CITY OF SOUTH SAN FRANCISCO

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

STANDARDS FOR PUBLIC IMPROVEMENTS

MARCH 2014

315 Maple Avenue
Mailing: P.O. Box 711
South San Francisco, CA 94080

(650) 829-6652
(650) 877-8554 Inspector

STANDARD PLANS AND SPECIFICATIONS

The Standards for Public Improvements of the City of South San Francisco, California are identical to the 2010 Standard Specifications of the State of California, Business and Transportation Agency, Department of Transportation, except for the following City Standards which shall apply in lieu of any similar State standards.

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SIDEWALK GENERAL NOTES

1. Subgrade shall be compacted to at least 95% relative compaction.

2. Where unsuitable subgrade material is encountered, remedial work to be done under the direction of the City Engineer, includes but is not limited to, removing unsuitable material and placing a layer of Class II Aggregate Base under the installation.

3. Undercut subgrade for gutter or sidewalk shall be filled with approved granular material.

4. Existing concrete shall be removed at expansion or weakened plane joints or at sawcuts.

5. Sawcuts must be full depth.

6. No utility boxes, poles, posts or any other facilities or devices will be permitted in the sidewalk area without the written approval of the City Engineer.

7. New work shall match existing in score and color.

8. Subgrade shall be thoroughly wetted immediately prior to placing concrete.

9. Concrete shall be State Class A-6 sack mix - with 1-inch maximum aggregate. 1/2 to 3/4 lb. of lampblack shall be added per cubic yard of concrete mix.

10. Concrete shall have a slump of not more than 4 inches.

11. No admixtures shall be used without the permission of the City Engineer.

12. 1/2-inch thick expansion joints shall be placed on both sides of driveway approaches, curb, gutter, and sidewalk return points and at 20' feet on center.

13. Weakened plane joints at least 1-1/2 inches deep shall be placed at the center of driveways and 20' on center.

14. 1/4-inch deep score marks shall be placed as described in the Standard Specifications or as directed by the City Engineer.

15. No concrete shall be placed until the City Engineer or his authorized representative has inspected and approved forms and subgrade.

16. All exposed edges shall be rounded with 1/2-inch radius tool.

17. All surfaces shall be broom finished.

18. Curbs, sidewalks and driveway approaches shall be backfilled within 7 days after placing concrete. This shall include any required AC patchwork.

19. Form faces shall not vary from the dimensions shown by more than .02 feet. Forms shall meet grade.

20. Unless otherwise specified on the approved plans, concrete shall be cured by means of the impervious membrane method.

21. All sidewalk constructed adjacent to curbs shall be poured monolithic with curb unless otherwise approved by City Engineer.

22. All work within the public right-of-way shall be performed by a State licensed "Class A" contractor. A concrete contractor with a "C" License may perform concrete flatwork.

23. All paving shall be completed no later than 5 days after installation of utility.

24. A minimum of 6" of asphalt shall be removed along the gutter lip for the installation of forms. For curb and gutter installations AC shall be brought to finish grade of forms and transitioned as required by the City Engineer.

25. All asphalt repairs shall be flush with the adjacent surfaces at conforms and edges. Maximum allowable tolerances shall be .01' longitudinally and .02' transversely.

26. All face angle installations in returns shall match existing radius of curb.

CONSTRUCTION & OPERATIONS NOTES

1. Accessible pedestrian path of travel shall be maintained during construction at all times.

2. All excavation spoils shall be laded directly into trucks and disposed of at an approved dumpsite.

3. Storage of construction materials and equipment will not be allowed in or upon the public right-of-way. All materials intended for use on any project shall be off loaded directly from delivery vehicles and placed as required during the course of construction. Should the permit holder or his/her contractors wish to stockpile materials near the work site, they shall make arrangements in advance for storage. All storage sites shall be secure, inaccessible to the general public and kept free of construction spoils, debris and trash at all times storage sites shall be subject to the review and approval of the City Engineer.

4. Construction sites shall be kept clean at all times. At no time shall the contractor or permit holder be allowed to leave the site prior to thoroughly cleaning sidewalks, curbs, gutters, and street surfaces. Cleaning shall be accomplished by either hand or machine sweeping as required. In no event shall the contractor be allowed to flush the streets with water until such time as the area has been completely and thoroughly swept and all debris picked up and properly disposed of.

5. All excavations shall be backfilled and compacted at day's end. A minimum of two inches of temporary paving shall be installed and compacted by mechanical means to produce a smooth surface for pedestrian and vehicular traffic. Traffic plates will not be allowed except as approved by the Engineer during the permit application process. Installation of plates will only be allowed if a bonafide emergency has been declared. In this event, plates will be allowed providing they are anchored either by welding or pinned. All edges shall be secured to prevent rattling and movement as well as protected with temporary asphalt (min two foot taper). Long term installations, those in excess of five days, will be allowed, if approved by the City Engineer, providing that existing surfaces are ground to accept plate installations and provide for a matching surface where plate meets roadway surface.

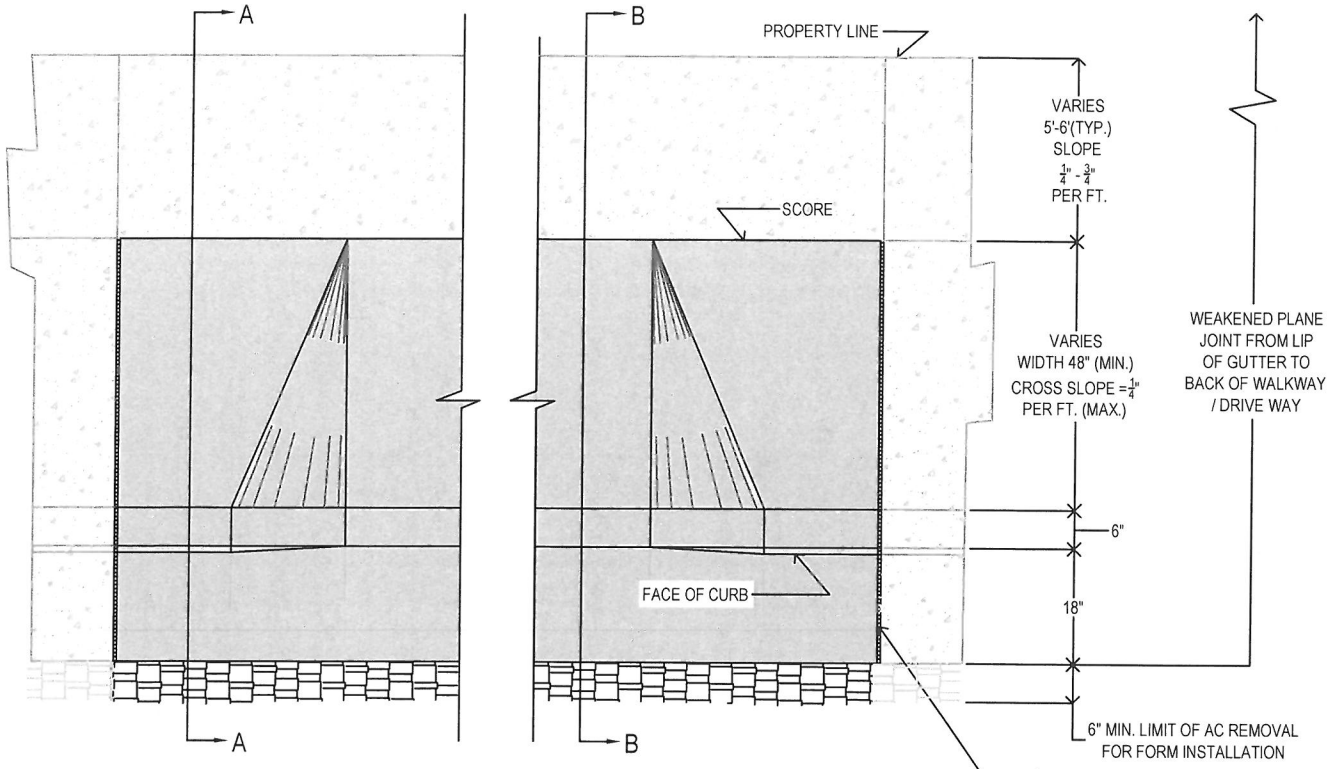
6. Equipment shall not be stored on or within the public right-of-way without prior written approval from the City Engineer. If permitted, equipment shall be secured and locked with protective covers in place. Adequate barricades with operable flashers shall be installed around the equipment and remain in working order at all times.

7. In the event of non-compliance with permit, project conditions and/or City standards for construction within the public right-of-way, the City will exercise its right to suspend project permits or halt work in progress until such time as the permit holder or his contractor is in compliance. Should the City have to obtain outside services for cleaning equipment, transport services, towing, contract personnel or utilize City forces for cleanup, the City will bill for its services and expenses including all incidentals and

administrative overhead costs.

8. Air Quality Dust Control: All construction projects are required to comply with the Bay Area Air Quality Management District's (BAAQMD) dust control measures. These measures are levied by the Engineering Division as a condition of building permit issuance and are monitored for compliance by staff and/or special City Engineering and/or Planning inspectors. The measures include:

    a) Water all active construction sites at least twice daily.
    b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
    c) Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
    d) Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
    e) Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
    f) Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
    g) Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiled materials.
    h) Install sandbags or other erosion-control measures to prevent silt runoff to public roadways.
    i) Replant vegetation in disturbed areas as quickly as possible.
    j) Watering should be used to control dust generation during the break-up of pavement.
    k) Cover all trucks hauling demolition debris from the site.
    l) Use dust-proof chutes to load debris into trucks whenever feasible.
    m) Water or cover stockpiles of debris, soil, sand or other materials that can be blown by the wind.
    n) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be in proper running order prior to operation.
    o) Diesel powered equipment shall not be left inactive and idling for more than five minutes, and shall comply with applicable BAAQMD rules.
    p) Use alternative fueled construction equipment, if possible.
    q) All vehicle speeds on unpaved roads shall be limited to 15 mph.
    r) Post a visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 24 hours. The Air District phone number shall also be visible to ensure compliance with applicable regulations.



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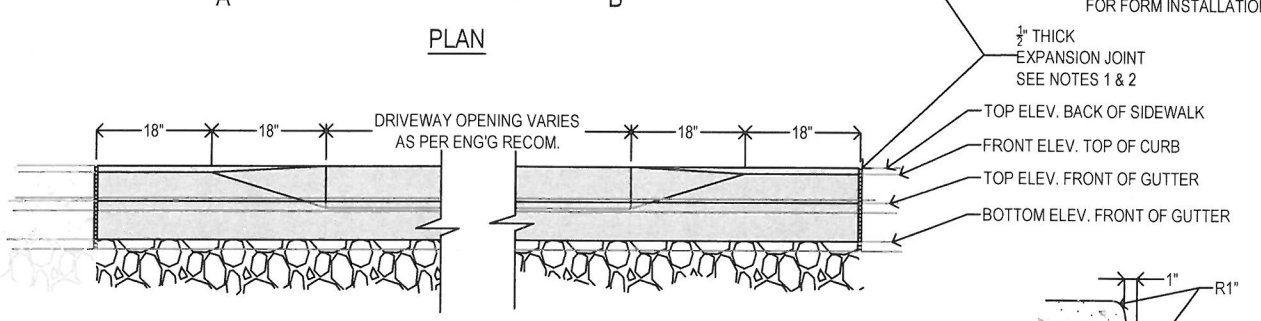
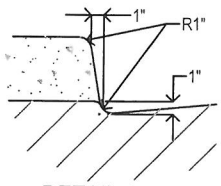
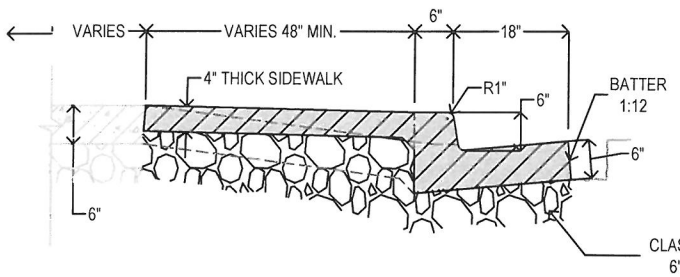


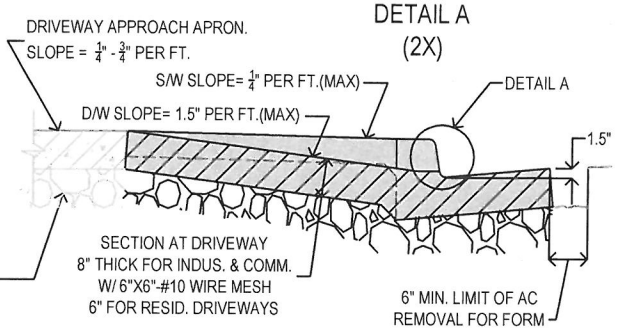
FRONT ELEVATION



DETAIL A
(2X)



SECTION A-A



SECTION B-B

NOTES:

1. ALL EXISTING CONCRETE SHALL BE SAW CUT AT EXISTING CONSTRUCTION SCORE LINES OR JOINTS TO PROVIDE A NEAT VERTICAL JOINT. PORTLAND CEMENT CONCRETE DRIVEWAY SHALL BE EXTENDED FROM STREET PAVEMENT EDGE TO PROPERTY LINE. DRIVEWAY, CURB, AND GUTTER SHALL BE MONOLITHIC UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. EXISTING SIDEWALK, CURB AND GUTTER MUST BE COMPLETELY REMOVED.
2. EXPANSION JOINT SHALL BE 1/2"X4" ASPHALTIC FIBER AT EVERY 20 FEET INTERVALS.
3. CONCRETE SHALL BE CLASS A -6 SACK MIX, 1" MAX. AGGREGATE WITH 1/2 TO 3/4 POUND LAMPBLACK ADDED PER CUBIC YARD.

