

<u>SYMBOL</u>	<u>DESCRIPTION</u>
AC	ASPHALTIC CONCRETE
AD	AREA DRAIN
BFP	BACK FLOW PREVENTER
BLDG	BUILDING
BW	BOTTOM OF WALL
CB	CATCH BASIN
CO	CLEANOUT
CONC	CONCRETE
CKG	CURB AND GUTTER
DCDA	DOUBLE CHECK DETECTOR ASSEMBLY
DI	DROP INLET
DWY	DRIVEWAY
E, ELEC	ELECTRIC
EX, EXIST	EXISTING
EASE	EASEMENT
EB	ELECTRIC BOX
ECC	EXTRUDED CONCRETE CURB
EG	EXISTING GROUND
EL, ELEV	ELEVATION
EP	EDGE OF PAVEMENT
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT
FC	FACE OF CURB
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FIRE HYDRANT
FI	FLOW LINE
FM	FORCE MAIN
FW	FIRE WATER
GB	GRADE BREAK
GR	GRATE ELEVATION
HC	HANDICAP RAMP
HD	TOP OF HEADER
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
IEE	INGRESS/EGRESS EASEMENT
INV	INVERT
IRR	IRRIGATION
JP	JOINT POLE
JT	JOINT TRENCH
L	LENGTH
LG	LINEAR FOOT
LP	LIP OF GUTTER
LP	LOW POINT
LS	LANDSCAPE
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
N.T.S.	NOT TO SCALE
OH	OVERHEAD
PAE	PUBLIC ACCESS EASEMENT
PCL	PARCEL
PL	PROPERTY LINE
POC	POINT OF CONNECTION
PR	PROPOSED
PSDE	PRIVATE STORM DRAIN EASEMENT
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE PIPE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RM	RM ELEVATION
RW	RIGHT OF WAY
S	SLOPE
SAD	SEE ARCHITECTURAL DRAWINGS
SD	STORM DRAIN
SDR	STANDARD DIMENSION RATIO
SF	SQUARE FOOT
SL	STREET LIGHT
SLD	SEE LANDSCAPE DRAWINGS
SS	SANITARY SEWER
STA	STATION
STD	STANDARD
SW	SIDEWALK
TC	TOP OF CURB
TCC	TOP OF CRENULATED CURB
TEL	TELEPHONE
T, TRANS	TRANSFORMER
TTC	TOP OF PAVEMENT
TW	THEORETICAL TOP OF CURB
TOP	TOP OF WALL
TYP	TYPICAL
UB	UTILITY BOX
W	WATER
WM	WATER METER
WV	WATER VALVE

PROPOSED

EXISTING

VICINITY MAP
NOT TO SCALE

NUMBER	NAME	DESCRIPTION
1	C1.0	CIVIL TITLE SHEET
2	C1.1	CONSTRUCTION NOTES
3	C2.0	PARCEL MAP
4-7	C3.0	EXISTING CONDITIONS
8-11	C4.0	SITE PLAN & HORIZONTAL CONTROL
12-15	C5.0	GRADING AND DRAINAGE PLAN
16-19	C6.0	COMPOSITE UTILITY PLAN
20	C7.0	STORM WATER CONTROL PLAN
21	C8.0	EROSION CONTROL PLAN
22	C8.1	EROSION CONTROL DETAILS
23	C8.3	BEST MANAGEMENT PRACTICES
24	C9.0	CROSS SECTIONS
25-26	C10.0	CONSTRUCTION DETAILS

THE GEOTECHNICAL ASPECTS OF THESE PLANS HAVE BEEN PREPARED IN GENERAL CONFORMANCE WITH THE RECOMMENDATIONS OF THE REPORT TITLED, "GEOTECHNICAL EXPLORATION, GATEWAY VILLAGE, SANTA CLARA CA", DATED JUNE 24, 2013, BY ENGeo, INC. (PROJECT NO. 9683.000.000).

THESE PLANS HAVE BEEN PREPARED BY ME OR UNDER MY
DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

PATRICK CHAN
P.E. #83189
BKF ENGINEERS

DATE _____

CITY OF SANTA CLARA

APPROVED BY PLANNING, ENGINEERING
TRANSPORTATION AND PUBLIC WORKS

COMMENTS:

SIGNED: _____

BY	DATE
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BDE
ARCHITECTURE

950 HOWARD STREET
SAN FRANCISCO
CA 94103
P.(415)677-0966

**SANTA CLARA
SQUARE, LLC**

**925 East Meadow Drive
Palo Alto, CA 94303
Tel 650.494.3700**

CONSULTANT



BKF
ENGINEERS / SURVEYORS / PLANNERS

ENGINEERS / SURVEYORS / PLANNERS
1850 TECHNOLOGY DRIVE, SUITE 650
SAN JOSE, CA 95110
408/467-9100
CONTACTS
PATRICK CHAN
SCOTT SCHORK

GWV
GATEWAY VILLAGE
3700 EL CAMINO REAL
SANTA CLARA, CA 95051

FOR
REFERENCE
ONLY

ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	2/22/15
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16

BYAMP _____

ALL DRAWINGS AND WRITTEN MATERIAL
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AND MAY NOT BE DUPLICATED, USED OR
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OF THE ENGINEER.

CIVIL TITLE
SHEET

SHRIMP TITLE

20126113

Sheet Size: 353 X 42

C1.0

ON-SITE IMPROVEMENTS

GENERAL NOTES

- APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR/OWNER OF THE RESPONSIBILITY FOR THE CORRECTION OF MISTAKES, ERRORS OR OMISSIONS.
- CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE STATE OF CALIFORNIA BEST MANAGEMENT PRACTICES HANDBOOK FOR APPLICABLE CONTROL MEASURES AND EMPLOY ITS PROVISIONS THROUGHOUT ALL CONSTRUCTION.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL PERMITS NECESSARY TO PERFORM THE IMPROVEMENTS IN THESE PLANS FROM THE APPROPRIATE AGENCIES AND TO COMPLY WITH THE AGENCIES' REQUIREMENTS. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL LAWS.
- WHEN IT IS FOUND THAT FIELD CONDITIONS ARE NOT AS SHOWN ON THE PLANS, THE CONSULTING ENGINEER MUST MAKE REVISIONS AND/OR ADJUSTMENTS TO THE SATISFACTION OF THE CITY ENGINEER/OWNER PRIOR TO FURTHER CONSTRUCTION.
- CONTRACTOR SHALL CAREFULLY PRESERVE THE SURROUNDING PROPERTY BY CONFINING OPERATION WITHIN THE LIMITS OF WORK AREA. ALL EXISTING UTILITIES AND IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE CITY ENGINEER/OWNER.
- A NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT (NPDES CONSTRUCTION PERMIT) IS REQUIRED PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY RELATED TO THIS SITE AND SHALL BE OBTAINED BY THE OWNER/CONTRACTOR AS APPROPRIATE. ANY DISCHARGE (DURING CONSTRUCTION) OF GROUNDWATER INTO THE DOWNSTREAM STORM DRAIN OR SANITARY SEWER SYSTEM SHALL REQUIRE APPROVAL/PERMIT FROM THE CITY OF SUNNYVALE. THE CONTRACTOR SHALL TEST THE GROUNDWATER FOR CONTAMINATES AND PRESENT THE RESULTS TO THE CITY FOR REVIEW BEFORE DISCHARGING INTO CITY SYSTEM.
- CONSTRUCTION AND STAGING PLANS TO BE SUBMITTED TO CITY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL STANDARD STREET MONUMENTS, LOT CORNER PIPES, AND OTHER PERMANENT MONUMENTS DISTURBED DURING THE PROCESS OF CONSTRUCTION SHALL BE REPLACED AND A RECORD OF SURVEY OR CORNER RECORD PER SECTION 8771 OF THE PROFESSIONAL LAND SURVEYORS ACT FILED BEFORE ACCEPTANCE OF THE IMPROVEMENTS BY THE CITY OF SUNNYVALE. COPIES OF ANY RECORD OF SURVEY OR CORNER RECORDS SHALL BE SUBMITTED TO THE CITY.
- CONTRACTOR SHALL KEEP UP-TO-DATE A COMPLETE RECORD SET OF PRINTS OF THE CONTRACT DRAWINGS SHOWING EVERY CHANGE FROM THE ORIGINAL DRAWINGS MADE DURING THE COURSE OF CONSTRUCTION, INCLUDING EXACT LOCATION, SIZES, MATERIALS AND EQUIPMENT. A COMPLETE SET OF CORRECTED AND COMPLETED RECORD DRAWING PRINTS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL ACCEPTANCE FOR REVIEW AND APPROVAL BY THE ENGINEER.
- PROVIDE ACCESS AT ALL TIMES TO ALL ABUTTING PROPERTIES, EXCEPT AS APPROVED BY THE INSPECTOR. 48 HOURS WRITTEN NOTICE MUST BE GIVEN TO THE AFFECTED PROPERTY OWNER(S) WHEN ACCESS IS AFFECTED. TRENCHES SHALL BE BACKFILLED AND PAVED (TEMPORARY CUTBACK ASPHALT) PRIOR TO LEAVING THE JOB SITE EACH WORKDAY. THE INSPECTOR MAY APPROVE STEEL PLATING AT HIS DISCRETION.
- CONTRACTOR IS REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- ALL CONSTRUCTION MATERIALS, EQUIPMENT, AND DEBRIS ARE PROHIBITED FROM BEING STORED IN THE PUBLIC RIGHT OF WAY. LANE CLOSURES FOR PARKING, STORAGE OF MATERIALS AND/OR EQUIPMENT, OR STOCKPILING WILL NOT BE PERMITTED.
- THE CONTRACTOR SHALL CONFORM TO THE RULES AND REGULATIONS OF THE CONSTRUCTION SAFETY ORDERS OF THE STATE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH PERTAINING TO EXCAVATION AND TRENCHES PER SECTION 306 OF THE STANDARD PROVISIONS. FOR DEEP TRENCHES, THE CONTRACTOR SHALL SUBMIT TO THE CITY A COPY OF THEIR ANNUAL OR SINGLE PROJECT PERMIT FOR TRENCH AND EXCAVATIONS FROM THE STATE DEPARTMENT OF INDUSTRIAL RELATIONS DIVISION OF OCCUPATIONAL SAFETY AND HEALTH.
- AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION AND ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE IN SUCH A MANNER THAT IT WILL CONTAIN DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK PER SECTION 7-8 OF THE STANDARD PROVISIONS. THE CONTRACTOR SHALL PERFORM SUCH TREATMENT WITHIN 2 HOURS AFTER NOTIFICATION BY THE CITY THAT AN AIRBORNE NUISANCE EXISTS.
- SIDEWALK AND/OR WALKWAY AREAS TO REMAIN FREE AND CLEAR OF ANY OBSTRUCTIONS AND TO ALLOW FOR THE SAFE PASSAGE OF THE GENERAL PUBLIC. ANY CONSTRUCTION FENCING SHALL BE BEHIND THE PROPERTY LINE. ALL CONSTRUCTION-RELATED DEBRIS TO BE PLACED ON PRIVATE PROPERTY.
- ALL ON-SITE GRADING AND PAVING SHALL CONFORM TO THE GEOTECHNICAL INVESTIGATION AND PAVEMENT DESIGN PREPARED BY ENGeo, INC., DATED DECEMBER 26, 2012, AND TO THE CITY STANDARD PLANS AND SPECIFICATIONS, AS APPLICABLE.

UTILITY NOTES

- NEW WATER PIPELINES, VALVES, AND FITTINGS SHALL BE STERILIZED, TESTED BY THE CONTRACTOR, AND SHALL PASS BACTERIA AND OTHER WATER QUALITY REQUIREMENTS BEFORE BEING PUT INTO SERVICE. CONTRACTOR SHALL SUPPLY ALL MATERIALS, LABOR AND EQUIPMENT REQUIRED TO DISINFECT THE PIPELINES AND APPURTENANCES. THE DISINFECTANT SHALL REMAIN IN CONTACT WITH THE WATER FOR A MINIMUM OF 24 HOURS BEFORE FLUSHING. BACTERIOLOGICAL TESTING SHALL BE CONDUCTED NO LESS THAN 24 HOURS AFTER FLUSHING. DISINFECTION WILL BE WITNESSED BY THE INSPECTOR. CHLORINE TABLETS (E.G., HTH) SHALL BE FASTENED TO THE TOP OF THE PIPE WITH TAR OR PERMATEX #2 ACCORDING TO THE CITY'S SCHEDULE. WATER MAIN DISINFECTING AND FLUSHING SHALL BE PER SECTION 306 OF THE CITY SPECIFICATIONS.
- JOINT TRENCH LINES AND APPURTENANCES ARE SHOWN FOR INFORMATION ONLY. CONTRACTOR SHALL REFERENCE JOINT TRENCH PLANS FOR INSTALLATION OF THESE FACILITIES.
- CONTRACTOR SHALL STENCIL ALL CATCH BASINS WITH THE NON-POINT-SOURCE "NO DUMPING" MESSAGE. THE STENCIL IS AVAILABLE FROM THE CITY'S ENVIRONMENTAL DIVISION, WHICH MAY BE REACHED BY CALLING (408) 730-7260.
- IN THE EVENT OF WET UNSTABLE TRENCH BOTTOM OR IF GROUND WATER IS ENCOUNTERED, DEWATERING WILL BE REQUIRED. CONTRACTOR SHALL CONTACT THE GEOTECHNICAL ENGINEER FOR DEWATERING RECOMMENDATIONS.
- THE EXISTING UTILITIES CROSSING THE NEW PIPELINE ARE SHOWN ACCORDING TO THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY THAT TYPE, SIZE, LOCATION AND DEPTH OF ALL THE UTILITY CROSSINGS (BOTH MAINS AND LATERALS) ARE CORRECT AS SHOWN. NO GUARANTEE IS MADE THAT ALL EXISTING UTILITIES (BOTH MAINS AND LATERALS) ARE SHOWN. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING AND SHALL PROTECT ALL EXISTING UTILITIES (BOTH MAINS AND LATERALS) FROM DAMAGE DUE TO HIS OPERATION.
- ALL UTILITY STRUCTURES INCLUDING BUT NOT LIMITED TO MANHOLES, CATCH BASINS, WATER VALVES, FIRE HYDRANTS, CABLE TV, TELEPHONE AND ELECTRIC VAULTS AND PULL BOXES ETC. THAT LIE WITHIN THE PUBLIC RIGHT OF WAY, EASEMENTS OR AREAS AFFECTED BY THE WORK ON THE PROJECT SHALL BE ADJUSTED TO GRADE BY THE CONTRACTOR OR THE RESPECTIVE UTILITY COMPANY FOR WHICH THE CONTRACTOR IS RESPONSIBLE TO COORDINATE.
- BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH THE "CITY OF SUNNYVALE WATER SYSTEM CROSS CONNECTION CONTROL PROGRAM POLICIES AND REGULATIONS." A BACKFLOW PREVENTION ASSEMBLY SHALL CONSIST OF 2 CHECK VALVES AND A PRESSURE RELIEF VALVE CONNECTED IN SERIES WITH 2 NON-RISING STEM GATE VALVES. BACKFLOW PREVENTION ASSEMBLIES SHALL BE THE SAME SIZE AS THE PIPE MAIN IN WHICH THEY ARE INSTALLED. THE ASSEMBLY SHALL BE UL LISTED AND APPROVED BY THE RESEARCH FOUNDATION FOR CROSS-CONNECTION CONTROL, UNIVERSITY OF SOUTHERN CALIFORNIA. DEVICES MUST BE PAINTED WITH 2 COATS OF BLACK UV WEATHER RESISTANT PAINT (RUSTOLEUM, ETC.). THE FDC AND STANDPIPE OF THE DOUBLE DETECTOR CHECK VALVE ASSEMBLY FOR FIRE SERVICES MUST BE PAINTED WITH TWO COATS OF SAFETY YELLOW (RUSTOLEUM, ETC.). MASTIG ALL BOLTS/NUTS OR USE STAINLESS STEEL COMPONENTS.
- ON-SITE PVC SANITARY AND STORM PIPE & FITTINGS SHALL CONFORM TO ASTM D-3034 AND F-679, SDR 35 PVC GRAVITY SEWER PIPE. AS MANUFACTURED BY JM PIPE. OR APPROVED EQUAL. SANITARY SEWER LATERALS SHALL BE A MINIMUM OF 1' BELOW WATER LATERALS, UNLESS OTHERWISE NOTED. SEWER LINE TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MOST CURRENT BUILDING CODE.
- ON SITE SANITARY SEWER PIPE AND FITTINGS SHALL BE SDR26. LATERALS SHALL BE A MINIMUM OF 1' BELOW WATER LATERALS.
- CONTRACTOR SHALL COORDINATE UTILITY INFORMATION SHOWN ON THE PLANS WITH INSTALLATION OF PG&E, CABLE, TELEPHONE AND/OR JOINT TRENCH LAYOUT AND DETAILS.
- THE METER AND METER BOX SHALL BE FURNISHED AND INSTALLED BY THE CITY UPON ACCEPTANCE OF THE LATERAL SERVICE LINE, AND THE PROPERTY OWNER HAS ASSUMED RESPONSIBILITY FOR THE CONNECTION ON THE DISCHARGE SIDE OF THE METER. A BACKFLOW PREVENTION DEVICE IS REQUIRED FOR ALL SERVICES 2" AND LARGER. NO METER SHALL BE INSTALLED PRIOR TO FULL COMPLIANCE WITH THE CROSS-CONNECTION CONTROL PROGRAM.
- WATER PRESSURE TEST SHALL BE PERFORMED PER SECTION 306 OF THE CITY SPECIFICATION.
- CONTRACTOR SHALL VERIFY ALL EXISTING INVERT ELEVATIONS FOR STORM DRAIN AND SANITARY SEWER CONSTRUCTION PRIOR TO COMMENCEMENT OF ANY WORK. ALL WORK FOR STORM AND SANITARY SEWER INSTALLATION SHALL BEGIN AT THE DOWNSTREAM CONNECTION POINT. THIS WILL ALLOW FOR ANY NECESSARY ADJUSTMENTS TO BE MADE PRIOR TO THE INSTALLATION OF THE ENTIRE LINE. IF THE CONTRACTOR FAILS TO BEGIN AT THE DOWNSTREAM CONNECTION POINT AND WORKS DOWNSTREAM, CONTRACTOR SHALL PROCEED AT CONTRACTOR'S OWN RISK AND BE RESPONSIBLE FOR ANY ADJUSTMENTS NECESSARY. CONTRACTOR SHALL VERIFY LOCATION OF SANITARY SEWER LATERAL WITH OWNER PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITY CROSSINGS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO POTHOLE AND/OR UNCOVER AND EXPOSE EXISTING UTILITIES AT CROSSING LOCATIONS. CONTRACTOR TO PROTECT ALL EXISTING UTILITIES AND SERVICE LATERALS FROM DAMAGE DUE TO CONTRACTOR'S OPERATIONS. ANY AND ALL UTILITY SERVICE LATERALS THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED TO THE SATISFACTION OF THE CITY ENGINEER.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES WITH THE APPROPRIATE AGENCIES.
- ALL EXISTING WATER VALVES SHALL BE OPERATED ONLY BY THE CITY. THIS INCLUDES THAT OPERATION OF VALVES REQUIRED TO PERMIT THE FILLING OF THE SYSTEM INSTALLED BY THE CONTRACTOR.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY AFFECTED RESIDENTS AND BUSINESSES 48 HOURS PRIOR TO THE START OF A WATER MAIN SHUTDOWN. THE WATER MAIN SHUTDOWN WILL BE COMPLETED BY CITY CREWS ONLY.
- ON-SITE PERFORATED PIPE AND FITTINGS SHALL BE SOLVENT WELD PVC SDR 35 GRAVITY SEWER PIPE CONFORMING TO ASTM D3034, AS MANUFACTURED BY PACIFIC PLASTICS OR APPROVED EQUAL.

GRADING AND SURFACE IMPROVEMENT NOTES

- ASPHALT CONCRETE SHALL CONFORM TO TYPE B GRADE PG-64, 3/4" MAXIMUM, MEDIUM GRADING, PER SECTION 39 OF THE STATE STANDARD SPECIFICATIONS, UNLESS OTHERWISE NOTED.
- LAMPBLACK SHALL BE ADDED AT THE RATE OF 1 PINT (POWDER) PER CUBIC YARD FOR ON SITE CURBS, GUTTERS, SIDEWALK, WALKWAY, DRIVEWAY APPROACHES, OR STRESS PAD.
- AGGREGATE BASE SHALL CONFORM TO CLASS 2 AGGREGATE BASE, 3/4" MAXIMUM, MEDIUM GRADATION PER SECTION 26 OF THE STATE STANDARD SPECIFICATIONS, AND SHALL HAVE A MINIMUM COMPACTION OF 95% RELATIVE UNDER ASPHALTIC CONCRETE PAVING AND A MINIMUM COMPACTION OF 90% RELATIVE UNDER SIDEWALK AREAS.
- CURB AND GUTTER SUBGRADE TOP 6 INCHES SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION.
- PORTLAND CEMENT CONCRETE SHALL CONFORM TO CLASS A, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.
- PAVEMENT EXCAVATION SHALL INCLUDE REMOVAL AND DISPOSAL OF EXISTING A.C. PAVEMENT AND PCC CURB REQUIRED FOR THE CONSTRUCTION OF NEW SURFACE IMPROVEMENTS. THE CONTRACTOR SHALL SAW-CUT EXISTING PAVEMENT AT LOCATIONS AS SHOWN ON THE PLANS PRIOR TO REMOVAL OF EXISTING PAVEMENT. ALL EXCAVATED MATERIALS SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF IN AN AREA PROVIDED BY THE CONTRACTOR.
- CONTRACTOR SHALL GRADE TO THE LINE AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION AS INDICATED.

	HORIZONTAL	VERTICAL	COMPACTION
PAVEMENT SUBGRADE	0.1±	+0.1' TO -0.1'	95%

THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO CONFORM TO THE LINES, GRADES, SECTIONS, AND DIMENSIONS AS SET FORTH ON THESE PLANS. ALL GRADED AREAS SHALL CONFORM TO THE VERTICAL ELEVATIONS SHOWN WITH A TOLERANCE OF ONE-TENTH OF A FOOT. WHERE GRADED AREAS DO NOT CONFORM TO THESE TOLERANCES, THE CONTRACTORS SHALL BE REQUIRED TO DO CORRECTIVE GRADING, AT NO EXTRA COST TO THE OWNER.
- NON-CRYSTALLIZING TYPE WEED KILLER SHALL BE SPREAD OVER THE AGGREGATE BASE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- PRIME COAT OF SC-70 LIQUID ASPHALT CONFORMING TO THE PROVISIONS OF THE GREENBOOK SPECIFICATIONS SHALL BE APPLIED AT THE RATE OF 0.15 TO 0.25± GALLONS PER SQUARE YARD TO SURFACE OF AGGREGATE BASE PRIOR TO PLACEMENT OF NEW ASPHALT CONCRETE.
- PRIOR TO STARTING CONSTRUCTION, A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE SUBMITTED TO THE CITY PUBLIC WORKS AND BUILDING DEPARTMENTS. REFERENCE IS MADE TO THE STATE OF CALIFORNIA BEST MANAGEMENT PRACTICES HANDBOOK FOR APPLICABLE CONTROL MEASURES. CONTRACTOR SHALL BE FAMILIAR WITH THE SWPPP AND BE RESPONSIBLE FOR IMPLEMENTING ITS PROVISIONS THROUGHOUT ALL CONSTRUCTION PHASES.
- A DEEPEMED CURB EXTENDING 4" MIN. BELOW PAVEMENT SUBGRADE SHALL BE INSTALLED BEHIND ALL NEW CURB/CURB & GUTTER, WHERE ADJACENT TO LANDSCAPED AREAS.
- MANHOLES, WATER VALVE BOXES, CLEAN OUT FRAMES AND COVERS SHALL BE BROUGHT TO FINISHED GRADE BY THE CONTRACTOR AFTER PAVING IS COMPLETED.
- GRADE BREAKS ON CURBS AND SIDEWALKS TO BE ROUNDED OFF (WHILE CONCRETE FINISHING WORK IS IN PROGRESS) IN FORM WORK AND FINISHED SURFACING.
- POSITIVE SURFACE GRADIENTS OF AT LEAST 2% MUST BE PROVIDED ADJACENT TO FOUNDATIONS IN ORDER TO DIRECT SURFACE WATER TOWARD COLLECTION AND DISCHARGE FACILITIES.
- CONTRACTOR SHALL DETERMINE EARTHWORK QUANTITIES BASED ON THE TOPOGRAPHIC SURVEY, THE GEOTECHNICAL INVESTIGATION AND THE PROPOSED SURFACE THICKNESS AND BASE THE BID ACCORDINGLY. IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM IF A SEPARATE DEMOLITION CONTRACT HAS BEEN ISSUED TO TAKE THE SITE FROM THE WAY IT IS AT THE TIME OF THE BID TO THE CONDITIONS DESCRIBED IN THESE DOCUMENTS. ANY DIFFERENCES BETWEEN THE STATE IN WHICH THE SITE IS DELIVERED TO THE CONTRACTOR AND THESE DOCUMENTS SHOULD BE NOTED TO THE ENGINEER/ARCHITECT.
- ALL FILL SHALL BE COMPACTED PER THE GEOTECHNICAL REPORT AND THE CONTRACTOR SHALL COORDINATE AND COMPLY WITH THE OWNERS TESTING AGENCY TO TAKE THE APPROPRIATE TESTS TO VERIFY COMPACTION VALUES.
- IMPORT SOILS SHOULD MEET THE REQUIREMENTS OF THE SOILS REPORT AND SPECIFICATIONS.
- DO NOT ADJUST GRADES ON THIS PLAN WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE GROUND ELEVATIONS AND OVERALL TOPOGRAPHY OF THE SITE PRIOR TO THE START OF CONSTRUCTION AS TO THE ACCURACY BETWEEN THE WORK SET FORTH ON THESE PLANS AND THE WORK IN THE FIELD. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND CIVIL ENGINEER IN WRITING PRIOR TO START OF CONSTRUCTION WHICH MAY REQUIRE CHANGES IN DESIGN AND/OR AFFECT THE EARTHWORK QUANTITIES.

SUBSURFACE NOTES

- STRUCTURAL FILL WITHIN 5.0' OF ROUGH GRADE SHALL BE COMPACTED TO A MINIMUM 90% RELATIVE COMPACTION. THE UPPER 6" OF SUBGRADE SOILS BENEATH PAVEMENTS SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION.
- FILL MATERIAL SHALL BE SPREAD AND COMPACTED IN LIFTS NOT TO EXCEED 8" IN UNCOMPACTED THICKNESS.
- ON-SITE TRENCH BACKFILL SHALL BE COMPACTED TO A MINIMUM 90% RELATIVE COMPACTION. IN PAVEMENT AREAS THE UPPER 6" OF TRENCH BACKFILL SHALL BE COMPACTED TO 95% RELATIVE COMPACTION.
- DRAINAGE BEHIND WALLS AND ABOVE GROUND WATER SHALL UTILIZE 1/2" TO 3/4" CRUSH WRAPPED IN FILTER FABRIC. DRAINAGE PANELS MAY BE UTILIZED IN LIEU OF GRAVEL DRAIN ROCK.

