



The City of San Diego

**PRIORITY DEVELOPMENT PROJECT (PDP)
STORM WATER QUALITY MANAGEMENT
PLAN (SWQMP) FOR**

Dolphin Motel

PTS No. 556027



ENGINEER OF WORK:

Antony K. Christensen, RCE 54021
Provide Wet Signature and Stamp Above
Line

PREPARED FOR:

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DATE:

April 10, 2017
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Approved by: City of San Diego

Date

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ACRONYMS

APN	Assessor's Parcel Number
ASBS	Area of Special Biological Significance
BMP	Best Management Practice
CEQA	California Environmental Quality Act
CGP	Construction General Permit
DCV	Design Capture Volume
DMA	Drainage Management Areas
ESA	Environmentally Sensitive Area
GLU	Geomorphic Landscape Unit
GW	Ground Water
HMP	Hydromodification Management Plan
HSG	Hydrologic Soil Group
HU	Harvest and Use
INF	Infiltration
LID	Low Impact Development
LUP	Linear Underground/Overhead Projects
MS4	Municipal Separate Storm Sewer System
N/A	Not Applicable
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
PDP	Priority Development Project
PE	Professional Engineer
POC	Pollutant of Concern
SC	Source Control
SD	Site Design
SDRWQCB	San Diego Regional Water Quality Control Board
SIC	Standard Industrial Classification
SWPPP	Stormwater Pollutant Protection Plan
SWQMP	Storm Water Quality Management Plan
TMDL	Total Maximum Daily Load
WMAA	Watershed Management Area Analysis
WPCP	Water Pollution Control Program
WQIP	Water Quality Improvement Plan


CERTIFICATION PAGE

Project Name: Dolphin Motel

Permit Application Number: PTS No. 556027

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 Storm Water Standards, which is based on the requirements of SDRWQCB Order No. R9-2013-0001 as amended by R9-2015-0001 and R9-2015-0100 (MS4 Permit).

I have read and understand that the City Engineer has adopted minimum requirements for managing urban runoff, including storm water, from land development activities, as described in the Storm Water Standards. I certify that this PDP 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 PDP SWQMP by the City Engineer 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.



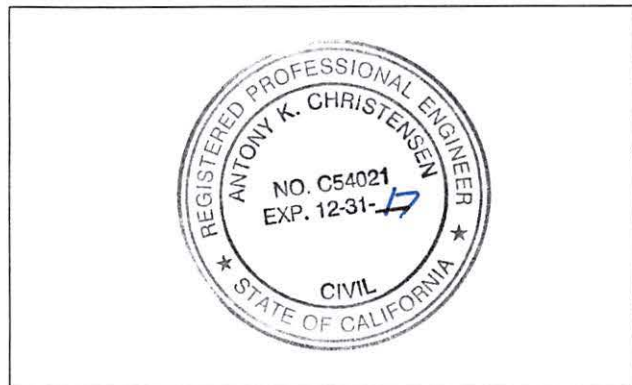
Engineer of Work's Signature, PE Number & Expiration Date

Antony K. Christensen, RCE 54021

Christensen Engineering & Surveying

November 17, 2017

Date



SUBMITTAL RECORD

Use this Table to keep a record of submittals of this PDP SWQMP. Each time the PDP 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 plan check comments is included. When applicable, insert response to plan check comments.

Submittal Number	Date	Project Status	Changes
1	04-10-2017	<input checked="" type="checkbox"/> Preliminary Design/Planning/CEQA <input type="checkbox"/> Final Design	Initial Submittal
2	08-30-17	<input checked="" type="checkbox"/> Preliminary Design/Planning/CEQA <input type="checkbox"/> Final Design	Address City Comments
3	11-17-17	<input checked="" type="checkbox"/> Preliminary Design/Planning/CEQA <input type="checkbox"/> Final Design	Address City Comments
4		<input type="checkbox"/> Preliminary Design/Planning/CEQA <input type="checkbox"/> Final Design	

PROJECT VICINITY MAP

Project Name: Dolphin Motel
Permit Application Number: PTS No. 556027



STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Complete and attach DS-560 Form included in Appendix A.1



City of San Diego
Development Services
 1222 First Ave., MS-302
 San Diego, CA 92101
 (619) 446-5000

Storm Water Requirements Applicability Checklist

FORM
DS-560
 OCTOBER 2016

Project Address: 1453-63 Rosecrans St. & 2912-30 Garrison Street

Project Number (for City Use Only):

SECTION 1. Construction Storm Water BMP Requirements:

All construction sites are required to implement construction BMPs in accordance with the performance standards in the [Storm Water Standards Manual](#). Some sites are additionally required to obtain coverage under the State Construction General Permit (CGP)¹, which is administered by the State Water Resources Control Board.

For all projects complete PART A: If project is required to submit a SWPPP or WPCP, continue to PART B.

PART A: Determine Construction Phase Storm Water Requirements.

1. Is the project subject to California's statewide General NPDES permit for Storm Water Discharges Associated with Construction Activities, also known as the State Construction General Permit (CGP)? (Typically projects with land disturbance greater than or equal to 1 acre.)

Yes; SWPPP required, skip questions 2-4 No; next question

2. Does the project propose construction or demolition activity, including but not limited to, clearing, grading, grubbing, excavation, or any other activity resulting in ground disturbance and contact with storm water runoff?

Yes; WPCP required, skip 3-4 No; next question

3. Does the project propose routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility? (Projects such as pipeline/utility replacement)

Yes; WPCP required, skip 4 No; next question

4. Does the project only include the following Permit types listed below?

- Electrical Permit, Fire Alarm Permit, Fire Sprinkler Permit, Plumbing Permit, Sign Permit, Mechanical Permit, Spa Permit.
- Individual Right of Way Permits that exclusively include only ONE of the following activities: water service, sewer lateral, or utility service.
- Right of Way Permits with a project footprint less than 150 linear feet that exclusively include only ONE of the following activities: curb ramp, sidewalk and driveway apron replacement, pot holing, curb and gutter replacement, and retaining wall encroachments.

Yes; no document required

Check one of the boxes below, and continue to PART B:

If you checked "Yes" for question 1, a **SWPPP is REQUIRED. Continue to PART B**

If you checked "No" for question 1, and checked "Yes" for question 2 or 3, a **WPCP is REQUIRED**. If the project proposes less than 5,000 square feet of ground disturbance AND has less than a 5-foot elevation change over the entire project area, a Minor WPCP may be required instead. **Continue to PART B.**

If you checked "No" for all questions 1-3, and checked "Yes" for question 4, PART B **does not apply and no document is required. Continue to Section 2.**

1. More information on the City's construction BMP requirements as well as CGP requirements can be found at: www.sandiego.gov/stormwater/regulations/index.shtml

PART B: Determine Construction Site Priority

This prioritization must be completed within this form, noted on the plans, and included in the SWPPP or WPCP. The city reserves the right to adjust the priority of projects both before and after construction. Construction projects are assigned an inspection frequency based on if the project has a "high threat to water quality." The City has aligned the local definition of "high threat to water quality" to the risk determination approach of the State Construction General Permit (CGP). The CGP determines risk level based on project specific sediment risk and receiving water risk. Additional inspection is required for projects within the Areas of Special Biological Significance (ASBS) watershed. **NOTE:** The construction priority does **NOT** change construction BMP requirements that apply to projects; rather, it determines the frequency of inspections that will be conducted by city staff.

Complete PART B and continued to Section 2

- 1. **ASBS**
a. Projects located in the ASBS watershed.

- 2. **High Priority**
a. Projects 1 acre or more determined to be Risk Level 2 or Risk Level 3 per the Construction General Permit and not located in the ASBS watershed.
b. Projects 1 acre or more determined to be LUP Type 2 or LUP Type 3 per the Construction General Permit and not located in the ASBS watershed.

- 3. **Medium Priority**
a. Projects 1 acre or more but not subject to an ASBS or high priority designation.
b. Projects determined to be Risk Level 1 or LUP Type 1 per the Construction General Permit and not located in the ASBS watershed.

- 4. **Low Priority**
a. Projects requiring a Water Pollution Control Plan but not subject to ASBS, high, or medium priority designation.

SECTION 2. Permanent Storm Water BMP Requirements.

Additional information for determining the requirements is found in the [Storm Water Standards Manual](#).

PART C: Determine if Not Subject to Permanent Storm Water Requirements.

Projects that are considered maintenance, or otherwise not categorized as "new development projects" or "redevelopment projects" according to the [Storm Water Standards Manual](#) are not subject to Permanent Storm Water BMPs.

If "yes" is checked for any number in Part C, proceed to Part F and check "Not Subject to Permanent Storm Water BMP Requirements".

If "no" is checked for all of the numbers in Part C continue to Part D.

- 1. Does the project only include interior remodels and/or is the project entirely within an existing enclosed structure and does not have the potential to contact storm water? Yes No

- 2. Does the project only include the construction of overhead or underground utilities without creating new impervious surfaces? Yes No

- 3. Does the project fall under routine maintenance? Examples include, but are not limited to: roof or exterior structure surface replacement, resurfacing or reconfiguring surface parking lots or existing roadways without expanding the impervious footprint, and routine replacement of damaged pavement (grinding, overlay, and pothole repair). Yes No

PART D: PDP Exempt Requirements.

PDP Exempt projects are required to implement site design and source control BMPs.

If “yes” was checked for any questions in Part D, continue to Part F and check the box labeled “PDP Exempt.”

If “no” was checked for all questions in Part D, continue to Part E.

1. Does the project ONLY include new or retrofit sidewalks, bicycle lanes, or trails that:

- Are designed and constructed to direct storm water runoff to adjacent vegetated areas, or other non-erodible permeable areas? Or;
- Are designed and constructed to be hydraulically disconnected from paved streets and roads? Or;
- Are designed and constructed with permeable pavements or surfaces in accordance with the Green Streets guidance in the City’s Storm Water Standards manual?

Yes; PDP exempt requirements apply No; next question

2. Does the project ONLY include retrofitting or redeveloping existing paved alleys, streets or roads designed and constructed in accordance with the Green Streets guidance in the [City’s Storm Water Standards Manual](#)?

Yes; PDP exempt requirements apply No; project not exempt.

PART E: Determine if Project is a Priority Development Project (PDP).

Projects that match one of the definitions below are subject to additional requirements including preparation of a Storm Water Quality Management Plan (SWQMP).

If “yes” is checked for any number in PART E, continue to PART F and check the box labeled “Priority Development Project”.

If “no” is checked for every number in PART E, continue to PART F and check the box labeled “Standard Development Project”.

- | | |
|--|---|
| <p>1. New Development that creates 10,000 square feet or more of impervious surfaces collectively over the project site. This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.</p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <p>2. Redevelopment project that creates and/or replaces 5,000 square feet or more of impervious surfaces 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.</p> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>3. New development or redevelopment of a restaurant. Facilities that sell prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC 5812), and where the land development creates and/or replace 5,000 square feet or more of impervious surface.</p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <p>4. New development or redevelopment on a hillside. The project creates and/or replaces 5,000 square feet or more of impervious surface (collectively over the project site) and where the development will grade on any natural slope that is twenty-five percent or greater.</p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <p>5. New development or redevelopment of a parking lot that creates and/or replaces 5,000 square feet or more of impervious surface (collectively over the project site).</p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <p>6. New development or redevelopment of streets, roads, highways, freeways, and driveways. The project creates and/or replaces 5,000 square feet or more of impervious surface (collectively over the project site).</p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

- 7. **New development or redevelopment discharging directly to an Environmentally Sensitive Area.** The project creates and/or replaces 2,500 square feet of impervious surface (collectively over project site), and discharges 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). Yes No

- 8. **New development or redevelopment projects of a retail gasoline outlet (RGO) that create and/or replaces 5,000 square feet of impervious surface.** The development project meets the following criteria: (a) 5,000 square feet or more or (b) has a projected Average Daily Traffic (ADT) of 100 or more vehicles per day. Yes No

- 9. **New development or redevelopment projects of an automotive repair shops that creates and/or replaces 5,000 square feet or more of impervious surfaces.** Development projects categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539. Yes No

- 10. **Other Pollutant Generating Project.** The project is not covered in the categories above, results in the disturbance of one or more acres of land and is expected to generate pollutants post construction, such as fertilizers and pesticides. This does not include projects creating less than 5,000 sf of impervious surface and where added landscaping does not require regular use of pesticides and fertilizers, such as slope stabilization using native plants. Calculation of the square footage of impervious surface need not include linear pathways that are for infrequent vehicle use, such as emergency maintenance access or bicycle pedestrian use, if they are built with pervious surfaces of if they sheet flow to surrounding pervious surfaces. Yes No

PART F: Select the appropriate category based on the outcomes of PART C through PART E.

- 1. The project is **NOT SUBJECT TO PERMANENT STORM WATER REQUIREMENTS.**

- 2. The project is a **STANDARD DEVELOPMENT PROJECT.** Site design and source control BMP requirements apply. See the [Storm Water Standards Manual](#) for guidance.

- 3. The project is **PDP EXEMPT.** Site design and source control BMP requirements apply. See the [Storm Water Standards Manual](#) for guidance.

- 4. The project is a **PRIORITY DEVELOPMENT PROJECT.** Site design, source control, and structural pollutant control BMP requirements apply. See the [Storm Water Standards Manual](#) for guidance on determining if project requires a hydromodification plan management

Joy D. Christensen

Assistant Engineer

Name of Owner or Agent (Please Print)

Title

Joy D. Christensen

11/19/2017

Signature

Date

Applicability of Permanent, Post-Construction
Storm Water BMP Requirements

Form I-1

Project Identification

Project Name: Dolphin Motel

Permit Application Number: PTS No. 556027

Date: April 10, 2017

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 summary 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 Part 1 of Storm Water Standards 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 BMP Design Manual (Part 1 of Storm Water Standards) for guidance.	<input checked="" type="checkbox"/> Yes	Go to Step 2.
	<input type="checkbox"/> No	Stop. Permanent BMP requirements do not apply. No SWQMP will be required. Provide discussion below.

Discussion / justification if the project is not a "development project" (e.g., the project includes only interior remodels within an existing building):

Step 2: Is the project a Standard Project, Priority Development Project (PDP), or exception to PDP definitions? To answer this item, see Section 1.4 of the BMP Design Manual (Part 1 of Storm Water Standards) <u>in its entirety</u> for guidance, AND complete Storm Water Requirements Applicability Checklist.	<input type="checkbox"/> Standard Project	Stop. Standard Project requirements apply.
	<input checked="" type="checkbox"/> PDP	PDP requirements apply, including PDP SWQMP. Go to Step 3.
	<input type="checkbox"/> PDP Exempt	Stop. Standard Project requirements apply. Provide discussion and list any additional requirements below.

