SAN MATEO COUNTYWIDE
Water Pollution Prevention Program
Clean Water. Healthy Community.

C.3 and C.6 Development Review Checklist

Municipal Regional Stormwater Permit (MRP 3.0)
Stormwater Controls for Development Projects

City of East Palo Alto
Building Department
1960 Tate Street
East Palo Alto, CA 94303
(650) 853-3189
https://www.ci.east-palo-alto.ca.us

Project Information (Enter information only into blue-highlighted cells - other cells are locked.)

I.A Enter Project Data (For "C.3 Regulated Projects," data will be reported in the municipality's stormwater Annual Report.)

Project Name:	1933 Pulgas Avenue Townhomes	Case Number:	
Project Address:	1933 Pulgas Avenue	Cross Street:	Camellia Drive
Project APN:	063-492-280	Project Watershed:	San Francisquito
Applicant Name:	Cityview Development LLC Attn: Xue Li	Project Phase No.	
Applicant Phone:	(408) 666-6178	Applicant Email Address:	omeiusa667@gmail.com; cityviewepa@gmail.com

Development Type: (check all that apply)

- ☐ Small Single-Family Home Project (<10,000 sq. ft. of created and/or replaced impervious surface[1])
- ☐ Large Single-Family Home Project (≥10,000 sq. ft. of created and/or replaced impervious surface[1])
- ☐ Subdivision - Residential: Two or more lot development[2] # of units:
- ☑ Multi-Family Residential # of units: 58
- ☐ Commercial
- ☐ Industrial, Manufacturing
- ☐ Mixed-Use # of units:
- ☑ New, widened or reconstructed roads related to parcel-based projects[3]
- ☐ Stand-alone pavement maintenance or construction work, or similar work related to parcel-based projects[3]
- ☐ Other redevelopment project as defined by MRP: creating, adding and/or replacing exterior existing impervious surface on a site where past development has occurred.
- ☐ Institutional: schools, libraries, jails, etc.
- ☐ Parks and trails, camp grounds, other recreational
- ☐ Kennels, Ranches
- ☐ Other, Please specify

Project Description (Don't include past or future phases)[4]: Demolish residential improvements on the existing lot and construct ten, three-story buildings and appurtenant site improvements including widening the existing roadway.

I.A.1 Total Project Area: 93,114 square feet (on and off-site)
I.A.2 Total Area on-site: 92,531 square feet (on the private property)
I.A.3 Total Area off-site: 583 square feet (frontage or area in Public Right of Way being improved)
I.A.4 Total Area of land disturbed during construction: 85,000 square feet
(Include all project on-site and off-site areas of clearing, grading, excavating and stockpiling)
I.A.5 Site slope: 1 %

I.A.6 Certification:

I certify that the information provided on this form is correct and acknowledge that, should the project exceed the amount of new and/or replaced impervious surface provided in this form, the as-built project may be subject to additional improvements.

☐ Preliminary Calculations Attached ☑ Final Calculations Attached ☐ Stormwater Control Plan Attached

Name of person completing the form:	Randall R. West - Lera & Braze Engineering, Inc.	Title:	Senior Design Engineer
Signature:	Randall R. West	Date:	12/19/24
Phone Number:	(510) 887-4086	E-mail:	rwest@leabraze.com

[1] Small and Large Detached Single-Family Homes that are not part of a common plan of development[2].

[2] Common Plans of Development (subdivisions or contiguous, commonly owned lots, for the construction of two or more homes developed within 1 year of each other), and/or constructed with shared utilities, are not considered single family home projects by the MRP.

[3] Stand-alone roadway or pavement projects, or pavement work that is part of a project, creating or replacing 5,000 sq. ft. or more of impervious surface may be subject to C.3 requirements - both in public and private areas. See the Roads Factsheet at: www.flowstobay.org/newdevelopment

[4] Project description examples: 5-story office building, industrial warehouse, residential with five 4-story buildings for 200 condominiums, etc.

I.B Is the project a "C.3 Regulated Project" per MRP Provision C.3.b? (Use table below to make determination.)

I.B.1 Enter the amount of Impervious surface Retained, Replaced or Created[5] by the project (use DMA Table in Worksheet D):

Table I.B.1 Impervious[5] and Pervious[5] Surfaces (Match DMA Summary Table in Worksheet D, if applicable)

	Pre-Project	Post-Project			
	I.B.1.a	**I.B.1.b**	**I.B.1.c**	**I.B.1.d**	**I.B.1.e**
Impervious Surfaces (IS) (e.g., sidewalks, driveways, parking areas, patios, roads, rooftops, pools, pathways, etc.)	Existing (Pre-Project) Impervious Surface (sq.ft.)	Existing Impervious Surface to be Retained[5] (sq.ft.)	Existing Impervious Surface to be Replaced[5] (sq.ft.)	New Impervious Surface to be Created[5] (sq.ft.)	Post-Project Impervious Surface (sq.ft.) (=b+c+d)
On-site area (within the parcel/private site boundaries)	40,909	6,157	34,752	34,357	75,266
Off-site area (e.g., frontage/other area in Public Right of Way)	465	-	-		-
Subtotal:	41,374	6,157	34,752	34,357	75,266
Total Impervious Surface Replaced and Created: ***(sum of totals for columns I.B.1.c and I.B.1.d):***		**I.B.1.f**	**69,109 sq. ft.**		
Pervious Surfaces (PS) (e.g., landscaping, pervious pavement, bioretention areas, parking strips, street trees, etc. - both on-site and off-site)	Existing (Pre-Project) Pervious Surface (sq.ft.)				Post-project Pervious Surface (sq.ft.)
All pervious off-site area (e.g., frontage/Public Right of Way)[6]	118				-
Landscaping area on-site	51,622				6,513
Pervious Pavement area on-site	-			**I.B.1.g**	11,335
Green Roof area on-site	-				-
Subtotal:	51,740	**50% Rule Calculation**			17,848
Total Project Area (should be equal to **I.A.1**)	93,114	**I.B.1.h**	**85** %		93,114