LEGAL RELATIONS AND RESPONSIBILITY

- ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA AND SHALL HAVE AND MAINTAIN A VALID CITY BUSINESS LICENSE, PER SECTION 2 OF THE STANDARD PROVISIONS.
- THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF ALL PERMITS, LICENSES OR OTHER AUTHORIZATIONS APPLICABLE TO THE WORK WITH RESPECT TO THE ENVIRONMENTAL QUALITY ACT.
- ALL WORK SHALL BE CONDUCTED IN A MANNER WHICH PREVENTS THE RELEASE OF HAZARDOUS MATERIALS OR HAZARDOUS WASTE TO THE SOIL OR GROUNDWATER, AND MINIMIZES THE DISCHARGE OF HAZARDOUS MATERIALS, HAZARDOUS WASTES, POLLUTED WATER AND SEDIMENTS TO THE STORM DRAIN SYSTEM PER SECTION 7-8 AND 7-10 OF THE STANDARD PROVISIONS.
- TO REDUCE POTENTIAL NOISE NUISANCE TO SURROUNDING PROPERTY OWNERS, THE FOLLOWING ACTIONS SHALL BE TAKEN:
 - A. CONSTRUCTION CONTRACTORS SHALL MUFFLE AND SHIELD INTAKES AND EXHAUSTS, SHROUD OR SHIELD IMPACT TOOLS, AND USE ELECTRIC-POWERED CONSTRUCTION EQUIPMENT (AS FEASIBLE).
 - B. ALL STATIONARY NOISE-GENERATING EQUIPMENT SHALL BE LOCATED AS FAR AWAY AS POSSIBLE FROM NEIGHBORING PROPERTY LINES.
 - C. ALL CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED AND OPERATED ACCORDING TO MANUFACTURER'S MAINTENANCE SCHEDULES AND RECOMMENDATIONS TO MINIMIZE NOISE AND EXHAUST EMISSIONS (PARTICULARLY NITROGEN OXIDES).

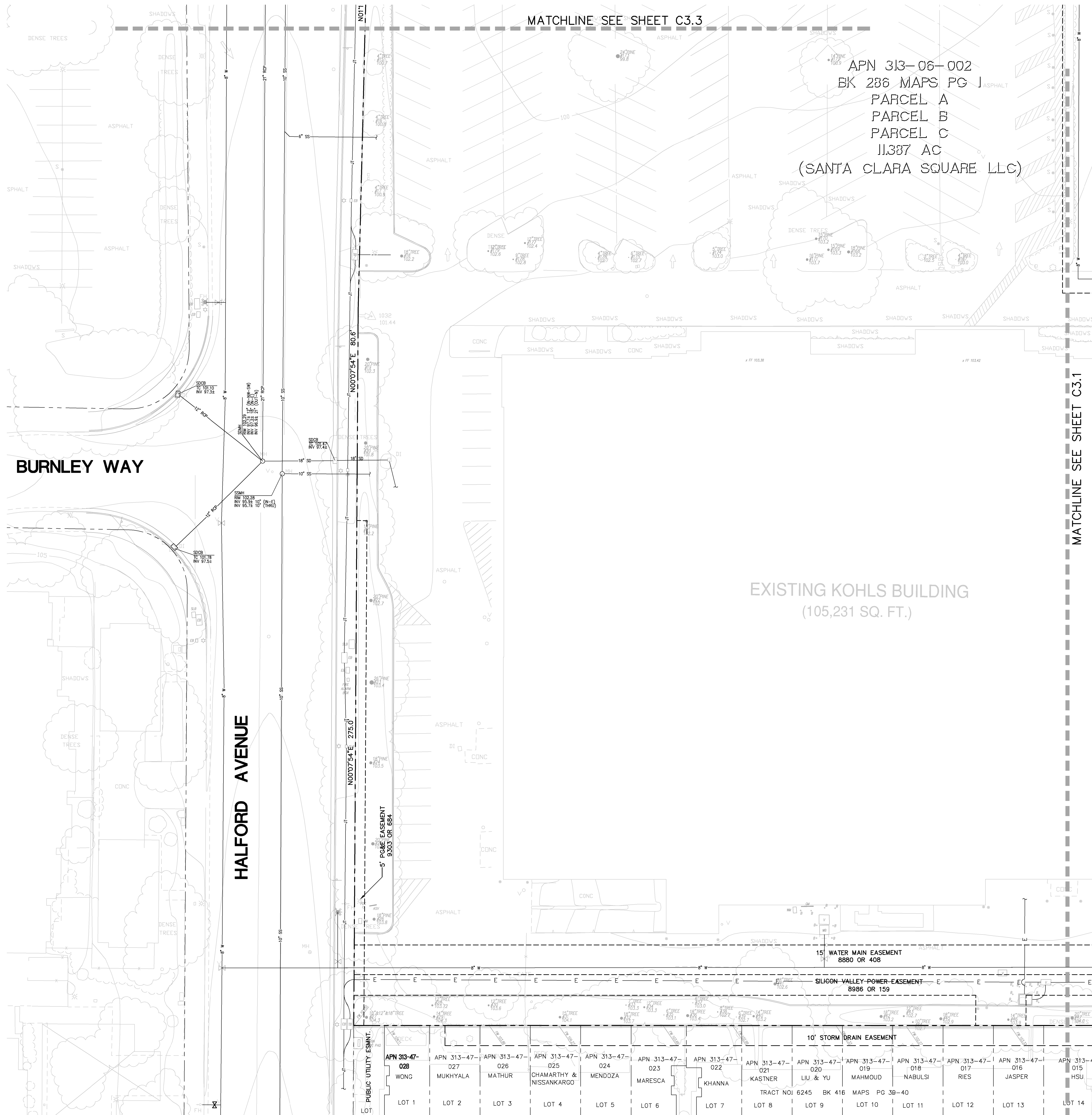
FIRE PREVENTION NOTES

- THE ONSITE FIRE HYDRANTS SHALL BE FLUSHED AND PLACED IN SERVICE PRIOR TO COMBUSTIBLE MATERIALS BEING BROUGHT ON SITE.
- THE FIRE LANE SHALL BE INSTALLED AND MAINTAINED PRIOR TO COMBUSTIBLE MATERIALS BEING BROUGHT ON SITE.

NOTIFICATION

- IF ANY DAMAGE OCCURS TO AN UNDERGROUND FACILITY THAT RESULTS IN THE ESCAPE OF ANY FLAMMABLE, TOXIC OR CORROSIVE GAS OR LIQUID OR ENDANGERS LIFE, HEALTH, OR PROPERTY, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY OWNER AND CALL THE 911 EMERGENCY TELEPHONE NUMBER TO NOTIFY LOCAL PUBLIC SAFETY OFFICIALS.
- THE CONTRACTOR SHALL PROVIDE THE NAME AND TELEPHONE NUMBER OF THE AUTHORIZED REPRESENTATIVE (SUPERINTENDENT) OF THE WORK TO THE CITY IN WRITING PRIOR TO THE START OF WORK PER SECTION 7-6 OF THE STANDARD PROVISIONS. PUBLIC WORKS: TELE. (408) 730-7415 AND FAX (408) 730-7286.
- CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) AT (800)842-2444 AT LEAST TWO WORKING DAYS BUT NOT MORE THAN 14 DAYS PRIOR TO COMMENCING EXCAVATION WORK TO VERIFY EXISTING UNDERGROUND UTILITIES PER SECTION 5-1 OF THE STANDARD PROVISIONS AND CHAPTER 3.1, DIVISION 5, TITLE 1 OF THE GOVERNMENT CODE.

ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	2/22/15
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16

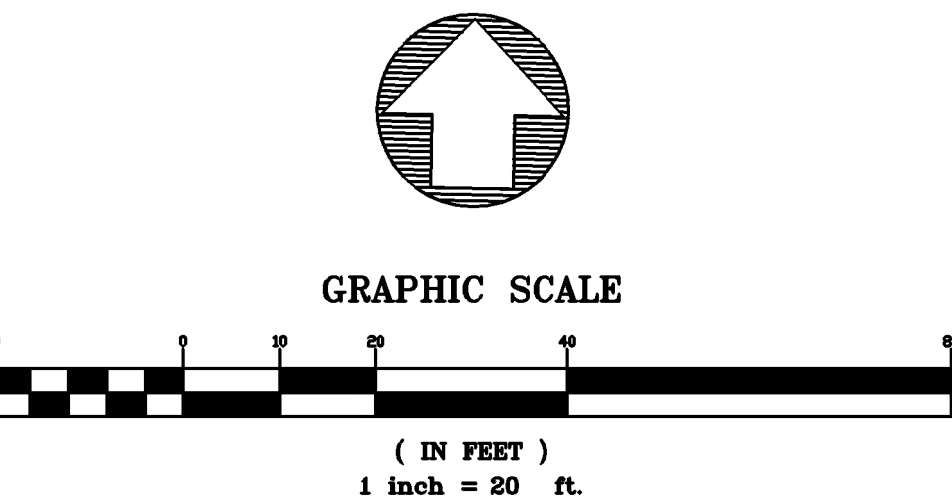


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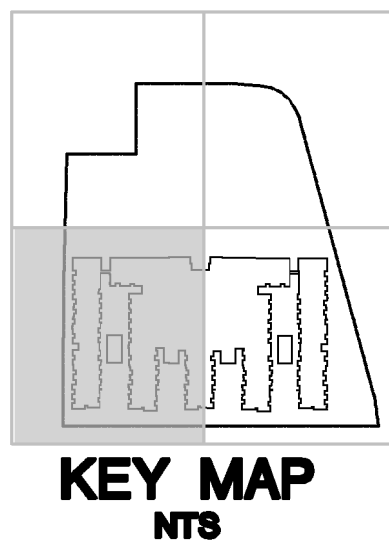
SIDEWALK, CURB AND GUTTER	
PROPERTY LINE	
EDGE OF PAVEMENT	
DRIVEWAY	
ACCESSIBILITY RAMP	
MANHOLE	
STORM DRAIN INLET	
WATER METER	
VALVE	
FIRE HYDRANT	
ELECTROQUER	
JOINT POLE	
PULL BOX	
ELECTRICAL LINE	
NATURAL GAS LINE	
FIBER OPTIC LINE	
SANITARY SEWER LINE	
STORM DRAIN LINE	
COMMUNICATION LINE	
WATER LINE	
ROADSIDE SIGN	
FENCE	
TREE/SHRUB	
SPOT ELEVATIONS	

KEYNOTES

CONSTRUCTION NOTES



ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	12/22/15
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16



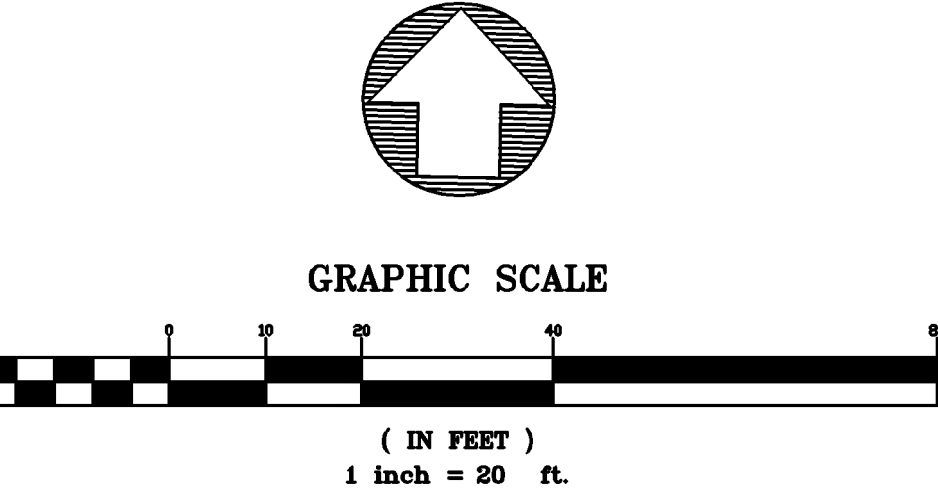


LEGEND

- SIDEWALK, CURB AND GUTTER
- PROPERTY LINE
- EDGE OF PAVEMENT
- DRIVEWAY
- ACCESSIBILITY RAMP
- MANHOLE
- STORM DRAIN INLET
- WATER METER
- VALVE
- FIRE HYDRANT
- ELECTROJER
- JOINT POLE
- PULL BOX
- ELECTRICAL LINE
- NATURAL GAS LINE
- FIBER OPTIC LINE
- SANITARY SEWER LINE
- STORM DRAIN LINE
- COMMUNICATION LINE
- WATER LINE
- ROADSIDE SIGN
- FENCE
- TREE/SHRUB
- SPOT ELEVATIONS

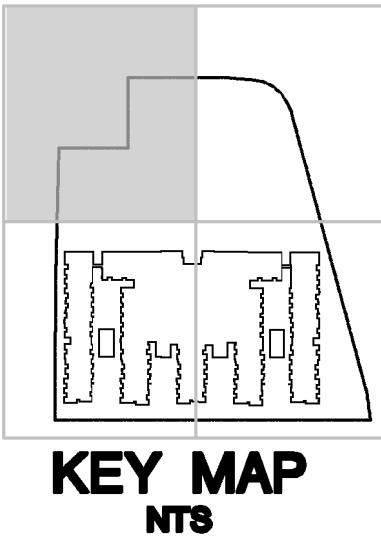
KEYNOTES

CONSTRUCTION NOTES



FOR REFERENCE ONLY

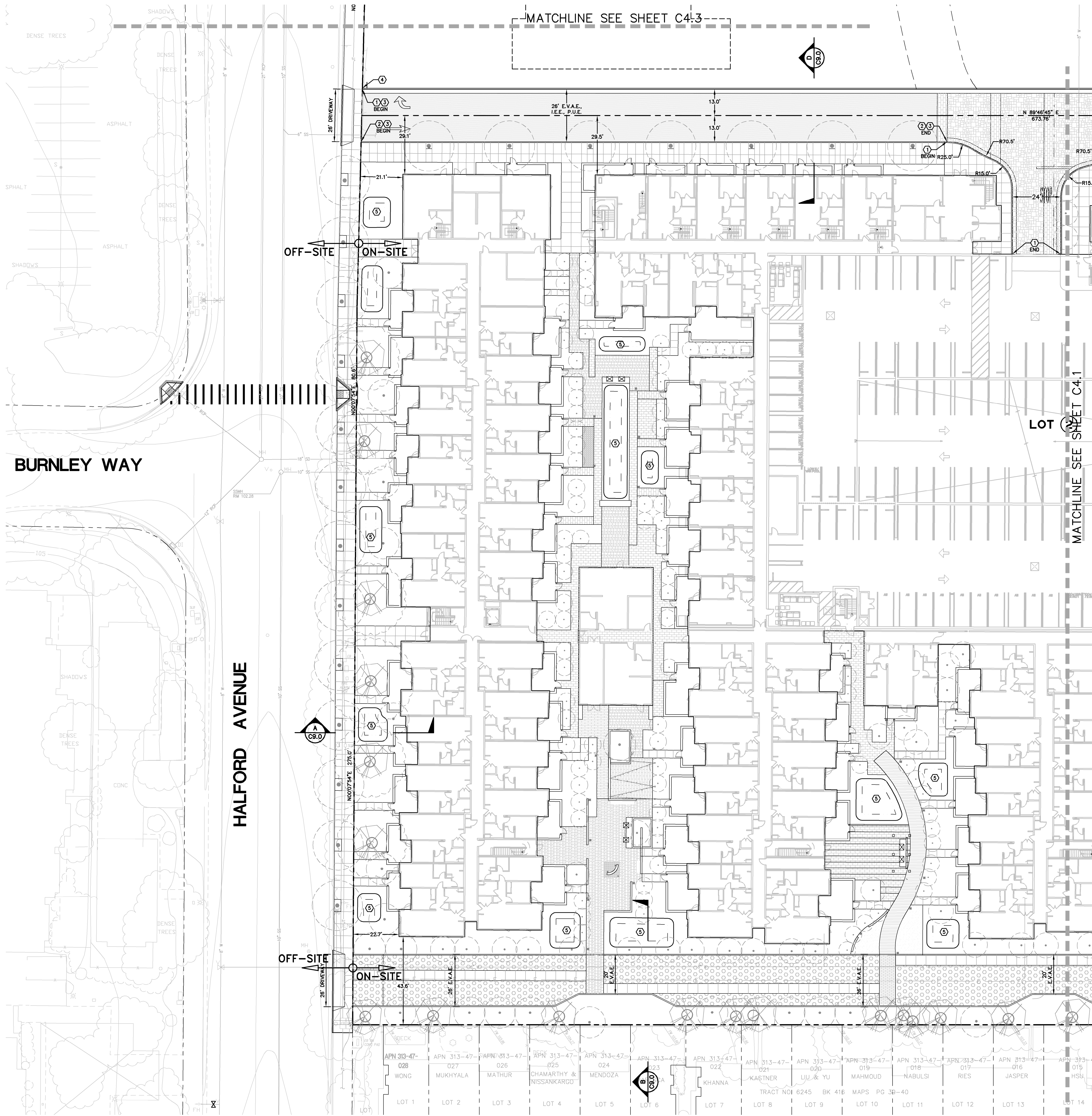
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SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
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CONCRETE SUBMITTAL	2/22/15
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16



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OF THE ENGINEER.

EXISTING CONDITIONS

SHEET NO.
20126113
SHEET SIZE: 20 x 42



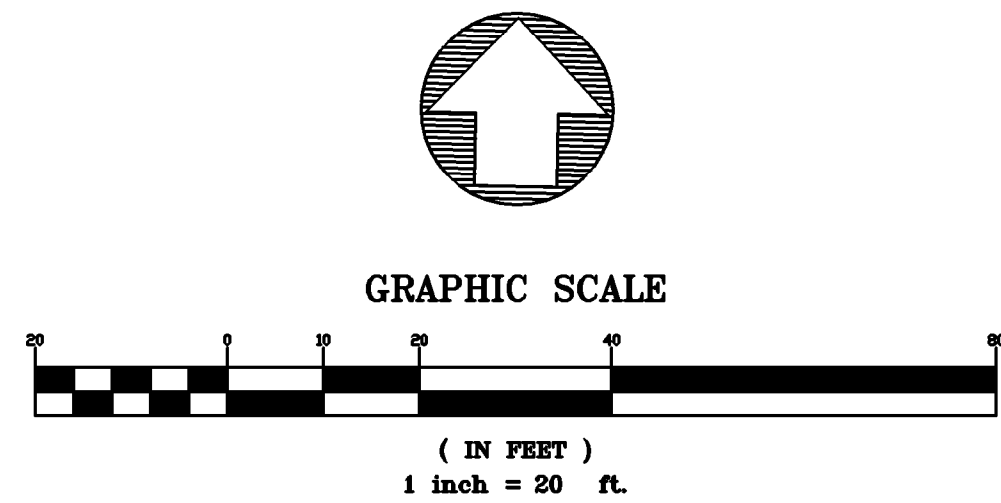
LEGEND

PROPERTY LINE	---
LOT LINE	----
EXISTING EASEMENT LINE	- - - -
PROPOSED EASEMENT LINE	----
VERTICAL CURB AND GUTTER	=====
VERTICAL CURB	=====
BIORETENTION BASIN	[Symbol]
ASPHALT PAVEMENT (3" AC OVER 10" CLASS II AB)	[Symbol]
GRASSCRETE (SEE DETAIL 9, SHEET C10.0)	[Symbol]
ON-SITE CONCRETE SIDEWALK (4" CONC/4" CL 2 AB)	[Symbol]

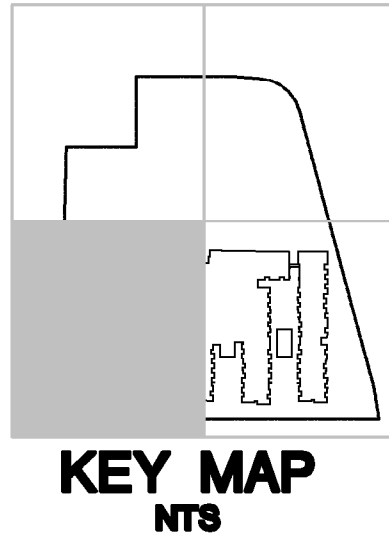
KEYNOTES

- ① MONOLITHIC CURB & GUTTER PER CITY DETAIL ST-11
- ② VERTICAL CURB PER DETAIL 7, SHEET C10.0
- ③ FIRE LANE CURB MARKING PER DETAIL 12, SHEET C10.0
- ④ CURB TAPER PER DETAIL 13, SHEET C10.0
- ⑤ BIORETENTION BASIN PER DETAIL 5, SHEET C10.0

CONSTRUCTION NOTES



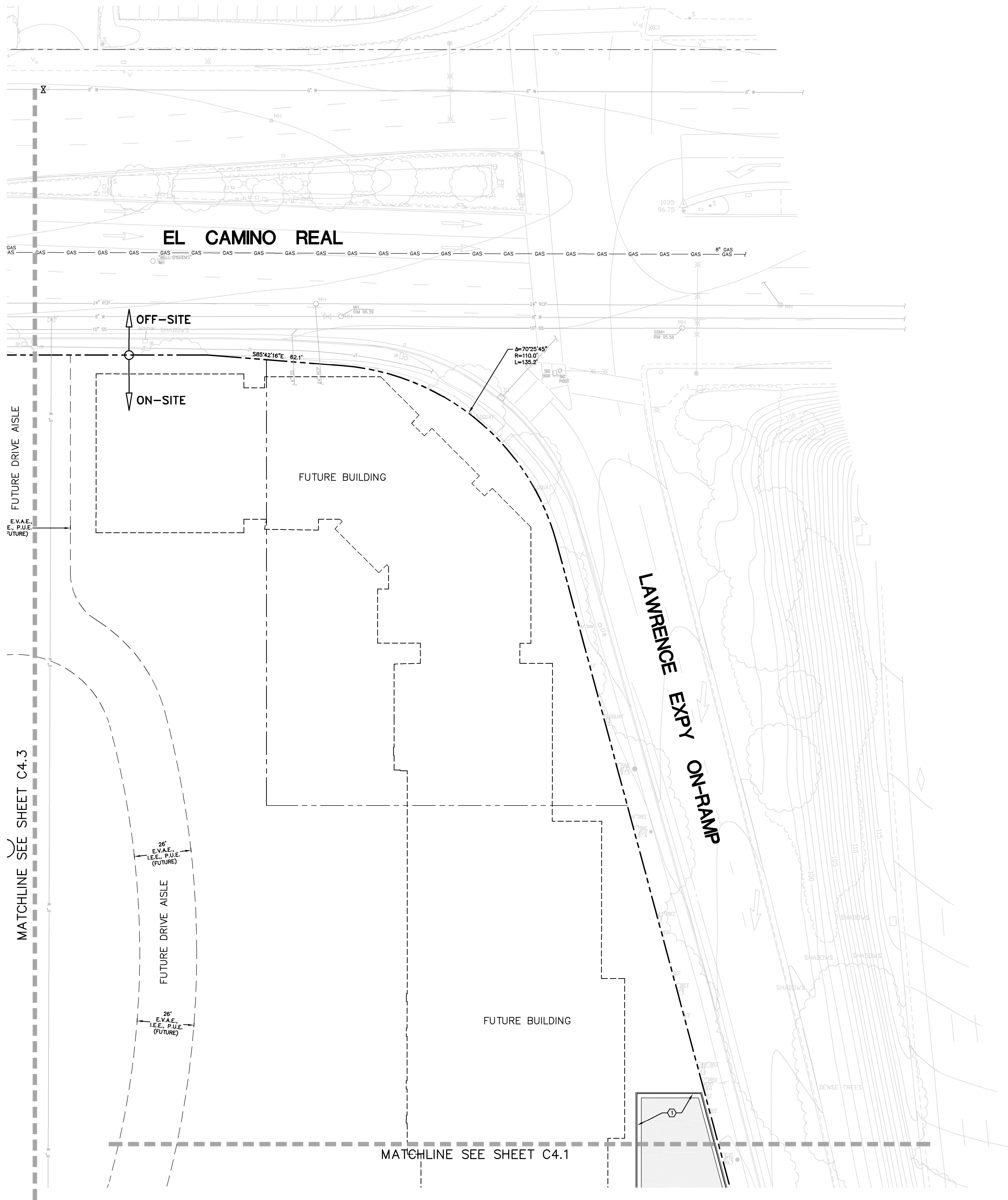
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SCHEMATIC DESIGN	10/23/15
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100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	2/22/15
CD SET 2	12/22/15
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SUPERSTRUCTURE SUBMITTAL	2/19/16



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SITE PLAN & HORIZONTAL CONTROL PLAN

Sheet Title
Drawn By
20126113
Checked By
20126113



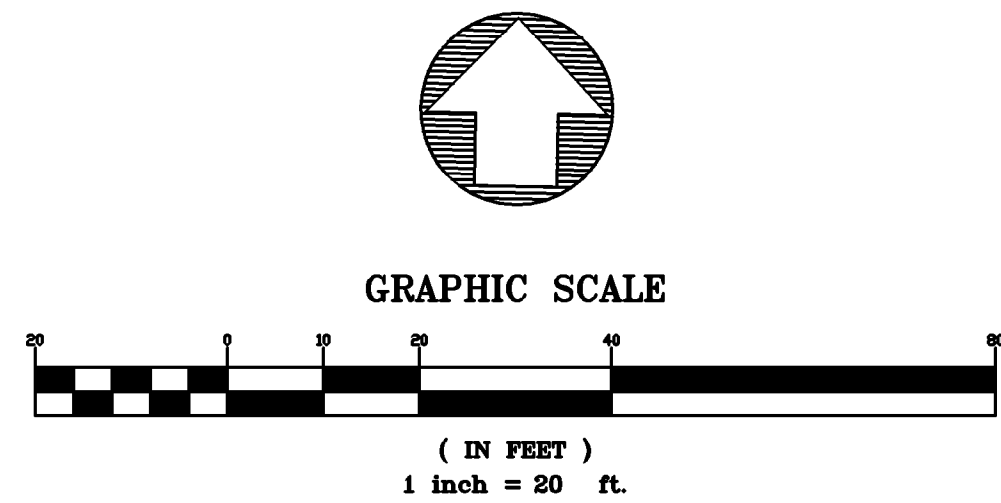
LEGEND

PROPERTY LINE	---
LOT LINE	---
EXISTING EASEMENT LINE	---
PROPOSED EASEMENT LINE	---
VERTICAL CURB AND GUTTER	---
VERTICAL CURB	---
BIORETENTION BASIN	---
ASPHALT PAVEMENT (3" AC OVER 10" CLASS II AB)	---
GRASSCRETE (SEE DETAIL 9, SHEET C10.0)	---
ON-SITE CONCRETE SIDEWALK (4" CONC/4" CL 2 AB)	---

