

1-800-227-2600

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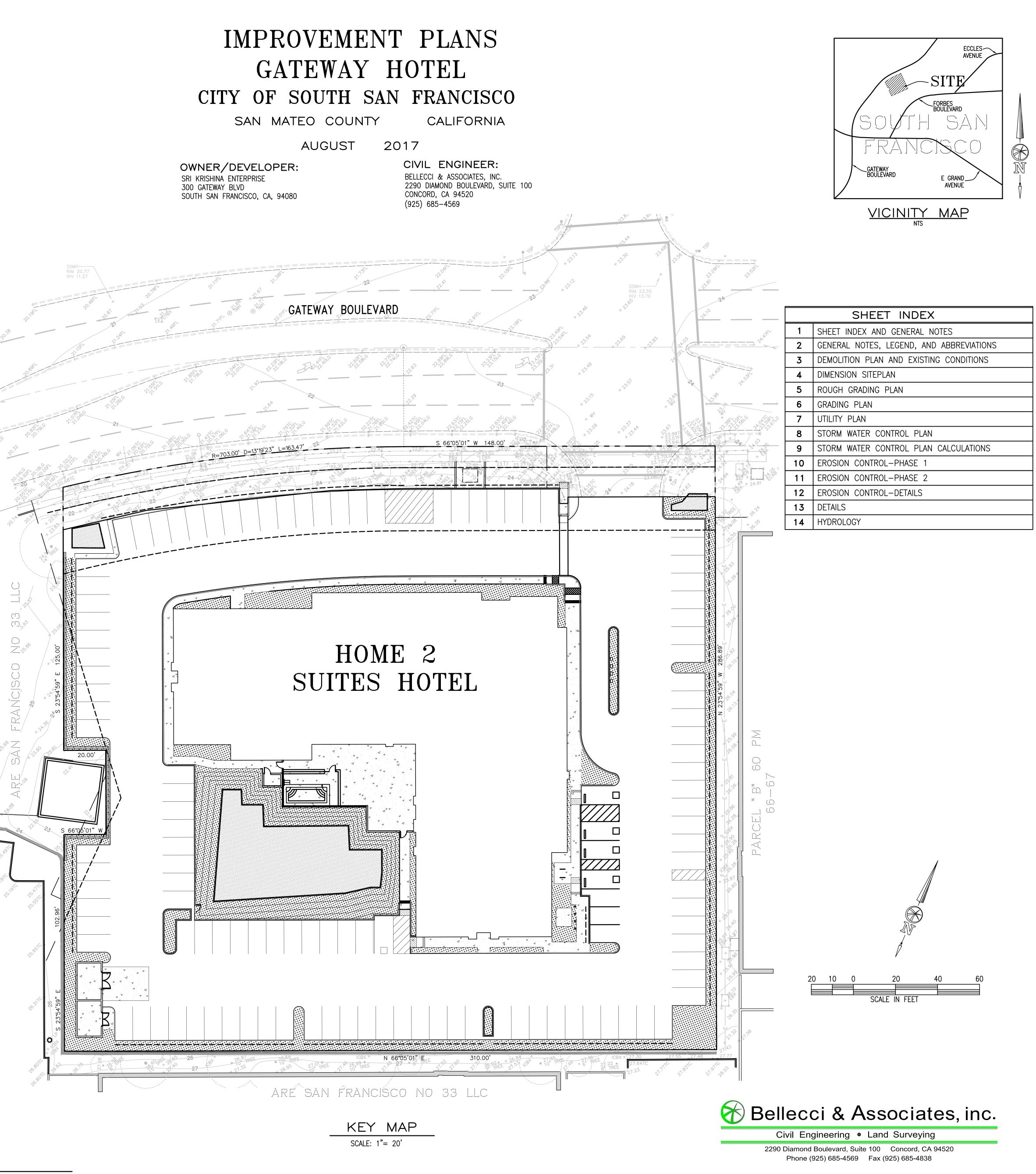
ENGINEERING GENERAL NOTES THE ENGINEER ASSUMES NO RESPONSIBILITY BEYOND THE ADEQUACY OF HIS DESIGN

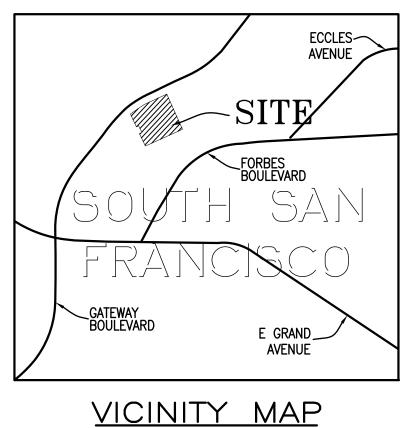
- THE CIVIL ENGINEERING DESIGN SHOWN HEREON WAS PREPARED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING AND/OR SURVEYING PRACTICES APPLICABLE ON THE DATE OF SIGNATURE BY THE ENGINEER. IF CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON DOES NOT COMMENCE WITHIN EIGHT MONTHS FROM THE DATE OF SIGNATURE BY THE ENGINEER, THE PLANS MUST BE REVIEWED FOR CURRENT COMPLIANCE WITH GENERALLY ACCEPTED ENGINEERING AND/OR SURVEYING PRACTICES AND RE-ISSUED BY THE ENGINEER PRIOR TO ANY WORK BEING PERFORMED.
- CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR PUBLIC WORKS, AMBULANCE, POLICE AND FIRE DEPARTMENTS.
- ENCROACHMENT PERMITS REQUIRED FOR WORK WITHIN EXISTING PUBLIC RIGHTS OF WAY SHALL BE OBTAINED BY THE CONTRACTOR. WHEN BELLECCI & ASSOCIATES, INC. IS TO PROVIDE THE CONSTRUCTION STAKES,
- THE NUMBER AND LOCATION OF STAKES REQUIRED SHALL BE DETERMINED BEFORE THE CONSTRUCTION BEGINS AND SHALL BE AGREED UPON BY BELLECCI & ASSOCIATES, INC., THE OWNER AND THE CONTRACTOR. ALL STAKING REQUESTS SHOULD BE DIRECTED TO THE ENGINEER A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO ACTUAL NEED. ANY ADDITIONAL STAKING OR RESTAKING WILL ONLY BE DONE AS DIRECTED AND AUTHORIZED BY THE OWNER OR HIS AUTHORIZED AGENT
- THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ANY WORK PERFORMED BY THE CONTRACTOR AND/OR OWNER BASED ON DRAWINGS WHICH HAVE NOT BEEN SIGNED AND SEALED BY THE ENGINEER, APPROVED BY THE CITY OF SOUTH SAN FRANCISCO AND SPECIFICALLY NOTED AS "APPROVED FOR CONSTRUCTION" BY THE ENGINEER ALL INFORMATION SHOWN ON PRELIMINARY DRAWINGS IS SUBJECT TO CORRECTION AND/OR CHANGE AND THE CONTRACTOR AND/OR OWNER SHALL PERFORM ANY AND ALL IMPROVEMENTS AT THEIR OWN RISK.
- 8. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL EASEMENTS, RIGHTS OF ENTRY, ETC. NECESSARY TO CONSTRUCT ANY WORK SHOWN HEREON.
- OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES PRIOR TO CONSTRUCTION OR CONSTRUCTION STAKING BY THE ENGINEER. ANY RESTAKING REQUIRED AS A RESULT OF OBSTRUCTIONS ENCOUNTERED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER ASSUMES RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED WILL BE THE OBSTRUCTIONS ENCOUNTERED. ALL EXISTING ELEVATIONS SHOWN ARE AS MEASURED IN THE FIELD UNLESS OTHERWISE NOTED.
- 10. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM BELLECCI & ASSOCIATES, INC.
- 11. THE CONTRACTOR SHALL PROVIDE THE NECESSARY SAFETY OR TESTING EQUIPMENT AND PERSONNEL.
- 12. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAG PERSONS, OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY IN ACCORDANCE WITH CALTRANS AND CAL-OSHA SPECIFICATIONS.
- 13. IF ANY CULTURAL FEATURES OR ARCHAEOLOGICAL MATERIALS ARE UNCOVERED DURING GRADING, TRENCHING, OR OTHER EXCAVATION WORK, ALL WORK WITHIN THIRTY YARDS (30 YD) OF THESE MATERIALS SHALL BE STOPPED UNTIL A PROFESSIONAL ARCHAEOLOGIST CERTIFIED BY THE SOCIETY OF PROFESSIONAL ARCHAEOLOGY (SOPA) HAS HAD AN OPPORTUNITY TO EVALUATE THE SIGNIFICANCE OF THE FIND AND SUGGEST APPROPRIATE MITIGATION MEASURES ARE DETERMINED AND IMPLEMENTED, IF DEEMED NECESSARY.
- 14. REMOVE ALL TREES AND BRUSH IN RIGHT-OF-WAY UNLESS SPECIFICALLY NOTED FOR PRESERVATION.
- 15. ALL WORK SHALL CONFORM TO THE CURRENTLY ADOPTED EDITIONS OF THE STANDARD PLANS AND SPECIFICATIONS OF THE CITY OF SOUTH SAN FRANCISCO UNLESS OTHERWISE NOTED.
- 16. THE INSTALLATIONS OF EROSION CONTROL FACILITIES AND MEASURES IS NECESSARY AT ALL TIMES.
- 17. REFER TO CITY OF SOUTH SAN FRANCISCO, ENGINEERING PROCEDURES MANUAL OF STANDARD PLANS AND SPECIFICATIONS FOR ADDITIONAL IMPORTANT INFORMATION AND REQUIREMENTS.
- 18. CONTOUR INTERVAL SHOWN, ON THE PLANS ARE AT 1 FOOT MINOR AND 5 FOOT MAJOR.

MISCELLANEOUS GENERAL NOTES

- APPROVAL OF THESE PUBLIC IMPROVEMENT PLANS AS SHOWN DOES NOT CONSTITUTE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT BOUNDARY.
- 2. THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO OTHER EXISTING FACILITIES EXCEPT AS SHOWN ON THESE PLANS. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING FACILITY WHETHER OR NOT IT IS SHOWN HEREON, AND IS RESPONSIBLE FOR CORRECTING ANY DAMAGE TO SAID UTILITIES.
- 3. LOCATION AND ELEVATION OF EXISTING IMPROVEMENTS SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (1-800-227-2600) TO OBTAIN A U.S.A. IDENTIFICATION NUMBER AND TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY DUE TO ACTUAL LOCATION OF EXISTING FACILITIES.
- ALL WORK SHALL CONFORM TO THE CURRENT ADOPTED EDITIONS OF THE STANDARD PLANS AND SPECIFICATIONS OF THE CITY OF SOUTH SAN FRANCISCO UNLESS OTHERWISE NOTED.
- 5. "CITY ENGINEER" SHALL MEAN THE CITY ENGINEER OR HIS/HER AUTHORIZED AGENT ACTING WITHIN THE SCOPE OF HIS/HER AUTHORITY.
- 6. THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION CONFERENCE AT THE JOB SITE WITH THE CITY, DEVELOPER, SUBCONTRACTORS, UTILITIES, AND OTHER AFFECTED AGENCIES AT LEAST TWO (2) WORKING DAYS PRIOR TO STARTING ANY CONSTRUCTION WORK. THE CONTRACTOR MUST HAVE APPROVED PLANS PRIOR TO SCHEDULING A PRECONSTRUCTION MEETING
- TRAFFIC CONTROL SHALL BE PROVIDED IN CONFORMANCE WITH THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)" ISSUED BY THE STATE OF CALIFORNIA. DEPARTMENT OF TRANSPORTATION AND AS REQUIRED BY THE CITY ENGINEER.
- 8. CONTRACTOR'S OPERATIONS SHALL CONFORM TO THE RULES AND REGULATIONS OF THE STATE OF CALIFORNIA CONSTRUCTION SAFETY ORDERS PERTAINING TO TRENCHES AND EXCAVATIONS.
- 9. CONTRACTOR SHALL PROVIDE AT LEAST TWO (2) WORKING DAYS ADVANCE NOTICE TO THE CITY ENGINEER PRIOR TO CONNECTING TO EXISTING WATER FACILITIES. THE MANIPULATION OF EXISTING WATER VALVES SHALL BE DONE UNDER THE DIRECTION OF CITY WATER DIVISION PERSONNEL.
- 10. IF DRIVEWAY DEPRESSIONS ARE MADE IN ANY CURB, DRIVEWAY APPROACHES ARE THEN CONSIDERED TO BE PART OF THE IMPROVEMENT PLAN AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF SOUTH SAN FRANCISCO STANDARD PLANS.
- 11. TREES SHALL NOT BE PLANTED WITHIN THE CITY OF SOUTH SAN FRANCISCO RIGHT-OF-WAY UNLESS A PERMIT HAS BEEN OBTAINED FROM THE PUBLIC WORKS DEPARTMENT, OR IF THE TREES ARE PLANTED IN ACCORDANCE WITH A LANDSCAPE PLAN APPROVED BY THE CITY ENGINEER AND THE COMMUNITY DEVELOPMENT DIRECTOR.
- 12. JOINTS BETWEEN NEW PAVEMENT AND EXISTING PAVEMENT SHALL BE MADE BY SAW-CUTTING EXISTING PAVEMENT TO EFFECT A NEAT BUTT JOINT AND AS DEPICTED ON THE CITY STANDARD PLANS. FEATHERING NEW ASPHALT PAVING OVER EXISTING PAVEMENT IS NOT ALLOWED.
- 13. NO FINAL PAVING SHALL BE DONE UNTIL EXISTING POWER POLES AND OTHER EXISTING FACILITIES, ARE RELOCATED OUTSIDE THE AREAS TO BE PAVED.
- 14. ALL UNDERGROUND UTILITIES SHALL BE CONSTRUCTED PRIOR TO THE PLACEMENT OF BASEROCK UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
- 15. ALL PAVEMENT MARKINGS IN THE PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC UNLESS SPECIFICALLY CALLED OUT AS PAINT. NO PERMANENT MARKINGS SHALL BE PLACED UNTIL THE CITY TRAFFIC ENGINEER, CITY ENGINEER OR HIS REPRESENTATIVE APPROVES CAT TRACKING IN THE FIELD.
- 16. BLUE REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED AT EACH FIRE HYDRANT LOCATION AS SHOWN ON THE CITY OF SOUTH SAN FRANCISCO STANDARD PLANS.
- 17. ALL TRAFFIC SIGNS AND STREET NAME SIGNS SHALL BE HIGH REFLECTIVE GRADE MATERIALS.
- 18. THE IMPROVEMENT PLANS SHALL REFLECT THAT ALL ON-SITE/OFF-SITE STORM DRAIN INLETS SHALL BE "NO DUMPING DRAINS TO CREEK" STENCILED, USING A TWO-STEP THERMOPLASTIC ON THE FACE OF THE CURB ADJACENT TO THE INLET. THE PROJECT PLANS SHALL ALSO INCLUDE EROSION CONTROL MEASURES TO PREVENT SOIL, DIRT AND DEBRIS FROM ENTERING THE STORM DRAIN SYSTEM, IN ACCORDANCE WITH THE REGULATIONS OUTLINED IN THE ASSOCIATION OF BAY AREA GOVERNMENTS (ABAG) EROSION AND SEDIMENT CONTROL HANDBOOK.
- 19. THE CITY ENGINEER PRIOR TO THE PLACEMENT OF CONCRETE, MUST APPROVE FORMS FOR CURBS, GUTTERS, AND SIDEWALKS.
- 20. THE CONTRACTOR SHALL REVIEW THE CURRENT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PROVIDED BY THE OWNER. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY FOR CONDUCTING HIS/HER OPERATIONS IN ADHERENCE TO THE SWPPP. THE CONTRACTOR IS RESPONSIBLE FOR ANY FINES. DELAYS, AND/OR DAMAGES RESULTING FROM ANY STATE WATER QUALITY CONTROL BOARD SANCTIONS CAUSED BY THE OPERATION OF THE CONTRACTOR OR HIS/HER SUBCONTRACTORS.
- 21. A CERTIFIED DISTRIBUTION SYSTEM OPERATOR MUST BE PRESENT FOR ALL HYDROSTATIC TESTING, CHLORINATION, FLUSHING , BACTERIA TESTING AND CONNECTIONS TO THE EXISTING SYSTEM, PER CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, OPERATOR CERTIFICATION REGULATIONS, SECTION 63770. THE CITY OF SOUTH SAN FRANCISCO CITY ENGINEER MUST RECEIVE THE REQUEST FOR THE CERTIFIED OPERATOR TO BE PRESENT FOR THESE OPERATIONS IN WRITING NO LESS THAN SIX (6) WORKING DAYS PRIOR TO THE ANTICIPATED DATE OF WORK.