I.B.2 Please review and attach additional worksheets as required below using the Total Impervious Surface (IS) Replaced or Created in cell **I.B.1.f** from Table **I.B.1** above and other factors:

	Review Steps	**Check One** Yes	No	**Attach Worksheet**
I.B.2.a	Does this project involve any earthwork and/or stockpiling of soil, aggregates etc? If YES, then Check Yes, and Complete Worksheet A. If NO, then Check No, and go to I.B.2.b	☑	☐	A
I.B.2.b	Is **I.B.1.f** greater than or equal to 2,500 sq.ft? If YES, then the Project is subject to Provision C.3.i. - complete Worksheets B, C and go to I.B.2.c. If NO, go to I.B.2.i - or ask municipal staff for Small Project Checklist.	☑	☐	B, C
I.B.2.c	Does the 50% rule apply to the project? Is **I.B.1.h** 50% or more? If YES, site design, source control and treatment requirements apply to the entire on-site area. Continue to I.B.2.d If NO, these requirements apply only to the impervious surface created and/or replaced. Continue to I.B.2.d	☑	☐	
I.B.2.d	Is this project a Roadway Project and is **I.B.1.f** greater than or equal to 5,000 sq.ft? If YES, project may be C.3 Regulated Project. See the Roadways Fact Sheet at: www.flowstobay.org/newdevelopment If NO, go to I.B.2.e	☐	☑	
I.B.2.e	Is **I.B.1.f** greater than or equal to 5,000 sq.ft? Or 10,000 sq.ft. for a Large Single-Family Home? (Small Single-Family Homes are exempt) If YES, project is a C.3 Regulated Project - complete Worksheet D. Then continue to I.B.2.f. If NO, then skip to I.B.2.g.	☑	☐	D
I.B.2.f	Is **I.B.1.f** greater than or equal to 43,560 sq.ft, (i.e., one acre)? If YES, project may be subject to Hydromodification Management requirements - complete Worksheet E then go to I.B.2.g. If NO, then go to I.B.2.g.	☑	☐	E
I.B.2.g	Is **I.A.4** greater than or equal to 43,560 sq.ft., (i.e., one acre)? [**SWRS Site**: Subject to monthly inspections from Oct 1 to April 30; weekly inspections if located in ASBS Watershed] For more information see: www.swrcb.ca.gov/water_issues/programs/stormwater/construction.shtml If YES, check box, obtain coverage under CA Construction General Permit & submit Notice of Intent to municipality- go to I.B.2.h. If NO, then go to I.B.2.h.	☑	☐	
I.B.2.h	Is this a Special Project or does it have the potential to be a Special Project? If YES, complete Worksheet F - then continue to I.B.2.i. If NO, go to I.B.2.i.	☐	☑	F
I.B.2.i	Is this project a **Hillside Site**? Or a **High Priority Site**? Hillside Sites include those with ≥ 20% slope (see **I.A.5**) disturbing greater than or equal to 5,000 square feet. High Priority Sites include: 1) Project that involve grading in excess of 250 c.y. or requiring a Grading or Land Clearing Permit; or 2) Project with land disturbance of: a.) 1 sq. ft. or greater within the Fitzgerald Marine Reserve ASBS Watershed, b.) 1,000 sq. ft. or greater for areas within 100 feet of a creek, wetland, or coastline; or 3) Any public project involving work within a waterway or any private project involving work within a waterway that requires a permit issued by the Planning and Building Department. [**SWRS Site:** Subject to monthly inspections from Oct 1 to April 30; weekly inspections if located in ASBS Watershed] If YES, complete section G-2 on Worksheet G - then continue to I.B.2.j. and complete the Certification in Section **I.A.6**	☑	☐	G
I.B.2.j	**For Municipal Staff Use Only**: Are you using Alternative Certification for the project review? If YES, then fill out section G-1 on Worksheet G. Fill out other sections of Worksheet G as appropriate. See cell **I.B.1.g** above - Is the project installing 3,000 square feet or more of pervious pavement? If YES, then fill out section G-3 on Worksheet G. Add to Municipal Inspection Lists (C.3 and C.3.h)	☐ ☐	☐ ☐	G

[5] "Retained" means to leave existing impervious surfaces in place; "Replaced" means to install new impervious surface where existing impervious surface is removed anywhere on the same site; and "Created" means the amount of new impervious surface being proposed which exceeds the total amount of existing impervious surface at the site.

