

Water Quality Management Plan (Conceptual Priority WQMP)

Project Name:

3303 & 3355 Via Lido

Prepared for:

Shubin + Donaldson Architects, Inc.

Contact: Sieglinde Pukke

403 E. Montecito Street #2A

Santa Barbara, CA 93101

(805) 682-7000

Prepared by:

C&V Consulting, Inc.

Engineer: Dane P. McDougall Registration No.: 80705

27156 Burbank

Foothill Ranch, CA 92610


(949) 916-3800

February 2013

Project Owner's Certification			
Permit/ Application No.		Grading Permit No.	
Tract/Parcel Map No.	Tract No. 17555	Building Permit No.	
CUP, SUP, and/or APN (Specify Lot Numbers if Portions of Tract)			423-112-02 423-112-03

This Water Quality Management Plan (WQMP) has been prepared for Shubin + Donaldson Architects, Inc. by C&V Consulting, Inc. The WQMP is intended to comply with the requirements of the local NPDES Stormwater Program requiring the preparation of the plan.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the current Orange County Drainage Area Management Plan (DAMP) and the intent of the non-point source NPDES Permit for Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the incorporated Cities of Orange County within the Santa Ana Region. Once the undersigned transfers its interest in the property, its successors-in-interest shall bear the aforementioned responsibility to implement and amend the WQMP. An appropriate number of approved and signed copies of this document shall be available on the subject site in perpetuity.

Owner: New Port Beach Townhouse LLLP, a Nevada limited liability limited Pprtnership			
Title	Manager		
Company	New Port Beach Townhouse LLLP		
Address	3120 Sovereign Drive, Suite 4B, Lansing MI 48911		
Email	Steve_mills@dart.biz		
Telephone #	517-525-4900		
Signature		Date	3-22-13

Contents

Page No.

Section I Discretionary Permit(s) and Water Quality Conditions.....	3
Section II Project Description	4
Section III Site Description	7
Section IV Best Management Practices (BMPs)	10
Section V Inspection/Maintenance Responsibility for BMPs.....	22
Section VI Site Plan and Drainage Plan	24
Section VII Educational Materials	25

Attachments

Attachment A	Educational Materials
Attachment B	BMP Exhibit & Grading Plan
Attachment C	Worksheets From County of Orange TGD
Attachment D	Reference Exhibits/Figures from County of Orange TGD
Attachment E..	BMP Fact Sheets & Details
Attachment F..	Notice of Transfer of Responsibility Form
Attachment G	Soils Report

Section I Discretionary Permit(s) and Water Quality Conditions

Project Information	
Permit/Application No.	Tract/Parcel Map No.
Additional Information/ Comments:	Coastal Development Permits - approval TBD
Water Quality Conditions	
Water Quality Conditions (list verbatim)	No formal conditions of approval have been issued at this time.
Watershed-Based Plan Conditions	
Provide applicable conditions from watershed - based plans including WIHMPs and TMDLS.	Watershed Infiltration and Hydromodification Management Plan (WIHMP) for the Newport Bay-Newport Coast area has not been approved at this time.

Section II Project Description

II.1 Project Description

Description of Proposed Project				
Development Category (Verbatim from WQMP):	New development projects that create 10,000 square feet or more of impervious surface. This category includes commercial, industrial, residential housing subdivisions, mixed-use, and public projects on private or public property that falls under the planning and building authority or the Permittees. The WQMP development category is "Priority".			
Project Area (ft ²): 50,099	Number of Dwelling Units: 24		SIC Code: 236116	
Narrative Project Description:	The project site consists of approximately 1.196 acres located at 3303 Via Lido and 3355 Via Lido in the City of Newport Beach. The project site is currently developed with an existing office building, a church building, and a parking lot that will require demolition. Site improvements are to include construction of 24 new townhomes with landscaping and on site parking and on site guest parking.			
Project Area	Pervious		Impervious	
	Area (acres / sq ft)	Percentage	Area (acres / sq ft)	Percentage
Pre-Project Conditions	0	0	1.196 / 52,099	100%
Post-Project Conditions	0.132/5,756	11%	1.064/46,343	89%
Drainage Patterns/Connections	Underground storm drain facilities do not exist adjacent to the site. Storm water runoff presently surface flows off the site to the adjacent public streets (Via Lido, Via Oporto and Via Malaga) where they are collecting in surface gutters and conveyed to the north. From there flows are collecting in an off-site catch basin where they empty into the adjacent Newport Bay.			

