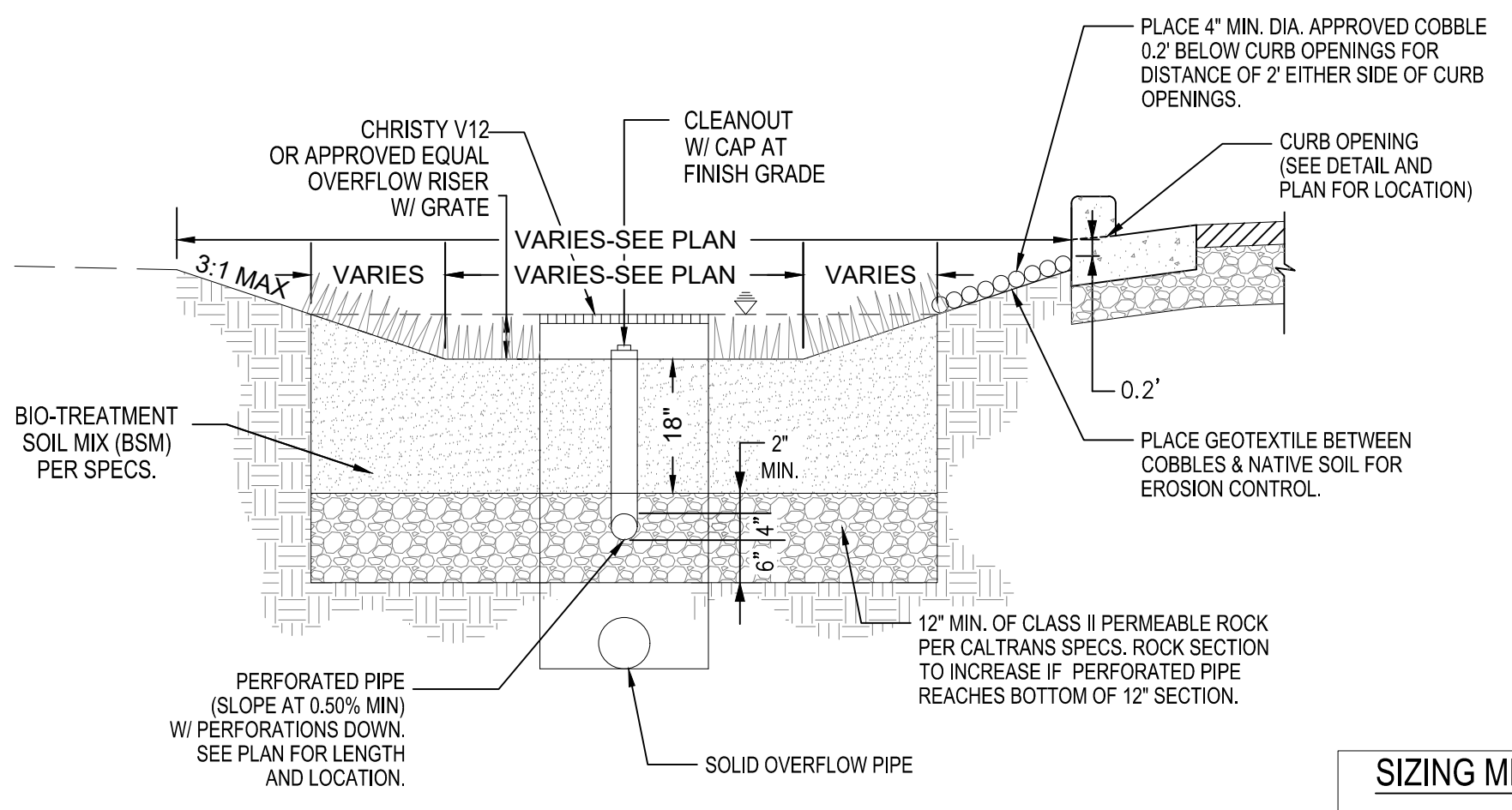
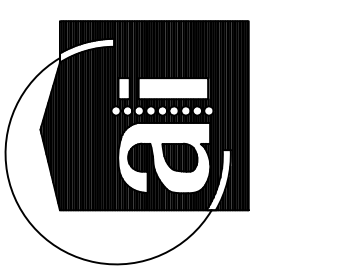
Footnotes:
 * "Lined" refers to an impermeable liner placed on the bottom of a Bioretention basin or a concrete Flow-Through Planter, such that no infiltration into native soil occurs.
 ** Sizing for Bioretention Area Required calculated using the 4% Method (Impervious Area x 0.04)
 *** Per Chapter 2.3 of the C3 Stormwater Handbook Roadway projects that add new sidewalk along an existing roadway are exempt from Provision C.3.c of the Municipal Stormwater Permit.
 **** DMA 3, 5 and 6 are not being treated but will be treated by Equivalent Treatment Area EQ-1. Area EQ-1 is equal to or greater than the required treatment area of DMA 3, 5 and 6. EQ-1 is not required to be treated as it is [insert reason here]



