HILLSDALE TERRACE

2700, 2728, 2790 South El Camino Real
San Mateo, CA

APN: 039-352-060, 039-352-070, 039-352-090

Stormwater Control Plan Report

February 18, 2015

Prepared by:

GREEN
CIVIL ENGINEERING

Chin Hang Wong, PE

204 East 2nd Avenue, #820, San Mateo, CA 94401

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Contents

Appendices

I. Introduction & Project Setting

The following Stormwater Control Plan Report (SWCP) documents the proposed post-construction Best Management Practices (BMPs) necessary to support the proposed site development known as Hillsdale Terrace, located at 2700, 2728, &2790 South El Camino Real, San Mateo, California (APN: 039-352-060, 039-352-070, 039-352-090). The purpose of this SWCP is to provide preliminary calculations for sizing stormwater treatment measures designed to treat runoff from small storm events. This SWCP is intended to provide general concepts and guidelines to be followed by more detailed and comprehensive analyses. The project must comply with the San Mateo Countywide Water Pollution Prevention Program (Program), which requires post construction stormwater controls under Provision C.3 of the countywide municipal stormwater NPDES permit.

See the attached Exhibit A – Vicinity Map for location of project site.

A. Existing Conditions

The existing site is approximately 1.0 acre in size and is currently includes 3 parcels that will be re-developed after existing commercial improvements on parcel 2700 and 2728 are removed. The existing site consists of 2 buildings, asphalt concrete pavement parking areas, and some landscape areas. The site storm water from existing terrain of parcel 2700 and 2728 are from roofs, landscaped areas, and paved areas and is directed to the curb drains. Runoff on the vacant parcel 2790 would tend to pool on the irregular soil surface and eventually percolate into the subsurface. There was no evidence of seepage or springs detected on site.

See the attached Exhibit B - Topographic Survey Plan for existing site topography.

B. Constraints and Opportunities for Stormwater Control

Due to the high-density type development, combined with the existing soil condition, the post construction BMPs are being utilized to the maximum extent possible. The site design has many constraints but is maximizing opportunities to utilize landscape/open space to minimize the effect of impervious areas.
Per the project Geotechnical Investigation by Earth Investigations, the proposed project site is underlain by more than 21 ½ feet of unconsolidated soil that was interpreted to be alluvial deposits. On the Vacant parcel formerly occupied by a Texaco service station, the alluvial deposits were mantled by approximately 12 feet of undocumented fill. As reported by the San Mateo Health Service Agency, the measured depth to ground water was 10 feet.

The SWCP intends to deliver as much possible roof and patio runoff to flow-through planters, with perforated pipe subdrains, and as much possible walkway runoff to bio-retention areas prior to entering the conveyance system. Treatment BMPs are sized to treat runoff from rain intensity of 0.2 inches per hour. By implementing this design approach through landscape features that utilize the site gravity, the general runoff flow will be away from the proposed building to treatment measures.

The proposed Hillsdale Terrace project will consist of the following planned impervious and pervious surfaces:

- Proposed Impervious Surface Area (roof, paved areas, etc.)
  = 35,340 sf (81% of site)

- Proposed Pervious Surface Area (permeable paver, landscape areas, etc.)
  = 8,180 sf (19% of site)

Accordingly to San Mateo County C.3 Stormwater Technical Guidance on Hydromodification Management (HM) requirements, the project is not required to implement HM.

II. Selection and Preliminary Design of Stormwater Treatment BMPs

The SWCP has identified distinct drainage areas (tributary areas) that treat stormwater runoff. These drainage areas have been identified as follows:

Drainage Area 1 (BMP#1) consists of landscape and permeable paver of the roof area and it is self-treating. Drainage Area 2, 3, 4 and 5 are the remaining roof or skylight areas that will be carried down by down sprouts and treated by flow-through planters BMP#2, BMP#3, BMP#4 and BMP#5 on the ground floor. Drainage Area 6 and 7 are combined with ground level walkways and asphalt concrete private roads/driveway and stormwater in these areas will drain to the bio-retention area BMP#6 and BMP#7.

See Table 1 below and Exhibit C – Stormwater Control Plan C1.0 and Detail Plan C1.1 for the summary of required treatment areas and proposed treatment areas.

Table 1- Stormwater Treatment Area Summary

Treatment Area	Proposed Treatment Method (BMP#)	Drainage Area (sf)	Required Treatment Area (sf) 4% of Drainage Area	Provided Treatment Measure Area (sf)
Area #1	Self – Treating (BMP#1)	4990	-	-
Area #2	Flow – Through Planter (BMP#2)	3240	130	138
Area #3	Flow – Through Planter (BMP#3)	3170	127	138
Area #4	Flow – Through Planter (BMP#4)	7080	283	284
Area #5	Flow – Through Planter (BMP#5)	6550	262	292
Area #6	Bio-Retention Area (BMP#6)	2300	221	236
Area #7	Bio-Retention Area (BMP#7)	2600	196	231
Area #8	Landscape	1870	-	-

Notes

(1) Sizing guideline for Flow based treatment is 4% per County of San Mateo standards.
(2) 0.04 Sizing Factor based on 0.2 in/hour rainfall intensity divided by 5 in/hour soil infiltration rate.
(3) This project is applying 25% of treatment reduction credit for special project.

