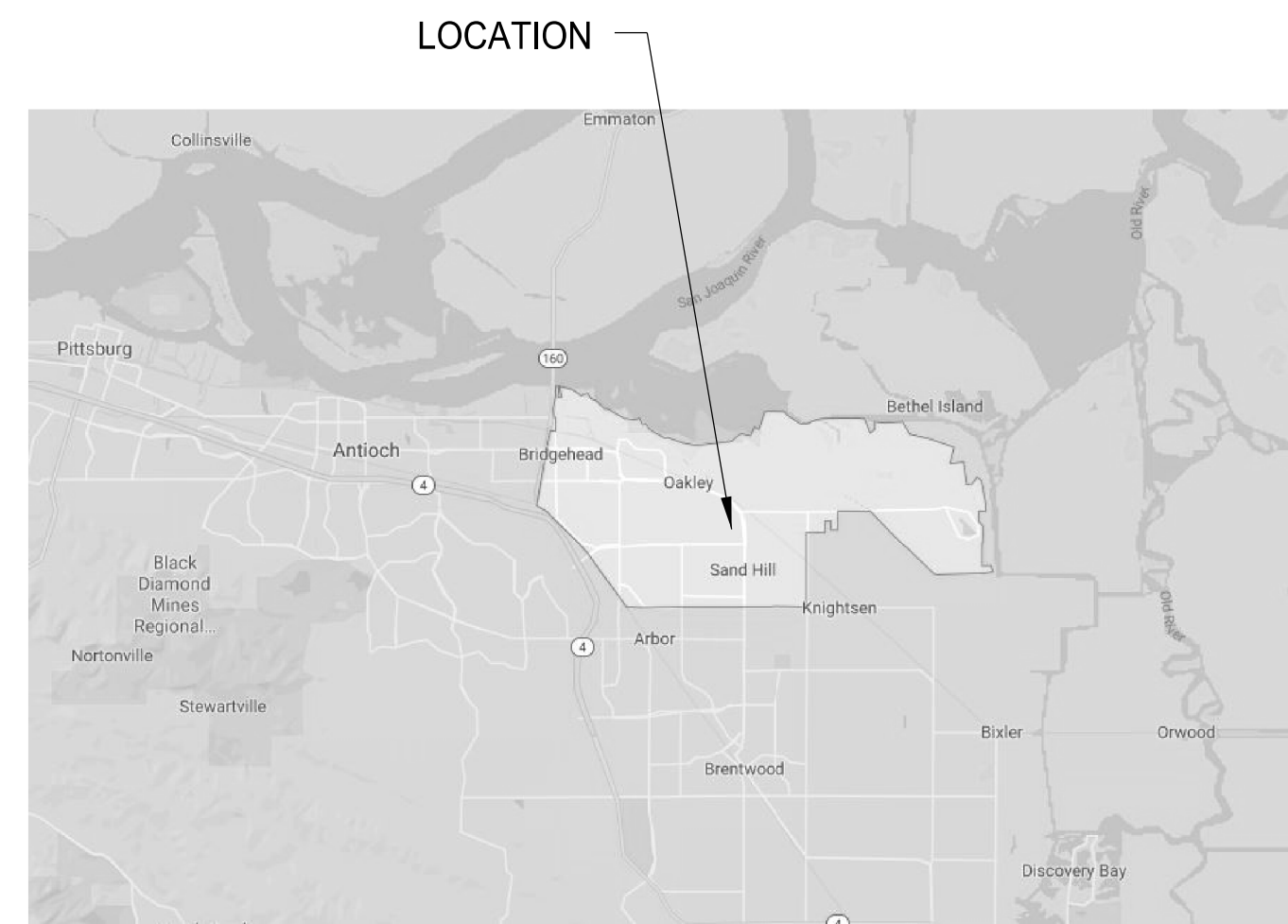
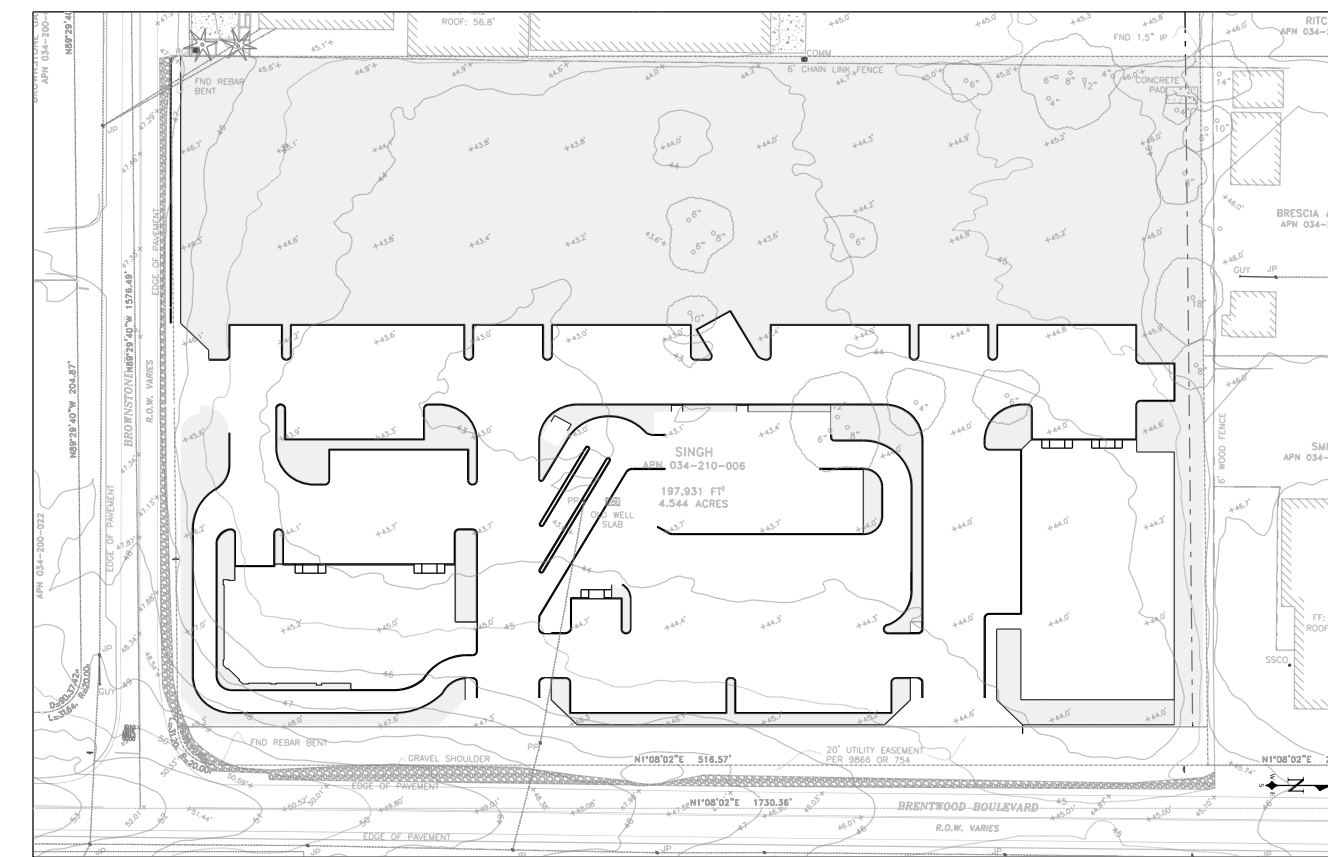


BROWNSTONE & MAIN COMMERCIAL DEVELOPMENT

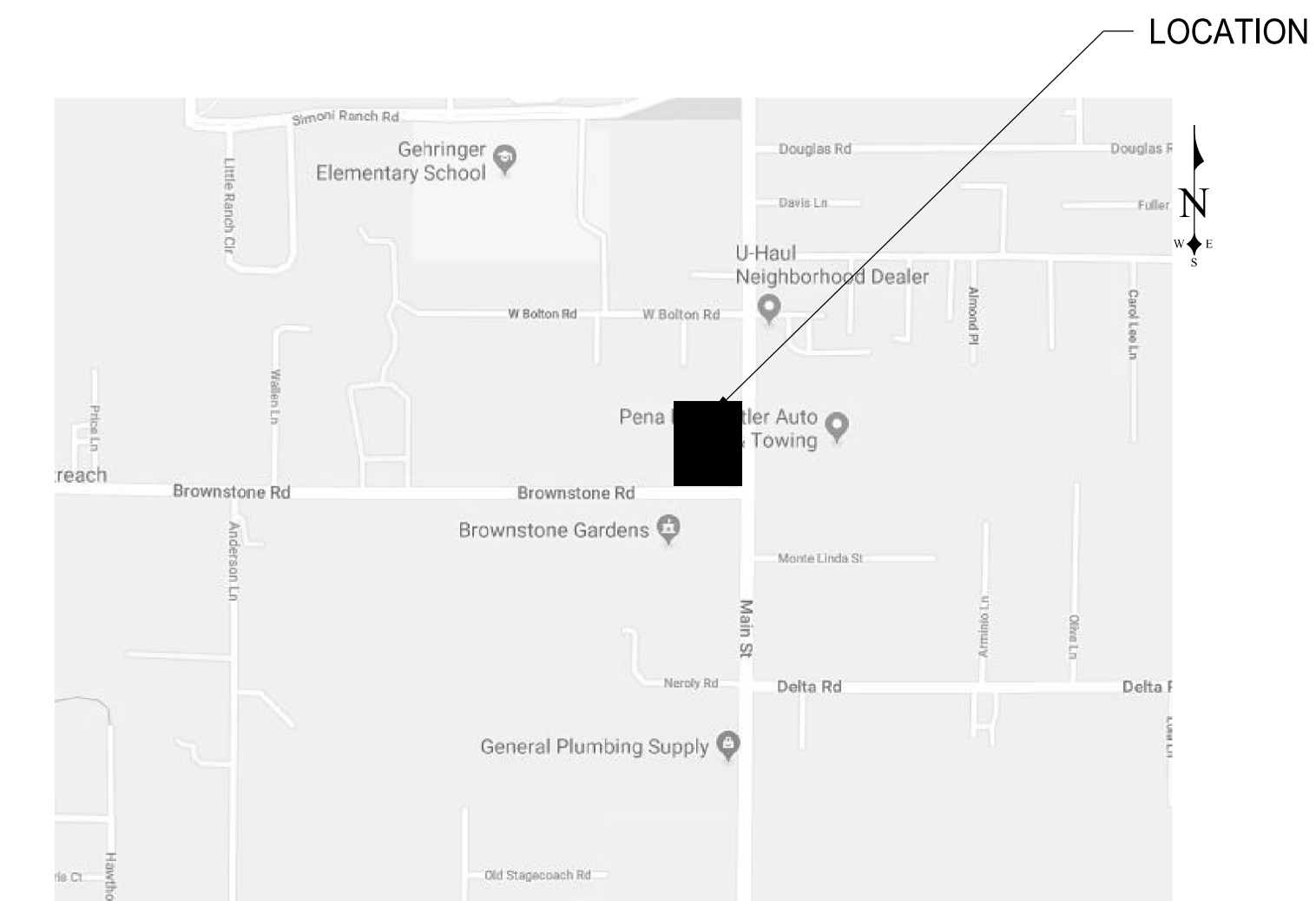
CONCEPTUAL CIVIL PLANS FOR DEVELOPMENT AT N.W. CORNER OF BROWNSTONE ROAD & BRENTWOOD BLVD / MAIN ST.



VICINITY MAP
NTS



SITE PLAN
SCALE: 1" = 100'



VICINITY MAP
NTS

BASIS OF BEARINGS

THE CALCULATED TIE BETWEEN FOUND MONUMENTS AS SHOWN ON THAT CERTAIN RECORD OF SURVEY (141 LSM 4) AT THE INTERSECTION OF BRENTWOOD BLVD AND DELTA ROAD AND THE INTERSECTION OF BROWNSTONE ROAD AND ANDERSON LANE, KNOWN AND ACCEPTED AS N68°10'04"W.

BENCHMARK

BENCHMARK DISK SET IN CONCRETE CURB AT THE SE CORNER OF HWY 4 & BOLTON ROAD, BEING 25' EAST OF THE CL OF HIGHWAY 4 & 165' SOUTH OF THE CL OF BOLTON ROAD DESIGNATED CONTRA COSTA COUNTY BENCHMARK NO. 3028 (NGVD 29, ELEV 45.50') ELEVATION VIA VERTICON SHIFT = 47.89 (NAVD 88)

SOILS NOTE

ALL EARTHWORK ACTIVITIES SHALL CONFORM TO THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL ENGINEERING INVESTIGATION, PREPARED BY BEAR ENGINEERING GROUP, INC, CONCORD, CA #02-2020-01 DATED JANUARY 9, 2020.

ABBREVIATIONS

AB - AGGREGATE BASE	MAX - MAXIMUM
AC - ASPHALT CONCRETE	MIN - MINIMUM
ARV - AIR RELEASE VALVE	NAPOTS - NOT A PART OF THIS SUBDIVISION
BF - BLIND FLANGE	P - PAD ELEVATION
B/W - BACK OF WALK	PL - PROPERTY LINE
CL - CENTER LINE / CLASS	PP - POWER POLE
CONC. - CONCRETE	PVC - POLYVINYLCHLORIDE
CU - COPPER	PVMT - PAVEMENT
DI - DRAIN INLET	R - RADIUS
DIP - DUCTILE IRON PIPE	RIM - RIM ELEVATION
DWY - DRIVEWAY	RW - RIGHT OF WAY
Ø - DIAMETER	S - SLOPE, SOUTH
EL - ELEVATION	SD - STORM DRAIN
EP - EDGE OF PAVEMENT	SS - SANITARY SEWER
EXIST/EX - EXISTING	STD - STANDARD
FF - FINISH FLOOR	SW - SIDEWALK
FL - FLOWLINE	TB - TOP OF BANK
FG - FINISH GRADE	TC - TOP OF CURB
FH - FIRE HYDRANT	TCD - THROUGH CURB DRAIN
FOC - FACE OF CURB	TF - TOP OF FOOTING
GB - GRADE BREAK	TW - TOP OF WALL
GR - GRATE ELEVATION	TYP - TYPICAL
HP - HIGH POINT	UE - UNDERGROUND ELECTRICAL
IE - INVERT ELEVATION	UG - UNDERGROUND GAS
INV - INVERT	UT - UNDERGROUND TELEPHONE
L - LENGTH	W - WATER MAIN
LP - LOW POINT	WM - WATER METER / MAIN
	WS - WATER SERVICE

SYMBOL LEGEND

EXISTING	PROPOSED	CONTRACTOR TO INSTALL STANDARD
SSMH	SSMH	SEWER MANHOLE
SDMH		DROP INLET
		CATCH BASIN
		CURB & GUTTER
		WATER VALVE
		1" WATER SERVICE & CHECK VALVE
		FIRE HYDRANT ASSEMBLY
		BLOWOFF ASSEMBLY
		CLEANOUT
		CONCRETE
		WELL TYPE MONUMENT
		70W HPSV STREET LIGHT
		EROSION CONTROL FILTER
		NEW STORM DRAIN
		NEW WATER LINE

NOTE: APPROVAL OF THESE PLANS DOES NOT RELEASE THE DEVELOPER OF THE RESPONSIBILITY FOR CORRECTION OF MISTAKES, ERRORS, OR OMISSIONS CONTAINED THEREIN. IF DURING THE COURSE OF CONSTRUCTION OF THE IMPROVEMENTS PUBLIC INTEREST REQUIRES A MODIFICATION OF OR A DEPARTURE FROM THE SPECIFICATIONS AND DETAILS OF THE CITY OF OAKLEY OF THESE PLANS, THE CITY ENGINEER SHALL HAVE THE AUTHORITY TO REQUIRE SUCH MODIFICATION OR DEPARTURE AND TO SPECIFY THE MANNER IN WHICH SAME IS TO BE MADE.

APPROVED AS TO DESIGN ONLY BASED ON INFORMATION SUBMITTED HEREON

CITY OF OAKLEY

APPROVED BY CITY ENGINEER _____ DATE _____

SOILS ENGINEER APPROVAL:

THE GEOTECHNICAL ASPECTS OF THE PLAN HVE BEEN REVIEWED AND FOUND IN CONFORMANCE WITH THE SOILS REPORT DATED 8/16/16.

APPROVED _____ DATE _____

EARTH WORK QUANTITIES

CUT:	10,130 CY
FILL:	24,000 CY
EXPORT:	0 CY
IMPORT:	13,870 CY

NOTE: EARTHWORK QUANTITIES SHOWN ARE APPROXIMATE. DURING DESIGN PHASE EFFORT WILL BE MADE TO BALANCE CUT & FILL. DOES NOT INCLUDE FOUNDATIONS, PAVEMENT, UTILITY SPOILS, SHRINKAGE OR SWELL.

SHEET INDEX

C1	COVER SHEET
C2	ROAD CROSS SECTIONS & GENERAL NOTES
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C6	EROSION CONTROL PLAN
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C8	STORM WATER PLAN
C9	OFFSITE STORM DRAIN PLAN & PROFILE
C10	WATER DETAILS
C11	SEWER DETAILS
C12	TRASH ENCLOSURE SEWER DETAILS
C13	STORM DRAINAGE DETAILS
C14	MISC DETAILS

NOT FOR CONSTRUCTION

NO.	BY	DATE	CSJ	DATE	REVISIONS



Date: February 17, 2020
Scale: As Noted
Designed: LA
Drawn: LA
Checked: LA
Proj. Engr: LA
File: 15-02

CSI Engineering
77 Solano Square #283
Benicia, CA 94510
(707) 563-8612
www.csieng.com



BROWNSTONE & MAIN
COVER SHEET

SHEET
C1
1 OF 14 SHEETS
APN: 034-210-006

GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST CITY OF OAKLEY STANDARD DETAILS AND SPECIFICATIONS.
- BENCHMARK: THE COUNTY MONUMENT BENCHMARK 3028.
- FINISH GRADE PROFILE REPRESENTS TOP OF CURB.
- ALL LOT FILL SHALL BE DONE IN CONFORMANCE TO THE SOILS ENGINEER'S RECOMMENDATIONS. SEE THE SOILS REPORT DATED JANUARY 9, 2020, BY BEAR ENGINEERING COMPANY.
- ANY EXISTING WELLS ENCOUNTERED SHALL BE ABANDONED AND SEALED PER CONTRA COSTA HEALTH DEPARTMENT.
- THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL UTILITIES 48 HOURS PRIOR TO ANY EXCAVATION SO THAT THEIR LINES CAN BE MARKED. THOSE TO BE NOTIFIED INCLUDE, BUT MAY NOT BE LIMITED TO:
- UNDERGROUND SERVICE ALERT (800) 227-2600 (NEW NUMBER) PG&E PACIFIC BELL, TCI, DELTA IRONHORSE SANITARY DISTRICT, AND THE CITY OF OAKLEY
- ANY DEVIATIONS OR CHANGES IN THESE PLANS WITHOUT OFFICIAL APPROVAL OF THE DESIGN ENGINEER SHALL ABSOLVE THE DESIGN ENGINEER OF ANY AND ALL RESPONSIBILITY OF SAID DEVIATION OR CHANGE.
- THE SURVEYOR SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF WHEN FIELD STAKING IS TO BE REQUIRED.
- COMPACTION TESTS WILL BE PERFORMED ON ALL TRENCHES AND STREET WORK TO VERIFY THAT COMPACTION CONFORMS TO CITY STANDARDS. THE INITIAL TEST AND ONE RE-TEST WILL BE PERFORMED BY THE CITY (24 HOUR NOTICE REQUIRED). ALL ADDITIONAL TESTING WILL BE AT THE DEVELOPER'S/CONTRACTOR'S EXPENSE
- ALL WORK ADJACENT TO EXISTING PAVEMENT SECTION SHALL BUTT UP TO FULL EXISTING SECTION. WHERE FULL SECTION IS NOT ENCOUNTERED, CONTINUE REMOVAL OF ADDITIONAL PAVEMENT UNTIL A FULL SECTION IS FOUND. SEE CITY STANDARD DETAIL ST-25
- MONUMENTS SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE FINAL MAP IN ACCORDANCE WITH THE CITY STANDARD DETAILS AND SPECIFICATIONS.
- THE STREET LIGHTS SHALL NOT BE INSTALLED UNTIL THE DEVELOPER HAS PROVIDED AN ACCEPTABLE STREET LIGHT WIRING PLAN SIGNED AND

STAMPED BY A REGISTERED ELECTRICAL ENGINEER INDICATING THE WIRING RUN LOCATION BETWEEN THE STREET LIGHT AND THE POWER SOURCE FOR CITY RECORDS.