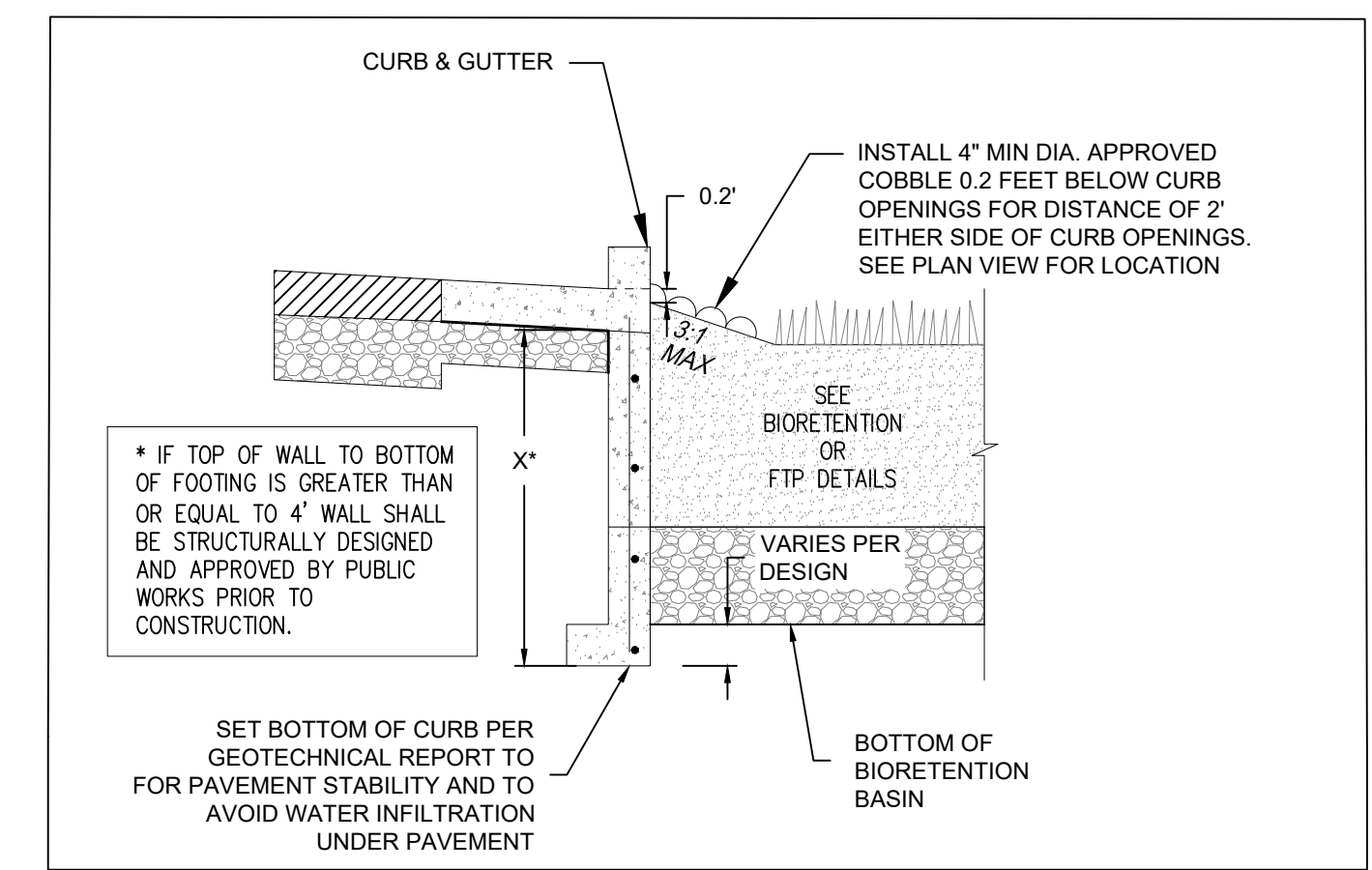
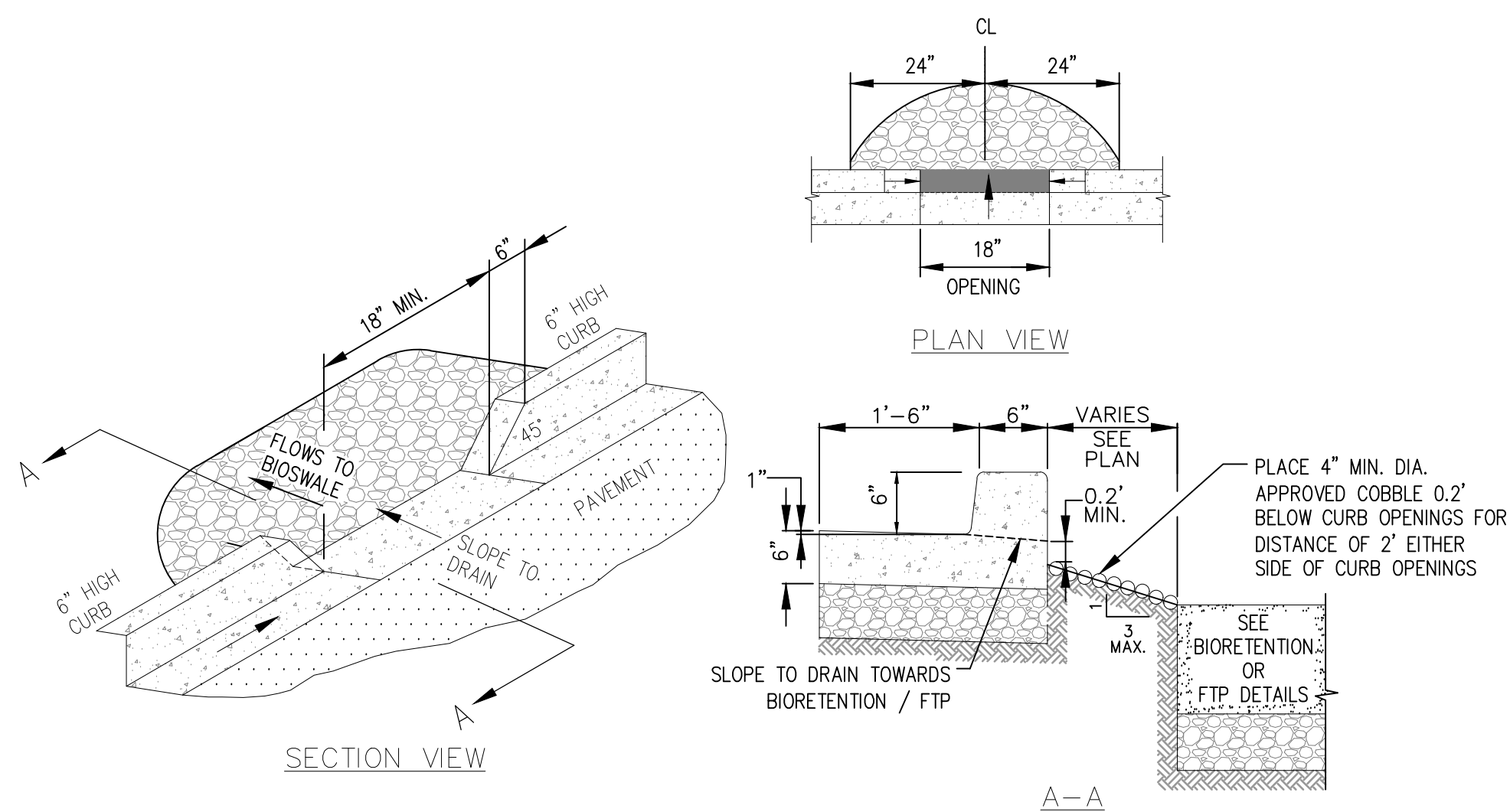
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SIZING METHOD:
 4%



