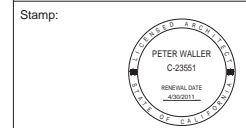


**UNIVERSITY VILLAGE
SENIOR HOUSING &
MARKETPLACE**
1030 - 1130 SAN PABLO AVENUE,
ALBANY, CA 94706

Client:
University of California, Berkeley
Real Estate Services
200 A&E Building
Berkeley, CA 94720-1382

Revision Schedule		
Rev. No.	Issue	Date
	REVISED PUD & RE-ZONING SUBMITTAL	3/30/11

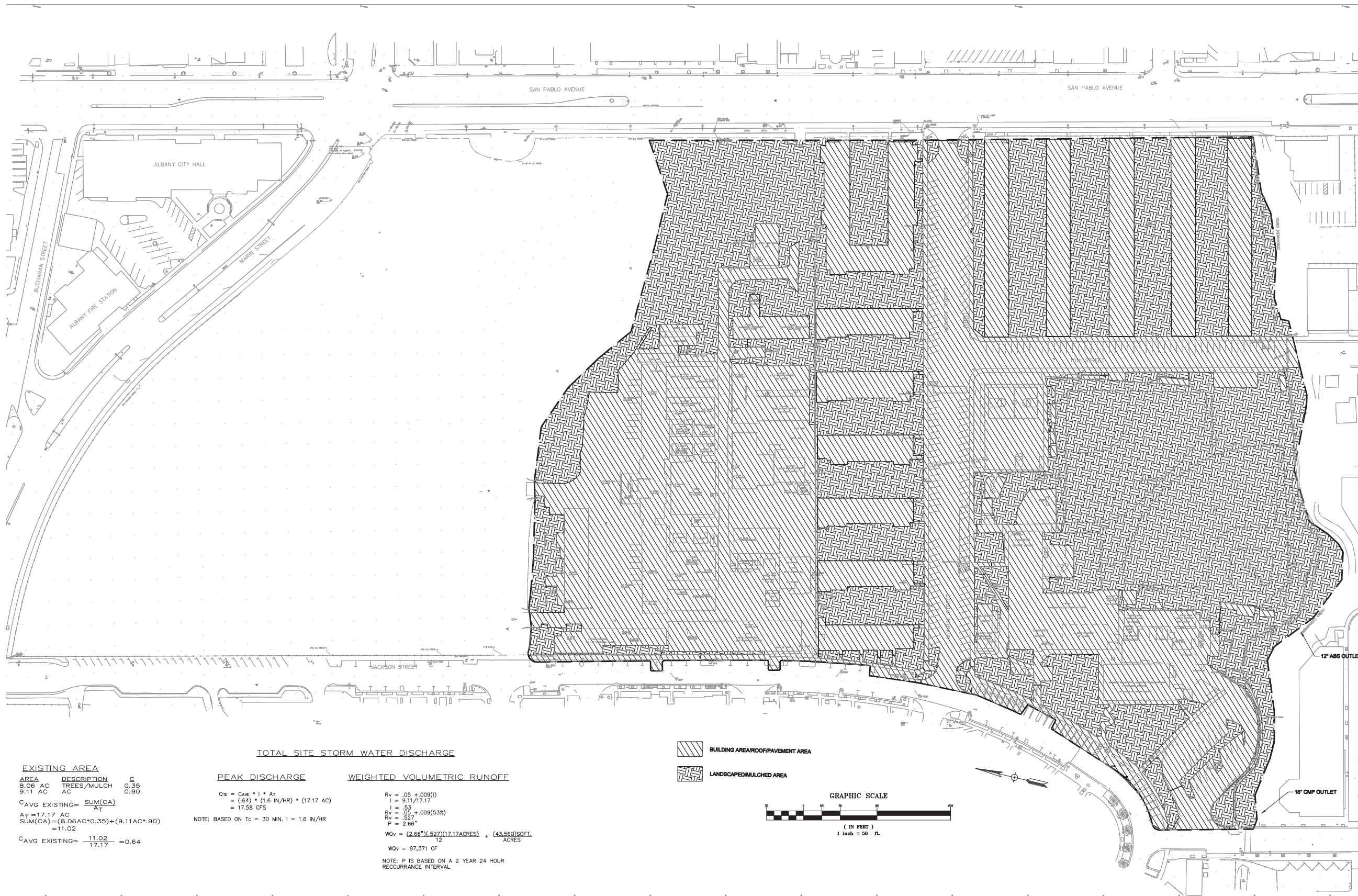


Job Number: 0507
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Date: 01/11/2011
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Title
PERVIOUS/IMPERVIOUS CALCULATIONS - EXISTING