[6] Per the MRP, pavement that meets the following definition of pervious pavement is NOT an impervious surface: pavement that stores and infiltrates rainfall at a rate equal to immediately surrounding unpaved, landscaped areas, or that stores and infiltrates the rainfall runoff volume described in Provision C.3. Gravel pavement is not pervious unless it is constructed using pervious pavement system designs or runoff flows to adjacent landscaping. Pervious off-site areas include landscaped areas such as parking strips and street trees; off-site pervious pavement includes pervious concrete gutters and interlocking permeable concrete paver sidewalks, etc. 7/1/23

Worksheet A

C.6 – Construction Stormwater BMPs

Identify Plan sheet showing the appropriate construction Best Management Practices (BMPs) used on this project:
(Applies to all projects with earthwork)

Yes	Plan Sheet	Best Management Practice (BMP)
☑	ER-1 & ER-2	Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, rinse water from architectural copper, and non-stormwater discharges to storm drains and watercourses.
☑	ER-1 & ER-2	Store, handle, and dispose of construction materials/wastes properly to prevent contact with stormwater.
☑	ER-1 & ER-2	Do not clean, fuel, or maintain vehicles on-site, except in a designated area where wash water is contained and treated.
☑	ER-1 & ER-2	Train and provide instruction to all employees/subcontractors re: construction BMPs.
☑	ER-1	Protect all storm drain inlets in vicinity of site using sediment controls such as berms, fiber rolls, or filters.
☑	ER-1	Limit construction access routes and stabilize designated access points.
☑	SW-1	Attach the San Mateo Countywide Water Pollution Prevention Program's construction BMP plan sheet to project plans and require contractor to implement the applicable BMPs on the plan sheet.
☑	ER-1	Use temporary erosion controls to stabilize all denuded areas until permanent erosion controls are established.
☑	ER-1	Delineate with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses.
☑	ER-1 & ER-2	Provide notes, specifications, or attachments describing the following: ■ Construction, operation and maintenance of erosion and sediment controls, include inspection frequency; ■ Methods and schedule for grading, excavation, filling, clearing of vegetation, and storage and disposal of excavated or cleared material; ■ Specifications for vegetative cover & mulch, include methods and schedules for planting and fertilization; ■ Provisions for temporary and/or permanent irrigation.
☑	ER-1 & ER-2	Perform clearing and earth moving activities only during dry weather.
☐	N/A	Use sediment controls or filtration to remove sediment when dewatering and obtain all necessary permits.
☑	ER-1	Trap sediment on-site, using BMPs such as sediment basins or traps, earthen dikes or berms, silt fences, check dams, soil blankets or mats, covers for soil stock piles, etc.
☑	ER-1	Divert on-site runoff around exposed areas; divert off-site runoff around the site (e.g., swales and dikes).
☑	ER-1	Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.

Worksheet B

C.3 – Source Controls

Select appropriate source controls and identify the detail/plan sheet where these elements are shown.

Yes	Detail/Plan Sheet No.	Features that require source control	Source Control Measures (Refer to Local Source Control List for detailed requirements)
☑	C-2 & C-3	Storm Drain	Mark on-site inlets with the words "No Dumping! Flows to Bay" or equivalent.
☐		Floor Drains	Plumb interior floor drains to sanitary sewer [or prohibit].
☐		Parking garage	Plumb interior parking garage floor drains to sanitary sewer.[8]
☑	C-2	Landscaping	■ Retain existing vegetation as practicable. ■ Follow ReScape (www.rescapeca.org) principles. Select diverse species appropriate to the site. Include plants that are pest- and/or disease-resistant, drought-tolerant, and/or attract beneficial insects. ■ Minimize use of pesticides and quick-release fertilizers. ■ Use efficient irrigation system; design to minimize runoff.
☐		Pool/Spa/Fountain	Provide connection to the sanitary sewer to facilitate draining.[8]
☐		Food Service Equipment (non-residential)	Provide sink or other area for equipment cleaning, which is: ■ Connected to a grease interceptor prior to sanitary sewer discharge.[8] ■ 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 signed to require equipment washing in this area.
☐		Refuse Areas	■ Provide a roofed and enclosed area for dumpsters, recycling containers, etc., designed to prevent stormwater run-on and runoff. ■ Connect any drains in or beneath dumpsters, compactors, and tallow bin areas serving food service facilities to the sanitary sewer.[8] ■ For more information, see the New Development Projects Litter Reduction Fact Sheet at: https://www.flowstobay.org/wp-content/uploads/2021/06/New-Dev-Litter-Reduction-Fact-Sheet-
☐		Outdoor Process Activities[9]	Perform process activities either indoors or in roofed outdoor area, designed to prevent stormwater run-on and runoff, and to drain to the sanitary sewer.[8]
☐		Outdoor Equipment/ Materials Storage	■ Cover the area or design to avoid pollutant contact with stormwater runoff. ■ Locate area only on paved and contained areas. ■ Roof storage areas that will contain non-hazardous liquids, drain to sanitary sewer[8], and contain by berms or similar.
☐		Vehicle/ Equipment Cleaning	■ Roofed, pave and berm wash area to prevent stormwater run-on and runoff, plumb to the sanitary sewer[8], and sign as a designated wash area. ■ Commercial car wash facilities shall discharge to the sanitary sewer.[8]
☐		Vehicle/ Equipment Repair and Maintenance	■ Designate repair/maintenance area indoors, or an outdoors area designed to prevent stormwater run-on and runoff and provide secondary containment. Do not install drains in the secondary containment areas. ■ No floor drains unless pretreated prior to discharge to the sanitary sewer.[8] ■ Connect containers or sinks used for parts cleaning to the sanitary sewer.[8]
☐		Fuel Dispensing Areas	■ Fueling areas shall have impermeable surface that is a) minimally graded to prevent ponding and b) separated from the rest of the site by a grade break. ■ Canopy shall extend at least 10 ft. in each direction from each pump and drain away from fueling area.
☐		Loading Docks	■ Cover and/or grade to minimize run-on to and runoff from the loading area. ■ Position downspouts to direct stormwater away from the loading area. ■ Drain water from loading dock areas to the sanitary sewer.[8] ■ Install door skirts between the trailers and the building.
☐		Fire Sprinklers	Design for discharge of fire sprinkler test water to landscape or sanitary sewer.[8]
☐		Miscellaneous Drain or Wash Water	■ Drain condensate of air conditioning units to landscaping. Large air conditioning units may connect to the sanitary sewer.[8] ■ Roof drains from equipment drain to landscaped area where practicable. ■ Drain boiler drain lines, roof top equipment, all wash water to sanitary sewer.[8]
☐		Architectural Copper Rinse Water	■ Drain rinse water to landscaping, discharge to sanitary sewer[8], or collect and dispose properly offsite. See flyer "Requirements for Architectural Copper."[10]

