

CITY OF OCEANSIDE
ENGINEERING DIVISION

ENGINEER OF WORK

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Quick Reference Guide

Item	Project Information
Project Name	Vista Way Homes
Application Number(s)	T21-00002
Project Address	3710 Vista Way
Total Parcel Area	85,813.2 sq. ft.
Project Description	The project is located at 3710 Vista Way adjacent to 78 Freeway. The project is located along the north side of Vista Way, at the northwest corner of Vista Way and North Way. The 78 freeway runs parallel with Vista Way's southerly right-of-way. Access to the site is from Vista Way. There are duplexes located adjacent to the westerly and northerly boundary of the site. These lots drain away from this site onto the existing frontage streets (Lille St. to the west and Gail dr. to the north). The project proposes the construction of 18 residential units. This project is proposed to be a "Common Interest Development for Senior Housing". This 1.97-acre project will include affordable housing. This site was previously a part of a residential development with homes and streets, these improvements have been removed from the site.
Proposed Disturbed Area	71,003 sq. ft.
Created or Replaced Impervious	30,389 sq. ft.
Project Hydrologic Unit Watershed	☐ Santa Maria ☐ San Luis Rey ☒ Carlsbad
Required to implement HMP	☒ Yes ☐ No



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CERTIFICATION PAGE

Project Name: Vista Way Homes
Permit Application Number: TM T21-00002

I hereby declare that I am the Engineer in Responsible Charge of design of storm water BMPs for this project, and that I have exercised responsible charge over the design of the project as defined in Section 6703 of the Business and Professions Code, and that the design is consistent with the requirements of the City of Oceanside BMP Design Manual, which is based on the requirements of San Diego Regional Water Quality Control Board Order No. R9-2013-0001 (MS4 Permit).

I have read and understand that the City has adopted minimum requirements for managing urban runoff, including storm water, from land development activities, as described in the BMP Design Manual. I certify that this SWQMP has been completed to the best of my ability and accurately reflects the project being proposed and the applicable source control and site design BMPs proposed to minimize the potentially negative impacts of this project's land development activities on water quality. I understand and acknowledge that the plan check review of this SWQMP by City staff is confined to a review and does not relieve me, as the Engineer in Responsible Charge of design of storm water BMPs for this project, of my responsibilities for project design.

As Engineer of Work, I agree to indemnify, defend, and hold harmless the City of Oceanside, its officers, agents, and employees from any and all liability, claims, damages, or injuries to any person or property which might arise from the negligent acts, errors, or omissions of the Engineer of Work, my employees, agents or consultants.

Engineer of Work's Signature, PE Number & Expiration Date

Victor Rodriguez-Fernandez _____
Print Name

Alta Consultants _____
Company

05/03/2022 _____
Date

Engineer's Seal:



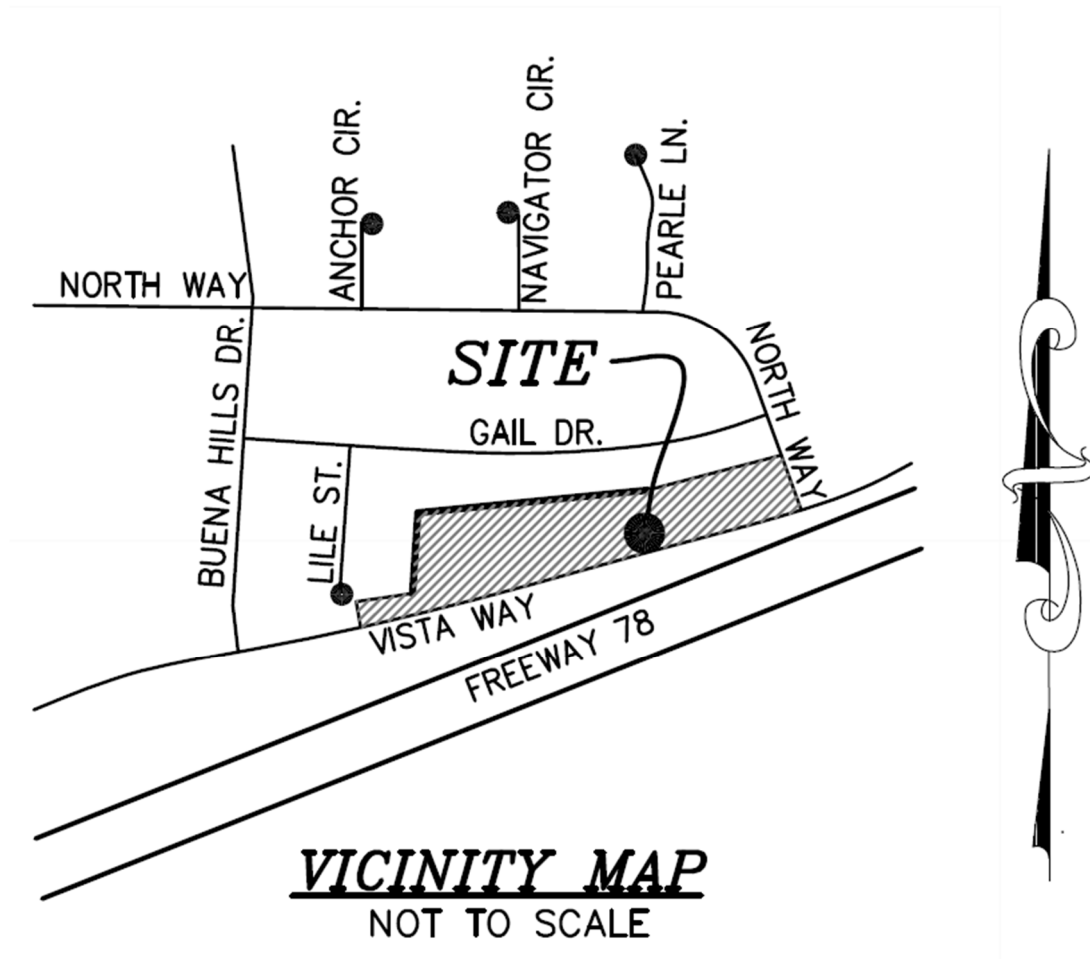
SUBMITTAL RECORD

Use this Table to keep a record of submittals of this SWQMP. Each time the SWQMP is re-submitted, provide the date and status of the project. In last column indicate changes that have been made or indicate if response to plancheck comments is included. When applicable, insert response to plancheck comments behind this page.

Submittal Number	Date	Project Status	Changes
1	05/03/2022	☒ Preliminary Design/ Planning/ CEQA ☐ Final Design	Initial Submittal
2		☐ Preliminary Design/ Planning/ CEQA ☐ Final Design	
3		☐ Preliminary Design/ Planning/ CEQA ☐ Final Design	
4		☐ Preliminary Design/ Planning/ CEQA ☐ Final Design	



Project Vicinity Map



Applicability of Permanent, Post-Construction Storm Water BMP Requirements (Storm Water Intake Form for all Development Permit Applications)		Form I-1
Project Identification		
Project Name: Vista Way Homes		
Permit Application Number: TM T21-00002		Date: 05/03/22
Determination of Requirements		
The purpose of this form is to identify permanent, post-construction requirements that apply to the project. This form serves as a short <u>summary</u> of applicable requirements, in some cases referencing separate forms that will serve as the backup for the determination of requirements. Answer each step below, starting with Step 1 and progressing through each step until reaching "Stop". Refer to the manual sections and/or separate forms referenced in each step below.		
Step	Answer	Progression
Step 1: Is the project a "development project"? See Section 1.3 of the manual for guidance.	☒ Yes	Go to Step 2.
	☐ No	Stop. Permanent BMP requirements do not apply. No SWQMP will be required. Provide discussion below.
Discussion / justification if the project is <u>not</u> a "development project" (e.g., the project includes <i>only</i> interior remodels within an existing building):		
Step 2: Is the project a Standard Project, PDP, or exception to PDP definitions? To answer this item, see Section 1.4 of the manual <i>in its entirety</i> for guidance, AND complete Form I-2, Project Type Determination.	☐ Standard Project	Stop. Standard Project requirements apply, including Standard Project SWQMP.
	☒ PDP	PDP requirements apply, including PDP SWQMP. Go to Step 3.
	☐ Exception to PDP definitions	Stop. Standard Project requirements apply. Provide discussion and list any additional requirements below. Prepare Standard Project SWQMP.
Discussion / justification, and additional requirements for exceptions to PDP definitions, if applicable:		



Step	Answer	Progression
Step 3. Is the project subject to earlier PDP requirements due to a prior lawful approval? See Section 1.10 of the manual for guidance.	☐ Yes	Consult the [City Engineer] to determine requirements. Provide discussion and identify requirements below. Go to Step 4.
	☒ No	BMP Design Manual PDP requirements apply. Go to Step 4.
Discussion / justification of prior lawful approval, and identify requirements (<i>not required if prior lawful approval does not apply</i>):		
Step 4. Do hydromodification control requirements apply? See Section 1.6 of the manual for guidance.	☒ Yes	PDP structural BMPs required for pollutant control (Chapter 5) and hydromodification control (Chapter 6). Go to Step 5.
	☐ No	Stop. PDP structural BMPs required for pollutant control (Chapter 5) only. Provide brief discussion of exemption to hydromodification control below.
Discussion / justification if hydromodification control requirements do <u>not</u> apply:		
Step 5. Does protection of critical coarse sediment yield areas apply? See Section 6.2 of the manual for guidance.	☐ Yes	Management measures required for protection of critical coarse sediment yield areas (Chapter 6.2). Stop.
	☒ No	Management measures not required for protection of critical coarse sediment yield areas. Provide brief discussion below. Stop.
Discussion / justification if protection of critical coarse sediment yield areas does <u>not</u> apply: Development area not located nearby Critical Coarse sediment yield areas.		



Project Type Determination Checklist		Form I-2	
Project Information			
Project Name: Vista Way Homes			
Permit Application Number: TM T21-00002			
Project Type Determination: Standard Project or PDP			
The project is (select one): ☐ New Development ☒ Redevelopment			
The total proposed newly created or replaced impervious area is: 30,389 ft ² (0.70) acres			
Is the project in any of the following categories, (a) through (f)?			
Yes ☒	No ☐	(a)	New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes ☐	No ☒	(b)	Redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes ☐	No ☒	(c)	New and redevelopment projects that create 5,000 square feet or more of impervious surface (collectively over the entire project site), and support one or more of the following uses: (i) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption SIC code 5812). (ii) Hillside development projects. This category includes development on any natural slope that is twenty-five percent or greater. (iii) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce. (iv) Streets, roads, highways, freeways, and driveways. This category is defined as any paved impervious surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles.



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Yes ☐	No ☒	(d)	New or redevelopment projects that create or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharging directly to an Environmentally Sensitive Area (ESA). "Discharging directly to" includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands). <u>Note: ESAs are areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Board and SDRWQCB; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and SDRWQCB; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees. See manual Section 1.4.2 for additional guidance.</u>
Yes ☐	No ☒	(e)	New development projects that support one or more of the following uses: (i) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following SIC codes: 5013, 5014, 5541, 7532-7534, or 7536-7539. (ii) Retail gasoline outlets. This category includes retail gasoline outlets that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic of 100 or more vehicles per day.
Yes ☒	No ☐	(f)	New or redevelopment projects that result in the disturbance of one or more acres of land and are expected to generate pollutants post construction. <i>Note: See manual Section 1.4.2 for additional guidance.</i>
Does the project meet the definition of one or more of the PDP categories (a) through (f) listed above? ☐ No – the project is not a PDP (Standard Project). ☒ Yes – the project is a PDP.			
The following is for redevelopment PDPs only: The area of existing (pre-project) impervious area at the project site is: ft² (A) The total proposed newly created or replaced impervious area is: ft² (B) Percent impervious surface created or replaced (B/A)*100: _% The percent impervious surface created or replaced is (select one based on the above calculation): ☐ less than or equal to fifty percent (50%) – only new impervious areas are considered PDP OR ☐ greater than fifty percent (50%) – the entire project site is a PDP			



Site Information Checklist For PDPs		Form I-3B (PDPs)
Project Summary Information		
Project Name:	Vista Way Homes	
Project Address:	3710 Vista Way Oceanside, CA 92056	
Assessor's Parcel Number(s)	165-493-47	
Permit Application Number	Tm T21-00002	
Project Watershed (Hydrologic Unit)	Select One: ☐ Santa Margarita 902 ☐ San Luis Rey 903 ☒ Carlsbad 904	
Parcel Area (total area of Assessor's Parcel(s) associated with the project)	<u>1.97</u> Acres (<u>85,813.2</u> Square Feet)	
Area to be disturbed by the project (Project Area)	<u>1.63</u> Acres (<u>71,003</u> Square Feet)	
Project Proposed Impervious Area (subset of Project Area)	<u>0.70</u> Acres (<u>30,389</u> Square Feet*)	
Project Proposed Pervious Area (subset of Project Area)	<u>1.27</u> Acres (<u>55,424</u> Square Feet)	
Note: Proposed Impervious Area + Proposed Pervious Area = Area to be Disturbed by the Project. This may be less than the Parcel Area.		

Hydrologic Unit	Hydrologic Area	Hydrologic Sub-Area
Santa Margarita 902.00	☐ Ysidora 902.10	☐ Lower Ysidora 902.11
San Luis Rey 903.00	☐ Lower San Luis 903.10	☐ Mission 903.11
		☐ Bonsall 903.12
Carlsbad 904.00	☐ Loma Alta 904.10	Not Applicable
	☒ Buena Vista Creek 904.20	☒ El Salto 904.21
		☐ Vista 904.22
	☐ Agua Hedionda 4.30	☐ Los Monos 904.31



Description of Existing Site Condition and Drainage Patterns

Current Status of the Site (select all that apply):

- ☐ Existing development
- ☒ Previously graded but not built out
- ☐ Agricultural or other non-impervious use
- ☐ Vacant, undeveloped/natural

Description / Additional Information:

Existing Land Cover Includes (select all that apply):

- ☒ Vegetative Cover
- ☐ Non-Vegetated Pervious Areas
- ☐ Impervious Areas

Description / Additional Information:

Underlying Soil belongs to Hydrologic Soil Group (select all that apply):

- ☐ NRCS Type A
- ☐ NRCS Type B
- ☐ NRCS Type C
- ☒ NRCS Type D

Existing soil group is unclassified but surrounded by Soil Type D

Approximate Depth to Groundwater:

- ☐ Groundwater Depth < 5 feet
- ☐ 5 feet < Groundwater Depth < 10 feet
- ☒ 10 feet < Groundwater Depth < 20 feet
- ☐ Groundwater Depth > 20 feet



Description of Existing Site Topography and Drainage [How is storm water runoff conveyed from the site? At a minimum, this description should answer (1) whether existing drainage conveyance is natural or urban; (2) describe existing constructed storm water conveyed through the site? If so, describe]:

There is an existing manufactured slope along the north and west side of the project with several large existing trees. The remainder of the site is relatively flat. The site slopes west to east towards the southeast corner of the site (the northwest corner of Vista Way and North Way) where there is an existing cross-gutter that conveys runoff easterly across North Way.

The Pre-Development runoff sheet flows to the existing streets. This sheet flow goes into (3) three public storm drain facilities. The west portion of the site sheet flows to the Vista Way gutter where it is collected by an existing inlet (Existing Curb Inlet A) that then flows southerly under Vista Way and into the cal-trans right-of-way. A small area located at the northeast corner of the site sheet flows to North Way gutter and into an existing inlet (Existing Curb Inlet B) that then flows southerly under North Way into a clean out in Vista Way. From there the runoff flows easterly to another cleanout and a connecting pipe that crosses Vista Way south and into the cal-trans right-of-way. Vista Way and into the cal-trans right-of-way. The remainder of the site sheet flows to the Vista Way and curb return gutter at the southeast corner of the site where it enters the existing cross gutter which flows easterly across North Way.



Description of Proposed Site Development and Drainage Patterns

Project Description / Proposed Land Use and/or Activities:

The project proposes 18 residential units and associated driveways, hardscape, landscape wet and dry utilities.

List/describe proposed impervious features of the project (e.g., buildings, roadways, parking lots, courtyards, athletic courts, other impervious features):

The project proposes new driveways, walkways, courtyards and buildings

List/describe proposed pervious features of the project (e.g., landscape areas):

The project proposes to incorporate pervious pavers and landscaping.

Does the project include grading and changes to site topography?

☒ Yes

☐ No

Description / Additional Information:

Does the project include changes to site drainage (e.g., installation of new storm water conveyance systems)?

☒ Yes

☐ No

Description / Additional Information:

The project proposes to mimic existing drainage patterns with flows reaching the proposed stormwater structures that will utilized for water pollution, hydromodification and peak flow attenuation. All runoff will ultimately be discharged into an existing offsite public conveyance systems.



Identify whether any of the following features, activities, and/or pollutant source areas will be present (select all that apply):

- ☒ Onsite storm drain inlets
- ☐ Interior floor drains and elevator shaft sump pumps
- ☐ Interior parking garages
- ☒ Need for future indoor & structural pest control
- ☒ Landscape/outdoor pesticide use
- ☐ Pools, spas, ponds, decorative fountains, and other water features
- ☐ Food service
- ☐ Refuse areas
- ☐ Industrial processes
- ☐ Outdoor storage of equipment or materials
- ☐ Vehicle and equipment cleaning
- ☐ Vehicle/equipment repair and maintenance
- ☐ Fuel dispensing areas
- ☐ Loading docks
- ☐ Fire sprinkler test water
- ☒ Miscellaneous drain or wash water
- ☒ Plazas, sidewalks, and parking lots



Identification of Receiving Water Pollutants of Concern

Describe path of storm water from the project site to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable):

All project runoff is capture by storm drain structures, onsite grated inlets and offsite street gutters that drain into existing curb inlets. Project runoff eventually comingle with offsite runoff.

All flows discharge into the nearby Loma Alta Creek taking flows west into the Pacific Ocean

List any 303(d) impaired water bodies within the path of storm water from the project site to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable), identify the pollutant(s)/stressor(s) causing impairment, and identify any TMDLs for the impaired water bodies:

303(d) Impaired Water Body	Pollutant(s)/Stressor(s)	TMDLs
Buena Vista Creek	Benthic Community Effects, Benthic Macroinvertebrate Bioassessments, Chloride, Sediment Toxicity, Selenium, Sulfates, Total Dissolved Solids, Turbidity	Category 5A Sediment Toxicity , Selenium
Buena Vista Lagoon	Indicator Bacteria, Nutrients, Sedimentation/Siltation	Category 5A Indicator Bacteria, Nutrients, Sedimentation/Siltation



Identification of Project Site Pollutants*

***Identification of project site pollutants is only required if flow-thru treatment BMPs are implemented onsite in lieu of retention or biofiltration BMPs (note the project must also participate in an alternative compliance program unless prior lawful approval to meet earlier PDP requirements is demonstrated)**

Identify pollutants expected from the project site based on all proposed use(s) of the site (see manual Appendix B.6):

Pollutant	Not Applicable to the Project Site	Expected from the Project Site	Also a Receiving Water Pollutant of Concern
Sediment	NA		
Nutrients	NA		
Heavy Metals	NA		
Organic Compounds	NA		
Trash & Debris	NA		
Oxygen Demanding Substances	NA		
Oil & Grease	NA		
Bacteria & Viruses	NA		
Pesticides	NA		

Note: Indicator Bacteria shall be addressed as a Pollutant of Concern (POC) for projects located in the Lower San Luis Hydrologic Area and for projects that discharge to the Pacific Ocean Shoreline within the boundaries of the City of Oceanside.

Note: Nutrients shall be addressed as a Pollutant of Concern (POC) for projects located in the Loma Alta Hydrologic Area.



Hydromodification Management Requirements

Do hydromodification management requirements apply (see Section 1.6 of the manual)?

☒ Yes, hydromodification management flow control structural BMPs required.

☐ No, the project will discharge runoff directly to existing underground storm drains discharging directly to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean.

☐ No, the project will discharge runoff directly to conveyance channels whose bed and bank are concrete-lined all the way from the point of discharge to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean.

☐ No, the project will discharge runoff directly to an area identified as appropriate for an exemption by the WMAA for the watershed in which the project resides.

Description / Additional Information (to be provided if a 'No' answer has been selected above):

Critical Coarse Sediment Yield Areas*

***This Section only required if hydromodification management requirements apply**

Based on the maps provided within the WMAA, do potential critical coarse sediment yield areas exist within the project drainage boundaries?

☐ Yes

☒ No, no critical coarse sediment yield areas to be protected based on WMAA maps

If yes, have any of the optional analyses presented in Section 6.2 of the manual been performed?

☐ 6.2.1 Verification of GLUs Onsite

☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment

☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite

☐ No optional analyses performed, the project will avoid critical coarse sediment yield areas identified based on WMAA maps

If optional analyses were performed, what is the final result?

☐ No critical coarse sediment yield areas to be protected based on verification of GLUs onsite.

☐ Critical coarse sediment yield areas exist but additional analysis has determined that protection is not required. Documentation attached in Attachment 8 of the SWQMP.

☐ Critical coarse sediment yield areas exist and require protection. The project will implement management measures described in Sections 6.2.4 and 6.2.5 as applicable, and the areas are identified on the SWQMP Exhibit.

Discussion / Additional Information:



Flow Control for Post-Project Runoff*

***This Section only required if hydromodification management requirements apply**

List and describe point(s) of compliance (POCs) for flow control for hydromodification management (see Section 6.3.1). For each POC, provide a POC identification name or number correlating to the project's HMP Exhibit and a receiving channel identification name or number correlating to the project's HMP Exhibit.

There are two (2) points of compliance (POC1 and POC2) along the street ROW. All DMAs flow to these two points before flowing offsite and commingling with offsite runoff into a public curb inlet (POC1) and street gutters (POC2).

Has a geomorphic assessment been performed for the receiving channel(s)?

☒ No, the low flow threshold is 0.1Q2 (default low flow threshold)

☐ Yes, the result is the low flow threshold is 0.1Q2

☐ Yes, the result is the low flow threshold is 0.3Q2

☐ Yes, the result is the low flow threshold is 0.5Q2

If a geomorphic assessment has been performed, provide title, date, and preparer:

Discussion / Additional Information: (optional)



Other Site Requirements and Constraints

When applicable, list other site requirements or constraints that will influence storm water management design, such as zoning requirements including setbacks and open space, or local codes governing minimum street width, sidewalk construction, allowable pavement types, and drainage requirements.

None

Optional Additional Information or Continuation of Previous Sections As Needed

This space provided for additional information or continuation of information from previous sections as needed.



Source Control BMP Checklist for All Development Projects (Standard Projects and PDPs)		Form I-4	
Project Identification			
Project Name: Vista Way Homes			
Permit Application Number: TM T21-00002			
Source Control BMPs			
All development projects must implement source control BMPs SC-1 through SC-6 where applicable and feasible. See Chapter 4 and Appendix E of the manual for information to implement source control BMPs shown in this checklist. Answer each category below pursuant to the following. • "Yes" means the project will implement the source control BMP as described in Chapter 4 and/or Appendix E of the manual. Discussion / justification is not required. • "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided. • "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project has no outdoor materials storage areas). Discussion / justification may be provided.			
Source Control Requirement		Implemented?	
SC-1 Prevention of Illicit Discharges into the MS4		☒ Yes	☐ No ☐ N/A
Discussion / justification if SC-1 not implemented:			
SC-2 Storm Drain Stenciling or Signage		☒ Yes	☐ No ☐ N/A
Discussion / justification if SC-2 not implemented:			
SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal		☐ Yes	☐ No ☒ N/A
Discussion / justification if SC-3 not implemented:			



Form I-4 Page 2 of 3

Source Control Requirement	Implemented?		
SC-4 Protect Materials Stored in Outdoor Work Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☐ Yes	☐ No	☒ N/A
Discussion / justification if SC-4 not implemented:			
SC-5 Protect Trash Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☐ Yes	☐ No	☒ N/A
Discussion / justification if SC-5 not implemented:			



Form I-4 Page 3 of 3

SC-6 Additional BMPs Based on Potential Sources of Runoff Pollutants (must answer for each source listed below)	Implemented?		
Onsite storm drain inlets	☒ Yes	☐ No	☐ N/A
Interior floor drains and elevator shaft sump pumps	☐ Yes	☐ No	☒ N/A
Interior parking garages	☐ Yes	☐ No	☒ N/A
Need for future indoor & structural pest control	☒ Yes	☐ No	☐ N/A
Landscape/outdoor pesticide use	☒ Yes	☐ No	☐ N/A
Pools, spas, ponds, decorative fountains, and other water features	☐ Yes	☐ No	☒ N/A
Food service	☐ Yes	☐ No	☒ N/A
Refuse area	☐ Yes	☐ No	☒ N/A
Industrial processes	☐ Yes	☐ No	☒ N/A
Outdoor storage of equipment or materials	☐ Yes	☐ No	☒ N/A
Vehicle and equipment cleaning	☒ Yes	☐ No	☐ N/A
Vehicle/equipment repair and maintenance	☐ Yes	☐ No	☒ N/A
Fuel dispensing areas	☒ Yes	☐ No	☐ N/A
Loading docks	☐ Yes	☐ No	☒ N/A
Fire sprinkler test water	☐ Yes	☐ No	☒ N/A
Miscellaneous drain or wash water	☐ Yes	☐ No	☒ N/A
Plazas, sidewalks, and parking lots	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-6 not implemented. Clearly identify which sources of runoff pollutants are discussed. Justification must be provided for <u>all</u> "No" answers shown above.			



Site Design BMP Checklist for All Development Projects (Standard Projects and PDPs)		Form I-5	
Project Identification			
Project Name: Oceanside Vista Way Homes			
Permit Application Number: TM T21-00002			
Site Design BMPs			
All development projects must implement site design BMPs SD-1 through SD-8 where applicable and feasible. See Chapter 4 and Appendix E of the manual for information to implement site design BMPs shown in this checklist.			
Answer each category below pursuant to the following.			
• "Yes" means the project will implement the site design BMP as described in Chapter 4 and/or Appendix E of the manual. Discussion / justification is not required. • "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided. • "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project site has no existing natural areas to conserve). Discussion / justification may be provided.			
Site Design Requirement		Applied?	
SD-1 Maintain Natural Drainage Pathways and Hydrologic Features		☐ Yes	☐ No ☒ N/A
Discussion / justification if SD-1 not implemented:			
SD-2 Conserve Natural Areas, Soils, and Vegetation		☐ Yes	☐ No ☒ N/A
Discussion / justification if SD-2 not implemented:			
SD-3 Minimize Impervious Area		☒ Yes	☐ No ☐ N/A
Discussion / justification if SD-3 not implemented: The development will not exceed allowable building square footages and will provide landscape in accordance with code requirements. Impervious areas were minimized where possible.			
SD-4 Minimize Soil Compaction		☐ Yes	☒ No ☒ N/A
Discussion / justification if SD-4 not implemented: The project includes grading for paved surfaces which will require compaction based on the soils engineer's recommendations.			



Form I-5 Page 2 of 2

Site Design Requirement	Applied?		
SD-5 Impervious Area Dispersion	☐ Yes	☒ No	☐ N/A
Discussion / justification if SD-5 not implemented: New paved surfaces will be directed towards landscaped areas, impervious area dispersion requirements cannot be met in every scenario, so this DCV discount will not be utilized for this project			
SD-6 Runoff Collection	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-6 not implemented:			
SD-7 Landscaping with Native or Drought Tolerant Species	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-7 not implemented:			
SD-8 Harvesting and Using Precipitation	☐ Yes	☐ No	☒ N/A
Discussion / justification if SD-8 not implemented:			



Summary of PDP Structural BMPs	Form I-6 (PDPs)
Project Identification	
Project Name: Vista Way Homes	
Permit Application Number: TM T21-00002	
PDP Structural BMPs	
All PDPs must implement structural BMPs for storm water pollutant control (see Chapter 5 of the manual). Selection of PDP structural BMPs for storm water pollutant control must be based on the selection process described in Chapter 5. PDPs subject to hydromodification management requirements must also implement structural BMPs for flow control for hydromodification management (see Chapter 6 of the manual). Both storm water pollutant control and flow control for hydromodification management can be achieved within the same structural BMP(s). PDP structural BMPs must be verified by the local jurisdiction at the completion of construction. This may include requiring the project owner or project owner's representative to certify construction of the structural BMPs (see Section 1.12 of the manual). PDP structural BMPs must be maintained into perpetuity, and the local jurisdiction must confirm the maintenance (see Section 7 of the manual). Use this form to provide narrative description of the general strategy for structural BMP implementation at the project site in the box below. Then complete the PDP structural BMP summary information sheet (page 3 of this form) for each structural BMP within the project (copy the BMP summary information page as many times as needed to provide summary information for each individual structural BMP). Describe the general strategy for structural BMP implementation at the site. This information must describe how the steps for selecting and designing storm water pollutant control BMPs presented in Section 5.1 of the manual were followed, and the results (type of BMPs selected). For projects requiring hydromodification flow control BMPs, indicate whether pollutant control and flow control BMPs are integrated or separate. The proposed area of disturbance has been delineated as drainage management areas (DMAs), there are small self-mitigating areas within the DMA, The DCV was estimated by adjusting the runoff factor to account for pervious surfaces that drain to the treatment facility. Harvesting was determined to be unfeasible due to the lack of landscaped areas. The project proposes the use of a proprietary Biofiltration BMPs consisting of a treatment system and an above ground storage system. These devices comply with treatment and flow sizing requirements. Additionally, within the storage system a concrete box with a weir wall and orifice have been proposed to comply with flow control requirements. The weir wall will retain storm events up to the 100-year and the orifice has been sized to comply with pre-developed project site conditions. A pump basin and system will be downstream of the storm water treatment and storage facilities. The treated and stored storm water will be discharge at two locations along Vista Way. (Continue on page 2 as necessary.)	
Form I-6 Page 2 of 4	



(Page reserved for continuation of description of general strategy for structural BMP implementation at the site)

(Continued from page 1)



Structural BMP Summary Information**(Copy this page as needed to provide information for each individual proposed structural BMP)**

Structural BMP ID No. BMP 1

Construction Plan Sheet No. TM

Type of structural BMP:

- ☐ Retention by harvest and use (HU-1)
☐ Retention by infiltration basin (INF-1)
☐ Retention by bioretention (INF-2)
☐ Retention by permeable pavement (INF-3)
☐ Partial retention by biofiltration with partial retention (PR-1)
☒ Biofiltration (BF-1)
☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below)
☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below)
☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below)
☒ Detention pond or vault for hydromodification management
☐ Other (describe in discussion section below)

Purpose:

- ☒ Pollutant control only
☐ Hydromodification control only
☐ Combined pollutant control and hydromodification control
☐ Pre-treatment/forebay for another structural BMP
☐ Other (describe in discussion section below)

Who will certify construction of this BMP?

Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the manual)

ALTA Consultants

619-749-8818

Who will be the final owner of this BMP?

Property Owner

Who will maintain this BMP into perpetuity?

Property Owner

What is the funding mechanism for maintenance?

Property Owner



Structural BMP Summary Information

(Copy this page as needed to provide information for each individual proposed structural BMP)

Discussion (as needed):

Runoff will be routed to a proposed proprietary Biofiltration BMP consisting of an BioClean Modular Wetland System (MWS) for treatment. The MWS has been sized to comply with the treatment control requirements.



Structural BMP Summary Information**(Copy this page as needed to provide information for each individual proposed structural BMP)**

Structural BMP ID No. BMP 2

Construction Plan Sheet No. C-14

Type of structural BMP:

- ☐ Retention by harvest and use (HU-1)
☐ Retention by infiltration basin (INF-1)
☐ Retention by bioretention (INF-2)
☐ Retention by permeable pavement (INF-3)
☐ Partial retention by biofiltration with partial retention (PR-1)
☒ Biofiltration (BF-1)
☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below)
☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below)
☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below)
☒ Detention pond or vault for hydromodification management
☐ Other (describe in discussion section below)

Purpose:

- ☐ Pollutant control only
☐ Hydromodification control only
☒ Combined pollutant control and hydromodification control
☐ Pre-treatment/forebay for another structural BMP
☐ Other (describe in discussion section below)

Who will certify construction of this BMP?

Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the manual)

ALTA Consultants

619-749-8818

Who will be the final owner of this BMP?

Property Owner

Who will maintain this BMP into perpetuity?

Property Owner

What is the funding mechanism for maintenance?

Property Owner



Structural BMP Summary Information

(Copy this page as needed to provide information for each individual proposed structural BMP)

Discussion (as needed):

Runoff will be routed to a proposed proprietary Biofiltration BMP consisting of an BioClean Modular Wetland System (MWS) for treatment and then to an underground storage system for volume (HMP) and peak flow control. The MWS has been sized to comply with the treatment control requirements.





City of Oceanside
300 N Coast Highway
Oceanside, CA 92054

**Permanent BMP
Construction**
Self Certification Form

February
2016

Date Prepared:	Project No.: TM T21-00002
Project Applicant: NEPTUNE INVESTMENTS, LLC	Phone: 858-401-9090
Project Address: 3710 Vista Way, Oceanside, CA 92056	
Project Engineer: Victro Rodriguez-Fernandez	Phone: 619-749-8818
The purpose of this form is to verify that the site improvements for the project, identified above, have been constructed in conformance with the approved Storm Water Quality Management Plan (SWQMP) documents and drawings. This form must be completed by the engineer and installing contractor and submitted prior to final inspection of the construction permit. Completion and submittal of this form is required for all new development and redevelopment projects in order to comply with the City's Storm Water ordinances and NDPES Permit Order No. R9-2013-0001. Final inspection for occupancy and/or release of grading or public improvement bonds may be delayed if this form is not submitted and approved by the City of Oceanside.	
ENGINEER'S CERTIFICATION: As the professional in responsible charge for the design of the above project, I certify that I have inspected all constructed Low Impact Development (LID) site design, source control and treatment control BMP's required per the approved SWQMP and Construction Permit No. ; and that said BMP's have been constructed in compliance with the approved plans and all applicable specifications, permits, ordinances and Order No. R9-2013-0001 of the San Diego Regional Water Quality Control Board. I understand that this BMP certification statement does not constitute an operation and maintenance verification. Signature: _____	



Date of Signature: _ _ _ _ _

Printed Name: _ _ _ _ _

Title: _ _ _ _ _

Phone No. _ _ _ _ _

Engineer's Stamp

CONTRACTOR'S CERTIFICATION:

As the professional in responsible charge for construction of the above project, I certify that all constructed Low Impact Development (LID) site design, source control and treatment control BMP's required per the approved SWQMP and Construction Permit No. ; have been constructed in compliance with the approved plans and all applicable specifications, permits, and ordinances.

I understand that this BMP certification statement does not constitute an operation and maintenance verification.

Signature: _ _ _ _ _

Date of Signature: _ _ _ _ _

Printed Name: _ _ _ _ _

Title: _ _ _ _ _

Phone No. _ _ _ _ _



ATTACHMENT 1
BACKUP FOR PDP POLLUTANT CONTROL BMPS



Indicate which Items are Included:

Attachment Sequence	Contents	Checklist
Attachment 1a	DMA Exhibit (Required) See DMA Exhibit Checklist.	☒ Included
Attachment 1b	Tabular Summary of DMAs Showing DMA ID matching DMA Exhibit, DMA Area, and DMA Type (Required)* *Provide table in this Attachment OR on DMA Exhibit in Attachment 1a	☒ Included on DMA Exhibit in Attachment 1a ☐ Included as Attachment 1b, separate from DMA Exhibit
Attachment 1c See County Automated Worksheet	Design Capture Volume Worksheet	☒ Included
Attachment 1d	Form I-7, Harvest and Use Feasibility Screening Checklist (Required unless the entire project will use infiltration BMPs) Refer to Appendix B.3-1 of the BMP Design Manual to complete Form I-7.	☒ Included ☐ Not included because the entire project will use infiltration BMPs
Attachment 1e	Form I-8, Categorization of Infiltration Feasibility Condition (Required unless the project will use harvest and use BMPs) Refer to Appendices C and D of the BMP Design Manual to complete Form I-8.	☒ Included ☐ Not included because the entire project will use harvest and use BMPs
Attachment 1f See County Automated Worksheet	Pollutant Control BMP Design Worksheets / Calculations (Required) Refer to Appendices B and E of the BMP Design Manual for structural pollutant control BMP design guidelines	☒ Included



Use this checklist to ensure the required information has been included on the DMA Exhibit:

The DMA Exhibit must identify:

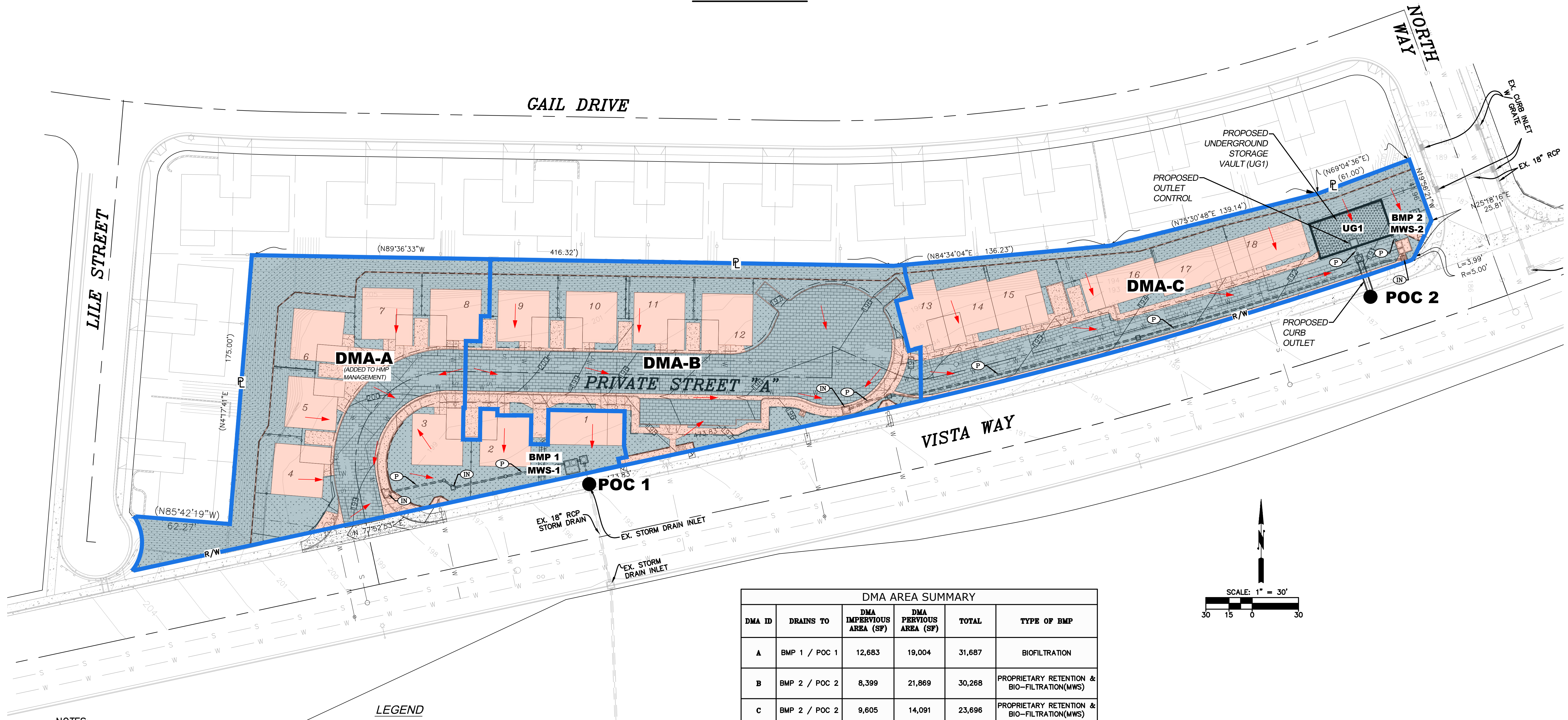
- ☒ Underlying hydrologic soil group
- ☒ Approximate depth to groundwater
- ☒ Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- ☒ Critical coarse sediment yield areas to be protected
- ☒ Existing topography and impervious areas
- ☒ Existing and proposed site drainage network and connections to drainage offsite
- ☒ Proposed grading
- ☒ Proposed impervious features
- ☒ Proposed design features and surface treatments used to minimize imperviousness
- ☒ Drainage management area (DMA) boundaries, DMA ID numbers, and DMA areas (square footage or acreage), and DMA type (i.e., drains to BMP, self-retaining, or self-mitigating)
- ☒ Potential pollutant source areas and corresponding required source controls (see Chapter 4, Appendix E.1, and Form I-3B)
- ☒ Structural BMPs (identify location, type of BMP, and size/detail)



Attachment 1a
DMA Exhibit



VISTA WAY HOMES
DMA PLAN



- NOTES:**
1. THE UNDERLYING SOIL TYPE GROUPS IS "D" FOR THE ENTIRE PROPERTY AND SURROUNDING PARCELS
 2. THE APPROXIMATE DEPTH TO GROUND WATER IS EXPECTED TO BE LESS THAN 15 FEET
 3. NO CRITICAL COARSE SEDIMENT YIELD AREAS TO BE PROTECTED BASED ON SEDIMENT TRANSPORT ANALYSIS (SEE PROJECT SWQMP).
 4. THE SITE DOES NOT CONTAIN ANY EXISTING NATURAL HYDROLOGIC FEATURES. (WATERCOURSES, SEEPS, SPRINGS, WETLANDS)

LEGEND

POC 1 ● POINT OF COMPLIANCE

MWS-#

PERVIOUS AREAS

IMPERVIOUS AREAS

PROPOSED PIPE

PROPOSED INLET

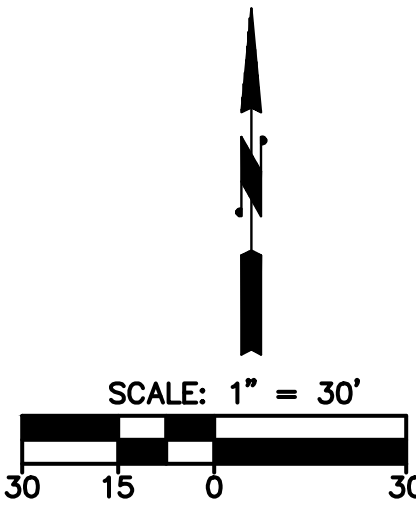
DRAINAGE MANAGEMENT AREA (DMA)

FLOW DIRECTION

MODULAR WETLAND SYSTEM

DMA AREA SUMMARY					
DMA ID	DRAINS TO	DMA IMPERVIOUS AREA (SF)	DMA PERVIOUS AREA (SF)	TOTAL	TYPE OF BMP
A	BMP 1 / POC 1	12,683	19,004	31,687	BIOFILTRATION
B	BMP 2 / POC 2	8,399	21,869	30,268	PROPRIETARY RETENTION & BIO-FILTRATION(MWS)
C	BMP 2 / POC 2	9,605	14,091	23,696	PROPRIETARY RETENTION & BIO-FILTRATION(MWS)

1. DMA Type can only be: 1) Drains to BMP, 2) Self-mitigating, 3) De Minimis, or 4) Self-retaining
2. BMP Type must be consistent with terminology in the BMP Design Manual and/or CASQA Fact Sheets
3. Structural BMP Size is typically presented as an area (sq. ft.) or size (e.g., proprietary devices)



DUAL PURPOSE BMP				
BMP	TRIBUTARY AREA (SF)	FOOTPRINT AREA (FT²)	DEPTH (FT)	TOTAL VOLUME (FT³)
UG1	85,651	1241	3.5	4,320

SUMMARY OF RISER				
BMP	LOWER ORIFICE		UPPER WEIR	
	DIAMETER (IN)	ELEV. (FT)	LENGTH (FT)	ELEV. (FT)
UG1	1.4	18	6	3.5



Attachment 1c

Tabular Summary of DMAs

County of San Diego Automated Worksheet.



Automated Worksheet B.1: Calculation of Design Capture Volume (V2.0)

Category	#	Description	<i>i</i>	<i>ii</i>	Units
Standard Drainage Basin Inputs	1	Drainage Basin ID or Name	DMA A	DMA B&C	unitless
	2	85th Percentile 24-hr Storm Depth	0.62	0.62	inches
	3	Impervious Surfaces <u>Not Directed to Dispersion Area</u> (C=0.90)	12,683	18,004	sq-ft
	4	Semi-Pervious Surfaces <u>Not Serving as Dispersion Area</u> (C=0.30)			sq-ft
	5	Engineered Pervious Surfaces <u>Not Serving as Dispersion Area</u> (C=0.10)	19,004	35,960	sq-ft
	6	Natural Type A Soil <u>Not Serving as Dispersion Area</u> (C=0.10)			sq-ft
	7	Natural Type B Soil <u>Not Serving as Dispersion Area</u> (C=0.14)			sq-ft
	8	Natural Type C Soil <u>Not Serving as Dispersion Area</u> (C=0.23)			sq-ft
	9	Natural Type D Soil <u>Not Serving as Dispersion Area</u> (C=0.30)			sq-ft
Dispersion Area, Tree Well & Rain Barrel Inputs (Optional)	10	Does Tributary Incorporate Dispersion, Tree Wells, and/or Rain Barrels?	No	No	yes/no
	11	Impervious Surfaces Directed to Dispersion Area per SD-B (Ci=0.90)			sq-ft
	12	Semi-Pervious Surfaces Serving as Dispersion Area per SD-B (Ci=0.30)			sq-ft
	13	Engineered Pervious Surfaces Serving as Dispersion Area per SD-B (Ci=0.10)			sq-ft
	14	Natural Type A Soil Serving as Dispersion Area per SD-B (Ci=0.10)			sq-ft
	15	Natural Type B Soil Serving as Dispersion Area per SD-B (Ci=0.14)			sq-ft
	16	Natural Type C Soil Serving as Dispersion Area per SD-B (Ci=0.23)			sq-ft
	17	Natural Type D Soil Serving as Dispersion Area per SD-B (Ci=0.30)			sq-ft
	18	Number of Tree Wells Proposed per SD-A			#
	19	Average Mature Tree Canopy Diameter			ft
	20	Number of Rain Barrels Proposed per SD-E			#
	21	Average Rain Barrel Size			gal
Initial Runoff Factor Calculation	22	Total Tributary Area	31,687	53,964	sq-ft
	23	Initial Runoff Factor for Standard Drainage Areas	0.42	0.37	unitless
	24	Initial Runoff Factor for Dispersed & Dispersion Areas	0.00	0.00	unitless
	25	Initial Weighted Runoff Factor	0.42	0.37	unitless
	26	Initial Design Capture Volume	688	1,032	cubic-feet
Dispersion Area Adjustments	27	Total Impervious Area Dispersed to Pervious Surface	0	0	sq-ft
	28	Total Pervious Dispersion Area	0	0	sq-ft
	29	Ratio of Dispersed Impervious Area to Pervious Dispersion Area	n/a	n/a	ratio
	30	Adjustment Factor for Dispersed & Dispersion Areas	1.00	1.00	ratio
	31	Runoff Factor After Dispersion Techniques	0.42	0.37	unitless
	32	Design Capture Volume After Dispersion Techniques	688	1,032	cubic-feet
Tree & Barrel Adjustments	33	Total Tree Well Volume Reduction	0	0	cubic-feet
	34	Total Rain Barrel Volume Reduction	0	0	cubic-feet
Results	35	Final Adjusted Runoff Factor	0.42	0.37	unitless
	36	Final Effective Tributary Area	13,309	19,967	sq-ft
	37	Initial Design Capture Volume Retained by Site Design Elements	0	0	cubic-feet
	38	Final Design Capture Volume Tributary to BMP	688	1,032	cubic-feet
No Warning Messages					



Modular Wetlands[®] Linear

A Stormwater Biofiltration Solution



SIZING CHART

FLOW-BASED DESIGNS

The Modular Wetlands® Linear can be used in stand-alone applications to meet treatment flow requirements, and since it is the only biofiltration system that can accept inflow pipes several feet below the surface, it can be used in decentralized design applications as well as large central end-of-the-line applications.

Model #	Dimensions	WetlandMEDIA Surface Area (sq.ft.)	Treatment Flow Rate (cfs)
MWS-L-4-4	4'x4'	23	0.052
MWS-L-4-6	4'x6'	32	0.073
✓ MWS-L-4-8	4'x8'	50	0.115 ✓
MWS-L-8-8	8'x8'	100	0.230
✓ MWS-L-8-12	8'x12'	151	0.346 ✓
MWS-L-8-16	8'x16'	201	0.462
MWS-L-8-20	8'x20'	252	0.577
MWS-L-8-24	8'x24'	302	0.693

APPLICATIONS



The Modular Wetlands® Linear has been successfully used on numerous new construction and retrofit projects. The system's superior versatility makes it beneficial for a wide range of stormwater and waste water applications.

INDUSTRIAL

The Modular Wetlands has helped various sites meet difficult EPA-mandated effluent limits for dissolved metals and other pollutants.

RESIDENTIAL

Low to high density developments can benefit from the versatile design of the Modular Wetlands. The system can be used in both decentralized LID design and cost-effective end-of-the-line configurations.

STREETS

The Modular Wetlands is extremely space efficient, and adept to meeting special constraints of existing utilities on retrofit projects.

PARKING LOTS

Parking lots are designed to maximize space and the Modular Wetlands' 4 ft. standard planter width allows for easy integration into parking lot islands and other landscape medians.

COMMERCIAL

Compared to bioretention systems, the Modular Wetlands can treat far more area in less space, meeting treatment and volume control requirements.

More applications include:

- Agriculture
- Reuse
- Low Impact Development
- Waste Water
- Mixed Use

Attachment 1d

Form I-7, Harvest and Use Feasibility Screening Checklist



Harvest and Use Feasibility Checklist		Form I-7
1. Is there a demand for harvested water (check all that apply) at the project site that is reliably present during the wet season? ☒ Toilet and urinal flushing ☒ Landscape irrigation ☐ Other: _____		
2. If there is a demand; estimate the anticipated average wet season demand over a period of 36 hours. Guidance for planning level demand calculations for toilet/urinal flushing and landscape irrigation is provided in Section B.3.2. Toilet and Urinal Demand -> 9.3 Gal / resident Landscape Demand -> 1,470 Gal / irr. Acre mod use 9.3 gal / day x (0.13368 cu ft / gal) x (1.5 days) = 1.86 cu ft / person over 36 hours 18 units x 4 people / unit x (1.86 cu ft / person) = 133.92 cu ft / 36 hours (toilet / urinal flushing) 0.57 AC irrigated x 1,470 gal / ac – 36 hr x 0.13368 cu ft / gal = 112 cu ft / 36 hrs (landscaping) 134 cu ft + 112 cu ft = 246 cu ft total over a 36 hour period		
3. Calculate the DCV using worksheet B-2.1. DCV = <u>1,720</u> (cubic feet)		
3a. Is the 36 hour demand greater than or equal to the DCV? ☐ Yes / ☒ No ➡ ↓	3b. Is the 36 hour demand greater than 0.25DCV but less than the full DCV? ☐ Yes / ☒ No ➡ ↓	3c. Is the 36 hour demand less than 0.25DCV? ☒ Yes ↓
Harvest and use appears to be feasible. Conduct more detailed evaluation and sizing calculations to confirm that DCV can be used at an adequate rate to meet drawdown criteria.	Harvest and use may be feasible. Conduct more detailed evaluation and sizing calculations to determine feasibility. Harvest and use may only be able to be used for a portion of the site, or (optionally) the storage may need to be upsized to meet long term capture targets while draining in longer than 36 hours.	Harvest and use is considered to be infeasible.
Is harvest and use feasible based on further evaluation? ☐ Yes, refer to Appendix E to select and size harvest and use BMPs. ☒ No, select alternate BMPs.		



Attachment 1e

Form I-8, Categorization of Infiltration Feasibility Condition

TO BE PROVIDED ON NEXT SUBMITTAL



Attachment 1f

Pollutant Control BMP Design Worksheets / Calculations



Automated Worksheet B.1: Calculation of Design Capture Volume (V2.0)

Category	#	Description	<i>i</i>	<i>ii</i>	Units
Standard Drainage Basin Inputs	1	Drainage Basin ID or Name	DMA A	DMA B&C	unitless
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	7	Natural Type B Soil <u>Not Serving as Dispersion Area</u> (C=0.14)			sq-ft
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	9	Natural Type D Soil <u>Not Serving as Dispersion Area</u> (C=0.30)			sq-ft
Dispersion Area, Tree Well & Rain Barrel Inputs (Optional)	10	Does Tributary Incorporate Dispersion, Tree Wells, and/or Rain Barrels?	No	No	yes/no
	11	Impervious Surfaces Directed to Dispersion Area per SD-B (Ci=0.90)			sq-ft
	12	Semi-Pervious Surfaces Serving as Dispersion Area per SD-B (Ci=0.30)			sq-ft
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	38	Final Design Capture Volume Tributary to BMP	688	1,032	cubic-feet
No Warning Messages					

Sizing of Flow-Based Biofiltration BMP Modular Wetland Systems (MWS)

[illegible]

ATTACHMENT 2
BACKUP FOR PDP HYDROMODIFICATION CONTROL MEASURES



Indicate which Items are Included:

Attachment Sequence	Contents	Checklist
Attachment 2a	1. Hydromodification Management Exhibit (Required)	☒ Included See Hydromodification Management Exhibit Checklist.
Attachment 2b	Management of Critical Coarse Sediment Yield Areas (WMAA Exhibit is required, additional analyses are optional) See Section 6.2 of the BMP Design Manual.	☒ Exhibit showing project drainage boundaries marked on WMAA Critical Coarse Sediment Yield Area Map (Required) Optional analyses for Critical Coarse Sediment Yield Area Determination ☐ 6.2.1 Verification of Geomorphic Landscape Units Onsite ☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment ☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite
Attachment 2c	Geomorphic Assessment of Receiving Channels (Optional) See Section 6.3.4 of the BMP Design Manual.	☒ Not performed ☐ Included ☐ Submitted as separate stand-alone document
Attachment 2d	Flow Control Facility Design and Structural BMP Drawdown Calculations (Required) Overflow Design Summary for each structural BMP See Chapter 6 and Appendix G of the BMP Design Manual	☐ Included ☒ Submitted as separate stand-alone document
Attachment 2e	Vector Control Plan (Required when structural BMPs will not drain in 96 hours)	☐ Included ☒ Not required because BMPs will drain in less than 96 hours



Use this checklist to ensure the required information has been included on the Hydromodification Management Exhibit:

The Hydromodification Management Exhibit must identify:

- ☒ Underlying hydrologic soil group
- ☒ Approximate depth to groundwater
- ☒ Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- ☒ Critical coarse sediment yield areas to be protected
- ☒ Existing topography
- ☒ Existing and proposed site drainage network and connections to drainage offsite
- ☒ Proposed grading
- ☒ Proposed impervious features
- ☒ Proposed design features and surface treatments used to minimize imperviousness
- ☒ Point(s) of Compliance (POC) for Hydromodification Management
- ☒ Existing and proposed drainage boundary and drainage area to each POC (when necessary, create separate exhibits for pre-development and post-project conditions)
- ☒ Structural BMPs for hydromodification management (identify location, type of BMP, and size/detail)

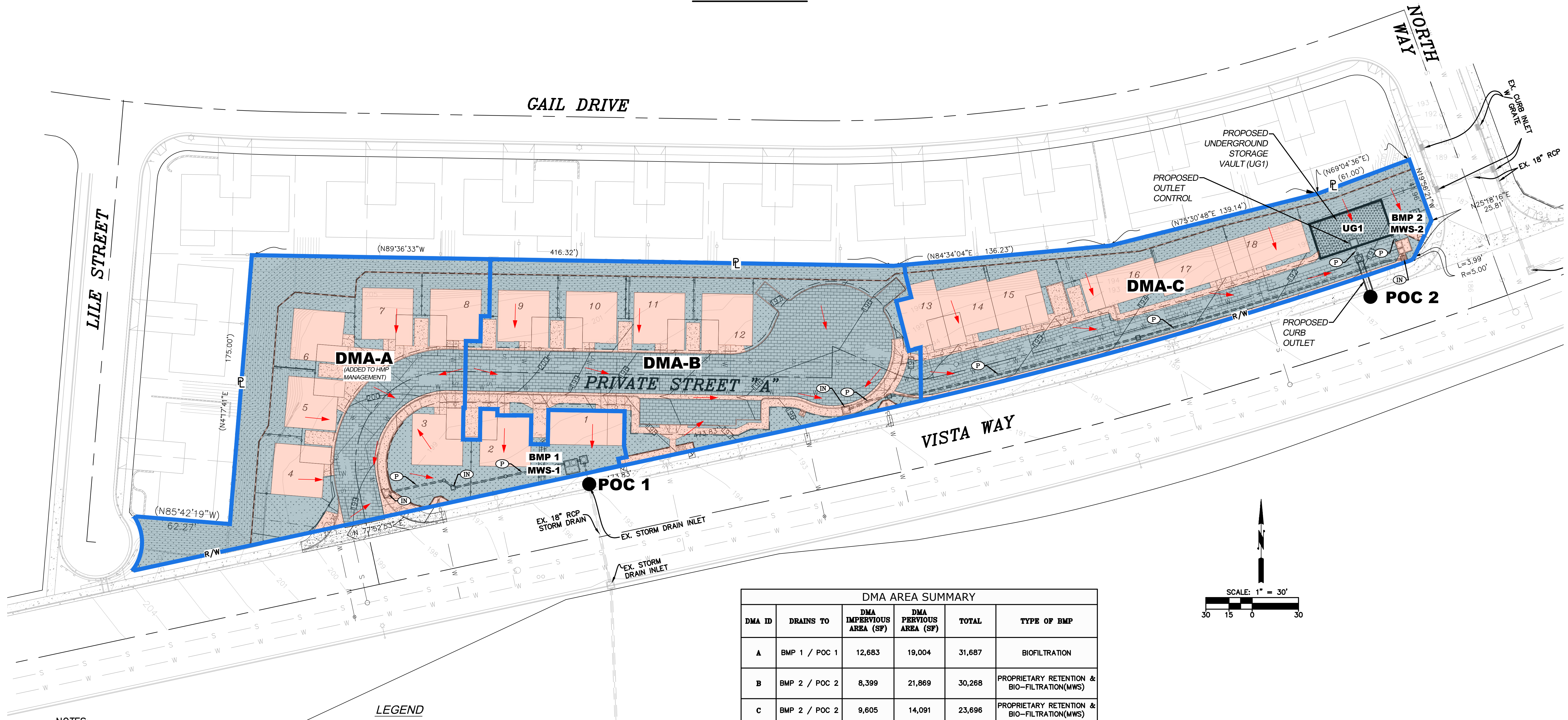
Please provide the Exhibit in 24"x36" format with map pocket, wet date, and stamp.