BIO-RETENTION BASIN

N.T.S. 1

CURB OPENING

N.T.S. 2

CURB ADJACENT TO BIO-RETENTION

N.T.S. 3

PROJECT SITE INFORMATION:

- SOILS TYPE: SILTY CLAY
- GROUND WATER DEPTH: 39'
- NAME OF RECEIVING BODY: GUADALUPE RIVER
- FLOOD ZONE: D
- FLOOD ELEVATION (IF APPLICABLE): N/A

STANDARD STORMWATER CONTROL NOTES

- Standing water shall not remain in the treatment measures for more than five days, to prevent mosquito generation. Should any mosquito issues arise, contact the Santa Clara Valley Vector Control District (District). Mosquito larvicides shall be applied only when absolutely necessary, as indicated by the District, and then only by a licensed professional or contractor. Contact information for the District is provided below.
- Do not use pesticides or other chemical applications to treat diseased plants, control weeds or removed unwanted growth. Employ non-chemical controls (biological, physical and cultural controls) to treat a pest problem. Prune plants properly and at the appropriate time of year. Provide adequate irrigation for landscape plants. Do not over water.

SOURCE CONTROL MEASURES:

- SERVICE STATIONS/ FUELING AREAS (MUST INCLUDE ALL FOUR BELOW):
 - GRADE FUELING AREAS TO PREVENT PONDING.
 - USE CONCRETE FOR THE FUEL AREA SURFACE.
 - SEPARATE THE FUELING AREA FROM THE REST OF THE SITE BY A GRADE BREAKS THAT PREVENT RUN-ON.
 - COVER THE FUELING AREAS WITH A CANOPY EXTENDING A MINIMUM OF TEN FEET FROM EACH PUMP.
- BENEFICIAL LANDSCAPING.
- USE OF WATER EFFICIENT IRRIGATION SYSTEMS.
- MAINTENANCE (PAVEMENT SWEEPING, CATCH BASIN CLEANING, GOOD HOUSEKEEPING).
- STORM DRAIN LABELING.

SITE DESIGN MEASURES:

- PROTECT EXISTING TREES, VEGETATION, AND SOIL.
- REDUCE EXISTING IMPERVIOUS SURFACES.
- CREATE NEW PERVIOUS AREAS:
 - LANDSCAPING.
- DIRECT RUNOFF FROM ROOFS, SIDEWALKS, PATIOS TO LANDSCAPED AREAS.

BIOTREATMENT SOIL REQUIREMENTS

- BIORETENTION SOIL MIX SHALL MEET THE REQUIREMENTS AS OUTLINED IN APPENDIX C OF THE C-3 STORM WATER HANDBOOK AND SHALL BE A MIXTURE OF FINE SAND AND COMPOST MEASURED ON A VOLUME BASIS OF 60-70% SAND AND 30-40% COMPOST. CONTRACTOR TO REFER TO APPENDIX C FOR SAND AND COMPOST MATERIAL SPECIFICATIONS. CONTRACTOR MAY OBTAIN A COPY OF THE C3 HANDBOOK AT: [HTTP://WWW.SANJOSECA.GOV/INDEX.ASPX?NID=1761](http://www.sanjooseca.gov/index.aspx?nid=1761)
- PRIOR TO ORDERING THE BIOTREATMENT SOIL MIX OR DELIVERY TO THE PROJECT SITE, CONTRACTOR SHALL PROVIDE A BIOTREATMENT SOIL MIX SPECIFICATION CHECKLIST, COMPLETED BY THE SOIL MIX SUPPLIER AND CERTIFIED TESTING LAB.

BIORETENTION & FLOW-THROUGH PLANTER NOTES:

- SEE GRADING PLAN FOR BASIN FOOTPRINT AND DESIGN ELEVATIONS.
- PLACE 3 INCHES OF COMPOSTED, NON-FLOATABLE MULCH IN AREAS BETWEEN STORMWATER PLANTINGS.
- SEE LANDSCAPE PLAN FOR MULCH, PLANT MATERIALS AND IRRIGATION REQUIREMENTS
- CURB CUTS SHALL BE A MINIMUM 18" WIDE AND SPACED AT 10' O.C. INTERVALS AND SLOPED TO DIRECT STORMWATER TO DRAIN INTO THE BASIN. CURB CUTS SHALL ALSO NOT BE PLACED IN LINE WITH OVERFLOW CATCH BASIN. SEE GRADING PLAN FOR MORE DETAIL ON LOCATIONS OF CURB CUTS.
- A MINIMUM 0.2' DROP BETWEEN STORM WATER ENTRY POINT (I.E. CURB OPENING, FLUSH CURB, ETC.) AND ADJACENT LANDSCAPE FINISHED GRADE.
- DO NOT COMPACT NATIVE SOIL / SUBGRADE AT BOTTOM OF BASIN. LOOSEN SOIL TO 12" DEPTH.