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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

STANDARD CURB, GUTTER, SIDEWALK AND DRIVEWAY APPROACHES

SCALE NTS	APPROVED:	DRAWN: KCM
DATE: Feb 27, 2014		CHECKED: SB
SHEET	DRAWING NO. R-1	

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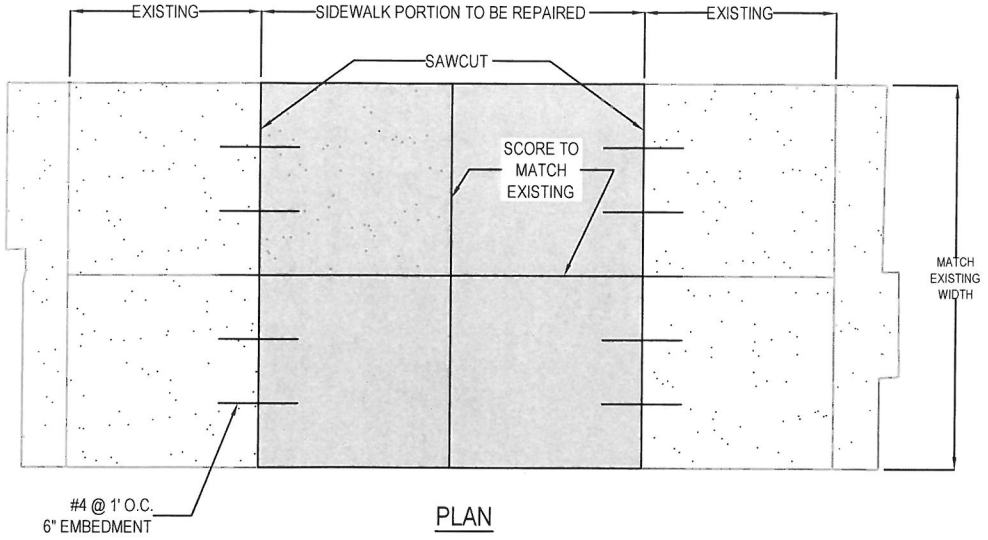

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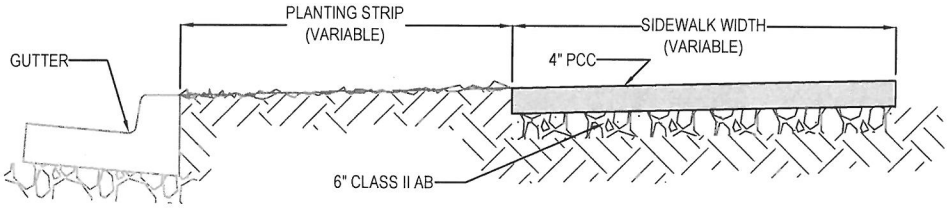
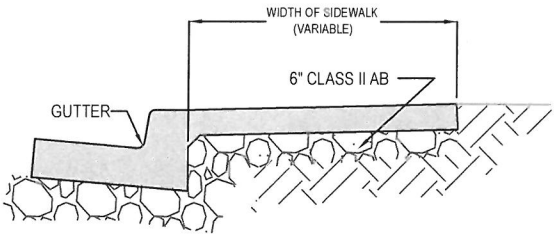
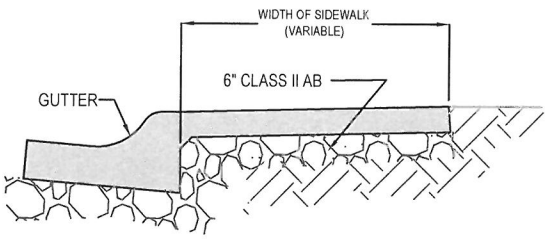


SIDEWALK WITH SEPARATE CURB AND GUTTER



MONOLITHIC SIDEWALK
CURB AND GUTTER



MONOLITHIC SIDEWALK
ROLL CURB AND GUTTER

NOTES:

1. PLACE 1/2 " ASPHALTIC FIBER EXPANSION JOINT AT CURB RETURNS, DRIVEWAYS AND AT 20' INTERVALS.
2. PORTLAND CEMENT CONCRETE (PCC) SHALL BE 6 SACK MIX WITH 1/2-3/4 POUND LAMPBLACK PER CUBIC YARD.
3. ALL BASE MATERIAL SHALL BE COMPACTED AS REQUIRED BY CITY ENGINEER.
4. ALL REPAIRS SHALL BE MONOLITHIC UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. REFER TO DRAWING R-7 FOR ADDITIONAL DETAILS.
5. SAW CUT AT EXISTING JOINTS OR SCORE LINES.
6. MAXIMUM SIDEWALK CROSS SLOPE SHALL BE 1:48 (2%) .

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1	9/25/13	UPDATE DRAWINGS	KCM	SB

CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

STANDARDS FOR SIDEWALK REPAIR

SCALE NTS | APPROVED: | DRAWN: KCM
DATE: Feb 27, 2014 | CHECKED: SB
SHEET | DRAWING NO. R-2

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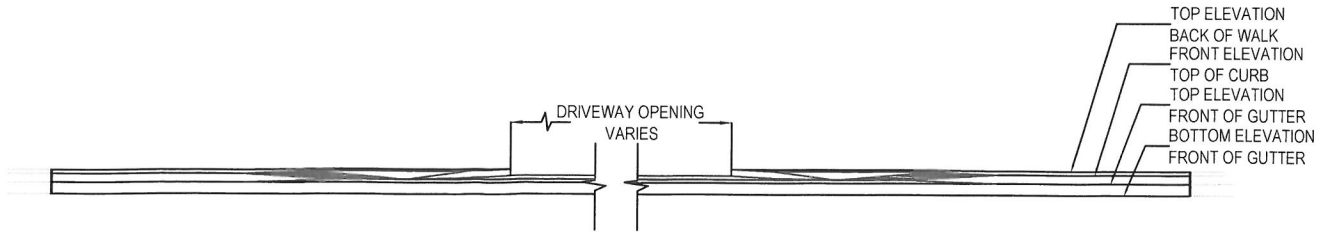
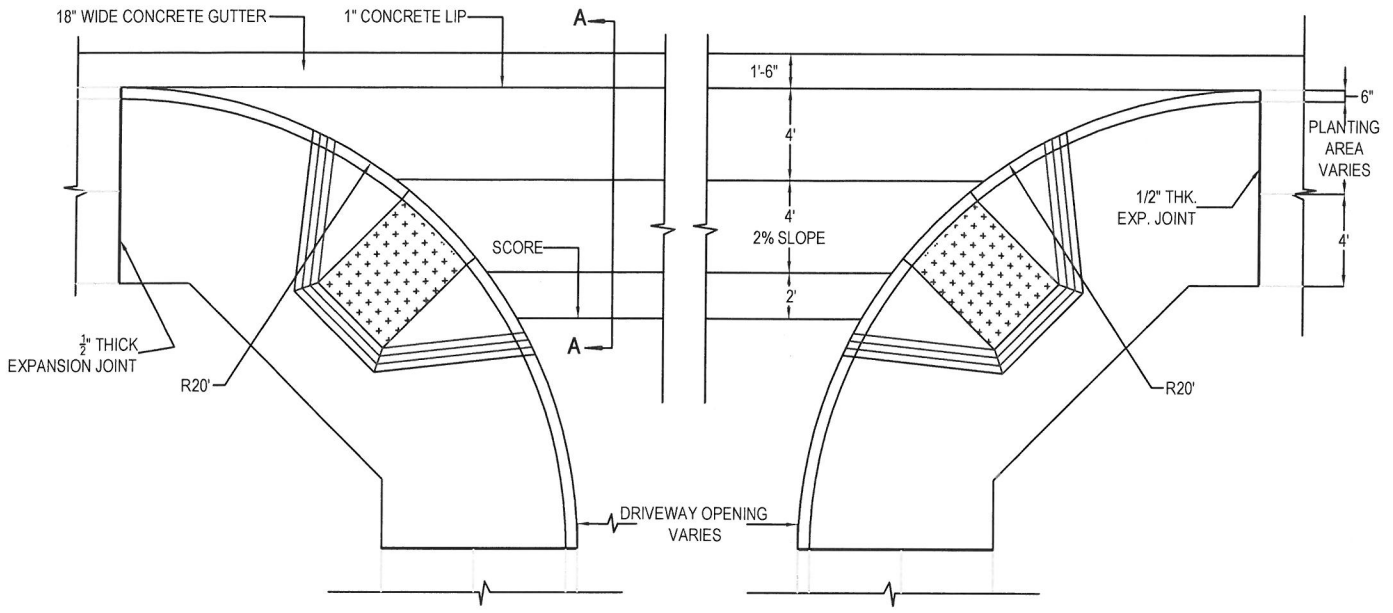


FRONT ELEVATION



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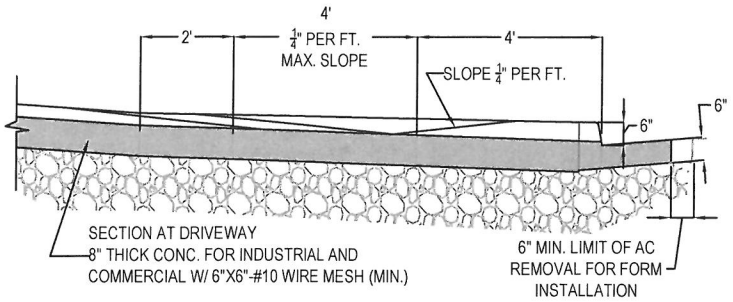

SECTION A-A

NOTES:

1. ALL EXISTING CONCRETE SHALL BE SAW CUT AT EXISTING CONSTRUCTION JOINTS OR SCORE LINES TO PROVIDE A NEAT VERTICAL JOINT. PORTLAND CEMENT CONCRETE DRIVEWAY SHALL EXTEND FROM STREET PAVEMENT EDGE TO PROPERTY LINE. DRIVEWAY, CURB, AND GUTTER SHALL BE MONOLITHIC. EXISTING SIDEWALK, CURB AND GUTTER MUST BE COMPLETELY REMOVED.
2. EXPANSION JOINT SHALL BE ½" X4" ASPHALTIC FIBER.
3. CONCRETE SHALL BE CLASS A (6 SACK) WITH ½ TO ¾ POUND LAMP BLOCK ADDED PER CUBIC YARD.
4. CURB RAMPS SHALL COMPLY WITH THE LATEST CALTRANS STANDARD.
5. LEVEL LANDING (4'X4') AT BOTTOM OF CURB RAMP SHALL HAVE A MAXIMUM SLOPE OF 5%.

			PRIVATE STREET INTERSECTING A PUBLIC STREET
UPDATE DRAWINGS	KCM	SB	
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CITY OF SOUTH SAN FRANCISCO DEPARTMENT OF PUBLIC WORKS	SCALE NTS	APPROVED:	DRAWN: KCM
	DATE: Feb 27, 2014		CHECKED: SB
	SHEET	DRAWING NO. R-3	

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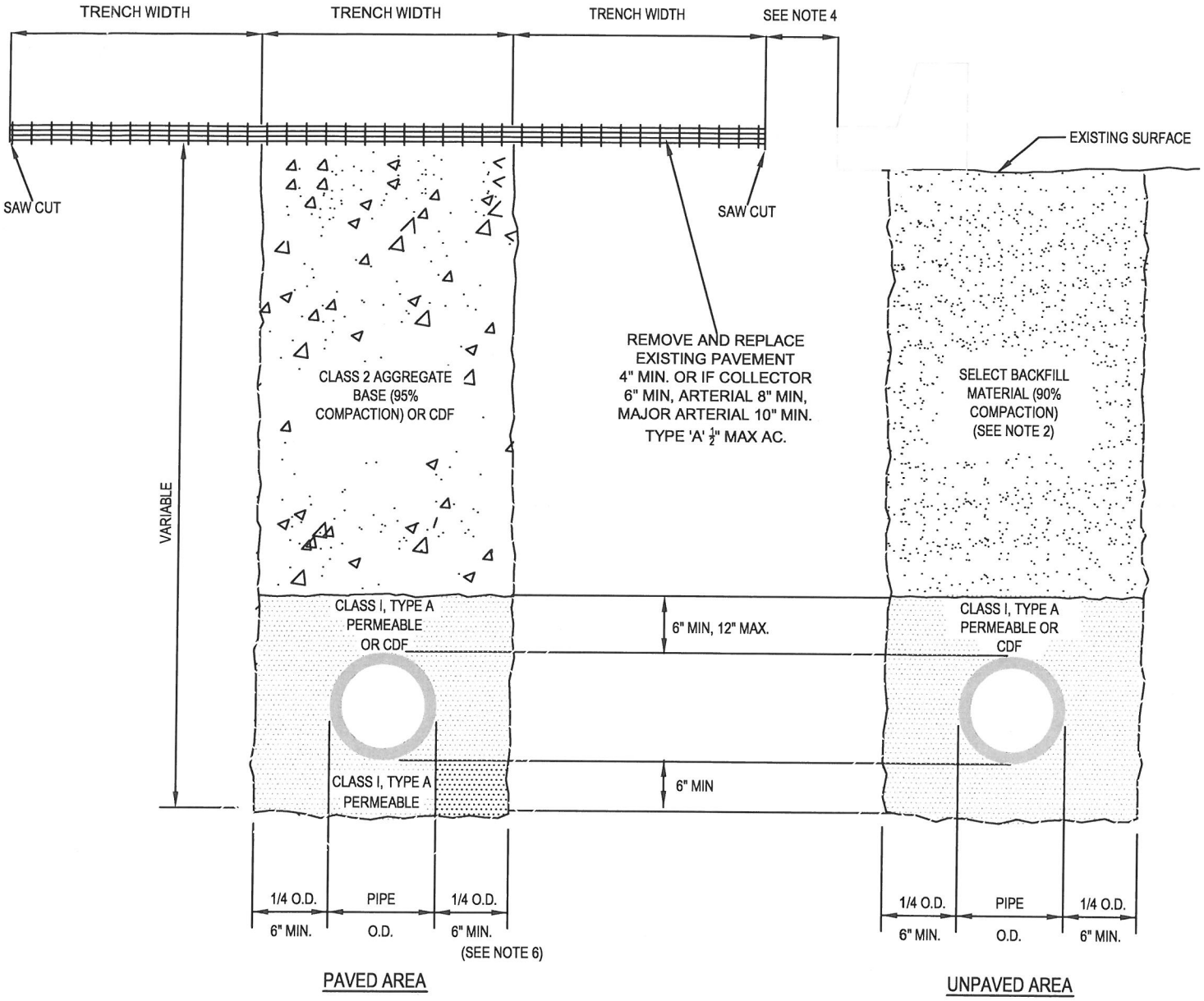

NOTES:

1. CLASS I, TYPE A PERMEABLE MATERIAL PER CALTRANS STANDARDS SPECIFICATIONS, SECTION 68-1.025, COMPACTED TO 95%. AT LEAST 75% OF THE PARTICLES SHALL HAVE ONE OR MORE FRACTURED FACES.
2. SELECTED BACKFILL MATERIAL SHALL BE MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3" IN GREATEST DIMENSION, VEGETABLE MATTER, OR UNSATISFACTORY MATERIAL.
3. CONTROLLED DENSITY FILL (CDF) SHALL BE APPROVED BY THE CITY ENGINEER.
4. IF THE OUTER EDGE OF THE REPLACEMENT WIDTH IS WITHIN 36" FROM THE LIP OF THE GUTTER, THE ENTIRE PAVEMENT SECTION BETWEEN THE TRENCH AND THE LIP OF THE GUTTER SHALL BE REMOVED AND REPLACED.
5. ANY SERVICE LATERAL CROSSING THE PIPE SHALL HAVE A MINIMUM OF 6" CLEARANCE.
6. IF USING CONTROLLED DENSITY FILL (CDF), 6" MINIMUM CLEARANCE ON SIDES OF PIPE IS PERMISSIBLE.

