(D21-00004, CUP21-00004)

CITY OF OCEANSIDE
ENGINEERING DIVISION

PRIORITY DEVELOPMENT PROJECT

STORM WATER QUALITY MANAGEMENT PLAN

FOR

Tri-City Psychiatric Development

ENGINEER OF WORK

_____

Jeff Gavazza, PE – Lic No. C59894 Date:

PREPARED FOR:

~~David Dobson, County of San Diego~~

~~Dept. of General Services~~

~~5560 Overland Ave, Ste 410~~

~~San Diego, CA 92123~~

~~(858) 694-3610~~

PREPARED BY:

KPFF, Inc.

700 South Flower Street, Ste 2100

Los Angeles, CA 90017

(213) 418-0201

Summary of Comments on D21-00004 - 3rd Planning SWQMP Review - SWQMP Redlines - 2022-02-22.pdf

Page: 1

Number: 1 Author: Alex Subject: Cross-Out Date: 2/22/2022 12:10:09 PM
OWNER/APPLICANT

Quick Reference Guide

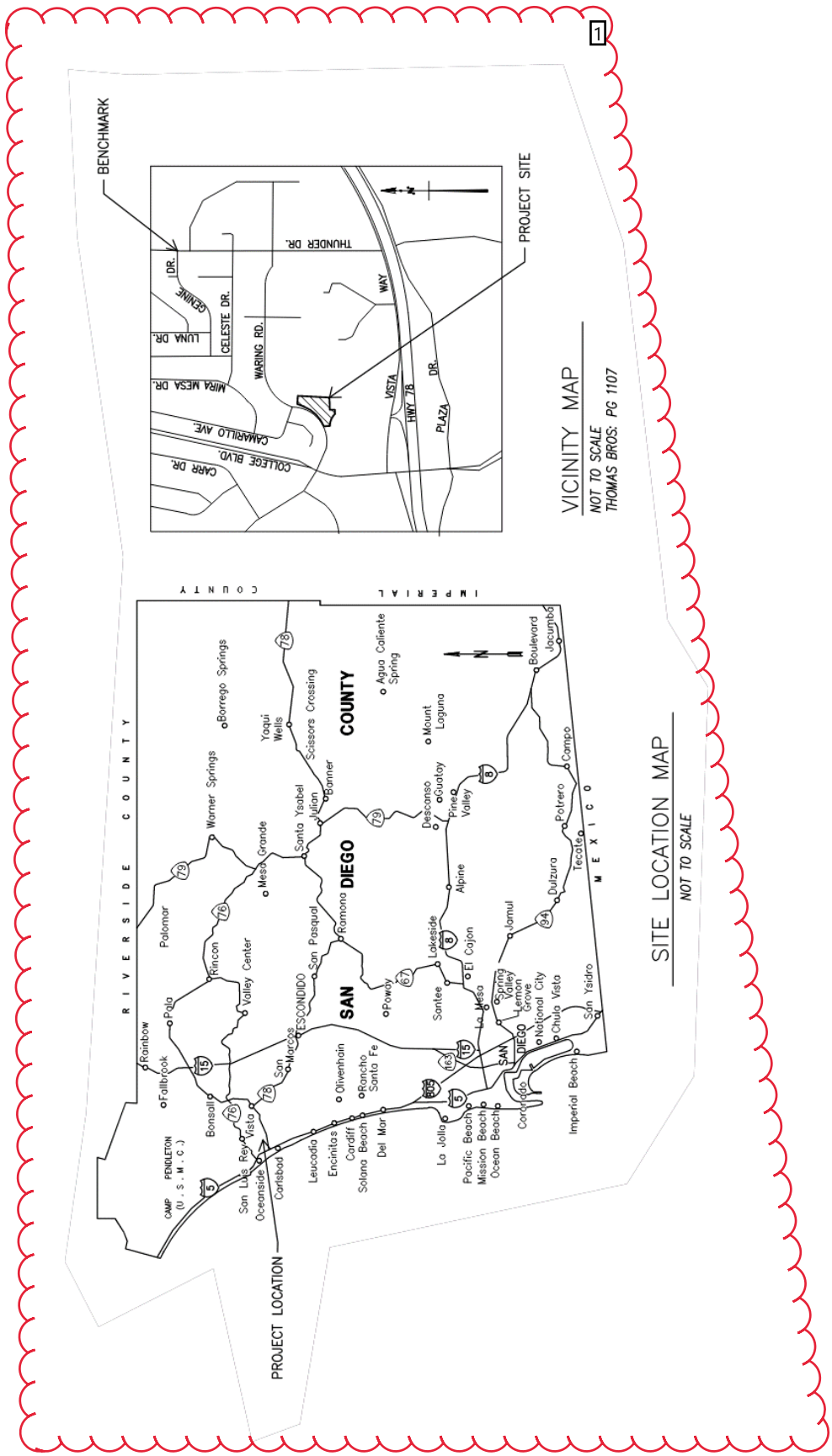
Item	Project Information
Project Name	Tri-City Psychiatric Development
Application Number(s)	D21-00004 and CUP21-00004
Project Address	4002 Vista Way[1]
Total Parcel Area	164,300 sq. ft.
Project Description	• Project will provide a new health facility roughly 14,460 SF on a previously disturbed site. • Project is currently a parking lot and graded embankment recently developed to included existing lighting, landscaping, irrigation, and LID facilities. • Existing development is roughly 63% impervious surfaces. (sidewalks and asphalt parking lot) • Project proposes to reduce the total impervious surfaces to a total of 52% (building, sidewalk, concrete emergency access driveway and asphalt parking lot)
Proposed Disturbed Area	126,600 sq. ft.
Created or Replaced Impervious	58,300 sq. ft.
Project Hydrologic Unit Watershed	☐ Santa Maria ☐ San Luis Rey ☒ Carlsbad
Required to implement HMP	[2] ☐ Yes [3] ☒ ~~No~~

