



CITY OF OAKLAND

STORMWATER SUPPLEMENTAL FORM MRP 3.0

This form must be submitted with all Planning and Zoning applications for projects defined as Regulated Projects by Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES) and is required to be reported in Oakland's stormwater Annual Report.

The San Francisco Bay Regional Water Quality Control Board reissued the Municipal Regional Stormwater Permit (MRP 3.0). The MRP went into effect July 1, 2022, with further changes to the Regulated Project Thresholds effective July 1, 2023. The following projects are considered Regulated Projects.

- One Single Family Home Project that creates or replaces 10,000 square feet or more of new or existing impervious surface area;
- Any other development project that creates or replaces 5,000 square feet or more of new or impervious surface area; and
- Any paving maintenance or paving upgrade project that creates or replaces 5,000 square feet or more of new or impervious surface area and affects/disturbs the base layer.

For more information about the C.3 stormwater requirements for Regulated Projects and routine maintenance activities, please refer to the City of Oakland's Overview of Provision C.3 <https://cao-94612.s3.amazonaws.com/documents/oak038806.pdf> and the website of the Alameda Countywide Clean Water Program: [C3TG-V8-Final-2023_03-Compiled.pdf](https://cleanwaterprogram.org/C3TG-V8-Final-2023_03-Compiled.pdf) (cleanwaterprogram.org)

GENERAL INFORMATION

1. Project Name (if applicable): _____
2. Project Address (including cross street): _____
3. Assessor's Parcel Number(s): _____
4. Applicant's Name: _____
5. Applicant's Address: _____
6. Applicant's Phone: _____ Email: _____
7. Project Type (check all that apply): ☐ Detached Single-Family ☐ Residential ☐ Commercial ☐ Industrial
☐ Mixed Use ☐ Paving/Repaving¹ ☐ Public Streets/Roads
8. Project Description (Also note any past or future phases of project): _____

9. Slope on Site: _____ %
10. Project Watershed:² _____
11. Total Site Area (acres): _____
12. Total Land Area Disturbed³ (acres) _____

Supplemental Stormwater Form Completed by: _____

Signature

Date

Print or Type Name

To Be Completed By City Staff:

Date Application Submitted: _____

Case Number(s): _____

➤ Note to Staff: Please route a copy of this form to the stormwater coordinator in the Planning and Zoning Division.

¹ Paving maintenance or paving upgrade projects are projects that upgrade from dirt to gravel, upgrade from dirt/gravel to pavement, remove/replace asphalt or concrete to top of base course or lower, and repair of pavement base (i.e., base failure repair).

² Project Watershed information is available via the following link. <http://acffloodcontrol.org/resources/explore-watersheds>

³ Includes all areas to be cleared, excavated, and graded as well as borrow and stockpiling areas.

SUPPLEMENTAL PROJECT INFORMATION

- 13. Type of Development** (check one): ☐ Development on previously undeveloped land
☐ Development on previously developed land

14. Site Calculations:

Type of Impervious Surface ⁴	Pre-Project Impervious Surface (sq. ft.)	Existing Impervious Surface to be Replaced ⁷ (sq. ft.)	New Impervious Surface to be Created ⁷ (sq. ft.)	Post-project pervious surface (sq. ft.)
Roof area(s) – excluding any portion of the roof that is vegetated (“green roof”)				N/A
Impervious sidewalks, patios, paths, driveways ⁵				
Impervious uncovered parking ⁶				
Streets (public)				
Streets (private)				
Totals:				
Area of Existing Impervious Surface to remain in place		N/A		
Total New Impervious Surface (<i>sum of totals for columns b and c</i>):				

- | | <u>Yes</u> | <u>No</u> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| 15. Is your project a single-family detached home where the Total New/Replaced Impervious Area is $\geq 10,000$ sq. ft.? If YES, your project is a C.3.b Regulated Project. | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. Does your project create or replace impervious surfaces where the Total New/Replaced Impervious Area above is $\geq 5,000$ sq. ft.? If YES, your project is a C.3.b Regulated Project. | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. Does the total amount of Replaced impervious surface equal 50 percent or more of the Pre-Project Impervious Surface? If YES, stormwater treatment requirements apply to the whole site; if NO, these requirements apply only to the impervious surface created and/or replaced. | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. Does your project create or replace impervious surfaces where the Total New/Replaced Impervious Area is 2,500 to $>5,000$ sq. ft. OR for single family detached home 2,500 to $>10,000$ sq ft? If Yes, your project is a C.3.i Small Project and must implement site design and source control requirements. | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. Is your project a public road reconstruction project ≥ 1 acre (43,560 sq. ft.)? If YES, your project is a C.3.b Regulated Project. | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. Does your project involve paving maintenance or a paving upgrade from dirt to gravel, dirt/gravel to pavement, remove/replace asphalt or concrete to the top of base course or lower, and repair of pavement base (i.e., base failure repair) that is 5,000 sq. ft. or more? If YES, your project is a C.3.b Regulated Project. | <input type="checkbox"/> | <input type="checkbox"/> |

⁴ A surface covering or pavement of a developed parcel of land that prevents the land’s natural ability to absorb and infiltrate rainfall/stormwater. Any surface that cannot be effectively (easily) penetrated by water. Permeable paving (such as permeable concrete and interlocking pavers) underlain with permeable soil or permeable storage material, and green roofs with a minimum of three inches of planting media, are not considered impervious surfaces.

⁵ A gravel surface is an impervious surface, except when it is constructed as part of appropriately designed pervious pavement system.

⁶ Uncovered parking includes top level of a parking structure unless drainage from the uncovered portion is connected to the sanitary sewer along with the covered portions of the parking structure.

21. Does your project install 3,000 sq. ft. or more of pervious pavement systems or permeable surfaces (not including private-use patios at residences)? (Pervious pavement systems include pervious concrete, pervious asphalt, pervious pavers, and grid pavers, etc.⁷ If YES, stormwater treatment system inspection requirements (C.3.h) apply⁸

☐ ☐

22. Does the project include any of the following: ⁹

- One acre or more in site area? ☐ ☐
- Require a grading permit? ☐ ☐
- Adjacent to a creek or other waterway such as a body of water or the Estuary? ☐ ☐
- Is the site a "Hillside Site" that disturbs $\geq 5,000$ sq. ft., but less than 1 acre (43,560 sq. ft.) of land? "Hillside Sites" in the City of Oakland are sites with a footprint slope of greater than 20% ☐ ☐
- Does the project involve demolition of a structure subject to the PCBs Building Demolition requirements? ☐ ☐

IMPLEMENTATION OF C.3 STORMWATER REQUIREMENTS TO PROJECT

SITE DESIGN MEASURES

Site design measures are site planning techniques that conserve natural spaces and/or limit the amount of impervious surface in development projects in order to minimize the amount of stormwater runoff.