ATTACHMENT 2A



VISTA WAY HOMES
DMA PLAN



- NOTES:
1. THE UNDERLYING SOIL TYPE GROUPS IS "D" FOR THE ENTIRE PROPERTY AND SURROUNDING PARCELS
 2. THE APPROXIMATE DEPTH TO GROUND WATER IS EXPECTED TO BE LESS THAN 15 FEET
 3. NO CRITICAL COARSE SEDIMENT YIELD AREAS TO BE PROTECTED BASED ON SEDIMENT TRANSPORT ANALYSIS (SEE PROJECT SWQMP).
 4. THE SITE DOES NOT CONTAIN ANY EXISTING NATURAL HYDROLOGIC FEATURES. (WATERCOURSES, SEEPS, SPRINGS, WETLANDS)

LEGEND

POC 1 ● POINT OF COMPLIANCE

MWS-# MODULAR WETLAND SYSTEM

PERVIOUS AREAS

IMPERVIOUS AREAS

PROPOSED PIPE

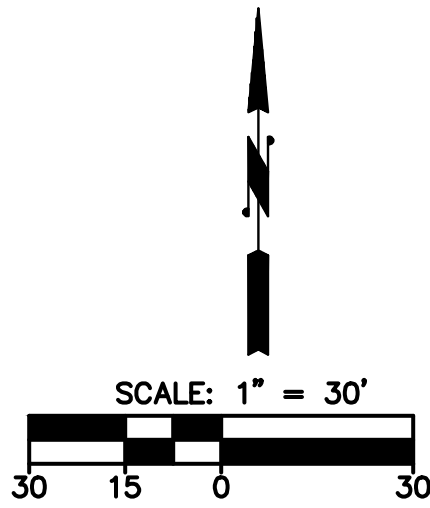
PROPOSED INLET

DMA AREA SUMMARY					
DMA ID	DRAINS TO	DMA IMPERVIOUS AREA (SF)	DMA PERVIOUS AREA (SF)	TOTAL	TYPE OF BMP
A	BMP 1 / POC 1	12,683	19,004	31,687	BIOFILTRATION
B	BMP 2 / POC 2	8,399	21,869	30,268	PROPRIETARY RETENTION & BIO-FILTRATION(MWS)
C	BMP 2 / POC 2	9,605	14,091	23,696	PROPRIETARY RETENTION & BIO-FILTRATION(MWS)

1. DMA Type can only be: 1) Drains to BMP, 2) Self-mitigating, 3) De Minimis, or 4) Self-retaining
2. BMP Type must be consistent with terminology in the BMP Design Manual and/or CASQA Fact Sheets
3. Structural BMP Size is typically presented as an area (sq. ft.) or size (e.g., proprietary devices)

DUAL PURPOSE BMP				
BMP	TRIBUTARY AREA (SF)	FOOTPRINT AREA (FT²)	DEPTH (FT)	TOTAL VOLUME (FT³)
UG1	85,651	1241	3.5	4,320

SUMMARY OF RISER			
BMP	LOWER ORIFICE		UPPER WEIR
	DIAMETER (IN)	ELEV. (FT)	LENGTH (FT) ELEV. (FT)
UG1	1.4	18	6 3.5



ATTACHMENT 2B



PCCSYA Map

Legend

 3710 Vista Way

 PCCSYA Areas

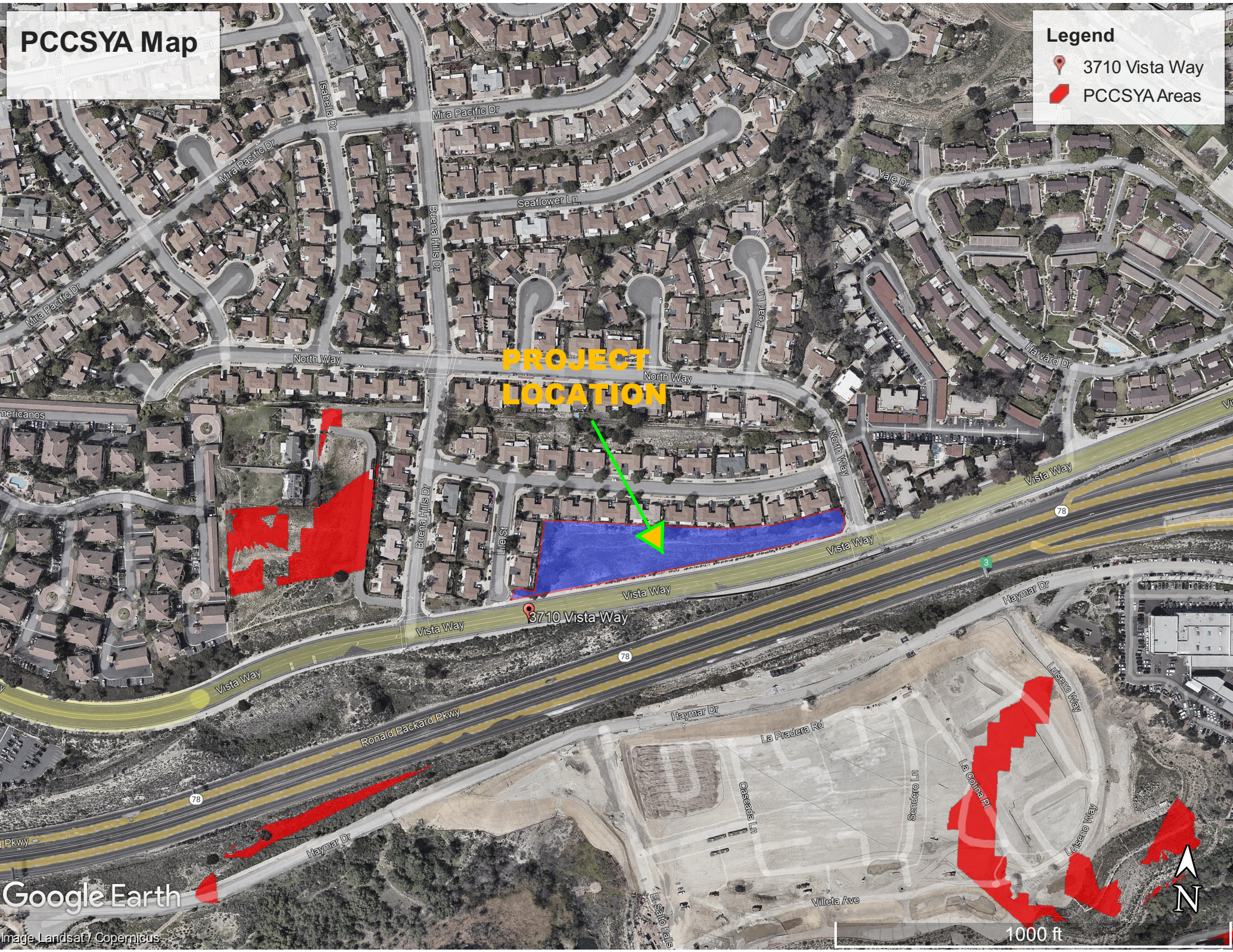
PROJECT
LOCATION

3710 Vista Way

Google Earth

Image Landsat 7 Copernicus

1000 ft



ATTACHMENT 2D



BMP Sizing Spreadsheet V3.1			
Project Name:	Vista Way Oceanside	Hydrologic Unit:	904.21
Project Applicant:	AP Consulting	Rain Gauge:	Oceanside
Jurisdiction:	City of Oceanside	Total Project Area:	85,813
Parcel (APN):	165-493-47	Low Flow Threshold:	0.1Q2
BMP Name:	BMP 1	BMP Type:	Cistern
BMP Native Soil Type:	D	BMP Infiltration Rate (in/hr):	NA

Areas Draining to BMP						HMP Sizing Factors	Minimum BMP Size
DMA Name	Area (sf)	Pre Project Soil Type	Pre-Project Slope	Post Project Surface Type	Area Weighted Runoff Factor (Table G.2-1) ¹	Volume	Volume (CF)
DMA 1 impervious	12,683	D	Moderate	Concrete	1.0	0.12	1522
DMA 1 pervious	19,004	D	Moderate	Landscape	0.1	0.12	228
DMA 2 impervious	8,399	D	Moderate	Concrete	1.0	0.12	1008
DMA 2 pervious	21,869	D	Moderate	Landscape	0.1	0.12	262
DMA 3 impervious	9,605	D	Moderate	Concrete	1.0	0.12	1153
DMA 3 pervious	14,091	D	Moderate	Landscape	0.1	0.12	169
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
BMP Tributary Area	85,651					Minimum BMP Size	4342

Proposed BMP Size* **4320** * Assumes standard configuration

Standard Cistern Depth (Overflow Elevation)	3.5	ft
Provided Cistern Depth (Overflow Elevation)	3.5	ft
Minimum Required Cistern Footprint)	1241	CF

Notes:

1. Runoff factors which are used for hydromodification management flow control (Table G.2-1) are different from the runoff factors used for pollutant control BMP sizing (Table B.1-1). Table references are taken from the San Diego Region Model BMP Design Manual,

Describe the BMP's in sufficient detail in your PDP SWQMP to demonstrate the area, volume, and other criteria can be met within the constraints of the site.

BMP's must be adapted and applied to the conditions specific to the development project such as unstable slopes or the lack of available head.
Designated Staff have final review and approval authority over the project design.

This BMP Sizing Spreadsheet has been updated in conformance with the San Diego Region Model BMP Design Manual, May 2018. For questions or concerns please contact the jurisdiction in which your project is located.

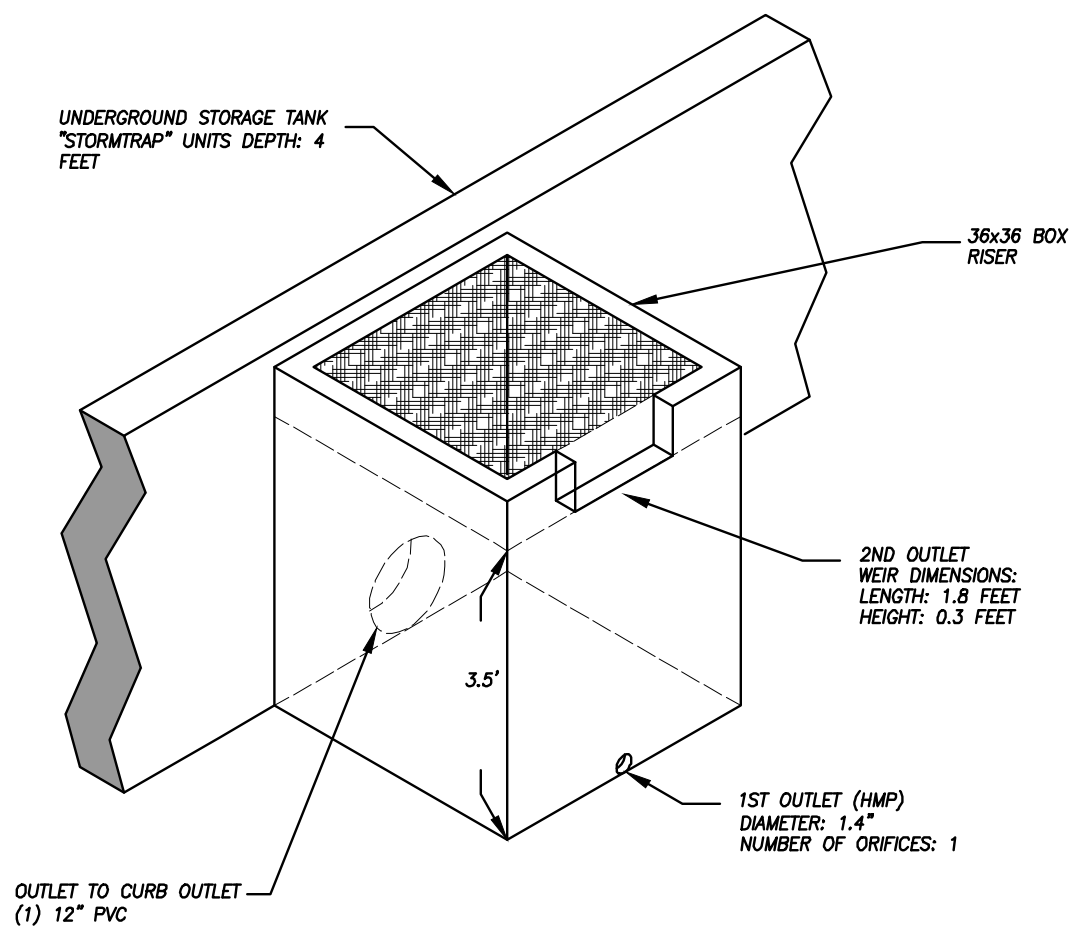
BMP Sizing Spreadsheet V3.1			
Project Name:	Vista Way Oceanside	Hydrologic Unit:	904.21
Project Applicant:	AP Consulting	Rain Gauge:	Oceanside
Jurisdiction:	City of Oceanside	Total Project Area:	85,813
Parcel (APN):	165-493-47	Low Flow Threshold:	0.1Q2
BMP Name	BMP 1	BMP Type:	Cistern

DMA Name	Rain Gauge	Pre-developed Condition		Unit Runoff Ratio (cfs/ac)	DMA Area (ac)	Orifice Flow - %Q ₂ (cfs)	Orifice Area (in ²)
		Soil Type	Slope				
DMA 1 impervious	Oceanside	D	Moderate	0.575	0.291	0.017	0.25
DMA 1 pervious	Oceanside	D	Moderate	0.575	0.436	0.025	0.37
DMA 2 impervious	Oceanside	D	Moderate	0.575	0.193	0.011	0.16
DMA 2 pervious	Oceanside	D	Moderate	0.575	0.502	0.029	0.43
DMA 3 impervious	Oceanside	D	Moderate	0.575	0.221	0.013	0.19
DMA 3 pervious	Oceanside	D	Moderate	0.575	0.323	0.019	0.27

3.50	0.113	1.67	1.46
Max Orifice Head	Max Tot. Allowable Orifice Flow	Max Tot. Allowable Orifice Area	Max Orifice Diameter
(feet)	(cfs)	(in²)	(in)

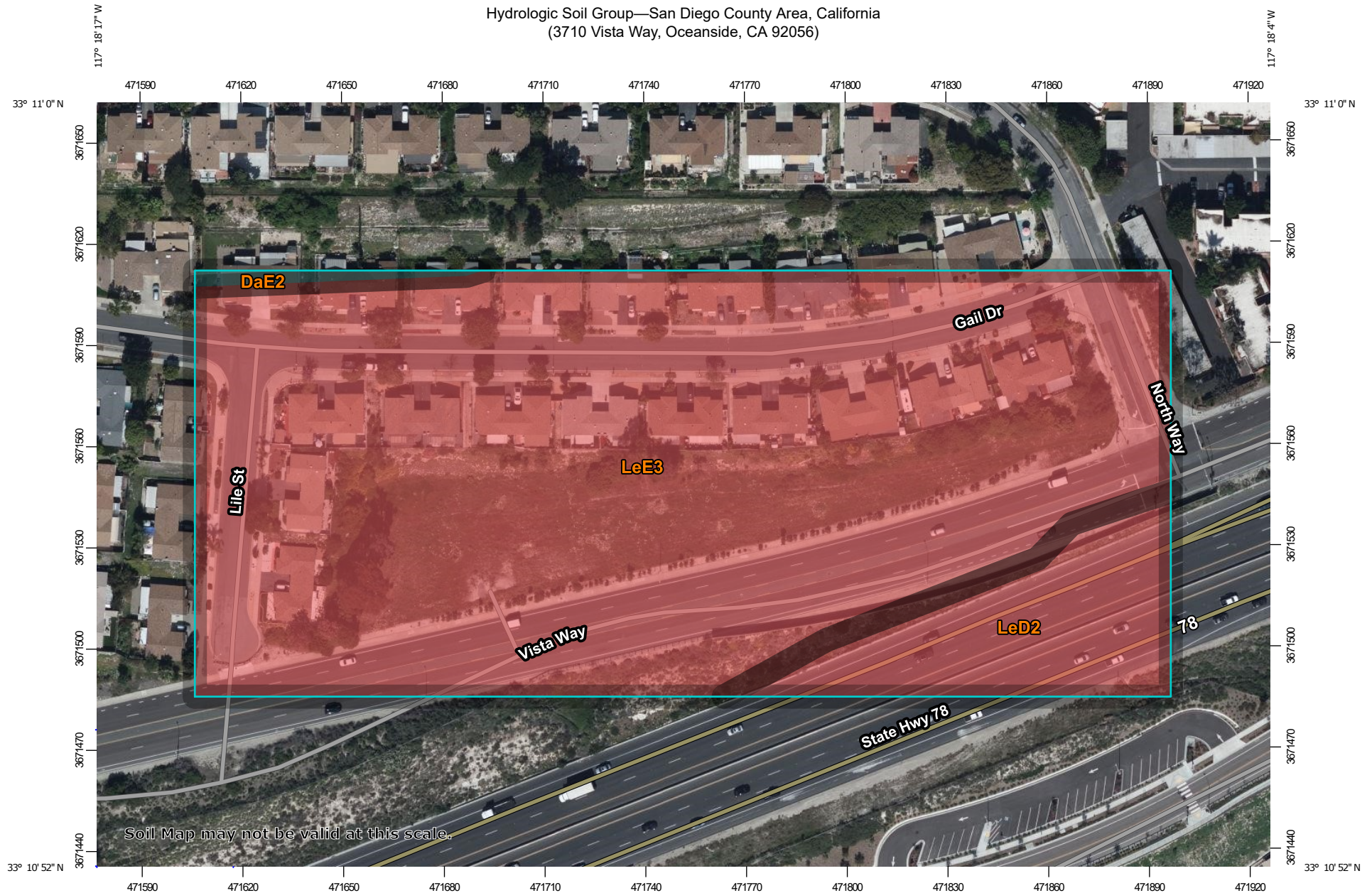
Provide Hand Calc.	0.104	1.54	1.400
Average outflow during surface drawdown	Max Orifice Outflow	Actual Orifice Area	Selected Orifice Diameter
(cfs)	(cfs)	(in ²)	(in)

Drawdown (Hrs)	Provide Hand Calculation
----------------	--------------------------

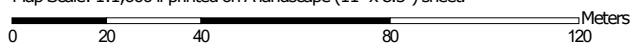


OUTLET DETAIL
NTS

Hydrologic Soil Group—San Diego County Area, California
(3710 Vista Way, Oceanside, CA 92056)



Map Scale: 1:1,600 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

5/20/2022
Page 1 of 4

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Diego County Area, California
Survey Area Data: Version 16, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 24, 2020—Feb 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
DaE2	Diablo clay, 15 to 30 percent slopes, eroded, warm MAAT	C	0.1	0.7%
LeD2	Las Flores loamy fine sand, 9 to 15 percent slopes, eroded	D	1.0	11.4%
LeE3	Las Flores loamy fine sand, 9 to 30 percent slopes, severely eroded	D	8.0	87.9%
Totals for Area of Interest			9.1	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

**ATTACHMENT 3
STRUCTURAL BMP MAINTENANCE INFORMATION
TO BE PROVIDED AT FINAL
ENGINEERING PHASE**



Indicate which Items are Included:

Attachment Sequence	Contents	Checklist
Attachment 3a	Structural BMP Maintenance Thresholds and Actions (Required)	☒ Included See Structural BMP Maintenance Information Checklist.



ATTACHMENT 4
Copy of Plan Sheets Showing Permanent Storm Water BMPs



ATTACHMENT 5

Drainage Report



Preliminary Drainage Study

FOR:

**T21-00002
3710 Vista Way
Oceanside, CA 92056
Tentative Map**

Prepared for:

**NEPTUNE INVESTMENTS, LLC
PO Box 9890
Rancho Santa Fe, CA 92067**

Prepared by:

**ALTA CONSULTANTS
Planning, Engineering, Surveying
1283 E. Main St., Suite #109
San Diego, CA 92021
(619) 749-8818**

Project Site Address:

**3710 Vista Way
Oceanside, CA 92056
APN: 165-493-47**

Preparation Date:

March 2021

Revision Date:

May 2022

Engineer of Work: Bartolome J. Pastor
RCE. 38606

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1. INTRODUCTION AND PROJECT DESCRIPTION	Page 1
1.1. Introduction.....	Page 1
1.2. Project Location & vicinity Map.....	Page 2
1.3. Project Description.....	Page 3
2. HYDRO-MODIFICATION.....	Page 5
3. PROCEDURE.....	Page 5
3.1 Peak Flows.....	Page 6
3.2a Coefiecient of Runoff “C” Values (pre-development).....	Page 6
3.2b Coefiecient of Runoff “C” Values (post-development).....	Page 7
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3.3a Summary of Runoff for Pre-Development.....	Page 8
3.3b Summary of Runoff for Post-Development.....	Page 8
4. CONCLUSION.....	Page 9
5. TABLE: COMPARISON OF PRE TO POST DEVELOPMENT RUNOFF.....	Page 10
6. REFERENCES.....	Page 11

APPENDICIES:

Appendix 1	Hydrology Calculations
Appendix 2.....	Inlets
Appendix 3.....	Peak Flow Atenuation Analysis

EXHIBITS:

EXHIBIT A.....	Pre-Development Drainage Map & DMA Map
EXHIBIT B.....	Post-Development Drainage Map
EXHIBIT C.....	Post-Development DMA Map

ATTACHMENTS:

Attachment 1	TP Plans
Attachment 2.....	Soils Plat

1.1 INTRODUCTION

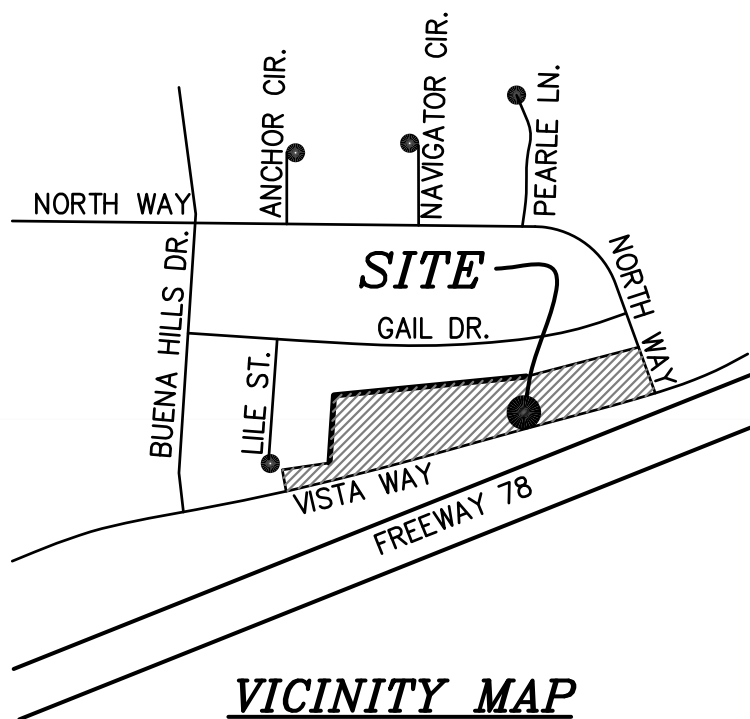
This section describes the project, Vista Way Homes (18 residential units). This project is proposed to be a “*Common Interest Development for Senior Housing*”. This project will include affordable housing. CCR’s will be prepared for this project prior to occupancy. These CCR’s will cover the maintenance of drainage and storm water facilities for this site. The project is on 1.97-acre lot with no existing visible improvements other than some retaining walls. This site was previously a part of a residential development with homes and streets. These improvements have been removed from the site.

The drainage study is based on the County of San Diego Drainage Manual, January 2017. The Rational Method is used to calculate pre and post development runoff for this project. The 6-hour precipitation is as calculated in the Intensity-Duration Design Chart (see section 3.2). The Soil classification used in this study is “D”. The pre-development coefficient of runoff “C” values for this project should be based on the previous residential single family development $C=0.55$ which the downstream storm drain was designed for. The City of Oceanside in their review has instructed us to use a “C” value of $C=0.35$ for pre-development. The post-development coefficient of runoff “C” values for this project are based on the County of San Diego’s Evaluation of Rational Method “C” Values see table 3.1b.

Using a pre-development “C” value of 0.35 will require on-site detention See appendix 3 for the Peak Flow attenuation analysis for this project.

1.2 PROJECT LOCATION

The project is located at 3710 Vista Way adjacent to 78 Freeway. The project is located along the north side of Vista Way, at the northwest corner of Vista Way and North Way. The 78 freeway runs parallel with Vista Way’s southerly right-of-way. Access to the site is from Vista Way. There are duplexes located adjacent to the westerly and northerly boundary of the site. These lots drain away from this site onto their frontage streets (Lile St. to the west and Gail Dr. to the north).



VICINITY MAP
NOT TO SCALE



1.3 PROJECT DESCRIPTION VISTA WAY HOMES

The project site has been previously developed. The previous residential development that was on this site has been removed. The site now is vacante as shown on exhibit "A". Although the storm drain system that fronts this development should have been designed using the previous residential use the City of Oceanside has requested that instead of using a residential coeffiecent of runoff of $C=0.55$ that we use $C=0.35$ value. $C=0.35$ corresponds to the present site conditions (vacante and landscaped) soil type "D". as shown on Exhibit "A".

There is an existing manufactured slope along the north and west side of the project with several large existing trees. The remainder of the site is relatively flat. The site slopes west to east towards the southeast corner of the site (the northwest corner of Vista Way and North Way) where there is an existing cross-gutter that conveys runoff easterly across North Way. Both Vista Way and North Way are fully improved streets no new street dedications or improvements are proposed by this project. The only improvements proposed within the public right-of-way are utility connections, driveway cut and private storm drain connections to the existing public storm drain facilities. No offsite drainage flows onto the site, except at the west side of the project where a small amount of slope within the public right-of-way flows onto the site. This offsite area does not include any hard scape. Since this site does not have any off-site drainage flowing onto it except as described and none of the improvements in the right-of-way proposed by this project will measurably increase runoff the watershed area is bounded by the project boundary and the right-of-way including the small offsite right-of-way area on the west side of the site.

Pre-Development see Exhibit A

The Pre-Development runoff sheet flows to the existing streets. This sheet flow goes into (3) three public storm drain facilities. The west portion of the site sheet flows to the Vista Way gutter where it is collected by an existing inlet (Existing Curb Inlet A) that then flows southerly under Vista Way and into the cal-trans right-of-way. A small area located at the northeast corner of the site sheet flows to North Way gutter and into an existing inlet (Existing Curb Inlet B) that then flows southerly under North Way into a clean out in vista way. From there the runoff flows easterly to another cleanout and a connecting pipe that crosses vista way south and into the cal-trans right-of-way. Vista Way and into the cal-trans right-of-way. The remainder of the site sheet flows to the Vista Way and the curb return gutter at the southeast corner of the site where it enters the existing cross gutter which flows easterly across North Way to an existing inlet on Vista Way which connects to the same storm drain system called out above for the North Way inlet which flows southinto the cal-trans right-of-way.

Post-Development see Exhibit B

The Post-development drainage will also flow to the (3) three public drainage facilities described in the pre-development discussion above. The proposed site improvements for this project will collect the majority of the site runoff on-site where it will then be conveyed to the existing public storm drain facilities.

A portion of the site will continue to sheet flow into the existing gutters. The development of this site requires several retaining walls. Retaining walls will be installed parallel with both the Vista Way and North Way. To keep the footings on private property. There is a minimum of 2 inch setback from the right-of-way to the face of wall (drainage basins A1, B1, C2 & D). Also there are landscaped areas that continue to sheet flow to the Vista Way. Areas A1, B1 and C2 also include site access areas. The on-site drainage is collected and treated prior to entering the public storm drain facilities as follows:

Retaining walls along right-of ways are designed so that the surface drainage flows away from the tops of walls into the onsite drainage facilities. These walls subdrains will outlet to the existing right of way. The interior retaining walls will have weep holes at the base of the walls that will direct any surface runoff from behind walls onto the adjacent pads.

Area A: drainage basins A1-A5 are located at the west end of the site and are equivalent in area to P1. These areas all drain to the Existing Curb Inlet "A". Area A1 by the Vista Way gutter and areas A2-A5 through the on-site storm drain system which connects to the back of the existing inlet "A". Detention is required for Drainage Basin A; Pre-Q100=1.30 CFS, Post Q100=2.24 CFS a net increase in runoff of 0.94 CFS.

Area B: drainage basins B1 & B2 are located at the center of the site. Area B1 drains to the Vista Way Gutter. B2 Drains to a private B inlet in the cul-de-sac then flows east through a storm drain to the Catch basin in area C1.

Area C: drainage basins C1-C2 are located at the East end of the site. These areas all drain to the Existing Vista Way gutter. Area C1 by the Vista Way gutter and areas C1 through the on-site storm drain system which outlets to D-25A curb outlet. The B2 and C1 Drainages combine to outlet to Vista way; Post Q100=2.98 CFS.

Area D: drainage basin D are located at the East end of the site. This area drains to existing inlet "B" on North Way. Post Q100=0.00 CFS.

Post Development drainage basins B + C + D have equivalent area to Pre-development drainage basins P2 + P3. Pre-development Q100=1.33, Post-development Q100=3.02 CFS for a net increase in runoff of 1.69 CFS.

2. HYDRO-MODIFICATION

Hydro-Modification is required for this project. See this project's SWQMP for Hydro Modification.

3. PROCEDURE

In preparation of the pre-development hydrology our calculations are based on the rational method with coefficient of runoff $C=0.35$ for the existing landscaped vacant development. The total pre-development runoff is $Q=2.63$ CFS (100-year storm frequency). See Table 3.3a for a summary of 100, 50, 10, 5 & 2-year storm frequency runoff values

The post-development runoff coefficients are calculated using the County of San Diego's *Evaluation Ration Method "C" Values* method per table 3.2b. The initial time of concentration is based on urban areas overland time of flow curves. The total post-development runoff is $Q=5.26$ CFS (100-year storm frequency). See table 3.3b for a summary of 100, 50, 10, 5 & 2-year storm frequency runoff values.

For a comparison of pre to post development 100, 50, 10, 5 & 2-year storm frequency runoff values see table 3.3c.

3.1 Peak Flows (P6)

Using the Isopluvial Charts the Peak Flows used for this project are as follows:

Table 3.1a: Peak Flows Rainfall Event P24 (24 Hours)				
100 YR	50 YR	10 YR	5 YR	2 YR
5.00	4.50	3.25	2.50	2.00

Table 3.1b: Peak Flows Rainfall Event P6 (6 Hours)				
100 YR	50 YR	10 YR	5 YR	2 YR
2.80	2.50	1.80	1.40	1.10

Table 3.1c: Ratio P6/P24				
100 YR	50 YR	10 YR	5 YR	2 YR
56.0%	55.6%	55.4%	56.0%	55.0%
Adjusted P6				
2.80	2.50	1.80	1.40	1.10

3.2 Coefficient of Runoff "C" Values

Soil Type "D": Cp= 0.35

Table 3.3a shows the % impervios for the site per Exhibit "A"

Table 3.2a: Pre-Development "C" Values							
Drainage Basin	Area In AC	Area In SF	Impervious Area	% Imp.	Pervious Area	% Per.	"C" Value
P1	0.73	31,687	90	0%	31,597	100%	0.35
P2	1.23	53,626	9	0%	53,617	100%	0.35
P3	0.01	342	15	4%	327	96%	0.35
Total	1.97	85,655	113	0%	85,542	100%	0.35

The Post-development "C" Values for this site were determined using Equation below included in the County of San Diego "Evaluation of Rational Method "C" Values"

Equation 1: $C=0.90(\% \text{ impervious}) + C_p(1-\% \text{ impervious})$

To determine the % impervious for the various drainage basins for this site the See Table 3.3b.

Note: basins A1, B1, C2 & D drain directly to the adjacent streets and are untreated These areas are included in the HMP calculations for the site.

Minimus Area= 2,465 SF or 2.88%

Table 3.2b: Post-Development "C" Values							
Drainage Basin	Area In AC	Area In SF	Impervious Area	% Imp.	Pervious Area	% Per.	"C" Value
A1	0.05	2,052	290	14%	1,762	86%	0.43
A2	0.52	22,806	8,404	37%	14,402	63%	0.55
A3	0.06	2,800	1,605	57%	1,195	43%	0.67
A4	0.05	1,999	1,166	58%	833	42%	0.67
A5	0.05	2,030	1,218	60%	812	40%	0.68
A	0.73	31,687	12,683	40%	19,004	60%	0.57
B1	0.01	288	256	89%	32	11%	0.84
B2	0.69	29,980	8,143	27%	21,837	73%	0.50
B	0.69	30,268	8,399	28%	21,869	72%	0.50
C1	0.54	23,575	9,547	40%	14,028	60%	0.57
C2	0.00	121	58	48%	63	52%	0.61
C	0.54	23,696	9,605	41%	14,091	59%	0.57
D	0.00	4	0	0%	4	100%	0.35
B+C	1.24	53,964	18,004	33%	35,960	67%	0.53
Total	1.97	85,655	30,687	36%	54,968	64%	0.55

Table 3.2c: Post Compared to Pre Drainage			
	P1	A	P1-A=
	31,687	31,687	0
	P2	B+C	P2-B-C
	53,626	53,964	-338
	P3	D	P3-D
	342	4	338
Total	85,655	85,655	0

There is a 338 SF diversion of drainage
from basin P3(D) to Drainage
Basin P2(C)

3.3 Summary of Runoff

Table 3.3a: Pre-Development Runoff					
Drainage Basin	Q 100 CFS	Q 50 CFS	Q 10 CFS	Q 5 CFS	Q 2 CFS
P1	1.30	1.16	0.84	0.65	0.51
P2	1.31	1.17	0.84	0.66	0.52
P3	0.02	0.02	0.01	0.01	0.01
Total	2.63	2.35	1.69	1.32	1.03

Table 3.3b: Post-Development Undetained Runoff					
Drainage Basin	Q 100 CFS	Q 50 CFS	Q 10 CFS	Q 5 CFS	Q 2 CFS
A1	0.09	0.08	0.06	0.04	0.03
A2	1.44	1.28	0.92	0.72	0.57
A3	0.29	0.26	0.19	0.14	0.11
A4	0.21	0.19	0.13	0.10	0.08
A5	0.22	0.19	0.14	0.11	0.09
A	2.24	2.00	1.44	1.12	0.88
B1	0.04	0.03	0.02	0.02	0.01
B2	1.64	1.46	1.05	0.82	0.64
B	1.67	1.49	1.08	0.84	0.66
C1	1.34	1.20	0.86	0.67	0.53
C2	0.01	0.01	0.00	0.00	0.00
C	1.35	1.21	0.87	0.68	0.53
D	0.00	0.00	0.00	0.00	0.00
B+C+D	3.02	2.70	1.94	1.51	1.19
Total	5.26	4.70	3.38	2.63	2.07

Table: Comparison of Pre to Post Development Runoffs						
Drainage Basin	Area In SF	Q 100 CFS	Q 50 CFS	Q 10 CFS	Q 5 CFS	Q 2 CFS
P1	31,687	1.30	1.16	0.84	0.65	0.51
A	31,687	2.24	2.00	1.44	1.12	0.88
Pre-Post	0	-0.94	-0.84	-0.60	-0.47	-0.37
P2+P3	53,968	1.33	1.19	0.86	0.67	0.52
B+C+D	53,968	3.02	2.70	1.94	1.51	1.19
Pre-Post	0	-1.69	-1.51	-1.09	-0.85	-0.66
Total Pre-Post	0	-2.63	-2.35	-1.69	-1.31	-1.03

Detention Required

Detention Required

4. CONCLUSION

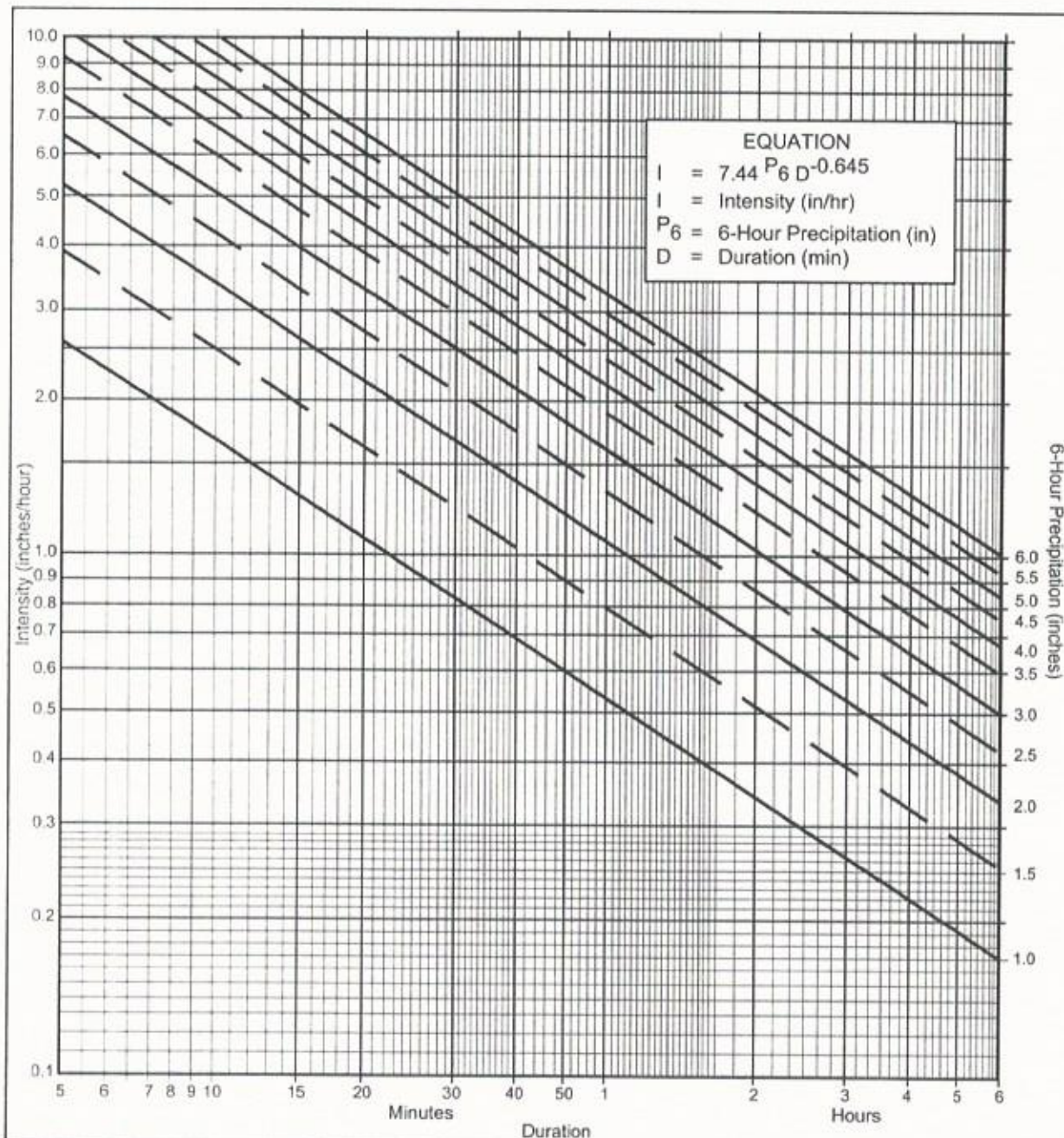
Pre-Development Drainage Basin P3 will no longer flow to inlet "B". This will divert QA100=0.02 CFS to the cross-gutter. All other drainage patterns are maintained. It is our opinion that there is no impact on the downstream existing drainage facilities.

5. REFERENCES

This report has been prepared in accordance with current City of Oceanside regulations and procedures. The following have been used in preparation of this study:

- County of San Diego Drainage Design Manual, January 2017
- Handbook of Hydraulics (7th Edition), Baxter and King

The calculations are based on the Rational Method.



Directions for Application:

- (1) From precipitation maps determine 6 hr and 24 hr amounts for the selected frequency. These maps are included in the County Hydrology Manual (10, 50, and 100 yr maps included in the Design and Procedure Manual).
- (2) Adjust 6 hr precipitation (if necessary) so that it is within the range of 45% to 65% of the 24 hr precipitation (not applicable to Desert).
- (3) Plot 6 hr precipitation on the right side of the chart.
- (4) Draw a line through the point parallel to the plotted lines.
- (5) This line is the intensity-duration curve for the location being analyzed.

Application Form:

- (a) Selected frequency 2 year
- (b) $P_6 = \underline{1.10}$ in., $P_{24} = \underline{2.00}$, $\frac{P_6}{P_{24}} = \underline{55.0} \%$ (2)
- (c) Adjusted $P_6^{(2)} = \underline{1.10}$ in.
- (d) $t_x = \underline{\quad}$ min.
- (e) $I = \underline{\quad}$ in./hr.

Note: This chart replaces the Intensity-Duration-Frequency curves used since 1965.

P6	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Duration	I	I	I	I	I	I	I	I	I	I	I
5	2.63	3.95	5.27	6.59	7.90	9.22	10.54	11.86	13.17	14.49	15.81
7	2.12	3.18	4.24	5.30	6.36	7.42	8.48	9.54	10.60	11.66	12.72
10	1.68	2.53	3.37	4.21	5.05	5.90	6.74	7.58	8.42	9.27	10.11
15	1.30	1.95	2.59	3.24	3.89	4.54	5.19	5.84	6.49	7.13	7.78
20	1.08	1.62	2.15	2.69	3.23	3.77	4.31	4.85	5.39	5.93	6.46
25	0.93	1.40	1.87	2.33	2.80	3.27	3.73	4.20	4.67	5.13	5.60
30	0.83	1.24	1.66	2.07	2.49	2.90	3.32	3.73	4.15	4.56	4.98
40	0.69	1.03	1.38	1.72	2.07	2.41	2.76	3.10	3.45	3.79	4.13
50	0.60	0.90	1.19	1.49	1.79	2.09	2.39	2.69	2.98	3.28	3.58
60	0.53	0.80	1.06	1.33	1.59	1.86	2.12	2.39	2.65	2.92	3.18
90	0.41	0.61	0.82	1.02	1.23	1.43	1.63	1.84	2.04	2.25	2.45
120	0.34	0.51	0.68	0.85	1.02	1.19	1.36	1.53	1.70	1.87	2.04
150	0.29	0.44	0.59	0.73	0.88	1.03	1.18	1.32	1.47	1.62	1.76
180	0.26	0.39	0.52	0.65	0.78	0.91	1.04	1.18	1.31	1.44	1.57
240	0.22	0.33	0.43	0.54	0.65	0.76	0.87	0.98	1.08	1.19	1.30
300	0.19	0.28	0.38	0.47	0.56	0.66	0.75	0.85	0.94	1.03	1.13
360	0.17	0.25	0.33	0.42	0.50	0.58	0.67	0.75	0.84	0.92	1.00

Intensity-Duration Design Chart - Template

FIGURE

3-1

County of San Diego Hydrology Manual



Rainfall Isopluvials

2 Year Rainfall Event - 6 Hours

----- Isopluvial (inches)

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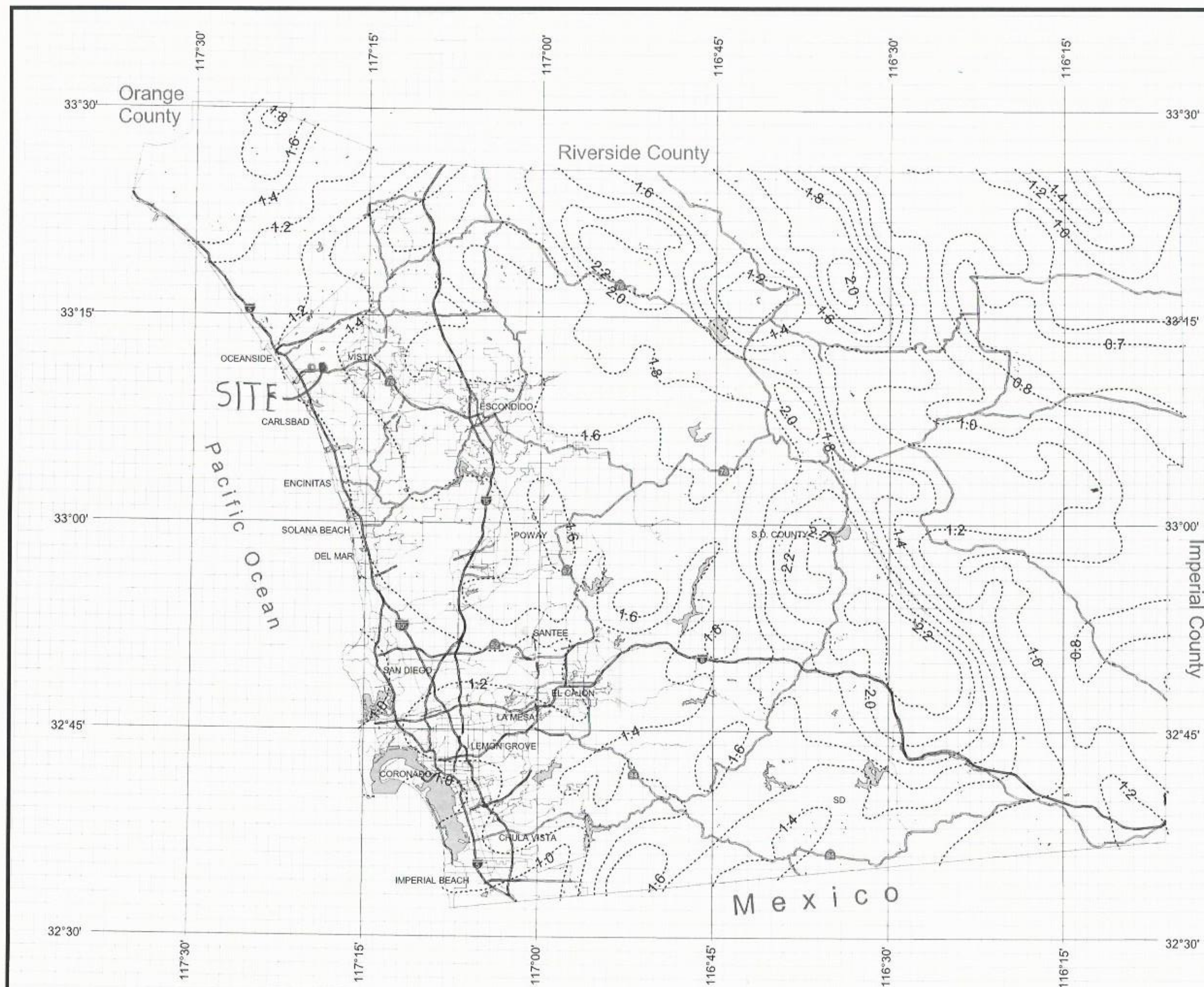


3 0 3 Miles

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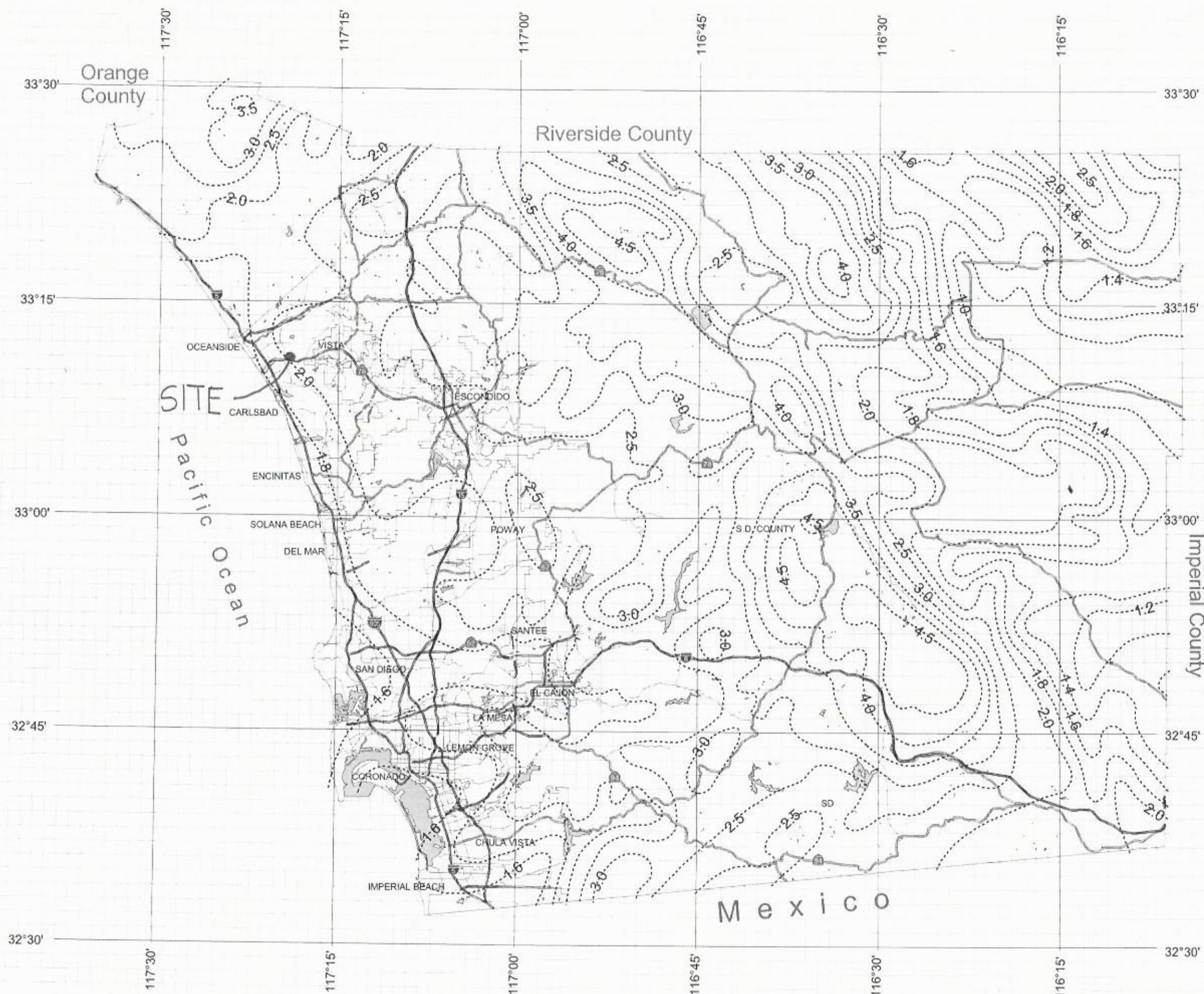
County of San Diego Hydrology Manual



Rainfall Isopluvials

2 Year Rainfall Event - 24 Hours

..... Isopluvial (inches)



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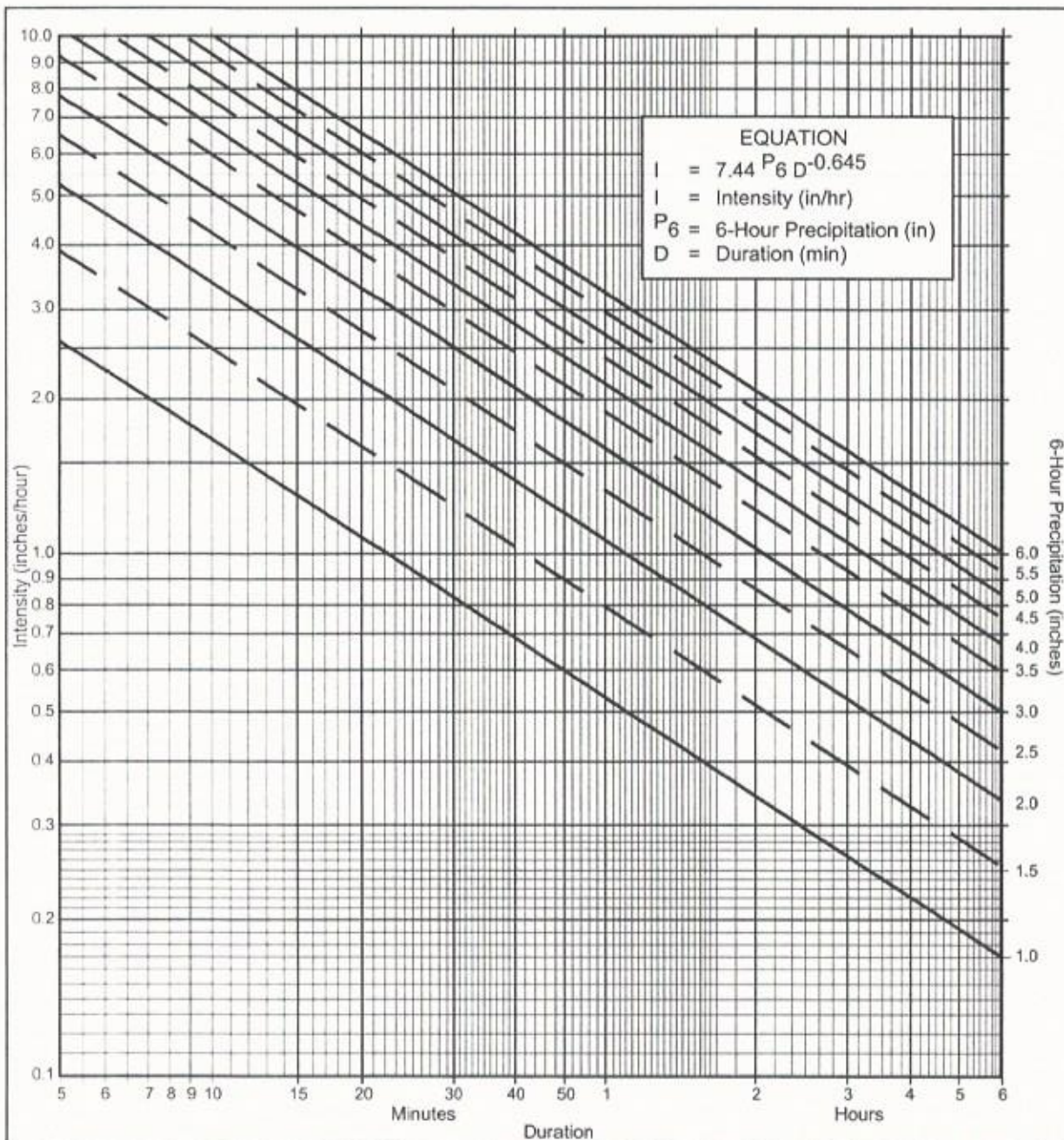


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- (2) Adjust 6 hr precipitation (if necessary) so that it is within the range of 45% to 65% of the 24 hr precipitation (not applicable to Desert).
- (3) Plot 6 hr precipitation on the right side of the chart.
- (4) Draw a line through the point parallel to the plotted lines.
- (5) This line is the intensity-duration curve for the location being analyzed.

Application Form:

- (a) Selected frequency 5 year
- (b) $P_6 = 1.4$ in., $P_{24} = 2.5$, $\frac{P_6}{P_{24}} = 56\%$ ⁽²⁾
- (c) Adjusted $P_6^{(2)} = 1.4$ in.
- (d) $t_x =$ _____ min.
- (e) $I =$ _____ in./hr.

Note: This chart replaces the Intensity-Duration-Frequency curves used since 1965.