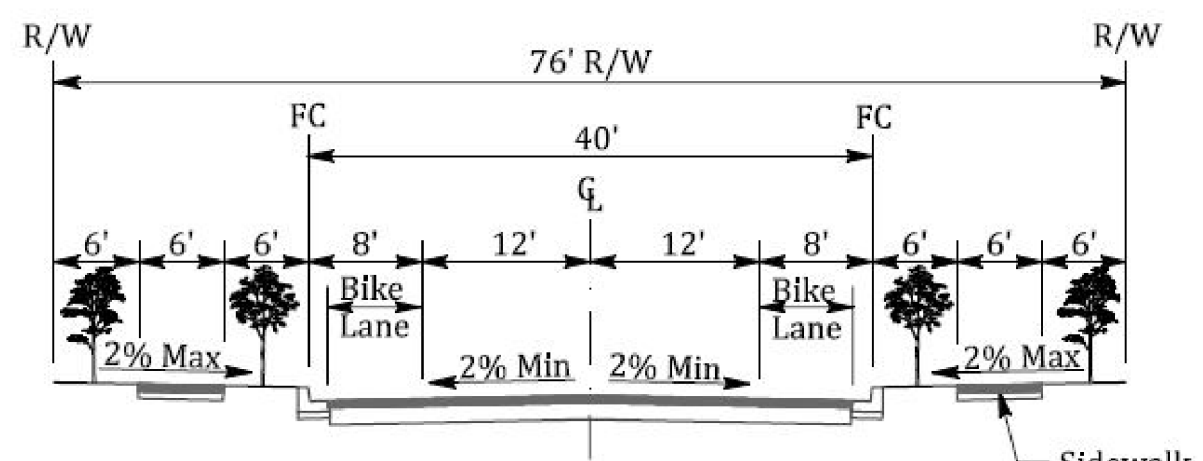
- STREET TREES ARE TO BE PLANTED AT EACH LOT UPON OCCUPANCY. MAILBOXES SHALL BE INSTALLED AT EACH LOT IN ACCORDANCE WITH POST OFFICE REQUIREMENTS.
- ALL PIPE GRADES SHOWN AS FLOW LINE ELEVATIONS.
- ONE 4" SANITARY SEWER LATERAL AND CLEANOUT SHALL BE INSTALLED TO EACH LOT AT LOCATIONS SHOWN ON THE DRAWINGS AND AN "S" STAMPED ON THE CURB ABOVE THE LATERAL.
- ALL WATER LINES SHALL HAVE A MINIMUM COVER OF 48". ONE WATER LATERAL SHALL BE INSTALLED TO EACH LOT AND A "W" STAMPED ON THE CURB ABOVE THE LATERAL.
- WHENEVER POSSIBLE SANITARY SEWER LATERALS TO CROSS UNDER WATER MAIN.
- FIRE HYDRANTS SHALL BE PER APPROVED CITY LIST. PAVEMENT MARKERS SHALL BE INSTALLED AT EACH FIRE HYDRANT LOCATION PER DETAIL W-1.
- ALL FIRE HYDRANT INSTALLATIONS WILL BE SUBJECT TO APPROVAL BY THE FIRE CHIEF. FLOW TESTING BY THE FIRE DEPARTMENT WILL ONLY BE MADE AT THE REQUEST OF THE PUBLIC WORKS INSPECTOR AT SUCH TIME AS ALL WORK IN THE WATER SUPPLY SYSTEM HAS BEEN COMPLETED.
- PRIOR TO BEGINNING ANY WORK ON EXISTING STREETS, ADVANCE-WARNING SIGNS (C18 AND C13) SHALL BE INSTALLED.
- TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH CALTRANS "MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES" CURRENT EDITION. FAILURE TO COMPLY MAY RESULT IN IMMEDIATE STOPPAGE OF WORK UNTIL THE PROPER TRAFFIC CONTROL IS IN ORDER.
- THE DEVELOPER/OWNER SHALL HAVE A JOB SUPERINTENDENT OR A DESIGNATED RESPONSIBLE REPRESENTATIVE ON THE JOB SITE ANYTIME WORK IS IN PROGRESS DURING THE CONSTRUCTION OF THE PROJECT. THE DEVELOPER/OWNER SHALL ADVISE THE CITY ENGINEER WHO THE DESIGNEE IS IN WRITING.
- THE NOTICE SHALL INCLUDE AN EMERGENCY NOTIFICATION PHONE NUMBER. THE CITY SHALL BE ADVISED IN WRITING IF THERE IS TO BE A CHANGE IN JOB-SITE REPRESENTATIVE.
- A PRE-CONSTRUCTION MEETING OF ALL THE CONTRACTOR'S REPRESENTATIVES INVOLVED IN THE PROJECT WILL BE HELD PRIOR TO

THE START OF CONSTRUCTION AT THE REQUEST OF THE CITY OF OAKLEY CITY ENGINEER.

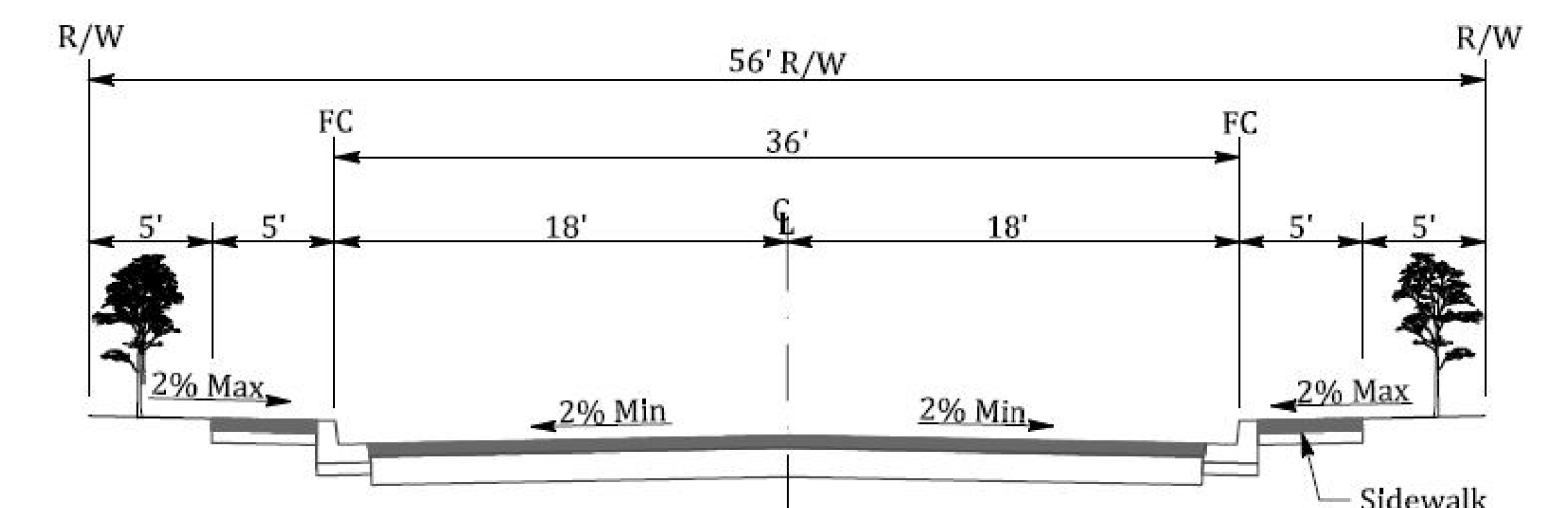
- THE DEVELOPER SHALL PROVIDE "AS-BUILT" PLANS FOR TRAFFIC SIGNALS WITHIN TWO WEEKS OF SIGNAL TURN-ON.
- CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY OF JOB SITE CONDITIONS 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, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, IDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.
- IN INDUSTRIAL AREAS, ALL SANITARY SEWERS SHALL BE EXTRA STRENGTH VCP.
- CHANNEL CONSTRUCTION SHALL CONFORM TO CONTRA COSTA COUNTY FLOOD CONTROL STANDARDS AND AS SHOWN ON THESE PLANS
- ALL STORM SEWERS SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED ON THE PLANS.
- DEVELOPER SHALL PROVIDE THE FOLLOWING TO THE CITY PRIOR TO TRACT ACCEPTANCE FOR MAINTENANCE
- AN ELEVATION CERTIFICATION OF ALL INSTALLED MONUMENTS FROM THE SURVEYOR. THE ELEVATION SHALL BE NOTED ON THE RECORD DRAWINGS; AN ELEVATION CERTIFICATION OF ALL PADS FROM THE SURVEYOR; A CERTIFICATION (FINAL SOILS REPORT) FROM THE SOILS ENGINEER STATING THAT ALL GRADING HAS BEEN COMPLETED IN ACCORDANCE WITH THE RECOMMENDATIONS FOR THE PRELIMINARY SOILS REPORT.
- THE STREET STRUCTURAL SECTIONS SHOWN ON THE PLANS ARE PRELIMINARY ONLY. FINAL STRUCTURAL SECTIONS WILL BE DETERMINED BASED ON ACTUAL "R" VALUE TESTS IN THE FIELD FOLLOWING CALTRANS FLEXIBLE PAVEMENT DESIGN CRITERIA.
- CONSTRUCTION OPERATIONS - WASTEWATER GENERATED DURING CONSTRUCTION SHALL NOT BE DISCHARGED TO THE STORM DRAIN SYSTEM. THIS INCLUDES WASTE FROM PAINTING, SAW CUTTING, CONCRETE WORK, ETC. THE CONTRACTOR SHALL MAKE ARRANGEMENTS TO ELIMINATE DISCHARGES TO THE STORM DRAIN SYSTEM AND, IF

NECESSARY, PROVIDE AN AREA FOR ON-SITE WASHING ACTIVITIES DURING CONSTRUCTION. MATERIALS, WHICH COULD CONTAMINATE STORM RUNOFF, SHALL BE STORED IN AREAS, WHICH ARE DESIGNED TO PREVENT EXPOSURE TO RAINFALL AND TO NOT ALLOW STORM WATER TO RUN ONTO THE AREA.

- PAVEMENT CLEANING - FLUSHING OF STREETS/PARKING LOTS TO REMOVE DIRT AND CONSTRUCTION DEBRIS IS PROHIBITED UNLESS PROPER SEDIMENT CONTROLS ARE USED. PREFERABLY, AREAS REQUIRING CLEANING SHOULD BE SWEEP
- STORM DRAIN INLETS - STORM DRAIN INLETS MUST BE STENCILED OR MARKED WITH THE FOLLOWING STATEMENT: "NO DUMPING, DRAINS TO DELTA." STENCILS MAY BE OBTAINED FROM THE WATER RESOURCES DIVISION OF THE PUBLIC SERVICES DEPARTMENT.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED BY OCTOBER 15 OF EACH YEAR.
- DURING GRADING OPERATIONS, THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL MEASURES BOTH ON-SITE AND ON THE HAUL ROUTE, INCLUDING (LIST ACTUAL HAUL ROUTE STREET NAMES). STREETS SHALL BE SWEEPED A MINIMUM OF TWO TIMES A DAY OR AS REQUIRED BY THE CITY ENGINEER.
- ALL GRADING SHALL BE IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN PREPARED BY THE DEVELOPER PER THE NOTICE OF INTENT ON FILE WITH THE STATE WATER RESOURCES CONTROL BOARD.



1
C2 MAIN STREET CROSS SECTION



2
C2 BROWNSTONE ROAD CROSS SECTION

BY	DATE	CSJ	DATE	REVISIONS



Date: February 17, 2020
 Scale: None
 Designed: LA
 Drawn: LA
 Checked: LA
 Proj. Engr: LA
 File: 15-02

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BROWNSTONE & MAIN
 ROAD CROSS SECTIONS & GENERAL NOTES

SHEET
 C2
 2 OF 14 SHEETS
 APN: 034-210-006

**IRONHOUSE SANITARY DISTRICT
SEWER NOTES**

1. ALL SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE IRONHOUSE SANITARY DISTRICT (ISD) AND BE SUBJECT TO INSPECTION BY AN INSPECTOR REPRESENTING ISD. COPIES OF THE STANDARD PLANS AND SPECIFICATIONS ARE AVAILABLE AT THE DISTRICT OFFICE, 450 WALNUT MEADOWS DRIVE, OAKLEY, CA 94561. PHONE: 925-625-2279.
2. ALL GRAVITY SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE PIPE CONFORMING TO ASTM D 3034, SDR 26, UNLESS OTHERWISE NOTED. ALL SANITARY SEWER FORCEMAINS SHALL CONFORM TO AWWA C900, CLASS 200 (DR14). CONTRACTOR SHALL OBTAIN APPROVAL FROM ISD FOR SANITARY SEWER PIPE OR FORCEMAIN THAT DEVIATES FROM THIS CRITERIA.
3. GRAVITY SANITARY SEWERS SHALL BE LAID AT THE FOLLOWING MINIMUM SLOPES:

SEWER SIZE (INCHES)	MINIMUM SLOPE (FEET/FT)
8	0.0035
10	0.0028
12	0.0017
15	0.0015

4. MANHOLES SHALL BE PLACED AT INTERVALS NOT GREATER THAN THREE-HUNDRED (300) FEET.
5. ALL PIPES DELIVERED TO JOB SITE ARE TO BE MARKED AS TO PIPE TYPE, STRENGTH, CLASS AND BRAND NAME.
6. FINAL TESTS OF THE SANITARY SEWER ARE TO BE PERFORMED AFTER 100% ROCK IS PLACED AND COMPACTION TEST RESULTS ARE SATISFACTORY TO ISD, AS PER THE STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION, CENTRAL CONTRA COSTA SANITARY DISTRICT SECTION 18-03, CLEANING AND TESTING.
7. PLASTIC PIPE SHALL BE MANDRELED WITH RIGID MANDREL WITH EFFECTIVE CIRCULAR CROSS SECTION HAVING A DIAMETER OF AT LEAST 95% OF THE SPECIFIED AVERAGE INSIDE DIAMETER OF PIPE.
8. ALL SEWER LINES SHALL BE AIR TESTED AS PER THE STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION, CENTRAL CONTRA COSTA SANITARY DISTRICT SECTION 18-03, CLEANING AND TESTING.
9. ALL SEWER LINES SHALL BE BALL FLUSHED AS PER THE STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION, CENTRAL CONTRA COSTA SANITARY DISTRICT SECTION 18-03, CLEANING AND TESTING.
10. ALL SEWER LINES 6-INCHES AND LARGER WILL BE TELEVISED BY AN ISD APPROVED COMPANY. THE TELEVISING CONTRACTOR SHALL BE APPROVED BY THE DISTRICT AT LEAST TWO WEEKS IN ADVANCE OF THE WORK. AN ISD INSPECTOR MUST BE PRESENT DURING THE TELEVISING PROCESS.
11. DEVELOPER SHALL FURNISH COMPACTION TEST OF SEWER TRENCH AT 400 FOOT INTERVALS BY A QUALIFIED LAB PER CENTRAL CONTRA COSTA SANITARY DISTRICT SPECIFICATION 20.03E.

**IRONHOUSE SANITARY DISTRICT
SEWER NOTES (CONT.)**

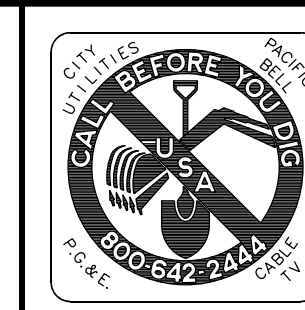
12. ALL PLASTIC SANITARY SEWER LINES AND LATERALS SHALL HAVE ROCK MATERIAL BEDDING AND SHADING WITHIN THE RIGHT-OF-WAY IN ACCORDANCE WITH CENTRAL CONTRA COSTA SANITARY DISTRICT SECTION 28-21.
13. ALL 6-INCH LATERALS MUST BE TIED INTO A MANHOLE. NO DIRECT CONNECTION OF A 6-INCH LATERAL INTO A SEWER MAIN IS ALLOWED.
14. MINIMUM SLOPES FOR LATERALS ARE 4-INCH AT 2% AND 6-INCH AT 1%.
15. ISD SHALL RECEIVE ONE SET OF MYLAR AS-BUILTS AND CD OF AS-BUILTS IN AUTOCAD FORMAT. ACTUAL LOCATIONS OF HOUSE LATERALS ARE TO BE SHOWN ON "AS-BUILTS" AS ARE ALL DEVIATIONS FROM CONSTRUCTION PRINT.
16. EACH SEWER SERVICE LATERAL SHALL BE MARKED WITH A 2 INCH HIGH "S" INSCRIBED ON THE CURB DIRECTLY ABOVE THE SERVICE. LATERAL TO BE MARKED WITH A 2" X 4' STAKE PAINTED GREEN AND LEFT IN PLACE THROUGH THE FINAL YARD GRADE.
17. MINIMUM VERTICAL CLEARANCE BETWEEN SEWER MAIN AND ALL OTHER UTILITY CROSSINGS SHALL BE ONE (1) FOOT. IF LESS THAN ONE (1) FOOT THEN A SIX (6) INCH CONCRETE CAP SHALL BE PLACED OVER THE SEWER PIPE AS DIRECTED IN THE FIELD BY THE ISD INSPECTOR.
18. CONTRACTORS ARE REQUIRED TO FOLLOW ALL LOCAL, STATE, AND FEDERAL CONSTRUCTION REGULATIONS. BEFORE ENTERING ISD'S CONFINED SPACES CONTRACTORS ARE REQUIRED TO PROVIDE ISD THE FOLLOWING:
 - CONTRACTORS CONFINED SPACE PROGRAM,
 - CONFINED SPACE PERMIT FORM,
 - PERSONNEL TRAINING RECORDS OF CONFINED SPACE SUPERVISOR, ATTENDANT, ENTRANT, AND RESCUE PERSON, AND
 - RESPIRATOR FIT TEST RECORD OF RESCUE PERSON.
 CONTRACTORS WILL NOT RELY ON LOCAL FIRE DEPARTMENT PERSONNEL TO PROVIDE CONFINED SPACE RESCUES.

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	BY	DATE	CSJ	DATE	REVISIONS	



Date: February 17, 2020
 Scale: None
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BROWNSTONE & MAIN

SEWER SYSTEM NOTES

SHEET
 C3
 3 OF 14 SHEETS
 APN: 034-210-006

GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST CITY OF OAKLEY STANDARD DETAILS AND SPECIFICATIONS.
2. BENCHMARK: THE COUNTY MONUMENT BENCHMARK 3028.
3. FINISH GRADE PROFILE REPRESENTS TOP OF CURB.
4. ALL LOT FILL SHALL BE DONE IN CONFORMANCE TO THE SOILS ENGINEER'S RECOMMENDATIONS. SEE THE SOILS REPORT DATED JANUARY 9, 2020 BY BEAR ENGINEERING COMPANY.
5. ANY EXISTING WELLS ENCOUNTERED SHALL BE ABANDONED AND SEALED PER CONTRA COSTA HEALTH DEPARTMENT.
6. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL UTILITIES 48 HOURS PRIOR TO ANY EXCAVATION SO THAT THEIR LINES CAN BE MARKED. THOSE TO BE NOTIFIED INCLUDE, BUT MAY NOT BE LIMITED TO:
7. UNDERGROUND SERVICE ALERT (800) 227-2600 (NEW NUMBER) PG&E PACIFIC BELL, TCI, DELTA IRONHORSE SANITARY DISTRICT, AND THE CITY OF OAKLEY
8. ANY DEVIATIONS OR CHANGES IN THESE PLANS WITHOUT OFFICIAL APPROVAL OF THE DESIGN ENGINEER SHALL ABSOLVE THE DESIGN ENGINEER OF ANY AND ALL RESPONSIBILITY OF SAID DEVIATION OR CHANGE.
9. THE SURVEYOR SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF WHEN FIELD STAKING IS TO BE REQUIRED.
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11. ALL WORK ADJACENT TO EXISTING PAVEMENT SECTION SHALL BUTT UP TO FULL EXISTING SECTION. WHERE FULL SECTION IS NOT ENCOUNTERED, CONTINUE REMOVAL OF ADDITIONAL PAVEMENT UNTIL A FULL SECTION IS FOUND. SEE CITY STANDARD DETAIL ST-25
12. MONUMENTS SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE FINAL MAP IN ACCORDANCE WITH THE CITY STANDARD DETAILS AND SPECIFICATIONS.
13. THE STREET LIGHTS SHALL NOT BE INSTALLED UNTIL THE DEVELOPER HAS PROVIDED AN ACCEPTABLE STREET LIGHT WIRING PLAN SIGNED AND

**Diablo Water District General Water Notes
Page 2 of 4**

8. If crossing a sanitary sewer or storm drain pipeline or recycled water pipeline, a new water main shall be constructed no less than 45-degrees to and at least one foot above that pipeline. No connection joints shall be made in the water main within eight horizontal feet of the pipeline being crossed.
9. Special construction requirements for water mains: where a water main is to be located parallel to or cross a sanitary sewer or storm drain pipeline or recycled water pipeline with less than the required separation, the installation and materials shall conform to the State of California, Division of Drinking Water, California Regulations Related to Drinking Water, and shall be subject to the approval of the Division of Drinking Water.
10. Maintain 5.0' minimum separation between water services and sanitary sewer laterals.
11. Public Fire hydrants shall have 1-4 1/2" & 2-2 1/2" outlets, and each hydrant shall be isolated from the main line by a 6" gate valve and shall receive two (2) coats of Rust-oleum V7400 Safety Yellow.