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	A	Call Two Working Days Before You Dig!	
_			AL NOTES AN ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE CITY OF SOUTH SAN FRANCISCO FOR ANY WORK TO BE PERFORMED WITHIN THE PUBLIC RIGHT-OF-WAY.
		B.	(NOTE ALL OTHER PERMIT REQUIREMENTS FROM ANY OTHER AFFECTED AGENCIES.) APPROVAL OF THESE PUBLIC IMPROVEMENT PLANS AS SHOWN DOES NOT CONSTITUTE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT BOUNDARY.
	В	C.	THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO OTHER EXISTING FACILITIES EXCEPT AS SHOWN ON THESE PLANS. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING FACILITY WHETHER OR NOT IT IS SHOWN HEREON, AND IS RESPONSIBLE FOR CORRECTING ANY DAMAGE TO SAID UTILITIES.
_		D.	LOCATION AND ELEVATION OF EXISTING IMPROVEMENTS SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (1-800-227-2600) TO OBTAIN A U.S.A. IDENTIFICATION NUMBER AND TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY DUE TO ACTUAL LOCATION OF EXISTING FACILITIES.
	(	E.	ALL WORK SHALL CONFORM TO THE CURRENTLY ADOPTED EDITIONS OF THE STANDARD PLANS AND SPECIFICATIONS OF THE CITY OF SOUTH SAN FRANCISCO UNLESS OTHERWISE NOTED.
	С	F.	"CITY ENGINEER" SHALL MEAN THE CITY ENGINEER OR HIS/HER AUTHORIZED AGENT ACTING WITHIN THE SCOPE OF HIS/HER AUTHORITY.
		G.	THE DEVELOPER SHALL TELEPHONE THE CITY OF SOUTH SAN FRANCISCO ENGINEERING DIVISION, (650) 829-6652, AT LEAST TWO (2) WORKING DAYS PRIOR TO STARTING CONSTRUCTION WORK.
		н.	THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION CONFERENCE AT THE JOB SITE WITH THE CITY, DEVELOPER, SUBCONTRACTORS, UTILITIES, AND OTHER AFFECTED AGENCIES AT LEAST TWO (2) WORKING DAYS PRIOR TO STARTING ANY CONSTRUCTION WORK. THE CONTRACTOR MUST HAVE APPROVED PLANS PRIOR TO SCHEDULING A PRECONSTRUCTION MEETING.
	D	l.	TRAFFIC CONTROL SHALL BE PROVIDED IN CONFORMANCE WITH THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)" ISSUED BY THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION AND AS REQUIRED BY THE CITY ENGINEER.
_		J.	IF ANY CULTURAL FEATURES OR ARCHAEOLOGICAL MATERIALS ARE UNCOVERED DURING GRADING, TRENCHING, OR OTHER EXCAVATION WORK, ALL WORK WITHIN ONE HUNDRED FEET (100') OF THESE MATERIALS SHALL BE STOPPED UNTIL A PROFESSIONAL ARCHAEOLOGIST CERTIFIED BY THE SOCIETY OF PROFESSIONAL ARCHAEOLOGY (SOPA) AND/OR THE SOCIETY OF CALIFORNIA ARCHAEOLOGY (SCA) HAS HAD AN OPPORTUNITY TO EVALUATE THE SIGNIFICANCE OF THE FIND AND APPROPRIATE MITIGATION MEASURES ARE DETERMINED AND IMPLEMENTED.
		К.	REGULAR HOURS OF WORK WILL BE LIMITED TO 7:00 A.M. TO 3:30 P.M., MONDAY THROUGH FRIDAY. THE OWNER OR DEVELOPER MUST SUBMIT A WRITTEN REQUEST FOR APPROVAL BY THE CITY ENGINEER AT LEAST TWO (2) WORKING DAYS IN ADVANCE TO WORK DURING ANY OTHER HOURS, WEEKENDS, OR HOLIDAYS.
	E		THE FOLLOWING SPECIAL HOURS OF WORK WILL BE ENFORCED FROM MONDAY THROUGH FRIDAY:
			WORK AFFECTING TRAFFIC ON WILL BE LIMITED TO 9:00 A.M. TO 3:00 P.M.
			SCHOOL IS IN SESSION WILL BE LIMITED TO 9:00 A.M. TO 3:00 P.M.
_			IMITED TO 8:00 A.M. TO 4:30 P.M.
			WORK IN EXCESS OF THREE HUNDRED FEET (300') FROM OCCUPIED RESIDENTIAL UNITS WILL BE LIMITED TO 7:00 A.M. TO 5:00 P.M.
	F		ALL SATURDAY WORK SHALL BE RESTRICTED TO 9:00 A.M. TO 4:00 P.M. CONTRACTOR'S OPERATIONS SHALL CONFORM TO THE RULES AND REGULATIONS OF THE STATE OF CALIFORNIA CONSTRUCTION SAFETY ORDERS PERTAINING TO TRENCHES AND EXCAVATIONS.
		М.	CONTRACTOR SHALL PROVIDE AT LEAST TWO (2) WORKING DAYS ADVANCE NOTICE TO THE CITY ENGINEER PRIOR TO CONNECTING TO EXISTING WATER FACILITIES. THE MANIPULATION OF EXISTING WATER VALVES SHALL BE DONE UNDER THE DIRECTION OF CITY WATER DIVISION PERSONNEL.
_		N.	THE INSTALLATION OF EROSION CONTROL FACILITIES AND MEASURES IS NECESSARY AT ALL TIMES. (EROSION CONTROL PLAN SHALL BE APPROVED BY THE CITY ENGINEER).
		0.	MAILBOXES SHALL BE INSTALLED IN LOCATIONS APPROVED BY THE LOCAL POSTMASTER AND PER CITY OF SOUTH SAN FRANCISCO STANDARD PLANS AND BE SHOWN ON THE SIGNING AND STRIPING PLANS.
	G	Ρ.	ALL DRIVEWAY LOCATIONS AND WIDTHS ARE APPROVED BASED ON THE INFORMATION PROVIDED BY THE DEVELOPER/OWNER. IF THERE IS A REQUIRED CHANGE IN THE FLOOR PLAN, THE DEVELOPER/OWNER SHALL WIDEN OR RELOCATE THE DRIVEWAY SOLELY AT HIS/HER OWN COST.
		Q.	IF DRIVEWAY DEPRESSIONS ARE MADE IN ANY CURB, DRIVEWAY APPROACHES ARE THEN CONSIDERED TO BE PART OF THE IMPROVEMENT PLAN AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF SOUTH SAN FRANCISCO STANDARD PLANS.
_		R.	MONUMENTS ARE TO BE SET AS SHOWN ON THE PLANS AND PER THE REQUIREMENTS OF THE SUBDIVISION MAP ACT, LAND SURVEYORS ACT, AND THE CITY SUBDIVISION ORDINANCE AND SHALL BE IN ACCORDANCE WITH THE RULES AND PROCEDURES APPROVED BY THE COUNTY SURVEYOR. ALL LOT CORNERS AND TRACT BOUNDARIES SHALL BE LOCATED AND MONUMENTED IN ACCORDANCE WITH THE RECORDED TRACT MAP AND WRITTEN CERTIFICATION SHALL BE SUBMITTED TO THE CITY ENGINEER BY THE PROJECT CIVIL ENGINEER.
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S. TREES SHALL NOT BE PLANTED WITHIN THE CITY OF SOUTH SAN FRANCISCO RIGHT OF-WAY UNLESS A PERMIT HAS BEEN OBTAINED FROM THE PUBLIC WORKS DEPARTMENT, OR IF THE TREES ARE PLANTED IN ACCORDANCE WITH A LANDSCAPE PLAN APPROVED BY THE CITY ENGINEER AND THE COMMUNITY DEVELOPMENT DIRECTOR.

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- T. JOINTS BETWEEN NEW PAVEMENT AND EXISTING PAVEMENT SHALL BE MADE BY SAW-CUTTING EXISTING PAVEMENT TO EFFECT A NEAT BUTT JOINT AND AS DEPICTED ON THE CITY STANDARD PLANS. FEATHERING NEW ASPHALT PAVING OVER EXISTING PAVEMENT IS NOT ALLOWED.
- U. THE CONTRACTOR SHALL NOTIFY THE SAN MATEO COUNTY FLOOD CONTROL DISTRICT IRRIGATION DISTRICT PRIOR TO STARTING WORK NEAR DISTRICT'S FACILITIES AND SHALL COORDINATE ALL WORK WITH DISTRICT'S REPRESENTATIVES.
- V. LOCATION AND HEIGHT OF ALL RETAINING WALLS SHALL BE AS SHOWN ON THESE PLANS. RETAINING WALLS HIGHER THAN ONE FOOT (1') SHALL BE STRUCTURALLY DESIGNED AND APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION (SEE STANDARD PLANS G-3A, G-3B, G-4A AND G-4B FOR DETAILS).
- W. IT SHALL BE THE RESPONSIBILITY OF THE APPLICANT/ENGINEER TO CONTACT THE VARIOUS UTILITY AGENCIES, ADVISE THE AGENCIES OF THE PROPOSED IMPROVEMENTS, AND PAY FOR THE COST OF RELOCATIONS, IF NEEDED.
- X. NO FINAL PAVING SHALL BE DONE UNTIL EXISTING POWER POLES AND OTHER EXISTING FACILITIES, ARE RELOCATED OUTSIDE THE AREAS TO BE PAVED.
- Y. SUB GRADE FOR ALL STREET, CURB AND GUTTER, AND CONCRETE FLATWORK SHALL BE COMPACTED TO NINETY-FIVE PERCENT (95%) RELATIVE COMPACTION.
- Z. ALL UNDERGROUND UTILITIES SHALL BE CONSTRUCTED PRIOR TO THE PLACEMENT OF BASEROCK UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
- AA. ALL PAVEMENT MARKINGS IN THE PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC UNLESS SPECIFICALLY CALLED OUT AS PAINT. NO PERMANENT MARKINGS SHALL BE PLACED UNTIL THE CITY TRAFFIC ENGINEER, CITY ENGINEER OR HIS REPRESENTATIVE APPROVES CAT TRACKING IN THE FIELD.
- BB. BLUE REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED AT EACH FIRE HYDRANT LOCATION AS SHOWN ON THE CITY OF SOUTH SAN FRANCISCO STANDARD PLANS.
- CC. ALL TRAFFIC SIGNS AND STREET NAME SIGNS SHALL BE HIGH REFLECTIVE GRADE MATERIALS.
- DD. THE IMPROVEMENT PLANS SHALL REFLECT THAT ALL ON-SITE/OFF-SITE STORM DRAIN INLETS SHALL BE "NO DUMPING DRAINS TO CREEK" STENCILED, USING A TWO-STEP THERMOPLASTIC ON THE FACE OF THE CURB ADJACENT TO THE INLET. THE PROJECT PLANS SHALL ALSO INCLUDE EROSION CONTROL MEASURES TO PREVENT SOIL, DIRT AND DEBRIS FROM ENTERING THE STORM DRAIN SYSTEM, IN ACCORDANCE WITH THE REGULATIONS OUTLINED IN THE ASSOCIATION OF BAY AREA GOVERNMENTS (ABAG) EROSION AND SEDIMENT CONTROL HANDBOOK.
- EE. THE CITY ENGINEER PRIOR TO THE PLACEMENT OF CONCRETE MUST APPROVE FORMS FOR CURBS, GUTTERS, AND SIDEWALKS.
- FF. ALL STORM DRAIN STRUCTURES SHALL BE CONSTRUCTED TO CITY OF SOUTH SAN FRANCISCO STANDARDS (WITH WEEP HOLES AT SUBGRADE ELEVATION) UNLESS OTHERWISE NOTED.
- GG. THE CONTRACTOR SHALL REVIEW THE CURRENT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PROVIDED BY THE OWNER. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY FOR CONDUCTING HIS/HER OPERATIONS IN ADHERENCE TO THE SWPPP. THE CONTRACTOR IS RESPONSIBLE FOR ANY FINES, DELAYS, AND/OR DAMAGES RESULTING FROM ANY STATE WATER QUALITY CONTROL BOARD SANCTIONS CAUSED BY THE OPERATION OF THE CONTRACTOR OR HIS/HER SUBCONTRACTORS.
- HH. APPLICABLE CITY OF SOUTH SAN FRANCISCO STANDARD DETAILS INCLUDE BUT ARE NOT LIMITED TO, THE FOLLOWING: (LIST STANDARD DETAILS).

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### ABBREVIATIONS

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AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
ARV	AIR RELEASE VALVE
BC	BEGIN CURVE
BM	BENCH MARK
BO	BLOW OFF
CB	CATCH BASIN
CL	CENTERLINE
	GENTERLINE
CONST	CONSTRUCTION
CR	CURB RETURN
DCDA	DOUBLE CHECK DETECTOR
	ASSEMBLY
	ASSEMDLI
DW	DRIVEWAY
EA	EACH
EBMUD	EAST BAY MUNICIPAL UTILITY
	DISTRICT
	END CURVE
EC	END CURVE
EL	ELEVATION
FP	EDGE OF PAVEMENT
EX	EXISTING
FC	FACE OF CURB
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GB	GRADE BREAK
GR	GRATE ELEVATION
GR	GRATE ELEVATION
GV	GATE VALVE
HP	HIGH POINT
INV	INVERT ELEVATION
1	
L	LENGTH
LF	LINEAR FEET
LP	LOW POINT
LT	LEFT
— ·	
MAX	MAXIMUM
MIN	MINIMUM
IVITIN	
NTS	NOT TO SCALE
PCC	PORTLAND CEMENT CONCRET
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PRC	PT OF REVERSE CURVE
PT	POINT
PUE	PUBLIC UTILITY EASEMENT
PRV	PRESSURE REDUCING VALVE
PV	PAVEMENT GRADE
R	RADIUS
R/W	RIGHT-OF-WAY
RIM	RIM ELEVATION
DT	RIGHT
RT	
S	SLOPE
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SHT	SHEET
SL	STREET LIGHT
SNS	STREET NAME SIGN
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSL	SANITARY SEWER LATERAL
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
SUB	SUBDIVISION
TC	TOP OF CURB
TEMP	TEMPORARY
TI	
	TRAFFIC INDEX
TVD	
TYP	TYPICAL
	TYPICAL
W	TYPICAL WATER LINE
W	TYPICAL WATER LINE
W WQ	TYPICAL WATER LINE WATER QUALITY
W	TYPICAL WATER LINE
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### <u>LEGEND</u>

EXISTING

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### **DESCRIPTION** PROPERTY LINE

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CURB, GUTTER AND SIDEWALK
CENTERLINE
SANITARY SEWER PIPE
SANITARY SEWER MANHOLE
STORM DRAIN PIPE
STORM DRAIN MANHOLE
STORM DRAIN CATCH BASIN
IELD INLET
VATER MAIN
VATER VALVE
IRE HYDRANT
LECTROLIER
OWER POLE
TREET MONUMENTS
STREET SIGN
MINOR CONTOURS
AJOR CONTOURS
POT ELEVATIONS

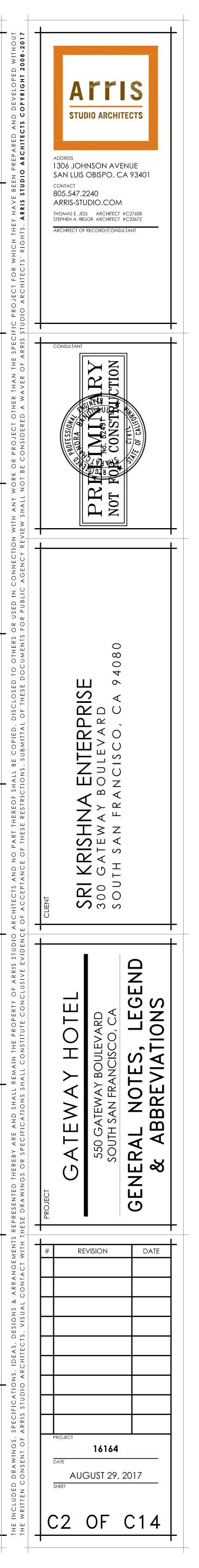


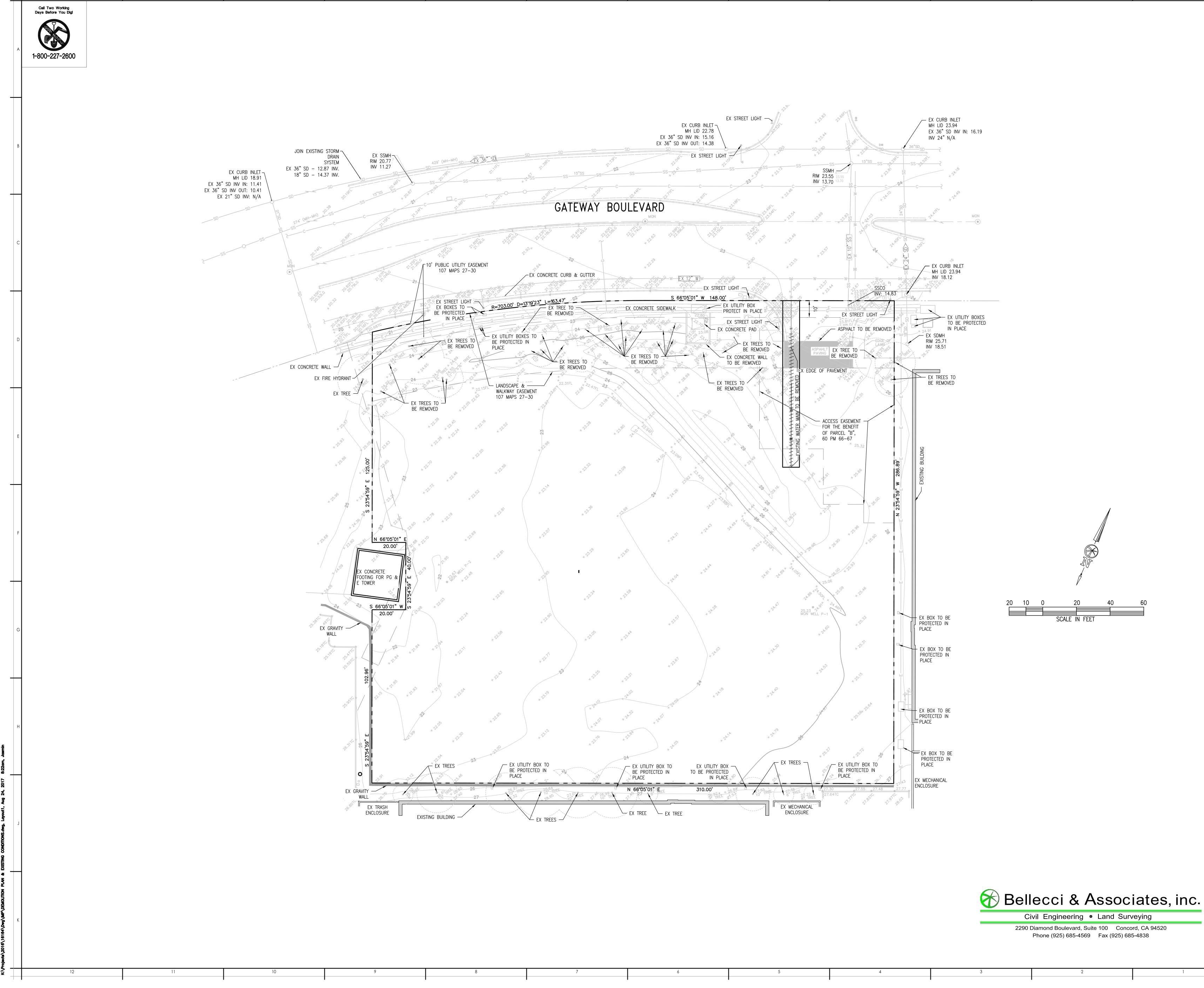
# Bellecci & Associates, inc.

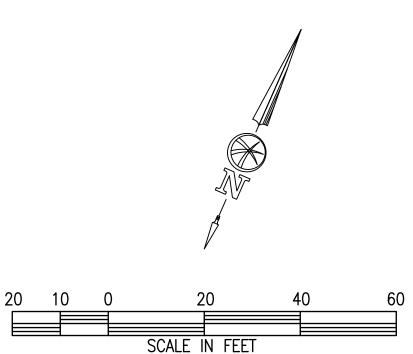
Civil Engineering • Land Surveying

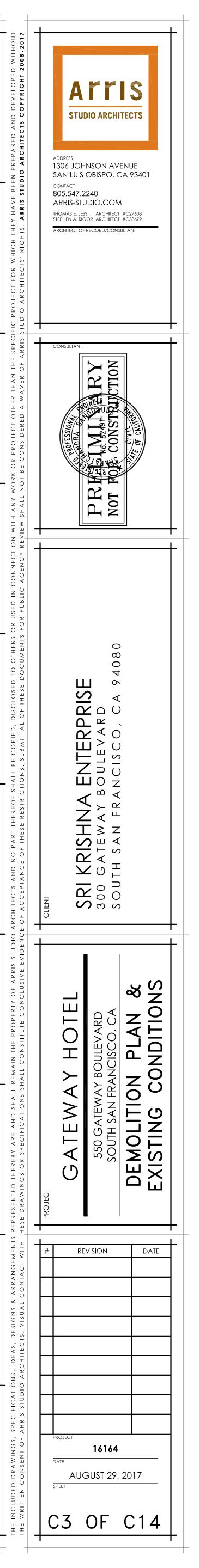
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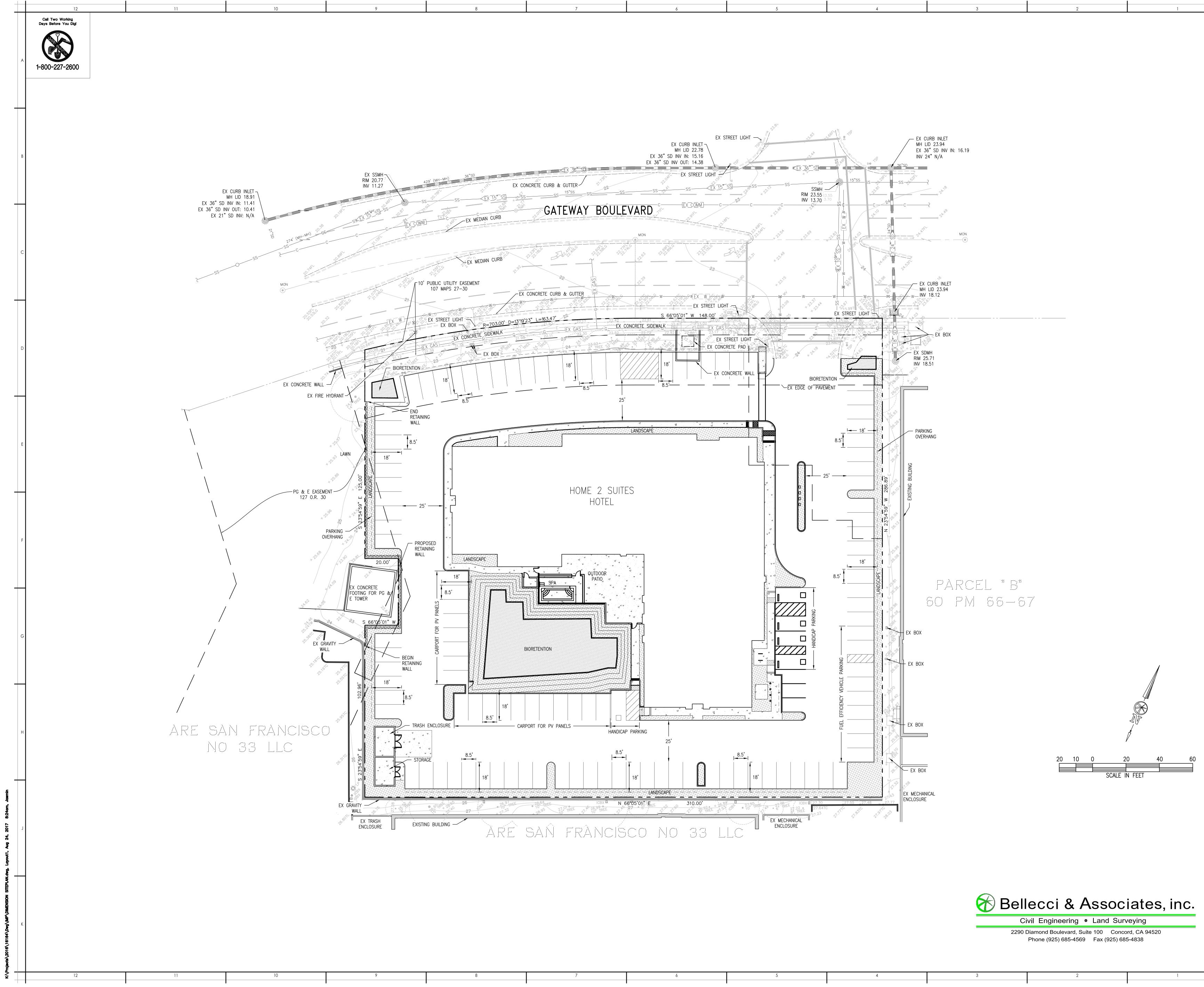
2290 Diamond Boulevard, Suite 100 Concord, CA 94520 Phone (925) 685-4569 Fax (925) 685-4838