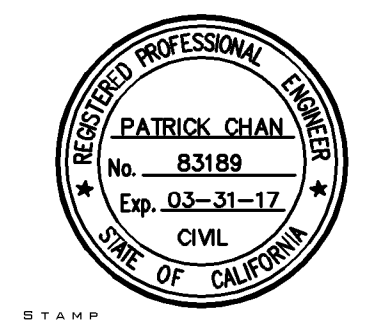
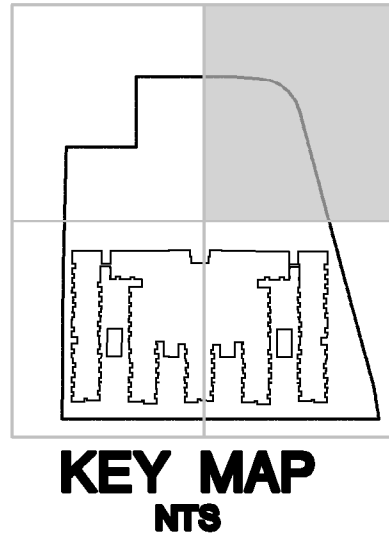
KEYNOTES

- MONOLITHIC CURB & GUTTER PER CITY DETAIL ST-11
- VERTICAL CURB PER DETAIL 7, SHEET C10.0
- FIRE LANE CURB MARKING PER DETAIL 12, SHEET C10.0
- CURB TAPER PER DETAIL 13, SHEET C10.0
- BIORETENTION BASIN PER DETAIL 5, SHEET C10.0

CONSTRUCTION NOTES



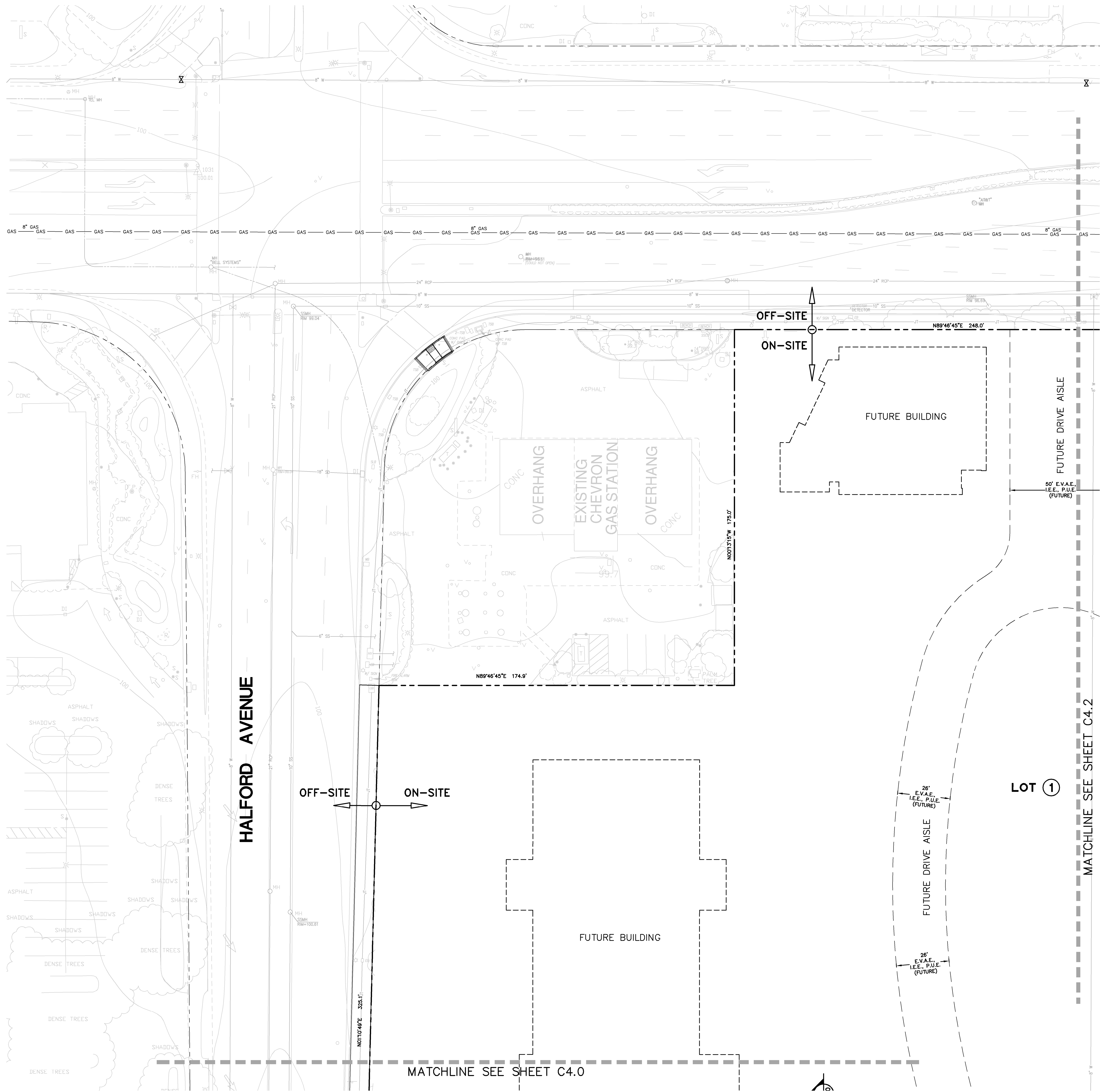
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SCHEMATIC DESIGN	10/23/15
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100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	2/22/15
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16



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SITE PLAN &
HORIZONTAL
CONTROL
PLAN

SHEET TITLE	
DATE	2012/01/13
DESIGNED BY	SCOTT SCHORN
CHECKED BY	SCOTT SCHORN



LEGEND

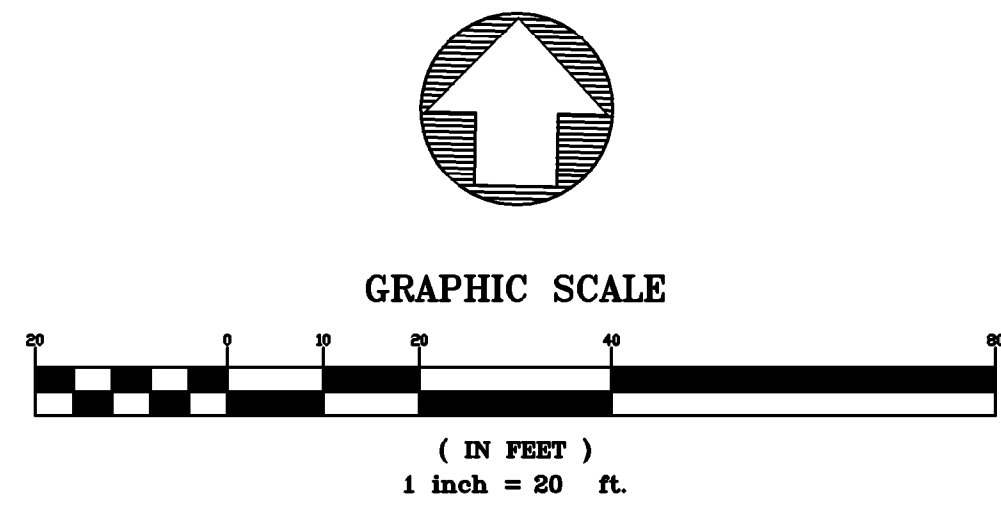
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LOT LINE	---
EXISTING EASEMENT LINE	---
PROPOSED EASEMENT LINE	---
VERTICAL CURB AND GUTTER	---
VERTICAL CURB	---
BIORETENTION BASIN	---
ASPHALT PAVEMENT (3" AC OVER 10" CLASS II AB)	---
GRASSCRETE (SEE DETAIL 9, SHEET C10.0)	---
ON-SITE CONCRETE SIDEWALK (4" CONC/4" CL 2 AB)	---

KEYNOTES

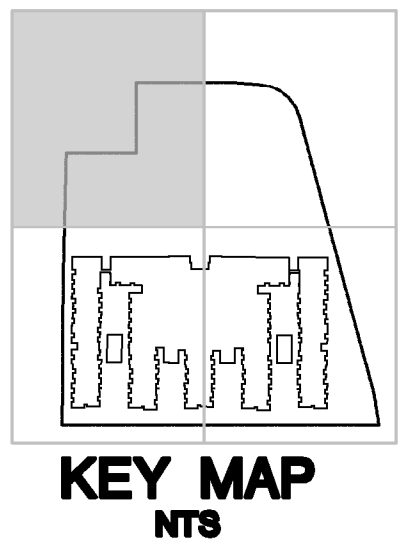
- MONOLITHIC CURB & GUTTER PER CITY DETAIL ST-11
- VERTICAL CURB PER DETAIL 7, SHEET C10.0
- FIRE LANE CURB MARKING PER DETAIL 12, SHEET C10.0
- CURB TAPER PER DETAIL 13, SHEET C10.0
- BIORETENTION BASIN PER DETAIL 5, SHEET C10.0

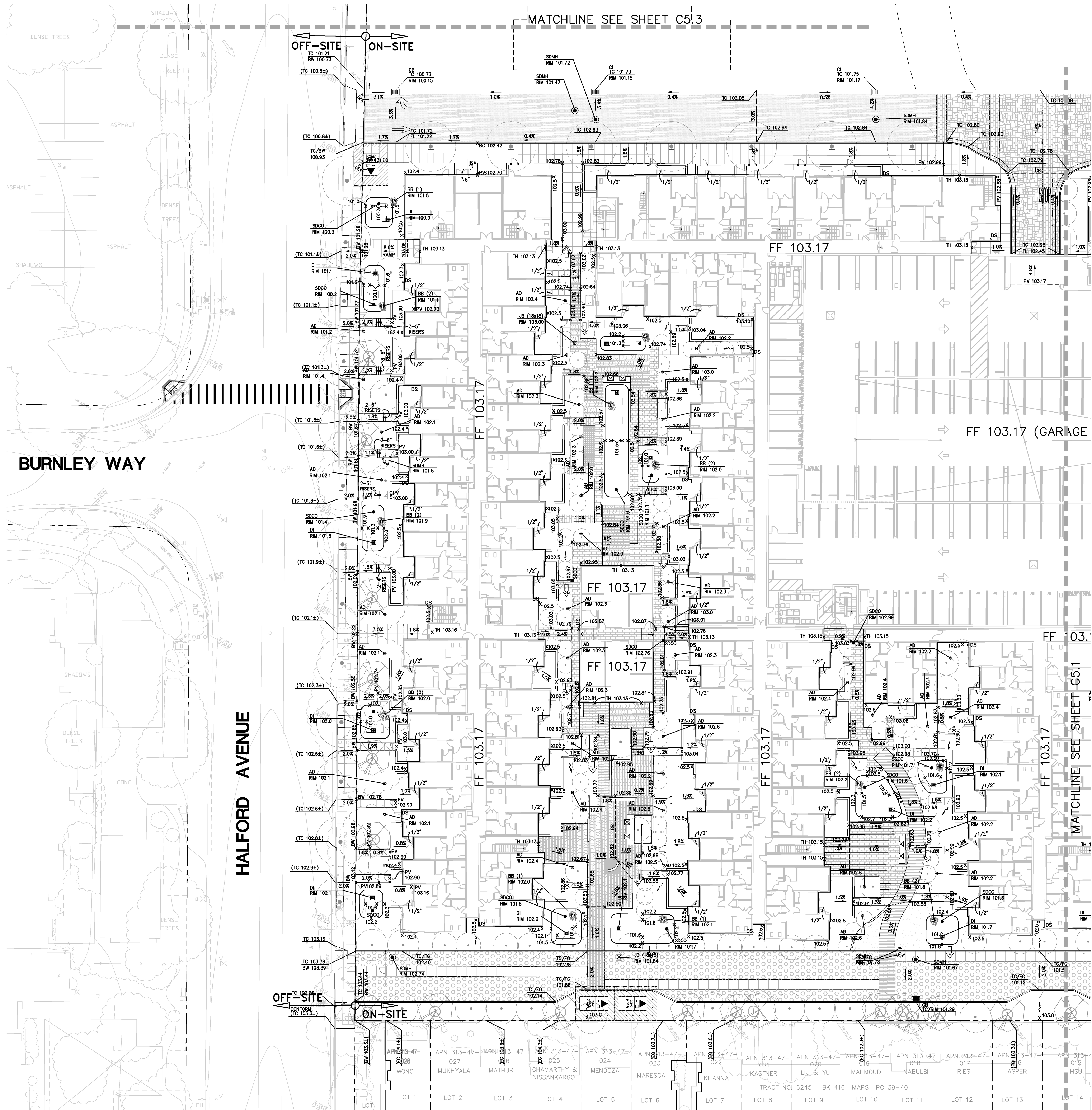
CONSTRUCTION NOTES

ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	2/22/15
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16



ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
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CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16





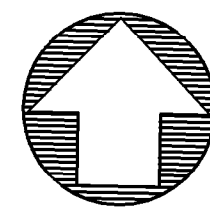
LEGEND

PROPERTY LINE	---
LOT LINE/ADJ. PROPERTY LINE	---
FEMA FLOOD ZONE LINE	---
VERTICAL CURB AND GUTTER	---
VERTICAL CURB	---
BIORETENTION BASIN	---
ASPHALT PAVEMENT	---
GRASSCOTE PAVING	---
CONCRETE SIDEWALK	---
EXISTING ELEVATION	(TC 97.0±)
PROPOSED ELEVATION	TC 100.8
SLOPE TO DRAIN (HARDSCAPE)	---
SLOPE TO DRAIN (SOFTSCAPE)	---
OVERLAND RELEASE	---
STEP	---
STORM DRAIN MANHOLE	SDMH
STORM DRAIN CATCH BASIN	CB
STORM DRAIN DROP INLET	DI
STORM DRAIN JUNCTION BOX	JB
STORM DRAIN BUBBLER BOX	BB
STORM DRAIN AREA DRAIN	AD
STORM DRAIN CLEAN OUT	SDCO
SANITARY SEWER MANHOLE	SSMH
SANITARY SEWER CLEANOUT	SSCO

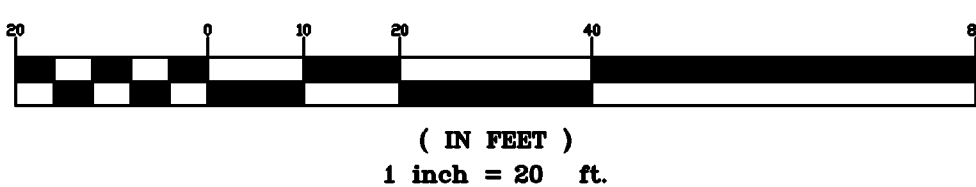
KEYNOTES

CONSTRUCTION NOTES

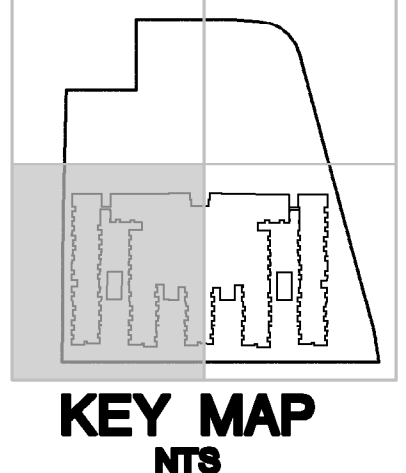
- ALL WALKWAYS FROM PORCH TO SIDEWALK SHALL SLOPE 2% MAX.
- ALL PORCHES SHALL SLOPE 2% MAX.
- SEE LANDSCAPE PLANS FOR TREE PROTECTION NOTE AND DETAILS.
- LANDSCAPE FINISH GRADE ADJACENT TO THE BUILDING SHALL BE MINIMUM 6" BELOW FINISH FLOOR AND SLOPE AWAY AT A MINIMUM 2% GRADIENT FROM FOUNDATION.
- NO GRADING OR STORAGE OF MATERIALS SHALL OCCUR UNDER THE TREE'S CANOPY AT ANY TIME, UNLESS OTHERWISE SPECIFY BY PLAN.
- DOWNSPOUTS TO BE EITHER:
A) DISCHARGE ONTO SPLASH BLOCKS, SEE DETAIL 6 ON SHEET C10.0.
B) DISCHARGE ONTO SPLASH BLOCKS, SEE DETAIL 6 ON SHEET C10.0.
C) DISCHARGE ONTO SPLASH BLOCKS, SEE DETAIL 6 ON SHEET C10.0.
D) DISCHARGE ONTO SPLASH BLOCKS, SEE DETAIL 6 ON SHEET C10.0.
- 2"-4" COBBLE STONE ENERGY DISSIPATORS SHALL BE A MINIMUM 24"x24" AREA AS DEPICTED PER PLAN AND TO BE PLACED AT CURB CUTS AND AROUND OVERFLOW DRAINS (OVD) & BUBBLER BOXES (BB).



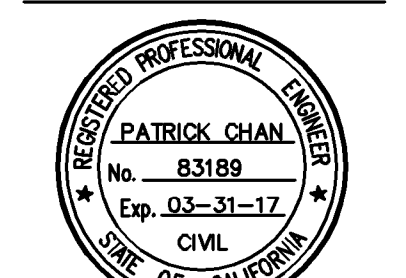
GRAPHIC SCALE



ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	2/22/15
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16



KEY MAP
NTS



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**GRADING
AND
DRAINAGE
PLAN**

Sheet Title
Date
Project No. 20126113
Drawn By: [Name]
Check By: [Name]

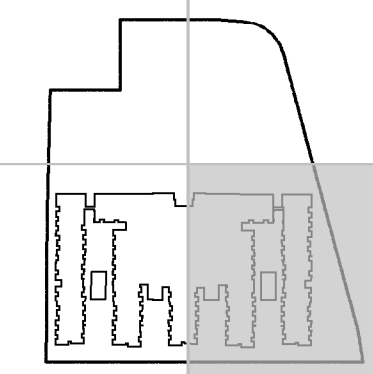
LEGEND

PROPERTY LINE	---
LOT LINE/ADJ. PROPERTY LINE	---
FEMA FLOOD ZONE LINE	---
VERTICAL CURB AND GUTTER	---
VERTICAL CURB	---
BIORETENTION BASIN	---
ASPHALT PAVEMENT	---
GRASSCOTE PAVING	---
CONCRETE SIDEWALK	---
EXISTING ELEVATION	(TC 97.0±)
PROPOSED ELEVATION	TC 100.8
SLOPE TO DRAIN (HARDSCAPE)	---
SLOPE TO DRAIN (SOFTSCAPE)	---
OVERLAND RELEASE	---
STEP	---
STORM DRAIN MANHOLE	SDMH
STORM DRAIN CATCH BASIN	CB
STORM DRAIN DROP INLET	DI
STORM DRAIN JUNCTION BOX	JB
STORM DRAIN BUBBLER BOX	BB
STORM DRAIN AREA DRAIN	AD
STORM DRAIN CLEAN OUT	SDCO
SANITARY SEWER MANHOLE	SSMH
SANITARY SEWER CLEANOUT	SSCO

KEYNOTES

CONSTRUCTION NOTES

- ALL WALKWAYS FROM PORCH TO SIDEWALK SHALL SLOPE 2% MAX.
- ALL PORCHES SHALL SLOPE 2% MAX.
- SEE LANDSCAPE PLANS FOR TREE PROTECTION NOTE AND DETAILS.
- LANDSCAPE FINISH GRADE ADJACENT TO THE BUILDING SHALL BE MINIMUM 6" BELOW FINISH FLOOR AND SLOPE AWAY AT A MINIMUM 2% GRADIENT FROM FOUNDATION.
- NO GRADING OR STORAGE OF MATERIALS SHALL OCCUR UNDER THE TREE'S CANOPY AT ANY TIME, UNLESS OTHERWISE SPECIFY BY PLAN.
- DOWNSPOUTS TO BE EITHER:
 - DISCHARGE ONTO SPLASH BLOCKS, SEE DETAIL 6 ON SHEET C10.0. SPLASH BLOCKS SHALL BE POSITIONED TOWARDS PRIVATE STREET, BIORETENTION BASINS, OR AREA DRAIN.
 - HARD PIPED TO BIORETENTION AREAS.
- 2"-4" COBBLE STONE ENERGY DISSIPATORS SHALL BE A MINIMUM 24"x24" AREA AS DEPICTED PER PLAN AND TO BE PLACED AT CURB CUTS AND AROUND OVERFLOW DRAINS (OFD) & BUBBLER BOXES (BB).



KEY MAP
NTS



GRADING AND DRAINAGE PLAN

Scale: 1" = 20' ft.
 Date: 2/19/16
 Project: 20126113
 Drawn By: J. J. J.

C5.1

BDE
ARCHITECTURE

950 HOWARD STREET
SAN FRANCISCO
CA 94103
P. (415) 677-0966

SANTA CLARA
SQUARE, LLC

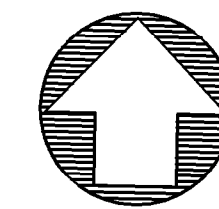
925 East Meadow Drive
Palo Alto, CA 94303
Tel 650.494.3700

BKF
ENGINEERING / SURVEYING / PLANNING
1650 TECHNOLOGY DRIVE, SUITE 650
SAN JOSE, CA 95110
(408) 457-9100
CHARTERED
SCOTT SCHORN

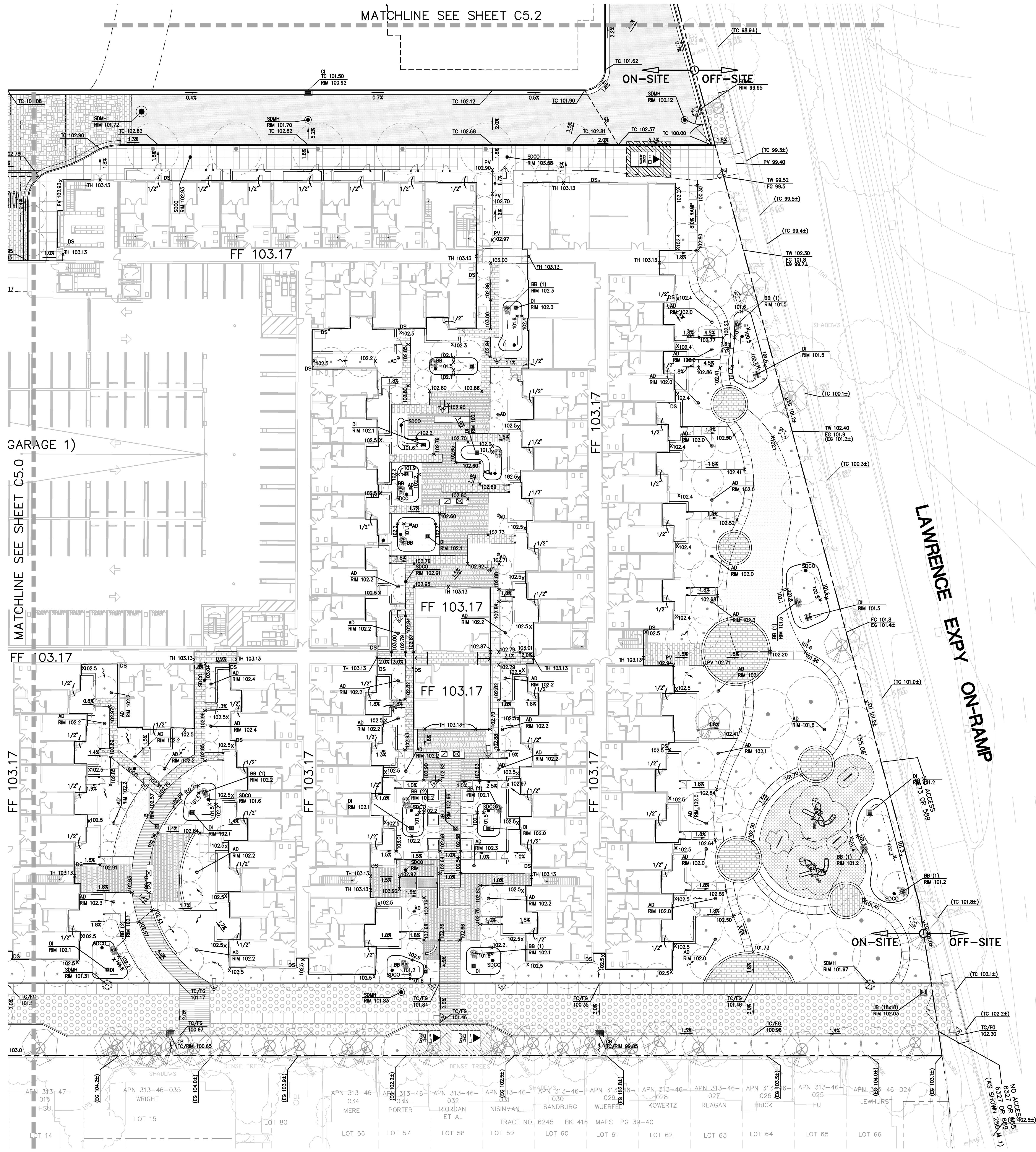
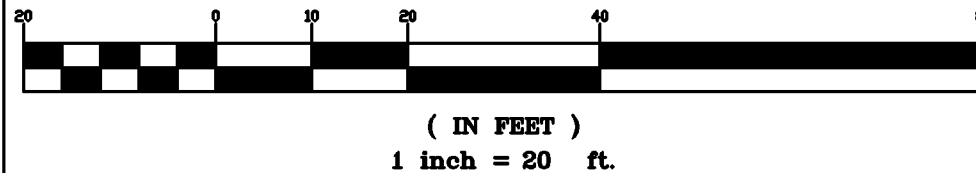
GWV
GATEWAY VILLAGE
3700 EL CAMINO REAL
SANTA CLARA, CA 95051

FOR
REFERENCE
ONLY

ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	2/22/15
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16



GRAPHIC SCALE



MATCHLINE SEE SHEET C5.2

GARAGE 1)

FF 103.17

FF 103.17

FF 103.17

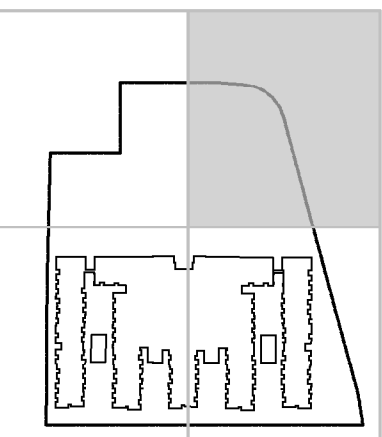
FF 103.17

FF 103.17

LAWRENCE EXPY ON-RAMP

ON-SITE OFF-SITE

ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	2/22/15
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16