23. Site Design Measures. C.3 Regulated Projects must implement all appropriate and feasible site design measures. Small Projects, defined as single family detached homes if the Total New/Replaced Impervious Area is $>2,500$ to $<10,000$ sq. ft. or for all other projects $>2,500$ to $<5,000$ sq. ft., must include one of Site Design Measures listed in a through g (check "Applicable" if the measure is applicable to the project; check "Not Applicable" if the measure is not applicable):

- | | <u>Applicable</u> | <u>Not Applicable</u> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| a. Minimize land disturbance and impervious surfaces (especially parking lots). | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Maximize permeability by clustering development and preserving open space. | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Use micro-detention, including distributed landscape based detention | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Protect sensitive areas, including wetland and riparian areas, and minimize changes to natural topography. | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Use self-treating or self-retaining areas ¹⁰ | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Minimize stormwater runoff by implementing one or more of the following site design measures (check "Applicable" for <u>at least one</u> measure below): | <input type="checkbox"/> | <input type="checkbox"/> |
| | <u>Applicable</u> | <u>Not Applicable</u> |
| i. Direct roof runoff into cisterns or rain barrels and reuse for irrigation or other non-potable use. | <input type="checkbox"/> | <input type="checkbox"/> |

⁷ Use the specifications in the C3 Technical Guidance (Version 4.1) or for Small Projects see the BASMAA Pervious Paving Factsheet. [C3TG-V8-Final-2023_03-Compiled.pdf \(cleanwaterprogram.org\)](#)

⁸ Planning staff to notify Inspection staff that O&M inspections are required.

⁹ Planning staff to notify Inspection staff that stormwater inspections are required during the wet weather season (October 1 through April 30) and other times as appropriate.

¹⁰ Use the specifications in the C3 Technical Guidance (Version 4.1) (Sections 4.1 and 4.2) [C3TG-V8-Final-2023_03-Compiled.pdf \(cleanwaterprogram.org\)](#)

	<u>Applicable</u>	<u>Not Applicable</u>
ii. Direct roof runoff onto vegetated areas.	<input type="checkbox"/>	<input type="checkbox"/>
iii. Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.	<input type="checkbox"/>	<input type="checkbox"/>
iv. Direct runoff from driveways and/or uncovered parking lots onto vegetated areas.	<input type="checkbox"/>	<input type="checkbox"/>
v. Construct sidewalks, walkways, and/or patios with permeable pavement systems/surfaces.	<input type="checkbox"/>	<input type="checkbox"/>
vi. Construct driveways, bike lanes, and/or uncovered parking lots with pavement systems/surfaces.	<input type="checkbox"/>	<input type="checkbox"/>

SOURCE CONTROL MEASURES

Source control measures are structural and operational measures that aim to prevent stormwater runoff pollution by reducing contact between runoff and the source of pollution.

24. Source Control Measures. The following source control measures are required for all projects as applicable (check “Applicable” if the measure is applicable to the project; check “Not Applicable” if the measure is not applicable)
Include measures on the plans.

	<u>Applicable</u>	<u>Not Applicable</u>	<u>Shown on plans</u>	<u>Sheet #</u>
			YES	No
a. Install stenciling/medallions as directed at storm drain inlets, such as “No Dumping – Drains to Bay.”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. For interior floor drains, plumb drains to sanitary sewer	<input type="checkbox"/>	<input type="checkbox"/>		
c. For interior parking garage floors, plumb drains to sanitary sewer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. For landscaping areas, retain existing vegetation as practicable; Select diverse species appropriate to the site and include as pest/disease resistant, drought tolerant and those that attract beneficial insects. Cover and enclose trash/recycling storage areas and design these areas to prevent storm water run-on and run-off into the trash area. Connect any drains to sanitary sewer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For pools, spas, and fountains, provide connection to the sanitary sewer to facilitate draining.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. For food service equipment (non-residential projects) provide sink or other area for equipment cleaning which is: connected to a grease interceptor prior to sanitary sewer drainage; large enough for the largest mat or piece of equipment to be cleaned; indoors or in an outdoor roofed area designed to prevent stormwater run-on and run-off and signage to require equipment washing in this area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. For refuse areas, provide a roofed and enclosed area for dumpsters, recycling containers, etc. design to prevent stormwater run-on and run-off and connect drains in or underneath dumpsters, compactors, and tallow bin areas for food service facilities to the sanitary sewer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>Applicable</u>	<u>Not Applicable</u>	<u>Shown on plans</u>		<u>Sheet #</u>
			YES	No	
h. For outdoor process activities ¹¹ , perform process activities either indoors or in roofed outdoor areas designed to prevent run-on and run-off and to drain to the sanitary sewer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
i. For outdoor equipment storage and material storage, cover the area or design to avoid pollutant contact with stormwater run-off; locate the area only on paved and contained surfaces; roof storage areas that will contain non-hazardous liquids should drain to the sanitary sewer and be contained by berms or similar structures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
j. For vehicle equipment and cleaning and commercial car wash facilities, provide roofed, paved and bermed vehicle equipment wash areas to prevent stormwater run-on and runoff, plumb to sanitary sewer and provide signage as the designated wash area. Commercial car wash facilities shall discharge to the sanitary sewer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
k. For vehicle equipment repair and maintenance, designate vehicle repair/maintenance area indoors, or in an outdoor area designed to prevent stormwater run-on and runoff and provide secondary containment. Do not install floor unless pretreated prior to discharge to the sanitary sewer. Connect containers and sinks used for parts cleaning to the sanitary sewer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
l. For fuel dispensing areas, the areas shall have impermeable surface that is graded to prevent ponding, separated from the rest of the site by a grade break and canopies shall extend at least 10' in each direction from pumps and drain away from fueling area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
m. For loading docks, cover and/or grade the docks to minimize run-on and run-off, position downspouts to direct stormwater away from the loading areas, drain water from the docks to the sanitary sewer, and install door skirts between trailers and the building.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
n. For fire sprinklers, design the discharge of fire sprinkler test water to on-site vegetated areas or to the sanitary sewer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
o. For miscellaneous drain and wash water, drain condensate of air conditioning units to landscaping, connect large air conditioning units to the sanitary sewer, drain roofs drains to unpaved areas where practicable, and drain boiler drain lines, rooftop equipment and all wash water to the sanitary sewer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
p. For projects that include architectural copper, discharge rinse water to sanitary sewer, or collect and dispose properly offsite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

¹¹ Businesses that may have outdoor process activities/equipment include machine shops, auto-repair, and industries with pre-treat facilities.

