

APPENDIX H
LOW IMPACT DEVELOPMENT PLAN (LID)

Low Impact Development Plan (LID Plan)

Project Name:

One Industrial Building

309 West Allen Avenue, San Dimas, Ca. 91773

Prepared for:

Ceg Construction , Llc

7901 S. Crossway Drive

Pico Rivera, Ca. 90660

(562) 948-4850

Prepared by:

Seaboard Engineering Company

1415 E. Colorado Street, Ste. 205

Glendale , Ca. 91205

310 -277-7337



PE Stamp & Sign Here

05/18/2022

Project Owner's Certification

I certify under penalty of law that this document and all attachments were prepared under my jurisdiction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathered the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner's Name:	James Devling		
Owner's Title:	Approved Signatory		
Company:	CEG Construction		
Address:	7901 s. Crossway Drive, Plco Rivera, CA. 90660		
Email:	jdevling@cegconstruction.com		
Telephone No:	(562)948-4850		
Signature:		Date:	

Preparer (Engineer) Certification


Engineer's Name:	Marites A. Dizon, P.E. , P.L.S. , Q.S.D., Q.S.P.		
Engineer's Title:	President		
Company:	Seaboard Engineering Company		
Address:	1415 E. Colorado Street, Glendale , Ca. 91205		
Email:	marites@seaboardengco.com		
Telephone No:	310-277-7337		
I hereby certify that this Low Impact Development Plan is in compliance with, and meets the requirements set forth in, Order No. R4-2012-0175, of the Los Angeles Regional Water Quality Control Board.			
Engineer's Signature		Date	05/05/2022
Place Stamp Here			

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1. PROJECT DESCRIPTION

1.1. PROJECT CATEGORY

Check which box best represents the proposed project category. Only check "Yes" for one box.

Category	YES	NO
1. Development ^a of a new project equal to 1 acre or greater of disturbed area and adding more than 10,000 square feet of impervious area ^b	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Development ^a of a new industrial park with 10,000 square feet or more of surface area ^c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Development ^a of a new commercial mall with 10,000 square feet or more surface area ^c	<input type="checkbox"/>	<input type="checkbox"/>
4. Development ^a of a new retail gasoline outlet with 5,000 square feet or more of surface area ^c	<input type="checkbox"/>	<input type="checkbox"/>
5. Development ^a of a new restaurant (SIC 5812) with 5,000 square feet or more of surface area ^c	<input type="checkbox"/>	<input type="checkbox"/>
6. Development ^a of a new parking lot with either 5,000 ft ² or more of impervious area ^b or with 25 or more parking spaces	<input type="checkbox"/>	<input type="checkbox"/>
7. Development ^a of a new automotive service facility (SIC 5013, 5014, 5511, 5541, 7532-7534 and 7536-7539) with 5,000 square feet or more of surface area ^c	<input type="checkbox"/>	<input type="checkbox"/>
8. Projects located in or directly adjacent to, or discharging directly to a Significant Ecological Area (SEA), ^d where the development will: a. Discharge stormwater runoff that is likely to impact a sensitive biological species or habitat; and b. Create 2,500 square feet or more of impervious area ^b	<input type="checkbox"/>	<input type="checkbox"/>
9. Redevelopment ^e of 5,000 square feet or more in one of the categories listed above If yes, list redevelopment category here: 2	<input type="checkbox"/>	<input type="checkbox"/>
10. Redevelopment ^e of 10,000 square feet or more to a Single Family Home, without a change in land use.	<input type="checkbox"/>	<input type="checkbox"/>

- a Development includes any construction or demolition activity, clearing, grading, grubbing, or excavation or any other activity that results in land disturbance.
- b Surfaces that do not allow stormwater runoff to percolate into the ground. Typical impervious surfaces include: concrete, asphalt, roofing materials, etc.
- c The surface area is the total footprint of an area. Not to include the cumulative area above or below the ground surface.
- d An area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and would be disturbed or degraded by human activities and developments. Also, an area designated by the City as approved by the Regional Water Quality Control Board.
- e Land-disturbing activities that result in the creation, addition, or replacement of a certain amount of impervious surface area on an already developed site. Redevelopment does not include routine maintenance activities that are conducted to maintain the original line and grade, hydraulic capacity, or original purpose of facility, nor does it include modifications to existing single family structures, or emergency construction activities required to immediately protect public health and safety.

1.2. PROJECT DESCRIPTION

Total Project Area (ft²): 112,431 SF

Total Project Area (Ac): 2.58 Ac.

EXISTING CONDITIONS

Condition	Area (ft ²)	Percentage (%)
Pervious Area:	102,278 SF	90%
Impervious Area:	10,153 SF	10%

PROPOSED CONDITIONS

Condition	Area (ft ²)	Percentage (%)
Pervious Area:	16,034 SF	14.26%
	AREA 1A = 7,092 SF	6.31 %
	AREA 1B = 8,942	7.95%
Impervious Area:	96,397 SF	85.74%
	AREA 1A = 68,953 SF	61.33%
	AREA 1B = 27,444 SF	24.41%

Site Characteristics

<p>DRAINAGE PATTERNS/CONNECTIONS</p> <p>[Include a detailed description of existing and proposed drainage patterns. Describe the areas and sub-areas (to include square footage), treatment locations, direction of flow through each area, discharge point(s), ultimate termination point, etc.]</p>	<p>Existing:</p> <p>The site is located on the northwest corner of West Allen Avenue and Cataract Avenue in the City of San Dimas. The site is bounded by commercial/industrial developments on the northerly and westerly side of the project. West Allen Avenue is on the south side and Cataract Avenue bounded the project site on the east.</p> <p>Existing use of the land is residential use with home residential homes and garages. The project site is zoned as AL which is light agricultural zone. The project has a coefficient of runoff equal to 0.10 for pre-developed site and 0.857 for developed site. The natural ground topography of the site is towards the south and drains to West Allen Avenue and runs westerly along W. Allen Avenue. There are no storm drain system within the proximity of the project. West Allen Avenue and Cataract</p>
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	<p>Avenue are both improved street with curb and gutter and asphalt pavement .</p>
	<p>Proposed:</p> <p>The proposed project is to construct one industrial building with loading areas and parking lot. It is proposed to construct the building at the center of the project and parking area on the west side and driveway on the west of the project. The proposed runoff will drain to the south through curb and gutter</p> <p>The proposed drainage pattern will be to the south. The runoff for Area 1 A will drain to the landscape. It is proposed to have infiltration trench at the drive aisle and runoff will have infiltration and any excess drainage will be discharge to West Allen Avenue through a parkway drain. Area 1B will drain to the landscape area and into the infiltration trench along West Allen avenue and excess runoff will also be discharged through the curb face.</p>
<p>NARRATIVE PROJECT DESCRIPTION:</p> <p>[Include a detailed description of project areas, type of facilities, activities conducted onsite, materials and products received and stored on site, SIC Code (if applicable), land uses, land cover, design elements, drainage management areas (DMAs), etc.]</p>	<p>This report is for Low impact development plan (L.I.D. plan) for the proposed industrial building . The design data and parameters are based on Los Angeles County Municipal Stormwater Permit (Regional Board Order – 2012-0175). Existing field condition are based on the topographical survey prepared by SEABOARD Engineering Land Surveying company.</p> <hr/> <p>The proposed landscape area for A & B is 16,034 square feet.</p> <p>The total impervious area for A & B is 96,397square feet.</p> <p>The project have sidewalk along the property frontage on both Cataract Avenue and West Allen Avenue</p> <p>The best management practice used is an underground infiltration trench system with rocks only and the storm drain that drains to the existing storm drain systems will all be privately maintained.</p>

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<p>OFFSITE RUNON</p> <p>[Describe any offsite runon anticipated and how the runon will be either accounted for in LID BMP sizing or directed around the site.]</p>	<p>Project does not have off-site run-on. The property on the north side, an industrial development have drainage runoff to Cataract Avenue and the one on west side drains to West Allen Avenue.</p>
<p>UTILITIES:UTILITY AND INFRASTRUCTURE INFORMATION</p> <p>[Include a description of the existing and proposed onsite utility and infrastructure. Evaluate the potential impacts of stormwater infiltration on subsurface utilities, establish necessary setbacks, and if the utilities need to be relocated. Retention-based stormwater quality control measures should not be located near utility lines where an increased volume of water could damage utilities.]</p>	<p>The site has existing utility lines, i.e. water, sewer , storm drain, electrical and oil lines that can serve the property. The water and sewer services will be removed and re-constructed to new service locations to serve the new buildings.</p>
<p>SIGNIFICANT ECOLOGICAL AREAS (SEAs)</p> <p>[Identify any known Significant Ecological Area (SEA) which the project is located in or directly adjacent to,</p>	<p>Project does not have any significant ecological areas.</p>

1.3. HYDROMODIFICATION ANALYSIS

DOES THE PROPOSED PROJECT FALL INTO ONE OF THE FOLLOWING CATEGORIES? CHECK YES/NO.	YES	NO
1. <i>Project is a redevelopment that decreases the effective impervious area compared to the pre-project conditions.</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Describe: the project have infiltration with mitigated storage volume of stormwater stored in an underground infiltration chamber system filled with rock gravel.		
2. <i>Project is a redevelopment that increases the infiltration capacity of pervious areas compared to the pre-project conditions.</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Describe: The project will have rock gravel to enhance the infiltration capacity of the site.		
3. <i>Project discharges directly or via a storm drain to a sump, lake, area under tidal influence, into a waterway that has a 100-year peak flow (Q_{100}) of 25,000 cfs or more.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Describe: The project does not discharges to the storm drain directly to a sump or lake, area under tidal influence.		
4. <i>Project discharges directly or via a storm drain into concrete or otherwise engineered (not natural) channels (e.g., channelized or armored with rip rap, shotcrete, etc.), which, in turn, discharge into receiving water that is not susceptible to hydromodification impacts.</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Describe: The project does not discharges to the storm drain directly, and does not discharge to receiving water susceptible to hydromodification.		

HYDROMODIFICATION ANALYSIS

The project is exempt from the Hydromodification Control Measures.

1.4. PROPERTY OWNERSHIP/MANAGEMENT

[Describe ownership of all portions of project and site. Include information on if any infrastructure transfer to public agencies (City, County, Caltrans, etc.). Describe any property management company/association that will be formed. Include lesee information, as applicable.]	Owners: MR. James Devling CEG CONSTRUCTION, INC 7901 S. CROSSWAY DRIVE PICO RIVERA , CA. 90660 (562) 948-4850
	The owner will maintain the project site. The building will be leased.