8 Any connection to the sanitary sewer system is subject to sanitary district approval.
9 Businesses that may have outdoor process activities/equipment include machine shops, auto repair, industries with pretreatment facilities.
10 See the Flowstobay website: https://flowstobay.org/wp-content/uploads/2020/04/ArchitecturalcopperBMPs.pdf

Worksheet C

Low Impact Development – Site Design Measures

Select Appropriate Site Design Measures *(Required for C.3 Regulated Projects; all other projects are encouraged to implement site design measures, which may be required at municipality discretion.) Projects that create and/or replace between 2,500 and 5,000 sq.ft. of impervious surface, and detached single family homes that create/replace between 2,500 and 10,000 sq.ft. of impervious surface, must include* ***one of Site Design Measures a through f*** *(Provision C.3.i requirements).*[10] *Larger (>=5,000 sq.ft) projects must also include applicable Site Design Measures g through i. Consult with municipal staff about requirements for your project.*

Select appropriate site design measures and Identify the Plan Sheet where these elements are shown.

Yes	Plan Sheet No.	Site Design Measures
☐		a. Direct roof runoff into cisterns or rain barrels and use rainwater for irrigation or other non-potable use.
☐		b. Direct roof runoff onto vegetated areas.
☑	SCP-2.0	c. Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.
☐		d. Direct runoff from driveways and/or uncovered parking lots onto vegetated areas.
☑	SCP-2.0	e. Construct sidewalks, walkways, and/or patios with pervious or permeable surfaces. Use the specifications in the C.3 Regulated Projects Guide downloadable at www.flowstobay.org/newdevelopment
☐		f. Construct bike lanes, driveways, and/or uncovered parking lots with pervious surfaces. Use the specifications in the C.3 Regulated Projects Guide downloadable at www.flowstobay.org/newdevelopment
☐		g. Limit disturbance of natural water bodies and drainage systems; minimize compaction of highly permeable soils; protect slopes and channels; and minimize impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies;
☐		h. Conserve natural areas, including existing trees, other vegetation and soils.
☐		i. Minimize impervious surfaces.

Regulated Projects can also consider the following site design measures to reduce treatment system sizing:

Yes	Plan Sheet No.	Site Design Measures
☑	SCP-2.0	j. Self-treating area (see Section 4.2 of the C.3 Regulated Projects Guide)
☑	SCP-2.0	k. Self-retaining area (see Section 4.3 of the C.3 Regulated Projects Guide)

[10] See MRP Provision C.3.a.i.(6) for non-C.3 Regulated Projects, C.3.c.i.(2)(a) for Regulated Projects, C.3.i for projects that create/replace between 2,500 and 5,000 sq.ft. of impervious surface and detached single family homes that create/replace between 2,500 and 10,000 sq.ft. of impervious surface.

Worksheet D

C.3 Regulated Projects and Non-Regulated GI Projects

Stormwater Treatment Measures and Site Design Measures by Drainage Management Area (DMA)

Check all applicable boxes, answer questions and fill in cells related to the site design and treatment measure(s) included in the project.

Drainage Management Area Summary Table

Complete the information below at the Entitlement, Building Permit and Certificate of Occupancy stages for Regulated C.3 Projects and Non-Regulated Green Infrastructure Projects. (The first four cells are automatically filled in from the Project Info sheet.)

Project Name:	1933 Pulgas Avenue Townhomes
Project Address:	1933 Pulgas Avenue
Cross Streets:	Camellia Drive
APN:	063-492-280
Special Project[11]?	No
C.3 Regulated?	Yes
Public or Private Project?	Private

of C.3.d amount of runoff treated by Non-LID Systems on the Special Project site.

Public projects are those on public property or ROW; private projects are on privately-owned property but can include improvements in the public ROW required as part of the project.