Discussion / justification, and additional requirements for exceptions to PDP definitions, if applicable:

Form I-1 Page 2

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 BMP Design Manual (Part 1 of Storm Water Standards) for guidance.	<input type="checkbox"/> Yes	Consult the City Engineer to determine requirements. Provide discussion and identify requirements below. Go to Step 4.
	<input checked="" type="checkbox"/> No	BMP Design Manual PDP requirements apply. Go to Step 4.
Discussion / justification of prior lawful approval, and identify requirements (<u>not required if prior lawful approval does not apply</u>):		
Step 4. Do hydromodification control requirements apply? See Section 1.6 of the BMP Design Manual (Part 1 of Storm Water Standards) for guidance.	<input type="checkbox"/> Yes	PDP structural BMPs required for pollutant control (Chapter 5) and hydromodification control (Chapter 6). Go to Step 5.
	<input checked="" type="checkbox"/> 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: The project discharges to Rosecrans Street and Garrison Street and that runoff is conveyed into the public storm drains system located therein and flows less than 300' southeasterly into San Diego Bay		
Step 5. Does protection of critical coarse sediment yield areas apply? See Section 6.2 of the BMP Design Manual (Part 1 of Storm Water Standards) for guidance.	<input type="checkbox"/> Yes	Management measures required for protection of critical coarse sediment yield areas (Chapter 6.2). Stop.
	<input checked="" type="checkbox"/> 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: The project site and area upstream of it is not in a CCSYA.		

Site Information Checklist For PDPs		Form I-3B
Project Summary Information		
Project Name	Dolphin Motel	
Project Address	1453-1455 AND 1461-1463 ROSECRANS ST AND 2912 AND 2930 GARRISON ST SAN DIEGO, CA 92106	
Assessor's Parcel Number(s) (APN(s))	530-751-01,02,03,04 AND 05	
Permit Application Number	PTS NO. 556027	
Project Watershed	Select One: <input type="checkbox"/> San Dieguito River <input type="checkbox"/> Penasquitos <input type="checkbox"/> Mission Bay <input type="checkbox"/> San Diego River <input checked="" type="checkbox"/> San Diego Bay <input type="checkbox"/> Tijuana River	
Hydrologic subarea name with Numeric Identifier up to two decimal places (9XX.XX)	San Diego Mesa Hydrologic Area (908.2) Cholla Hydrologic Sub-Area 908.22	
Project Area (total area of Assessor's Parcel(s) associated with the project or total area of the right-of-way)	<u>0.572</u> Acres (_____ Square Feet)	
Area to be disturbed by the project (Project Footprint)	<u>0.572</u> Acres (_____ Square Feet)	
Project Proposed Impervious Area (subset of Project Footprint)	<u>0.560</u> Acres (_____ Square Feet)	
Project Proposed Pervious Area (subset of Project Footprint)	<u>0.012</u> Acres (_____ Square Feet)	
Note: Proposed Impervious Area + Proposed Pervious Area = Area to be Disturbed by the Project. This may be less than the Project Area.		
The proposed increase or decrease in impervious area in the proposed condition as compared to the pre-project condition.	(0.012 Acre decrease) <u>-2.1%</u>	

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:

Site has had previous grading, including the construction of sewer mains and storm drains and pervious easement access area.

Existing Land Cover Includes (select all that apply):

- Vegetative Cover
 Non-Vegetated Pervious Areas
 Impervious Areas

Description / Additional Information:

Existing site is entirely impervious.

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

- NRCS Type A
 NRCS Type B
 NRCS Type C
 NRCS Type D

Approximate Depth to Groundwater (GW):

- GW Depth < 5 feet
 5 feet < GW Depth < 10 feet
 10 feet < GW Depth < 20 feet
 GW Depth > 20 feet

Existing Natural Hydrologic Features (select all that apply):

- Watercourses
 Seeps
 Springs
 Wetlands
 None

Description / Additional Information:

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. If runoff from offsite is conveyed through the site? If yes, quantification of all offsite drainage areas, design flows, and locations where offsite flows enter the project site and summarize how such flows are conveyed through the site;
3. Provide details regarding existing project site drainage conveyance network, including storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, and natural and constructed channels;
4. Identify all discharge locations from the existing project along with a summary of the conveyance system size and capacity for each of the discharge locations. Provide summary of the pre-project drainage areas and design flows to each of the existing runoff discharge locations.

Description / Additional Information:

The existing and proposed runoff is urban. No runoff is conveyed through the site. Existing drainage flows to Garrison Street westerly of the site (1.60 cfs) and then in the public storm drain located therein and then to San Diego Bay, located less than 300' southeasterly of the site. Following development the same pattern will persist with some runoff flowing the Rosecrans (Q100=0.46 cfs) street gutter before flowing to the same public storm drain in Garrison Street and then to San Diego Bay. The remaining runoff to Garrison will be 1.14 cfs. The existing site is totally impervious and the proposed development is slightly less. The site is hydromodification exempt. All runoff from impervious surfaces will be treated by two lined biofiltration basins. The site has been determined to be a "non-infiltration" site from the results of infiltration testing and from the depth of groundwater.

A detailed description of the drainage patterns and flows are discussed and demonstrated in the Drainage Study and were developed using the City of San Diego Drainage Design Manual rational method. See attachment "D".

Description of Proposed Site Development and Drainage Patterns

Project Description / Proposed Land Use and/or Activities:

The project site is currently developed as a commercial development as a motel and psychic card reader. The development will result in the entire site being a motel site.

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

The project includes the construction of buildings, parking area and underground parking with walkways and driveways.

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

This project includes landscaped areas interspersed amongst the impervious areas as well as vegetated biofiltration basins

Does the project include grading and changes to site topography?

Yes

No

Description / Additional Information:

Grading will be employed to excavated for the building.

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

Yes

No

If yes, provide details regarding the proposed project site drainage conveyance network, including storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural and constructed channels, and the method for conveying offsite flows through or around the proposed project site. Identify all discharge locations from the proposed project site along with a summary of the conveyance system size and capacity for each of the discharge locations. Provide a summary of pre and post-project drainage areas and design flows to each of the runoff discharge locations. Reference the drainage study for detailed calculations.

Description / Additional Information:

The site will include treatment of runoff by biofiltration basins. That runoff will be conveyed to Rosecrans (0.45 cfs) and Garrison Street (1.12 cfs) by curb outlets. Since the drainage areas do not change and since the runoff coefficient does not change the total runoff from the site remains as 1.60 cfs (Q100) So there is an additional 0.01cfs of surface runoff to Rosecrans Street (not conveyed by the curb outlet) and 0.02 cfs by surface runoff to Garrison Street (not conveyed by the curb outlet).

See the attached drainage study for a detailed discussion of drainage.

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

- On-site 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
- Large Trash Generating Facilities
- Animal Facilities
- Plant Nurseries and Garden Centers
- Automotive-related Uses

Description / Additional Information:

There will be onsite area drains, garages and covered refuse area.

Identification and Narrative of Receiving Water

Narrative describing flow path from discharge location(s), through urban storm conveyance system, to receiving creeks, rivers, and lagoons and ultimate discharge location to Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable)

According to the California 2010 303d list published by the San Diego Regional Water Quality Control Board the nearest impaired water body is the San Diego Bay impaired by coliform bacteria, benthic community effects, copper and sediment toxicity. The San Diego Bay is approximately 300 southeasterly of the project and the project does not directly discharge into the San Diego Bay. Runoff is comingled with that from the public storm drains.

Provide a summary of all beneficial uses of receiving waters downstream of the project discharge locations.

Surface water beneficial uses include water contact recreational activities, non-contact recreational activities, warm freshwater habitat and wildlife habitat. Groundwater beneficial uses include municipal water supply.

Identify all ASBS (areas of special biological significance) receiving waters downstream of the project discharge locations.

None exist downstream of this project.

Provide distance from project outfall location to impaired or sensitive receiving waters.

San Diego Bay is approximately 300 feet southeasterly of the project site.

Summarize information regarding the proximity of the permanent, post-construction storm water BMPs to the City's Multi-Habitat Planning Area and environmentally sensitive lands

No MHPA is located in proximity to the site.

Form I-3B Page 8 of 11

Identification of Receiving Water Pollutants of Concern

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 and/or Highest Priority Pollutants from the WQIP for the impaired water bodies:

303(d) Impaired Water Body	Pollutant(s)/Stressor(s)	TMDLs/ WQIP Highest Priority Pollutant
San Diego Bay	Bacteria; Dissolved copper, lead, and zinc	Bacteria; Dissolved copper, lead, and zinc

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 anticipated from the project site based on all proposed use(s) of the site (see BMP Design Manual (Part 1 of Storm Water Standards) Appendix B.6):

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

Hydromodification Management Requirements

Do hydromodification management requirements apply (see Section 1.6 of the BMP Design 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 Section 6.2 and Appendix H does CCSYA exist on the project footprint or in the upstream area draining through the project footprint?

- Yes
- No

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.

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.

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

Form I-4

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 BMP Design Manual (Part 1 of the Storm Water Standards) 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 BMP Design 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	Applied?		
SC-1 Prevention of Illicit Discharges into the MS4	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Discussion / justification if SC-1 not implemented: No non-storm water discharges are expected from this site.			
SC-2 Storm Drain Stenciling or Signage	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Discussion / justification if SC-2 not implemented: No drains will exist that will require stenciling.			
SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Discussion / justification if SC-3 not implemented: No materials will be stored outside the building and there is no run-on to the site.			
SC-4 Protect Materials Stored in Outdoor Work Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Discussion / justification if SC-4 not implemented: No materials will be stored outside the buildings			
SC-5 Protect Trash Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Discussion / justification if SC-5 not implemented: Trash will be contained in an area with a roof to protect it from rain impacting the refuse area.			

Form I-4 Page 2 of 2

Source Control Requirement	Applied?		
SC-6 Additional BMPs Based on Potential Sources of Runoff Pollutants (must answer for each source listed below)			
On-site storm drain inlets	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Interior floor drains and elevator shaft sump pumps	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Interior parking garages	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Need for future indoor & structural pest control	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Landscape/Outdoor Pesticide Use	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Pools, spas, ponds, decorative fountains, and other water features	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Food service	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Refuse areas	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Industrial processes	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Outdoor storage of equipment or materials	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Vehicle/Equipment Repair and Maintenance	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Fuel Dispensing Areas	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Loading Docks	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Fire Sprinkler Test Water	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Miscellaneous Drain or Wash Water	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Plazas, sidewalks, and parking lots	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
SC-6A: Large Trash Generating Facilities	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
SC-6B: Animal Facilities	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
SC-6C: Plant Nurseries and Garden Centers	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
SC-6D: Automotive-related Uses	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
<p>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.</p>			

**Site Design BMP Checklist
for All Development Projects**

Form I-5

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 BMP Design Manual (Part 1 of Storm Water Standards) 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 BMP Design 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.

A site map with implemented site design BMPs must be included at the end of this checklist.

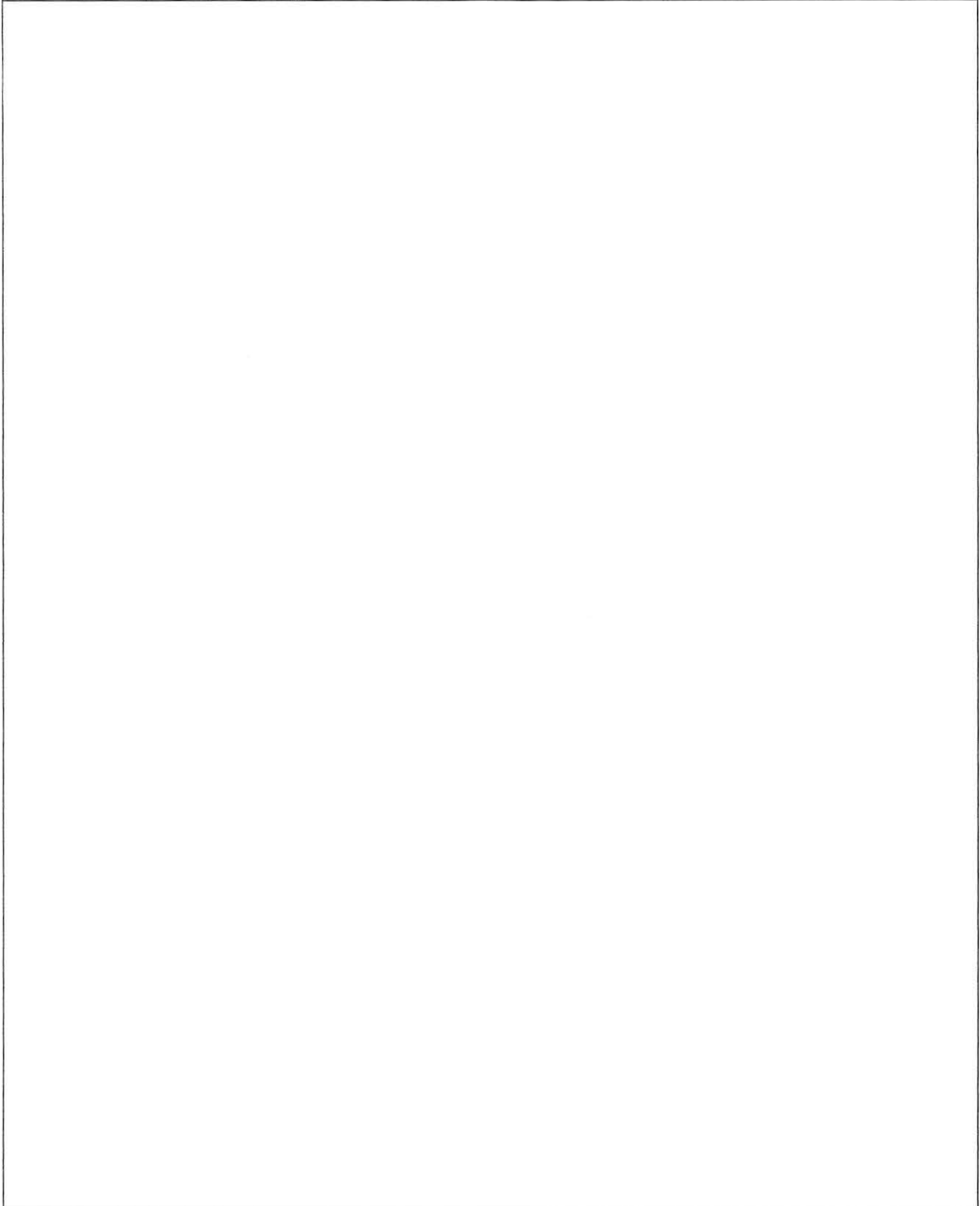
Site Design Requirement	Applied?		
SD-1 Maintain Natural Drainage Pathways and Hydrologic Features	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Discussion / justification if SD-1 not implemented: No natural drainage pathways exist in the project area.			
1-1 Are existing natural drainage pathways and hydrologic features mapped on the site map?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
1-2 Are trees implemented? If yes, are they shown on the site map?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
1-3 Implemented trees meet the design criteria in SD-1 Fact Sheet (e.g. soil volume, maximum credit, etc.)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
1-4 Is tree credit volume calculated using Appendix B.2.2.1 and SD-1 Fact Sheet in Appendix E?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
SD-2 Have natural areas, soils and vegetation been conserved?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Discussion / justification if SD-2 not implemented: While trees will be incorporated into site design no credit is sought for their use. No natural undisturbed areas exist onsite.			