III. Source Control Measures

The project will incorporate all applicable source control measures as required by the City of San Mateo. Best Management Practices (BMPs) that will be implemented to further reduce the potential for pollutants to enter runoff or the storm drain system include but are not limited to the following:

Potential Source	Permanent BMPS	Operational BMPs
On-site drain inlets.	Inlets that could be accessed from sidewalks and driveways will be marked with A **"No dumping - Drains to Creek"** or similar message.	• Inlet markings will be inspected annually and replaced or renewed as needed. • Drain Inlets and related structures will be inspected and maintained as specified in the BMP Operation and Maintenance Plan (to be developed and submitted for approval).
Interior parking garages (in residential areas).	Any floor drains in covered parking areas are to be plumbed to the sanitary sewer.	Drains will be periodically inspected to avoid blockages and overflow.
Need for future indoor and structural pest control.	Standard building design minimizes potential needs for future pest control.	Residents will receive integrated pest management information.

Landscape/outdoor pesticide use.	• Any native trees, shrubs, and ground cover on the site will be preserved to the maximum extent possible. • Landscaping will be designed to minimize required irrigation and runoff, to promote surface infiltration, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. • Plantings for swales will be selected to be appropriate to anticipated soil and moisture conditions. • Where possible, pest-resistant plants will be selected, especially for locations adjacent to hardscape. • Plants will be selected appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	• All open space landscaping is to be maintained by a professional landscaping contractor. • Residents will receive integrated pest management information.
Restaurant in Building and any future tenants providing food service.	• All facilities approved for food service uses will be required to have interior map sink suitably sized for washing any floor mats, containers, or equipment per City of San Mateo use permit requirements	• Lessees will receive brochure regarding water pollution prevention tips and food service facility.
Vehicle and equipment cleaning	Vehicle and equipment cleaning areas are not planned for this site.	No car washing will be permitted on-site.
Fire sprinkler test water	Fire sprinkler test valves will be equipped with a means to divert test water to the sanitary sewer.	
Refuse areas	• Site refuse and recycled materials areas will be sized and detailed per the City of San Mateo requirements. • Other refuse areas to be indoors, floors will be sloped to prevent drainage to exterior. Any floor drains must connect to sanitary sewer. • Any and all dumpsters (if applicable) will be marked with a do not dump hazardous materials here or similar.	• Receptacles shall remain covered and be inspected regularly for leaks. Leaks shall be repaired. • Spills will be cleaned up using dry methods

IV. BMP Operation and Maintenance

All stormwater treatment facilities (flow through planters and bio-retention areas) and pervious paving area in this plan will be maintained by the owner of the subject property.

Summary of Maintenance Requirements

Flow-through planters and bio-retention areas remove pollutants from stormwater through a variety of physical, biological, and chemical treatment processes. The primary maintenance requirement for flow-through planters and bio-retention areas is the regular inspection and repair or replacement of the treatment measure's components. Typical routine maintenance consists of the following:

- Inspect inlets, cleanouts, flow-through planters and bio-retention area for obstructions and trash.
- Inspect flow-through planters and bio-retention area for ponded water. If ponded water does not drain within five days, remove surface soils and replace with sand. If mosquito larvae are observed, contact the San Mateo County Mosquito Abatement District at (650)-344-8592.
- Conduct a biannual (twice yearly) evaluation of the health of any plants, and remove any dead or diseased vegetation.
- Treat diseased vegetation, as needed, using preventative and low-toxic measures to the extent possible, and replace any dead plants.
- The use of pesticides and quick-release synthetic fertilizers shall be minimized, and the principles of integrated pest management (IPM) followed. Check with the local jurisdiction for any local policies regarding the use of pesticides and fertilizers.
- Maintain vegetation and the irrigation system. Prune and weed, as needed, to keep the bio-retention area neat and orderly in appearance.
- Inspect and, if needed, replace mulch before the wet season begins. Mulch should be replaced when erosion is evident or when the bio-retention area begins to look unattractive.
- The entire area may need mulch replacement every two to three years, although spot mulching may be sufficient when there are random void areas.

Pervious pavers including hardscape such as pervious concrete consists of coarse aggregate (no fines) and a mixture of cement, admixtures, and water which has a surface void content allowing stormwater runoff to pass through. Standards for Ongoing Maintenance and Upkeep include the following:

- Keep landscaped areas well maintained.
- Inspect outlets yearly, preferably before the wet season. Remove accumulated trash and debris.
- If routine cleaning does not restore infiltration rates, then reconstruction of the part

of pervious surface not infiltrating is required.

- The surface area affected by hydraulic failure should be lifted, if possible, for inspection of the internal materials to identify the location and extent of the blockage.
- Surface materials should be lifted and replaced if damaged by brush (or abrasive) cleaning.
- Sub-surface layers may need periodic cleaning and replacing.
- Deposits may need to be disposed of as controlled waste.