Sheet

C1.0



TOTAL SITE STORM WATER DISCHARGE

EXISTING AREA

AREA	DESCRIPTION	C
8.06 AC	TREES/MULCH	0.35
9.11 AC	AC	0.90

$C_{AVG\ EXISTING} = \frac{SUM(CA)}{A_T}$
 $A_T = 17.17\ AC$
 $SUM(CA) = (8.06AC * 0.35) + (9.11AC * 0.90)$
 $= 11.02$
 $C_{AVG\ EXISTING} = \frac{11.02}{17.17} = 0.64$

PEAK DISCHARGE

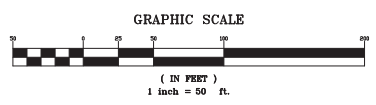
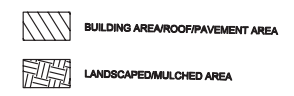
$Q_{PE} = C_{AVG} * I * A_T$
 $= (.64) * (1.6\ IN/HR) * (17.17\ AC)$
 $= 17.58\ CFS$

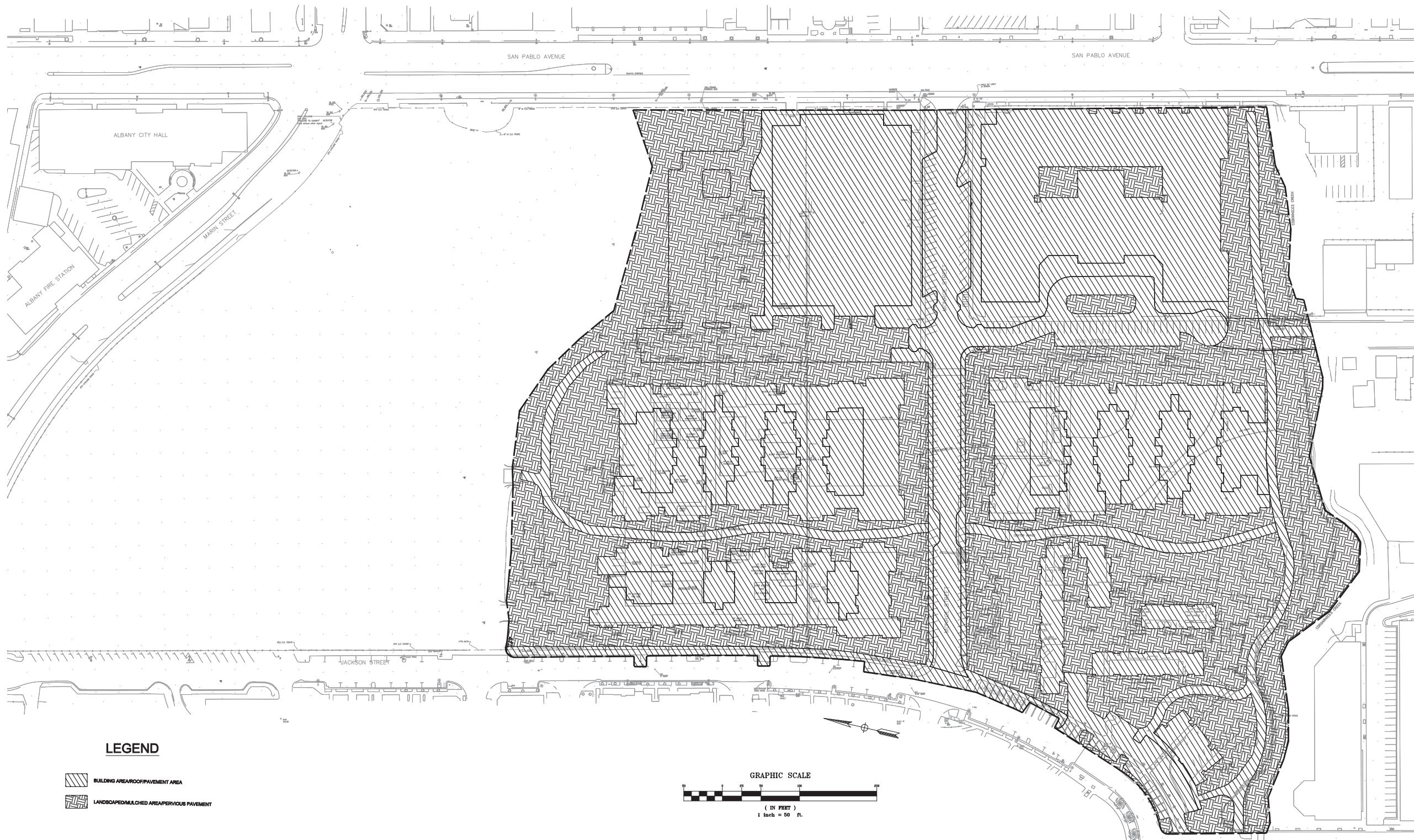
NOTE: BASED ON $T_c = 30\ MIN.$ $I = 1.6\ IN/HR$