DMA Identification Number	Impervious Area[12] (ft^2)	Pervious Area[13] (ft^2)	Type of Site Design Measure or Treatment Measure[14]	Sizing Criteria Used[15]	Size Required[16]	Size Provided
DMA 1	4,402	180	Flow-through planter lined with underdrain	2c: Flow	177 sqft.	180 sqft.
DMA 2	4,298	180	Flow-through planter lined with underdrain	2c: Flow	173 sqft.	180 sqft.
DMA 3	4,422	180	Flow-through planter lined with underdrain	2c: Flow	178 sqft.	180 sqft.
DMA 4	3,644	160	Flow-through planter lined with underdrain	2c: Flow	147 sqft.	160 sqft.
DMA 5	3,596	160	Flow-through planter lined with underdrain	2c: Flow	145 sqft.	160 sqft.
DMA 6	8,454	207	Bioretention unlined with underdrain	2c: Flow	339 sqft.	321 sqft.
DMA 7	5,521	108	Bioretention unlined with underdrain	2c: Flow	222 sqft.	233 sqft.
DMA 8	5,519	99	Bioretention unlined with underdrain	2c: Flow	222 sqft.	233 sqft.
DMA 9	6,998	141	Bioretention unlined with underdrain	2c: Flow	281 sqft.	321 sqft.
DMA 10	3,967	276	Bioretention unlined w/o underdrain	2c: Flow	160 sqft.	242 sqft.
DMA 11	6,073	399	Bioretention unlined w/o underdrain	2c: Flow	245 sqft.	293 sqft.
DMA 12	5,915	424	Bioretention unlined w/o underdrain	2c: Flow	239 sqft.	355 sqft.
DMA 13	5,030	352	Bioretention unlined w/o underdrain	2c: Flow	203 sqft.	293 sqft.
DMA 14	5,637	350	Bioretention unlined w/o underdrain	2c: Flow	227 sqft.	293 sqft.
DMA 15	851	-	Bioretention unlined with underdrain	2c: Flow	35 sqft.	35 sqft.
DMA 16	851	-	Bioretention unlined with underdrain	2c: Flow	35 sqft.	35 sqft.
DMA 17	88	11,335	Pervious pavement w/o underdrain	1b: Volume	71 Cuft.	2,721 cuft.
DMA 18	-	3,297	Self-treating area	N/A	N/A	N/A
add rows, if needed						
TOTALS	75,266	17,848	N/A	N/A	N/A	N/A
Totals from Project Info Sheet Cells	75,266	17,848				

Is the project harvesting and using rainwater? Yes ☐

Rainwater Harvesting/Use Measures:

- ☐ Rainwater Harvesting for indoor non-potable water use
- ☐ Rainwater Harvesting for landscape irrigation use

A long term Operations and Maintenance (O&M) Agreement and Plan for this project will be required. Please contact the municipality for an agreement template and/or consult the C.3 Regulated Projects Guide and table of contents at www.flowstobay.org/newdevelopment for maintenance plan templates for specific facility types.

11 Special Projects are smart growth, high density, transit-oriented or affordable housing developments with the criteria defined in Provision C.3.e.ii.(2), (3) or (4) (see Worksheet F).

12 The sq.ft. of impervious area within the Drainage Management Area

13 The sq.ft. of pervious area within the Drainage Management Area

14 "Lined" refers to an impermeable liner placed on the bottom of a bioretention area, such that no infiltration into native soil occurs.

15 Select from the menu which of the following Provision C.3.d.i hydraulic sizing methods was used, if any. Volume based approaches: 1(a) Urban Runoff Quality Management approach, or 1(b) 80% capture approach (recommended volume-based approach). Flow-based approaches: 2(a) 10% of 50-year peak flow approach, 2(b) 2 times the 85th percentile rainfall intensity approach, 2(c) 0.2-Inch-per-hour intensity approach (recommended flow-based approach - also known as the 4% rule for bioretention), or 3 Combination flow and volume-based approach. "Other" is used for Site Design Measures such as Self-Retaining or Self-Treating Areas.

16 Each DMA should drain to one treatment area (unless it is self-treating or self-retaining). If multiple DMAs are draining to one treatment area, they should be combined into one DMA. If one DMA drains to multiple treatment areas, that DMA should be split up so there is one DMA per treatment area (which allows the treatment area to be properly sized).

Worksheet E
Hydromodification Management

E-1 Is the project a Hydromodification[17] Management (HM) Project?

E-1.1 Is the total impervious area increased over the pre-project condition?

- ☑ Yes. Continue to E-1.2
- ☐ No. Go to Item E-1.3 and check “No.”

E-1.2 Is the site located in an HM Control Area per the HM Control Areas map (Appendix H of the C.3 Regulated Projects Guide)?

- ☐ Yes. Go to E-1.3 and Check "Yes".
- ☑ No. Attach map, indicating project location. Go to Item E-1.3 and check “No.”

E-1.3 Is the project a Hydromodification Management Project?

- ☐ Yes. The project is subject to HM requirements in Provision C.3.g of the Municipal Regional Stormwater Permit.
- ☑ No. The project is EXEMPT from HM requirements.

► If the project is subject to the HM requirements, incorporate in the project flow duration control measures designed such that post-project discharge rates and durations match pre-project discharge rates and durations.

► The Bay Area Hydrology Model (BAHM) has been developed to help size flow duration controls. See www.clearcreeksolutions.info/downloads. Guidance is provided in Chapter 7 of the C.3 Regulated Projects Guide.