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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

TYPICAL UTILITY TRENCH DETAIL

SCALE: NTS
DATE: May 15, 2012
SHEET
APPROVED:
DRAWN: KCM
CHECKED: SB
DRAWING NO. R-4

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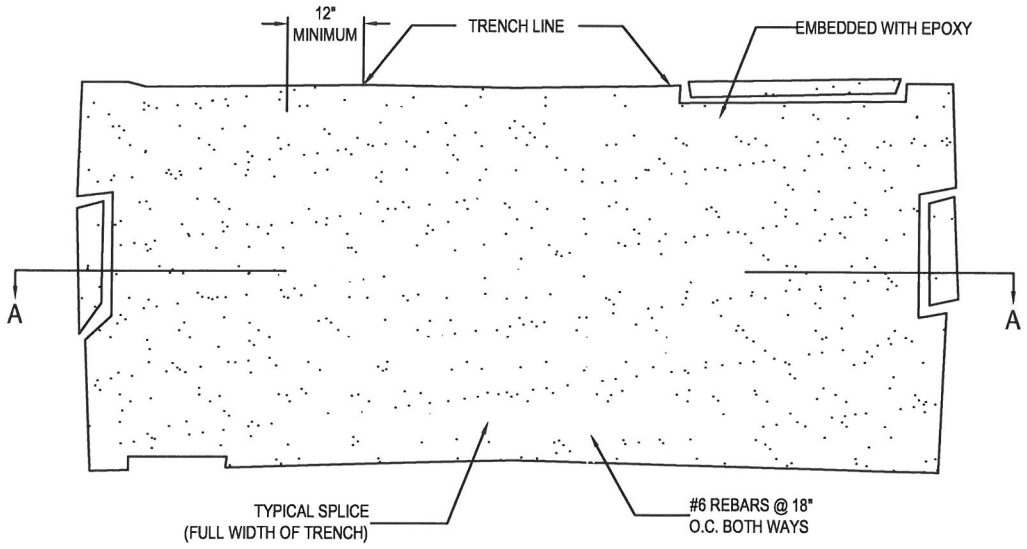

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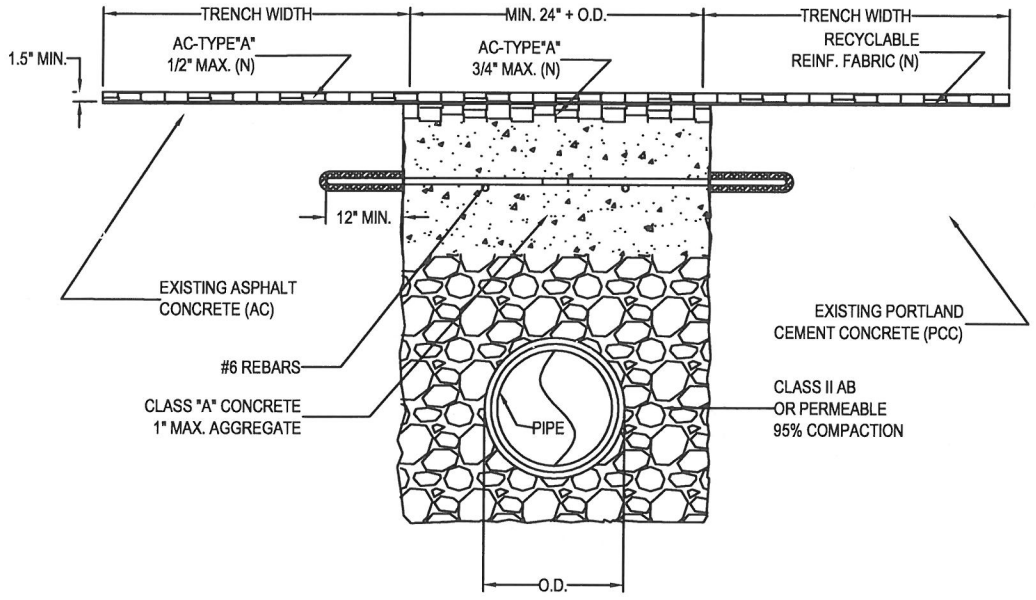

SECTION A-A

NOTES:

1. FULL DEPTH SAWCUTTING REQUIRED PRIOR TO TRENCHING.
2. BACKFILL SHALL BE CLASS II 3/4" MAX. AGGREGATE BASE OR 3/4" PERMEABLE AGGREGATE BACKFILL.
3. CONCRETE SHALL MATCH EXISTING DIMENSIONS-CLASS A (1" MAXIMUM AGGREGATE).
4. BORE 12" MINIMUM INTO EXISTING SLAB, INSTALL #6 REBARS AS SHOWN WITH EPOXY. EPOXY TO CONFORM TO SEC. 95-2.03 CALTRANS SPECIFICATIONS.
5. EXISTING ASPHALT CONCRETE SHALL BE GROUND TO A MINIMUM DEPTH OF 1-1/2" ON BOTH SIDES OF TRENCH. WIDTH OF ASPHALTIC CONCRETE GRINDING SHALL EQUAL WIDTH OF TRENCH (BOTH SIDES).
6. PAVEMENT REINFORCEMENT FABRIC TO BE REINSTALLED OVER AR 4000 (MINIMUM 0.25 GALLON PER SQUARE YARD).
7. RECYCLABLE PAVEMENT REINFORCEMENT FABRIC SHALL BE APPROVED BY THE CITY ENGINEER.

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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

TRENCH REPAIR- PCC PAVEMENT AND PAVEMENT REINFORCING FABRIC

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DATE: May 03, 2012		CHECKED: SB
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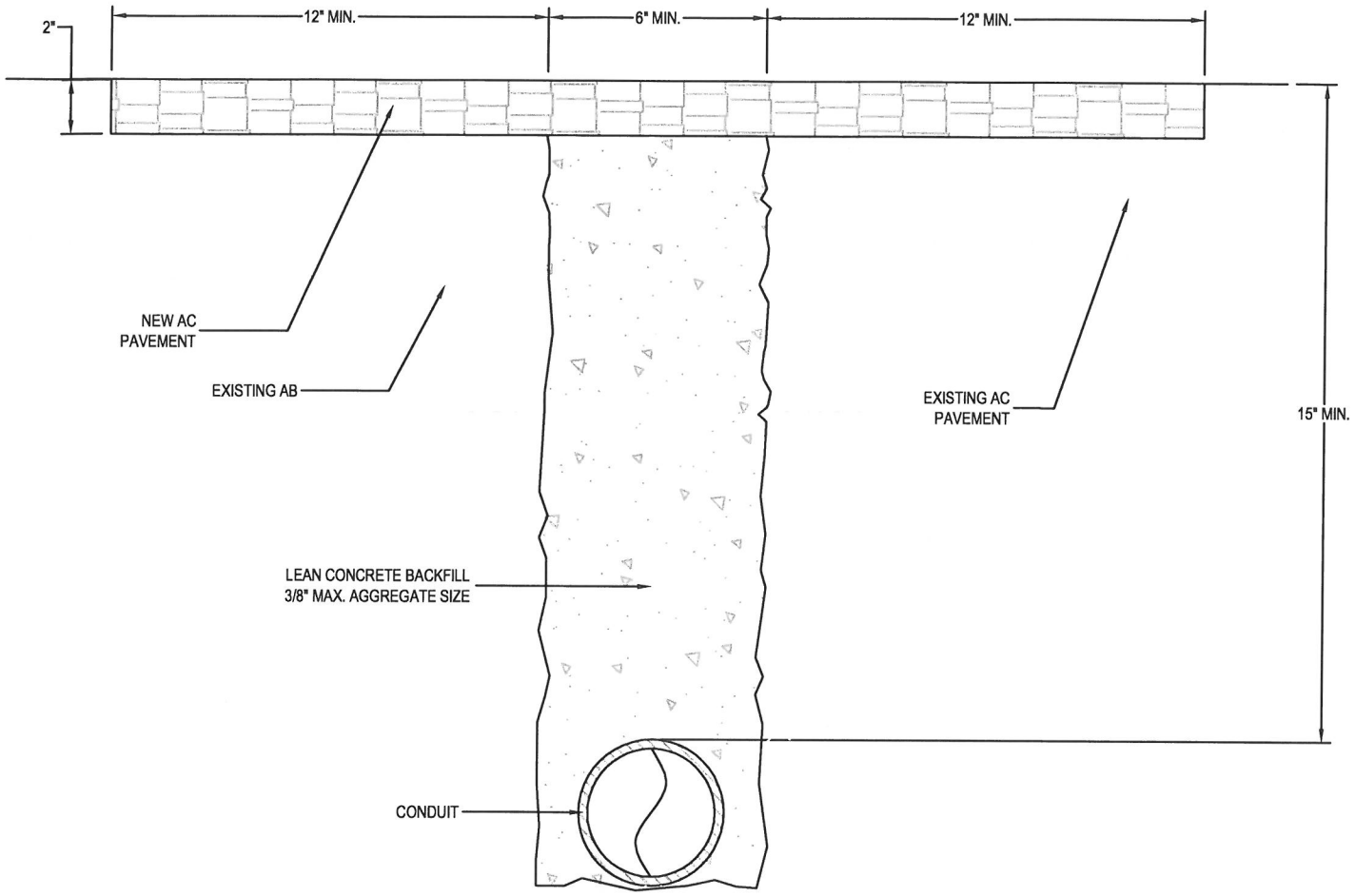

NOTES:

1. MINIMUM TRENCH EXCAVATION SHALL BE 15" TO TOP OF CONDUIT.
2. TRENCH BACKFILL SHALL BE LEAN CONCRETE. MINIMUM 300 POUNDS PORTLAND CEMENT PER CUBIC YARD. PCC BACKFILL SHALL BE VIBRATED AND STRUCK OFF THE EXISTING AC SURFACE. MAXIMUM AGGREGATE SIZE-3/8".
3. A MINIMUM OF 12" FROM THE OUTSIDE EDGE OF TRENCH SHALL BE GROUND TO 2" BENEATH FINISH GRADE.

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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

ROCKWHEEL TRENCH REPAIR

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DATE: May 03, 2012		CHECKED: SB
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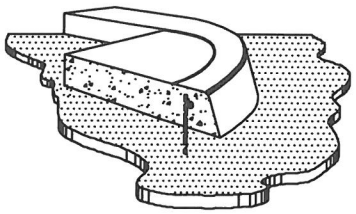
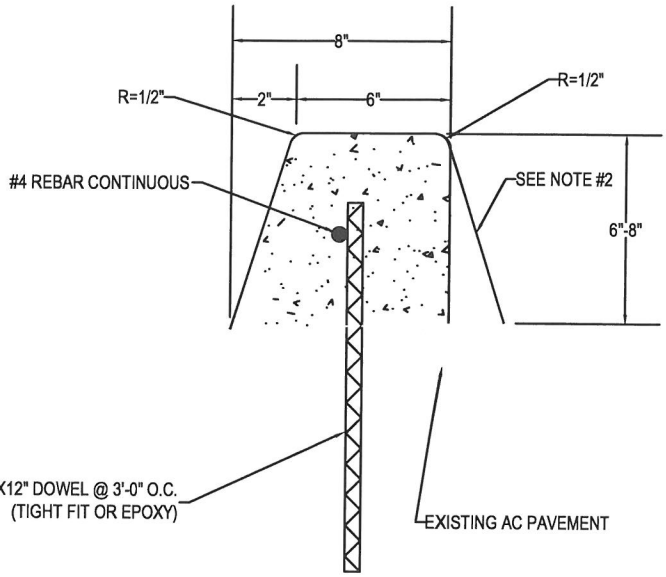
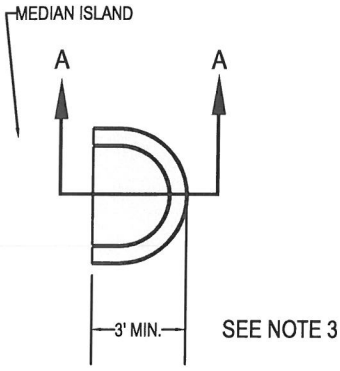


SECTION A-A

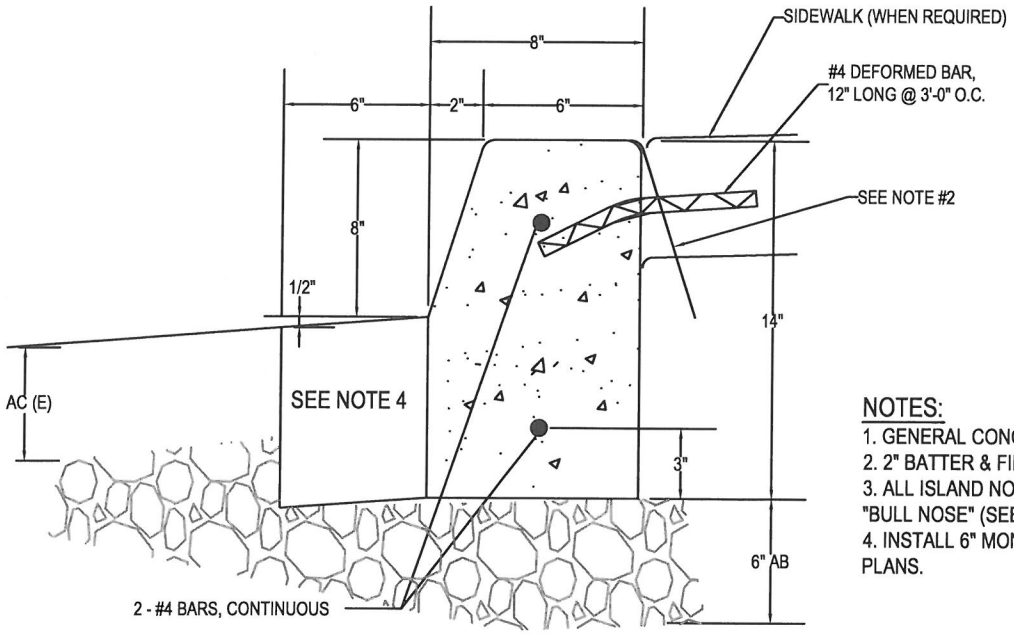




BULL NOSE DETAIL

NOTE:
DELETE #4 BAR & DOWEL IF CURB IS EXTRUDED. FOR EXTRUDED CURB CONSTRUCTION, EPOXY RESIN ADHESIVE SHALL BE APPLIED IN LIEU OF BAR & DOWEL REINFORCING.

TACK-ON CURB
(TO BE USED IN PARKING LOTS)



NOTES:
1. GENERAL CONCRETE NOTES SHALL APPLY.
2. 2" BATTER & FINISH BACKSIDE IF BACK OF CURB IS EXPOSED.
3. ALL ISLAND NOSES TO BE POURED MONOLITHICALLY WITH "BULL NOSE" (SEE "BULL NOSE" DETAIL).
4. INSTALL 6" MONOLITHIC GUTTER WITH CURB IF REQUIRED ON PLANS.

VERTICAL CURB

NO.	DATE	REVISION	BY	APP.
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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

FREESTANDING CURB 6" & 8"

SCALE: NTS	APPROVED: SB	DRAWN: KCM
DATE: May 03, 2012		CHECKED: SB
SHEET	DRAWING NO. R-7	

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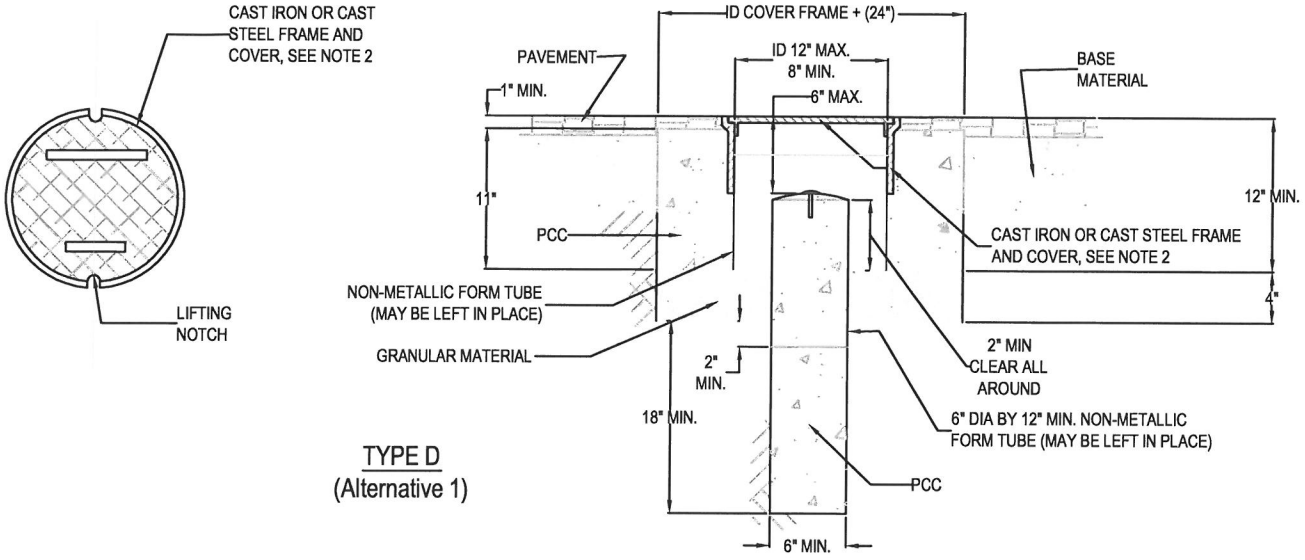

TYPE D
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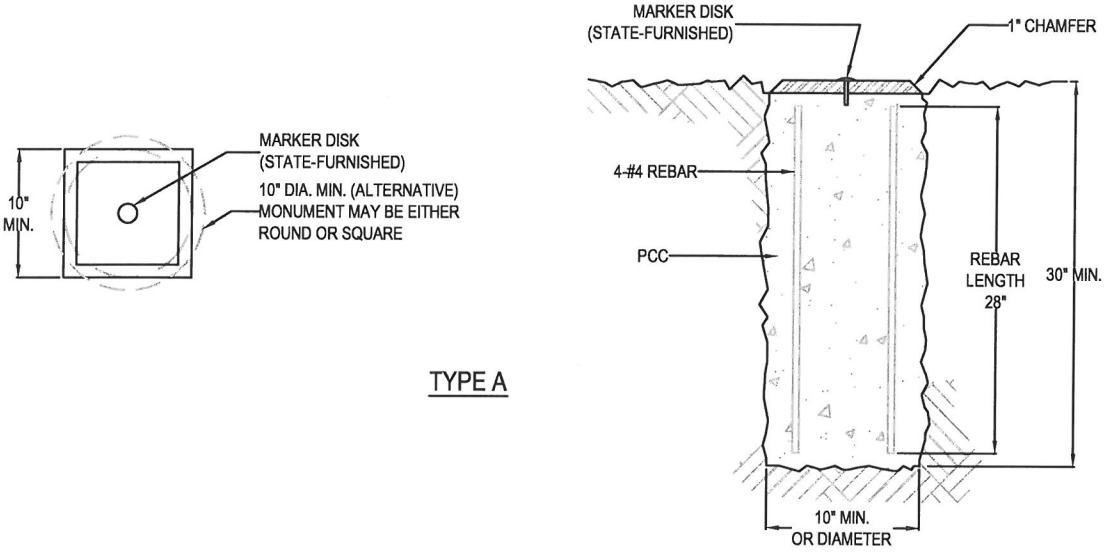

TYPE A

NOTES:

1. THE CONFIGURATION OF THE CAST IRON OR CAST STEEL FRAME MAY VARY FROM THAT SHOWN.
2. FRAME SHALL BE EMBEDDED IN THE CONCRETE A MINIMUM OF 3".
3. ALL PORTLAND CEMENT CONCRETE SHALL BE CLASS B OR MINOR CONCRETE WITH 1" MAXIMUM AGGREGATE.