WEIGHTED VOLUMETRIC RUNOFF

$R_v = .05 + .009(I)$
 $I = 9.11/17.17$
 $R_v = .05 + .009(53\%)$
 $R_v = .527$
 $P = 2.66"$
 $WQ_v = (2.66") * (.527) * (17.17\ ACRES) = (43,560) SOFT. ACRES$
 $WQ_v = 87,371\ CF$

NOTE: P IS BASED ON A 2 YEAR 24 HOUR REOCCURRENCE INTERVAL

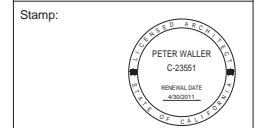




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Title
PERVIOUS/IMPERVIOUS CALCULATIONS - PROPOSED

Sheet

C1.1

LEGEND

- BUILDING AREA/ROOF/PAVEMENT AREA
- LANDSCAPED/MULCHED AREA/PERVIOUS PAVEMENT

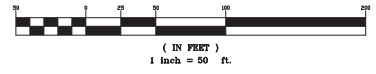
INCREASE IN IMPERVIOUS AREA

EXISTING AREA			PROPOSED AREA		
AREA	DESCRIPTION	C	AREA	DESCRIPTION	C
8.06 AC	TREES/MULCH	0.35	7.47 AC	TREES/MULCH	0.35
9.11 AC	AC	0.90	9.70 AC	AC	0.90
CAVG EXISTING = $\frac{\sum(CA)}{A_T}$			CAVG PROPOSED = $\frac{\sum(CA)}{A_T}$		
A _T = 17.17 AC			A _T = 17.17 AC		
SUM(CA) = (8.06AC*0.35) + (9.11AC*0.90) = 11.02			SUM(CA) = (7.47*0.35) + (9.70*0.90) = 11.34		
CAVG EXISTING = $\frac{11.02}{17.17} = 0.64$			CAVG PROPOSED = $\frac{11.34}{17.17} = 0.66$		
INCREASE = $\frac{17.17}{0.55} * (0.66 - 0.64) = 0.62$ AC					

TOTAL SITE STORM WATER DISCHARGE

PEAK DISCHARGE	WEIGHTED VOLUMETRIC RUNOFF
Q _T = C _{AVG} * I * A _T = (0.66) * (1.6 IN/HR) * (17.17 AC) = 18.13 CFS	R _v = .05 + .009(I) I = 9.70/17.17 I = .56 R _v = .05 + .009(.56%) R _v = .54 P = 2.66"
NOTE: BASED ON T _c = 30 MIN. I = 1.6 IN/HR	W _{Qv} = $\frac{(2.66" * .54)(17.17 \text{ ACRES})}{12}$, (43,560) GPF/ACRES
	W _{Qv} = 91,848 CF
	NOTE: P IS BASED ON A 2 YEAR 24 HOUR RECCURRENCE INTERVAL

