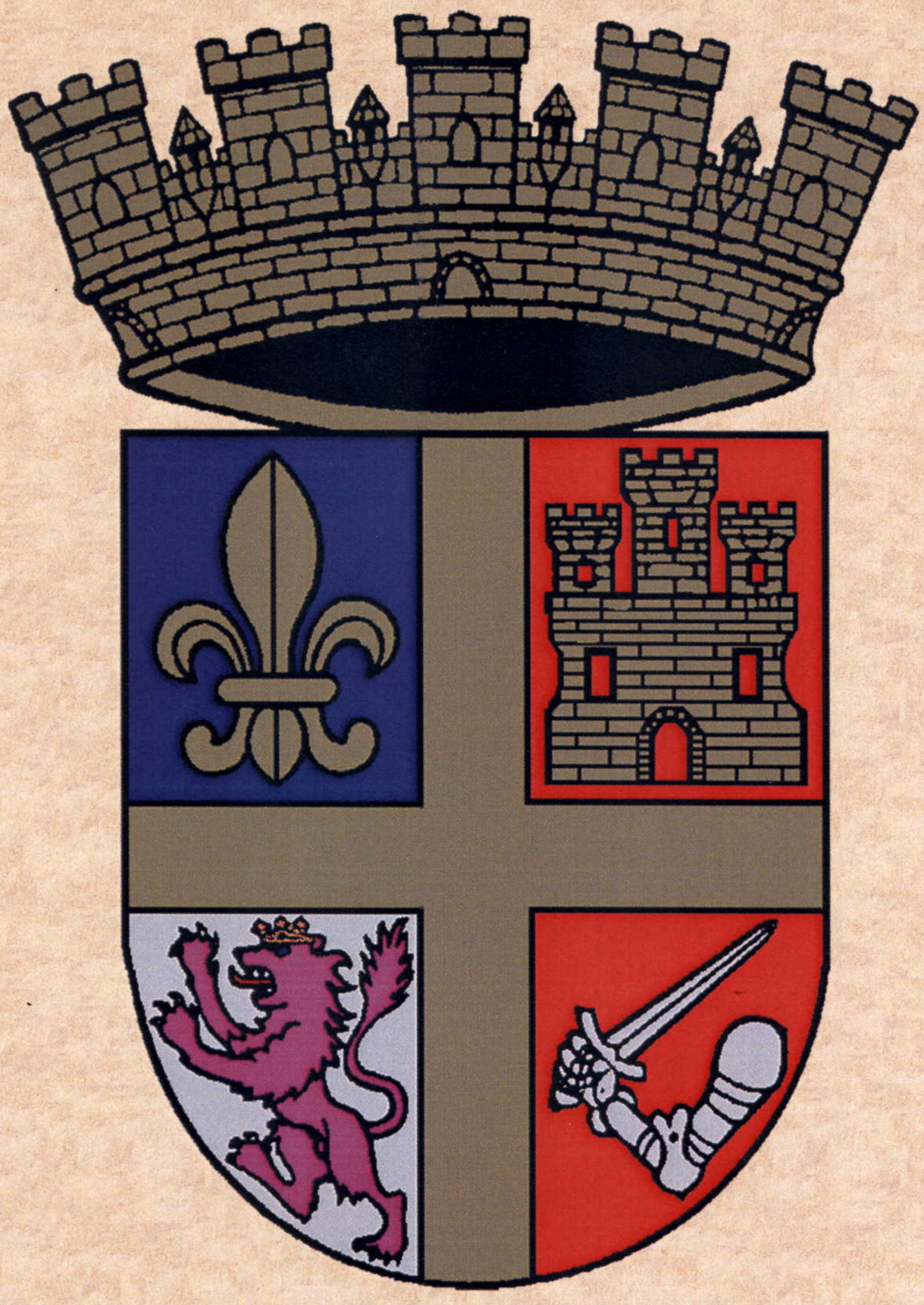
PAVING & DRAINAGE DETAILS



City of St. Augustine

Public Works Department

904 ~ 825 ~ 1040

http://www.staugustinegovernment.com/

ISSUED: APRIL 10, 2008