P6	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Duration	I	I	I	I	I	I	I	I	I	I	I
5	2.63	3.95	5.27	6.59	7.90	9.22	10.54	11.86	13.17	14.49	15.81
7	2.12	3.18	4.24	5.30	6.36	7.42	8.48	9.54	10.60	11.66	12.72
10	1.68	2.53	3.37	4.21	5.05	5.90	6.74	7.58	8.42	9.27	10.11
15	1.30	1.95	2.59	3.24	3.89	4.54	5.19	5.84	6.49	7.13	7.78
20	1.08	1.62	2.15	2.69	3.23	3.77	4.31	4.85	5.39	5.93	6.46
25	0.93	1.40	1.87	2.33	2.80	3.27	3.73	4.20	4.67	5.13	5.60
30	0.83	1.24	1.66	2.07	2.49	2.90	3.32	3.73	4.15	4.56	4.98
40	0.69	1.03	1.38	1.72	2.07	2.41	2.76	3.10	3.45	3.79	4.13
50	0.60	0.90	1.19	1.49	1.79	2.09	2.39	2.69	2.98	3.28	3.58
60	0.53	0.80	1.06	1.33	1.59	1.86	2.12	2.39	2.65	2.92	3.18
90	0.41	0.61	0.82	1.02	1.23	1.43	1.63	1.84	2.04	2.25	2.45
120	0.34	0.51	0.68	0.85	1.02	1.19	1.36	1.53	1.70	1.87	2.04
150	0.29	0.44	0.59	0.73	0.88	1.03	1.18	1.32	1.47	1.62	1.76
180	0.26	0.39	0.52	0.65	0.78	0.91	1.04	1.18	1.31	1.44	1.57
240	0.22	0.33	0.43	0.54	0.65	0.76	0.87	0.98	1.08	1.19	1.30
300	0.19	0.28	0.38	0.47	0.56	0.66	0.75	0.85	0.94	1.03	1.13
360	0.17	0.25	0.33	0.42	0.50	0.58	0.67	0.75	0.84	0.92	1.00

Intensity-Duration Design Chart - Template

FIGURE

3-1

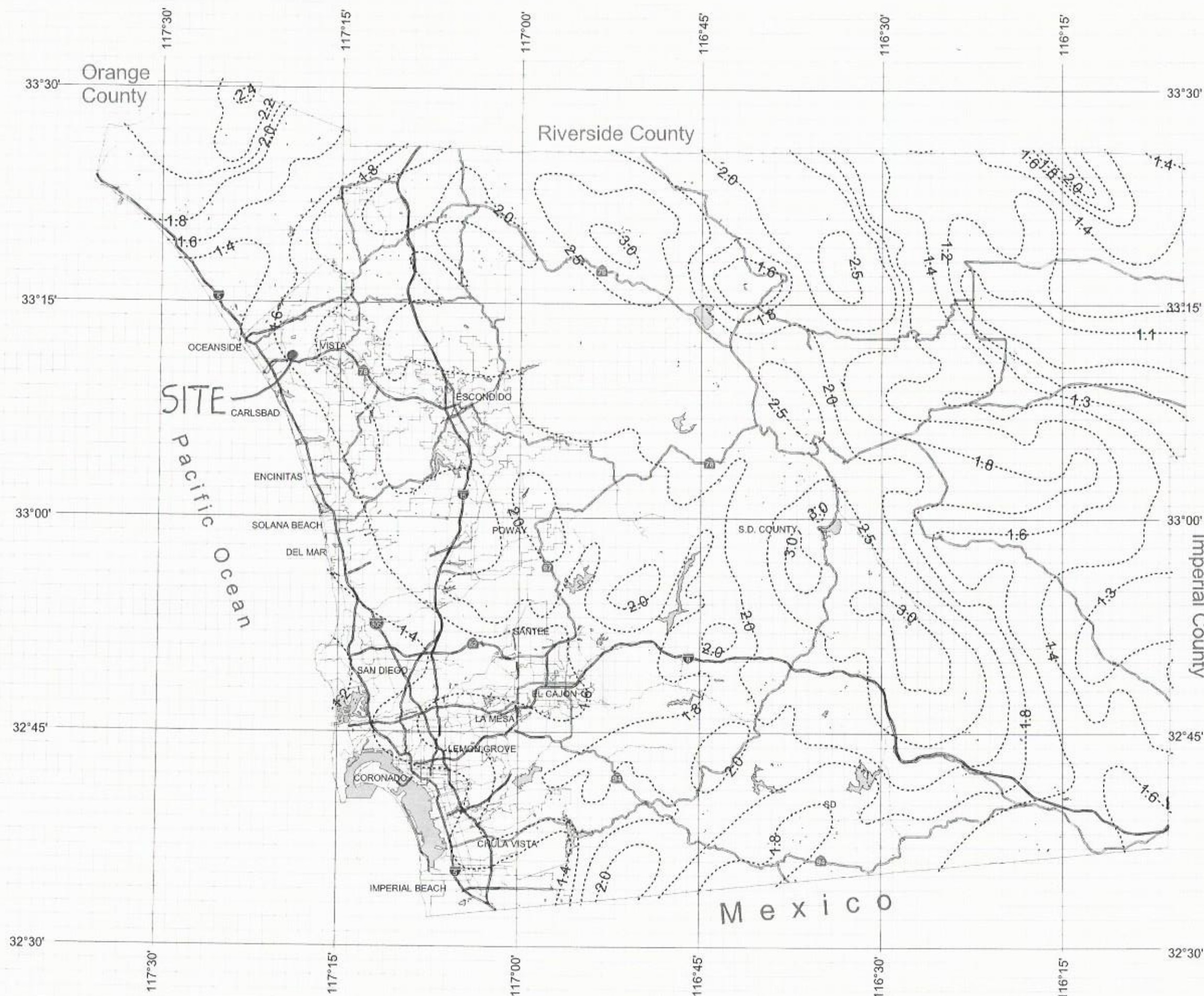
County of San Diego Hydrology Manual



Rainfall Isopluvials

5 Year Rainfall Event - 6 Hours

..... Isopluvial (inches)



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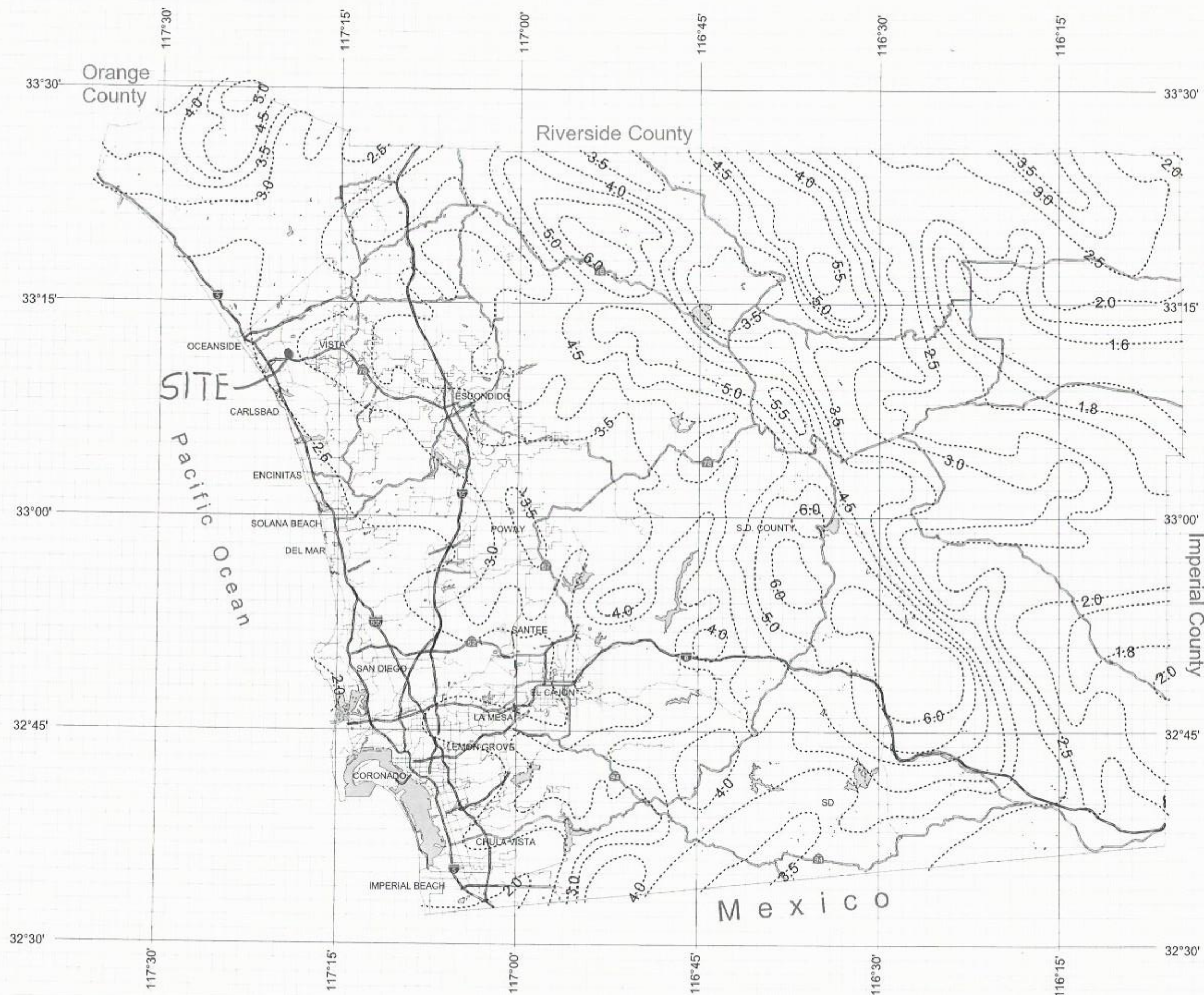
County of San Diego Hydrology Manual



Rainfall Isopluvials

5 Year Rainfall Event - 24 Hours

----- Isopluvial (inches)



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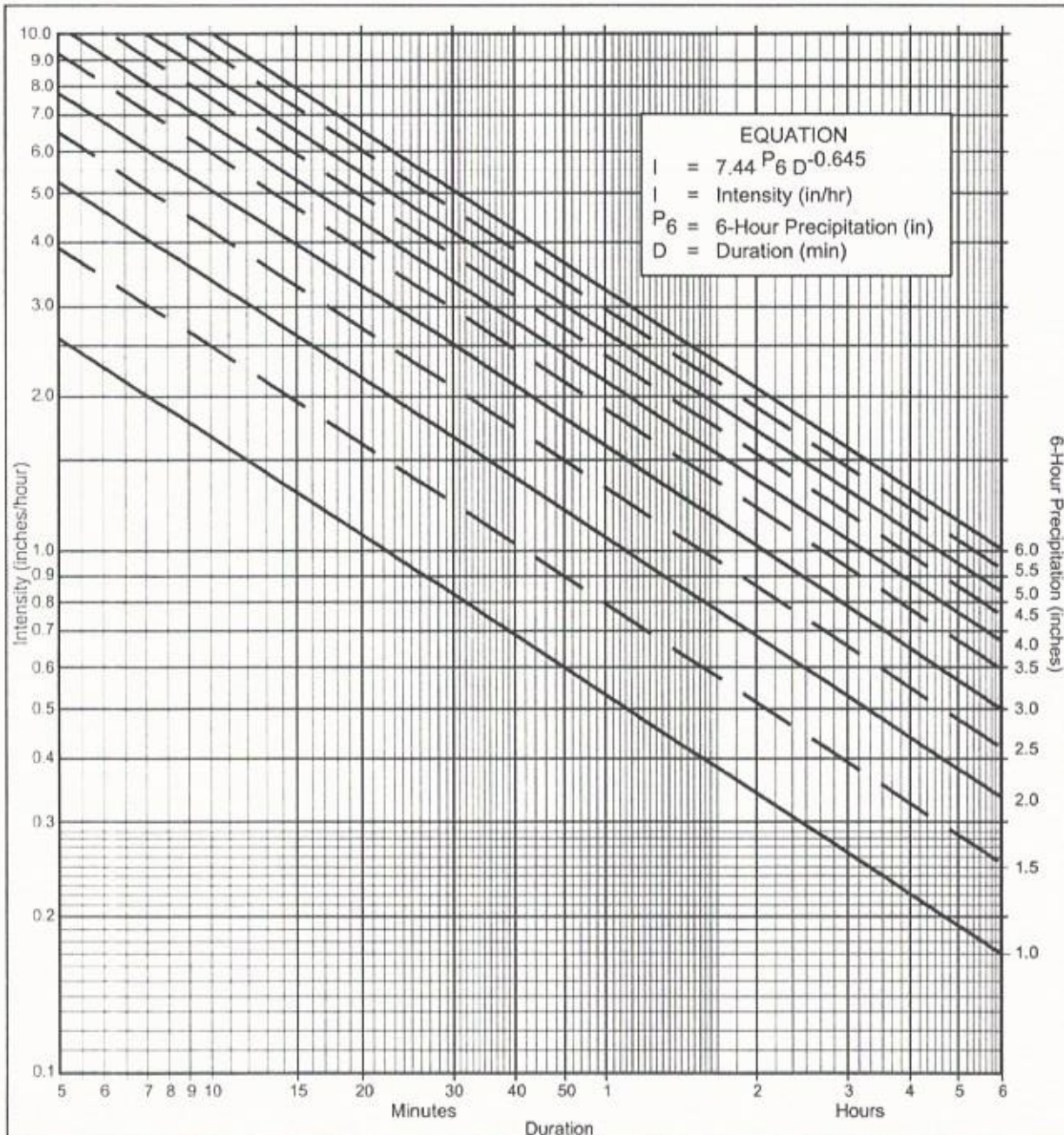


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3 0 3 Miles



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- (3) Plot 6 hr precipitation on the right side of the chart.
- (4) Draw a line through the point parallel to the plotted lines.
- (5) This line is the intensity-duration curve for the location being analyzed.

Application Form:

- (a) Selected frequency 10 year
- (b) $P_6 = 1.80$ in., $P_{24} = 3.25$, $\frac{P_6}{P_{24}} = 55.4\%$ ⁽²⁾
- (c) Adjusted $P_6^{(2)} = 1.80$ in.
- (d) $t_x =$ _____ min.
- (e) $I =$ _____ in./hr.

Note: This chart replaces the Intensity-Duration-Frequency curves used since 1965.

P6	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Duration											
5	2.63	3.95	5.27	6.59	7.90	9.22	10.54	11.86	13.17	14.49	15.81
7	2.12	3.18	4.24	5.30	6.36	7.42	8.48	9.54	10.60	11.66	12.72
10	1.68	2.53	3.37	4.21	5.05	5.90	6.74	7.58	8.42	9.27	10.11
15	1.30	1.95	2.59	3.24	3.89	4.54	5.19	5.84	6.49	7.13	7.78
20	1.08	1.62	2.15	2.69	3.23	3.77	4.31	4.85	5.39	5.93	6.46
25	0.93	1.40	1.87	2.33	2.80	3.27	3.73	4.20	4.67	5.13	5.60
30	0.83	1.24	1.66	2.07	2.49	2.90	3.32	3.73	4.15	4.56	4.98
40	0.69	1.03	1.38	1.72	2.07	2.41	2.76	3.10	3.45	3.79	4.13
50	0.60	0.90	1.19	1.49	1.79	2.09	2.39	2.69	2.98	3.28	3.58
60	0.53	0.80	1.06	1.33	1.59	1.86	2.12	2.39	2.65	2.92	3.18
90	0.41	0.61	0.82	1.02	1.23	1.43	1.63	1.84	2.04	2.25	2.45
120	0.34	0.51	0.68	0.85	1.02	1.19	1.36	1.53	1.70	1.87	2.04
150	0.29	0.44	0.59	0.73	0.88	1.03	1.18	1.32	1.47	1.62	1.76
180	0.26	0.39	0.52	0.65	0.78	0.91	1.04	1.18	1.31	1.44	1.57
240	0.22	0.33	0.43	0.54	0.65	0.76	0.87	0.98	1.08	1.19	1.30
300	0.19	0.28	0.38	0.47	0.56	0.66	0.75	0.85	0.94	1.03	1.13
360	0.17	0.25	0.33	0.42	0.50	0.58	0.67	0.75	0.84	0.92	1.00

Intensity-Duration Design Chart - Template

FIGURE

3-1

10 Year Rainfall Event - 6 Hours

----- Isopluvial (inches)

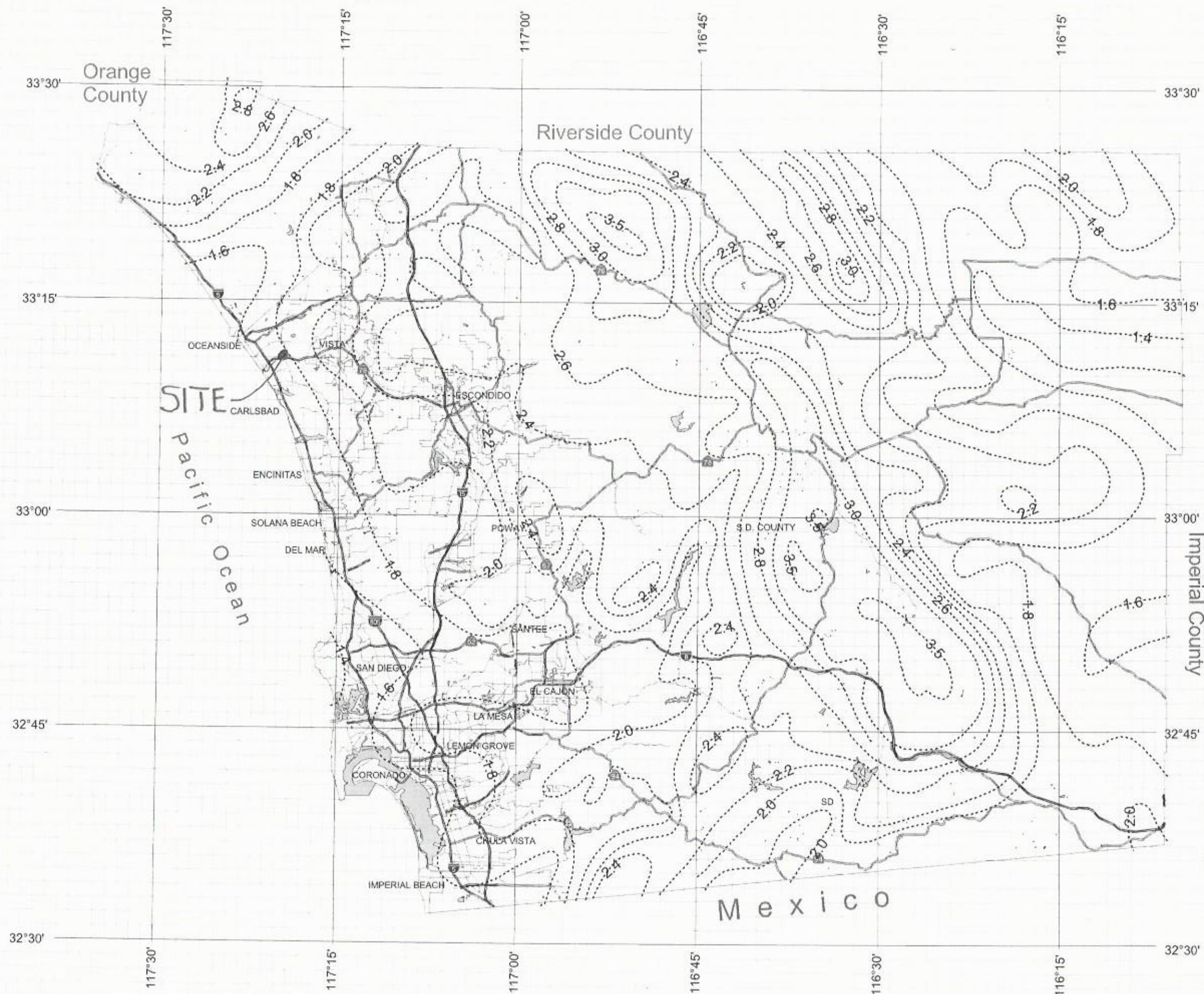


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3 0 3 Miles



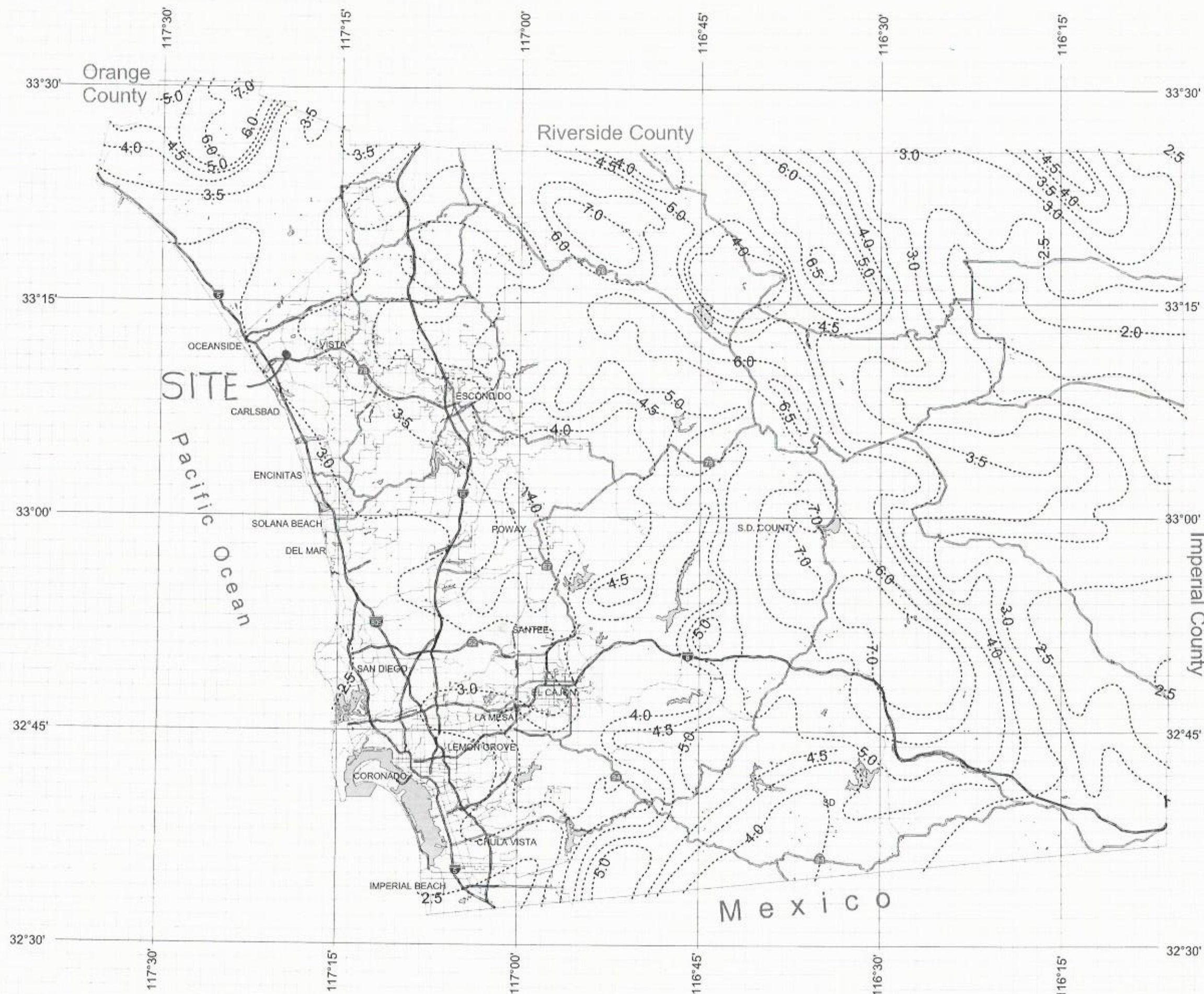
County of San Diego Hydrology Manual



Rainfall Isopluvials

10 Year Rainfall Event - 24 Hours

----- Isopluvial (inches)



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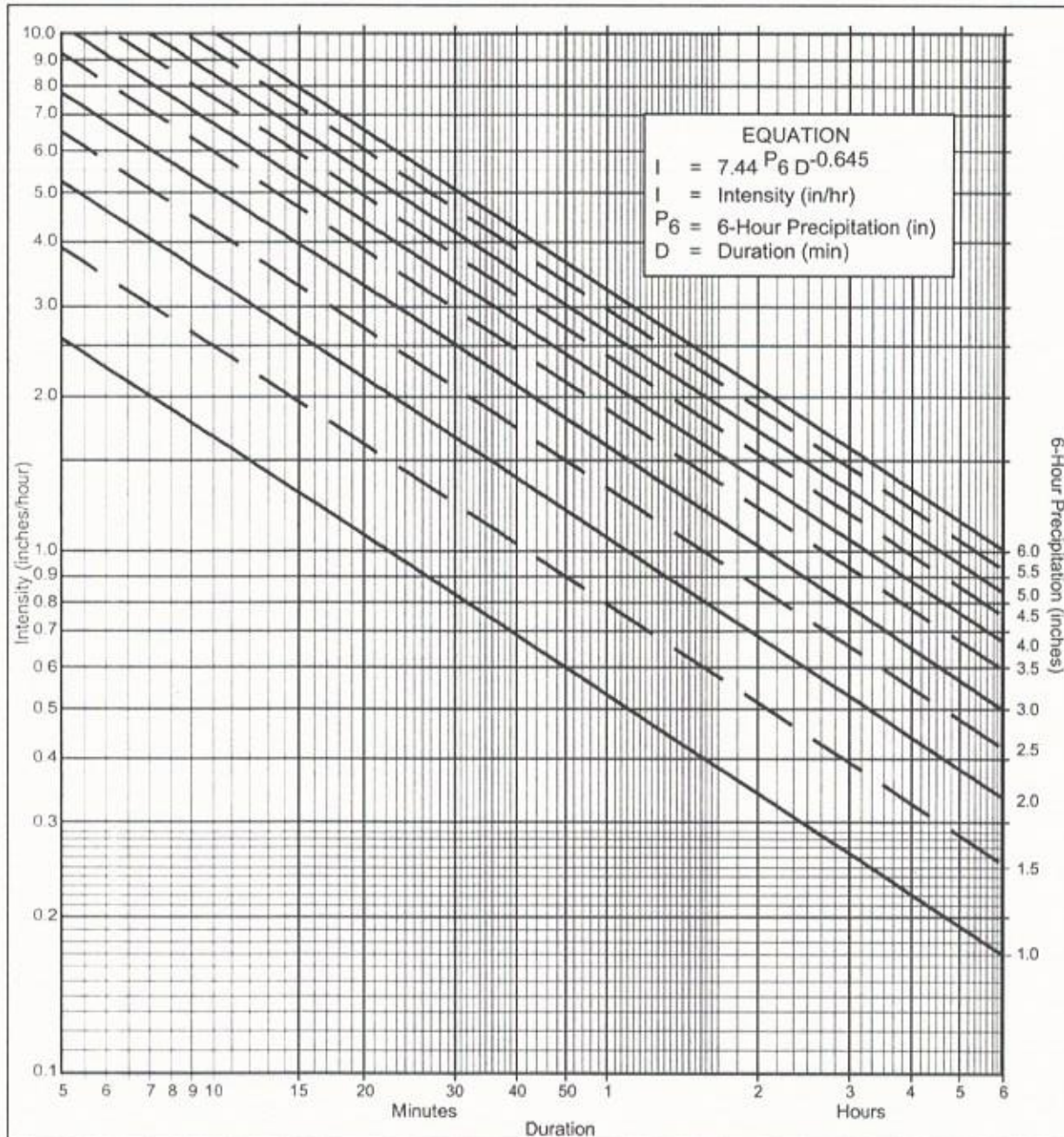


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- (2) Adjust 6 hr precipitation (if necessary) so that it is within the range of 45% to 65% of the 24 hr precipitation (not applicable to Desert).
- (3) Plot 6 hr precipitation on the right side of the chart.
- (4) Draw a line through the point parallel to the plotted lines.
- (5) This line is the intensity-duration curve for the location being analyzed.

Application Form:

- (a) Selected frequency 50 year
- (b) $P_6 = 2.5$ in., $P_{24} = 4.5$, $\frac{P_6}{P_{24}} = 55.6\%$ ⁽²⁾
- (c) Adjusted $P_6^{(2)} = 2.5$ in.
- (d) $t_x =$ _____ min.
- (e) $I =$ _____ in./hr.

Note: This chart replaces the Intensity-Duration-Frequency curves used since 1965.

P_6	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Duration											
5	2.63	3.95	5.27	6.59	7.90	9.22	10.54	11.86	13.17	14.49	15.81
7	2.12	3.18	4.24	5.30	6.36	7.42	8.48	9.54	10.60	11.66	12.72
10	1.68	2.53	3.37	4.21	5.05	5.90	6.74	7.58	8.42	9.27	10.11
15	1.30	1.95	2.59	3.24	3.89	4.54	5.19	5.84	6.49	7.13	7.78
20	1.08	1.62	2.15	2.69	3.23	3.77	4.31	4.85	5.39	5.93	6.46
25	0.93	1.40	1.87	2.33	2.80	3.27	3.73	4.20	4.67	5.13	5.60
30	0.83	1.24	1.66	2.07	2.49	2.90	3.32	3.73	4.15	4.56	4.98
40	0.69	1.03	1.38	1.72	2.07	2.41	2.76	3.10	3.45	3.79	4.13
50	0.60	0.90	1.19	1.49	1.79	2.09	2.39	2.69	2.98	3.28	3.58
60	0.53	0.80	1.06	1.33	1.59	1.86	2.12	2.39	2.65	2.92	3.18
90	0.41	0.61	0.82	1.02	1.23	1.43	1.63	1.84	2.04	2.25	2.45
120	0.34	0.51	0.68	0.85	1.02	1.19	1.36	1.53	1.70	1.87	2.04
150	0.29	0.44	0.59	0.73	0.88	1.03	1.18	1.32	1.47	1.62	1.76
180	0.26	0.39	0.52	0.65	0.78	0.91	1.04	1.18	1.31	1.44	1.57
240	0.22	0.33	0.43	0.54	0.65	0.76	0.87	0.98	1.08	1.19	1.30
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360	0.17	0.25	0.33	0.42	0.50	0.58	0.67	0.75	0.84	0.92	1.00

Intensity-Duration Design Chart - Template

FIGURE

3-1

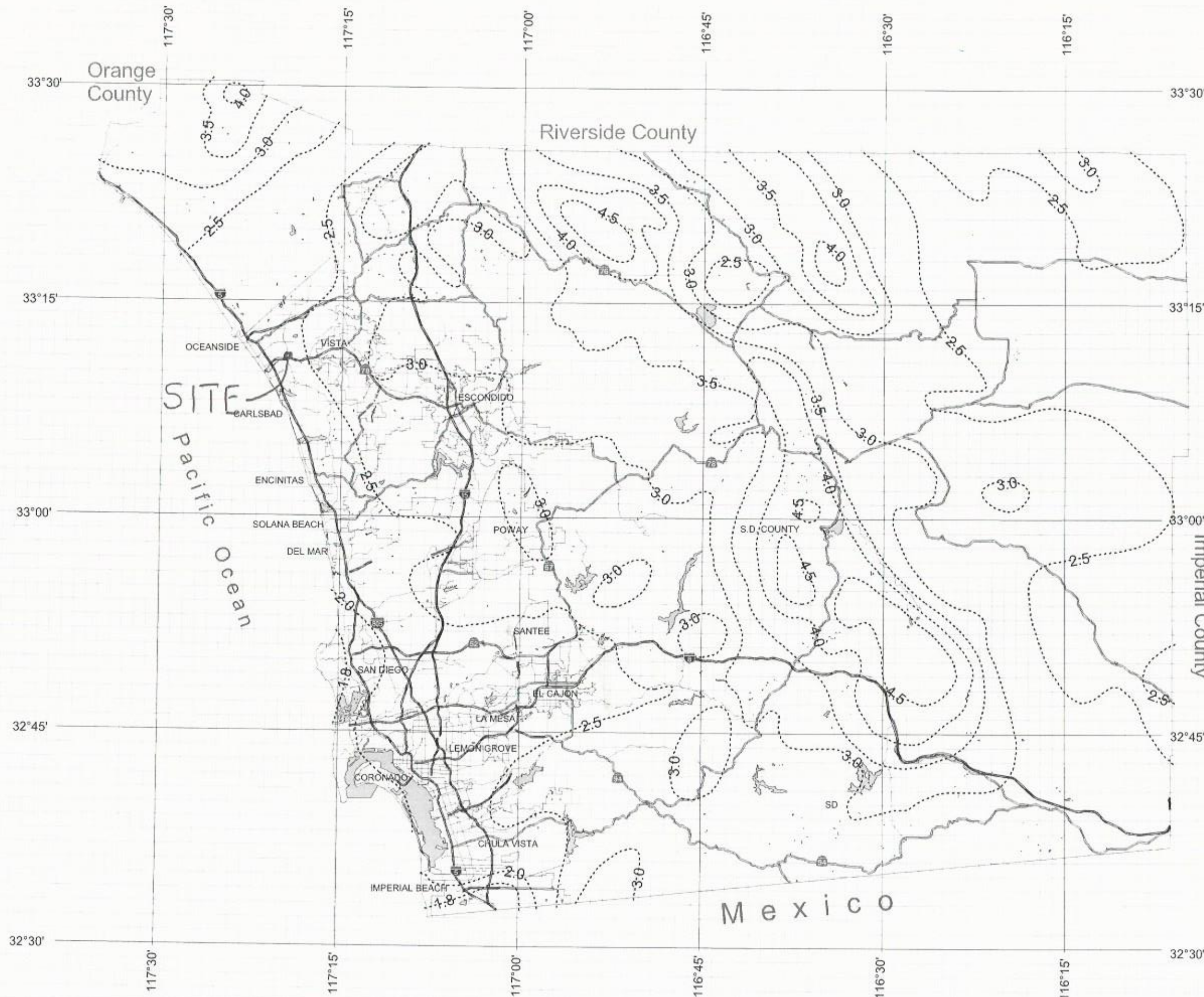
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Rainfall Isopluvials

50 Year Rainfall Event - 6 Hours

..... Isopluvial (inches)



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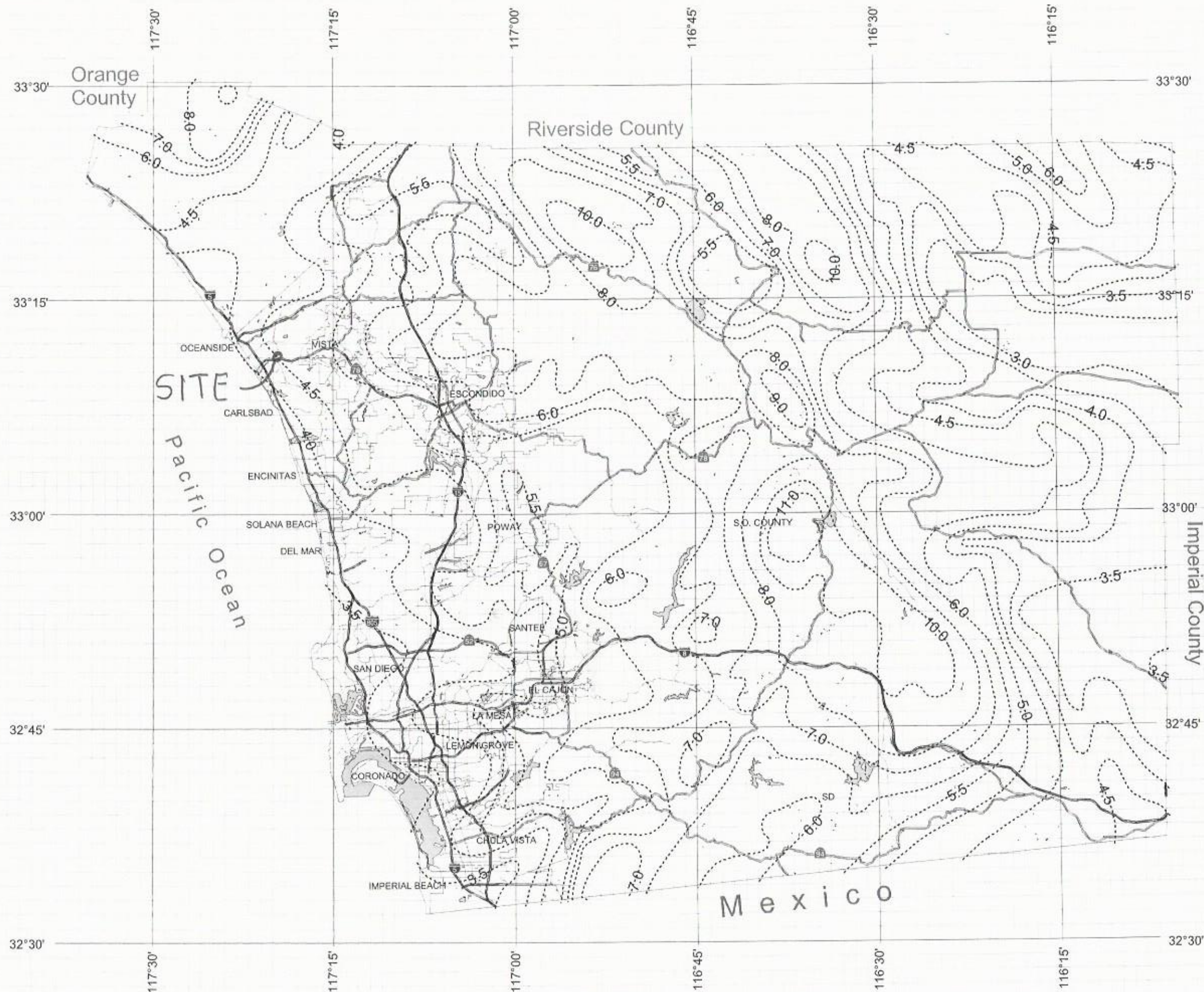
County of San Diego Hydrology Manual



Rainfall Isopluvials

50 Year Rainfall Event - 24 Hours

..... Isopluvial (inches)



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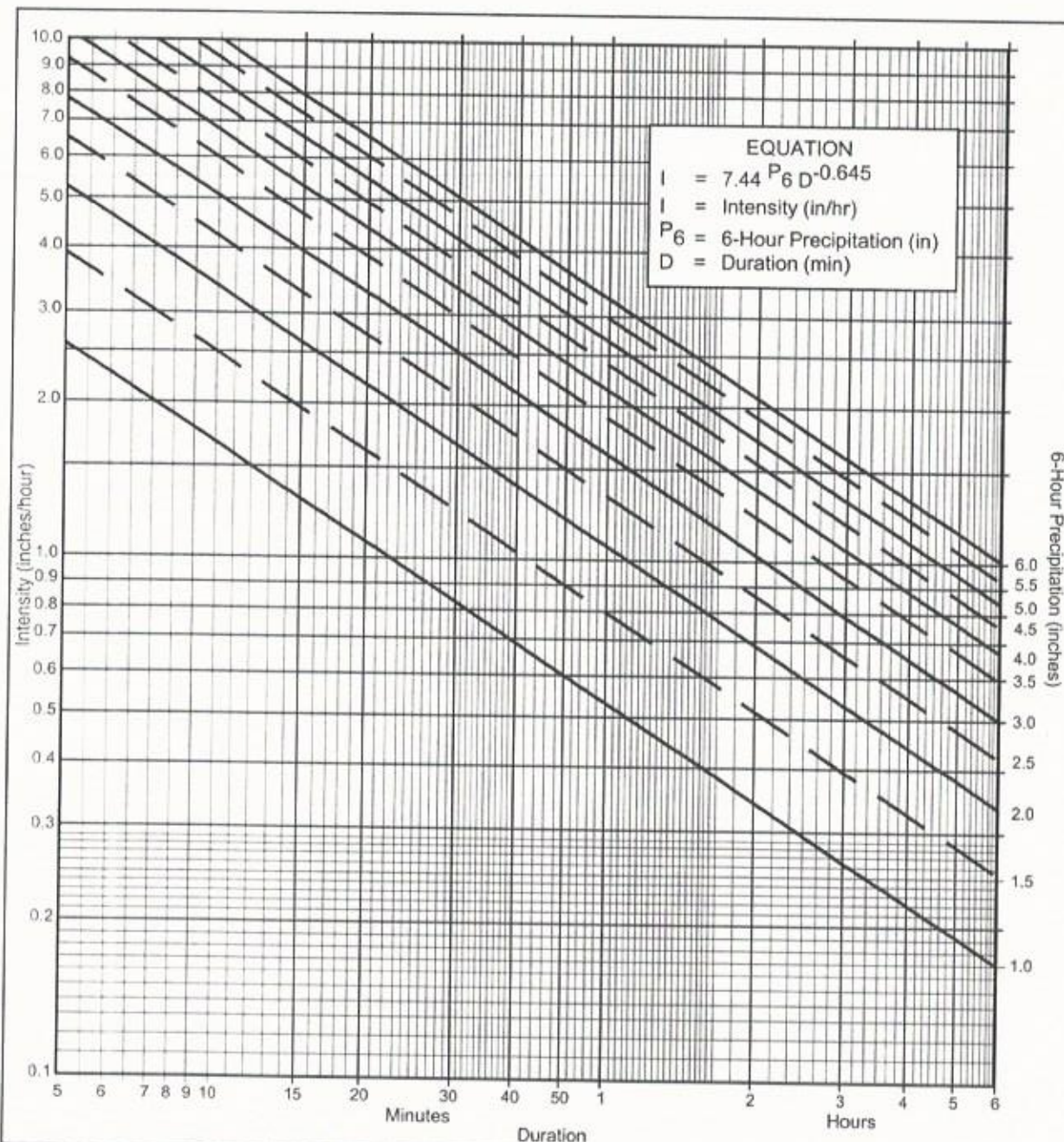


3 0 3 Miles

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- (3) Plot 6 hr precipitation on the right side of the chart.
- (4) Draw a line through the point parallel to the plotted lines.
- (5) This line is the intensity-duration curve for the location being analyzed.

Application Form:

- (a) Selected frequency 100 year
- (b) $P_6 = \underline{2.8}$ in., $P_{24} = \underline{5.0}$, $\frac{P_6}{P_{24}} = \underline{56} \%^{(2)}$
- (c) Adjusted $P_6^{(2)} = \underline{2.8}$ in.
- (d) $t_x = \underline{\hspace{2cm}}$ min.
- (e) $I = \underline{\hspace{2cm}}$ in./hr.

Note: This chart replaces the Intensity-Duration-Frequency curves used since 1965.

P6	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Duration	I	I	I	I	I	I	I	I	I	I	I
5	2.63	3.95	5.27	6.59	7.90	9.22	10.54	11.86	13.17	14.49	15.81
7	2.12	3.18	4.24	5.30	6.36	7.42	8.48	9.54	10.60	11.66	12.72
10	1.68	2.53	3.37	4.21	5.05	5.90	6.74	7.58	8.42	9.27	10.11
15	1.30	1.95	2.59	3.24	3.89	4.54	5.19	5.84	6.49	7.13	7.78
20	1.08	1.62	2.15	2.69	3.23	3.77	4.31	4.85	5.39	5.93	6.46
25	0.93	1.40	1.87	2.33	2.80	3.27	3.73	4.20	4.67	5.13	5.60
30	0.83	1.24	1.66	2.07	2.49	2.90	3.32	3.73	4.15	4.56	4.98
40	0.69	1.03	1.38	1.72	2.07	2.41	2.76	3.10	3.45	3.79	4.13
50	0.60	0.90	1.19	1.49	1.79	2.09	2.39	2.69	2.98	3.28	3.58
60	0.53	0.80	1.06	1.33	1.59	1.86	2.12	2.39	2.65	2.92	3.18
90	0.41	0.61	0.82	1.02	1.23	1.43	1.63	1.84	2.04	2.25	2.45
120	0.34	0.51	0.68	0.85	1.02	1.19	1.36	1.53	1.70	1.87	2.04
150	0.29	0.44	0.59	0.73	0.88	1.03	1.18	1.32	1.47	1.62	1.76
180	0.26	0.39	0.52	0.65	0.78	0.91	1.04	1.18	1.31	1.44	1.57
240	0.22	0.33	0.43	0.54	0.65	0.76	0.87	0.98	1.08	1.19	1.30
300	0.19	0.28	0.38	0.47	0.56	0.66	0.75	0.85	0.94	1.03	1.13
360	0.17	0.25	0.33	0.42	0.50	0.58	0.67	0.75	0.84	0.92	1.00

Intensity-Duration Design Chart - Template

FIGURE

3-1

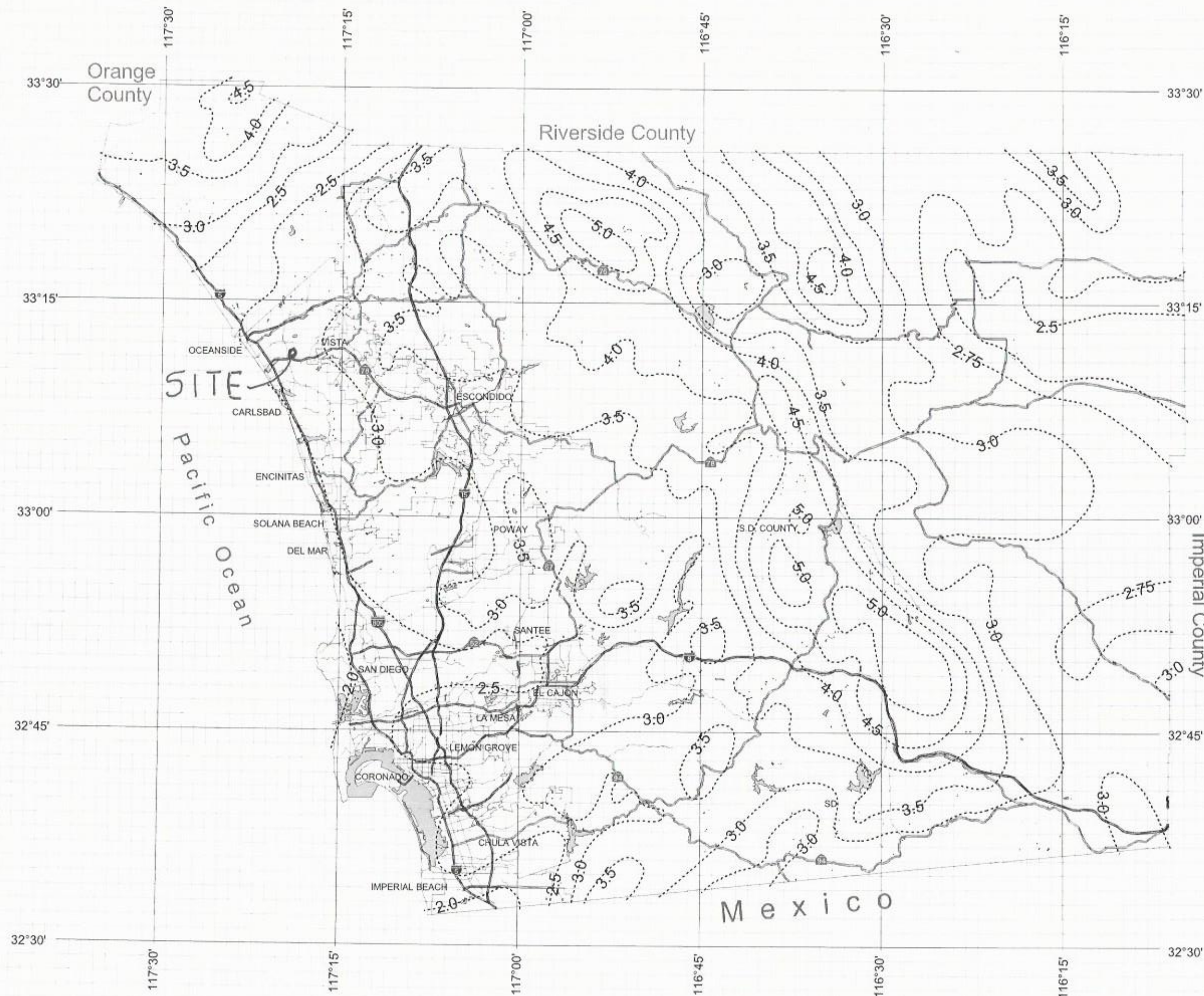
County of San Diego Hydrology Manual



Rainfall Isopluvials

100 Year Rainfall Event - 6 Hours

----- Isopluvial (inches)



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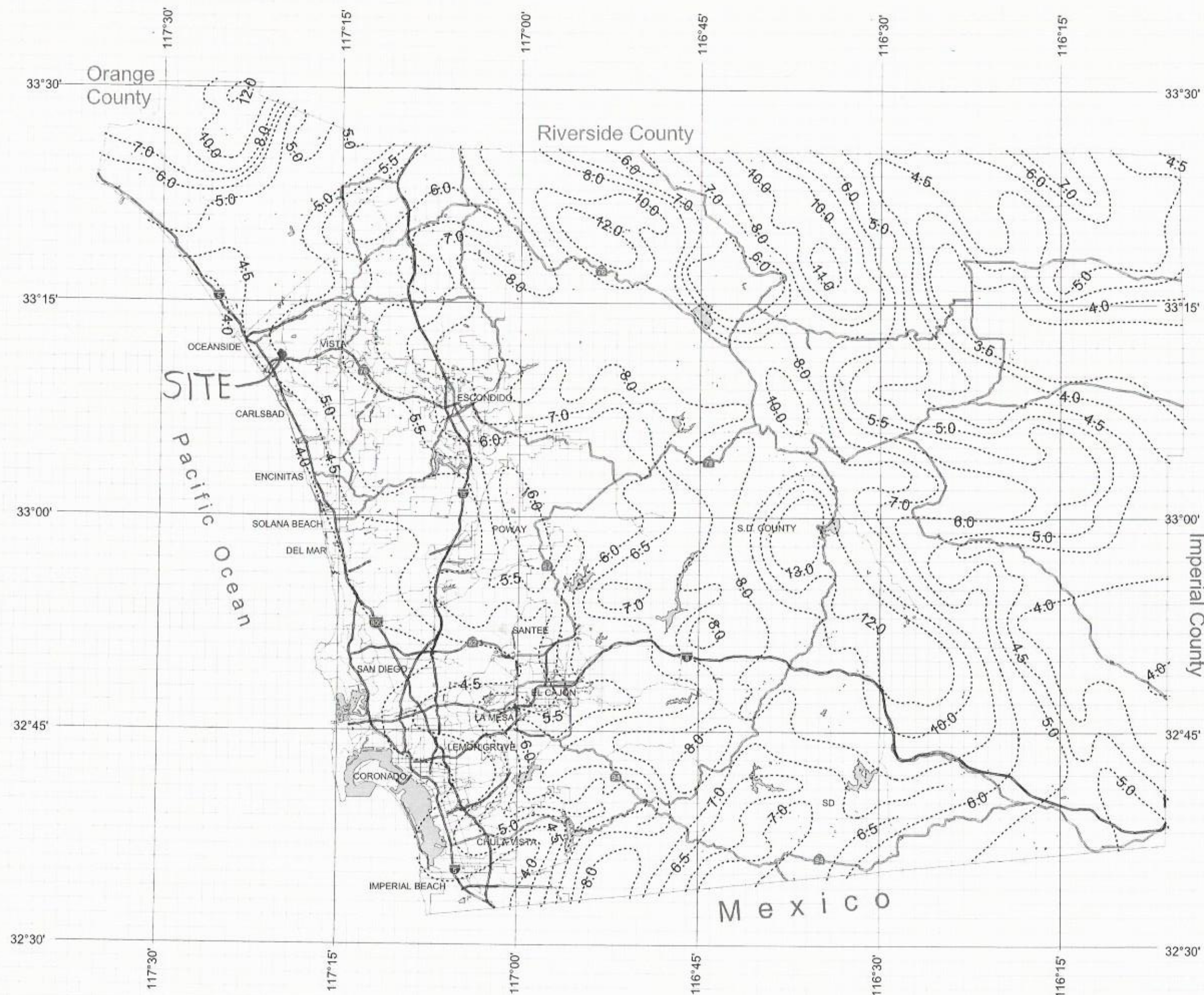
County of San Diego Hydrology Manual



Rainfall Isopluvials

100 Year Rainfall Event - 24 Hours

..... Isopluvial (inches)



**DPW
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APPENDIX 1

Hydrology Calculations

PRE-DEVELOPMENT HYDROLOGY

P6 = 2.80

[illegible]

Page 2 of 5 Pages

*INTENSITY-DURATION DESIGN CHART

Date: May 13, 2022

Soil Classification = "D"

Appendix 1-1

EXHIBIT A

Frequency = 50 Yr. Storm

P6 = 2.50

[illegible]

Page 3 of 5 Pages

*INTENSITY-DURATION DESIGN CHART

Date: May 13, 2022

Soil Classification = "D"

Appendix 1-1

EXHIBIT A

Frequency = 10 Yr. Storm

P6 = 1.80

[illegible]

P6 = 1.40

[illegible]

P6 = 1.10

[illegible]

POST-DEVELOPMENT HYDROLOGY

Project Name: TPM for 3710 Vista Way

Page 1 of 20 Pages

Location: Oceanside Job #499-01

*INTENSITY-DURATION DESIGN CHART

Date: May 12, 2022

Post-Development Hydrology

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

Frequency = 100 Yr. Storm

P6 = 2.80

NODE		Watershed		Land	Pipe		Designed	So or	Water	H or	Dist.	Travel		P6		Σ	Q	
Fr	To	No.	SQ SF	Use	Size	n	Runoff	Sf	"Y"	Vel	Travel	"Ti"	Tc	I	C	CA	TOTAL	Remarks
WATERSHED AREA A																		
							Elev. Node 1	217.0	Dist. Travel =		325.00							
							Elev. Node 2	194.7										
							Elev. Delta	22.30										
1	2	A1	2,052	OS				6.86%			325.00	11.49	11.49	4.31	0.43	0.02	0.09	
Node 2 is Existing B Inlet																		
							Elev. Node 3	206.0	Dist. Travel =		210.00							
							Elev. Node 4	198.2										
							Elev. Delta	7.80										
3	4	A2	22,806	RES				3.71%			210.00	9.22	9.22	4.97	0.55	0.29	1.44	B Inlet
4	5				1.00	0.013	1.44	1.00%	0.44	4.29	36.21	0.14	9.36	4.92				Area Drain
							Elev. Node 6	201.4	Dist. Travel =		60.00							
							Elev. Node 5	200.7										
							Elev. Delta	0.70										
6	5	A3	2,800	RES				1.17%			60.00	5.76	5.76	6.74	0.67	0.04	0.29	Area Drain
															QA2+QA3=		1.73	
4	5				1.00	0.013	1.73	1.00%	0.49	4.50	6.86	0.03	9.39	4.91				C/O
5	7				1.00	0.013	1.73	1.00%	0.49	4.50	33.75	0.12	9.51	4.87				Area Drain
							Elev. Node 9	201.40	Dist. Travel =		60.00							
							Elev. Node 8	200.70										
							Elev. Delta	0.70										
9	8	A4	1,999	RES				1.17%			60.00	5.68	5.68	6.79	0.67	0.03	0.21	Area Drain
															QA2+QA3+QA4=		1.94	

Page 2 of 20 Pages

*INTENSITY-DURATION DESIGN CHART

Date: May 12, 2022

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

P6 = 2.80

[illegible]

Location: Oceanside Job #499-01

*INTENSITY-DURATION DESIGN CHART

Date: May 12, 2022

Post-Development Hydrology

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

Frequency = 100 Yr. Storm

P6 = 2.80

NODE		Watershed		Land	Pipe		Designed	So or	Water	H or	Dist.	Travel		P6		Σ	Q	
Fr	To	No.	SQ FT	Use	Size	n	Runoff	Sf	"Y"	Vel	Travel	"Ti"	Tc	I	C	CA	TOTAL	Remarks
16	17				1.00	0.013	1.64	0.50%	0.59	3.42	26.50	0.13	10.23	4.65			2424	Brooks C/O
17	18				1.00	0.013	1.64	0.50%	0.59	3.42	163.86	0.80	11.03	4.43			2424	Brooks C/O
18	26				1.00	0.013	1.64	0.50%	0.59	3.42	177.17	0.86	11.89	4.22			3636	Brooks Inlet
WATERSHED AREA C																		
						Elev. Node 14		191.30	Dist. Travel =		365.00							
						Elev. Node 25		186.30										
						Elev. Delta		5.00										
14	25	C2	121.00	RES				1.37%			365.00	15.06	15.06	3.62	0.61	0.00	0.01	
						Elev. Node 15		210.5	Dist. Travel =		400.00							
						Elev. Node 26		192.0										
						Elev. Delta		18.50										
15	26	C1	23,575	RES				4.63%			400.00	11.40	11.40	4.34	0.57	0.31	1.34	Catch Basin
																QB2=	1.64	
																QC1+QB2=	2.98	
26	27				1.00	0.013	2.98	5.00%	0.42	9.41	2.03	0.00	11.40	4.33				Modular Wetland
27	28				1.00	0.013	2.98	5.00%	0.42	9.41	2.00	0.00	11.41	4.33				Water Storage
28	29				1.00	0.013	2.98	5.00%	0.42	9.41	2.00	0.00	11.41	4.33				D-25A Curb Outlet
29		D-25																
		X-A	b	Z	R													
		0.59	3	0	0.17													
	30					0.013	2.98	2.00%	0.20	5.08	20.00	0.07	11.46	4.32				Gutter
																QC1+QB2=	2.98	
																QC2=	0.01	
						Elev. Node 15		190.7	Dist. Travel =		25.00					QB1=	0.04	
						Elev. Node 26		188.2								QD=	0.00	
						Elev. Delta		2.50								QB+QC+QD=	3.02	X-Gutter

Page 4 of 20 Pages

*INTENSITY-DURATION DESIGN CHART

Date: May 12, 2022

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

P6 = 2.80

NODE		Watershed		Land	Pipe		Designed	So or	Water	H or	Dist.	Travel		P6		Σ	Q	
Fr	To	No.	SQ FT	Use	Size	n	Runoff	Sf	"Y"	Vel	Travel	"Ti"	Tc	I	C	CA	TOTAL	Remarks
		D	4	RES				10.00%			25.00	3.14	5.00	7.38	0.35	0.00	0.00	Ex. Inlet
Post Development Runoff for Drainage Basin QB+QC+QD=																	3.02	
Pre Development Runoff for Drainage Basin QP2+QP3=																	1.33	
Net Increase in Runoff=																	1.69	
Detention Required																		