GRAPHIC SCALE



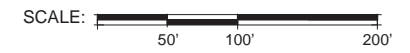
SWALE A

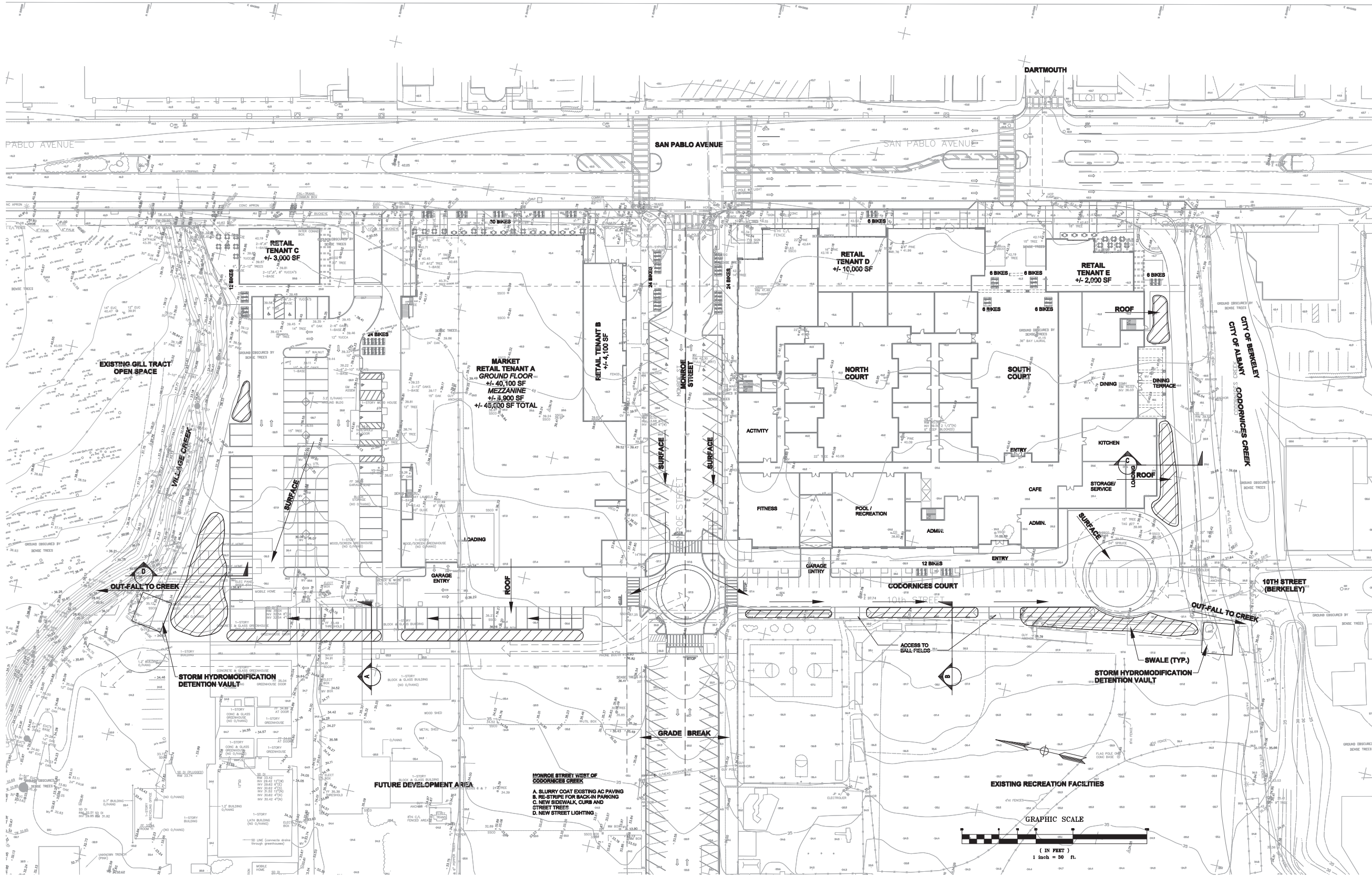
IMPERVIOUS AREA = 69,479 SF
UNIT BASIN STORAGE VOLUME = 0.04 IN
SWALE VOLUME = 0.4 IN * 69,479 SF. * (1FT/12IN)
SWALE VOLUME = 2,316 CF