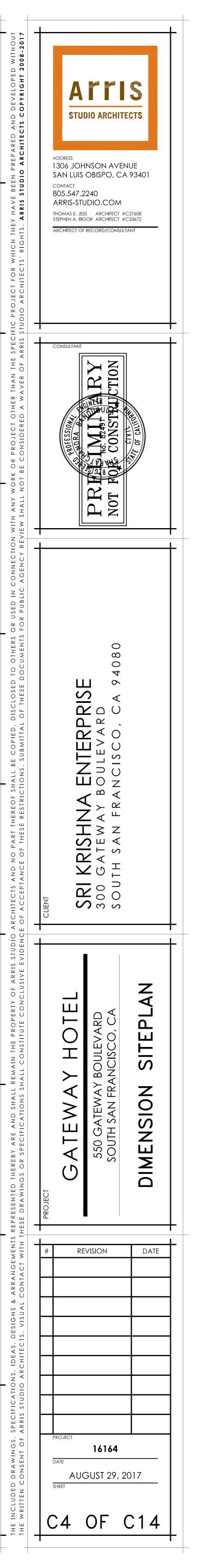




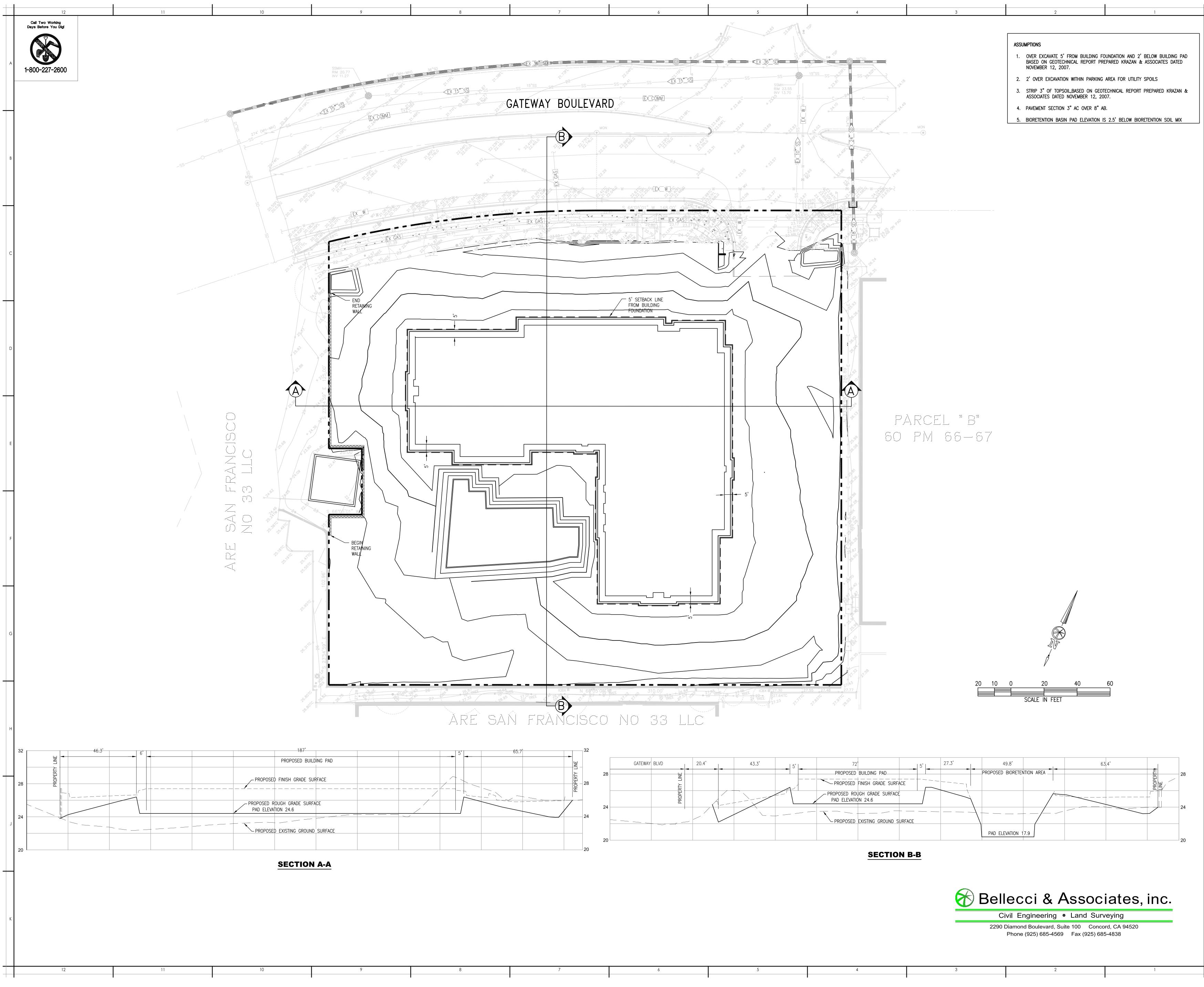


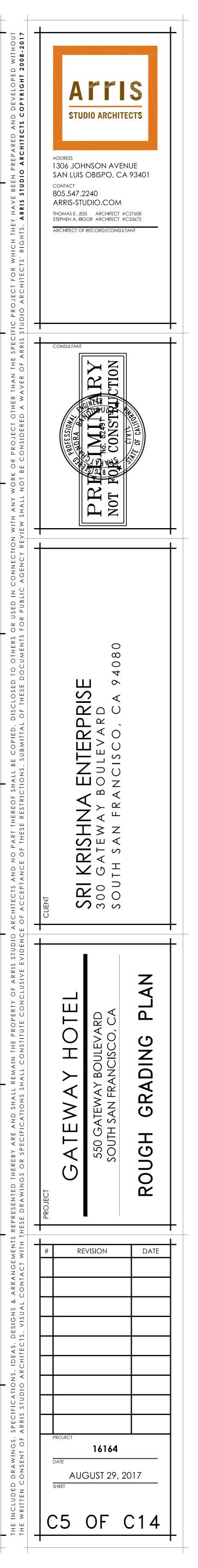


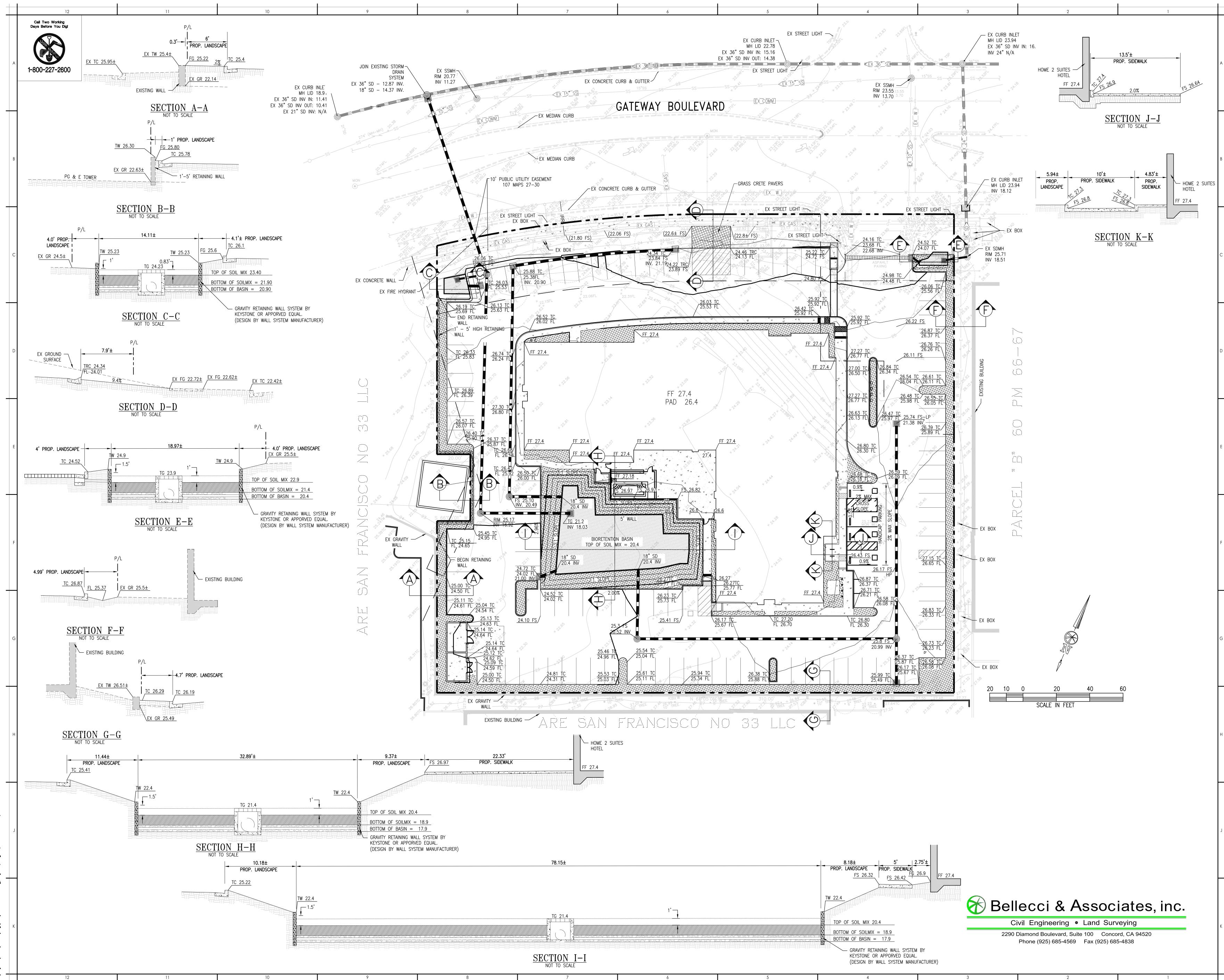






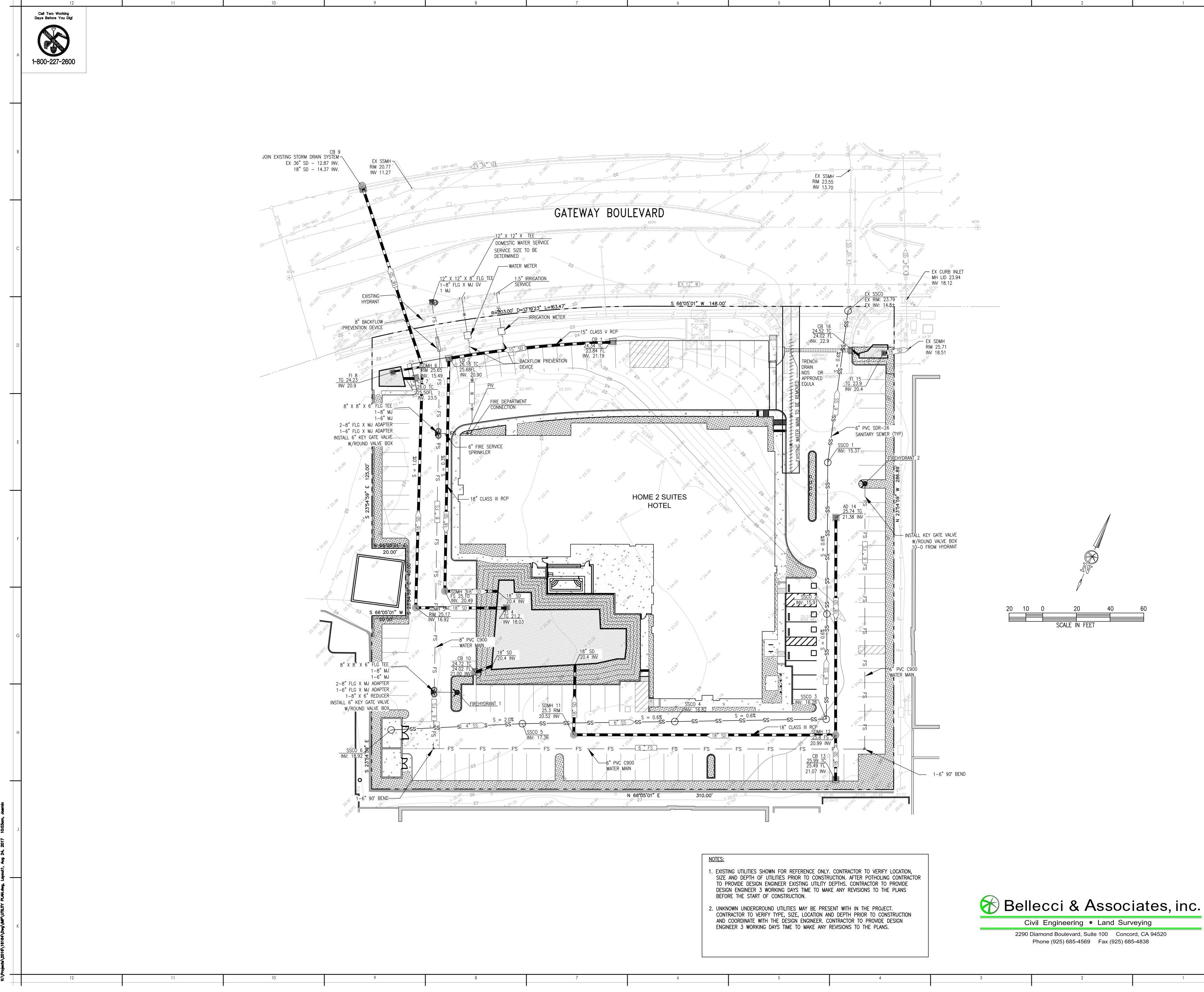


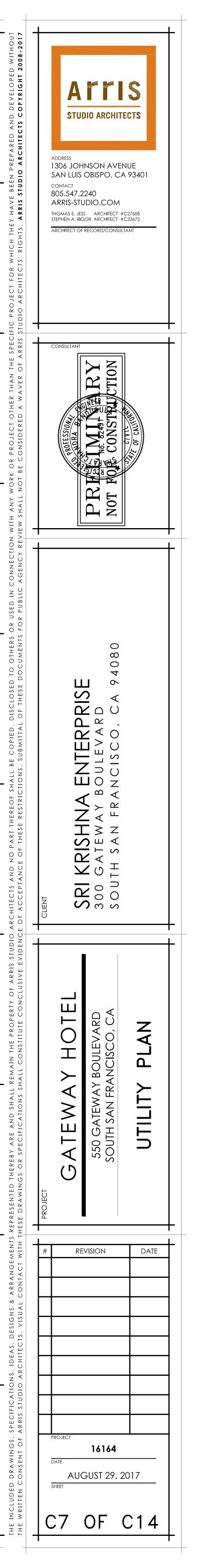


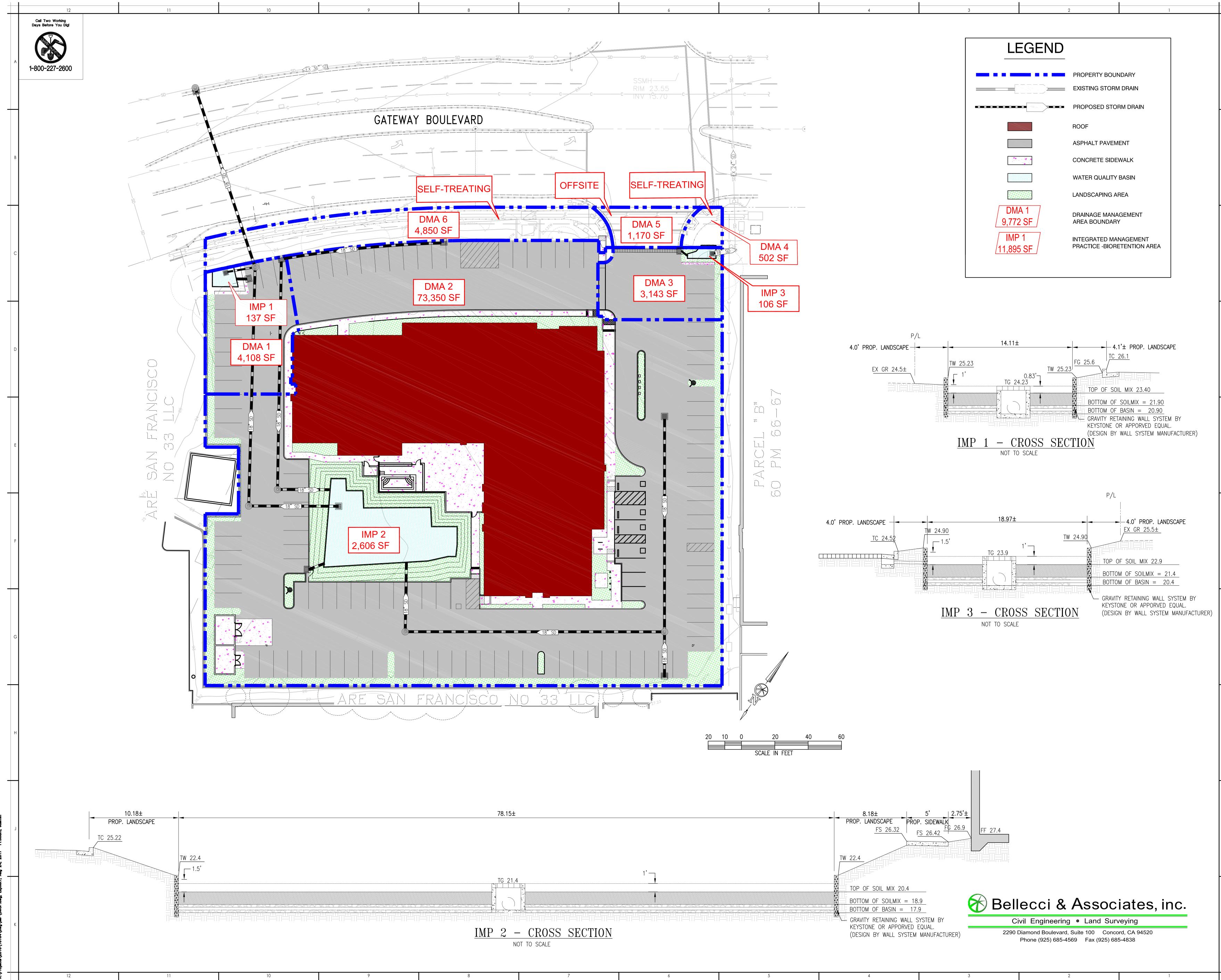


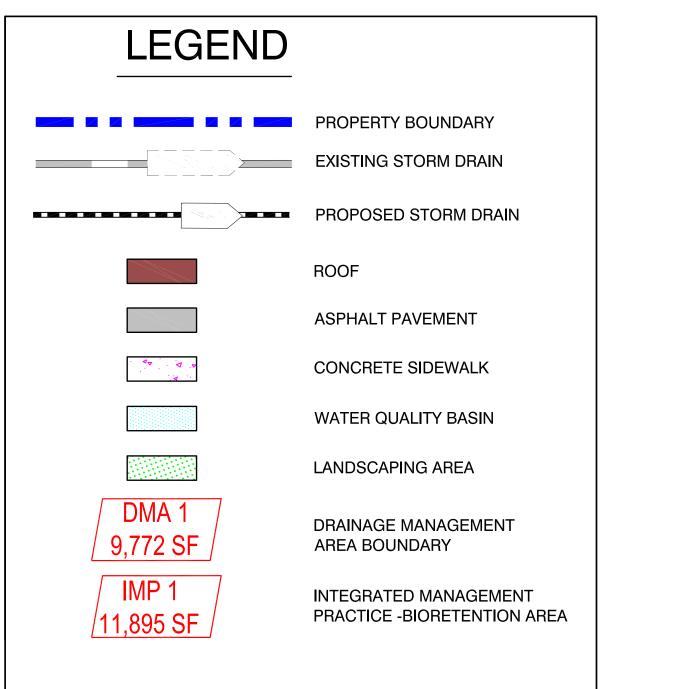
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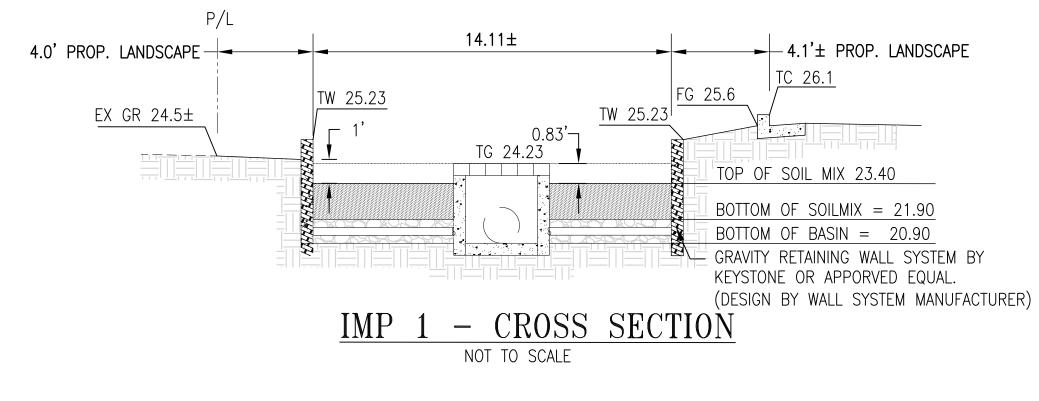














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	- Markahaat San Cal	aulating the Combine	tion Flows and Male	man Beatland			
		Iculating the Combina ing Section 1, make a copy of thi			this the project. Enter info	rmation specific to s	he nmiert mvi DMA
		ng section 1, make a copy of the v. Cells shaded in light blue cont		-		тпацыя эрспук. со в	пе ргојеса ока Отна
	1.0 Project Information	on					
	1-1 Project Name: 1-2 City application ID:		HOME 2 SUITES		The calculations presented here sizing method provided in the C	ountywide Program's C.	3 Technical Guidance,
	1-3 Site Address or APN:	Les.			Version 4.0. The steps presented Suidance, applicable portions of		
	1-4 Tract or Parcel Map No 1-5 Rainfall Region	.o:	6	Ľ	'Guidance from Chapter 5".		
	1-6 Region Mean Annual F		20.10				Click here for ma
	1-7 Site Mean Annual Pred	cipitation (MAP)	20				
	1-8			itment factor is automa		1.00	
		(The "Site Mean Annual Pre Refer	ecipitation (MAP)" is divided * to the map in Appendix C o				
	2.0 Calculate Percent	tage of Impervious Surfac					
	2-1 Name of DMA:		DMA 1		· <b>v</b>		
	For items 2-2 and 2-3,	, enter the areas in square feet f					
	Type of :	Surface Area of	surface type within DMA (Sq. Ft.)	Adjust Pervious Surface	Effective Impervious Area		
	2-2 Impervious surface		3,474	1.0	3,474		
	2-3 Pervious surface		634	0.1	63		
	2-4	Area (square feet) =	4,108 Total Effective	Impervious Area (EIA)	3,537 Sq	uare feet	
		sin Channan Valuma in In		when non vien level	5,557		
		sin Storage Volume in Ind					
	Table 5-3. Unit Basir	in Storage Volumes in Inches Static	for 80 Percent Capture U on, and Mean Annual	lsing 48-Hour Drawdo Runoff	wns, based on runoff co	efficient	
	Reg	gion Pre	ecipitation (Inches)	Coefficient of 1.0			
	2			2.04" 0.86"			
	3	3 Half Moon I	Bay, 25.92"	0.82"			
	4			0.64" 0.73"			
	6		co airport, 20.1" co Oceanside, 19.3"	0.85" 0.72"			
		3an Frankis	to oceanisme, 15.5		_		-
	3-1 (The coeffici	cient for this method is always 1.	0, due to the conversion of i		dume from Table 5-3:	0.85	
	3-2				asin storage volume:	0.85	Inches
		(The unit basin storage volume	[Item 3-1] is adjusted by ap				
	3-3	ted unit basin sizing volume [Iten	n 2.71 is multiplied by the Al		olume (in cubic feet):	249	Cubic feet
		ation of the Rain Event	п э-гј њанцинси ву инс он	ин 204 (юсн 2-4) оно с	nneneu w cume jeeg		
	4-1 Rainfall intensity		0.2	Inches per hour			
	4-2 Divide Item 3-2 by Iter	m 4-1	4.23	Hours of Rain Eve	nt Duration		
		hate of Surface Area of Tr		1			
	5-1 4% of DMA EIA (Item 2 5-2 Area 25% smaller than	-	141	Square feet			
	3% of DMA EIA}		106	Square feet			
	5-3 Volume of treated run 2	hoff for area in Item 5	187	Cubic feet (item 5-2	* 5 inches per hour * 1/12	* item 4-2)	
	6.0 Initial Adjustmen	t of Depth of Surface Por	nding Area				
	6-1 Subtract Item 5-3 from				of runoff to be stored in po		
	6-2 Divide Item 6-1 by Iter 6-3 Convert Item 6-2 from			1	runoff in surface ponding a ed runoff in surface pondir		
	6-4 If ponding depth in Ite	em 6-3 meets your target depth	(recommend 6"), skip to Ite	m 8-1. If not, continue	-	Burcoy	
	(Note: Overflow outlet	t elevation should be set based o	on the calculated ponding a	epin.)			
							May
	Combination Flow and Volume	e		1			
	Combination Flow and Volume	e		1			
	Combination Flow and Volume	e		1			
	Combination Flow and Volume	e		1			
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	Combination Flow and Volume	e		1			
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	Combination Flow and Volume	e		1			
				1			
	Combination Flow and Volume          7.0 Optimize Size of T         7-1 Enter an area larger th	Treatment Measure	127		23 if you need lace working	; depth.1	
	7.0 Optimize Size of T 7-1 Enter an area larger th 7-2 Volume of treated run	Treatment Measure		<b>Sq.ft.</b> (enter larger are	ea if you need less ponding		
	7.0 Optimize Size of T 7-1 Enter an area larger th 7-2 Volume of treated run 1	Treatment Measure han Item 5-2 noff for area in Item 7-	241	Sq.ft. (enter larger an Cubic feet (Item 7-1	* 5 inches per hour * 1/12	* item 4-2)	
	7.0 Optimize Size of T 7-1 Enter an area larger th 7-2 Volume of treated run 1 7-3 Subtract item 7-2 from	Treatment Measure han Item 5-2 noff for area in Item 7 m Item 3-3	241 8	Sq.ft. (enter larger an Cubic feet (item 7-1 Cubic feet (Amount	* 5 inches per hour * 1/12 of runoff to be stored in po	* Item 4-2) Inding area)	
	7.0 Optimize Size of T 7-1 Enter an area larger th 7-2 Volume of treated run 1 7-3 Subtract item 7-2 from 7-4 Divide Item 7-3 by Iter 7-5 Convert Item 7-4 from	Treatment Measure         han Item 5-2         noff for area in Item 7         m Item 3-3         m 7-1         n ft. to inches	241 8 0.06 0.69	Sq.ft. (enter larger an Cubic feet (item 7-1 Cubic feet (Amount Feet (Depth of stored Inches (Depth of stored	* 5 inches per hour * 1/12 of runoff to be stored in po runoff in surface ponding a ed runoff in surface pondir	* Item 4-2) mding area) area)	