OPERATION AND MAINTENANCE INFORMATION:

- PROPERTY INFORMATION:**
 - PROPERTY ADDRESS:
 1103 CURTNER AVENUE
 SAN JOSE, CA
 - PROPERTY OWNER:
 MIKE FRANGES
 CURTNER CORNER INC.
- RESPONSIBLE PARTY FOR MAINTENANCE:**
 - CONTACT:
 MIKE FRANGES
 - PHONE NUMBER OF CONTACT:
 408-247-2242
 - EMAIL:
 mfrancis@aol.com
 - ADDRESS:
 1103 CURTNER AVENUE
 SAN JOSE, CA

NO.	MAINTENANCE TASK	FREQUENCY OF TASK
1	REMOVE OBSTRUCTIONS, WEEDS, DEBRIS AND TRASH FROM BIORETENTION AREA AND ITS INLETS AND OUTLETS; AND DISPOSE OF PROPERLY.	QUARTERLY, OR AS NEEDED AFTER STORM EVENTS
2	INSPECT BIORETENTION AREA FOR STANDING WATER. IF STANDING WATER DOES NOT DRAIN WITHIN 2-3 DAYS, TILL AND REPLACE THE SURFACE BIOTREATMENT SOIL WITH THE APPROVED SOIL MIX AND REPLANT.	QUARTERLY, OR AS NEEDED AFTER STORM EVENTS
3	CHECK UNDERDRAINS FOR CLOGGING. USE THE CLEANOUT RISER TO CLEAN ANY CLOGGED UNDERDRAINS.	QUARTERLY, OR AS NEEDED AFTER STORM EVENTS
4	MAINTAIN THE IRRIGATION SYSTEM AND ENSURE THAT PLANTS ARE RECEIVING THE CORRECT AMOUNT OF WATER (IF APPLICABLE).	QUARTERLY
5	ENSURE THAT THE VEGETATION IS HEALTHY AND DENSE ENOUGH TO PROVIDE FILTERING AND PROTECT SOILS FROM EROSION. PRUNE AND WEED THE BIORETENTION AREA. REMOVE AND/OR REPLACE ANY DEAD PLANTS.	ANNUALLY, BEFORE THE WET SEASON BEGINS
6	USE COMPOST AND OTHER NATURAL SOIL AMENDMENTS AND FERTILIZERS INSTEAD OF SYNTHETIC FERTILIZERS, ESPECIALLY IF THE SYSTEM USES AN UNDERDRAIN.	ANNUALLY, BEFORE THE WET SEASON BEGINS
7	CHECK THAT MULCH IS AT APPROPRIATE DEPTH (2 - 3 INCHES PER SOIL SPECIFICATIONS) AND REPLENISH AS NECESSARY BEFORE WET SEASON BEGINS. IT IS RECOMMENDED THAT 2" - 3" OF ARBOR MULCH BE REAPPLIED EVERY YEAR.	ANNUALLY, BEFORE THE WET SEASON BEGINS
8	INSPECT THE ENERGY DISSIPATION AT THE INLET TO ENSURE IT IS FUNCTIONING ADEQUATELY, AND THAT THERE IS NO SCOUR OF THE SURFACE MULCH. REMOVE ACCUMULATED SEDIMENT.	ANNUALLY, BEFORE THE WET SEASON BEGINS
9	INSPECT OVERFLOW PIPE TO ENSURE THAT IT CAN SAFELY CONVEY EXCESS FLOWS TO A STORM DRAIN. REPAIR OR REPLACE DAMAGED PIPING.	ANNUALLY, BEFORE THE WET SEASON BEGINS
10	REPLACE BIOTREATMENT SOIL AND MULCH, IF NEEDED. CHECK FOR STANDING WATER, STRUCTURAL FAILURE AND CLOGGED OVERFLOWS. REMOVE TRASH AND DEBRIS. REPLACE DEAD PLANTS.	ANNUALLY, BEFORE THE WET SEASON BEGINS
11	INSPECT BIORETENTION AREA USING THE ATTACHED INSPECTION CHECKLIST.	ANNUALLY, BEFORE THE WET SEASON