SPECIAL PROJECTS

Provision C.3 requires development projects to incorporate stormwater treatment measures into the project in order to remove pollutants from stormwater runoff. Since December 1, 2011, only Low Impact Development (LID) treatment measures are allowed. LID treatment measures are rainwater harvesting, infiltration, evapotranspiration, and biotreatment. Non-LID treatment measures include high flowrate tree well filters and mechanical vault-type media filters. Non-LID treatment measures are only allowed for Special Projects as defined by Provision C.3. This section of the form will determine if the project qualifies as a Special Project and non-LID treatment measures are allowed with an in depth discussion of infeasibility and identification of opportunities to include LID.

- 25. Density** (check one): ☐ Residential Project – Dwelling Units (DU) per Acre: _____
☐ Nonresidential Project – Floor Area Ratio (FAR): _____
☐ Mixed-Use Project: Indicate either DU or FAR above.

Special Project Category “A”

26. Does the project have ALL the following characteristics?

- | | <u>Yes</u> | <u>No</u> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| a. Located in a CBD, D-BV1, D-BV-2, D-LM-2, CN-1, CN-2, CN-3, RU-5, or S-15 zone; or
Located in a Retail, Dining, and Entertainment district in Jack London Square on the City’s General Plan map; or
Located in a City-designated historic district (either an Area of Primary Importance or an Area of Secondary Importance); or
Located on a site listed on the City’s Local Register of Historical Resources (as defined by the Oakland Planning Code)? | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Create and/or replaces 0.5 acres or less of impervious surface? | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Include no surface parking, except for incidental parking for emergency vehicle access, ADA access, and passenger or freight loading zones? | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Have at least 85% lot coverage by permanent structures? | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>➤ If you checked “yes” for <u>all</u> of the above questions, the project qualifies as a <u>Category “A” Special Project and proceed to Section 29.</u></p> <p>➤ If you checked “no” for <u>any</u> of the above questions, the project is not a <u>Category “A” Special Project.</u></p> | | |

Special Project Category “B”

27. Does the project have ALL the following characteristics?

- | | <u>Yes</u> | <u>No</u> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| a. Located in a CBD, D-BV-1, D-BV-2, D-LM-2, CN-1, CN-2, CN-3, RU-5, or S-15 zone; or
Located in a Retail, Dining, and Entertainment district in Jack London Square on the City’s General Plan map; or
Located in a City-designated historic district (either an Area of Primary Importance or an Area of Secondary Importance); or
Located on a site listed on the City’s Local Register of Historical Resources (as defined by the Oakland Planning Code)? | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Create and/or replace more than 0.5 acres of impervious surface but no more than 2.0 acres of impervious surface? | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Include no surface parking, except for incidental parking for emergency vehicle access, ADA access, and passenger or freight loading zones? | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Have at least 85% lot coverage by permanent structures? | <input type="checkbox"/> | <input type="checkbox"/> |

- | | <u>Yes</u> | <u>No</u> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| e. Have a minimum Gross Density (GD) ¹² of 50 dwelling units per acre (for residential projects) or a floor area ratio (FAR) ¹³ of 2.0 (for commercial projects)? Either criterion may be used for mixed-use projects ¹⁴ . | <input type="checkbox"/> | <input type="checkbox"/> |
| ➤ If you checked “yes” for <u>all</u> of the above questions, the project qualifies as a <u>Category “B” Special Project and proceed to Section 29.</u> | | |
| ➤ If you checked “no” for <u>any</u> of the above questions, the project is not a <u>Category “B” Special Project.</u> | | |

Special Project Category “C” (Affordable Housing)

28. Does the project have ALL the following characteristics?

- | | <u>Yes</u> | <u>No</u> |
|-------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| a. Is the project a mainly residential, 100% affordable housing development project? ¹⁵ | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Have a minimum Gross Density of 40 dwelling units per acre. | <input type="checkbox"/> | <input type="checkbox"/> |
| ➤ If you checked “yes” for <u>all</u> of the above questions, the project qualifies as a <u>Category “C” Special Project.</u> | | |
| ➤ If you checked “no” for <u>any</u> of the above questions, the project is not a <u>Category “C” Special Project.</u> | | |

29. Calculate the amount of stormwater runoff that can be treated with non-LID treatment measures by using the worksheet below. If the project does not qualify as a Special Project, skip this step and go to no. 30 and check “no.”

Check the Special Project Category(ies) the project qualifies for based on the information from pages 6-7 and circle the Treatment Reduction Credit amount that corresponds to the project’s characteristics.

	Treatment Reduction Credit
<input type="checkbox"/> Category “A” Special Project All Category “A” Special Projects	100%
<input type="checkbox"/> Category “B” Special Project	
≥ 50 dwellings per acre (residential); or ≥ 2.0 floor area ratio (FAR) (nonresidential)	50%
≥ 75 dwellings per acre (residential); or ≥ 3.0 floor area ratio (FAR) (nonresidential)	75%
≥ 100 dwellings per acre (residential); or ≥ 4.0 floor area ratio (FAR) (nonresidential)	100%

☐ **Category “C” Special Project**

a. Affordable Housing Credit¹⁶

Complete the two steps below to calculating Affordable Housing Credits:

¹² Gross Density (GD) is the total number of residential units divided by the acreage of the entire site area, including land occupied by public right-of-ways, recreational, civic, commercial, and other non-residential uses.

⁸ Floor Area Ratio (FAR) is the ratio of the total floor area on all floors of all buildings at a project site (except structures, floors, or floor areas dedicated to parking) to the total project site area.

¹⁴ Mixed-use project is the development or redevelopment of property to be used for two or more different uses, all intended to be harmonious and complementary.

¹⁵ Affordable housing is defined as preserved housing with deed restrictions running at least 55 years, at rent/mortgage rates (including utilities) no greater than 30 percent of the total household income, and which meets the following income levels specified in the Federal Department of Housing and Urban Development’s (HUD’s) definition of affordable housing in metropolitan areas: For metropolitan areas, HUD defines Extremely Low household incomes as 0 - 30 percent of area median household income (AMI), Very Low household incomes as 31 – 50 percent of AMI, Low household incomes as 51-80 percent of AMI, and Moderate household incomes as 81-120 percent of AMI.

¹⁶ Up to three Manager’s Dwelling Units that are used may be exempted from the deed restriction requirement and may be excluded from the Affordable Housing Credit calculations.

First, the percentage of the project's DUs in each affordability category are multiplied by the respective Credit Multipliers, according to the table below, and rounded to the nearest whole number.