Form I-5 Page 2 of 4

Site Design Requirement	Applied?		
SD-3 Minimize Impervious Area	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<p>Discussion / justification if SD-3 not implemented:</p> <p>The site uses areas of landscaping to decrease impervious surface area. The minimum size of parking is used to develop the site and is in covered garages, for the most part. Pervious surfaces are used for walkways and some landscaped areas.</p>			
SD-4 Minimize Soil Compaction	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<p>Discussion / justification if SD-4 not implemented:</p>			
SD-5 Impervious Area Dispersion	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<p>Discussion / justification if SD-5 not implemented:</p>			
5-1 Is the pervious area receiving runoff from impervious area identified on the site map?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
5-2 Does the pervious area satisfy the design criteria in SD-5 Fact Sheet in Appendix E (e.g. maximum slope, minimum length, etc.)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
5-3 Is impervious area dispersion credit volume calculated using Appendix B.2.1.1 and SD-5 Fact Sheet in Appendix E?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	

Site Design Requirement	Applied?		
SD-6 Runoff Collection	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Discussion / justification if SD-6 not implemented:			
6a-1 Are green roofs implemented in accordance with design criteria in SD-6A Fact Sheet? If yes, are they shown on the site map?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
6a-2 Is green roof credit volume calculated using Appendix B.2.1.2 and SD-6A Fact Sheet in Appendix E?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
6b-1 Are permeable pavements implemented in accordance with design criteria in SD-6B Fact Sheet? If yes, are they shown on the site map?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
6b-2 Is permeable pavement credit volume calculated using Appendix B.2.1.3 and SD-6B Fact Sheet in Appendix E?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
SD-7 Landscaping with Native or Drought Tolerant Species	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Discussion / justification if SD-7 not implemented:			
SD-8 Harvesting and Using Precipitation	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
Discussion / justification if SD-8 not implemented: The landscape area does not afford an opportunity to use the minimum required volume of runoff to drawdown in 36 hrs based on criteria found in the Storm Water Manual. Neither does the use for Toilet and Urinal flushing (no urinals exist onsite).			
8-1 Are rain barrels implemented in accordance with design criteria in SD-8 Fact Sheet? If yes, are they shown on the site map?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
8-2 Is rain barrel credit volume calculated using Appendix B.2.2.2 and SD-8 Fact Sheet in Appendix E?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	

Insert Site Map with all site design BMPs identified:

A large, empty rectangular box with a thin black border, intended for the user to insert a site map. The map should show the site design and identify all Best Management Practices (BMPs) used.

CONSTRUCTION NOTES

- 1 C/L PROPOSED 25' DRIVEWAY PER SDG-163
- 2 PROPOSED PED RAMP PER SDG-132
- 3 REMOVE AND REPLACE EXISTING DRIVEWAY WITH CURB GUTTER AND SIDEWALK (TYPICAL)
- 4 REMOVE EX CONCRETE. REPLACE WITH PLANTER (TYPICAL)
- 5 PROPOSED SIDEWALK PER SDG-155
- 6 KILL EXISTING WATER SERVICE (TYPICAL)
- 7 ABANDON EXISTING SEWER LATERAL AT P/L (TYPICAL)
- 8 PROPOSED 6" SEWER LATERAL
- 9 PROPOSED 2" WATER SERVICE
- 10 PROPOSED 4" FIRE SERVICE
- 11 VISIBILITY TRIANGLE (TYPICAL)
- 12 MAIN FLOOR LEVEL CATCH BASIN (TYPICAL)
- 13 PVC DRAIN CONVEYING RUNOFF TO BMP-2
- 14 CATCH BASIN WITH PUMP (AT GROUND LEVEL) TO CONVEY MAIN FLOOR AND PARKING RAMP RUNOFF TO BIOFILTRATION BASIN. INCLUDES OVERFLOW TO CURB OULET IN THE CASE OF PUMP FAILURE
- 15 BIOFILTRATION BASIN TO TREAT RUNOFF FROM ROOF (504 SF) (BMP-1)
- 16 BIOFILTRATION BASIN TO TREAT RUNOFF FROM MAIN LEVEL (163 SF) (BMP-2)
- 17 DRAIN WITHIN BUILDING TO CONVEY DOWNSPOUT ROOF RUNOFF TO BMP-1 (TYPICAL)
- 18 OUTER EXTENT OF ROOF (OUTLINE)
- 19 CURB OUTLET PER D-25 Q100 = 0.44 CFS V100 = 2.2 FPS
- 20 CURB OUTLET PER D-25 Q100 = 1.14 CFS V100 = 3.1 FPS
- 21 PROPOSED BACKFLOW PREVENTER (TYPICAL) (ZURN 475DA FOR 4" FS)
- 23 ROOF DOWNSPOUT (JOINED BY ITEM #17 DRAIN WHERE SHOWN TO BMP-1)
- 24 "GARDEN" AREA ON MAIN FLOOR. SEE LANDSCAPE PLAN
- 26 "GARDEN" AREA DRAIN CONVEYING RUNOFF TO BMP-2 (TYPICAL)
- 27 "GARDEN" AREA PVC DRAIN (TYPICAL)

TITLE NOTES

- 1 AN EASEMENT OR RIGHT OF WAY FOR THE CONSTRUCTION AND MAINTENANCE OF FLUMES, CANALS OR AQUEDUCTS, CONVEYED BY DEED FROM FRANK A. KIMBALL, AND WARREN G. KIMBALL TO KIMBALL BROTHERS WATER COMPANY, A CORPORATION, DATED JUNE 9, 1869, AND RECORDED IN BOOK 7, PAGE 124 OF DEEDS. THE INTEREST OF SAID GRANTEE IN AND TO SAID EASEMENT HAS SINCE PASSED TO AND NOW VESTS OF RECORD IN THE SWEETWATER AUTHORITY. THE LOCATION AND EXTENT OF SAID EASEMENT IS NOT DISCLOSED OF RECORD AND IS NOT PLOTTED.
- 2 AN EASEMENT FOR SEWER PURPOSES AND RIGHTS INCIDENTAL THERETO GRANTED TO THE CITY OF SAN DIEGO, A MUNICIPAL CORPORATION, RECORDED JUNE 12, 1928 IN BOOK 1510, PAGE 12, OF DEEDS, OF OFFICIAL RECORDS. (TO BE VACATED)
- 3 AN EASEMENT FOR THE CONSTRUCTION AND MAINTENANCE OF A PRIVATE SEWER LATERAL AND RIGHTS INCIDENTAL THERETO GRANTED TO THE CITY OF SAN DIEGO, A MUNICIPAL CORPORATION, RECORDED FEBRUARY 4, 1944 IN BOOK 1635, PAGE 177 OF OFFICIAL RECORDS. (TO BE VACATED)
- 4 AN EASEMENT FOR POLES AND WIRES AND RIGHTS INCIDENTAL THERETO GRANTED TO THE SAN DIEGO GAS AND ELECTRIC COMPANY, RECORDED MAY 29, 1944 IN BOOK 1684, PAGE 263, OF OFFICIAL RECORDS. (TO BE QUITCLAIMED)
- 5 AN EASEMENT FOR PUBLIC STREET AND RIGHTS INCIDENTAL THERETO GRANTED TO THE CITY OF SAN DIEGO, RECORDED MARCH 3, 1959 IN BOOK 7527, PAGE 49 OF OFFICIAL RECORDS.
- 6 AN EASEMENT FOR POLES AND WIRES AND RIGHTS INCIDENTAL THERETO GRANTED TO THE SAN DIEGO GAS AND ELECTRIC COMPANY, RECORDED IN BOOK 1688, PAGE 116, OF OFFICIAL RECORDS. (TO BE QUITCLAIMED)
- 7 AN EASEMENT FOR COMMUNICATION STRUCTURES AND RIGHTS INCIDENTAL THERETO, GRANTED TO THE PACIFIC TELEPHONE AND TELEGRAPH COMPANY, RECORDED MAY 11, 1966 AS INSTRUMENT NO. 79002, OF OFFICIAL RECORDS. (TO BE QUITCLAIMED)

LEGAL DESCRIPTION

LOTS 1 AND 2, BLOCK 62 OF ROSEVILLE, CITY OF SAN DIEGO, COUNTY OF SAN DIEGO, ACCORDING TO MAP THEREOF NO. 165 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, EXCEPTING THAT PORTION IF ANY HERETOFORE OR NOW LYING BELOW THE ORDINARY HIGH TIDE LINE OF THE BAY OF SAN DIEGO.

LOT 3 IN BLOCK 62 OF ROSEVILLE, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 165, FILED IN THE OFFICE OF THE RECORDER OF SAN DIEGO COUNTY, EXCEPTING THAT PORTION, IF ANY, HERETOFORE OR NOW LYING BELOW THE ORDINARY HIGH TIDE LINE OF THE BAY OF SAN DIEGO.

LOTS 4 AND 5 IN BLOCK 62, OF ROSEVILLE, IN CITY OF SAN DIEGO, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 165, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY.

APNs: 530-751-01,02,03,04 AND 05

BASIS OF BEARINGS

A PORTION OF THE MEAN HIGH TIDE LINE AS SHOWN ON SHEET 3 OF RECORD OF SURVEY 20732. I.E. SOUTH 37°29'53" WEST.

APN / ADDRESS

ASSESSOR'S PARCEL NUMBERS: 530-751-01,02,03,04 AND 05

ADDRESS: 1453-1455 AND 1461-1463 ROSECRANS ST AND 2912 AND 2930 GARRISON ST SAN DIEGO, CA 92106

BENCHMARK

CITY OF SAN DIEGO BENCHMARK BRASS PLUG LOCATED IN THE TOP OF CURB AT THE WESTERLY CORNER OF ROSECRANS STREET AND GARRISON STREET. ELEVATION = 8.474' MEAN SEA LEVEL (N.G.V.D. 1929).

NOTES

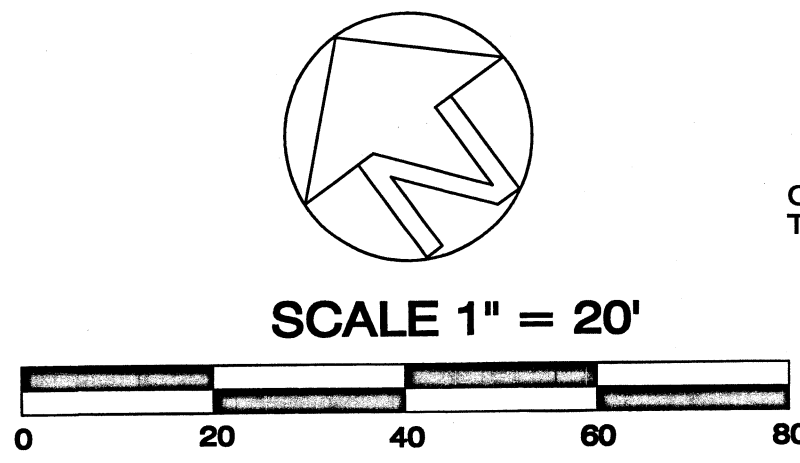
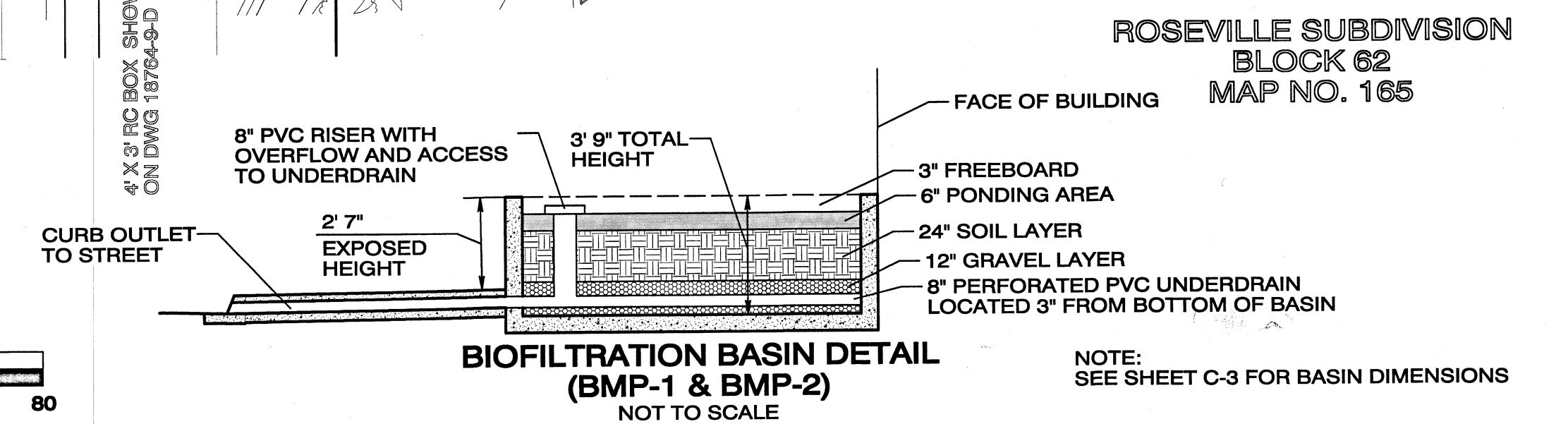
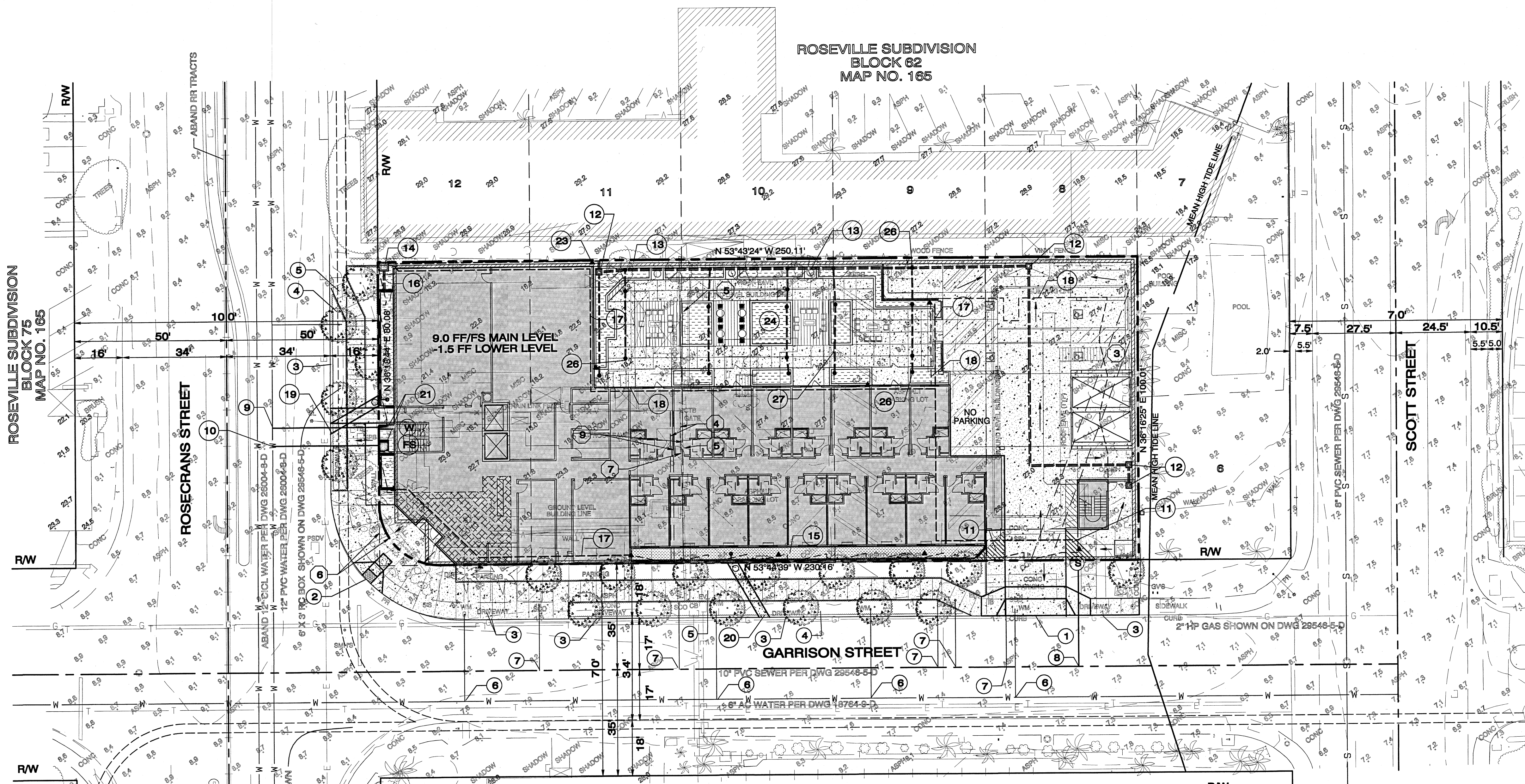
- 1 UTILITIES SHOWN HEREON ARE FROM CITY OF SAN DIEGO RECORDS AND ARE THEIR LOCATION ARE APPROXIMATE. NOT ALL UTILITIES MAY BE SHOWN. BEFORE ANY WORK TAKES PLACE CONTRACTOR SHALL HAVE ALL UTILITIES MARKED OUT AND SHALL USE SPECIAL CARE DURING CONSTRUCTION.
- 2 TITLE INFORMATION FOR THIS PROJECT IS FROM FIDELITY NATIONAL TITLE COMPANY PRELIMINARY REPORT ORDER NO. 005-2308597-1MB, DATED OCTOBER 7, 2016 AND CHICAGO TITLE PRELIMINARY REPORT ORDER NO. 0068901-993-SD2-CFU, DATED MARCH 16, 2017. ITEMS OTHER THAN EASEMENTS EXIST. SEE TITLE REPORTS FOR DETAILS.
- 3 THE SOURCE OF THE TOPOGRAPHIC INFORMATION SHOWN HEREON IS FROM SURVEY BY CHRISTENSEN ENGINEERING & SURVEYING, DATED 01-07-13 AND REVISED 01-08-13.
- 4 THE SUBJECT PROPERTY IS SERVED BY CITY OF SAN DIEGO SANITARY SEWER AND WATER MAINS.
- 5 NAD27 COORDINATES = 204-1698. NAD83 COORDINATES = 1844-6258.
- 6 TITLE ITEM 3 TO BE VACATED. TITLE ITEMS 4, 5, 7 & 9 TO BE QUITCLAIMED.
- 7 AN ENCROACHMENT MAINTENANCE AND REMOVAL AGREEMENT WILL BE REQUIRED FOR PRIVATE CURB OUTLETS AND WALKWAYS WITHIN ROSECRANS AND GARRISON STREET RIGHTS OF WAY