II.2 Potential Stormwater Pollutants

Pollutants of Concern		
Pollutant	Circle One: E=Expected to be of concern N=Not Expected to be of concern	Additional Information and Comments
Suspended-Solid/ Sediment	<u>E</u> N	
Nutrients	<u>E</u> N	
Heavy Metals	<u>E</u> N	
Pathogens (Bacteria/Virus)	<u>E</u> N	
Pesticides	<u>E</u> N	
Oil and Grease	<u>E</u> N	
Toxic Organic Compounds	<u>E</u> N	
Trash and Debris	<u>E</u> N	

II.3 Hydrologic Conditions of Concern

No - See map (Figure XVI-3d in Attachment D)

Yes - Describe applicable hydrologic conditions of concern below. *Refer to Section 2.2.3 in the TGD.*

II.4 Post Development Drainage Characteristics

Describe post development drainage characteristics. *Refer to Section 2.2.4 in the TGD.*

Existing land use consists of multiple structures and a parking lot. The existing property is considered to be nearly all impervious. The proposed development will improve this situation by providing some landscaped features in common areas and the front of the proposed homes. Overall peak flows from the property are anticipated to be less than or equal to pre development flows.

In landscaped areas, the use of area drain inlets will be employed to reduce storm water from transporting sediments over flatwork improvements. Area drains will curb core to adjacent public streets per public standards.

II.5 Property Ownership/Management

Describe property ownership/management. *Refer to Section 2.2.5 in the TGD.*

Parcel A of the project site (APN 423-112-02) located at 3303 Via Lido is owned by First Church of Christ, Scientist as to Parcel A. Parcel B of the project site (APN 423-112-03) located at 3355 Via Lido is own by Newport Beach Townhouse LLP, A Nevada Limited Liability Partnership. A homeowners association will be formed to be responsible for the long term maintenance of the project's stormwater facilities.

Section III Site Description

III.1 Physical Setting

Planning Area/ Community Name	Lido Village
Location/Address	3303 & 3355 Via Lido
	Newport Beach, CA
Land Use	APN: 423-112-02 → PI (Private Institution) APN: 423-112-03 → Commercial
Zoning	RM-20
Acreage	1.196
Predominant Soil Type	Soil Type D

III.2 Site Characteristics

Precipitation Zone	0.67" per Orange County Rainfall Zones Map, Figure XVI.1 of the Technical Guidance Document
Topography	The topography of the site slopes gently in a northwest direction, at a rate of no more than a third of a percent, with elevations above sea level from 10 feet at the southerly portion of the project site and 7 feet throughout the remainder of the project site.
Drainage Patterns/Connections	Underground storm drain facilities do not exist adjacent to the site. Storm water runoff presently surface flows off the site to the adjacent public streets (Via Lido, Via Oporto and Via Malaga) where they are collecting in surface gutters and conveyed to the north. From there flows are collecting in an off-site catch basin where they empty into the adjacent Newport Bay.

Site Characteristics (continued)

Soil Type, Geology, and Infiltration Properties	<p>Per the Geotechnical Engineering Services Report, prepared by Professional Service Industries, Inc. dated August 24, 2012, the following soil conditions were encountered:</p> <p>“As indicated on our boring logs, the existing pavement section generally consists of approximately 3 inches of asphalt underlain by a silty sand with gravel (apparent base course) that was estimated to be about 6 inches thick. The pavement section was underlain by native soil consisting of medium dense silty gravelly sand with trace organics that extend to a depth of approximately 5-feet below existing grade, very soft to soft clayey silt that extends to a depth of approximately 7½-feet below existing grade, and loose to very dense slightly silty sand to the maximum depth explored of approximately 50-feet below the existing ground surface elevation.”</p>
Hydrogeologic (Groundwater) Conditions	<p>Per the Geotechnical Engineering Services Report, prepared by Professional Service Industries, Inc. dated August 24, 2012:</p> <p>“Groundwater was measured at approximately 5-feet below existing grade in all four borings at the time of drilling. Based on a review of the California Geological Survey (CGS) Seismic Hazard Zone Report for the Newport Quadrangle, the historic high groundwater depth for the site area is noted to be about 5 feet below grade.</p> <p>It is possible that seasonal variations (temperature, rainfall, tide conditions etc) will cause fluctuations in the groundwater level. Additionally, perched water may be encountered in discontinuous zones within the overburden. The groundwater levels presented in this report are the levels that were measured at the time of our field activities. It is recommended that the contractor determine the actual groundwater levels at the site at the time of the construction activities to determine the impact, if any, on the construction procedures.”</p>
Geotechnical Conditions (relevant to infiltration)	<p>Per the Geotechnical Engineering Services Report, prepared by Professional Service Industries, Inc. dated August 24, 2012, the following information was provided in regards to infiltration:</p> <p>“Note that the upper soils are sensitive to disturbances caused by construction traffic and to changes in moisture content. During wet weather periods, increases in the moisture content of the soil can cause significant reduction in the soil strength and support capabilities. Furthermore, perched groundwater conditions can develop during periods of heavy rainfall as a result of less permeable</p>