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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

SURVEY MONUMENTS

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DATE: May 03, 2012		CHECKED: SB
SHEET	DRAWING NO. R-8	

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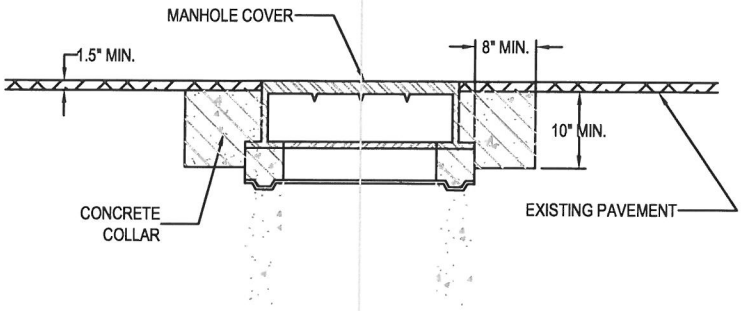
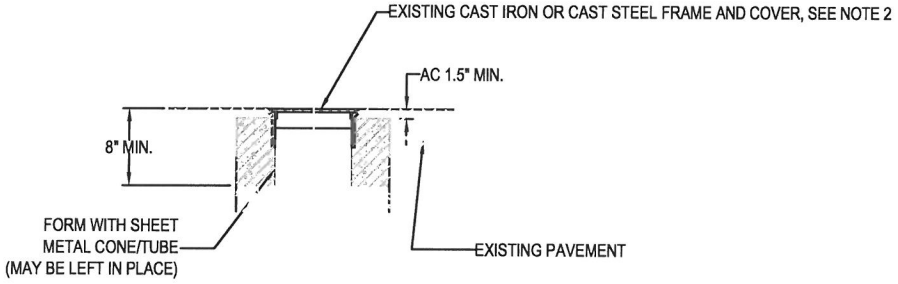


ADJUSTING MANHOLE FRAME & COVER TO GRADE DETAIL



ADJUSTING MONUMENT FRAME & COVER TO GRADE DETAIL

NOTES:

1. ALL POINTS OF CONFORM TO MATCH EXISTING.
2. RODDING INLETS (IF ANY) TO BE ADJUSTED TO GRADE IN A MANNER SATISFACTORY TO THE ENGINEER.
3. THE CONTRACTOR SHALL MAINTAIN ONE LANE OF TRAFFIC OPEN IN EACH DIRECTION AT ALL TIMES.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES.
5. THE CONTRACTOR SHALL FURNISH FLAGMEN, PLACE AND MAINTAIN ALL NECESSARY BARRICADES AND WARNING SIGNS AROUND THE CONSTRUCTION AREAS SO AS TO PROVIDE PROTECTION TO BOTH VEHICULAR AND PEDESTRIAN TRAFFIC. ALL BARRICADES FURNISHED AND PLACED BY THE CONTRACTOR SHALL BE PROPERLY ILLUMINATED AT NIGHT.
6. AT THE END OF EACH WORKDAY AND AT TIMES WHEN WORK IS SUSPENDED, ALL EQUIPMENTS AND OTHER OBSTRUCTIONS SHALL BE REMOVED FROM THE ROADWAY.

NO.	DATE	REVISION	BY	APP.
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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

ADJUSTING MONUMENT/MANHOLE TO GRADE

SCALE: 1:30	APPROVED:	DRAWN: KCM
DATE: May 03, 2012		CHECKED: SB
SHEET	DRAWING NO. R-9	

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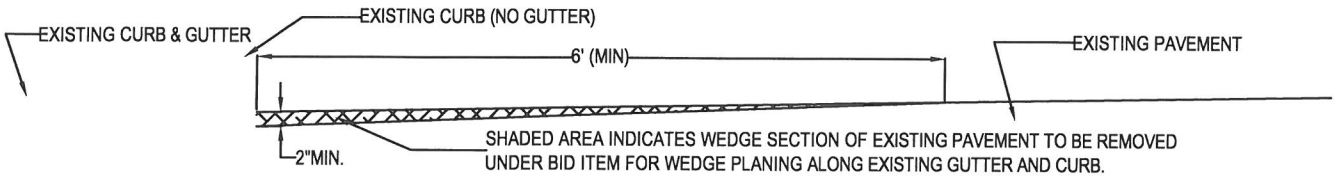
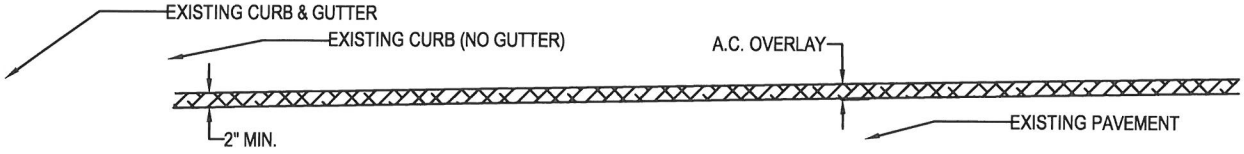
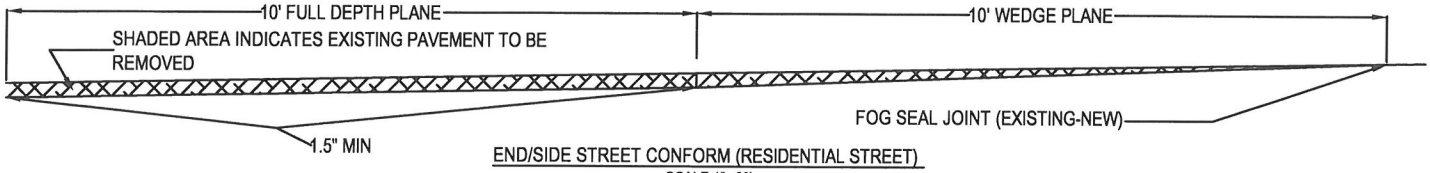


WEDGE PLANING DETAIL
SCALE 1" : 20'

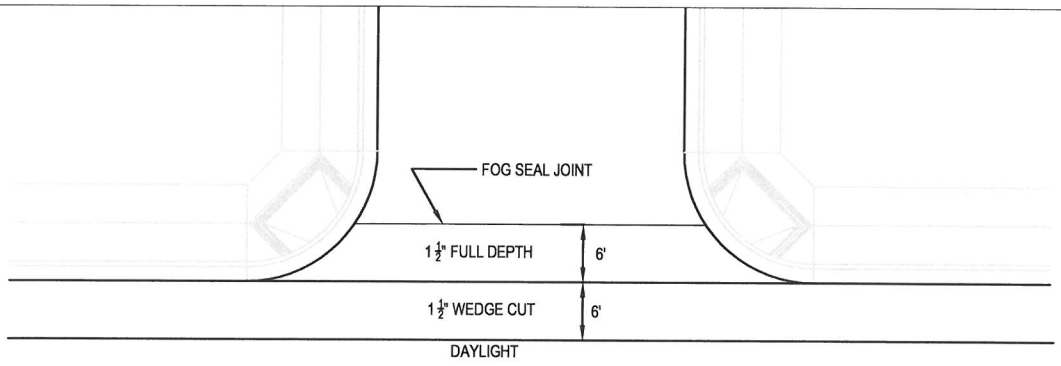


TYPICAL OVERLAY HALF SECTION
SCALE 1" : 20'

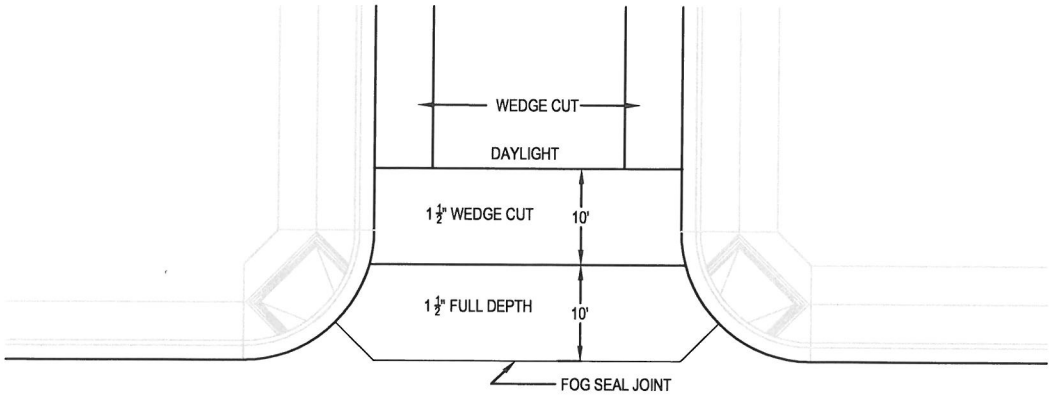


END/SIDE STREET CONFORM (RESIDENTIAL STREET)
SCALE 1" : 20'

NOTE:
STREET CONFORM DISTANCE FOR OTHER TYPES OF STREET SHALL BE DETERMINED BY ENGINEER.



SIDE STREET PLAN VIEW
SCALE 1" : 240'



END STREET PLAN VIEW
SCALE 1" : 240'

CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

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WEDGE CUT AND AC OVERLAY DETAILS

SCALE: AS SHOWN
APPROVED:
DRAWN: KCM
DATE: May 03, 2012
CHECKED: SB
SHEET
DRAWING NO. R-10

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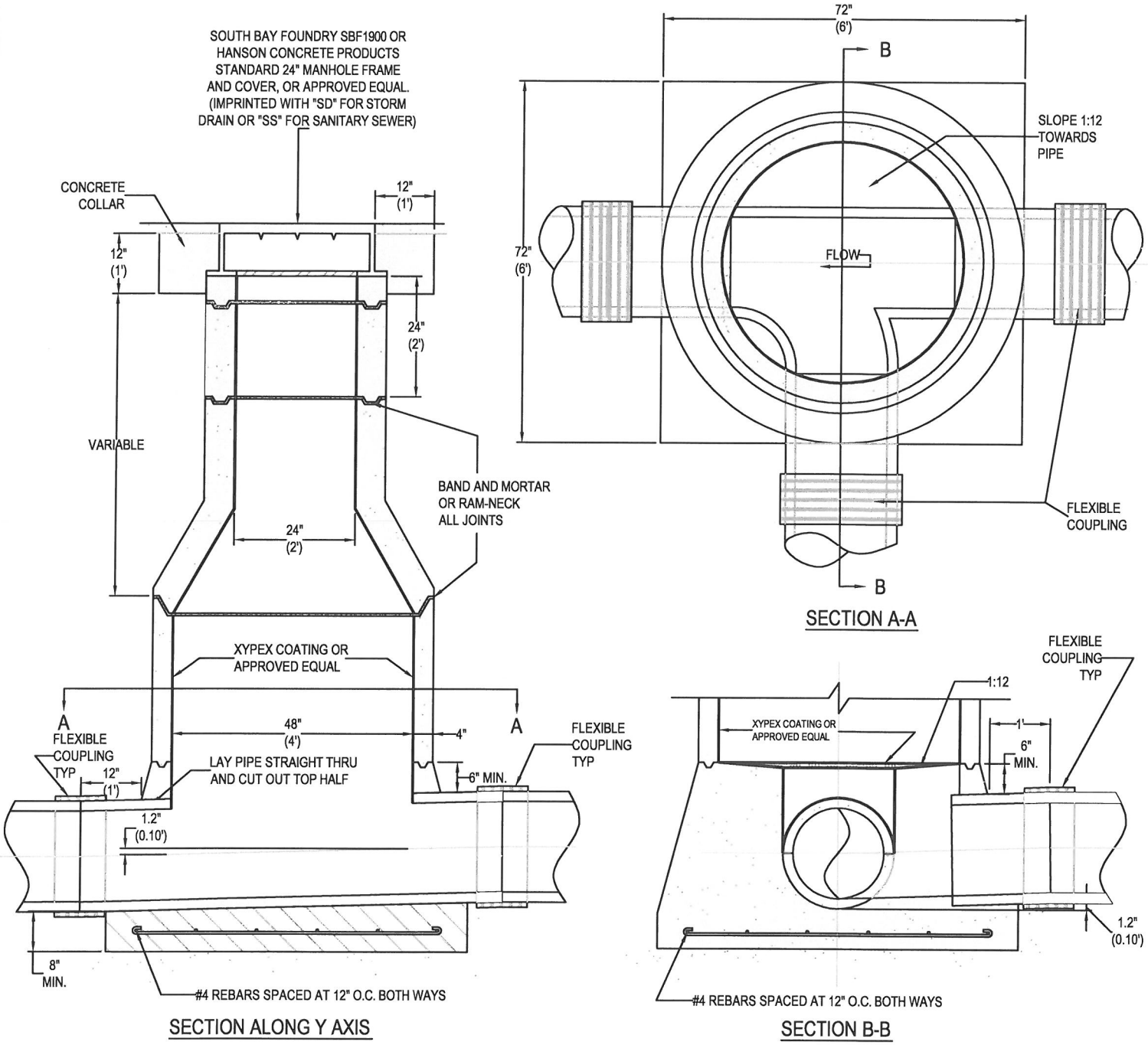

NOTES:

1. BASE AND COLLAR SHALL BE CLASS "B" (5-SACK) CONCRETE PLACED AGAINST UNDISTURBED EARTH OR APPROVED BACKFILL MATERIAL COMPACTED TO 95% RELATIVE DENSITY.
2. PRECAST BARREL AND CONE SECTIONS SHALL CONFORM TO ASTM C-478 SPECIFICATIONS.
3. MANHOLE FRAME SHALL MATCH EXISTING GRADE AFTER PAVING.
4. MORTAR JOINTS SHALL USE A MIX OF TWO PARTS SAND AND ONE PART CEMENT.
5. FOR SANITARY SEWER MANHOLES, BAND AND MORTAR ALL JOINTS PRIOR TO WATER PROOFING. FOR ALL MANHOLES, RAM-NECK ALL JOINTS.
6. WATER PROOFING SHALL BE DONE ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
7. NO CONCRETE SHALL BE PLACED PRIOR TO INSPECTION BY THE CITY CONSTRUCTION INSPECTOR. MANUFACTURED FITTINGS SHALL BE UTILIZED TO PROVIDE FOR UNIFORM SWEEP AND TRANSITION FOR LATERALS OR INTERSECTING MAINS.
8. CONSTRUCT A DROP ACROSS MANHOLE OF 0.10 FEET WHERE POSSIBLE WHEN LINE BENDS OR PIPE DIAMETER CHANGES.