E-2 Incorporate HM Controls (if required)

Are the applicable items provided with the Plans?

Yes	No	NA	
☐	☐	☐	Site plans with pre- and post-project impervious surface areas, surface flow directions of entire site, locations of flow duration controls and site design measures per HM site design requirement
☐	☐	☐	Soils report or other site-specific document showing soil type(s) on site
☐	☐	☐	If project uses the Bay Area Hydrology Model (BAHM), a list of model inputs and outputs.
☐	☐	☐	If project uses custom modeling, a summary of the modeling calculations with corresponding graph showing curve matching (existing, post-project, and post-project with HM controls curves), goodness of fit, and (allowable) low flow rate.
☐	☐	☐	If project uses the Impracticability Provision, a listing of all applicable costs and a brief description of the alternative HM project (name, location, date of start up, entity responsible for maintenance).
☐	☐	☐	If the project uses alternatives to the default BAHM approach or settings, a written description and rationale.

17 Hydromodification is the change in a site’s runoff hydrograph, including increases in flows and durations that results when land is developed (made more impervious). The effects of hydromodification include, but are not limited to, increased bed and bank erosion of receiving streams, loss of habitat, increased sediment transport and/or deposition, and increased flooding. Hydromodification control measures are designed to reduce these effects.

MAP INDEX FOR HM CONTROL AREA IN SELECTED AREAS OF SAN MATEO COUNTY*

Legend

- Major Road and Highway
- Jurisdictional Boundary
- HM Applicable Area
- Exempt Area

N

0 0.5 1 2 3 4 Miles

DALY CITY
BROADMOOR
COLMA
BRISBANE
SOUTH SAN FRANCISCO
PACIFICA
HWY 1
I-280
Skyline Blvd
SAN BRUNO
PACIFICA
MILLBRAE
BURLINGAME
BURLINGAME
El Camino Real
US 101
HILLSBOROUGH
SAN MATEO
FOSTER CITY
MONTARA
Alameda de las Pulgas
REDWOOD CITY
MOSS BEACH
EL GRANADA
6th Ave/Laurel St
BELMONT
SAN CARLOS
MENLO PARK
REDWOOD CITY
ATHERTON
EAST PALO ALTO
Atherton Rd
HALF MOON BAY

San Francisco Bay

Pacific Ocean

1933 Pulgas Avenue
East Palo Alto, CA
Exempt from HM

* This map series includes only areas where the HM control area boundary does NOT follow major roadways.

Worksheet G
(For municipal staff use only)

G-1 **Alternative Certification:** Were the treatment and/or HM control sizing and design reviewed by a qualified third-party professional that is not a member of the project team or agency staff?

☐ Yes ☐ No Name of Reviewer: _____

G-2 **Is project a Construction Stormwater Regulated Site (SWRS Site)?** SWRS Sites include:
1)Site that disturbs 1 acre or more of land (see I.B.2.f);
2)Hillside Site (see I.B.2.i); and
3)High Priority Site (see I.B.2.i).
These sites are subject to monthly inspections from Oct 1 to April 30. See MRP Provision C.6.e.ii.(2)(b) and C.6.e.ii.(2)(c). These sites in the Fitzgerald Marine Reserve ASBS Watershed are subject to weekly inspections per the State Ocean Plan.

☐ Yes ☐ No If yes, add site to Staff's SWRS Construction Site Inspection List

G-3 **Inspections of Sites with Pervious Pavement**: Regulated projects that are installing 3,000 sq.ft. or more of pervious pavement (see cell **I.B.1.g**) (excluding private-use patios in single family homes, townhomes, or condominiums) must have the pavement system inspected by the jurisdiction upon completion of the installation and the site must be added to the jurisdiction's list of sites needing inspections at least once every five years – see provision C.3.h. Pervious pavement systems include pervious concrete, pervious asphalt, pervious pavers and grid pavers etc. and are described in the C3 Regulated Projects Guide downloadable at: www.flowstobay.org/newdevelopment.

☐ Yes ☐ No If yes, add site to Staff's Lists for Construction and O&M inspections (C.3 and C.3.h)

Operations and Maintenance (O&M) Submittals

G-4 Stormwater Treatment Measure and/HM Control Owner or Operator's Information:

Name: _____

Address: _____

Phone: _____ Email: _____

► Applicant must call for inspection and receive inspection at completion of installation of treatment measures and/or hydromodification management controls including any pervious pavement areas of 3,000 sq.ft. or more.

The following questions apply to C.3 Regulated Projects and Hydromodification Management Projects.