V. Certification

Engineer's Certification

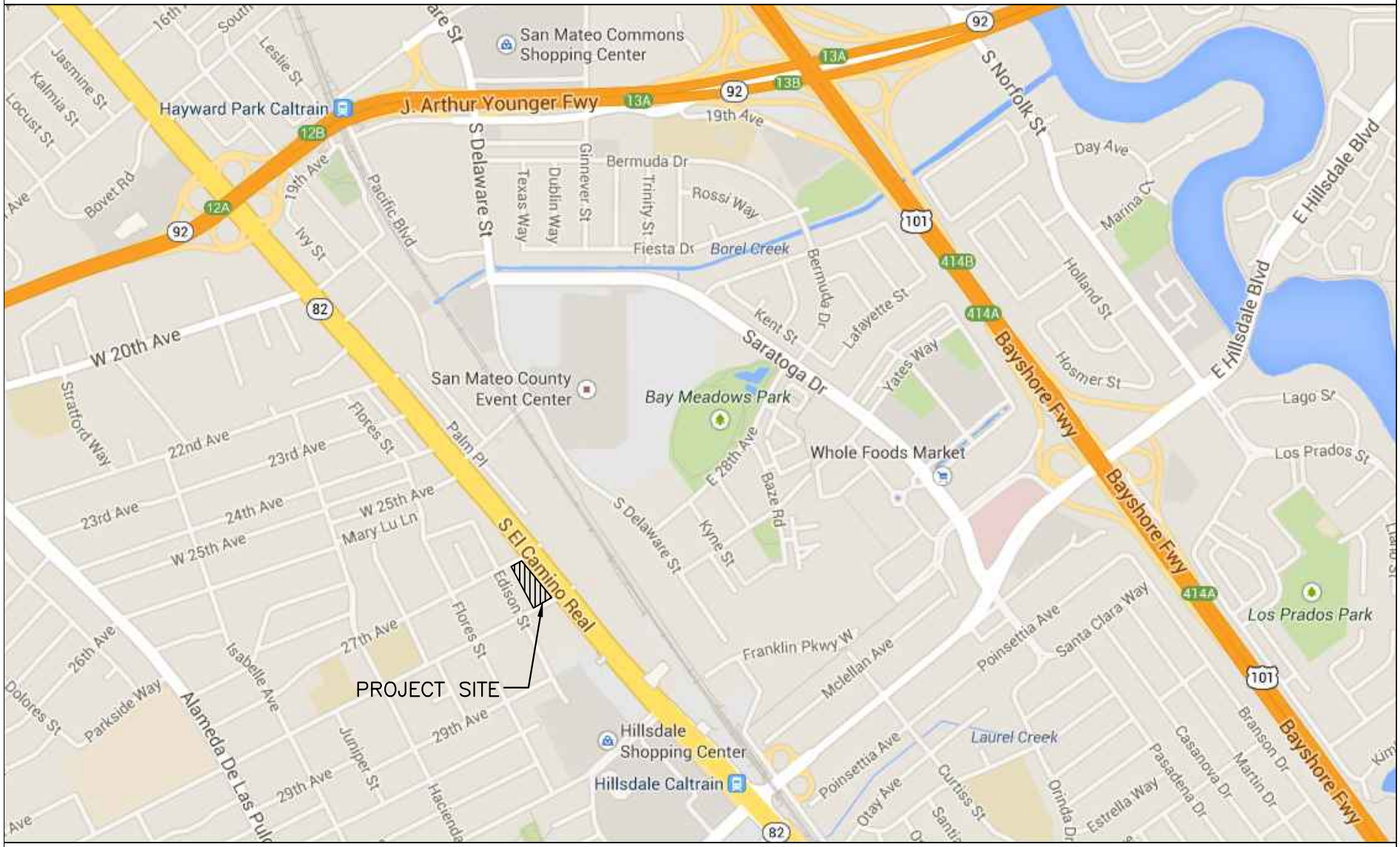
I certify that all storm water treatment Best Management Practices described in this Storm Water Control Plan have been designed to meet the City or County of San Mateo's storm water quality requirements. This document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Further, those responsible for completing this Plan has been trained on the design of storm water treatment BMP's.

Signature: _____ Date: 02/17/2015

Civil Engineer: Chin Hang Wong
PE, QSD
Green Civil Engineering
Green-eng@hotmail.com
204 E 2nd Ave #820
San Mateo, CA 94401

VI. Appendix

- Appendix A – Vicinity Map
- Appendix B – Topographic Survey Plan
- Appendix C – Storm Water Control Plan, Sheet C1.0 and Detail, Sheet C1.1
- Appendix D – Landscape Plan, Sheet L1.0
- Appendix E – Planning Permit Submittal Checklist