Valve can lids for 6" fire hydrant shut-off valve shall be painted with Krylon Interior/Exterior Flat White - Blanco Mate #1502 as per fire department requirements.
12. Use Mueller streamline PVC coated copper for service line and ARV piping.
13. Contractor shall install curb stops and meter boxes acceptable to Diablo Water District at each lot immediately prior to jumper being removed. At the expense of the Developer/Contractor, pad locks will be installed by Diablo Water District at each angle stop.
14. Use 304 stainless steel nuts and bolts for all bolt-ups as well as gate valve bonnets and stuffing box nuts and bolts. Bolts shall be marked 'F-593C' or 'F-593D' only. Heads with two slash marks are not to be used.
15. The Contractor shall maintain water service to all residences at all times during construction.
16. No work shall commence until all submittals have been approved.
17. Thrust blocks (or other pipe joint restraints) shall be provided at all angle points on the water system. Thrust blocks for treated water pipelines (W) shall be per the DWD details.
18. Work hours shall be Monday through Friday 8:00 a.m. to 4:30 p.m. except for District observed holidays. Any requests for working outside these times must be submitted to the District inspector at least 48 hours in advance. It is recommended that requests

Updated June 2019

**Diablo Water District General Water Notes
Page 3 of 4**

- for Saturday work be made by the close of business the Wednesday prior. Requests for Saturday work may be approved or denied depending on inspector availability. A request for work during a District holiday shall not be permitted.
19. All joint trench utilities shall cross underneath all water facilities. If these criteria cannot be met, the Developer/Contractor shall install a red concrete cap over the joint trench facilities.
20. All Butterfly Valves (BFVs) shall be epoxy lined and coated. Lining shall be certified by the factory to be holiday free.
21. All hot taps shall be performed by Tap Master, Inc. of Concord, California, phone: 925-439-7975. Tapping sleeve shall be stainless steel type JCM 432, no equal.
22. No trees shall be planted, or light/utility poles installed within 10' of any water mains, fire services, or fire hydrant laterals. Measurement shall be taken as the clear distance between the root ball and water main.
23. All locator wires shall be tested, and test results shall be included in the Cathodic Protection Test Report.
24. All water meters shall be provided with a 520M-FlexNet MTX Unit. Meter boxes for meters less than 1-1/2 inch in size shall have Christy B12P001-F (FlexNet) lids. All meter box lids shall have drilled holes for FlexNet 520M Units.
25. Water Meters 5/8" in size shall be Sensus 5/8" x 3/4" SR11 Low Lead, 1 cubic foot, labeled 5/8" x 3/4". Water Meters 1" in size shall be Sensus 1" SR11 Low Lead, 1 cubic foot. Flow meters 1-1/2" through 4" in size shall be Sensus OMNI C2. compound meters (cubic feet).
26. JDH Corrosion Consultants, Inc., 1100 Willow Pass Court, Concord, CA, 925-927-6630, shall conduct all final cathodic protection test reports at the expense of the Developer/Contractor.
27. Install a ball shut-off valve and box on customer's side after backflow device for new construction as required by the City of Oakley's specifications.
28. The Developer/Contractor shall provide the Global Positioning System (GPS) coordinates of all buried fittings (excluding saddles and corporation stops) and all above ground facilities as determined by the District in a shapefile data format as defined by ESRI. GPS coordinates of existing water facilities that are exposed during any construction activity shall also be provided. All GPS coordinates shall be to within an accuracy of ten (10) centimeters and shall include Latitude, Longitude and Elevation.

Updated June 2019

**Diablo Water District General Water Notes
Page 4 of 4**

29. The Contractor shall re-chlorinate and retest any lines that do not pass the first or subsequent round of bacteriological testing or as directed by Diablo Water District.
30. All materials and products shall be NSF 61 certified that are in contact with and potentially in contact with potable water, including surfaces within the air space of the water.
31. Contractors using their water meter for the temporary jumper, must have yearly calibration tests performed and shall submit the report to the District.

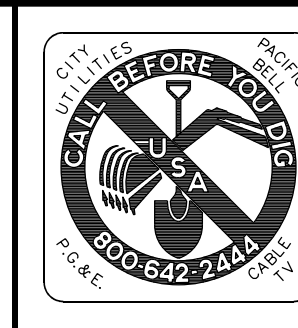
Updated June 2019

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	BY	DATE	CSJ	DATE		REVISIONS	



Date: February 17, 2020
 Scale: None
 Designed: LA
 Drawn: LA
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 Proj. Engr: LA
 File: 15-02

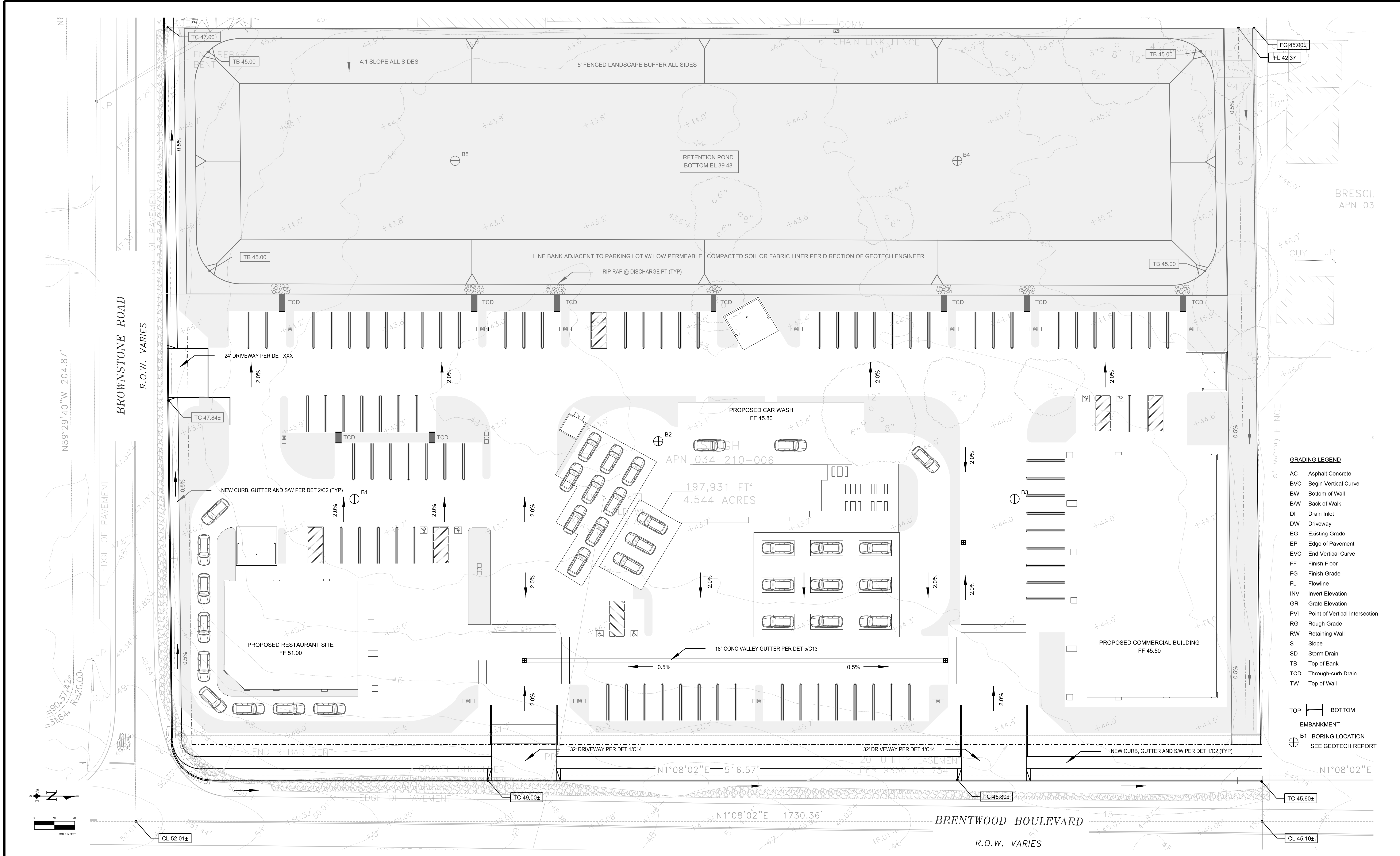
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WATER SYSTEM NOTES

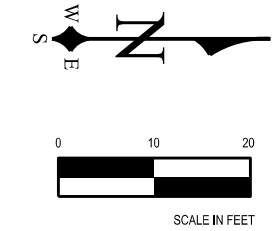
SHEET
 C4
 4 OF 14 SHEETS
 APN: 034-210-006



GRADING LEGEND

AC	Asphalt Concrete
BVC	Begin Vertical Curve
BW	Bottom of Wall
B/W	Back of Walk
DI	Drain Inlet
DW	Driveway
EG	Existing Grade
EP	Edge of Pavement
EVC	End Vertical Curve
FF	Finish Floor
FG	Finish Grade
FL	Flowline
INV	Invert Elevation
GR	Grate Elevation
PVI	Point of Vertical Intersection
RG	Rough Grade
RW	Retaining Wall
S	Slope
SD	Storm Drain
TB	Top of Bank
TCD	Through-curb Drain
TW	Top of Wall

TOP BOTTOM
 EMBANKMENT
 B1 BORING LOCATION
 SEE GEOTECH REPORT



BY	DATE	CSJ	DATE	REVISIONS



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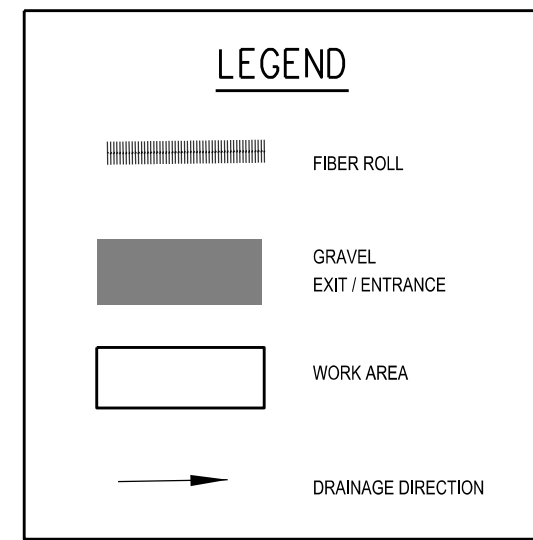
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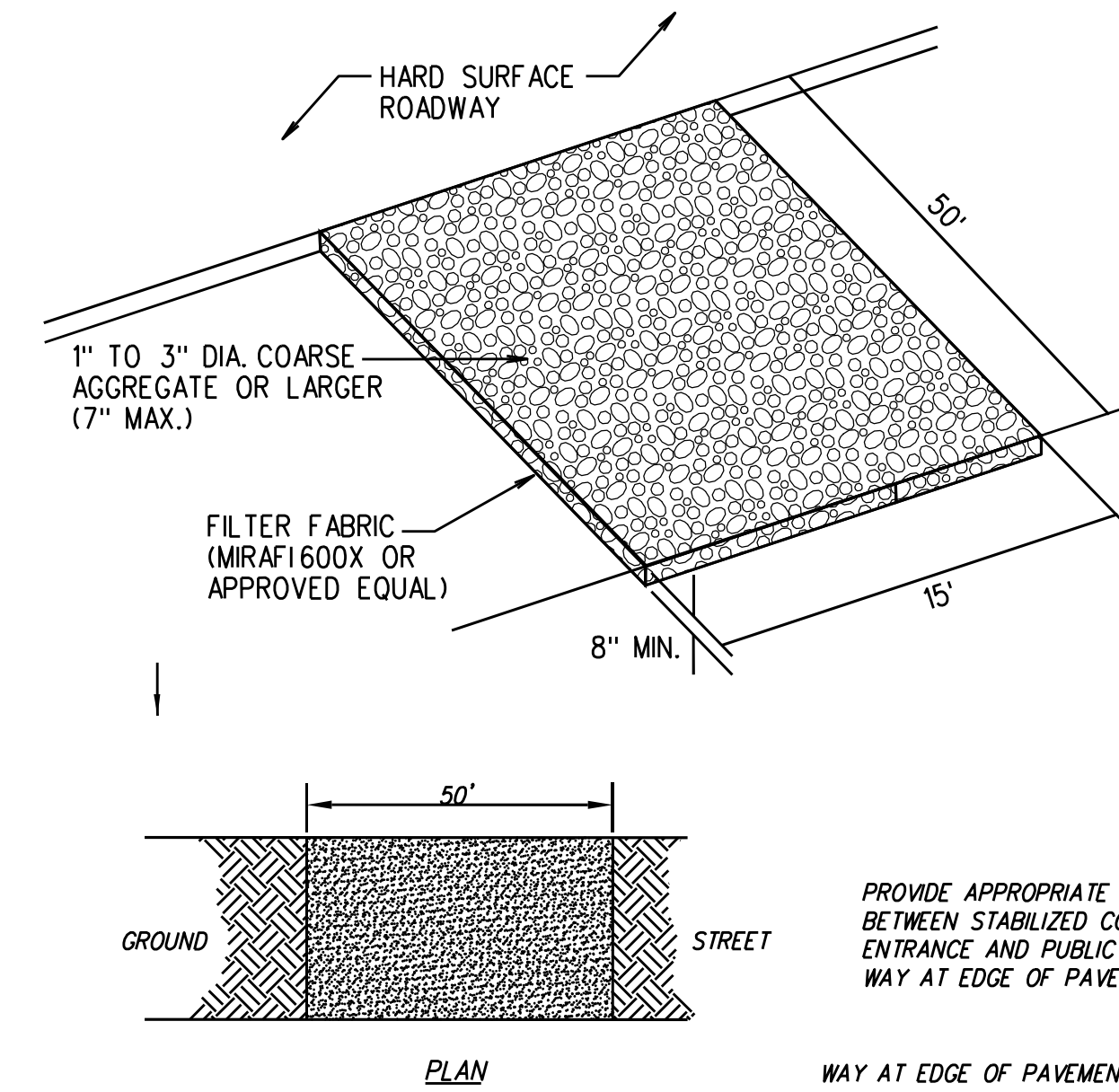
CONCEPTUAL GRADING PLAN

SHEET
C5
 5 OF 14 SHEETS
 APN: 034-210-006

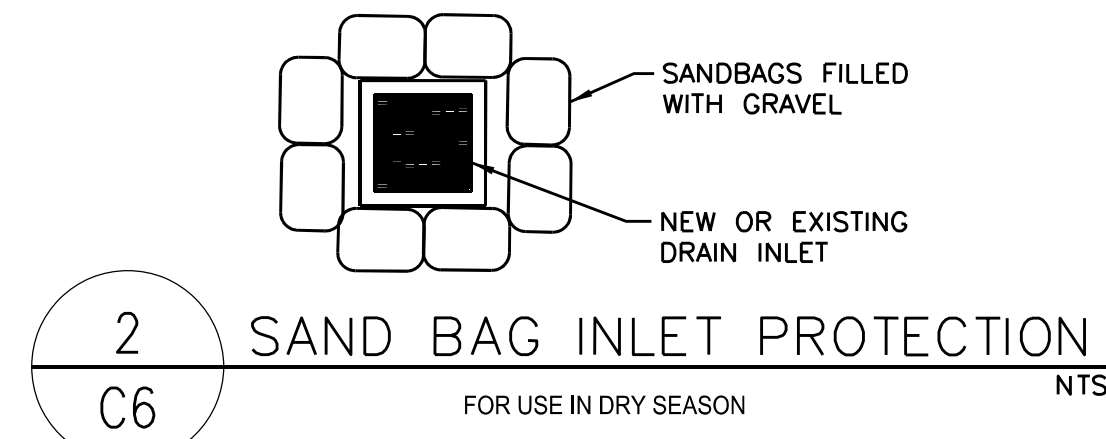
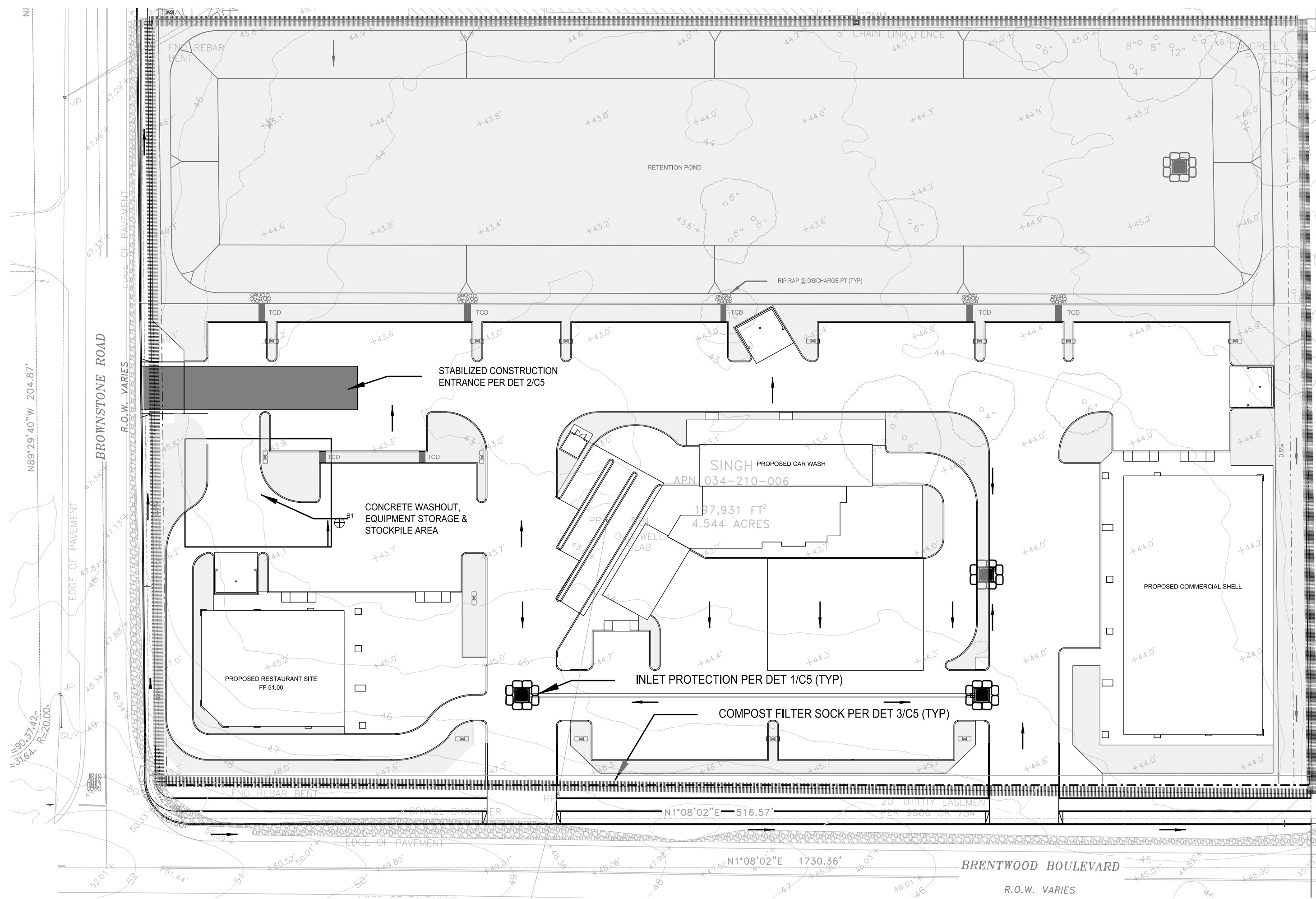