PROJECT NAME:
**FUELING FACILITY
 1103 CURTNER AVENUE
 SAN JOSE, CA**

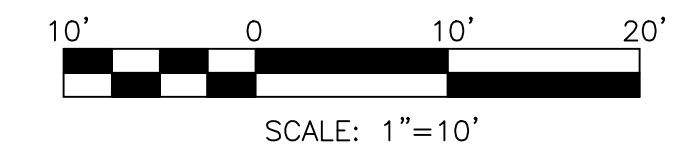
CLIENT NAME & ADDRESS:
**SALKHI PETROLEUM
 2145 MENDOCINO AVENUE
 SANTA ROSA, CA 95401**

NO.	DATE	DESCRIPTION	BY
1	10/09/19	PERMIT APPLICATION	DS

SHEET TITLE
STORMWATER CONTROL NOTES AND DETAILS

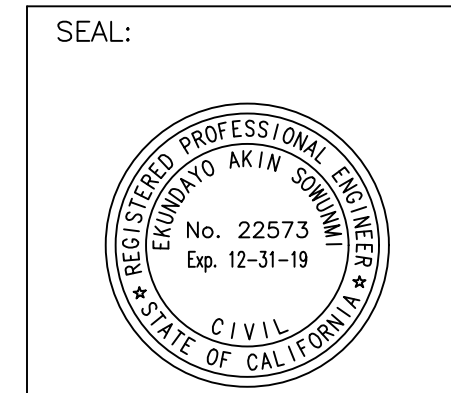
PROJECT NO. **S19030**
 DRAWN BY: **DS**
 CHECKED BY: **ES**
 SCALE: **AS SHOWN**
 DATE: **09/15/2019**

SHEET NO.
C3.2
 of 7

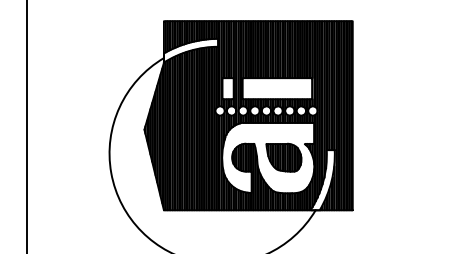


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PERMIT #ES15000435



ACKLAND INTERNATIONAL, INC.
 333 Hegeberger Road, Suite 206
 Oakland, CA 94621
 510.564.4284 (tel)
 510.633.2431 (fax)