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CITY OF SOUTH SAN FRANCISCO
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STANDARDS FOR PRECAST MANHOLE

SCALE NTS	APPROVED: SB	DRAWN: KCM
DATE: May 03, 2012		CHECKED: SB
SHEET	DRAWING NO. D-1	

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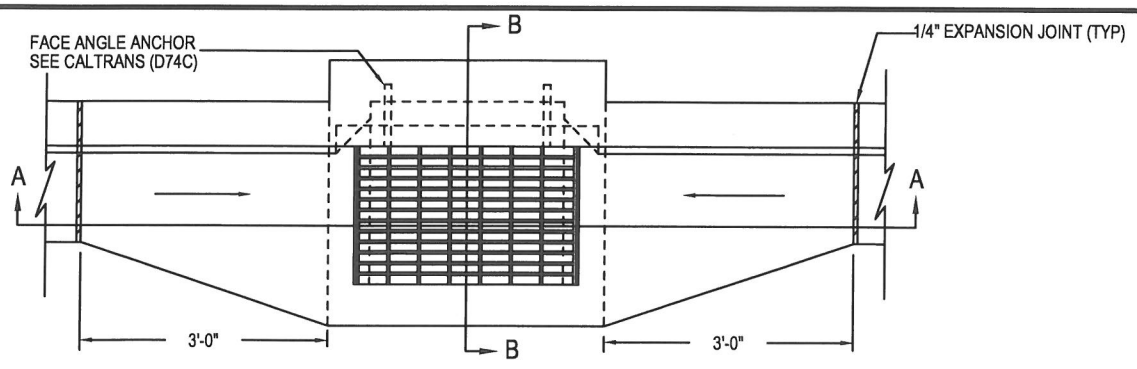
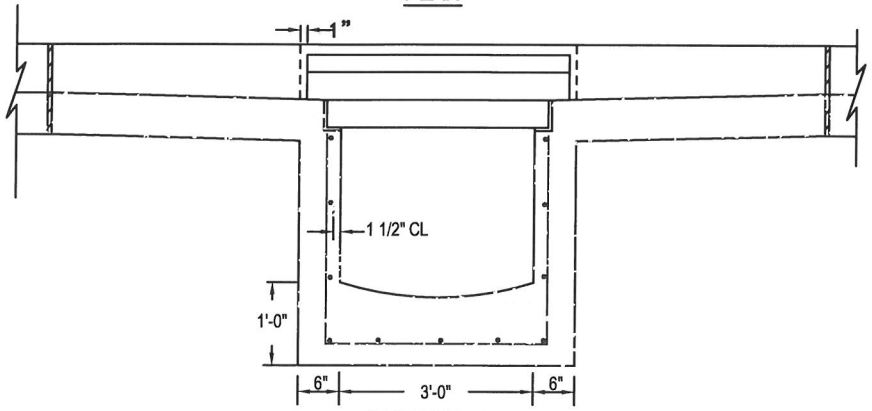
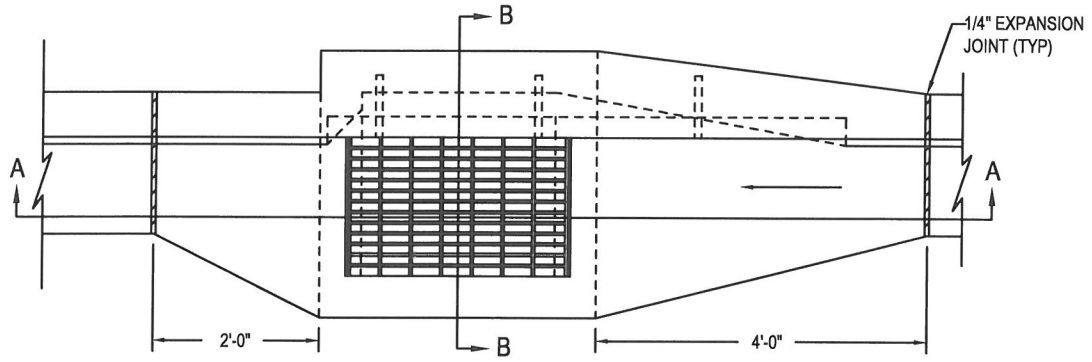


PLAN

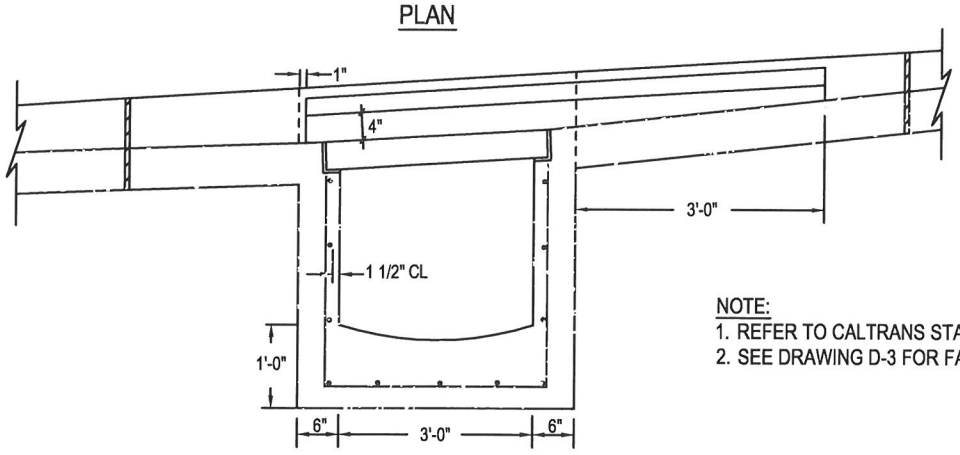


SECTION A–A

TYPE I GUTTER - LONGITUDINAL STREET GRADE LESS THAN 5%



PLAN



SECTION A-A

TYPE II GUTTER - LONGITUDINAL STREET GRADE 5% AND GREATER

NOTE:
1. REFER TO CALTRANS STANDARDS FOR ADDITIONAL DETAILS.
2. SEE DRAWING D-3 FOR FACE ANCHOR DETAIL.

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CITY OF SOUTH SAN FRANCISCO
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STANDARD CATCH BASIN

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DATE: May 03, 2012 | CHECKED: SB
SHEET | DRAWING NO. D-2

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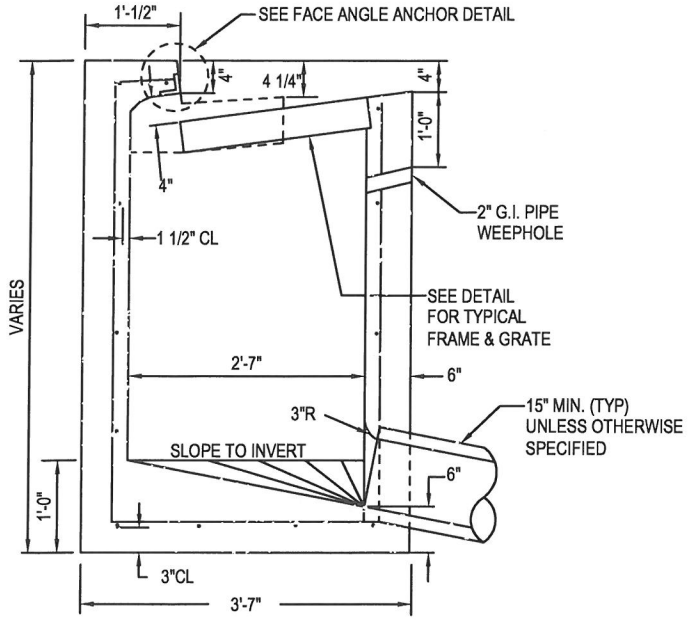
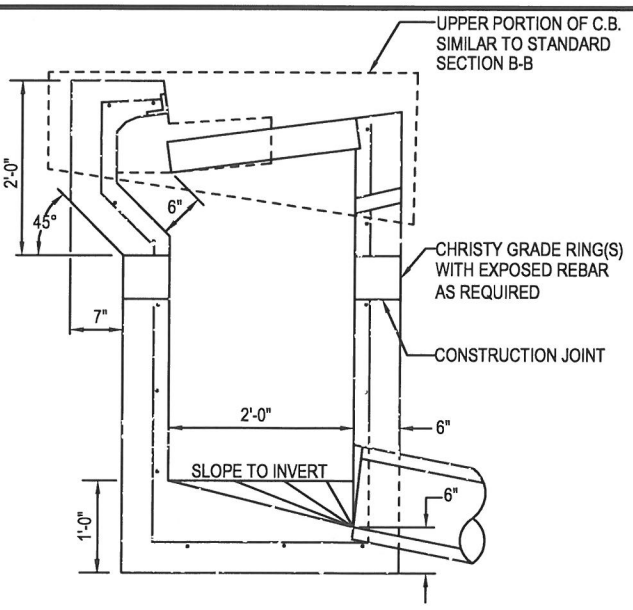
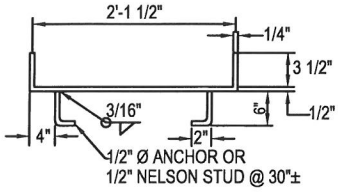


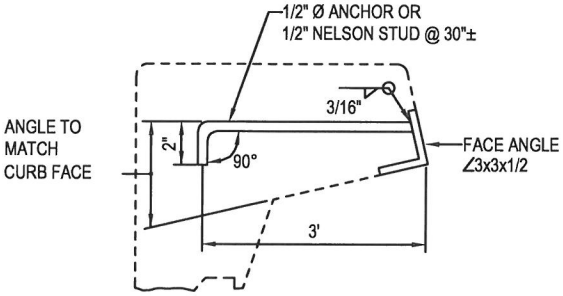
SECTION B-B



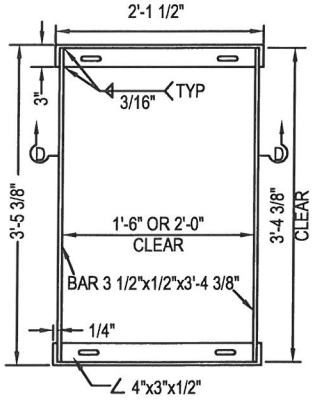
SECTION B-B
ALTERNATIVE CONSTRUCTION



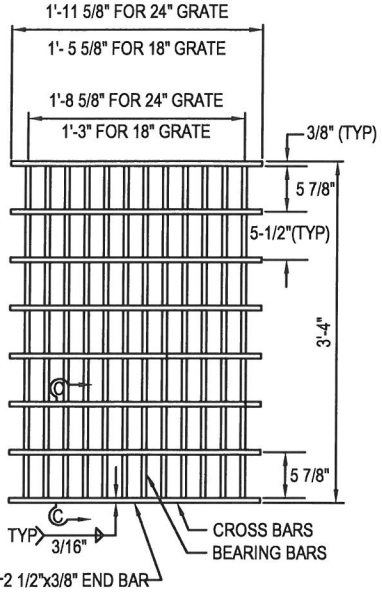
SECTION D-D

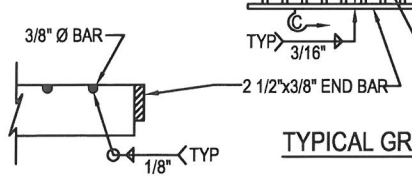


FACE ANGLE ANCHOR DETAIL



TYPICAL FRAME





TYPICAL GRATE

SECTION C-C

NOTES:

1. GRATE, FRAMES, AND FACE ANGLES SHALL BE HOTDIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM SPEC. NO. A-123.
2. REINFORCING STEEL IN WALLS SHALL BE #4 BARS AT 12"± O.C. EACH WAY.
3. BEARING BARS FOR GRATES SHALL BE 3 1/2" x 3/8" BARS ON 1 7/8" CENTER.
4. USE NO. 12 BARS FOR 24" GRATE, NO. 9 BARS FOR 18" GRATE.
   24" GRATE WEIGHT 192 LBS, 18" GRATE WEIGHT 145 LBS.
5. 3/8"Ø CROSS BARS FOR GRATES MAY BE FILLET WELDED, RESISTANCE WELDED OR ELECTROFORGED TO BEARING
6. BARS.
   ALL CONCRETE SHALL BE STATE CLASS A (6 SACK MIX).
7. PRECAST OR CAST-IN-PLACE CONCRETE UNIT BASED ON STATE TYPE "GO" IS ACCEPTABLE ALTERNATE.

CITY OF SOUTH SAN FRANCISCO CALIFORNIA

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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

STANDARD CATCH BASIN TYPES GO-SSFT

SCALE: NTS	APPROVED: SB	DRAWN: KCM
DATE: May 03, 2012		CHECKED: SB
SHEET	DRAWING NO. D-3	

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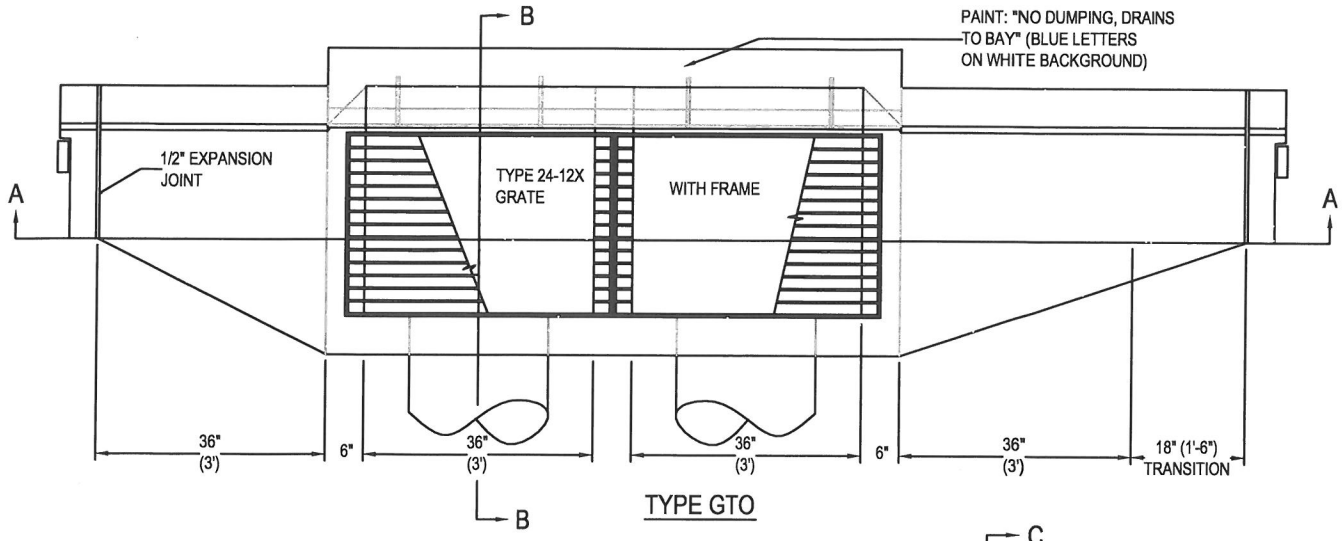
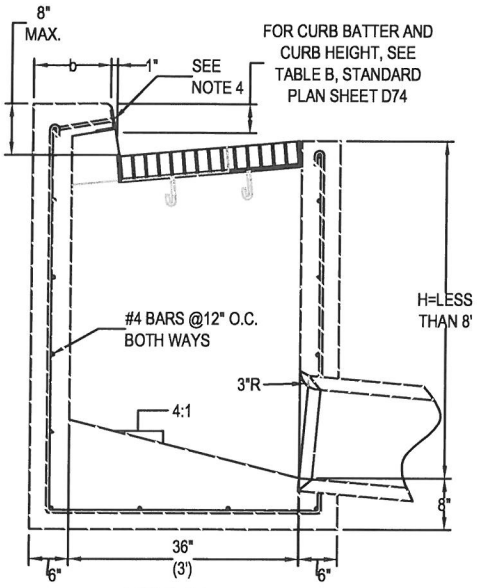
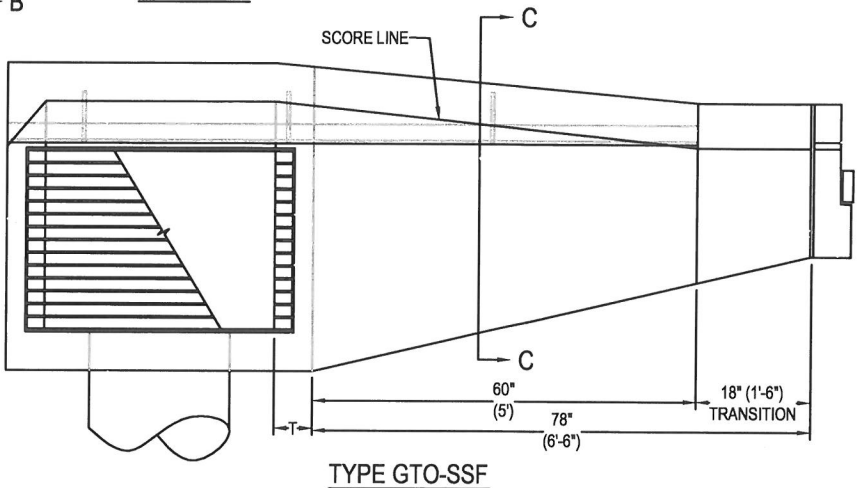