SWALE B AND C

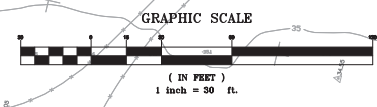
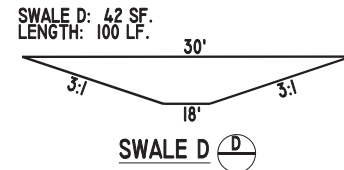
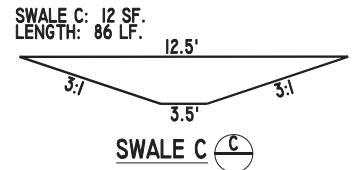
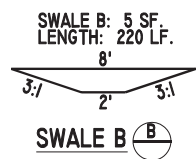
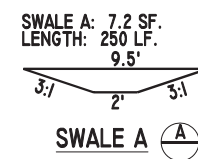
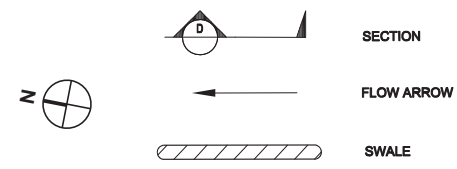
IMPERVIOUS AREA = 106,839 SF
UNIT BASIN STORAGE VOLUME = 0.04 IN
SWALE VOLUME = 0.4 IN * 106,839 SF. * (1FT/12IN)
SWALE VOLUME = 3,561 CF

PERVIOUS / IMPERVIOUS CALCULATIONS: PROPOSED





LEGEND



DRAINAGE PLAN - CONCEPT

SCALE: 50' 100' 200'

1611 Telegraph Avenue, Suite 200
Oakland, California 94612
510.465.7010 p | 510.465.8575 f
www.pyatok.com

Consultants:
PGA DESIGN
444 17th Street,
Oakland, CA 94612

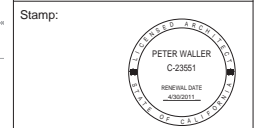
BKF ENGINEERS
4670 Willow Road, Suite 250,
Pleasanton, CA 94588

BICYCLE SOLUTIONS
338 S. Fremont St. #112,
San Mateo, CA 94401-3374

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1	REVISED PUD & RE-ZONING SUBMITTAL	3/30/11