Best Management Practices (BMPs)

1.5. SITE DESIGN

85 TH PERCENTILE, 24-HOUR STORM DEPTH	The 85th percentile used for the site is 1 inch.
. SITE DESIGN . [Describe site design and drainage plan including; site design practices utilized and how BMPs are incorporated using the appropriate hierarchy.] The project site design utilizes the landscape area and installs an . Underground Infiltration chamber system under the landscape area with . gravel to enhance the infiltration capacity of the site. The landscape area . is depressed to mitigate the run-off. . . .

BMP LIST

[Fill out the table below with information on the BMPs incorporated in each Drainage Management Area (DMA)]

DMA DESIGNATION	SQUARE FOOTAGE (SF)	ACREAGE (AC)	STORM WATER QUALITY DESIGN VOLUME (SWQDV, CF)	STORM WATER QUALITY DESIGN FLOWRATE (SWQDQ, CFS)	BMP TYPE [Include make & model if proprietary]	MINIMUM BMP SIZE [Include units]	BMP SIZE PROVIDED [Include units]	GPS COORDINATES
A	76,045	1.746	5,139 CF	0.40 CFS	INFILTRATION TRENCH	882 SF	885 SF	N34.11772 W117.81239
B	36,386	0.835	1,912 CF	0.16 CFS	INFILTRATION TRENCH	260 SF	400 SF	N34.117664 W117.811881

1.6. BMP SELECTION

1.6.1. INFILTRATION BMPs

NAME	INCLUDED [Check all that apply.]
Bioretention without underdrains	<input type="checkbox"/>
Infiltration Trench	<input checked="" type="checkbox"/>
Infiltration Basin	<input type="checkbox"/>
Drywell	<input type="checkbox"/>
Proprietary Subsurface Infiltration Gallery/CHAMBERS	<input type="checkbox"/>
Permeable Pavement (concrete, asphalt, pavers)	<input type="checkbox"/>
Other:	<input type="checkbox"/>
Other:	<input type="checkbox"/>

<p>DESCRIPTION</p> <p>[Describe Infiltration BMPs. Include descriptions on selection, sizing, and feasibility, as applicable. If infiltration is infeasible, provide brief explanation, including reference to the geotechnical report.]</p>	<p>The underground infiltration trench system bmp includes an infiltration rock gravel under the parking area for drainage area 1A and under the landscape area for drainage area 1B. The rock gravel will infiltrates the volume into the ground.</p>
<p>CALCULATIONS</p> <p>[Show calculations to demonstrate that the Storm Water Quality Design volume can be met with Infiltration BMPs.]</p>	<p>SEE CALCULATION HEREON</p>

Peak Flow Hydrologic Analysis

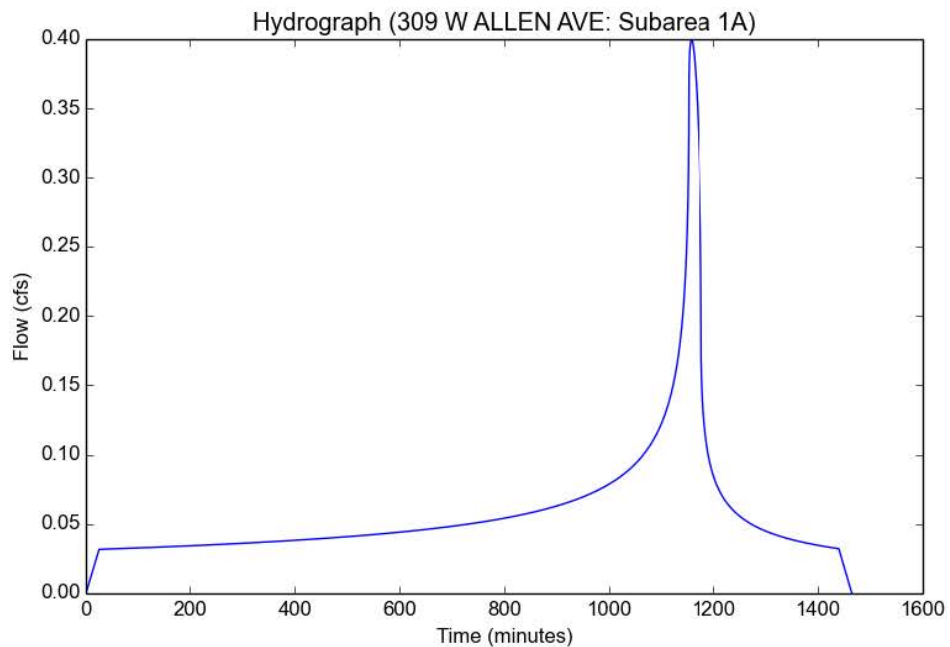
File location: Y:/2021/21-068 Allen-Cataract San Dimas/21-068 docs/21-068hyd/area 1- 746/309 W ALLEN AVE - Subarea 1A-85TH.pdf
 Version: HydroCalc 0.3.1

Input Parameters

Project Name	309 W ALLEN AVE
Subarea ID	Subarea 1A
Area (ac)	1.746
Flow Path Length (ft)	490.0
Flow Path Slope (vft/hft)	0.01
85th Percentile Rainfall Depth (in)	1.0
Percent Impervious	0.897
Soil Type	7
Design Storm Frequency	85th percentile storm
Fire Factor	0
LID	True

Output Results

Modeled (85th percentile storm) Rainfall Depth (in)	1.0
Peak Intensity (in/hr)	0.28
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.8176
Time of Concentration (min)	25.0
Clear Peak Flow Rate (cfs)	0.3997
Burned Peak Flow Rate (cfs)	0.3997
24-Hr Clear Runoff Volume (ac-ft)	0.118
24-Hr Clear Runoff Volume (cu-ft)	5139.1474



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309 W. Allen Avenue

JOB No. 21-68

XI. STORM MITIGATION CALCULATION - LID

DESIGN FOR INFILTRATION - BMP

AREA A

REQUIRED STORM WATER QUALITY DESIGN VOLUME IS = 5139 CF

THAN THE 85TH PERCENTILE VOLUME

AREA OF DETENTION = 885 SF AREA PROPOSED ON THE PROJECT

LANDSCAPE AREA = 7,092 SF

AREA 1.746 ACRE

$A_p = 0.1628 \times 0.1 = 0.0163$

$A_{imp} = 1.746 \times 0.9 = 1.5714$

SOIL ORGANIC MEDIA INF = 34 IN/HR per Sladden Percolation report 01/14/22

FILL 3 FEET Proj. No. 444-21106

T -retention time = 72 HRS

i: VOLUME DESIGN

$V = 1 \times 0.0625 \times 43560$ AREA

$V = 1 \times 2723 \times 1.588$

$V = 4322.4615$ CF HOWEVER USE LID CALCULATOR = 5139 CF

ii: DETERMINE THE INFILTRATION RATE

$K_{sat\ design} = \frac{K_{sat}}{F_s} = \frac{34.290}{3.000}$ IN/HR

= 11.43

since no infiltration is allowed, the volume is multiplied by 1.5 for bio-filtration

iii. DETERMINE THE BOTTOM INFILTRATION AREA = A min

$V_r = TIME\ FILL \times K\ SAT \times AREA$

$V_r = 3 \times 11.43\ IN/HR \times 885 /12$

$V_r = 2529$ CF

$A\ MIN = \frac{SWQDV \times 1}{(T * K_{sat}/12) + d_p} = \frac{(5139.0 - 2529) \times 1.0}{(T * K_{sat}/12) + d_p}$

$A\ MIN. = \frac{2610}{3 \times 11.43\ IN/HR + 0.100}$

= 882.54 SF < Area of proposed Detention= 885

SURFACE AREA PROVIDED = 885 SF > 882.54 SF

therefore provided Infiltration trench area is okay.

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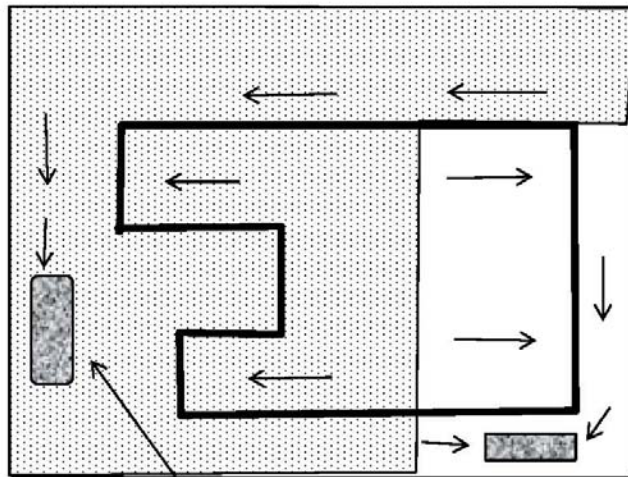
Determine Volume Storage

$$\begin{aligned} \text{VOL s} &= ((\text{SWQDV}) - (885 \times 0.100)) - \text{Vr} / 0.4 \\ \text{VOL s} &= 5139 - 88.5 - 2529 \\ \text{VOL s} &= 2522 / 0.4 \quad (0.40 \text{ is factor for Gravel voids}) \\ \text{VOL s} &= 6304 \text{ CUBIC FEET} \end{aligned}$$

iv. DETERMINE THE DEPTH

$$\begin{aligned} \text{DEPTH} &= \text{VOL s} / \text{Area provided} \\ \text{DEPTH} &= 6304 / 885 \text{ SF} \\ \text{DEPTH} &= 7.12 \text{ feet GRAVEL trench} \end{aligned}$$

provide 7.5 FEET



W. ALLEN AVENUE

CATARACT ST.