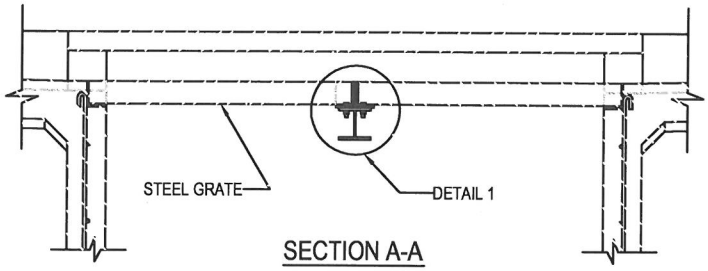
TYPE GTO



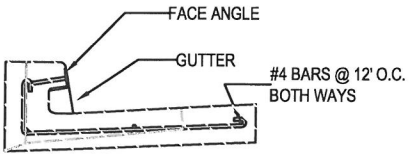
SECTION B-B



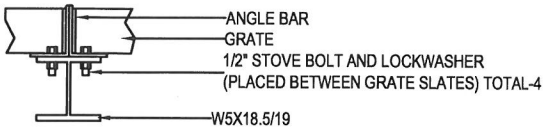
TYPE GTO-SSF



SECTION A-A



SECTION C-C



DETAIL 1 (2X)

NOTES:

1. CURB SECTION SHALL MATCH ADJACENT CURB.
2. GRATES SHALL BE TYPE 24-14X WITH FRAME.
3. REINFORCING BARS SHALL BE #4 AT 12" O.C. BOTH WAYS.
4. SEE STD. PLAN SHEET D74 FOR FACE ANGLE ANCHOR DETAIL 3" MIN.
5. REFER TO GENERAL NOTES ON STANDARD PLAN SHEET D74.
6. PROVIDE MIN. 18" TRANSITION IN CURB AND GUTTER.

TABLE B

CURB TYPE	NORMAL CURB HEIGHT	CURB BATTER	"a" DIMEN-SION	"b" DIMENS-SION
A-6	6"	1 1/2"	T+7-1/2"	12 1/2"
A-8	8"	2"	T+7"	12"
B	6"	4"	T+5"	10"
DIKE	6"	3"	T+6"	

NO.	DATE	REVISION	BY	APP.
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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

STANDARD CATCH BASINS
TYPES GTO AND GTO-SSF

SCALE 1:30 | APPROVED: | DRAWN: KCM
DATE: JANUARY 2009 | CHECKED: SB
SHEET | DRAWING NO. D-4

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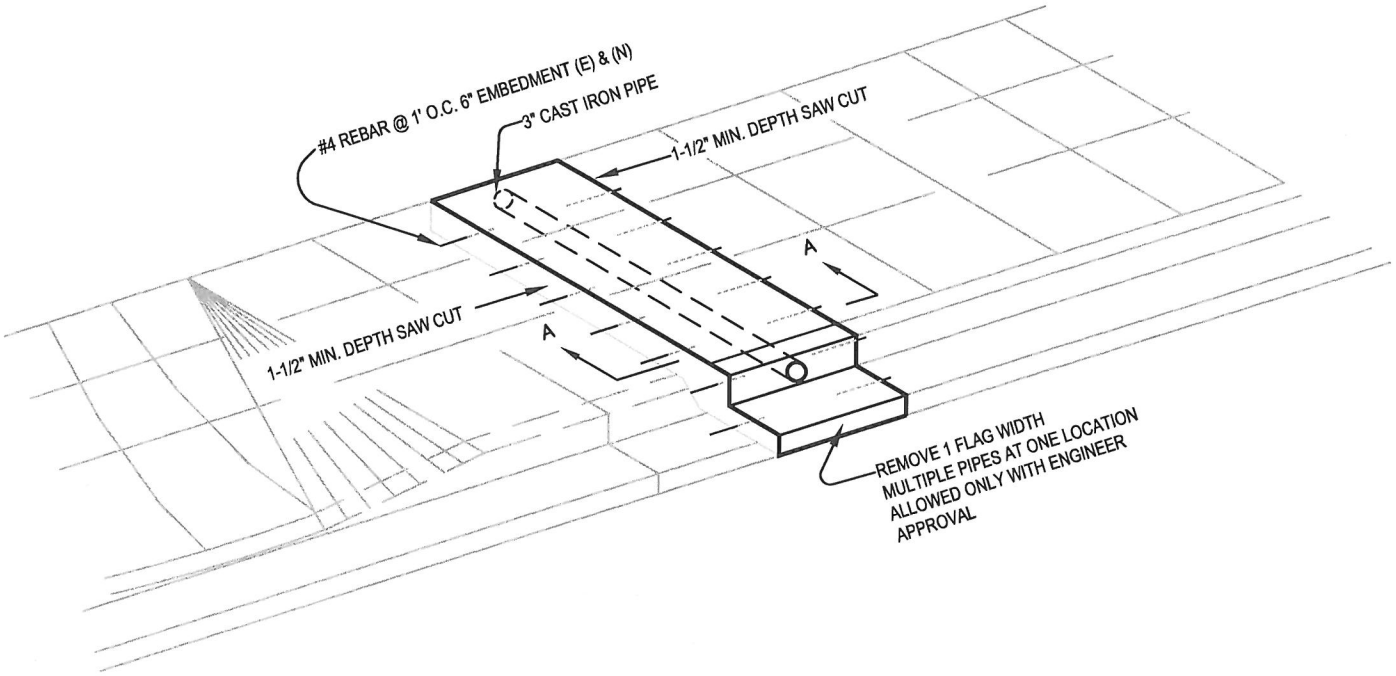
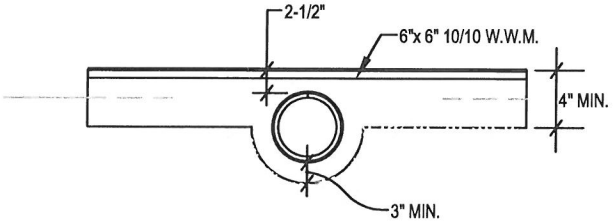
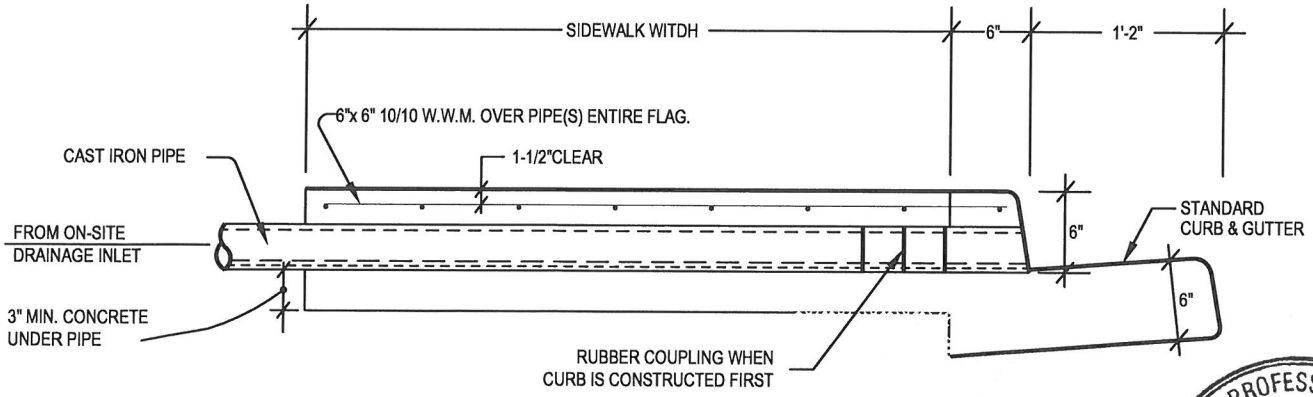




SECTION A-A

NOTE:

WHERE MULTIPLE PIPES ARE ALLOWED, PIPE SPACING SHALL MAINTAIN A MINIMUM CLEAR DISTANCE OF THREE (3) INCHES.



ELEVATION

REGISTERED PROFESSIONAL ENGINEER
BRIAN WAYNE McMINN
64143
Exp. 12/31/12
CIVIL
STATE OF CALIFORNIA

CITY OF SOUTH SAN FRANCISCO
CALIFORNIA

NO.	DATE	REVISION	BY	APP.
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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

CURB DRAIN DETAILS

SCALE: NTS
APPROVED: Brian McMinn
DRAWN: KCM
DATE: Sep 20, 2012
CHECKED: SB
SHEET
DRAWING NO. D-5

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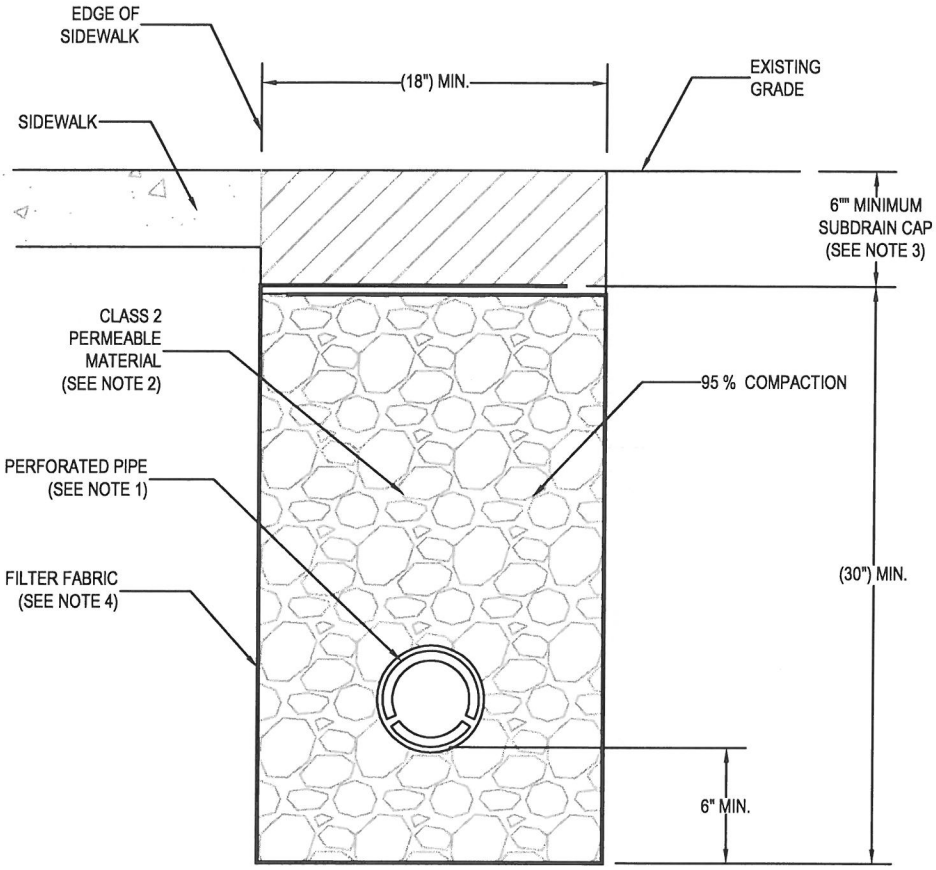

NOTES:

1. PERFORATED PIPE WHERE SPECIFIED (PLACE PERFORATIONS DOWN). ABS PIPE WITH MINIMUM DIAMETER OF FOUR (4) INCHES CONFIRMING TO ASTM D-2751SDR35 OR CONTECH A2000.
2. CLASS 2 PERMEABLE MATERIAL AS GIVEN IN SECTION 68-1.025, STATE OF CALIFORNIA STANDARD SPECIFICATIONS, JULY, 1992 EDITION.
3. SUBDRAIN CAP SHOULD CONSIST OF COMPACTED FILL OR TOPSOIL DEPENDING ON SUBDRAIN LOCATION.
4. FILTER FABRIC AS GIVEN IN SECTION 88-1.03, STATE OF CALIFORNIA STANDARD SPECIFICATIONS, JULY, 1992 EDITION.
5. INSTALL CLEANOUT AT THE UPPER END OF THE PIPE RUN, AT CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENT, AT PIPE JUNCTIONS AND AT 100 FEET INTERVALS.