	layers impeding infiltration. In these instances, overlying subgrade soils may become unstable and require remedial measures. It will, therefore, be advantageous to perform earthwork and foundation construction activities during dry weather.”
Off-Site Drainage	No off-site drainage was accounted for within this report.
Utility and Infrastructure Information	<p>No underground storm drain exists directly adjacent to the site. The proposed development is designed to convey storm water flows through surface drainage to adjacent public streets or by collection into small area drain systems on-site which curb core to the adjacent public streets.</p> <p>There is a proposed water feature/fountain near the corner of Via Lido and Via Malaga. There is a common open space with enhanced paving, seating, and landscape area located at the northern section of the project site, between Units 4-5, between Units 9-10, near Unit 11 at the southeast corner of the project site with total of approximately 2,380 square feet of open space.</p>

III.3 Watershed Description

Receiving Waters	Lower Newport Bay
303(d) Listed Impairments	Chlordane, Copper, DDT, Indicator Bacteria, Nutrients, PCBs, Pesticides, Sediment Toxicity
Applicable TMDLs	Copper, Indicator Bacteria, Nutrients, Pesticides, Turbidity/Siltation
Pollutants of Concern for the Project	Copper, Indicator Bacteria, Nutrients, Pesticides, Suspended Solids, Heavy Metals, Pathogens, Oil and Grease, Toxic Organic Compounds, Trash and Debris
Environmentally Sensitive and Special Biological Significant Areas	Lower Newport Bay

Section IV Best Management Practices (BMPs)

IV. 1 Project Performance Criteria

<p>(NOC Permit Area only) Is there an approved WIHMP or equivalent for the project area that includes more stringent LID feasibility criteria or if there are opportunities identified for implementing LID on regional or sub-regional basis?</p>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
<p>If yes, describe WIHMP feasibility criteria or regional/sub-regional LID opportunities.</p>		

Project Performance Criteria (continued)

<p>If HCOC exists, list applicable hydromodification control performance criteria (Section 7.II-2.4.2.2 in MWQMP)</p>	<p>For the purpose of the proposed project, HCOCs do not exist since the existing condition of the site is 100% impervious.</p>
<p>List applicable LID performance criteria (Section 7.II-2.4.3 from MWQMP)</p>	<p>Per 7.II-2.4.2.3 of the Model WQMP, the available LID Treatment BMPs to be utilized in reducing the post-development impacts include shallow infiltration, harvest and use, evapotranspiration, or biotreat/biofilter, of the 85th percentile of a 24-hour storm event.</p>
<p>List applicable treatment control BMP performance criteria (Section 7.II-3.2.2 from MWQMP)</p>	<p>Per 7.II-3.2.2 of the Model WQMP, if the LID performance criteria is not feasibly met by retention and/or biotreatment, then sizing of onsite treatment control BMPs are required. Sizing of these treatment control BMPs will include, if applicable, any Water Quality credits as calculated per the Technical Guidance Document. If the additional required volume cannot be met, however has a medium to high effectiveness for reducing the primary POCs, the project is considered to be in compliance, then a waiver application and participation in an alternative program may be not required.</p> <p>If the cost of providing treatment control BMPs greatly outweighs the pollution control benefits, a waiver of treatment control and LID requirements can be requested.</p>
<p>Calculate LID design storm capture volume for Project.</p>	<p>(Simple Method)</p> $DCV_{EX} = (0.75 \times 1 + 0.15) \times 0.67 \times 1.196 \text{ AC} \times 43560 \text{ sf/ac} \times (1/12) \text{ in/ft}$ <p>=2,620 cf</p> $DCV_{PROP} = (0.75 \times 0.89 + 0.15) \times 0.67 \times 1.196 \text{ AC} \times 43560 \text{ sf/ac} \times (1/12) \text{ in/ft}$ <p>= 2,380 cf</p> <p>(Worksheet A & B – Reference Attachment C)</p>

IV.2. SITE DESIGN AND DRAINAGE PLAN

The proposed development is located on the Balboa Peninsula, in the City of Newport Beach. The Pacific Ocean is located about 2,000 feet to the west of the site, and the Newport Bay is located about 170 feet to the east of the site. The topography of the site slopes gently in a northwest direction, at a rate of no more than a third of a percent.