GRADING DATA

AREA OF SITE - 24,941 S.F.
 AREA OF SITE TO BE GRADED: 24,941 SF
 PERCENT OF SITE TO BE GRADED: 100%
 AREA OF SITE WITH SLOPES GREATER THAN 25%: 0 S.F.

AMOUNT OF CUT - 9160 C.Y.
 AMOUNT OF FILL - 180 C.Y.
 AMOUNT OF EXPORT - 8,980 C.Y.
 MAXIMUM FILL - <1'
 MAXIMUM CUT - 11' FOOT VERTICAL WITHIN STRUCTURE
 NONE ELSEWHERE
 MAXIMUM HEIGHT OF FILL SLOPE - NONE
 MAXIMUM HEIGHT OF CUT SLOPE - NONE
 RETAINING WALL: NONE NOT A PART OF BUILDING

EARTHWORK CALCULATIONS ARE APPROXIMATE TO FINISH FLOOR/SURFACE



ROSEVILLE SUBDIVISION
 BLOCK 62
 MAP NO. 165



ANTHONY K. CHRISTENSEN, R.C.E. 54021
 Date: NOVEMBER 17, 2017

Owners:
 PL BOUTIQUE INVESTORS LLC
 17828 VILLAMOURA DR
 POWAY CA 92064-1013

Prepared By:
 CHRISTENSEN ENGINEERING & SURVEYING
 7888 SILVERTON AVENUE, SUITE "J"
 SAN DIEGO, CA 92126
 PHONE (858) 271-9901 FAX (858) 271-8912

Project Address:
 1453-1455 AND 1461-1463 ROSECRANS ST
 AND 2912 AND 2930 GARRISON ST
 SAN DIEGO, CA 92106

Project Name:
 DOLPHIN MOTEL

Revision 4:
 Revision 3: 11-17-17 REVISE WATER SERVICES
 Revision 2: 08-30-17 REVISE GARDEN DESIGN
 Revision 1: 08-25-17 REVISED DESIGN ADDRESS CITY COMMENTS

Original Date: APRIL 10, 2017

Sheet Title: PRELIMINARY GRADING PLAN
 Sheet of Sheets

PDP Structural BMPs

All PDPs must implement structural BMPs for storm water pollutant control (see Chapter 5 of the BMP Design Manual, Part 1 of Storm Water Standards). 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 BMP Design 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 City at the completion of construction. This includes requiring the project owner or project owner's representative to certify construction of the structural BMPs (complete Form DS-563). PDP structural BMPs must be maintained into perpetuity (see Chapter 7 of the BMP Design 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 BMP Design 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.

Non-infiltration is used for this project. It was determined the site could not be developed using infiltration due to the low infiltration rate and the groundwater level. Lined biofiltration basins have been designed to treat runoff from impervious areas for pollutants. The basins were sized using the Storm Water Manual worksheets. See Attachment 6 for exhibit geotechnical report and for exhibit detailing the testing performed and the results obtained. Site infiltration rate is 0.0097 in/hr before implementing factor of safety of 2.0.

(Continue on page 2 as necessary.)

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

(Continued from page 1)

Form I-6 Page 3 of X (Copy as many as needed)

Structural BMP Summary Information

Structural BMP ID No. BMP-1

Construction Plan Sheet No. Sheet C-2

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
 - 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 form DS-563

Antony K. Christensen, RCE
Christensen Engineering & Surveying
7888 Silverton Avenue, Suite "J"
San Diego, CA 92126
858-271-9901

Who will be the final owner of this BMP?

PL BOUTIQUE INVESTORS LLC
17828 VILLAMOURA DR
POWAY CA 92064-1013

Who will maintain this BMP into perpetuity?

PL BOUTIQUE INVESTORS LLC
or assigns

What is the funding mechanism for maintenance?

Funding will be maintained through a Storm Water Management and Discharge Control Maintenance Agreement

Structural BMP Summary Information

Structural BMP ID No. BMP-2

Construction Plan Sheet No. Sheet C-2

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
 - 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 form DS-563	Antony K. Christensen, RCE Christensen Engineering & Surveying 7888 Silverton Avenue, Suite "J" San Diego, CA 92126 858-271-9901
Who will be the final owner of this BMP?	PL BOUTIQUE INVESTORS LLC 17828 VILLAMOURA DR POWAY CA 92064-1013
Who will maintain this BMP into perpetuity?	PL BOUTIQUE INVESTORS LLC or assigns
What is the funding mechanism for maintenance?	Funding will be maintained through a Storm Water Management and Discharge Control Maintenance Agreement



THE CITY OF SAN DIEGO

City of San Diego
Development Services
1222 First Ave., MD-302
San Diego, CA 92101
(619) 446-5000

Permanent BMP Construction

Self Certification Form

FORM
DS-563
February 2016

Date Prepared:	Project No.:
Project Applicant:	Phone:
Project Address:	
Project Engineer:	Phone:

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 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 as amended by R9-2015-0001 and R9-2015-0100. 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 San Diego.

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 structural 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 as amended by R9-2015-0001 and R9-2015-0100 of the San Diego Regional Water Quality Control Board.

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

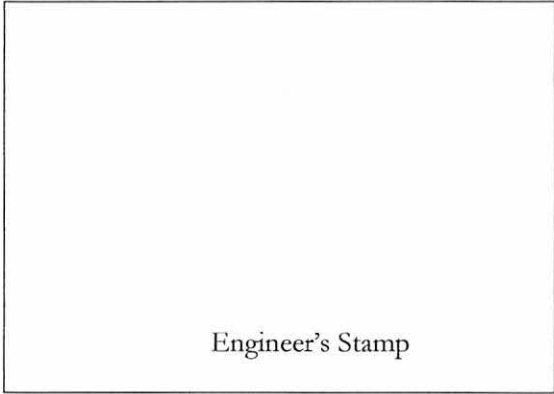
Signature: _____

Date of Signature: _____

Printed Name: _____

Title: _____

Phone No. _____



Engineer's Stamp

**ATTACHMENT 1
BACKUP FOR PDP POLLUTANT
CONTROL BMPS**

This is the cover sheet for Attachment 1.

Indicate which Items are Included:

Attachment Sequence	Contents	Checklist
Attachment 1a	DMA Exhibit (Required) See DMA Exhibit Checklist.	<input checked="" type="checkbox"/> 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	<input checked="" type="checkbox"/> Included <input type="checkbox"/> Included as Attachment 1b, separate from DMA Exhibit
Attachment 1c	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.	<input checked="" type="checkbox"/> Included <input type="checkbox"/> Not included because the entire project will use infiltration BMPs
Attachment 1d	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.	<input checked="" type="checkbox"/> Included <input type="checkbox"/> Not included because the entire project will use harvest and use BMPs
Attachment 1e	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 and site design credit calculations	<input checked="" type="checkbox"/> 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)

THIS CHECKLIST IS SHOWN ON DMA EXHIBIT

DMA/IMP AREA SUMMARY

DMA	IMPERVIOUS AREA	PERMEABLE AREA	TOTAL AREA CONVEYED TO IMP	IMP NAME	IMP SURFACE AREA	SELF-MITIGATING AREA	"C" VALUE	
G	0.405 AC	0.000 AC	0.405 AC	BMP-1	504 SF	0.000 AC	0.90	
R	0.118 AC	0.037 AC	0.155 AC	BMP-2	163 SF	0.000 AC	0.89	
SM	0.000 AC	0.002 AC	N/A	N/A	N/A	0.002 AC	N/A	
DM	229 SF	DE MINIMIS AREA						
B	0.000 AC	217 SF - AREA OF BASINS EXPOSED TO PRECIPITATION						

NOTE:
 ALL SELF MITIGATING AREA SHALL COMPLY WITH SECTION 5.2.1 OF THE CITY OF SAN DIEGO STORM WATER MANUAL. LANDSCAPED AREA SHALL BE VEGETATED WITH NATIVE OR NON-NATIVE/NON-INVASIVE DROUGHT TOLERANT SPECIES THAT DO NOT REQUIRE REGULAR APPLICATION OF FERTILIZERS AND PESTICIDES.
 SOILS SHALL BE AMENDED AND AERATED TO PROMOTE WATER RETENTION CHARACTERISTICS EQUIVALENT TO UNDISTURBED NATIVE SOIL.
 NO MORE THAN 5% OF SELF MITIGATING AREA SHALL BE INCIDENTALLY IMPERVIOUS.
 IMPERVIOUS AREA SHALL NOT BE HYDRAULICALLY CONNECTED TO OTHER IMPERVIOUS AREAS.
 SELF-MITIGATING AREAS SHALL BE SEPARATE FROM DMA'S PERMANENT STORM WATER POLLUTANT CONTROL BMPs.

EXHIBIT CHECKLIST:

HYDROLOGIC SOIL GROUP: "D" (UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICES WEB SOIL SURVEY)
 APPROXIMATE DEPTH TO GROUNDWATER: APPROXIMATELY 10' (VARIES)
 EXISTING NATURAL HYDROLOGIC RESOURCES: NO WATERCOURSES, SEEP SPRINGS OR WETLANDS EXIST IN THE PROJECT AREA
 CRITICAL COARSE SEDIMENT YIELD AREAS: POTENTIAL CCSYAs (PCCSYAs) DO NOT OCCUR ONSITE OR UPSTREAM
 EXISTING TOPOGRAPHY AND IMPERVIOUS AREAS: TOPOGRAPHY IS SHOWN. MOTEL AND COMMERCIAL DEVELOPMENT EXISTS

EXISTING AND PROPOSED SITE DRAINAGE NETWORK AND CONNECTIONS TO DRAINAGE OFFSITE: DRAINAGE CURRENTLY FLOWS BOTH EASTERLY SOUTHERLY. BOTH EVENTUALLY FLOW WESTERLY FOLLOWING DEVELOPMENT IT WILL CONTINUE TO DO SO

PROPOSED GRADING: IS SHOWN ON DMA MAP

PROPOSED IMPERVIOUS FEATURES: IMPERVIOUS ROOF, WALKWAYS AND SOME PARKING

PROPOSED DESIGN FEATURES AND SURFACE TREATMENTS USED TO MINIMIZE IMPERVIOUSNESS: LANDSCAPING IS USED TO LESSEN IMPERVIOUSNESS.