KEY MAP
NTS



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GRADING
AND
DRAINAGE
PLAN

SHEET TITLE
SCALE
PROJECT NO. 20126113 DRAWN BY
CHECKED BY: DP & JF

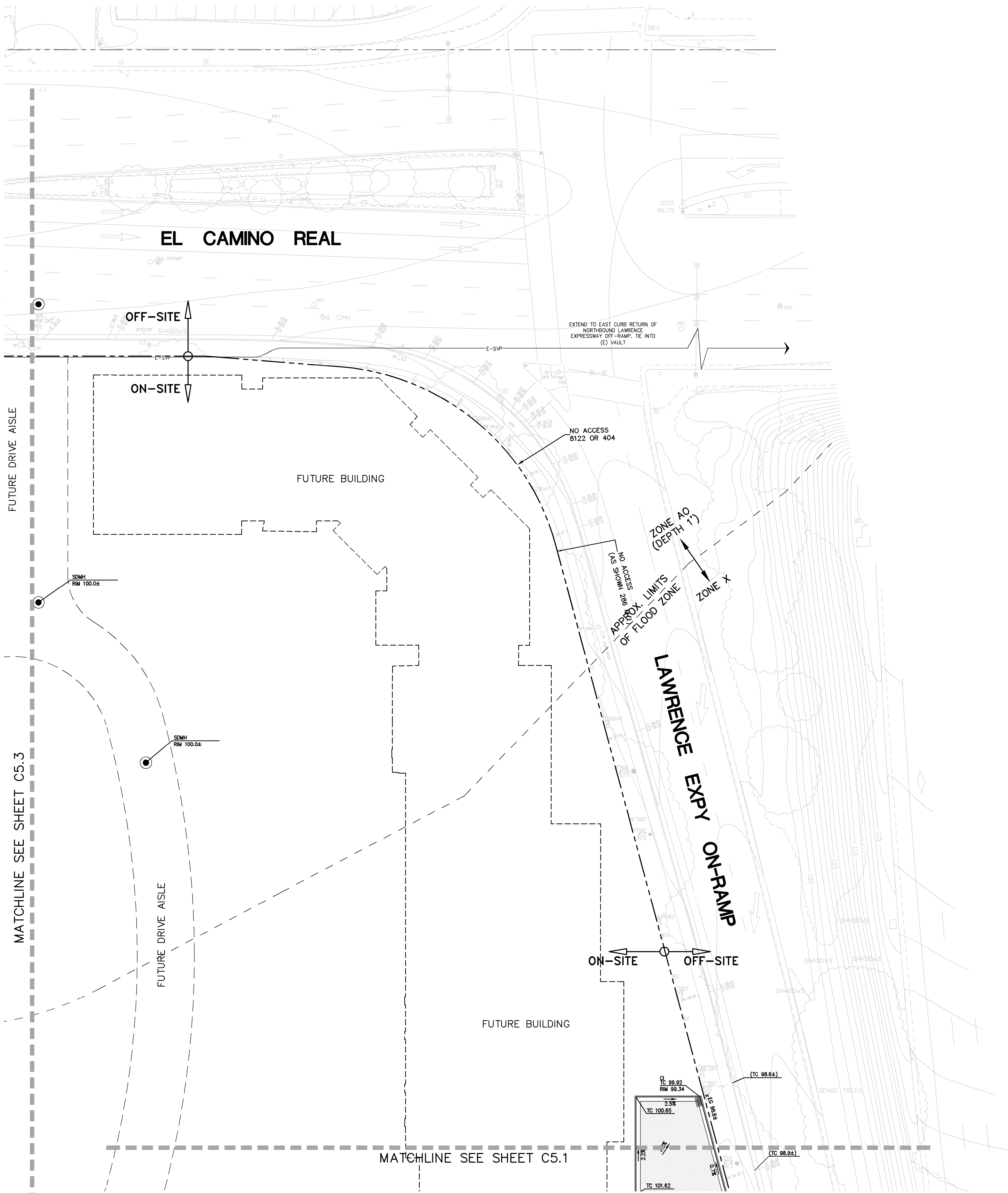
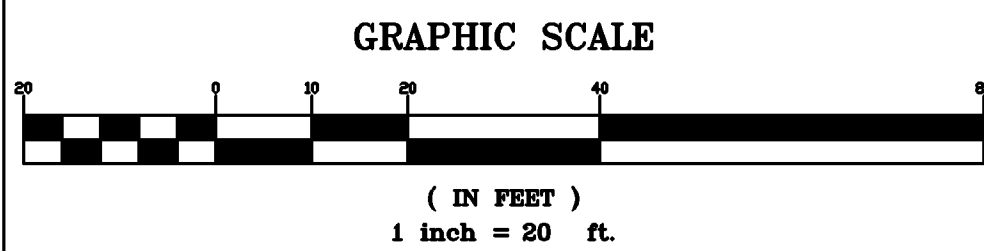
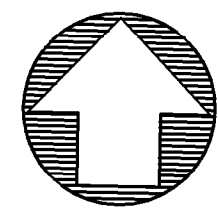
LEGEND

PROPERTY LINE	---
LOT LINE/ADJ. PROPERTY LINE	---
FEMA FLOOD ZONE LINE	---
VERTICAL CURB AND GUTTER	---
VERTICAL CURB	---
BIORETENTION BASIN	[Symbol]
ASPHALT PAVEMENT	[Symbol]
GRASS/CRETE PAVING	[Symbol]
CONCRETE SIDEWALK	[Symbol]
EXISTING ELEVATION	(TC 97.0±)
PROPOSED ELEVATION	TC 100.8
SLOPE TO DRAIN (HARDSCAPE)	---
SLOPE TO DRAIN (SOFTSCAPE)	---
OVERLAND RELEASE	[Symbol]
STEP	4"
STORM DRAIN MANHOLE	SDMH
STORM DRAIN CATCH BASIN	CB
STORM DRAIN DROP INLET	DI
STORM DRAIN JUNCTION BOX	JB
STORM DRAIN BUBBLER BOX	BB
STORM DRAIN AREA DRAIN	AD
STORM DRAIN CLEAN OUT	SDCO
SANITARY SEWER MANHOLE	SSMH
SANITARY SEWER CLEANOUT	SSCO

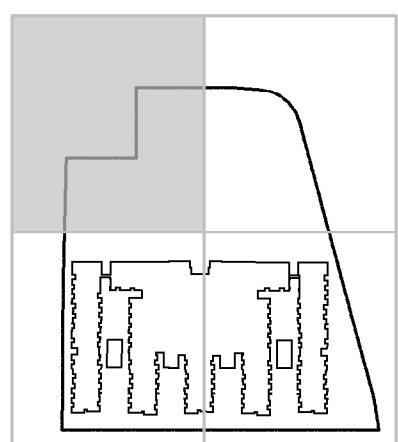
KEYNOTES

CONSTRUCTION NOTES

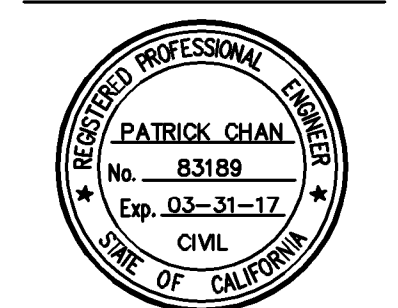
- ALL WALKWAYS FROM PORCH TO SIDEWALK SHALL SLOPE 2% MAX.
- ALL PORCHES SHALL SLOPE 2% MAX.
- SEE LANDSCAPE PLANS FOR TREE PROTECTION NOTE AND DETAILS.
- LANDSCAPE FINISH GRADE ADJACENT TO THE BUILDING SHALL BE MINIMUM 8" BELOW FINISH FLOOR AND SLOPE AWAY AT A MINIMUM 2% GRADIENT FROM FOUNDATION.
- NO GRADING OR STORAGE OF MATERIALS SHALL OCCUR UNDER THE TREE'S CANOPY AT ANY TIME, UNLESS OTHERWISE SPECIFY BY PLAN.
- DOWNSPOUTS TO BE EITHER:
A) DISCHARGE ONTO SPLASH BLOCKS, SEE DETAIL 6 ON SHEET C10.0.
SPLASH BLOCKS SHALL BE POSITIONED TOWARDS PRIVATE STREET, BIORETENTION BASINS, OR AREA DRAIN.
B) HARD PIPED TO BIORETENTION AREAS.
- 2'-4" COBBLE STONE ENERGY DISSIPATORS SHALL BE A MINIMUM 24"x24" AREA AS DEPICTED PER PLAN AND TO BE PLACED AT CURB CUTS AND AROUND OVERFLOW DRAINS (OFD) & BUBBLER BOXES (BB).



ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	2/22/15
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16



KEY MAP
NTS



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DISCLOSED WITHOUT THE WRITTEN CONSENT
OF THE ENGINEER.

GRADING
AND
DRAINAGE
PLAN

SHEET TITLE
DATE
20126113
DRAWN BY
CHECKED BY
DATE

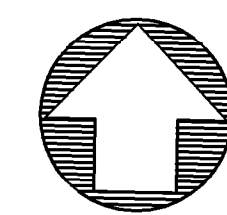
LEGEND

PROPERTY LINE	---
LOT LINE/ADJ. PROPERTY LINE	---
FEMA FLOOD ZONE LINE	---
VERTICAL CURB AND GUTTER	---
VERTICAL CURB	---
BIORETENTION BASIN	[Symbol]
ASPHALT PAVEMENT	[Symbol]
GRASS/CRETE PAVING	[Symbol]
CONCRETE SIDEWALK	[Symbol]
EXISTING ELEVATION	(TC 97.0±)
PROPOSED ELEVATION	TC 100.8
SLOPE TO DRAIN (HARDSCAPE)	---
SLOPE TO DRAIN (SOFTSCAPE)	---
OVERLAND RELEASE	[Symbol]
STEP	4"
STORM DRAIN MANHOLE	SDMH
STORM DRAIN CATCH BASIN	CB
STORM DRAIN DROP INLET	DI
STORM DRAIN JUNCTION BOX	JB
STORM DRAIN BUBBLER BOX	BB
STORM DRAIN AREA DRAIN	AD
STORM DRAIN CLEAN OUT	SDCO
SANITARY SEWER MANHOLE	SSMH
SANITARY SEWER CLEANOUT	SSCO

KEYNOTES

CONSTRUCTION NOTES

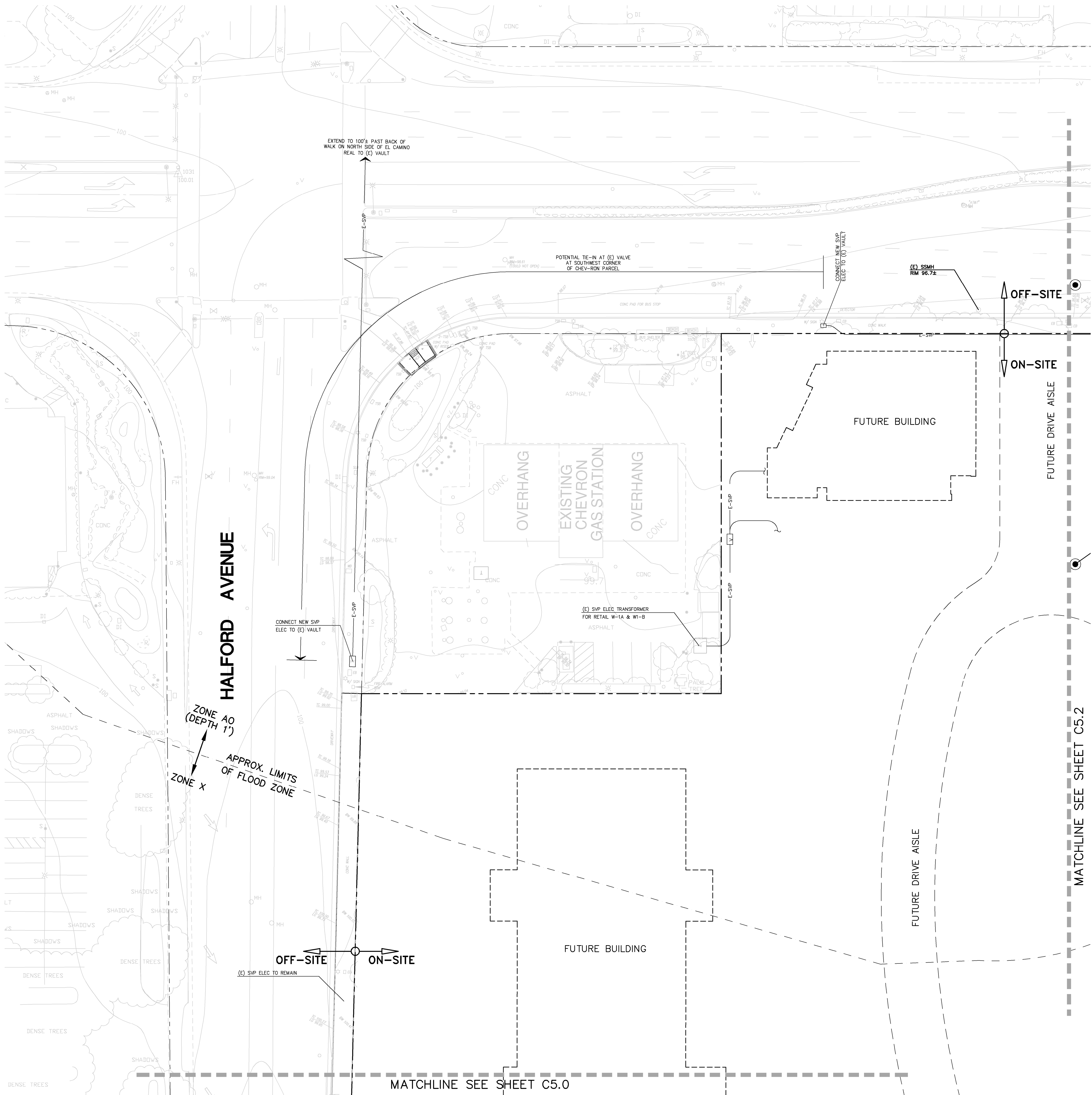
- ALL WALKWAYS FROM PORCH TO SIDEWALK SHALL SLOPE 2% MAX.
- ALL PORCHES SHALL SLOPE 2% MAX.
- SEE LANDSCAPE PLANS FOR TREE PROTECTION NOTE AND DETAILS.
- LANDSCAPE FINISH GRADE ADJACENT TO THE BUILDING SHALL BE MINIMUM 8" BELOW FINISH FLOOR AND SLOPE AWAY AT A MINIMUM 2% GRADIENT FROM FOUNDATION.
- NO GRADING OR STORAGE OF MATERIALS SHALL OCCUR UNDER THE TREE'S CANOPY AT ANY TIME, UNLESS OTHERWISE SPECIFY BY PLAN.
- DOWNSPOUTS TO BE EITHER:
A) DISCHARGE ONTO SPLASH BLOCKS, SEE DETAIL 6 ON SHEET C10.0.
SPLASH BLOCKS SHALL BE POSITIONED TOWARDS PRIVATE STREET.
BIORETENTION BASINS OR AREA DRAIN.
B) HARD PIPED TO BIORETENTION AREAS.
- 2"-4" COBBLE STONE ENERGY DISSIPATORS SHALL BE A MINIMUM 24"x24" AREA AS DEPICTED PER PLAN AND TO BE PLACED AT CURB CUTS AND AROUND OVERFLOW DRAINS (OFD) & BUBBLER BOXES (BB).

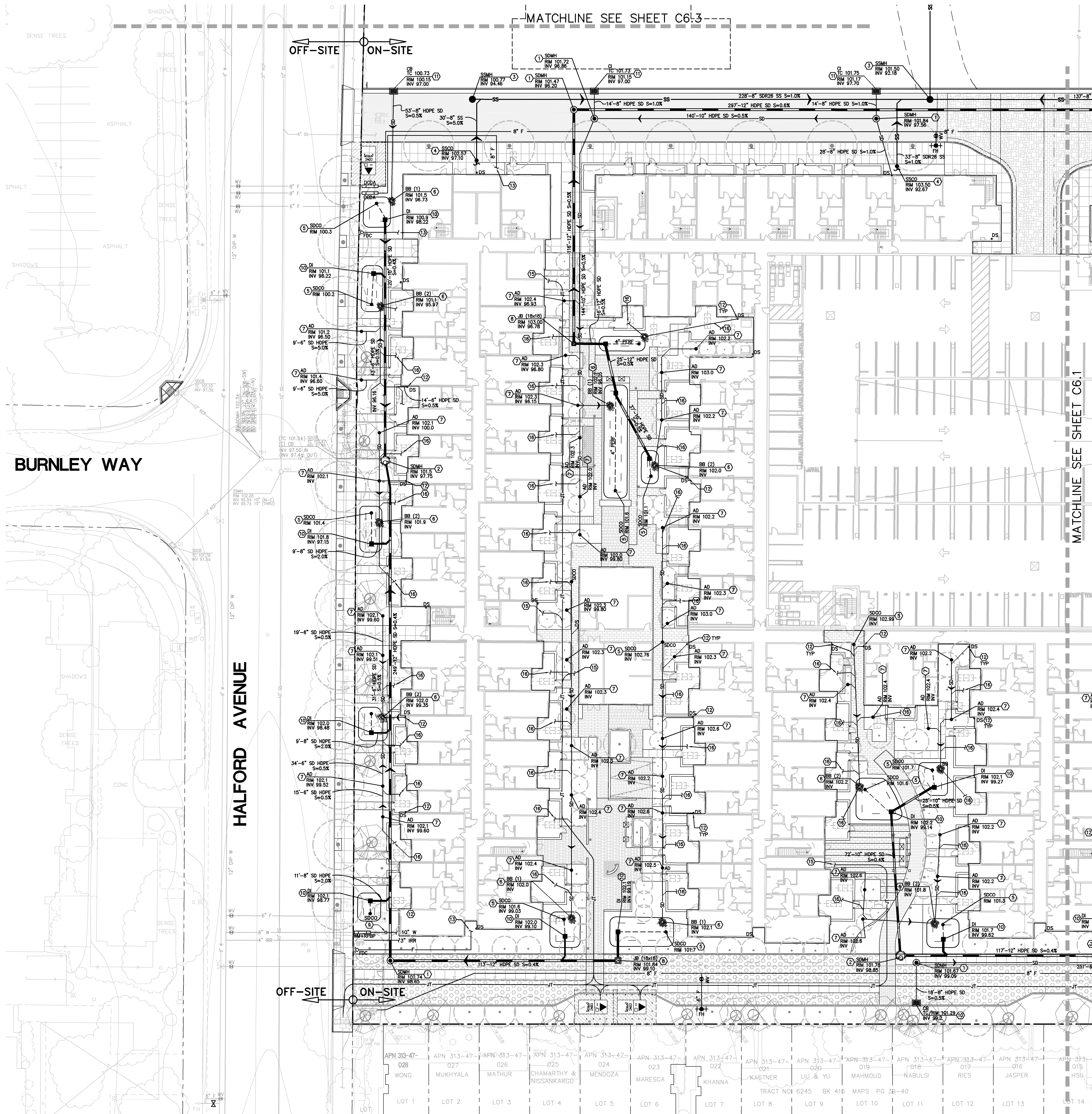


GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.





LEGEND

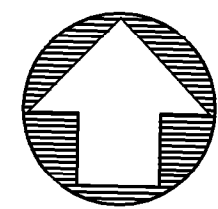
PROPERTY LINE	---
LOT LINE/ADA PROPERTY LINE	---
TOP OF BANK (BIORETENTION)	---
FLOW LINE (BIORETENTION)	---
STORM DRAIN LINE (UNTREATED)	SD
STORM DRAIN LINE (TREATED)	SS
SANITARY SEWER LINE	W
DOMESTIC WATER LINE	F/TS
FIRE WATER/SERVICE LINE	IRR
IRRIGATION LINE	---
STORM DRAIN MANHOLE	SDMH
STORM DRAIN CATCH BASIN	CB
STORM DRAIN DROP INLET	DI
STORM DRAIN JUNCTION BOX	JB
STORM DRAIN BUBBLER BOX	BB
STORM DRAIN AREA DRAIN	AD
STORM DRAIN CLEAN OUT	SDCO
SANITARY SEWER MANHOLE	SSMH
SANITARY SEWER CLEANOUT	SSCO
DOUBLE CHECK DETECTOR ASSEMBLY	DCDA
POST INDICATOR VALVE	PIV
FIRE DEPARTMENT CONNECTION	FDC
WATER VALVE	WV
WATER METER	WM
REDUCED PRESSURE BACKFLOW PRINCIPLE	RPBP
BACK FLOW PREVENTER	BFP
WHARF HYDRANT	WHARF
EXISTING FIRE HYDRANT	EH
PROPOSED FIRE HYDRANT	PH
SECTIONAL CONTROL VALVE	SCV
PAD MOUNT TRANSFORMER (SHOWN FOR REFERENCE ONLY)	PT

KEYNOTES

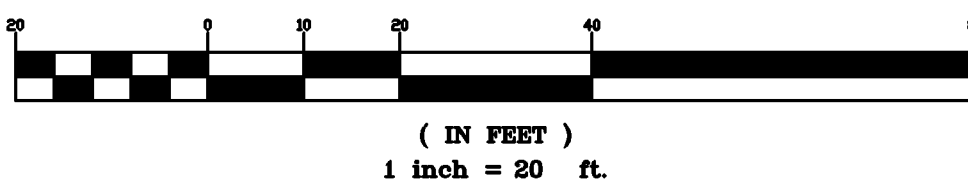
- STORM DRAIN MANHOLE (CONCENTRIC) PER CITY STD DS-1
- STORM DRAIN MANHOLE (ECCENTRIC) PER CITY STD DS-1
- SANITARY SEWER MANHOLE PER CITY STD DS-1
- SANITARY SEWER CLEANOUT PER DETAIL 2, SHEET C10.0
- STORM DRAIN CLEANOUT PER DETAIL 2, SHEET C10.0
- BUBBLER BOX PER DETAIL 3, SHEET C10.0
- LANDSCAPE AREA DRAIN PER DETAIL 1, SHEET C10.0
- STORM DRAIN JUNCTION BOX W/ NON-SLIP SKID RESISTANT LID PER DETAIL 3, SHEET C10.0
- 10" TO 8" PIPE REDUCER
- DROP INLET PER DETAIL 4, SHEET C10.0
- CURB INLET PER DETAIL 1, SHEET C10.1
- DOWNSPOUT, SEE ARCHITECTURAL DRAWINGS FOR DETAILS
- FOR CONTINUATION, SEE FIRE PROTECTION DRAWINGS
- FOR CONTINUATION, SEE PLUMBING DRAWINGS
- FOR CONTINUATION, SEE ELECTRICAL DRAWINGS
- CONNECT TO PATIO UNDER SLAB DRAIN W/ 4" SD. SEE DETAIL 1 FOR CONNECTION.

CONSTRUCTION NOTES

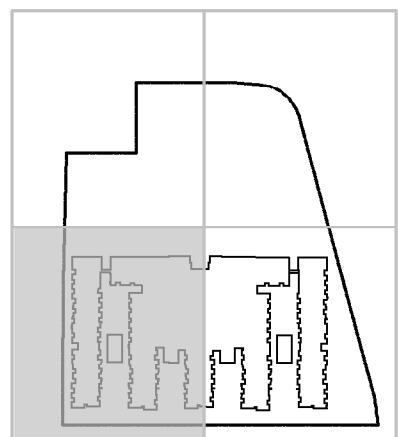
- JOINT TRENCH AND STREET LIGHT LINES & STRUCTURES ARE SHOWN FOR COORDINATION PURPOSES ONLY. SEE JOINT TRENCH PLANS FOR INFORMATION.
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- PIPE MATERIAL:
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 - PUBLIC SD: RCP CLASS 3
 - SS (PRIVATE): PVC SDR 25
 - WATER (PRIVATE): PVC C900 CLASS 200



GRAPHIC SCALE



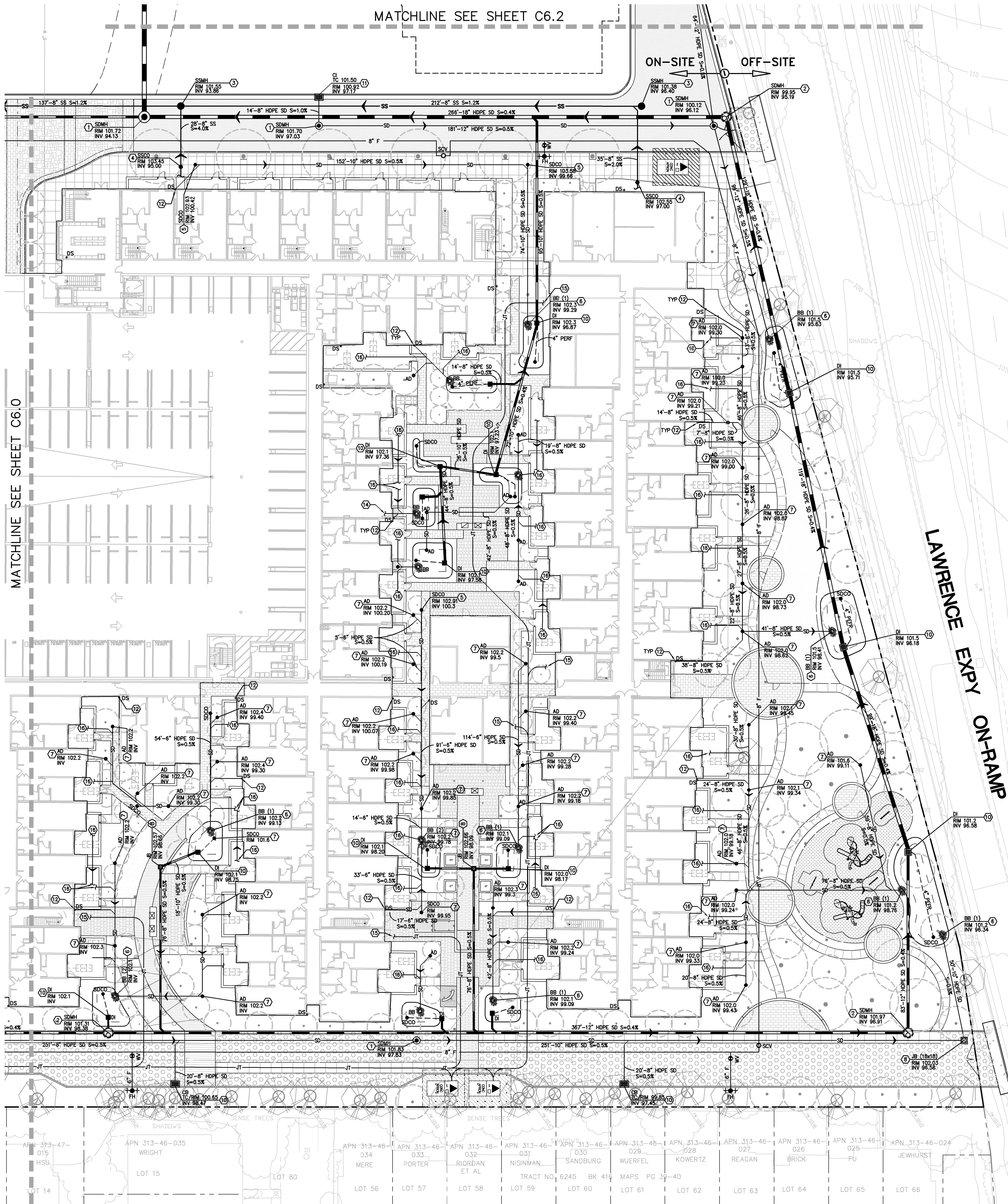
ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	2/22/15
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16



KEY MAP
NTS



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OF THE ENGINEER.