Underground storm drain facilities do not exist adjacent to the site. Storm water runoff presently surface flows off the site to the adjacent public streets (Via Lido, Via Oporto and Via Malaga) where they are collecting in surface gutters and conveyed to the north. From there flows are collecting in an off-site catch basin where they empty into the adjacent Newport Bay.

The property is designated in FEMA Flood Zone "X" shaded, areas considered to be outside of the 100-year floodplain, but inside the 500-year floodplain.

Typical to the Balboa Peninsula area, groundwater was found at shallow depths (up to five feet from the surface).

Existing land use consists of multiple structures and a parking lot. The existing property is considered to be nearly all impervious. The proposed development will improve this situation by providing some landscaped features in common areas and the front of the proposed homes. Overall peak flows from the property are anticipated to be less than or equal to pre development flows.

In landscaped areas, the use of area drain inlets will be employed to reduce storm water from transporting sediments over flatwork improvements. Area drains will curb core to adjacent public streets per public standards.

Water quality BMPs will be employed per City of Newport Beach Model WQMP requirements. Hydraulic Conditions of Concern are not anticipated because the proposed development will not be increasing overall storm water runoff volumes.

Due to the historic groundwater levels, deep infiltration BMPs would not be a feasible on this site. However, considering the site layout, Hydrologic Source Control (HSC) BMPs were utilized to reduce the overall design capture volume.

Drainage Management Areas (DMA) Table:

Drainage Area No. (DMA)	Area (ac)	DCV (cf)	Design Flow Rate (cfs) *	Proposed BMPs
A-1	0.173	318	0.017	HSC-2 Impervious Dispersion HSC-3 Street Trees INF-6 Permeable Pavement
A-2	0.373	787	0.050	HSC-2 Impervious Dispersion HSC-3 Street Trees INF-6 Permeable Pavement
A-3	0.321	614	0.034	HSC-2 Impervious Dispersion HSC-3 Street Trees INF-6 Permeable Pavement
A-4	0.330	658	0.039	HSC-2 Impervious Dispersion HSC-3 Street Trees INF-6 Permeable Pavement

IV.3 LID BMP SELECTION AND PROJECT CONFORMANCE ANALYSIS

IV.3.1 Hydrologic Source Controls

Name	Included?
Localized on-lot infiltration	<input type="checkbox"/>
Impervious area dispersion (e.g. roof top disconnection)	<input checked="" type="checkbox"/>
Street trees (canopy interception)	<input checked="" type="checkbox"/>
Residential rain barrels (not actively managed)	<input type="checkbox"/>
Green roofs/Brown roofs	<input type="checkbox"/>
Blue roofs	<input type="checkbox"/>
Impervious area reduction (e.g. permeable pavers, site design)	<input checked="" type="checkbox"/>

Impervious Area Dispersion: Impervious area dispersion refers to the practice of routing runoff from pervious areas, such as rooftops, walkways, and patios onto the surface of adjacent pervious areas. Runoff is dispersed uniformly via splash block and soaks into the ground as it moves slowly across the surface of pervious areas. Minor ponding may occur, but it is not the intent of this practice to actively promote on-lot storage or infiltration. Standing water is not allowed. Impervious Area Dispersion is ranked second in the preferred method of treatment.

Street Trees: By intercepting rainfall, trees can provide several aesthetic and storm water benefits including peak flow control, increased infiltration and evapotranspiration, and runoff temperature reduction. The volume of precipitation intercepted by the canopy reduces the treatment volume required for downstream treatment BMPs. Shading reduces heat island effect as well as the temperature of adjacent impervious surfaces, over which storm water flows, and thus reduces the heat transferred to downstream receiving waters. Tree routes also strengthen the soil structure and provided infiltration pathways, simultaneously reducing erosion potential and enhancing infiltration. Street Trees are provided along the private street and near the guest parking areas. Street Trees are ranked third in the preferred method of treatment.