Page: 3

Number: 1 Author: Alex Subject: Inserted Text Date: 2/22/2022 12:14:52 PM
Oceanside, CA 92056

Number: 2 Author: Alex Subject: Highlight Date: 2/22/2022 12:13:55 PM

Number: 3 Author: Alex Subject: Cross-Out Date: 2/22/2022 12:14:00 PM



Project Vicinity Map

Page: 7

Number: 1 Author: Alex Subject: Polygon Date: 2/22/2022 12:12:22 PM
PORTRAIT ORIENTATION

Form I-1 Page 2 of 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 manual for guidance.	☒Yes	Consult the [City Engineer] to determine requirements. Provide discussion and identify requirements below. Go to Step 4.
	1☐No	BMP Design Manual PDP requirements apply. Go to Step 4.
Discussion / justification of prior lawful approval, and identify requirements (*not required if prior lawful approval does not apply*): Project will maintain existing developed LID basins and install similar LID basin to capture separate area.		
Step 4. Do hydromodification control requirements apply? See Section 1.6 of the manual for guidance.	☒Yes	PDP structural BMPs required for pollutant control (Chapter 5) and hydromodification control (Chapter 6). Go to Step 5.
	☐No	Stop. PDP structural BMPs required for pollutant control (Chapter 5) only. Provide brief discussion of exemption to hydromodification control below.
Discussion / justification if hydromodification control requirements do <u>not</u> apply:		
Step 5. Does protection of critical coarse sediment yield areas apply? See Section 6.2 of the manual for guidance.	☐Yes	Management measures required for protection of critical coarse sediment yield areas (Chapter 6.2). Stop.
	☒No	Management measures not required for protection of critical coarse sediment yield areas. Provide brief discussion below. Stop.
Discussion / justification if protection of critical coarse sediment yield areas does <u>not</u> apply: 2~~Drains to developed system, ultimately draining to Buena Vista Lagoon. Ultimate amount of impervious surface and expected runoff will decrease relative to the existing condition.~~		