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CITY OF SOUTH SAN FRANCISCO
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TYPICAL BEHIND SIDEWALK SUBDRAIN DETAILS

SCALE: 1:10	APPROVED:	DRAWN: KCM
DATE: May 03, 2012		CHECKED: SB
SHEET	DRAWING NO. D-6	

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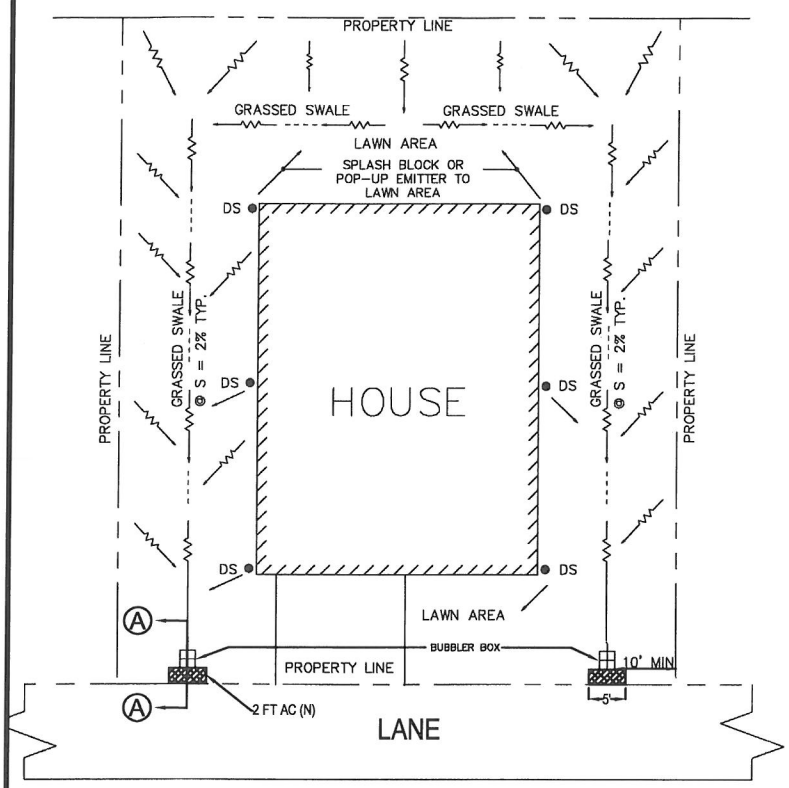
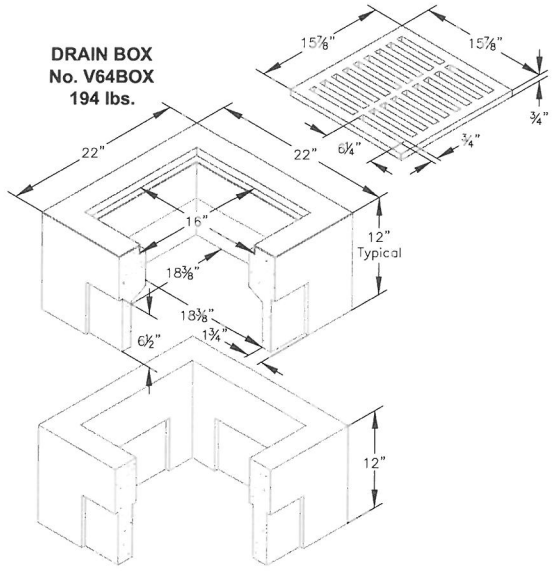
LEGEND:

– SHEET FLOW
– SPLASH BLOCK
– GRASSED SWALE OR DRAIN PIPE



CAST IRON GRATE
No. V64-71C
32 lbs.

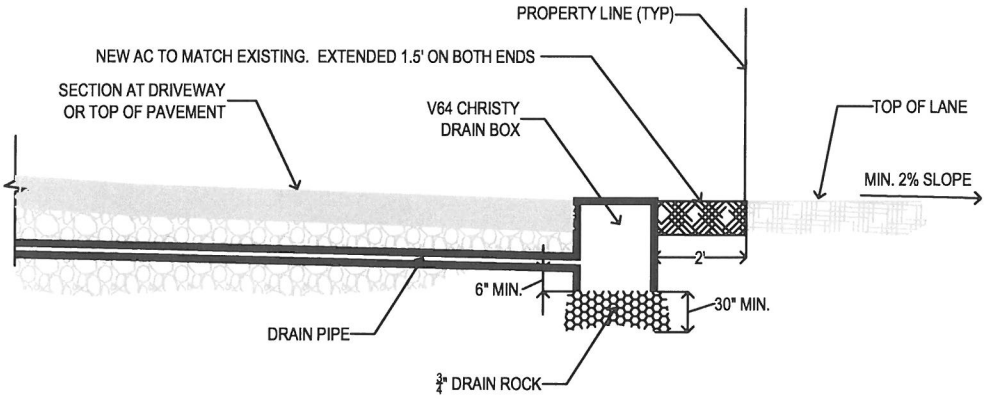
DRAIN BOX
No. V64BOX
194 lbs.



This concrete drain box has a cast in galvanized frame and is specifically engineered for drainage in medium areas such as parking lots, school grounds, walkways, ects. Its design permits final grading material to "lock in" and finish clean. Knock-outs accommodate up to 8" O.D. pipe. Approximate dimensions and weight shown. Also available in bolt down.

Ordering Code	Item	Approx. Shipping Weight	Description
V64BOX	DRAIN BOX	194	V64 Drain Box (18⅜" x 18⅜")– 12 per pallet
V64-71C	GRATE	32	Cast iron
V64X12	EXTENSION	152	12" Reinforced concrete – 12 per pallet

V64 DRAIN BOX



SECTION A-A

			BUBBLER BOX DRAIN OUTLET		
UPDATE DRAWINGS	KCM	SB			
REVISION	BY	APP.	SCALE NTS	APPROVED: SB	DRAWN: KCM
CITY OF SOUTH SAN FRANCISCO DEPARTMENT OF PUBLIC WORKS			DATE: May 03, 2012		CHECKED: SB
			SHEET	DRAWING NO. D-7	

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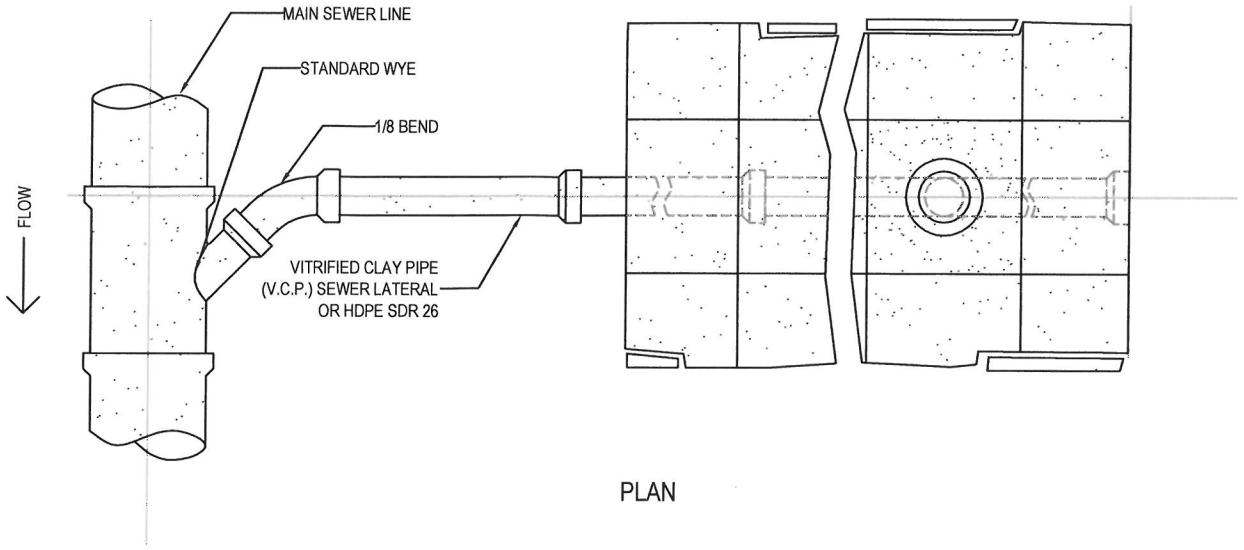
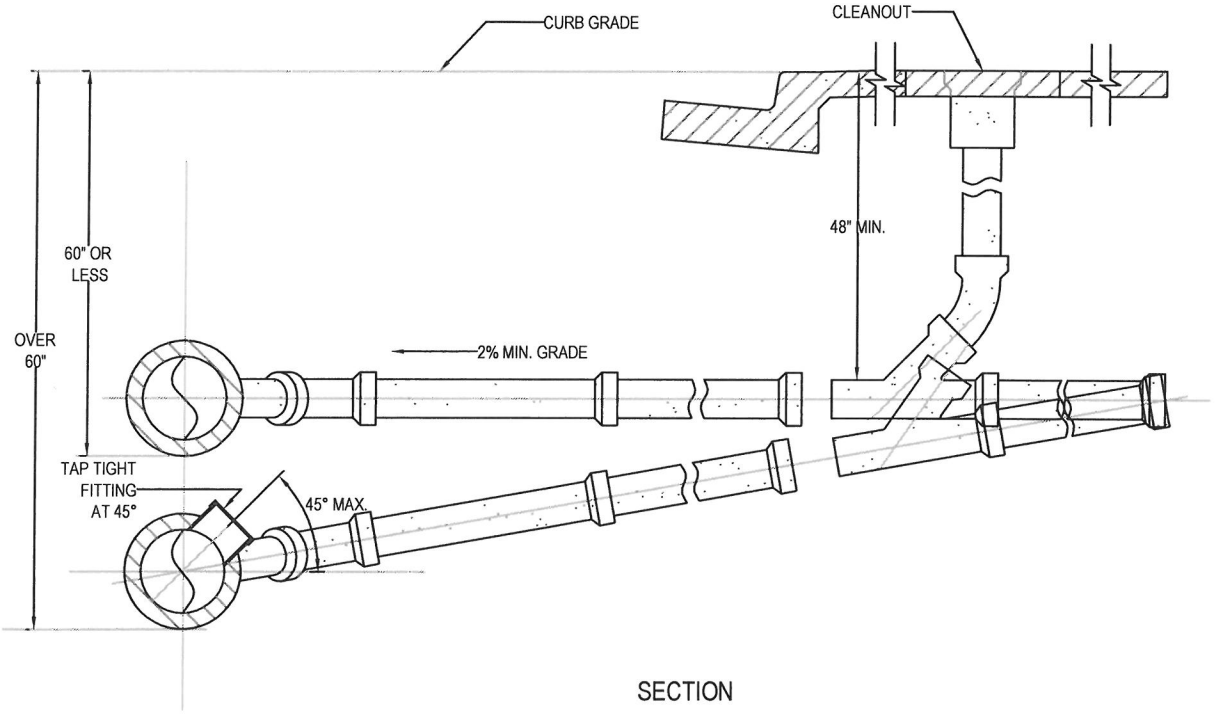


PLAN



SECTION

NOTES:

1. SEWER PIPE JOINTS SHALL BE SPEED SEAL OR APPROVED EQUAL.
2. TAP TIGHT FITTINGS APPROVED ON 8" OR LARGER PIPE I.D. INSTALLED AT 45°.
3. WHERE INFEASIBLE AND UPON APPROVAL BY CITY ENGINEER, CLEANOUT BOX CAN BE LOCATED BEHIND SIDEWALK OR IN LANDSCAPE AREA WITHIN CITY'S RIGHT-OF-WAY.
4. ALTERNATIVE TAP TIGHT FITTING SHALL MEET THE REQUIREMENTS FOR ASTM D 3034.

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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

STANDARD SEWER LATERAL

SCALE NTS	APPROVED:	DRAWN: KCM
DATE: Jun 05, 2013		CHECKED: SB
SHEET		DRAWING NO. SS-1

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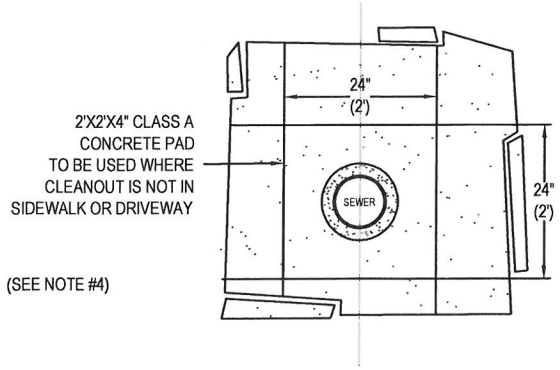
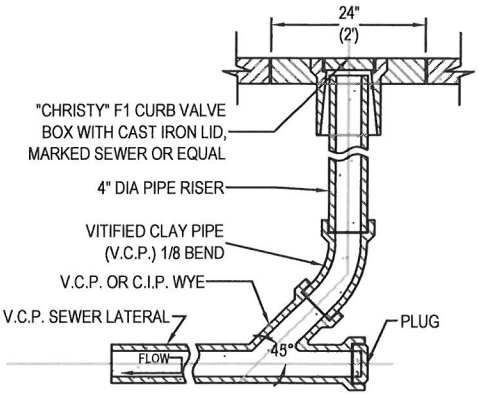
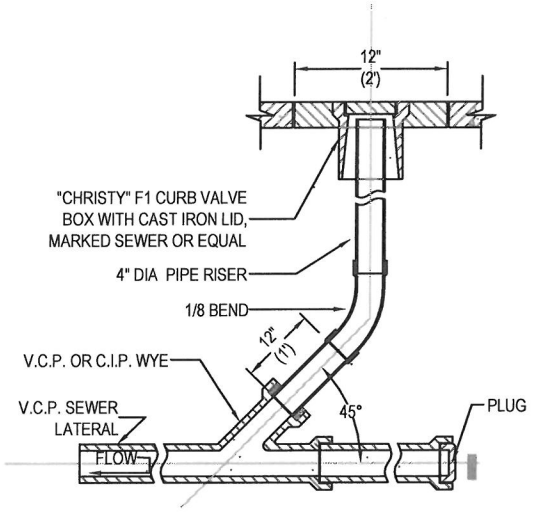


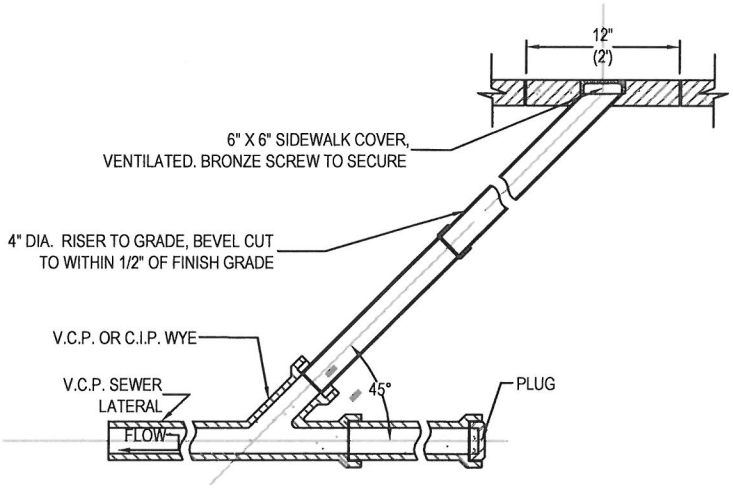
PLAN



V.C.P. LONGITUDINAL SECTION



HDPE/C.I.P. LONGITUDINAL SECTION



45° C.I.P. LONGITUDINAL SECTION
(EXISTING/REUSE)

NOTES:

1. SEWER PIPE JOINTS SHALL BE SPEED SEAL OR APPROVED EQUAL.
2. CAST IRON PIPE (C.I.P.) MAY BE EITHER BELL AND SPIGOT OR SLEEVE AND CLAMP TYPE.
3. HDPE SDR 26 PIPE CAN BE USED IN LIEU OF CIP OR VCP.
4. WHERE INFEASIBLE AND UPON APPROVAL BY CITY ENGINEER, CLEANOUT BOX CAN BE LOCATED BEHIND SIDEWALK OR IN LANDSCAPE AREA WITHIN CITY'S RIGHT-OF-WAY.
5. ALTERNATIVE TAP TIGHT FITTING SHALL MEET THE REQUIREMENTS FOR ASTM D 3034.