Project Name: TPM for 3710 Vista Way

Page 5 of 20 Pages

Location: Oceanside Job #499-01

*INTENSITY-DURATION DESIGN CHART Date: November 3, 2021

Post-Development Hydrology

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

Frequency = 50 Yr. Storm

P6 = 2.50

NODE		Watershed		Land	Pipe		Designed	So or	Water	H or	Dist.	Travel		P6		Σ	Q	
Fr	To	No.	SQ SF	Use	Size	n	Runoff	Sf	"Y"	Vel	Travel	"Ti"	Tc	I	C	CA	TOTAL	Remarks
WATERSHED AREA A																		
							Elev. Node 1	217.0	Dist. Travel =		325.00							
							Elev. Node 2	194.7										
							Elev. Delta	22.30										
1	2	A1	2,052	OS				6.86%			325.00	11.49	11.49	3.85	0.43	0.02	0.08	
Node 2 is Existing B Inlet																		
							Elev. Node 3	206.0	Dist. Travel =		210.00							
							Elev. Node 4	198.2										
							Elev. Delta	7.80										
3	4	A2	22,806	OS				3.71%			210.00	9.22	9.22	4.44	0.55	0.29	1.28	B Inlet
4	5				1.00	0.013	1.28	1.00%	0.42	4.17	36.21	0.14	9.37	4.39				Area Drain
							Elev. Node 6	201.4	Dist. Travel =		60.00							
							Elev. Node 5	200.7										
							Elev. Delta	0.70										
6	5	A3	2,800	RES				1.17%			60.00	5.76	5.76	6.01	0.67	0.04	0.26	Area Drain
															QA2+QA3=		1.54	
4	5				1.00	0.013	1.54	1.00%	0.46	4.37	6.86	0.03	9.39	4.39				C/O
5	7				1.00	0.013	1.54	1.00%	0.46	4.37	33.75	0.13	9.52	4.35				Area Drain
							Elev. Node 9	201.40	Dist. Travel =		60.00							
							Elev. Node 8	200.70										
							Elev. Delta	0.70										
9	8	A4	1,999	RES				1.17%			60.00	5.68	5.68	6.06	0.67	0.03	0.19	Area Drain
															QA2+QA3+QA4=		1.73	

Location: Oceanside Job #499-01

*INTENSITY-DURATION DESIGN CHART

Date: May 12, 2022

Post-Development Hydrology

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

Frequency = 50 Yr. Storm

P6 = 2.50

[illegible]

Page 8 of 20 Pages

*INTENSITY-DURATION DESIGN CHART

Date: May 12, 2022

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

P6 = 2.50

[illegible]

Project Name: TPM for 3710 Vista Way

Page 9 of 20 Pages

Location: Oceanside Job #499-01

*INTENSITY-DURATION DESIGN CHART Date: November 3, 2021

Post-Development Hydrology

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

Frequency = 10 Yr. Storm

P6 = 1.80

NODE		Watershed		Land	Pipe		Designed	So or	Water	H or	Dist.	Travel		P6		Σ	Q	
Fr	To	No.	SQ SF	Use	Size	n	Runoff	Sf	"Y"	Vel	Travel	"Ti"	Tc	I	C	CA	TOTAL	Remarks
WATERSHED AREA A																		
							Elev. Node 1	217.0	Dist. Travel =		325.00							
							Elev. Node 2	194.7										
							Elev. Delta	22.30										
1	2	A1	2,052	OS				6.86%			325.00	11.49	11.49	2.77	0.43	0.02	0.06	
Node 2 is Existing B Inlet																		
							Elev. Node 3	206.0	Dist. Travel =		210.00							
							Elev. Node 4	198.2										
							Elev. Delta	7.80										
3	4	A2	22,806	OS				3.71%			210.00	9.22	9.22	3.20	0.55	0.29	0.92	B Inlet
4	5				1.00	0.013	0.92	1.00%	0.35	3.81	36.21	0.16	9.38	3.16				Area Drain
							Elev. Node 6	201.4	Dist. Travel =		60.00							
							Elev. Node 5	200.7										
							Elev. Delta	0.70										
6	5	A3	2,800	RES				1.17%			60.00	5.76	5.76	4.33	0.67	0.04	0.19	Area Drain
															QA2+QA3=		1.11	
4	5				1.00	0.013	1.11	1.00%	0.38	4.00	6.86	0.03	9.41	3.15				C/O
5	7				1.00	0.013	1.11	1.00%	0.38	4.00	33.75	0.14	9.55	3.12				Area Drain
							Elev. Node 9	201.40	Dist. Travel =		60.00							
							Elev. Node 8	200.70										
							Elev. Delta	0.70										
9	8	A4	1,999	RES				1.17%			60.00	5.68	5.68	4.37	0.67	0.03	0.13	Area Drain
															QA2+QA3+QA4=		1.24	

Location: Oceanside Job #499-01

*INTENSITY-DURATION DESIGN CHART

Date: May 12, 2022

Post-Development Hydrology

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

Frequency = 10 Yr. Storm

P6 = 1.80

[illegible]

Project Name: TPM for 3710 Vista Way

Page 11 of 20 Pages

Location: Oceanside Job #499-01

*INTENSITY-DURATION DESIGN CHART

Date: May 12, 2022

Post-Development Hydrology

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

Frequency = 10 Yr. Storm

P6 = 1.80

NODE		Watershed		Land	Pipe		Designed	So or	Water	H or	Dist.	Travel		P6		Σ	Q	
Fr	To	No.	SQ FT	Use	Size	n	Runoff	Sf	"Y"	Vel	Travel	"Ti"	Tc	I	C	CA	TOTAL	Remarks
16	17				1.00	0.013	1.05	0.50%	0.45	3.06	26.50	0.14	10.24	2.99			2424 Brooks C/O	
17	18				1.00	0.013	1.05	0.50%	0.45	3.06	163.86	0.89	11.14	2.83			2424 Brooks C/O	
18	26				1.00	0.013	1.05	0.50%	0.45	3.06	177.17	0.96	12.10	2.68			3636 Brooks Inlet	
WATERSHED AREA C																		
							Elev. Node 14	191.30	Dist. Travel =	365.00								
							Elev. Node 25	186.30										
							Elev. Delta	5.00										
14	25	C2	121.00	RES				1.37%			365.00	15.06	15.06	2.33	0.61	0.00	0.00	
							Elev. Node 15	210.5	Dist. Travel =	400.00								
							Elev. Node 26	192.0										
							Elev. Delta	18.50										
15	26	C1	23,575	RES				4.63%			400.00	11.40	11.40	2.79	0.57	0.31	0.86	Catch Basin
																QB2=	1.05	
																QC1+QB2=	1.92	
26	27				1.00	0.013	1.92	5.00%	0.33	8.35	2.03	0.00	11.40	2.79				Modular Wetland
27	28				1.00	0.013	1.92	5.00%	0.33	8.35	2.00	0.00	11.41	2.79				Water Storage
28	29				1.00	0.013	1.92	5.00%	0.33	8.35	2.00	0.00	11.41	2.79				D-25A Curb Outlet
29		D-25																
		X-A	b	Z	R													
		0.45	3	0	0.14													
	30					0.013	1.92	2.00%	0.15	4.31	20.00	0.08	11.48	2.78				Gutter
																QC1+QB2=	1.92	
																QC2=	0.00	
							Elev. Node 15	190.7	Dist. Travel =	25.00						QB1=	0.02	
							Elev. Node 26	188.2								QD=	0.00	
							Elev. Delta	2.50								QB+QC+QD=	1.94	X-Gutter

Location: Oceanside Job #499-01

*INTENSITY-DURATION DESIGN CHART

Date: May 12, 2022

Post-Development Hydrology

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

Frequency = 10 Yr. Storm

P6 = 1.80

[illegible]

Project Name: TPM for 3710 Vista Way

Page 13 of 20 Pages

Location: Oceanside Job #499-01

*INTENSITY-DURATION DESIGN CHART Date: November 3, 2021

Post-Development Hydrology

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

Frequency = 5 Yr. Storm

P6 = 1.40

NODE		Watershed		Land	Pipe		Designed	So or	Water	H or	Dist.	Travel		P6		Σ	Q	
Fr	To	No.	SQ SF	Use	Size	n	Runoff	Sf	"Y"	Vel	Travel	"Ti"	Tc	I	C	CA	TOTAL	Remarks
WATERSHED AREA A																		
							Elev. Node 1	217.0	Dist. Travel =		325.00							
							Elev. Node 2	194.7										
							Elev. Delta	22.30										
1	2	A1	2,052	OS				6.86%			325.00	11.49	11.49	2.16	0.43	0.02	0.04	
Node 2 is Existing B Inlet																		
							Elev. Node 3	206.0	Dist. Travel =		210.00							
							Elev. Node 4	198.2										
							Elev. Delta	7.80										
3	4	A2	22,806	OS				3.71%			210.00	9.22	9.22	2.49	0.55	0.29	0.72	B Inlet
4	5				1.00	0.013	0.72	1.00%	0.31	3.55	36.21	0.17	9.39	2.46				Area Drain
							Elev. Node 6	201.4	Dist. Travel =		60.00							
							Elev. Node 5	200.7										
							Elev. Delta	0.70										
6	5	A3	2,800	RES				1.17%			60.00	5.76	5.76	3.37	0.67	0.04	0.14	Area Drain
															QA2+QA3=		0.86	
4	5				1.00	0.013	0.86	1.00%	0.34	3.74	6.86	0.03	9.42	2.45				C/O
5	7				1.00	0.013	0.86	1.00%	0.34	3.74	33.75	0.15	9.57	2.43				Area Drain
							Elev. Node 9	201.40	Dist. Travel =		60.00							
							Elev. Node 8	200.70										
							Elev. Delta	0.70										
9	8	A4	1,999	RES				1.17%			60.00	5.68	5.68	3.40	0.67	0.03	0.10	Area Drain
															QA2+QA3+QA4=		0.97	

Location: Oceanside Job #499-01

*INTENSITY-DURATION DESIGN CHART

Date: May 12, 2022

Post-Development Hydrology

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

Frequency = 5 Yr. Storm

P6 = 1.40

[illegible]

Location: Oceanside Job #499-01

*INTENSITY-DURATION DESIGN CHART

Date: May 12, 2022

Post-Development Hydrology

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

Frequency = 5 Yr. Storm

P6 = 1.40

[illegible]

Project Name: TPM for 3710 Vista Way

Page 17 of 20 Pages

Location: Oceanside Job #499-01

*INTENSITY-DURATION DESIGN CHART Date: November 3, 2021

Post-Development Hydrology

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

Frequency = 2 Yr. Storm

P6 = 1.10

NODE		Watershed		Land	Pipe		Designed	So or	Water	H or	Dist.	Travel		P6		Σ	Q	
Fr	To	No.	SQ SF	Use	Size	n	Runoff	Sf	"Y"	Vel	Travel	"Ti"	Tc	I	C	CA	TOTAL	Remarks
WATERSHED AREA A																		
							Elev. Node 1	217.0	Dist. Travel =		325.00							
							Elev. Node 2	194.7										
							Elev. Delta	22.30										
1	2	A1	2,052	OS				6.86%			325.00	11.49	11.49	1.69	0.43	0.02	0.03	
Node 2 is Existing B Inlet																		
							Elev. Node 3	206.0	Dist. Travel =		210.00							
							Elev. Node 4	198.2										
							Elev. Delta	7.80										
3	4	A2	22,806	OS				3.71%			210.00	9.22	9.22	1.95	0.55	0.29	0.57	B Inlet
4	5				1.00	0.013	0.56	1.00%	0.27	3.31	36.21	0.18	9.41	1.93				Area Drain
							Elev. Node 6	201.4	Dist. Travel =		60.00							
							Elev. Node 5	200.7										
							Elev. Delta	0.70										
6	5	A3	2,800	RES				1.17%			60.00	5.76	5.76	2.65	0.67	0.04	0.11	Area Drain
															QA2+QA3=		0.68	
4	5				1.00	0.013	0.68	1.00%	0.30	3.49	6.86	0.03	9.44	1.92				C/O
5	7				1.00	0.013	0.68	1.00%	0.30	3.49	33.75	0.16	9.60	1.90				Area Drain
							Elev. Node 9	201.40	Dist. Travel =		60.00							
							Elev. Node 8	200.70										
							Elev. Delta	0.70										
9	8	A4	1,999	RES				1.17%			60.00	5.68	5.68	2.67	0.67	0.03	0.08	Area Drain
															QA2+QA3+QA4=		0.76	

Page 18 of 20 Pages

*INTENSITY-DURATION DESIGN CHART

Date: May 12, 2022

Soil Classification = "D"

Appendix 1-1

EXHIBIT B

P6 = 1.10

[illegible]

APPENDIX 2

Inlets

Page 1 of 1 Pages

T21-00002

Date: May 12, 2022

*INTENSITY-DURATION DESIGN CHART

* INTENSITY-DURATION DESIGN CHART

Sag	Grade
Cu	a
3.00	0.33

Appendix I-1

P6=

2.80

Coef. =

[illegible]

APPENDIX 3
Unit Hydrograph and Modified-Puls Detention Routing
Underground Storage UG-1

San Diego County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software, (c)1991-2019 Version 9.1

Rational method hydrology program based on
San Diego County Flood Control Division 2003 hydrology manual
Rational Hydrology Study Date: 05/24/22

VISTA WAY 100-YR PEAK FLOWS

***** Hydrology Study Control Information *****

Program License Serial Number 6499

Rational hydrology study storm event year is 100.0
English (in-lb) input data Units used

Map data precipitation entered:
6 hour, precipitation(inches) = 2.800
24 hour precipitation(inches) = 5.000
P6/P24 = 56.0%
San Diego hydrology manual 'C' values used

+++++
Process from Point/Station 5.000 to Point/Station 10.000
**** USER DEFINED FLOW INFORMATION AT A POINT ****

User specified 'C' value of 0.550 given for subarea
Rainfall intensity (I) = 4.321(In/Hr) for a 100.0 year storm
User specified values are as follows:
TC = 11.46 min. Rain intensity = 4.32(In/Hr)
Total area = 1.240(Ac.) Total runoff = 3.020(CFS)

Hydrograph in 1 Minute intervals ((CFS))

Time(h+m)	Volume	Ac.Ft	Q(CFS)	0	0.8	1.5	2.3	3.0
0+ 0	0.0000		0.00	Q				
0+ 1	0.0000		0.01	Q				
0+ 2	0.0000		0.02	Q				
0+ 3	0.0001		0.03	Q				
0+ 4	0.0001		0.04	Q				
0+ 5	0.0002		0.05	Q				
0+ 6	0.0003		0.06	Q				
0+ 7	0.0004		0.07	Q				
0+ 8	0.0005		0.08	VQ				
0+ 9	0.0006		0.09	VQ				
0+10	0.0008		0.10	VQ				
0+11	0.0009		0.11	VQ				
0+12	0.0011		0.11	VQ				
0+13	0.0013		0.11	VQ				
0+14	0.0014		0.11	VQ				
0+15	0.0016		0.11	VQ				
0+16	0.0017		0.11	VQ				
0+17	0.0019		0.11	VQ				
0+18	0.0020		0.12	VQ				
0+19	0.0022		0.12	VQ				
0+20	0.0024		0.12	VQ				
0+21	0.0025		0.12	VQ				
0+22	0.0027		0.12	VQ				
0+23	0.0028		0.12	VQ				
0+24	0.0030		0.12	VQ				
0+25	0.0032		0.12	VQ				
0+26	0.0033		0.12	VQ				
0+27	0.0035		0.12	VQ				
0+28	0.0037		0.12	VQ				
0+29	0.0038		0.12	VQ				
0+30	0.0040		0.12	IQ				
0+31	0.0041		0.12	IQ				
0+32	0.0043		0.12	IQ				
0+33	0.0045		0.12	IQ				
0+34	0.0046		0.12	IQ				
0+35	0.0048		0.12	IQ				
0+36	0.0050		0.12	IQ				
0+37	0.0052		0.12	IQ				
0+38	0.0053		0.12	IQ				
0+39	0.0055		0.12	IQ				
0+40	0.0057		0.12	IQ				
0+41	0.0058		0.12	IQ				
0+42	0.0060		0.12	IQ				
0+43	0.0062		0.12	IQ				
0+44	0.0063		0.12	IQ				
0+45	0.0065		0.12	IQ				
0+46	0.0067		0.12	IQ				
0+47	0.0069		0.13	IQ				
0+48	0.0070		0.13	IQ				

0+49	0.0072	0.13	Q				
0+50	0.0074	0.13	Q				
0+51	0.0076	0.13	Q				
0+52	0.0077	0.13	Q				
0+53	0.0079	0.13	QV				
0+54	0.0081	0.13	QV				
0+55	0.0083	0.13	QV				
0+56	0.0084	0.13	QV				
0+57	0.0086	0.13	QV				
0+58	0.0088	0.13	QV				
0+59	0.0090	0.13	QV				
1+ 0	0.0092	0.13	QV				
1+ 1	0.0093	0.13	QV				
1+ 2	0.0095	0.13	QV				
1+ 3	0.0097	0.13	QV				
1+ 4	0.0099	0.13	QV				
1+ 5	0.0101	0.13	QV				
1+ 6	0.0103	0.13	QV				
1+ 7	0.0104	0.13	QV				
1+ 8	0.0106	0.13	QV				
1+ 9	0.0108	0.13	QV				
1+10	0.0110	0.14	QV				
1+11	0.0112	0.14	QV				
1+12	0.0114	0.14	QV				
1+13	0.0116	0.14	QV				
1+14	0.0118	0.14	QV				
1+15	0.0119	0.14	Q V				
1+16	0.0121	0.14	Q V				
1+17	0.0123	0.14	Q V				
1+18	0.0125	0.14	Q V				
1+19	0.0127	0.14	Q V				
1+20	0.0129	0.14	Q V				
1+21	0.0131	0.14	Q V				
1+22	0.0133	0.14	Q V				
1+23	0.0135	0.14	Q V				
1+24	0.0137	0.14	Q V				
1+25	0.0139	0.14	Q V				
1+26	0.0141	0.14	Q V				
1+27	0.0143	0.14	Q V				
1+28	0.0145	0.14	Q V				
1+29	0.0147	0.14	Q V				
1+30	0.0149	0.15	Q V				
1+31	0.0151	0.15	Q V				
1+32	0.0153	0.15	Q V				
1+33	0.0155	0.15	Q V				
1+34	0.0157	0.15	Q V				
1+35	0.0159	0.15	Q V				
1+36	0.0161	0.15	Q V				
1+37	0.0163	0.15	Q V				
1+38	0.0165	0.15	Q V				
1+39	0.0167	0.15	Q V				
1+40	0.0170	0.15	Q V				
1+41	0.0172	0.15	Q V				
1+42	0.0174	0.15	Q V				

1+43	0.0176	0.15		Q	V							
1+44	0.0178	0.16		Q	V							
1+45	0.0180	0.16		Q	V							
1+46	0.0182	0.16		Q	V							
1+47	0.0185	0.16		Q	V							
1+48	0.0187	0.16		Q	V							
1+49	0.0189	0.16		Q	V							
1+50	0.0191	0.16		Q	V							
1+51	0.0193	0.16		Q	V							
1+52	0.0195	0.16		Q	V							
1+53	0.0198	0.16		Q	V							
1+54	0.0200	0.16		Q	V							
1+55	0.0202	0.16		Q	V							
1+56	0.0204	0.16		Q	V							
1+57	0.0207	0.17		Q	V							
1+58	0.0209	0.17		Q	V							
1+59	0.0211	0.17		Q	V							
2+ 0	0.0214	0.17		Q	V							
2+ 1	0.0216	0.17		Q	V							
2+ 2	0.0218	0.17		Q	V							
2+ 3	0.0221	0.17		Q	V							
2+ 4	0.0223	0.17		Q	V							
2+ 5	0.0225	0.17		Q	V							
2+ 6	0.0228	0.17		Q	V							
2+ 7	0.0230	0.17		Q	V							
2+ 8	0.0233	0.17		Q	V							
2+ 9	0.0235	0.17		Q	V							
2+10	0.0237	0.17		Q	V							
2+11	0.0240	0.18		Q	V							
2+12	0.0242	0.18		Q	V							
2+13	0.0245	0.18		Q	V							
2+14	0.0247	0.18		Q	V							
2+15	0.0250	0.18		Q	V							
2+16	0.0252	0.18		Q	V							
2+17	0.0255	0.18		Q	V							
2+18	0.0257	0.18		Q	V							
2+19	0.0260	0.19		Q	V							
2+20	0.0262	0.19		Q	V							
2+21	0.0265	0.19		Q	V							
2+22	0.0268	0.19		Q	V							
2+23	0.0270	0.19		Q	V							
2+24	0.0273	0.19		Q	V							
2+25	0.0275	0.19		Q	V							
2+26	0.0278	0.19		Q	V							
2+27	0.0281	0.19		Q	V							
2+28	0.0284	0.20		Q	V							
2+29	0.0286	0.20		Q	V							
2+30	0.0289	0.20		Q	V							
2+31	0.0292	0.20		Q	V							
2+32	0.0294	0.20		Q	V							
2+33	0.0297	0.20		Q	V							
2+34	0.0300	0.20		Q	V							
2+35	0.0303	0.20		Q	V							
2+36	0.0306	0.20		Q	V							

2+37	0.0308	0.21	Q	V					
2+38	0.0311	0.21	Q	V					
2+39	0.0314	0.21	Q	V					
2+40	0.0317	0.21	Q	V					
2+41	0.0320	0.21	Q	V					
2+42	0.0323	0.22	Q	V					
2+43	0.0326	0.22	Q	V					
2+44	0.0329	0.22	Q	V					
2+45	0.0332	0.22	Q	V					
2+46	0.0335	0.22	Q	V					
2+47	0.0338	0.22	Q	V					
2+48	0.0341	0.23	Q	V					
2+49	0.0345	0.23	Q	V					
2+50	0.0348	0.23	Q	V					
2+51	0.0351	0.23	Q	V					
2+52	0.0354	0.23	Q	V					
2+53	0.0357	0.23	Q	V					
2+54	0.0360	0.23	Q	V					
2+55	0.0364	0.23	Q	V					
2+56	0.0367	0.24	Q	V					
2+57	0.0370	0.24	Q	V					
2+58	0.0374	0.24	Q	V					
2+59	0.0377	0.25	Q	V					
3+ 0	0.0380	0.25	Q	V					
3+ 1	0.0384	0.25	Q	V					
3+ 2	0.0387	0.25	Q	V					
3+ 3	0.0391	0.26	Q	V					
3+ 4	0.0394	0.26	Q	V					
3+ 5	0.0398	0.26	Q	V					
3+ 6	0.0402	0.27	Q	V					
3+ 7	0.0405	0.27	Q	V					
3+ 8	0.0409	0.27	Q	V					
3+ 9	0.0413	0.27	Q	V					
3+10	0.0417	0.28	Q	V					
3+11	0.0421	0.28	Q	V					
3+12	0.0425	0.28	Q	V					
3+13	0.0428	0.28	Q	V					
3+14	0.0432	0.28	Q	V					
3+15	0.0436	0.29	Q	V					
3+16	0.0440	0.29	Q	V					
3+17	0.0444	0.29	Q	V					
3+18	0.0448	0.29	Q	V					
3+19	0.0452	0.30	Q	V					
3+20	0.0457	0.30	Q	V					
3+21	0.0461	0.31	Q	V					
3+22	0.0465	0.32	Q	V					
3+23	0.0470	0.32	Q	V					
3+24	0.0474	0.33	Q	V					
3+25	0.0479	0.33	Q	V					
3+26	0.0484	0.34	Q	V					
3+27	0.0488	0.35	Q	V					
3+28	0.0493	0.35	Q	V					
3+29	0.0498	0.36	Q	V					
3+30	0.0503	0.36	Q	V					

3+31	0.0508	0.37	Q	V					
3+32	0.0513	0.37	Q	V					
3+33	0.0518	0.38	Q	V					
3+34	0.0524	0.38	Q	V					
3+35	0.0529	0.39	Q	V					
3+36	0.0534	0.39	Q	V					
3+37	0.0540	0.39	Q	V					
3+38	0.0545	0.40	Q	V					
3+39	0.0551	0.40	Q	V					
3+40	0.0557	0.41	Q	V					
3+41	0.0562	0.43	Q	V					
3+42	0.0568	0.44	Q	V					
3+43	0.0575	0.46	Q	V					
3+44	0.0581	0.48	Q	V					
3+45	0.0588	0.49	Q	V					
3+46	0.0595	0.51	Q	V					
3+47	0.0603	0.53	Q	V					
3+48	0.0610	0.55	Q	V					
3+49	0.0618	0.56	Q	V					
3+50	0.0626	0.58	Q	V					
3+51	0.0634	0.60	Q	V					
3+52	0.0643	0.62	Q	V					
3+53	0.0652	0.64	Q	V					
3+54	0.0661	0.67	Q	V					
3+55	0.0670	0.69	Q	V					
3+56	0.0680	0.71	Q	V					
3+57	0.0690	0.73	Q	V					
3+58	0.0700	0.76	Q	V					
3+59	0.0711	0.78	Q	V					
4+ 0	0.0722	0.80	Q	V					
4+ 1	0.0734	0.82	Q	V					
4+ 2	0.0745	0.84	Q	V					
4+ 3	0.0759	1.04	Q	V					
4+ 4	0.0777	1.24	Q	V					
4+ 5	0.0796	1.44	Q	V					
4+ 6	0.0819	1.64	Q	V					
4+ 7	0.0844	1.83	Q	V					
4+ 8	0.0872	2.03	Q	V					
4+ 9	0.0903	2.23	Q	V					
4+10	0.0936	2.43	Q	V					
4+11	0.0972	2.62	Q	V					
4+12	0.1011	2.82	Q	V					
4+13	0.1053	3.02	Q	V					
4+14	0.1091	2.79	Q	V					
4+15	0.1127	2.56	Q	V					
4+16	0.1159	2.33	Q	V					
4+17	0.1187	2.10	Q	V					
4+18	0.1213	1.87	Q	V					
4+19	0.1236	1.63	Q	V					
4+20	0.1255	1.40	Q	V					
4+21	0.1271	1.17	Q	V					
4+22	0.1284	0.94	Q	V					
4+23	0.1294	0.71	Q	V					
4+24	0.1301	0.48	Q	V					

4+25	0.1307	0.47		Q				V	
4+26	0.1313	0.45		Q				V	
4+27	0.1319	0.44		Q				V	
4+28	0.1325	0.42		Q				V	
4+29	0.1331	0.41		Q				V	
4+30	0.1336	0.39		Q				V	
4+31	0.1341	0.38		Q				V	
4+32	0.1346	0.36		Q				V	
4+33	0.1351	0.35		Q				V	
4+34	0.1356	0.34		Q				V	
4+35	0.1360	0.32		Q				V	
4+36	0.1365	0.32		Q				V	
4+37	0.1369	0.31		Q				V	
4+38	0.1373	0.30		Q				V	
4+39	0.1377	0.30		Q				V	
4+40	0.1381	0.29		Q				V	
4+41	0.1385	0.28		Q				V	
4+42	0.1389	0.28		Q				V	
4+43	0.1392	0.27		Q				V	
4+44	0.1396	0.26		Q				V	
4+45	0.1400	0.26		Q				V	
4+46	0.1403	0.25		Q				V	
4+47	0.1407	0.25		Q				V	
4+48	0.1410	0.24		Q				V	
4+49	0.1413	0.24		Q				V	
4+50	0.1417	0.24		Q				V	
4+51	0.1420	0.23		Q				V	
4+52	0.1423	0.23		Q				V	
4+53	0.1426	0.23		Q				V	
4+54	0.1429	0.22		Q				V	
4+55	0.1432	0.22		Q				V	
4+56	0.1435	0.21		Q				V	
4+57	0.1438	0.21		Q				V	
4+58	0.1441	0.21		Q				V	
4+59	0.1444	0.21		Q				V	
5+ 0	0.1446	0.20		Q				V	
5+ 1	0.1449	0.20		Q				V	
5+ 2	0.1452	0.20		Q				V	
5+ 3	0.1455	0.20		Q				V	
5+ 4	0.1457	0.19		Q				V	
5+ 5	0.1460	0.19		Q				V	
5+ 6	0.1462	0.19		Q				V	
5+ 7	0.1465	0.19		Q				V	
5+ 8	0.1468	0.18		Q				V	
5+ 9	0.1470	0.18		Q				V	
5+10	0.1473	0.18		Q				V	
5+11	0.1475	0.18		Q				V	
5+12	0.1477	0.18		Q				V	
5+13	0.1480	0.17		Q				V	
5+14	0.1482	0.17		Q				V	
5+15	0.1485	0.17		Q				V	
5+16	0.1487	0.17		Q				V	
5+17	0.1489	0.17		Q				V	
5+18	0.1491	0.17		Q				V	

5+19	0.1494	0.16	Q				V	
5+20	0.1496	0.16	Q				V	
5+21	0.1498	0.16	Q				V	
5+22	0.1500	0.16	Q				V	
5+23	0.1503	0.16	Q				V	
5+24	0.1505	0.16	Q				V	
5+25	0.1507	0.16	Q				V	
5+26	0.1509	0.15	Q				V	
5+27	0.1511	0.15	Q				V	
5+28	0.1513	0.15	Q				V	
5+29	0.1515	0.15	Q				V	
5+30	0.1517	0.15	Q				V	
5+31	0.1519	0.15	Q				V	
5+32	0.1521	0.15	Q				V	
5+33	0.1523	0.15	Q				V	
5+34	0.1525	0.14	Q				V	
5+35	0.1527	0.14	Q				V	
5+36	0.1529	0.14	Q				V	
5+37	0.1531	0.14	Q				V	
5+38	0.1533	0.14	Q				V	
5+39	0.1535	0.14	Q				V	
5+40	0.1537	0.14	Q				V	
5+41	0.1539	0.14	Q				V	
5+42	0.1541	0.14	Q				V	
5+43	0.1542	0.13	Q				V	
5+44	0.1544	0.13	Q				V	
5+45	0.1546	0.13	Q				V	
5+46	0.1548	0.13	Q				V	
5+47	0.1550	0.13	Q				V	
5+48	0.1552	0.13	Q				V	
5+49	0.1553	0.13	Q				V	
5+50	0.1555	0.13	Q				V	
5+51	0.1557	0.13	Q				V	
5+52	0.1559	0.13	Q				V	
5+53	0.1560	0.13	Q				V	
5+54	0.1562	0.13	Q				V	
5+55	0.1564	0.12	Q				V	
5+56	0.1565	0.12	Q				V	
5+57	0.1567	0.12	Q				V	
5+58	0.1569	0.12	Q				V	
5+59	0.1571	0.12	Q				V	
6+ 0	0.1572	0.12	Q				V	
6+ 1	0.1574	0.12	Q				V	
6+ 2	0.1576	0.12	Q				V	
6+ 3	0.1577	0.12	Q				V	

End of computations, total study area = 1.240 (Ac.)

FLOOD HYDROGRAPH ROUTING PROGRAM
Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2018
Study date: 05/24/22

Program License Serial Number 6499

***** HYDROGRAPH INFORMATION *****

From study/file name: OC.rte
*****HYDROGRAPH DATA*****
Number of intervals = 363
Time interval = 1.0 (Min.)
Maximum/Peak flow rate = 3.020 (CFS)
Total volume = 0.158 (Ac.Ft)
Status of hydrographs being held in storage
Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
Peak (CFS) 0.000 0.000 0.000 0.000 0.000
Vol (Ac.Ft) 0.000 0.000 0.000 0.000 0.000

+++++
Process from Point/Station 10.000 to Point/Station 10.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 363
Hydrograph time unit = 1.000 (Min.)
Initial depth in storage basin = 0.00 (Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.500	0.014	0.035	0.014	0.014
1.500	0.043	0.064	0.043	0.043

2.500	0.071	0.083	0.071	0.071
3.500	0.100	0.099	0.100	0.100
3.600	0.103	0.277	0.103	0.103
3.700	0.105	0.601	0.105	0.105
3.800	0.108	1.020	0.107	0.109

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	0.8	1.51	2.26	3.02	Depth (Ft.)
0.017	0.01	0.00	0.000	O					0.00
0.033	0.02	0.00	0.000	O					0.00
0.050	0.03	0.00	0.000	O					0.00
0.067	0.04	0.00	0.000	O					0.00
0.083	0.05	0.00	0.000	O					0.01
0.100	0.06	0.00	0.000	O					0.01
0.117	0.07	0.00	0.000	O					0.01
0.133	0.08	0.00	0.000	O					0.02
0.150	0.09	0.00	0.001	O					0.02
0.167	0.10	0.00	0.001	OI					0.03
0.183	0.11	0.00	0.001	OI					0.03
0.200	0.11	0.00	0.001	OI					0.04
0.217	0.11	0.00	0.001	OI					0.04
0.233	0.11	0.00	0.001	OI					0.05
0.250	0.11	0.00	0.001	OI					0.05
0.267	0.11	0.00	0.002	OI					0.06
0.283	0.11	0.00	0.002	OI					0.06
0.300	0.12	0.00	0.002	OI					0.07
0.317	0.12	0.01	0.002	OI					0.07
0.333	0.12	0.01	0.002	OI					0.08
0.350	0.12	0.01	0.002	OI					0.08
0.367	0.12	0.01	0.003	OI					0.09
0.383	0.12	0.01	0.003	OI					0.10
0.400	0.12	0.01	0.003	OI					0.10
0.417	0.12	0.01	0.003	OI					0.11
0.433	0.12	0.01	0.003	OI					0.11
0.450	0.12	0.01	0.003	OI					0.12
0.467	0.12	0.01	0.003	OI					0.12
0.483	0.12	0.01	0.004	OI					0.13
0.500	0.12	0.01	0.004	OI					0.13
0.517	0.12	0.01	0.004	OI					0.14
0.533	0.12	0.01	0.004	OI					0.14
0.550	0.12	0.01	0.004	OI					0.15
0.567	0.12	0.01	0.004	OI					0.16
0.583	0.12	0.01	0.005	OI					0.16
0.600	0.12	0.01	0.005	OI					0.17
0.617	0.12	0.01	0.005	OI					0.17
0.633	0.12	0.01	0.005	OI					0.18
0.650	0.12	0.01	0.005	OI					0.18
0.667	0.12	0.01	0.005	OI					0.19
0.683	0.12	0.01	0.005	OI					0.19

0.700	0.12	0.01	0.006	OI					0.20
0.717	0.12	0.01	0.006	OI					0.20
0.733	0.12	0.01	0.006	OI					0.21
0.750	0.12	0.02	0.006	OI					0.21
0.767	0.12	0.02	0.006	OI					0.22
0.783	0.13	0.02	0.006	OI					0.23
0.800	0.13	0.02	0.006	OI					0.23
0.817	0.13	0.02	0.007	OI					0.24
0.833	0.13	0.02	0.007	OI					0.24
0.850	0.13	0.02	0.007	OI					0.25
0.867	0.13	0.02	0.007	OI					0.25
0.883	0.13	0.02	0.007	OI					0.26
0.900	0.13	0.02	0.007	OI					0.26
0.917	0.13	0.02	0.008	OI					0.27
0.933	0.13	0.02	0.008	OI					0.27
0.950	0.13	0.02	0.008	OI					0.28
0.967	0.13	0.02	0.008	OI					0.29
0.983	0.13	0.02	0.008	OI					0.29
1.000	0.13	0.02	0.008	OI					0.30
1.017	0.13	0.02	0.008	OI					0.30
1.033	0.13	0.02	0.009	OI					0.31
1.050	0.13	0.02	0.009	OI					0.31
1.067	0.13	0.02	0.009	OI					0.32
1.083	0.13	0.02	0.009	OI					0.32
1.100	0.13	0.02	0.009	OI					0.33
1.117	0.13	0.02	0.009	OI					0.33
1.133	0.13	0.02	0.010	OI					0.34
1.150	0.13	0.02	0.010	OI					0.34
1.167	0.14	0.02	0.010	OI					0.35
1.183	0.14	0.02	0.010	OI					0.36
1.200	0.14	0.03	0.010	OI					0.36
1.217	0.14	0.03	0.010	OI					0.37
1.233	0.14	0.03	0.010	OI					0.37
1.250	0.14	0.03	0.011	OI					0.38
1.267	0.14	0.03	0.011	OI					0.38
1.283	0.14	0.03	0.011	OI					0.39
1.300	0.14	0.03	0.011	OI					0.39
1.317	0.14	0.03	0.011	OI					0.40
1.333	0.14	0.03	0.011	OI					0.41
1.350	0.14	0.03	0.012	OI					0.41
1.367	0.14	0.03	0.012	OI					0.42
1.383	0.14	0.03	0.012	OI					0.42
1.400	0.14	0.03	0.012	OI					0.43
1.417	0.14	0.03	0.012	OI					0.43
1.433	0.14	0.03	0.012	OI					0.44
1.450	0.14	0.03	0.012	OI					0.44
1.467	0.14	0.03	0.013	OI					0.45
1.483	0.14	0.03	0.013	OI					0.46
1.500	0.15	0.03	0.013	OI					0.46
1.517	0.15	0.03	0.013	OI					0.47
1.533	0.15	0.03	0.013	OI					0.47
1.550	0.15	0.03	0.013	OI					0.48
1.567	0.15	0.03	0.014	OI					0.48
1.583	0.15	0.03	0.014	OI					0.49



3.400	0.33	0.06	0.038	O	I					1.34
3.417	0.33	0.06	0.039	O	I					1.35
3.433	0.34	0.06	0.039	O	I					1.36
3.450	0.35	0.06	0.039	O	I					1.38
3.467	0.35	0.06	0.040	O	I					1.39
3.483	0.36	0.06	0.040	O	I					1.40
3.500	0.36	0.06	0.041	O	I					1.42
3.517	0.37	0.06	0.041	O	I					1.43
3.533	0.37	0.06	0.041	O	I					1.45
3.550	0.38	0.06	0.042	O	I					1.46
3.567	0.38	0.06	0.042	O	I					1.48
3.583	0.39	0.06	0.043	O	I					1.49
3.600	0.39	0.06	0.043	O	I					1.51
3.617	0.39	0.06	0.044	O	I					1.52
3.633	0.40	0.06	0.044	O	I					1.54
3.650	0.40	0.07	0.045	O	I					1.56
3.667	0.41	0.07	0.045	O	I					1.57
3.683	0.43	0.07	0.046	O	I					1.59
3.700	0.44	0.07	0.046	O	I					1.61
3.717	0.46	0.07	0.047	O	I					1.63
3.733	0.48	0.07	0.047	O	I					1.65
3.750	0.49	0.07	0.048	O	I					1.67
3.767	0.51	0.07	0.048	O	I					1.69
3.783	0.53	0.07	0.049	O	I					1.71
3.800	0.55	0.07	0.050	O	I					1.74
3.817	0.56	0.07	0.050	O	I					1.76
3.833	0.58	0.07	0.051	O	I					1.78
3.850	0.60	0.07	0.052	O	I					1.81
3.867	0.62	0.07	0.052	O	I					1.84
3.883	0.64	0.07	0.053	O	I					1.86
3.900	0.67	0.07	0.054	O	I					1.89
3.917	0.69	0.07	0.055	O	I					1.92
3.933	0.71	0.07	0.056	O	I					1.95
3.950	0.73	0.07	0.057	O	I					1.99
3.967	0.76	0.07	0.058	O	I					2.02
3.983	0.78	0.07	0.058	O	I					2.05
4.000	0.80	0.08	0.059	O	I					2.09
4.017	0.82	0.08	0.060	O	I					2.12
4.033	0.84	0.08	0.062	O	I					2.16
4.050	1.04	0.08	0.063	O		I				2.20
4.067	1.24	0.08	0.064	O		I	I			2.26
4.083	1.44	0.08	0.066	O			I			2.32
4.100	1.64	0.08	0.068	O			I	I		2.39
4.117	1.83	0.08	0.070	O				I		2.47
4.133	2.03	0.08	0.073	O				I		2.56
4.150	2.23	0.09	0.076	O				I	I	2.66
4.167	2.43	0.09	0.079	O				I	I	2.76
4.183	2.62	0.09	0.082	O					I	2.88
4.200	2.82	0.09	0.086	O					I	3.00
4.217	3.02	0.09	0.090	O					I	3.14
4.233	2.79	0.10	0.093	O					I	3.27
4.250	2.56	0.10	0.097	O					I	3.39
4.267	2.33	0.11	0.100	O				I		3.51
4.283	2.10	0.27	0.103	O			I			3.60

4.300	1.87	0.61	0.105			O			I				3.70
4.317	1.63	0.81	0.107				O		I				3.75
4.333	1.40	0.94	0.107				O	I					3.78
4.350	1.17	1.00	0.108				O	I					3.79
4.367	0.94	1.01	0.108				IO						3.80
4.383	0.71	0.98	0.108			I	O						3.79
4.400	0.48	0.91	0.107			I	O						3.77
4.417	0.47	0.83	0.107			I	O						3.76
4.433	0.45	0.77	0.106			I	O						3.74
4.450	0.44	0.71	0.106			I	O						3.73
4.467	0.42	0.66	0.105			I	O						3.71
4.483	0.41	0.62	0.105			I	O						3.70
4.500	0.39	0.58	0.105			I	O						3.69
4.517	0.38	0.54	0.105			IO							3.68
4.533	0.36	0.51	0.104			I	O						3.67
4.550	0.35	0.48	0.104			I	O						3.66
4.567	0.34	0.45	0.104			IO							3.65
4.583	0.32	0.42	0.104			IO							3.65
4.600	0.32	0.40	0.104			IO							3.64
4.617	0.31	0.39	0.104			IO							3.63
4.633	0.30	0.37	0.104			O							3.63
4.650	0.30	0.36	0.103			O							3.62
4.667	0.29	0.34	0.103			O							3.62
4.683	0.28	0.33	0.103			O							3.62
4.700	0.28	0.32	0.103			IO							3.61
4.717	0.27	0.31	0.103			IO							3.61
4.733	0.26	0.30	0.103			IO							3.61
4.750	0.26	0.29	0.103			IO							3.61
4.767	0.25	0.29	0.103			IO							3.60
4.783	0.25	0.28	0.103			O							3.60
4.800	0.24	0.28	0.103			O							3.60
4.817	0.24	0.27	0.103			O							3.60
4.833	0.24	0.27	0.103			O							3.60
4.850	0.23	0.27	0.103			O							3.59
4.867	0.23	0.26	0.103			O							3.59
4.883	0.23	0.26	0.103			O							3.59
4.900	0.22	0.26	0.103			O							3.59
4.917	0.22	0.26	0.103			O							3.59
4.933	0.21	0.25	0.103			O							3.59
4.950	0.21	0.25	0.103			O							3.58
4.967	0.21	0.25	0.102			O							3.58
4.983	0.21	0.24	0.102			O							3.58
5.000	0.20	0.24	0.102			O							3.58
5.017	0.20	0.24	0.102			O							3.58
5.033	0.20	0.23	0.102			O							3.58
5.050	0.20	0.23	0.102			O							3.57
5.067	0.19	0.23	0.102			O							3.57
5.083	0.19	0.23	0.102			O							3.57
5.100	0.19	0.22	0.102			IO							3.57
5.117	0.19	0.22	0.102			IO							3.57
5.133	0.18	0.22	0.102			IO							3.57
5.150	0.18	0.21	0.102			IO							3.56
5.167	0.18	0.21	0.102			IO							3.56
5.183	0.18	0.21	0.102			IO							3.56

5.200	0.18	0.21	0.102	IO					3.56
5.217	0.17	0.20	0.102	IO					3.56
5.233	0.17	0.20	0.102	IO					3.56
5.250	0.17	0.20	0.102	IO					3.56
5.267	0.17	0.20	0.102	IO					3.56
5.283	0.17	0.19	0.102	IO					3.55
5.300	0.17	0.19	0.102	IO					3.55
5.317	0.16	0.19	0.102	IO					3.55
5.333	0.16	0.19	0.102	IO					3.55
5.350	0.16	0.19	0.101	IO					3.55
5.367	0.16	0.18	0.101	IO					3.55
5.383	0.16	0.18	0.101	IO					3.55
5.400	0.16	0.18	0.101	IO					3.55
5.417	0.16	0.18	0.101	IO					3.54
5.433	0.15	0.18	0.101	IO					3.54
5.450	0.15	0.17	0.101	IO					3.54
5.467	0.15	0.17	0.101	IO					3.54
5.483	0.15	0.17	0.101	IO					3.54
5.500	0.15	0.17	0.101	IO					3.54
5.517	0.15	0.17	0.101	IO					3.54
5.533	0.15	0.17	0.101	IO					3.54
5.550	0.15	0.16	0.101	IO					3.54
5.567	0.14	0.16	0.101	IO					3.54
5.583	0.14	0.16	0.101	IO					3.54
5.600	0.14	0.16	0.101	IO					3.53
5.617	0.14	0.16	0.101	IO					3.53
5.633	0.14	0.16	0.101	IO					3.53
5.650	0.14	0.16	0.101	IO					3.53
5.667	0.14	0.15	0.101	IO					3.53
5.683	0.14	0.15	0.101	IO					3.53
5.700	0.14	0.15	0.101	IO					3.53
5.717	0.13	0.15	0.101	IO					3.53
5.733	0.13	0.15	0.101	IO					3.53
5.750	0.13	0.15	0.101	IO					3.53
5.767	0.13	0.15	0.101	IO					3.53
5.783	0.13	0.15	0.101	IO					3.53
5.800	0.13	0.14	0.101	IO					3.53
5.817	0.13	0.14	0.101	IO					3.52
5.833	0.13	0.14	0.101	IO					3.52
5.850	0.13	0.14	0.101	IO					3.52
5.867	0.13	0.14	0.101	IO					3.52
5.883	0.13	0.14	0.101	IO					3.52
5.900	0.13	0.14	0.101	IO					3.52
5.917	0.12	0.14	0.101	IO					3.52
5.933	0.12	0.14	0.101	IO					3.52
5.950	0.12	0.13	0.101	IO					3.52
5.967	0.12	0.13	0.101	IO					3.52
5.983	0.12	0.13	0.101	IO					3.52
6.000	0.12	0.13	0.101	IO					3.52
6.017	0.12	0.13	0.101	IO					3.52
6.033	0.12	0.13	0.101	IO					3.52
6.050	0.12	0.13	0.101	IO					3.52
6.067	0.00	0.12	0.100	IO					3.51
6.083	0.00	0.11	0.100	IO					3.51

6.100	0.00	0.11	0.100	IO					3.50
6.117	0.00	0.10	0.100	IO					3.50
6.133	0.00	0.10	0.100	IO					3.49
6.150	0.00	0.10	0.100	IO					3.49
6.167	0.00	0.10	0.100	IO					3.48
6.183	0.00	0.10	0.099	IO					3.48
6.200	0.00	0.10	0.099	IO					3.48
6.217	0.00	0.10	0.099	IO					3.47
6.233	0.00	0.10	0.099	IO					3.47
6.250	0.00	0.10	0.099	IO					3.46
6.267	0.00	0.10	0.099	IO					3.46
6.283	0.00	0.10	0.099	IO					3.45
6.300	0.00	0.10	0.098	IO					3.45
6.317	0.00	0.10	0.098	IO					3.44
6.333	0.00	0.10	0.098	IO					3.44
6.350	0.00	0.10	0.098	IO					3.43
6.367	0.00	0.10	0.098	IO					3.43
6.383	0.00	0.10	0.098	IO					3.42
6.400	0.00	0.10	0.098	IO					3.42
6.417	0.00	0.10	0.098	IO					3.41
6.433	0.00	0.10	0.097	IO					3.41
6.450	0.00	0.10	0.097	IO					3.41
6.467	0.00	0.10	0.097	IO					3.40
6.483	0.00	0.10	0.097	IO					3.40
6.500	0.00	0.10	0.097	IO					3.39
6.517	0.00	0.10	0.097	IO					3.39
6.533	0.00	0.10	0.097	IO					3.38
6.550	0.00	0.10	0.096	IO					3.38
6.567	0.00	0.10	0.096	IO					3.37
6.583	0.00	0.10	0.096	IO					3.37
6.600	0.00	0.10	0.096	IO					3.36
6.617	0.00	0.10	0.096	IO					3.36
6.633	0.00	0.10	0.096	IO					3.35
6.650	0.00	0.10	0.096	IO					3.35
6.667	0.00	0.10	0.096	IO					3.35
6.683	0.00	0.10	0.095	IO					3.34
6.700	0.00	0.10	0.095	IO					3.34
6.717	0.00	0.10	0.095	IO					3.33
6.733	0.00	0.10	0.095	IO					3.33
6.750	0.00	0.10	0.095	IO					3.32
6.767	0.00	0.10	0.095	IO					3.32
6.783	0.00	0.10	0.095	IO					3.31
6.800	0.00	0.10	0.094	IO					3.31
6.817	0.00	0.10	0.094	IO					3.30
6.833	0.00	0.10	0.094	IO					3.30
6.850	0.00	0.10	0.094	IO					3.30
6.867	0.00	0.10	0.094	IO					3.29
6.883	0.00	0.10	0.094	IO					3.29
6.900	0.00	0.10	0.094	IO					3.28
6.917	0.00	0.10	0.094	IO					3.28
6.933	0.00	0.10	0.093	IO					3.27
6.950	0.00	0.10	0.093	IO					3.27
6.967	0.00	0.10	0.093	IO					3.26
6.983	0.00	0.10	0.093	IO					3.26



36.700	0.00	0.00	0.001	O								0.02
36.717	0.00	0.00	0.001	O								0.02
36.733	0.00	0.00	0.001	O								0.02
36.750	0.00	0.00	0.001	O								0.02
36.767	0.00	0.00	0.001	O								0.02
36.783	0.00	0.00	0.001	O								0.02
36.800	0.00	0.00	0.001	O								0.02
36.817	0.00	0.00	0.001	O								0.02
36.833	0.00	0.00	0.001	O								0.02
36.850	0.00	0.00	0.001	O								0.02
36.867	0.00	0.00	0.001	O								0.02
36.883	0.00	0.00	0.001	O								0.02
36.900	0.00	0.00	0.001	O								0.02
36.917	0.00	0.00	0.001	O								0.02
36.933	0.00	0.00	0.001	O								0.02
36.950	0.00	0.00	0.001	O								0.02
36.967	0.00	0.00	0.001	O								0.02
36.983	0.00	0.00	0.001	O								0.02
37.000	0.00	0.00	0.001	O								0.02
37.017	0.00	0.00	0.001	O								0.02
37.033	0.00	0.00	0.001	O								0.02
37.050	0.00	0.00	0.001	O								0.02
37.067	0.00	0.00	0.001	O								0.02
37.083	0.00	0.00	0.001	O								0.02
37.100	0.00	0.00	0.001	O								0.02
37.117	0.00	0.00	0.001	O								0.02
37.133	0.00	0.00	0.001	O								0.02
37.150	0.00	0.00	0.001	O								0.02
37.167	0.00	0.00	0.001	O								0.02
37.183	0.00	0.00	0.001	O								0.02
37.200	0.00	0.00	0.001	O								0.02
37.217	0.00	0.00	0.001	O								0.02
37.233	0.00	0.00	0.001	O								0.02
37.250	0.00	0.00	0.001	O								0.02
37.267	0.00	0.00	0.001	O								0.02
37.283	0.00	0.00	0.001	O								0.02
37.300	0.00	0.00	0.001	O								0.02
37.317	0.00	0.00	0.001	O								0.02
37.333	0.00	0.00	0.001	O								0.02
37.350	0.00	0.00	0.001	O								0.02
37.367	0.00	0.00	0.001	O								0.02
37.383	0.00	0.00	0.001	O								0.02
37.400	0.00	0.00	0.001	O								0.02
37.417	0.00	0.00	0.001	O								0.02
37.433	0.00	0.00	0.001	O								0.02
37.450	0.00	0.00	0.001	O								0.02
37.467	0.00	0.00	0.001	O								0.02
37.483	0.00	0.00	0.001	O								

[illegible]

38.500	0.00	0.00	0.000	O					0.02
38.517	0.00	0.00	0.000	O					0.02
38.533	0.00	0.00	0.000	O					0.02
38.550	0.00	0.00	0.000	O					0.02
38.567	0.00	0.00	0.000	O					0.02
38.583	0.00	0.00	0.000	O					0.02
38.600	0.00	0.00	0.000	O					0.02
38.617	0.00	0.00	0.000	O					0.02
38.633	0.00	0.00	0.000	O					0.02
38.650	0.00	0.00	0.000	O					0.02
38.667	0.00	0.00	0.000	O					0.02
38.683	0.00	0.00	0.000	O					0.02
38.700	0.00	0.00	0.000	O					0.02
38.717	0.00	0.00	0.000	O					0.02
38.733	0.00	0.00	0.000	O					0.02
38.750	0.00	0.00	0.000	O					0.02
38.767	0.00	0.00	0.000	O					0.02
38.783	0.00	0.00	0.000	O					0.02
38.800	0.00	0.00	0.000	O					0.02
38.817	0.00	0.00	0.000	O					0.02
38.833	0.00	0.00	0.000	O					0.02
38.850	0.00	0.00	0.000	O					0.02
38.867	0.00	0.00	0.000	O					0.02
38.883	0.00	0.00	0.000	O					0.02
38.900	0.00	0.00	0.000	O					0.01
38.917	0.00	0.00	0.000	O					0.01
38.933	0.00	0.00	0.000	O					0.01
38.950	0.00	0.00	0.000	O					0.01
38.967	0.00	0.00	0.000	O					0.01
38.983	0.00	0.00	0.000	O					0.01
39.000	0.00	0.00	0.000	O					0.01
39.017	0.00	0.00	0.000	O					0.01
39.033	0.00	0.00	0.000	O					0.01
39.050	0.00	0.00	0.000	O					0.01
39.067	0.00	0.00	0.000	O					0.01
39.083	0.00	0.00	0.000	O					0.01
39.100	0.00	0.00	0.000	O					0.01
39.117	0.00	0.00	0.000	O					0.01
39.133	0.00	0.00	0.000	O					0.01

*****HYDROGRAPH DATA*****

Number of intervals = 2348
 Time interval = 1.0 (Min.)
 Maximum/Peak flow rate = 1.008 (CFS)
 Total volume = 0.157 (Ac.Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac.Ft) 0.000 0.000 0.000 0.000 0.000

+++++
Process from Point/Station 10.000 to Point/Station 10.000
**** STORE OR DELETE CURRENT HYDROGRAPH ****

Current stream hydrograph saved in file OCHYDRO.rte

*****HYDROGRAPH DATA*****

Number of intervals = 0
Time interval = 0.0 (Min.)
Maximum/Peak flow rate = 0.000 (CFS)
Total volume = 0.000 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

UG1

Elevation	Elev. Difference	Area (sf)	Acre-feet
0.00	0.00	1241	0.0000
0.50	0.50	1241	0.0142
1.00	0.50	1241	0.0285
1.50	0.50	1241	0.0427
2.00	0.50	1241	0.0570
2.50	0.50	1241	0.0712
3.00	0.50	1241	0.0855
3.50	0.50	1241	0.0997
3.60	0.10	1241	0.1026
3.70	0.10	1241	0.1054
3.80	0.10	1241	0.1083

Outlet structure for Discharge of UG1

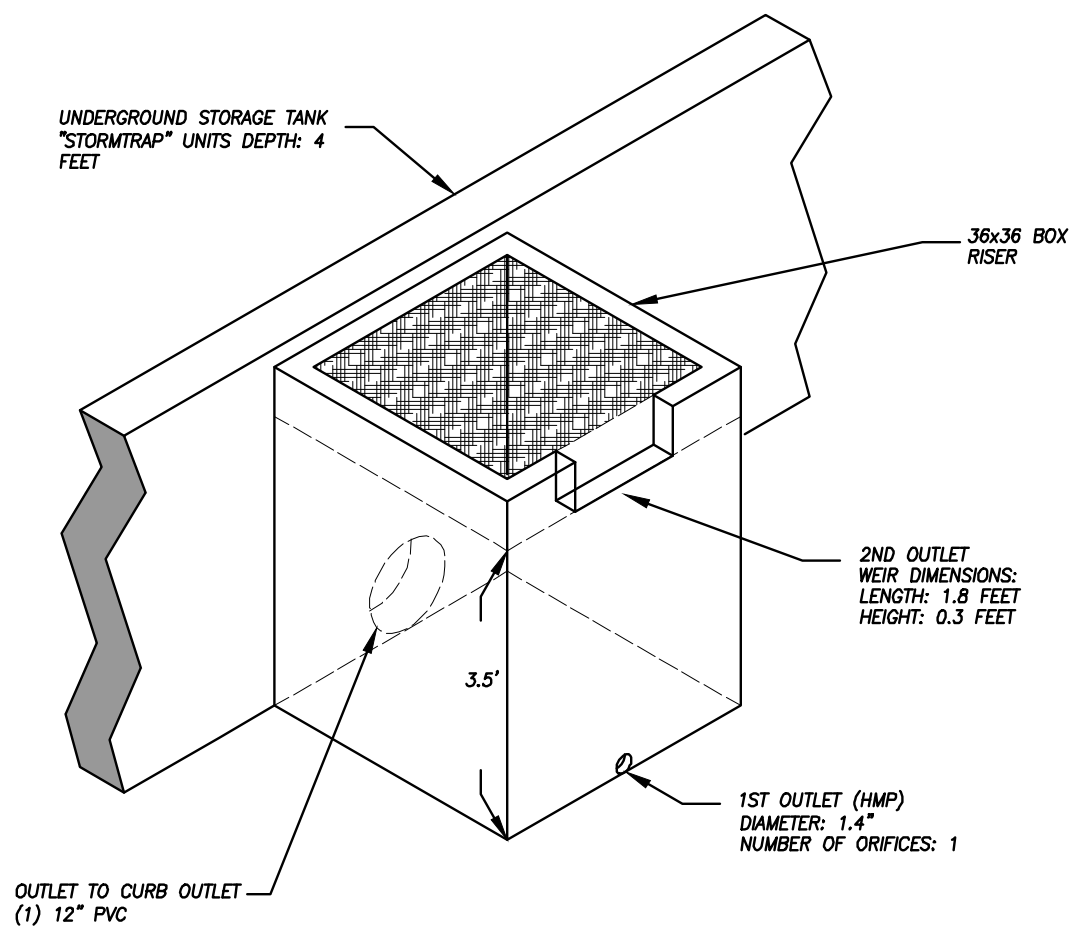
Discharge vs Elevation Table

Low orifice: **1.4** "
 Number: 1
 Cg-low: 0.62

Emergency Weir

Invert: 3.500 ft
 B: 1.8 ft

h (ft)	Q _{low-orif} (cfs)	Q _{emer} (cfs)	Q _{tot} (cfs)
0.000	0.000	0.000	0.000
0.500	0.035	0.000	0.035
1.500	0.064	0.000	0.064
2.500	0.083	0.000	0.083
3.500	0.099	0.000	0.099
3.600	0.100	0.176	0.277
3.700	0.102	0.499	0.601
3.800	0.103	0.917	1.020