Page: 10

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 12:12:50 PM

Number: 2 Author: Alex Subject: Cross-Out Date: 2/22/2022 12:16:26 PM

SITE IS NOT MAPPED WITHIN A POTENTIAL CRITICAL COARSE SEDIMENT YIELD AREA

Form I-2 Page 2 of 2			
Yes ☐	No ☒	(d)	New or redevelopment projects that create or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharging directly to an Environmentally Sensitive Area (ESA). "Discharging directly to" includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands). Note: ESAs are areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Board and SDRWQCB; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and SDRWQCB; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees. See manual Section 1.4.2 for additional guidance.
Yes ☐	No ☒	(e)	New development projects that support one or more of the following uses: (i) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following SIC codes: 5013, 5014, 5541, 7532-7534, or 7536-7539. (ii) Retail gasoline outlets. This category includes retail gasoline outlets that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic of 100 or more vehicles per day.
Yes ☐	No ☒	(f)	New or redevelopment projects that result in the disturbance of one or more acres of land and are expected to generate pollutants post construction. *Note: See manual Section 1.4.2 for additional guidance.*

Does the project meet the definition of one or more of the PDP categories (a) through (f) listed above?

☐ No – the project is not a PDP (Standard Project).

☒ Yes – the project is a PDP.

The following is for redevelopment PDPs only:

The area of existing (pre-project) impervious area at the project site is: 63,200 ft² (A)
The total proposed newly created or replaced impervious area is: 58,300 ft² (B)
Percent impervious surface created or replaced (A/B)*100: 92.2%
The percent impervious surface created or replaced is (select one based on the above calculation):

☐ less than or equal to fifty percent (50%) – only new impervious areas are considered PDP

OR

☒ greater than fifty percent (50%) – the entire project site is a PDP

Page: 12

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 12:18:30 PM
THIS MEANS THAT EVERYTHING WITHIN THE PARCEL LIMITS MUST CONFORM WITH PDP CRITERIA--BOTH DISTURBED AND UNDISTURBED AREAS

Site Information Checklist For PDPs	Form I-3B (PDPs)
Project Summary Information	
Project Name: Tri-City Psychiatric Development	
Project Address: 4002 Vista Way Oceanside, CA 92056	
Assessor's Parcel Number(s): 1660103700	
Permit Application Number: (D21-00004 and CUP21-00004)	
Project Watershed (Hydrologic Unit)	Select One: ☐Santa Margarita 902 ☐San Luis Rey 903 ☒Carlsbad 904
Parcel Area (total area of Assessor's Parcel(s) associated with the project)	3.77 Acres (164,300 Square Feet)
Area to be disturbed by the project (Project Area)	2.91 Acres (126,700 Square Feet)
Project Proposed Impervious Area (subset of Project Area)	1.34 Acres (58,300 Square Feet)
Project Proposed Pervious Area (subset of Project Area)	1.65 Acres (41,700 Square Feet)
Note: Proposed Impervious Area + Proposed Pervious Area = Area to be Disturbed by the Project. This may be less than the Parcel Area.	

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

Page: 13

Number: 1 Author: Alex Subject: Polygon Date: 2/22/2022 12:18:58 PM

Number: 2 Author: Alex Subject: Line Date: 2/22/2022 12:19:29 PM

Number: 3 Author: Alex Subject: Highlight Date: 2/22/2022 12:20:30 PM

REVISE FOR CONSISTENCY WITH VALUE PRESENTED ELSEWHERE

Number: 4 Author: Alex Subject: Highlight Date: 2/22/2022 12:21:20 PM

DOES NOT ADD TO PROJECT AREA

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: 1 raded parking lot with stormwater and lighting improvements.

Existing Land Cover Includes (select all that apply):

☒Vegetative Cover

☒Non-Vegetated Pervious Areas

☒Impervious Areas

Description / Additional Information:

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

☐NRCS Type A

☐NRCS Type B

2 ~~☒NRCS Type C~~

3 ☐NRCS Type D

Approximate Depth to Groundwater:

☐Groundwater Depth < 5 feet

☐5 feet < Groundwater Depth < 10 feet

☐10 feet < Groundwater Depth < 20 feet

☒Groundwater Depth > 20 feet

Page: 14

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 12:21:44 PM
DISCUSS EXISTING STRUCTURAL BMPs

Number: 2 Author: Alex Subject: Cross-Out Date: 2/22/2022 12:22:15 PM

Number: 3 Author: Alex Subject: Highlight Date: 2/22/2022 12:22:12 PM
PER NRCS WEB SOIL SURVEY