Impervious Area Reduction: Impervious Area Reduction such as permeable concrete pavements contain small voids that allow water to pass through to a gravel base. They come in a variety of forms; they may be modular paving system (concrete pavers, grass-pave, or gravel-pave) or poured in place pavement (pours concrete, permeable asphalt). All permeable pavements treat stormwater and remove sediments and metals to some degree within the pavement pore space and

gravel base. While conventional pavement result in increased rates and volumes of surface runoff, properly constructed and maintained porous pavements, allow stormwater to percolate through the pavement and enter the soil below. This facilitates groundwater recharge while providing the structural and functional features needed for the roadway, parking lot, or sidewalk. The paving surface, subgrade and installation requirements of permeable pavements are more complex than those for conventional asphalt or concrete surfaces. For porous pavements to function properly over an expected life span of 15-20 years, they must be properly sited and carefully designed and installed, as well as periodically maintained. Failure to protect paved areas from construction-related sediment loads can result in their premature clogging and failure.

IV.3.2 Infiltration BMPs

Name	Included?
Bioretention without underdrains	<input type="checkbox"/>
Rain gardens	<input type="checkbox"/>
Porous landscaping	<input type="checkbox"/>
Infiltration planters	<input type="checkbox"/>
Retention swales	<input type="checkbox"/>
Infiltration trenches	<input type="checkbox"/>
Infiltration basins	<input type="checkbox"/>
Drywells	<input type="checkbox"/>
Subsurface infiltration galleries	<input type="checkbox"/>
French drains	<input type="checkbox"/>
Permeable asphalt	<input type="checkbox"/>
Permeable concrete	<input type="checkbox"/>
Permeable concrete pavers	<input type="checkbox"/>

IV.3.3 Evapotranspiration, Rainwater Harvesting BMPs

Name	Included?
All HSCs; <i>See Section IV.3.1</i>	<input type="checkbox"/>
Surface-based infiltration BMPs	<input type="checkbox"/>
Biotreatment BMPs	<input type="checkbox"/>
Above-ground cisterns and basins	<input type="checkbox"/>
Underground detention	<input type="checkbox"/>
Other:	<input type="checkbox"/>
Other:	<input type="checkbox"/>
Other:	<input type="checkbox"/>

IV.3.4 Biotreatment BMPs

Name	Included?
Bioretention with underdrains	<input type="checkbox"/>
Stormwater planter boxes with underdrains	<input type="checkbox"/>
Rain gardens with underdrains	<input type="checkbox"/>
Constructed wetlands	<input type="checkbox"/>
Vegetated swales	<input type="checkbox"/>
Vegetated filter strips	<input type="checkbox"/>
Proprietary vegetated biotreatment systems	<input type="checkbox"/>
Wet extended detention basin	<input type="checkbox"/>
Dry extended detention basins	<input type="checkbox"/>
Other:	<input type="checkbox"/>
Other:	<input type="checkbox"/>

IV.3.5 Hydromodification Control BMPs

Hydromodification Control BMPs	
BMP Name	BMP Description
N/A	N/A

IV.3.6 Regional/Sub-Regional LID BMPs

Regional/Sub-Regional LID BMPs
N/A

IV.3.7 Treatment Control BMPs

Treatment Control BMPs	
BMP Name	BMP Description
Impervious Dispersion	By diverting the roof top and hardscape runoff to yard areas for natural infiltration for volume reduction. Reference Worksheet A located in Attachment C.
Street Trees	Provided street trees along the private roadway and parking areas will reduce the volume of runoff from impervious areas by evapotranspiration and infiltration to the root system for volume reduction. Reference Worksheet A located in Attachment C.
Impervious Area Reduction	Permeable concrete pavers, planters and landscape areas will reduce the volume of runoff from impervious areas for volume reduction. Reference Worksheet A located in Attachment C.

IV.3.8 Non-structural Source Control BMPs

Fill out non-structural source control check box forms or provide a brief narrative explaining if non-structural source controls were not used.