OUTLET DETAIL
NTS

Table: Comparion of Overall Pre and Post Development Mitigated Peakflows				
BASIN	Area (sf)	Q(100 PRE) cfs	Q(100 MITIGATED) cfs	DELTA cfs
A	31,687	1.30	---	
P1	31,687	---	2.24	
P2+P3	53,968	1.33	---	
B+C+D	53,968	---	1.02	
		2.63	3.26	0.63
Note: There is an overall net increase of 0.63 cfs, we don't expect this increase to be detrimental to downstream facilites since the project drains directly to major bodies of water, Buena Vista Creek, Buena Vista Lagoon and ultimately into the Pacific Ocean				

EXHIBIT A
Pre-Development Drainage Map

VISTA WAY HOMES

EXHIBIT "A"
PRE-DEVELOPMENT
DRAINAGE AREA MAP
FOR TENTATIVE MAP

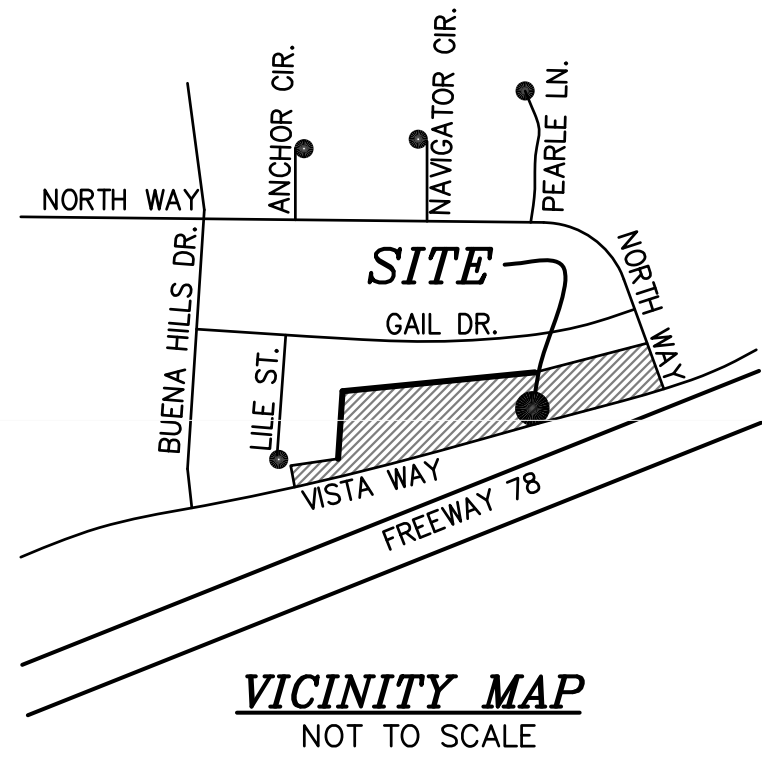
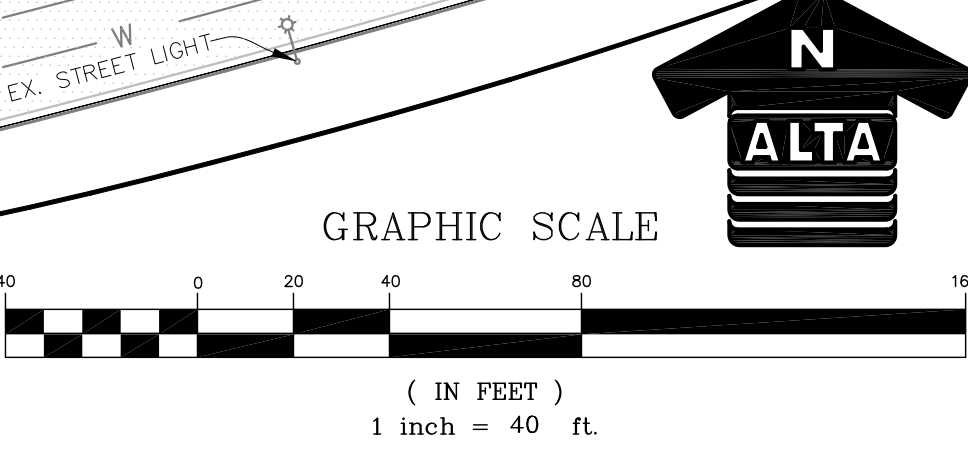
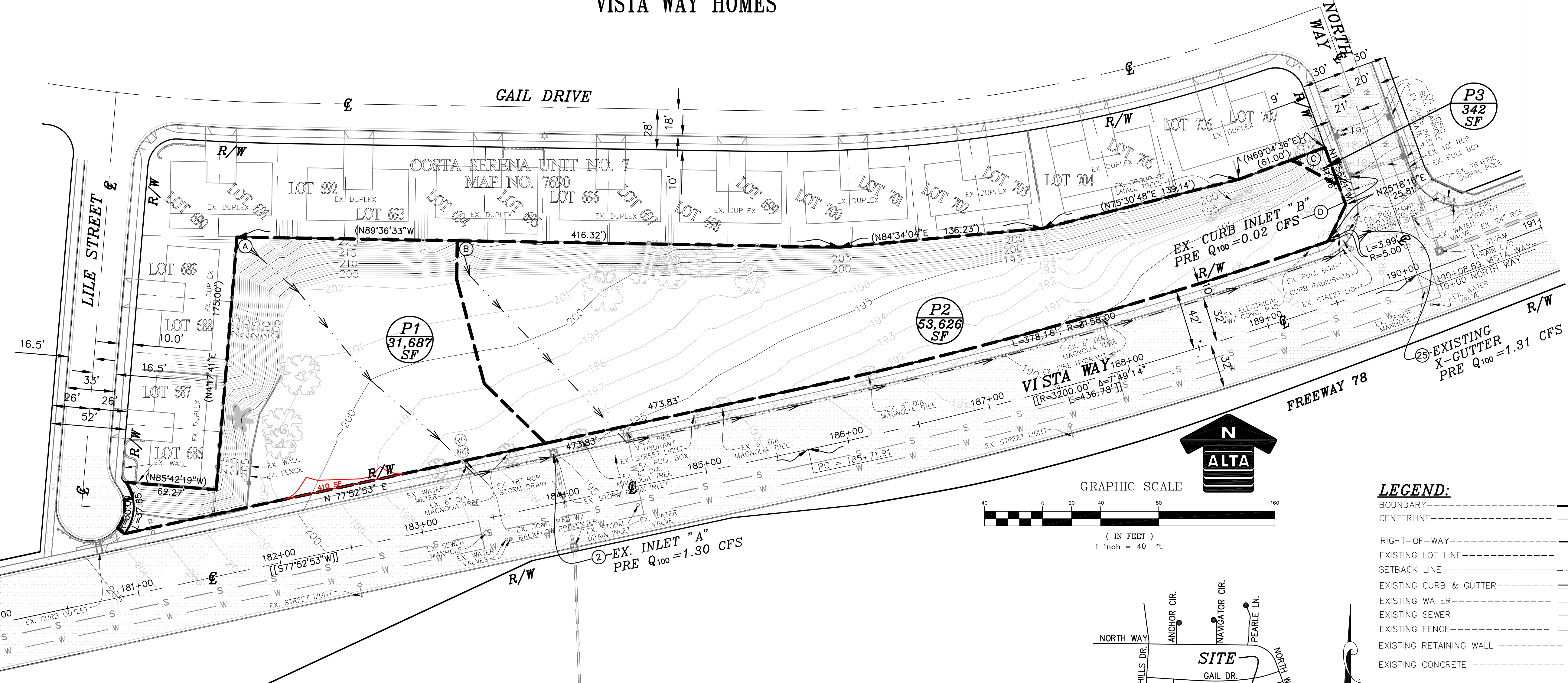
POST DAM LEGEND:
100 YEAR FREQUENCY

- WATERSHED BOUNDARY-----
- WATERSHED NAME-----
- WATERSHED DESIGNATION-----
- WATERSHED AREA-----
- DRAINAGE NODE-----
- FLOW PATH FOR To-----
- HYDROLOGIC SOIL GROUP "D"
- DEPTH TO GROUNDWATER > 12'

General Notes

THIS PROJECT IS A COMMON INTEREST DEVELOPMENT FOR SENIOR HOUSING. CCR'S WILL BE PREPARED FOR THIS PROJECT TO DEFINE AND MAINTAIN COMMON USE AREAS SUCH AS DRIVEWAYS, PARKING, LANDSCAPING & ETC. AFFORDABLE HOUSING (D21-00005) IS INCLUDED AS A PART OF THIS PROJECT ALONG WITH BONUS DENSITY (DB21-00003)

- EXISTING GROSS SUBDIVISION AEREA: 1.97 AC
- PROPOSED GROSS SUBDIVISION AEREA: 1.97 AC
- ASSESSOR'S PARCEL NUMBER: 165-493-47
- SITE ADDRESS: 3710 VISTA WAY
OCEANSIDE, CA 92056
- PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.
- BENCH MARK: DESCRIPTION: CL MONUMENT 3.5" BRASS DISC
STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS
RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
CITY OF OCEANSIDE #1020
- SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
- TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
- THE BASIS OF BEARINGS FOR THIS SUBDIVISION IS THE SOUTH LINE OF LOT 707 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP HEREOF NO. 7690 I.E. NORTH 69°04'36" EAST.
- FEMA FLOOD DESIGNATION: THIS SITE IS NOT WITH A 100-YEAR FLOODWAY OR FLOODPLAIN PER FEMA MAP 06073C0766G DATED: 2/16/12



LEGEND:

- BOUNDARY-----
- CENTERLINE-----
- RIGHT-OF-WAY-----
- EXISTING LOT LINE-----
- SETBACK LINE-----
- EXISTING CURB & GUTTER-----
- EXISTING WATER-----
- EXISTING SEWER-----
- EXISTING FENCE-----
- EXISTING RETAINING WALL-----
- EXISTING CONCRETE-----
- EXISTING AC PAVING-----
- EXISTING CONTOUR LINE-----
- EXISTING ELEVATION-----
- EXISTING FIRE HYDRANTS-----

ENGINEER OF WORK

BARTOLOME J. PASTOR, RCE 38606
DATED: MAY 2022



T21-00002
D21-00005
DB21-00003

ALTA CONSULTANTS
PLANNING ENGINEERING SURVEYING
1283 E. Main St., Ste. 109, Escondido, CA 92021 (619) 749-8818 Fax (619) 749-8818
JOB NO. 499-01, DATE MAY 24, 2022

EXHIBIT B
Post-Development Drainage Map

VISTA WAY HOMES

EXHIBIT "B"
POST-DEVELOPMENT
DRAINAGE AREA MAP
FOR TENTATIVE MAP

POST DAM LEGEND:
100 YEAR FREQUENCY

- WATERSHED BOUNDARY-----
WATERSHED NAME-----
WATERSHED DESIGNATION-----
WATERSHED AREA-----
SUBBASIN BOUNDARY-----
SUBBASIN NAME-----
WATERSHED DESIGNATION-----
SUBBASIN AREA-----
DRAINAGE NODE-----
FLOW PATH FOR To-----
HYDROLOGIC SOIL GROUP "D"
DEPTH TO GROUNDWATER > 12'

General Notes

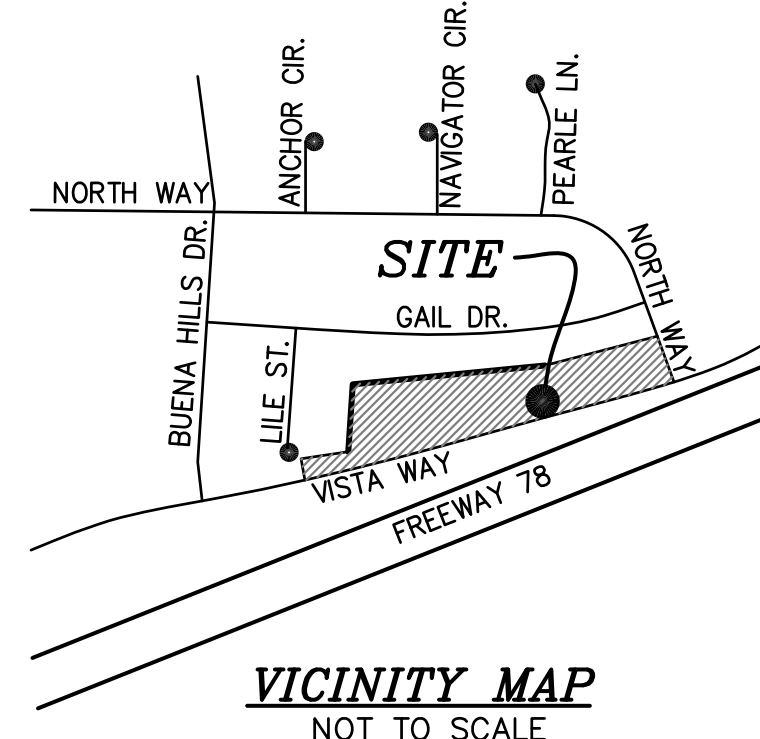
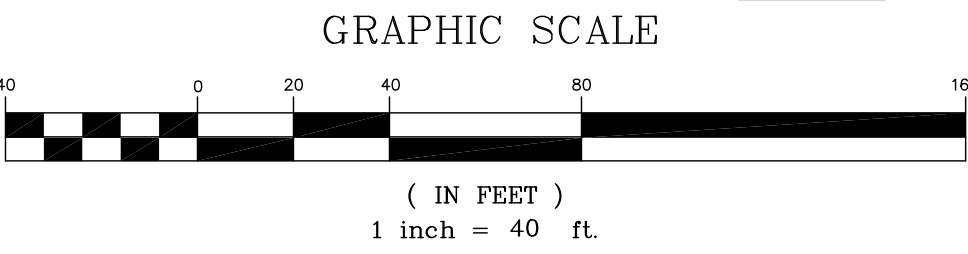
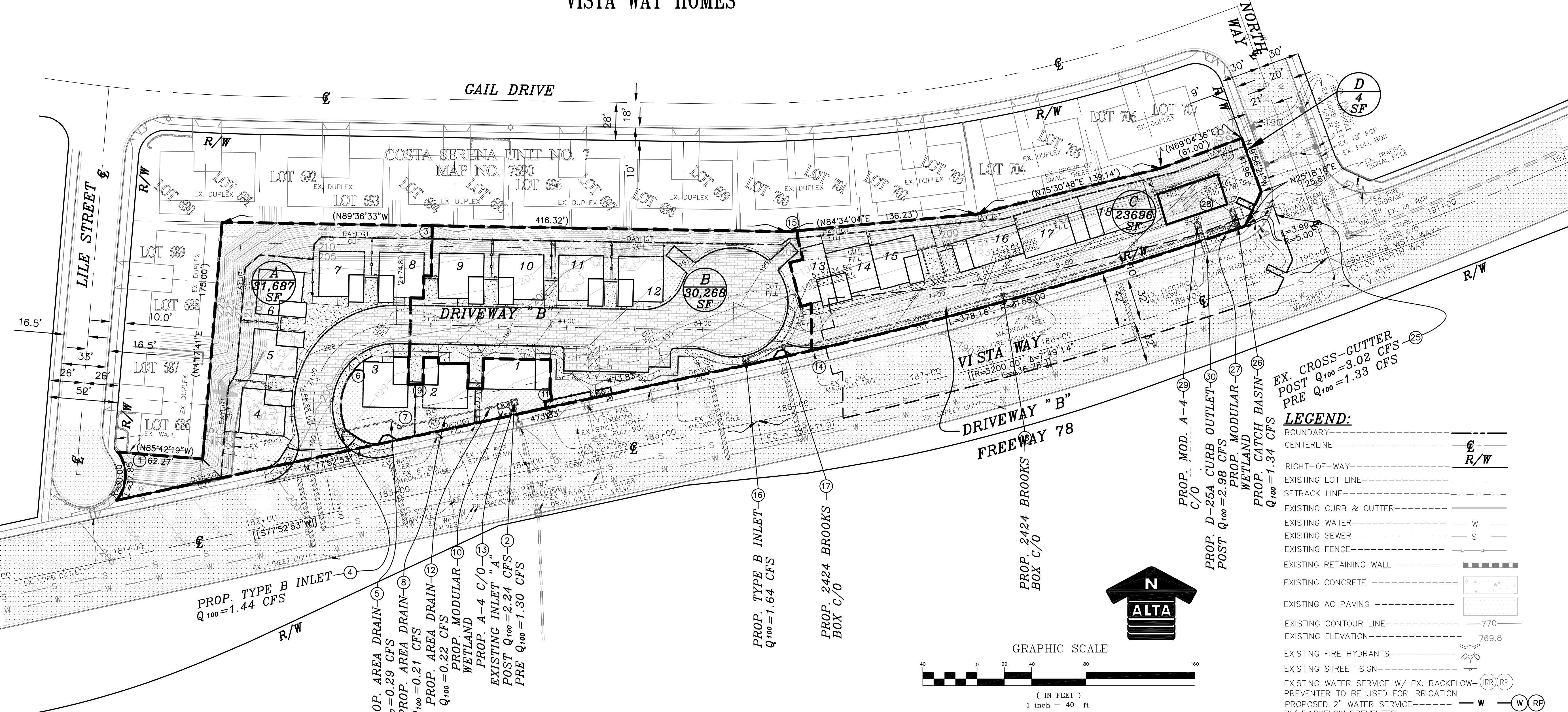
THIS PROJECT IS A COMMON INTEREST DEVELOPMENT FOR SENIOR HOUSING. CCR'S WILL BE PREPARED FOR THIS PROJECT TO DEFINE AND MAINTAIN COMMON USE AREAS SUCH AS DRIVEWAYS, PARKING, LANDSCAPING & ETC. AFFORDABLE HOUSING (D21-00005) IS INCLUDED AS A PART OF THIS PROJECT ALONG WITH BONUS DENSITY (DB21-00003)

- EXISTING GROSS SUBDIVISION AREA: 1.97 AC
- PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
- PROPOSED PUBLIC STREET DEDICATION: 0 AC
- PROPOSED PRIVATE STREET AREA: 0 AC
- TOTAL NUMBER OF EXISTING LOTS: 1
- TOTAL NUMBER OF PROPOSED LOTS: 1
- TOTAL NUMBER OF PROPOSED PROPOSED UNITS: 18
- PROPOSED PARKING:
1 ATTACHED GARAGE SPACE PER UNIT=18
UNATTACHED STANDARD PARKING SPACES (18'x9')=19
UNATTACHED COMPACT PARKING SPACES (16'x8')=2
VAN ACCESSIBLE HANDICAPPED PARKING SPACES=2
TOTAL PARKING SPACES PROPOSED=43
PARKING SPACES PER UNIT=2.39
- ASSESSOR'S PARCEL NUMBER: 165-493-47
- SITE ADDRESS: 3710 VISTA WAY
OCEANSIDE, CA 92056
- PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.
- EXISTING GENERAL PLAN LAND USE: RESIDENTIAL
- PROPOSED GENERAL PLAN LAND USE: RESIDENTIAL-SENIOR HOUSING
- EXISTING ZONING: RM-A
- PROPOSED ZONING: RM-A
- PROPOSED DENSITY: 9.14 DU/AC
- STATUS OF LEGAL ACCESS: VISTA WAY AN EXISTING & FULLY IMPROVED PUBLIC STREET
- BENCH MARK: DESCRIPTION: CL MONUMENT 3.5" BRASS DISC STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS
RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
CITY OF OCEANSIDE #1024
- SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
- TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
- THE BASIS OF BEARINGS FOR THIS SUBDIVISION IS THE SOUTH LINE OF LOT 707 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690 I.E. NORTH 69°04'36" EAST.
- MAXIMUM SLOPE GRADIENT: 2:1
- AREA/PERCENT OF SITE IN DRIVEWAYS & PARKING: 22,588 SF OR 26%
- MINIMUM REQUIRED OPEN SPACE IS 300 SF PER UNIT=18x300=5,400 SF
COMMON OPEN SPACE IS LOCATED IN TWO AREAS OF 1,521 SF+1,203 SF=2,724 SF
EACH UNIT WILL HAVE A MINIMUM OF 150 SF OF PRIVATE OPEN SPACE
- AREA/PERCENT OF SITE IN LANDSCAPING: 28,588 SF OR 33%
AREA/PERCENT OF SITE IN PAVERS: 27,815 SF OR 32%
- ONSITE GRADING FOR THIS PROJECT: (8% SHRINKAGE FOR CUT)
CUT= 3,000 C.Y. FILL= 4,000 C.Y. IMPORT= 1,000 C.Y.
NOTE: ALL QUANTITIES ARE BASED ON FINISH GRADE. NO ALLOWANCE MADE FOR SHRINKAGE OR BULKING OF MATERIAL.
- GRADED AREA: 1.63 AC=82% OF SITE
- FOR PROPOSED FENCING & SIGNAGE SEE LANDSCAPE PLANS FOR THIS PROJECT.
- FEMA FLOOD DESIGNATION: THIS SITE IS NOT WITH A 100-YEAR FLOODWAY OR FLOODPLAIN PER FEMA MAP 06073C0766G DATED: 2/16/12
- SOLAR ACCESS: ALL LOTS WITHIN THIS SUBDIVISION HAVE A MINIMUM OF 100 SQUARE FEET OF SOLAR ACCESS FOR EACH FUTURE DWELLING ALLOWED BY THIS SUBDIVISION.

T21-00002 D21-00005 DB21-00003

ALTA CONSULTANTS
PLANNING ENGINEERING SURVEYING
1283 E. Main St., Ste. 105, Rm. 105, Oceanside, CA 92054 (619) 749-8818 Fax (619) 749-8818
JOB NO. 499-01, DATE MAY 12, 2022

Date: 5/12/2022 SHEET 1 OF 1



ENGINEER OF WORK
Bartolome J. Pastor
BARTOLOME J. PASTOR, RCE 38606
DATED: MAY , 2022



- LEGEND:
- | | |
|--|--------|
| BOUNDARY----- | ℄ |
| CENTERLINE----- | R/W |
| RIGHT-OF-WAY----- | ℄ |
| EXISTING LOT LINE----- | --- |
| SETBACK LINE----- | --- |
| EXISTING CURB & GUTTER----- | --- |
| EXISTING WATER----- | W |
| EXISTING SEWER----- | S |
| EXISTING FENCE----- | --- |
| EXISTING RETAINING WALL----- | --- |
| EXISTING CONCRETE----- | --- |
| EXISTING AC PAVING----- | --- |
| EXISTING CONTOUR LINE----- | 770 |
| EXISTING ELEVATION----- | 769.8 |
| EXISTING FIRE HYDRANTS----- | --- |
| EXISTING STREET SIGN----- | --- |
| EXISTING WATER SERVICE W/ EX. BACKFLOW PREVENTER TO BE USED FOR IRRIGATION | IRR RP |
| PROPOSED 2" WATER SERVICE----- | W |
| W/ BACKFLOW PREVENTER | W |
| PROPOSED 8" FIRE SERVICE----- | W |
| FOR PVT. FIRE HYDRANT | W |
| PROPOSED 1" WATER SERVICE W/----- | W |
| PRIVATE WATER METER TO BE MAINTAINED BY HOA | W |
| PROPOSED PRIVATE 4" SEWER LATERAL----- | S |
| 8" PRIVATE SEWER MAIN W/ SEWER MH----- | S |
| PARKING SPACE NUMBER----- | 1 |
| PROPOSED G-2 CURB & GUTTER----- | --- |
| PROPOSED G-1 GUTTER----- | --- |
| PROPOSED ROLLED CURB----- | --- |
| PROPOSED FENCE----- | --- |
| SEE LANDSCAPE PLANS FOR DETAILS | --- |
| PROPOSED LANDSCAPING----- | --- |
| PROPOSED CONCRETE----- | --- |
| PROPOSED AC PAVING----- | --- |
| PROPOSED PAVER----- | --- |
| PER DETAIL ON SHEET NO. 10 OF TM | --- |
| TRENCH RESURFACING M_3A----- | --- |
| PROPOSED RETAINING WALL----- | --- |
| 2:1 SLOPE----- | --- |
| DAYLIGHT LINE----- | --- |
| DIRECTION OF FLOW----- | --- |
| (PVT.) PROPOSED STORM DRAIN----- | --- |
| CURB OUTLET PER D-25A----- | --- |
| (PVT.) PROPRIETARY TREATMENT UNIT----- | --- |
| PER DETAIL ON SHEET NO. 10 OF TM | --- |
| (PVT.) MODIFIED TYPE A CLEANOUT----- | --- |
| W/ SUMP PUMP | --- |
| (PVT.) 3636 OR 1818 BROOKS BOX----- | --- |
| W/ TRAFFIC GRATE PER DETAILS ON SHEET 11 OF TM | --- |
| (PVT.) 2424 BROOKS BOX----- | --- |
| PARKWAY GRATE PER DETAILS ON SHEET 11 OF TM | --- |
| AREA DRAIN PER DETAIL ON SHEET 10 OF TM----- | --- |

EXHIBIT C
Post-Development DMA Map

VISTA WAY HOMES DMA PLAN

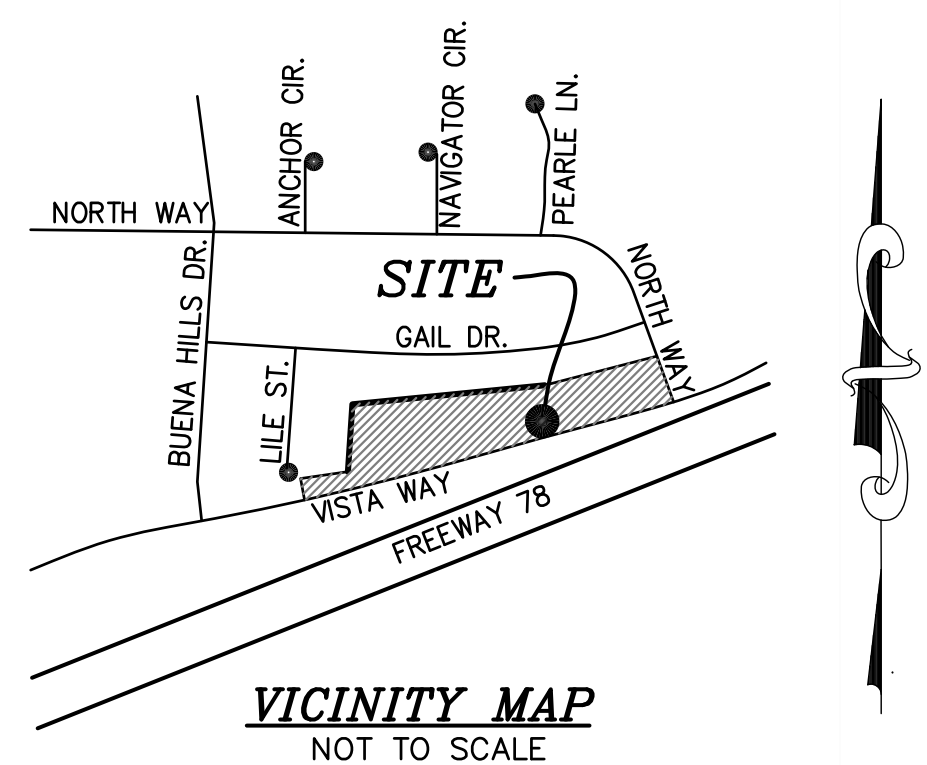
General Notes

THIS PROJECT IS A COMMON INTEREST DEVELOPMENT FOR SENIOR HOUSING. CCR'S WILL BE PREPARED FOR THIS PROJECT TO DEFINE AND MAINTAIN COMMON USE AREAS SUCH AS DRIVEWAYS, PARKING, LANDSCAPING & ETC. AFFORDABLE HOUSING (D21-00005) IS INCLUDED AS A PART OF THIS PROJECT ALONG WITH BONUS DENSITY (DB21-00003)

- EXISTING GROSS SUBDIVISION AREA: 1.97 AC
- PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
- PROPOSED PUBLIC STREET DEDICATION: 0 AC
- PROPOSED PRIVATE STREET AREA: 0 AC
- TOTAL NUMBER OF EXISTING LOTS: 1
- TOTAL NUMBER OF PROPOSED LOTS: 1
- TOTAL NUMBER OF PROPOSED PROPOSED UNITS: 18
- PROPOSED PARKING:
 - 1 ATTACHED GARAGE SPACE PER UNIT=18
 - UNATTACHED STANDARD PARKING SPACES (18'x10')=23
 - VAN ACCESSIBLE HANDICAPPED PARKING SPACES=2
 - TOTAL PARKING SPACES PROPOSED=43
 - PARKING SPACES PER UNIT=2.39
- ASSESSOR'S PARCEL NUMBER: 165-493-47
- SITE ADDRESS: 3710 VISTA WAY
OCEANSIDE, CA 92056
- PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.
- STATUS OF LEGAL ACCESS: VISTA WAY AN EXISTING & FULLY IMPROVED PUBLIC STREET
- BENCH MARK: DESCRIPTION: CL MONUMENT 3.5" BRASS DISC
STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS
RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
- SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
- TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
- THE BASIS OF BEARINGS FOR THIS SUBDIVISION IS THE SOUTH LINE OF LOT 707 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690 I.E. NORTH 69°04'36" EAST.
- MAXIMUM SLOPE GRADIENT: 2:1
- ONSITE GRADING FOR THIS PROJECT: (8% SHRINKAGE FOR CUT)
CUT= 3,000 C.Y. FILL= 4,000 C.Y. IMPORT= 1,000 C.Y.
NOTE: ALL QUANTITIES ARE BASED ON FINISH GRADE. NO ALLOWANCE MADE FOR SHRINKAGE OR BULKING OF MATERIAL.
- GRADED AREA: 1.63 AC=82% OF SITE
- FEMA FLOOD DESIGNATION: THIS SITE IS NOT WITH A 100-YEAR FLOODWAY OR FLOODPLAIN PER FEMA MAP 06073C0766G

DMA LEGEND:

DMA AREA -----
WATERSHED NAME -----
WATERSHED DESIGNATION -----
WATERSHED AREA -----
HYDROLOGIC SOIL GROUP "D"
DEPTH TO GROUNDWATER > 12



VICINITY MAP
NOT TO SCALE

ENGINEER OF WORK

BARTOLOME J. PASTOR, RCE 38606
DATED: MAY 24, 2022

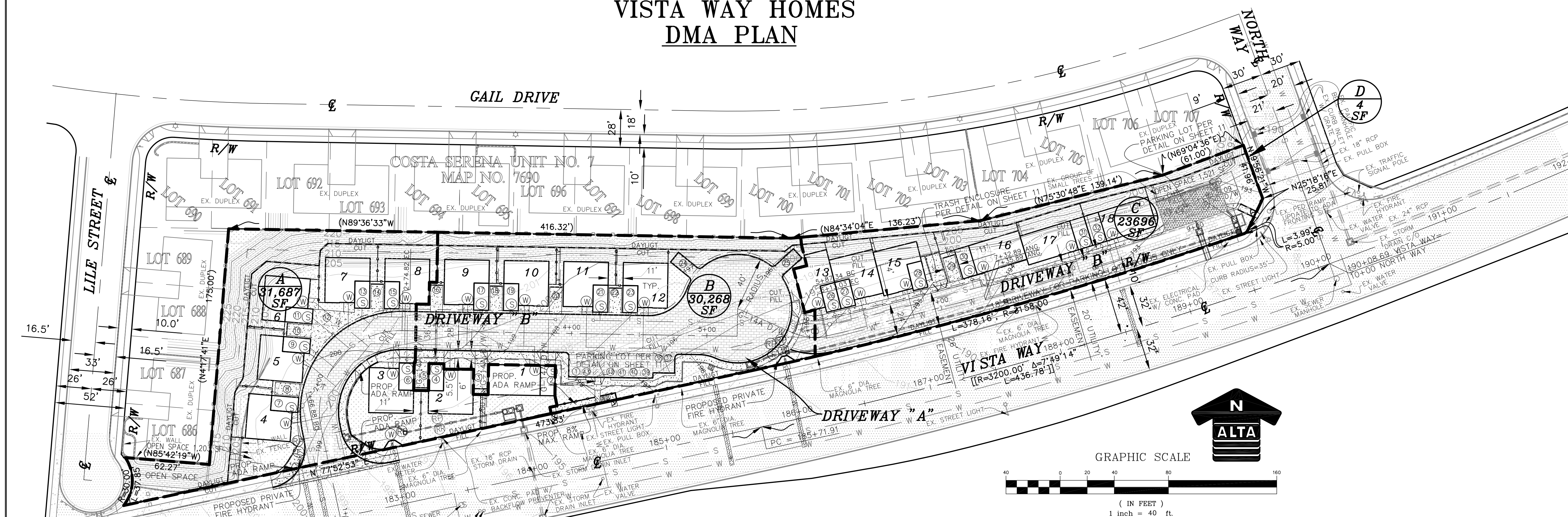


T21-00002
D21-00005
DB21-00003

ALTA CONSULTANTS
PLANNING ENGINEERING SURVEYING
1283 E. Main St., Ste. 105, Escondido, CA 92025 (619) 749-8818 Fax (619) 749-8818
JOB NO. 499-01, DATE MAY 24, 2022

Date: 5/24/2022

SHEET 1 OF 1



BMP-2 SEE SWQMP FORMS 1-6
PERVIOUS PAVERS (NOT A STRUCTURAL BMP) THROUGHOUT DMA A2, B1 & C1 USED AS FILTERING FOR DRAINAGE CONVEYED TO BIO-FILTRATION BMP (MODULAR WETLAND)

BMP-1 SEE SWQMP FORMS 1-6
LANDSCAPING (NOT A STRUCTURAL BMP) THROUGHOUT DMA A, B & C USED AS FILTERING FOR DRAINAGE CONVEYED TO BIO-FILTRATION BMP (MODULAR WETLAND)

BMP-3 SEE SWQMP FORMS 1-6
GRAVEL FOR WATER STORAGE UNDER PERVIOUS PAVERS, PROVIDES FLOW CONTROL FOR HYDRO-MODIFICATION & 100 YEAR STORM DETENTION PRIOR TO BEING CONVEYED TO BIO-FILTRATION (MODULAR WETLAND)

BMP-4 SEE SWQMP FORMS 1-6
MODULAR WETLAND (BIO-FILTRATION) POLLUTION CONTROL BY BIO-CLEAN SEE SHEET NO. 9 FOR DETAILS

LEGEND:

BOUNDARY-----	---
CENTERLINE-----	---
PROPOSED LOT LINE-----	---
RIGHT-OF-WAY-----	---
EXISTING LOT LINE-----	---
SETBACK LINE-----	---
EXISTING CURB & GUTTER-----	---
EXISTING WATER-----	---
EXISTING SEWER-----	---
EXISTING FENCE-----	---
EXISTING RETAINING WALL-----	---
EXISTING CONCRETE-----	---
EXISTING AC PAVING-----	---
EXISTING CONTOUR LINE-----	---
EXISTING ELEVATION-----	---
EXISTING FIRE HYDRANTS-----	---
EXISTING WATER SERVICE W/ EX. BACKFLOW PREVENTER TO BE USED FOR IRRIGATION-----	---
EXISTING STREET SIGN-----	---
PROPOSED WATER SERVICE W/ BACKFLOW PREVENTER-----	---
PROPOSED SEWER LATERAL SERVICE-----	---
SEWER MH-----	---
PARKING SPACE NUMBER-----	---
PROPOSED TYPE G PER G-2 CURB-----	---
PROPOSED FENCE-----	---
SEE LANDSCAPE PLANS FOR DETAILS-----	---
PROPOSED GATE FOR EMERGENCY ACCESS-----	---
SEE LANDSCAPE PLANS FOR DETAILS-----	---

PROPOSED LANDSCAPING-----	---
PROPOSED CONCRETE-----	---
PROPOSED AC PAVING-----	---
PROPOSED PAVEMENT-----	---
PER DETAIL ON SHEET NO. 6-----	---
PROPOSED BUILDING-----	---
TRENCH RESURFACING-----	---
PROPOSED WATER STORAGE-----	---
SEE SWQMP FOR DETAILS-----	---
PROPOSED RETAINING WALL-----	---
2:1 SLOPE-----	---
DAYLIGHT LINE-----	---
DIRECTION OF FLOW-----	---
PROPOSED STORM DRAIN-----	---
CURB OUTLET PER D-25-----	---
PROPRIETARY TREATMENT UNIT-----	---
PER DETAIL ON SHEET NO. 9-----	---
MODIFIED TYPE D CLEANOUT-----	---
W/SUMP PUMP-----	---

POLLUTANT	POTENTIAL SOURCE	SOURCE CONTROLS
SEDIMENT	DURING GRADING OPERATIONS	CONST. BMP'S PERMANENT LANDSCAPING AND HARDSCAPE
NUTRIENTS	FERTILIZER	TO BE APPLIED ONLY AS NEEDED
TRASH & DEBRIS	GENERAL TRASH	REMOVE & DISPOSE IN A PROPER MANNER
OXYGEN DEMANDING SUBSTANCES	GENERAL	TO REMOVE & DISPOSE IN A PROPER MANNER
BACTERIA & VIRUSES	GENERAL	ALL RUNOFF IS DIRECTED TO BIO-FILTRATION UNITS
PESTICIDES	LANDSCAPING	ALL RUNOFF IS DIRECTED TO BIO-FILTRATION UNITS

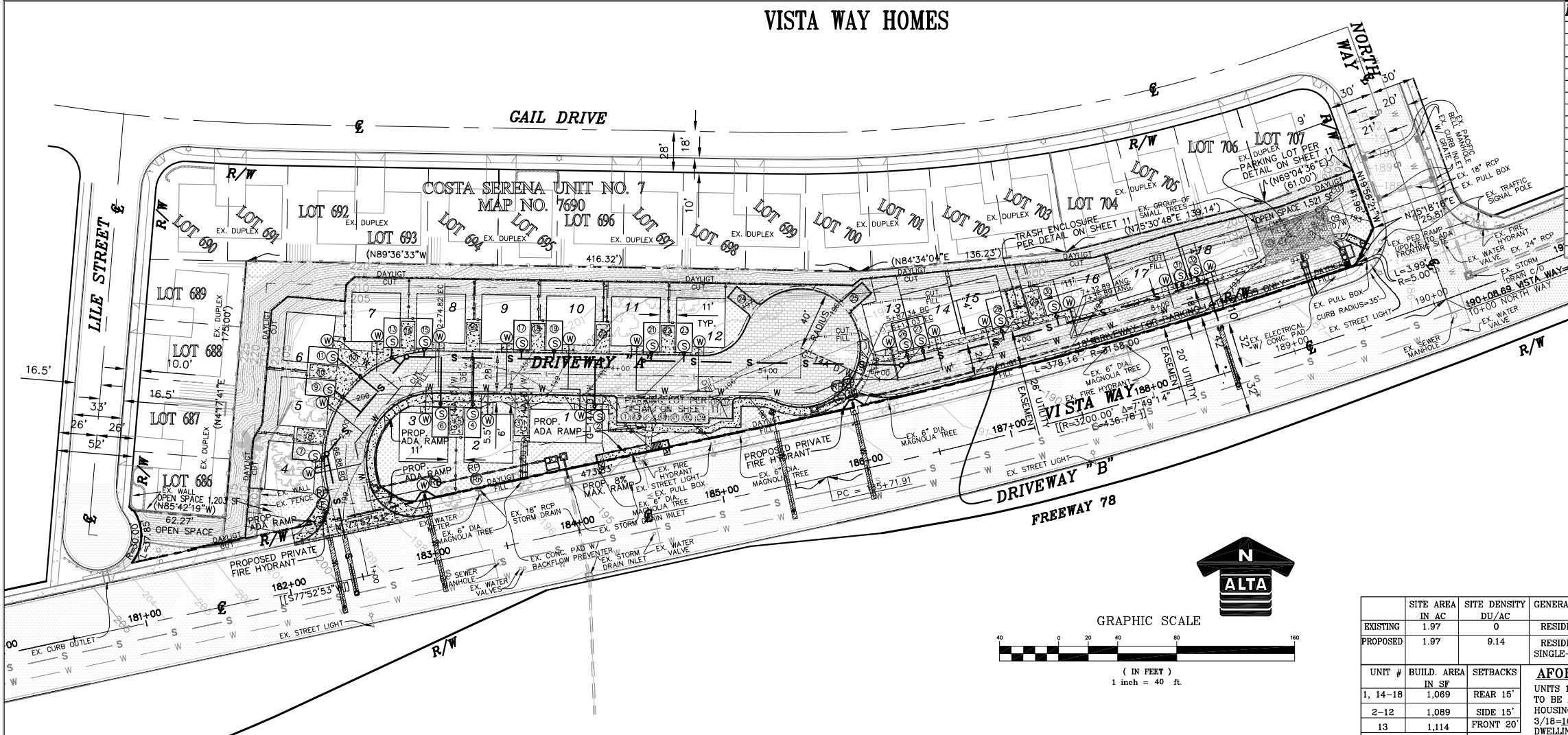
REQUIRED NOTES FOR THIS EXHIBIT:

- THE UNDERLYING HYDROLOGIC SOIL GROUP IS "D".
- THE GROUNDWATER IN THIS AREA IS DEEP ENOUGH NOT TO IMPACT SITE DEVELOPMENT.
- THERE ARE NO NATURAL HYDROLOGIC FEATURES ON THIS SITE.
- THERE ARE NO CRITICAL COURSE SEDIMENT YIELD AREAS ON THE PROJECT.
- THE EXISTING TOPOGRAPHY AND PROPOSED IMPERVIOUS AREAS ARE INDICATED ON THE EXHIBIT.
- THE EXISTING AND PROPOSED SITE DRAINAGE NETWORK AND CONNECTIONS TO OFFSITE ARE SHOWN.
- THERE IS NO PROPOSED DEMOLITION ON THIS SITE. OTHER THAN CLEARING & GRUBBING, REMOVAL OF EXISTING WALLS, AND SAWCUT AND REMOVAL OF EXISTING PUBLIC IMPROVEMENTS AS NEEDED TO PROVIDE ACCESS AND UTILITIES FOR THIS SITE.
- THE PROPOSED GRADING IS SHOWN ON THIS EXHIBIT, INCLUDING PROPOSED RETAINING WALLS.
- THE PROPOSED IMPERVIOUS FEATURES ON THIS PROJECT ARE SHOWN ON THIS EXHIBIT.
- THE DESIGN FEATURES AND SURFACE TREATMENTS USED TO MAINTAIN IMPERVIOUSNESS ARE SHOWN ON THIS EXHIBIT.
- DRAINAGE MANAGEMENT AREAS ARE SHOWN AND IDENTIFIED. MINIMALIST AREAS ARE INDICATED.
- THERE ARE NO POLLUTANT SOURCE AREAS REQUIRING SOURCE CONTROLS ON THIS PROJECT.
- THE STRUCTURAL (PERMANENT) BMP'S ARE SHOWN AND IDENTIFIED ON THIS EXHIBIT.

AREA A2-A5 LOW IMPACT DEVELOPMENT DESIGN DRAINS TO MODULAR WETLAND								AREA C1 LOW IMPACT DEVELOPMENT DESIGN DRAINS TO MODULAR WETLAND								AREA C2 LOW IMPACT DEVELOPMENT DESIGN DRAINS TO EXISTING X-GUTTER							
DMA NAME	DMA AREA SF	POST PROJECT SURFACE TYPE	% OF A2	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	% OF A2	SOIL TYPE "D"	DMA NAME	DMA AREA SF	POST PROJECT SURFACE TYPE	% OF C1	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	% OF C1	SOIL TYPE "D"	DMA NAME	DMA AREA SF	POST PROJECT SURFACE TYPE	% OF B2 B3 & B4	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	% OF B2 B3 & B4	SOIL TYPE "D"
ASPHALT	0	ASPHALT	0%	1.0	0	0%	C=0.57	ASPHALT	0	ASPHALT	0%	1.0	0	0%	C=0.57	ASPHALT	0	ASPHALT	0%	1.0	0	0%	C=0.61
BUILDINGS	9,053	BUILDINGS	30.5%	1.0	9,053	30.5%		BUILDINGS	6,620	BUILDINGS	28%	1.0	6,620	28%		BUILDINGS	0	ROOFS	0%	1.0	0	0%	
CONCRETE	2,599	CONCRETE	9.0%	1.0	2,599	9%		CONCRETE	2,390	CONCRETE	10%	1.0	2,390	10%		CONCRETE	58	CONCRETE	48%	1.0	58	48%	
LANDSCAPING	12,858	LANDSCAPING	43.5%	0.1	1,286	4.5%		LANDSCAPING	5,228	LANDSCAPING	22%	0.1	523	2%		LANDSCAPING	63	LANDSCAPING	52%	0.1	6	8.5%	
WALLS	349	WALLS	1%	1.0	349	1%		WALLS	537	WALLS	2.5%	1.0	537	2.5%		WALLS	0	WALLS	0%	1.0	0	0%	
PAVERS	4,776	PAVERS	16%	0.2	955	3.0%		PAVERS	8,800	PAVERS	37.5%	0.2	1,760	7.5%		PAVERS	0	PAVERS	0%	0.2	0	0%	
TREATMENT	35	PROPRIETARY	0%	0.1	4	0%	C=0.50	TREATMENT	35	PROPRIETARY	0%	0.1	4	0%	C=0.473	TREATMENT	0	PROPRIETARY	0%	0.1	0	0%	C=0.61
TOTAL DMA AREA	29,635	34.5% OF TOTAL AREA	100%	SEE SWQMP FOR SITE SPECIFIC POLLUTION CONTROL & FLOW CONTROL	SIZING FACTOR	MINIMUM AREA		TOTAL DMA AREA	23,575	27.5% OF TOTAL AREA	100%	SEE SWQMP FOR SITE SPECIFIC POLLUTION CONTROL & FLOW CONTROL	SIZING FACTOR	MINIMUM AREA		TOTAL DMA AREA	121	0% OF TOTAL AREA	100%	SEE SWQMP FOR SITE SPECIFIC POLLUTION CONTROL & FLOW CONTROL	SIZING FACTOR	MINIMUM AREA	
TOTAL DMA AREA				14,242	0.04	569		TOTAL DMA AREA				11,830	0.04	473		TOTAL DMA AREA				64	0.04	3	
AREA B2 LOW IMPACT DEVELOPMENT DESIGN DRAINS TO MODULAR WETLAND								AREA A1 LOW IMPACT DEVELOPMENT DESIGN DRAINS TO EXISTING INLET "A"								AREA D1 LOW IMPACT DEVELOPMENT DESIGN DRAINS TO EXISTING INLET "B"							
DMA NAME	DMA AREA SF	POST PROJECT SURFACE TYPE	% OF B1	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	% OF B1	SOIL TYPE "D"	DMA NAME	DMA AREA SF	POST PROJECT SURFACE TYPE	% OF A1 & A3	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	% OF A1 & A3	SOIL TYPE "D"	DMA NAME	DMA AREA SF	POST PROJECT SURFACE TYPE	% OF D1	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	% OF D1	SOIL TYPE "D"
ASPHALT	0	ASPHALT	0%	1.0	0	0%	C=0.50	ASPHALT	0	ASPHALT	0%	1.0	0	0%	C=0.43	ASPHALT	0	ASPHALT	0%	1.0	0	0%	C=0.35
BUILDINGS	4,544	BUILDINGS	15%	1.0	4,544	15%		BUILDINGS	0	BUILDINGS	0%	1.0	0	0%		BUILDINGS	0	ROOFS	0%	1.0	0	0%	
CONCRETE	3,285	CONCRETE	11%	1.0	3,285	11%		CONCRETE	265	CONCRETE	13%	1.0	265	13%		CONCRETE	0	CONCRETE	0%	1.0	0	0%	
LANDSCAPING	7,735	LANDSCAPING	26%	0.1	774	2.5%		LANDSCAPING	1,625	LANDSCAPING	79%	0.1	163	8%		LANDSCAPING	4	LANDSCAPING	100%	0.1	0.4	10%	
WALLS	314	WALLS	1.0%	1.0	314	1.0%		WALLS	25	WALLS	1%	1.0	25	1%		WALLS	0	WALLS	0%	1.0	0	0%	
PAVERS	14,102	PAVERS	47%	0.2	2,820	1.0%		PAVERS	137	PAVERS	0%	0.2	0	0%		PAVERS	0	PAVERS	0%	0.2	0	0%	
TREATMENT	0	PROPRIETARY	0%	0.1	0	0%	C=0.43	TREATMENT	0	PROPRIETARY	0%	0.1	0	0%	C=0.43	TREATMENT	0	PROPRIETARY	0%	0.1	0	0%	C=0.35
TOTAL DMA AREA	29,980	35% OF TOTAL AREA	100%	SEE SWQMP FOR SITE SPECIFIC POLLUTION CONTROL & FLOW CONTROL	SIZING FACTOR	MINIMUM AREA		TOTAL DMA AREA	2,052	2.5% OF TOTAL AREA	100%	SEE SWQMP FOR SITE SPECIFIC POLLUTION CONTROL & FLOW CONTROL	SIZING FACTOR	MINIMUM AREA		TOTAL DMA AREA	4	0% OF TOTAL AREA	100%	SEE SWQMP FOR SITE SPECIFIC POLLUTION CONTROL & FLOW CONTROL	SIZING FACTOR	MINIMUM AREA	
TOTAL DMA AREA				11,763	0.04	469		TOTAL DMA AREA				480	0.04	19		TOTAL DMA AREA				0.4	0.04	0.02	

ATTACHMENT 1
TM Plans

VISTA WAY HOMES



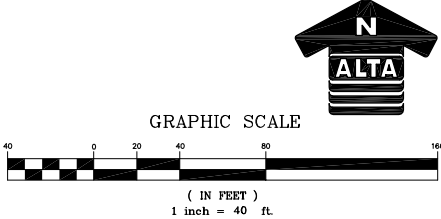
PARKING SCHEDULE		
UNIT NO.	GARAGE	DETACHED
1	2	1
2	4	3
3	6	5
4	7	8
5	9	10
6	11	12
7	13	14
8	15	16
9	17	18
10	19	20
11	20	21
12	22	23
13	26	25
14	27	24
15	28	35
16	30	29
17	31	34
18	32	33
UNASSIGNED PARKING SPACES		36-43

General Notes

- THIS PROJECT IS A COMMON INTEREST DEVELOPMENT FOR SENIOR HOUSING. CCR'S WILL BE PREPARED FOR THIS PROJECT TO DEFINE AND MAINTAIN COMMON USE AREAS SUCH AS DRIVEWAYS, PARKING, LANDSCAPING & ETC. AFFORDABLE HOUSING (D21-00005) IS INCLUDED AS A PART OF THIS PROJECT ALONG WITH BONUS DENSITY (DB21-00003)
- EXISTING GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED PUBLIC STREET DEDICATION: 0 AC
 - PROPOSED PRIVATE STREET AREA: 0 AC
 - TOTAL NUMBER OF EXISTING LOTS: 1
 - TOTAL NUMBER OF PROPOSED LOTS: 1
 - TOTAL NUMBER OF PROPOSED PROPOSED UNITS: 18
 - PROPOSED PARKING:
1 ATTACHED GARAGE SPACE PER UNIT=18
UNATTACHED STANDARD PARKING SPACES (16'x8')=19
UNATTACHED COMPACT PARKING SPACES (16'x8')=2
VAN ACCESSIBLE HANDICAPPED PARKING SPACES=2
TOTAL PARKING SPACES PROPOSED=43
PARKING SPACES PER UNIT=2.39
 - ASSESSOR'S PARCEL NUMBER: 165-493-47
 - SITE ADDRESS: 3710 VISTA WAY
OCEANSIDE, CA 92056
 - PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.
 - EXISTING GENERAL PLAN LAND USE: RESIDENTIAL
 - PROPOSED GENERAL PLAN LAND USE: RESIDENTIAL-SENIOR HOUSING
 - EXISTING ZONING: RM-A
 - PROPOSED ZONING: RM-A
 - PROPOSED DENSITY: 9.14 DU/AC
 - STATUS OF LEGAL ACCESS: VISTA WAY AN EXISTING & FULLY IMPROVED PUBLIC STREET
 - BENCH MARK: DESCRIPTION: CL MONUMENT 3.5" BRASS DISC
STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS
RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
CITY OF OCEANSIDE #1024
 - SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
 - TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
 - THE BASIS OF BEARINGS FOR THIS SUBDIVISION IS THE SOUTH LINE OF LOT 707 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP HEREOF NO. 7690 I.E. NORTH 69°04'36" EAST.
 - MAXIMUM SLOPE GRADIENT: 2:1
 - AREA/PERCENT OF SITE IN DRIVEWAYS & PARKING: 22,588 SF OR 26%
 - MINIMUM REQUIRED OPEN SPACE IS 300 SF PER UNIT=18x300=5,400 SF
COMMON OPEN SPACE IS LOCATED IN TWO AREAS OF 1,521 SF+1,203 SF=2,724 SF
EACH UNIT WILL HAVE A MINIMUM OF 150 SF OF PRIVATE OPEN SPACE
 - AREA/PERCENT OF SITE IN LANDSCAPING: 28,588 SF OR 33%
AREA/PERCENT OF SITE IN PAVERS: 27,815 SF OR 32%
 - ONSITE GRADING FOR THIS PROJECT: (8% SHRINKAGE FOR CUT)
CUT= 3,000 C.Y. FILL= 4,000 C.Y. IMPORT= 1,000 C.Y.
NOTE: ALL QUANTITIES ARE BASED ON FINISH GRADE. NO ALLOWANCE MADE FOR SHRINKAGE OR BULKING OF MATERIAL.
 - GRADED AREA: 1.63 AC=82% OF SITE
 - FOR PROPOSED FENCING & SIGNAGE SEE LANDSCAPE PLANS FOR THIS PROJECT.
 - FEMA FLOOD DESIGNATION: THIS SITE IS NOT WITH A 100-YEAR FLOODWAY OR FLOODPLAIN PER FEMA MAP 08073C0768G DATED: 2/16/12
 - SOLAR ACCESS: ALL LOTS WITHIN THIS SUBDIVISION HAVE A MINIMUM OF 100 SQUARE FEET OF SOLAR ACCESS FOR EACH FUTURE DWELLING ALLOWED BY THIS SUBDIVISION.
 - RENEWABLE ENERGY: SECTION 3047 OF THE ZONING ORDINANCE WILL BE A CONDITIONED FOR THIS PROJECT

LEGEND:

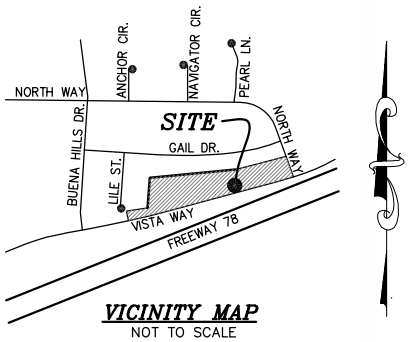
BOUNDARY	-----	PROPOSED LANDSCAPING	-----
CENTERLINE	-----	PROPOSED CONCRETE	-----
RIGHT-OF-WAY	-----	PROPOSED AC PAVING	-----
EXISTING LOT LINE	-----	PROPOSED PAVER	-----
SETBACK LINE	-----	PER DETAIL ON SHEET NO. 10	
EXISTING CURB & GUTTER	-----	TRENCH RESURFACING M_3A	-----
EXISTING WATER	-----	PROPOSED WATER STORAGE	-----
EXISTING SEWER	-----	SEE SWOMP FOR DETAILS	
EXISTING FENCE	-----	PROPOSED RETAINING WALL	-----
EXISTING RETAINING WALL	-----	2:1 SLOPE	-----
EXISTING CONCRETE	-----	DAYLIGHT LINE	-----
EXISTING AC PAVING	-----	DIRECTION OF FLOW	-----
EXISTING CONTOUR LINE	-----	(PVT.) PROPOSED STORM DRAIN	-----
EXISTING ELEVATION	-----	CURB OUTLET PER D-25A	-----
EXISTING FIRE HYDRANTS	-----	(PVT.) PROPRIETARY TREATMENT UNIT	-----
EXISTING STREET SIGN	-----	PER DETAIL ON SHEET NO. 10	
EXISTING WATER SERVICE W/ EX. BACKFLOW PREVENTER TO BE USED FOR IRRIGATION	-----	(PVT.) MODIFIED TYPE A-4 CLEANOUT	-----
PROPOSED 2" WATER SERVICE W/ BACKFLOW PREVENTER	-----	W/ SUMP PUMP	
PROPOSED 8" FIRE SERVICE FOR PVT. FIRE HYDRANT	-----	(PVT.) 3636 OR 1818 BROOKS BOX	-----
PROPOSED 1" WATER SERVICE W/ PRIVATE WATER METER TO BE MAINTAINED BY HOA	-----	W/ TRAFFIC GRATE PER DETAILS ON SHEET 11	
PROPOSED PRIVATE 4" SEWER LATERAL	-----	(PVT.) 2424 BROOKS BOX W/ PARKWAY GRATE PER DETAILS ON SHEET 11	
8" PRIVATE SEWER MAIN W/ SEWER MH	-----	AREA DRAIN PER DETAIL ON SHEET 10	-----
PARKING SPACE NUMBER	-----		
PROPOSED G-2 CURB & GUTTER	-----		
PROPOSED G-1 GUTTER	-----		
PROPOSED ROLLED CURB	-----		
PROPOSED FENCE	-----		
SEE LANDSCAPE PLANS FOR DETAILS			



	SITE AREA IN AC	SITE DENSITY DU/AC	GENERAL PLAN	ZONING	LANDSCAPING
EXISTING	1.97	0	RESIDENTIAL	RM-A	100%
PROPOSED	1.97	9.14	RESIDENTIAL SINGLE-FAMILY	RM-A	40%

UNIT #	BUILD. AREA IN SF	SETBACKS
1, 14-18	1,069	REAR 15'
2-12	1,089	SIDE 15'
13	1,114	FRONT 20'
18 UNITS TOTAL		

AFFORDABLE HOUSING
UNITS 16, 17 & 18 ARE PROPOSED TO BE AFFORDABLE. THE AFFORDABLE HOUSING UNITS FOR THIS SITE. 3/18-18.7 OF THE PROPOSED DWELLINGS FOR THIS SITE WILL BE AFFORDABLE HOUSING.