	7.0 Optimize Size of T 7-1 Enter an area larger th 7-2 Volume of treated run 1 7-3 Subtract Item 7-2 from 7-4 Divide Item 7-3 by Iter 7-5 Convert Item 7-4 from 7-6 If the ponding depth in	Treatment Measure han Item 5-2 noff for area in Item 7- m Item 3-3 m 7-1	241 8 0.06 0.69 ere. If not, repeat Steps 7-1	Sq.ft. (enter larger an Cubic feet (litem 7-1 Cubic feet (Amount of Feet (Depth of stored Inches (Depth of stored through 7-5 until you of	* 5 inches per hour * 1/12 of runoff to be stored in po runoff in surface ponding a ed runoff in surface pondir	* Item 4-2) mding area) area)	
	7.0 Optimize Size of T 7-1 Enter an area larger th 7-2 Volume of treated run 1 7-3 Subtract Item 7-2 from 7-4 Divide Item 7-3 by Iter 7-5 Convert Item 7-4 from 7-6 If the ponding depth in (Note: Overflow outlet 8.0 Surface Area of Tr	Treatment Measure han Item 5-2 noff for area in Item 7 m Item 3-3 m 7-1 n ft. to inches in Item 7-5 meets target, stop he t elevation should be set based o reatment Measure for D	241 8 0.06 0.69 ere. If not, repeat Steps 7-1 on the calculated ponding d MA	Sq.ft. (enter larger an Cubic feet (Item 7-1 Cubic feet (Amount Feet (Depth of stored Inches (Depth of stored Inches (Depth of stored through 7-5 until you of epth.)	* 5 inches per hour * 1/12 of runoff to be stored in po runoff in surface ponding a ed runoff in surface pondir stain target depth.	* Item 4-2) inding area) area) ig area)	
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	7.0 Optimize Size of T 7-1 Enter an area larger th 7-2 Volume of treated run 1 7-3 Subtract Item 7-2 from 7-4 Divide Item 7-3 by Iter 7-5 Convert Item 7-4 from 7-6 If the ponding depth in (Note: Overflow outlet 8.0 Surface Area of Tr	Treatment Measure han Item 5-2 noff for area in Item 7 m Item 3-3 m 7-1 n ft. to inches in Item 7-5 meets target, stop he t elevation should be set based o reatment Measure for D	241 8 0.06 0.69 ere. If not, repeat Steps 7-1 on the calculated ponding d MA	Sq.ft. (enter larger an Cubic feet (Item 7-1 Cubic feet (Amount Feet (Depth of stored Inches (Depth of stored Inches (Depth of stored through 7-5 until you of epth.)	* 5 inches per hour * 1/12 of runoff to be stored in po runoff in surface ponding a ed runoff in surface pondir stain target depth.	* Item 4-2) inding area) area) ig area)	
	7.0 Optimize Size of T 7-1 Enter an area larger th 7-2 Volume of treated run 1 7-3 Subtract Item 7-2 from 7-4 Divide Item 7-3 by Iter 7-5 Convert Item 7-4 from 7-6 If the ponding depth in (Note: Overflow outlet 8.0 Surface Area of Tr	Treatment Measure han Item 5-2 noff for area in Item 7 m Item 3-3 m 7-1 n ft. to inches in Item 7-5 meets target, stop he t elevation should be set based o reatment Measure for D	241 8 0.06 0.69 ere. If not, repeat Steps 7-1 on the calculated ponding d MA	Sq.ft. (enter larger an Cubic feet (Item 7-1 Cubic feet (Amount Feet (Depth of stored Inches (Depth of stored Inches (Depth of stored through 7-5 until you of epth.)	* 5 inches per hour * 1/12 of runoff to be stored in po runoff in surface ponding a ed runoff in surface pondir stain target depth.	* Item 4-2) inding area) area) ig area)	
	7.0 Optimize Size of T 7-1 Enter an area larger th 7-2 Volume of treated run 1 7-3 Subtract Item 7-2 from 7-4 Divide Item 7-3 by Iter 7-5 Convert Item 7-4 from 7-6 If the ponding depth in (Note: Overflow outlet 8.0 Surface Area of Tr	Treatment Measure han Item 5-2 noff for area in Item 7 m Item 3-3 m 7-1 n ft. to inches in Item 7-5 meets target, stop he t elevation should be set based o reatment Measure for D	241 8 0.06 0.69 ere. If not, repeat Steps 7-1 on the calculated ponding d MA	Sq.ft. (enter larger an Cubic feet (Item 7-1 Cubic feet (Amount Feet (Depth of stored Inches (Depth of stored Inches (Depth of stored through 7-5 until you of epth.)	* 5 inches per hour * 1/12 of runoff to be stored in po runoff in surface ponding a ed runoff in surface pondir stain target depth.	* Item 4-2) inding area) area) ig area)	
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	7.0 Optimize Size of T 7-1 Enter an area larger th 7-2 Volume of treated run 1 7-3 Subtract Item 7-2 from 7-4 Divide Item 7-3 by Iter 7-5 Convert Item 7-4 from 7-6 If the ponding depth in (Note: Overflow outlet 8.0 Surface Area of Tr	Treatment Measure han Item 5-2 noff for area in Item 7 m Item 3-3 m 7-1 n ft. to inches in Item 7-5 meets target, stop he t elevation should be set based o reatment Measure for D	241 8 0.06 0.69 ere. If not, repeat Steps 7-1 on the calculated ponding d MA	Sq.ft. (enter larger an Cubic feet (Item 7-1 Cubic feet (Amount Feet (Depth of stored Inches (Depth of stored Inches (Depth of stored through 7-5 until you of epth.)	* 5 inches per hour * 1/12 of runoff to be stored in po runoff in surface ponding a ed runoff in surface pondir stain target depth.	* Item 4-2) inding area) area) ig area)	
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	7.0 Optimize Size of T 7-1 Enter an area larger th 7-2 Volume of treated run 1 7-3 Subtract Item 7-2 from 7-4 Divide Item 7-3 by Iter 7-5 Convert Item 7-4 from 7-6 If the ponding depth in (Note: Overflow outlet 8.0 Surface Area of Tr	Treatment Measure han Item 5-2 noff for area in Item 7 m Item 3-3 m 7-1 n ft. to inches in Item 7-5 meets target, stop he t elevation should be set based o reatment Measure for D	241 8 0.06 0.69 ere. If not, repeat Steps 7-1 on the calculated ponding d MA	Sq.ft. (enter larger an Cubic feet (Item 7-1 Cubic feet (Amount Feet (Depth of stored Inches (Depth of stored Inches (Depth of stored through 7-5 until you of epth.)	* 5 inches per hour * 1/12 of runoff to be stored in po runoff in surface ponding a ed runoff in surface pondir stain target depth.	* Item 4-2) inding area) area) ig area)	
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Combination Flow and Volume