Description of Existing Site Topography and Drainage [How is storm water runoff conveyed from the site? At a minimum, this description should answer (1) whether existing drainage conveyance is natural or urban; (2) describe existing constructed storm water conveyance systems, if applicable; and (3) is runoff from offsite conveyed through the site? If so, describe]:

Stormwater is conveyed through surface flow on the parking lot to an LID detention pond along the southern boundary of the site. The LID detention pond outflows to a rock lined or concrete lined swale depending on location which then discharges [1] an adjacent property through a stormwater easement to the City's conveyance system within [2] ~~Waring Road, later to College Blvd.~~.

[3] he area has a large slope immediately adjacent to the project in areas where water hits slope it flows offsite to Waring Road and/or the existing property.

Residential housing borders the site to the north and is located uphill of the project. No channel conveyances were observed that would bring a sizable amount of offsite through into the project area.

Page: 15

Number: 1 Author: Alex Subject: Inserted Text Date: 2/22/2022 12:25:11 PM
SOUTHERLY

Number: 2 Author: Alex Subject: Cross-Out Date: 2/22/2022 12:25:40 PM
VISTA WAY, THEN COLLEGE BOULEVARD, THEN DIRECTLY TO BUENA VISTA CREEK

Number: 3 Author: Alex Subject: Highlight Date: 2/22/2022 12:26:23 PM
APPROXIMATELY HALF OF THIS HILL DRAINS ONTO THE PARKING LOT; THE OTHER HALF DRAINS TO WARING

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

☒Onsite storm drain inlets

☐Interior floor drains and elevator shaft sump pumps

☐Interior parking garages

1☐Need for future indoor & structural pest control

2☐Landscape/outdoor pesticide use

☐Pools, spas, ponds, decorative fountains, and other water features

3☐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

Page: 18

Number: 1	Author: Alex	Subject: Highlight	Date: 2/22/2022 12:33:53 PM
Number: 2	Author: Alex	Subject: Highlight	Date: 2/22/2022 12:33:55 PM
Number: 3	Author: Alex	Subject: Highlight	Date: 2/22/2022 12:36:36 PM

Identification of Receiving Water Pollutants of Concern

Describe path of storm water from the project site to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable): 1Water will discharge from site and enter the city system from Waring Road or Vista Way. Once in the existing system it will be conveyed to College Blvd. piping system and then west along Vista Way, before meeting Buena Vista Creek and Buena Vista Lagoon before the Pacific Ocean.

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

303(d) Impaired Water Body	Pollutant(s)/Stressor(s)	TMDLs
Buena Vista Creek	2elenium Sedimentation	3A
Buena Vista Lagoon	Indicator Bacteria Nutrients 5edimentation	4A

Page: 19

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 12:38:43 PM
REVISE FOR CONSISTENCY WITH FORM I-3B PAGE 3/10

Number: 2 Author: Alex Subject: Highlight Date: 2/22/2022 12:39:15 PM
TOXICITY
SELENIUM
BENTHIC COMMUNITY EFFECTS
BIFENTHRIN

Number: 3 Author: Alex Subject: Highlight Date: 2/22/2022 12:40:50 PM
N/A

Number: 4 Author: Alex Subject: Highlight Date: 2/22/2022 12:40:53 PM
N/A

Number: 5 Author: Alex Subject: Highlight Date: 2/22/2022 12:39:34 PM
SEDIMENTATION/SILTATION
TOXICITY

Form I-3B Page 7 of 10			
Identification of Project Site Pollutants*			
1**Identification of project site pollutants is only required if flow-thru treatment BMPs are implemented onsite in lieu of retention or biofiltration BMPs (note the project must also participate in an alternative compliance program unless prior lawful approval to meet earlier PDP requirements is demonstrated)**			
Identify pollutants expected from the project site based on all proposed use(s) of the site (see manual Appendix B.6):			
Pollutant	**Not Applicable to the Project Site**	**Expected from the Project Site**	**Also a Receiving Water Pollutant of Concern**
Sediment	x		x
Nutrients	x		x
Heavy Metals	x		
Organic Compounds	x		
Trash & Debris		x	
Oxygen Demanding Substances	x		
Oil & Grease	x		
Bacteria & Viruses	x		
Pesticides	x		

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

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

Page: 20

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 12:41:18 PM
TABLE NOT REQUIRED TO BE COMPLETED

Hydromodification Management Requirements

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

1☐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):

2roject is located on a hillside, water will be slowed but not infiltrated due to slope stability concerns.