EROSION CONTROL NOTES

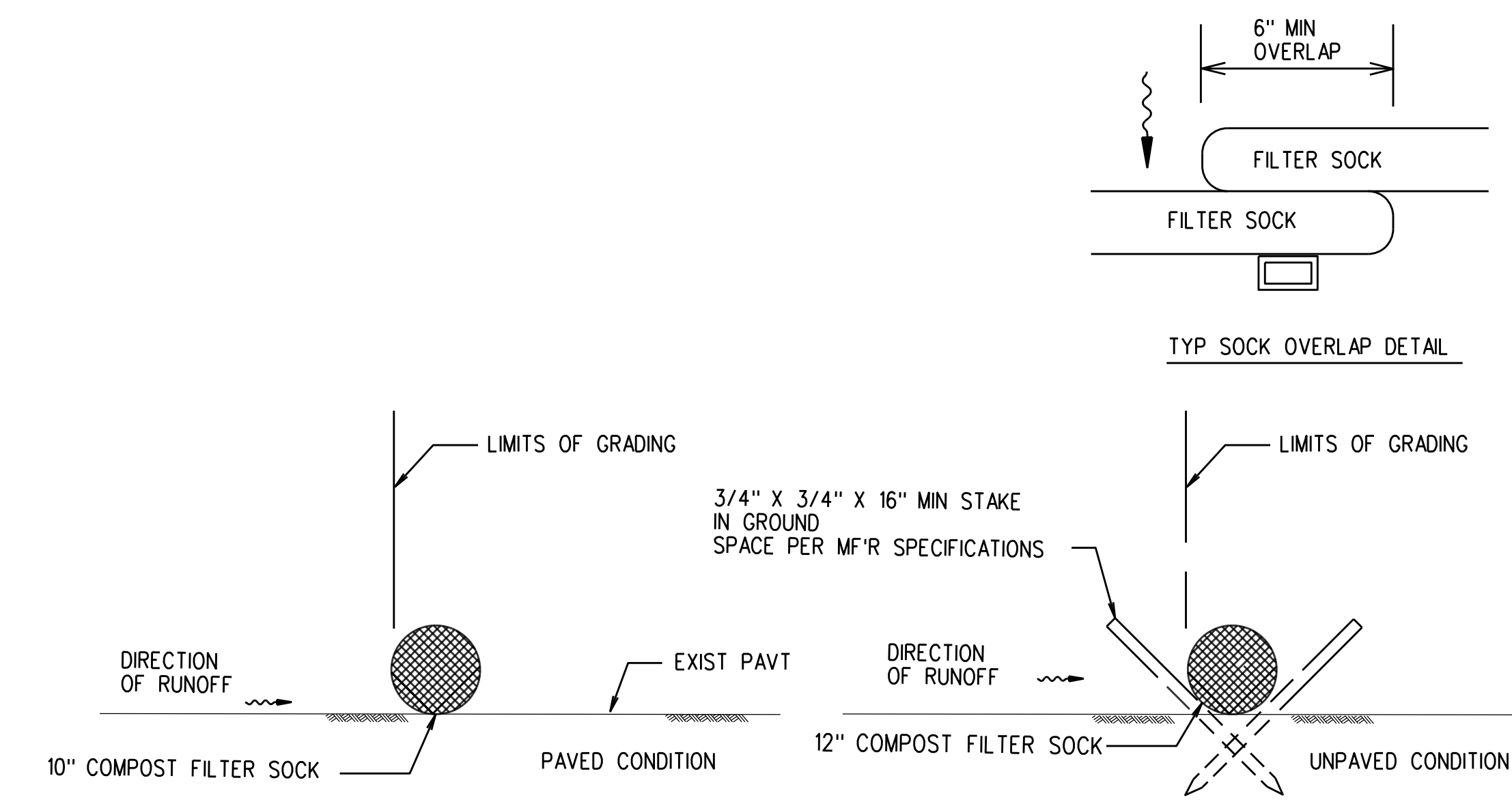
- TEMPORARY EROSION CONTROL DEVICES SHOWN HEREON, WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.
- ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR. ALSO, STREETS SHALL BE CLEANED DAILY.
- AFTER SEWER AND UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS-FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTERLINE OR A CROWNED STREET.
- EXCEPT AS OTHERWISE DIRECTED BY THE INSPECTOR, ALL DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY.
- ALL DEBRIS AND SILT SHALL BE REMOVED WITHIN TWENTY-FOUR (24) HOURS AFTER EACH STORM IN ALL BASINS.
- CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN TO MEET FIELD CONDITIONS WILL BE MADE ONLY WITH APPROVAL OF OR AT THE DIRECTION OF THE AGENT FOR THE RESPONSIBLE PARTY.
- ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE WILL BE MAINTAINED SO THAT SEDIMENT LADEN RUNOFF DOES NOT ENTER THE STORM DRAINAGE SYSTEM ALL YEAR.
- AS STORM DRAIN IMPROVEMENTS ARE CONSTRUCTED, ALL STRUCTURES AND INLET PIPES SHALL BE PROTECTED FROM INFLOW OR SILT BY SILT BAGS AND SAND BAGS PER DETAILS.
- CONTRACTOR SHALL HAVE TOOLS, EQUIPMENT, AND MATERIALS TO PROVIDE EROSION CONTROL MEASURE MADE NECESSARY BY A CONSTRUCTION OPERATION ON THE JOB SITE BEFORE BEGINNING THAT OPERATION.
- ADJACENT PROPERTIES SHALL BE PROTECTED FROM STORM WATERS, MUD, SILT, ETC. ON A DAILY BASIS.
- DUST CONTROL SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION. THE CONTRACTOR, WHEN HE OR HIS SUBCONTRACTOR ARE OPERATING EQUIPMENT ON-SITE, SHALL PREVENT THE FORMATION OF ANY AIRBORNE NUISANCE BY WATERING AND OR TREATING THE SITE OF THE WORK IN SUCH A MANNER THAT WILL CONFINE DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST FROM HIS OWN ACTIVITIES OR HIS SUBCONTRACTOR'S ACTIVITIES IN PERFORMING THE WORK UNDER HIS CONTRACT AND SHALL BE RESPONSIBLE FOR ANY CITATIONS, FINES, OR CHARGES RESULTING FROM DUST NUISANCE. DUST CONTROL WILL BE PERFORMED ON A DAILY BASIS.



1 STABILIZED CONSTRUCTION ENTRANCE
NTS
C6

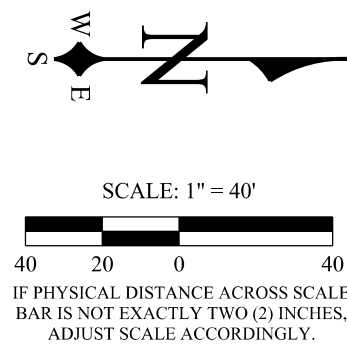


2 SAND BAG INLET PROTECTION
NTS
C6
FOR USE IN DRY SEASON



3 DETAIL-COMPOST FILTER SOCK
NTS
C6

NOTES FOR COMPOST FILLED FILTER SOCKS:
1. MAY BE USED IN LIEU OF SILT FENCE FOR RUNOFF CONTROL
2. BAGS SHALL BE OVERLAPPED BY 2' MIN
3. COMPOST SHALL NOT CONTAIN BIOSOLIDS & SHALL BE CONSISTENT W/ EPA STDS.



NO.	BY	DATE	CSJ	DATE	REVISIONS



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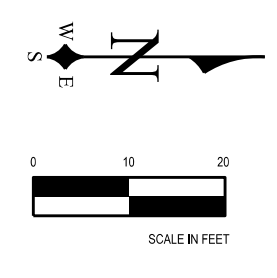
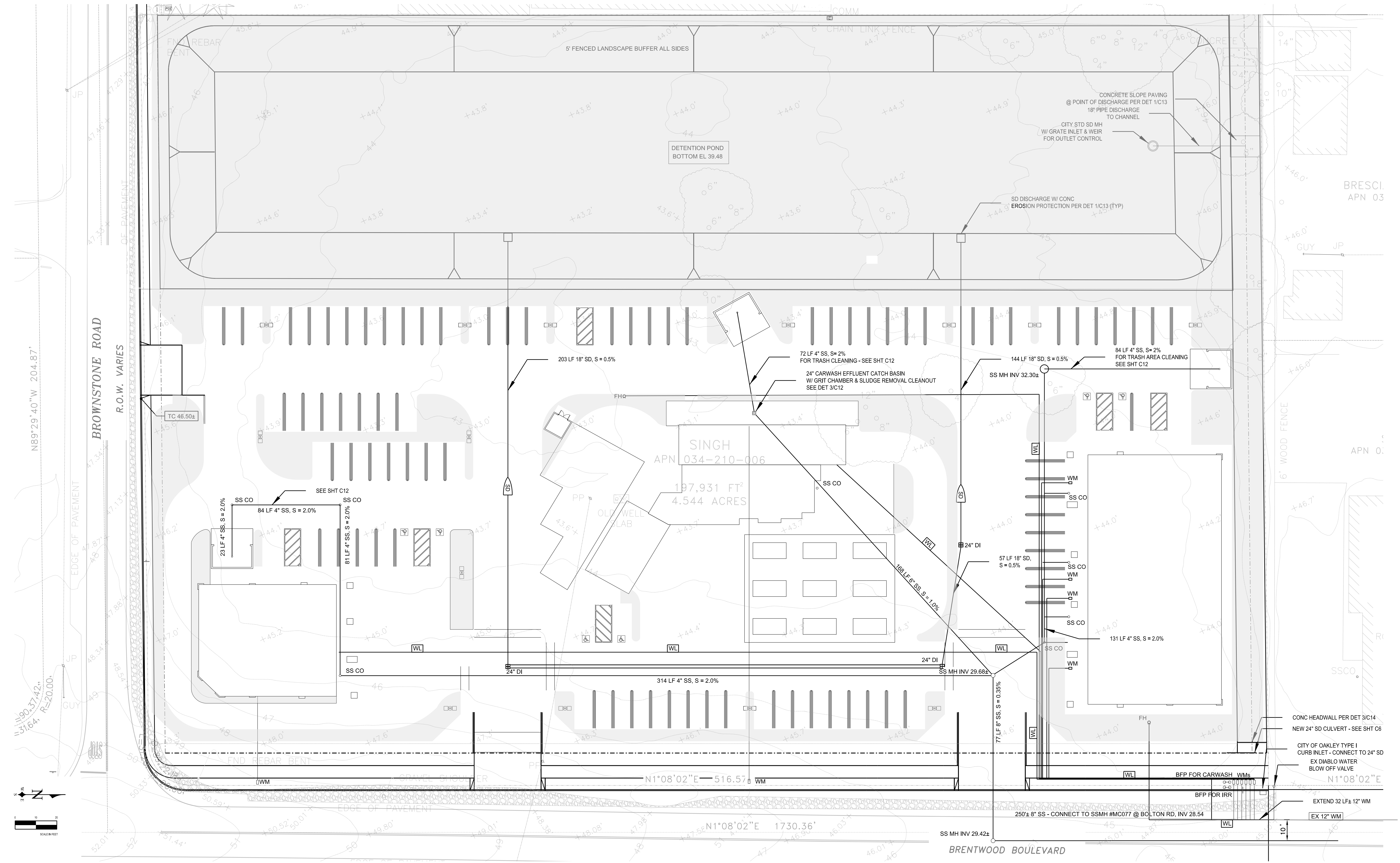
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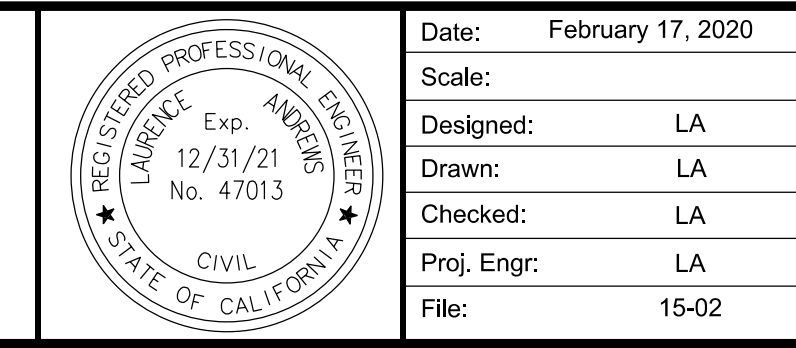
BROWNSTONE & MAIN

CONCEPTUAL EROSION CONTROL PLAN

SHEET
C6
6 OF 14 SHEETS
APN: 034-210-006



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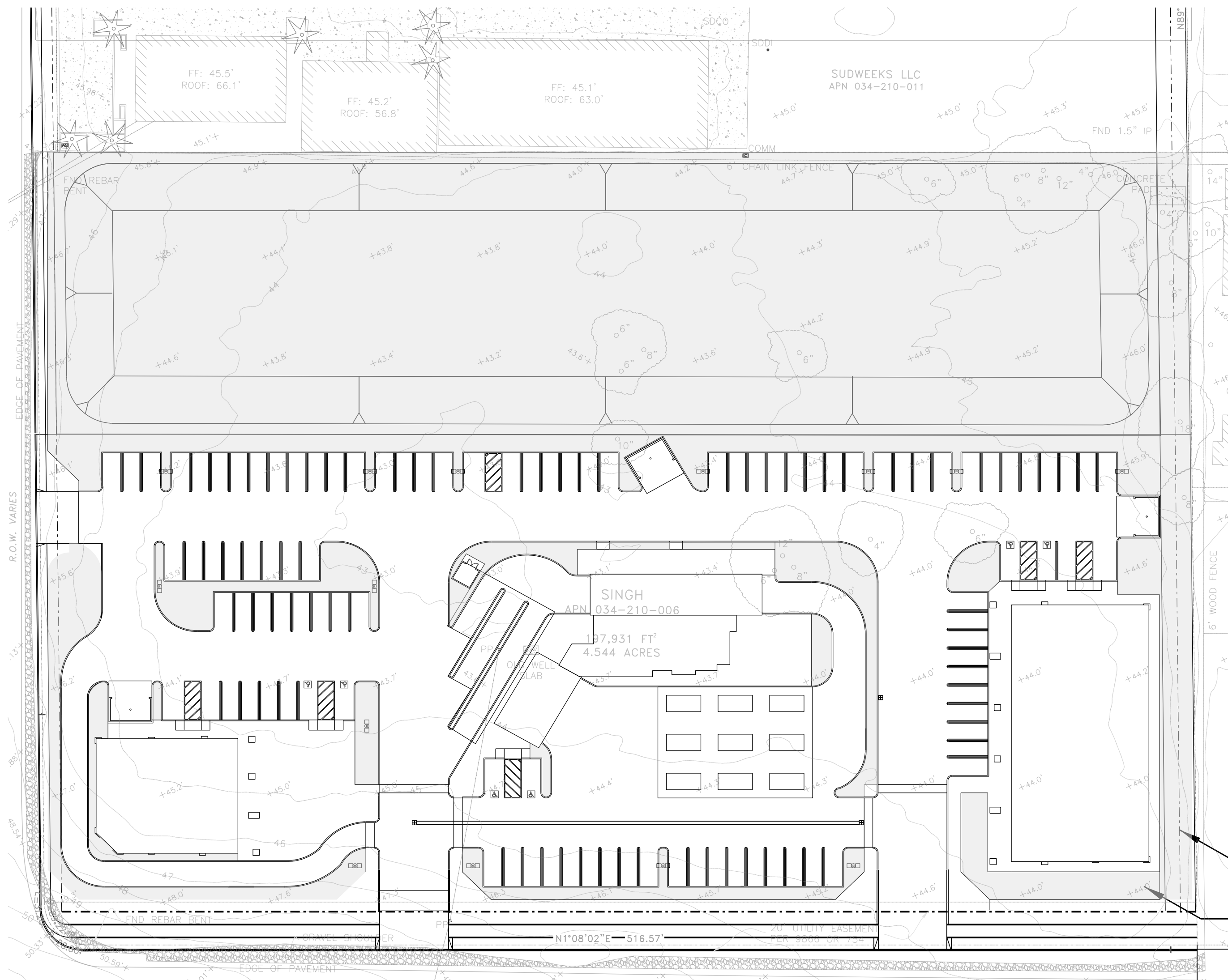
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 CONCEPTUAL UTILITY PLAN

SHEET
 C7
 7 OF 14 SHEETS
 APN: 034-210-006



BROWNSTONE & MAIN

DRAINAGE CALCULATIONS

Run-on Flow Calculations

Upstream Drainage Basin	Area (ac)	c	f	i	Q
A (residential)	9.84	0.25	1.25	3.4	10.46
B (church)	1.06	0.9	1.25	3.4	4.05
C (Pasture)	1.78	0.2	1.25	3.4	1.51
TOTAL	12.68				16.02

Project Flow Calculations

Existing flow					
D1 - pond area	1.89	0.25	1.25	3.4	2.01
D2 - development site area	2.68	0.25	1.25	3.4	2.85
TOTAL	4.57				4.86

Developed Flow Calculations					
D1 - pond area	1.89	0.25	1.25	3.4	2.01
D2 - development site area	2.68	0.9	1.25	3.4	10.25
TOTAL	4.57				12.26

Total existing and proposed flow offsite: 20.88

Estimated existing 100 yr volume	$V = 4.86 \times 60 \text{ sec/min} \times 60 \text{ min/hr} \times 24/2 \times 67$	140,668	cu ft
Estimated developed 100 yr volume	$V = 12.26 \times 60 \text{ sec/min} \times 60 \text{ min/hr} \times 24/2 \times 68$	354,853	cu ft
Increase		214,186	cu ft

Approximate area available area for pond	60,863	sq ft
Top of pond elevation	45.0	ft
Initial trial depth for pond	3.52	ft
Freeboard	2.00	ft
Total depth	5.52	ft
Elevation of flow line of channel	42.37	ft
Initial elevation of bottom of pond	39.48	ft
Depth of pond below flow line of channel	2.89	ft
Storage volume of pond below channel elevation	175,842	cu ft
Additional storage needed above channel flow line	38,344	cu ft

NOTE: Above calculations are conceptual only, based on 2/3 of a triangular 100 year - 24 hour hydrograph. Once a site plan is vetted, plans will be submitted to Contra Costa County Flood Control Agency to develop a site-specific hydrograph for final design of retention pond and outlet structure.

BROWNSTONE & MAIN, OAKLEY, CA

STORM RUNOFF TABULATION

EXISTING IMPERVIOUS SURFACES	
LOCATION	AREA (SF)
SITE	0
TOTAL	0

NEW IMPERVIOUS SURFACES	
LOCATION	
HARDSCAPE	86,400.00
BUILDINGS	17,314.00
TOTAL	103,714.00

EXISTING PERVIOUS SURFACES	
LOCATION	
SITE	198,025.78

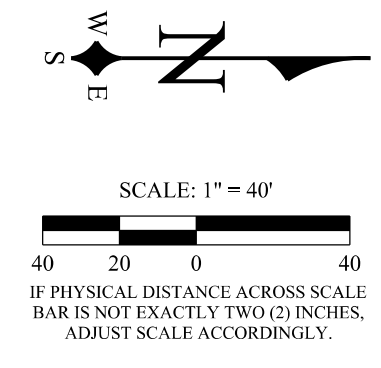
PROPOSED PERVIOUS SURFACES	
LANDSCAPE AREAS	
LANDSCAPE AREAS	4,440.00
POND	87,471.00
CHANNEL	4,942.00
TOTAL	96,853.00

NET INCREASE IN IMPERVIOUS SURFACES	96,853.00
MINIMUM TREATMENT REQUIRED (4%)	3,874.12
ACTUAL TREATMENT PROVIDED	92,413.00

TREATMENT METHOD: DETENTION POND AND VEGETATED CHANNEL

- WATER POLLUTION AND GOOD HOUSEKEEPING NOTES**
- MATERIALS POLLUTION PREVENTION PLAN.
 - APPLICABLE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION. OTHER MATERIALS AND SUBSTANCES NOT LISTED BELOW SHALL BE ADDED TO THE INVENTORY.