<u>AMI</u>	<u>AMI Credit Multiplier</u>	<u>Number of Units in each AMI category</u>	<u>%</u>
Moderate ($\leq 120\%$ of AMI)	0.20		
Low ($\leq 80\%$ of AMI)	1.00		
Very Low ($\leq 50\%$ of AMI)	2.00		
Extremely Low ($\leq 30\%$ of AMI)	3.00		
Acutely Low ($\leq 15\%$ of AMI) ¹⁷	4.00		
Weighted Sum Total ¹⁸			

Second, the Affordable Housing Credit is granted according to which range (in the table below) that whole number above falls into.

<u>Weighted Sum (whole number)</u> <u>Affordable Housing Credit</u>	<u>Weighted Sum (whole number) Affordable Housing Credit</u>
$X \leq 9\%$	0%
$10\% \leq X \leq 20\%$	20%
$21\% \leq X \leq 30\%$	30%
$31\% \leq X \leq 40\%$	40%
$41\% \leq X \leq 50\%$	50%
$51\% \leq X \leq 60\%$	60%
$61\% \leq X \leq 70\%$	70%
$81\% \leq X \leq 90\%$	90%
$91\% \leq X \leq 100\%$	100%

b. Location

100% of the site located within ¼ mile of existing or planned transit hub ¹⁹	5%
100% of the site is located within a planned Priority Development Area	10%

c. Density

≥ 40 units per acre	5%
≥ 60 units per acre (residential); or ≥ 4.0 floor area ratio (FAR) (nonresidential/mixed-use)	10%
≥ 100 units per acre (residential); or ≥ 6.0 floor area ratio (FAR) (nonresidential/mixed-use)	15%

d. Parking

No surface parking (except for incidental parking for emergency vehicle access, ADA access, and passenger or freight loading zones)	5%
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Total Category "C" (sum of affordable housing location, density, and parking treatment reduction credits): ²⁰

¹⁷ DUs that are free to tenants, i.e., that do not charge tenants any rent/mortgage, are included in this category.

¹⁸ The credits generated in the table are summed together to produce a Weighted Sum and rounded to the nearest whole number.

¹⁹ Transit hub is defined as a rail, light rail, or commuter rail station, ferry terminal, or bus transfer station served by three or more bus routes (i.e., a bus stop with no supporting services does not qualify). A planned transit hub is a station on the MTC's Regional Transit Expansion Program list, per MTC's Resolution 3434 (revised September 2008), which is a regional priority funding plan for future transit stations in the San Francisco Bay Area.

30. Does the project qualify as a Special Project (check one)?

☐ No

☐ Yes:

a. Special Project Category (A, B, or C): ²¹ _____

b. LID Treatment Reduction Credit: _____ %

c. Maximum Impervious Surface Area Allowed to be Treated with Non-LID Treatment Measures (multiply the amount in [b] by the Total Post-Project Impervious Surface Area [see no. 14 on page 2]): ²² _____ sq. ft.

HYDROMODIFICATION MANAGEMENT

Changes to the timing and volume of stormwater runoff from a site are known as “hydrograph modification” or “hydromodification.” Provision C.3 requires certain development projects to incorporate measures to manage hydromodification. This section of the form will determine if hydromodification management measures are required for the project.

31. Does the project have the following characteristics?

	<u>Yes</u>	<u>No</u>
a. Create and/or replace one acre or more of impervious surface?	<input type="checkbox"/>	<input type="checkbox"/>
b. The total post-project amount of impervious surface would exceed the amount of existing/pre-project impervious surface?	<input type="checkbox"/>	<input type="checkbox"/>
c. Located in a susceptible area on the Hydromodification Susceptibility Map? ²³	<input type="checkbox"/>	<input type="checkbox"/>
➤ If you checked “no” for <u>any</u> of the questions above, hydromodification management measures are <u>not</u> required. Go to no. 32 and check “no.”		
➤ If you checked “yes” for <u>all</u> of the questions above, hydromodification management measures <u>are</u> required. Go to no. 32 and check “yes.”		

32. Are Hydromodification Management Measures Required (check one)?

☐ No

☐ Yes. Hydromodification management measures must be designed to meet the following standard:

Hydromodification Management Standard

Hydromodification management measures shall be designed such that post-project stormwater discharge rates and durations match pre-project discharge rates and durations from 10% of the pre-project two-year peak flow up to the pre-project 10-year peak flow.

²⁰ Category C Special Projects are only allowed to claim one location credit, and one density credit, even if the project qualifies for more than one.

²¹ If the project qualifies for more than one category of Special Projects, the project applicant may choose which category applies to the project.

²² The remaining stormwater runoff requiring treatment must be treated with LID treatment measures. The project applicant may choose to treat stormwater runoff with LID treatment measures even if non-LID treatment measures are allowed.

²³ The Hydromodification Susceptibility Map is a tool created by the Alameda Countywide Clean Water Program to locate areas susceptible to hydromodification. The Hydromodification Susceptibility Map is attached to this form (see Attachment B) and the full interactive full map may be accessed here: <https://accwp.maps.arcgis.com/apps/webappviewer/index.html?id=11d7a1bfb90d46ce80f94defc03d012c>.

To assist in the design of hydromodification management measures, the Alameda Countywide Clean Water Program, in collaboration with other clean water agencies, has developed a computer software program called the Bay Area Hydrology Model (BAHM). The BAHM is available at <https://www.clearcreeksolutions.info/downloads>. Please refer to the “C.3 Stormwater Technical Guidance” manual available on the Alameda Countywide Clean Water Program’s website [C3TG-V8-Final-2023_03-Compiled.pdf \(cleanwaterprogram.org\)](https://www.clearcreeksolutions.info/downloads) for more information about the BAHM and hydromodification management measures.

Hydraulic calculations for hydromodification management measures are not required to be submitted with applications for Planning and Zoning permits/approvals. However, Provision C.3 requires adequate area for hydromodification management measures must be provided in the project drawings submitted with applications for Planning and Zoning permits/approvals.

PROPOSED STORMWATER MANAGEMENT MEASURES

Use this section to identify the stormwater measures that will be incorporated into the project to comply with Provision C.3.

33. Proposed Site Design Measures. List the required measures from page 3-4 along with any other proposed site design measures:

34. Proposed Source Control Measures. List the required measures from pages 4-5 along with any other proposed source control measures:

35. Proposed Non-LID Treatment Measures. Non-LID treatment measures are only allowed for Special Projects (see pages 6-9) AND if it is infeasible to incorporate 100% LID treatment.

Are non-LID treatment measures proposed (check one)?