CAD FILES AVAILABLE UPON REQUEST

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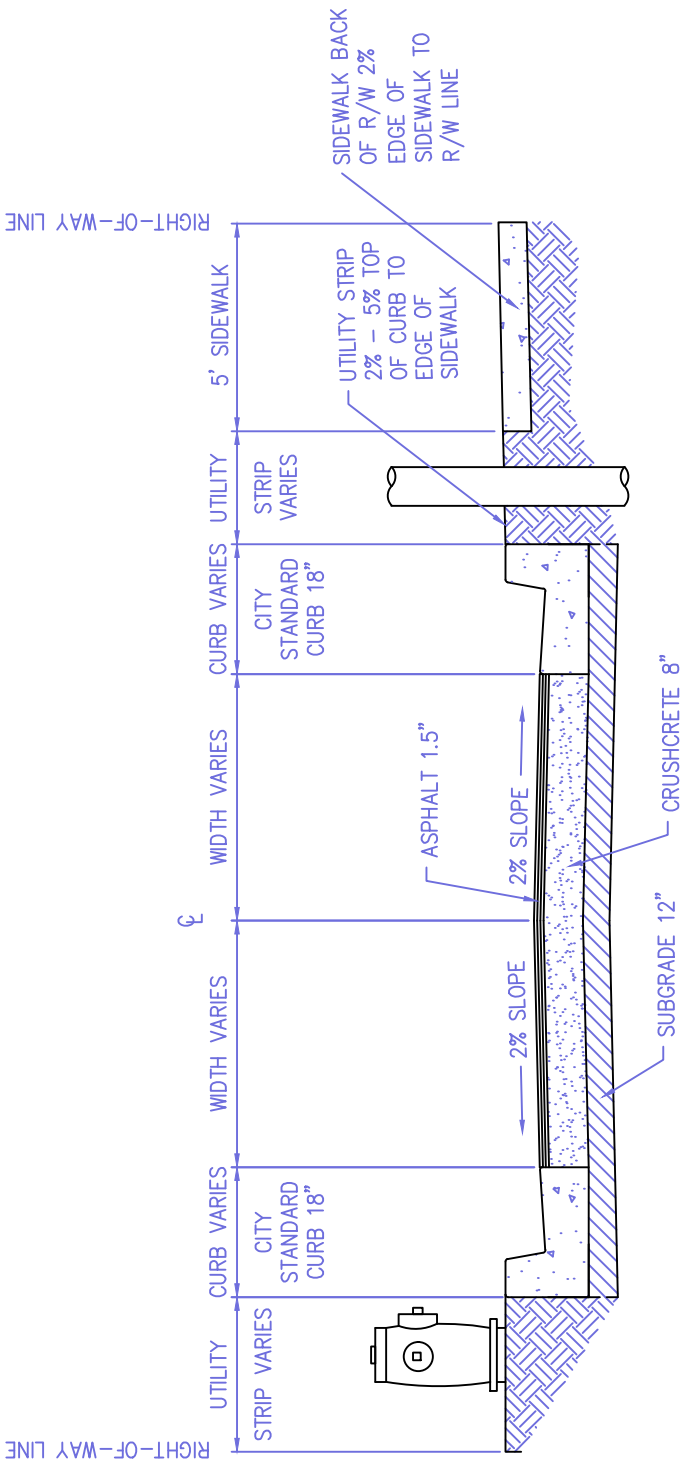
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-01A**