CONCRETE	PETROLEUM BASED PRODUCTS
DETERGENTS	CLEANING SOLVENTS
PAINTS (ENAMEL AND LATEX)	WOOD
METAL STUDS	MASONRY BLOCK
 - MATERIAL MANAGEMENT PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF. AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCT AS IS REQUIRED TO DO THE JOB.
 - ALL MATERIALS STORED ONSITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS.
 - PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
 - SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
 - WHENEVER POSSIBLE, A PRODUCT SHALL BE USED UP COMPLETELY BEFORE DISPOSING OF THE CONTAINER.
 - MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
 - THE CONTRACTOR SHALL CONDUCT INSPECTIONS TO ENDURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.
 - ONSITE AND OFFSITE PRODUCTS SPECIFIC PLAN
 - THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ONSITE:
 - PETROLEUM BASED PRODUCTS: ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED ANY ASPHALT SUBSTANCE USED ONSITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.
 - PAINTS: ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL NOT BE DISCHARGED TO THE CITY DRAINAGE SYSTEM BUT SHALL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

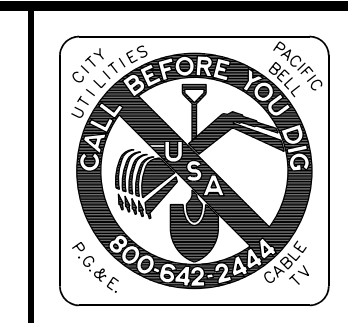


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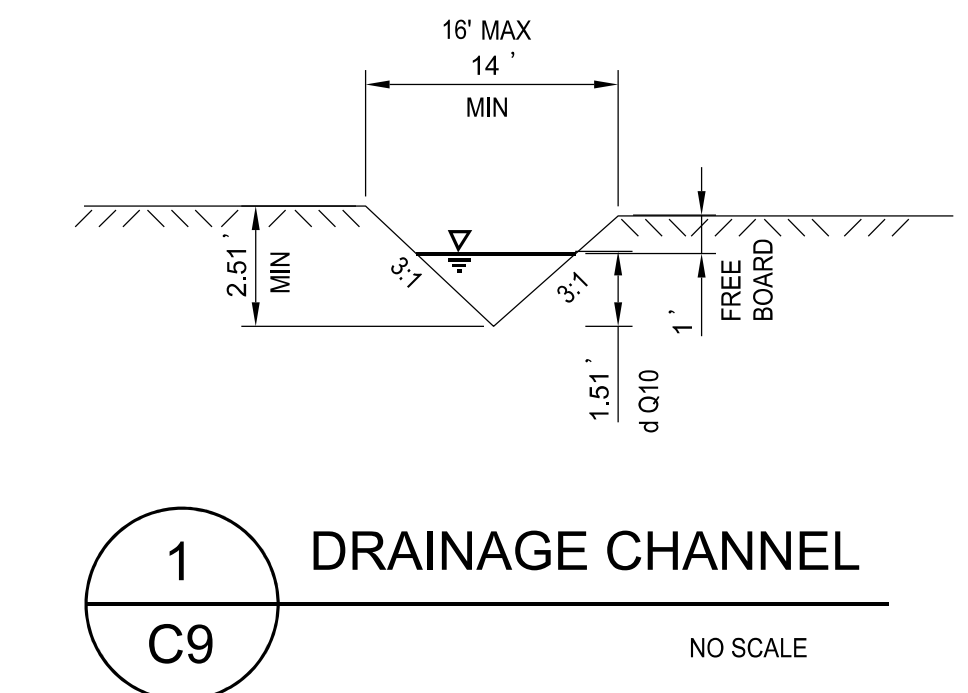
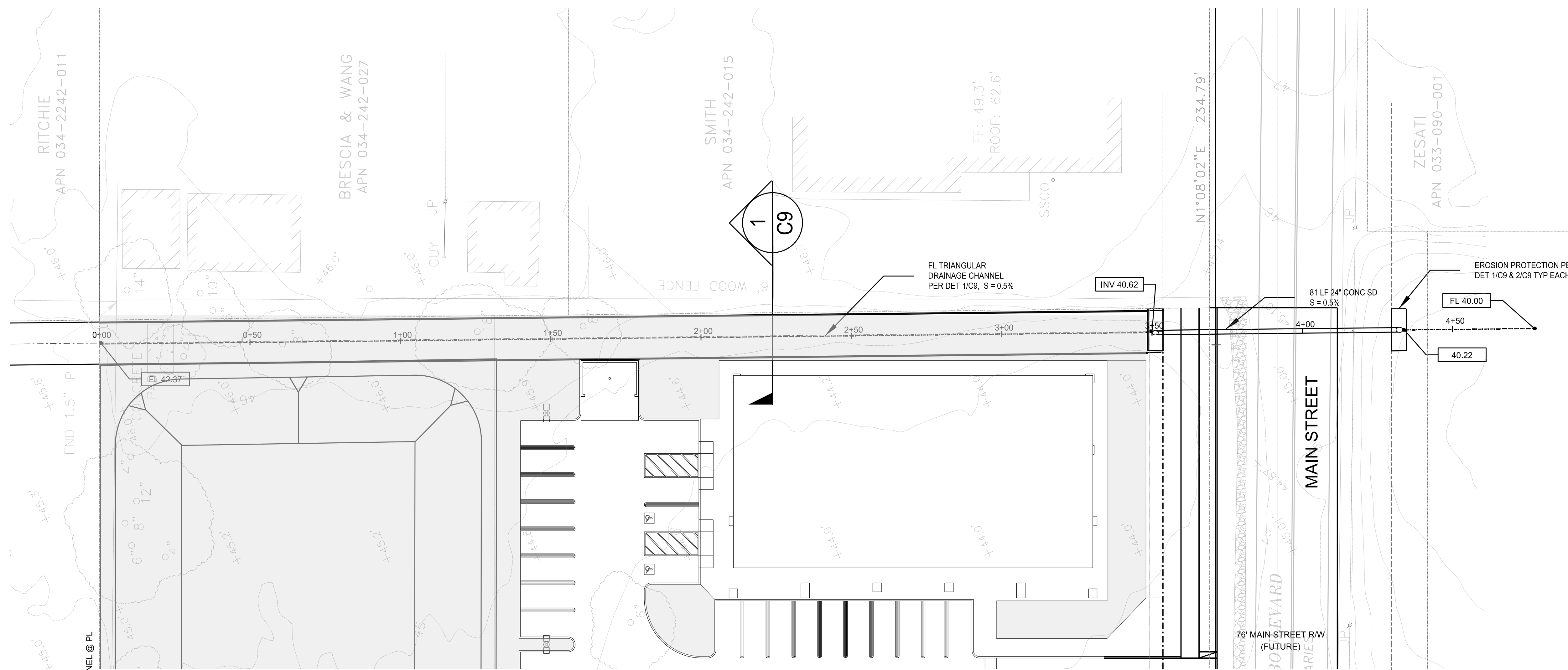
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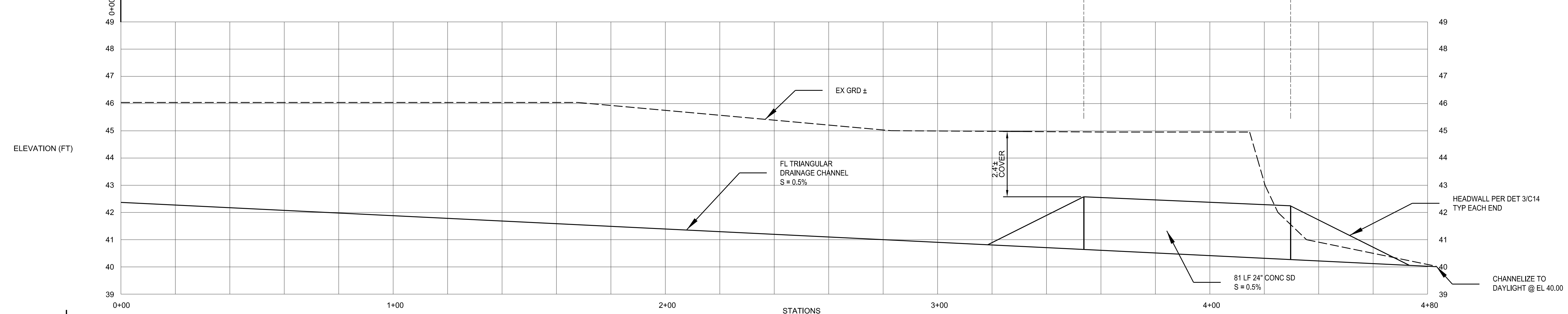
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CONCEPTUAL STORM WATER PLAN

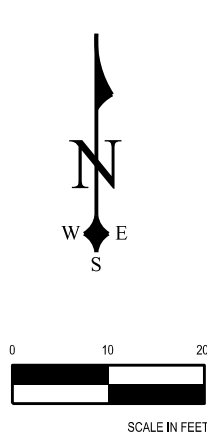


1 DRAINAGE CHANNEL
C9 NO SCALE

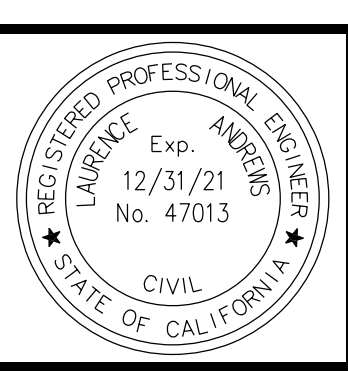
PLAN
SCALE: 1" = 20'



PROFILE
SCALE: 1" = 20' (HORIZ)
SCALE: 1" = 2' (VERT)



BY	DATE	CSJ	DATE	REVISIONS

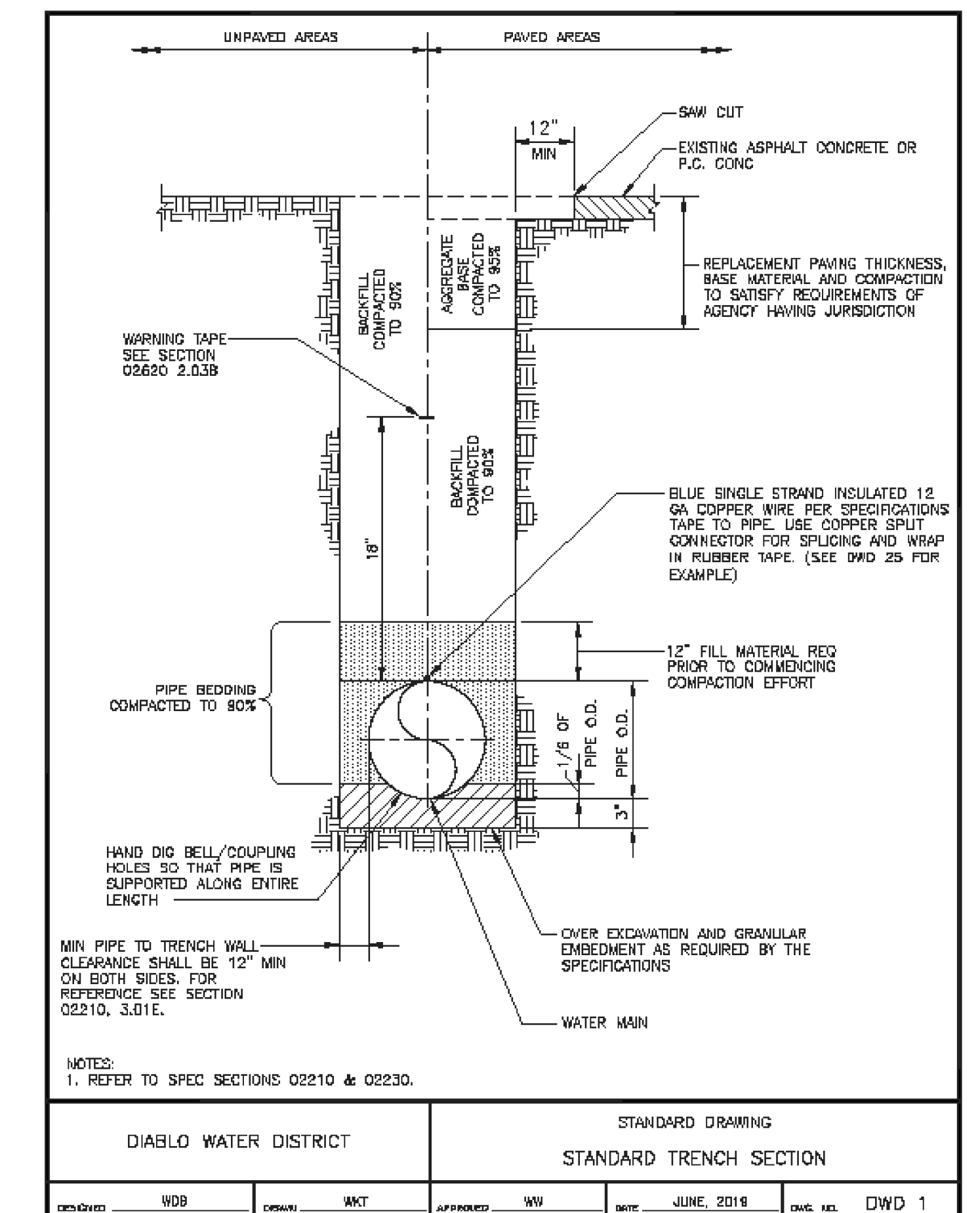
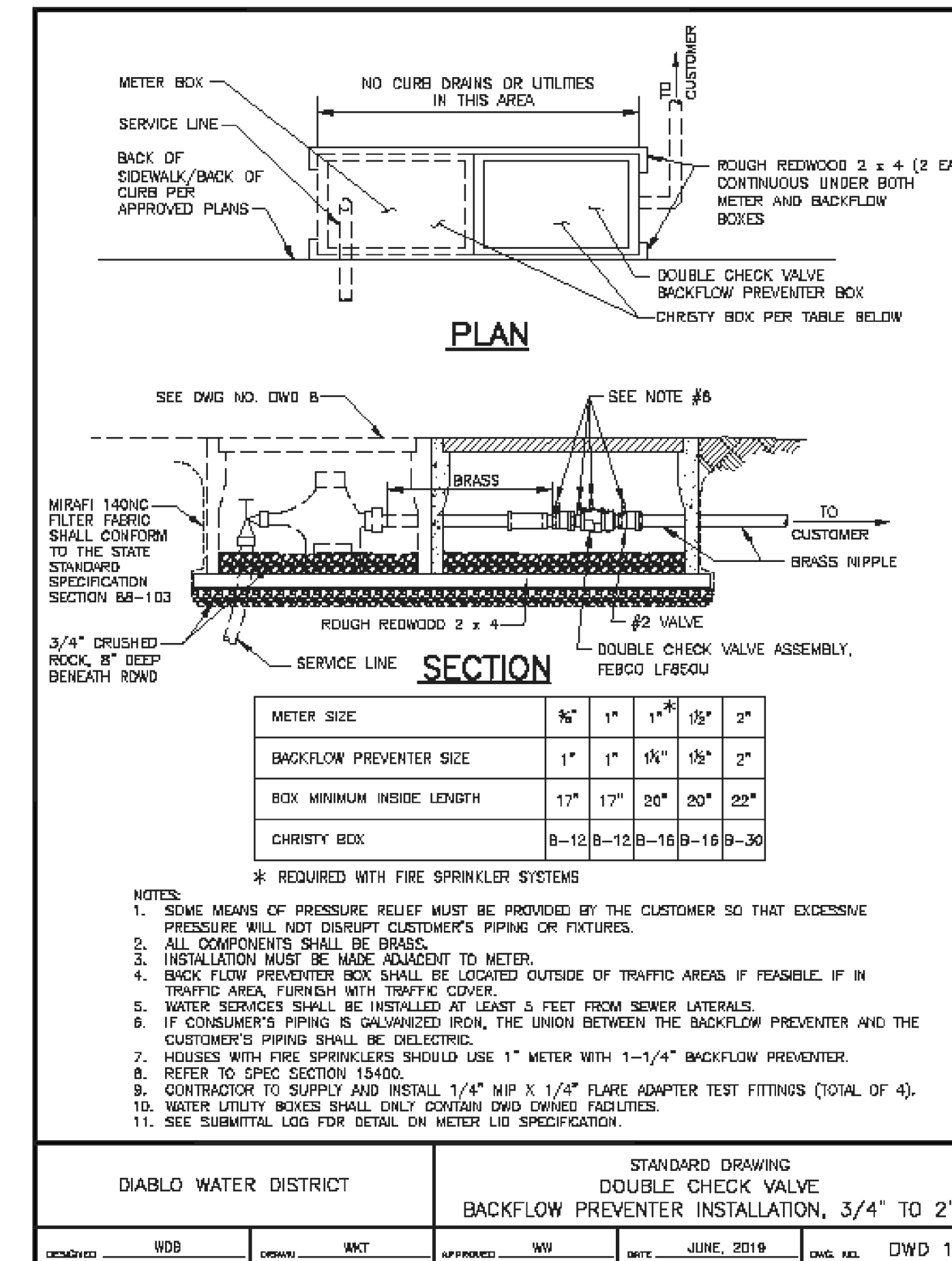
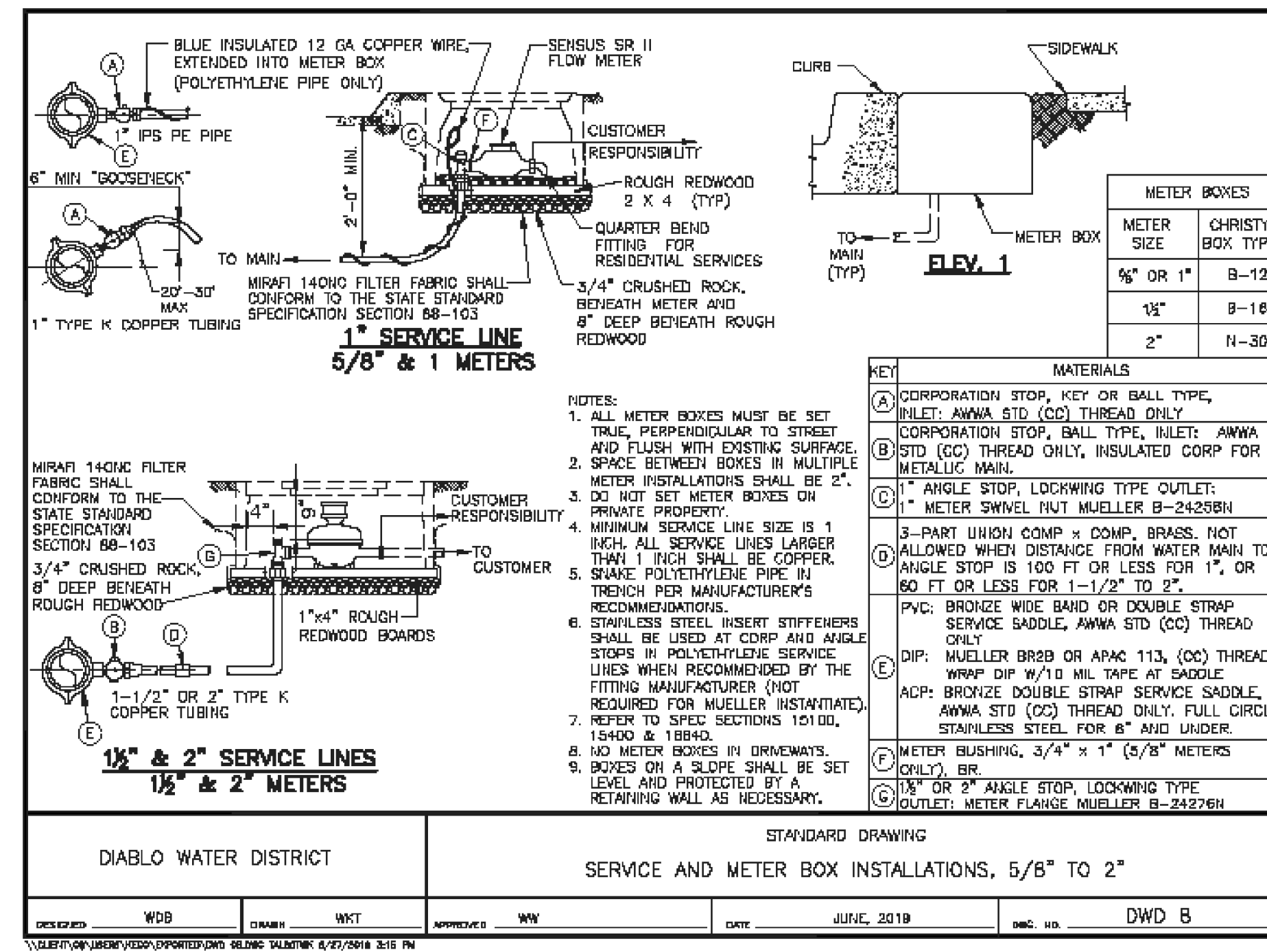
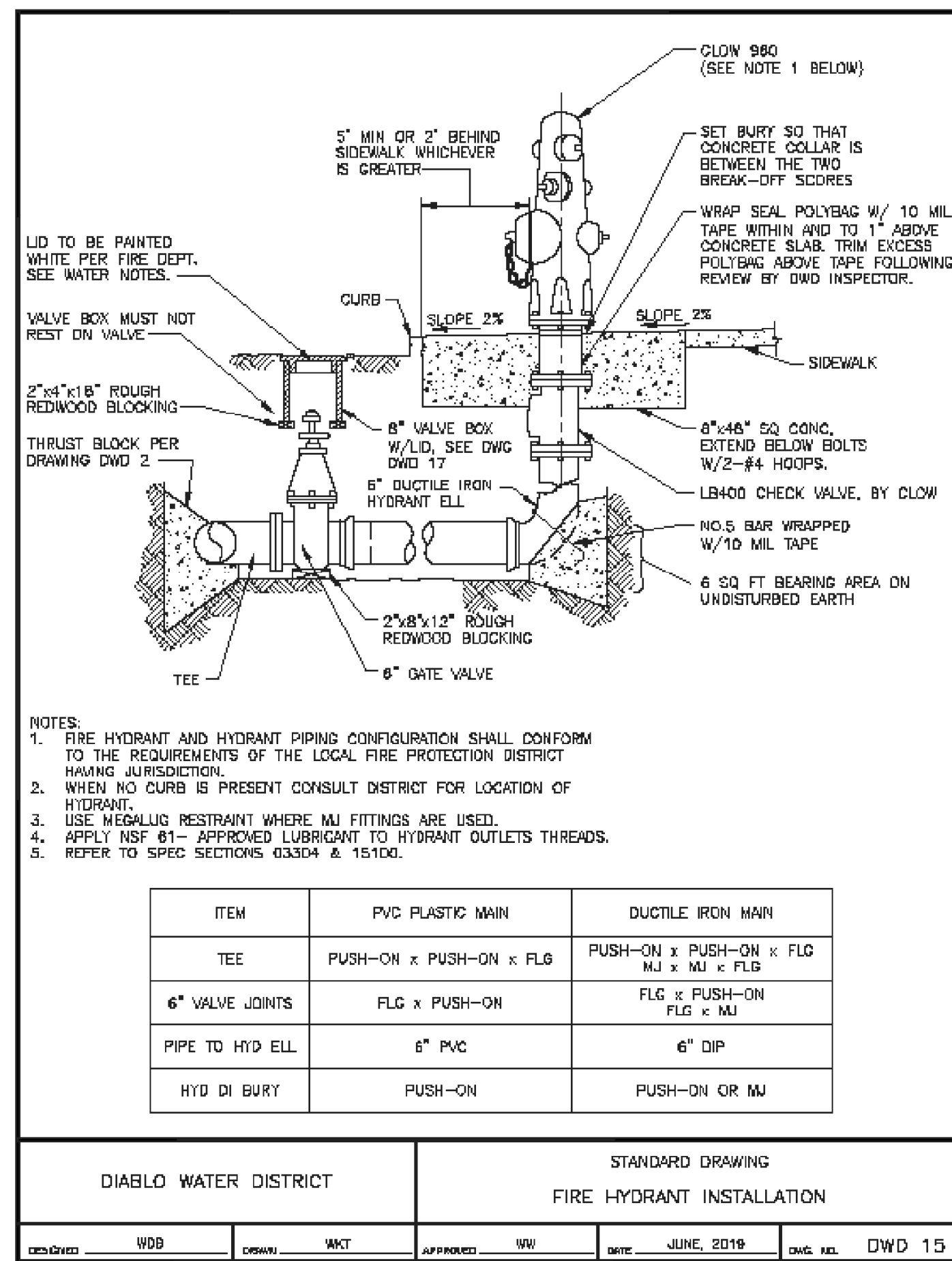