TOTAL DETENTION AREA A= 885 SF X 7.5 FT DEPTH
 TRIBUTARY AREA = 1.746 Ac

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Peak Flow Hydrologic Analysis

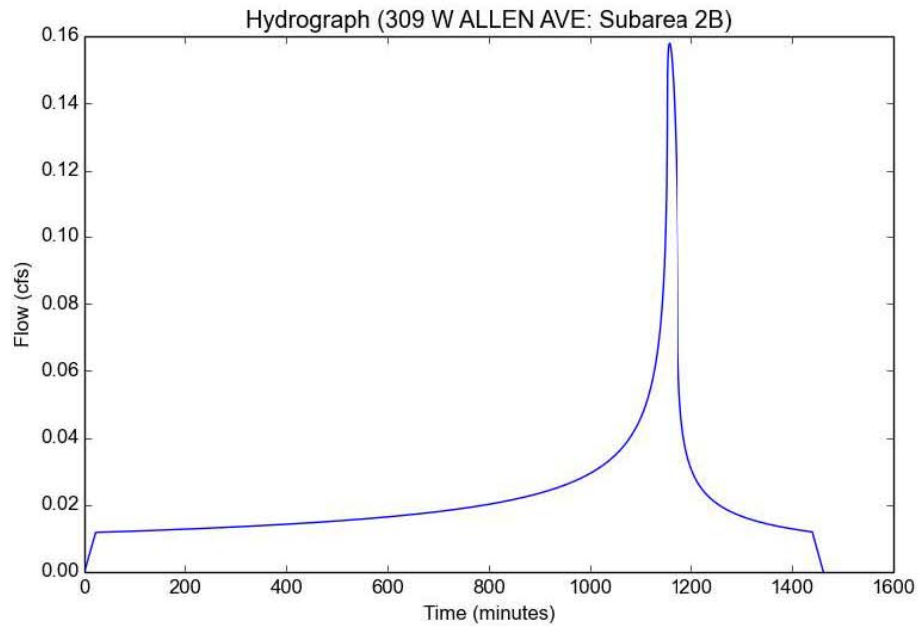
File location: Y:/2021/21-068 Allen-Cataract San Dimas/21-068 docs/21-068hyd/area 2-0835/309 W ALLEN AVE - Subarea 2B-85th.pdf
 Version: HydroCalc 0.3.1

Input Parameters

Project Name	309 W ALLEN AVE
Subarea ID	Subarea 2B
Area (ac)	0.835
Flow Path Length (ft)	320.0
Flow Path Slope (vft/hft)	0.01
85th Percentile Rainfall Depth (in)	1.0
Percent Impervious	0.67
Soil Type	7
Design Storm Frequency	85th percentile storm
Fire Factor	0
LID	True

Output Results

Modeled (85th percentile storm) Rainfall Depth (in)	1.0
Peak Intensity (in/hr)	0.2974
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.636
Time of Concentration (min)	22.0
Clear Peak Flow Rate (cfs)	0.1579
Burned Peak Flow Rate (cfs)	0.1579
24-Hr Clear Runoff Volume (ac-ft)	0.0439
24-Hr Clear Runoff Volume (cu-ft)	1911.8277



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309 W. Allen Avenue

JOB No. 21-68

XI. STORM MITIGATION CALCULATION - LID

DESIGN FOR INFILTRATION - BMP

AREA B

REQUIRED STORM WATER QUALITY DESIGN VOLUME IS = 1912 CF
 THAN THE 85TH PERCENTILE VOLUME

AREA OF DETENTION = 400 SF AREA PROPOSED ON THE PROJECT
LANDSCAPE AREA = 8,942 SF

AREA 0.835 ACRE

Ap = 0.2053 X 0.1 = 0.0205

Aimp = 0.835 X 0.9 = 0.7515

SOIL ORGANIC MEDIA INF = **34** IN/HR per Sladden Percolation report 01/14/22

T FILL = 3 FEET Proj. No. 444-21106

T -retention time = 48 HRS

i: VOLUME DESIGN

V = 1 X 0.0625 X 43560 AREA

V = 1 X 2723 X 0.772

V = 2101.84625 CF HOWEVER USE LID CALCULATOR = 1912 CF

ii: DETERMINE THE INFILTRATION RATE

K sat design = $\frac{K \text{ sat}}{F_s} = \frac{34.290}{3.000}$ IN/HR

= 11.43

since no infiltration is allowed, the volume is multiplied by 1.5 for bio-filtration

iii. DETERMINE THE BOTTOM INFILTRATION AREA = A min

Vr = TIME FILL X K SAT X AREA

Vr = 3 X 11.43 IN /HR X 400 /12

Vr = 1143 CF

A MIN = $\frac{SWQDV \times 1}{(T * Ksat/12) + dp} = \frac{(1912.0 - 1143) \times 1.0}{(3 * 11.43/12) + 0.100}$

A MIN. = $\frac{769}{3 \times 11.43 \text{ IN/HR} + 0.100}$

= 260.02 SF < Area of proposed Detention= 400

SURFACE AREA PROVIDED = 400 SF > 260.02 SF

therefore provided Infiltration trench area is okay.

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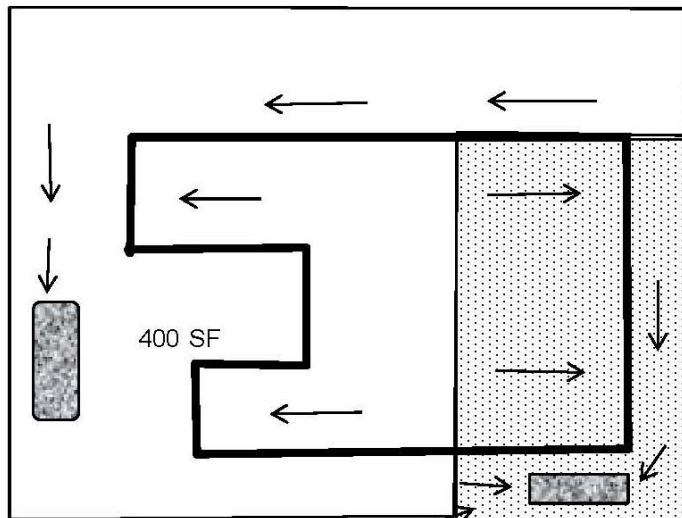
Determine Volume Storage

$$\begin{aligned} \text{VOL s} &= ((\text{SWQDV}) - (400 \times 0.100)) - Vr / 0.4 \\ \text{VOL s} &= 1912 - 40 - 1143 \\ \text{VOL s} &= 729 / 0.4 \quad (0.40 \text{ is factor for Gravel voids}) \\ \text{VOL s} &= 1823 \quad \text{CUBIC FEET} \end{aligned}$$

iv. DETERMINE THE DEPTH

$$\begin{aligned} \text{DEPTH} &= \text{VOL s} / \text{Area provided} \\ \text{DEPTH} &= 1823 / 400 \text{ SF} \\ \text{DEPTH} &= 4.56 \text{ feet GRAVEL trench} \end{aligned}$$

provide 5 feet depth



$$\begin{aligned} \text{TOTAL DETENTION AREA B} &= 400 \text{ SF} \times 5 \text{ FT depth} \\ \text{TRIBUTARY AREA} &= 0.835 \text{ Ac} \end{aligned}$$

PAGE

1.6.2. RAINWATER HARVEST AND USE BMPs

NAME	INCLUDED [Check all that apply.]
Above-ground cisterns and basins	<input type="checkbox"/>
Underground detention	<input type="checkbox"/>
Other:	<input type="checkbox"/>
Other:	<input type="checkbox"/>
Other:	<input type="checkbox"/>

<p>DESCRIPTION</p> <p>[Describe Rainwater Harvest and Use BMPs. Include descriptions on selection, suitability, sizing, and infeasibility, as applicable.]</p>	N. A.
<p>CALCULATIONS</p> <p>[Show calculations to demonstrate if the Storm Water Quality Design volume can be met with Rainwater Harvest and Use BMPs. If not, document how much can be met with Rainwater Harvest and Use and why it is not feasible to meet the full volume with Rainwater Harvest and Use BMPs.]</p>	N.A.

1.6.3. ALTERNATIVE COMPLIANCE BMPs

BIOFILTRATION BMPs

(If Infiltration BMPs and Rainwater Harvest and Use BMPs are Infeasible) NOT APPLICABLE

NAME	INCLUDED [Check all that apply.]
Bioretention with underdrains (i.e. planter box, rain garden, etc.)	<input type="checkbox"/>
Constructed Wetland	<input type="checkbox"/>
Vegetated Swale	<input type="checkbox"/>
Vegetated Filter Strip	<input type="checkbox"/>
Tree-Well Filter	<input type="checkbox"/>
Other:	<input type="checkbox"/>
Other:	<input type="checkbox"/>

<p>DESCRIPTION</p> <p>[If the full Design Storm Capture Volume cannot be met with Infiltration BMPs, and/or Rainwater Harvest and Use BMPs, describe Biofiltration BMPs. Include descriptions on selection, suitability, sizing, and infeasibility, as applicable.]</p>	<p>N.A.</p>
<p>CALCULATIONS</p> <p>[Show calculations to demonstrate how 1.5 times the Storm Water Quality Design volume and/or flowrate can be met with Biotreatment BMPs.]</p>	<p>N.A.</p>

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OFFSITE BMPs

(If Infiltration BMPs, Rainwater Harvest and Use BMPs, and Biofiltration BMPs are Infeasible)

NAME	INCLUDED [Check all that apply.]
Offsite Infiltration	<input type="checkbox"/>
Ground Water Replenishment Projects	<input type="checkbox"/>
Offsite Project - Retrofit Existing Development	<input type="checkbox"/>
Regional Storm Water Mitigation Program	<input type="checkbox"/>
Other:	<input type="checkbox"/>
Other:	<input type="checkbox"/>

<p>DESCRIPTION</p> <p>[If the full Design Storm Capture Volume cannot be met with Infiltration BMPs, Rainwater Harvest and Use BMPs, or Biofiltration BMPs, describe proposed Alternative Compliance BMPs. Include descriptions on selection, suitability, sizing, and infeasibility, as applicable.]</p>	<p>N.A.</p>
<p>CALCULATIONS</p> <p>[Show calculations to demonstrate how the conditions required by the MS4 Permit will be met with Alternative Compliance BMPs.]</p>	<p>N.A.</p>

1.6.4. TREATMENT CONTROL BMPs

Treatment control BMPs can only be used as pre-treatment to LID BMPs.

NAME	INCLUDED [Check all that apply.]
Media Filter	<input type="checkbox"/>
Filter Insert	<input checked="" type="checkbox"/>
CDS Unit	<input type="checkbox"/>
Other: Marking " No Dumping Sign" on catch basin	<input checked="" type="checkbox"/>
Other:	<input type="checkbox"/>

DESCRIPTION [Include descriptions on selection, suitability, sizing, and infeasibility, as applicable.]	Marking " No Dumping Sign" on catch basin. Bio clean filter inserts on the catch basins are also proposed to filter and oil and hydrocarbons coming from the asphalt pavement. The catch basin inserts are proposed on all catch basins in the loading area. The surface water will then sheet flow to the concrete gutter and then discharges to the landscape / infiltration trench that drains to the underground infiltration chambers systems. The minimum size catch basin is 24 inches x 24 inches and the catch basin filter insert model Part # GISB 24-24-24 has a throat flow capacity of 2.41 cfs.
--	---

1.6.5. HYDROMODIFICATION CONTROL BMPs

NAME	INCLUDED [Check all that apply.]
Infiltration System	<input type="checkbox"/>
Above-ground Cistern	<input type="checkbox"/>
Above-ground Basin	<input type="checkbox"/>
Underground Detention	<input type="checkbox"/>
Other:	<input type="checkbox"/>
Other:	<input type="checkbox"/>

<p>DESCRIPTION</p> <p>[If the site is susceptible to hydromodification, include descriptions on selection and sizing of Hydromodification Control Measures.]</p>	N.A.
<p>CALCULATIONS</p> <p>[If the site is susceptible to hydromodification, show calculations to demonstrate how the volume, flowrate, and duration conditions can be met with Hydromodification Control Measures BMPs.]</p>	N.A.