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Combination Flow and Volume

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## IMP 2 SIZING CALCULATION

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0 Project Information				
-1 Project Name:	HOME 2 SUITES			here are based on the combination flow and volume the Countywide Program's C.3 Technical Guidance,
-2 City application ID:				ented below are explained in Section 5.1 of the
-3 Site Address or APN:				ms of which are included in this file, in the sheet nam
-4 Tract or Parcel Map No:			"Guidance from Chapter 5".	-
-5 Rainfall Region	6			
-6 Region Mean Annual Precipitation (MAP)	20.10			Click here for ma
.7 Site Mean Annual Precipitation (MAP)	20			
-8 (The "Site Mean	MAP adju Annual Precipitation (MAP)" is divided Refer to the map in Appendix C o		- plicable rain gauge, sho	
0 Calculate Percentage of Impervio	us Surface for Drainage Mana	gement Area (DN	1A)	
-1 Name of DMA:	DMA 2			
For items 2-2 and 2-3, enter the areas in s	quare feet for each type of surface with	nin the DMA.		_
	Area of surface type within DMA	Adjust Pervious	Effective Impervious	]
Type of Surface	(Sq. Ft.)	Surface	Area	
-2 Impervious surface	61,573	1.0	61,573	1
-3 Pervious surface	11,777	0.1	1,178	1
Total DMA Area (square feet)		0.1	1,170	1
	,		63.751	Courses foot
-4	Iotal Effective	Impervious Area (EIA)	62,751	Square feet
Table 5-3. Unit Basin Storage Volume		Shing to mour brand	owney wasca on italio	
Region	Station, and Mean Annual Precipitation (Inches)	Runoff Coefficient of 1.0		
1	Precipitation (Inches) Boulder Creek, 55.9"	Coefficient of 1.0 2.04"		
1 2	Precipitation (Inches) Boulder Creek, 55.9" La Honda, 24.4"	Coefficient of 1.0 2.04" 0.86"		
1 2 3	Precipitation (Inches) Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92"	Coefficient of 1.0 2.04" 0.86" 0.82"		
1 2	Precipitation (Inches) Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Aixo, 14.6"	Coefficient of 1.0 2.04" 0.86"		
1 2 3 4	Precipitation (Inches) Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92"	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64"		
1 2 3 4 5	Precipitation (Inches) Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Aixo, 14.6" San Francisco, 21.0"	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.64"		
1 2 3 4 5 6 7	Precipitation (Inches) Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1"	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage	rolume from Table 5-3: cetive impervious area.]	0.85
1 2 3 4 5 6 7 -1 (The coefficient for this method -2	Precipitation (Inches) Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Aito, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Oceanside, 19.3"	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage to any kandscaping to effe Adjusted unit	ctive impervious area.) bash storage volume:	
1       2       3       4       5       6       7   •1 (The coefficient for this method •2 (The unit basin store) •3 (The adjusted unit basin sizing weights)	Precipitation (Inches) Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Aito, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Oceanside, 19.3" is always 1.0, due to the conversion of age volume [Item 3-1] is adjusted by ap rolume [Item 3-2] is multiplied by the Di	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage of any landscoping to effe Adjusted unit phying the MAP adjustic Required Capture	ctive impervious area.) bash storage volume: ment factor (Item 1-8).) Volume (in cubic feet):	0.85 Inches
	Precipitation (Inches) Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco, 21.0" San Francisco Decanside, 19.3" is adways 1.0, due to the conversion of a age volume [Item 3-1] is adjusted by ap rotume [Item 3-2] is multiplied by the Da n Event	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage to any kandscaping to effe Adjusted unit plying the MAP adjusti Required Capture MA EIA [Item 2-4] and to	ctive impervious area.) bash storage volume: ment factor (Item 1-8).) Volume (in cubic feet):	0.85 Inches
1         2         3         4         5         6         7         -1         (The coefficient for this method         -2         (The unit basin stor         -1         (The adjusted unit basin stor         -3         (The adjusted unit basin sizing to adjust the Duration of the Rai         -1         Adjusted unit basin sizing to adjust the Duration of the Rai         -1         Rainfall intensity	Precipitation (Inches) Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Oceanside, 19.3" is adways 1.0, due to the conversion of a age volume [Item 3-1] is adjusted by ap rolume [Item 3-2] is multiplied by the Da n Event	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage to any kandscaping to effe Adjusted unit oplying the MAP adjuste Required Capture MA EIA [item 2-4] and to Inches per hour	ctive impervious area.) bash storage Volüme: ment factor (Item 1-8].) Volume (in cubic feet): converted to cubic feet)	0.85 Inches
1         2         3         4         5         6         7         (The coefficient for this method         (The coefficient for this method         2         (The unit basin stor         3         (The adjusted unit basin sizing to 0         O Calculate the Duration of the Rai         1       Rainfall intensity	Precipitation (Inches) Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Oceanside, 19.3" is adways 1.0, due to the conversion of a age volume [Item 3-1] is adjusted by ap rolume [Item 3-2] is multiplied by the Da n Event	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage to any kandscaping to effe Adjusted unit plying the MAP adjusti Required Capture MA EIA [Item 2-4] and to	ctive impervious area.) bash storage Volüme: ment factor (Item 1-8].) Volume (in cubic feet): converted to cubic feet)	0.85 Inches
1         2         3         4         5         6         7         (The coefficient for this method         -1         (The coefficient for this method         -2         (The odjusted unit basin sizing to         O Calculate the Duration of the Rai         -1       Rainfall intensity         -2       Divide item 3-2 by item 4-1         O Preliminary Estimate of Surface A	Precipitation (Inches) Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Aito, 14.6" San Francisco, 21.0" San Francisco, 21.0" San Francisco Decenside, 19.3" is adways 1.0, due to the conversion of a age volume [Item 3-1] is adjusted by ap tolume [Item 3-2] is multiplied by the Da n Event 0.2 4.23	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage to any kandscaping to effe Adjusted unit oplying the MAP adjuste Required Capture MA EIA [item 2-4] and to Inches per hour	ctive impervious area.) bash storage Volüme: ment factor (Item 1-8].) Volume (in cubic feet): converted to cubic feet)	0.85 Inches
1         2         3         4         5         6         7         -1         (The coefficient for this method         -2         (The unit basin stor         -3         (The adjusted unit basin sizing v         O Calculate the Duration of the Rai         -1       Rainfall intensity         -2       Divide Item 3-2 by Item 4-1         O Preliminary Estimate of Surface A         -1       4% of DMA EIA (item 2-4)	Precipitation (Inches) Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Aito, 14.6" San Francisco, 21.0" San Francisco, 21.0" San Francisco Decenside, 19.3" is adways 1.0, due to the conversion of a age volume [Item 3-1] is adjusted by ap tolume [Item 3-2] is multiplied by the Da n Event 0.2 4.23	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage to any kandscaping to effe Adjusted unit oplying the MAP adjuste Required Capture MA EIA [item 2-4] and to Inches per hour	ctive impervious area.) bash storage Volüme: ment factor (Item 1-8].) Volume (in cubic feet): converted to cubic feet)	0.85 Inches
1         2         3         4         5         6         7         -1         (The coefficient for this method         -2         (The coefficient for this method         -2         (The odjusted unit basin sizing v         O Calculate the Duration of the Rai         -1       Rainfall intensity         -2       Divide Item 3-2 by Item 4-1         0       Preliminary Estimate of Surface A         -1       4% of DMA EIA (Item 2-4)         -2       Area 25% smaller than Item 5-1       (i.e.,	Precipitation (Inches) Boulder Greek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Aito, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Decenside, 19.3" is adways 1.0, due to the conversion of a age volume [Item 3-1] is adjusted by ap rolume [Item 3-2] is multiplied by the D n Event 0.2 4.23 Area of Treatment Measure 2,510	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage to any kandscaping to effe Adjusted unit plying the MAP adjusts Required Capture MA EIA [item 2-4] and to Inches per hour Hours of Rain Eve Square feet	ctive impervious area.) bash storage Volüme: ment factor (Item 1-8].) Volume (in cubic feet): converted to cubic feet)	0.85 Inches
1         2         3         4         5         6         7         -1         (The coefficient for this method         -2         (The coefficient for this method         -2         (The odjusted unit basin sizing v         O Calculate the Duration of the Rai         -1       Rainfall intensity         -2       Divide Item 3-2 by Item 4-1         0       Preliminary Estimate of Surface A         -1       4% of DMA EIA (Item 2-4)	Precipitation (Inches) Boulder Greek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Aito, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Decenside, 19.3" is adways 1.0, due to the conversion of a age volume [Item 3-1] is adjusted by ap rolume [Item 3-2] is multiplied by the D n Event 0.2 4.23 Area of Treatment Measure 2,510 1,883	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage to any kandscaping to effe Adjusted unit phying the MAP adjust Required Capture MA EIA [item 2-4] and to Inches per hour Hours of Rain Eve	ctive impervious area.) bash storage Volüme: ment factor (Item 1-8].) Volume (in cubic feet): converted to cubic feet)	0.85 Inches
1         2         3         4         5         6         7         -1         (The coefficient for this method         -2         (The unit basin stor         -3         (The adjusted unit basin sizing v         O Calculate the Duration of the Rai         -1       Rainfall intensity         -2       Divide Item 3-2 by Item 4-1         O Preliminary Estimate of Surface A         -1       4% of DMA EIA (Item 2-4)         -2       Area 25% smaller than Item 5-1 (i.e., 3% of DMA EIA)	Precipitation (Inches)           Boulder Creek, 55.9"           La Honda, 24.4"           Half Moon Bay, 25.92"           Palo Alto, 14.6"           San Francisco, 21.0"           San Francisco airport, 20.1"           San Francisco Decenside, 19.3"           is adways 1.0, due to the conversion of age volume [item 3-1] is adjusted by approximate the problem of the second secon	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage to any kandscaping to effe Adjusted unit plying the MAP adjust Required Capture MA EIA [item 2-4] and a Inches per hour Hours of Rain Eve Square feet Square feet	ctive impervious area.) bash storage Volüme: ment factor (Item 1-8].) Volume (in cubic feet): converted to cubic feet)	0.85 Inches 4,423 Cubic feet
1         2         3         4         5         6         7         -1         (The coefficient for this method         -2         (The unit basin sizing v         O Calculate the Duration of the Rai         -1         (The adjusted unit basin sizing v         O Calculate the Duration of the Rai         -1         Rainfall intensity         -2         Divide item 3-2 by item 4-1         O Preliminary Estimate of Surface A         -1         -2         Area 25% smaller than item 5-1         -3         -3         Volume of treated runoff for area in item 2	Precipitation (Inches)         Boulder Creek, 55.9"         La Honda, 24.4"         Half Moon Bay, 25.92"         Palo Ako, 14.6"         San Francisco, 21.0"         San Francisco airport, 20.1"         San Francisco Decenside, 19.3"         is adways 1.0, due to the conversion of age volume [Item 3-1] is adjusted by approximate [Item 3-2] is multiplied by the Data of the conversion of age volume [Item 3-2] is multiplied by the Data of the conversion of a second seco	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage to any kandscaping to effe Adjusted unit plying the MAP adjust Required Capture MA EIA [item 2-4] and a Inches per hour Hours of Rain Eve Square feet Square feet	ctive impervious area.) bash storage volume: ment factor [Item 1-8].) Volume (in cubic feet) converted to cubic feet) ent Duration	0.85 Inches 4,423 Cubic feet
1         2         3         4         5         6         7         -1         (The coefficient for this method         -2         (The odjusted unit basin sizing v         O Calculate the Duration of the Rai         -1       Rainfall intensity         -2       Divide item 3-2 by item 4-1         O Preliminary Estimate of Surface A         -1       4% of DMA EIA (item 2-4)         -2       Area 25% smaller than item 5-1       (i.e., 3% of DMA EIA)         -3       Volume of treated runoff for area in item 2       2         0       Initial Adjustment of Depth of Su       3	Precipitation (Inches)         Boulder Creek, 55.9"         La Honda, 24.4"         Half Moon Bay, 25.92"         Palo Alto, 14.6"         San Francisco, 21.0"         San Francisco airport, 20.1"         San Francisco Oceanside, 19.3"         is adwoys 1.0, due to the conversion of age volume [Item 3-1] is adjusted by apolume [Item 3-2] is multiplied by the Data and the conversion of age volume [Item 3-2] is multiplied by the Data and the conversion of a second secon	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage to any landscaping to effer Adjusted unit phying the MAP adjuste Required Capture MA EIA [item 2-4] and to Inches per hour Hours of Rain Eve Square feet Square feet Cubic feet (Item 5-	ctive impervious area.) bash storage volume: ment factor [Item 1-8].) Volume (in cubic feet) converted to cubic feet) ent Duration	0.85 Inches 4,423 Cubic feet 1/12 * Item 4-2)
1         2         3         4         5         6         7         -1         (The coefficient for this method         -2         (The unit basin stor         -3         (The adjusted unit basin sizing v         O Calculate the Duration of the Rai         -1       Rainfall intensity         -2       Divide Item 3-2 by Item 4-1         O Preliminary Estimate of Surface A         -1       4% of DMA EIA (Item 2-4)         -2       Area 25% smaller than Item 5-1 (i.e., 3% of DMA EIA)         -3       Volume of treated runoff for area in Item 2         O Initial Adjustment of Depth of Su         -1       Subtract Item 5-3 from Item 3-3	Precipitation (Inches)         Boulder Creek, 55.9"         La Honda, 24.4"         Half Moon Bay, 25.92"         Palo Ako, 14.6"         San Francisco, 21.0"         San Francisco airport, 20.1"         San Francisco Decenside, 19.3"         is adways 1.0, due to the conversion of age volume [item 3-1] is adjusted by apolume [item 3-2] is multiplied by the Dimensioner of the conversion o	Coefficient of 1.0 2.04" 0.86" 0.82" 0.64" 0.73" 0.64" 0.73" 0.72" Unit basin storage to any kandscaping to effe Adjusted unit phying the MAP adjust Required Capture MA EIA [item 2-4] and to Inches per hour Hours of Rain Eve Square feet Cubic feet (Item 5- Cubic feet (Amount	ctive impervious area.) bash storage volume: ment factor (Item 1-8).) Volume (in cubic feet) converted to cubic feet) ent Duration 2 * 5 inches per hour * : t of runoff to be stored i	0.85 Inches 4,423 Cubic feet 1/12 * Item 4-2) in ponding area}
1         2         3         4         5         6         7         -1         (The coefficient for this method         -2         (The unit basin stor         -3         (The adjusted unit basin sizing v         O Calculate the Duration of the Rai         -1       Rainfall intensity         -2       Divide Item 3-2 by Item 4-1         O Preliminary Estimate of Surface A         -1       4% of DMA EIA (Item 2-4)         -2       Area 25% smaller than Item 5-1       (i.e., 3% of DMA EIA)         -3       Volume of treated runoff for area in Item	Precipitation (Inches)         Boulder Creek, 55.9"         La Honda, 24.4"         Half Moon Bay, 25.92"         Palo Ako, 14.6"         San Francisco, 21.0"         San Francisco airport, 20.1"         San Francisco Decenside, 19.3"         is adways 1.0, due to the conversion of a age volume [Item 3-1] is adjusted by approximately approximately and a set of the conversion of the conversion of a set of the conversion of a set of the conversion of a set of the conversion of a set of the conversion of t	Coefficient of 1.0 2.04" 0.86" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage to any landscaping to effe Adjusted unit plying the MAP adjuste Required Capture MA EIA [Item 2-4] and to Inches per hour Hours of Rain Eve Square feet Square feet Cubic feet (Item 5- Cubic feet (Amount Feet (Depth of stored)	ctive impervious area.) bash storage volume: ment factor (Item 1-8).) Volume (in cubic feet) converted to cubic feet) ent Duration	0.85 Inches 4,423 Cubic feet 1/12 * Item 4-2) in ponding area) ing area)

7.0 Optimize Size of Treatment Measu	Ire			
7-1 Enter an area larger than Item 5-2		Sg.ft. (enter larger area if you need less ponding depth.)		
7-2 Volume of treated runoff for area in Item 7-				
1	4,592	Cubic feet (Item 7-1 * 5 inches per hour * 1/12 * Item 4-2)		
7-3 Subtract Item 7-2 from Item 3-3	(169)	Cubic feet (Amount of runoff to be stored in ponding area)		
7-4 Divide Item 7-3 by Item 7-1	-0.06	Feet (Depth of stored runoff in surface ponding area)		
7-5 Convert Item 7-4 from ft. to inches	-0.78	Inches (Depth of stored runoff in surface ponding area)		
	-6 If the ponding depth in Item 7-5 meets target, stop here. If not, repeat Steps 7-1 through 7-5 until you obtain target depth.     (Note: Overflow outlet elevation should be set based on the calculated ponding depth.)			
8.0 Surface Area of Treatment Measu	re for DMA			
8-1 Final surface area of treatment	2,606	Square feet (Either Item 5-2 or final amount in Item 7-1)		