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 OFFSITE STORM DRAIN PLAN & PROFILE



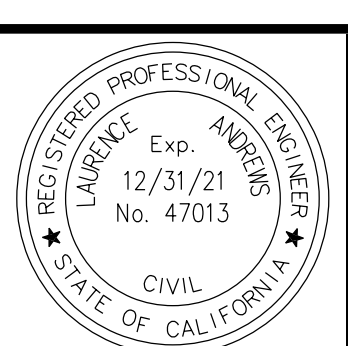
1 TYPICAL FIRE HYDRANT NTS C10

2 TYPICAL WATER METER & SERVICE NTS C10

3 TYPICAL BACKFLOW PREVENTER NTS C10

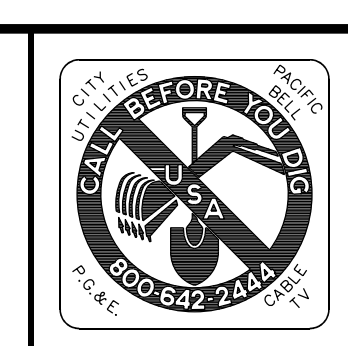
4 WATER LINE TRENCH NTS C10

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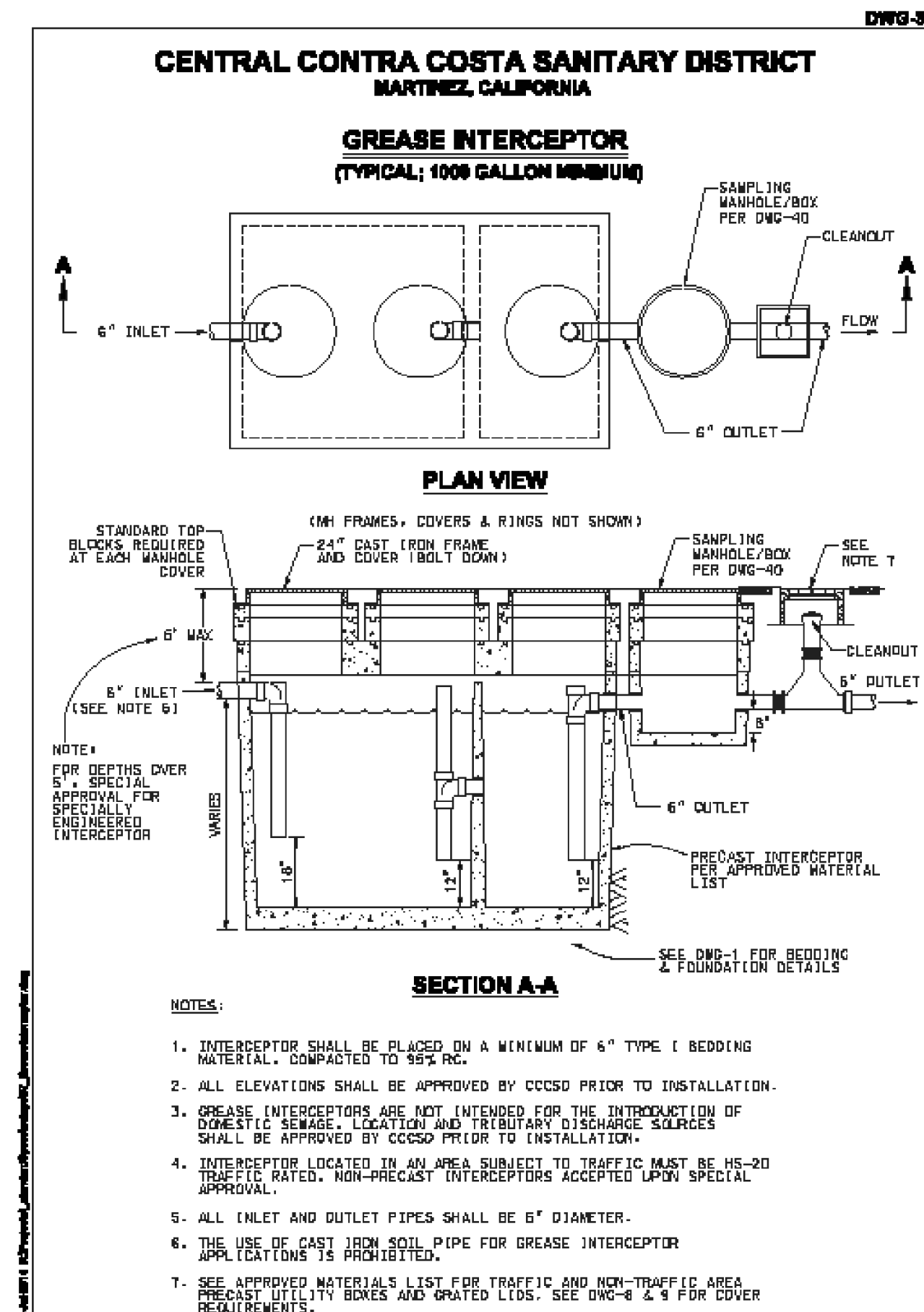
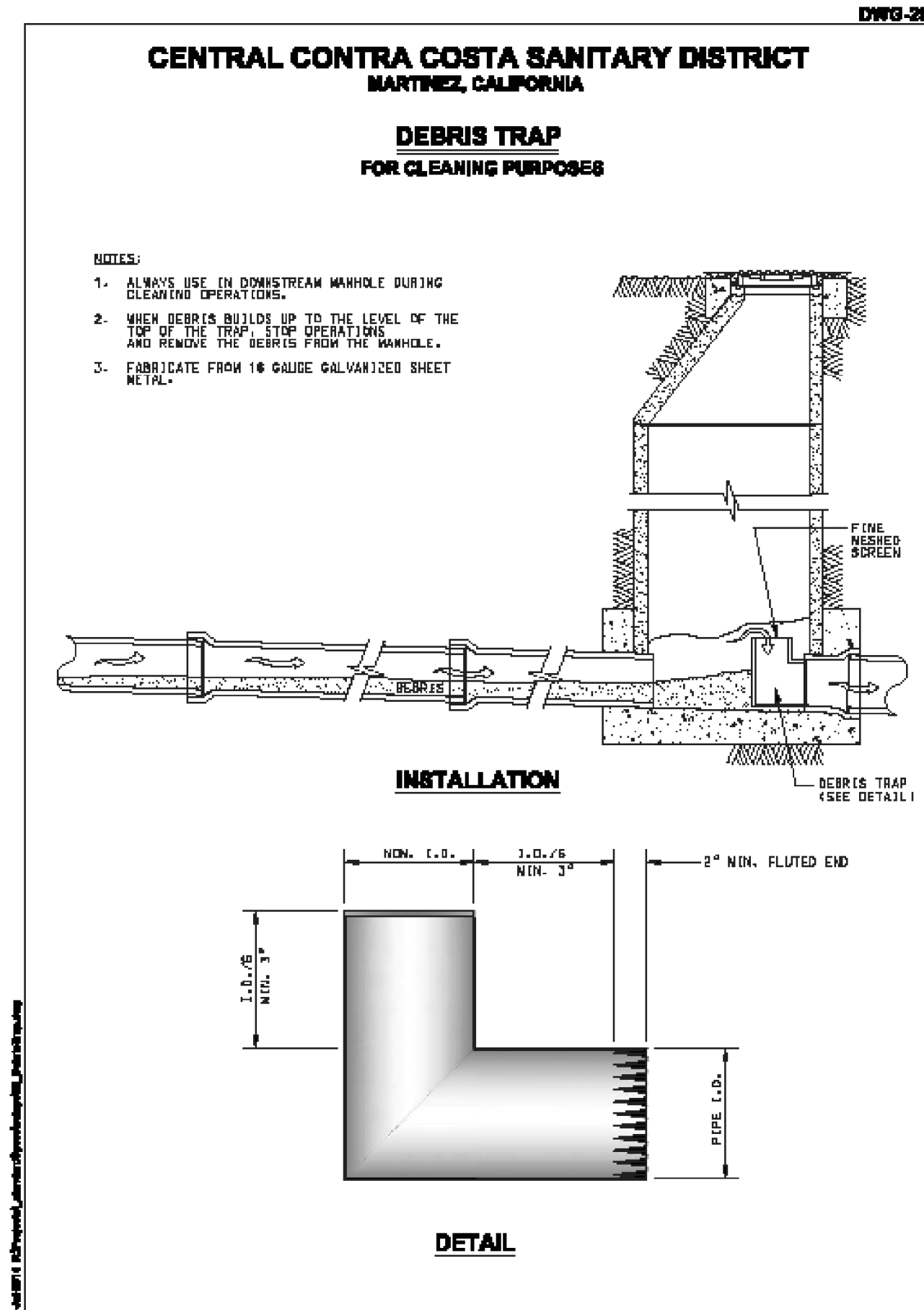
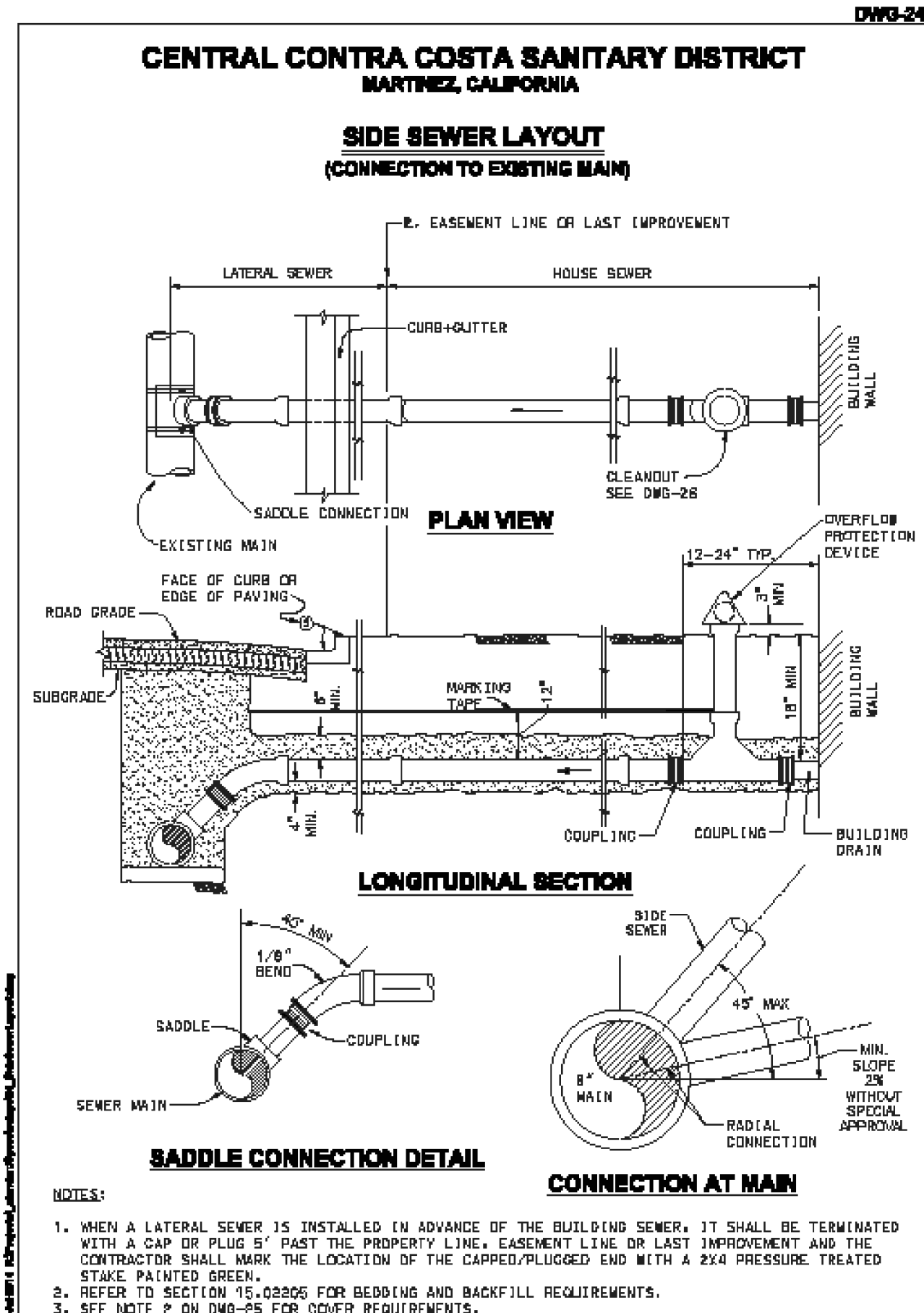
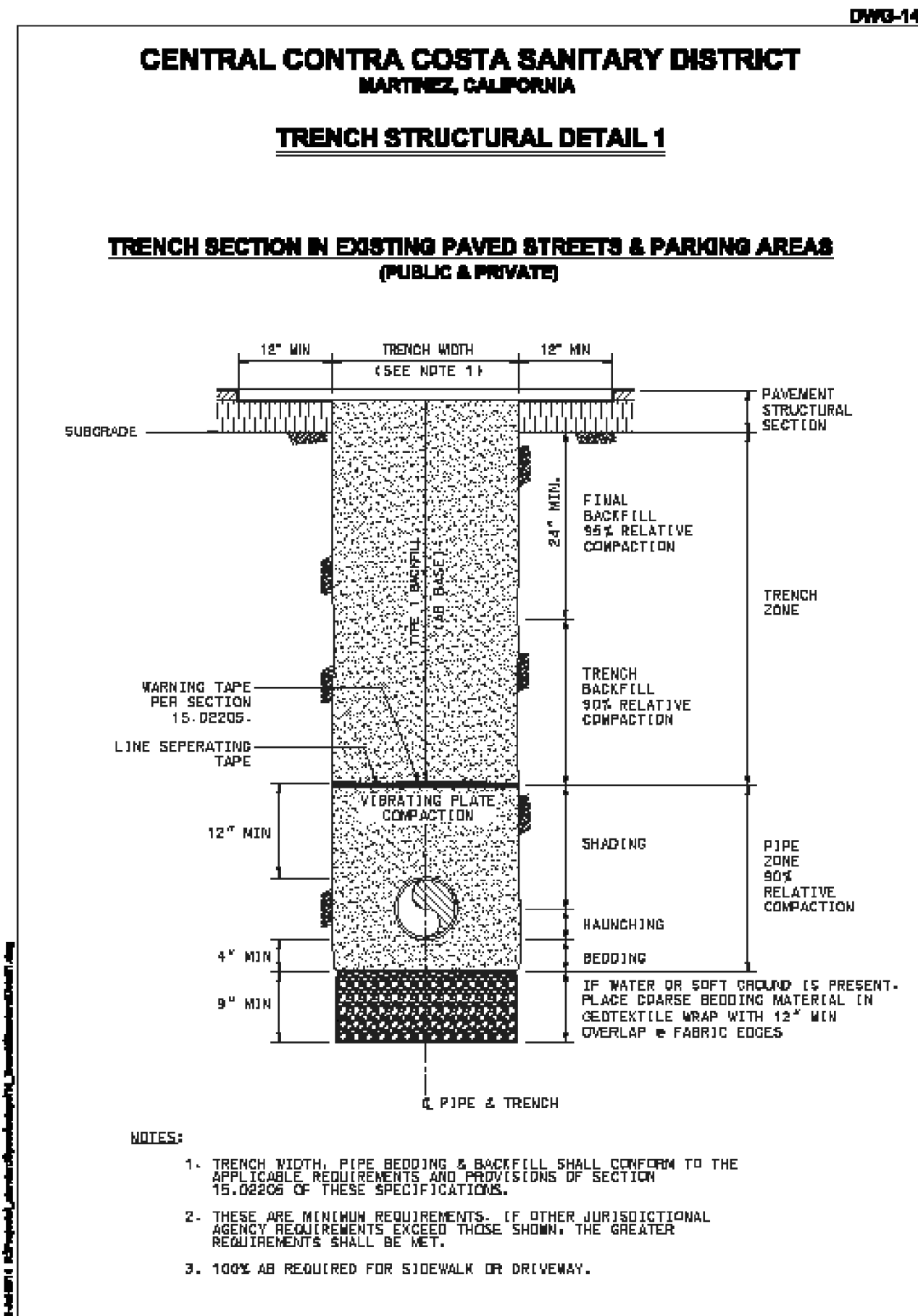
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BROWNSTONE & MAIN
WATER SYSTEM DETAILS