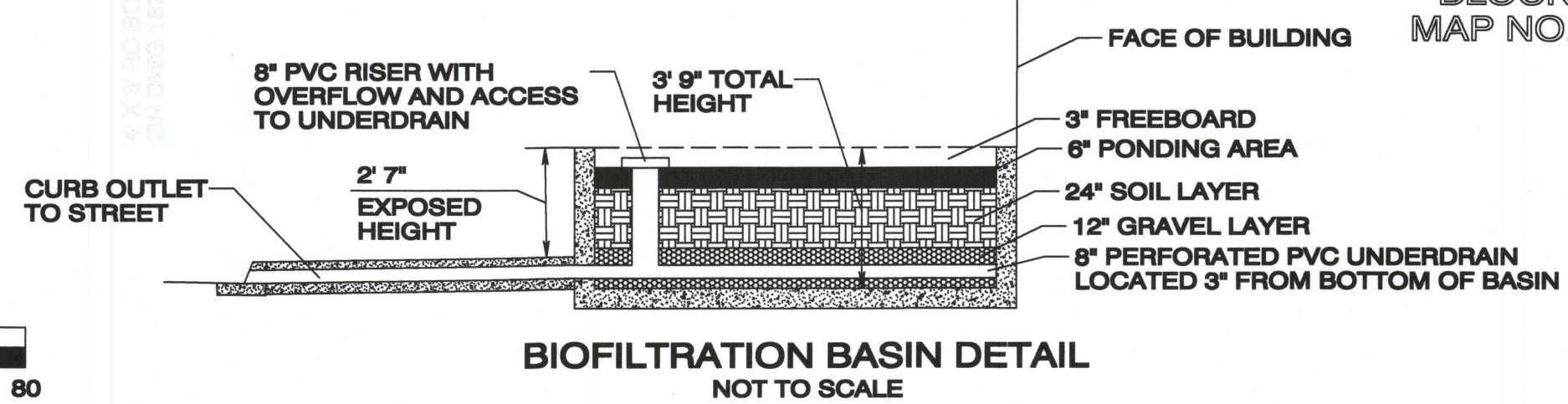
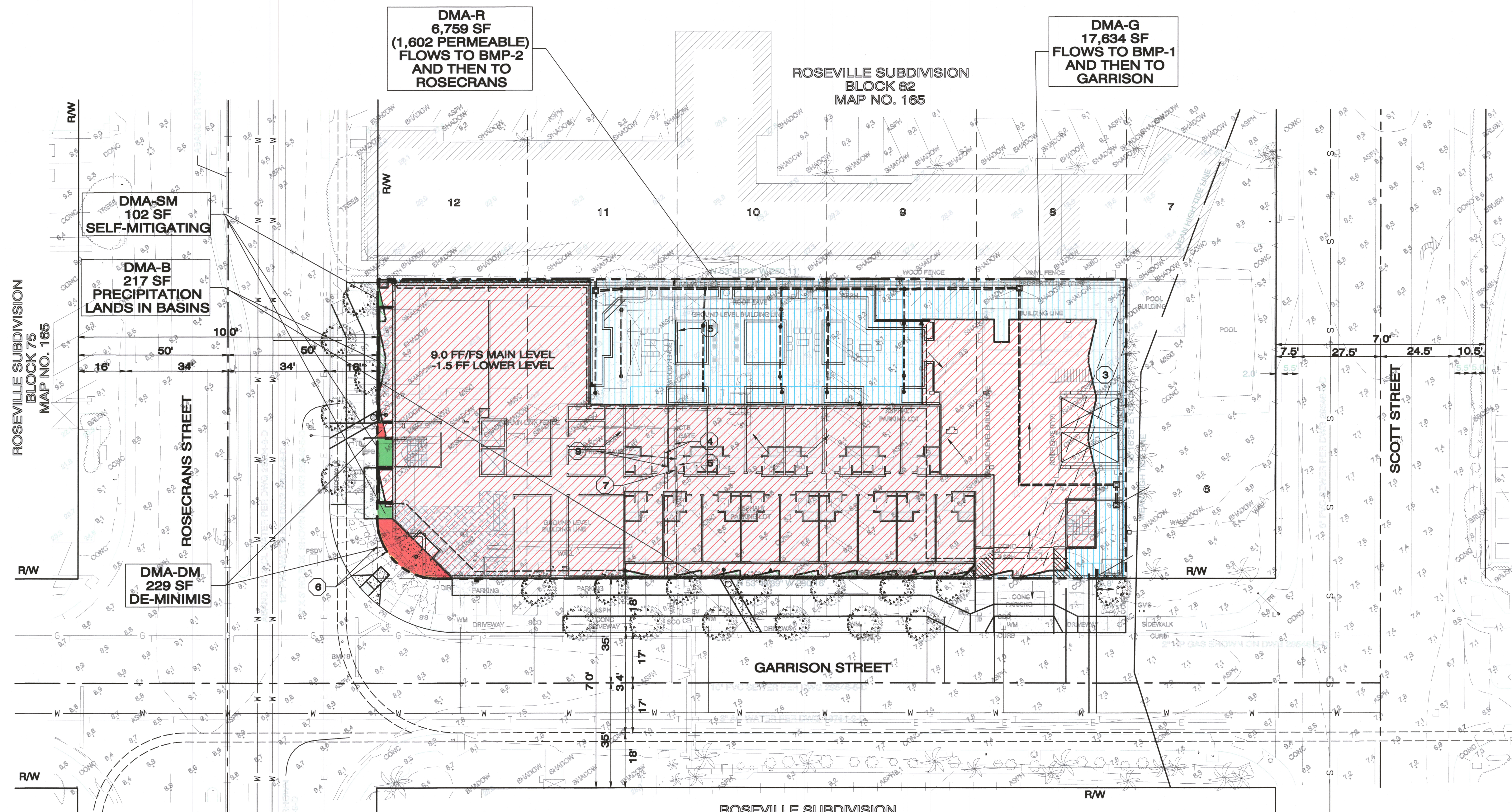
DMA MANAGEMENT AREA BOUNDARIES, NUMBERS, AREAS AND TYPES: SHOWN

POTENTIAL POLLUTANT SOURCE AREAS AND SOURCE CONTROLS:

EXISTING ONSITE STORM DRAIN INLET: DO NOT EXIST
 INDOOR DRAINS, GARAGES AND PESTICIDE USE: GARAGES ARE SHOWN
 LANDSCAPE/OUTSIDE PESTICIDE USE: NOT ANTICIPATED TO BE USED
 POOLS, SPAS, PONDS: NONE PROPOSED
 FOOD SERVICE: NOT EMPLOYED
 REFUSE AREAS: COVERED REFUSE AREA WILL BE EMPLOYED IN BASEMENT
 INDUSTRIAL PROCESSES: DO NOT OCCUR
 OUTDOOR STORAGE OF EQUIPMENT OR MATERIALS: DOES NOT EXIST
 VEHICLE CLEANING: DOES NOT EXIST
 VEHICLE AND EQUIPMENT REPAIR: DOES NOT EXIST
 FUEL DISPENSING AREAS: DO NOT EXIST
 LOADING DOCKS: DO NOT EXIST
 FIRE SPRINKLER TEST WATER: WILL BE CONVEYED TO SEWER
 MISCELLANEOUS DRAIN OR WASH WATER: DOES NOT EXIST
 PLAZAS, SIDEWALKS AND PARKING AREAS: ARE AS SHOWN

STRUCTURAL BMP SHOWN AS TO LOCATION, TYPE, SIZE AND DETAIL ARE SHOWN (BIOFILTRATION BASINS)

HYDROMODIFICATION REQUIREMENTS: IS EXEMPT. RUNOFF FLOWS VIA HARDENED CONVEYANCE TO AN EXEMPT WATER BODY (SAN DIEGO BAY)



Owners:
 PL BOUTIQUE INVESTORS LLC
 17828 VILLAMOURA DR
 POWAY CA 92064-1013

Prepared By:
 CHRISTENSEN ENGINEERING & SURVEYING
 7888 SILVERTON AVENUE, SUITE "J"
 SAN DIEGO, CA 92128
 PHONE (658) 271-8901 FAX (658) 271-8912

Project Address:
 1453-1455 AND 1461-1463 ROSECRANS ST AND 2912 AND 2930 GARRISON ST
 SAN DIEGO, CA 92105

Project Name:
 DOLPHIN MOTEL

Revision 4:
 Revision 3: 11-17-17 REVISE DMA-G AREA
 Revision 2: 08-30-17 REVISE DESIGN
 Revision 1: 08-25-17 REVISED DESIGN ADDRESS CITY COMMENTS

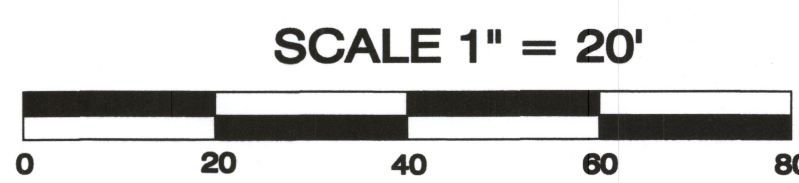
Original Date: APRIL 10, 2017

Sheet Title:
 DRAINAGE MANAGEMENT AREA MAP

Sheet of Sheets:
 Sheet of Sheets



ANTHONY K. CHRISTENSEN, R.C.E. 54021
 Date: NOVEMBER 17, 2017



**Appendix H: Guidance for Investigation Potential Critical Coarse Sediment Yield Areas
Dolphin Motel**

Harvest and Use Feasibility Checklist		Form I-7
<p>1. Is there a demand for harvested water (check all that apply) at the project site that is reliably present during the wet season?</p> <p><input checked="" type="checkbox"/> Toilet and urinal flushing</p> <p><input checked="" type="checkbox"/> Landscape irrigation</p> <p><input type="checkbox"/> Other: _____</p>		
<p>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. [Provide a summary of calculations here]</p> <p>From Table B.3-3 for Low Plant Water use 390 gal/36hr/Ac Area of landscaping = 0.01 Ac Landscape water demand = 390 x 0.01 = 3.9 gallons = 1.5 cf</p> <p>82 motel rooms (2 visitors/room) 9 gal x 1.4/24hr/visitor (19gal/36hr) Toilet and urinal flushing demand – 21 (assume 25% occupancy) x 2 x19= 798 gallons = 107 cf</p>		
<p>3. Calculate the DCV using worksheet B-2.1. DCV = <u>1010</u> (cubic feet)</p>		
<p>3a. Is the 36 hour demand greater than or equal to the DCV?</p> <p><input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No ⇒</p> <p align="center">↓</p>	<p>3b. Is the 36 hour demand greater than 0.25DCV but less than the full DCV?</p> <p><input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No ⇒</p> <p align="center">↓</p>	<p>3c. Is the 36 hour demand less than 0.25DCV?</p> <p><input checked="" type="checkbox"/> Yes</p> <p align="center">↓</p>
<p>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.</p>	<p>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.</p>	<p>Harvest and use is considered to be infeasible.</p>
<p>Is harvest and use feasible based on further evaluation?</p> <p><input type="checkbox"/> Yes, refer to Appendix E to select and size harvest and use BMPs.</p> <p><input checked="" type="checkbox"/> No, select alternate BMPs.</p>		

Part 1 - Full Infiltration Feasibility Screening Criteria
 Would infiltration of the full design volume be feasible from a physical perspective without any undesirable consequences that cannot be reasonably mitigated?

Criteria	Screening Question	Yes	No
1	Is the estimated reliable infiltration rate below proposed facility locations greater than 0.5 inches per hour? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Provide basis:
 Nine (9) infiltration tests (P-1 through P-9) have performed at the project site. The stabilized percolation rates overserved in the field have been converted to infiltration rates. Using a factor of safety of 2, the onsite soils possess infiltration rates ranging between 0.00 and 0.07 inches/hour with an average infiltration rate of less than 0.5 inches/hour. A more detailed discussion of the site specific infiltration testing can be found in our, "Updated Preliminary Infiltration Feasibility Study, Dolphin Motel Project, Point Loma San Diego, California", dated November 20, 2017, Report No. 1611-03-B-7.

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.

2	Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Provide basis:
 Design Infiltration rates at the project site are less than 0.5 inches/hour. As such, this screening question does not control the feasibility of infiltration at the project site and is not applicable.

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.

Worksheet C.4-1 Page 2 of 4

Criteria	Screening Question	Yes	No
3	Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of groundwater contamination (shallow water table, storm water pollutants or other factors) that cannot be mitigated to an acceptable level? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Provide basis: The preliminary design infiltration rates at the project site are less than 0.5 inches/hour. Infiltration at a rate greater than 0.5 inches/hour is not feasible for this project. As such, this screening question does not control the feasibility of infiltration at the project site.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.</p>			
4	Can infiltration greater than 0.5 inches per hour be allowed without causing potential water balance issues such as change of seasonality of ephemeral streams or increased discharge of contaminated groundwater to surface waters? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Provide basis: The design infiltration rates at the project site are less than 0.5 inches/hour. Infiltration at a rate greater than 0.5 inches/hour is not feasible for this project. As such, this screening question does not control the feasibility of infiltration at the project site. Per Section C.4.4 of the BMP Design Manual, final determination should be made by the project design engineer.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.</p>			
Part 1 Result*	<p>If all answers to rows 1-4 are "Yes" a full infiltration design is potentially feasible. The feasibility screening category is Full Infiltration</p> <p>If any answer from row 1-4 is "No", infiltration may be possible to some extent but would not generally be feasible or desirable to achieve a "full infiltration" design. Proceed to Part 2</p>	No, full infiltration is not feasible	

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by the City Engineer to substantiate findings

Part 2 – Partial Infiltration vs. No Infiltration Feasibility Screening Criteria

Would infiltration of water in any appreciable amount be physically feasible without any negative consequences that cannot be reasonably mitigated?

Criteria	Screening Question	Yes	No
5	Do soil and geologic conditions allow for infiltration in any appreciable rate or volume? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Provide basis:</p> <p>Site specific infiltration testing yielded preliminary design infiltration rates (utilizing a factor of safety of 2) ranging between 0.00 and 0.07 inches/hour with an average rate of less than 0.0097 inches/hour. In addition the subsurface soils encountered are relatively dense and possess high fines content, and perched groundwater was encountered at shallow depths during previous geotechnical studies at the site. Infiltration at the project site is anticipated to be negligible. It is anticipated that over the lifetime of the development the infiltration rates will further diminish. The BMP Design Manual utilizes the subjective terminology of ‘appreciable’ and fails to define a lower bound infiltration rate. It is our current understanding that an ‘appreciable’ infiltration rate is interpreted to be an infiltration rate of 0.01 in/hr or greater. Therefore, in consideration of the current interpretation, the soil and geologic conditions at the project site locally does not allow for infiltration in an ‘appreciable’ rate or volume. A more detailed discussion of the site specific infiltration testing can be found in our, “Updated Preliminary Infiltration Feasibility Study, Dolphin Motel Project, Point Loma San Diego, California”, dated November 20, 2017, Report No. 1611-03-B-7.</p>			
6	Can Infiltration in any appreciable quantity be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Provide basis:</p> <p>As stated in response to criteria 5; it is our current understanding that an ‘appreciable’ infiltration rate is interpreted to be an infiltration rate of 0.01 in/hr or greater. Therefore, in consideration of the current interpretation, the soil and geologic conditions at the project site does not allow for infiltration in an ‘appreciable’ rate or volume. As such, this screening question does not control the feasibility of infiltration at the project site.</p>			
<p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.</p>			

Worksheet C.4-1 Page 4 of 4

Criteria	Screening Question	Yes	No
7	Can Infiltration in any appreciable quantity be allowed without posing significant risk for groundwater related concerns (shallow water table, storm water pollutants or other factors)? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Provide basis: As stated in response to previous screening questions; it is our current understanding that an 'appreciable' infiltration rate is interpreted to be an infiltration rate of 0.01 in/hr or greater. Therefore, in consideration of the current interpretation, the soil and geologic conditions at the project site locally does not allow for infiltration in an 'appreciable' rate or volume. As such, this screening question does not control the feasibility of infiltration at the project site.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.</p>			
8	Can infiltration be allowed without violating downstream water rights? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Provide basis: It is not anticipated that infiltration would violate downstream water rights; however, per Section C.4.4 of the BMP Design Manual, final determination should be made by the project design engineer.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.</p>			
Part 2 Result*	If all answers from row 5-8 are "Yes", then partial infiltration design is potentially feasible. The feasibility screening category is Partial Infiltration. If any answer from row 5-8 is "No", then infiltration of any volume is considered to be infeasible within the drainage area. The feasibility screening category is No Infiltration.		No Infiltration

**To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by the City Engineer to substantiate findings*

Appendix B: Storm Water Pollutant Control Hydrologic Calculations and Sizing Methods

**Dolphin Motel
BMP-1**

Worksheet B.2-1 DCV

Design Capture Volume		Worksheet B.2-1		
1	85 th percentile 24-hr storm depth from Figure B.1-1	d=	0.55	inches
2	Area tributary to BMP (s)	A=	0.405	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1)	C=	0.90	unitless
4	Trees Credit Volume	TCV=	0	cubic-feet
5	Rain barrels Credit Volume	RCV=	0	cubic-feet
6	Calculate DCV = $(3630 \times C \times d \times A) - TCV - RCV$	DCV=	727	cubic-feet



Project Name

Dolphin Motel

BMP ID

BMP-1 (ROOF)

Volume Retention for No Infiltration Condition

Worksheet B.5-5


1	Area draining to the biofiltration BMP	17634	sq. ft.
2	Adjusted runoff factor for drainage area (Refer to Appendix B.1 and B.2)	0.9	
3	Effective impervious area draining to the BMP [Line 1 x Line 2]	15871	sq. ft.
4	Required area for Evapotranspiration [Line 3 x 0.03]	476	sq. ft.
5	Biofiltration BMP Footprint	504	sq. ft.