Critical Coarse Sediment Yield Areas*

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

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

☐Yes

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

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

☐6.2.1 Verification of GLUs Onsite

☐6.2.2 Downstream Systems Sensitivity to Coarse Sediment

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

☒3o optional analyses performed, the project will avoid critical coarse sediment yield areas identified based on WMAA maps

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

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

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

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

Discussion / Additional Information:

Page: 21

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 12:41:28 PM

Number: 2 Author: Alex Subject: Cross-Out Date: 2/22/2022 12:41:33 PM

Number: 3 Author: Alex Subject: Highlight Date: 2/22/2022 12:42:55 PM

PROVIDE VERIFICATION IN ATTACHMENT 2

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.

1

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

2 ☐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)

Page: 22

Number: 1	Author: Alex	Subject: Polygon	Date: 2/22/2022 12:43:14 PM	
COMPLETE				
Number: 2	Author: Alex	Subject: Highlight	Date: 2/22/2022 12:43:19 PM	

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.

1

Page: 23

Number: 1 Author: Alex Subject: Polygon Date: 2/22/2022 12:44:16 PM

DISCUSS PARTICULARS HERE, AS NEEDED (I.E. AREAS THAT ARE NOT FEASIBLY ABLE TO BE DRAINED TO AN ONSITE BMP, GREEN STREET FEATURES ALONG WARING FOR R/W IMPROVEMENTS, ETC.)

Source Control BMP Checklist for All Development Projects (Standard Projects and PDPs)	Form I-4

Project Identification

Project Name Tri-City Psychiatric Development

Permit Application Number: D21-00004 and CUP21-00004

Source Control BMPs

All development projects must implement source control BMPs SC-1 through SC-6 where applicable and feasible. See Chapter 4 and Appendix E of the manual for information to implement source control BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the source control BMP as described in Chapter 4 and/or Appendix E of the manual. 1 ~~Discussion / justification is not required~~.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project has no outdoor materials storage areas). Discussion / justification may be provided.

Source Control Requirement	Implemented?		
SC-1 Prevention of Illicit Discharges into the MS4	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-1 not implemented: 2			
SC-2 Storm Drain Stenciling or Signage	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-2 not implemented:			
SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☐ Yes	☐ No	☒ N/A
Discussion / justification if SC-3 not implemented:			

Page: 24

Number: 1 Author: Alex Subject: Cross-Out Date: 2/22/2022 12:47:55 PM
THIS TEMPLATE LANGUAGE IS DATED; PLEASE DESCRIBE HOW ALL APPLICABLE SOURCE CONTROL BMPs WILL BE IMPLEMENTED

Number: 2 Author: Alex Subject: Polygon Date: 2/22/2022 12:46:14 PM
DISCUSS ALL "YES" ANSWERS (TYP)

Form I-4 Page 3 of 3			
1 **C-6** Additional BMPs Based on Potential Sources of Runoff Pollutants (must answer for each source listed below)	**Implemented?**		
Onsite storm drain inlets	☒ Yes	☐ No	☐ N/A
Interior floor drains and elevator shaft sump pumps	☐ Yes	☐ No	☒ N/A
Interior parking garages	☐ Yes	☐ No	☒ N/A
Need for future indoor & structural pest control	☐ Yes	☐ No	☒ N/A
Landscape/outdoor pesticide use	☒ Yes	☐ No	☐ N/A
Pools, spas, ponds, decorative fountains, and other water features	☐ Yes	☐ No	☒ N/A
Food service	☐ Yes	☐ No	☒ N/A
Refuse area	☐ Yes	☐ No	☒ N/A
Industrial processes	☐ Yes	☐ No	☒ N/A
Outdoor storage of equipment or materials	☐ Yes	☐ No	☒ N/A
Vehicle and equipment cleaning	☐ Yes	☐ No	☒ N/A
Vehicle/equipment repair and maintenance	☐ Yes	☐ No	☒ N/A
Fuel dispensing areas	☐ Yes	☐ No	☒ N/A
Loading docks	☐ Yes	☐ No	☒ N/A
Fire sprinkler test water	☒ Yes	☐ No	☐ N/A
Miscellaneous drain or wash water	☒ Yes	☐ No	☐ N/A
Plazas, sidewalks, and parking lots	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-6 not implemented. Clearly identify which sources of runoff pollutants are discussed. Justification must be provided for all "No" answers shown above.			