LEGEND

PROPERTY LINE	---
LOT LINE/ADJ. PROPERTY LINE	---
TOP OF BANK (BIORETENTION)	---
FLOW LINE (BIORETENTION)	---
STORM DRAIN LINE (UNTREATED)	SD
STORM DRAIN LINE (TREATED)	SS
SANITARY SEWER LINE	W
DOMESTIC WATER LINE	F/TS
FIRE WATER/SERVICE LINE	IR
IRRIGATION LINE	---
STORM DRAIN MANHOLE	SMH
STORM DRAIN CATCH BASIN	CB
STORM DRAIN DROP INLET	DI
STORM DRAIN JUNCTION BOX	JB
STORM DRAIN BUBBLER BOX	BB
STORM DRAIN AREA DRAIN	AD
STORM DRAIN CLEAN OUT	SDCO
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SANITARY SEWER CLEANOUT	SSCO
DOUBLE CHECK DETECTOR ASSEMBLY	DCDA
POST INDICATOR VALVE	PIV
FIRE DEPARTMENT CONNECTION	FDC
WATER VALVE	WV
WATER METER	WM
REDUCED PRESSURE BACKFLOW PRINCIPLE	RPBP
BACK FLOW PREVENTER	BFP
WHARF HYDRANT	WHARF
EXISTING FIRE HYDRANT	FH
PROPOSED FIRE HYDRANT	FH
SECTIONAL CONTROL VALVE	SCV
PAD MOUNT TRANSFORMER (SHOWN FOR REFERENCE ONLY)	PT

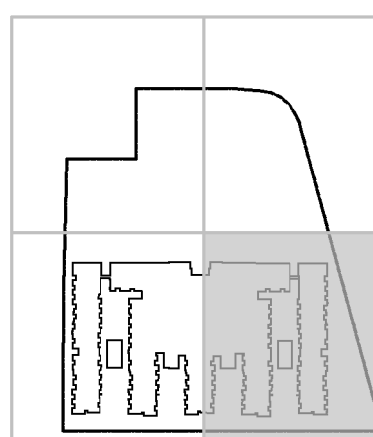
KEYNOTES

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- SANITARY SEWER MANHOLE PER CITY STD DS-1
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- STORM DRAIN CLEANOUT PER DETAIL 2, SHEET C10.0
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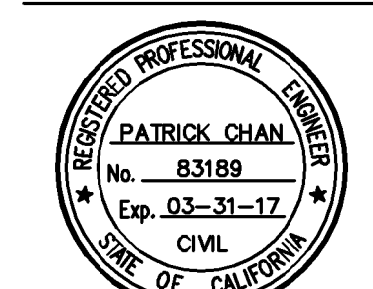
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CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16



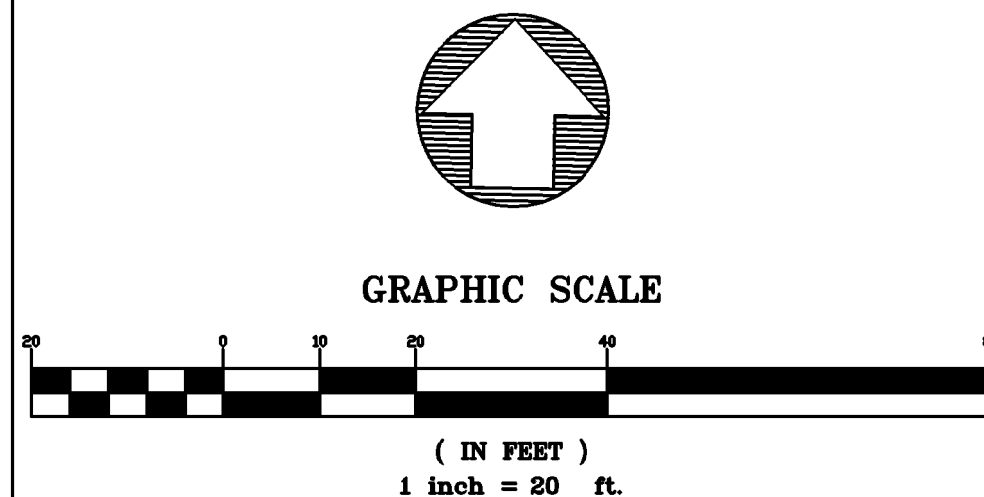
KEY MAP
NTS

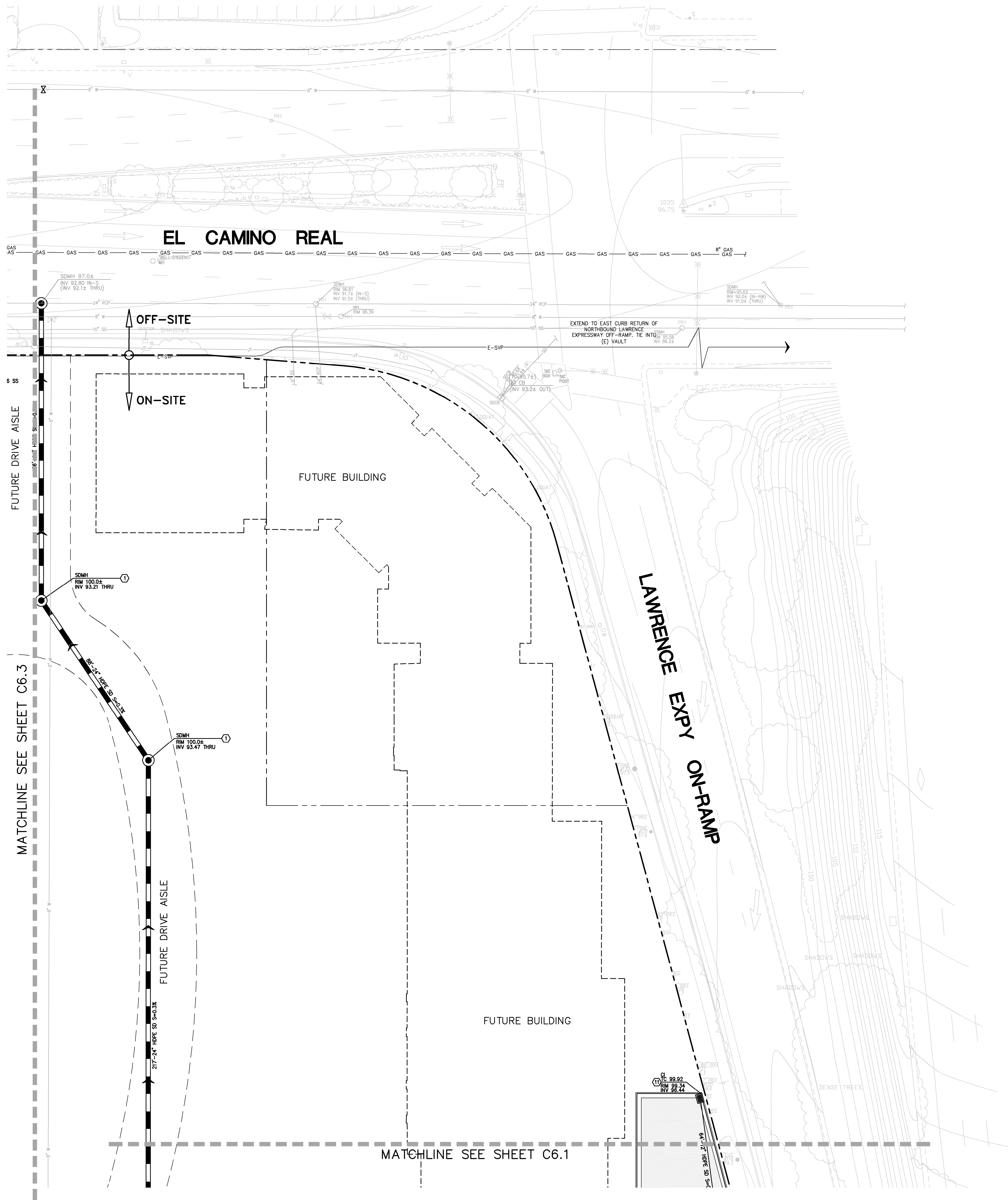


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OR BY ANY MEANS, WITHOUT THE WRITTEN CONSENT
OF THE ENGINEER.

**COMPOSITE
UTILITY
PLAN**

SHEET NO.
20128113
DATE
20128113
DESIGNED BY
CHECKED BY





LEGEND

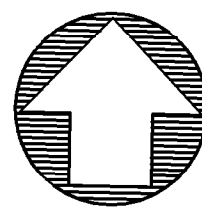
PROPERTY LINE	---
LOT LINE/ADA PROPERTY LINE	---
TOP OF BANK (BIORETENTION)	---
FLOW LINE (BIORETENTION)	---
STORM DRAIN LINE (UNTREATED)	SD
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SECTIONAL CONTROL VALVE	SCV
PAD MOUNT TRANSFORMER (SHOWN FOR REFERENCE ONLY)	PT

KEYNOTES

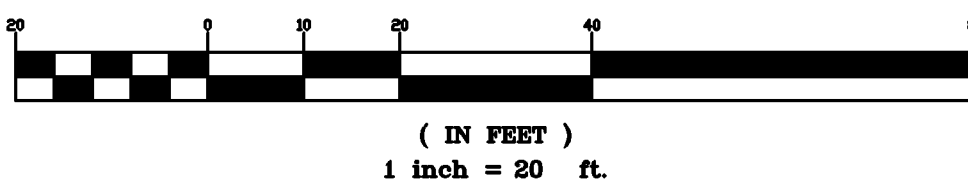
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- FOR CONTINUATION, SEE ELECTRICAL DRAWINGS
- CONNECT TO PATIO UNDER SLAB DRAIN W/ 4" SD. SAD FOR CONNECTION DETAILS

CONSTRUCTION NOTES

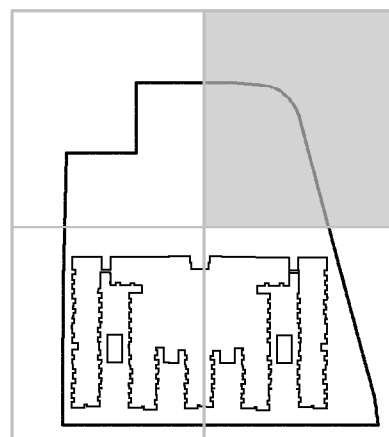
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- PIPE MATERIAL:
A) PRIVATE SD: HDPE ADS N-12 (SMOOTH INTERIOR), OR APPROVED EQUAL.
B) PUBLIC SD: RCP CLASS 3
C) SS (PRIVATE): PVC SDR 26
D) WATER (PRIVATE): PVC C900 CLASS 200



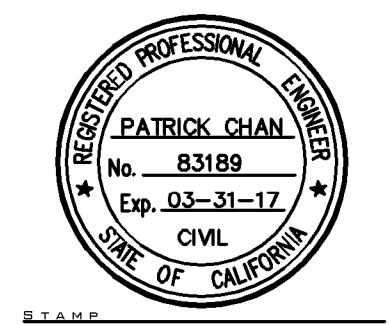
GRAPHIC SCALE



ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
CD SET 1	12/10/15
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KEY MAP
NTS



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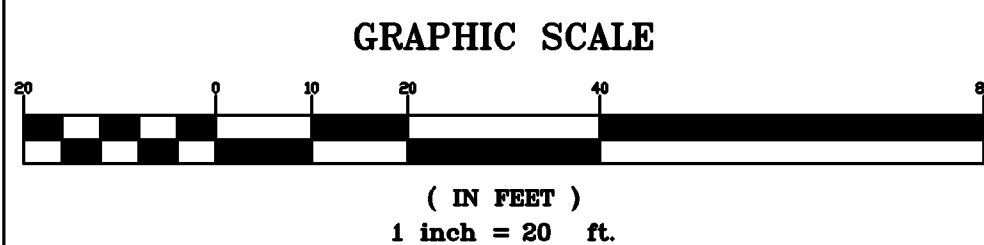
COMPOSITE
UTILITY
PLAN

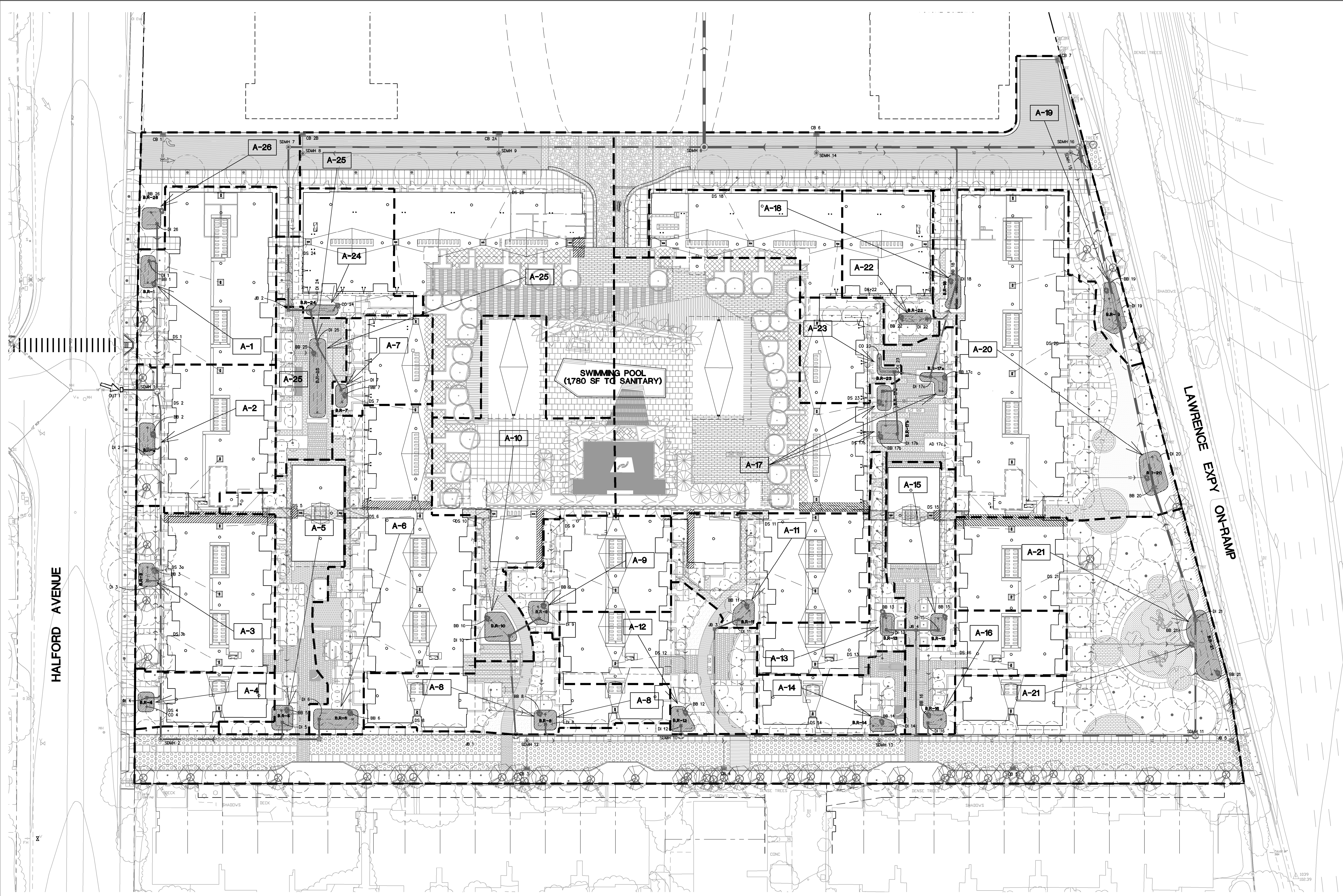
SHEET TITLE
DATE
20126113
DRAWN BY
CHECKED BY

LOT LINE/ADJ. PROPERTY LINE
 TOP OF BANK (BIORETENTION)
 LOW FLOW LINE (BIORETENTION)
 STORM DRAIN LINE (UNTREATED)
 STORM DRAIN LINE (TREATED)
 SANITARY SEWER LINE
 DOMESTIC WATER LINE
 FIRE WATER/SERVICE LINE
 IRRIGATION LINE
 STORM DRAIN MANHOLE
 STORM DRAIN CATCH BASIN
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 STORM DRAIN AREA DRAIN
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 SANITARY SEWER MANHOLE
 SANITARY SEWER CLEANOUT
 DOUBLE CHECK DETECTOR ASSEMBLY
 POST INDICATOR VALVE
 FIRE DEPARTMENT CONNECTION
 WATER VALVE
 WATER METER
 REDUCED PRESSURE BACKFLOW PRINCIPLE
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 EXISTING FIRE HYDRANT
 PROPOSED FIRE HYDRANT
 SECTIONAL CONTROL VALVE
 SDMH
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 JB
 BB
 AD
 SDCO
 SMH
 SSSO
 DCDA
 PIV
 FDC
 WV
 WM
 RBPB
 BFP
 WHARF
 FH
 SCV

- ① STORM DRAIN MANHOLE (CENTRICITY) PER CITY STD DS-1
- ② STORM DRAIN MANHOLE (ECCENTRICITY) PER CITY STD DS-1
- ③ SANITARY SEWER MANHOLE PER CITY STD DS-1
- ④ SANITARY SEWER CLEANOUT PER DETAIL 2, SHEET C10.0
- ⑤ STORM DRAIN CLEANOUT PER DETAIL 2, SHEET C10.0
- ⑥ BUBBLER BOX PER DETAIL 3, SHEET C10.0
- ⑦ LANDSCAPE AREA DRAIN PER DETAIL 1, SHEET C10.0
- ⑧ STORM DRAIN JUNCTION BOX W/ NON-SLIP SKID RESISTANT LID PER DETAIL X, SHEET CXX
- ⑨ 10" TO 8" PIPE REDUCER
- ⑩ DROP INLET PER DETAIL 4, SHEET C10.0
- ⑪ CURB INLET PER DETAIL 1, SHEET C10.1
- ⑫ DOWNSPOUT, SEE ARCHITECTURAL DRAWINGS FOR DETAILS
- ⑬ FOR CONTINUATION, SEE FIRE PROTECTION DRAWINGS
- ⑭ FOR CONTINUATION, SEE PLUMBING DRAWINGS
- ⑮ FOR CONTINUATION, SEE ELECTRICAL DRAWINGS
- ⑯ CONNECT TO EXISTING LAUNCH RAIL DRAIN W/ 1" CR

1. JOINT TRENCH AND STREET LIGHT LUGS & STRUCTURES ARE SHOWN FOR COORDINATION PURPOSES ONLY. SEE JOINT TRENCH PLAN FOR IRRIGATION.
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 - b. PRIVATE UTILITIES TRENCHES PER OMV STD ST-24, SHEET C10 AND PER GEOTECHNICAL REPORT.
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 - a. PRIVATE SD: HDPE ADS N-12 (SMOOTH INTERIOR), OR APPROVED ALTERN.
 - b. PUBLIC SD: RCP CLASS 3
 - c. SS (PRIVATE): PVC SDR 26
 - d. WATER (PRIVATE): PVC 6900 CLASS 200





LEGEND

PROPERTY LINE
LOT LINE/ADJ. PROPERTY LINE
TOP OF BANK (BIORETENTION)
FLOW LINE (BIORETENTION)
STORM DRAIN LINE (UNTREATED)
STORM DRAIN LINE (TREATED)

BIORETENTION TREATMENT AREA

GRASS PAVERS

DRAINAGE AREA BOUNDARY

ULTIMATE POINT OF STORM WATER DISCHARGE

BIORETENTION DESIGNATION

DIRECTION OF FLOW

SLOPE TO DRAIN

STORM DRAIN MANHOLE
STORM DRAIN CATCH BASIN
STORM DRAIN DROP INLET
STORM DRAIN JUNCTION BOX
STORM DRAIN BUBBLER BOX
STORM DRAIN AREA DRAIN
STORM DRAIN CLEAN OUT

SDMH
CB
DI
JB
BB
AD
SDCO

CONSTRUCTION NOTES

DOWNSPOTS ARE TO BE EITHER:
1. DISCONNECTED FROM STORM DRAIN PIPE AND HAVE STORMWATER RUNOFF SHEET FLOW TO BIORETENTION AREAS; OR
2. HARD PIPED TO BIORETENTION AREAS.

TREATMENT CONTROL MEASURE SUMMARY							
AREAS DRAINAGE	DRAINAGE AREA SIZE (SF)	PERVIOUS SURFACE (SF)	TYPE OF PERVIOUS SURFACE		TYPE OF IMPERVIOUS SURFACE		PROPOSED TREATMENT CONTROLS
			IMPERVIOUS SURFACE (SF)		REQUIRED (SF)	PROVIDED (SF)	
A-1	11,690	2,080	Landscape	9,610	Roof/Sidewalk/Patio	223	BR-1
A-2	9,800	2,035	Landscape	7,765	Roof/Sidewalk/Patio	231	BR-2
A-3	11,330	1,625	Landscape	9,705	Roof/Sidewalk/Patio	224	BR-3
A-4	3,745	695	Landscape	3,050	Roof/Sidewalk/Patio	90	BR-4
A-5	8,375	2,055	Landscape	6,320	Roof/Sidewalk/Patio	189	BR-5
A-6	18,415	2,840	Landscape	15,575	Roof/Sidewalk/Patio	459	BR-6
A-7	4,215	600	Landscape	3,615	Roof/Sidewalk/Patio	106	BR-7
A-8	9,005	2,400	Landscape	6,605	Roof/Sidewalk/Patio	198	BR-8
A-9	7,350	1,300	Landscape	6,050	Roof/Sidewalk/Patio	179	BR-9
A-10	16,405	950	Landscape	15,455	Roof/Sidewalk/Patio	413	BR-10
A-11	10,365	1,840	Landscape	8,525	Roof/Sidewalk/Patio	241	BR-11
A-12	9,615	3,000	Landscape	6,615	Roof/Sidewalk/Patio	200	BR-12
A-13	5,250	1,480	Landscape	3,770	Roof/Sidewalk/Patio	113	BR-13
A-14	4,930	1,300	Landscape	3,630	Roof/Sidewalk/Patio	109	BR-14
A-15	5,900	1,340	Landscape	4,560	Roof/Sidewalk/Patio	136	BR-15
A-16	5,930	1,000	Landscape	4,930	Roof/Sidewalk/Patio	146	BR-16
A-17	33,015	6,710	Landscape	26,305	Roof/Sidewalk/Patio	612	BR-17
A-18	9,135	750	Landscape	8,375	Roof/Sidewalk/Patio	224	BR-18
A-19	20,410	2,455	Landscape	17,955	Roof/Sidewalk/Patio	413	BR-19
A-20	27,565	7,030	Landscape	20,535	Roof/Sidewalk/Patio	482	BR-20
A-21	52,536	21,490	Landscape	31,046	Roof/Sidewalk/Patio	754	BR-21
A-22	6,135	930	Landscape	5,205	Roof/Sidewalk/Patio	153	BR-22
A-23	4,510	870	Landscape	3,640	Roof/Sidewalk/Patio	108	BR-23
A-24	7,235	1,240	Landscape	5,995	Roof/Sidewalk/Patio	156	BR-24
A-25	32,888	5,136	Landscape	27,752	Roof/Sidewalk/Patio	642	BR-25
A-26	5,830	900	Landscape	4,930	Roof/Sidewalk/Patio	145	BR-26
POOL	1,780	-	-	-	TO SANITARY SEWER	-	-
	343,359	74,061		267,518		6,948	7,581

GRAPHIC SCALE

1 inch = 30 ft.