☐ No

☐ Yes (describe):

a. If both non-LID and LID treatment proposed, percentage of drainage area treated with non-LID treatment: _____

b. Non-LID treatment measures must meet minimum design criteria published by a government agency or be certified by a government agency. Identify the government agency and the applicable criteria/certification: _____

c. If non-LID treatment measures are proposed, provide a discussion explaining why it is infeasible to incorporate 100% LID treatment in the project (attach additional sheets if necessary) as described in Attachment C.²⁴ **Make sure to use the sample format approved by the San Francisco Bay Regional Water Quality Control Board.** Technical Guidance document attached. Select a treatment measure certified for “Basic” General Use Level Designation (GULD) by the Washington State Department of Ecology’s Technical Assessment Protocol – Ecology (TAPE). Guidance is provided in Section Appendix J of the C.3 Technical Guidance (download at [C3TG-V8-Final-2023_03-Compiled.pdf \(cleanwaterprogram.org\)](https://www.clearcreeksolutions.info/downloads)– excerpt attached).²⁵

²⁴ Both technical and economic factors may be considered in the discussion of the feasibility of 100% LID treatment.

²⁵ TAPE certification is used in order to satisfy Special Project’s reporting requirements in the MRP.

36. Proposed Biotreatment Measures. Biotreatment measures may be used to treat stormwater runoff requiring LID treatment.

Are biotreatment measures proposed (check one)?

☐ No

☐ Yes (describe):

37. Numeric Sizing for Stormwater Treatment Measures. Stormwater treatment measures—both non-LID treatment measures and LID treatment measures (including rainwater harvesting and biotreatment)—must be designed to capture a specified amount of stormwater runoff using one of the design criteria in Provision C.3.

Indicate the method to be used to size the proposed stormwater treatment measures (check one):

a. Volume Hydraulic Design Basis – Treatment measures whose primary mode of action depends on *volume capacity*:

☐ i. The maximized stormwater capture volume for the area, on the basis of historical rainfall records, determined using the formula and volume capture coefficients set forth in Urban Runoff Quality Management, (e.g., approximately the 85th percentile 24-hour storm runoff event);

☐ ii. The volume of annual runoff required to achieve 80 percent or more capture, determined in accordance with the methodology set forth in Section 5 of the California Stormwater Quality Association’s Stormwater Best Management Practice Handbook, New Development and Redevelopment (2003), using local rainfall data; https://www.casqa.org/sites/default/files/BMPHandbooks/BMP_NewDevRedev_Complete.pdf

b. Flow Hydraulic Design Basis – Treatment measures whose primary mode of action depends on *flow capacity*:

☐ i. 10 percent of the 50-year peak flowrate;

☐ ii. The flow of runoff produced by a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the applicable area, based on historical records of hourly rainfall depths;

☐ iii. The flow of runoff resulting from a rain event equal to at least 0.2 inches per hour intensity; or

c. ☐ Combination Flow and Volume Design Basis – Treatment measures using a combination of flow and volume capacity sized to treat at least 80 percent of the total runoff over the life of the project, using local rainfall data.

38. Proposed Hydromodification Management Measures. Hydromodification management measures are required for certain projects (see page 9-10).

Are hydromodification management measures proposed (check one)?

☐ No

☐ Yes (describe):

SUBMITTAL REQUIREMENTS

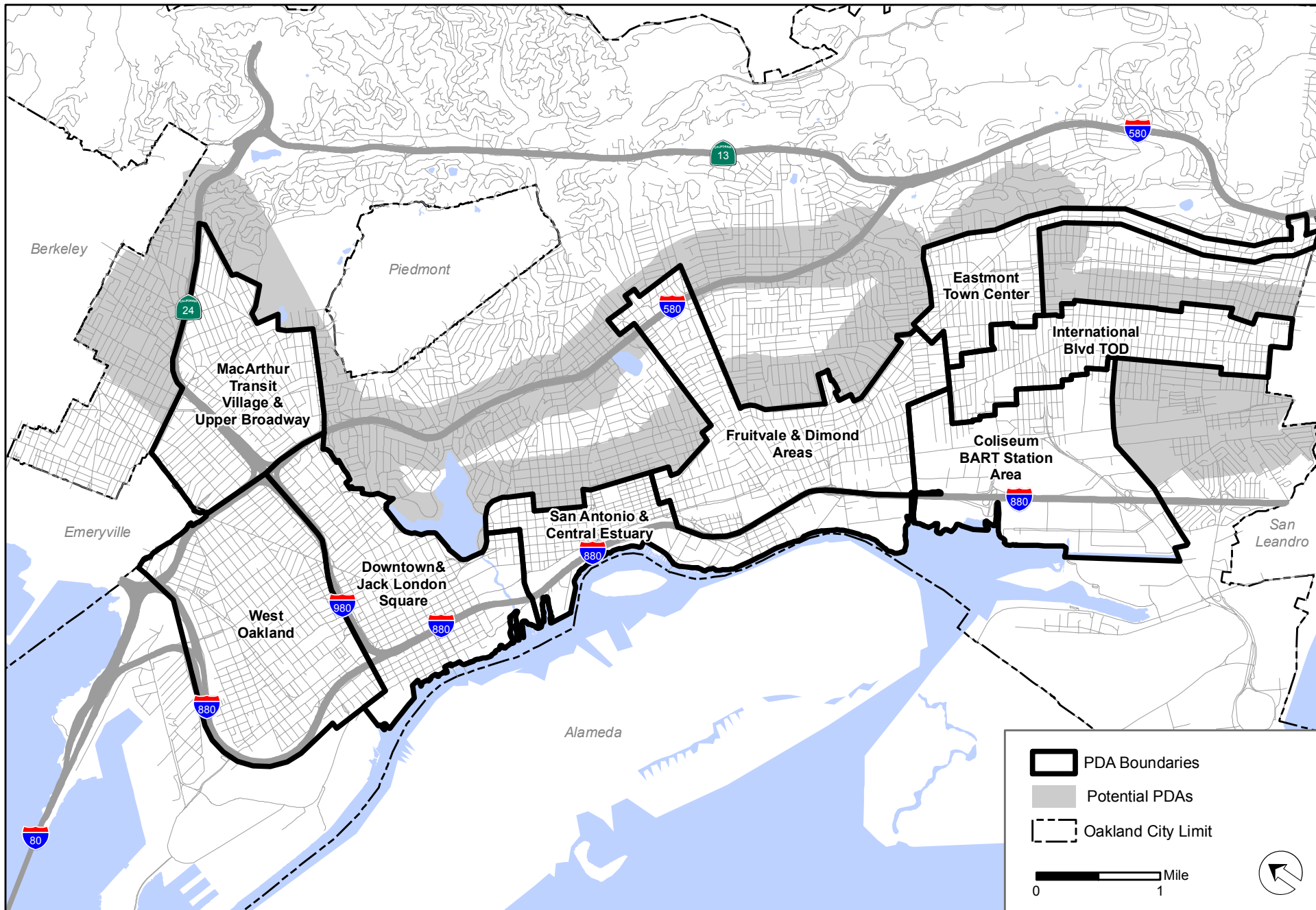
This section of the form identifies the stormwater-related information required to be submitted with the project application.