DESCRIPTION	DATE	REVISED
TYPICAL ROADWAY LIGHT TRAFFIC	1/8/08	3/10/08



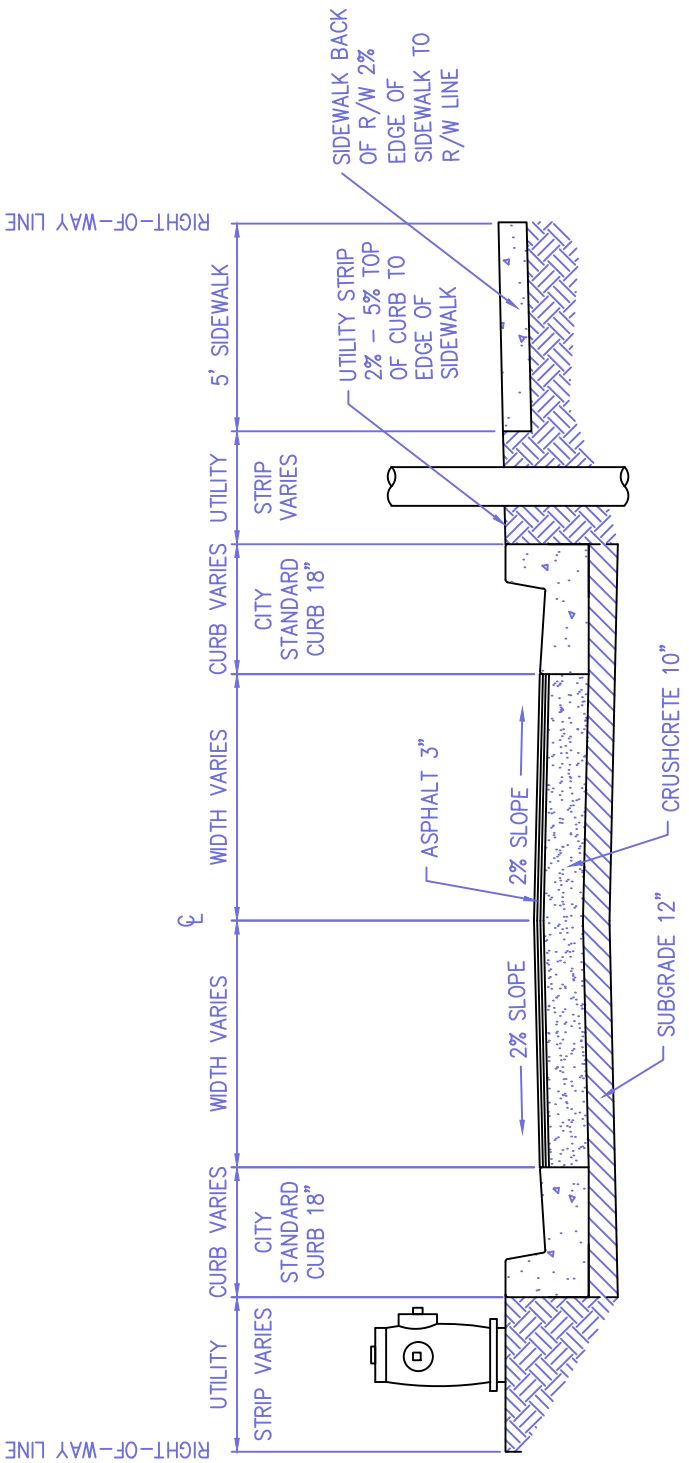
NOTE:

1. WIDTH OF RIGHT-OF-WAY VARIES.
2. WIDTH OF PAVEMENT SHALL BE APPROVED BY THE PUBLIC WORKS DEPT. CROWN OF PAVEMENT SHALL BE THE CENTERLINE OF THE ROADWAY UNLESS APPROVED BY THE PUBLIC WORKS DEPT.
3. TYPE S1 ASPHALT SHALL BE PLACED AND COMPACTED WITH AN APPROVED COMPACTOR TO A MINIMUM OF 98% OF MAXIMUM DENSITY. THICKNESS OF ASPHALT SHALL BE 1 1/2". ALL SPECIFICATIONS SHALL BE FOLLOWED FROM F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2000, SECTION 331 TYPE S ASPHALT CONCRETE.
4. CRUSHCRETE SHALL BE PLACED AND COMPACTED WITH AN APPROVED COMPACTOR TO A MINUMUM OF 100% AS DETERMINED BY AASHTO T180, CRUSHCRETE SHALL BE COMPACTED IN 4" LIFTS, ASTM C33 FOR GRADATION 7(1/2" TO NO.4) SHALL BE FOLLOWED FOR AGGREGATE GRADATION. LBR SHALL BE AT LEAST 100 PRIOR TO PAVING. ALL SPECIFICATIONS SHALL BE FOLLOWED FROM F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2007, SECTION 200 ROCK BASE AND SECTION 204 GRADED AGGREGATE BASE.
5. STABILIZED SUBGRADE SHALL BE COMPACTED BY AN APPROVED COMPACTOR TO A MINIMUM OF 98% OF MAXIMUM DENSITY, LIMEROCK BEARING RATIO SHALL BE A MINIMUM OF 40. THICKNESS OF STABILIZED SUBGRADE SHALL BE 12".