EXISTING EASEMENTS NOTES

SEE SHEET NO. 2 FOR LOCATIONS
THE FOLLOWING EASEMENTS ARE SHOWN ON THE TITLE REPORT PREPARED BY STEWART TITLE COMPANY, ORDER NO. 19000480110 AND DATED FEBRUARY 01, 2019 EASEMENTS SHOWN HEREON USE THE SAME ITEMS NUMBERS AS REFERENCED IN SAID REPORT.

SHEET INDEX

TENTATIVE PARCEL MAP	SHEET 1
SITE TOPO & EX. EASEMENTS	SHEET 2
FIRE ACCESS PLAN, ADA ACCES. & TYPICAL STREET SECTIONS	SHEET 3
CONCEPT WATER & SEWER PLANS	SHEET 4-5
CONCEPT GRADING PLAN	SHEET 6-7
CONCEPT SECTIONS AND DRIVEWAY "B" PRIVATE STREET "A" PROFILE & SITE SECTIONS	SHEET 8
CONCEPT STORM DRAIN PROFILES	SHEET 9
CONCEPT STORM WATER DETAILS	SHEET 10
MISC. DETAILS	SHEET 11
EXHIBITS FOR PROPOSED BUILDING SETBACKS	SHEET 12-13
PROPOSED DMA PLAN	SHEET 14
WAIVER EXHIBIT	SHEET 15

ENGINEER OF WORK

BARTOLOME J. PASTOR, RCE 38606
DATED: MAY 2022

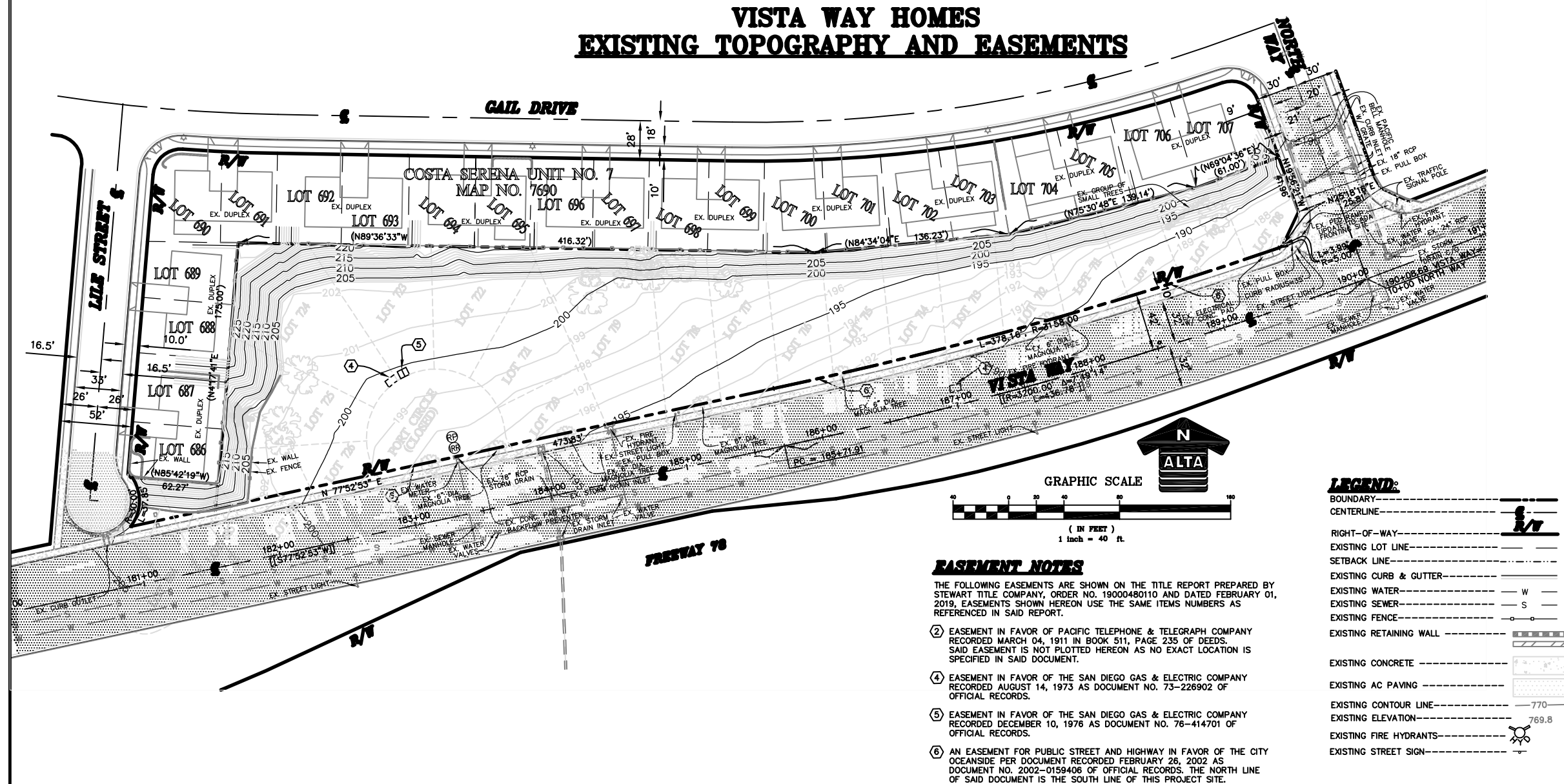
OWNER

OWNER: NEPTUNE INVESTMENTS, LLC
ADDRESS: POB BOX 9890
RANCHO SANTA FE, CA 92067
TELEPHONE: (858) 401-9090
E-MAIL: rezashera@gmail.com

BY: REZA SHERA

ALTA CONSULTANTS
PLANNING ENGINEERING SURVEYING
1283 E. Main St., Ste. 100, El Cajon, CA 92021 (619) 749-8816 Fax (619) 749-8816
JOB NO. 499-01, DATE MAY 24, 2022

VISTA WAY HOMES EXISTING TOPOGRAPHY AND EASEMENTS



EASEMENT NOTES

THE FOLLOWING EASEMENTS ARE SHOWN ON THE TITLE REPORT PREPARED BY STEWART TITLE COMPANY, ORDER NO. 19000480110 AND DATED FEBRUARY 01, 2019, EASEMENTS SHOWN HEREON USE THE SAME ITEMS NUMBERS AS REFERENCED IN SAID REPORT.

- ② EASEMENT IN FAVOR OF PACIFIC TELEPHONE & TELEGRAPH COMPANY RECORDED MARCH 04, 1911 IN BOOK 511, PAGE 235 OF DEEDS. SAID EASEMENT IS NOT PLOTTED HEREON AS NO EXACT LOCATION IS SPECIFIED IN SAID DOCUMENT.
- ④ EASEMENT IN FAVOR OF THE SAN DIEGO GAS & ELECTRIC COMPANY RECORDED AUGUST 14, 1973 AS DOCUMENT NO. 73-226902 OF OFFICIAL RECORDS.
- ⑤ EASEMENT IN FAVOR OF THE SAN DIEGO GAS & ELECTRIC COMPANY RECORDED DECEMBER 10, 1976 AS DOCUMENT NO. 76-414701 OF OFFICIAL RECORDS.
- ⑥ AN EASEMENT FOR PUBLIC STREET AND HIGHWAY IN FAVOR OF THE CITY OCEANSIDE PER DOCUMENT RECORDED FEBRUARY 26, 2002 AS DOCUMENT NO. 2002-0159406 OF OFFICIAL RECORDS. THE NORTH LINE OF SAID DOCUMENT IS THE SOUTH LINE OF THIS PROJECT SITE.

LEGEND

BOUNDARY	---
CENTERLINE	---
RIGHT-OF-WAY	---
EXISTING LOT LINE	---
SETBACK LINE	---
EXISTING CURB & GUTTER	---
EXISTING WATER	W
EXISTING SEWER	S
EXISTING FENCE	---
EXISTING RETAINING WALL	---
EXISTING CONCRETE	---
EXISTING AC PAVING	---
EXISTING CONTOUR LINE	---
EXISTING ELEVATION	---
EXISTING FIRE HYDRANTS	---
EXISTING STREET SIGN	---

General Notes

THIS PROJECT IS A COMMON INTEREST DEVELOPMENT FOR SENIOR HOUSING. CCR'S WILL BE PREPARED FOR THIS PROJECT TO DEFINE AND MAINTAIN COMMON USE AREAS SUCH AS DRIVEWAYS, PARKING, LANDSCAPING & ETC. AFFORDABLE HOUSING (D21-00005) IS INCLUDED AS A PART OF THIS PROJECT ALONG WITH BONUS DENSITY (DB21-00003)

1. EXISTING GROSS SUBDIVISION AREA: 1.97 AC
2. PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
9. ASSESSOR'S PARCEL NUMBER: 185-493-47
10. SITE ADDRESS: 3710 VISTA WAY OCEANSIDE, CA 92056
11. PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.
18. BENCH MARK: DESCRIPTION: CL MONUMENT 3.5" BRASS DISC STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
CITY OF OCEANSIDE #1020
19. SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
20. TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
21. THE BASIS OF BEARINGS FOR THIS SUBDIVISION IS THE SOUTH LINE OF LOT 707 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP HEREOF NO. 7690 I.E. NORTH 69°04'36" EAST.
28. FEMA FLOOD DESIGNATION: THIS SITE IS NOT WITH A 100-YEAR FLOODWAY OR FLOODPLAIN PER FEMA MAP 06073C0768G DATED: 5/16/12

ENGINEER OF WORK

Bartolome J. Pastor
BARTOLOME J. PASTOR, RCE 38806
DATED: MAY 24, 2022



T21-00002
D21-00005
DB21-00003

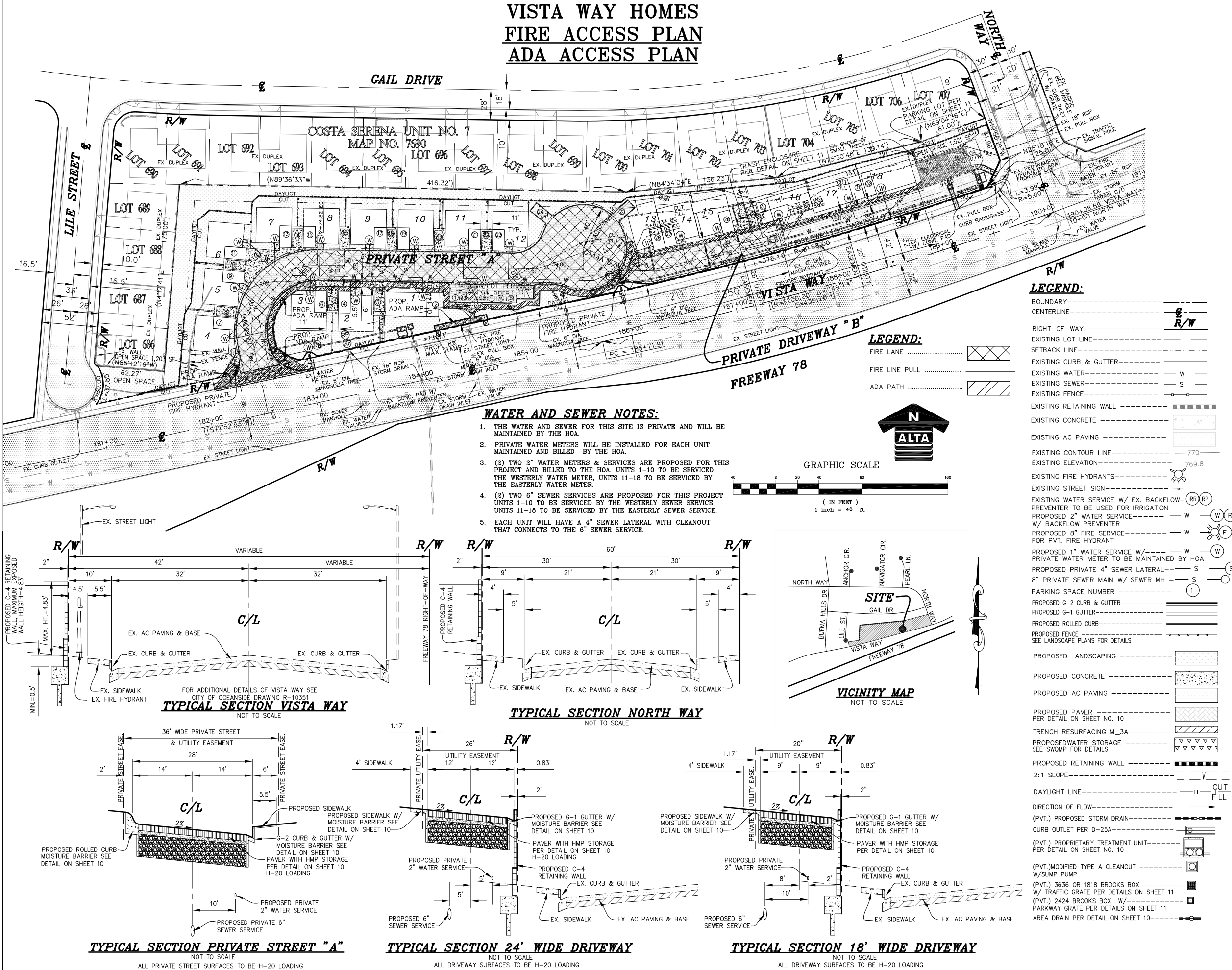
ALTA CONSULTANTS

PLANNING ENGINEERING SURVEYING
1880 E. Main St., Ste. 100, E. Oceanside, CA 92056 (619) 740-0010 Fax (619) 740-0016
JOB NO. 499-01, DATE MAY 24, 2022

Date: 5/24/2022

SHEET 2 OF 15

VISTA WAY HOMES
FIRE ACCESS PLAN
ADA ACCESS PLAN



- General Notes**
- THIS PROJECT IS A COMMON INTEREST DEVELOPMENT FOR SENIOR HOUSING. CCR'S WILL BE PREPARED FOR THIS PROJECT TO DEFINE AND MAINTAIN COMMON USE AREAS SUCH AS DRIVEWAYS, PARKING, LANDSCAPING & ETC. AFFORDABLE HOUSING (D21-00005) IS INCLUDED AS A PART OF THIS PROJECT ALONG WITH BONUS DENSITY (DB21-00003)
- EXISTING GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
 - TOTAL NUMBER OF EXISTING LOTS: 1
 - TOTAL NUMBER OF PROPOSED LOTS: 1
 - TOTAL NUMBER OF PROPOSED PROPOSED UNITS: 18
 - PROPOSED PARKING:
1 ATTACHED GARAGE SPACE PER UNIT=18
UNATTACHED STANDARD PARKING SPACES (18'x9')=21
UNATTACHED COMPACT PARKING SPACES (14'x8')=2
VAN ACCESSIBLE HANDICAPPED PARKING SPACES=2
TOTAL PARKING SPACES PROPOSED=43
PARKING SPACES PER UNIT=2.39
 - ASSESSOR'S PARCEL NUMBER: 165-493-47
 - SITE ADDRESS: 3710 VISTA WAY
OCEANSIDE, CA 92056
 - PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.
 - EXISTING GENERAL PLAN LAND USE: RESIDENTIAL
 - PROPOSED GENERAL PLAN LAND USE: RESIDENTIAL-SENIOR HOUSING
 - EXISTING ZONING: RM-A
 - PROPOSED ZONING: RM-A
 - PROPOSED DENSITY: 9.14 DU/AC
 - STATUS OF LEGAL ACCESS: VISTA WAY AN EXISTING & FULLY IMPROVED PUBLIC STREET
 - FOR PROPOSED FENCING SEE LANDSCAPE PLANS FOR THIS PROJECT.

- FIRE NOTES:**
- ALL HOMES ARE REQUIRED TO HAVE FIRE SPRINKLERS PER NFPA 13.
 - WATER METER SIZE TO BE DETERMINED BY FIRE SPRINKLER DEMAND.
 - FIRE ACCESS ROADWAYS SHALL BE A MINIMUM 28' WIDE WITH NO PARKING SIGNS POSTED ON EITHER SIDE OF THE STREET.
 - TURNING RADIUS SAHALE BE 30' INSIDE AND 50' OUTSIDE.
 - ADDRESSES SHALL BE 4" IN HEIGHT AND VISIBLE FROM STREET WITH CONTRASTING COLORS.
 - SMOKE AND CARBON MONOXIDE ALARMS REQUIRED PER 2019 CALIFORNIA FIRE CODE, CALIFORNIA BUILDING CODE AND CALIFORNIA RESIDENTIAL CODE.
 - KNOX KEY SWITCH AND OPTICOM REQUIRED FOR SITE ACCESS GATES.
 - HYDRANTS MUST BE WITH 400' OF WTERIOR WALLS OF THE STRUCTURE. HYDRANTS ARE PRIVATE ON A LOOPED PUBLIC WATER MAIN.
 - ALL DRIVEWAY SURFACES WILL BE DESIGNED FOR H-20 LOADING.
 - (2) PRIVATE FIRE HYDRANTS WITH PRIVATE FIRE SERVICE LATERALS ARE PROPOSED FOR THIS PROJECT.
 - FIRE MASTER PLAN IS REQUIRED AS PART OF FINAL DESIGN.
 - PRIOR TO DELIVERY OF COMBUSTIBLE MATERIALS OR START OF OF COMBUSTIBLE CONSTRUCTION, PAVED VEHICLE ACCESS ROADS CAPABLE OF SUPPORTING VEHICLE LOADING (75,000 LBS) MUST BE INSTALLED. IN ADDITION THE APPROVED, PERMANENT WATER SUPPLY (FIRE HYDRANTS MUST BE INSTALLED, TESTED AND PLACED IN SERVICE PRIOR TO DELIVERY OF COMBUSTIBLE MATERIALS OR START OF COMBUSTIBLE CONSTRUCTION.
 - PRE-CON MEETING WILL ALSO BE REQUIRED PRIOR TO COMBUSTIBLES BEING DROPPED ON SITE.
 - THE CITY OF OCEANSIDE IS IN THE PROCESS OF IMPLEMENTING A CITYWIDE CFD IT IS EXPECTED THAT THIS PROJECT WILL BE REQUIRED TO ANNEX INTO THE CFD AS A CONDITION OF APPROVAL.

ENGINEER OF WORK

Bartolome J. Pastor
BARTOLOME J. PASTOR, RCE 38606
DATED: MAY 2022

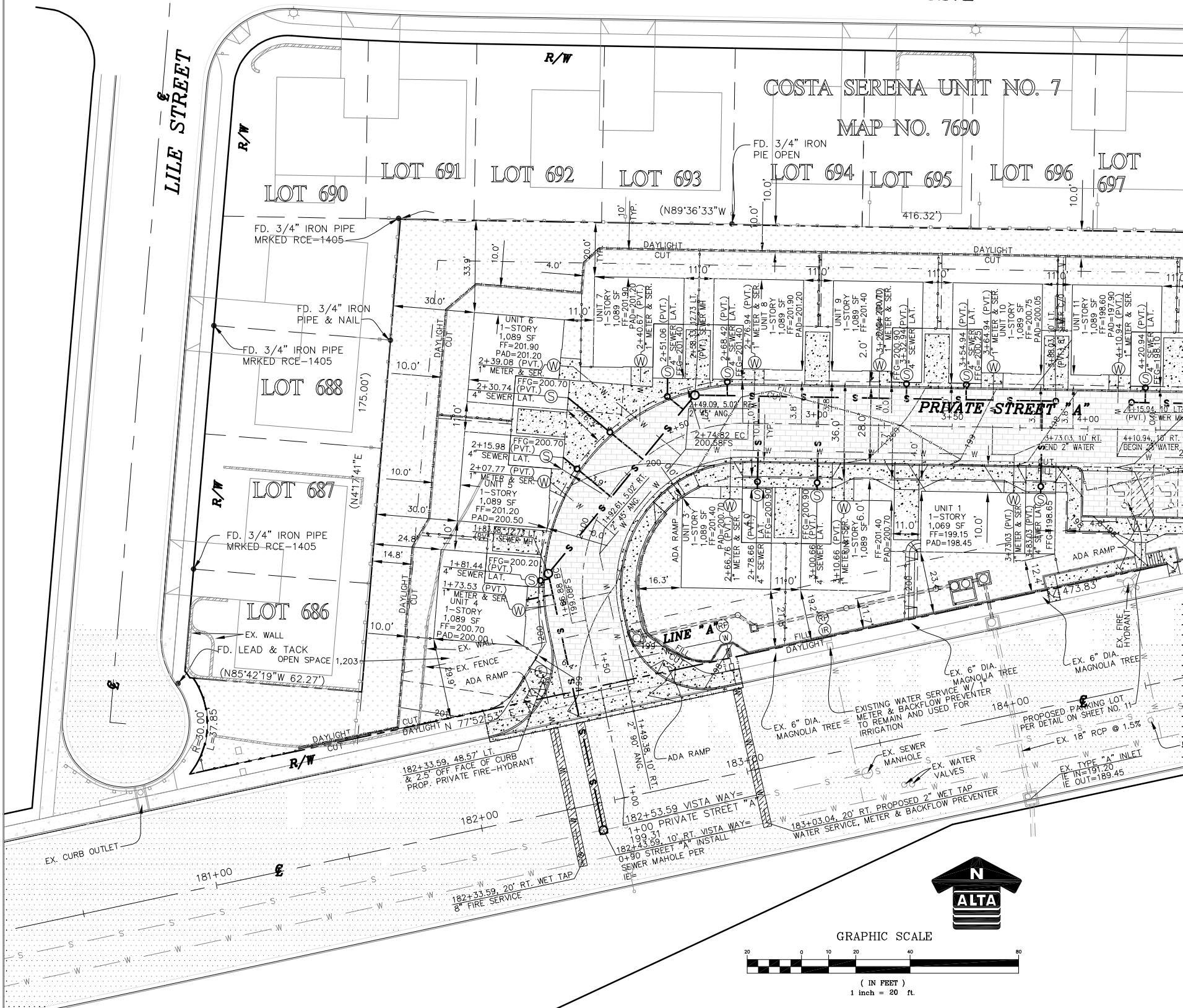
T21-00002
D21-00005
DB21-00003

VISTA WAY HOMES
CONCEPT SEWER & WATER PLAN

GAIL DRIVE

COSTA SERENA UNIT NO. 7

MAP NO. 7690

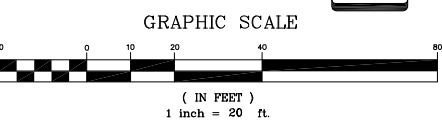


MATCH LINE SEE SHEET NO. 5

- WATER NOTES:**
- 1) CPC 2013, SECTION 603.5.11: NO RECLAIMED WATER IS AVAILABLE FOR THIS PROJECT. NO RECLAIMED WATER IS PROPOSED FOR THIS PROJECT.
 - 2) CPC 2013, SECTION 603.5.11: NO RECLAIMED WATER IS AVAILABLE FOR THIS PROJECT. THERE ARE NO CONNECTIONS TO NON-POTABLE WATER.
 - 3) CPC 2013, SECTION 601.2: IDENTIFICATION OF POTABLE AND NON-POTABLE WATER SYSTEM (NO NON-POTABLE WATER SYSTEM IN THIS PROJECT) EACH SYSTEM SHALL BE COLOR CODED AS FOLLOWS:
 - a) 601.2.1 **POTABLE WATER:** GREEN BACKGROUND WITH WHITE LETTERING
 1. **NON-POTABLE WATER:** YELLOW BACKGROUND WITH BLACK LETTERING WITH THE WORDS "CAUTION: NON-POTABLE WATER, DO NOT DRINK". "A UNIVERSAL POISON SYMBOL OF SKULL AND CROSSBONES SHALL BE PROVIDED" [HCD 1 & 2]
 - b) 601.2.2 **MINIMUM LENGTH OF COLOR FIELD AND SIZE OF LETTERS:** SEE TABLE
 1. **RECLAIMED WATER:** PURPLE IN COLOR (PANTONE #512) AND SHALL BE IMPRINTED IN NORMAL 1/2 INCH HIGH, BLACK, UPPER CASE LETTERS, WITH THE WORDS "CAUTION: RECLAIMED WATER, DO NOT DRINK". "A UNIVERSAL POISON SYMBOL OF SKULL AND CROSSBONES SHALL BE PROVIDED" [HCD 1 & 2]
 - 4) CPC 2013, SECTION 611.1: WATER TREATMENT UNITS, REVERSE OSMOSIS DRINKING WATER TREATMENT UNITS SHALL MEET THE REQUIREMENTS OF THE APPROPRIATE STANDARDS) REFERENCED IN TABLE 611.4. WASTE DISCHARGE FROM REVERSE OSMOSIS OR OTHER TYPES OF WATER TREATMENT UNITS SHALL ENTER THE DRAINAGE SYSTEM THROUGH AN AIRGAP.
 - 5) CPC 2013, SECTION 603.2: APPROVAL OF BACKFLOW DEVICES OR ASSEMBLIES, BEFORE ANY DEVICE OR ASSEMBLY IS INSTALLED FOR THE PREVENTION OF BACKFLOW, IT SHALL FIRST BE APPROVED BY THE AUTHORITY HAVING JURISDICTION. DEVICES OR ASSEMBLIES SHALL BE TESTED FOR CONFORMING RECOGNIZED STANDARDS OR OTHER STANDARDS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION THAT ARE CONSISTENT WITH THE INTENT OF THIS CODE.
 - a) TESTING OF BACKFLOW DEVICES OR ASSEMBLIES SHALL BE PERFORMED BY A CERTIFIED BACKFLOW ASSEMBLY CHECKER (CPC SECTION 603.2).
 - b) COPIES OF TESTING OF BACKFLOW DEVICES OR ASSEMBLIES SHALL BE PROVIDED.
 - 6) PRIVATE WATER METERS WILL BE INSTALLED FOR EACH PROPOSED UNIT. THESE PRIVATE WATER METERS WILL BE MAINTAINED AND MANAGED BY THE HOA FOR THIS PROJECT.
 - 7) THERE ARE (2) 2" PUBLIC WATER METERS PROPOSED FOR THIS SITE. THE PROPOSED 2" WATER METER AT STA. 183+04.04 SERVES UNITS 1-10. THE PROPOSED 2" WATER METER AT STA. 185+99.64 SERVES UNITS 11-19.
 - 8) PUBLIC WATER METERS SHALL A MINIMUM 3' SPACING / CLEARANCE ALL AROUND METER FOR MAINTENANCE
 - 9) FIRE HYDRANTS SHALL A MINIMUM 5' SPACING / CLEARANCE ALL AROUND FIRE HYDRANTS FOR MAINTENANCE

LEGEND:

BOUNDARY-----	
CENTERLINE-----	
RIGHT-OF-WAY-----	
EXISTING LOT LINE-----	
SETBACK LINE-----	
EXISTING CURB & GUTTER-----	
EXISTING WATER-----	
EXISTING SEWER-----	
EXISTING FENCE-----	
EXISTING RETAINING WALL-----	
EXISTING CONCRETE-----	
EXISTING AC PAVING-----	
EXISTING CONTOUR LINE-----	
EXISTING ELEVATION-----	
EXISTING FIRE HYDRANTS-----	
EXISTING STREET SIGN-----	
EXISTING WATER SERVICE W/ EX. BACKFLOW PREVENTER TO BE USED FOR IRRIGATION-----	
PROPOSED 2" WATER SERVICE-----	
W/ BACKFLOW PREVENTER-----	
PROPOSED 8" FIRE SERVICE-----	
FOR PVT. FIRE HYDRANT-----	
PROPOSED 1" WATER SERVICE W/-----	
PRIVATE WATER METER TO BE MAINTAINED BY HOA-----	
PROPOSED PRIVATE 4" SEWER LATERAL-----	
8" PRIVATE SEWER MAIN W/ SEWER MH-----	
PARKING SPACE NUMBER-----	
PROPOSED 0-2 CURB & GUTTER-----	
PROPOSED 0-1 GUTTER-----	
PROPOSED ROLLED CURB-----	
PROPOSED FENCE-----	
SEE LANDSCAPE PLANS FOR DETAILS-----	
PROPOSED LANDSCAPING-----	
PROPOSED CONCRETE-----	
PROPOSED AC PAVING-----	
PROPOSED PAVES-----	
PER DETAIL ON SHEET NO. 10-----	
TRENCH RESURFACING M_3A-----	
PROPOSED WATER STORAGE-----	
SEE SWAMP FOR DETAILS-----	
PROPOSED RETAINING WALL-----	
2:1 SLOPE-----	
DAYLIGHT LINE-----	
DIRECTION OF FLOW-----	
(PVT.) PROPOSED STORM DRAIN-----	
CURB OUTLET PER D-25-----	
(PVT.) PROPRIETARY TREATMENT UNIT-----	
PER DETAIL ON SHEET NO. 10-----	
(PVT.) MODIFIED TYPE A CLEANOUT-----	
W/SUMP PUMP-----	
(PVT.) 3636 OR 1818 BROOKS BOX-----	
W/ TRAFFIC GRATE PER DETAILS ON SHEET 11-----	
(PVT.) 2424 BROOKS BOX W/-----	
PARKWAY GRATE PER DETAILS ON SHEET 11-----	
AREA DRAIN PER DETAIL ON SHEET 10-----	



General Notes

THIS PROJECT IS A COMMON INTEREST DEVELOPMENT FOR SENIOR HOUSING. CCR'S WILL BE PREPARED FOR THIS PROJECT TO DEFINE AND MAINTAIN COMMON USE AREAS SUCH AS DRIVEWAYS, PARKING, LANDSCAPING & ETC. AFFORDABLE HOUSING (D21-00005) IS INCLUDED AS A PART OF THIS PROJECT ALONG WITH BONUS DENSITY (DB21-00003)

1. EXISTING GROSS SUBDIVISION AREA: 1.97 AC
2. PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
3. PROPOSED PUBLIC STREET DEDICATION: 0 AC
4. PROPOSED PRIVATE STREET AREA: 0 AC
5. TOTAL NUMBER OF EXISTING LOTS: 1
6. TOTAL NUMBER OF PROPOSED LOTS: 1
7. TOTAL NUMBER OF PROPOSED PROPOSED UNITS: 18
8. PROPOSED PARKING:
 - 1 ATTACHED GARAGE SPACE PER UNIT=18
 - UNATTACHED STANDARD PARKING SPACES (18'x9')=19
 - UNATTACHED COMPACT PARKING SPACES (16'x8')=2
 - VAN ACCESSABLE HANDICAPPED PARKING SPACES=2TOTAL PARKING SPACES PROPOSED=43
PARKING SPACES PER UNIT=2.39
9. ASSESSOR'S PARCEL NUMBER: 165-493-47
10. SITE ADDRESS: 3710 VISTA WAY
OCEANSIDE, CA 92056
11. PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.
12. EXISTING GENERAL PLAN LAND USE: RESIDENTIAL
13. PROPOSED GENERAL PLAN LAND USE: RESIDENTIAL-SENIOR HOUSING
14. EXISTING ZONING: RM-A
15. PROPOSED ZONING: RM-A
16. PROPOSED DENSITY: 9.14 DU/AC
17. STATUS OF LEGAL ACCESS: VISTA WAY AN EXISTING & FULLY IMPROVED PUBLIC STREET
18. BENCH MARK: DESCRIPTION: CL MONUMENT 3.5" BRASS DISC
STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS
RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
CITY OF OCEANSIDE #1020
19. SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
20. TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
21. THE BASIS OF BEARINGS FOR THIS SUBDIVISION IS THE SOUTH LINE OF LOT 707 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP HEREOF NO. 7690 I.E. NORTH 69°04'36" EAST.
22. MAXIMUM SLOPE GRADIENT: 2:1
23. AREA/PERCENT OF SITE IN DRIVEWAYS & PARKING: 22,588 SF OR 26%
24. AREA/PERCENT OF SITE IN OPEN SPACE: 0
25. AREA/PERCENT OF SITE IN LANDSCAPING: 37,993 OR 44%
26. FOR PROPOSED FENCING & SIGNAGE SEE LANDSCAPE PLANS PLANS FOR THIS PROJECT.
27. FEMA FLOOD DESIGNATION: THIS SITE IS NOT WITH A 100-YEAR FLOODWAY OR FLOODPLAIN PER FEMA MAP 08073C0766G DATED: 5/16/12

ENGINEER OF WORK

Bartolome J. Pastor
BARTOLOME J. PASTOR, RCE 38606
DATED: _____ MAY _____, 2022

ALTA CONSULTANTS
PLANNING ENGINEERING SURVEYING
1288 E. Main St., Ste. 100, Escondido, CA 92021 (619) 749-8816 Fax (619) 749-8816
JOB NO. 499-01, DATE MAY 24, 2022

Date: 5/24/2022 SHEET 4 OF 15

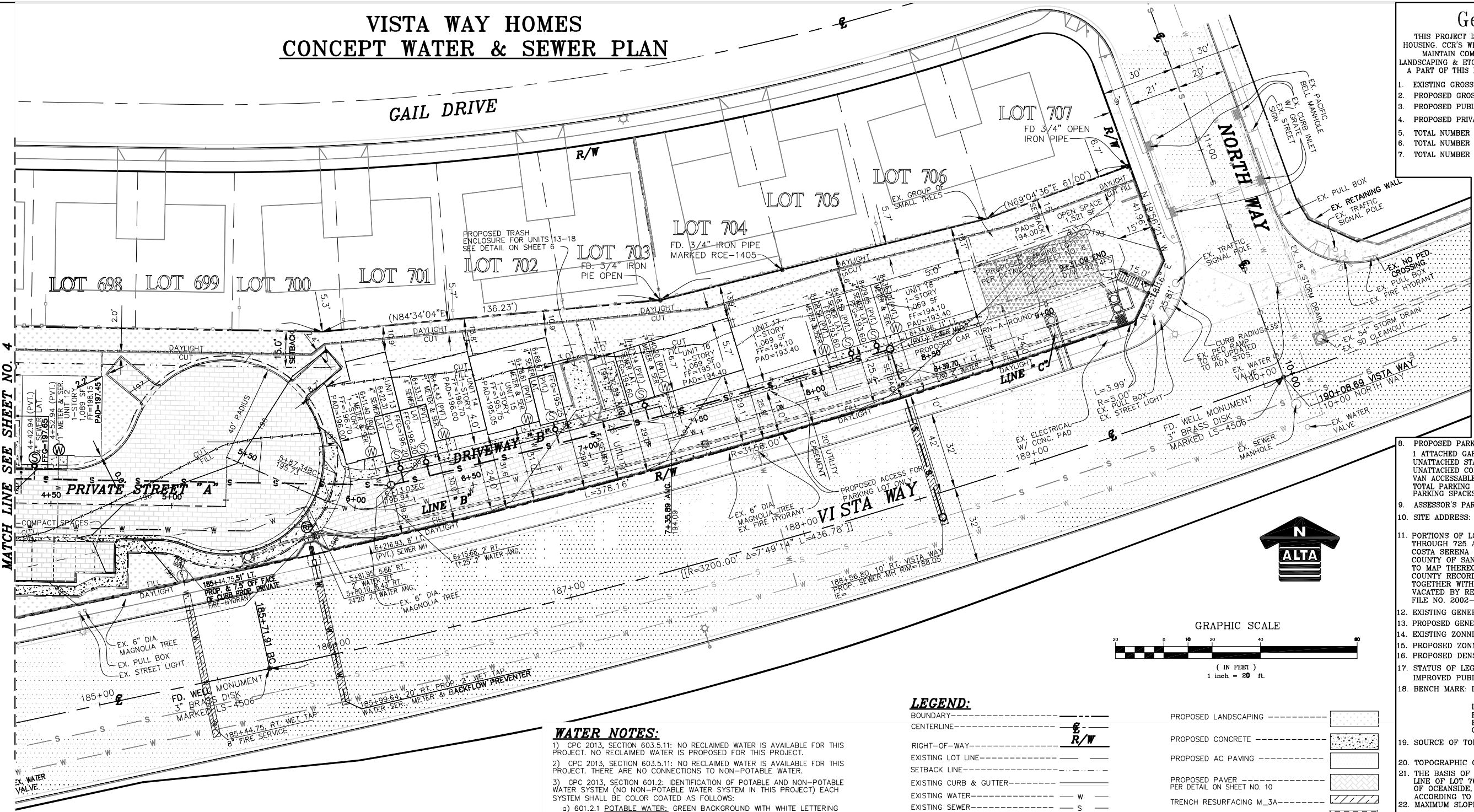
T21-00002
D21-00005
DB21-00003

VISTA WAY HOMES
CONCEPT WATER & SEWER PLAN

General Notes

THIS PROJECT IS A COMMON INTEREST DEVELOPMENT FOR SENIOR HOUSING. CCR'S WILL BE PREPARED FOR THIS PROJECT TO DEFINE AND MAINTAIN COMMON USE AREAS SUCH AS DRIVEWAYS, PARKING, LANDSCAPING & ETC. AFFORDABLE HOUSING (D21-00005) IS INCLUDED AS A PART OF THIS PROJECT ALONG WITH BONUS DENSITY (DB21-00003)

- EXISTING GROSS SUBDIVISION AREA: 1.97 AC
- PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
- PROPOSED PUBLIC STREET DEDICATION: 0 AC
- PROPOSED PRIVATE STREET AREA: 0 AC
- TOTAL NUMBER OF EXISTING LOTS: 1
- TOTAL NUMBER OF PROPOSED LOTS: 1
- TOTAL NUMBER OF PROPOSED PROPOSED UNITS: 18



MATCH LINE SEE SHEET NO. 4

WATER NOTES:

- CPC 2013, SECTION 603.5.11: NO RECLAIMED WATER IS AVAILABLE FOR THIS PROJECT. NO RECLAIMED WATER IS PROPOSED FOR THIS PROJECT.
- CPC 2013, SECTION 603.5.11: NO RECLAIMED WATER IS AVAILABLE FOR THIS PROJECT. THERE ARE NO CONNECTIONS TO NON-POTABLE WATER.
- CPC 2013, SECTION 601.2: IDENTIFICATION OF POTABLE AND NON-POTABLE WATER SYSTEM (NO NON-POTABLE WATER SYSTEM IN THIS PROJECT) EACH SYSTEM SHALL BE COLOR COATED AS FOLLOWS:
 - NON-POTABLE WATER: GREEN BACKGROUND WITH WHITE LETTERING WITH THE WORDS "CAUTION: NON-POTABLE WATER, DO NOT DRINK". "A UNIVERSAL POISON SYMBOL OF SKULL AND CROSSBONES SHALL BE PROVIDED" [HCD 1 & 2]
 - 601.2.2 MINIMUM LENGTH OF COLOR FIELD AND SIZE OF LETTERS, SEE TABLE 1. RECLAIMED WATER: PURPLE IN COLOR (PANTONE #512) AND SHALL BE IMPRINTED IN NORMAL 1/2 INCH HIGH, BLACK, UPPER CASE LETTERS, WITH THE WORDS "CAUTION: RECLAIMED WATER, DO NOT DRINK". "A UNIVERSAL POISON SYMBOL OF SKULL AND CROSSBONES SHALL BE PROVIDED" [HCD 1 & 2]
- CPC 2013, SECTION 611.1: WATER TREATMENT UNITS, REVERSE OSMOSIS DRINKING WATER TREATMENT UNITS SHALL MEET THE REQUIREMENTS OF THE APPROPRIATE STANDARDS REFERENCED IN TABLE 611.4. WASTE DISCHARGE FROM REVERSE OSMOSIS OR OTHER TYPES OF WATER TREATMENT UNITS SHALL ENTER THE DRAINAGE SYSTEM THROUGH AN AIRGAP.
- CPC 2013, SECTION 603.2: APPROVAL OF BACKFLOW DEVICES OR ASSEMBLIES: BEFORE ANY DEVICE OR ASSEMBLY IS INSTALLED FOR THE PREVENTION OF BACKFLOW, IT SHALL FIRST BE APPROVED BY THE AUTHORITY HAVING JURISDICTION. DEVICES OR ASSEMBLIES SHALL BE TESTED FOR CONFORMING RECOGNIZED STANDARDS OR OTHER STANDARDS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION THAT ARE CONSISTENT WITH THE INTENT OF THIS CODE.
 - TESTING OF BACKFLOW DEVICES OR ASSEMBLIES SHALL BE PERFORMED BY A CERTIFIED BACKFLOW ASSEMBLY CHECKER (CPC SECTION 603.2).
 - COPIES OF TESTING OF BACKFLOW DEVICES OR ASSEMBLIES SHALL BE PROVIDED.
- PRIVATE WATER METERS WILL BE INSTALLED FOR EACH PROPOSED UNIT. THESE PRIVATE WATER METERS WILL BE MAINTAINED AND MANAGED BY THE HOA FOR THIS PROJECT.
- THERE ARE (2) 2" PUBLIC WATER METERS PROPOSED FOR THIS SITE. THE PROPOSED 2" WATER METER AT STA. 183+04.04 SERVES UNITS 1-10. THE PROPOSED 2" WATER METER AT STA. 185+99.64 SERVES UNITS 11-18
- PUBLIC WATER METERS SHALL A MINIMUM 3' SPACING / CLEARANCE ALL AROUND METER FOR MAINTENANCE
- FIRE HYDRANTS SHALL A MINIMUM 5' SPACING / CLEARANCE ALL AROUND FIRE HYDRANTS FOR MAINTENANCE

LEGEND:

- BOUNDARY-----
CENTERLINE-----
RIGHT-OF-WAY-----
EXISTING LOT LINE-----
SETBACK LINE-----
EXISTING CURB & GUTTER-----
EXISTING WATER-----
EXISTING SEWER-----
EXISTING FENCE-----
EXISTING RETAINING WALL-----
EXISTING CONCRETE-----
EXISTING AC PAVING-----
EXISTING CONTOUR LINE-----
EXISTING ELEVATION-----
EXISTING FIRE HYDRANTS-----
EXISTING STREET SIGN-----
EXISTING WATER SERVICE W/ EX. BACKFLOW- PREVENTER TO BE USED FOR IRRIGATION-----
PROPOSED 2" WATER SERVICE-----
PROPOSED 8" FIRE SERVICE-----
FOR PVT. FIRE HYDRANT-----
PROPOSED 1" WATER SERVICE W/-----
PRIVATE WATER METER TO BE MAINTAINED BY HOA-----
PROPOSED PRIVATE 4" SEWER LATERAL-----
8" PRIVATE SEWER MAIN W/ SEWER MH-----
PARKING SPACE NUMBER-----
PROPOSED G-2 CURB & GUTTER-----
PROPOSED G-1 GUTTER-----
PROPOSED ROLLED CURB-----
PROPOSED FENCE-----
SEE LANDSCAPE PLANS FOR DETAILS

- PROPOSED LANDSCAPING-----
PROPOSED CONCRETE-----
PROPOSED AC PAVING-----
PROPOSED PAVER-----
PER DETAIL ON SHEET NO. 10-----
TRENCH RESURFACING M-3A-----
PROPOSED WATER STORAGE-----
SEE SWAMP FOR DETAILS-----
PROPOSED RETAINING WALL-----
2:1 SLOPE-----
DAYLIGHT LINE-----
DIRECTION OF FLOW-----
(PVT.) PROPOSED STORM DRAIN-----
CURB OUTLET PER D-25-----
(PVT.) PROPRIETARY TREATMENT UNIT-----
PER DETAIL ON SHEET NO. 10-----
(PVT.) MODIFIED TYPE A CLEANOUT-----
W/ SUMP PUMP-----
(PVT.) 3636 OR 1818 BROOKS BOX-----
W/ TRAFFIC GRATE PER DETAILS ON SHEET 11-----
(PVT.) 2424 BROOKS BOX W/-----
PARKWAY GRATE PER DETAILS ON SHEET 11-----
AREA DRAIN PER DETAIL ON SHEET 10-----

- PROPOSED PARKING:
 - ATTACHED GARAGE SPACE PER UNIT=18
 - UNATTACHED STANDARD PARKING SPACES (18'x9')=19
 - UNATTACHED COMPACT PARKING SPACES (16'x6')=2
 - VAN ACCESSIBLE HANDICAPPED PARKING SPACES=2
 - TOTAL PARKING SPACES PROPOSED=43
 - PARKING SPACES PER UNIT=2.39
- ASSESSOR'S PARCEL NUMBER: 165-493-47
- SITE ADDRESS: 3710 VISTA WAY
OCEANSIDE, CA 92056
- PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.
- EXISTING GENERAL PLAN LAND USE: RESIDENTIAL
- PROPOSED GENERAL PLAN LAND USE: RESIDENTIAL-SENIOR HOUSING
- EXISTING ZONING: RM-A
- PROPOSED ZONING: RM-A
- PROPOSED DENSITY: 9.14 DU/AC
- STATUS OF LEGAL ACCESS: VISTA WAY AN EXISTING & FULLY IMPROVED PUBLIC STREET
- BENCH MARK: DESCRIPTION: CL MONUMENT 3.5" BRASS DISC STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS
RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
CITY OF OCEANSIDE #1020
- SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
- TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
- THE BASIS OF BEARINGS FOR THIS SUBDIVISION IS THE SOUTH LINE OF LOT 707 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP HEREOF NO. 7690 I.E. NORTH 69°04'36" EAST.
- MAXIMUM SLOPE GRADIENT: 2:1
- AREA/PERCENT OF SITE IN DRIVEWAYS & PARKING: 22,588 SF OR 26%
- AREA/PERCENT OF SITE IN OPEN SPACE: 0
- AREA/PERCENT OF SITE IN LANDSCAPING: 37,993 OR 44%
- ONSITE GRADING FOR THIS PROJECT: (8% SHRINKAGE FOR CUT)
CUT= 3,000 C.Y. FILL= 4,000 C.Y. IMPORT= 1,000 C.Y.
NOTE: ALL QUANTITIES ARE BASED ON FINISH GRADE. NO ALLOWANCE MADE FOR SHRINKAGE OR BULKING OF MATERIAL.
- GRADED AREA: 1.63 AC=82% OF SITE
- FOR PROPOSED FENCING & SIGNAGE SEE LANDSCAPE PLANS FOR THIS PROJECT.
- FEMA FLOOD DESIGNATION: THIS SITE IS NOT WITH A 100-YEAR FLOODWAY OR FLOODPLAIN PER FEMA MAP 06073C0768G DATED: 5/16/12

ENGINEER OF WORK

Bartolome J. Pastor
BARTOLOME J. PASTOR, RCE 38606
DATED: MAY, 2022

D21-00005
T21-00002 DB21-00003

ALTA CONSULTANTS
PLANNING ENGINEERING SURVEYING
1283 E. Main St., Ste. 100, Escondido, CA 92021 (619) 749-8816 Fax (619) 749-8816
JOB NO. 499-01, DATE MAY 24, 2022

VISTA WAY HOMES
CONCEPT GRADING PLAN

GAIL DRIVE

COSTA SERENA UNIT NO. 7

MAP NO. 7690

LILE STREET

MATCH LINE SEE SHEET NO. 7

LEGEND:

BOUNDARY	-----	ℰ
CENTERLINE	-----	R/W
RIGHT-OF-WAY	-----	ℰ
EXISTING LOT LINE	-----	
SETBACK LINE	-----	
EXISTING CURB & GUTTER	-----	
EXISTING WATER	-----	W
EXISTING SEWER	-----	S
EXISTING FENCE	-----	
EXISTING RETAINING WALL	-----	
EXISTING CONCRETE	-----	
EXISTING AC PAVING	-----	
EXISTING CONTOUR LINE	-----	770
EXISTING ELEVATION	-----	769.8
EXISTING FIRE HYDRANTS	-----	
EXISTING STREET SIGN	-----	
EXISTING WATER SERVICE W/ EX. BACKFLOW PREVENTER TO BE USED FOR IRRIGATION	-----	W
PROPOSED 2" WATER SERVICE W/ BACKFLOW PREVENTER	-----	W
PROPOSED 8" FIRE SERVICE FOR PVT. FIRE HYDRANT	-----	W
PROPOSED 1" WATER SERVICE W/ PRIVATE WATER METER TO BE MAINTAINED BY HOA	-----	W
PROPOSED PRIVATE 4" SEWER LATERAL	-----	S
8" PRIVATE SEWER MAIN W/ SEWER MH	-----	S
PARKING SPACE NUMBER	-----	1
PROPOSED G-2 CURB & GUTTER	-----	
PROPOSED G-1 GUTTER	-----	
PROPOSED ROLLED CURB	-----	
PROPOSED FENCE	-----	
SEE LANDSCAPE PLANS FOR DETAILS	-----	
PROPOSED LANDSCAPING	-----	
PROPOSED CONCRETE	-----	
PROPOSED AC PAVING	-----	
PROPOSED PAVER PER DETAIL ON SHEET NO. 10	-----	
TRENCH RESURFACING M_3A	-----	
PROPOSED WATER STORAGE SEE SMOMP FOR DETAILS	-----	
PROPOSED RETAINING WALL	-----	
2:1 SLOPE	-----	
DAYLIGHT LINE	-----	
DIRECTION OF FLOW	-----	
(PVT.) PROPOSED STORM DRAIN	-----	
CURB OUTLET PER D-25A	-----	
(PVT.) PROPRIETARY TREATMENT UNIT PER DETAIL ON SHEET NO. 10	-----	
(PVT.) MODIFIED TYPE A CLEANOUT W/ SUMP PUMP	-----	
(PVT.) 3636 OR 1818 BROOKS BOX W/ TRAFFIC GRATE PER DETAILS ON SHEET 11	-----	
(PVT.) 2424 BROOKS BOX W/ PARKWAY GRATE PER DETAILS ON SHEET 11	-----	
AREA DRAIN PER DETAIL ON SHEET 10	-----	

General Notes

- THIS PROJECT IS A COMMON INTEREST DEVELOPMENT FOR SENIOR HOUSING. CCR'S WILL BE PREPARED FOR THIS PROJECT TO DEFINE AND MAINTAIN COMMON USE AREAS SUCH AS DRIVEWAYS, PARKING, LANDSCAPING & ETC. AFFORDABLE HOUSING (DB1-00005) IS INCLUDED AS A PART OF THIS PROJECT ALONG WITH BONUS DENSITY (DB21-00003)
- EXISTING GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED PUBLIC STREET DEDICATION: 0 AC
 - PROPOSED PRIVATE STREET AREA: 0 AC
 - TOTAL NUMBER OF EXISTING LOTS: 1
 - TOTAL NUMBER OF PROPOSED LOTS: 1
 - TOTAL NUMBER OF PROPOSED PROPOSED UNITS: 18
 - PROPOSED PARKING:
1 ATTACHED GARAGE SPACE PER UNIT=18
UNATTACHED STANDARD PARKING SPACES (18'x9')=19
UNATTACHED COMPACT PARKING SPACES (16'x8')=2
VAN ACCESSIBLE HANDICAPPED PARKING SPACES=2
TOTAL PARKING SPACES PROPOSED=43
PARKING SPACES PER UNIT=2.39
 - ASSESSOR'S PARCEL NUMBER: 165-493-47
 - SITE ADDRESS: 3710 VISTA WAY OCEANSIDE, CA 92056
 - PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.
 - EXISTING GENERAL PLAN LAND USE: RESIDENTIAL
 - PROPOSED GENERAL PLAN LAND USE: RESIDENTIAL-SENIOR HOUSING
 - EXISTING ZONING: RM-A
 - PROPOSED ZONING: RM-A
 - PROPOSED DENSITY: 9.14 DU/AC
 - STATUS OF LEGAL ACCESS: VISTA WAY AN EXISTING & FULLY IMPROVED PUBLIC STREET
 - BENCH MARK: DESCRIPTION: CL MONUMENT 3.5" BRASS DISC STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS
RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
CITY OF OCEANSIDE #1020
 - SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
 - TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
 - THE BASIS OF BEARINGS FOR THIS SUBDIVISION IS THE SOUTH LINE OF LOT 707 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP HEREOF NO. 7690 I.E. NORTH 69°04'36" EAST.
 - MAXIMUM SLOPE GRADIENT: 2:1
 - AREA/PERCENT OF SITE IN DRIVEWAYS & PARKING: 22,588 SF OR 26%
 - MINIMUM REQUIRED OPEN SPACE IS 300 SF PER UNIT=18x300=5,400 SF
COMMON OPEN SPACE IS LOCATED IN TWO AREAS OF 1,521 SF+1,203 SF=2,724 SF
EACH UNIT WILL HAVE A MINIMUM OF 150 SF OF PRIVATE OPEN SPACE
 - AREA/PERCENT OF SITE IN LANDSCAPING: 37,993 SF OR 44%
 - ONSITE GRADING FOR THIS PROJECT: (8% SHRINKAGE FOR CUT)
CUT= 3,000 C.Y. FILL= 4,000 C.Y. IMPORT= 1,000 C.Y.
NOTE: ALL QUANTITIES ARE BASED ON FINISH GRADE. NO ALLOWANCE MADE FOR SHRINKAGE OR BULKING OF MATERIAL.
 - GRADED AREA: 1.63 AC=82% OF SITE
 - FOR PROPOSED FENCING & SIGNAGE SEE LANDSCAPE PLANS FOR THIS PROJECT.
 - FEMA FLOOD DESIGNATION: THIS SITE IS NOT WITH A 100-YEAR FLOODWAY OR FLOODPLAIN PER FEMA MAP 06073C0766G DATED: 2/16/12

ENGINEER OF WORK

BARTOLOME J. PASTOR, RCE 38606

DATED: MAY 24, 2022



T21-00002
DB21-00005
DB21-00003

ALTA CONSULTANTS
PLANNING ENGINEERING SURVEYING
1283 E. Main St., Ste. 100, In Cajon, CA 92021 (619) 749-8816 Fax (619) 749-8816
JOB NO. 499-01, DATE MAY 24, 2022

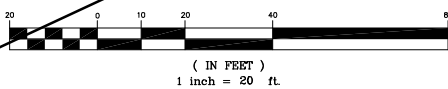
Date: 5/24/2022

SHEET 6 OF 15

PRIVATE STORM DRAIN: LINE "A" DATA
SEE SHRT 8 FOR PROFILE

- 1+56.60 PROP. 6" B-1 INLET PER D-25A
TG=199.03, FL=199.20, IE=194.86 Q₁₀₀=1.44 CFS
- PROP. 36.21 LF N77°52'53"E OF 12" PVC STORM DRAIN @ 1.00% Q₁₀₀=1.44 CFS, V₁₀₀=4.29 F/S
- 1+94.81 PROP. AREA DRAIN & 45" ANG.TG=200.70
IE=194.50 Q₁₀₀=0.29 CFS PER DETAIL ON SHEET 10
- PROP. 6.86 LF N57°07'07"E OF 12" PVC STORM DRAIN @ 1.00% Q₁₀₀=1.72 CFS, V₁₀₀=4.50 F/S
- 2+02.64 PROP. 2424 BROOKS BOX C/O W/ PARKWAY SOLID COVER TG=201.20, IE IN=194.43
IE OUT=194.33 PER DETAIL SHEET 11
- PROP. 33.75 LF N77°52'53"E OF 12" PVC STORM DRAIN @ 0.50% Q₁₀₀=1.72 CFS, V₁₀₀=4.50 F/S
- 2+37.35 PROP. AREA DRAIN TG=200.70
IE=194.16, Q₁₀₀=0.21 CFS PER DETAIL ON SHEET 10
- PROP. 33.75 LF N77°52'53"E OF 12" PVC STORM DRAIN @ 0.50% Q₁₀₀=1.93 CFS, V₁₀₀=4.63 F/S
- 2+71.50 PROP. AREA DRAIN TG=198.45
IE=193.99, Q₁₀₀=0.22 CFS PER DETAIL ON SHEET 10
- PROP. 5.5 LF N77°52'53"E OF 12" PVC STORM DRAIN @ 0.50% Q₁₀₀=2.15 CFS, V₁₀₀=4.75 F/S
- 2+80.60 STORMWATER BIO-FILTRATION SYSTEM BIO-CLEAN UNIT MWS L-8-8-4'-6"-V
RIM=198.95 SEE DETAILS ON SHEET 10
IE IN=193.96, IE OUT=192.63
- PROP. 2.0 LF N77°52'53"E OF 12" PVC STORM DRAIN @ 1.00% Q₁₀₀=2.15 CFS, V₁₀₀=4.75 F/S
- 2+89.10 PROP. A-4 CLENOUT PER D-9
RIM=196.95, IN=192.61, IE OUT=192.51
- PROP. 12.89 LF N12°07'07"E OF 12" PVC STORM DRAIN @ 1.40% Q₁₀₀=2.15 CFS, V₁₀₀=5.39 F/S