Landscape Area (must be identified on DS-3247)

		Identification	1	2	3	4	5
6	Landscape area that meet the requirements in SD-4 and SD-5 Fact Sheet (sq. ft.)		0				
7	Impervious area draining to the landscape area (sq. ft.)		0				
8	Impervious to Pervious Area ratio [Line 7/Line 6]		0.00	0.00	0.00	0.00	0.00
9	Effective Credit Area If (Line 8 >1.5, Line 6, Line 7/1.5)		0	0	0	0	0
10	Sum of Landscape area [sum of Line 9 Id's 1 to 5]					0	sq. ft.
11	Provided footprint for evapotranspiration [Line 5 + Line 10]					504	sq. ft.

Volume Retention Performance Standard

14	<p>Is Line 11 \geq Line 4?</p> <p>If yes, then volume retention performance standard for no infiltration condition is met.</p> <p>If no, increase the landscape area or propose other site design BMPs (e.g. trees, rain barrels, etc.) that will result in equivalent or greater average annual volume retention when compared to the average annual volume retention achieved by a standard biofiltration BMP. If the option of implementing other site design BMPs is selected, applicant must include supporting documentation with explanation of the approach in the PDP SWQMP.</p>	<p>Performance Standard is Met</p>
----	--	---

		Project Name Dolphin Motel		
		BMP ID BMP-1 (ROOF)		
Sizing Method for Pollutant Removal Criteria			Worksheet B.5-1	
1	Area draining to the BMP	17634	sq. ft.	
2	Adjusted runoff factor for drainage area (Refer to Appendix B.1 and B.2)	0.9		
3	85 th percentile 24-hour rainfall depth	0.55	inches	
4	Design capture volume [Line 1 x Line 2 x (Line 3/12)]	727	cu. ft.	
BMP Parameters				
5	Surface ponding [6 inch minimum, 12 inch maximum]	6	inches	
6	Media thickness [18 inches minimum], also add mulch layer and washed ASTM 33 fine aggregate sand thickness to this line for sizing calculations	24	inches	
7	Aggregate storage (also add ASTM No 8 stone) above underdrain invert (12 inches typical) – use 0 inches if the aggregate is not over the entire bottom surface area	9	inches	
8	Aggregate storage below underdrain invert (3 inches minimum) – use 0 inches if the aggregate is not over the entire bottom surface area	3	inches	
9	Freely drained pore storage of the media	0.2	in/in	
10	Porosity of aggregate storage	0.4	in/in	
11	Media filtration rate to be used for sizing (maximum filtration rate of 5 in/hr. with no outlet control; if the filtration rate is controlled by the outlet use the outlet controlled rate (includes infiltration into the soil and flow rate through the outlet structure) which will be less than 5 in/hr.)	5	in/hr.	
Baseline Calculations				
12	Allowable routing time for sizing	6	hours	
13	Depth filtered during storm [Line 11 x Line 12]	30	inches	
14	Depth of Detention Storage [Line 5 + (Line 6 x Line 9) + (Line 7 x Line 10) + (Line 8 x Line 10)]	15.6	inches	
15	Total Depth Treated [Line 13 + Line 14]	45.6	inches	
Option 1 – Biofilter 1.5 times the DCV				
16	Required biofiltered volume [1.5 x Line 4]	1091	cu. ft.	
17	Required Footprint [Line 16/ Line 15] x 12	287	sq. ft.	
Option 2 - Store 0.75 of remaining DCV in pores and ponding				
18	Required Storage (surface + pores) Volume [0.75 x Line 4]	546	cu. ft.	
19	Required Footprint [Line 18/ Line 14] x 12	420	sq. ft.	
Footprint of the BMP				
20	BMP Footprint Sizing Factor (Default 0.03 or an alternative minimum footprint sizing factor from Line 11 in Worksheet B.5-3)	0.03		
21	Minimum BMP Footprint [Line 1 x Line 2 x Line 20]	476	sq. ft.	
22	Footprint of the BMP = Maximum(Minimum(Line 17, Line 19), Line 21)	476	sq. ft.	
23	Provided BMP Footprint	504	sq. ft.	
24	Is Line 23 > Line 22?	Yes, Performance Standard is Met		

		Project Name	Dophin Motel	
		BMP ID	BMP-1 (ROOF)	
Sizing Method for Volume Retention Criteria		Worksheet B.5-2		
1	Area draining to the BMP	17634	sq. ft.	
2	Adjusted runoff factor for drainage area (Refer to Appendix B.1 and B.2)	0.9		
3	85 th percentile 24-hour rainfall depth	0.55	inches	
4	Design capture volume [Line 1 x Line 2 x (Line 3/12)]	727	cu. ft.	
BMP Parameters				
5	Footprint of the BMP	504	sq. ft.	
6	Media thickness [18 inches minimum], also add mulch layer and washed ASTM 33 fine aggregate sand thickness to this line for sizing calculations	18	inches	
7	Media retained pore space [50% of (FC-WP)]	0.05	in/in	
8	Aggregate storage below underdrain invert (3 inches minimum) – use 0 inches if the aggregate is not over the entire bottom surface area	3	inches	
9	Porosity of aggregate storage	0.4	in/in	
Volume Retention Requirement				
10	Measured infiltration rate in the DMA	0.01	in/hr.	
11	Factor of safety	2		
12	Reliable infiltration rate, for biofiltration BMP sizing [Line 10/ Line 11] Note: This worksheet is not applicable if Line 12 < 0.01 in/hr.	0.005	in/hr.	
13	Average annual volume reduction target (Figure B.5-2) When Line 12 ≥ 0.01 in/hr. = Minimum (40, 166.9 x Line 12 +6.62)	7.5	%	
14	Fraction of DCV to be retained (Figure B.5-3) $0.0000013 \times \text{Line } 13^3 - 0.000057 \times \text{Line } 13^2 + 0.0086 \times \text{Line } 13 - 0.014$	0.047		
15	Target volume retention [Line 14 x Line 4]	34	cu. ft.	
Evapotranspiration: Average Annual Volume Retention				
16	Effective evapotranspiration depth [Line 6 x Line 7]	0.9	inches	
17	Retained Pore Volume [(Line 16 x Line 5)/12]	38	cu. ft.	
18	Fraction of DCV retained in pore spaces [Line 17/Line 4]	0.05		
19	Evapotranspiration average annual capture [ET nomographs in Figure B.5-5]	3.8	%	
Infiltration: Average Annual Volume Retention				
20	Drawdown for infiltration storage [(Line 8 x Line 9)/Line 12]	240	hours	
21	Equivalent DCV fraction from evapotranspiration (use Line 19 and Line 20 in Figure B.4-1; Refer to Appendix B.4.2.2)	0.04		
22	Infiltration volume storage [(Line 5 x Line 8 x Line 9)/12]	50	cu. ft.	
23	Infiltration Storage Fraction of DCV [Line 22/Line 4]	0.07		
24	Total Equivalent Fraction of DCV [Line 21 + Line 23]	0.11		
25	Biofiltration BMP average annual capture [use Line 24 and 20 in Figure B.4-1]	10.40	%	
Volume retention required from site design and other BMPs				
26	Fraction of DCV retained (Figure B.5-3) $0.0000013 \times \text{Line } 25^3 - 0.000057 \times \text{Line } 25^2 + 0.0086 \times \text{Line } 25 - 0.014$	0.071		
27	Remaining target DCV retention [(Line 14 – Line 26) x Line 4] Note: If Line 27 is equal to or smaller than 0 then the BMP meets the volume retention performance standard. If Line 27 is greater than 0, the applicant must implement site design and/or other BMPs within the DMA that will retain DCV equivalent to or greater than Line 27 to meet the volume retention performance standard	-17	cu. ft.	
Volume Retention Performance Standard is Met				


Appendix B: Storm Water Pollutant Control Hydrologic Calculations and Sizing Methods


**Dolphin Motel
BMP-2**


Worksheet B.2-1 DCV

Design Capture Volume		Worksheet B.2-1		
1	85 th percentile 24-hr storm depth from Figure B.1-1	d=	0.55	inches
2	Area tributary to BMP (s)	A=	0.155	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1)	C=	0.69	unitless
4	Trees Credit Volume	TCV=	0	cubic-feet
5	Rain barrels Credit Volume	RCV=	0	cubic-feet
6	Calculate DCV = $(3630 \times C \times d \times A) - \text{TCV} - \text{RCV}$	DCV=	214	cubic-feet

$(1602 \text{ sf Imperious} \times (0.9) + 5157 \text{ sf Permeable} \times (0.1)) / 6759 \text{ sf} = 0.69$

		Project Name					Dolphin Motel	
		BMP ID					BMP-2 (FLOOR)	
Volume Retention for No Infiltration Condition						Worksheet B.5-5		
1	Area draining to the biofiltration BMP					6759	sq. ft.	
2	Adjusted runoff factor for drainage area (Refer to Appendix B.1 and B.2)					0.69		
3	Effective impervious area draining to the BMP [Line 1 x Line 2]					4664	sq. ft.	
4	Required area for Evapotranspiration [Line 3 x 0.03]					140	sq. ft.	
5	Biofiltration BMP Footprint					163	sq. ft.	
Landscape Area (must be identified on DS-3247)								
		Identification	1	2	3	4	5	
6	Landscape area that meet the requirements in SD-4 and SD-5 Fact Sheet (sq. ft.)		0					
7	Impervious area draining to the landscape area (sq. ft.)		0					
8	Impervious to Pervious Area ratio [Line 7/Line 6]		0.00	0.00	0.00	0.00	0.00	
9	Effective Credit Area If (Line 8 >1.5, Line 6, Line 7/1.5)		0	0	0	0	0	
10	Sum of Landscape area [sum of Line 9 Id's 1 to 5]					0	sq. ft.	
11	Provided footprint for evapotranspiration [Line 5 + Line 10]					163	sq. ft.	
Volume Retention Performance Standard								
14	<p>Is Line 11 \geq Line 4?</p> <p>If yes, then volume retention performance standard for no infiltration condition is met.</p> <p>If no, increase the landscape area or propose other site design BMPs (e.g. trees, rain barrels, etc.) that will result in equivalent or greater average annual volume retention when compared to the average annual volume retention achieved by a standard biofiltration BMP. If the option of implementing other site design BMPs is selected, applicant must include supporting documentation with explanation of the approach in the PDP SWQMP.</p>					Performance Standard is Met		

		Project Name Dolphin Motel		
		BMP ID BMP-2 (FLOOR)		
Sizing Method for Pollutant Removal Criteria			Worksheet B.5-1	
1	Area draining to the BMP	6759	sq. ft.	
2	Adjusted runoff factor for drainage area (Refer to Appendix B.1 and B.2)	0.69		
3	85 th percentile 24-hour rainfall depth	0.55	inches	
4	Design capture volume [Line 1 x Line 2 x (Line 3/12)]	214	cu. ft.	
BMP Parameters				
5	Surface ponding [6 inch minimum, 12 inch maximum]	6	inches	
6	Media thickness [18 inches minimum], also add mulch layer and washed ASTM 33 fine aggregate sand thickness to this line for sizing calculations	24	inches	
7	Aggregate storage (also add ASTM No 8 stone) above underdrain invert (12 inches typical) – use 0 inches if the aggregate is not over the entire bottom surface area	9	inches	
8	Aggregate storage below underdrain invert (3 inches minimum) – use 0 inches if the aggregate is not over the entire bottom surface area	3	inches	
9	Freely drained pore storage of the media	0.2	in/in	
10	Porosity of aggregate storage	0.4	in/in	
11	Media filtration rate to be used for sizing (maximum filtration rate of 5 in/hr. with no outlet control; if the filtration rate is controlled by the outlet use the outlet controlled rate (includes infiltration into the soil and flow rate through the outlet structure) which will be less than 5 in/hr.)	5	in/hr.	
Baseline Calculations				
12	Allowable routing time for sizing	6	hours	
13	Depth filtered during storm [Line 11 x Line 12]	30	inches	
14	Depth of Detention Storage [Line 5 + (Line 6 x Line 9) + (Line 7 x Line 10) + (Line 8 x Line 10)]	15.6	inches	
15	Total Depth Treated [Line 13 + Line 14]	45.6	inches	
Option 1 – Biofilter 1.5 times the DCV				
16	Required biofiltered volume [1.5 x Line 4]	321	cu. ft.	
17	Required Footprint [Line 16/ Line 15] x 12	84	sq. ft.	
Option 2 - Store 0.75 of remaining DCV in pores and ponding				
18	Required Storage (surface + pores) Volume [0.75 x Line 4]	160	cu. ft.	
19	Required Footprint [Line 18/ Line 14] x 12	123	sq. ft.	
Footprint of the BMP				
20	BMP Footprint Sizing Factor (Default 0.03 or an alternative minimum footprint sizing factor from Line 11 in Worksheet B.5-3)	0.03		
21	Minimum BMP Footprint [Line 1 x Line 2 x Line 20]	140	sq. ft.	
22	Footprint of the BMP = Maximum(Minimum(Line 17, Line 19), Line 21)	140	sq. ft.	
23	Provided BMP Footprint	163	sq. ft.	
24	Is Line 23 > Line 22?	Yes, Performance Standard is Met		

		Project Name Dophin Motel		
		BMP ID BMP-2 (FLOOR)		
Sizing Method for Volume Retention Criteria		Worksheet B.5-2		
1	Area draining to the BMP	6840	sq. ft.	
2	Adjusted runoff factor for drainage area (Refer to Appendix B.1 and B.2)	0.76		
3	85 th percentile 24-hour rainfall depth	0.55	inches	
4	Design capture volume [Line 1 x Line 2 x (Line 3/12)]	238	cu. ft.	
BMP Parameters				
5	Footprint of the BMP	211	sq. ft.	
6	Media thickness [18 inches minimum], also add mulch layer and washed ASTM 33 fine aggregate sand thickness to this line for sizing calculations	18	inches	
7	Media retained pore space [50% of (FC-WP)]	0.05	in/in	
8	Aggregate storage below underdrain invert (3 inches minimum) – use 0 inches if the aggregate is not over the entire bottom surface area	3	inches	
9	Porosity of aggregate storage	0.4	in/in	
Volume Retention Requirement				
10	Measured infiltration rate in the DMA	0.01	in/hr.	
11	Factor of safety	2		
12	Reliable infiltration rate, for biofiltration BMP sizing [Line 10/ Line 11] Note: This worksheet is not applicable if Line 12 < 0.01 in/hr.	0.005	in/hr.	
13	Average annual volume reduction target (Figure B.5-2) When Line 12 ≥ 0.01 in/hr. = Minimum (40, 166.9 x Line 12 + 6.62)	7.5	%	
14	Fraction of DCV to be retained (Figure B.5-3) $0.0000013 \times \text{Line } 13^3 - 0.000057 \times \text{Line } 13^2 + 0.0086 \times \text{Line } 13 - 0.014$	0.047		
15	Target volume retention [Line 14 x Line 4]	11	cu. ft.	
Evapotranspiration: Average Annual Volume Retention				
16	Effective evapotranspiration depth [Line 6 x Line 7]	0.9	inches	
17	Retained Pore Volume [(Line 16 x Line 5)/12]	16	cu. ft.	
18	Fraction of DCV retained in pore spaces [Line 17/Line 4]	0.07		
19	Evapotranspiration average annual capture [ET nomographs in Figure B.5-5]	5.2	%	
Infiltration: Average Annual Volume Retention				
20	Drawdown for infiltration storage [(Line 8 x Line 9)/Line 12]	240	hours	
21	Equivalent DCV fraction from evapotranspiration (use Line 19 and Line 20 in Figure B.4-1; Refer to Appendix B.4.2.2)	0.05		
22	Infiltration volume storage [(Line 5 x Line 8 x Line 9)/12]	21	cu. ft.	
23	Infiltration Storage Fraction of DCV [Line 22/Line 4]	0.09		
24	Total Equivalent Fraction of DCV [Line 21 + Line 23]	0.14		
25	Biofiltration BMP average annual capture [use Line 24 and 20 in Figure B.4-1]	13.18	%	
Volume retention required from site design and other BMPs				
26	Fraction of DCV retained (Figure B.5-3) $0.0000013 \times \text{Line } 25^3 - 0.000057 \times \text{Line } 25^2 + 0.0086 \times \text{Line } 25 - 0.014$	0.092		
27	Remaining target DCV retention [(Line 14 – Line 26) x Line 4] Note: If Line 27 is equal to or smaller than 0 then the BMP meets the volume retention performance standard. If Line 27 is greater than 0, the applicant must implement site design and/or other BMPs within the DMA that will retain DCV equivalent to or greater than Line 27 to meet the volume retention performance standard	-11	cu. ft.	
Volume Retention Performance Standard is Met				