1.6.6. NON-STRUCTURAL SOURCE CONTROL BMPs

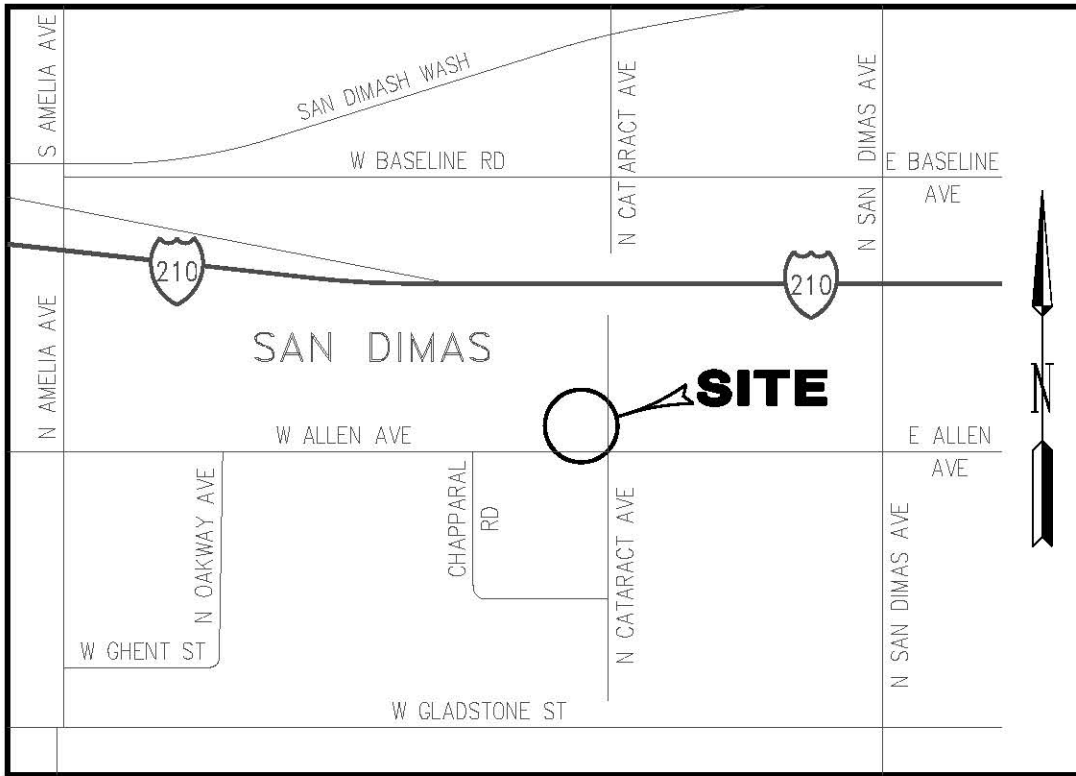
NAME	CHECK ONE	
	Included	Not Applicable
Education for Property Owners, Tenants and Occupants	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Activity Restrictions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Common Area Landscape Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Common Area Litter Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Housekeeping of Loading Docks	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Common Area Catch Basin Inspection	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Street Sweeping Private Streets and Parking Lots	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1.6.7. STRUCTURAL SOURCE CONTROL BMPs

NAME	CHECK ONE	
	Included	Not Applicable
Provide storm drain system stenciling and signage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Design and construct outdoor material storage areas to reduce pollution introduction	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Design and construct trash and waste storage areas to reduce pollution introduction	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Protect slopes and channels and provide energy dissipation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Loading docks	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Maintenance bays	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Vehicle wash areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Outdoor processing areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Equipment wash areas/racks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fueling areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hillside landscaping	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Attachment A

Calculations/MAPS



VICINITY MAP

NOT TO SCALE

LAND AREA:

AREA: 112,431 SQ. FT. OR 2.581 ACRES

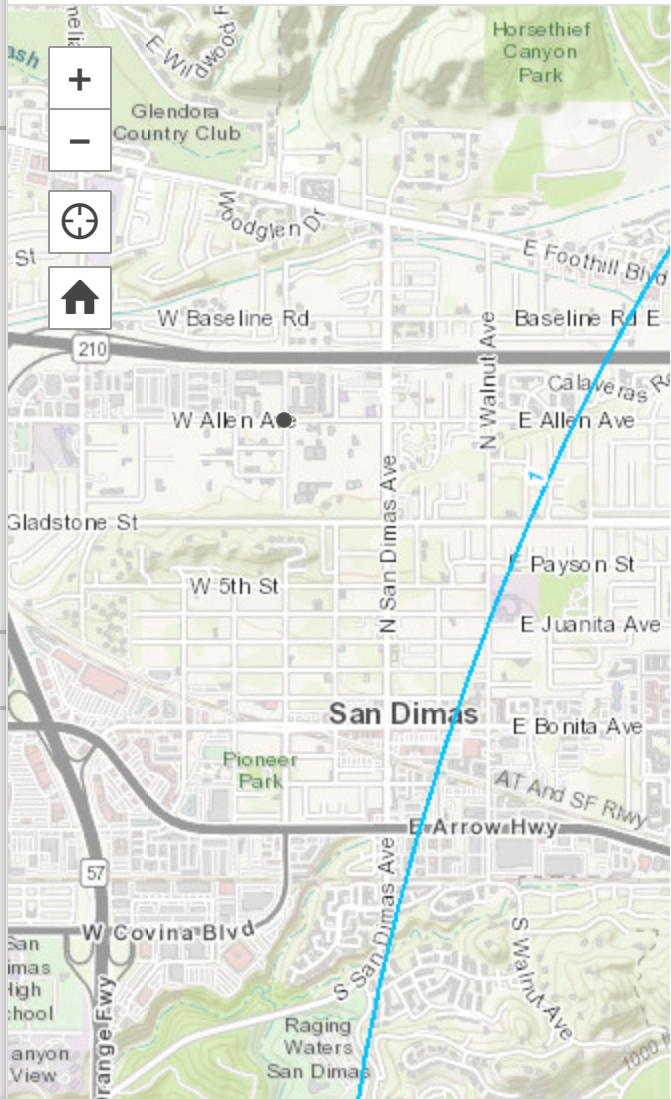
ASSESSOR'S PARCEL NUMBER:

A.P.N.'s 8392-016-008, 8392-016-047 AND 8392-016-048

Layers

- Hydrology GIS ▼
 - 50yr Two Tenths (Rainfall)
 - DPA Zones
 - Soils 2004
 - Final 85th Percentile, 24-hr Rainfall
 - 1-year, 1-hour Rainfall Intensity
 - Final 95th Percentile, 24-hr Rainfall

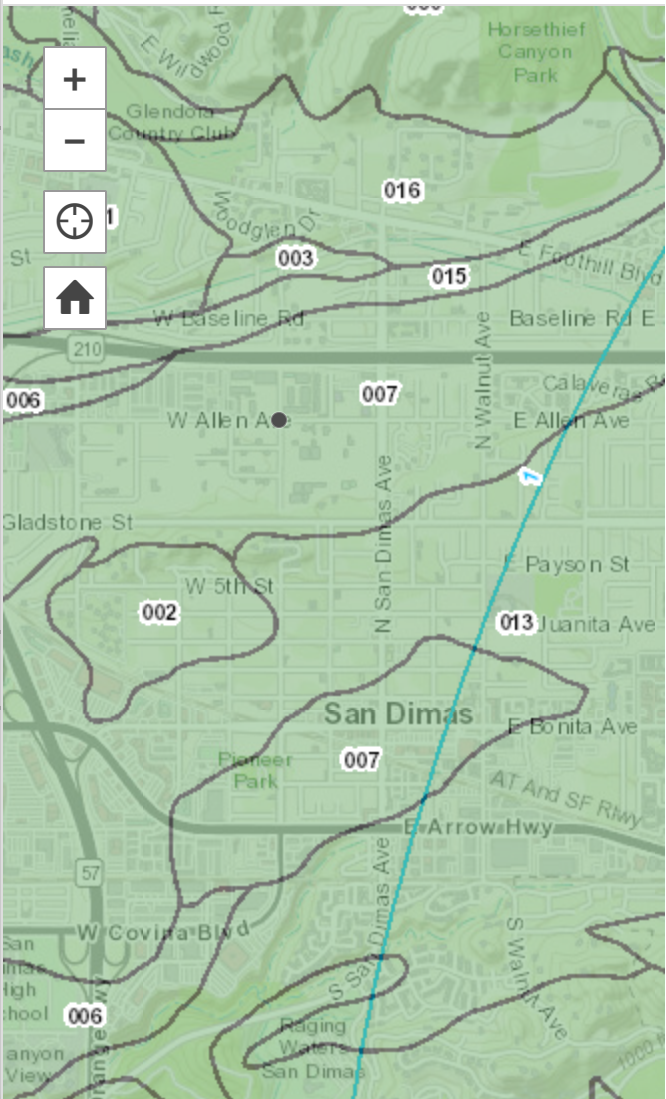
- LA County Parcels



Layers

- Hydrology GIS ▼
 - 50yr Two Tenths (Rainfall)
 - DPA Zones
 - Soils 2004
 - Final 85th Percentile, 24-hr Rainfall
 - 1-year, 1-hour Rainfall Intensity
 - Final 95th Percentile, 24-hr Rainfall

- LA County Parcels



Attachment B

Geotechnical Investigation

[



Sladden Engineering

45090 Golf Center Parkway, Suite F, Indio, CA. 92201 (760) 863-0713 Fax (760) 863-0847
6782 Stanton Avenue, Suite C, Buena Park, CA. 90621 (714) 523-0952 Fax (714) 523-1369
450 Egan Avenue, Beaumont, CA. 92223 (951) 845-7743 Fax (951) 845-8863
www.SladdenEngineering.com

January 14, 2022

Project No. 444-21106
22-01-005

CEG Construction, Inc.
7901 Crossway Drive
Pico Rivera, California 90660-4449

Project: Proposed Allen Industrial Facility
309 West Allen Avenue
San Dimas, California

Subject: Percolation/Infiltration Testing for On-Site Storm Water Management

Ref: Geotechnical Investigation report prepared by Sladden Engineering dated January 14, 2022; Project No. 444-21106, Report No. 22-01-001.

In accordance with your request, we have performed percolation/infiltration testing on the subject site to evaluate the infiltration potential of the near surface soil to assist in storm water management system design. It is our understanding that on-site storm water retention/infiltration is proposed for the project.