May 2013

5

6

Combination Flow and Volume

4

# IMP 3 SIZING CALCULATION

3

1

	ells shaded in yellow. Cells shaded in light	copy of this Excel file for each Drainag t blue contain formulas and values tha	-			
.0 Pro	oject Information					
l-1 Pro	roject Name:	HOME 2 SUITES		The calculations presented		
	ty application ID:			sizing method provided in t Version 4.0. The steps press		
	te Address or APN:			Guidance, applicable portio		
	act or Parcel Map No:			"Guidance from Chapter 5"	_	
	ainfall Region	6				
1-6 Re	egion Mean Annual Precipitation (MAP)	20.10				Click here for ma
-7 Sib	te Mean Annual Precipitation (MAP)	20				
l-8	-	Annual Precipitation (MAP)" is divided Refer to the map in Appendix C o	f the C.3 Technical Guid	plicable rain gauge, sho lance to identijy the Rai	•	-
	Iculate Percentage of Imperviou		gement Area (DN	1A)		
	lame of DMA:	DMA 3	un tha Dhát			
FOI	or items 2-2 and 2-3, enter the areas in squ			rife at the	1	
	Type of Surface	Area of surface type within DMA (Sq. Ft.)	Adjust Pervious Surface	Effective Impervious Area		
	a na ana ana ana ang kang-a-				4	
	npervious surface	2,743	1.0	2,743	-	
-3 Pe	ervious surface	400	0.1	40	J	
	Total DMA Area (square feet) =	3,143			l	
!-4		Total Effective	Impervious Area (EIA)	2,783	Square feet	
	Region	Precipitation (Inches)	Coefficient of 1.0			
	1	Boulder Creek, 55.9"	2.04"			
	1 2	Boulder Creek, 55.9" La Honda, 24.4"	2.04" 0.86"			
	1	Boulder Creek, 55.9"	2.04"			
	1 2 3	Boulder Creek, 55.9" La Handa, 24.4" Hali Moon Bay, 25.92"	2.04" 0.86" 0.82"			
	1 2 3 4 5 6	Boulder Creek, 55.9" La Handa, 24.4" Hali Moon Bay, 25.92" Palo Alto, 14.6" San Francisco, 21.0" San Francisco airport, 20.1"	2.04" 0.86" 0.82" 0.64" 0.73" 0.85"			
	1 2 3 4 5	Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0"	2.04" 0.86" 0.82" 0.64" 0.73"			
\$1	1 2 3 4 5 6 7	Boulder Creek, 55.9" La Handa, 24.4" Hali Moon Bay, 25.92" Palo Alto, 14.6" San Francisco, 21.0" San Francisco airport, 20.1"	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage v	rolume from Table 5-3: ctive impervious area.)	0.85	
	1 2 3 4 5 6 7 (The coefficient for this method is	Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Decenside, 19.3" always 1.0, due to the conversion of a	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.85" 0.72" Unit basin storage to any kandscaping to effe Adjusted unit	ctive impervious area.) bashı storage volume:		Inches
+2	1 2 3 4 5 6 7 (The coefficient for this method is (The unit basin stora)	Boulder Creek, 55.9" La Honda, 24.4" Hali Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Oceanside, 19.3"	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage u any landscaping to effe Adjusted unit phying the MAP adjusti Required Capture	ctive impervious area.) bash storage volume: ment factor (Item 1-8).) Volume (in cubic feet):		Inches Cubic feet
+2 -3	1 2 3 4 5 6 7 (The coefficient for this method is (The unit basin stora)	Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Oceanside, 19.3" adways 1.0, due to the conversion of a ye volume [Item 3-1] is adjusted by ap hume [Item 3-2] is multiplied by the Di	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage u any landscaping to effe Adjusted unit phying the MAP adjusti Required Capture	ctive impervious area.) bash storage volume: ment factor (Item 1-8).) Volume (in cubic feet):	0.85	
⊦-2 ⊦-3 .0 Cal	1 2 3 4 5 6 7 (The coefficient for this method is (The unit basin stora) (The adjusted unit basin sizing vo	Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Oceanside, 19.3" adways 1.0, due to the conversion of a ge volume [Item 3-1] is adjusted by ap kume [Item 3-2] is multiplied by the Di Event	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage u any landscaping to effe Adjusted unit phying the MAP adjusti Required Capture	ctive impervious area.) bash storage volume: ment factor (Item 1-8).) Volume (in cubic feet):	0.85	
+-2  -3  -1 Rai	1 2 3 4 5 6 7 (The coefficient for this method is (The unit basin stora (The adjusted unit basin sizing vo	Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Alto, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Oceanside, 19.3" adways 1.0, due to the conversion of a ge volume [item 3-1] is adjusted by ap kume [item 3-2] is multiplied by the Di Event	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage v any kandscaping to effe Adjusted unit phying the MAP adjustr Required Capture MA EIA [Item 2-4] and a	ctive impervious area.) bash storage Vokume: ment factor (Item 1-8].) Vokume (in cubic feet): converted to cubic feet)	0.85	
+2 -3 -1 Rai -2 Div	1 2 3 4 5 6 7 (The coefficient for this method is (The unit basin stora) (The adjusted unit basin sizing vo Iculate the Duration of the Rain sinfall intensity	Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Oceanside, 19.3" adways 1.0, due to the conversion of a ye volume [Item 3-1] is adjusted by ap kume [Item 3-2] is multiplied by the Di Event 0.2 4.23	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage u any kandscoping to effe Adjusted unit phying the MAP adjust Required Capture MA EIA [item 2-4] and a Inches per hour	ctive impervious area.) bash storage Vokume: ment factor [Item 1-8].) Vokume (in cubic feet): converted to cubic feet)	0.85	
	1 2 3 4 5 6 7 (The coefficient for this method is (The unit basin storag (The adjusted unit basin sizing vo (The adjusted unit basin sizing vo Iculate the Duration of the Rain sinfall intensity ivide Item 3-2 by Item 4-1	Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Oceanside, 19.3" adways 1.0, due to the conversion of a ge volume [Item 3-1] is adjusted by ap lume [Item 3-2] is multiplied by the Di Event 0.2 4.23 rea of Treatment Measure	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage a any kandscoping to effe Adjusted unit phying the MAP adjuste Required Capture MA EIA [item 2-4] and a Inches per hour Hours of Rain Eve	ctive impervious area.) bash storage Vokume: ment factor [Item 1-8].) Vokume (in cubic feet): converted to cubic feet)	0.85	
-2 -3 -3 -1 Rai -2 Div -2 Div -1 4%	1 2 3 4 5 6 7 (The coefficient for this method is (The unit basin sizing vo (The adjusted unit basin sizing vo Iculate the Duration of the Rain sinfall intensity wide Item 3-2 by Item 4-1 eliminary Estimate of Surface Au	Boulder Creek, 55.9" La Honda, 24.4" Hall Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Decenside, 19.3" adways 1.0, due to the conversion of a ge volume [Item 3-1] is adjusted by ap kume [Item 3-2] is multiplied by the Di Event 0.2 4.23 rea of Treatment Measure 111	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage u any kandscoping to effe Adjusted unit phying the MAP adjust Required Capture MA EIA [item 2-4] and a Inches per hour	ctive impervious area.) bash storage Vokume: ment factor [Item 1-8].) Vokume (in cubic feet): converted to cubic feet)	0.85	
-2 -3 -3 -1 Rai -2 Div -2 Div -1 4% 5-2 An 3%	1         2         3         4         5         6         7         (The coefficient for this method is (The unit basin stora)         (The adjusted unit basin stora)         (The adjusted unit basin sizing void unit basin sis void unit basin sizing void unit basin sizin	Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Oceanside, 19.3" adways 1.0, due to the conversion of a ge volume [item 3-1] is adjusted by ap kume [item 3-2] is multiplied by the Di Event 0.2 4.23 rea of Treatment Measure 111	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage a any kandscaping to effe Adjusted unit phying the MAP adjustr Required Capture MA EIA [item 2-4] and a Inches per hour Hours of Rain Eve Square feet Square feet	ctive impervious area.) bash storage Vokume: ment factor [Item 1-8].) Vokume (in cubic feet): converted to cubic feet)	0.85	
-2 -3 -3 -1 Rai -2 Div -2 Div -2 An -3 -3 Vo 2	1 2 3 4 4 5 6 7 (The coefficient for this method is (The unit basin stora) (The adjusted unit basin sizing vo (The adjusted unit basin sizing vo Iculate the Duration of the Rain sinfal intensity wide item 3-2 by item 4-1 eliminary Estimate of Surface An % of DMA EIA (item 2-4) rea 25% smaller than item 5-1 (i.e., % of DMA EIA) olume of treated runoff for area in item 5	Boulder Creek, 55.9" La Honda, 24.4" Hall Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Doeanside, 19.3" adways 1.0, due to the conversion of a ge volume [Item 3-1] is adjusted by ap kume [Item 3-2] is multiplied by the Di Event 0.2 4.23 rea of Treatment Measure 111 83	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage a any kandscaping to effe Adjusted unit phying the MAP adjustr Required Capture MA EIA [item 2-4] and a Inches per hour Hours of Rain Eve Square feet Square feet	ctive impervious area.) bash storage volume: ment factor [Item 1-8].) Volume (in cubic feet) converted to cubic feet) ent Duration	0.85	
I-1 Rai I-2 Div I-2 Div I-2 Div I-3 Pre I-3 Vo I-3 Vo 2 .0 Init	1         2         3         4         5         6         7         (The coefficient for this method is (The unit basin stora)         (The adjusted unit basin sizing void)         (The adjusted unit basin sizing void)         Iculate the Duration of the Rain sinfall intensity         wide Item 3-2 by Item 4-1         eliminary Estimate of Surface An & of DMA EIA (Item 2-4)         rea 25% smaller than Item 5-1       (i.e., & of DMA EIA)         olume of treated runoff for area in Item 5-1       (i.e., & of DMA EIA)         olume of treated runoff for area in Item 5-1       (i.e., % of DMA EIA)	Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Ako, 14.6" San Francisco 3irport, 20.1" San Francisco Oceanside, 19.3" adways 1.0, due to the conversion of a ge volume [item 3-1] is adjusted by ap kume [item 3-2] is multiplied by the Di Event 0.2 4.23 rea of Treatment Measure 111 83 147 face Ponding Area	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage unit one of the storage of	ctive impervious area.) bash storage volume: ment factor (Item 1-8].) Volume (in cubic feet) converted to cubic feet) ent Duration	0.85 196	
-2 -3 -0 Cal -1 Rai -2 Dik -2 Dik -3 -3 Vo 2 -3 Vo 2 -0 Ini -1 Su	1         2         3         4         5         6         7         (The coefficient for this method is (The unit basin stora)         (The adjusted unit basin sizing void unit basin	Boulder Creek, 55.9" La Honda, 24.4" Half Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Dceanside, 19.3" adways 1.0, due to the conversion of a ge volume [Item 3-1] is adjusted by ap kume [Item 3-2] is multiplied by the Di Event 0.2 4.23 rea of Treatment Measure 1111 833 147 face Ponding Area 49	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage a any landscoping to effe Adjusted unit plying the MAP adjuste Required Capture MA EIA [item 2-4] and a Inches per hour Hours of Rain Eve Square feet Square feet Cubic feet (Item 5-1) Cubic feet (Amount	ctive impervious area.) bash storage volume: ment factor [Item 1-8].) Volume (in cubic feet) converted to cubic feet) ent Duration 2 * 5 inches per hour * : t of runoff to be stored i	0.85 196 1/12 * item 4-2) in ponding area)	
2 3 1 Rai 1 Rai 1 Rai 2 Div 2 Div 3 Yo 3 Yo 2 0 Ini 1 Sui 2 Div	1         2         3         4         5         6         7         (The coefficient for this method is (The unit basin stora)         (The adjusted unit basin sizing void)         (The adjusted unit basin sizing void)         Iculate the Duration of the Rain sinfall intensity         wide Item 3-2 by Item 4-1         eliminary Estimate of Surface An & of DMA EIA (Item 2-4)         rea 25% smaller than Item 5-1       (i.e., & of DMA EIA)         olume of treated runoff for area in Item 5-1       (i.e., & of DMA EIA)         olume of treated runoff for area in Item 5-1       (i.e., % of DMA EIA)	Boulder Creek, 55.9" La Honda, 24.4" Hall Moon Bay, 25.92" Palo Ako, 14.6" San Francisco, 21.0" San Francisco airport, 20.1" San Francisco Decenside, 19.3" colways 1.0, due to the conversion of a ge volume [Item 3-1] is adjusted by ap kume [Item 3-2] is multiplied by the Di Event 0.2 4.23 rea of Treatment Measure 111 83 147 face Ponding Area 49 0.59	2.04" 0.86" 0.82" 0.64" 0.73" 0.85" 0.72" Unit basin storage u any landscaping to effe Adjusted unit plying the MAP adjustr Required Capture MA EIA [Item 2-4] and u Inches per hour Hours of Rain Eve Square feet Square feet Cubic feet (Item 5-1) Cubic feet (Amount Feet (Depth of stored	ctive impervious area.) bash storage volume: ment factor (Item 1-8].) Volume (in cubic feet) converted to cubic feet) ent Duration	0.85 196 1/12 * Item 4-2) in ponding area) ing area)	

7.0 Optimize Size of Treatment Measu	Ire			
7-1 Enter an area larger than Item 5-2		Sg.ft. (enter larger area if you need less ponding depth.)		
7-2 Volume of treated runoff for area in Item 7				
1	171	Cubic feet (Item 7-1 * 5 inches per hour * 1/12 * Item 4-2)		
7-3 Subtract item 7-2 from item 3-3	25	Cubic feet (Amount of runoff to be stored in ponding area)		
7-4 Divide Item 7-3 by Item 7-1	0.26	Feet (Depth of stored runoff in surface ponding area)		
7-5 Convert Item 7-4 from ft. to inches	3.12	Inches (Depth of stored runoff in surface ponding area)		
<ul> <li>7-6 If the ponding depth in Item 7-5 meets target, stop here. If not, repeat Steps 7-1 through 7-5 until you obtain target depth. (Note: Overflow outlet elevation should be set based on the calculated ponding depth.)</li> </ul>				
8.0 Surface Area of Treatment Measu	re for DMA			
8-1 Final surface area of treatment	97	Square feet (Either Item 5-2 or final amount in Item 7-1)		

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May 2013

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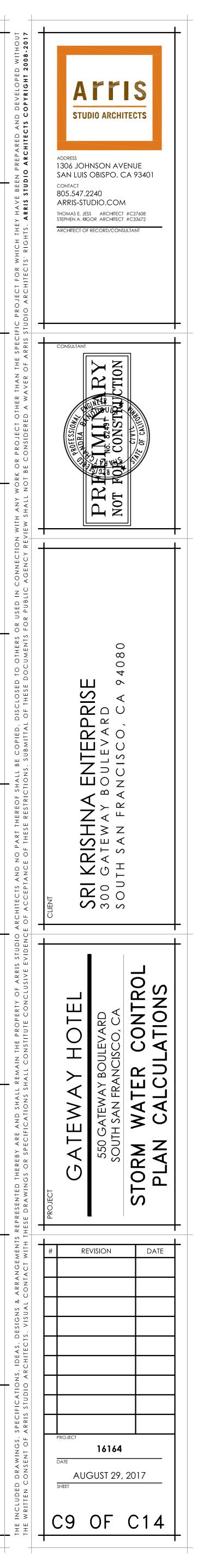
# Bellecci & Associates, inc.

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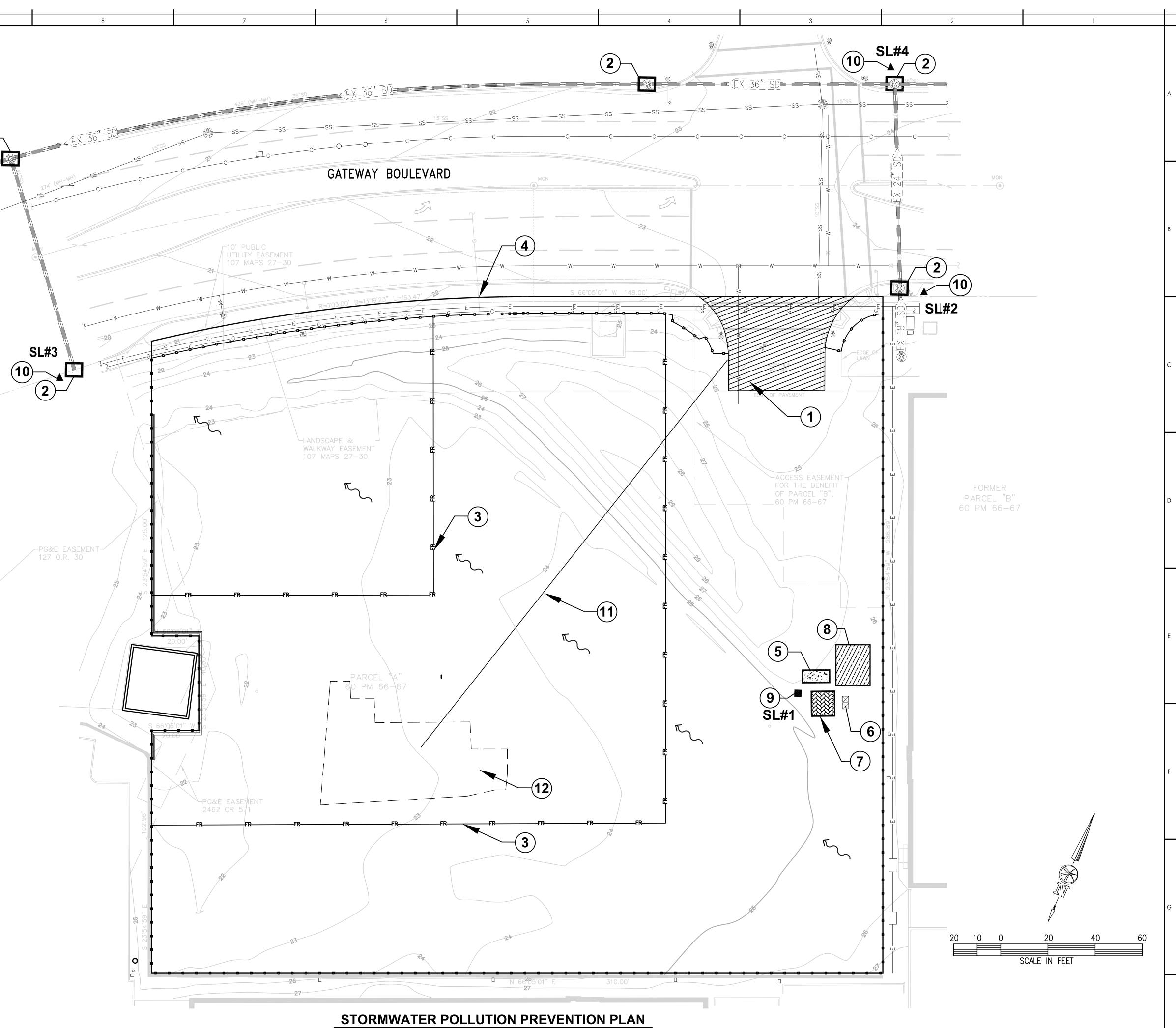


	12		11	10	9
A	Call Two Working Days Before You Dig! T-800-227-2600 LEGEND	PROJECT &	& CONSTRUCTION BOUNDAR		2
В		TEMPORAF STORM DR STABILIZE WM-8, CON	RY FIBER ROLLS RY SILT FENCE AIN INLET PROTECTION D CONSTRUCTION ENTRANC ICRETE WASHOUT AREA ION STAGING, MATERIALS STORA	GE, AND VEHICLE/EQUIPMENT	S
с		RECYCLABL SAMPLING L STORAGE AF SAMPLING L AS A BASE S	LEANING, & MAINTENANCE AREA E MATERIALS STOCKPILE AREA. OCATION OF RUNOFF ADJACENT REAS. OCATION OF RUNOFF IN AN UNCO AMPLE FOR COMPARISON.	TO MATERIAL AND WASTE	
D	CASQA C EC E TEC T EX E NS N O.C. O PERM P SE S SL S SS S SWPPP S TC T TEMP T TYP T WE W	EST MANAGI ALIFORNIA S ROSION CON EMPORARY I XISTING ON-STORMW N CENTER ERMANENT EDIMENT CO AMPLING LO OIL STABILIZ	EROSION CONTROL VATER NTROL CATION ATION R POLLUTION PREVENTION PLAN ONTROL	N	
		PPLICABLE 1 N AND ORIEN	HROUGHOUT THE PROJECT LIMI	IS DURING CONSTRUCTION. EXAC TED BY THE CONTRACTORS TO FIT	

- 2. ALL TEMPORARY BMPS WILL BE IMPLEMENTED AS PER THE CITY ENGINEER'S DIRECTION.
- 3. STAGING AREA FOR THIS PROJECT WILL BE LOCATED AS SHOWN ON THIS PLAN.
- 4. THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO INSTALL WATER POLLUTION CONTROL DEVICES AT GENERAL LOCATIONS THROUGHOUT THE SITE. THESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH THE NARRATIVE SECTION OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
- FIELD AND WEATHER CONDITIONS MAY NECESSITATE MODIFICATIONS TO THESE DRAWINGS.
- 6. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR PROTECTING THE STORMWATER FROM CONTAMINATION, WITH CONFORMING WITH THE CONSTRUCTION GENERAL PERMIT (CGP), AND **EROSION CONTROL DEVICES AS NEEDED TO PROTECT THE STORMWATER.**

BMP ID	BMP NAME	LOCATION				
EC-1	SCHEDULING	ENTIRE PROJECT				
EC-2	PRESERVATION OF EXISTING VEGETATION	EXISTING LANDSCAPE AREAS				
EC-4	HYDROSEEDING	EXPOSED SOILS				
EC-6	STRAW MULCH	DISTURBED SOIL				
EC-7	GEOTEXTILES AND MATS	STOCKPILE				
EC-9	EARTH DIKES & DRAINAGE SWALES	AT LOCATIONS SHOWN ON PLANS TO PREVENT RUN-OF				
SE-1	SILT FENCE	AS SHOWN ON PLANS				
SE-5	FIBER ROLL	AS SHOWN ON PLANS				
SE-7	STREET SWEEPING	ENTRANCE & PROJECT ROADS & SIDEWALKS				
SE-10	STORM DRAIN INLET PROTECTION	AS SHOWN ON PLANS				
TC-1	CONSTRUCTION ENTRANCE	AS SHOWN ON PLANS				
WE-1	WIND EROSION CONTROL	DISTURBED SOIL & STOCKPILE				
NS-1	WATER CONSERVATION PRACTICES	ENTIRE PROJECT				
NS-3	PAVING AND GRADING OPERATIONS	ADJACENT TO PROJECT PAVEMENT				
NS-6	<b>ILLICIT CONNECTION &amp; DISCHARGE REPORTING</b>	ENTIRE PROJECT				
NS-7	POTABLE WATER/IRRIGATION	ENTIRE PROJECT				
NS-8,10	VEHICLE/EQUIP CLEANING & MAINTENANCE	AS SHOWN ON PLANS				
NS-12-13	CONCRETE CURING & FINISHING	ADJACENT TO PROJECT SIDEWALK				
WM-1-2	MATERIAL DELIVERY, STORAGE & USE	AS SHOWN ON PLANS				
WM-3	STOCKPILE MANAGEMENT	AS SHOWN ON PLANS				
WM-4	SPILL PREVENTION & CONTROL	ENTIRE PROJECT				
WM-5	SOLID WASTE MANAGEMENT	MATERIALS STOCKPILE AREA & WASHOUT				
WM-8	CONCRETE WASTE MANAGEMENT	AS SHOWN ON PLANS				
WM-9	SANITARY - SEPTIC WASTE MANAGEMENT	AS SHOWN ON PLANS				
WM-10	LIQUID WASTE MANAGEMENT	ENTIRE PROJECT				

12



SCALE: 1"=20'

- 5

4

### **STORM WATER POLLUTION PREVENTION CONSTRUCTION NOTES:**

- (1) TC-1, CONSTRUCT TEMPORARY CONSTRUCTION ENTRANCE PER DETAIL ON SHEET 12.
- (2) SE-10, CONSTRUCT STORM DRAIN INLET PROTECT PER DETAIL ON SHEET 12.
- (3) SE-5, CONSTRUCT FIBER ROLLS PER DETAIL ON SHEET 12.
- (4) INSTALL TEMPORARY SILT FENCE PER DETAIL ON SHEET 12.
- **5** WM-8, CONCRETE WASHOUT AREA PER DETAIL ON SHEET 12.
- 6 WM-9, PORTABLE TOILETS.

8

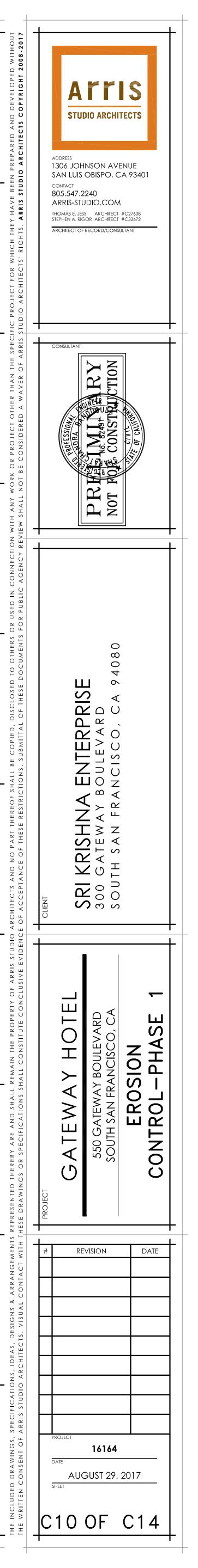
- (7) RECYCLABLE MATERIALS STOCKPILE AREA.
- **8** CONSTRUCTION STAGING, MATERIALS STORAGE, AND VEHICLE/EQUIPMENT STORAGE, CLEANING, & MAINTENANCE.
- **9** SAMPLING LOCATION OF SAMPLES OF RUNOFF FROM PLANNED MATERIAL AND WASTE STORAGE AREAS AND AREAS WHERE NON-VISIBLE POLLUTANT PRODUCING CONSTRUCTION ACTIVITIES ARE PLANNED.
- **10** SAMPLING LOCATION OF UNCONTAMINATED SAMPLE OF RUNOFF AS A BACKGROUND SAMPLE FOR COMPARISON WITH THE SAMPLES BEING ANALYZED FOR NON-VISIBLE POLLUTANTS.