Categorization of Infiltration Feasibility Condition		Worksheet C.4-1	
<p>Part 1 - Full Infiltration Feasibility Screening Criteria</p> <p>Would infiltration of the full design volume be feasible from a physical perspective without any undesirable consequences that cannot be reasonably mitigated?</p>			
Criteria	Screening Question	Yes	No
1	Is the estimated reliable infiltration rate below proposed facility locations greater than 0.5 inches per hour? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Provide basis:</p> <p>Two (2) borehole percolation tests were performed onsite as part of a feasibility analysis for the implementation of infiltration type BMPs. Testing was performed in general conformance with Appendix D, Section D.3.3.2 of the current BMP Design Manual. The observed percolation rates were then converted to observed infiltration rates using the "Porchet Method". The observed infiltration rates were calculated to be 0.0 in/hr in Test Boring P-1, and 0.14 in/hr in Test Boring P-2. Utilizing a factor of safety of 2, for preliminary screening purposes, the preliminary design infiltration rates range between 0.0 and 0.07 in/hr.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.</p>			
2	Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Provide basis:</p> <p>Design Infiltration rates at the project site are less than 0.5 inches/hour. As such, this screening question does not control the feasibility of infiltration at the project site and is not applicable.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.</p>			

Worksheet C.4-1 Page 2 of 4

Criteria	Screening Question	Yes	No
3	Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of groundwater contamination (shallow water table, storm water pollutants or other factors) that cannot be mitigated to an acceptable level? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Provide basis: The preliminary design infiltration rates at the project site are less than 0.5 inches/hour. Infiltration at a rate greater than 0.5 inches/hour is not feasible for this project. As such, this screening question does not control the feasibility of infiltration at the project site.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.</p>			
4	Can infiltration greater than 0.5 inches per hour be allowed without causing potential water balance issues such as change of seasonality of ephemeral streams or increased discharge of contaminated groundwater to surface waters? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Provide basis: The design infiltration rates at the project site are less than 0.5 inches/hour. Infiltration at a rate greater than 0.5 inches/hour is not feasible for this project. As such, this screening question does not control the feasibility of infiltration at the project site. Per Section C.4.4 of the BMP Design Manual, final determination should be made by the project design engineer.</p>			
Part 1 Result*	<p>If all answers to rows 1-4 are "Yes" a full infiltration design is potentially feasible. The feasibility screening category is Full Infiltration</p> <p>If any answer from row 1-4 is "No", infiltration may be possible to some extent but would not generally be feasible or desirable to achieve a "full infiltration" design. Proceed to Part 2</p>		

**To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by the City Engineer to substantiate findings*

Part 2 – Partial Infiltration vs. No Infiltration Feasibility Screening Criteria

Would infiltration of water in any appreciable amount be physically feasible without any negative consequences that cannot be reasonably mitigated?

Criteria	Screening Question	Yes	No
5	Do soil and geologic conditions allow for infiltration in any appreciable rate or volume? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Provide basis:</p> <p>Site specific infiltration testing yielded preliminary design infiltration rates ranging between 0.00 and 0.07 inches/hour. The subsurface soils encountered at the project site are interbedded, fine-grained clayey sand and sandy clay in a wet to saturated and loose/firm to moderately dense/stiff condition. Limited infiltration within the sandy lenses is anticipated. However, the clay lenses are considered impermeable when saturated and act as an aquitard/confining layer preventing vertical infiltration. Based on the results of our site specific investigation, the soil and geologic conditions at the project site do not allow for infiltration in an 'appreciable' rate or volume.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.</p>			
6	Can Infiltration in any appreciable quantity be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Provide basis:</p> <p>As discussed in previous responses and the referenced infiltration study, the onsite soils consist of interbedded clayey sand and sandy clay. The clay lenses will act as confining layers between the sandier lenses prohibiting vertical infiltration. It is anticipated that water introduced through infiltration type BMPs will flow laterally within confined sand lenses. In consideration of existing and proposed improvements in close proximity to the site, it is highly likely that water intrusion into nearby permeable improvements (e.g. utility trenches, wall backfill) will occur. In addition, the onsite soils have low horizontal hydraulic conductivity and may be susceptible to groundwater mounding. To reduce the associated risk to an acceptable level, mitigation measures such as cut-off walls, deepened foundation elements, structural setbacks and additional drainage systems will be necessary but are likely to be cost prohibitive. For preliminary screening purposes, partial infiltration is not considered feasible. The type, location, size, and depth of proposed infiltration BMPs has not been finalized at this time. When more detailed plans become available, additional analysis and modification to preliminary recommendations may be necessary.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.</p>			

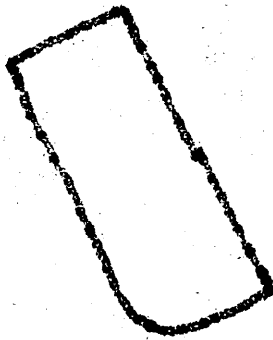
Worksheet C.4-1 Page 4 of 4

Criteria	Screening Question	Yes	No
7	Can Infiltration in any appreciable quantity be allowed without posing significant risk for groundwater related concerns (shallow water table, storm water pollutants or other factors)? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Provide basis: The site is at an approximate elevation ranging of 9 to 11 feet above sea level. Groundwater was found to be at approximately 15 feet below ground surface. Although, as previously stated it is our opinion that historical high ground water is at approximately 11 feet below ground surface. This opinion is based on soil mottling observed in subsurface samples and review of historic well data from the site vicinity. As such, it is not anticipated that the proposed infiltration BMPs will have the required 10-foot separation to high groundwater. The required separation can be reduced at the discretion of the reviewing agency provided the receiving groundwater body does not support beneficial uses and that adequate pre-treatment is provided to preclude the introduction of contaminants.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.</p>			
8	Can infiltration be allowed without violating downstream water rights? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Provide basis: It is not anticipated that infiltration would violated downstream water rights. Per Section C.4.4 of the BMP Design Manual, final determination should be made by the project design engineer.</p> <p>Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.</p>			
Part 2 Result*	If all answers from row 5-8 are "Yes", then partial infiltration design is potentially feasible. The feasibility screening category is Partial Infiltration. If any answer from row 5-8 is "No", then infiltration of any volume is considered to be infeasible within the drainage area. The feasibility screening category is No Infiltration.		

**To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by the City Engineer to substantiate findings*

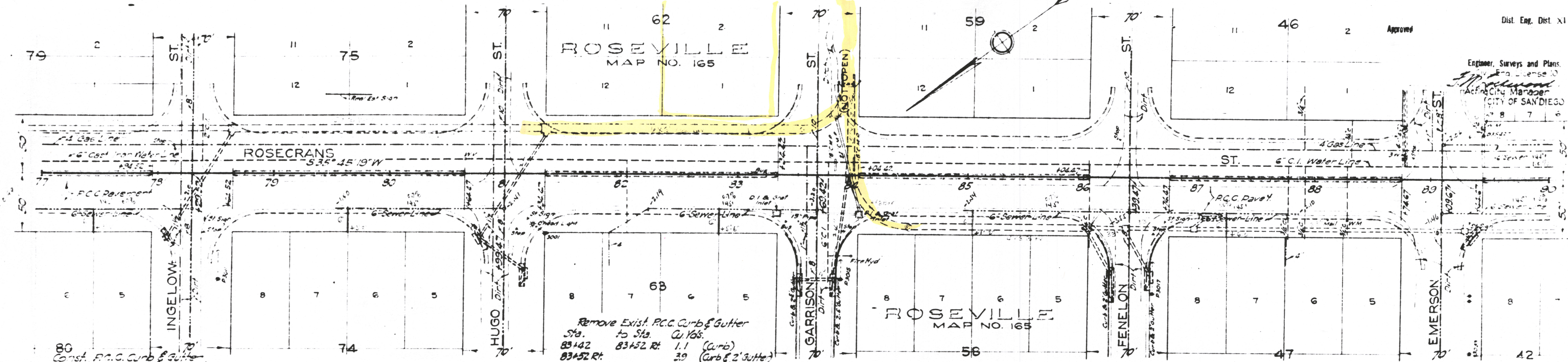
Hydromodification Exempt Drains from SanGIS





Const. Center Dividing Str. to Sta. 79+00
 10' x 20' PCC Pavement
 10' x 20' PCC Pavement
 See Detail Sheet
 Exceptions as Shown

Const. Laminated Guard Railing
 Sta. 82+00 to Sta. 83+00
 3" x 6" x 6" L.A.
 2' x 2'



Approved
 Engineer, Surveys and Plans
 License No. 10
 City of San Diego

Const. P.C.C. Curb & Gutter to Sta. 80+00

Sta.	Const. P.C.C. Curb & Gutter	Quantity
79+00	80+00	266.03
79+00	80+00	27.00
80+00	81+00	285.13
80+00	81+00	269.28
81+00	82+00	265.39
81+00	82+00	230.00
82+00	83+00	288.03
82+00	83+00	230.00
83+00	84+00	288.03
83+00	84+00	230.00
84+00	85+00	239.23
84+00	85+00	230.00

Remove Exist. P.C.C. Curb & Gutter

Sta.	Remove Exist. P.C.C. Curb & Gutter	Quantity
83+42	83+52 Rt. 1.1	(Curb)
83+52 Rt.	83+52 Rt. 3.9	(Curb & 2' Gutter)
83+80	83+98 Rt. 1.2	(Curb)
83+80 Rt.	83+80 Rt. 1.9	(Curb & 2' Gutter)
86+12	86+22 Rt. 4.4	(Curb & 2' Gutter)
86+54	86+66 Rt. 2.2	(Curb & 2' Gutter)

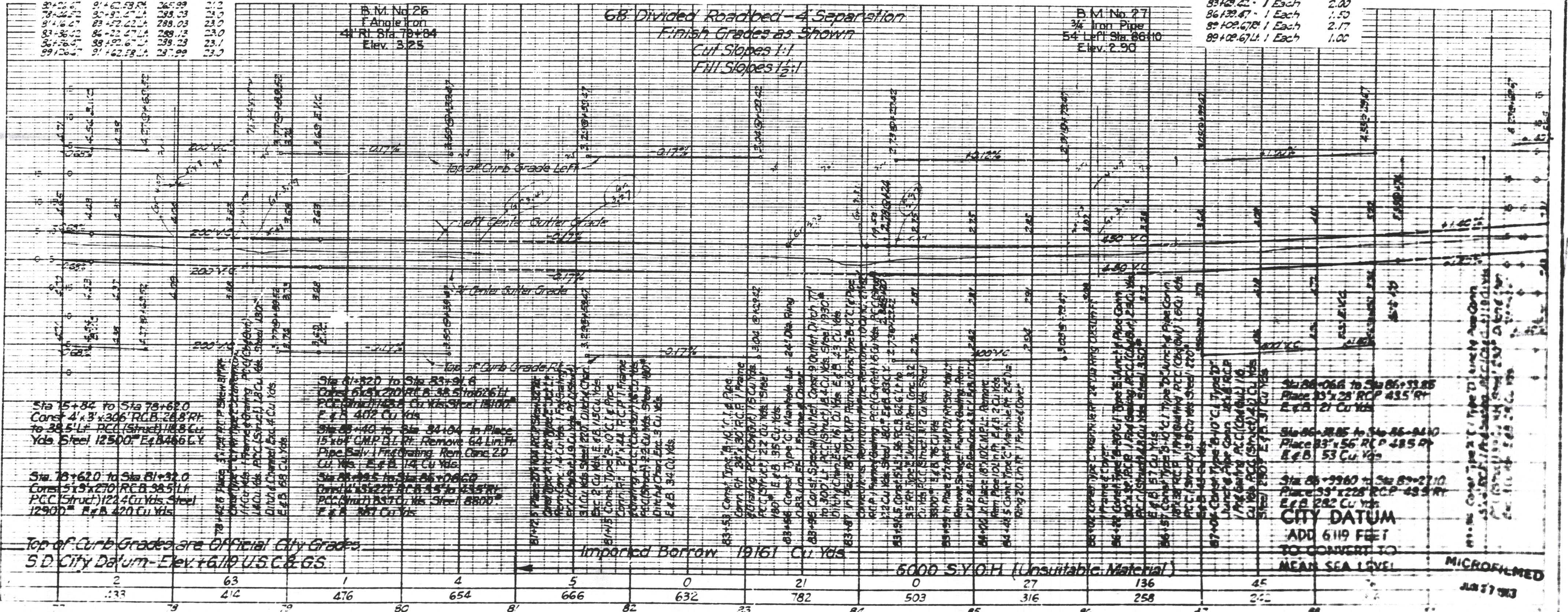
Adjust Existing Sewer Manholes to Grade

Sta.	Adjust Existing Sewer Manholes to Grade	Quantity
79+28.52 Rt.	79+28.52 Rt. 1 Each	1.83
80+99.47	80+99.47 1 Each	2.17
83+82.42	83+82.42 1 Each	2.00
86+139.47	86+139.47 1 Each	1.50
89+109.67 Rt.	89+109.67 Rt. 1 Each	2.17
89+109.67 Lt.	89+109.67 Lt. 1 Each	1.00

B.M. No. 26
 F Angle Iron
 4" Rt. Side 79+04
 Elev. 3.25

68' Divided Roadbed - 4' Separation
 Finish Grades as Shown
 Cut Slopes 1:1
 Fill Slopes 1 1/2:1

B.M. No. 27
 3/4" Iron Pipe
 54" Left Side 86+10
 Elev. 2.90



Sta 75+84 to Sta 78+82.0
 Const 4' x 3' x 306' P.C.C. 288 Rt.
 to 38.5' LF P.C.C. (Struct) 118.8 Cu Yds
 Steel 12500' E.P.B. 420 Cu Yds

Sta 78+62.0 to Sta 81+32.0
 Const 5' x 5' x 270' P.C.C. 385 Lt.
 P.C.C. (Struct) 124.4 Cu Yds Steel
 12900' E.P.B. 420 Cu Yds