BDE ARCHITECTURE

950 HOWARD STREET
SAN FRANCISCO
CA 94103
P. (415) 677-0966

SANTA CLARA SQUARE, LLC

925 East Meadow Drive
Palo Alto, CA 94303
Tel 650.494.3700

BKF

ENGINEERS / SURVEYORS / PLANNERS
1650 TECHNOLOGY DRIVE, SUITE 650
SAN JOSE, CA 95110
408.947.9100

GWV

GATEWAY VILLAGE
3700 EL CAMINO REAL
SANTA CLARA, CA 95051

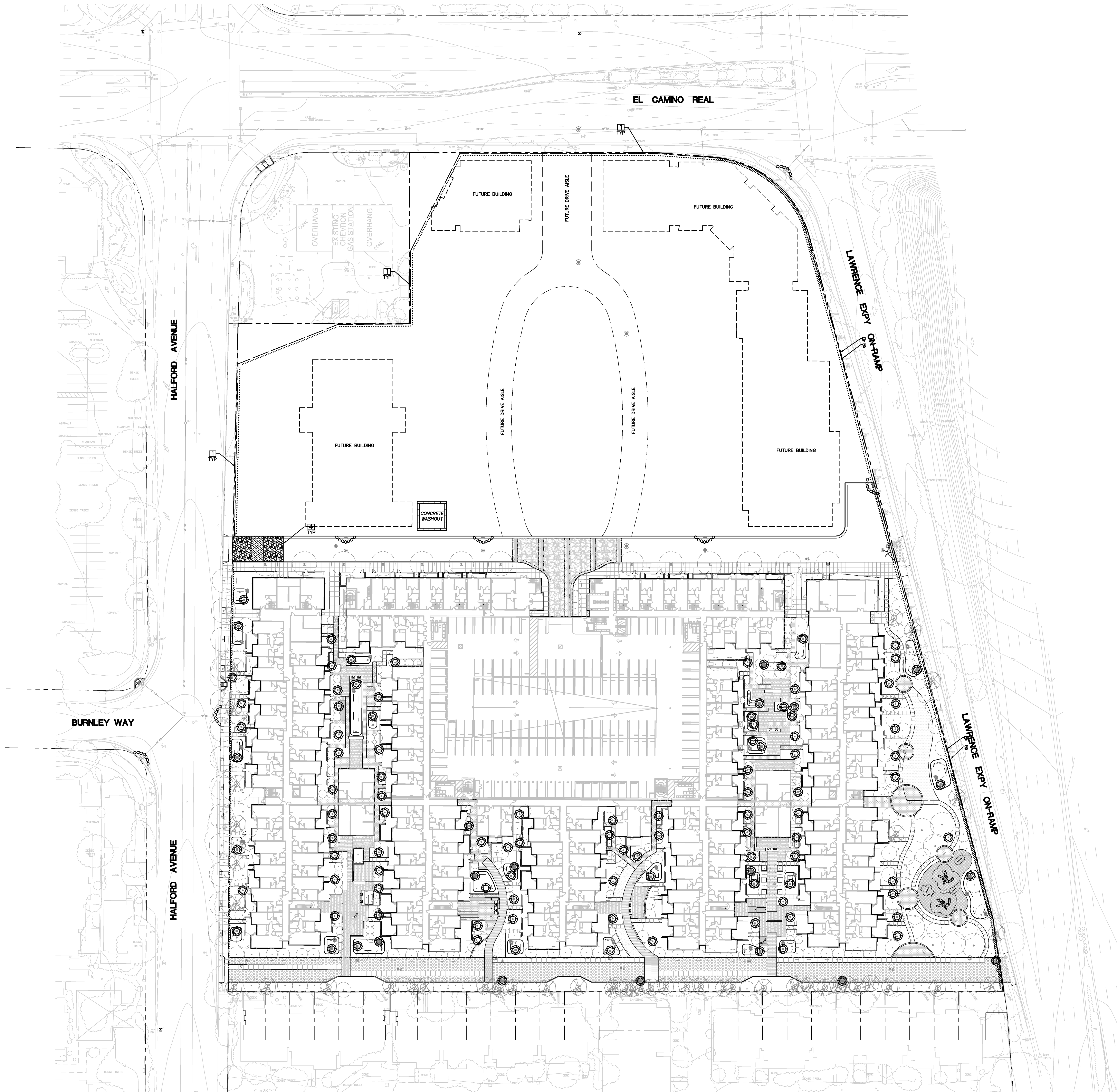
FOR REFERENCE ONLY

ISSUE DATE

SCHEMATIC DESIGN 10/23/15
DD SET 1 11/08/15
100% DD 11/26/15
CD SET 1 12/10/15
CONCRETE SUBMITTAL 12/22/15
CD SET 2 12/22/15
CD SET 3 1/26/16
CONCRETE RESUBMITTAL 2/18/16
SUPERSTRUCTURE SUBMITTAL

STORMWATER CONTROL PLAN

C7.0



LEGEND

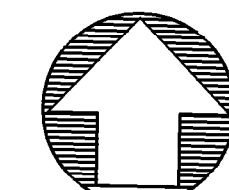
---	PROPERTY LINE
---	ADJACENT LOT LINE
.....	FIBER ROLL PER DETAIL 1, SHEET C8.1
---	TEMPORARY 6' CONSTRUCTION FENCE
⊗	INLET PROTECTION (TYPE A) PER DETAIL 2, SHEET C8.1
⊗	INLET PROTECTION (TYPE B) PER DETAIL 3, SHEET C8.1
▨	STABILIZED CONSTRUCTION ENTRANCE/EXIT PER DETAIL 4, SHEET C8.1
▨	OUTLET TIRE WASH PER DETAIL 5, SHEET C8.1
▨	CONCRETE WASTE MANAGEMENT PER DETAIL 6, SHEET C8.1

KEYNOTES

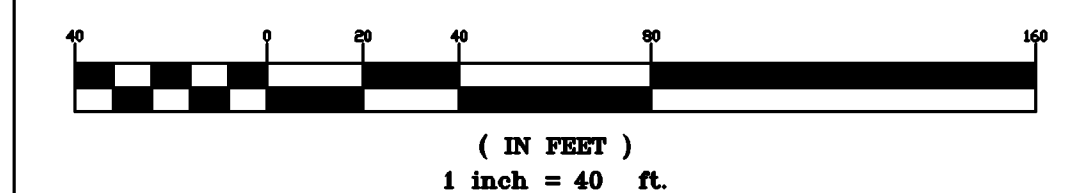
- NO PART OF THE TEMPORARY PERIMETER CONSTRUCTION FENCE SHALL ENCRDACH INTO PUBLIC RIGHT-OF-WAY OR ADJACENT PRIVATE PROPERTY, UNLESS AS SHOWN.
- EXISTING WOOD/CHAIN LINK FENCE AND WALLS TO REMAIN DURING CONSTRUCTION.
- SEE LANDSCAPE DRAWINGS FOR TREE PROTECTION PLANS.
- EXACT PLACEMENT OF CONSTRUCTION ENTRANCE, VEHICLE AND EQUIPMENT CLEARING, FUELING AND MAINTENANCE AREA, STOCKPILE AREA, SANITARY FACILITIES, VEHICLE WASHOUT, AND CONCRETE WASHOUT FACILITY IS THE RESPONSIBILITY OF THE CONTRACTOR.

GENERAL NOTES

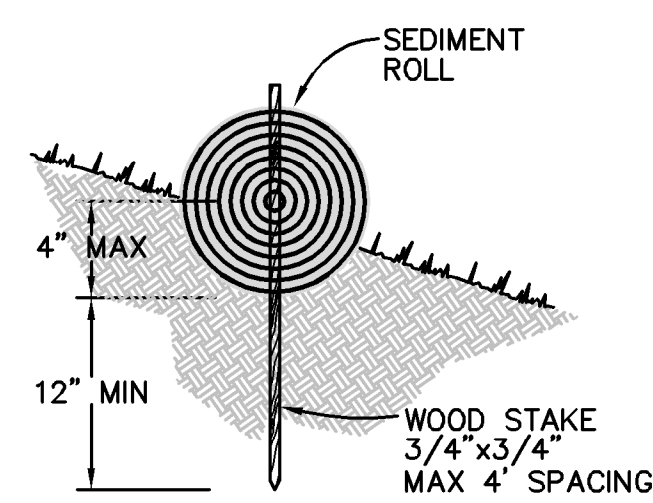
- SHEET C8.0 IS INTENDED TO BE USED FOR EROSION CONTROL ONLY.
- THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING ANY SEDIMENT FROM LEAVING THE SITE. FIBER ROLLS, SAND BAGS, AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. ALL EXISTING, TEMPORARY, OR PERMANENT CATCH BASINS SHALL USE ONE OF THE SEDIMENT BARRIERS SHOWN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED WITH ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURE MAINTENANCE THROUGHOUT THE DURATION OF THE PROJECT.
- THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO PUBLIC AND/OR PRIVATE OWNED AND MAINTAINED ROAD CAUSED BY THE CONTRACTOR'S GRADING ACTIVITIES, AND WILL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE. ADJACENT PUBLIC ROADS SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE OPERABLE YEAR ROUND OR UNTIL VEGETATION IS ESTABLISHED ON LANDSCAPED SURFACES.
- DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
- ALL EROSION CONTROL MEASURES MUST BE MONITORED AS REQUIRED BY THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (CRWQCB). ALL SLOPES SHALL BE REPAIRED AS SOON AS POSSIBLE WHEN DAMAGED.
- BORROW AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES (TARPS, FIBER ROLLS, SILT FENCES, ETC.) TO ENSURE SILT DOES NOT LEAVE THE SITE OR ENTER THE STORM DRAIN SYSTEM.
- ALL TRUCK TIRES SHALL BE CLEANED PRIOR TO EXITING THE PROPERTY.
- THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION ACTIVITIES AS REQUIRED BY THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (CRWQCB).
- DURING PERIODS WHEN STORMS ARE FORECAST:
 - EXCAVATED SOILS SHOULD NOT BE PLACED IN STREETS OR ON PAVED AREAS.
 - ANY EXCAVATED SOILS SHOULD BE REMOVED FROM THE SITE BY THE END OF THE DAY.
 - WHERE STOCKPILING IS NECESSARY, USE A TARPULIN OR SURROUND THE STOCKPILED MATERIAL WITH FIBER ROLLS, SILT FENCE, OR OTHER RUNOFF CONTROLS.
 - USE INLET CONTROLS (E.G. FILTER MAT) FOR STORM DRAINS ADJACENT TO STOCKPILED SOIL.
 - THOROUGHLY SWEEP ALL PAVED AREAS EXPOSED TO SOIL EXCAVATION AND PLACEMENT.
- DURING PERIODS WHEN STORMS ARE NOT FORECAST:
 - PREVENT STOCKPILED MATERIAL FROM ENTERING THE STORM DRAIN SYSTEM.
 - THOROUGHLY REMOVE LOOSE SOIL VIA SWEEPING FOLLOWING REMOVAL OF DIRT.
- THIS EROSION CONTROL PLAN IS FOR CONSTRUCTION BETWEEN OCTOBER 1 AND APRIL 15. OPEN SPACE AREAS ARE TO BE PLANTED BY SEPTEMBER 15. IF THESE CONDITIONS ARE NOT MET, CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN TO THE PROJECT ENGINEER THAT REFLECTS CURRENT SITE CONDITIONS FOR REVIEW AND APPROVAL.
- EROSION CONTROL MEASURES SHOWN ON THIS PLAN SHALL BE MAINTAINED REPAIRED AND REPLACED AFTER EACH SIGNIFICANT RAINFALL OR AS DIRECTED BY THE OWNER AND/OR THE CALIFORNIA REGIONAL WATER CONTROL BOARD (CRWQCB).
- ALL DRAINAGE INLETS WITHIN AND NEAR THE PROJECT SITE SHALL BE PROVIDED WITH SEDIMENT TRAPS OR SEDIMENT BARRIERS AS PER THIS PLAN.
- SEDIMENT DAMS AND TRAPS SHALL BE CHECKED FOR SEDIMENT ACCUMULATION AFTER EACH SIGNIFICANT RAINFALL. SEDIMENT SHALL BE REMOVED FROM THESE DEVICES WHEN IT HAS ACCUMULATED TO THREE-QUARTER OF THE ORIGINAL STORAGE HEIGHT.
- ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY THE OWNER AND/OR THE CALIFORNIA REGIONAL WATER CONTROL BOARD (CRWQCB) BASED ON FIELD REVIEWS OF THE SITE.
- DAMAGED EROSION CONTROL DEVICES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AS SOON AS PRACTICAL AFTER THE DAMAGE OCCURS.
- ALL EXPOSED DISTURBED SURFACES SHALL BE HYDROSEEDING WITH BROME SEED SPREAD AT THE RATE OF 5 POUNDS PER 1000 SQUARE FEET, OR APPROVED EQUAL. SEEDING AND WATERING SHALL BE MAINTAINED AS REQUIRED TO ENSURE GROWTH. HYDROSEEDING AREAS SHALL THEN BE COVERED WITH STRAW MULCH AND STABILIZED BY CRIMPING OR THE APPLICATION OF A LIQUID TACKIFIER.
- DURING GRADING OPERATIONS THE SITE SHALL BE WATERED ON A DAILY BASIS TO MINIMIZE THE RELEASE OF DUST AND OTHER PARTICULATE MATTER.
- EARTHWORK SHALL NOT BE PERFORMED DURING UNFAVORABLE CONDITIONS. AFTER INTERRUPTION OF WORK DUE TO HEAVY RAIN, THE ENGINEER SHALL APPROVE EARTHWORK BEFORE RESUMPTION OF EARTHWORKING OPERATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE TO PUT IN PLACE THE NECESSARY MEANS AND EXECUTE PROPER METHODS TO PROTECT EARTHWORK AGAINST UNFAVORABLE WEATHER CONDITIONS. CONTRACTOR SHALL NOT BE PAID FOR ANY DELAY OR ADDITIONAL WORK TO REMEDY PREVIOUS EARTHWORK RESULTING FROM THE CONTRACTOR'S NEGLIGENCE TO PROTECT THE SITE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLETE AND SUBMIT THE ANNUAL COMPLIANCE STATUS REPORT OF THE CONSTRUCTION STORM WATER GENERAL PERMIT ON THE SEPTEMBER 1ST OF EACH YEAR THE PROJECT IS IN CONSTRUCTION.
- THIS PROJECT SHALL COMPLY WITH APPLICABLE PROVISIONS IN THE STATE OF CALIFORNIA GENERAL PERMIT FOR STORMWATER DISCHARGES, ORDER NO. 2009-0009-DWG.



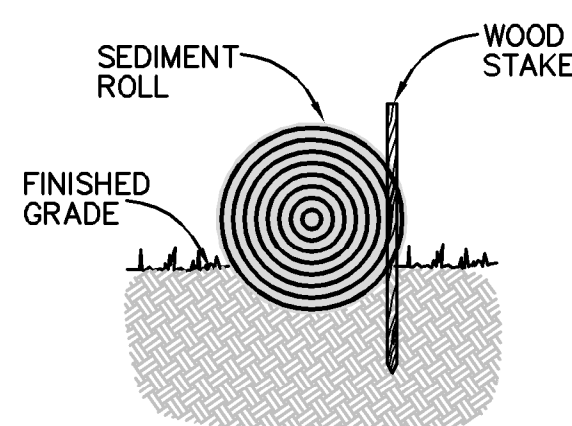
GRAPHIC SCALE



ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	2/22/16
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16



ENTRENCHMENT DETAIL IN SLOPE AREA



ENTRENCHMENT DETAIL IN FLAT AREA

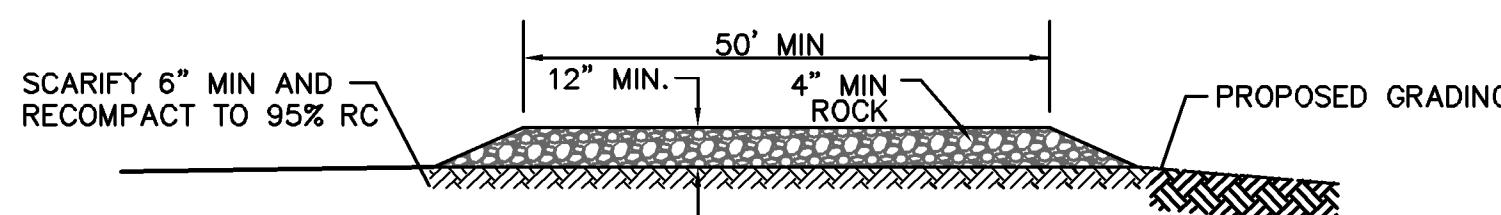
NOTES:

1. USE REED & GRAHAM, INC. GEOSYNTHETICS STRAW WALL FIBER ROLL (COMES IN 9' x 25' ROLLS) OR APPROVED EQUIVALENT.
2. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE FIBER ROLL IN A TRENCH, 3" - 5" DEEP, DUG ON CONTOUR.
3. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET.
4. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIKE ON THE DOWNSLOPE OF THE STRUCTURE MAY BE NECESSARY TO PREVENT FIBER ROLL FROM BEING WASHED AWAY. FIBER ROLLS IN PLACE OF WOOD STAKE.



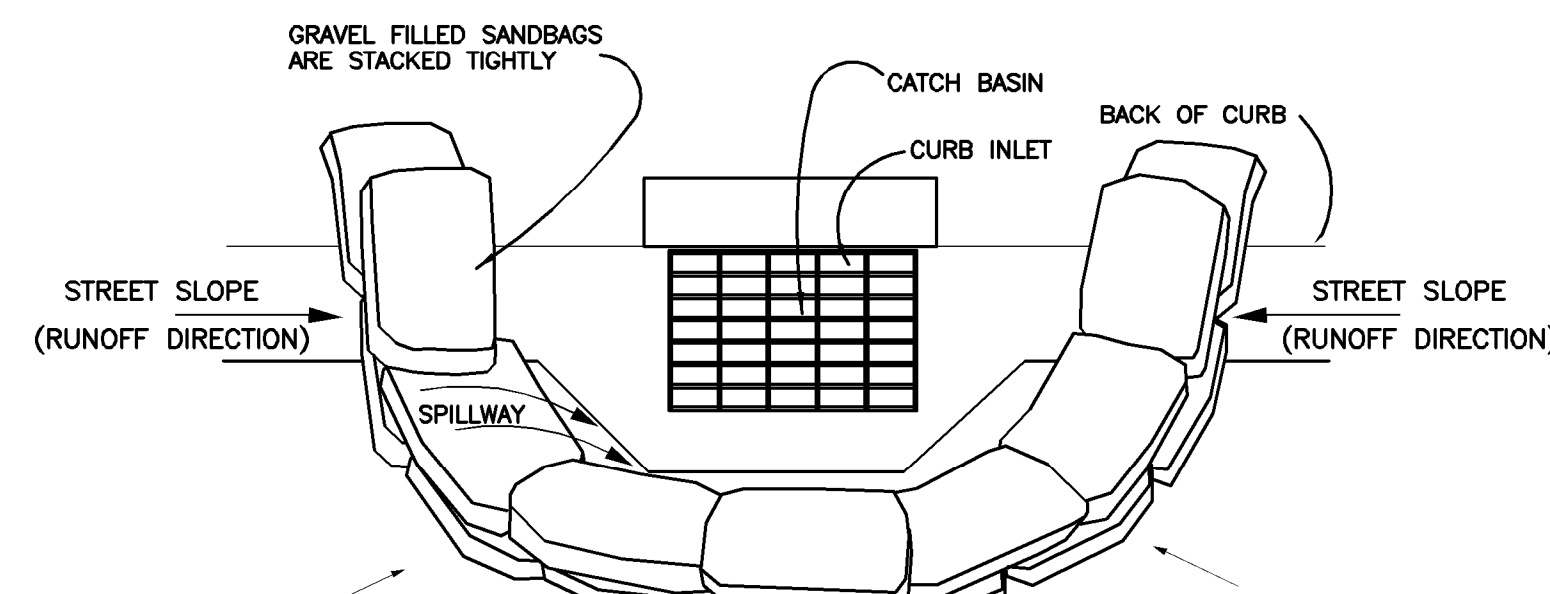
FIBER ROLL

SCALE: NTS

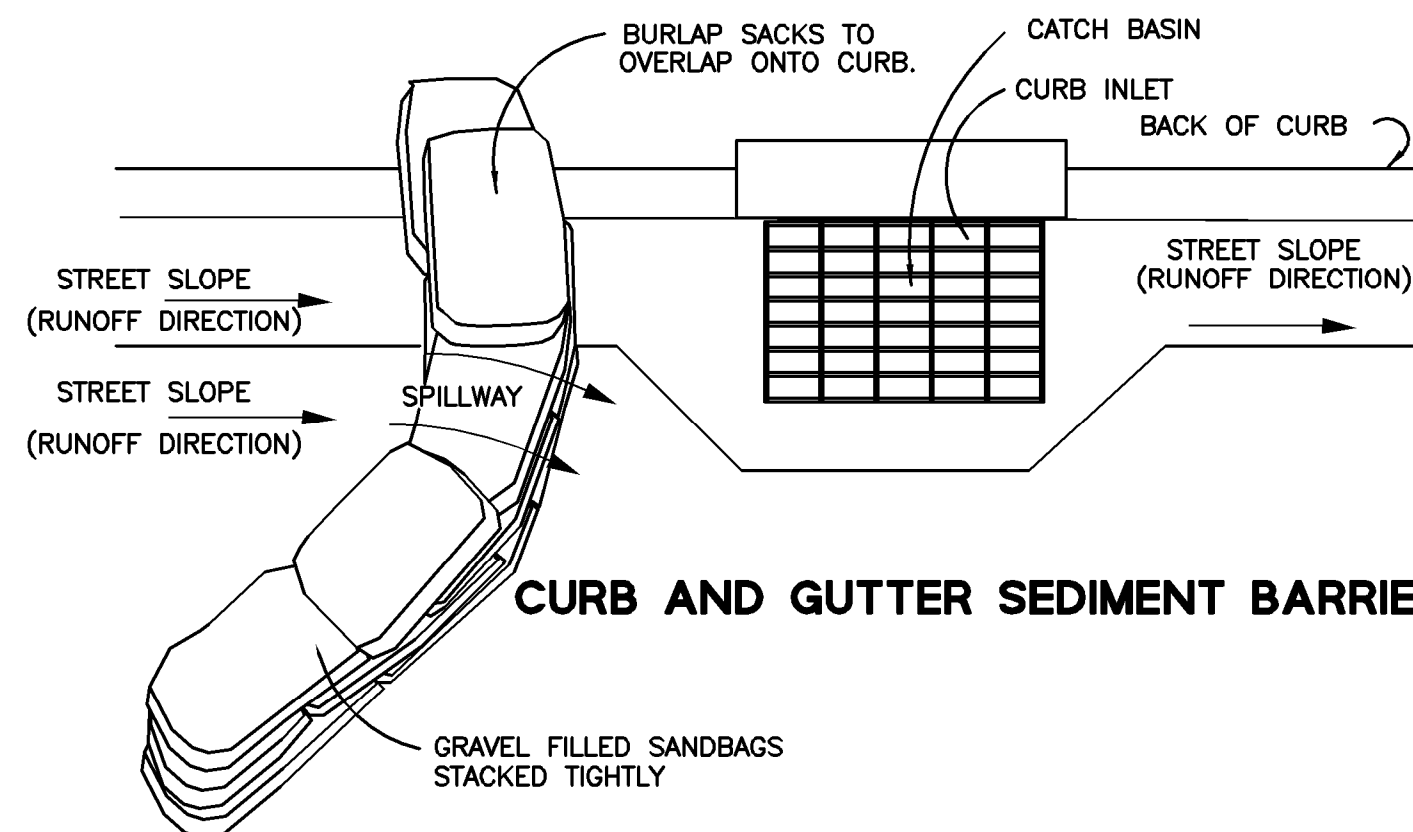


4 STABILIZED CONSTRUCTION ENTRANCE/EXIT

SCALE: NTS



CURB INLET SEDIMENT BARRIER



CURB AND GUTTER SEDIMENT BARRIER

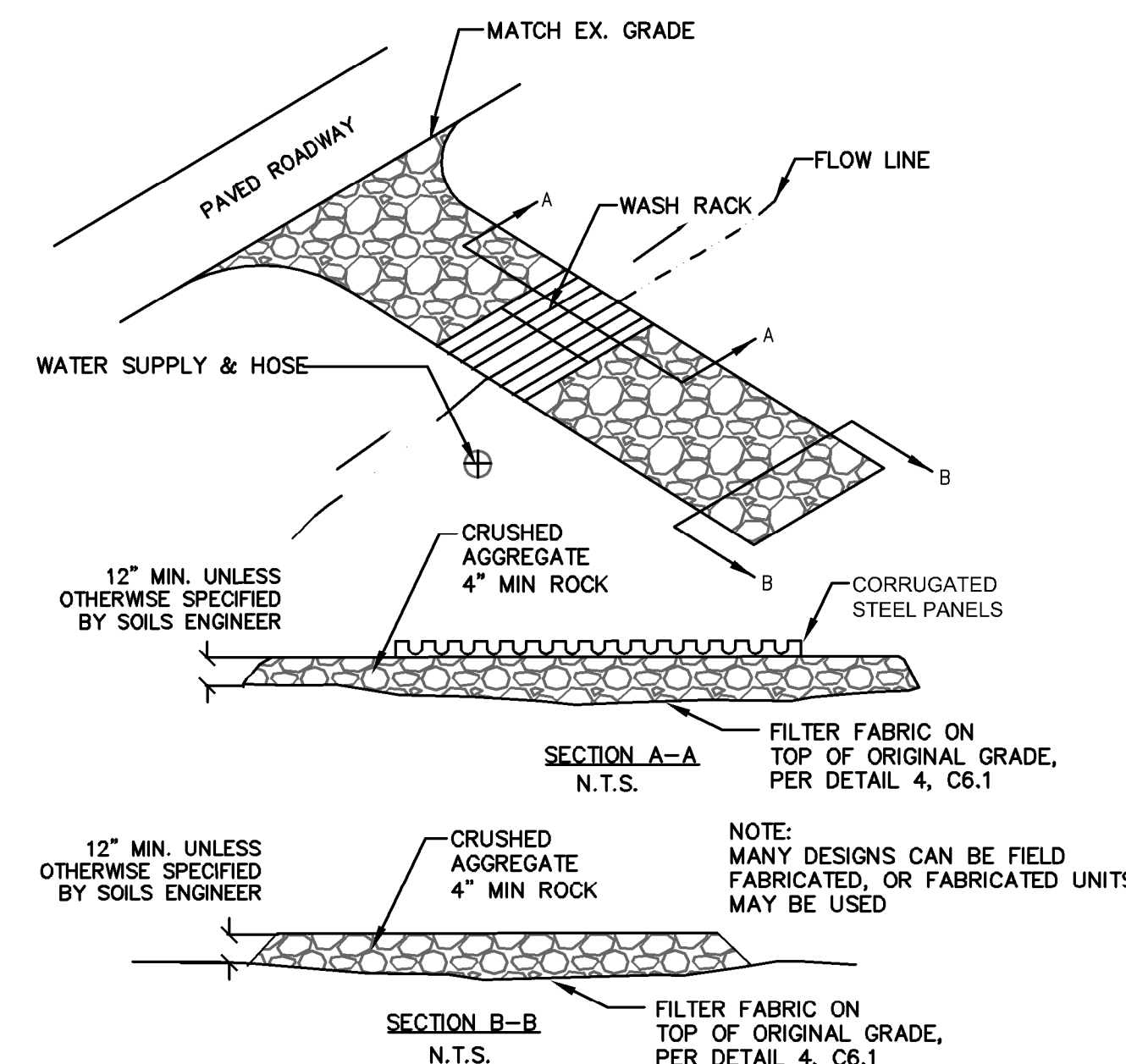
NOTES:

1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREETS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. SANDBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
3. LEAVE ONE SANDBAG CAP IN THE TOP ROW TO PROVIDE A SPILLWAY OVERFLOW. TOP OF SPILLWAY SHALL BE LOWER THAN TOP OF CURB.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.