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SAN MATEO, CA 94401

EXHIBIT A - VICINITY MAP

HILLSDALE TERRACE

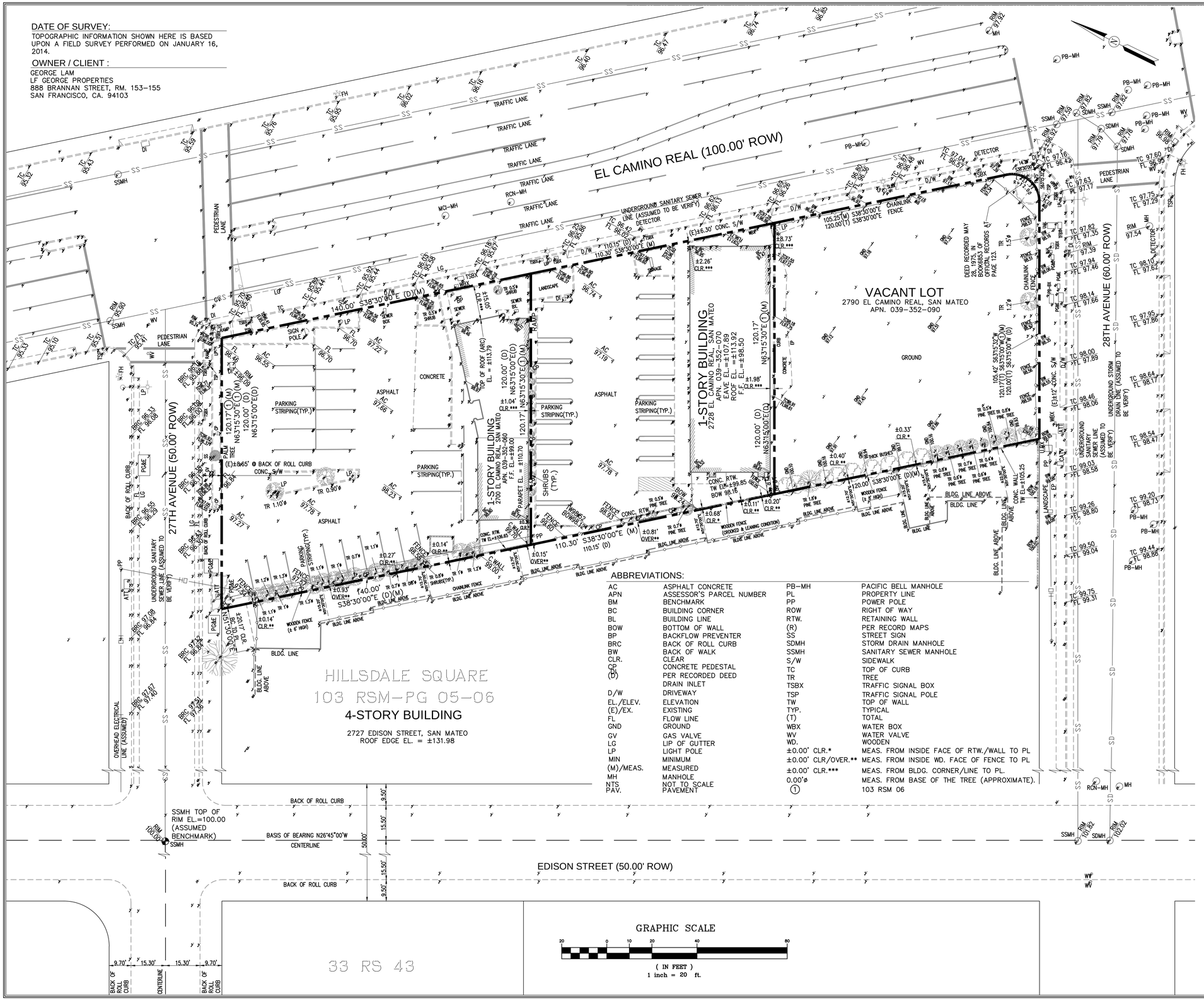
2700, 2728, 2790 SOUTH EL CAMINO REAL, SAN MATEO, CA 94403

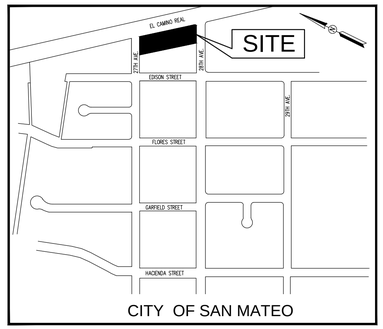
DATE OF SURVEY:

TOPOGRAPHIC INFORMATION SHOWN HERE IS BASED UPON A FIELD SURVEY PERFORMED ON JANUARY 16, 2014.

OWNER / CLIENT :

GEORGE LAM
LF GEORGE PROPERTIES
888 BRANNAN STREET, RM. 153–155
SAN FRANCISCO, CA. 94103





VICINITY MAP

NTS

ASSUMED BENCHMARK AT INTERSECTION OF 27TH AVE. & EDISON ST.

ASSUMED BENCHMARK @ SSMH TOP RIM ELEVATION = 100.00, AS SHOWN ON THE MAP.

BASIS OF BEARINGS

THE BEARING N26°45'00"W OF THE CENTERLINE OF EDISON STREET (DERIVE FROM SPLITTING THE CURB LINES) PER "MAP SHOWING A SUBDIVISION OF LOTS 1, 2, 19, AND 21 OF THE BERESFORD PARK TRACT, SAN MATEO COUNTY, CAL." AND "33 RS 43", FILED IN THE OFFICE OF THE RECORDER OF SAN MATEO COUNTY, STATE OF CALIFORNIA, WAS USED AS BASIS OF BEARING FOR THIS SURVEY.

LEGEND :

- PROPERTY LINE
- EXISTING LINE
- BUILDING LIMITS
- BENCHMARK REFERENCE
- OH — OVERHEAD ELECTRICAL LINE (APPROXIMATE)
- SD — STORM DRAIN LINE (APPROXIMATE)
- SS — SANITARY SEWER LINE (APPROXIMATE)

BOUNDARY NOTES:

1. PROPERTY AND RIGHT–OF WAY SHOWN HEREON ARE BASED ON RECORD DATA AND NOT INTENDED TO BE A DETAILED FINAL SURVEY OF THE PROPERTY.

2. ALL ANGLES ARE 90° UNLESS OTHERWISE NOTED.

3. ALL DISTANCES ARE MEASURED IN FEET AND DECIMALS THEREOF.

4. PROPERTY LINE TO MONUMENT LINE MEASURED DISTANCES WERE BASED UPON FOUND SURVEY MARKS, CURB SPLITS AND BUILDING OCCUPATIONS.

5. ENCROACHMENT FROM/ONTO THE ADJOINING PROPERTIES THAT MAY EXIST OR MAY BE CONSTRUCTED IS HEREBY ACKNOWLEDGED AND IT SHALL THE RESPONSIBILITY SOLELY OF THE PROPERTY OWNERS INVOLVED TO RESOLVE ANY ISSUES WHICH MAY ARISE THERE FROM. THIS MAP DOES NOT CONVEY ANY INTEREST IN SUCH ENCROACHMENT AREAS TO THE PROPERTY OWNER(S).