Percolation testing was performed on December 8, 2021 within two (2) shallow test bores excavated on the site. Testing was performed at depths of approximately 5 & 10 feet below existing grade for Test Hole BH-2/P-1 and Test Hole BH-3/P-2, respectively. The approximate locations of the tests are indicated on the attached Borehole Location Photograph (Figure 3). Testing was performed by placing water within the test bores and recording the drop in the water surface with time. Testing was performed in general accordance with the *United States Bureau of Reclamation (BOR) Procedure 7300-89 (1999)*. Test results are summarized in the following table.

PERCOLATION/INFILTRATION TEST RESULTS

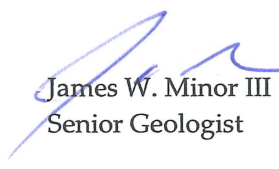
Test Number No.	Depth (ft)	Preadjusted Percolation Rate (in/hr)	Design Infiltration Rate (in/hr)
BH-2/P-1	5.00	120.00	34.29
BH-3/P-2	10.00	120.00	34.29

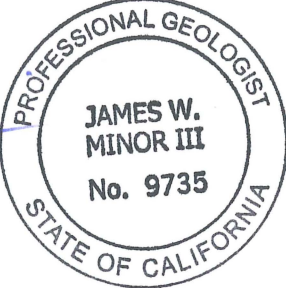
The preadjusted percolation rates determined represent the ultimate field rates that do not include a safety factor. The design infiltration rate utilizes a reduction factor that was determined in accordance with Los Angeles County guidelines for storm water management.

Groundwater was not encountered within our exploratory boreholes conducted during our exploratory investigation to the maximum explored depth of 17.0 feet bgs. Groundwater levels should not be a factor in the design of the storm water retention/infiltration system(s).

If you have any questions regarding this memo, please contact the undersigned.

Respectfully submitted,
SLADDEN ENGINEERING


James W. Minor III
Senior Geologist



Brett L. Anderson
Principal Engineer

Copies: 2 / Addressee

FIGURES

SITE LOCATION MAP
REGIONAL GEOLOGIC MAP
BOREHOLE LOCATION PHOTOGRAPH
SITE PLAN



Source: USGS (2012)

SITE LOCATION MAP

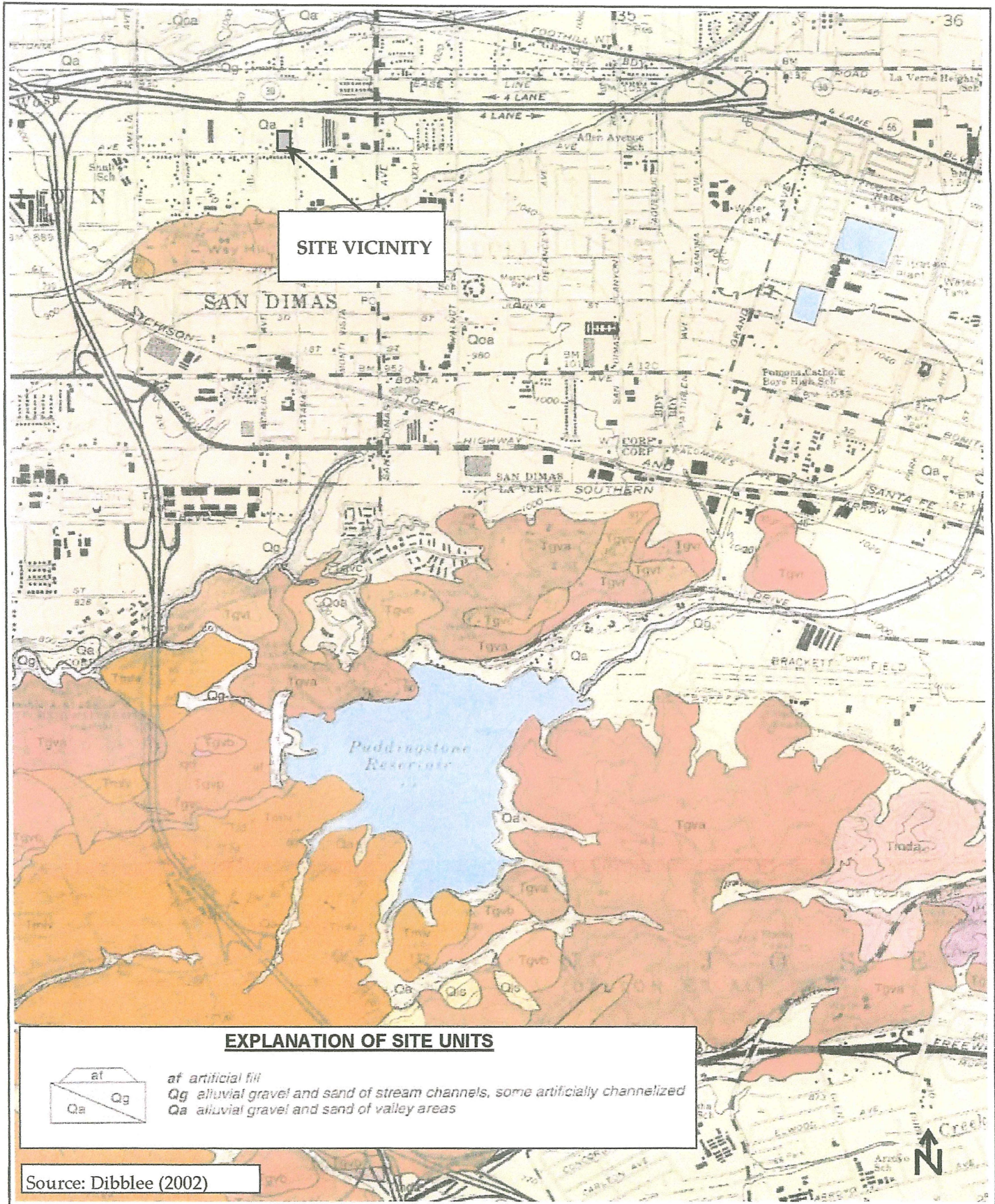
FIGURE

1



Sladden Engineering

Project Number:	444-21106
Report Number:	22-01-005
Date:	January 14, 2022



Source: Dibblee (2002)



Sladden Engineering

REGIONAL GEOLOGIC MAP

Project Number:	444-21106
Report Number:	22-01-005
Date:	January 14, 2022

FIGURE

2



BH-6/ P-2

Approximate Borehole Location/ Approximate Percolation Test Location



Source: Google Earth (2022)

BOREHOLE LOCATION PHOTOGRAPH

FIGURE

Project Number:

444-21106

Report Number:

22-01-005

Date:

January 14, 2022

3



Sladden Engineering

APPENDIX A

BORING LOGS

LOS ANGELES COUNTY PERCOLATION TEST DATA SHEETS



BORE LOG

Drill Rig:	Mobil B-61	Date Drilled:	12/1/2021
Elevation:	965 Ft (MSL)	Boring No:	BH-1

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
X	8/9/25						2		Silty Sand (SM); yellowish brown, dry, fine-to-coarse grained with gravel and cobbles (Fill).
							4		Gravelly Sand (SW); yellowish brown, dry, medium dense, fine-to-coarse grained with cobbles (Qa).
							6		Practical Auger Refusal at ~ 4.0 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							8		
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		



BORE LOG

Drill Rig: Mobil B-61 Date Drilled: 12/1/2021

Elevation: 965 Ft (MSL) Boring No: BH-2/P-1

Sample	Blow Counts	Bulk Sample	Expansion Index	% Mirus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
	25/17/16			7.6	1.4		2		Silty Sand (SM); yellowish brown, dry, fine-to-coarse grained with gravel and cobbles (Fill).
							4		Gravelly Sand (SW); yellowish brown, dry, medium dense, fine-to-coarse grained with cobbles (Qa).
							6		Terminated at ~ 5.0 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							8		
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED ALLEN INDUSTRIAL FACILITY
309 WEST ALLEN AVENUE, SAN DIMAS

Project No: 444-21106

Report No: 22-01-005



BORE LOG

Drill Rig:	Mobil B-61	Date Drilled:	12/1/2021
Elevation:	965 Ft (MSL)	Boring No:	BH-3/P-2

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); yellowish brown, dry, fine-to-coarse grained with gravel and cobbles (Fill).
	9/14/15			4.7	1.4	118.7	4		Gravelly Sand (SW); yellowish brown, dry, medium dense, fine-to-coarse grained with cobbles (Qa).
	18/19/22			8.1	1.7	127.7	6		Gravelly Sand (SW); yellowish brown, dry, medium dense, fine-to-coarse grained with cobbles (Qa).
	14/16/17			8.3	1.4		10		Gravelly Sand (SW); yellowish brown, dry, dense, fine-to-coarse grained with cobbles (Qa).
							12		Practical Auger Refusal at ~ 10.0 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Borehole Cased with Perforated Pipe for Percolation Testing.
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		



BORE LOG

Drill Rig: Mobil B-61 Date Drilled: 12/1/2021

Elevation: 965 Ft (MSL) Boring No: BH-4

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); yellowish brown, dry, fine-to-coarse grained with gravel and cobbles (Fill).
	12/12/12			4.0	2.2	123.1	4		Gravelly Sand (SW); yellowish brown, dry, fine-to-coarse grained with cobbles (Qa).
							6		Gravelly Sand (SW); yellowish brown, dry, medium dense, fine-to-coarse grained with cobbles (Qa).
	12/25/21			4.7	2.9		10		Gravelly Sand (SW); yellowish brown, dry, dense, fine-to-coarse grained with cobbles (Qa).
							14		Practical Auger Refusal at ~ 13.0 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED ALLEN INDUSTRIAL FACILITY
309 WEST ALLEN AVENUE, SAN DIMAS

Project No: 444-21106
Report No: 22-01-005



BORE LOG

Drill Rig: Mobil B-61 Date Drilled: 12/1/2021

Elevation: 965 Ft (MSL) Boring No: BH-5

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
	8/9/9			3.8	1.1		2		Silty Sand (SM); yellowish brown, dry, fine-to-coarse grained with gravel and cobbles (Fill).
							4		Gravelly Sand (SW); yellowish brown, dry, fine-to-coarse grained with cobbles (Qa).
							6		Gravelly Sand (SW); yellowish brown, dry, medium dense, fine-to-coarse grained with cobbles (Qa).
	50-6"			3.7	1.2		8		
							10		Gravelly Sand (SW); yellowish brown, dry, very dense, fine-to-coarse grained with cobbles (Qa).
							12		
							14		
							16		Practical Auger Refusal at ~ 14.0 Feet bgs.
							18		No Bedrock Encountered.
							20		No Groundwater or Seepage Encountered.
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED ALLEN INDUSTRIAL FACILITY
309 WEST ALLEN AVENUE, SAN DIMAS