SHEET C10
10 OF 14 SHEETS
APN: 034-210-006



1 SEWER TRENCH DETAIL
C11 NTS

2 TYPICAL SEWER SERVICE LATERAL
C11 NTS

3 CARWASH DEBRIS TRAP
C11 NTS

4 TYPICAL GREASE INTERCEPTOR
C11 NTS

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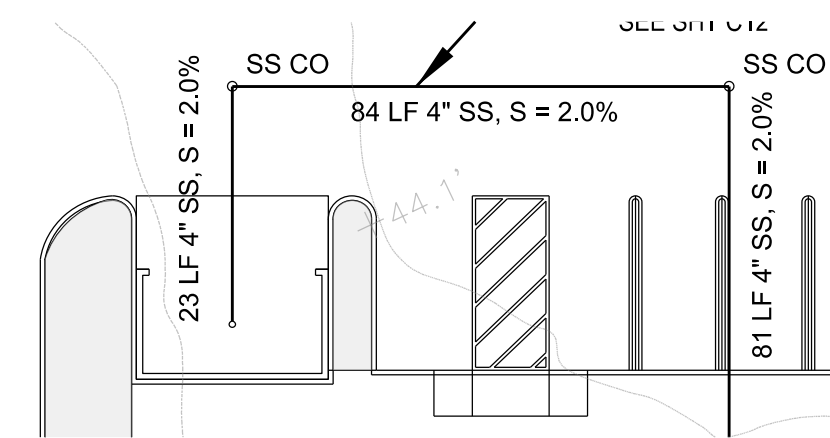
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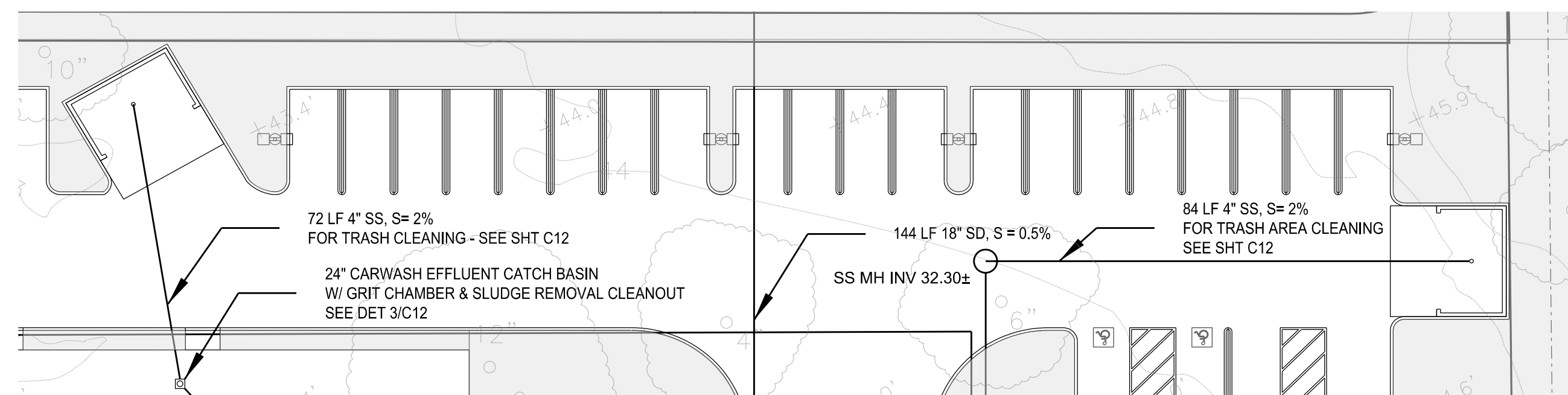


BROWNSTONE & MAIN
 SEWER DETAILS

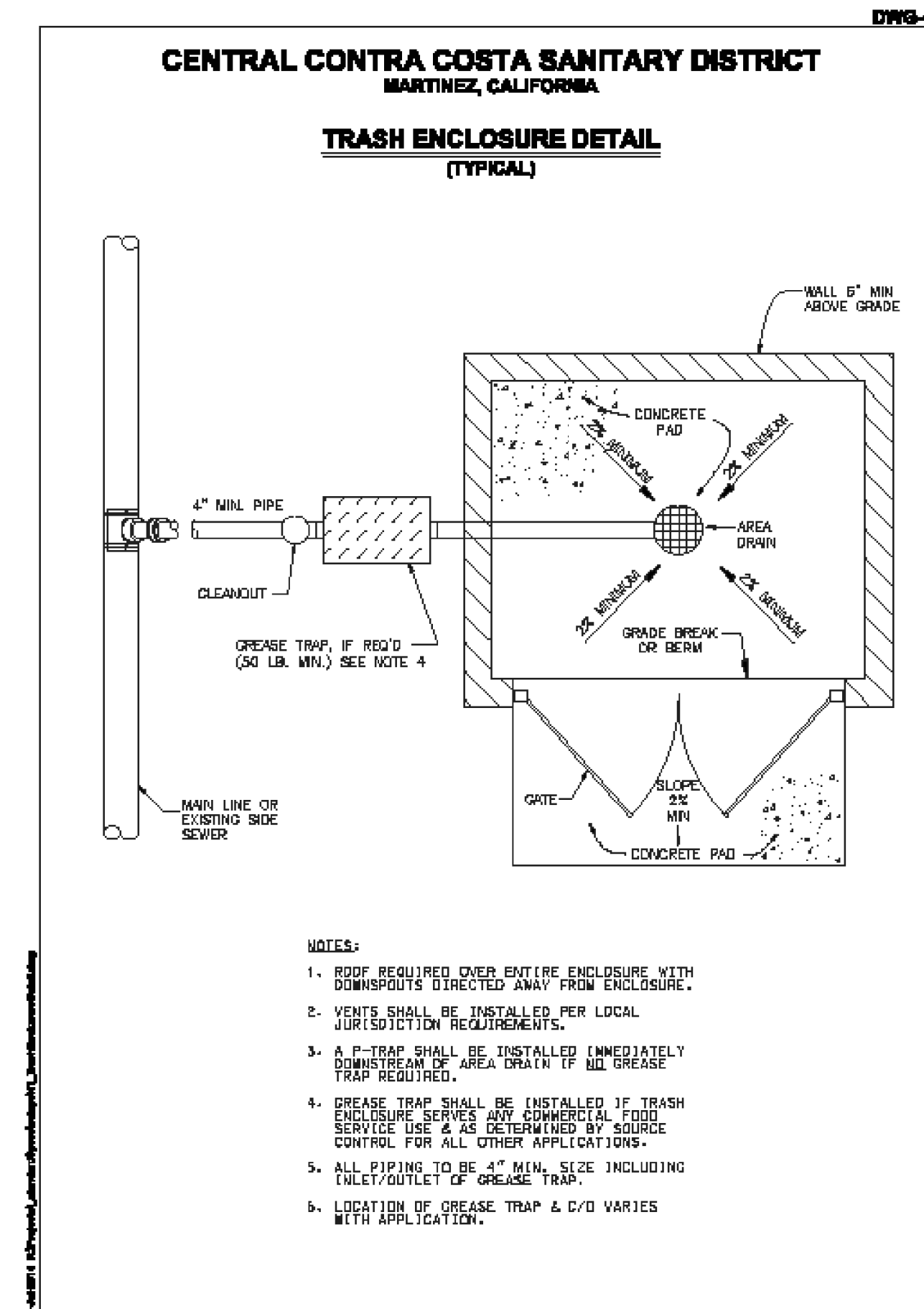
SHEET
 C11
 11 OF 14 SHEETS
 APN: 034-210-006



1 RESTAURANT TRASH ENCLOSURE
C12 SCALE: 1" = 20'

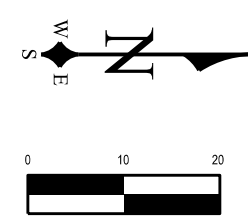


2 CARWASH & OFFICE TRASH ENCLOSURES
C12 1" = 20'



- NOTES:
1. ROOF REQUIRED OVER ENTIRE ENCLOSURE WITH DOWNSPOUTS DIRECTED AWAY FROM ENCLOSURE.
 2. VENTS SHALL BE INSTALLED PER LOCAL JURISDICTION REQUIREMENTS.
 3. A P-TRAP SHALL BE INSTALLED IMMEDIATELY DOWNSTREAM OF AREA DRAIN IF NO GREASE TRAP REQUIRED.
 4. GREASE TRAP SHALL BE INSTALLED IF TRASH ENCLOSURE SERVES ANY COMMERCIAL FOOD SERVICE USE & AS DETERMINED BY SOURCE CONTROL FOR ALL OTHER APPLICATIONS.
 5. ALL PIPING TO BE 4" MIN. SIZE INCLUDING INLET/OUTLET OF GREASE TRAP.
 6. LOCATION OF GREASE TRAP & C/O VARIES WITH APPLICATION.

3 SEWER FOR TRASH ENCLOSURE
C12 NTS

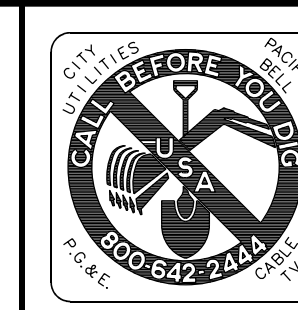


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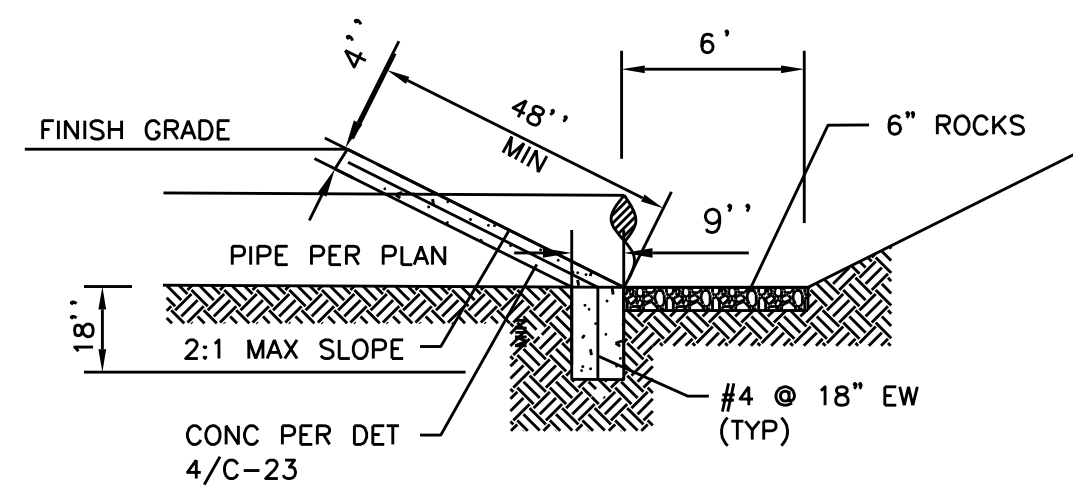
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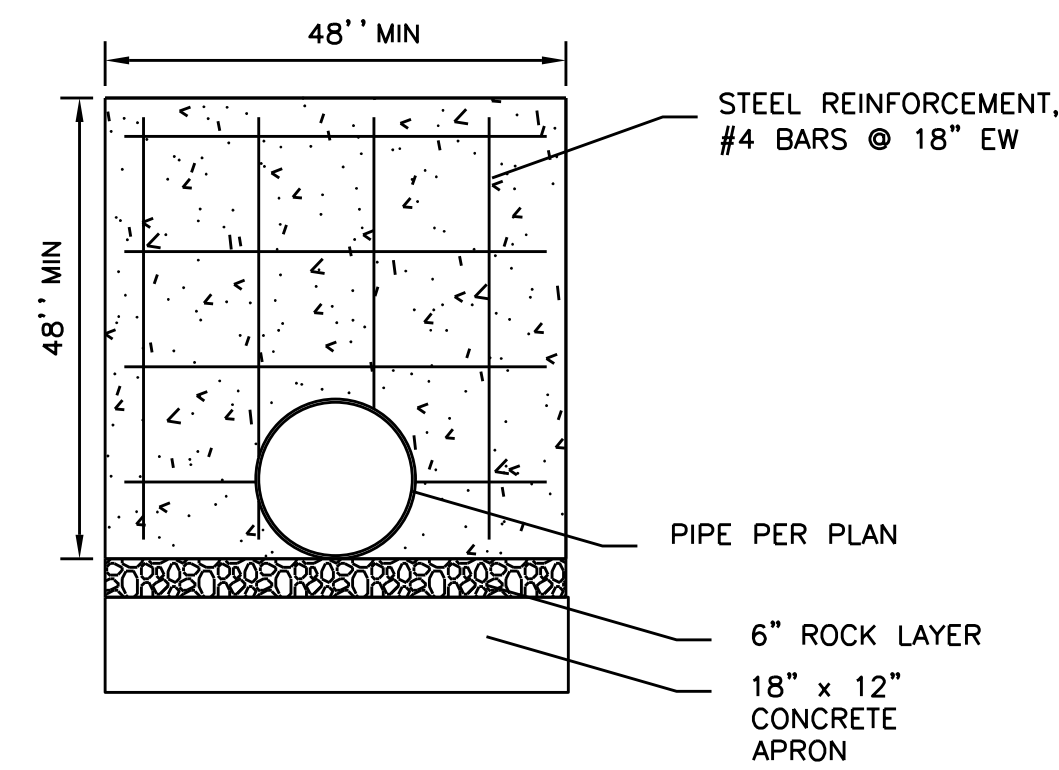
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TRASH ENCLOSURE SEWER DETAILS

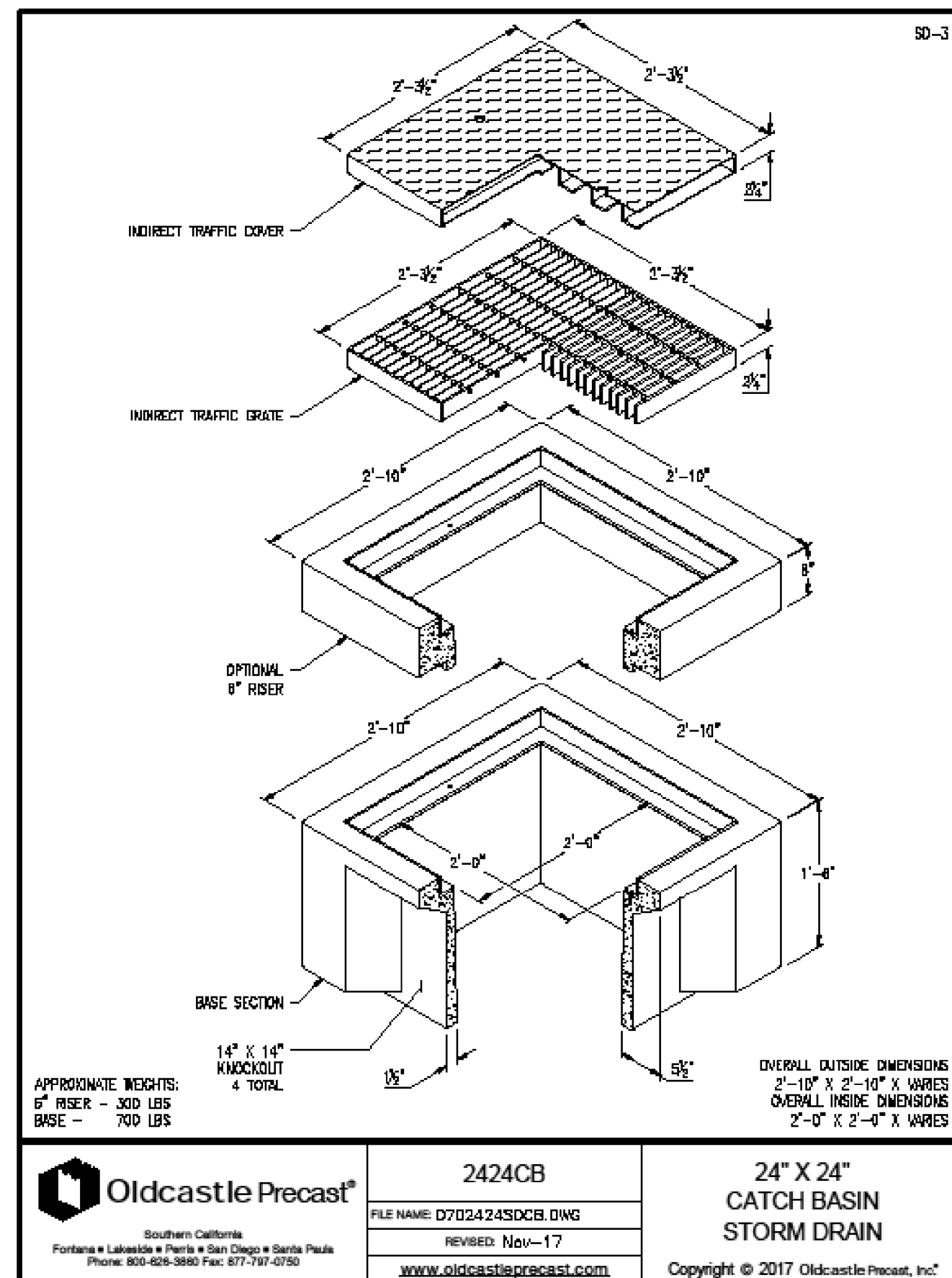
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APN: 034-210-006