6. RECORDED MAP REFERENCE: 33 RS 43, 103 RSM 06, AND 2 RSM 37, SAN MATEO COUNTY.

7. RECORD OWNERSHIP INFORMATION WAS TAKEN FROM GRANT DEED, INSTRUMENT NO. 2013–110986, DATED JULY 30, 2013.

8. BUILDING FOOTPRINTS SHOWN ARE ALL TAKEN ON THE GROUND LEVEL.

UTILITY STATEMENT:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORD DATA AND ARE APPROXIMATE ONLY. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ACTUAL LOCATION AND SIZE, TOGETHER WITH THE PRESENCE OF ANY ADDITIONAL UTILITY LINES NOT SHOWN ON THIS PLAN, SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR DURING CONSTRUCTION. PRIOR TO ANY DIGGING, CALL U.S.A. (1–800–642–2444) AT LEAST 48 HOURS IN ADVANCE TO HAVE EXISTING UNDERGROUND UTILITIES MARKED.

ABBREVIATIONS:

AC	ASPHALT CONCRETE	PB–MH	PACIFIC BELL MANHOLE
APN	ASSESSOR'S PARCEL NUMBER	PL	PROPERTY LINE
BM	BENCHMARK	PP	POWER POLE
BC	BUILDING CORNER	ROW	RIGHT OF WAY
BL	BUILDING LINE	RTW.	RETAINING WALL
BOW	BOTTOM OF WALL	(R)	PER RECORD MAPS
BP	BACKFLOW PREVENTER	SS	STREET SIGN
BRC	BACK OF ROLL CURB	SDMH	STORM DRAIN MANHOLE
BW	BACK OF WALK	SSMH	SANITARY SEWER MANHOLE
CLR.	CLEAR	S/W	SIDEWALK
CP	CONCRETE PEDESTAL	TC	TOP OF CURB
(D)	PER RECORDED DEED	TR	TREE
DI	DRAIN INLET	TSBX	TRAFFIC SIGNAL BOX
D/W	DRIVEWAY	TSP	TRAFFIC SIGNAL POLE
EL./ELEV.	ELEVATION	TW	TOP OF WALL
(E)/EX.	EXISTING	TYP.	TYPICAL
FL	FLOW LINE	(T)	TOTAL
GND	GROUND	WBX	WATER BOX
GV	GAS VALVE	WV	WATER VALVE
LG	LIP OF GUTTER	WD.	WOODEN
LP	LIGHT POLE	±0.00' CLR.*	MEAS. FROM INSIDE FACE OF RTW./WALL TO PL
MIN	MINIMUM	±0.00' CLR/OVER.**	MEAS. FROM INSIDE WD. FACE OF FENCE TO PL
(M)/MEAS.	MEASURED	±0.00' CLR.***	MEAS. FROM BLDG. CORNER/LINE TO PL.
MH	MANHOLE	0.00'ø	MEAS. FROM BASE OF THE TREE (APPROXIMATE).
NTS	NOT TO SCALE	①	103 RSM 06
PAV.	PAVEMENT		

BY	DATE	DESCRIPTION	APPR. BY CITY	DATE	BY
	01/21/2014	PREPARATION OF PLAN			
	02/10/2014	ADD ADJACENT BLDG. LINE			

DESIGNED BY: HC/LB
DRAWN BY: LB
CHECKED BY: HC
SCALE: 1"=20'

GL A CIVIL ENGINEERS, INC.
414 Mason Street Ste 404,
San Francisco, CA.
Tel. (415) 956–6707