Project No: 444-21106

Report No: 22-01-005

Page

5



BORE LOG

Drill Rig:	Mobil B-61	Date Drilled:	12/1/2021
Elevation:	965 Ft (MSL)	Boring No:	BH-6

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
	13/13/17	1	1	22.4	3.8	105.9	2		Silty Sand (SM); yellowish brown, dry, fine-to-coarse grained with gravel and cobbles (Fill).
	17/35/27			5.8	2.1	127.9	4		Gravelly Sand (SW); yellowish brown, dry, medium dense, fine-to-coarse grained with cobbles (Qa).
							6		Gravelly Sand (SW); yellowish brown, dry, dense, fine-to-coarse grained with cobbles (Qa).
	12/18/20			8.4	2.3		10		Gravelly Sand (SW); yellowish brown, dry, dense, fine-to-coarse grained with cobbles (Qa).
	16/17/23			4.4	2.1	123.1	16		Gravelly Sand (SW); yellowish brown, dry, dense, fine-to-coarse grained with cobbles (Qa).
							18		Practical Auger Refusal at ~ 17.0 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED ALLEN INDUSTRIAL FACILITY
309 WEST ALLEN AVENUE, SAN DIMAS

Project No:	444-21106
Report No:	22-01-005

LOS ANGELES COUNTY - BOREHOLE PERCOLATION TEST DATA SHEET

Project: 309 W. Allen Ave., San Dimas
 Job No. : 444-21106
 Date: 12/8/2021
 Test Hole: BH-2/P-1
 Depth of Test † 5.0 feet
 Tested by: R.F.

READING*	TIME	TIME INTERVAL	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)
A	TIMER	30	5	20	0.00	20.00
B	TIMER	30	5	20	0.00	20.00
C	TIMER	30	5	20	0.00	20.00

*Readings A and B (Determine if Presoak is required); >12 inches water

 If all water seeps away in 30 mins, no presoak; proceed to "C"

 If water remains, presoak for 4 hours.

*Reading C (Determine Test Interval); >12 inches water

 if all water seeps in 30 min, fill to a minimum of 12 inches but less than presoak water level; 8 (10 min) readings or until stabilized rate is obtained.

 if water remains in 30 min, fill to a minimum of 12 inches but less than presoak water level; 8 (30 min) readings or until stabilized rate is obtained

READING*	TIME	TIME INTERVAL	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)
1	TIMER	10	5	20.00	0.00	20.00
2	TIMER	10	5	20.00	0.00	20.00
3	TIMER	10	5	20.00	0.00	20.00
4	TIMER	10	5	20.00	0.00	20.00
5	TIMER	10	5	20.00	0.00	20.00
6	TIMER	10	5	20.00	0.00	20.00
7	TIMER	10	5	20.00	0.00	20.00
8	TIMER	10	5	20.00	0.00	20.00

Preadjusted Percolation Rate:	120.00	in/hr
Reduction Factor (R _f):	3.50	in/hr
Corrected Infiltration Rate:	34.29	in/hr

LOS ANGELES COUNTY - BOREHOLE PERCOLATION TEST DATA SHEET

Project: 309 W. Allen Ave., San Dimas
 Job No. : 444-21106
 Date: 12/8/2021
 Test Hole: BH-3/ P-2
 Depth of Test 1- 10 feet
 Tested by: R.F.

READING*	TIME	TIME INTERVAL	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)
A	TIMER	30	10	20.00	0.00	20.00
B	TIMER	30	10	20.00	0.00	20.00
C	TIMER	30	10	20.00	0.00	20.00

*Readings A and B (Determine if Presoak is required); >12 inches water

If all water seeps away in 30 mins, **no presoak**; proceed to "C"

If water remains, presoak for 4 hours.

*Reading C (Determine Test Interval); >12 inches water

if all water seeps in 30 min, fill to a minimum of 12 inches but less than presoak water level; 8 (10 min) readings or until stabilized rate is obtained.

if water remains in 30 min, fill to a minimum of 12 inches but less than presoak water level; 8 (30 min) readings or until stabilized rate is obtained

READING*	TIME	TIME INTERVAL	DEPTH (ft)	INITIAL W (in)	FINAL W (in)	ΔW (in)
1	TIMER	10	10	20.00	0.00	20.00
2	TIMER	10	10	20.00	0.00	20.00
3	TIMER	10	10	20.00	0.00	20.00
4	TIMER	10	10	20.00	0.00	20.00
5	TIMER	10	10	20.00	0.00	20.00
6	TIMER	10	10	20.00	0.00	20.00
7	TIMER	10	10	20.00	0.00	20.00
8	TIMER	10	10	20.00	0.00	20.00

Preadjusted Percolation Rate:	120.00	in/hr
Reduction Factor (R _f):	3.50	
Corrected Infiltration Rate:	34.29	in/hr

Attachment C

City Forms

Attachment D

Master Covenant Agreement (MCA)

TO BE FILLED IN FINAL SUSMP

Attachment E

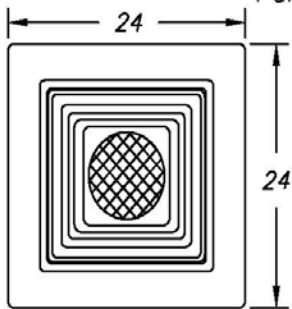
Operations and Maintenance (O&M) Plan

OPERATIONS AND MAINTENANCE (O&M) PLAN

FOR

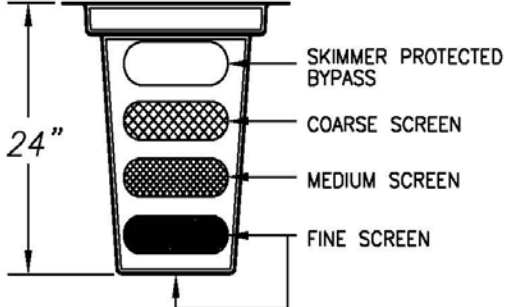
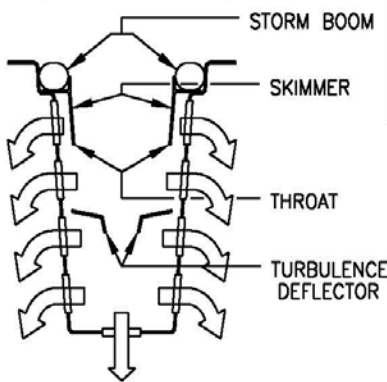
309 WEST ALLEN AVENUE, SAN DIMAS , CA. 91773

Part # GISB-24-24-24



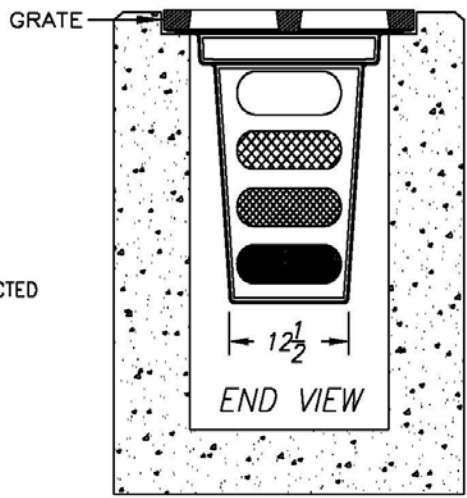
TOP VIEW

FLOW SCHEMATIC



SIDE VIEW

Flow Specifications				
Description of filter opening	Percent Open <small>Based on Screen Dimensions</small>	Total Square Inches per Unit	Square Inches of Total Unobstructed Openings	Flow Rate <small>(Cubic Feet per Second)</small>
Skimmer protected By-Pass	100%	162.3	162.3	6.7 cfs
Coarse Screen 3/4" x 1-3/4" stainless steel flattened expanded	62%	143.5	89.0	4.3cfs
Medium Screen 10x10 mesh stainless steel	56%	143.5	80.4	4.3cfs
Fine screen 14 x 18 mesh stainless steel	68%	156.1	106.1	6.3cfs
THROAT FLOW RATE Total: 4.4 cfs		TREATED FLOW RATE Total: 14.9cfs		
FLOW RATES BASED ON UNOBSTRUCTED OPENINGS				



CONCRETE STRUCTURE

REMOVE GRATE
INSERT GISB
REINSTALL GRATE

BOX MANUFACTURED FROM
MARINE GRADE FIBERGLASS & GEL
COATED FOR UV PROTECTION

5 YEAR MANUFACTURERS WARRANTY

PATENTED

ALL FILTER SCREENS ARE STAINLESS STEEL

EXCLUSIVE CALIFORNIA DISTRIBUTOR:
BIO CLEAN ENVIRONMENTAL SERVICE
P.O. BOX 869, OCEANSIDE, CA. 92049
TEL. 760-433-7640 FAX: 760-433-3176
Email: info@biocleanenvironmental.net

SUNTREE QUALITY PRODUCTS ARE BUILT FOR EASY CLEANING AND ARE
DESIGNED TO BE PERMANENT INFRASTRUCTURE AND SHOULD
LAST FOR DECADES.

SUNTREE TECHNOLOGIES 798 CLEARLAKE RD, SUITE #2 COCOA FL. 32922 TEL. 321-637-7552 FAX 321-637-7554		REVISION:	DATE:
GRATE INLET SKIMMER BOX GISB-24-24-24		REVISION:	DATE:
DATE: 05/20/04	SCALE: SF = 15	REVISION:	DATE:
DRAFTER: N.R.B.	UNITS = INCHES	REVISION:	DATE:

REQUIRED PERMITS

This section must list any permits required for the implementation, operation, and maintenance of the BMPs. Possible examples are:

- Permits for connection to sanitary sewer
- Permits from California Department of Fish and Game
- Encroachment permits

If no permits are required, a statement to that effect should be made.

RECORDKEEPING

All records must be made available for review upon request.