39. Submittal Requirements. The following materials/information must be submitted with the application for Planning and Zoning permit(s)/approval:

- ☐ **a. Stormwater Supplemental Form** – A completed copy of this form.
- ☐ **b. Preliminary Post-Construction Stormwater Management Plan** – A project drawing containing the following information (shown and labeled):
 - ☐ Location and size of new and replaced impervious surface;
 - ☐ Directional surface flow of stormwater runoff;
 - ☐ Location of proposed on-site storm drain lines;
 - ☐ Preliminary type and location of proposed site design measures;
 - ☐ Preliminary type and location of proposed source control measures;
 - ☐ Preliminary type and location of proposed stormwater treatment measures; and
 - ☐ Preliminary type and location of proposed hydromodification management measures (if applicable).

ATTACHMENT A

MAP OF OAKLAND PLANNED PRIORITY DEVELOPMENT AREAS (PDAs)



Priority Development Areas (PDAs)

Department of Planning and Building
December 2015

ATTACHMENT B

HYDROMODIFICATION SUSCEPTIBILITY MAP

Map Instructions

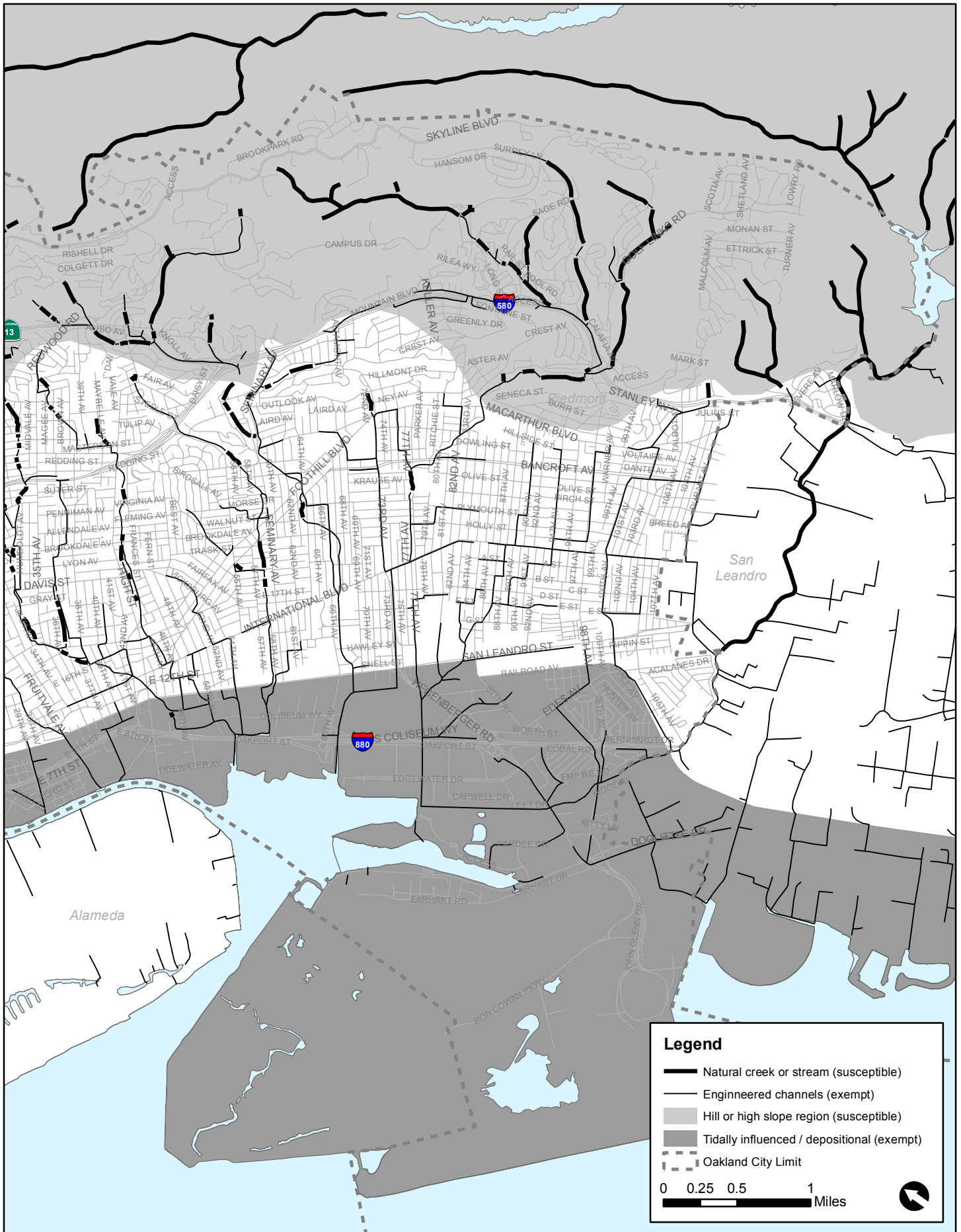
Use the map on the following pages to determine if the project is located in a susceptible area. The map is divided into three areas:

High Susceptibility Area (Light Grey) – This area generally consists of steep slopes. Applicable projects in this area are required to incorporate hydromodification management measures.

Potential Susceptibility Area (White) – This area is located between the hills and the tidal zone of San Francisco Bay. This area may be susceptible to hydromodification depending upon the nature of the drainage system. Applicable projects in this area are required to incorporate hydromodification management measures *unless* project stormwater runoff will flow through fully hardened, engineered channels from the project site to the tidal zone.

If stormwater runoff from the project site will flow through a natural creek or stream (shown as a thick black line on the map), hydromodification management measures are required.