Page: 26

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 12:45:07 PM
REVISE FOR CONSISTENCY WITH FORM I-3B, PAGE 5/10

Site Design BMP Checklist for All Development Projects (Standard Projects and PDPs)	Form I-5

Project Identification

Project Name: Tri-City Psychiatric Development

Permit Application Number: D21-00004 and CUP21-00004

Site Design BMPs

All development projects must implement site design BMPs SD-1 through SD-8 where applicable and feasible. See Chapter 4 and Appendix E of the manual for information to implement site design BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the site design BMP as described in Chapter 4 and/or Appendix E of the manual. ~~Discussion / justification is not required.~~
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project site has no existing natural areas to conserve). Discussion / justification may be provided.

Site Design Requirement	Applied?		
SD-1 Maintain Natural Drainage Pathways and Hydrologic Features	☐ Yes	☐ No	☒ N/A
Discussion / justification if SD-1 not implemented:			
SD-2 Conserve Natural Areas, Soils, and Vegetation	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-2 not implemented:			
SD-3 Minimize Impervious Area	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-3 not implemented:			
SD-4 Minimize Soil Compaction	☐ Yes	☐ No	☒ N/A
Discussion / justification if SD-4 not implemented:			

Number: 1 Author: Alex Subject: Cross-Out Date: 2/22/2022 12:47:20 PM
THIS TEMPLATE LANGUAGE IS DATED; PLEASE DESCRIBE HOW ALL APPLICABLE SITE DESIGN BMPs WILL BE IMPLEMENTED

Summary of PDP Structural BMPs	Form I-6 (PDPs)

Project Identification

Project Name: Tri-City Psychiatric Development

Permit Application Number: D21-00004 and CUP21-00004

PDP Structural BMPs

All PDPs must implement structural BMPs for storm water pollutant control (see Chapter 5 of the manual). Selection of PDP structural BMPs for storm water pollutant control must be based on the selection process described in Chapter 5. PDPs subject to hydromodification management requirements must also implement structural BMPs for flow control for hydromodification management (see Chapter 6 of the manual). Both storm water pollutant control and flow control for hydromodification management can be achieved within the same structural BMP(s).

PDP structural BMPs must be verified by the local jurisdiction at the completion of construction. This may include requiring the project owner or project owner's representative to certify construction of the structural BMPs (see Section 1.12 of the manual). PDP structural BMPs must be maintained into perpetuity, and the local jurisdiction must confirm the maintenance (see Section 7 of the manual).

Use this form to provide narrative description of the general strategy for structural BMP implementation at the project site in the box below. Then complete the PDP structural BMP summary information sheet (page 3 of this form) for each structural BMP within the project (copy the BMP summary information page as many times as needed to provide summary information for each individual structural BMP).

Describe the general strategy for structural BMP implementation at the site. This information must describe how the steps for selecting and designing storm water pollutant control BMPs presented in Section 5.1 of the manual were followed, and the results (type of BMPs selected). For projects requiring hydromodification flow control BMPs, indicate whether pollutant control and flow control BMPs are integrated or separate.

LID Detention planters are currently in place within the property. Due to success of these facilities, the ability to maintain surface flow through swales for a majority of the site and the restrictions for infiltration due to the adjacent hillside, overall selection of BMPs were minimized to the detention pond or more compact, manufactured flow-through systems that are not as frdotsn;r/

(Continue on page 2 as necessary.)

Page: 29

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 12:48:57 PM

PER CITY BMP DESIGN MANUAL, BEGIN WITH SOURCE CONTROL BMPs, THEN SITE DESIGN BMPs, THEN INFILTRATION FEASIBILITY ETC.