		Yes	No	N/A
G-4.1	Was maintenance plan submitted?	☐	☐	☐
G-4.2	Was maintenance plan approved?	☐	☐	☐
G-4.3	Was maintenance agreement submitted? (Date executed: _____)	☐	☐	☐

► *Attach the executed maintenance agreement as an appendix to this checklist.*

G-5 **Annual Operations and Maintenance (O&M) Submittals (for municipal staff use only):**

For C.3 Regulated Projects and Hydromodification Management Projects, indicate the dates on which the Applicant submitted annual reports for project O&M:

_____

G-6 **Comments (for municipal staff use only):**

G-7 NOTES (for municipal staff use only):

Project Info Notes: _____

Worksheet A Notes: _____

Worksheet B Notes: _____

Worksheet C Notes: _____

Worksheet D Notes: _____

Worksheet E Notes: _____

Worksheet F Notes: _____

G-8 Project Close-Out (for municipal staff use only):

		Yes	No	N/A
8.1	Were final Conditions of Approval met?	☐	☐	
8.2	Was initial inspection of the completed treatment/HM measure(s) conducted? (Date of inspection: _____)	☐	☐	☐
8.3	Was maintenance plan submitted? (Date executed: _____)	☐	☐	☐
8.4	Was project information provided to staff responsible for O&M verification inspections? (Date provided to inspection staff: _____)	☐	☐	☐

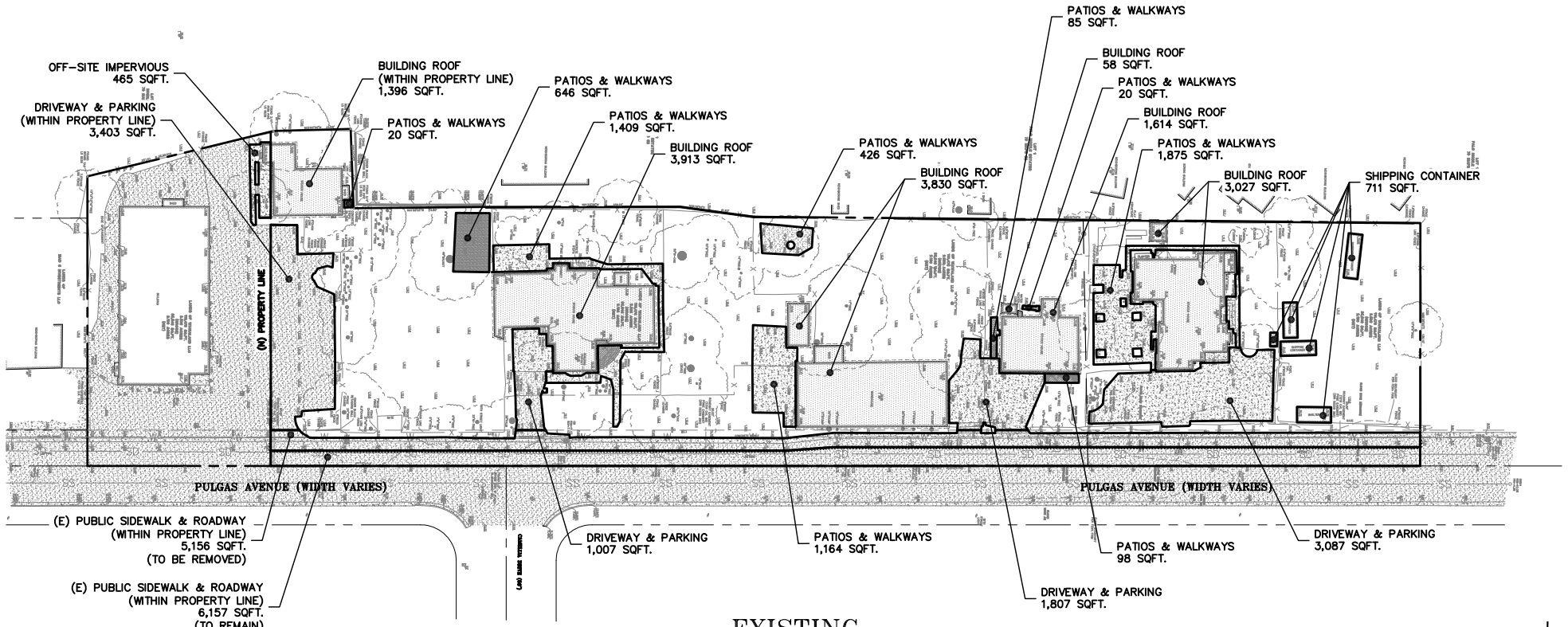
G-9 Project Close-Out (Continued -- for municipal staff use only):