TOPOGRAPHIC SURVEY PLAN

2700, 2728, & 2790 EL CAMINO REAL

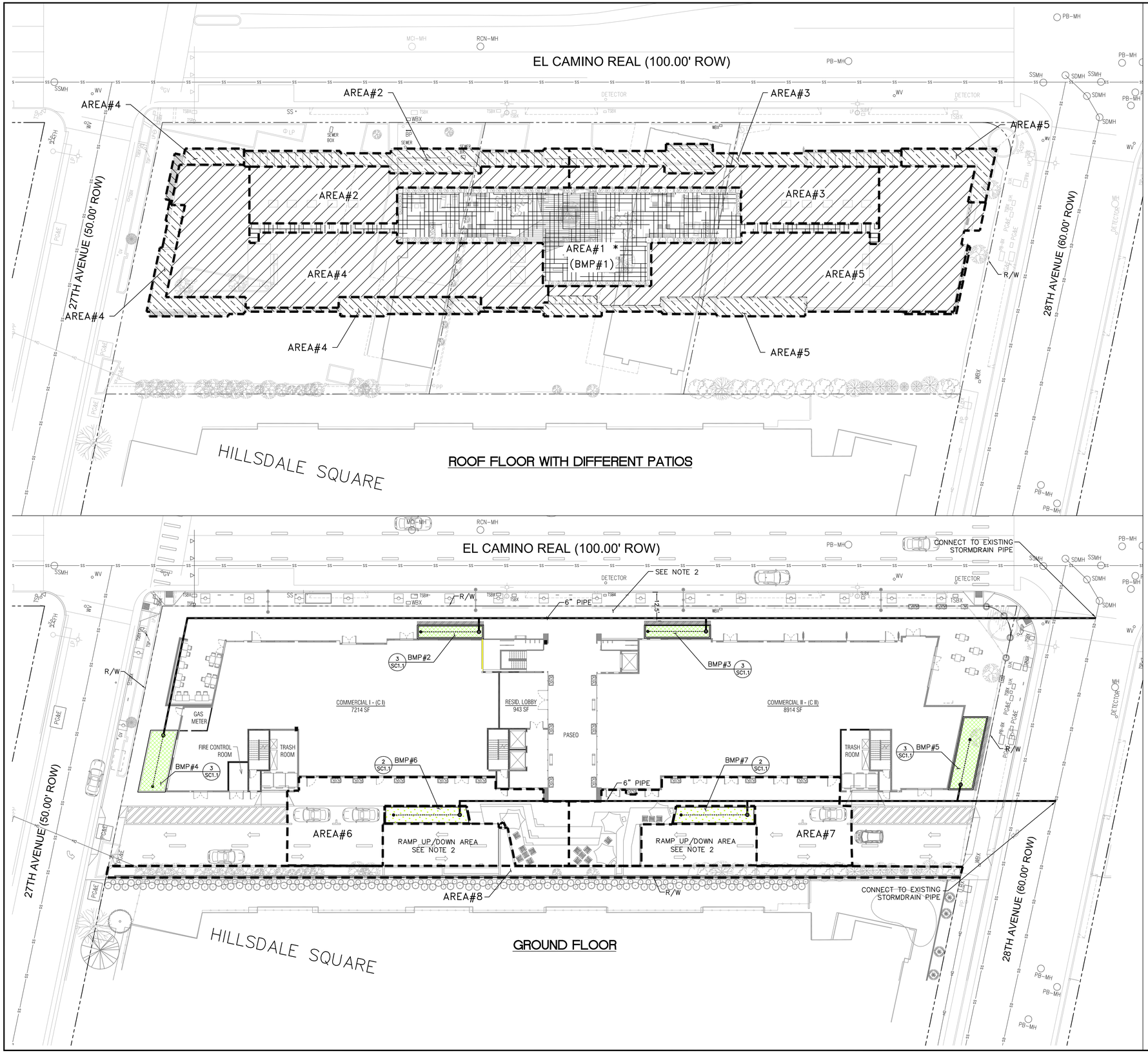
APN: 039-352-060, 039-352-070, 039-352-090

SAN MATEO CALIFORNIA

PN: 2700ECR

SHEET
C-1
SHEET 1 OF 1

EMAIL: GLAENGINEERS@SBCGLOBAL.NET



GRAPHIC SCALE

(IN FEET)
1 inch = 10 ft.

LEGEND

- AREA#1 = DRAINAGE BOUNDARY
- = ROOF
- = PATIO/SKYLIGHT
- = BIO-RETENTION AREA
- = FLOW THROUGH PLANTER AREA
- = ROOF GARDEN COMBINED WITH PERMEABLE PAVER AND LANDSCAPE
- = LANDSCAPE

TREATMENT MEASURE SIZING TABLE

TREATMENT AREA	PROPOSED TREATMENT METHOD(BMP#)	DRAINAGE AREA (SF)	REQUIRED TREATMENT AREA (SF) 4% OF DRAINAGE AREA	PROVIDED TREATMENT MEASURE(SF)
AREA#1 *	SELF-TREATING (BMP#1)	4990	–	–
AREA#2	FLOW-THROUGH PLANTER(BMP#2)	3240	130	138
AREA#3	FLOW-THROUGH PLANTER(BMP#3)	3170	127	138
AREA#4	FLOW-THROUGH PLANTER(BMP#4)	7080	283	284
AREA#5	FLOW-THROUGH PLANTER(BMP#5)	6550	262	292
AREA#6	BIO-RETENTION AREA(BMP#6)	2300	92	236
AREA#7	BIO-RETENTION AREA(BMP#7)	2600	104	231
AREA#8	LANDSCAPE	1870		

NOTES

1) SIZING GUIDELINE FOR FLOW BASED TREATMENT IS 4%, PER COUNTY OF SAN MATEO STANDARDS.
2) FOR SIDEWALK ALONG EL CAMINO REAL, 27TH AVE, 28TH AVE, RAMP UP/DOWN, AND PORTION OF PRIVATE ROAD, THE PROJECT TEAM WOULD APPLY TREATMENT REDUCTION CREDIT, SEE SPECIAL PROJECT FORM FOR DETAILS.
3) SEE LANDSCAPE PLAN FOR ONSITE PROPOSED LANDSCAPE DESIGN.
4) DRAINAGE AREA 2, 3, 4 AND 5 CONTAIN ROOF AREAS, DIFFERENT FLOOR PATIO AREAS AND SKYLIGHT AREAS.