Sta 81+82.0 to Sta 83+91.8
 Const 6' x 20' R.C.P. 83.5
 P.C.C. (Struct) 422 Cu Yds Steel 18100'

Sta 83+44.0 to Sta 84+104
 15' x 6' G.M.P. D.I. Rt. Remove 64 Lin. Ft.
 Pipe Bury 1' and Grating Rem Const 2.0
 Cu Yds E.P.B. 124 Cu Yds

Sta 84+94.5 to Sta 86+06.0
 Const 15' x 22' R.C.P. 4.5 to 4.5 Rt.
 P.C.C. (Struct) 837.0 Cu Yds Steel 8800'
 E.P.B. 367 Cu Yds

83+58 Const Type 10' x 10' x 10' P.C.C.
 Const 8' x 8' x 8' P.C.C. 1.1
 P.C.C. (Struct) 212 Cu Yds Steel 1304

83+80 Const Type 10' x 10' x 10' P.C.C.
 Const 8' x 8' x 8' P.C.C. 1.1
 P.C.C. (Struct) 212 Cu Yds Steel 1304

83+80 Const Type 10' x 10' x 10' P.C.C.
 Const 8' x 8' x 8' P.C.C. 1.1
 P.C.C. (Struct) 212 Cu Yds Steel 1304

83+80 Const Type 10' x 10' x 10' P.C.C.
 Const 8' x 8' x 8' P.C.C. 1.1
 P.C.C. (Struct) 212 Cu Yds Steel 1304

83+80 Const Type 10' x 10' x 10' P.C.C.
 Const 8' x 8' x 8' P.C.C. 1.1
 P.C.C. (Struct) 212 Cu Yds Steel 1304

83+80 Const Type 10' x 10' x 10' P.C.C.
 Const 8' x 8' x 8' P.C.C. 1.1
 P.C.C. (Struct) 212 Cu Yds Steel 1304

83+80 Const Type 10' x 10' x 10' P.C.C.
 Const 8' x 8' x 8' P.C.C. 1.1
 P.C.C. (Struct) 212 Cu Yds Steel 1304

83+80 Const Type 10' x 10' x 10' P.C.C.
 Const 8' x 8' x 8' P.C.C. 1.1
 P.C.C. (Struct) 212 Cu Yds Steel 1304

83+80 Const Type 10' x 10' x 10' P.C.C.
 Const 8' x 8' x 8' P.C.C. 1.1
 P.C.C. (Struct) 212 Cu Yds Steel 1304

Sta 86+06.0 to Sta 86+91.8
 Place 33' x 28' R.C.P. 435 Rt.
 E.P.B. 21 Cu Yds

Sta 86+38.05 to Sta 86+84.0
 Place 33' x 28' R.C.P. 435 Rt.
 E.P.B. 53 Cu Yds

Sta 86+99.0 to Sta 89+27.0
 Place 33' x 28' R.C.P. 435 Rt.
 E.P.B. 282 Cu Yds

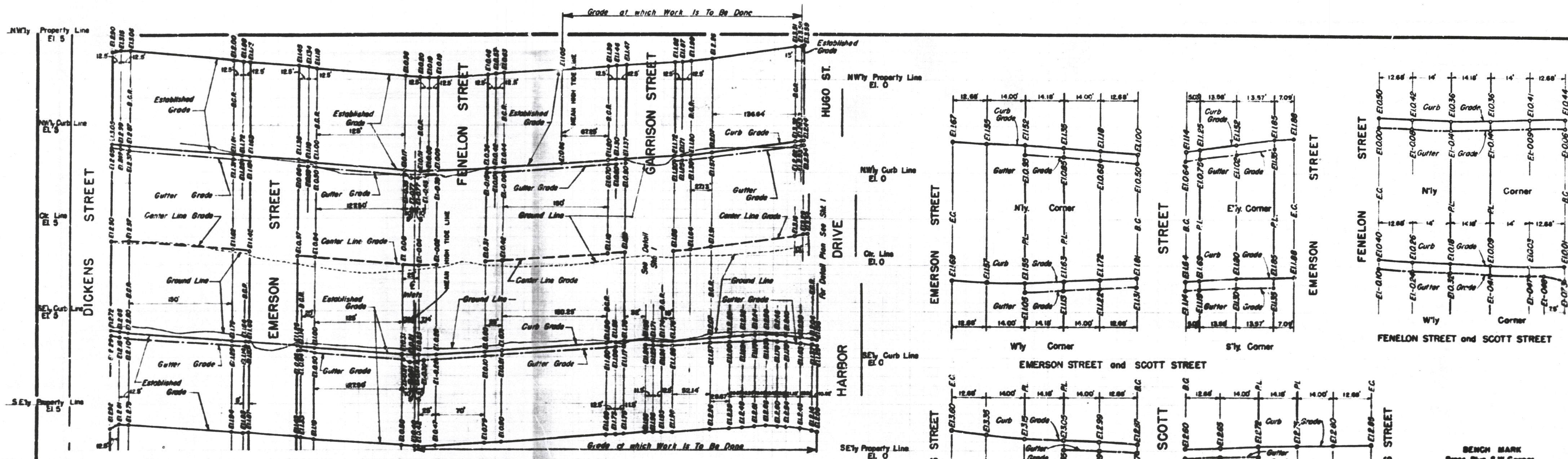
Top of Curb Grades are Official City Grades
 S.D. City Datum - Elev. +6.19 U.S.C. & G.S.

Impacted Borrow 19161 Cu Yds

6000 S.Y.O.H (Unsuitable Material)

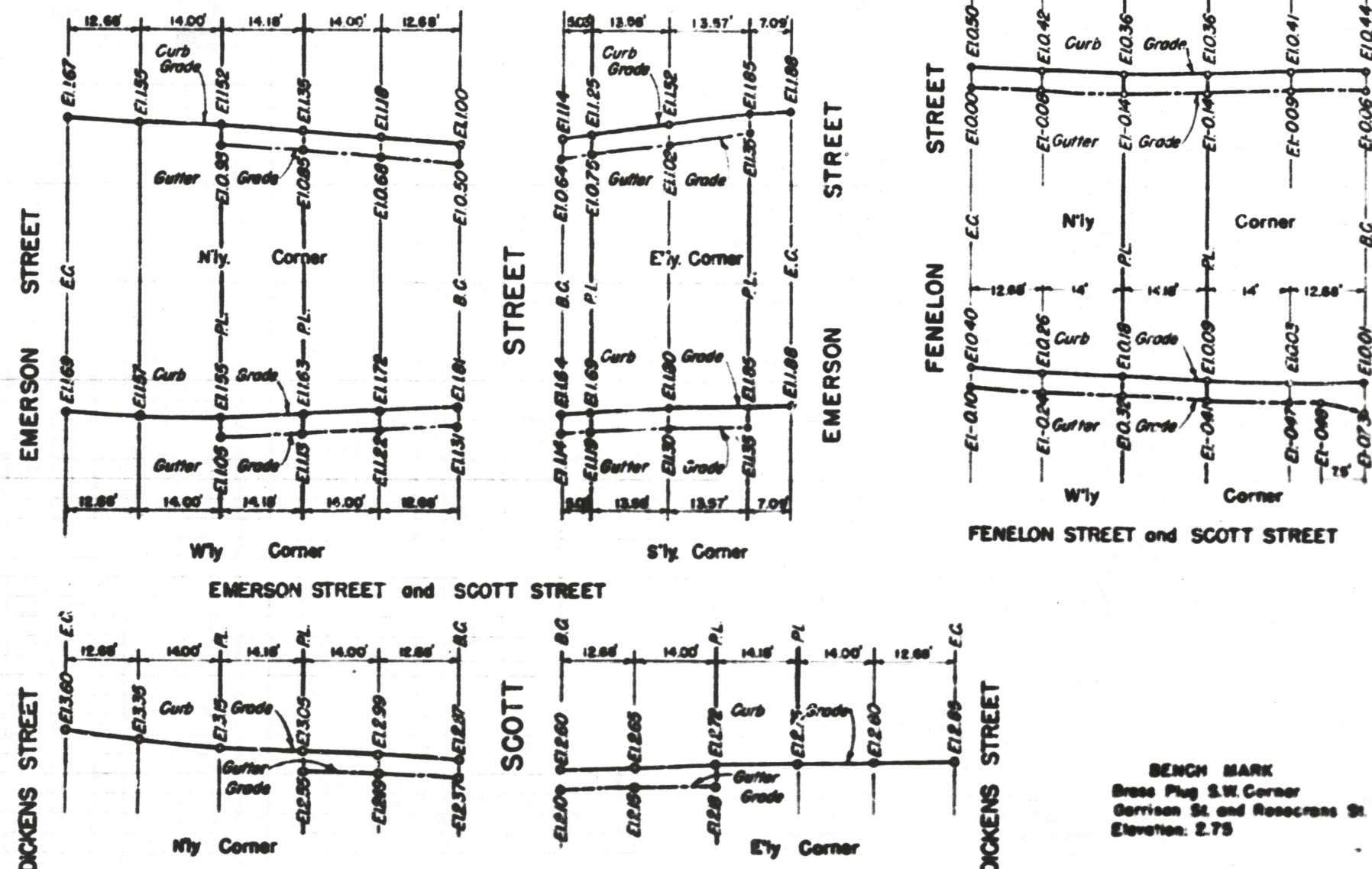
CITY DATUM
 ADD 6.19 FEET
 TO CONVERT TO
 MEAN SEA LEVEL

MICROFILMED
 JAN 1963



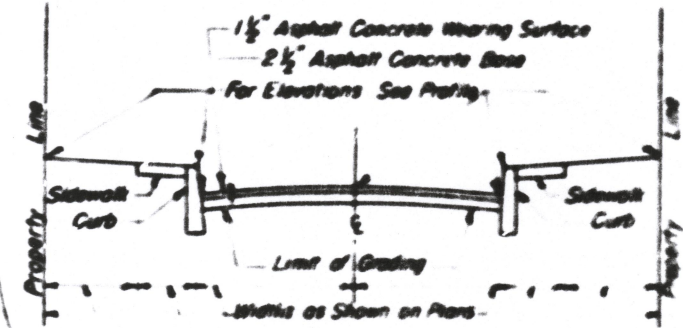
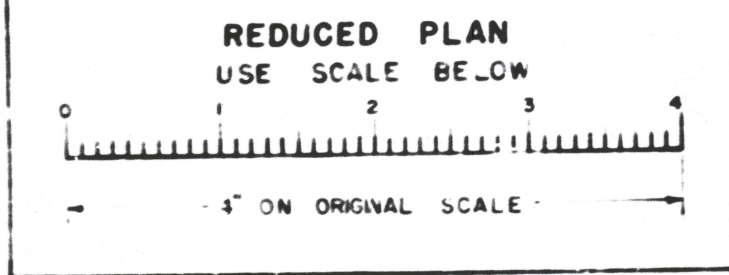
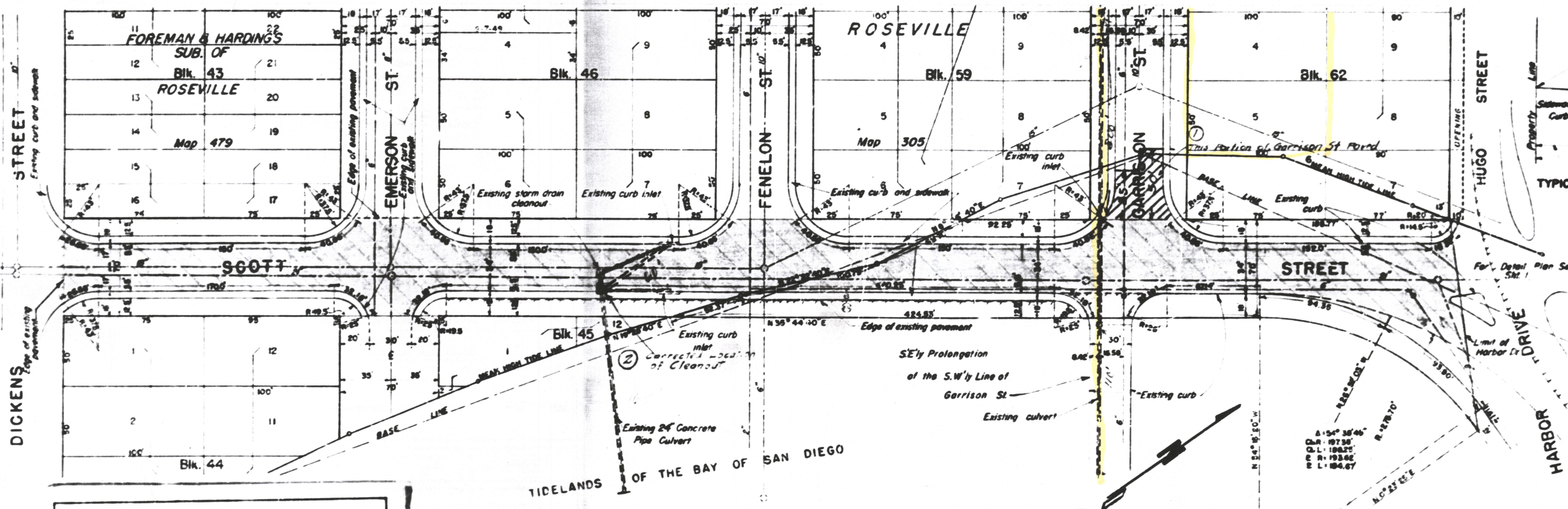
Profile showing the ESTABLISHED GRADE of SCOTT STREET between the northeasterly line of Dickens Street and the Mean High Tide Line of the Bay of San Diego and between the Mean High Tide Line of the Bay of San Diego and the southwesterly line of Harbor Drive and the GRADE AT WHICH WORK IS TO BE DONE on SCOTT STREET between the Mean High Tide Line of the Bay of San Diego and the southwesterly line of Harbor Drive.

Scale: Horizontal 1"=60' Vertical 1"=6'



PROFILES OF CURB RETURNS ON SCOTT STREET
Scale: Horizontal 1"=20' Vertical 1"=3'

BENCH MARK
Brass Plug S.W. Corner
Garrison St and Reservoir St
Elevation: 2.75



TYPICAL CROSS SECTION OF SCOTT STREET

CITY DATUM
ADD 6.119 FEET
TO CONVERT TO
MEAN SEA LEVEL

SHEET 2		CITY OF SAN DIEGO		2 SHEETS	
ENGINEERING DEPARTMENT					
SCOTT ST - HARBOR DR					
APPROVED	<i>A.K. Joffe</i>		DATE	2/2/50	SCALE
DESIGNED BY	G.J.L.		DATE	1/20/50	SCALE
DRAWN BY	G.J.L.		DATE	1/20/50	SCALE
CHECKED BY	G.J.L.		DATE	1/20/50	SCALE
CONSTRUCTION RECORD			8012		

Dolphin Motel

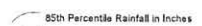




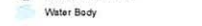

Hydromodification Exemption Path to Exempt Water Body (San Diego Bay)

Legend

-  Dolphin Motel
-  Rosecrans St & Garrison St



San Diego County 85th Percentile Isopluvials

-  85th Percentile Rainfall in Inches
-  Freeway
-  Highway
-  Major Road
-  Street
-  Municipal Boundary
-  Water Body

Note:
The 85th percentile is a 24-hour rainfall total.
It represents a value such that 85% of the
observed 24-hour rainfall totals will be less
than that value.

SITE →