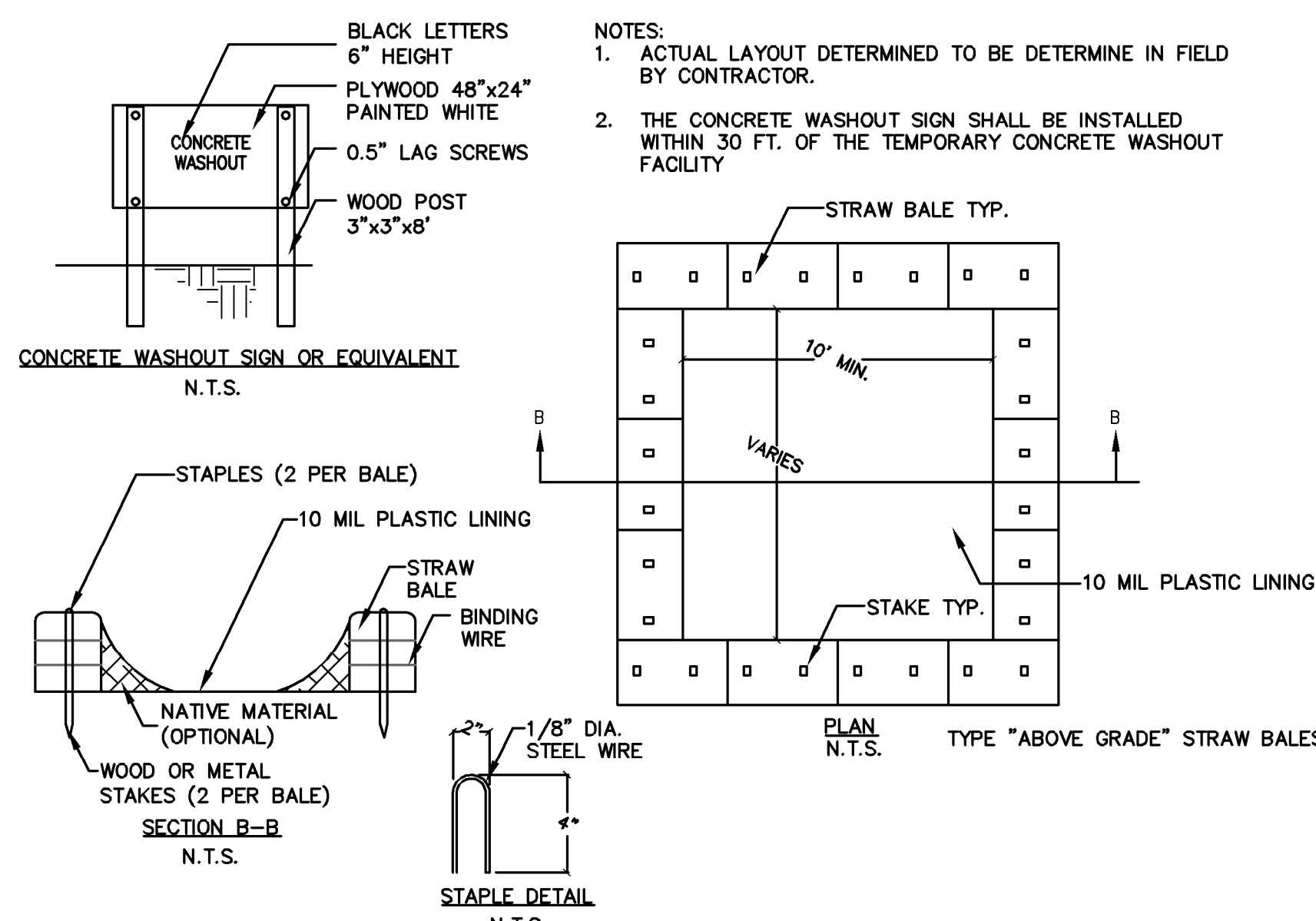
INLET PROTECTION (TYPE A)

SCALE: NTS



OUTLET TIRE WASH

SCALE: NTS



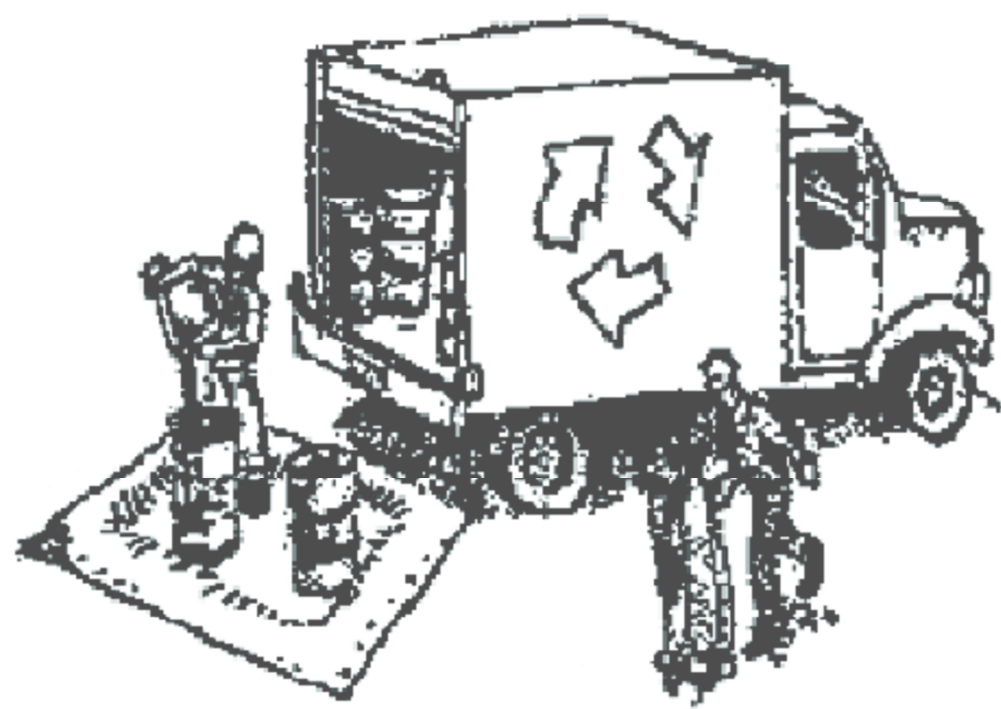
CONCRETE WASTE MANAGEMENT

SCALE: NTS

Construction Best Management Practices (BMPs)

Construction projects are required to implement year-round stormwater BMPs.

Materials & Waste Management



Non-Hazardous Materials

- ❑ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or when they are not in use.
- ❑ Use (but don't overuse) reclaimed water for dust control.
- ❑ Ensure dust control water doesn't leave site or discharge to storm drains.

Hazardous Materials

- ❑ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with City, County, State and Federal regulations.
- ❑ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ❑ Follow manufacturer's application instructions for hazardous materials and do not use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ❑ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ❑ Cover and maintain dumpsters. Check frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. A plastic liner is recommended to prevent leaks. Never clean out a dumpster by hosing it down on the construction site.
- ❑ Place portable toilets away from storm drains. Make sure they are in good working order. Check frequently for leaks.
- ❑ Dispose of all wastes and demolition debris properly. Recycle materials and wastes that can be recycled, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation.
- ❑ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.
- ❑ Keep site free of litter (e.g. lunch items, cigarette butts).
- ❑ Prevent litter from uncovered loads by covering loads that are being transported to and from site.

Construction Entrances and Perimeter

- ❑ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ❑ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control



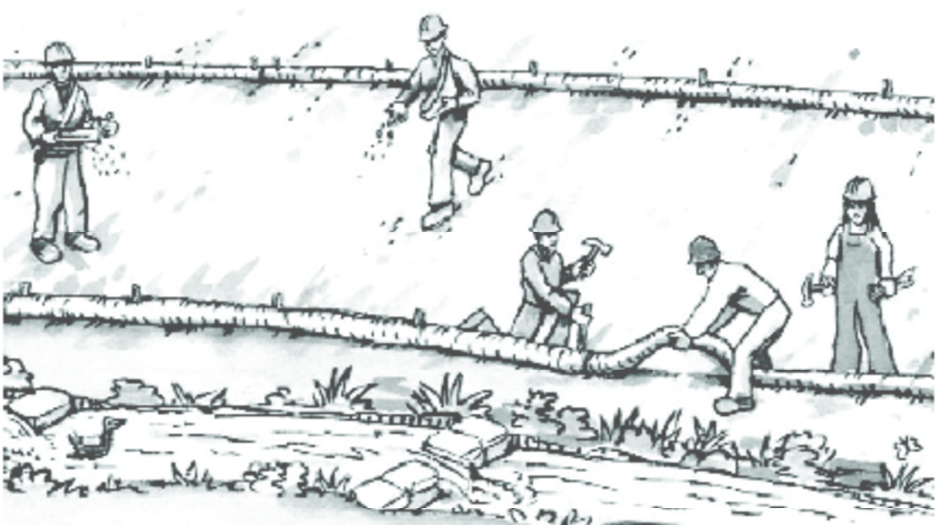
Maintenance and Parking

- ❑ Designate an area of the construction site, well away from streams or storm drain inlets and fitted with appropriate BMPs, for auto and equipment parking, and storage.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ❑ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ❑ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ❑ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment, and do not use diesel oil to lubricate equipment or parts onsite.

Spill Prevention and Control

- ❑ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ❑ Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks. Use drip pans to catch leaks until repairs are made.
- ❑ Clean up leaks, drips and other spills immediately and dispose of cleanup materials properly.
- ❑ Use dry cleanup methods whenever possible (absorbent materials, cat litter and/or rags).
- ❑ Sweep up spilled dry materials immediately. Never attempt to "wash them away" with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills to the appropriate local spill response agencies immediately. If the spill poses a significant hazard to human health and safety, property or the environment, you must report it to the State Office of Emergency Services. (800) 852-7550 (24 hours).

Earthmoving



Grading and Earthwork

- ❑ Schedule grading and excavation work during dry weather.
- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Remove existing vegetation only when absolutely necessary, plant temporary vegetation for erosion control on slopes or where construction is not immediately planned.
- ❑ Prevent sediment from migrating offsite and protect storm drain inlets, drainage courses and streams by installing and maintaining appropriate BMPs (i.e. silt fences, gravel bags, fiber rolls, temporary swales, etc.).
- ❑ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

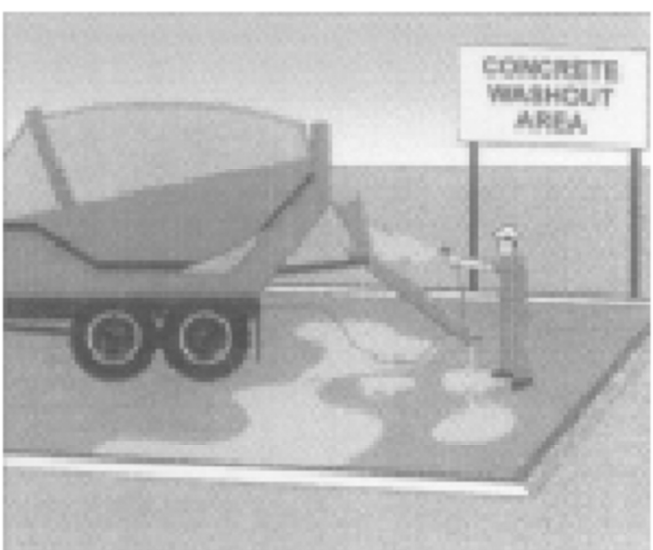
Contaminated Soils

- ❑ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
 - Unusual soil conditions, discoloration, or odor.
 - Abandoned underground tanks.
 - Abandoned wells
 - Buried barrels, debris, or trash.
- ❑ If the above conditions are observed, document any signs of potential contamination and clearly mark them so they are not disturbed by construction activities.

Landscaping

- ❑ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ❑ Stack bagged material on pallets and under cover.
- ❑ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

Concrete Management and Dewatering



Concrete Management

- ❑ Store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Store materials off the ground, on pallets. Protect dry materials from wind.
- ❑ Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) block any storm drain inlets and vacuum washwater from the gutter. If possible, sweep first.
- ❑ Wash out concrete equipment/trucks offsite or in a designated washout area onsite, where the water will flow into a temporary waste pit, and make sure wash water does not leach into the underlying soil. (See CASQA Construction BMP Handbook for properly designed concrete washouts.)

Dewatering

- ❑ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible, send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer, call your local wastewater treatment plant.
- ❑ Divert run-on water from offsite away from all disturbed areas.
- ❑ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ❑ In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

Paving/Asphalt Work



Paving

- ❑ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ❑ Cover storm drain inlets and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
- ❑ Collect and recycle or properly dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.

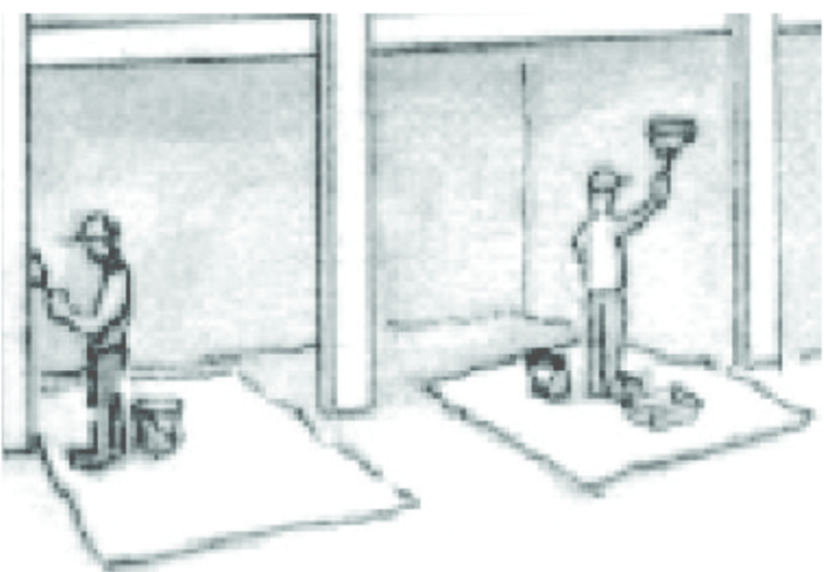
Sawcutting & Asphalt/Concrete Removal

- ❑ Protect storm drain inlets during saw cutting.
- ❑ If saw cut slurry enters a catch basin, clean it up immediately.
- ❑ Shovel or vacuum saw cut slurry deposits and remove from the site. When making saw cuts, use as little water as possible. Sweep up, and properly dispose of all residues.



**Santa Clara Valley
Urban Runoff
Pollution Prevention Program**

Painting & Paint Removal



Painting Cleanup and Removal

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ❑ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ❑ Sweep up or collect paint chips and dust from non-hazardous dry stripping and sand blasting into plastic drop cloths and dispose of as trash.
- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Storm drain polluters may be liable for fines of up to \$10,000 per day!

ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	2/22/16
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16



SECTION A



SECTION B

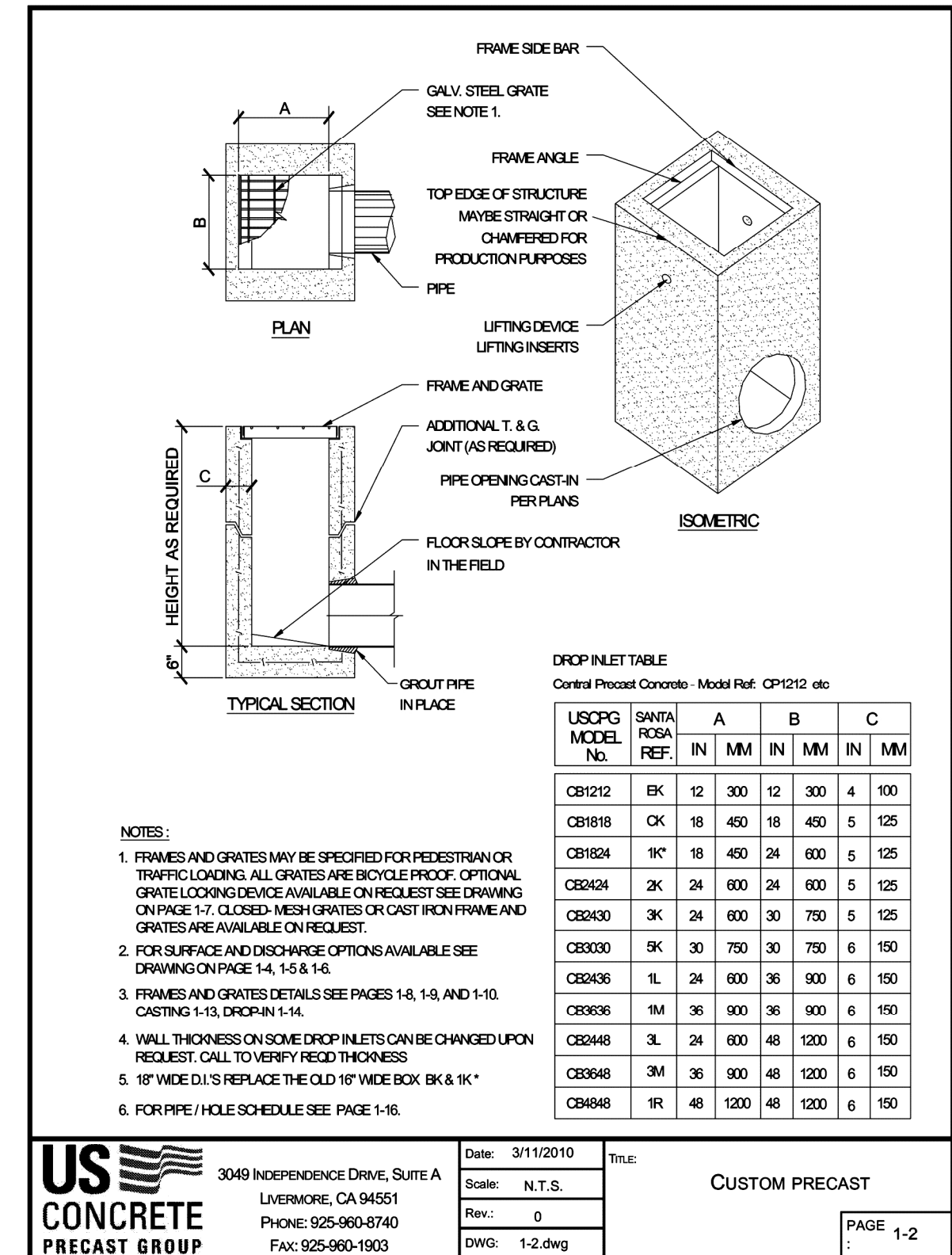
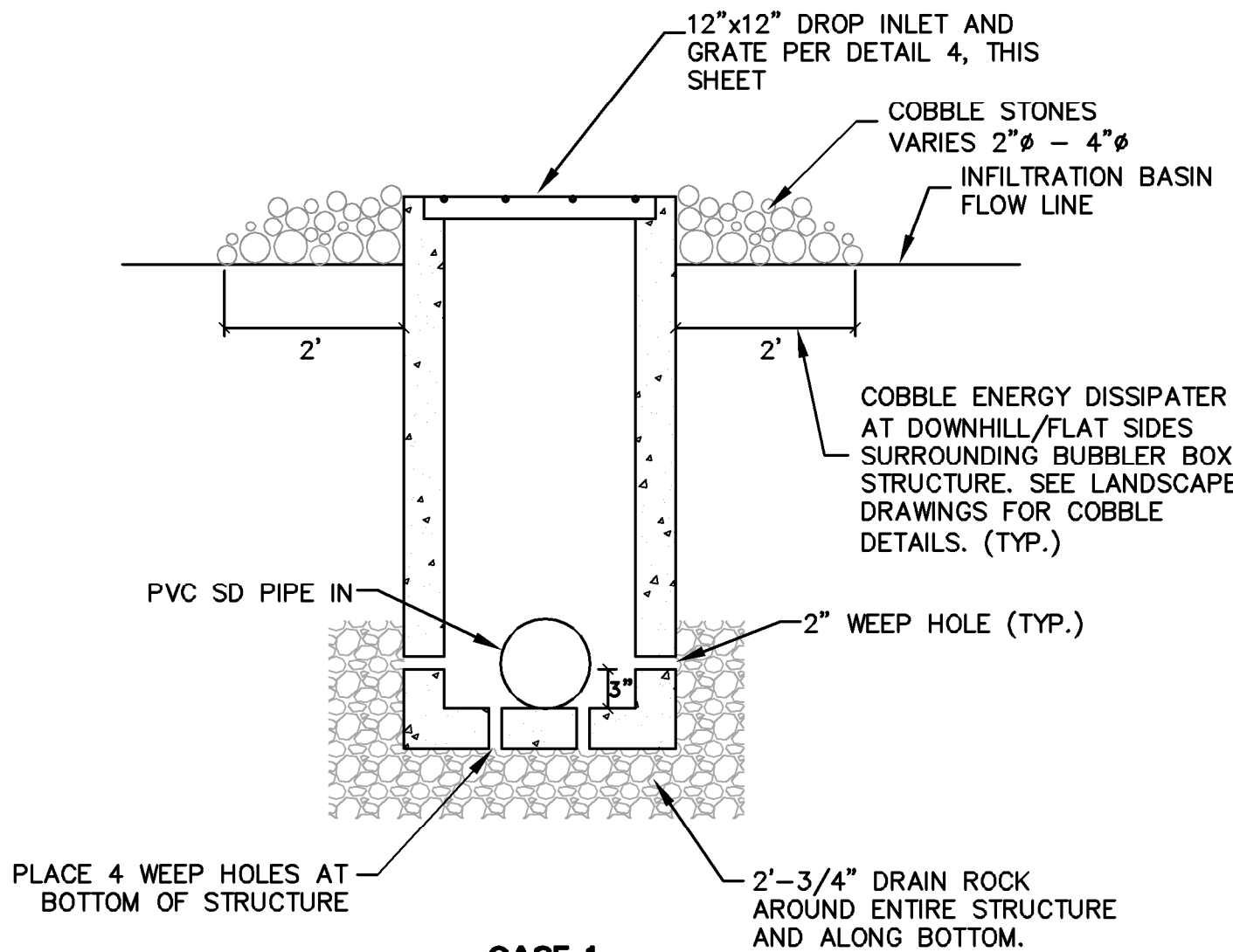
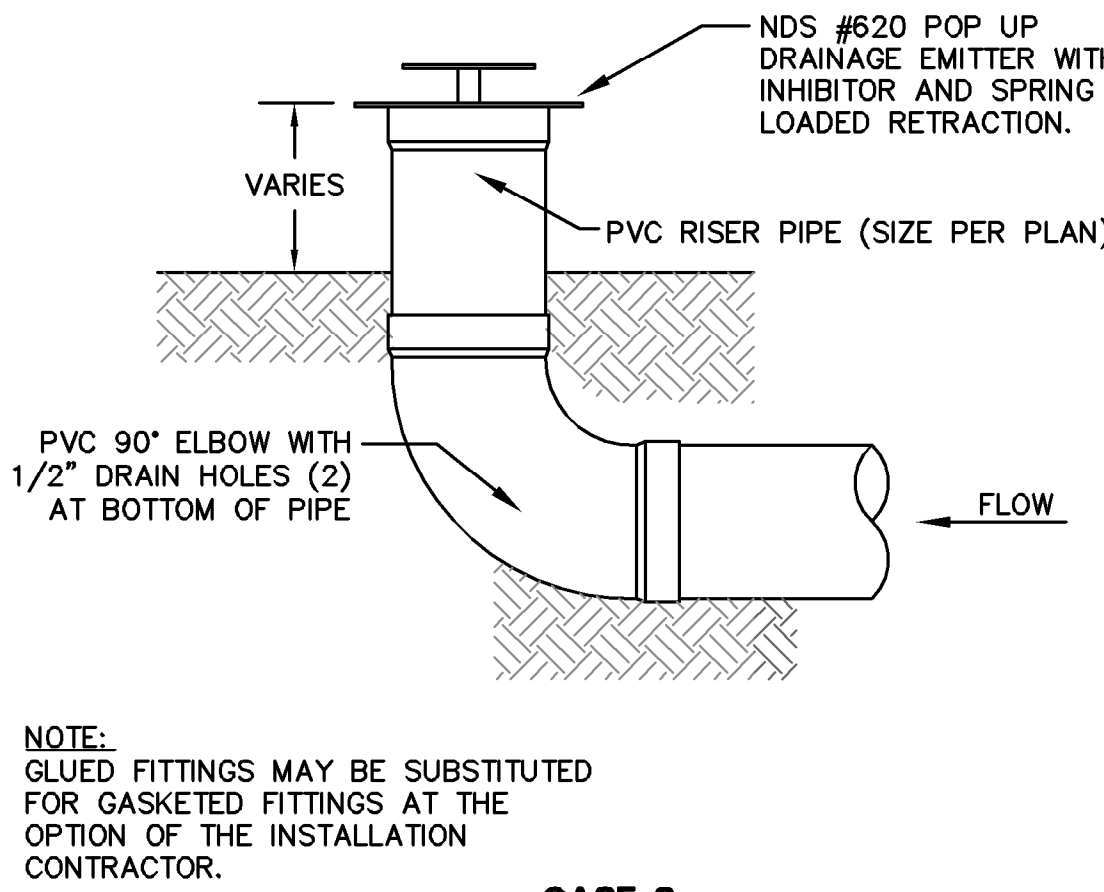
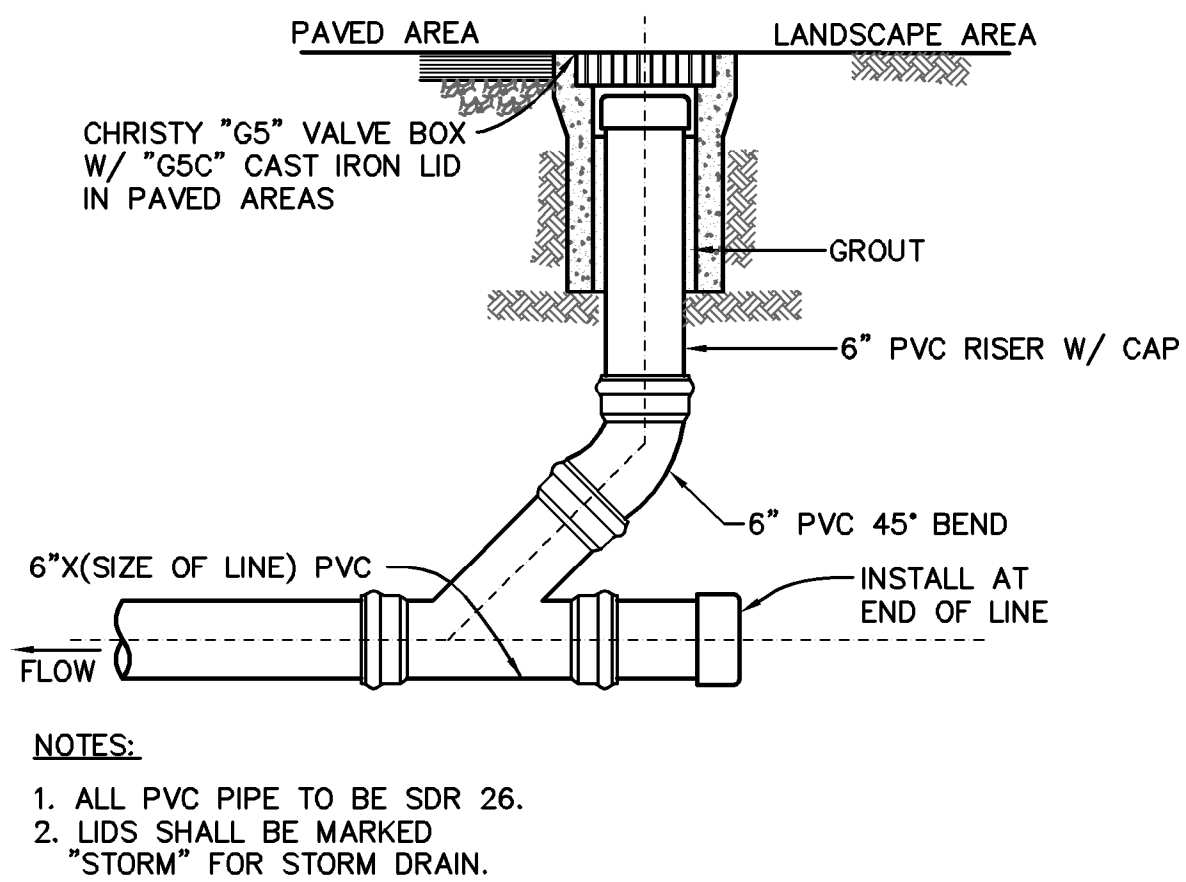
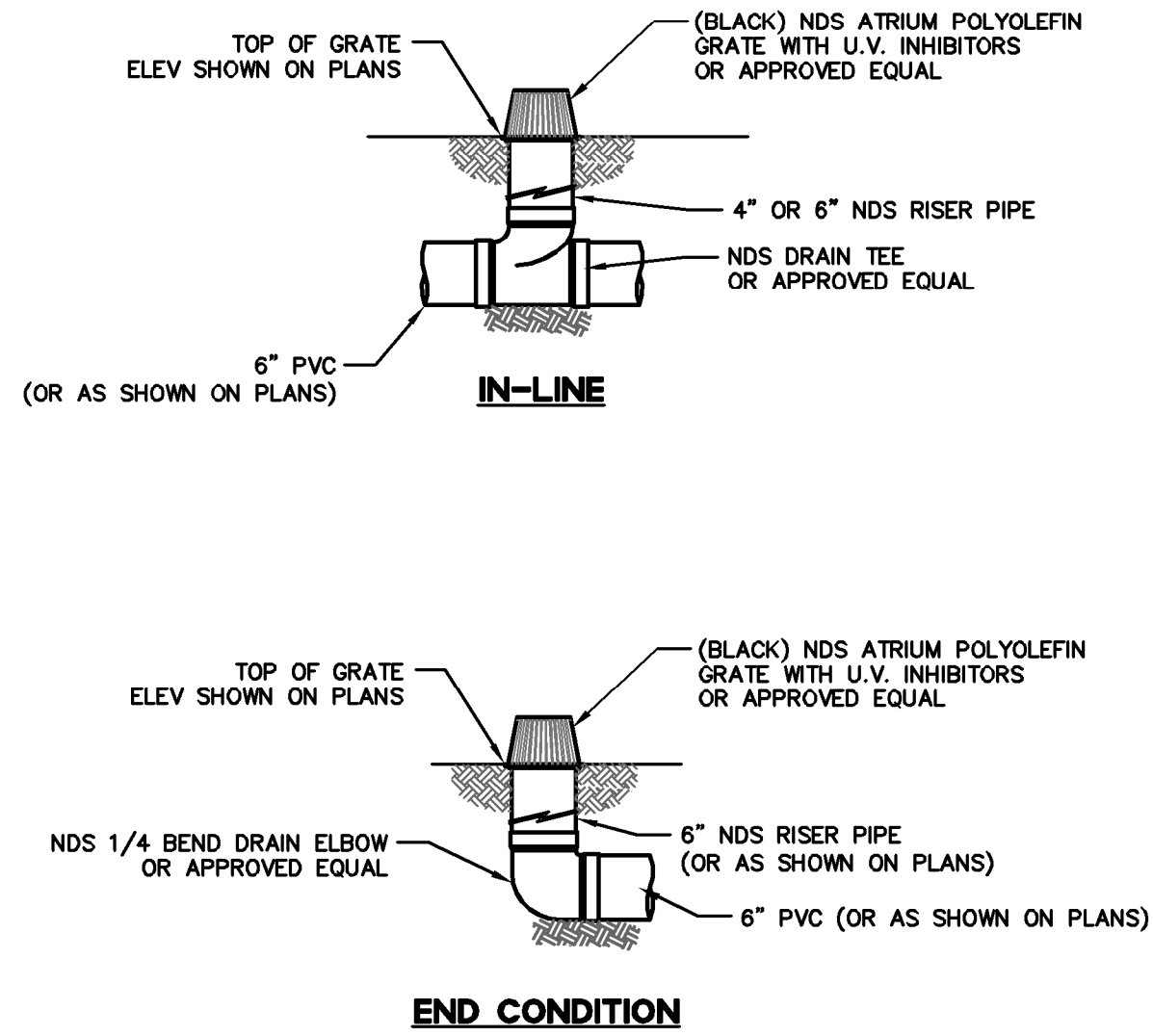