* ROOF DRAINAGE AREA COMBINED WITH LANDSCAPE AND PERMEABLE PAVER

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STORMWATER CONTROL PLAN

2700 SOUTH EL CAMINO REAL
SAN MATEO, CA 94403

REV.	DESCRIPTION	DATE
1	1	1
1		1
1		1
1		1

REGISTERED PROFESSIONAL ENGINEER
CHIN HANG WONG
NO. 73068
Exp. 12/31/2016
CIVIL
STATE OF CALIFORNIA

DATE:	02-17-2015
SCALE:	AS SHOWN
DRAWN:	CW
CHECK:	CW
JOB:	2014022

~SHEET~

SC1.0

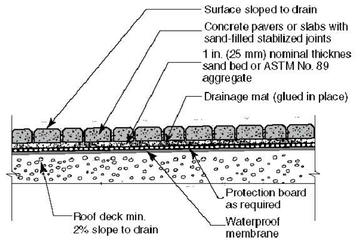
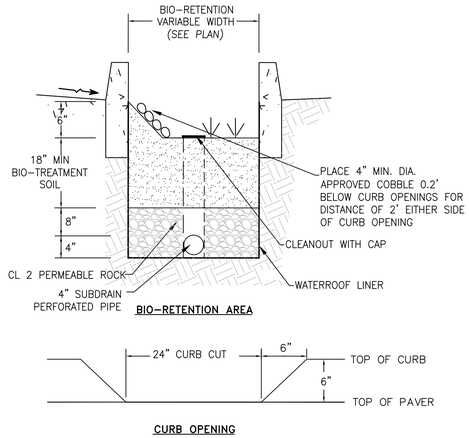
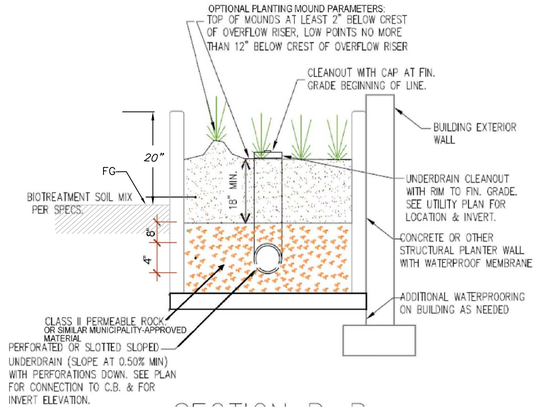


Figure 7. Sand-set concrete pavers or slabs for a pedestrian roof plaza deck. Units no larger than 12 x 12 in. (300 x 300 mm) length and width are recommended for sand-set applications to avoid tipping.

PERMEABLE PAVER 1/SC1.1 N.T.S.



BIO-RETENTION AREA 2/SC1.1 N.T.S.



FLOW THROUGH PLANTER 3/SC1.1 N.T.S.

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204 E 2ND AVE #820
SAN MATEO, CA 94401