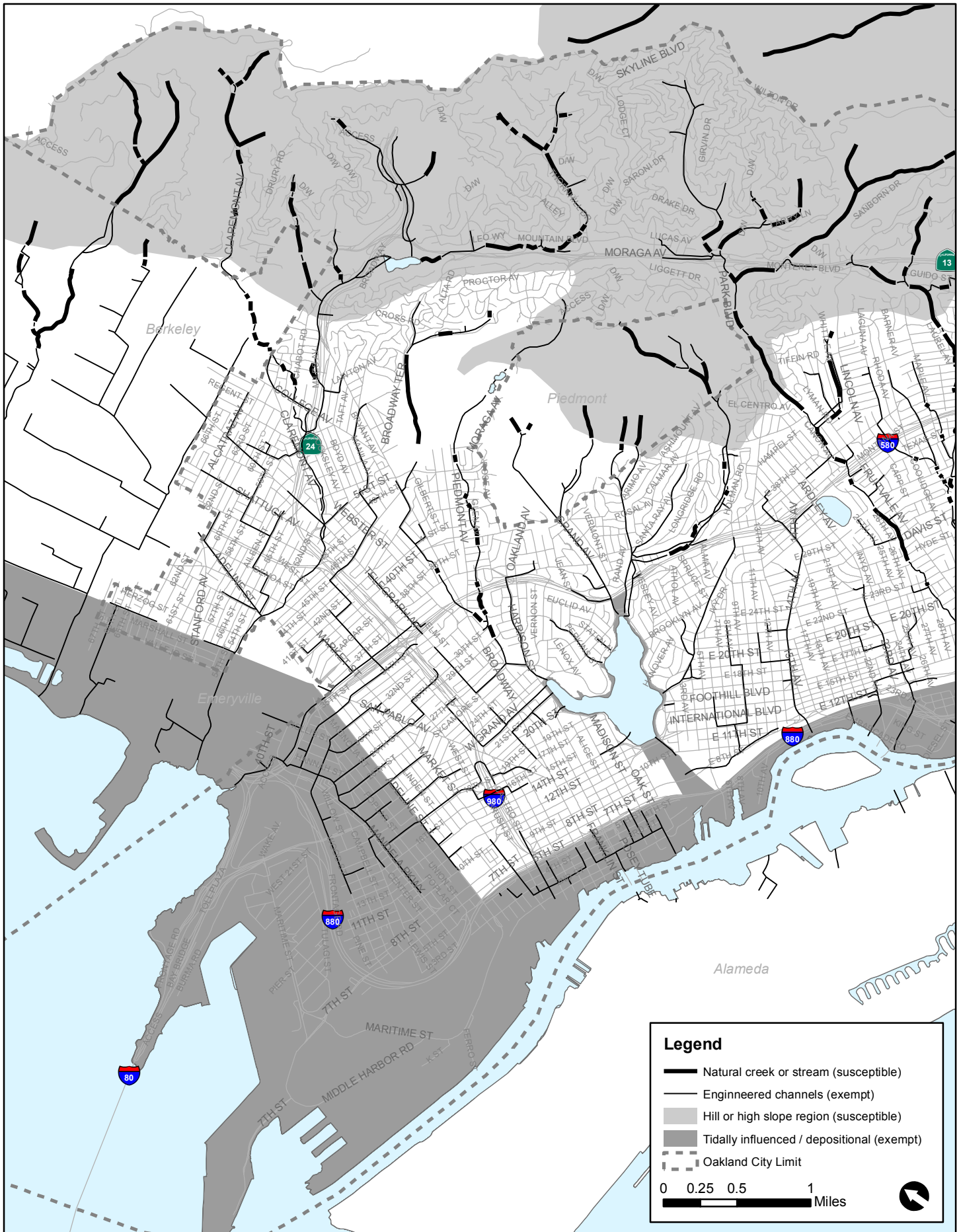
Tidal Influence / Depositional Area (Dark Grey) – This area is located in the tidal zone of San Francisco Bay. Creeks in this area are generally tidally influenced or primarily depositional. Projects in this area are exempt from hydromodification management measures.



Map by: City of Oakland, Department of Planning, Building, and Neighborhood Preservation
 Source: Alameda Countywide Clean Water Program
 March 2012



CITY OF OAKLAND Hydromodification Susceptibility Map - East



Map by: City of Oakland, Department of Planning, Building, and Neighborhood Preservation
 Source: Alameda Countywide Clean Water Program
 March 2012



CITY OF OAKLAND Hydromodification Susceptibility Map - West

ATTACHMENT C

LOW IMPACT DEVELOPMENT INFEASIBILITY

EXCERPTS FROM APPENDIX J OF THE C.3 TECHNICAL GUIDANCE AND SAMPLE FEASIBILITY REPORT TEMPLATE TO USE IN YOUR ANALYSIS

J.6 LID Infeasibility Requirement for Special Projects

In order to be considered a Special Project, in addition to documenting that all applicable criteria for one of the above-described Special Project categories have been met, the applicant must provide a narrative discussion of the feasibility or infeasibility of using 100 percent LID treatment onsite, offsite, or at a Regional Project. The narrative discussion is required to address the following:

1. The infeasibility of treating 100% of the amount of runoff identified in Provision C.3.d for the Regulated Project's drainage area with LID treatment measures onsite;
2. The infeasibility of treating 100% of the amount of runoff identified in Provision C.3.d for the Regulated Project's drainage area with LID treatment measures offsite or paying in-lieu fees to treat 100% of the Provision C.3.d runoff with LID treatment measures at an offsite or Regional Project; and
3. The infeasibility of treating 100% of the amount of runoff identified in Provision C.3.d for the Regulated Project's drainage area with some combination of LID treatment measures onsite, offsite, and/or paying in-lieu fees towards at an offsite or Regional Project.

The discussion is required to contain enough technical and/or economic detail to document the basis of any infeasibility that is determined.

J.6.1 On-site LID Treatment

The narrative discussion should describe how the routing of stormwater runoff has been optimized to route as much runoff as possible to LID treatment measures. A discussion should also be provided for each area of the site for which runoff must be treated with non-LID treatment measures, and should include the following:

1. Uses of impervious surfaces that preclude the use of LID treatment; and
2. Technical constraints that preclude the use of any landscaped areas for LID treatment, such as:
 - a. Inadequate size to accommodate bio-treatment facilities that meet the sizing requirements for the drainage area;
 - b. Slopes too steep to terrace;
 - c. Proximity to an unstable bank or slope;
 - d. Environmental constraints (e.g., landscaped area is within riparian corridor);
 - e. High groundwater or shallow bedrock;
 - f. Conflict with subsurface utilities;
 - g. Cap over polluted soil or groundwater;
 - h. Lack of head or routing path to move collected runoff to the landscaped area or from the landscaped area to the disposal point;
 - i. Other conflicts or required uses that preclude use for stormwater treatment (explain).

J.6.2 Off-site LID Treatment.