Non-Structural Source Control BMPs				
Identifier	Name	Check One		If not applicable, state brief reason
		Included	Not Applicable	
N1	Education for Property Owners, Tenants and Occupants	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
N2	Activity Restrictions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
N3	Common Area Landscape Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
N4	BMP Maintenance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
N5	Title 22 CCR Compliance (How development will comply)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
N6	Local Industrial Permit Compliance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residential Project
N7	Spill Contingency Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
N8	Underground Storage Tank Compliance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
N9	Hazardous Materials Disclosure Compliance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
N10	Uniform Fire Code Implementation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
N11	Common Area Litter Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
N12	Employee Training	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
N13	Housekeeping of Loading Docks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No proposed loading docks
N14	Common Area Catch Basin Inspection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
N15	Street Sweeping Private Streets and Parking Lots	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
N16	Retail Gasoline Outlets	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residential Project

IV.3.9 Structural Source Control BMPs

Structural Source Control BMPs				
Identifier	Name	Check One		If not applicable, state brief reason
		Included	Not Applicable	
S1	Provide storm drain system stenciling and signage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No proposed storm drain.
S2	Design and construct outdoor material storage areas to reduce pollution introduction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No proposed outdoor storage areas.
S3	Design and construct trash and waste storage areas to reduce pollution introduction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
S4	Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
S5	Protect slopes and channels and provide energy dissipation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No proposed slopes
	Incorporate requirements applicable to individual priority project categories (from SDRWQCB NPDES Permit)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
S6	Dock areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No proposed docks.
S7	Maintenance bays	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No proposed maintenance bays.
S8	Vehicle wash areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No proposed vehicle wash areas.
S9	Outdoor processing areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No proposed outdoor processing areas.
S10	Equipment wash areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No proposed equipment wash areas.
S11	Fueling areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No proposed fueling areas.
S12	Hillside landscaping	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Project not located within hillside areas.
S13	Wash water control for food preparation areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No proposed food preparation areas.
S14	Community car wash racks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No proposed community car wash racks.

IV.4 ALTERNATIVE COMPLIANCE PLAN (IF APPLICABLE)

IV.4.1 Water Quality Credits

Description of Proposed Project				
Project Types that Qualify for Water Quality Credits (Select all that apply):				
<input type="checkbox"/> Redevelopment projects that reduce the overall impervious footprint of the project site.	<input type="checkbox"/> Brownfield redevelopment, meaning redevelopment, expansion, or reuse of real property which may be complicated by the presence or potential presence of hazardous substances, pollutants or contaminants, and which have the potential to contribute to adverse ground or surface WQ if not redeveloped.	<input checked="" type="checkbox"/> Higher density development projects which include two distinct categories (credits can only be taken for one category): those with more than seven units per acre of development (lower credit allowance); vertical density developments, for example, those with a Floor to Area Ratio (FAR) of 2 or those having more than 18 units per acre (greater credit allowance).		
<input type="checkbox"/> Mixed use development, such as a combination of residential, commercial, industrial, office, institutional, or other land uses which incorporate design principles that can demonstrate environmental benefits that would not be realized through single use projects (e.g. reduced vehicle trip traffic with the potential to reduce sources of water or air pollution).	<input type="checkbox"/> Transit-oriented developments, such as a mixed use residential or commercial area designed to maximize access to public transportation; similar to above criterion, but where the development center is within one half mile of a mass transit center (e.g. bus, rail, light rail or commuter train station). Such projects would not be able to take credit for both categories, but may have greater credit assigned		<input type="checkbox"/> Redevelopment projects in an established historic district, historic preservation area, or similar significant city area including core City Center areas (to be defined through mapping).	
<input type="checkbox"/> Developments with dedication of undeveloped portions to parks, preservation areas and other pervious uses.	<input type="checkbox"/> Developments in a city center area.	<input type="checkbox"/> Developments in historic districts or historic preservation areas.	<input type="checkbox"/> Live-work developments, a variety of developments designed to support residential and vocational needs together – similar to criteria to mixed use development; would not be able to take credit for both categories.	<input type="checkbox"/> In-fill projects, the conversion of empty lots and other underused spaces into more beneficially used spaces, such as residential or commercial areas.
Calculation of Water Quality Credits (if applicable)	High Density = 5% $DCV_{PROP} = 2,080 \text{ cf}$ $DCV_{WaterCredit} = 2,080 \times 0.05 = 104 \text{ cf}$			