PROJECT NAME:
**FUELING FACILITY
 1103 CURTNER AVENUE
 SAN JOSE, CA**

CLIENT NAME & ADDRESS:
**SALKHI PETROLEUM
 2145 MENDOCINO AVENUE
 SANTA ROSA, CA 95401**

NO.	DATE	DESCRIPTION	BY
1	10/09/19	PERMIT APPLICATION	DS

SHEET TITLE
EROSION CONTROL PLAN

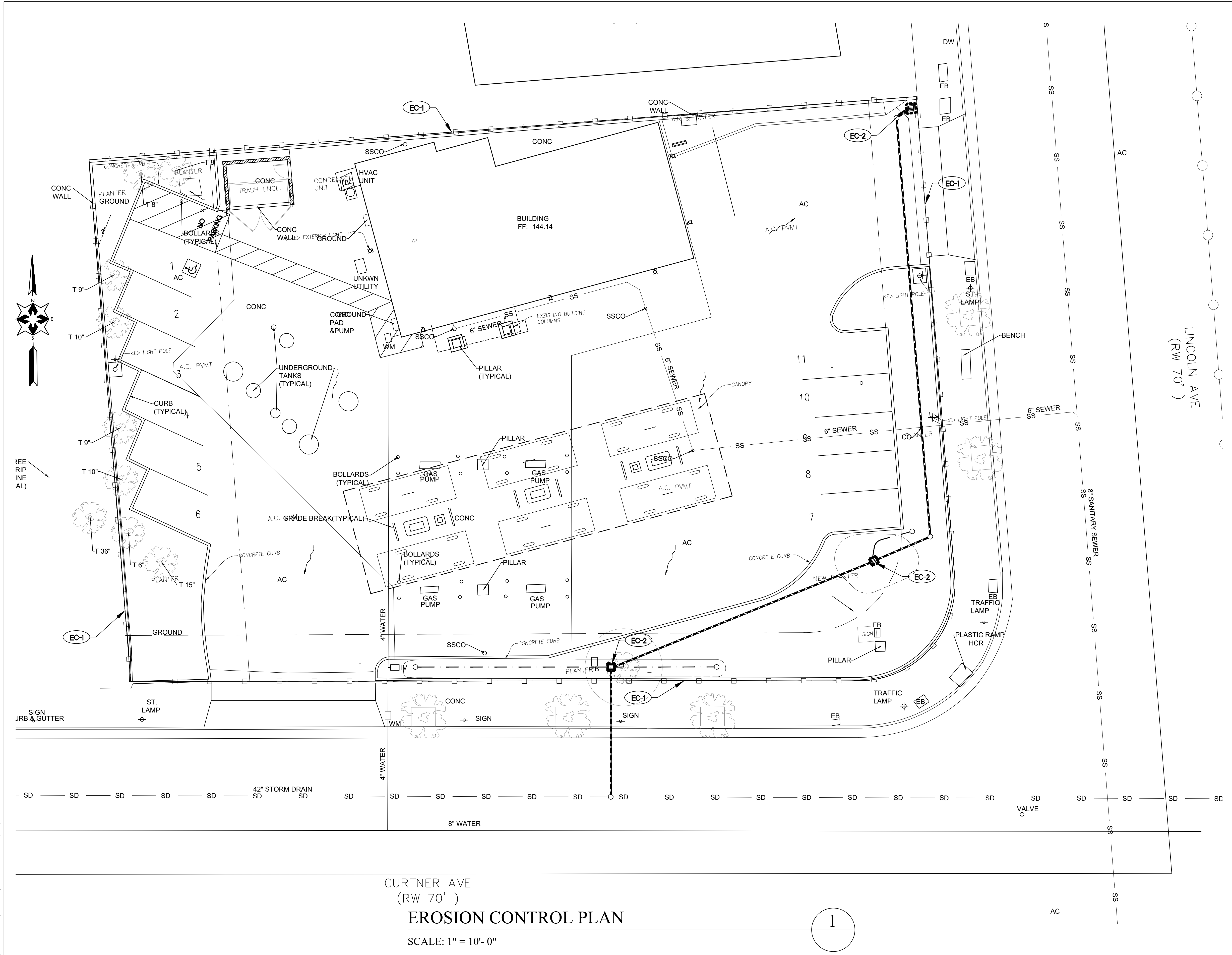
PROJECT NO. S19030
 DRAWN BY: DS
 CHECKED BY: ES
 SCALE: AS SHOWN
 DATE: 09/15/2019
 SHEET NO.
C4.0
 of 7

EROSION CONTROL ITEMS NOTES

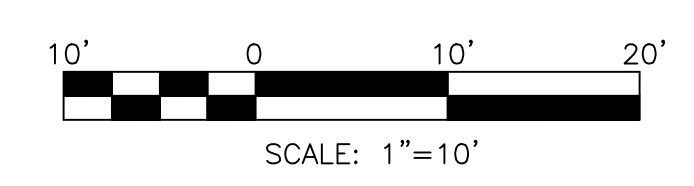
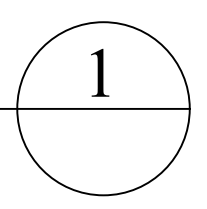
- EC-1 INSTALL STRAW WATTLE PER CITY STANDARD.
- EC-2 INSTALL DRAINAGE INLET PROTECTION PER CITY STANDARD.