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-01B**

DESCRIPTION	TYPICAL ROADWAY HEAVY TRAFFIC	DATE 3/10/08	REVISED 3/10/08



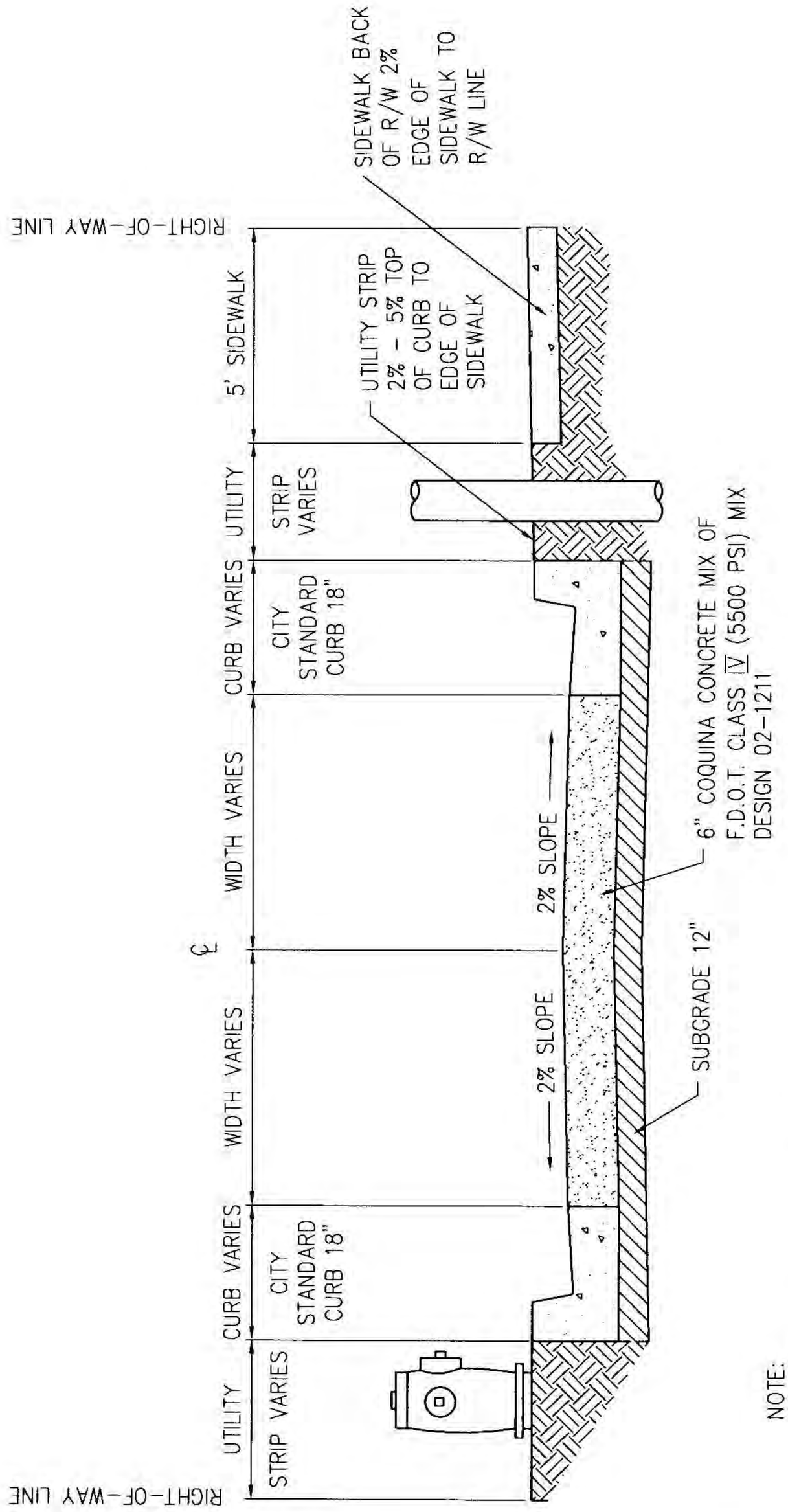
NOTE:

1. WIDTH OF RIGHT-OF-WAY VARIES.
2. WIDTH OF PAVEMENT SHALL BE APPROVED BY THE PUBLIC WORKS DEPT. CROWN OF PAVEMENT SHALL BE THE CENTERLINE OF THE ROADWAY UNLESS APPROVED BY THE PUBLIC WORKS DEPT.
3. TYPE S1 ASPHALT SHALL BE PLACED AND COMPACTED WITH AN APPROVED COMPACTOR TO A MINIMUM OF 98% OF MAXIMUM DENSITY. THICKNESS OF ASPHALT SHALL BE 3". ALL SPECIFICATIONS SHALL BE FOLLOWED FROM F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2000, SECTION 331 TYPE S ASPHALT CONCRETE.
4. CRUSHCRETE SHALL BE PLACED AND COMPACTED WITH AN APPROVED COMPACTOR TO A MINUMUM OF 100% AS DETERMINED BY AASHTO T180, CRUSHCRETE SHALL BE COMPACTED IN 4" LIFTS, ASTM C33 FOR GRADATION 7(1/2" TO NO.4) SHALL BE FOLLOWED FOR AGGREGATE GRADATION. LBR SHALL BE AT LEAST 100 PRIOR TO PAVING. ALL SPECIFICATIONS SHALL BE FOLLOWED FROM F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2007, SECTION 200 ROCK BASE AND SECTION 204 GRADED AGGREGATE BASE.
5. STABILIZED SUBGRADE SHALL BE COMPACTED BY AN APPROVED COMPACTOR TO A MINIMUM OF 98% OF MAXIMUM DENSITY, LIMEROCK BEARING RATIO SHALL BE A MINIMUM OF 40. THICKNESS OF STABILIZED SUBGRADE SHALL BE 12".