DETAIL SHEET

2700 SOUTH EL CAMINO REAL
SAN MATEO, CA 94403

REV.	DESCRIPTION	DATE
1	1	1
1		
1		
1		

REGISTERED PROFESSIONAL ENGINEER
CHIN HANG WONG
NO. 73068
Exp. 12/31/2016
CIVIL
STATE OF CALIFORNIA

DATE:	02-17-2015
SCALE:	AS SHOWN
DRAWN:	CW
CHECK:	CW
JOB:	2014022

~SHEET~

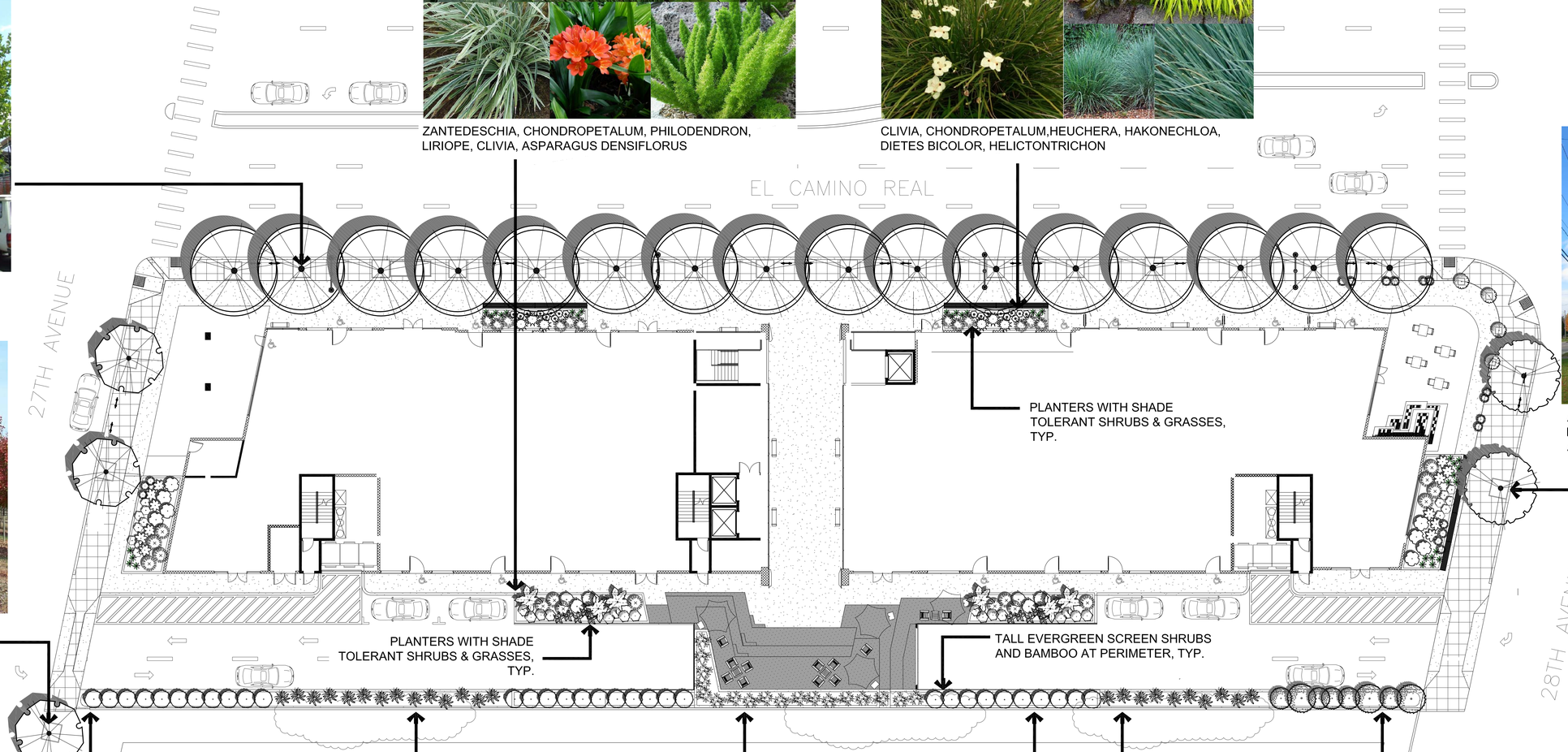
SC1.1

PLATANUS x ACERIFOLIA
DESIGNATED STREET TREE,
EL CAMINO REAL

ACE BUERGERIANUM
DESIGNATED STREET TREE,
27th AVE.

ZANTEDESCHIA, CHONDROPETALUM, PHILODENDRON,
LIRIOPE, CLIVIA, ASPARAGUS DENSIFLORUS

CLIVIA, CHONDROPETALUM,HEUCHERA, HAKONECHLOA,
DIETES BICOLOR, HELICTONTRICHON



ACE RUBRUM 'OCTOBER GLORY'
DESIGNATED STREET TREE, 28th
AVE.

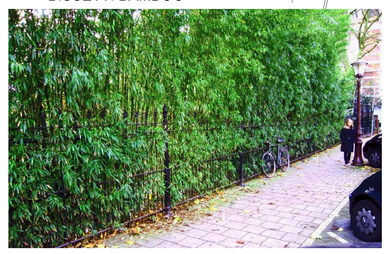
PRUNUS CAROLINANA
'BRIGHT & TIGHT'

PHYLOSTACHYS BISSETTI
BISSETTI BAMBOO

BAMBUSA OLDHAMII
GIANT TIMBER BAMBOO

PRUNUS CAROLINANA
'BRIGHT & TIGHT'

PHYLOSTACHYS BISSETTI
BISSETTI BAMBOO



EXISTING CALOCEDRUS DECURENS
INCENSE CEDAR, TYP. OF 8

VAN DORN ABED
LANDSCAPE ARCHITECTS, INC.
81 14TH ST., SAN FRANCISCO, CA
ZIP 94103 PH (415) 864-1921 FAX(415) 864-4796

LFG PROPERTIES

HILLSDALE TERRACE

2700 SOUTH EL CAMINO REAL
SAN MATEO, CA 94403

CONCEPTUAL PLANTING PLAN - GROUND FLOOR

SCALE: 1/16" = 1'-0"

DATE: 10/17/14

0 8 16 32 64

L1.0

Table 3-1: Planning Permit Submittal Checklist			
Required?[1]		Information on Project Drawings	Corresponding Planning Step (Section 3.2)
Yes	No		
❑	❑	Existing natural hydrologic features (depressions, watercourses, relatively undisturbed areas) and significant natural resources.	Step 1
❑	❑	Soil types and depth to groundwater.	Step 1
❑	❑	Existing and proposed site drainage network and connections to drainage offsite.	Step 1
❑	❑	For more complex drainage networks, show separate drainage areas in the existing and proposed site drainage network.	Step 1
❑	❑	Existing condition, including pervious and impervious areas, for each drainage area.	Step 1
❑	❑	Proposed pervious surfaces, including sensitive natural areas to be preserved and protected from development (for each drainage area).	Steps 2 and 3
❑	❑	Proposed site design measures to minimize impervious surfaces and promote infiltration[2], which will affect the size of treatment measures.	Steps 3 and 4
❑	❑	Proposed impervious surfaces, e.g., roof, plaza, sidewalk, street, parking lot (for each drainage area).	Step 4
❑	❑	Proposed locations and approximate sizes of stormwater treatment measures and (if 1 acre or more of impervious surface is created) hydromodification management measures. Elevations should show sufficient hydraulic head for the treatment measures to work.[2]	Steps 5 - 9
❑	❑	Conceptual planting palette for stormwater treatment measures.[2]	Step 10
❑	❑	Pollutant source areas – including loading docks; food service areas; refuse areas; outdoor processes and storage; vehicle cleaning, repair or maintenance; fuel dispensing; equipment washing; etc. – and corresponding source controls from the local source control list.	Step 12
		Written Information on Municipal Forms or in Report Format	
❑	❑	Completed Impervious Surface Form (obtain copy of form from municipality).	Step 4
❑	❑	Completed Feasibility Screening Worksheet, and, if applicable, the completed Rainwater Harvesting Feasibility Worksheet, Infiltration Feasibility Worksheet, and/or Special Projects Worksheet (obtain from local agency).	Steps 5 and 6
❑	❑	Preliminary calculations for each treatment or hydromodification management measures.	Step 9
❑	❑	Preliminary maintenance plan for stormwater treatment measures.	Step 11
❑	❑	List of source control measures included in the project.	Step 12

[1] Every item is not necessarily required for a project. Municipal staff may check the boxes in the "Required" column to indicate items required for a project.

[2] Site design and treatment measures that promote stormwater infiltration should be consistent with recommendations of the project geotechnical engineer based on the soils boring data, drainage pattern and the current requirements for stormwater controls.