6

- (1) INSTALL TEMPORARY STORM DRAIN/VALLEY GUTTER FROM STABILIZED ENTRANCE/EXIT TO BIORETENTION BASIN.
- **AS FIRST ORDER OF WORK CONSTRUCT BIORETENTION BASINS TO PROPOSED SUBGRADE. SUBGRADE OF BIORETENTION TO BE USED AS A TEMPORARY SITE SEDIMENT BASIN.**



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	12		11		10		9	
A	Call Two Working Days Before You Digl							
В		PROJECT &		BOUNDARY				
	ы	STORM DRAIN INLET PROTECTION						
		STABILIZE	D CONSTRUCTION	I ENTRANCE				
		WM-8, CONCRETE WASHOUT AREA						
			CTION STAGING, N CLEANING, & MA		RAGE, AND VEHICLE/EQUIP A.	'EHICLE/EQUIPMENT		
		RECYCLAE	BLE MATERIALS S	TOCKPILE AREA				
С		SAMPLING STORAGE		INOFF ADJACEN	T TO MATERIAL AND WAS	TE		
			LOCATION OF RU SAMPLE FOR CO		CONTAMINATED AREA TO E	BE USED		
		WM-9, PC	RTABLE TOILE	TS.				

### ABBREVATIONS

BMP CASQA EC TEC EX NS O.C. PERM SE SL SS SWPPP TC TEMP	BEST MANAGEMENT PRACTICE CALIFORNIA STOMWATER QUALITY ASSOCIATION EROSION CONTROL TEMPORARY EROSION CONTROL EXISTING NON-STORMWATER ON CENTER PERMANENT SEDIMENT CONTROL SAMPLING LOCATION SOIL STABILIZATION STORMWATER POLLUTION PREVENTION PLAN TRACKING CONTROL TEMPORARY
	TEMPORARY
TYP WE	TYPICAL WIND EROSION
WM	WASTE MANAGEMENT

### **SWPPP GENERAL NOTES:**

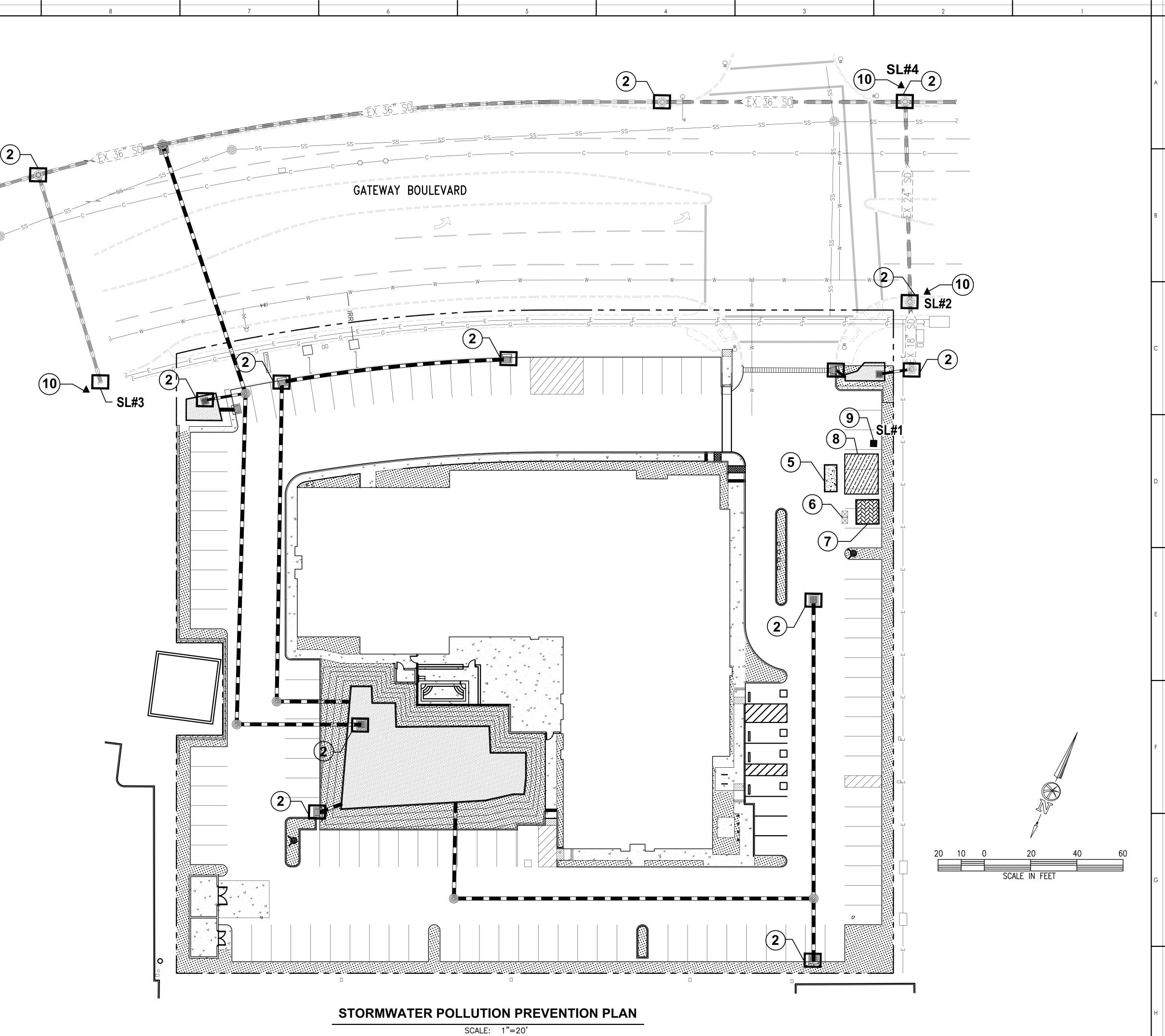
- 1. BMP(S) APPLICABLE THROUGHOUT THE PROJECT LIMITS DURING CONSTRUCTION. EXACT LOCATION AND ORIENTATION OF BMPS CAN BE ADJUSTED BY THE CONTRACTORS TO FIT FIELD CONDITION.
- 2. ALL TEMPORARY BMPS WILL BE IMPLEMENTED AS PER THE CITY ENGINEER'S DIRECTION.
- 3. STAGING AREA FOR THIS PROJECT WILL BE LOCATED AS SHOWN ON THIS PLAN.
- 4. THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO INSTALL WATER POLLUTION CONTROL DEVICES AT GENERAL LOCATIONS THROUGHOUT THE SITE. THESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH THE NARRATIVE SECTION OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
- 5. FIELD AND WEATHER CONDITIONS MAY NECESSITATE MODIFICATIONS TO THESE DRAWINGS.

		RY PROJECT BMPS
<b>BMP ID</b>	BMP NAME	LOCATION
EC-1	SCHEDULING	ENTIRE PROJECT
EC-2	PRESERVATION OF EXISTING VEGETATION	EXISTING LANDSCAPE AREAS
EC-4	HYDROSEEDING	EXPOSED SOILS
EC-6	STRAW MULCH	DISTURBED SOIL
EC-7	GEOTEXTILES AND MATS	STOCKPILE
EC-9	EARTH DIKES & DRAINAGE SWALES	AT LOCATIONS SHOWN ON PLANS TO PREVENT RUN-OF
SE-1	SILT FENCE	AS SHOWN ON PLANS
SE-5	FIBER ROLL	AS SHOWN ON PLANS
SE-7	STREET SWEEPING	ENTRANCE & PROJECT ROADS & SIDEWALKS
SE-10	STORM DRAIN INLET PROTECTION	AS SHOWN ON PLANS
TC-1	CONSTRUCTION ENTRANCE	AS SHOWN ON PLANS
WE-1	WIND EROSION CONTROL	DISTURBED SOIL & STOCKPILE
NS-1	WATER CONSERVATION PRACTICES	ENTIRE PROJECT
NS-3	PAVING AND GRADING OPERATIONS	ADJACENT TO PROJECT PAVEMENT
NS-6	ILLICIT CONNECTION & DISCHARGE REPORTING	ENTIRE PROJECT
NS-7	POTABLE WATER/IRRIGATION	ENTIRE PROJECT
NS-8,10	VEHICLE/EQUIP CLEANING & MAINTENANCE	AS SHOWN ON PLANS
NS-12-13	CONCRETE CURING & FINISHING	ADJACENT TO PROJECT SIDEWALK
WM-1-2	MATERIAL DELIVERY, STORAGE & USE	AS SHOWN ON PLANS
<b>WM-</b> 3	STOCKPILE MANAGEMENT	AS SHOWN ON PLANS
WM-4	SPILL PREVENTION & CONTROL	ENTIRE PROJECT
WM-5	SOLID WASTE MANAGEMENT	MATERIALS STOCKPILE AREA & WASHOUT
<b>WM-</b> 8	CONCRETE WASTE MANAGEMENT	AS SHOWN ON PLANS
<b>WM-</b> 9	SANITARY - SEPTIC WASTE MANAGEMENT	AS SHOWN ON PLANS
WM-10	LIQUID WASTE MANAGEMENT	ENTIRE PROJECT

10

- 9

12



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4

- 3

### **STORM WATER POLLUTION PREVENTION CONSTRUCTION NOTES:**

- 1 TC-1, CONSTRUCT TEMPORARY CONSTRUCTION ENTRANCE PER DETAIL ON SHEET 12.
- 2 SE-10, CONSTRUCT STORM DRAIN INLET PROTECT PER DETAIL ON SHEET 12.
- **3** SE-5, CONSTRUCT FIBER ROLLS PER DETAIL ON SHEET 12.
- (4) INSTALL TEMPORARY SILT FENCE PER DETAIL ON SHEET 12.
- **5** WM-8, CONCRETE WASHOUT AREA PER DETAIL ON SHEET 12.
- 6 WM-9, PORTABLE TOILETS.

8

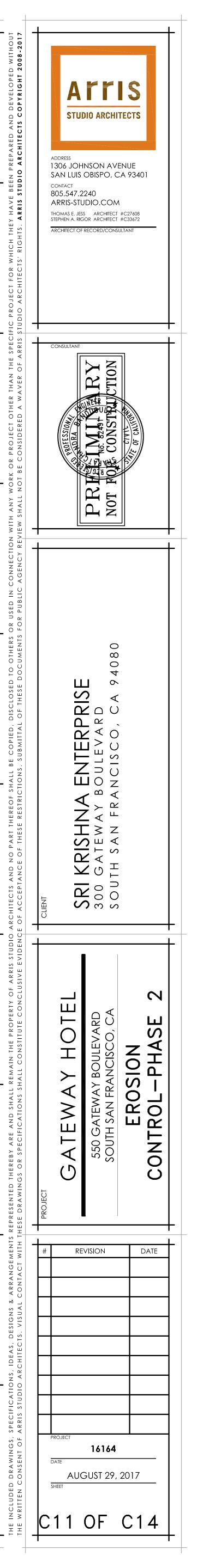
- **7** RECYCLABLE MATERIALS STOCKPILE AREA.
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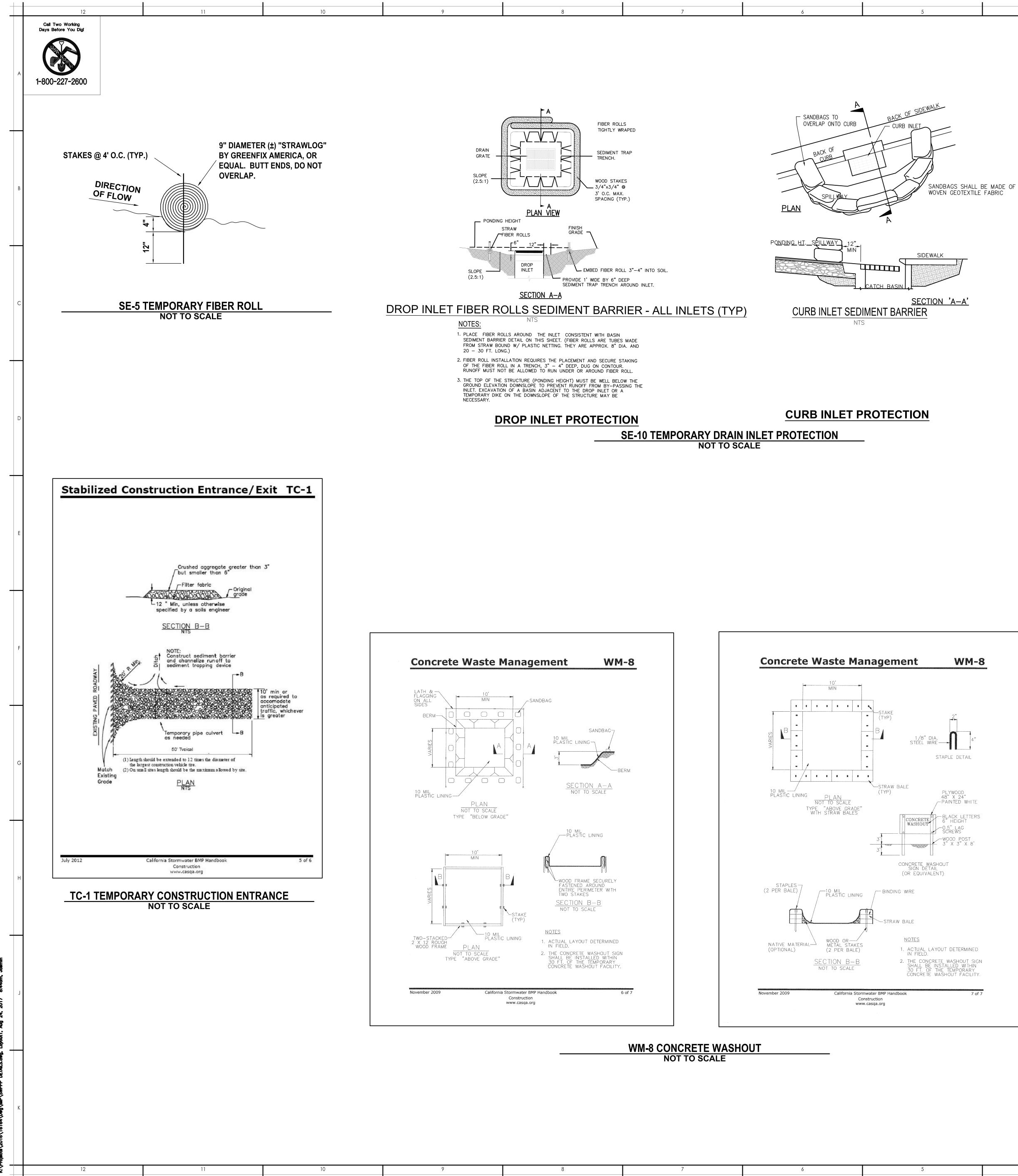
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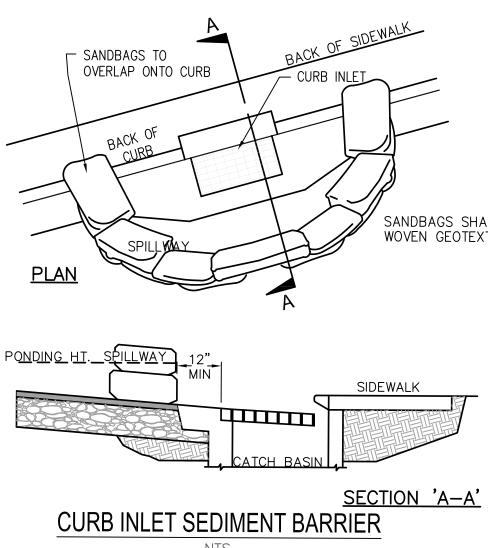


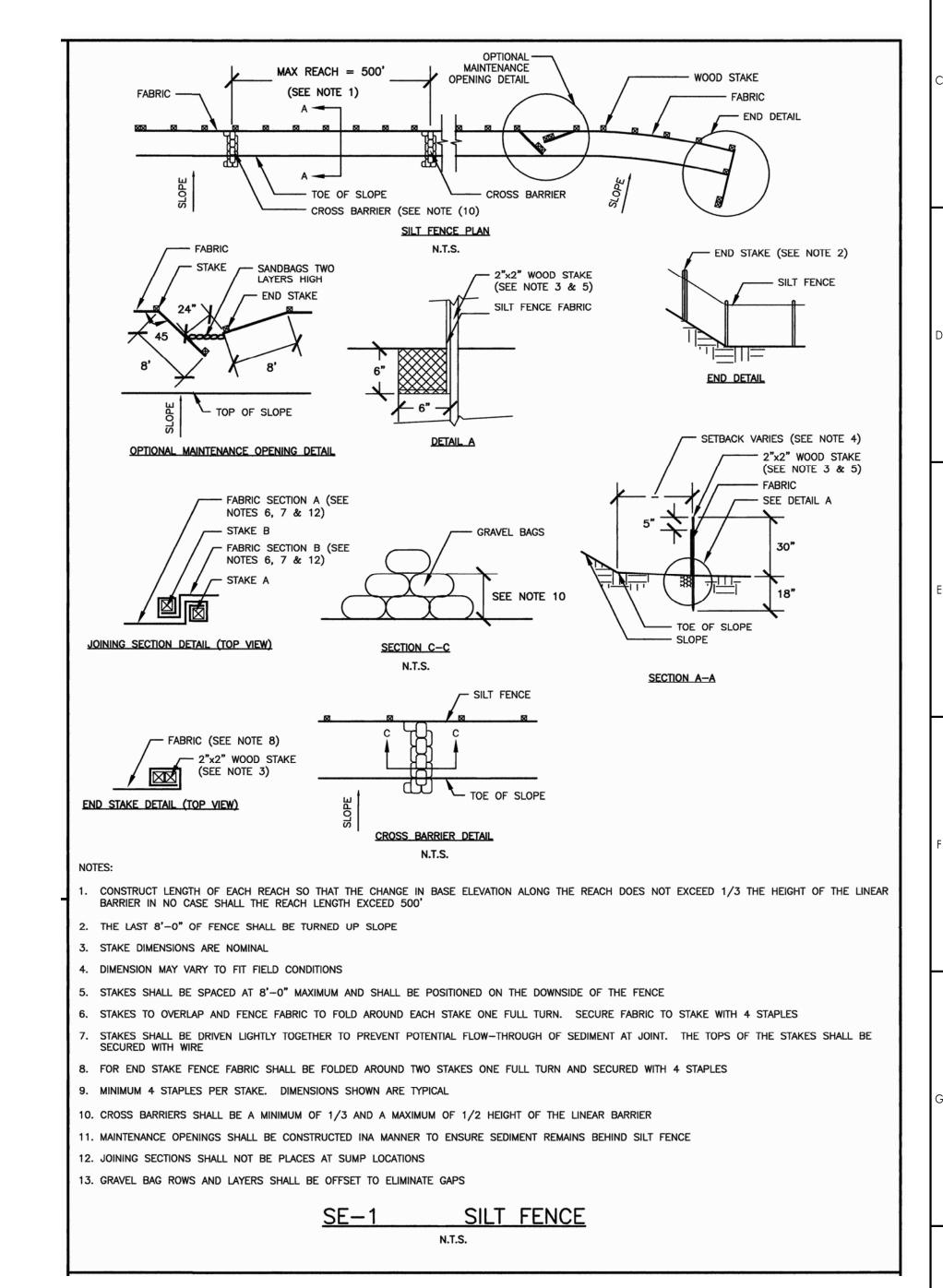
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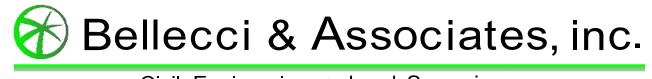