City of St. Augustine
PUBLIC WORKS DEPARTMENT

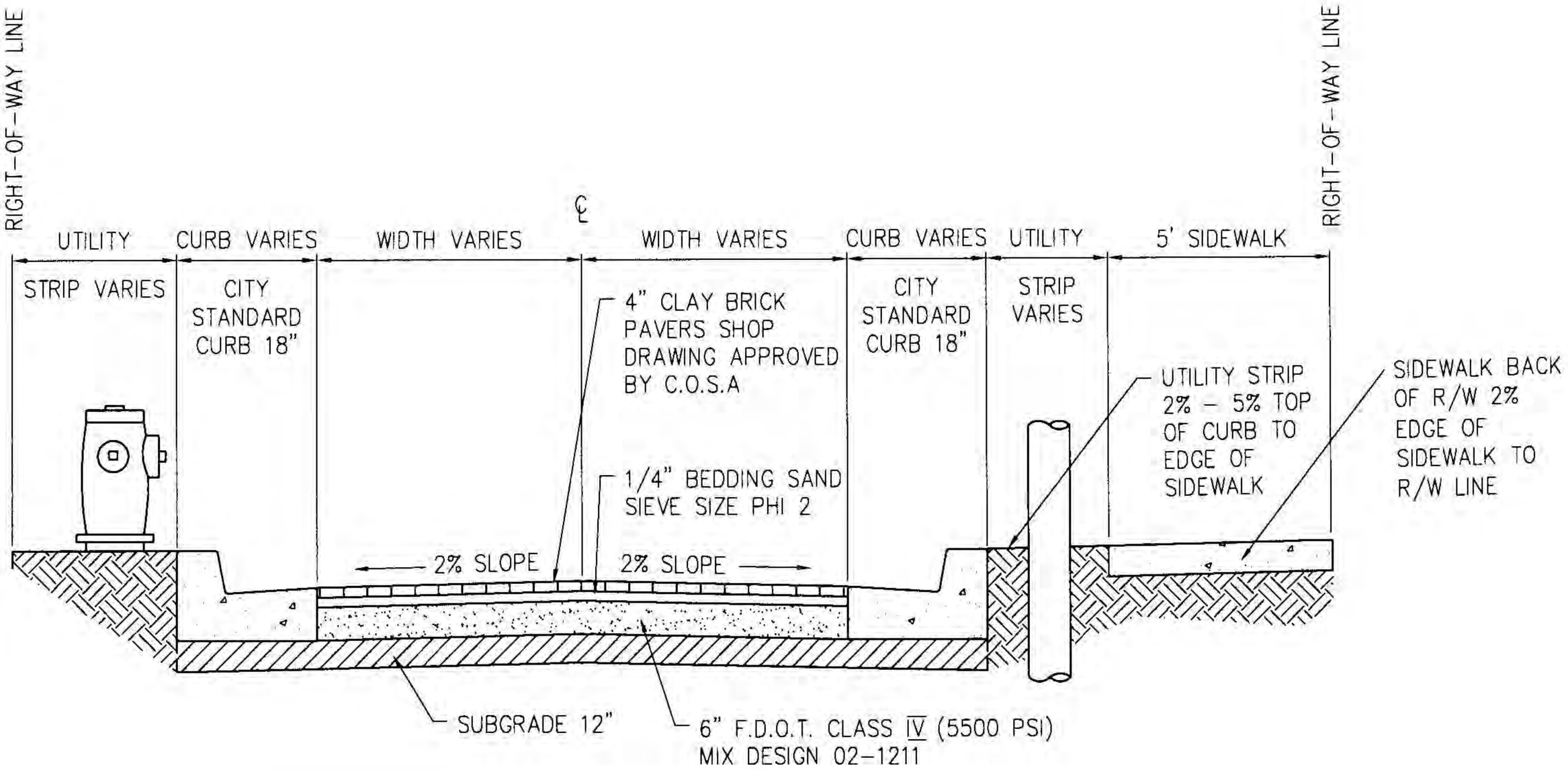
Paving and Drainage Details PD-01C

DESCRIPTION	DATE	REVISED
TYPICAL ROADWAY COQUINA CONCRETE	1/8/08	3/10/08



NOTE:

1. WIDTH OF RIGHT-OF-WAY VARIES.
2. WIDTH OF PAVEMENT SHALL BE APPROVED BY THE PUBLIC WORKS DEPT. CROWN OF PAVEMENT SHALL BE THE CENTERLINE OF THE ROADWAY UNLESS APPROVED BY THE PUBLIC WORKS DEPT.
3. COQUINA MIX CONCRETE SHALL HAVE A WASHED SURFACE WITH AGGREGATE SURFACE EXPOSED NOT TO EXCEED 1/4" IN SURFACE DEVIATION.
4. CONCRETE SHALL HAVE 4000 PSI PRIOR TO TRAFFIC USE. CONCRETE SHALL BE VIBRATED TO PREVENT VOIDS..
5. STABILIZED SUBGRADE SHALL BE COMPACTED BY AN APPROVED COMPACTOR TO A MINIMUM OF 98% OF MAXIMUM DENSITY, LIMEROCK BEARING RATIO SHALL BE A MINIMUM OF 40. THICKNESS OF STABILIZED SUBGRADE SHALL BE 12".



NOTE:

1. WIDTH OF RIGHT-OF-WAY VARIES.

2. WIDTH OF PAVEMENT SHALL BE APPROVED BY THE PUBLIC WORKS DEPT. CROWN OF PAVEMENT SHALL BE THE CENTERLINE OF THE ROADWAY UNLESS APPROVED BY THE PUBLIC WORKS DEPT.

3. BRICK PAVERS SHALL BE APPROVED FOR USE BY C.O.S.A.

4. CONCRETE SHALL MEET 4000 PSI PRIOR TO TRAFFIC USE.

5. STABILIZED SUBGRADE SHALL BE COMPACTED BY AN APPROVED COMPACTOR TO A MINIMUM OF 98% OF MAXIMUM DENSITY, LIMEROCK BEARING RATIO SHALL BE A MINIMUM OF 40. THICKNESS OF STABILIZED SUBGRADE SHALL BE 12".