Name of staff confirming project is closed out: _____

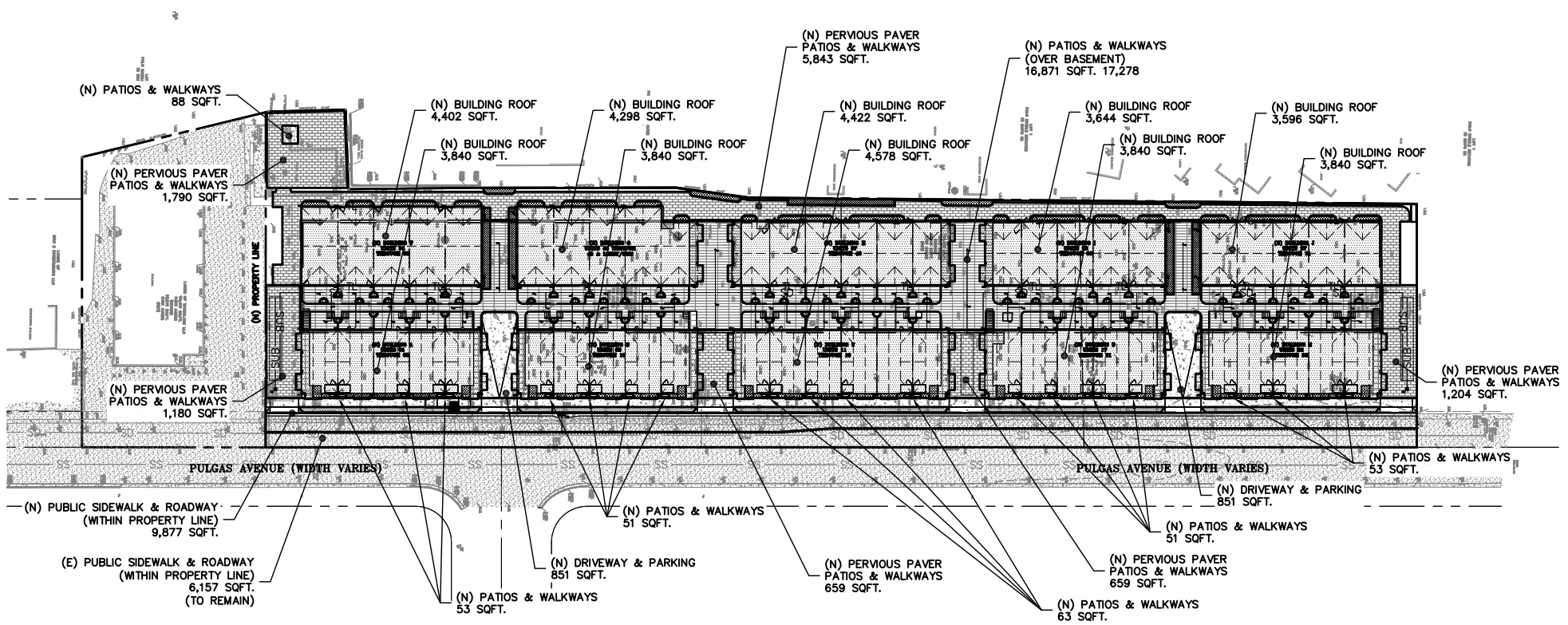
Signature: _____ Date: _____

Name of O&M staff receiving information: _____

Signature: _____ Date: _____



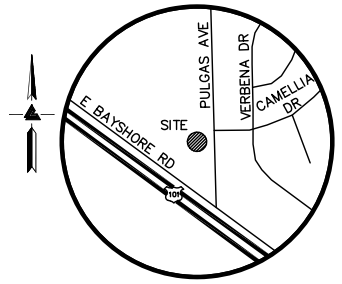
EXISTING



PROPOSED

0 20 40 80

SCALE: 1" = 40'



VICINITY MAP

NO SCALE

HATCH LEGEND

- BUILDING ROOF
- CONCRETE
- ASPHALT
- BRICK PAVERS
- D.G. / GRAVEL
- WATER
- PERVIOUS PAVERS
- SYNTHETIC TURF
- LAWN
- BIO-RETENTION

DEVELOPMENT AREA INFORMATION

TOTAL SITE AREA	92,531 SQUARE FEET (2.124 ACRE)			
TOTAL PROJECT AREA	93,114 SQUARE FEET (2.138 ACRE)			
TOTAL DISTURBED AREA	85,000 SQUARE FEET (1.951 ACRE)			
IMPERVIOUS AREAS	EXISTING TOTAL S.F.	REMOVED TOTAL S.F.	NEW TOTAL S.F.	PROPOSED TOTAL S.F.
BUILDING ROOF AREA*	13,838	13,838	40,300	40,300
DRIVEWAY & PARKING	9,304	9,304	1,702	1,702
IMPERVIOUS PATIOS & WALKWAYS	5,743	5,743	17,230	17,230
PUBLIC SIDEWALK & ROADWAY	11,313	5,156	9,877	16,034
SHIPPING CONTAINERS	711	711	0	0
OFF-SITE IMPERVIOUS AREA	465	465	0	0
TOTAL IMPERVIOUS AREA	41,374	35,217	69,109	75,266
NET CHANGE IN IMPERVIOUS AREA	+ 33,892 SQFT (NET INCREASE)			
PERVIOUS PAVING				
PERVIOUS PAVER PATIOS & WALKWAYS	0	0	11,335	11,335
TOTAL PERVIOUS PAVING AREA	0	0	0	0
NET CHANGE IN PERVIOUS PAVING AREA	+ 11,335 SQFT (NET INCREASE)			
TOTAL DEVELOPED AREA	41,374	35,217	79,027	86,601
NET CHANGE IN DEVELOPED AREA	+ 45,227 SQFT (NET INCREASE)			
ON-SITE LANDSCAPE / TREATMENT AREA	51,622			6,513
OFF-SITE LANDSCAPE AREA	118			0
TOTAL PROJECT PERVIOUS AREA	51,740			17,848

*HARDSCAPE BELOW ROOF OVERHANGS INCLUDED IN ROOF AREA

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
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PLEASANTON
SAN JOSE
WWW.LEABRAZE.COM

1933 PULGAS AVENUE EAST PALO ALTO, CALIFORNIA

APN: 063-492-280

COUNTY OF SAN MATEO

IMPERVIOUS SURFACE EXHIBIT

–	–
–	–
–	–
–	–
–	–
REVISIONS	BY
JOB NO:	2240115
DATE:	10-14-24
SCALE:	AS NOTED
DESIGN BY:	AV
CHECKED BY:	JC
SHEET NO:	

SCP-1.0