EROSION CONTROL NOTES

- ALL GRADING WORK SHALL BE WINTERIZED PRIOR TO OCTOBER 1, BY PLACING APPROPRIATE SILT FENCING, SILT FENCE/STRAW BALE DIKES AND STRAW BALES IN A MANNER TO MINIMIZE EROSION AND COLLECT SEDIMENT AND ALSO BY HYDROSEEDING AREAS DISTURBED.
- THE EROSION CONTROL PLAN IS INTENDED FOR EROSION CONTROL ONLY. OTHER INFORMATION SHOWN HEREIN MAY NOT BE THE MOST CURRENT.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AND FILING ALL PLANS WITH THE RELATED AGENCIES ASSOCIATED WITH THEIR WORK. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, PERMITS FOR STORAGE OF HAZARDOUS MATERIALS, BUSINESS PLANS, PERMITS FOR STORAGE OF FLAMMABLE LIQUIDS, GRADING PERMITS, OR OTHER PLANS OR PERMITS REQUIRED BY THE CITY OF SAN JOSE PUBLIC WORKS AGENCY. ALL PROPERTY OWNERS, CONTRACTORS, OR SUBCONTRACTORS WORKING ON-SITE ARE INDIVIDUALLY RESPONSIBLE FOR OBTAINING AND SUBMITTING ANY BUSINESS PLANS OR PERMITS REQUIRED BY CITY, STATE OR LOCAL AGENCIES.
- ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED DURING THE RAINY SEASON (OCT. 1 TO APRIL 15), UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THE EROSION CONTROL PLAN TO MEET FIELD CONDITIONS WILL BE MADE ONLY WITH THE APPROVAL OF, OR AT THE DIRECTION OF THE OWNER. CHANGES MADE TO SUIT FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CIVIL ENGINEER AND THE CITY OF SAN JOSE PUBLIC WORKS AGENCY FOR COMMENTS AND APPROVAL.
- ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AS NECESSARY AT THE END OF EACH WORKING DAY, AFTER SIGNIFICANT RAIN OR DAILY DURING THE RAINY SEASON.
- IF SIGNIFICANT SEDIMENT OR OTHER VISUAL SYMPTOMS OF IMPURITIES ARE NOTICED IN THE STORM WATER, CONTACT THE CIVIL ENGINEER IMMEDIATELY.
- CONTRACTOR IS RESPONSIBLE FOR INSPECTION AND RESTORATION OF ALL ASPECTS OF THE EROSION CONTROL PLAN. SEDIMENT ON THE SIDEWALKS AND GUTTERS SHALL BE REMOVED BY SHOVEL OR BROOM AND DISPOSED OF APPROPRIATELY OFF-SITE.
- ALL EMPLOYEES, CONTRACTORS, AND SUBCONTRACTORS ARE RESPONSIBLE FOR CONFORMING TO THE ELEMENTS SHOWN ON THE EROSION CONTROL PLAN AND RELATED DOCUMENTS.
- CONTRACTOR SHALL EMPLOY BEST MANAGEMENT PRACTICES (BMP'S) IN ACCORDANCE WITH THE ASSOCIATION OF BAY AREA GOVERNMENTS (ABAG) LATEST RECOMMENDATIONS AND SWPPP.
- ALL DUMPS OR OTHER TRASH STORAGE ENCLOSURES SHALL BE UTILIZED SOLELY FOR NON-HAZARDOUS MATERIALS.
- DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIALS AND DEBRIS. THE SITE SHALL BE MAINTAINED SO THAT A MINIMUM OF SEDIMENT-LADEN RUNOFF ENTERS THE STORM DRAIN SYSTEM. THE EROSION CONTROL PLAN SHALL REMAIN IN EFFECT UNTIL THE IMPROVEMENTS ARE ACCEPTED BY THE CITY OF SAN JOSE PUBLIC WORKS AGENCY AND ALL SLOPES ARE STABILIZED.
- BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF THE CITY OF SAN JOSE PUBLIC WORKS AGENCY.
- REMOVE SPOILS PROMPTLY AND AVOID STOCKPILING OF FILL MATERIALS WHEN RAIN IS IN FORECAST. IF RAIN IS FORECAST OR APPARENT, STOCKPILED SOILS AND OTHER MATERIALS SHALL BE COVERED WITH PLASTIC OR A TARP, AT THE REQUEST OF THE CITY OF SAN JOSE PUBLIC WORKS AGENCY.
- STORE, HANDLE AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES SO AS TO PREVENT THEIR ENTRY INTO THE STORM DRAIN SYSTEM. CONTRACTOR MUST NOT ALLOW CONCRETE, WASHWATERS, SLURRIES, PAINT OR OTHER MATERIALS TO ENTER THE CATCH BASINS, STORM DRAINAGE OR ENTER SITE RUNOFF.
- USE FILTRATION OR OTHER APPROVED MEASURES TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.
- NO CLEANING, FUELING OR MAINTAINING VEHICLES ON SITE SHALL BE PERMITTED TO ALLOW DELETERIOUS MATERIALS FROM ENTERING THE CATCH BASINS, STORM DRAINAGE, OR ENTER SITE RUNOFF.
- EROSION CONTROL MEASURES TO BE EMPLOYED PER EROSION AND SEDIMENT CONTROL FIELD MANUAL, CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD-SAN FRANCISCO BAY REGION, PROJECT SWPPP.



CURTNER AVE
 (RW 70')
EROSION CONTROL PLAN
 SCALE: 1" = 10'-0"



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