City of St. Augustine
PUBLIC WORKS DEPARTMENT

DESCRIPTION **TYPICAL ROADWAY BRICK PAVERS**

DATE 1/8/08

REVISED 3/10/08

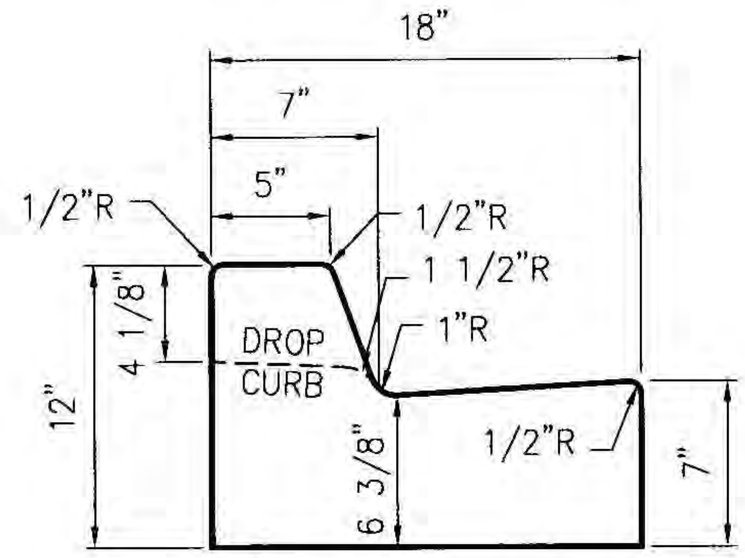
Paving and Drainage Details **PD-01D**

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-02A**

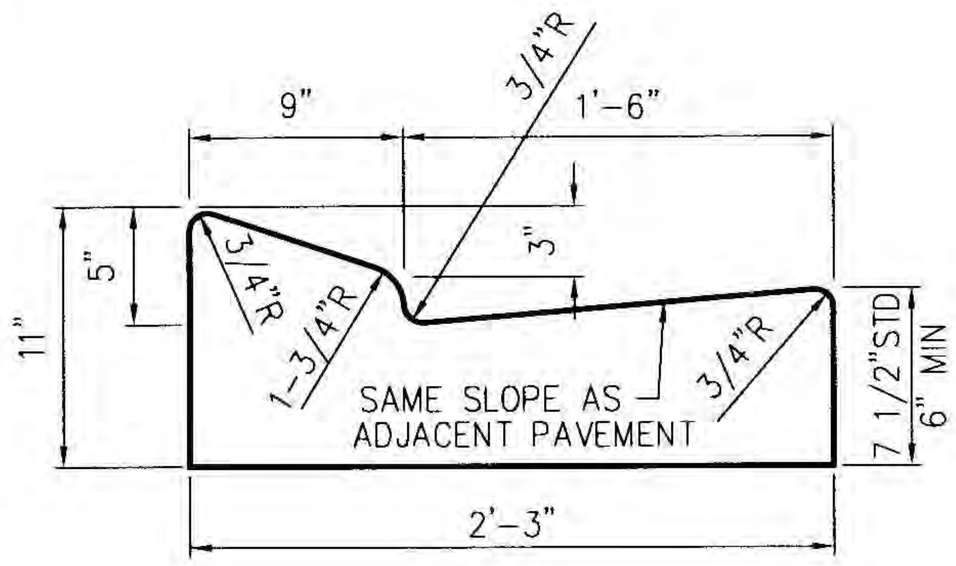
DESCRIPTION **CURB AND GUTTER**

DATE 11/12/96 **REVISED** 10/4/07