RESPONSIBLE PARTY

The owner is aware of the maintenance responsibilities of the proposed BMPs. A funding mechanism is in place to maintain the BMPs at the frequency stated in the LID Plan. The contact information for the entity responsible is below:

Name:	JAMES DEVLING
Company:	CEG CONSTRUCTION, INC
Title:	MANAGING MEMBER
Address 1:	7901 S. CROSSWAY DRIVE
Address 2:	PICO RIVERA, CA. 90660
Phone Number:	1-562-948-4850
Email:	jdevling@cegconstruction.com

Operations and Maintenance (O&M) Plan

BMP Name	BMP Implementation, Maintenance, and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Non-Structural Source Control BMPs			
Education for Property Owners, Tenants and Occupants	Provide Water Quality Orientation To Tenants And In Turn Will Orient Their Employees. Owner to insure that employees adheres to activity restriction.	WITHIN TWO WEEKS OF OCCUPANCY AND ANNUALLY AND AS NECESSARY	Owner Responsible For Implementation
Activity Restriction	Owner To Insure That Employees Adheres To Activity Restriction.	DAILY	Owner Responsible For Implementation
Common Area Landscape Management	Owner To Insure That Employees Maintains Through Maintenance Personnel	WITHIN TWO WEEKS OF OCCUPANCY AND ANNUALLY AND AS NECESSARY	Owner Responsible For Implementation
Common Area Litter Control	Owner To Insure That Employees Maintains Through Maintenance Personnel	DAILY	Owner Responsible For Implementation
Housekeeping of Loading Docks	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
Common Area Catch Basin Inspection	Owner To Insure That Employees Maintains And Clean The Catch Basin Filter Inserts Through Maintenance Personnel	TWICE A YEAR	Owner Responsible For Implementation

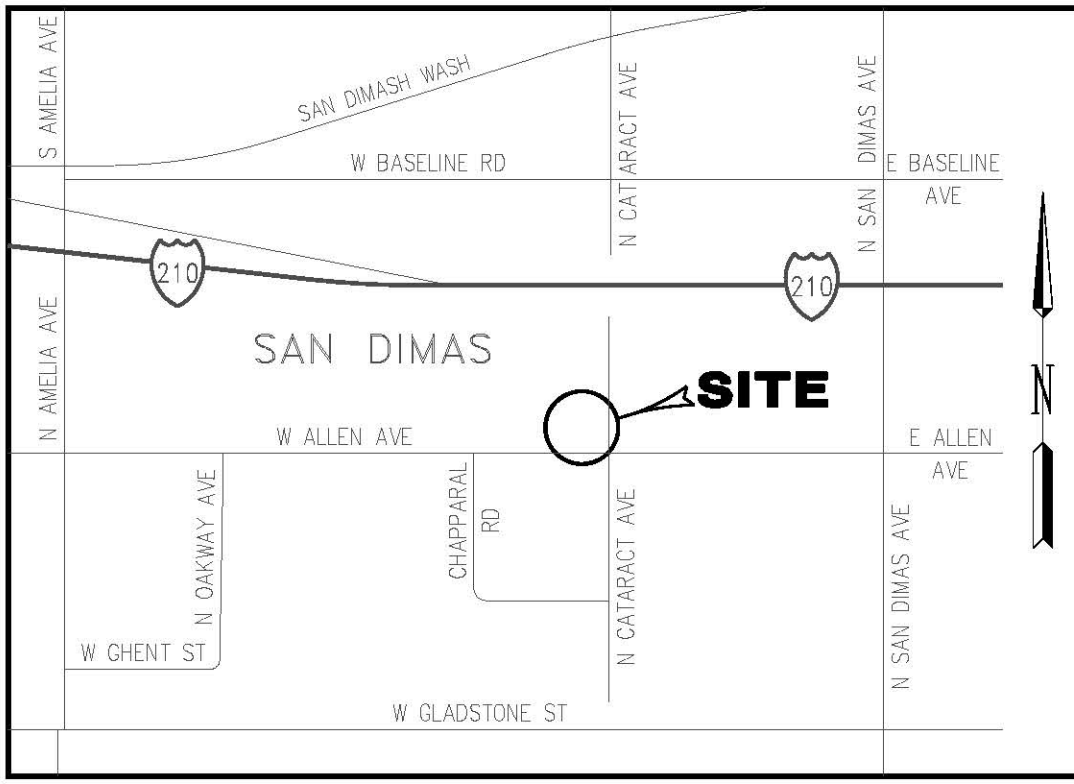
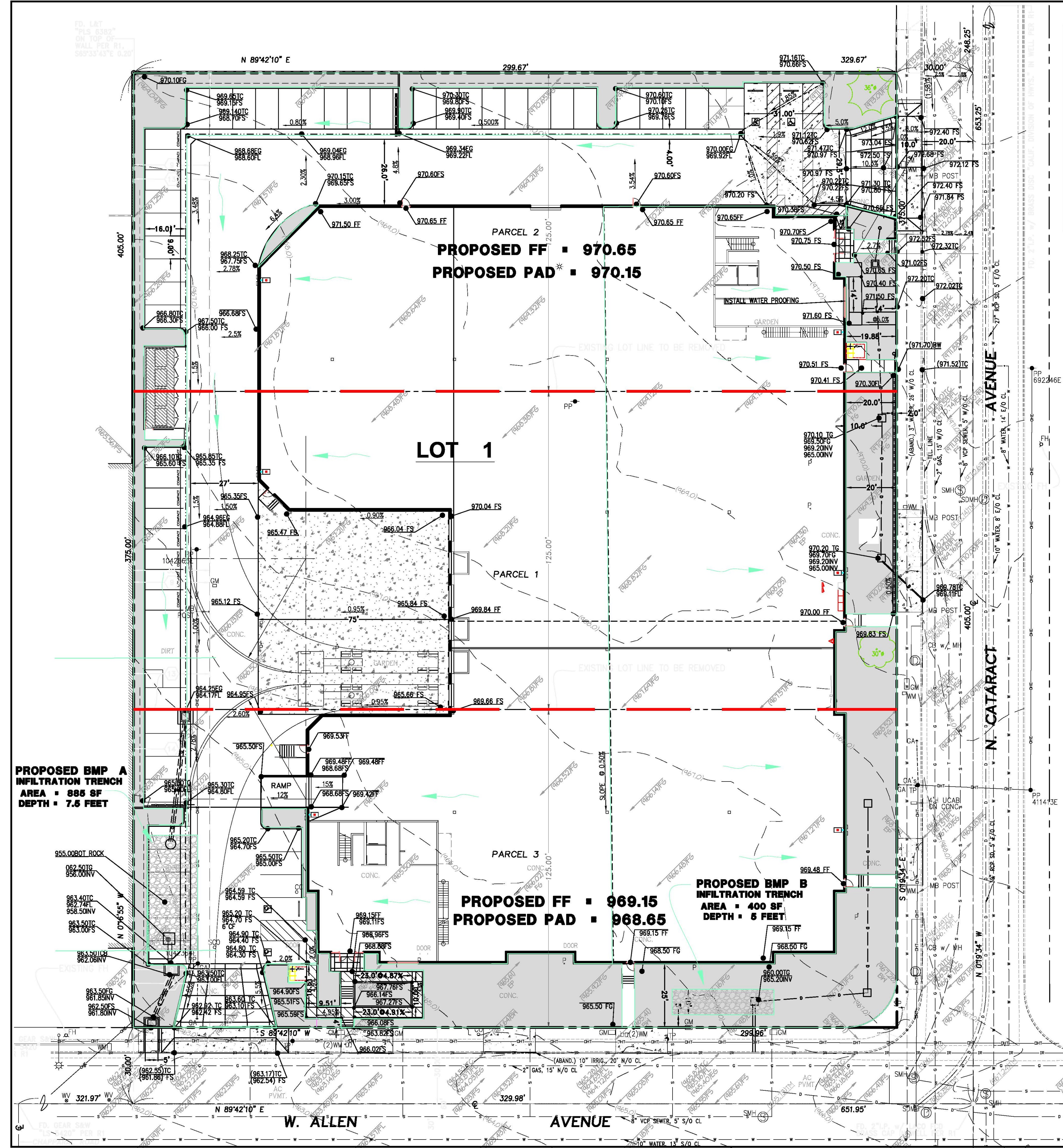
BMP Name	BMP Implementation, Maintenance, and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Street Sweeping Private Streets and Parking Lots	Sweep The Parking Lot To Remove Debris And Trash	TWICE A MONTH	Owner Responsible Through Site Maintenance Personnel
Structural Source Control BMPs			
Provide Storm Drain System Stenciling and Signage	Inspect The Catch Basin For Any Debris That May Clog The Flow. Remove Debris, Litter ., And Other Sediments Replace The Stencil And Signage As Necessary	MONTHLY	Owner Responsible Through Site Maintenance Personnel
Design and Construct Outdoor Material Storage Areas to Reduce Pollutant Introduction	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
Design and Construct Trash and Waste Storage Areas to Reduce Pollutant Introduction	INSPECT AND VERIFY AREAS FOR PROTECTED COVERAGE, MAINTAIN THE TRASH AND DUMPSTER RECEPTACLE COVER CLOSE AT ALL TIMES	TWICE A MONTH	Owner Responsible Through Site Maintenance Personnel
Use Efficient Irrigation Systems & Landscape Design	Maintain Irrigation System To Avoid Over And Under Watering Of Landscape Areas	MONTHLY	Owner Responsible Through Site Maintenance Personnel
Protect Slopes and Channels and Provide Energy Dissipation	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
Loading Docks	Maintain loading area by sweeping	EVERYDAY	Owner Responsible Through Site Maintenance Personnel
Vehicle Wash Areas/Racks	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE

BMP Name	BMP Implementation, Maintenance, and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Outdoor Processing Areas	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
Equipment Wash Areas	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
Fueling Areas	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
Hillside Landscaping	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
Treatment Control BMPs			
STORM DRAINAGE SIGNAGE	REPLACE OR REPAIR STORM DRAINAGE SIGNAGE TO MAINTAIN LEGIBILITY OF SIGN	TWICE A YEAR	Owner Responsible Through Site Maintenance Personnel
CATCH BASIN FILTER INSERTS	Inspect The Catch Basin Filter Insert If Damaged Or Needs Replacement. Clean And Removed Debris Or Sediments.	ANNUAL	Owner Responsible Through Site Maintenance Personnel
LID BMPs			
UNDERGROUND INFILTRATION TRENCH SYSTEM	REMOVE THE SEDIMENT BUILD UP AS NECESSARY. CLEAR OUT ALL TRASH AND DEBRIS. IF SYSTEM IS NOT FUNCTIONING, REPLACE THE INFILTRATION TRENCH SYSTEM WITH NEW ROCK GRAVEL SYSTEM. REGULAR VACUUMING OF DEBRIS SHALL BE PERFORMED AT LEAST ON AN ANNUAL BASIS.	ANNUALLY REPLACE GRAVEL AS NECESSARY ESPECIALLY WHEN NOT SYSTEM DOES DRAIN OR THERE IS STANDING WATER FOR 72 HOURS.	Owner Responsible Through Site Maintenance Personnel

BMP Name	BMP Implementation, Maintenance, and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Hydromodification Control BMPs NOT APPLICABLE			

Attachment F

Plans



VICINITY MAP
NOT TO SCALE

LAND AREA:
AREA: 112,431 SQ. FT. OR 2.581 ACRES

ASSESSOR'S PARCEL NUMBER:
A.P.N.'s 8392-016-008, 8392-016-047 AND 8392-016-048

BASIS OF BEARING:
THE BEARING NORTH 89° 42' 10" EAST OF THE CENTERLINE OF ALLEN AVENUE AS SHOWN ON A MAP FILED IN BOOK 308 PAGE 46 OF RECORD OF SURVEY, RECORDS OF LOS ANGELES COUNTY, WAS USED AS THE BASIS OF BEARINGS FOR THIS SURVEY.