SE-1 SILT FENCE NOT TO SCALE

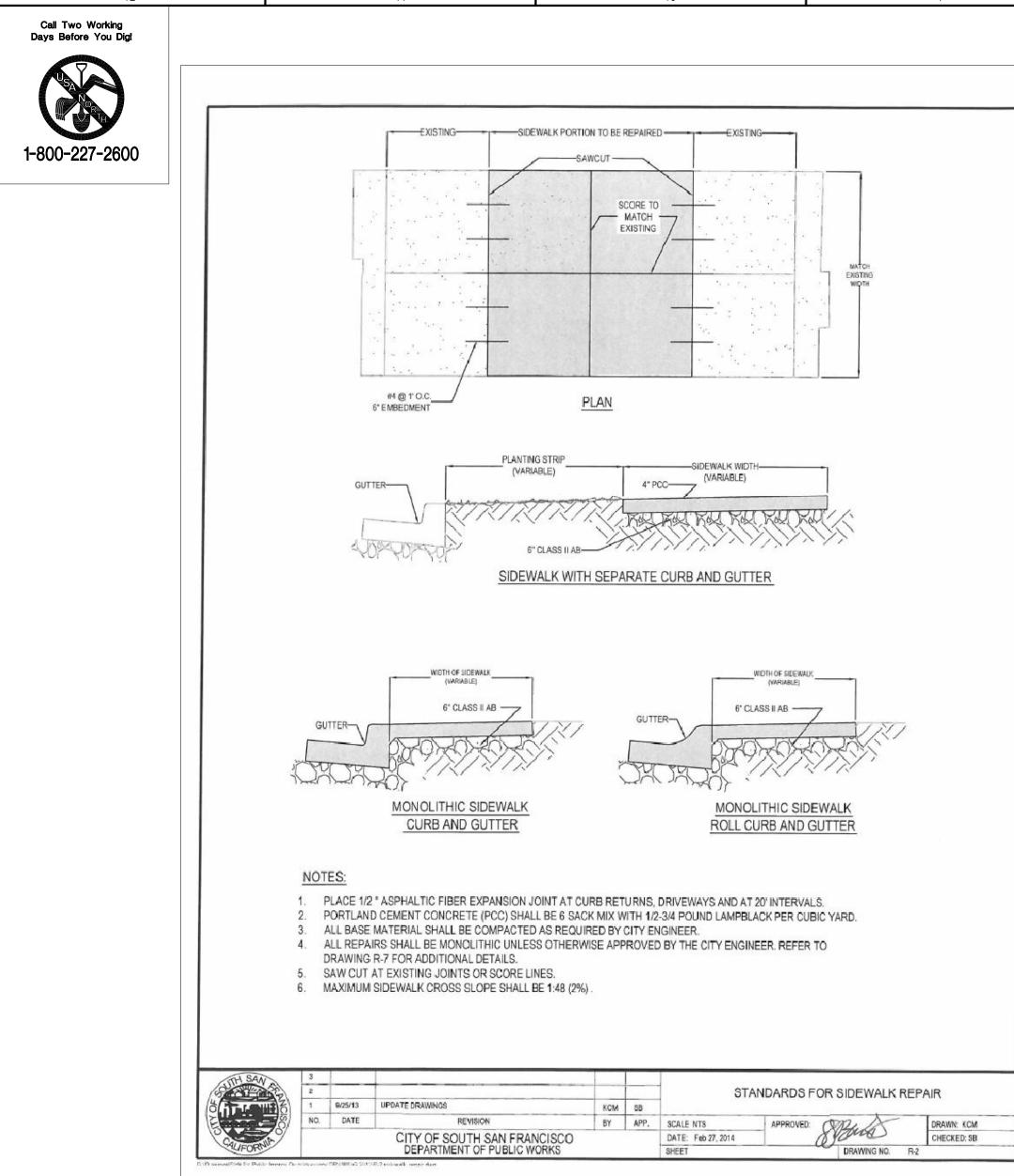


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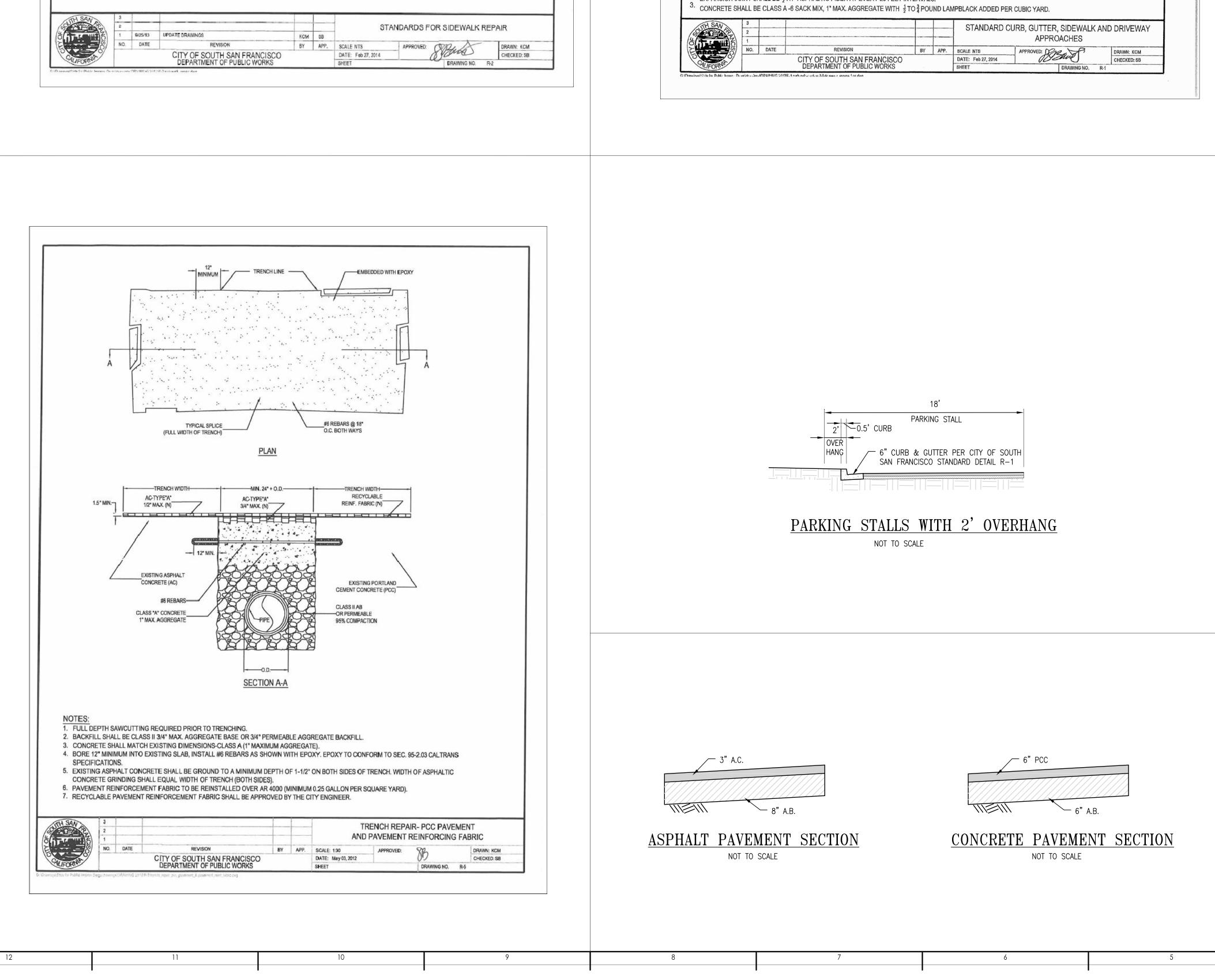




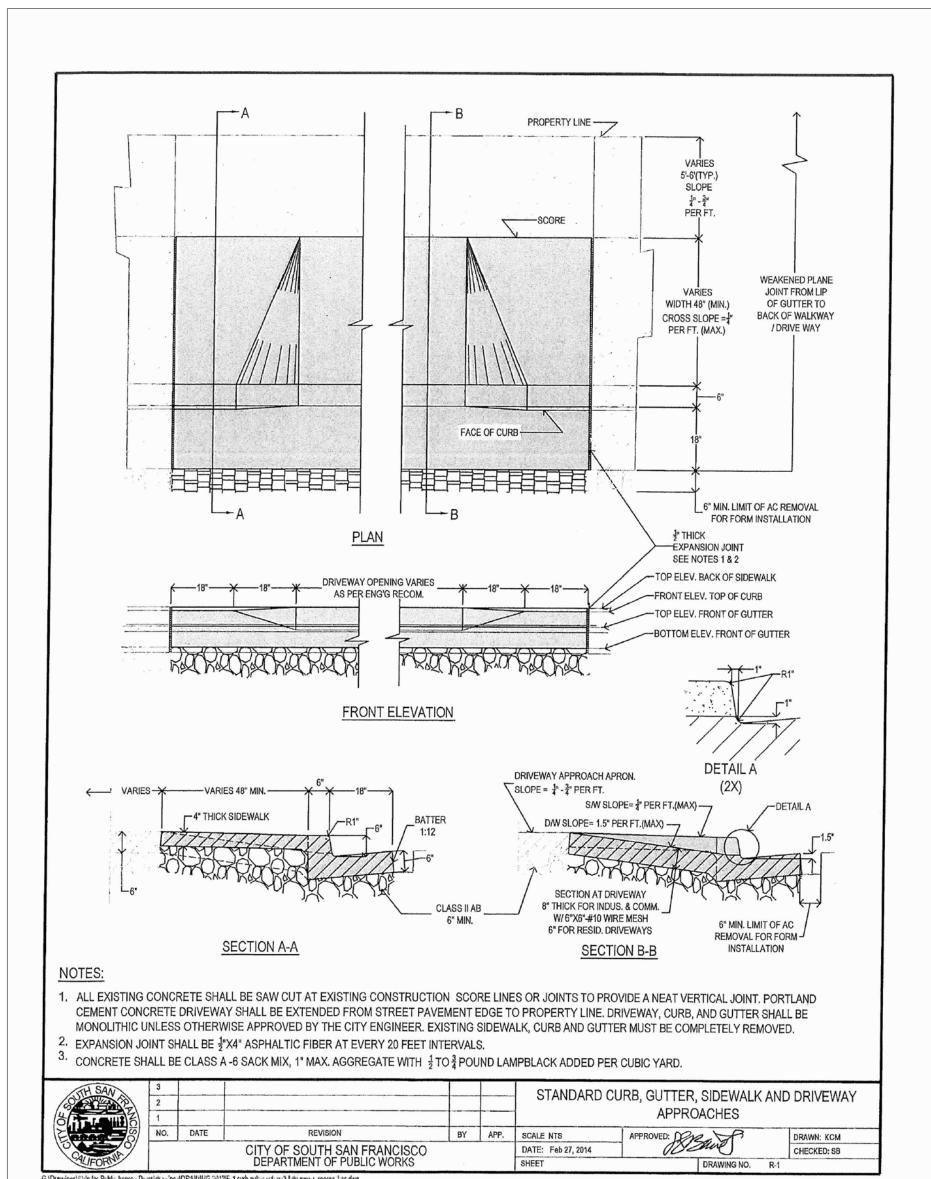
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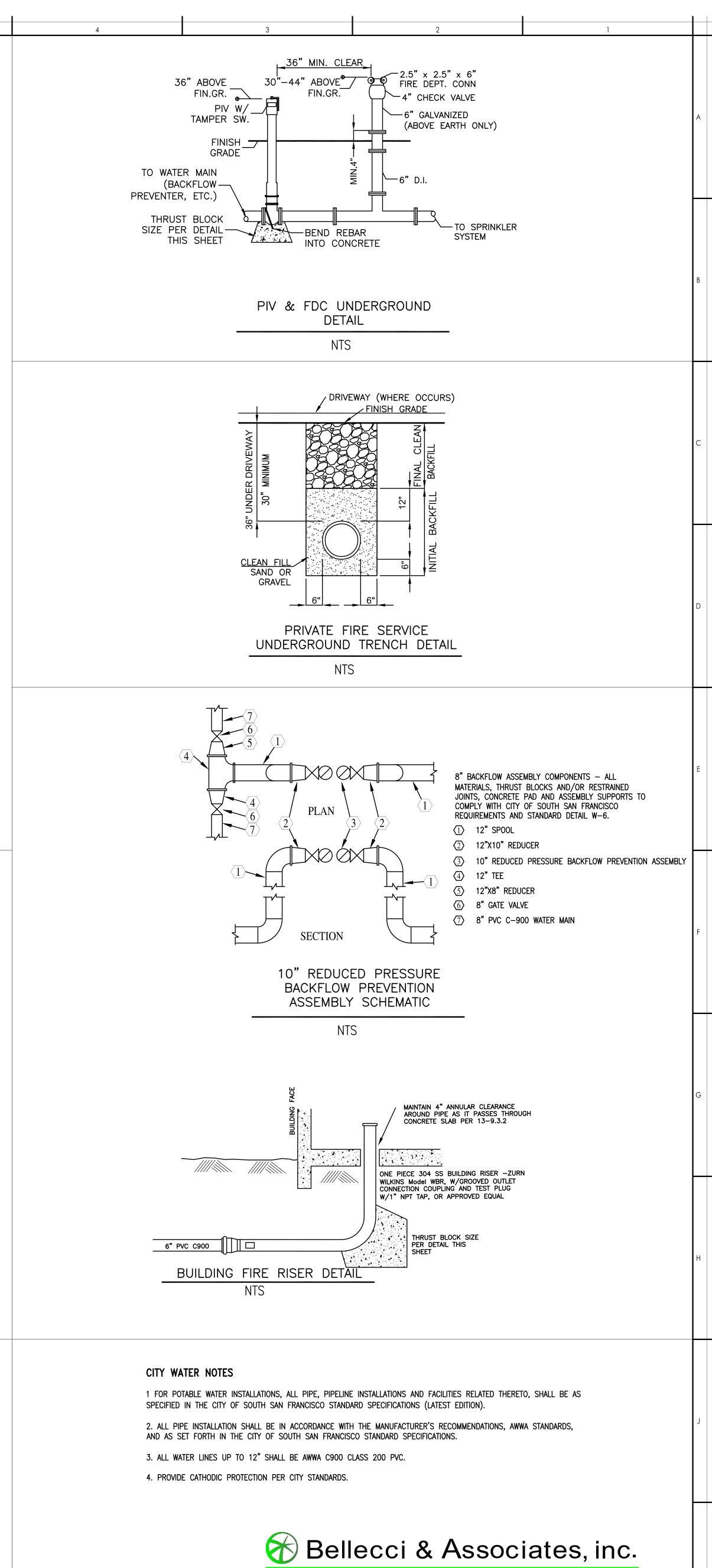
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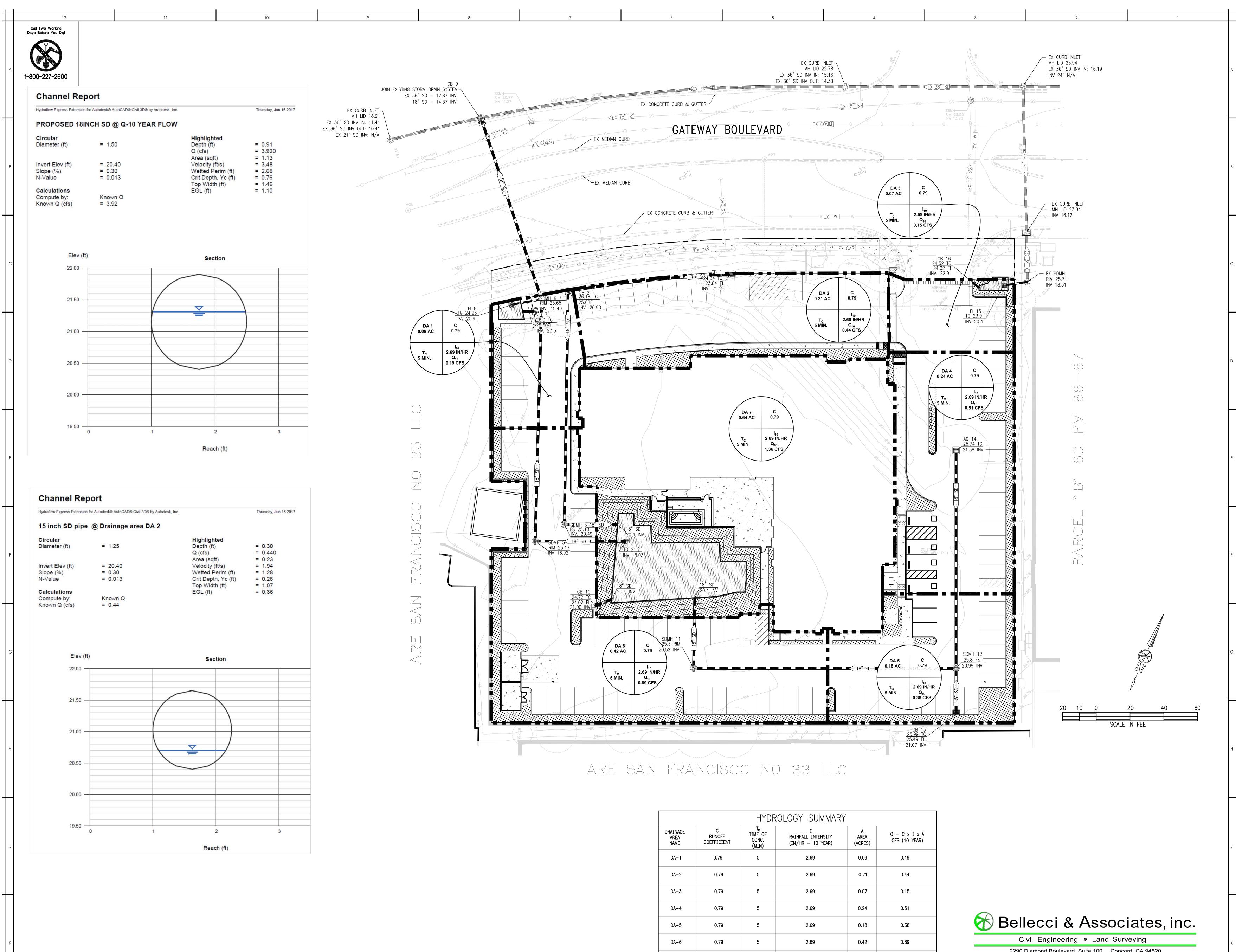
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HYDROLOGY SUMMARY								
DRAINAGE AREA NAME	C RUNOFF COEFFICIENT	T <sub>C</sub> TIME OF CONC. (MIN)	I RAINFALL INTENSITY (IN/HR – 10 YEAR)	A AREA (ACRES)	Q = C x I x A CFS (10 YEAR)			
DA-1	0.79	5	2.69	0.09	0.19			
DA-2	0.79	5	2.69	0.21	0.44			
DA-3	0.79	5	2.69	0.07	0.15			
DA-4	0.79	5	2.69	0.24	0.51			
DA-5	0.79	5	2.69	0.18	0.38			
DA-6	0.79	5	2.69	0.42	0.89			
DA-7	0.79	5	2.69	0.64	1.36			

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