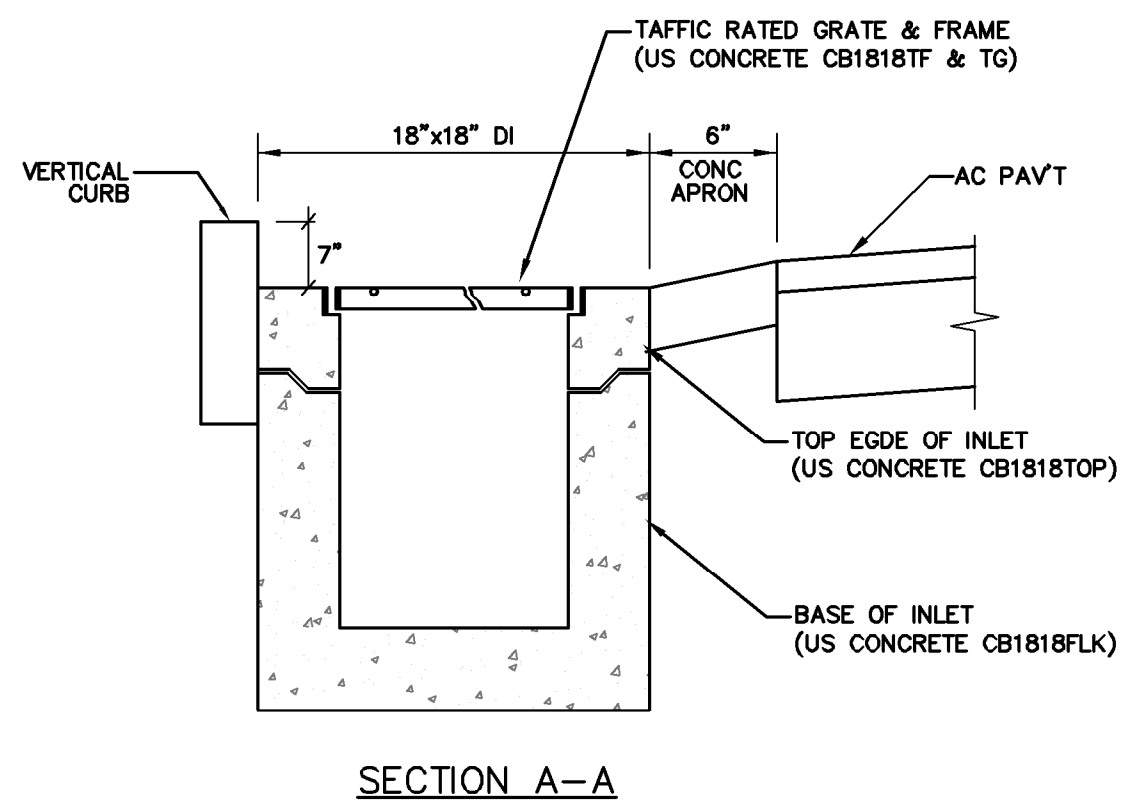
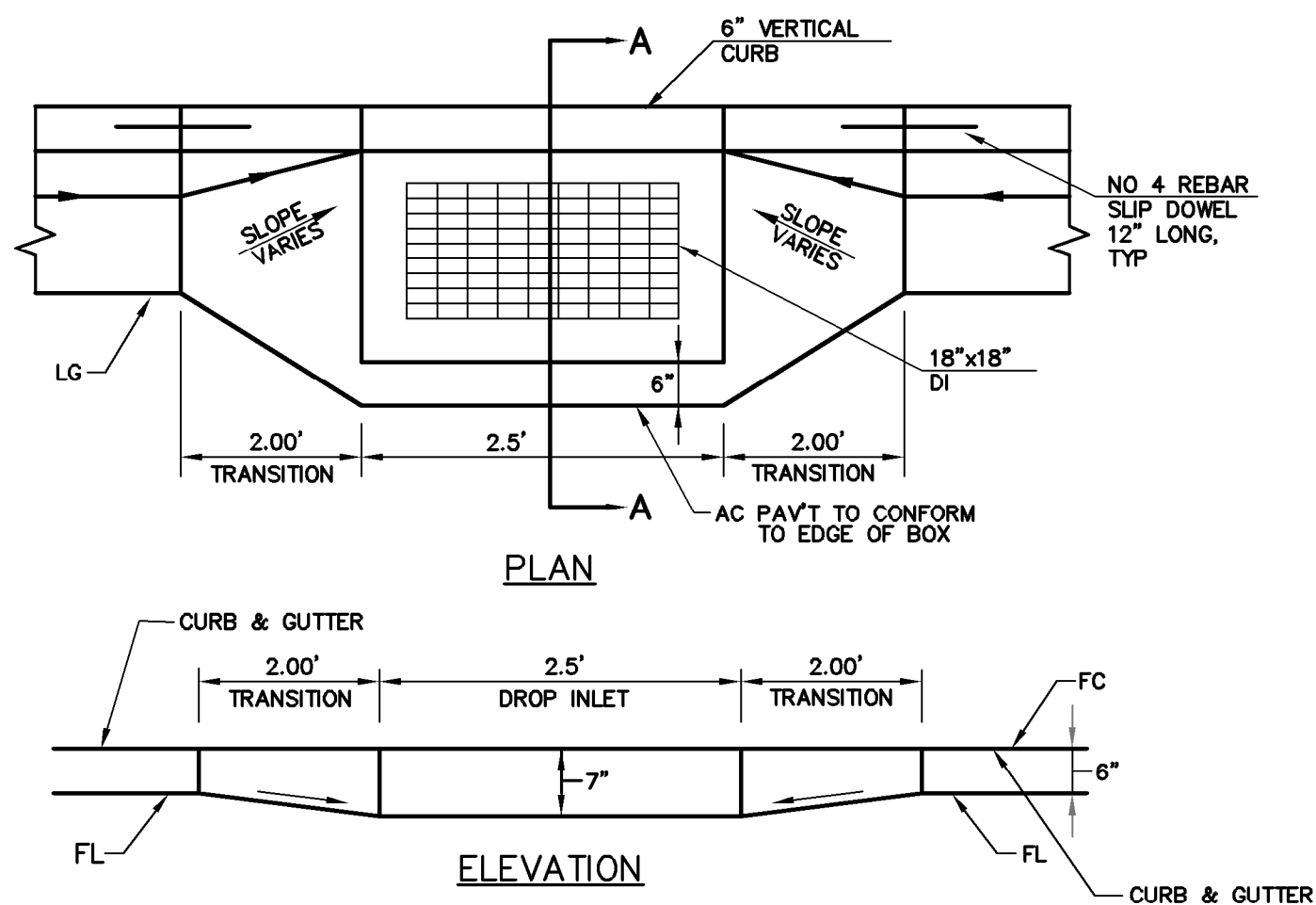
SECTION C



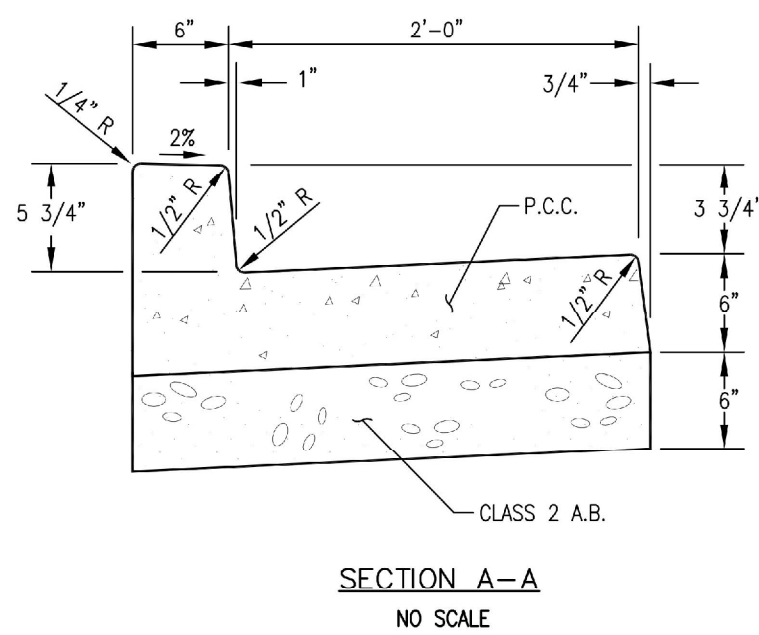
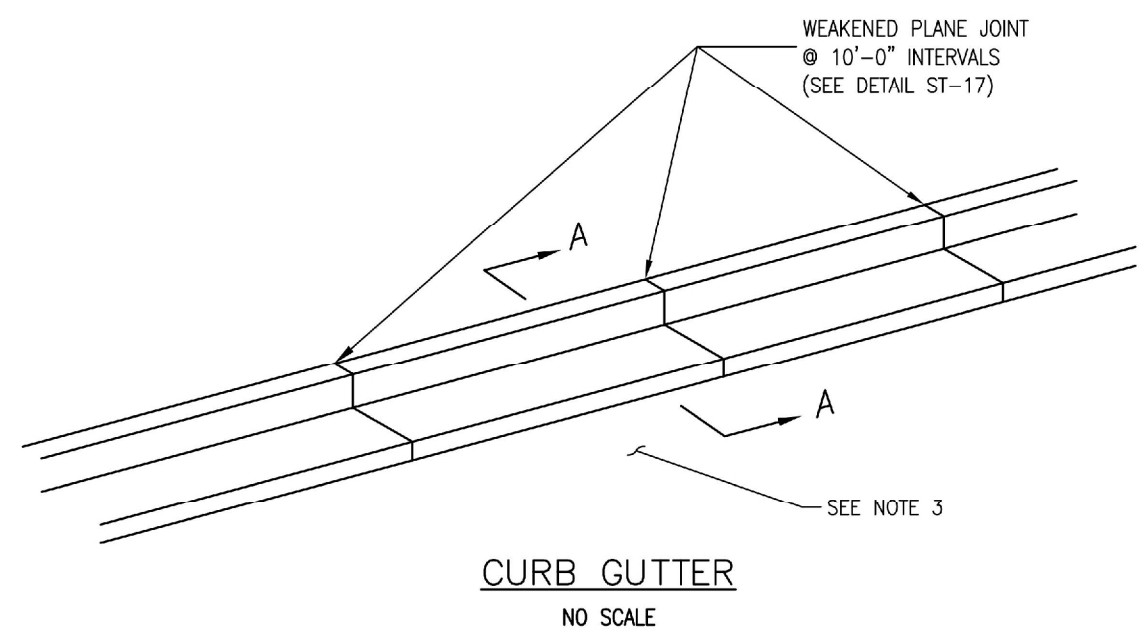
SECTION D

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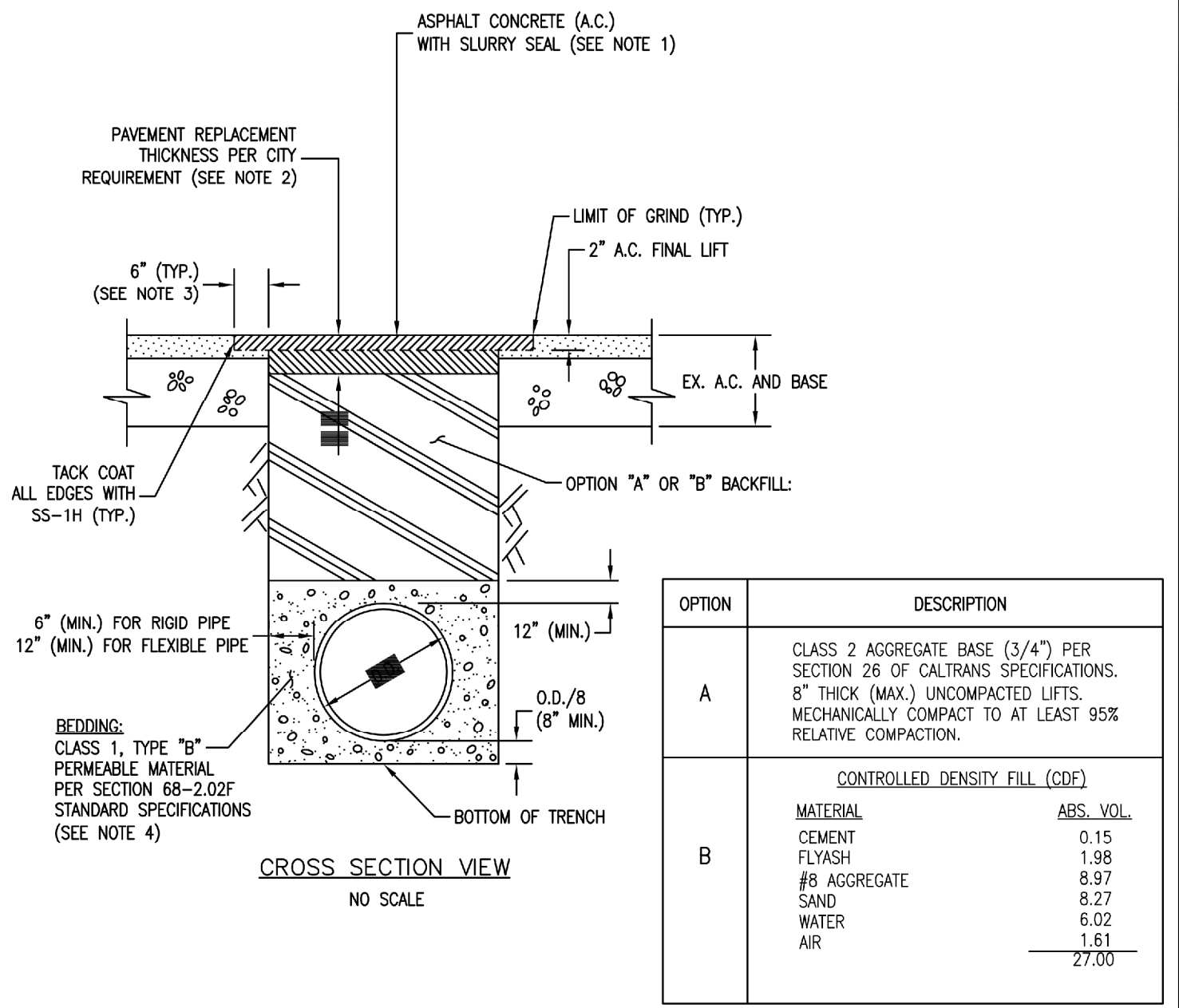


1 CURB INLET ON PRIVATE STREET



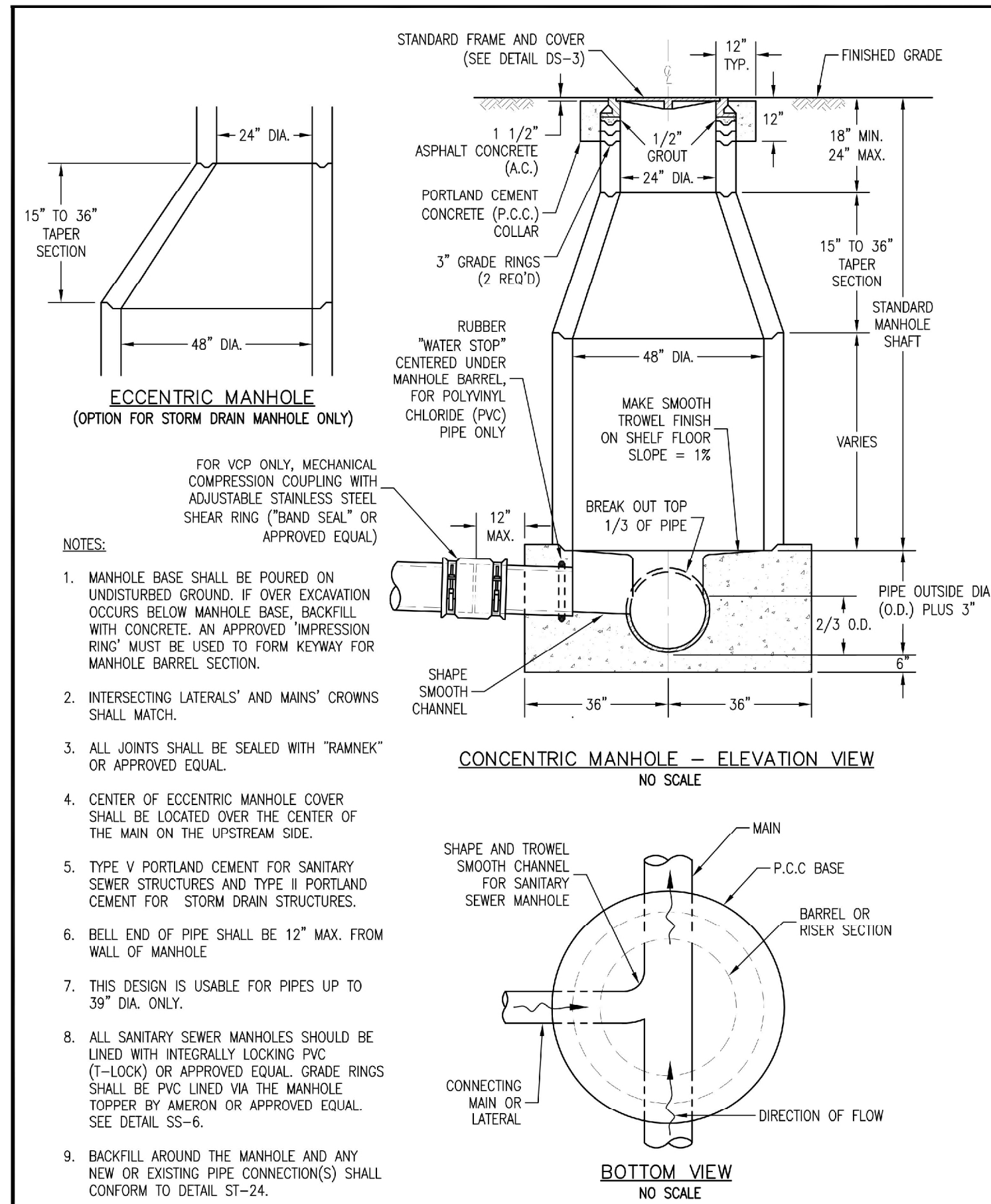
- NOTES:
- EXPANSION JOINTS (SEE DETAIL ST-17) SHALL BE INSTALLED AT MAJOR STRUCTURES AND CURB RETURNS.
 - TOLERANCE OF THE VERTICAL DIMENSION AT FACE OF CURB AND LIP OF GUTTER SHALL BE 1/4".
 - 18" WIDE BAND OF PAVEMENT SHALL BE REMOVED AND REPLACED. SEE NOTE 5 OF GENERAL NOTES (APPENDIX) FOR REQUIREMENTS.

DRAWN BY: K. TRAN	MONOLITHIC CURB AND GUTTER	ST-11
CHECKED BY: F. AMIN		
APPROVED BY: G. GOMEZ		
DATE: OCTOBER 2013	CITY OF SANTA CLARA	PAGE: 11



- NOTES:
- SLURRY SEAL SHALL BE EXTENDED 12" BEYOND THE A.C. PAVEMENT REPLACEMENT LIMIT.
 - A.C. PAVEMENT REPLACEMENT SHALL BE FULL DEPTH A.C. WITH THICKNESS PER CITY REQUIREMENT. SEE DETAIL ST-26 FOR TRENCH PAVEMENT THICKNESS REQUIREMENTS OF A PARTICULAR STREET.
 - THE 6" BENCH SECTION FOR A.C. SHALL BE GROUND AND REMOVED IMMEDIATELY PRIOR TO FINISH PAVING OPERATIONS.
 - BEDDING MATERIAL SHALL CONSIST ENTIRELY OF CRUSHED, ANGULAR ROCK (NO ROUNDED PEA GRAVEL ALLOWED) FOR FLEXIBLE PIPE. FOR WATER MAINS AND LATERALS, BEDDING SHALL BE SAND. MATERIAL SHALL BE INSTALLED IN MAX. 8" LIFTS AND COMPACTED WITH VIBRATORY COMPACTOR.

DRAWN BY: K. TRAN	TRENCH BACKFILL AND PAVEMENT REPLACEMENT	ST-24
CHECKED BY: F. AMIN		
APPROVED BY: G. GOMEZ		
DATE: DECEMBER 2014	CITY OF SANTA CLARA	PAGE: 24



- NOTES:
- MANHOLE BASE SHALL BE POURED ON UNDISTURBED GROUND. IF OVER EXCAVATION OCCURS BELOW MANHOLE BASE, BACKFILL WITH CONCRETE. AN APPROVED IMPRESSION RING MUST BE USED TO FORM KEYWAY FOR MANHOLE BARREL SECTION.
 - INTERSECTING LATERALS AND MAINS' CROWNS SHALL MATCH.
 - ALL JOINTS SHALL BE SEALED WITH "RAMMEX" OR APPROVED EQUAL.
 - CENTER OF ECCENTRIC MANHOLE COVER SHALL BE LOCATED OVER THE CENTER OF THE MAIN ON THE UPSTREAM SIDE.
 - TYPE V PORTLAND CEMENT FOR SANITARY SEWER STRUCTURES AND TYPE II PORTLAND CEMENT FOR STORM DRAIN STRUCTURES.
 - BELL END OF PIPE SHALL BE 12" MAX. FROM WALL OF MANHOLE.
 - THIS DESIGN IS USABLE FOR PIPES UP TO 36" DIA. ONLY.
 - ALL SANITARY SEWER MANHOLES SHOULD BE LINED WITH INTEGRALLY LOCKING PVC (T-LOCK) OR APPROVED EQUAL. GRADE RINGS SHALL BE PVC LINED VIA THE MANHOLE TOPPER BY AMERON OR APPROVED EQUAL. SEE DETAIL SS-4.
 - BACKFILL AROUND THE MANHOLE AND ANY NEW OR EXISTING PIPE CONNECTION(S) SHALL CONFORM TO DETAIL ST-24.

DRAWN BY: K. TRAN	MANHOLE	DS-1
CHECKED BY: F. AMIN		
APPROVED BY: G. GOMEZ		
DATE: OCTOBER 2013	CITY OF SANTA CLARA	PAGE: 43

ISSUE	DATE
SCHEMATIC DESIGN	10/23/15
DD SET 1	11/06/15
100% DD	11/25/15
CD SET 1	12/10/15
CONCRETE SUBMITTAL	2/22/15
CD SET 2	12/22/15
CD SET 3	1/25/16
CONCRETE RESUBMITTAL	2/19/16
SUPERSTRUCTURE SUBMITTAL	2/19/16