The applicant must demonstrate to the municipality performing the project review that it is infeasible to provide LID treatment of an equivalent amount of runoff offsite either by paying in-lieu fees to a regional project or on other property owned by the project proponent in the same watershed (in other words, that alternative compliance, as described in Chapter 9, is infeasible).

Check with the local municipality to determine if there are any regional projects available for alternative compliance purposes (at the time of completion of this Appendix, there were none in Alameda County). These considerations should be documented in the narrative discussion of the feasibility and infeasibility of providing 100% LID treatment.

J.6.3 Combination of On-site and Off-site LID Treatment

The applicant must also demonstrate to the municipality performing the project review that it is infeasible to provide LID treatment of 100% of the amount of runoff specified in Provision C.3.d with some combination of LID measures on-site, offsite, and or paying in-lieu fees to a regional project.

After determining the extent to which stormwater runoff can be optimized to route as much runoff as possible to LID treatment measures, if that amount is less than 100%, and if there are no options to provide LID treatment off-site on a property owned by the project proponent in the same watershed, check with the municipality to determine if there are any regional projects available for alternative compliance purposes for the remainder of the C.3.d amount of runoff. These considerations should be documented in the narrative discussion of the feasibility and infeasibility of providing 100% LID treatment.

J.7 Select Non-LID Treatment Measures Certified by a Government Agency

MRP Provision C.3.e.vi.(3)(i) requires municipalities to report to the Regional Water Board, for each non-LID treatment measure that the municipality approves, “whether the treatment system either meets minimum design criteria published by a government agency or received certification issued by a government agency, and reference the applicable criteria or certification.”

For Special Projects that are allowed to use non-LID treatment measures, applicants are advised to use treatment measures that have been certified by the Washington State Department of Ecology’s Technical Assessment Protocol – Ecology (TAPE), under General Use Level Designation (GULD) for Basic Treatment.²⁶ You can identify proprietary media filters and high flow rate tree well filters currently holding this certification at the following link:
<http://www.ecy.wa.gov/programs/wq/stormwater/newtech/technologies.html>.

The municipality may require that any non-LID treatment measures used in a Special Project be TAPE-certified, or the municipality may allow the use of non-LID treatment measures certified by another governmental program.

If the TAPE system is used, treatment measures must be sized based on the hydraulic sizing criteria specified in MRP Provision C.3.d and the design operating rate for which the product received TAPE GULD certification for Basic Treatment. If a different certification program is used, specify the design operating rate for which the product received the relevant certification.

²⁶ “General Use” is distinguished from a pilot or conditional use designation. “Basic Treatment” is distinguished from treatment effectiveness for phosphorus removal. Basic treatment is intended to achieve 80 percent removal of total suspended solids (TSS) for influent concentrations from 100 mg/L to 200 mg/L TSS and achieve 20 mg/L TSS for less heavily loaded influents.

Special Projects Narrative

410 Noor Avenue

410 Noor Ave.

Project (multi-family residential) applied to the Planning Division March 20, 2018. A Building Permit was applied for on April 15, 2022 and Building Permit is currently under review by the Building Division.

Proposed building footprint utilizes majority of site.

The project will be located within $\frac{1}{4}$ - $\frac{1}{2}$ mile of a transit hub with a Density of >60 DU/ac.

There will be no surface parking.

This project proposes a media filter to treat 65% of the site. Media filter will meet the specifications of the Western Washington Technical Assessment Protocol-Ecology (TAPE) program and Municipal regional permit requirements for NON-LID measures.

1. Feasibility/Infeasibility of Onsite LID Treatment

The project site was reviewed with regard to the feasibility and infeasibility of onsite LID treatment. The results of this review showed that it was infeasible to treat 100% percent of the C.3.d amount of runoff with LID treatment. The findings of this review are presented below.

- a. **On-site Drainage Conditions.** The majority of the site will be utilized by the proposed building footprints as well as active amenity areas for the future residents. Flows from Building A in Lot 1 will be split between a flow-through planter area in the back of the building, flow-through planters on podium, flow-through planters on the front of the building, and a media filter in the front of the building.

Flows from Building B and the adjacent site areas will be split between two flow-through planter areas in the garden area, three flow-through planters in the front of the building, and flow-through planters on podium.

Flows from Building C and the adjacent site areas will be split between flow-through planters on the north side of the building and a media filter.

- b. **Self-Treating and Self-Retaining Areas and LID Treatment Measures.** Self-treating areas are provided in the landscape area around Building A, to the east of Building B, and to the south of Building C.
- c. **Maximizing Flow to LID Features and Facilities.** The majority of Lot 1 will be captured in flow-through planters. Roof areas on the western side of the site will be directed to a planter on the west side of the site, and roof areas on the east side of the site will be directed to planters on podium and in front of the building.

Within Lot 2, all of the site areas around Building B as well as roof areas around the perimeter of the building will be directed to flow-through planter areas in the garden. Roof areas around the perimeter of the interior courtyard will drain to flow-through planters on podium. Roof areas on the northern half of Building C will be directed to planters on the northern side of Building C.

- d. **Constraints to Providing On-site LID Treatment Measures.** Portions of the site are proposed to drain to vault-based high flow rate media filters. In these areas, conditions and technical constraints are present that preclude the use of LID features and facilities, as described below and indicated on the attached exhibit.
- i. DMA 14: DMA 14 consists of the northern corner of Building A. This area contains a first floor courtyard which is lower than the adjacent planter. There is no way to collect the drainage from this area and treat it using LID treatment measures.
 - ii. DMA 25: DMA 25 consists of the southern portion of the roof on Building B as well as the southern roof of Building C and the impervious pavement area west of Building C.
 1. The area south of Building B contains a 10-foot wide AT&T easement and a 5-foot wide communication easement in which a bioretention facility cannot be placed. Therefore the roof drainage must be routed below grade away from the building, and cannot be treated in the planting adjacent to the downspouts, and there is insufficient landscape area to add treatment planters for these areas.
 2. The roof drainage from the south side of Building C must be routed down and through the building in order to avoid discharging on the south of the building, due to an existing 10-foot wide CalWater easement in which a bioretention facility cannot be placed. The plumbing through the building is too low to discharge to an LID treatment facility.
 3. The pavement area to the west of Building C is provided for fire department access and move-in/move-out loading, and therefore cannot accommodate landscaping.

2. Feasibility/Infeasibility of Off-Site LID Treatment. The possibility of providing off-site LID treatment was found to be infeasible for the following reasons.

- a. The project proponent does not own or otherwise control land within the same watershed of the project that can accommodate in perpetuity off-site bioretention facilities adequately sized to treat the runoff volume of the primary project.
- b. There are no regional LID stormwater mitigation programs available to the project for in-lieu C.3 compliance.