NO.	DATE	REVISION	BY	APP.
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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

STANDARD SEWER LATERAL CLEANOUT

SCALE NTS	APPROVED:	DRAWN: KCM
DATE: Jul 08, 2013		CHECKED: SB
SHEET	DRAWING NO.	SS-2

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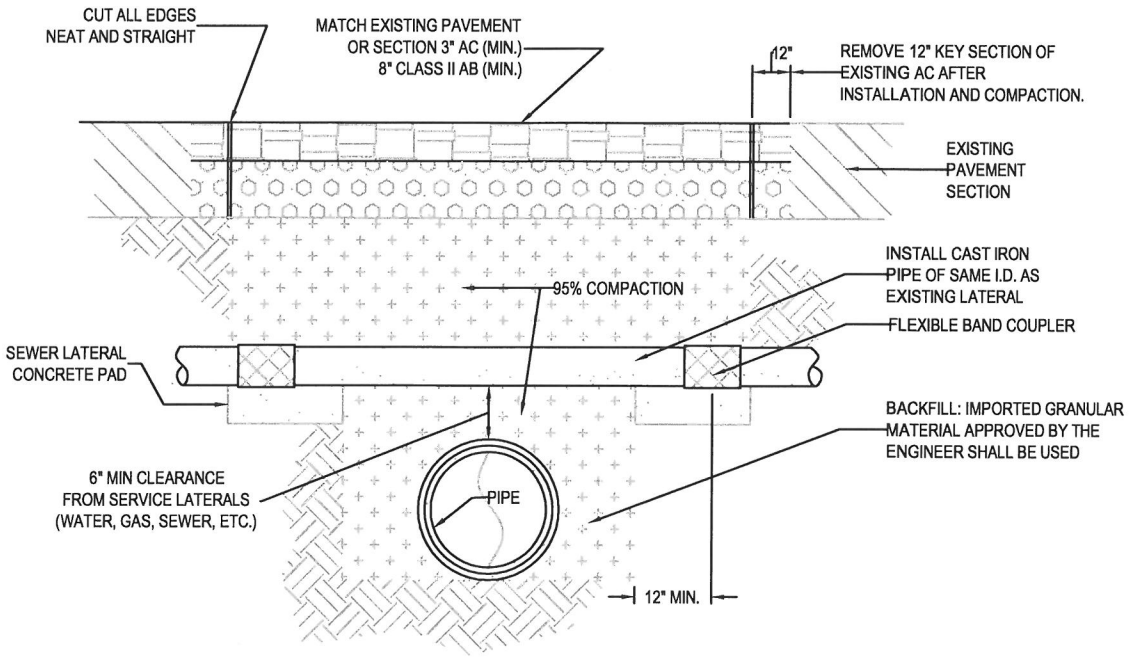

NOTES:

1. CAST IRON PIPE SHALL CONFORM TO THE SPECIFICATIONS OF ASTM-A74.
2. GM-B BANDED RUBBER COUPLINGS OR EQUIVALENT SHALL BE USED IN COMBINATION WITH ELASTOMERIC TRANSITIONAL BUSHINGS.

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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

SEWER LATERAL REPLACEMENT AT CROSSING

SCALE: NTS	APPROVED:	DRAWN: KCM
DATE: May 03, 2012		CHECKED: SB
SHEET	DRAWING NO. SS-3	

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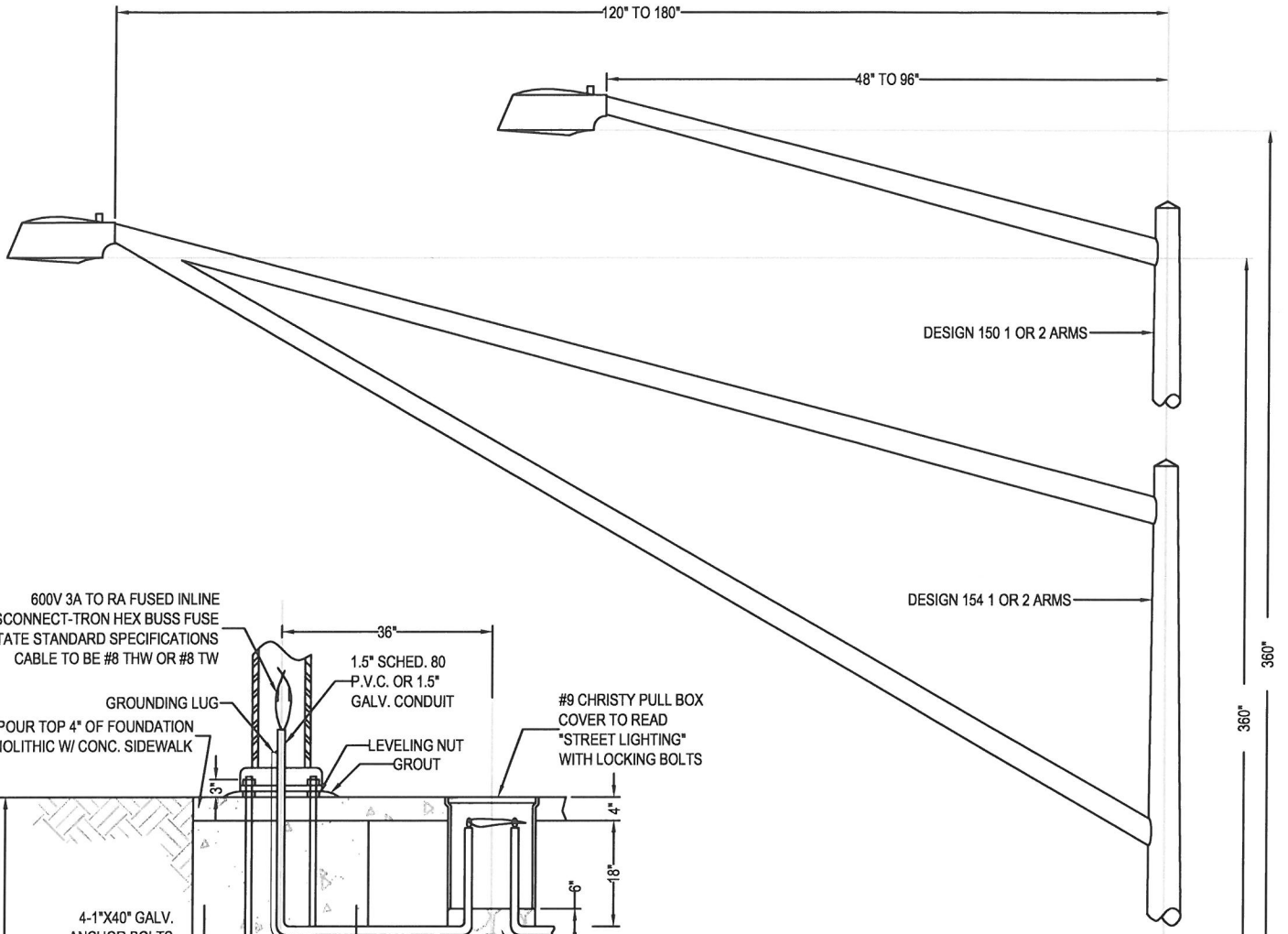
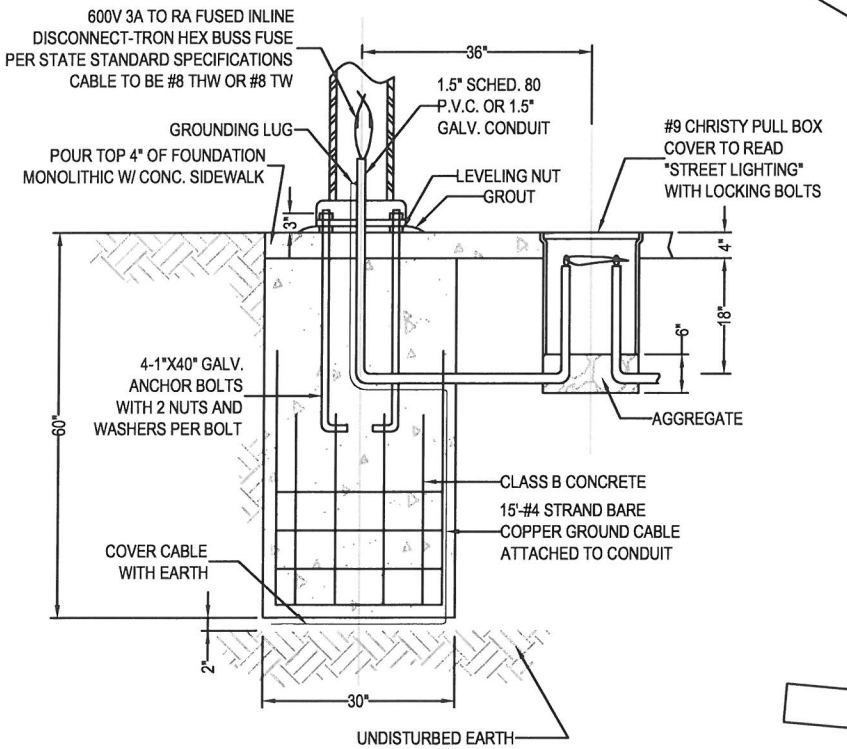
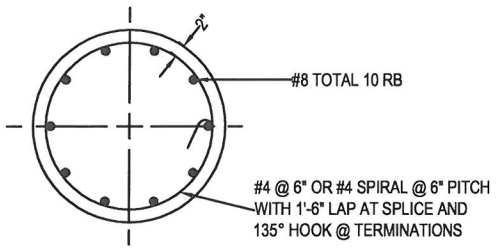
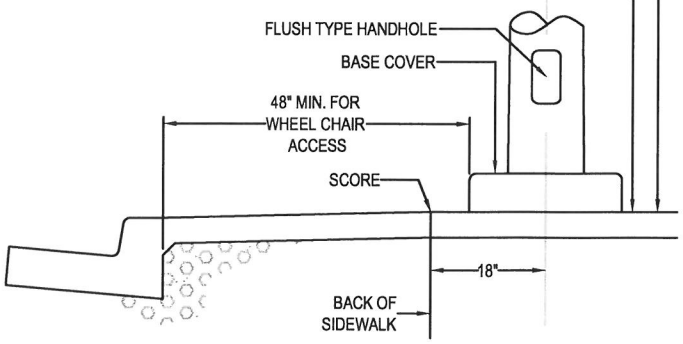






FOOTING DETAIL



SIDE VIEW

NOTES:

1. LUMINAIRE PER STANDARD SPECIFICATIONS FOR HIGH PRESSURE SODIUM VAPOR LAMP WITH INTERNAL REGULATOR BALLAST AND TYPE IV PHOTOELECTRIC CONTROL UNIT.
2. ALUMINUM POLE. UNION METAL DESIGN 150 STYLE A OR DESIGN 154 STYLE B OR APPROVED EQUAL.
3. REFER TO CALTRANS STANDARDS FOR APPLICABLE DETAILS.

NO.	DATE	REVISION	BY	APP.
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1	Mar 2009	Foundation Reinforcement	DC	DC

CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

STANDARD ALUMINUM ELECTROLIER

SCALE: NTS | APPROVED: | DRAWN: KCM
DATE: May 03, 2012 | CHECKED: SB
SHEET | DRAWING NO. E-1

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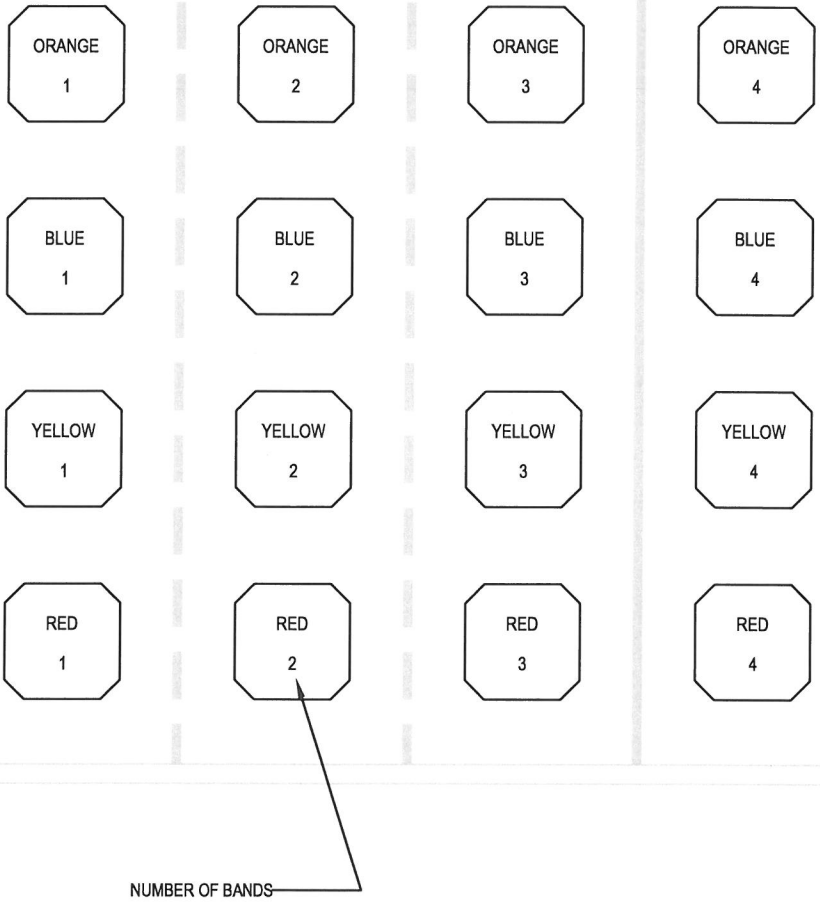

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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

COLOR CODE FOR LOOPS

SCALE: NTS
DATE: May 03, 2012
SHEET

APPROVED: SB

DRAWN: KCM
CHECKED: SB
DRAWING NO. E-2

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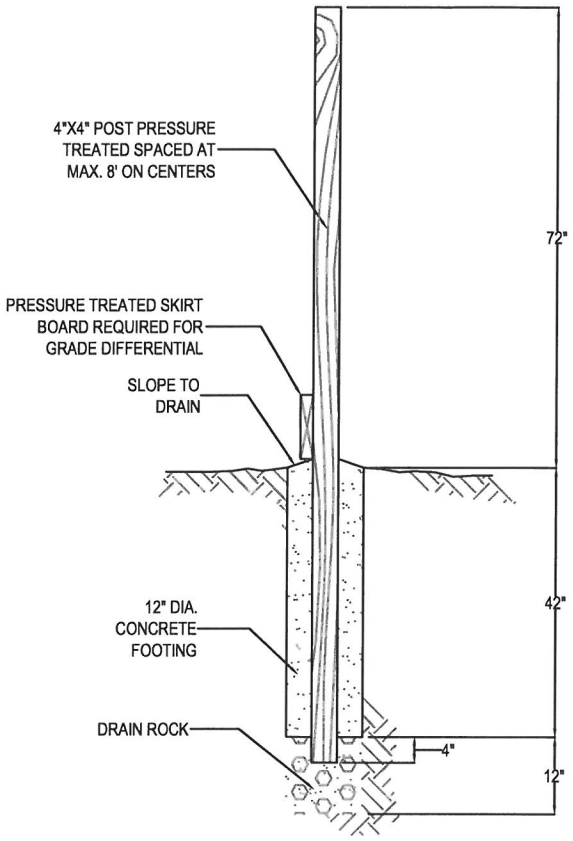
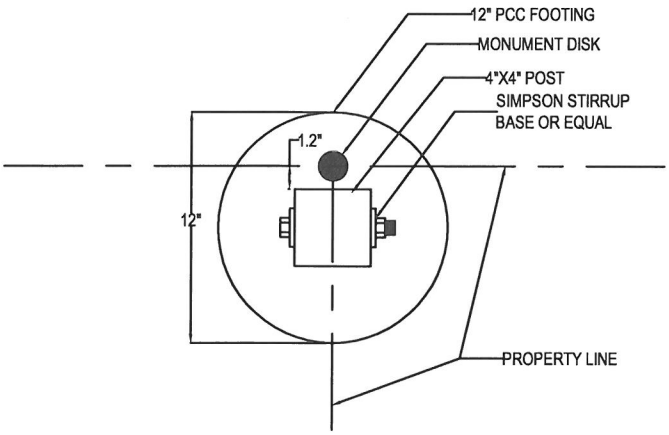


NOTE:

1. DEEPER FOOTING MAY BE REQUIRED BY THE CITY.

WOOD FENCE POST



REAR PROPERTY CORNER MONUMENT

NO.	DATE	REVISION	BY	APP.
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CITY OF SOUTH SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

WOOD FENCE POST,
REAR PROPERTY CORNER MONUMENT

SCALE: AS SHOWN | APPROVED: | DRAWN: KCM
DATE: May 03, 2012 | CHECKED: SB
SHEET | DRAWING NO. MISC-1

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