GRAPHIC SCALE

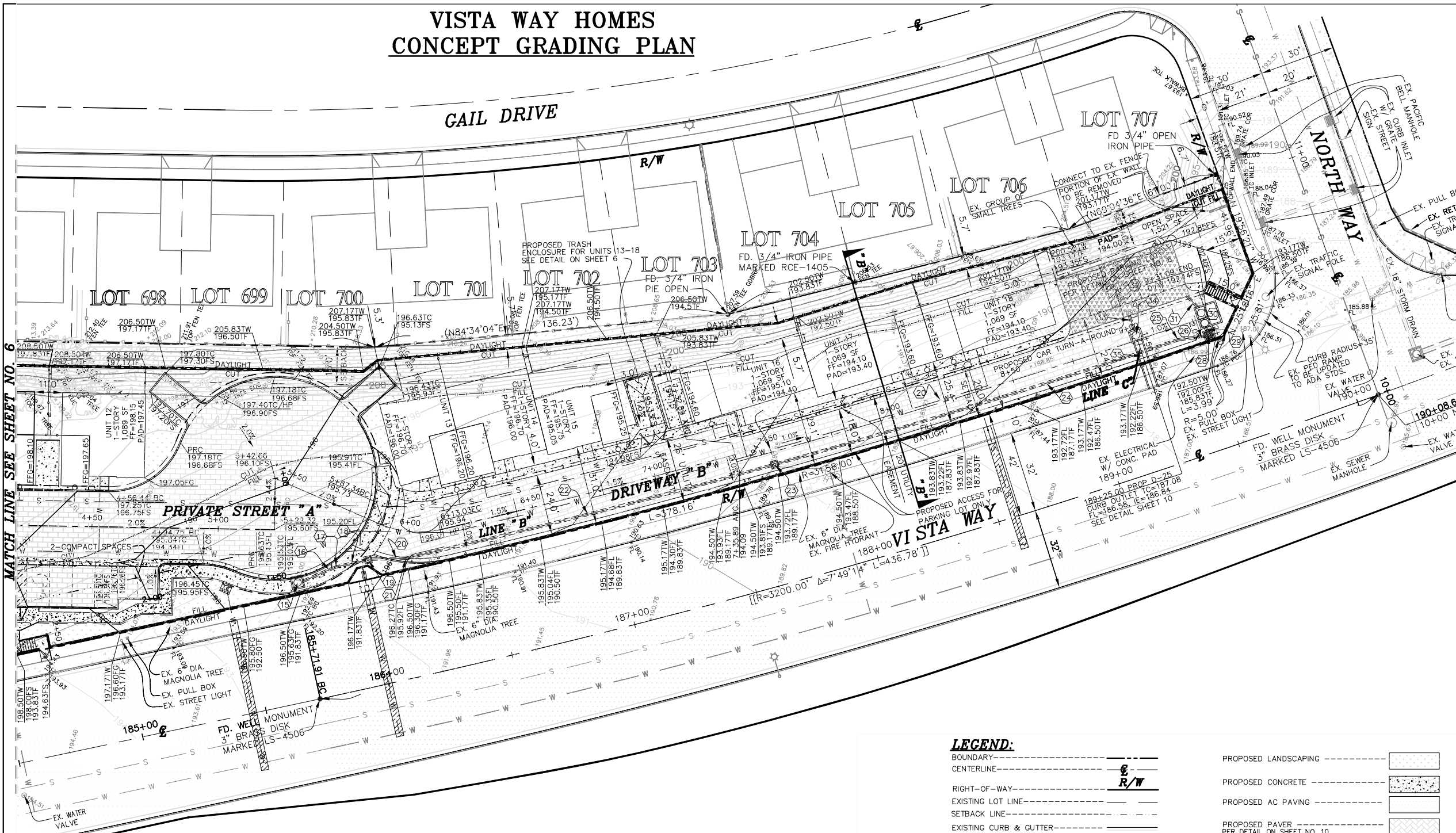


VISTA WAY HOMES
CONCEPT GRADING PLAN

General Notes

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- PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
- PROPOSED PUBLIC STREET DEDICATION: 0 AC
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LOCATION: INT VISTA WAY AND BUENA HILLS
RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
CITY OF OCEANSIDE #1020

- SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
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ENGINEER OF WORK
Bartolome J. Pastor
BARTOLOME J. PASTOR, RCE 38606
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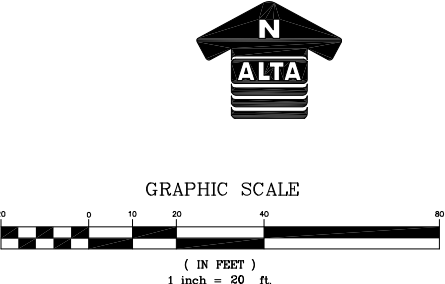
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PRIVATE STORM DRAIN: LINE "B" DATA
SEE SHEET 8 FOR PROFILE

- 5+67.28, 34.24' RT. PROP. 5" B INLET PER D-2 TC=195.51, FL=194.68, IE=191.73, Q₁₀₀=1.64 CFS
- PROP. 14.50 LF N66°37'53"E OF 12" PVC STORM DRAIN @ 0.50% Q₁₀₀=1.64 CFS, V₁₀₀=3.42 F/S
- 5+78.80, 24.48 RT. PROP. 12" PVC 11.25' ANG IE=191.85
- PROP. 12.00 LF N77°23'05"E OF 12" PVC STORM DRAIN @ 0.50% Q₁₀₀=1.64 CFS, V₁₀₀=3.42 F/S
- 5+88.76, 14.83' RT. PROP. 2424 BROOKS BOX C/O W/ TRAFFIC COVER RIM=195.80, IE IN=191.59 IE OUT=191.49 PER DETAIL ON SHEET 11
- PROP. 14.13 LF N88°38'05"E OF 12" PVC STORM DRAIN @ 0.50% Q₁₀₀=1.64 CFS, V₁₀₀=3.42 F/S
- 5+99.93, 10.70' RT. PROP. 12" PVC 11.25' ANG IE=191.42
- PROP. 149.73 LF, R=3,153.17' DELTA=02°43'15"E OF 12" PVC STORM DRAIN @ 0.50% Q₁₀₀=1.64 CFS V₁₀₀=3.42 F/S
- 5+150, 5.01' RT. PROP. 2424 BROOKS BOX C/O W/ TRAFFIC COVER RIM=193.97, IE IN=190.67 IE OUT=190.57 PER DETAIL ON SHEET 11
- PROP. 166.34 LF, R=3,153.17' DELTA=03°01'21"E OF 12" HDPE STORM DRAIN @ 0.50% Q₁₀₀=1.64 CFS V₁₀₀=3.42 F/S
- 5+170.7, 5.0' RT. PROP. 12" HDPE 11.25' ANG IE=189.73
- PROP. 10.83 LF N82°17'43"E OF 12" HDPE STORM DRAIN @ 0.50% Q₁₀₀=1.64 CFS, V₁₀₀=3.42 F/S

PRIVATE STORM DRAIN: LINE "C" DATA
SEE SHEET 8 FOR PROFILE

- 9+29.18, 7.08' RT. DRIVEWAY B 1+98.44 PROP. 3636 BROOKS BOX W/ TRAFFIC GRATE TG=192.00, IE IN=189.68, IE OUT=189.58 Q₁₀₀=1.34 CFS PER DETAIL SHEET 11
- PROP. 1.80 LF N28°52'18"W OF 12" HDPE STORM DRAIN @ 5.00% Q₁₀₀=2.98 CFS, V₁₀₀=5.08 F/S
- 1+91.08 STORMWATER BIO-FILTRATION SYSTEM BIO-CLEAN UNIT MWS L-6-8-4'-6"-V RIM=192.14 SEE DETAILS ON SHEET 10 IE IN=189.49, IE OUT=188.06
- PROP. 6.25 LF N44°40'04"W OF 12" PVC STORM DRAIN @ 1.00% Q₁₀₀=2.98 CFS, V₁₀₀=5.08 F/S
- WATER STORAGE IE IN=188.00, IE OUT=187.15 SEE SWQMP FOR DETAILS
- PROP. 6.25 LF N18°29'53"W OF 12" PVC STORM DRAIN @ 1.00% Q₁₀₀=2.98 CFS, V₁₀₀=5.08 F/S
- 9+01.87, 2.00' LT. D/W B 1+58.15 PROP. MOD. A-4 CLEANOUT PER D-9 RIM=192.57, IE IN=187.09 IE OUT=186.99
- PROP. 20.00 LF N18°29'53"W OF D-25A CURB OUTLET @ 2.00% Q₁₀₀=2.98 CFS, V₁₀₀=5.08 F/S UNDETAINED FL=186.59



LEGEND:

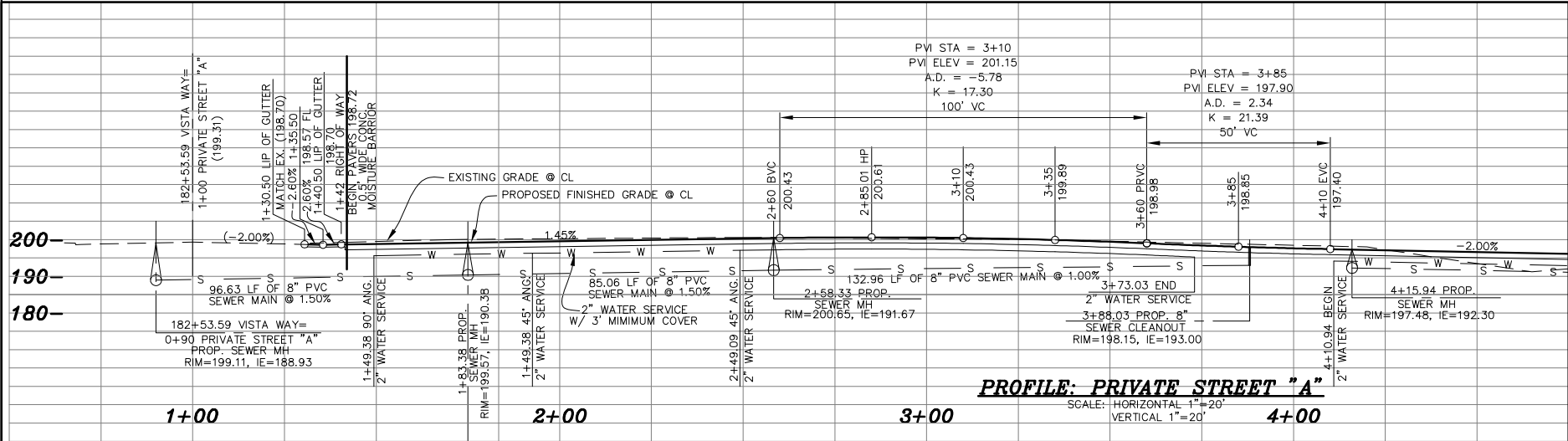
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W/ BACKFLOW PREVENTER
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FOR PVT. FIRE HYDRANT
PROPOSED 1" WATER SERVICE W/-----
PRIVATE WATER METER TO BE MAINTAINED BY HOA
PROPOSED PRIVATE 4" SEWER LATERAL-----
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PARKING SPACE NUMBER-----
PROPOSED G-2 CURB & GUTTER-----
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SEE LANDSCAPE PLANS FOR DETAILS

- PROPOSED LANDSCAPING-----
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PER DETAIL ON SHEET NO. 10
TRENCH RESURFACING M-3A-----
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W/ TRAFFIC GRATE PER DETAILS ON SHEET 11
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AREA DRAIN PER DETAIL ON SHEET 10-----

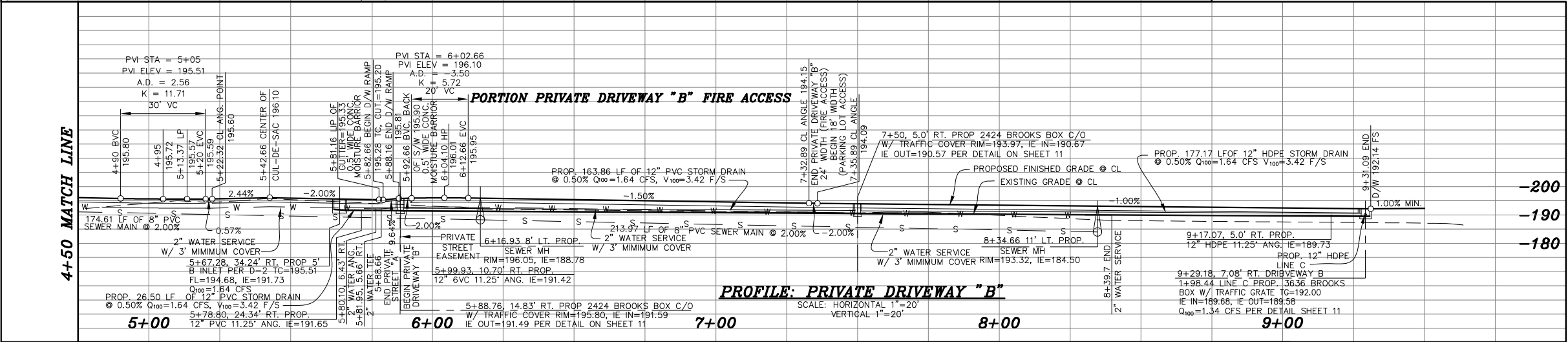
VISTA WAY HOMES
CONCEPT PROFILES AND SECTIONS

General Notes

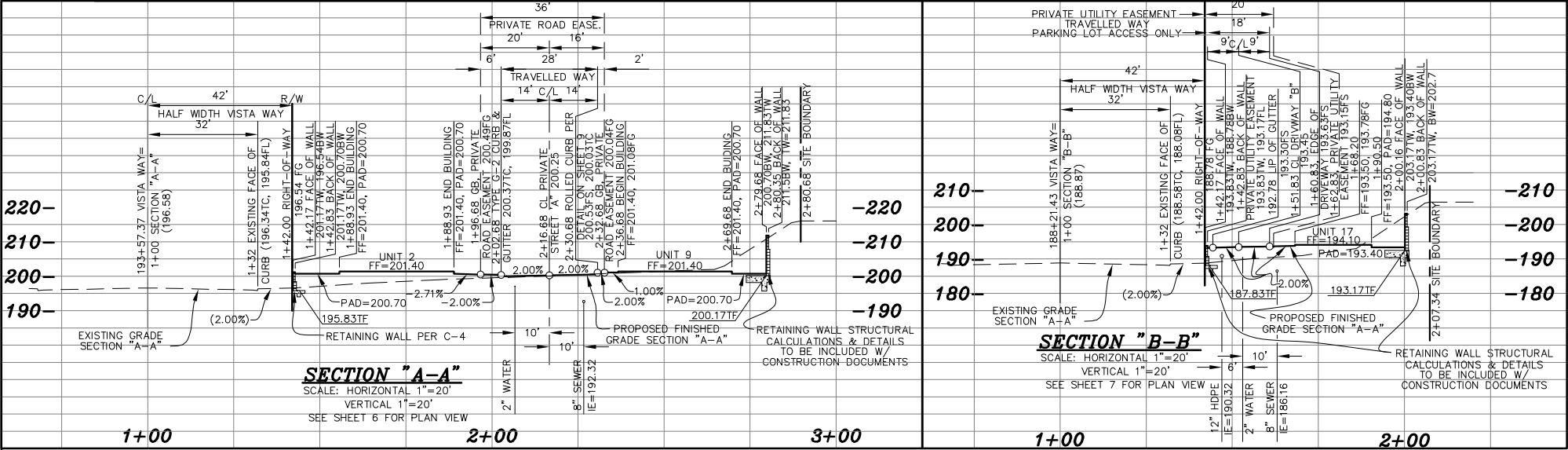
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4+50 MATCH LINE



4+50 MATCH LINE



ENGINEER OF WORK

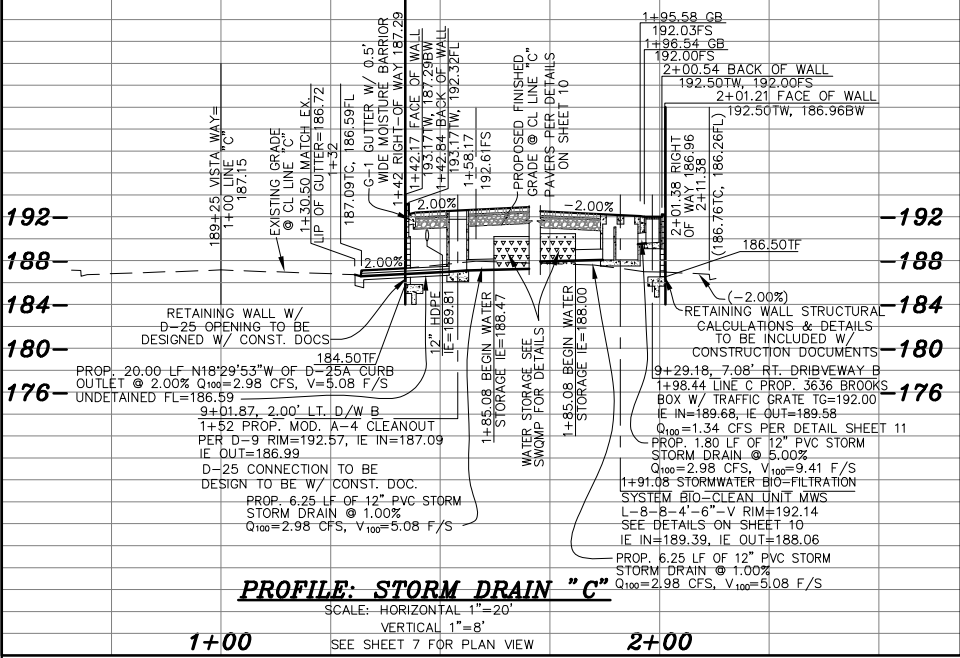
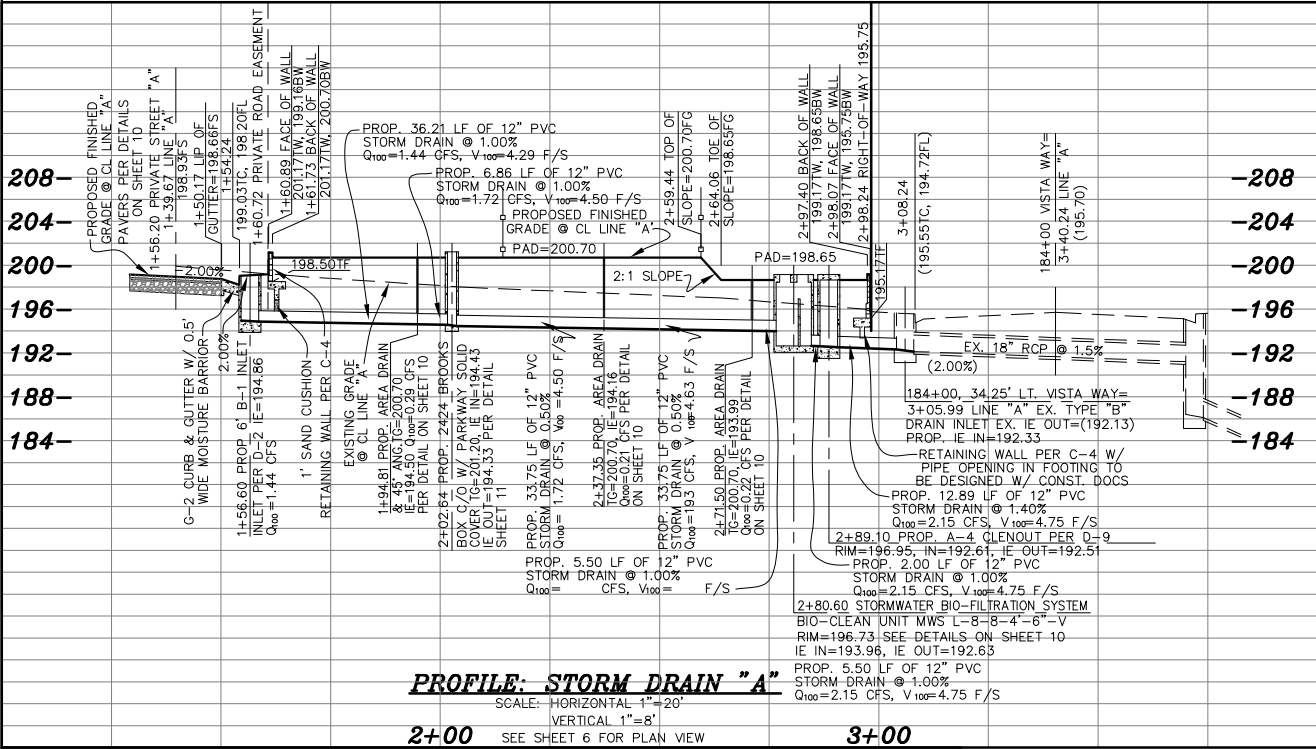
BARTOLOME J. PASTOR, RCE 38606
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VISTA WAY HOMES
CONCEPT STORM DRAIN PROFILES



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 - PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED PUBLIC STREET DEDICATION: 0 AC
 - PROPOSED PRIVATE STREET AREA: 0 AC
 - TOTAL NUMBER OF EXISTING LOTS: 1
 - TOTAL NUMBER OF PROPOSED LOTS: 1
 - TOTAL NUMBER OF PROPOSED PROPOSED UNITS: 18
 - PROPOSED PARKING:
1 ATTACHED GARAGE SPACE PER UNIT=18
UNATTACHED STANDARD PARKING SPACES (18'x9')=19
UNATTACHED COMPACT PARKING SPACES (16'x8')=2
VAN ACCESSABLE HADICAPPED PARKING SPACES=2
TOTAL PARKING SPACES PROPOSED=43
PARKING SPACES PER UNIT=2.39
 - ASSESSOR'S PARCEL NUMBER: 165-493-47
 - SITE ADDRESS: 3710 VISTA WAY
OCEANSIDE, CA 92056
 - PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.
 - EXISTING GENERAL PLAN LAND USE: RESIDENTIAL
 - PROPOSED GENERAL PLAN LAND USE: RESIDENTIAL-SENIOR HOUSING
 - EXISTING ZONING: 12RM-A
 - PROPOSED ZONING: RM-A
 - PROPOSED DENSITY: 9.14 DU/AC
 - STATUS OF LEGAL ACCESS: VISTA WAY AN EXISTING & FULLY IMPROVED PUBLIC STREET
 - BENCH MARK: DESCRIPTION: CL MONUMENT 3.5" BRASS DISC
STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS
RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
CITY OF OCEANSIDE #1020
 - SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
 - TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
 - THE BASIS OF BEARINGS FOR THIS SUBDIVISION IS THE SOUTH LINE OF LOT 707 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP HEREOF NO. 7690 I.E. NORTH 69°04'36" EAST.

ENGINEER OF WORK

Bartolome J. Pastor
BARTOLOME J. PASTOR, RCE 38606
DATED: MAY 2022



T21-00002
D21-00005
DB21-00003

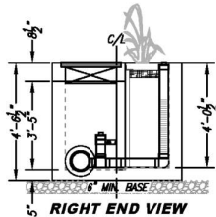
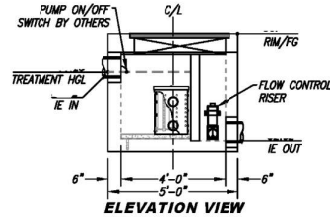
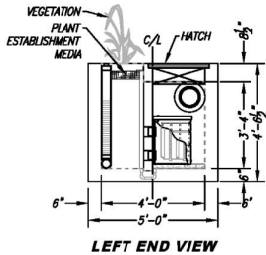
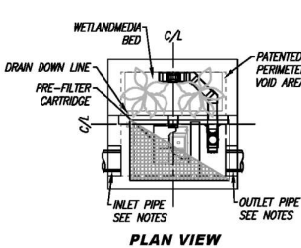
ALTA CONSULTANTS
PLANNING ENGINEERING SURVEYING
1283 E. Main St., Ste. 100, B. Cajon, CA 92021 (619) 749-8816 Fax (619) 749-8816
JOB NO. 499-01, DATE MAY 24, 2022

VISTA WAY HOMES
STORM WATER DETAILS

General Notes

- THIS PROJECT IS A COMMON INTEREST DEVELOPMENT FOR SENIOR HOUSING. CCR'S WILL BE PREPARED FOR THIS PROJECT TO DEFINE AND MAINTAIN COMMON USE AREAS SUCH AS DRIVEWAYS, PARKING, LANDSCAPING & ETC. AFFORDABLE HOUSING (D21-00005) IS INCLUDED AS A PART OF THIS PROJECT ALONG WITH BONUS DENSITY (DB21-00003)
- EXISTING GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED PUBLIC STREET DEDICATION: 0 AC
 - PROPOSED PRIVATE STREET AREA: 0 AC
 - TOTAL NUMBER OF EXISTING LOTS: 1
 - TOTAL NUMBER OF PROPOSED LOTS: 1
 - TOTAL NUMBER OF PROPOSED PROPOSED UNITS: 18
 - PROPOSED PARKING:
1 ATTACHED GARAGE SPACE PER UNIT=18
UNATTACHED STANDARD PARKING SPACES (18'x9')=19
UNATTACHED COMPACT PARKING SPACES (16'x8')=2
VAN ACCESSIBLE HANDICAPPED PARKING SPACES=2
TOTAL PARKING SPACES PROPOSED=43
PARKING SPACES PER UNIT=2.39
 - ASSESSOR'S PARCEL NUMBER: 165-493-47
 - SITE ADDRESS: 3710 VISTA WAY
OCEANSIDE, CA 92056
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 - EXISTING ZONING: 12RM-A
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 - PROPOSED DENSITY: 9.14 DU/AC
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 - BENCH MARK: DESCRIPTION: CL MONUMENT 3.5" BRASS DISC
STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS
RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
CITY OF OCEANSIDE #1020
 - SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
 - TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
 - THE BASIS OF BEARINGS FOR THIS SUBDIVISION IS THE SOUTH LINE OF LOT 707 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP HEREOF NO. 7690 I.E. NORTH 69°04'36" EAST.

SITE SPECIFIC DATA			
PROJECT NUMBER			
PROJECT NAME			
PROJECT LOCATION			
TREATMENT REQUIRED		FLOW BASED (CFS)	
VOLUME BASED (CF)	1,246	FLOW BASED (CFS)	N/A
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE		OFFLINE	
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE		PVC	8"
OUTLET PIPE		PVC	8"
PRETREATMENT		BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PEDESTRIAN	OPEN PLUMBER	PEDESTRIAN
FRAME & COVER	24" X 42"	N/A	N/A
WETLANDMEDIA VOLUME (CY)			0.83
ORIFICE SIZE (DIA. INCHES)			#0.48"
NOTES: PRELIMINARY NOT FOR CONSTRUCTION			

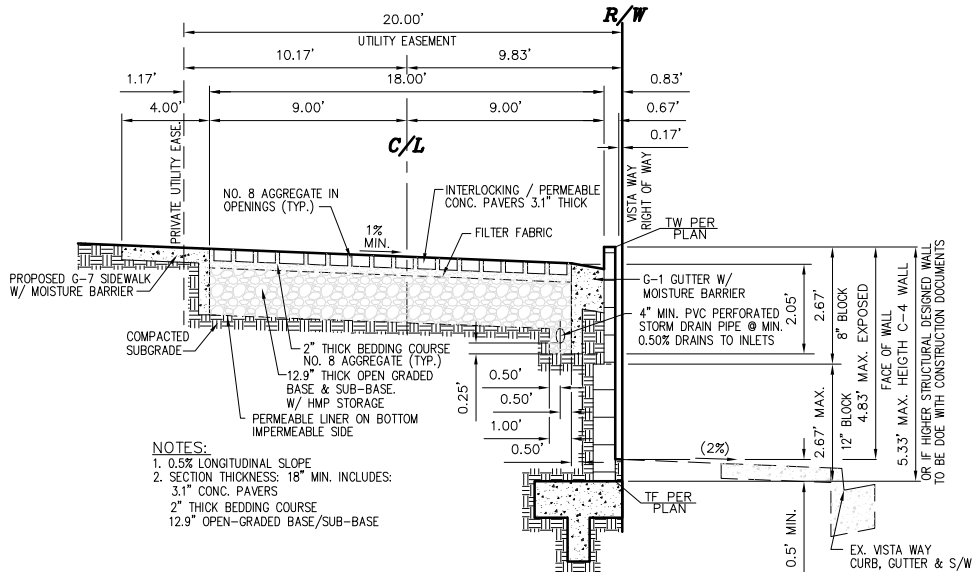


REQUIRED TREATMENT VOLUME (C)	
DRAINDOWN DURATION (HOURS)	.36
AVERAGE DISCHARGE RATE PER MWS UNIT (GPM)	
OPERATING HEAD (FT)	2.5
WETLANDMEDIA INFILTRATION RATE (IN/HR)	26
WETLANDMEDIA LOADING RATE (GPM/SF)	0.25
MWS-L-4-4-1"-V STORMWATER BIOFILTRATION SYSTEM STANDARD DETAIL	

- INSTALLATION NOTES
- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURER'S SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
 - UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE TO VERIFY PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
 - CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE. (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATER TIGHT PER MANUFACTURER'S STANDARD CONNECTION DETAIL.
 - CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE. VEGETATION SUPPLIED AND INSTALLED BY OTHERS. ALL UNITS WITH VEGETATION MUST HAVE DRIP OR SPRAY IRRIGATION SUPPLIED AND INSTALLED BY OTHERS.
 - CONTRACTOR RESPONSIBLE FOR CONTACTING BIO CLEAN FOR ACTIVATION OF UNIT. MANUFACTURER'S WARRANTY IS VOID WITH OUT PROPER ACTIVATION BY A BIO CLEAN REPRESENTATIVE.

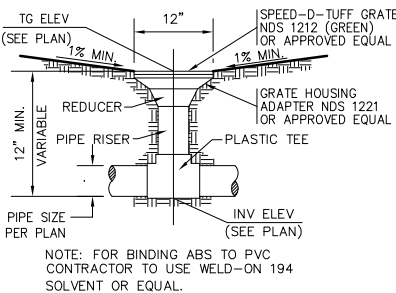
- GENERAL NOTES
- MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
 - ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT BIO CLEAN.

MODULAR WETLAND

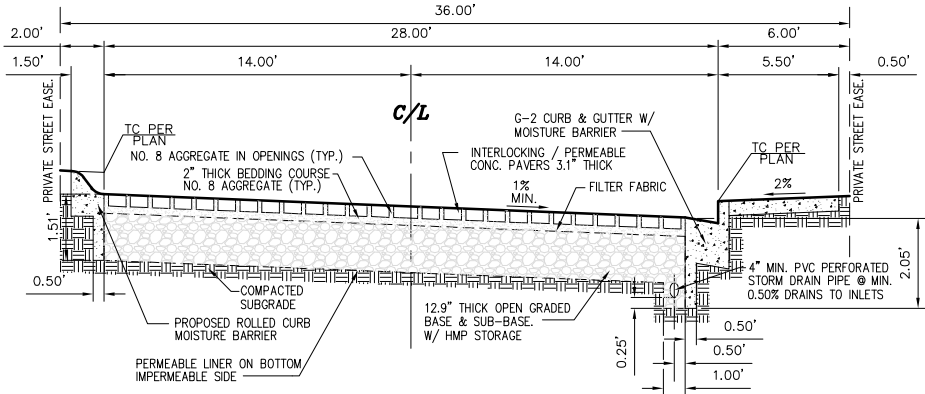


TYPICAL PAVER SECTION FOR PRIVATE DRIVEWAY "B"
18' WIDTH FOR PARKING LOT ACCESS

NOT TO SCALE



PRIVATE
LANDSCAPE AREA DRAIN DETAIL
NO SCALE

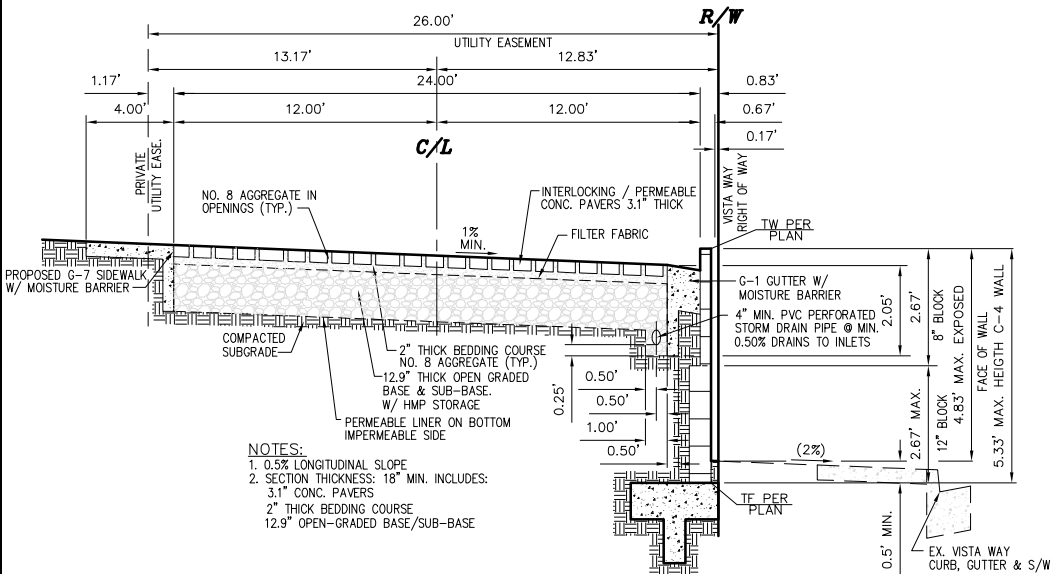


- NOTES:
- 0.5% LONGITUDINAL SLOPE
 - SECTION THICKNESS: 18" MIN. INCLUDES:
3.1" CONC. PAVERS
2" THICK BEDDING COURSE
12.9" OPEN-GRADED BASE/SUB-BASE

TYPICAL PAVER SECTION FOR PRIVATE STREET "A"

NOT TO SCALE

ALL PRIVATE STREET SURFACES TO BE H-20 LOADING



TYPICAL PAVER SECTION FOR PRIVATE DRIVEWAY "B"
24' WIDTH FOR EMERGENCY (FIRE) ACCESS

NOT TO SCALE

PRIVATE DRIVEWAY SURFACES TO BE H-20 LOADING

ENGINEER OF WORK

BARTOLOME J. PASTOR, RCE 38606
DATED: MAY 2022



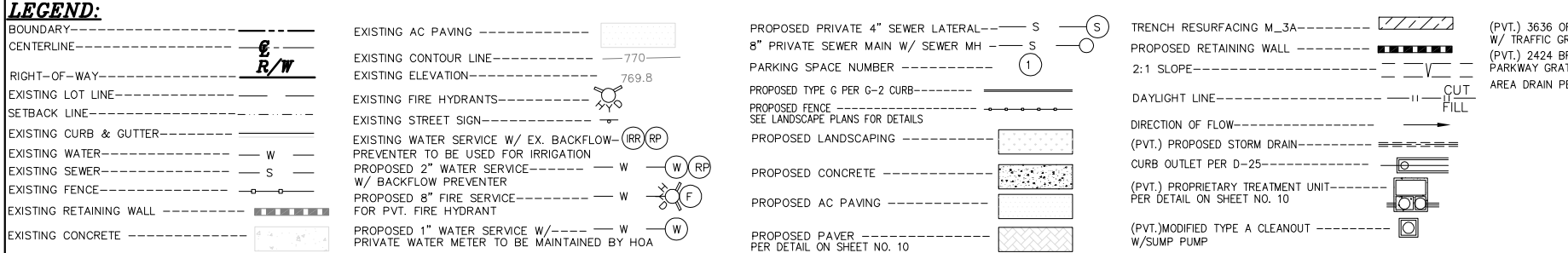
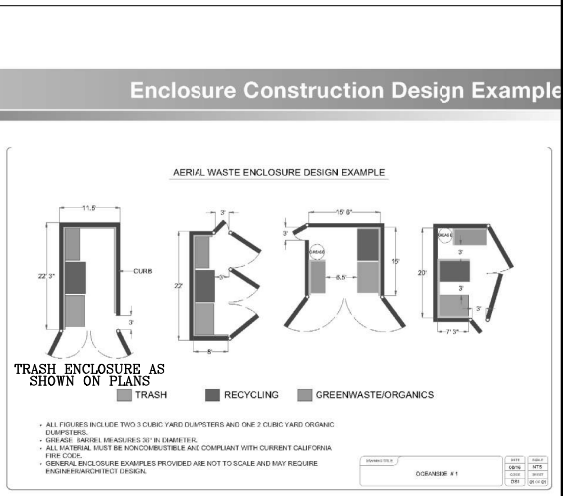
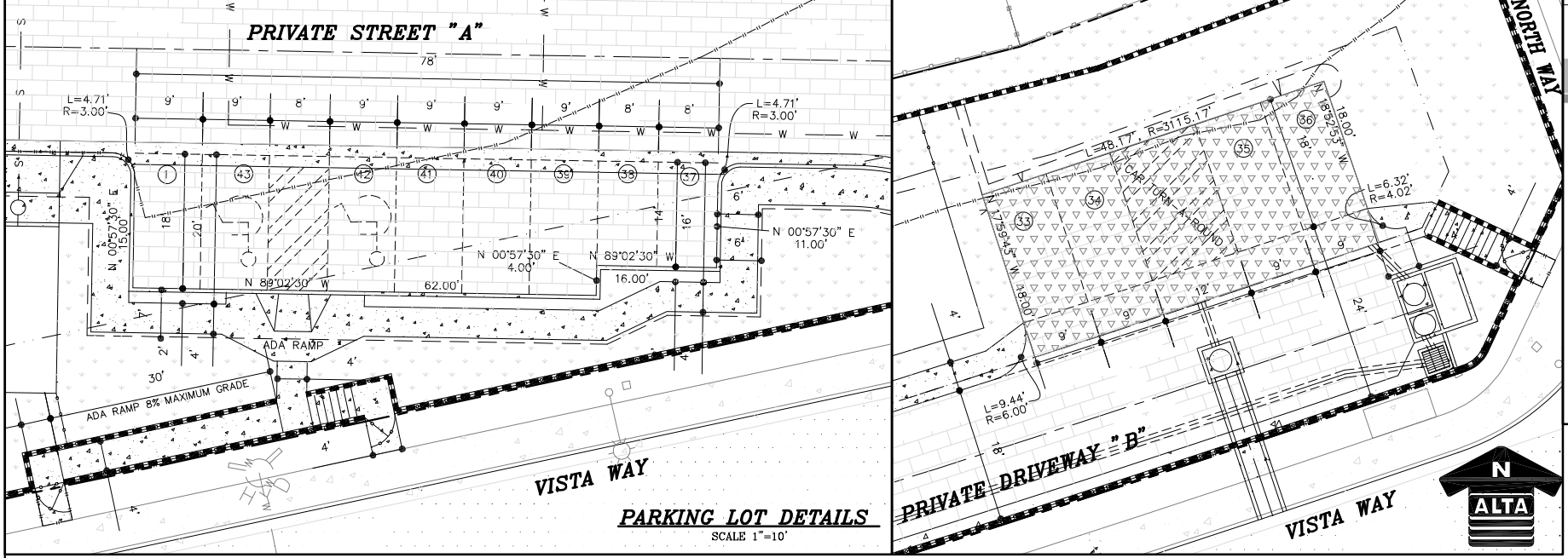
ALTA CONSULTANTS
PLANNING ENGINEERING SURVEYING
1283 E. Main St., Ste. 100, B. Cajon, CA 92021 (619) 749-8816 Fax (619) 749-8816
JOB NO. 499-01, DATE MAY 24, 2022

Date: 5/24/2022

SHEET 10 OF 15

T21-00002
D21-00005
DB21-00003

VISTA WAY HOMES
DETAILS



General Notes

THIS PROJECT IS A COMMON INTEREST DEVELOPMENT FOR SENIOR HOUSING. CCR'S WILL BE PREPARED FOR THIS PROJECT TO DEFINE AND MAINTAIN COMMON USE AREAS SUCH AS DRIVEWAYS, PARKING, LANDSCAPING & ETC. AFFORDABLE HOUSING (D21-00005) IS INCLUDED AS A PART OF THIS PROJECT ALONG WITH BONUS DENSITY (DB21-00003)

1. EXISTING GROSS SUBDIVISION AREA: 1.97 AC
2. PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
3. PROPOSED PUBLIC STREET DEDICATION: 0 AC
4. PROPOSED PRIVATE STREET AREA: 0 AC
5. TOTAL NUMBER OF EXISTING LOTS: 1
6. TOTAL NUMBER OF PROPOSED LOTS: 1
7. TOTAL NUMBER OF PROPOSED PROPOSED UNITS: 18

8. PROPOSED PARKING:
1 ATTACHED GARAGE SPACE PER UNIT=18
UNATTACHED SATNDARD PARKING SPACES (18'x9')=19
UNATTACHED COMPACT PARKING SPACES (16'x8')=2
VAN ACCESSABLE HADICAPPED PARKING SPACES=2
TOTAL PARKING SPACES PROPOSED=43
PARKING SPACES PER UNIT=2.39

9. ASSESSOR'S PARCEL NUMBER: 165-493-47

10. SITE ADDRESS: 3710 VISTA WAY OCEANSIDE, CA 92056

11. PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.

17. STATUS OF LEGAL ACCESS: VISTA WAY AN EXISTING & FULLY IMPROVED PUBLIC STREET

18. BENCH MARK: DESCRIPTION: CL MONUMENT 3.5" BRASS DISC STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS RECORD: CITY OF OCEANSIDE ELEVATION: 206.80 DATUM: NAV 88 CITY OF OCEANSIDE #1020

19. SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS SURVEYED ON: 02/20/2020

20. TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT

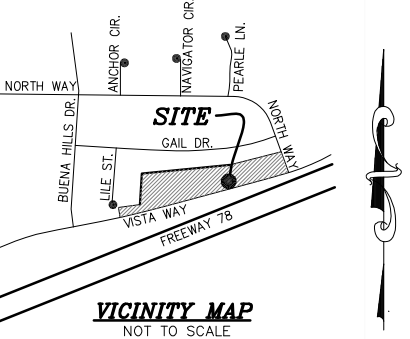
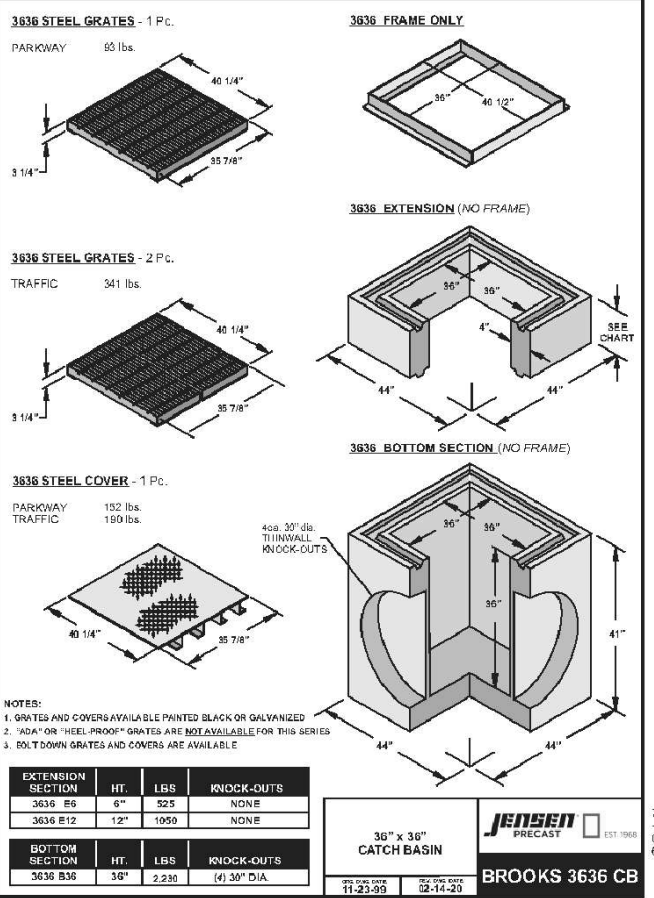
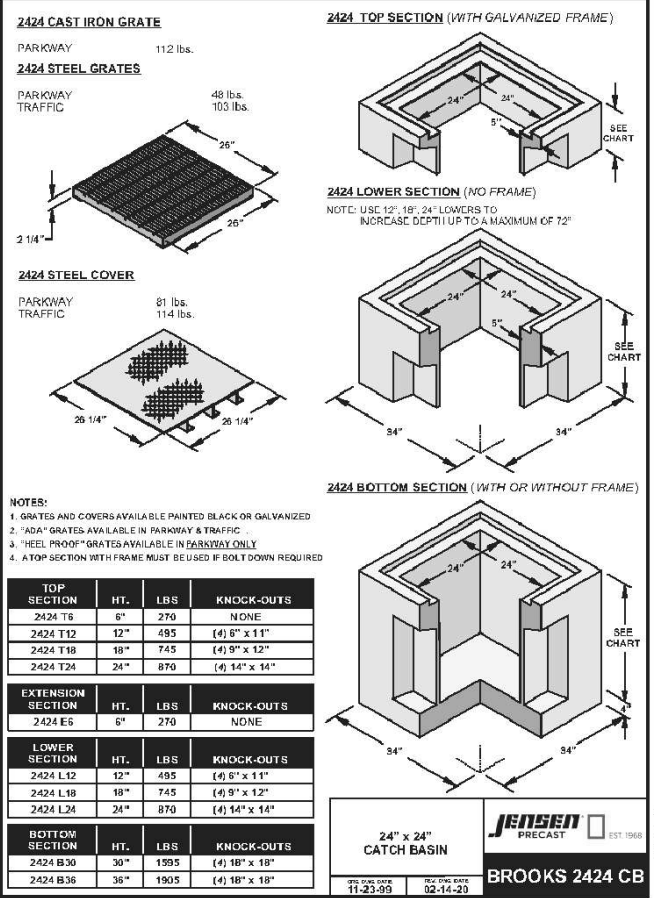
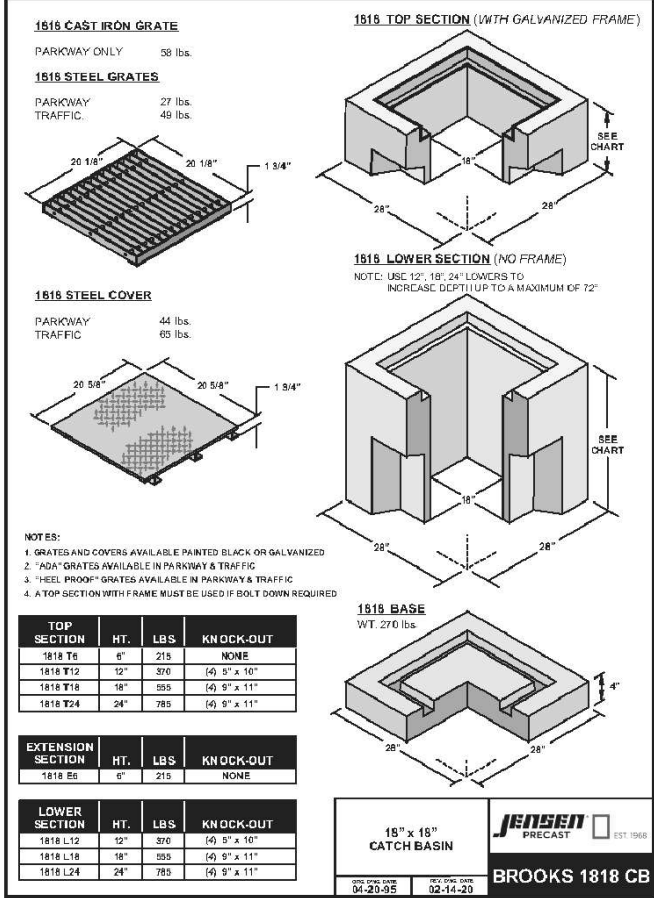
21. THE BASIS OF BEARINGS FOR THIS SUBDIVISION IS THE SOUTH LINE OF LOT 707 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP HEREOF NO. 7690 I.E. NORTH 69°04'36" EAST.

22. MAXIMUM SLOPE GRADIENT: 2:1

26. ONSITE GRADING FOR THIS PROJECT: (8% SHRINKAGE FOR CUT) CUT= 3,000 C.Y. FILL= 4,000 C.Y. IMPORT= 1,000 C.Y. NOTE: ALL QUANTITIES ARE BASED ON FINISH GRADE. NO ALLOWANCE MADE FOR SHRINKAGE OR BULKING OF MATERIAL.

27. GRADED AREA: 1.63 AC=82% OF SITE

28. FEMA FLOOD DESIGNATION: THIS SITE IS NOT WITH A 100-YEAR FLOODWAY OR FLOODPLAIN PER FEMA MAP 06073C0766G DATED: 5/12/16

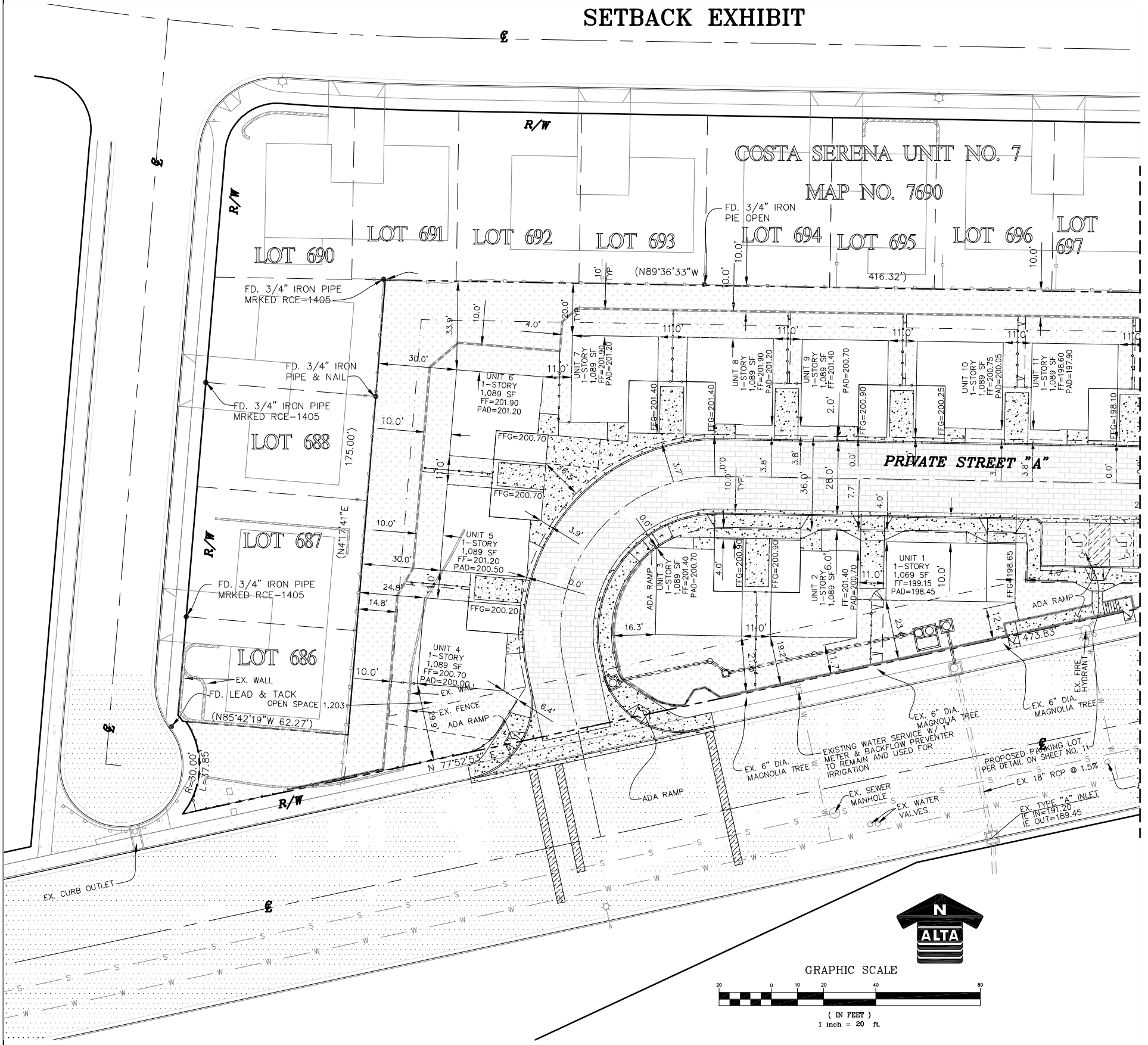


ENGINEER OF WORK
BARTOLOME J. PASTOR, RCE 38606
DATED: MAY 2022

T21-00002
D21-00005
DB21-00003

ALTA CONSULTANTS
PLANNING ENGINEERING SURVEYING
1283 E. Main St., Ste. 100, Escondido, CA 92021 (619) 749-8816 Fax (619) 749-8816
JOB NO. 499-01, DATE MAY 24, 2022

VISTA WAY HOMES
SETBACK EXHIBIT



MATCH LINE SEE SHEET NO. 13

LEGEND:

- BOUNDARY-----
CENTERLINE-----
RIGHT-OF-WAY-----
EXISTING LOT LINE-----
SETBACK LINE-----
EXISTING CURB & GUTTER-----
EXISTING WATER-----
EXISTING SEWER-----
EXISTING FENCE-----
EXISTING RETAINING WALL-----
EXISTING CONCRETE-----
EXISTING AC PAVING-----
EXISTING CONTOUR LINE-----
EXISTING ELEVATION-----
EXISTING FIRE HYDRANTS-----
EXISTING STREET SIGN-----
EXISTING WATER SERVICE W/ EX. BACKFLOW-
PREVENTER TO BE USED FOR IRRIGATION
PROPOSED 2" WATER SERVICE-----
W/ BACKFLOW PREVENTER
PROPOSED 8" FIRE SERVICE-----
FOR PVT. FIRE HYDRANT
PROPOSED 1" WATER SERVICE W/-----
PRIVATE WATER METER TO BE MAINTAINED BY HOA
PROPOSED PRIVATE 4" SEWER LATERAL-----
8" PRIVATE SEWER MAIN W/ SEWER MH-----
PARKING SPACE NUMBER
PROPOSED C-2 CURB & GUTTER-----
PROPOSED G-1 GUTTER-----
PROPOSED ROLLED CURB-----
PROPOSED FENCE-----
SEE LANDSCAPE PLANS FOR DETAILS
PROPOSED LANDSCAPING-----
PROPOSED CONCRETE-----
PROPOSED AC PAVING-----
PROPOSED PAVER-----
PER DETAIL ON SHEET NO. 10
TRENCH RESURFACING M_3A-----
PROPOSED WATER STORAGE-----
SEE SWAMP FOR DETAILS
PROPOSED RETAINING WALL-----
2:1 SLOPE-----
DAYLIGHT LINE-----
DIRECTION OF FLOW-----
(PVT.) PROPOSED STORM DRAIN-----
CURB OUTLET PER D-25-----
(PVT.) PROPRIETARY TREATMENT UNIT-----
PER DETAIL ON SHEET NO. 10
(PVT.) MODIFIED TYPE A CLEANOUT-----
W/SUMP PUMP
(PVT.) 3636 OR 1818 BROOKS BOX-----
W/ TRAFFIC GRATE PER DETAILS ON SHEET 11
(PVT.) 2424 BROOKS BOX W/-----
PARKWAY GRATE PER DETAILS ON SHEET 11
AREA DRAIN PER DETAIL ON SHEET 10-----

General Notes

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- EXISTING GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED PUBLIC STREET DEDICATION: 0 AC
 - PROPOSED PRIVATE STREET AREA: 0 AC
 - TOTAL NUMBER OF EXISTING LOTS: 1
 - TOTAL NUMBER OF PROPOSED LOTS: 1
 - TOTAL NUMBER OF PROPOSED PROPOSED UNITS: 18
 - PROPOSED PARKING:
1 ATTACHED GARAGE SPACE PER UNIT=18
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STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS
RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
CITY OF OCEANSIDE #1020
 - SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
 - TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
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 - MAXIMUM SLOPE GRADIENT: 2:1
 - AREA/PERCENT OF SITE IN DRIVEWAYS & PARKING: 22,588 SF OR 26%
 - MINIMUM REQUIRED OPEN SPACE IS 300 SF PER UNIT=18x300=5,400 SF
COMMON OPEN SPACE IS LOCATED IN TWO AREAS OF 1,521 SF+1,203 SF=2,724 SF
EACH UNIT WILL HAVE A MINIMUM OF 150 SF OF PRIVATE OPEN SPACE
 - AREA/PERCENT OF SITE IN LANDSCAPING: 37,993 SF OR 44%
 - ONSITE GRADING FOR THIS PROJECT: (8% SHRINKAGE FOR CUT)
CUT= 3,000 C.Y. FILL= 4,000 C.Y. IMPORT= 1,000 C.Y.
NOTE: ALL QUANTITIES ARE BASED ON FINISH GRADE. NO ALLOWANCE MADE FOR SHRINKAGE OR BULKING OF MATERIAL.
 - GRADED AREA: 1.63 AC=82% OF SITE
 - FOR PROPOSED FENCING & SIGNAGE SEE LANDSCAPE PLANS FOR THIS PROJECT.
 - FEMA FLOOD DESIGNATION: THIS SITE IS NOT WITH A 100-YEAR FLOODWAY OR FLOODPLAIN PER FEMA MAP 08073C0766G DATED: 2/16/12

ENGINEER OF WORK

BARTOLOME J. PASTOR, RCE 38606
DATED: MAY, 2022



T21-00002
D21-00005
DB21-00003

ALTA CONSULTANTS
PLANNING ENGINEERING SURVEYING
1283 E. Main St., Ste. 100, Escondido, CA 92021 (619) 749-8816 Fax (619) 749-8816
JOB NO. 499-01, DATE MAY 24, 2021