Form I-6 Page 3 of X (Copy as many as needed)	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No.: 1	
Construction Plan Sheet No. 8, C1008	
Type of structural BMP: 1☐Retention by harvest and use (HU-1) ☐Retention by infiltration basin (INF-1) ☐Retention by bioretention (INF-2) ☐Retention by permeable pavement (INF-3) ☐Partial retention by biofiltration with partial retention (PR-1) ☐Biofiltration (BF-1) ☐Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☒Detention pond or vault for hydromodification management ☐Other (describe in discussion section below)	
Purpose: ☐Pollutant control only ☐Hydromodification control only ☒Combined pollutant control and hydromodification control ☐Pre-treatment/forebay for another structural BMP ☐Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide 2ame and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the manual)	KPFF, Inc.
Who will be the final owner of this BMP?	Tri-City Medical Center / County of San Diego Dept. of General Services
Who will maintain this BMP into perpetuity?	Tri-City Medical Center / County of San Diego Dept. of General Services
What is the funding mechanism for maintenance?	Dept. of General Services annual funding for grounds maintenance.

Page: 31

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 12:49:56 PM
IDENTIFY BMP POLLUTANT REMOVAL MECHANISM

Number: 2 Author: Alex Subject: Highlight Date: 2/22/2022 12:50:25 PM
PROVIDE NAME AND CONTACT INFO IN ADJACENT COLUMN

Indicate which Items are Included:

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

Page: 36

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 12:51:50 PM
NOT PROVIDED

Design Capture Volume		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.6125	inches
2	Area tributary to BMP (s)	A=	0.7841	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1)	C=	.88	unitless
4	Street trees volume reduction	TCV=	2,880	1 cubic-feet
5	Rain barrels volume reduction	RCV=	0	cubic-feet
6	Calculate DCV = (3630 x C x d x A) – TCV - RCV	DCV=	-1,348	cubic-feet

Total is returning negative due to tree reduction credit. Adjusting to total TCV = 0.25 DCV, TCV then equals ~382.

DCV = (3630 x 0.88 x 0.6125 x 0.7841) – 382 = 1,148.5 cubic feet

Page: 40

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 12:52:52 PM

THIS APPROACH INDICATES THAT THE ENTIRE SITE WILL BE DRAINED TO MULTIPLE STREET TREES TO SATISFY POLLUTANT REMOVAL REQUIREMENTS. THIS MUST BE SUBSTANTIATED.

Harvest and Use Feasibility Checklist	Form I-7

1. Is there a demand for harvested water (check all that apply) at the project site that is reliably present during the wet season?

☑ Toilet and urinal flushing
☑ Landscape irrigation
☐ Other:_____

2. If there is a demand; estimate the anticipated average wet season demand over a period of 36 hours. Guidance for planning level demand calculations for toilet/urinal flushing and landscape irrigation is provided in Section B.3.2.

1 To_{wet} = 510

3. Calculate the DCV using worksheet B-2.1.

DCV = 1,150 (cubic feet)

3a. Is the 36 hour demand greater than or equal to the DCV?	3b. Is the 36 hour demand greater than 0.25DCV but less than the full DCV?	3c. Is the 36 hour demand less than 0.25DCV?
☐ Yes / ☒ No ⇨ ⇩	☒ Yes / ☐ No ⇨ ⇩	☐ Yes ⇩
Harvest and use appears to be feasible. Conduct more detailed evaluation and sizing calculations to confirm that DCV can be used at an adequate rate to meet drawdown criteria.	2 Harvest and use may be feasible. Conduct more detailed evaluation and sizing calculations to determine feasibility. Harvest and use may only be able to be used for a portion of the site, or (optionally) the storage may need to be upsized to meet long term capture targets while draining in longer than 36 hours.	Harvest and use is considered to be infeasible.

Is harvest and use feasible based on 3 urther evaluation?

☐ Yes, refer to Appendix E to select and size harvest and use BMPs.

☒ No, select alternate BMPs.