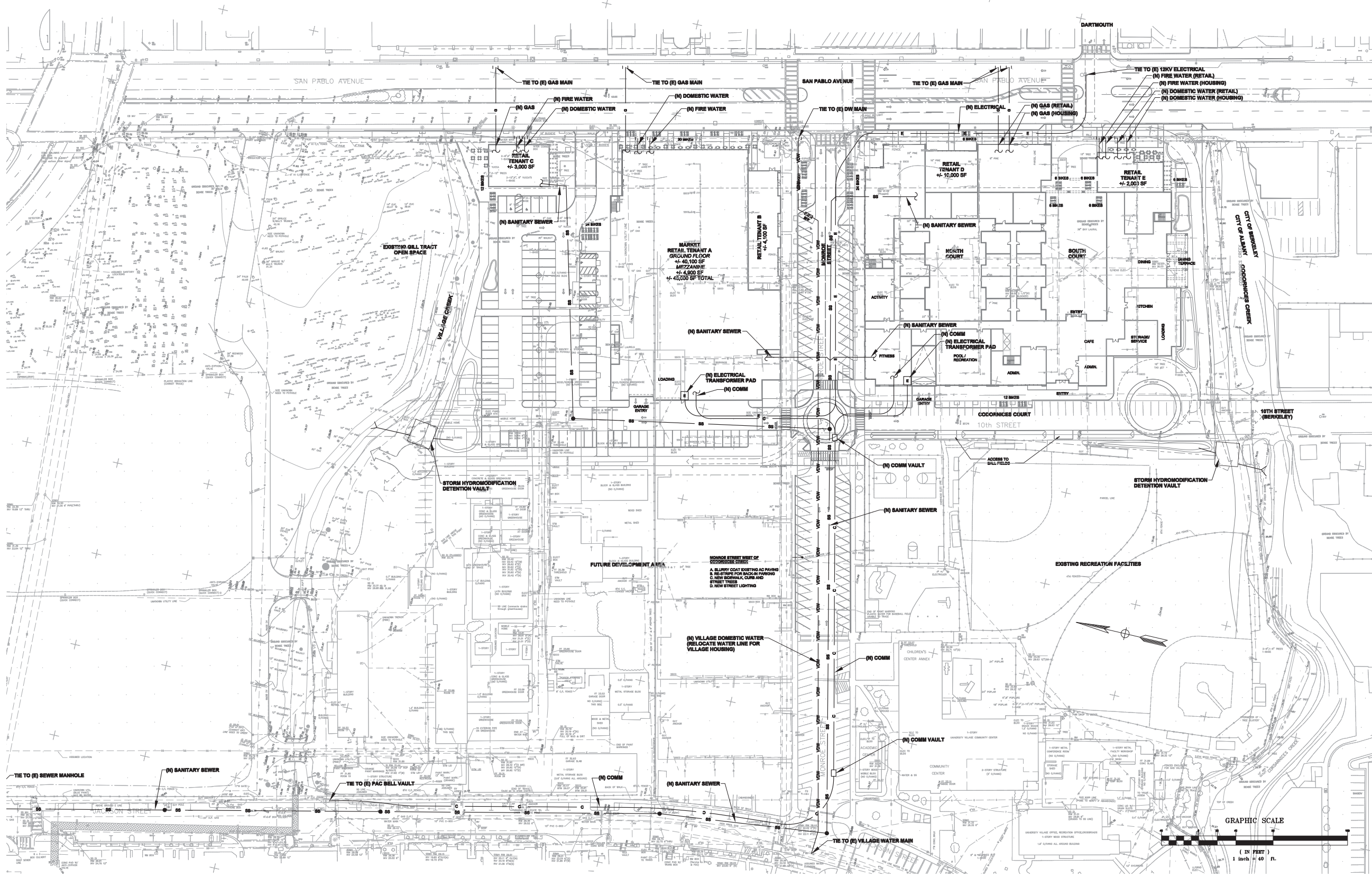


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Date: 01/11/2011
Scale: 1" = 30'-0"

Title
DRAINAGE PLAN - CONCEPT

Sheet

C2.0



— DW —	— DW —	DOMESTIC WATER
— VDW —	— VDW —	VILLAGE DOMESTIC WATER
— FW —	— FW —	FIRE WATER
— SS —	— SS —	SANITARY SEWER
— E —	— E —	ELECTRICAL
— C —	— C —	COMMUNICATIONS
— G —	— G —	GAS
— RBP —		REDUCED BACKFLOW PREVENTOR
— E —		ELECTRICAL TRANSFORMER PAD

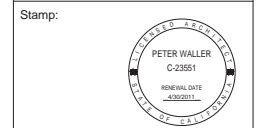
1.) UTILITY POINT OF CONNECTIONS TO BE CONFIRMED BY UTILITY PROVIDER

UTILITY PLAN - CONCEPT
SCALE: 1" = 40'