VISTA WAY HOMES
SETBACK EXHIBIT

General Notes

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- SITE ADDRESS: 3710 VISTA WAY
OCEANSIDE, CA 92056
- PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.
- EXISTING GENERAL PLAN LAND USE: RESIDENTIAL
- PROPOSED GENERAL PLAN LAND USE: RESIDENTIAL-SENIOR HOUSING
- EXISTING ZONING: RM-A
- PROPOSED ZONING: RM-A
- PROPOSED DENSITY: 9.14 DU/AC
- STATUS OF LEGAL ACCESS: VISTA WAY AN EXISTING & FULLY IMPROVED PUBLIC STREET
- BENCH MARK: DESCRIPTION: CL MONUMENT 3.5" BRASS DISC STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS
RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
CITY OF OCEANSIDE #1020
- SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
- TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
- THE BASIS OF BEARINGS FOR THIS SUBDIVISION IS THE SOUTH LINE OF LOT 707 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP HEREOF NO. 7690 I.E. NORTH 69°04'36" EAST.
- MAXIMUM SLOPE GRADIENT: 2:1
- AREA/PERCENT OF SITE IN DRIVEWAYS & PARKING: 22,588 SF OR 26%
- MINIMUM REQUIRED OPEN SPACE IS 300 SF PER UNIT=18x300=5,400 SF
COMMON OPEN SPACE IS LOCATED IN TWO AREAS OF 1,521 SF+1,203 SF=2,724 SF
EACH UNIT WILL HAVE A MINIMUM OF 150 SF OF PRIVATE OPEN SPACE
- AREA/PERCENT OF SITE IN LANDSCAPING: 37,993 SF OR 44%
- ONSITE GRADING FOR THIS PROJECT: (8% SHRINKAGE FOR CUT)
CUT= 3,000 C.Y. FILL= 4,000 C.Y. IMPORT= 1,000 C.Y.
NOTE: ALL QUANTITIES ARE BASED ON FINISH GRADE. NO ALLOWANCE MADE FOR SHRINKAGE OR BULKING OF MATERIAL.
- GRADED AREA: 1.63 AC=82% OF SITE
- FOR PROPOSED FENCING & SIGNAGE SEE LANDSCAPE PLANS FOR THIS PROJECT.
- FEMA FLOOD DESIGNATION: THIS SITE IS NOT WITH A 100-YEAR FLOODWAY OR FLOODPLAIN PER FEMA MAP 06073C0766G DATED: 2/16/12

ENGINEER OF WORK

BARTOLOME J. PASTOR, RCE 38606

DATED: MAY 24, 2022

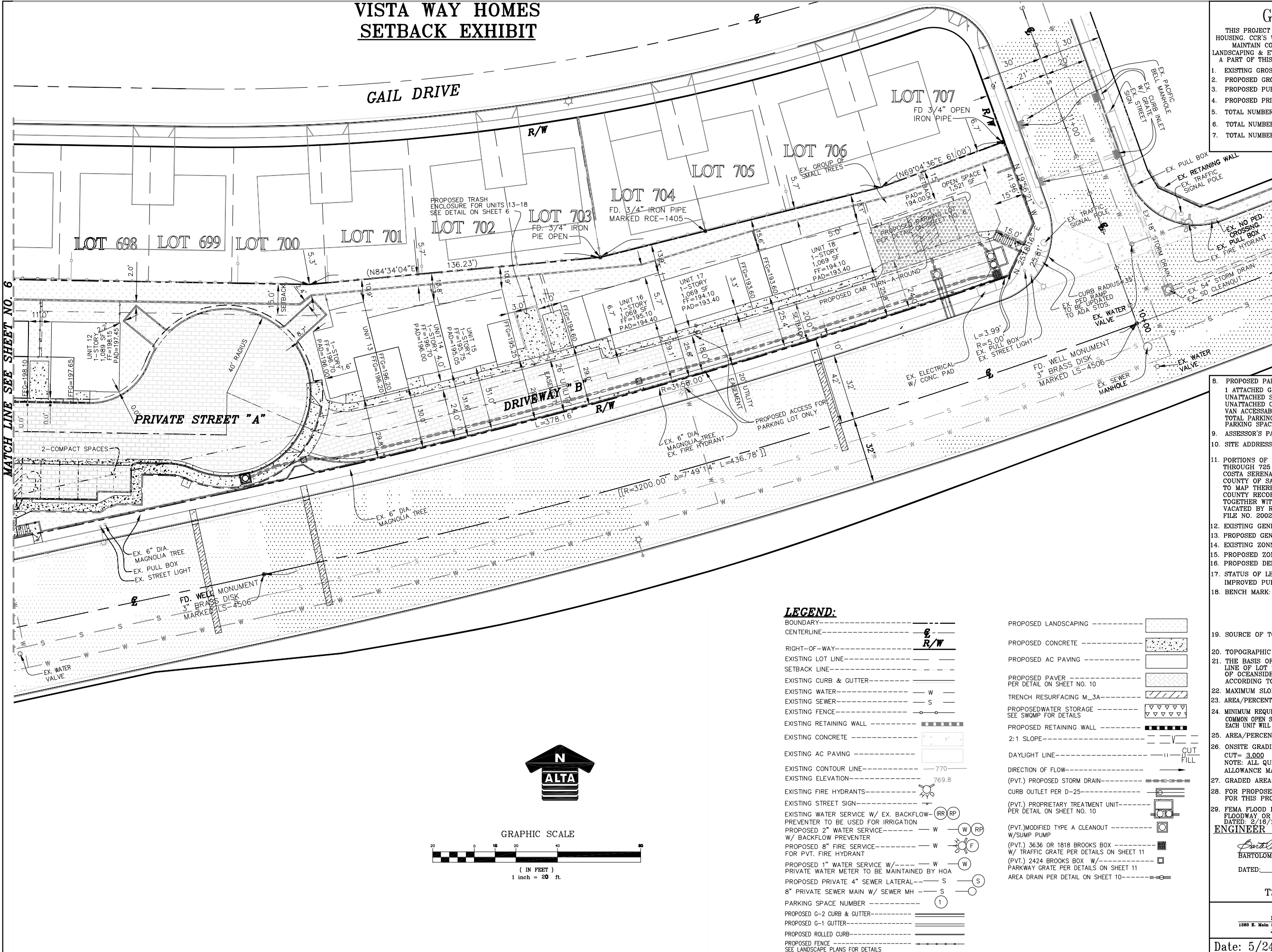
T21-00002 D21-00005 DB21-00003

ALTA CONSULTANTS

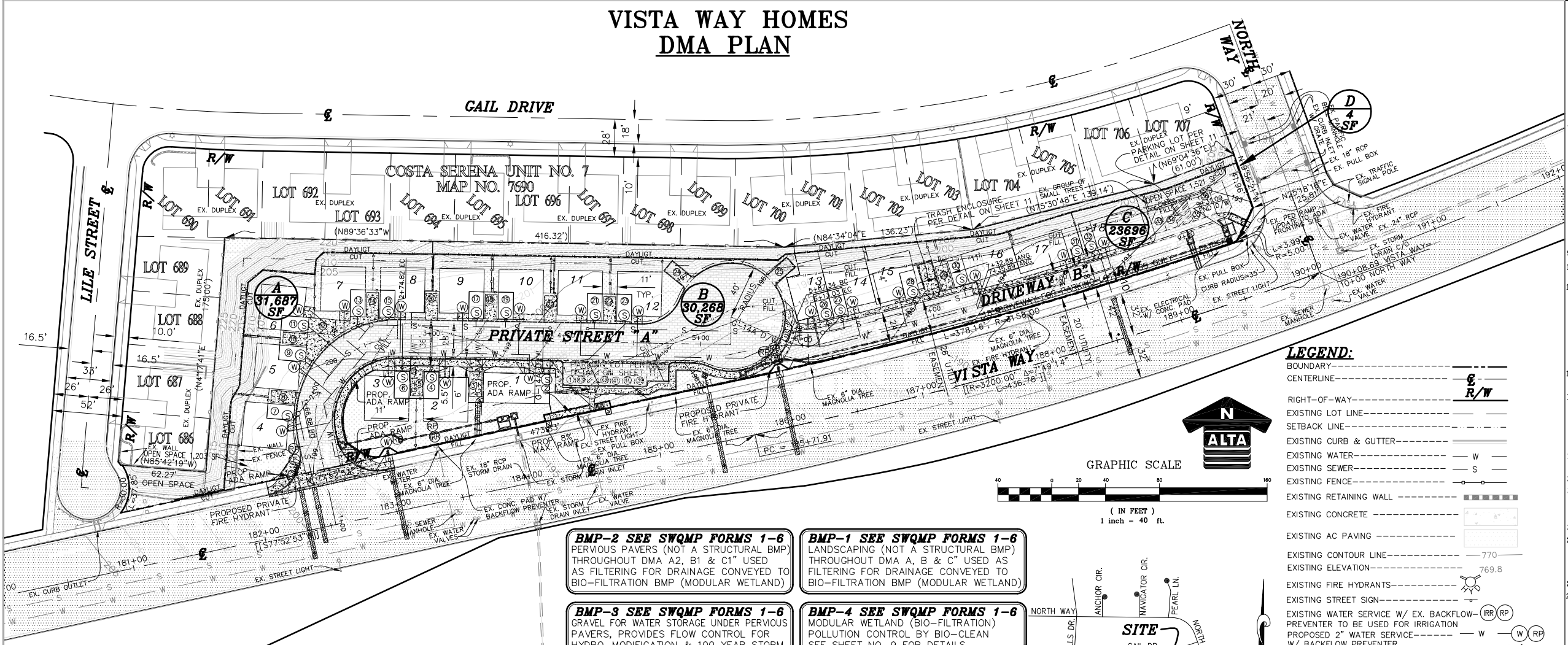
PLANNING ENGINEERING SURVEYING
1283 E. Main St., Ste. 100, B. Cajon, CA 92021 (619) 749-8816 Fax (619) 749-8816
JOB NO. 499-01, DATE MAY 24, 2022

Date: 5/24/2022

SHEET 13 OF 15



VISTA WAY HOMES
DMA PLAN



- BMP-2 SEE SWQMP FORMS 1-6**
PERVIOUS PAVERS (NOT A STRUCTURAL BMP) THROUGHOUT DMA A, B & C1" USED AS FILTERING FOR DRAINAGE CONVEYED TO BIO-FILTRATION BMP (MODULAR WETLAND)
- BMP-1 SEE SWQMP FORMS 1-6**
LANDSCAPING (NOT A STRUCTURAL BMP) THROUGHOUT DMA A, B & C" USED AS FILTERING FOR DRAINAGE CONVEYED TO BIO-FILTRATION BMP (MODULAR WETLAND)
- BMP-3 SEE SWQMP FORMS 1-6**
GRAVEL FOR WATER STORAGE UNDER PERVIOUS PAVERS, PROVIDES FLOW CONTROL FOR HYDRO-MODIFICATION & 100 YEAR STORM DETENTION PRIOR TO BEING CONVEYED TO BIO-FILTRATION (MODULAR WETLAND)
- BMP-4 SEE SWQMP FORMS 1-6**
MODULAR WETLAND (BIO-FILTRATION) POLLUTION CONTROL BY BIO-CLEAN SEE SHEET NO. 9 FOR DETAILS

POTENTIAL POLLUTANTS			
POLLUTANT	POTENTIAL SOURCE	SOURCE CONTROLS	
SEDIMENT	DURING GRADING OPERATIONS	CONST. BMP'S PERMANENT LANDSCAPING AND HARDSCAPE TO BE APPLIED ONLY AS NEEDED	
NUTRIENTS	FERTILIZER	TO BE APPLIED ONLY AS NEEDED	
TRASH & DEBRIS	GENERAL TRASH	REMOVE & DISPOSE IN A PROPER MANOR	
OXYGEN DEMANDING SUBSTANCES	GENERAL	TO REMOVE & DISPOSE IN A PROPER MAONOR	
BACTERIA & VIRUSES	GENERAL	ALL RUNOFF IS DIRECTED TO BIO-FILTRATION UNITS	
PESTICIDES	LANDSCAPING	ALL RUNOFF IS DIRECTED TO BIO-FILTRATION UNITS	

REQUIRED NOTES FOR THIS EXHIBIT:

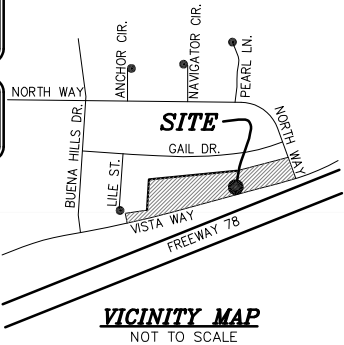
- THE UNDERLYING HYDROLOGIC SOIL GROUP IS "D".
- THE GROUDWATER IN THIS AREA IS DEEP ENOUGH NOT TO IMPACT SITE DEVELOPMENT.
- THERE ARE NO NATURAL HYDROLOGIC FEATURES ON THIS SITE.
- THERE ARE NO CRITICAL COURSE SEDIMENT YIELD AREAS ON THE PROJECT.
- THE EXISTING TOPOGRAPHY AND PROPOSED IMPERVIOUS AREAS ARE INDICATED ON THE EXHIBIT.
- THE EXISTING AND PROPOSED SITE DRAINAGE NETWORK AND CONNECTIONS TO OFFSITE ARE SHOWN.
- THERE IS NO PROPOSED DEMOLITION ON THIS SITE. OTHER THAN CLEARING & GRUBING, REMOVAL OF EXISTING WALLS, AND SAWCUT AND REMOVAL OF EXISTING PUBLIC IMPROVEMENTS AS NEEDED TO PROVIDE ACCESS AND UTILITIES FOR THIS SITE.
- THE PROPOSED GRADING IS SHOWN ON THIS EXHIBIT, INCLUDING PROPOSED RETAINING WALLS.
- THE PROPOSED IMPERVIOUS FEATURES ON THIS PROJECT ARE SHOWN ON THIS EXHIBIT.
- THE DESIGN FEATURES AND SURFACE TREATMENTS USED TO MAINTAIN IMPERVIOUSNESS ARE SHOWN ON THIS EXHIBIT.
- DRAINAGE MANAGEMENT AREAS ARE SHOWN AND IDENTIFIED. MINAULMIST AREAS ARE INDICATED.
- THERE ARE NO POLLUTANT SOURCE AREAS REQUIRING SOURCE CONTROLS ON THIS PROJECT.
- THE STRUCTURAL (PERMANENT) BMPs ARE SHOWN AND IDENTIFIED ON THIS EXHIBIT.

AREA A LOW IMPACT DEVELOPMENT DESIGN							AREA C LOW IMPACT DEVELOPMENT DESIGN						
DMA NAME	DMA AREA SF	POST PROJECT SURFACE TYPE	% OF A2	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	% OF A2	DMA NAME	DMA AREA SF	POST PROJECT SURFACE TYPE	% OF A1 & A3	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	% OF A1 & A3
ASPHALT	0	ASPHALT	0%	1.0	0	0%	ASPHALT	0	ASPHALT	0%	1.0	0	0%
BUILDINGS	9,053	BUILDINGS	29%	1.0	9,053	29%	BUILDINGS	6,620	BUILDINGS	28%	1.0	6,620	28%
CONCRETE	2,864	CONCRETE	9%	1.0	2,868	9%	CONCRETE	2,448	CONCRETE	10%	1.0	2,444	10%
LANDSCAPING	15,500	LANDSCAPING	49%	0.1	1,556	5%	LANDSCAPING	5,257	LANDSCAPING	22%	0.1	684	3%
WALLS	374	WALLS	1%	1.0	374	1%	WALLS	537	WALLS	3%	1.0	537	2%
PAVERS	4,913	PAVERS	15%	0.2	760	2%	PAVERS	8,800	PAVERS	37%	0.2	1,221	6%
TREATMENT	32	PROPRIETARY	0%	0.1	3	0%	TREATMENT	32	PROPRIETARY	0%	0.1	3	0%
TOTAL DMA AREA	31,687	37% OF TOTAL AREA	100%	SEE SWQMP FOR SITE SPECIFIC POLLUTION CONTROL & FLOW CONTROL	14,614	0.04	TOTAL DMA AREA	23,696	28% OF TOTAL AREA	100%	SEE SWQMP FOR SITE SPECIFIC POLLUTION CONTROL & FLOW CONTROL	11,753	0.04
TOTAL DMA AREA						585	TOTAL DMA AREA						469

AREA B LOW IMPACT DEVELOPMENT DESIGN							AREA D LOW IMPACT DEVELOPMENT DESIGN						
DMA NAME	DMA AREA SF	POST PROJECT SURFACE TYPE	% OF B1	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	% OF B1	DMA NAME	DMA AREA SF	POST PROJECT SURFACE TYPE	% OF A1 & A3	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	% OF A1 & A3
ASPHALT	0	ASPHALT	0%	1.0	0	0%	ASPHALT	0	ASPHALT	0%	1.0	0	0%
BUILDINGS	4,544	BUILDINGS	15%	1.0	4,544	15%	BUILDINGS	0	BUILDINGS	0%	1.0	0	0%
CONCRETE	3,513	CONCRETE	12%	1.0	4,866	10%	CONCRETE	0	CONCRETE	0%	1.0	0	0%
LANDSCAPING	7,702	LANDSCAPING	26%	0.1	814	3%	LANDSCAPING	4	LANDSCAPING	100%	0.1	0	0%
WALLS	342	WALLS	1%	1.0	344	1%	WALLS	0	WALLS	0%	1.0	0	0%
PAVERS	19,102	PAVERS	46%	0.2	2,468	8%	PAVERS	0	PAVERS	0%	0.2	0	0%
TREATMENT	0	PROPRIETARY	0%	0.1	3	0%	TREATMENT	0	PROPRIETARY	0%	0.1	0	0%
TOTAL DMA AREA	30,268	35% OF TOTAL AREA	100%	SEE SWQMP FOR SITE SPECIFIC POLLUTION CONTROL & FLOW CONTROL	13,038	0.04	TOTAL DMA AREA	4	0% OF TOTAL AREA	100%	SEE SWQMP FOR SITE SPECIFIC POLLUTION CONTROL & FLOW CONTROL	0	0.04
TOTAL DMA AREA						522	TOTAL DMA AREA						0

LEGEND:

- BOUNDARY-----
CENTERLINE-----
RIGHT-OF-WAY-----
EXISTING LOT LINE-----
SETBACK LINE-----
EXISTING CURB & GUTTER-----
EXISTING WATER-----
EXISTING SEWER-----
EXISTING FENCE-----
EXISTING RETAINING WALL-----
EXISTING CONCRETE-----
EXISTING AC PAVING-----
EXISTING CONTOUR LINE-----
EXISTING ELEVATION-----
EXISTING FIRE HYDRANTS-----
EXISTING STREET SIGN-----
EXISTING WATER SERVICE W/ EX. BACKFLOW PREVENTER TO BE USED FOR IRRIGATION-----
PROPOSED 2" WATER SERVICE-----
PROPOSED 8" FIRE SERVICE-----
FOR PVT. FIRE HYDRANT-----
PROPOSED 1" WATER SERVICE W/-----
PRIVATE WATER METER TO BE MAINTAINED BY HOA-----
PROPOSED PRIVATE 4" SEWER LATERAL-----
8" PRIVATE SEWER MAIN W/ SEWER MH-----
PARKING SPACE NUMBER-----
PROPOSED TYPE G PER G-2 CURB-----
PROPOSED FENCE-----
SEE LANDSCAPE PLANS FOR DETAILS-----
PROPOSED LANDSCAPING-----
PROPOSED CONCRETE-----
PROPOSED AC PAVING-----
PROPOSED PAVEMENT-----
PER DETAIL ON SHEET NO. 6-----
TRENCH RESURFACING M_3A-----
PROPOSED WATER STORAGE-----
SEE SWQMP FOR DETAILS-----
PROPOSED RETAINING WALL-----
2:1 SLOPE-----
DAYLIGHT LINE-----
DIRECTION OF FLOW-----
(PVT.) PROPOSED STORM DRAIN-----
CURB OUTLET PER D-25-----
(PVT.) PROPRIETARY TREATMENT UNIT-----
PER DETAIL ON SHEET NO. 9-----
(PVT.) MODIFIED TYPE A CLEANOUT-----
W/SUMP PUMP-----
(PVT.) 3636 OR 1818 BROOKS BOX-----
W/ TRAFFIC GRATE PER DETAILS ON SHEET 10-----
(PVT.) 2424 BROOKS BOX W/-----
PARKWAY GRATE PER DETAILS ON SHEET 10-----
AREA DRAIN PER DETAIL ON SHEET 10-----



General Notes

- THIS PROJECT IS A COMMON INTEREST DEVELOPMENT FOR SENIOR HOUSING. CCR'S WILL BE PREPARED FOR THIS PROJECT TO DEFINE AND MAINTAIN COMMON USE AREAS SUCH AS DRIVEWAYS, PARKING, LANDSCAPING & ETC. AFFORDABLE HOUSING (D21-00005) IS INCLUDED AS A PART OF THIS PROJECT ALONG WITH BONUS DENSITY (DB21-00003)
- EXISTING GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED PUBLIC STREET DEDICATION: 0 AC
 - PROPOSED PRIVATE STREET AREA: 0 AC
 - TOTAL NUMBER OF EXISTING LOTS: 1
 - TOTAL NUMBER OF PROPOSED LOTS: 1
 - TOTAL NUMBER OF PROPOSED PROPOSED UNITS: 18
 - PROPOSED PARKING:
1 ATTACHED GARAGE SPACE PER UNIT=18
UNATTACHED SATNDARD PARKING SPACES (18'x9')=19
UNATTACHED COMPACT PARKING SPACES (16'x8')=2
VAN ACCESSABLE HADICAPPED PARKING SPACES=2
TOTAL PARKING SPACES PROPOSED=43
PARKING SPACES PER UNIT=2.39
 - ASSESSOR'S PARCEL NUMBER: 165-493-47
 - SITE ADDRESS: 3710 VISTA WAY
OCEANSIDE, CA 92056
 - PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.
 - STATUS OF LEGAL ACCESS: VISTA WAY AN EXISTING & FULLY IMPROVED PUBLIC STREET
 - BENCH MARK: DESCRIPTION: CL MONUMENT 3.5" BRASS DISC STAMPED LS-4506
LOCATION: INT VISTA WAY AND BUENA HILLS
RECORD: CITY OF OCEANSIDE
ELEVATION: 206.80 DATUM: NAV 88
CITY OF OCENSE #1020
 - SOURCE OF TOPOGRAPHY: ALATA CONSULTANTS
SURVEYED ON: 02/20/2020
 - TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
 - THE BASIS OF BEARINGS FOR THIS SUBDIVISION IS THE SOUTH LINE OF LOT 707 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP HEREOF NO. 7690 I.E. NORTH 69°04'36" EAST.
 - MAXIMUM SLOPE GRADIENT: 2:1
 - ONSITE GRADING FOR THIS PROJECT: (8% SHRINKAGE FOR CUT)
CUT= 3,000 C.Y. FILL= 4,000 C.Y. IMPORT= 1,000 C.Y.
NOTE: ALL QUANTITIES ARE BASED ON FINISH GRADE. NO ALLOWANCE MADE FOR SHRINKAGE OR BULKING OF MATERIAL.
 - GRADED AREA: 1.63 AC=82% OF SITE
 - FEMA FLOOD DESIGNATION: THIS SITE IS NOT WITH A 100-YEAR FLOODWAY OR FLOODPLAIN PER FEMA MAP 06073C0766G

DMA LEGEND:

- DMA AREA -----
WATERSHED NAME -----
WATERSHED DESIGNATION -----
WATERSHED AREA -----
HYDROLOGIC SOIL GROUP "D"
DEPTH TO GROUNDWATER > 12

ENGINEER OF WORK

BARTOLOME J. PASTOR, RCE 38606
DATED: MAY 2022



T21-00002
D21-00005
DB21-00003

ALTA CONSULTANTS
PLANNING ENGINEERING SURVEYING
1283 E. Main St., Ste. 100, In Cajon, CA 92021 (619) 749-8818 Fax (619) 749-8818
JOB NO. 499-01, DATE MAY 24, 2022

VISTA WAY HOMES
WAIVER EXHIBIT

General Notes

- THIS PROJECT IS A COMMON INTEREST DEVELOPMENT FOR SENIOR HOUSING. CCR'S WILL BE PREPARED FOR THIS PROJECT TO DEFINE AND MAINTAIN COMMON USE AREAS SUCH AS DRIVEWAYS, PARKING, LANDSCAPING & ETC. AFFORDABLE HOUSING (D21-00005) IS INCLUDED AS A PART OF THIS PROJECT ALONG WITH BONUS DENSITY (DB21-00003)
- EXISTING GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED GROSS SUBDIVISION AREA: 1.97 AC
 - PROPOSED PUBLIC STREET DEDICATION: 0 AC
 - PROPOSED PRIVATE STREET AREA: 0 AC
 - TOTAL NUMBER OF EXISTING LOTS: 1
 - TOTAL NUMBER OF PROPOSED LOTS: 1
 - TOTAL NUMBER OF PROPOSED PROPOSED UNITS: 18
-
- ASSESSOR'S PARCEL NUMBER: 165-493-47
 - SITE ADDRESS: 3710 VISTA WAY
OCEANSIDE, CA 92056
 - PORTIONS OF LOTS 684, 685, 708 THROUGH 720, LOTS 721 THROUGH 725 AND PORTIONS OF LOTS 726 AND 727 OF COSTA SERENA UNIT NO. 7, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 7690, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JULY 3, 1973, TOGETHER WITH THAT PORTION OF PORT CIRCLE STREET AS VACATED BY RESOLUTION RECORDED FEBRUARY 26, 2002 AS FILE NO. 2002-0159407 OF OFFICIAL RECORDS.
 - EXISTING GENERAL PLAN LAND USE: RESIDENTIAL
 - PROPOSED GENERAL PLAN LAND USE: RESIDENTIAL-SENIOR HOUSING
 - EXISTING ZONNING: RM-A
 - PROPOSED ZONNING: RM-A
 - PROPOSED DENSITY: 9.14 DU/AC
 - STATUS OF LEGAL ACCESS: VISTA WAY AN EXISTING & FULLY IMPROVED PUBLIC STREET

WAIVER LEGEND:

- STANDARD SETBACKS -----
- PRIVAT STREET/ DRIVEWAY BUILDING SETBACK ----
- PRIVAT STREET/ DRIVEWAY GARAGE SETBACK ----
- 15' USABLE BACKYARD -----
- 6' RETAINING WALL -----
- DEVELOPABLE AREA LOST W/ 6' RETAINING WALL --

ENGINEER OF WORK

BARTOLOME J. PASTOR, RCE 38606
DATED: MAY, 2022

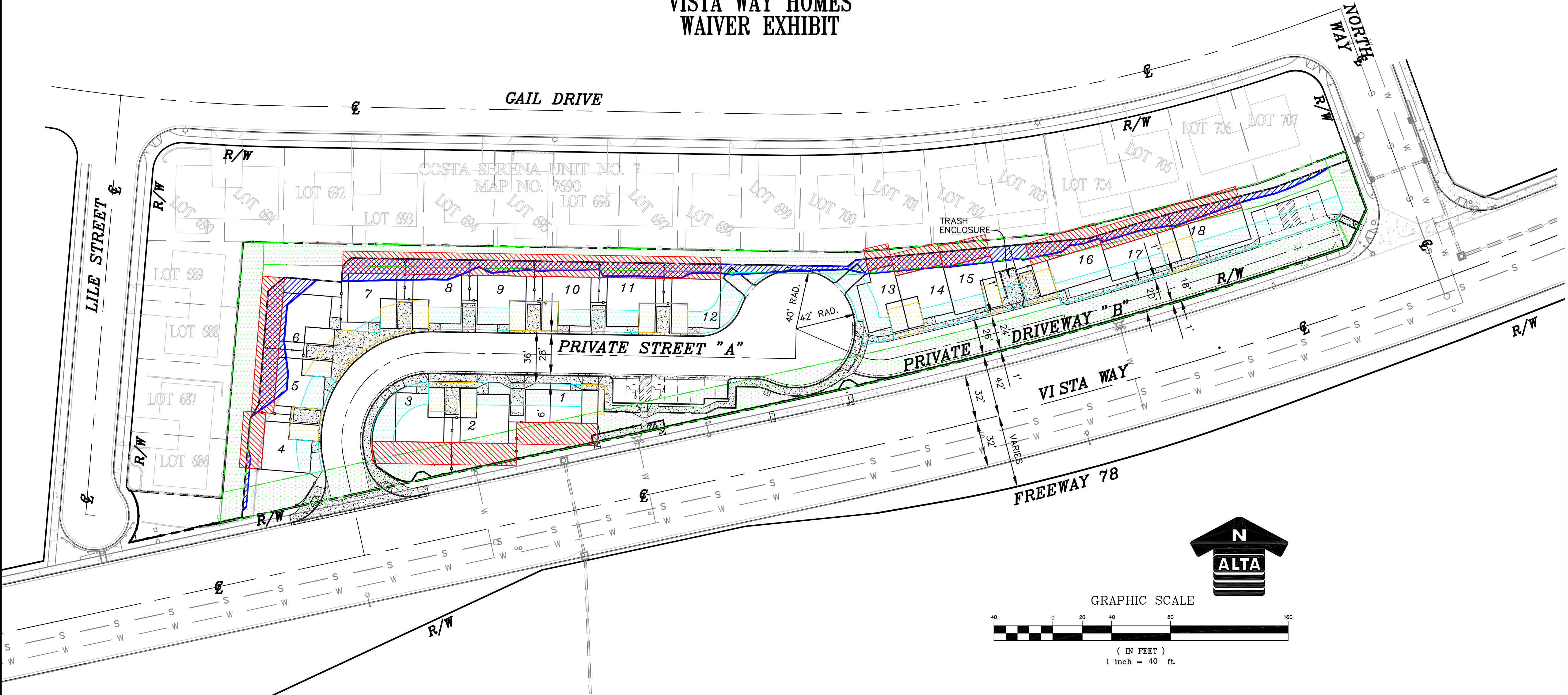
OWNER

OWNER: NEPTUNE INVESTMENTS, LLC
ADDRESS: POB BOX 9890
RANCHO SANTA FE, CA 92067
TELEPHONE: (858) 401-9090
E-MAIL: rezashera@gmail.com



T21-00002
DB21-00005
DB21-00003

ALTA CONSULTANTS
PLANNING ENGINEERING SURVEYING
1283 E. Main St., Ste. 109, El Cajon, CA 92021 (619) 749-8616 Fax (619) 749-8618
JOB NO. 499-01, DATE MAY 24, 2022



LEGEND:

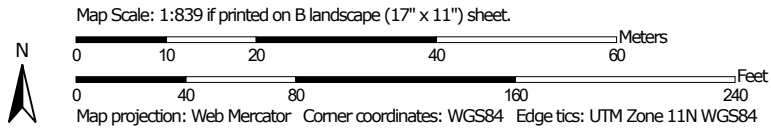
- BOUNDARY -----
- CENTERLINE -----
- RIGHT-OF-WAY -----
- EXISTING LOT LINE -----
- SETBACK LINE -----
- EXISTING CURB & GUTTER -----
- EXISTING WATER -----
- EXISTING SEWER -----
- EXISTING FENCE -----
- EXISTING RETAINING WALL -----
- EXISTING CONCRETE -----
- EXISTING FIRE HYDRANTS -----
- EXISTING STREET SIGN -----
- PROPOSED G-2 CURB & GUTTER -----
- PROPOSED G-1 GUTTER -----
- PROPOSED ROLLED CURB -----
- PROPOSED FENCE SEE LANDSCAPE PLANS FOR DETAILS -----
- PROPOSED RETAINING WALL -----
- PROPOSED CONCRETE -----

ATTACHMENT 2
Soils Plat

Soil Map—San Diego County Area, California
(3710 Vista Way)



Soil Map may not be valid at this scale.



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Diego County Area, California

Survey Area Data: Version 16, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 24, 2020—Feb 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
LeE3	Las Flores loamy fine sand, 9 to 30 percent slopes, severely eroded	2.0	100.0%
Totals for Area of Interest		2.0	100.0%

ATTACHMENT 6
Geotechnical and Groundwater Investigation Report



**EAST COUNTY SOIL CONSULTATION
AND ENGINEERING, INC.
10925 HARTLEY ROAD, SUITE "I"
SANTEE, CALIFORNIA 92071
Tel (619) 258-7901**

Pacific Group
P.O. Box 9890
Rancho Santa Fe, California 92067

December 5, 2019
Project No. 19-1107A2

Subject: Geotechnical Investigation for Proposed Senior Housing Project
3710 Vista Way
Oceanside, CA 92056
APN 165-493-47-00

Ladies & Gentlemen:

In accordance with your request, we have performed a geotechnical investigation at the subject site to discuss the geotechnical aspects of the project and provide recommendations for design and construction of the proposed senior housing project.

SCOPE OF SERVICES

The following scope of work was performed for this investigation:

- Site reconnaissance and review of published geologic, seismologic and geotechnical reports and maps pertinent to the project area
- Subsurface exploration consisting of three test borings and six test pits within the limits of the proposed housing project. The test borings and test pits were logged by our project supervisor.
- Collection of representative soil samples at selected depths. The obtained samples were sealed in moisture-resistant containers and transported to the laboratory for subsequent analysis.
- Laboratory testing of soil samples obtained during the field investigation.
- Geotechnical analysis of the field and laboratory data, which provided the basis for our conclusions and recommendations.
- Preparation of this report, which summarizes the results of our analysis and presents our findings and recommendations for the proposed construction.

SITE DESCRIPTION AND PROPOSED CONSTRUCTION

The subject site is an irregular-shaped, residential lot located at the northwest corner of Vista Way and North Way, in the City of Oceanside, California. The property is a vacant, previously graded parcel that slopes gently down to the southeast. Vegetation consists of grass, shrub and a few trees. The parcel is bordered by Vista Way to the south, North Way to the east and similar residential developments to the west and north.

No building plans were available at the time of our investigation. It is our understanding that the proposed construction will consist of 16 to 20 senior housing residences. The buildings will be one-story, wood framed structures founded on continuous and/or individual spread footings with slab-on-grade floors.

FIELD INVESTIGATION AND LABORATORY TESTING

On September 18 and 30, 2019, three test borings and six test pits were excavated to a maximum depth of approximately 8 feet below existing grade with a hand auger and a Caterpillar mini-excavator equipped with a 24-inch bucket, respectively. The approximate locations of the test borings and test pits are shown on the attached Figure 2. Logs of the subsurface soils and bedrock materials are shown on Figure 3.

Following the field exploration, laboratory testing was performed to evaluate the pertinent engineering properties of the foundation materials. The laboratory tests included maximum density and optimum moisture content, in place moisture content and dry density, and expansion index. The tests were performed in general accordance with ASTM standards and other accepted methods. The test results are shown on the logs of the test pits, Figure 3 and on Figure 4.

SOIL CONDITIONS

The subsurface descriptions are interpreted from conditions encountered during the field investigation and/or inferred from the geologic literature. Detailed descriptions of the subsurface materials are presented on the logs of the test borings and test pits provided on Figure 3. The following are general descriptions of the encountered soil and bedrock types.

Fill

Fill soils were encountered in all test borings and test pits to depths ranging from approximately 6 inches to 5 feet below existing grades. The fill consisted of light grayish brown, silty sand that was dry to moist and loose to medium dense in consistency.

Bedrock-Santiago Formation

Bedrock of the Santiago Formation was encountered below the fill soils. The bedrock generally consisted of light gray, silty sandstone that was dry to moist and medium dense to dense in consistency.

SOIL PROPERTIES

a. Compressible Soils

Our field observations and testing indicate low compressibility within the underlying sandstone bedrock of the Santiago Formation. However, loose, fill soils were encountered to depths ranging from approximately 6 inches to approximately 5 feet below existing surface grades within the proposed building areas. The fill soils are compressible. As a result, all existing fill should be removed and recompacted to a minimum of 90 percent relative compaction, as discussed later in the report.

b. Expansive Soils

An expansion index test (ASTM D 4829) was performed on a representative sample of the fill soils to determine volumetric change characteristics with change in moisture content. An expansion index of 0 was obtained which indicates the foundation soils are non expansive.

GROUNDWATER

Static groundwater was not encountered to the depths of the boreholes. The building pads are located at an elevation greater than 200 feet above Mean Sea Level. We do not expect groundwater to affect the proposed construction. Recommendations for surface drainage are presented later in the Drainage section of this report.

2016 CBC SEISMIC DESIGN CRITERIA

Seismic design values are presented on the attached Figure No. 5.

CONCLUSIONS

Based on our investigation, we conclude that the construction of the proposed senior housing project is feasible from a geotechnical standpoint, provided the recommendations presented in this report will be properly implemented during construction.

RECOMMENDATIONS

SITE GRADING

a. Clearing and Grubbing

The areas of the proposed construction should be cleared of vegetation and deleterious materials. Vegetation and the debris from the clearing operation should be properly disposed of off-site. The area should be thoroughly inspected for any possible buried objects that need to be rerouted or removed prior to construction. All holes, trenches, or pockets left by the removal of these objects should be properly backfilled with compacted fill materials.

b. Erosion Control

Due to the granular characteristics of the on-site soils, areas of recent grading or exposed ground may be subject to erosion. During construction, surface water should be controlled via berms, gravel/sandbags, silt fences, straw wattles, siltation or bioretention basins, positive surface grades or other method to avoid damage to the finish work or adjoining properties. All site entrances and exits must have coarse gravel or steel shaker plates to minimize offsite sediment tracking. Best Management Practices (BMPs) must be used to protect storm drains and minimize pollution. The contractor should take measures to prevent erosion of graded areas until such time as permanent drainage and erosion control measures have been installed. After completion of grading, all excavated surfaces should exhibit positive drainage and eliminate areas where water might pond.

c. Temporary Slopes

For the excavation of foundations and utility trenches, temporary vertical cuts to a maximum height of 5 feet may be constructed. Any temporary cuts greater than 5 feet in height should be shored or laid back at a 3/4:1 (horizontal to vertical) slope ratio. CAL-OSHA guidelines for temporary slopes and trench excavation safety should be implemented during construction.

d. Soil Removals

The existing fill soils within building areas and to a distance of at least 5 feet outside building limits should be removed to their full depth (about 5 feet maximum) exposing the underlying sandstone of the Santiago Formation. Where the existing fill depths are less than 3 feet the existing fill/bedrock should be overexcavated to a minimum depth of 3 feet below proposed pad grades.

e. Compaction and Method of Filling

Prior to fill placement, the bottoms of the excavations should be scarified to a depth of 6 to 8 inches, moisture conditioned to slightly above optimum moisture content and compacted to at least 90 percent relative compaction.

The on-site soils may be reused as compacted fill provided they are free of organic materials and debris, and rocks or cobbles over 6 inches in dimension. Any imported fill soils should be predominantly granular and approved by our field representative.

All fill should be compacted to a minimum relative compaction of 90 percent as determined by ASTM D1557. Fill should be placed at a moisture content slightly above optimum moisture content, in lifts 6 to 8 inches thick, with each lift compacted by mechanical means.

Utility trench backfill should also be compacted to at least 90 percent relative compaction.

All grading, fill placement, and compaction should be performed in accordance with the grading requirements of the City of Oceanside. Fill placement and compaction should be observed and tested as necessary by our field representative.

FOUNDATIONS AND FLOOR SLABS

- a. The proposed one-story buildings should be founded in properly compacted fill. Footings should have a minimum depth of 18 inches below building pad grade or lowest adjacent, finished grade, whichever is deeper. Continuous footings should be at least 15 inches wide and reinforced with a minimum of four #4 steel bars; two bars placed near the top of the footings and the other two bars placed near the bottom of the footings. Individual footings should be at least 18 inches square and reinforced with a grid of #4 bars spaced 12 inches on centers (each way) and placed on concrete blocks at the bottom of the footing.
- b. Floor slabs should be at least 5 inches thick and reinforced with #4 bars placed at 18 inches on center in two directions in the middle of the slab. The reinforcing steel should be supported on steel chairs or concrete blocks. Floor slabs should be underlain by 2 inches of clean sand over a 10-mil visqueen moisture barrier over 2 inches of clean sand. To minimize the potential for shrinkage cracks, the maximum concrete slump should be 4 inches and the maximum water-cement ratio should be 50 percent. Some shrinkage cracks are still possible.
- f. An allowable soil bearing value of 2,000 pounds per square foot may be used for the design of continuous and individual spread footings. This value may be increased by one-third for short term wind or seismic loads.
- g. Lateral loads may be resisted by an equivalent fluid passive soil pressure of 300 pounds per cubic foot. A coefficient of friction of 0.4 may also be used. If passive and friction values are used together, the friction value should be reduced by one-third.
- h. All footing excavations should be inspected and approved by our representative.
- i. For design purposes, total and differential settlements of ½ inch may be utilized.

DRAINAGE

Adequate measures should be undertaken so that drainage water is directed away from the foundations, footings, floor slabs and the tops of slopes via rain gutters, downspouts, surface swales and subsurface drains towards the natural drainage for this area. As required in the 2016 California Building Code, a minimum gradient of 2 percent is recommended in hardscape areas adjacent to the structure. In earth areas, a minimum gradient of 5 percent away from the structure for a distance of at least 10 feet should be provided. If this requirement cannot be met due to site limitations, drainage can be done through a swale in accordance with Section 1804.4 of the 2016 California Building Code. Earth swales should have a minimum gradient of 2 percent. Drainage should be directed to approved drainage facilities. Proper surface and subsurface drainage will be required to minimize the potential of water seeking the level of the bearing soils under the

foundations, footings and floor slabs, which may otherwise result in undermining and differential settlement of the structure and other improvements.

LIMITATIONS OF INVESTIGATION

Our investigation was performed using the skill and degree of care ordinarily exercised, under similar circumstances, by reputable soils engineers and geologists practicing in this or similar localities. No other warranty, expressed or implied, is made as to the conclusions and professional advice included in this report. This report provides no warranty, either expressed or implied, concerning future building performance. Future damage from geotechnical or other causes is a possibility.

This report is prepared for the sole use of our client and may not be assigned to others without the written consent of the client and ECSC&E, Inc.

The samples collected and used for testing, and the observations made, are believed representative of site conditions; however, soil and geologic conditions can vary significantly between exploration trenches, boreholes and surface exposures. As in most major projects, conditions revealed by construction excavations may vary with preliminary findings. If this occurs, the changed conditions must be evaluated by a representative of ECSC&E and designs adjusted as required or alternate designs recommended.

This report is issued with the understanding that it is the responsibility of the owner, or of his representative to ensure that the information and recommendations contained herein are brought to the attention of the project architect and engineer. Appropriate recommendations should be incorporated into the structural plans. The necessary steps should be taken to see that the contractor and subcontractors carry out such recommendations in the field.

The findings of this report are valid as of this present date. However, changes in the conditions of a property can occur with the passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside of our control. Therefore, this report is subject to review and should be updated after a period of two years.

ADDITIONAL SERVICES

The review of plans and specifications, field observations and testing under our direction are integral parts of the recommendations made in this report. If East County Soil Consultation and Engineering, Inc. is not retained for these services, the client agrees to assume our responsibility for any potential claims that may arise during construction. Observation and testing are additional services, which are provided by our firm, and should be budgeted within the cost of development.

Figures 1 through 5 are part of this report.

Respectfully Submitted,



Martin R. Owen, PE, GE
Geotechnical Engineer



**FIGURE 1
VICINITY MAP**

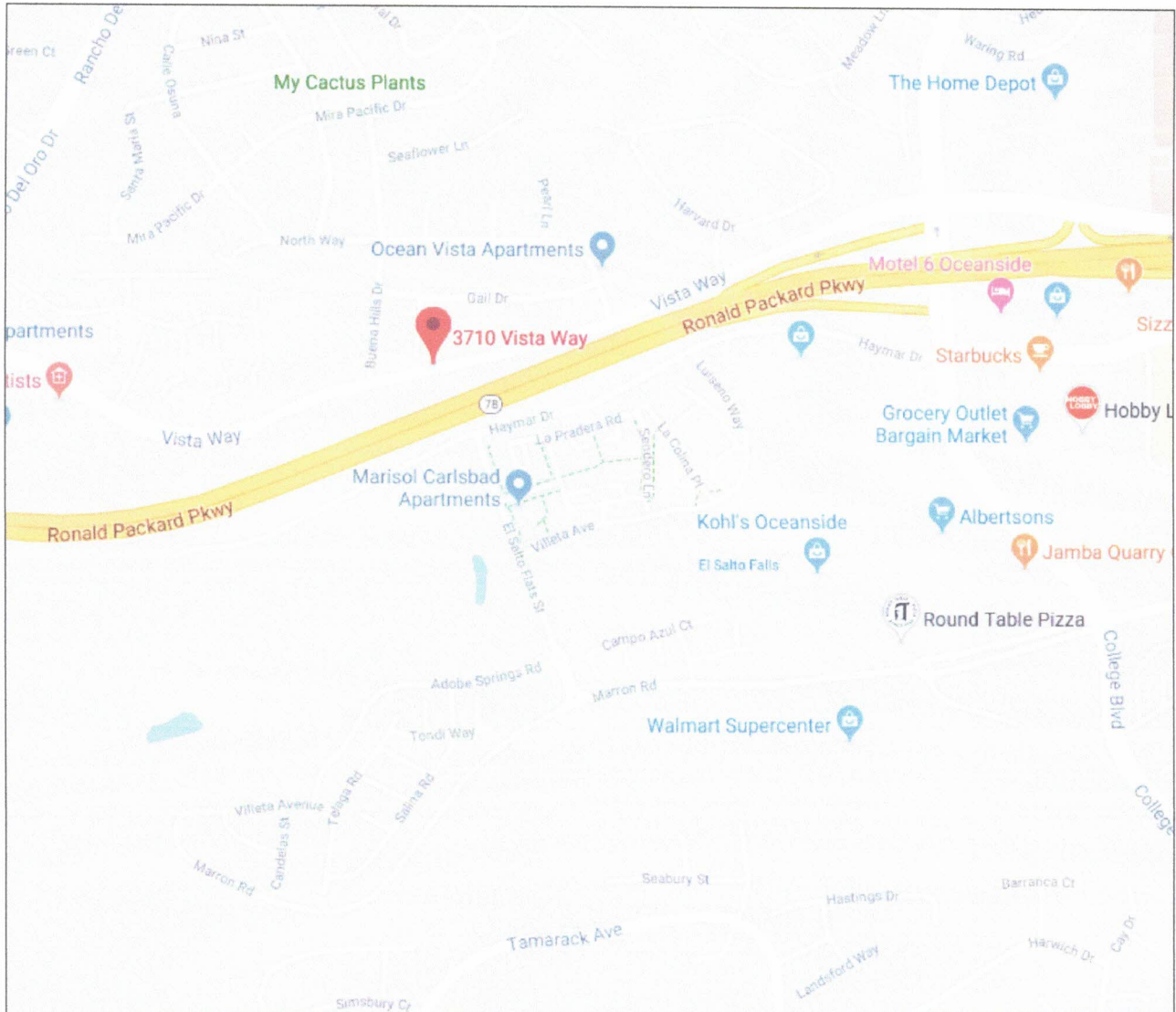


FIGURE 2
LOCATIONS OF TEST BORINGS AND TEST PITS



LEGEND

- B-3** ○ APPROXIMATE LOCATION OF TEST BORING
T-6 □ APPROXIMATE LOCATION OF TEST PIT

FIGURE 3 LOGS OF TEST BORINGS AND TEST PITS

TEST BORING NO. 1

DEPTH	SOIL DESCRIPTION	Y	M
Surface	FILL light grayish brown, dry to moist, loose to medium dense, silty sand		
1.0'	BEDROCK-SANTIAGO FORMATION light gray, dry to moist, medium dense to dense, silty sandstone		
2.0'	becomes moist and dense		
3.0'	bottom of borehole, no caving, no groundwater borehole backfilled 9/18/19		

TEST BORING NO. 2

DEPTH	SOIL DESCRIPTION	Y	M
Surface	FILL light grayish brown, dry to moist, loose to medium dense, silty sand		
0.5'	BEDROCK-SANTIAGO FORMATION light gray, dry to moist, medium dense to dense, silty sandstone		
2.5'	becomes moist and dense		
3.0'	bottom of borehole, no caving, no groundwater borehole backfilled 9/18/19		

TEST BORING NO. 3

DEPTH	SOIL DESCRIPTION	Y	M
Surface	FILL light grayish brown, dry to moist, loose to medium dense, silty sand		
3.5'	BEDROCK-SANTIAGO FORMATION light gray, dry to moist, medium dense to dense, silty sandstone		
4.0'	becomes moist and dense		
5.0'	bottom of borehole, no caving, no groundwater borehole backfilled 9/18/19		

Y = DRY DENSITY IN PCF
M = MOISTURE CONTENT IN %

FIGURE 3 LOGS OF TEST BORINGS AND TEST PITS (CONTINUED)

TEST PIT NO. 1

DEPTH	SOIL DESCRIPTION	Y	M
Surface	FILL light grayish brown, dry, loose to medium dense, silty sand		
1.0'	" " " " " " " "	98.4	2.9
2.0'	BEDROCK-SANTIAGO FORMATION light gray, dry to moist, dense, silty sandstone	112.5	10.8
3.0'	becomes moist and dense		
4.0'	" " "	109.8	11.0
5.0'	bottom of test pit, no caving, no groundwater test pit backfilled 9/30/19		

TEST PIT NO. 2

DEPTH	SOIL DESCRIPTION	Y	M
Surface	FILL light grayish brown, dry to moist, loose to medium dense, silty sand		
0.5'	BEDROCK-SANTIAGO FORMATION light gray, dry to moist, medium dense to dense, silty sandstone		
2.5'	" " " " " " " "	108.4	9.3
3.0'	bottom of test pit, no caving, no groundwater test pit backfilled 9/30/19		

TEST PIT NO. 3

DEPTH	SOIL DESCRIPTION	Y	M
Surface	FILL light grayish brown, dry to moist, loose to medium dense, silty sand		
2.0'	" " " " " " " "	101.0	7.4
5.0'	BEDROCK-SANTIAGO FORMATION light gray, dry to moist, medium dense to dense, silty sandstone		
6.0'	becomes moist and dense		
8.0'	bottom of test pit, no caving, no groundwater test pit backfilled 9/30/19		

Y = DRY DENSITY IN PCF

M = MOISTURE CONTENT IN %

FIGURE 3 LOGS OF TEST BORINGS AND TEST PITS (CONTINUED)

TEST PIT NO. 4

DEPTH	SOIL DESCRIPTION	Y	M
Surface	FILL light grayish brown, dry to moist, loose to medium dense, silty sand		
3.0'	" " " " " " " "	104.6	8.2
5.0'	BEDROCK-SANTIAGO FORMATION light gray, dry to moist, medium dense to dense, silty sandstone		
6.0'	bottom of test pit, no caving, no groundwater test pit backfilled 9/30/19		

TEST PIT NO. 5

DEPTH	SOIL DESCRIPTION	Y	M
Surface	FILL light grayish brown, dry to moist, loose to medium dense, silty sand		
1.5'	" " " " " " " "	99.0	9.1
3.0'	SANTIAGO FORMATION light gray, dry to moist, medium dense to dense, silty sandstone		
4.0'	bottom of test pit, no caving, no groundwater test pit backfilled 9/30/19		

TEST PIT NO. 6

DEPTH	SOIL DESCRIPTION	Y	M
Surface	FILL light grayish brown, dry to moist, loose to medium dense, silty sand		
2.5'	" " " " " " " "	104.5	9.6
4.0'	BEDROCK-SANTIAGO FORMATION light gray, dry to moist, medium dense to dense, silty sandstone		
5.0'	becomes moist and dense		
6.0'	bottom of test pit, no caving, no groundwater test pit backfilled 9/30/19		

Y = DRY DENSITY IN PCF

M = MOISTURE CONTENT IN %

FIGURE 4 RESULTS OF LABORATORY TESTS

EXPANSION INDEX TEST (ASTM D 4829)

TEST LOCATION	INITIAL MOISTURE CONTENT (%)	SATURATED MOISTURE CONTENT (%)	INITIAL DRY DENSITY (PCF)	EXPANSION INDEX	EXPANSION POTENTIAL
TP-3 @ 2.0'	9.2	17.6	111.8	0	NONE

MAXIMUM DENSITY TEST (ASTM D 1557)

TEST LOCATION	SOIL TYPE/ PROCEDURE	SOIL DESCRIPTION	MAXIMUM DRY DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)
TP-3 @ 2.0'	1/A	LIGHT GRAYISH BROWN SILTY SAND	125.0	10.0

FIGURE 5 SEISMIC DESIGN VALUES

The following 2016 CBC seismic design values may be used.

PARAMETER	VALUE	2016 CBC & ASCE 7 REFERENCES
Site Class	D	Table 20.3-1/ ASCE 7, Chapter 20
Mapped Spectral Acceleration for Short Periods, S_s	1.070g	Figure 1613.3.1(1)
Mapped Spectral Acceleration For a 1-Second Period, S_1	0.414g	Figure 1613.3.1(2)
Site Coefficient, F_a	1.072	Table 1613.3.3(1)
Site Coefficient, F_v	1.586	Table 1613.3.3(2)
Adjusted Max. Considered Earthquake Spectral Response Acceleration for Short Periods, S_{MS}	1.147g	Equation 16-37
Adjusted Max. Considered Earthquake Spectral Response Acceleration for 1-Second Period, S_{M1}	0.657g	Equation 16-38
5 Percent Damped Design Spectral Response Acceleration for Short Periods, S_{DS}	0.765g	Equation 16-39
5 Percent Damped Design Spectral Response Acceleration for 1-Second Period, S_{D1}	0.438g	Equation 16-40

ATTACHMENT 7
Storm Water Quality Assessment Form





City of Oceanside – Engineering Division – Clean Water Program
**STORM WATER QUALITY ASSESSMENT FOR PLANNING,
ENGINEERING, AND BUILDING PERMIT APPLICATIONS**

All applications for Planning, Engineering, or Building Division permits are required to complete this assessment form and include it as part of the initial permit application submittal. Staff will review the permit application content to determine the applicability of State and City storm water requirements. Please note a storm water assessment cannot be provided without a complete permit application package.

Section 1 – Project Information	
Applicant Name: NEPTUNE INVESTMENTS	Phone Number:
Project Name: 3710 VISTA WAY HOMES	Project Site Address: 3710 VISTA WAY HOMES
Permit Applications Number(s): TM T21-00002	Assessor Parcel Number(s): 165-493-47
Project Description: 18 UNIT RESIDENTIAL	Project Disturbed Area (square feet): 71,003
Existing Impervious Area (square feet): 0 SF	Created or Replaced Impervious Area (square feet): 30,389 SF
Section 2 – Identify Applicable Priority Development Project Categories (Check All Boxes that Apply)	
☒	New Development Project – A project that creates 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
☐	Redevelopment Project – A project that creates and/or replaces 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
☐	Restaurants – Category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812); where new or redevelopment projects create and/or replace 5,000 square feet or more impervious surface (collectively over the entire project site).
☐	Hillside Development – Category includes development on any natural slope that is twenty-five percent or greater; where new or redevelopment projects create and/or replace 5,000 square feet or more impervious surface (collectively over the entire project site).
☐	Parking Lots – Category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce; where new or redevelopment projects create and/or replace 5,000 square feet or more impervious surface (collectively over the entire project site).
☐	Streets, Roads, Highways, Freeways, and Driveways – Category is defined as any paved impervious surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles; where new or redevelopment projects that create and/or replace 5,000 square feet or more impervious surface (collectively over the entire project site).
☐	Water Quality Environmentally Sensitive Area – New or redevelopment projects that create and/or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharge directly to a Water Quality Environmentally Sensitive Area (WQESA). "Discharge directly to" includes flow that is conveyed overland a distance of 200 feet or less from the project to the WQESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands).
☐	Automotive Repair Shop – Category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539, where new or redevelopment projects create and/or replace 5,000 square feet or more impervious surface (collectively over the entire project site).
☐	Retail Gasoline Outlet (RGOs) – Category includes RGOs that meet the following criteria (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day; where new or redevelopment projects create and/or replace 5,000 square feet or more impervious surface (collectively over the entire project site).
☒	Development Projects greater than one acre – New or redevelopment projects that result in the disturbance of one or more acres of land and are expected to generate pollutants post construction.



City of Oceanside – Engineering Division – Clean Water Program
**STORM WATER QUALITY ASSESSMENT FOR PLANNING,
ENGINEERING, AND BUILDING PERMIT APPLICATIONS**

Section 3 – Identify Projects Not Subject to Permanent Stormwater Requirements (Check All Boxes that Apply)	
☐	The project consists of work entirely within an existing structure.
☐	The project consists of construction of overhead or underground utilities (no new impervious surfaces).
☐	The project consists of routine maintenance.
☐	The project consists of less than 50 yards of grading and presents no opportunities to improve water quality.
Section 4 – Project Category Determination	
☒	Priority Development Project: If any item in Section 2 is applicable, the project is a Priority Development Project. <u>Please prepare a PDP SWQMP for the project.</u>
☐	Standard Development Project: If none of the items in Section 2 or 3 are applicable, the project is a Standard Development Project. <u>Please prepare an SDP SWQMP.</u>
☐	Project Not Subject to Permanent Stormwater Requirements: If any item in Section 3 is applicable, the project is not subject to Permanent Stormwater Requirements. <u>Please submit the project plans with this form.</u> Note: Projects in this category are subject to typical pollution prevention measures outlined by the pollution prevention checklist on the following page.
Section 5 – Applicant Certification	
Name of Responsible Party: NEPTUNE INVESTMENTS LLC - REZA SHERA	Title: PRESIDENT
Email Address (optional)	Phone Number: 858-401-9090
I understand and acknowledge the City of Oceanside has adopted minimum requirements, as mandated by the San Diego Regional Water Quality Control Board – Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100 (NPDES NO. CAS0109266) for mitigating impacts associated with urban runoff, including storm water from construction and land development activities. I certify this assessment has been accurately completed to the best of my knowledge and is consistent with the proposed project. I acknowledge that non-compliance with the City Best Management Practice (BMP) Design Manual, Grading Ordinance, and Erosion Control Ordinance may result in enforcement action by the City, the California State Water Resources Control Board, and/or the San Diego Regional Water Quality Control Board. Enforcement action may include stop work orders, notice of violation, fines, or other actions.	
Applicant Signature:	Date: 05/23/2022