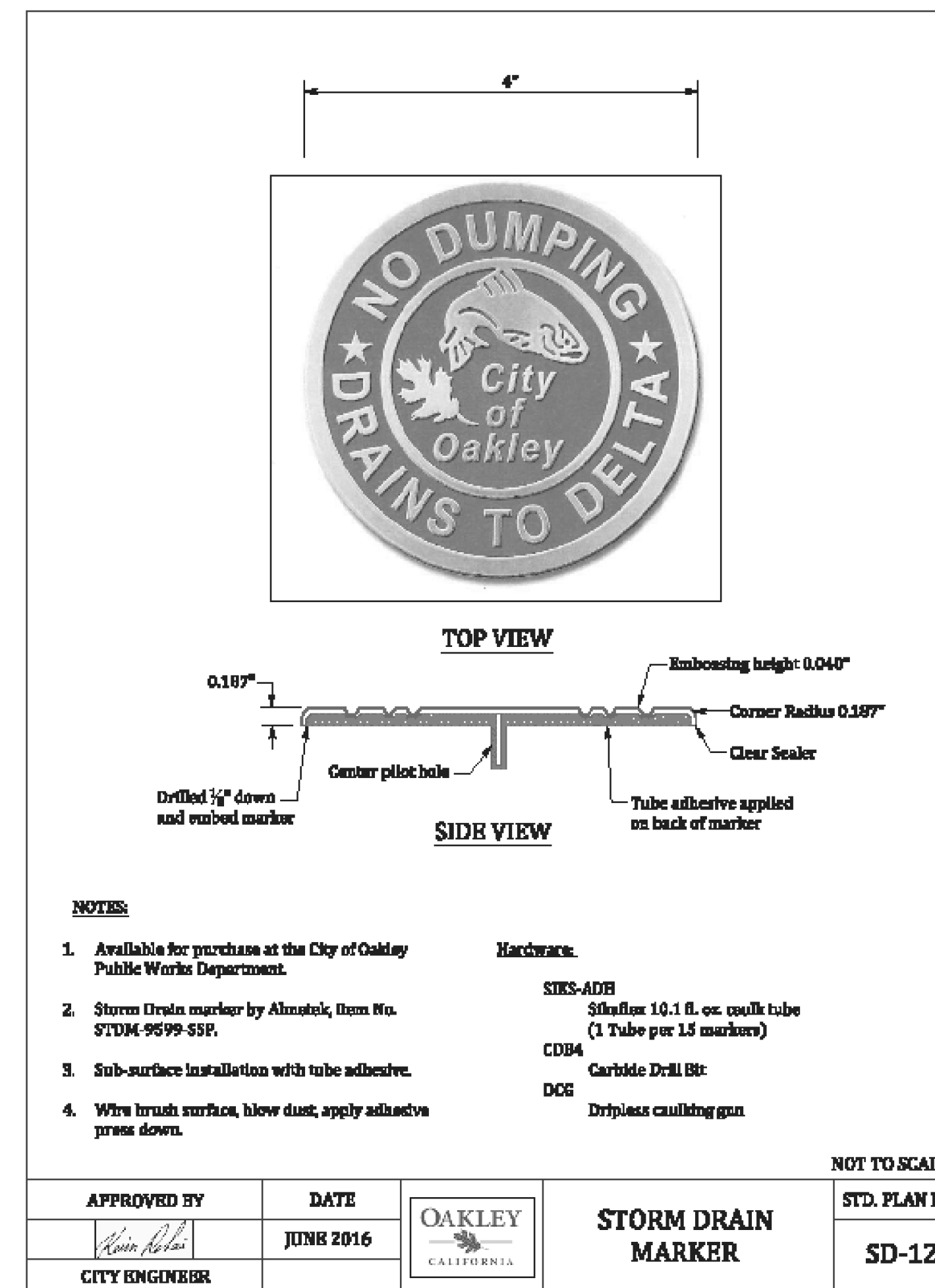
1 CULVERT EROSION PROTECTION DETAIL
C13 NTS



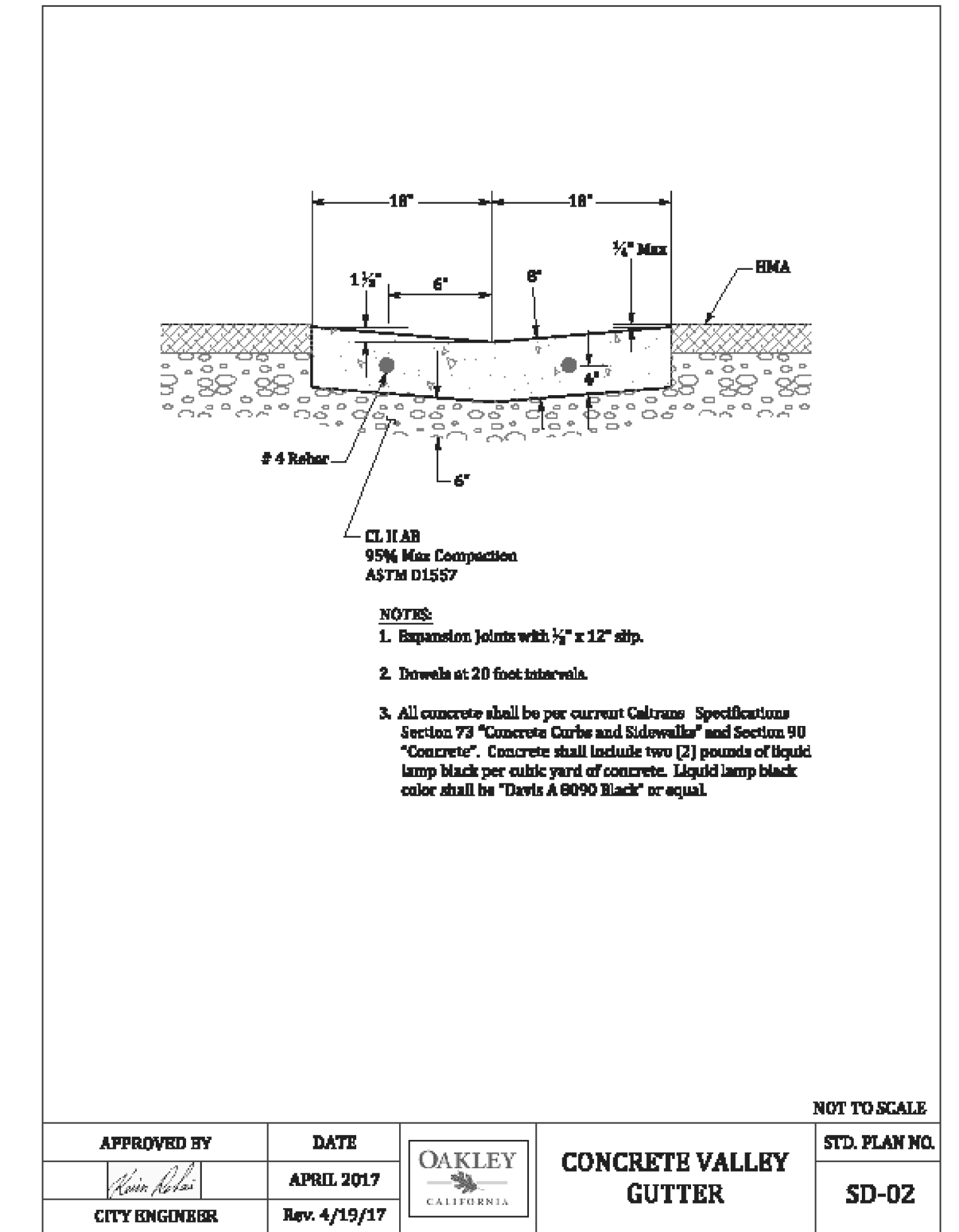
2 CULVERT WALL SECTION
C13 NTS



3 24\"/>



4 MEDALLION
C13 NTS



5 TYPICAL VALLEY GUTTER
C13 NTS

BY	DATE	CSJ	DATE	REVISIONS
LA	12/18/19			ADDED NEW SHEET



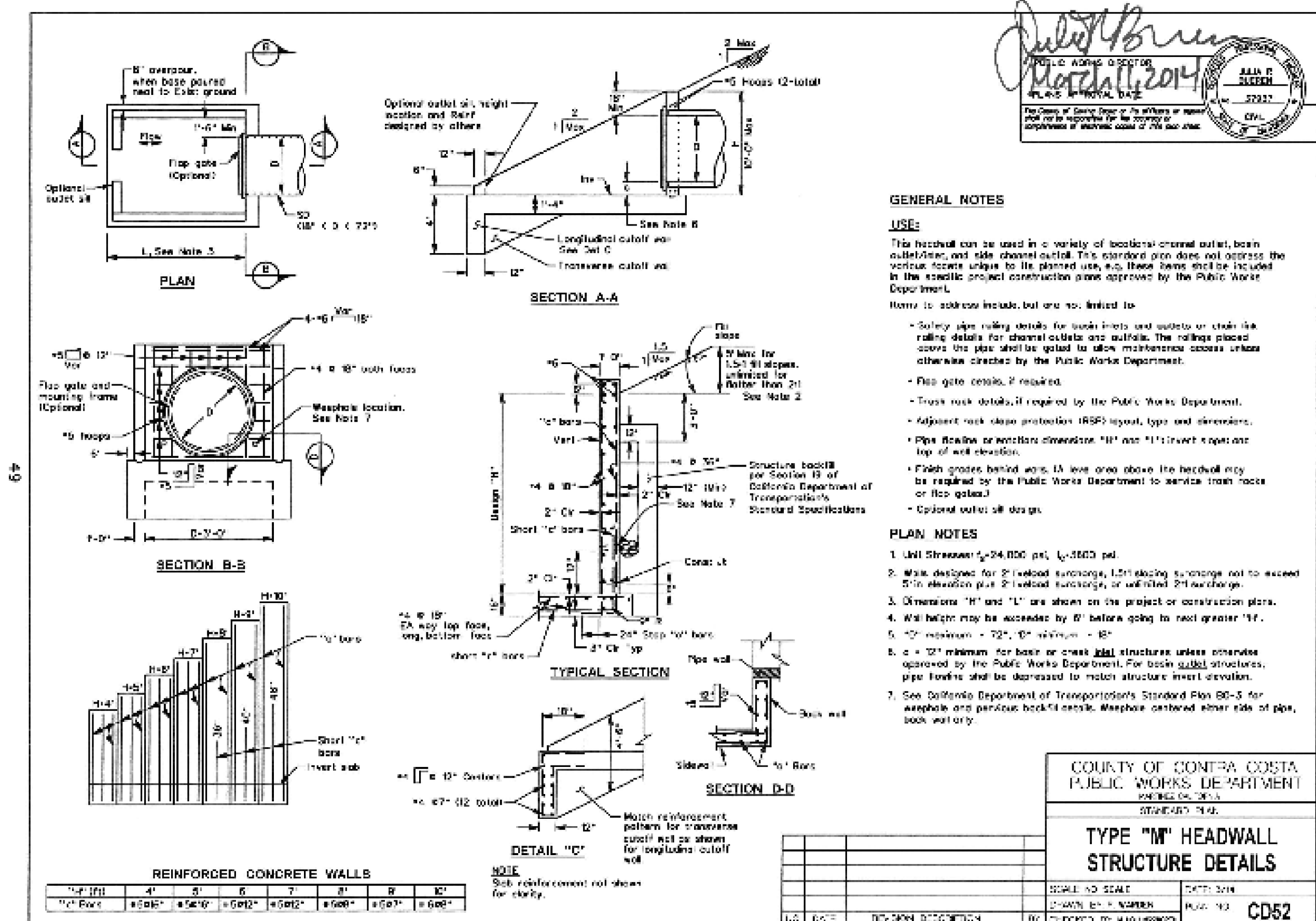
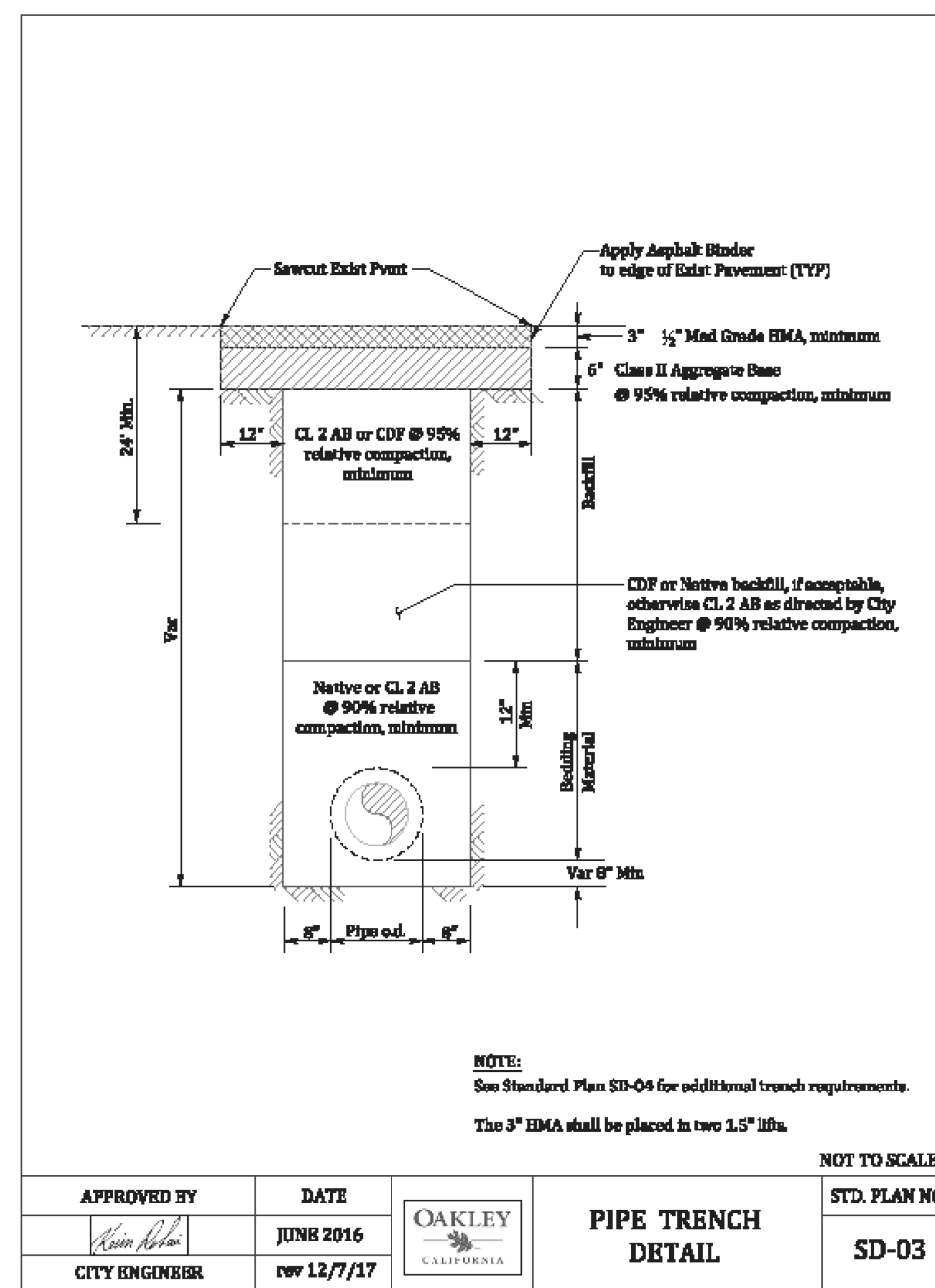
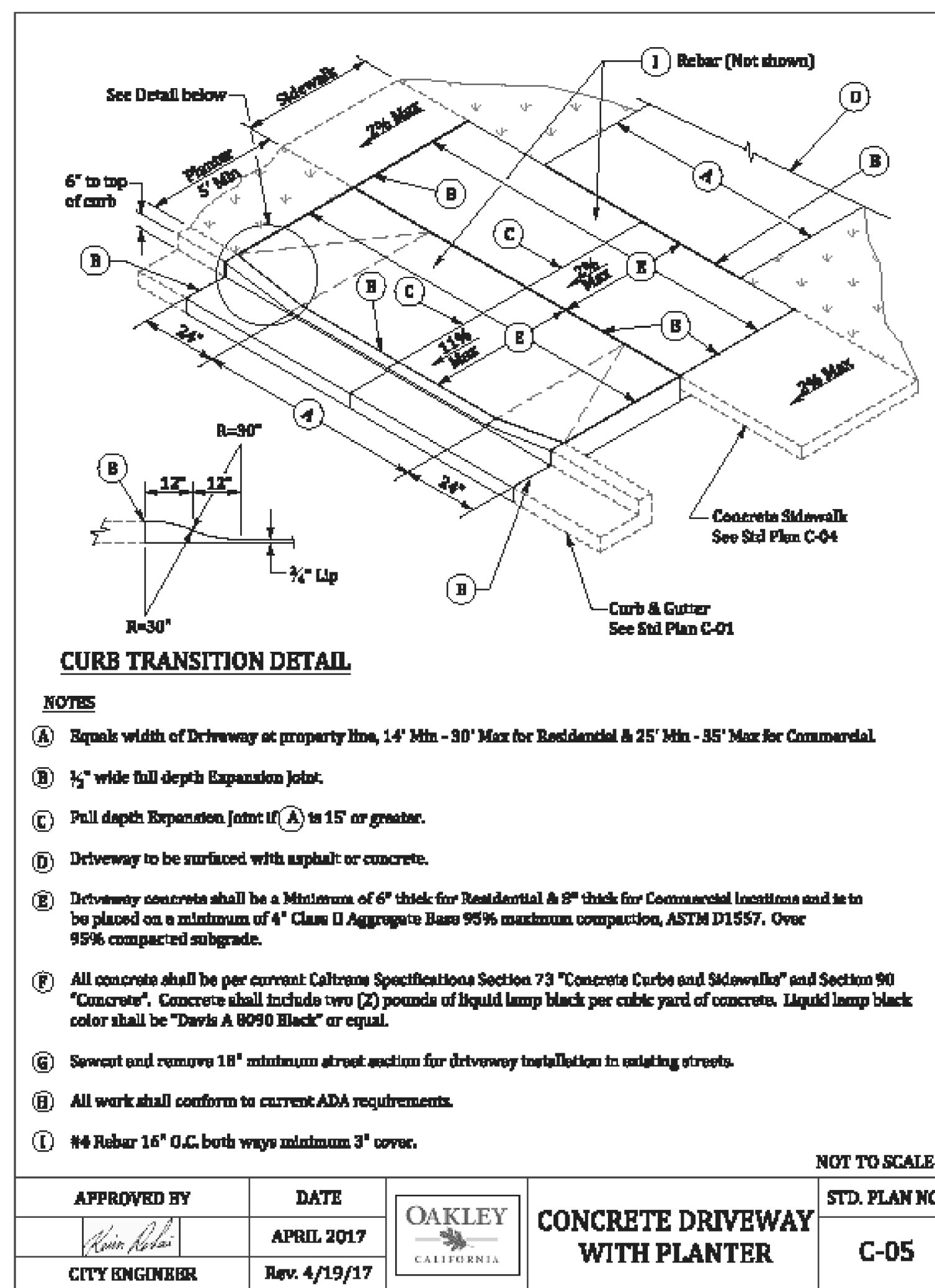
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Scale: Not to scale
Designed: LA
Drawn: LA
Checked: LA
Proj. Engr: LA
File: 15-02

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STORM DRAINAGE DETAILS

SHEET C13
13 OF 14 SHEETS
APN: 034-210-006

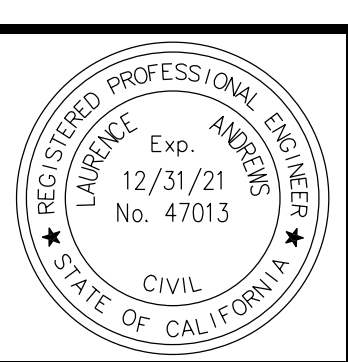
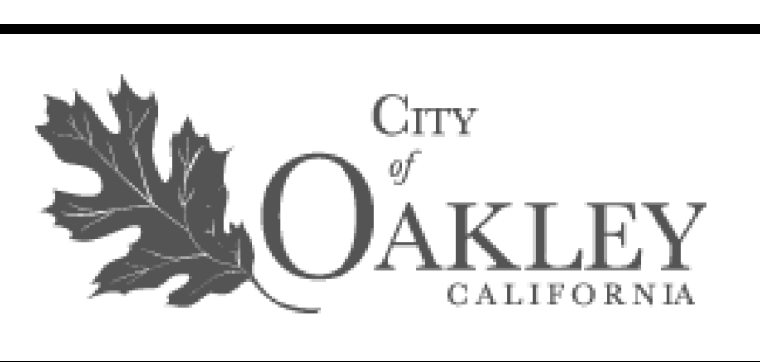


1 TYPICAL DRIVEWAY
C14 NTS

2 STORM DRAIN TRENCH IN MAIN STREET
C14 NTS

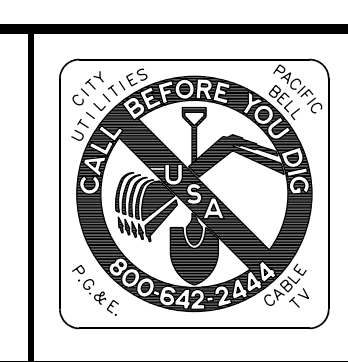
3 STORM DRAIN HEADWALL DETAILS
C14 NTS

LA	12/18/19		ADDED NEW SHEET
BY	DATE	CSJ	DATE



Date: February 17, 2020
Scale: Not to scale
Designed: LA
Drawn: LA
Checked: LA
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