- LEGEND:**
- AC - ASPHALT CONCRETE
 - CB - CATCHBASIN
 - CL - CENTERLINE
 - CLF - CHAIN LINK FENCE
 - CONC - CONCRETE
 - ELEC - ELECTRIC
 - FD - FOUND
 - HCR - HANDICAP RAMP
 - IP - IRON PIPE
 - LS - LAND SURVEYOR
 - L&T - LEAD & TACK
 - MB - MAIL BOX
 - MON - MONUMENT
 - MH - MANHOLE
 - P/L - PROPERTY LINE
 - P/LN - PLANTER
 - P.V.M.T. - PAVEMENT
 - R1 - RECORD OF SURVEY 308-46
 - S&W - SPIKE & WASHER
 - UCAB - UTILITY CABINET
 - WDF - WOOD FENCE
 - WIF - WROUGHT IRON FENCE
- SYMBOLS:**
- - SIGN POST
 - - GUARD POST
 - - POST
 - - FIRE HYDRANT
 - - STREET LIGHT
 - - AREA LIGHT
 - - POWER POLE
 - - TELEPHONE POLE
 - - GUY ANCHOR
 - - GAS METER
 - - WATER METER
 - - CLEANOUT
 - - SEWER CLEANOUT
 - - WATER VALVE
 - - GRATE INLET
 - - STORM DRAIN MANHOLE
 - - SEWER MANHOLE
 - - TREE
 - - PALM TREE
 - - PINE TREE

- ITEM NO.** **GRANTEE** **PURPOSE** **REFERENCE** **REMARKS**
- | | | | | |
|----|-------------------------------------|---|---|----------------------------------|
| 6 | | RIGHT TO DEVELOP WATER | BOOK 1004 PAGE 80 REC. 4/03/1995, DEEDS | AFFECTS PROPERTY |
| 7 | | PIPE LINE | BOOK 1280 PAGE 64 REC. 10/26/1996, DEEDS | AFFECTS PROPERTY |
| 8 | | ESMT. RESERVATION FOR PIPE LINES | BOOK 8420 PAGE 37 REC. 9/18/1926, O.R. | AFFECTS PROPERTY |
| 9 | SOUTHERN COUNTIES GAS CO. OF CALIF. | GAS PIPES, MAINS, METERING, | BOOK 9742 PAGE 873 REC. 7/30/1971, O.R. | SHOWN HEREON (30' WIDE) |
| 10 | SAN DIMAS RED-VELOPMENT AGENCY | CREATIVE GROWTH REDEVELOPMENT PROJ. AREA | HS-1 NO. 2207273333 REC. 12/11/2007, O.R. | PROPERTY IS W/P THE PROJECT AREA |
| 11 | ARTESIAN BELT WATER COMPANY | LICENSE TO CONSTRUCT & MAINTAIN 12" CEMENT PIPE | BOOK 1549 PAGE 319 REC. 4/22/1902, DEEDS | AFFECTS PROPERTY |
| 13 | SOUTHERN CALIF. EDISON CO. | ELECTRIC LINE | INST. NO. 2848 REC. 9/02/1954, O.R. | SHOWN HEREON (30' WIDE) |
| 14 | SOUTHERN CALIF. EDISON CO. | ELECTRIC LINE | INST. NO. 2847 REC. 9/02/1954, O.R. | SHOWN HEREON (30' WIDE) |

LEGAL DESCRIPTION: PROPOSED
THE LAND REFERRED TO IS SITUATED IN THE COUNTY OF LOS ANGELES, CITY OF SAN DIMAS, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOT 1:
THE SOUTHERLY THREE HUNDRED SEVENTY-FIVE (375) FEET OF THE SOUTHEAST QUARTER OF LOT 30 OF A SUBDIVISION OF A PART OF SECTIONS 33 AND 34, TOWNSHIP 1 NORTH, RANGE 9 WEST, AND A PART OF SECTIONS 4 AND 3, TOWNSHIP 1 SOUTH, RANGE 9 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE RANCHO SAN JOSE ADDITION, IN THE CITY OF SAN DIMAS, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 60 PAGE 8 OF MISCELLANEOUS RECORDS OF SAID COUNTY.

LEGAL DESCRIPTION: EXISTING
THE LAND REFERRED TO IS SITUATED IN THE COUNTY OF LOS ANGELES, CITY OF SAN DIMAS, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1:
THE NORTH ONE HUNDRED TWENTY-FIVE (125) FEET OF THE SOUTH TWO HUNDRED FIFTY (250) FEET OF THE SOUTHEAST QUARTER OF LOT 30 OF A SUBDIVISION OF A PART OF SECTIONS 33 AND 34, TOWNSHIP 1 NORTH, RANGE 9 WEST, AND A PART OF SECTIONS 4 AND 3, TOWNSHIP 1 SOUTH, RANGE 9 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE RANCHO SAN JOSE ADDITION, IN THE CITY OF SAN DIMAS, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 60 PAGE 8 OF MISCELLANEOUS RECORDS OF SAID COUNTY.

PARCEL 2:
THE NORTH 125 FEET OF THE SOUTH 375 FEET OF THE SOUTH HALF OF LOT 30 OF A SUBDIVISION OF A PART OF SECTIONS 33 AND 34, TOWNSHIP 1 NORTH, RANGE 9 WEST, AND A PART OF SECTIONS 4 AND 3, TOWNSHIP 1 SOUTH, RANGE 9 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE RANCHO SAN JOSE ADDITION, IN THE CITY OF SAN DIMAS, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 60 PAGE 8 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL 3:
THE SOUTH 125 FEET OF LOT 30 OF A SUBDIVISION OF A PART OF SECTIONS 33 AND 34, TOWNSHIP 1 NORTH, RANGE 9 WEST, AND A PART OF SECTIONS 4 AND 3, TOWNSHIP 1 SOUTH, RANGE 9 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE RANCHO SAN JOSE ADDITION, IN THE CITY OF SAN DIMAS, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 60 PAGE 8 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THEREFROM THAT PORTION THEREOF CONTAINED WITHIN THE BOUNDARIES OF THE WEST FIVE ACRES OF THE SOUTH HALF OF LOT 30, ACREAGE CALCULATED TO CENTER OF ADJACENT STREETS.

EXCEPT THEREFROM THAT PORTION WITHIN THE WEST FIVE ACRES THEREOF (ACREAGE CALCULATED TO CENTER OF ADJACENT STREETS).

EXCEPT THEREFROM THAT PORTION THEREOF INCLUDED WITHIN THE BOUNDARIES OF THE WEST FIVE ACRES OF THE SOUTH HALF OF SAID LOT 30, SAID ACREAGE IS CALCULATED TO CENTER OF ADJACENT STREETS.

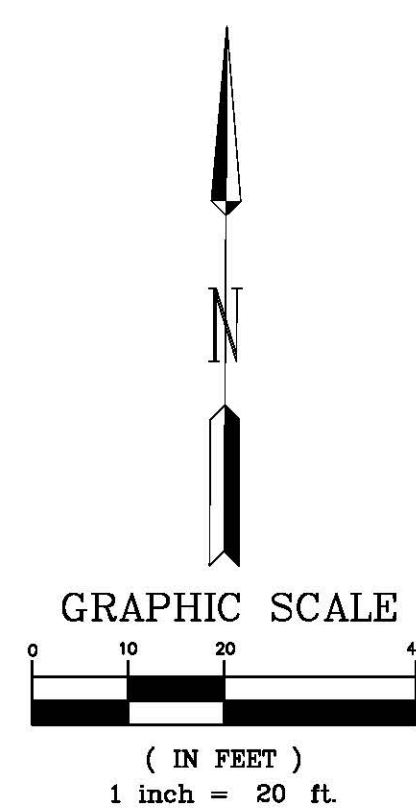
REFERENCE DOCUMENT:
OLD REPUBLIC TITLE COMPANY'S PRELIMINARY REPORT ORDER NO. 2676018294-52 DATED AUGUST 12, 2020.

EASEMENT SCHEDULE:

BENCHMARK: (LOS ANGELES COUNTY PUBLIC WORKS SURVEY SECTION)

QUAD/YEAR: SAN DIMAS / 2013
ELEVATION: 927.677 FT.
DESCRIPTION: 1&8R IN W CB 6.5FT S/O BCR @ SW COR AMELIA AVE & AUTO CTR DR
BM NUMBER: NG 3529

SURVEYOR'S NOTES:
1. IF UNDERGROUND UTILITIES AND OTHER SUBSTRUCTURES, ZONING, SET BACK, FLOOD ZONE, ASSESSOR PARCEL INFORMATION AND UTILITY INFORMATION ARE SHOWN HEREON, IT IS FOR GENERAL INFORMATIONAL PURPOSES ONLY, HAVING BEEN OBTAINED FROM A GENERAL REQUEST AT THE LOCAL AGENCIES PUBLIC COUNTER AND/OR SOURCES NOT CONNECTED WITH THIS COMPANY. NO REPRESENTATION IS MADE AS TO THE ACCURACY, CURRENCY OR COMPLETENESS OF SAID INFORMATION AND ANY USERS OF SAID INFORMATION ARE URGED TO CONTACT THE UTILITY OR LOCAL AGENCY DIRECTLY. ZONING RESTRICTIONS ARE SUBJECT TO DEVELOPMENTAL REVIEW AND APPROVAL.



TITLE
GRADING PLAN / LID PLAN
309 W. ALLEN AVENUE, 917 & 929 N. CATARACT AVENUE
SAN DIMAS, CA 91773

CLIENT
C.E.G. CONSTRUCTION

SCALE 1"=20'
SURVEY BY N.A.
PREPARED BY M.D.
CHECKED BY M.D.

SEABOARD ENGINEERING CO.
1415 E. COLORADO STREET, STE 205
GLENDALE, CALIFORNIA 91205
TEL. (310)277-7337 (818)550-0337 FAX (818)550-0339
SEABOARD@SEABOARDENGINEERING.COM

JOB NO. 21-68
DATE 05/18/2021
SHEET 1
OF 1 SHEETS

BY *Maites A. Dizon*
MARTES A. DIZON PLS 9246