Page: 41

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 12:53:21 PM
INCOMPLETE

Number: 2 Author: Alex Subject: Highlight Date: 2/22/2022 12:53:39 PM

Number: 3 Author: Alex Subject: Highlight Date: 2/22/2022 12:53:51 PM
WHERE IS FURTHER EVALUATION?

Form I-8 Page 3 of 4

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.	☐	☒

Provide basis:

Due to site location, scaled injection or infiltration of water is not advisable. Forcing infiltration along a constructed slope is not recommended due to risk geotechnical hazards.

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.

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.	☐	☒

Provide basis:

See question 5.

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.

Page: 44

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 12:55:03 PM
ANY RATE GREATER THAN 0.010 IN/HR IS CONSIDERED APPRECIABLE

Number: 2 Author: Alex Subject: Highlight Date: 2/22/2022 1:06:55 PM
CAN GEOTECHNICAL RISKS BE MITIGATED TO AN ACCEPTABLE LEVEL

ATTACHMENT 2
BACKUP FOR PDP HYDROMODIFICATION CONTROL MEASURES

This is the cover sheet for Attachment 2.

☐Mark this box if this attachment is empty because the project is exempt from PDP hydromodification management requirements.

Page: 46

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 1:07:27 PM
HYDROMODIFICATION MANAGEMENT IS APPLICABLE. PLEASE COMPLETE ATTACHMENT 2.

Use this checklist to ensure the required information has been included in the Structural BMP Maintenance Information Attachment:

Preliminary Design / Planning / CEQA level submittal:

☐ Attachment 3a must identify:

☐Typical maintenance indicators and actions for proposed structural BMP(s) based on Section 7.7 of the BMP Design Manual

- Attachment 3b is not required for preliminary design / planning / CEQA level submittal.

Final Design level submittal:

Attachment 3a must identify:

☐Specific maintenance indicators and actions for proposed structural BMP(s). This shall be based on Section 7.7 of the BMP Design Manual and enhanced to reflect actual proposed components of the structural BMP(s)
☐How to access the structural BMP(s) to inspect and perform maintenance
☐Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
☐Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
☐Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
☐Recommended equipment to perform maintenance
☐When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management
Attachment 3b: For private entity operation and maintenance, Attachment 3b shall include a draft maintenance agreement in the local jurisdiction's standard format (PDP applicant to contact the City Engineer to obtain the current maintenance agreement forms).

Page: 60

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 1:08:16 PM
PROVIDE

1 Use this checklist to ensure the required information has been included on the plans:

The plans must identify:

☐Structural BMP(s) with ID numbers matching Form I-6 Summary of PDP Structural BMPs
☐The grading and drainage design shown on the plans must be consistent with the delineation of DMAs shown on the DMA exhibit
☐Details and specifications for construction of structural BMP(s)
☐Signage indicating the location and boundary of structural BMP(s) as required by the City Engineer
☐How to access the structural BMP(s) to inspect and perform maintenance
☐Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
☐Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
☐Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
☐Recommended equipment to perform maintenance
☐When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management
☐Include landscaping plan sheets showing vegetation requirements for vegetated structural BMP(s)
☐All BMPs must be fully dimensioned on the plans
☐When proprietary BMPs are used, site specific cross section with outflow, inflow and model number shall be provided. Brochure photocopies are not allowed.

Page: 63

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 1:09:15 PM
PROVIDE PLANS FOR GRADING, LANDSCAPE, ARCHITECTURAL, ETC. TO SHOW HOW ALL SOURCE CONTROL, SITE DESIGN, STRUCTURAL, AND HYDROMO BMPs ARE IMPLEMENTED

ATTACHMENT 5
Drainage Report

This is the cover sheet for Attachment 5.

Page: 65

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 1:09:31 PM
PROVIDE COPY IN SWQMP

ATTACHMENT 6
Geotechnical and Groundwater Investigation Report

This is the cover sheet for Attachment 6.

Page: 67

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 1:09:48 PM
PROVIDE COPY IN SWQMP

ATTACHMENT 7
Storm Water Quality Assessment Form

This is the cover sheet for Attachment 7.

Page: 69

Number: 1 Author: Alex Subject: Highlight Date: 2/22/2022 1:10:12 PM
PROVIDE COPY IN SWQMP