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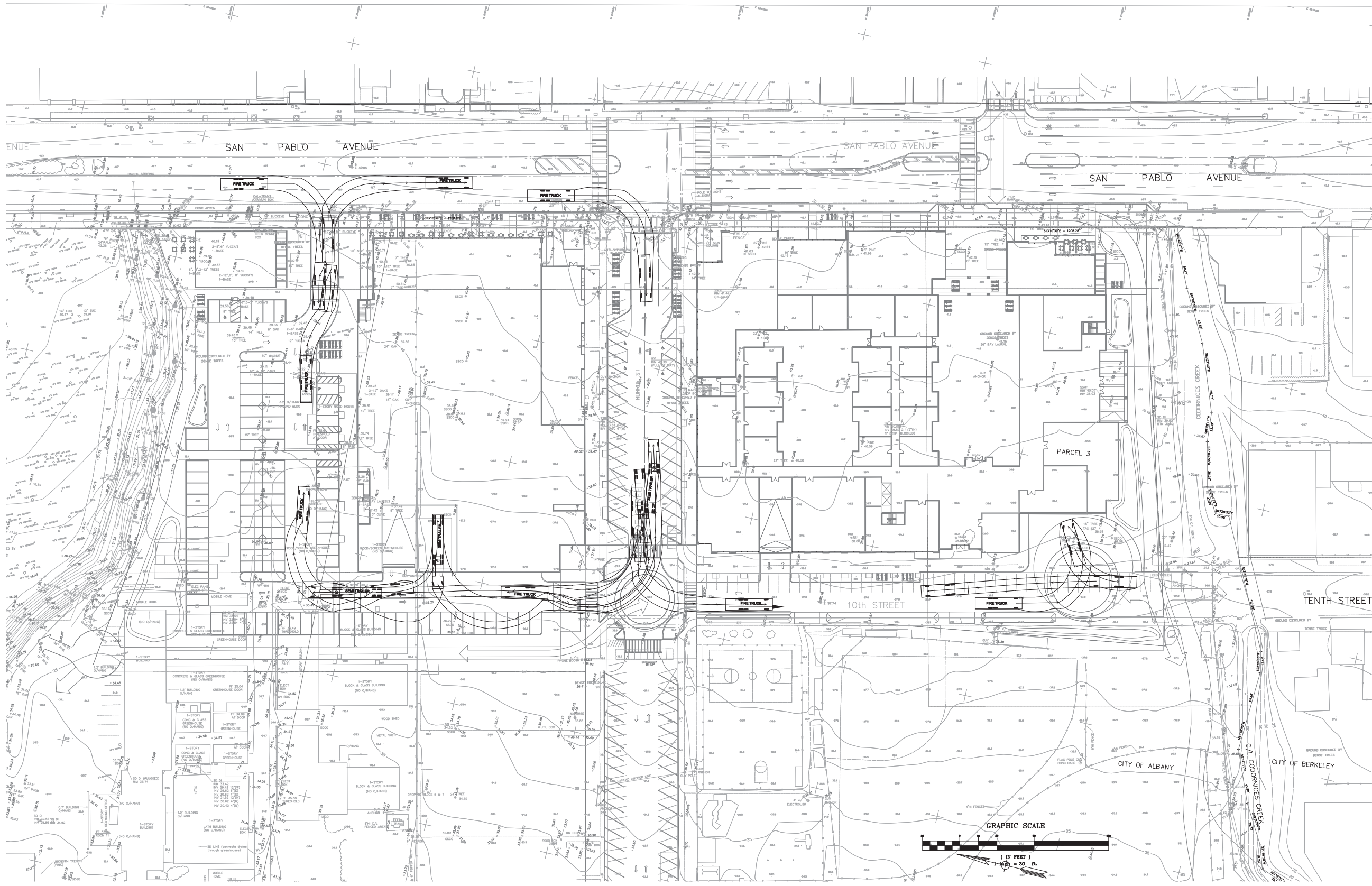
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Scale: 1" = 30'-0"

Title
UTILITY PLAN - CONCEPT

Sheet

C2.1

Not-For-Construction



TRUCK & EMERGENCY VEHICLE CIRCULATION

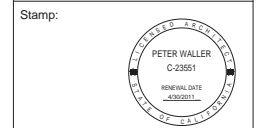
SCALE: 1" = 30'-0"
50' 100' 200'

1

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Title
**TRICK & EMERGENCY
VEHICLE CIRCULATION**

Sheet

C3.0