IV.4.2 Alternative Compliance Plan Information

N/A

Section V Inspection/Maintenance Responsibility for BMPs

BMP Inspection/Maintenance			
BMP	Responsible Party(s)	Inspection/Maintenance Activities Required	Minimum Frequency of Activities
Education for Property Owners, Tenants, & Occupants (N1)	HOA and individual homeowners	WQMP to be a part of Title Documents as part of purchase. HOA to give yearly report to residents.	As needed for property sales and once a year for reporting to residents.
Activity Restrictions (N2)	HOA	CC&Rs provided at time of sale and will identify activity restrictions for property and the neighborhood.	CC&Rs provided with property sales. Issue letters of non-compliance, as needed by HOA.
Common Area Landscape Management (N3)	HOA	HOA or appointed Property management company to provide maintenance of landscaping to meet current water efficiency and keep plants healthy and bio areas maintained with proper soil amendments.	Regular maintenance once a week and monthly inspections to determine deficiencies.
BMP Maintenance (N4)	HOA	HOA or appointed Property management company to provide maintenance of BMPs per the requirements of the	Regular maintenance once a week and monthly inspections to determine deficiencies.

		WQMP. Bioswales must be maintained with proper soil amendments and densely populated with vegetation.	
Common Area Litter Control (N11)	HOA	HOA or appointed Property Management Company to provide maintenance and to empty common area trash cans.	Regular maintenance once a week.
Street Sweeping Private Streets and Parking Lots (N15)	HOA	HOA or appointed Property Management Company to provide maintenance of Private Streets.	Regular street sweeping once a month.
Efficient Irrigation Systems & Landscape Design (S4)	HOA	HOA or appointed Property Management Company to provide maintenance of landscaping to meet current water efficiency standards, and keep plants healthy.	Regular maintenance once a week and monthly inspection to determine deficiencies.

Section VI Site Plan and Drainage Plan

VI.1 SITE PLAN AND DRAINAGE PLAN

Include a site plan and drainage plan sheet set containing the following minimum information:

- Project location
- Site boundary
- Land uses and land covers, as applicable
- Suitability/feasibility constraints
- Structural BMP locations
- Drainage delineations and flow information
- Drainage connections
- BMP details

See Attachment B for BMP Exhibit

VI.2 ELECTRONIC DATA SUBMITTAL

The minimum requirement is to provide submittal of PDF exhibits in addition to hard copies. Format must not require specialized software to open.

If the local jurisdiction requires specialized electronic document formats (CAD, GIS) to be submitted, this section will be used to describe the contents (e.g., layering, nomenclature, georeferencing, etc.) of these documents so that they may be interpreted efficiently and accurately.

Section VII Educational Materials

Education Materials			
Residential Material (http://www.ocwatersheds.com)	Check If Applicable	Business Material (http://www.ocwatersheds.com)	Check If Applicable
The Ocean Begins at Your Front Door	<input checked="" type="checkbox"/>	Tips for the Automotive Industry	<input type="checkbox"/>
Tips for Car Wash Fund-raisers	<input type="checkbox"/>	Tips for Using Concrete and Mortar	<input type="checkbox"/>
Tips for the Home Mechanic	<input checked="" type="checkbox"/>	Tips for the Food Service Industry	<input type="checkbox"/>
Homeowners Guide for Sustainable Water Use	<input checked="" type="checkbox"/>	Proper Maintenance Practices for Your Business	<input type="checkbox"/>
Household Tips	<input checked="" type="checkbox"/>	Other Material	Check If Attached
Proper Disposal of Household Hazardous Waste	<input checked="" type="checkbox"/>		
Recycle at Your Local Used Oil Collection Center (North County)	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Recycle at Your Local Used Oil Collection Center (Central County)	<input type="checkbox"/>		<input type="checkbox"/>
Recycle at Your Local Used Oil Collection Center (South County)	<input type="checkbox"/>		<input type="checkbox"/>
Tips for Maintaining a Septic Tank System	<input type="checkbox"/>		<input type="checkbox"/>
Responsible Pest Control	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Sewer Spill	<input type="checkbox"/>		<input type="checkbox"/>
Tips for the Home Improvement Projects	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Tips for Horse Care	<input type="checkbox"/>		<input type="checkbox"/>
Tips for Landscaping and Gardening	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Tips for Pet Care	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Tips for Pool Maintenance	<input checked="" type="checkbox"/>		<input type="checkbox"/>
Tips for Residential Pool, Landscape and Hardscape Drains	<input type="checkbox"/>		<input type="checkbox"/>
Tips for Projects Using Paint	<input checked="" type="checkbox"/>		<input type="checkbox"/>