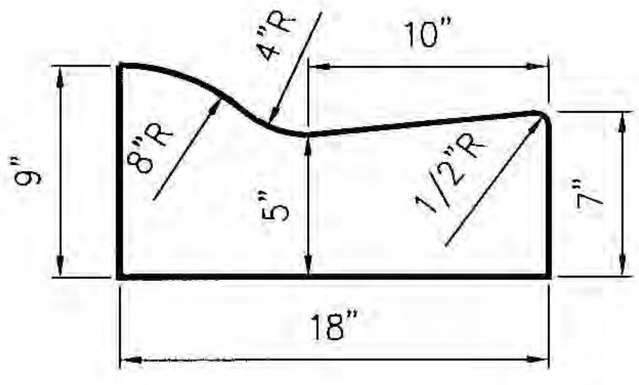
STANDARD CURB & GUTTER

.038850 CU. YDS. PER LINEAR FOOT



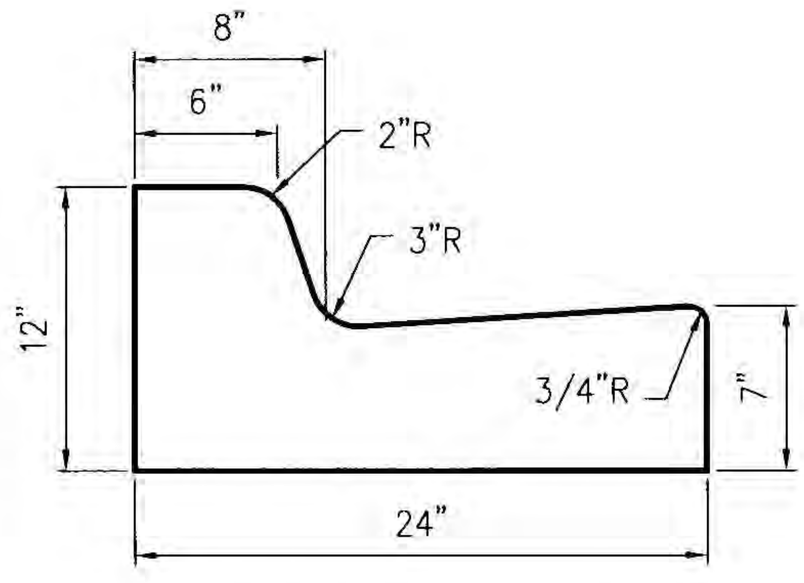
F.D.O.T. TYPE "E" CURB

STANDARD: .0530852 CU. YDS. PER LINEAR FOOT
NON-STANDARD: VARIES



MIAMI CURB & GUTTER

.0321169 CU. YDS. PER LINEAR FOOT



F.D.O.T. "F" CURB & GUTTER WITH 24" BASE

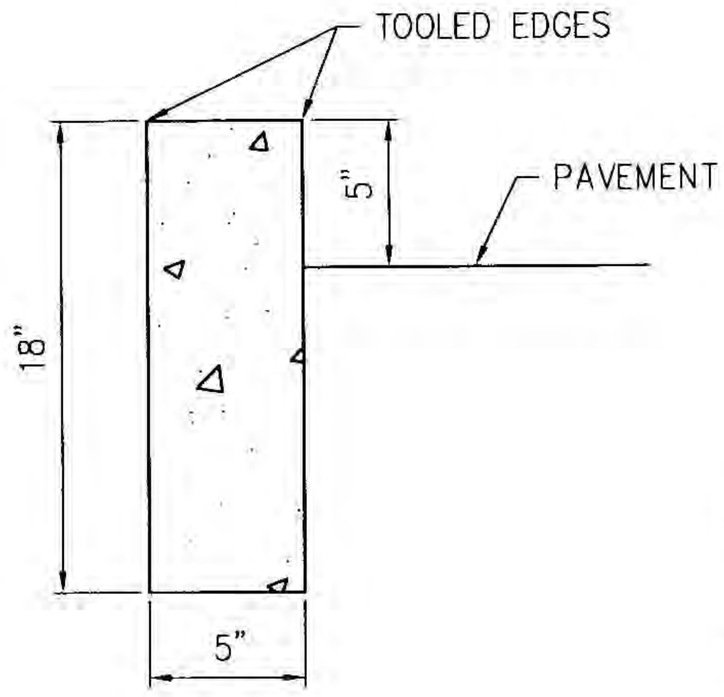
.0514011 CU. YDS. PER LINEAR FOOT

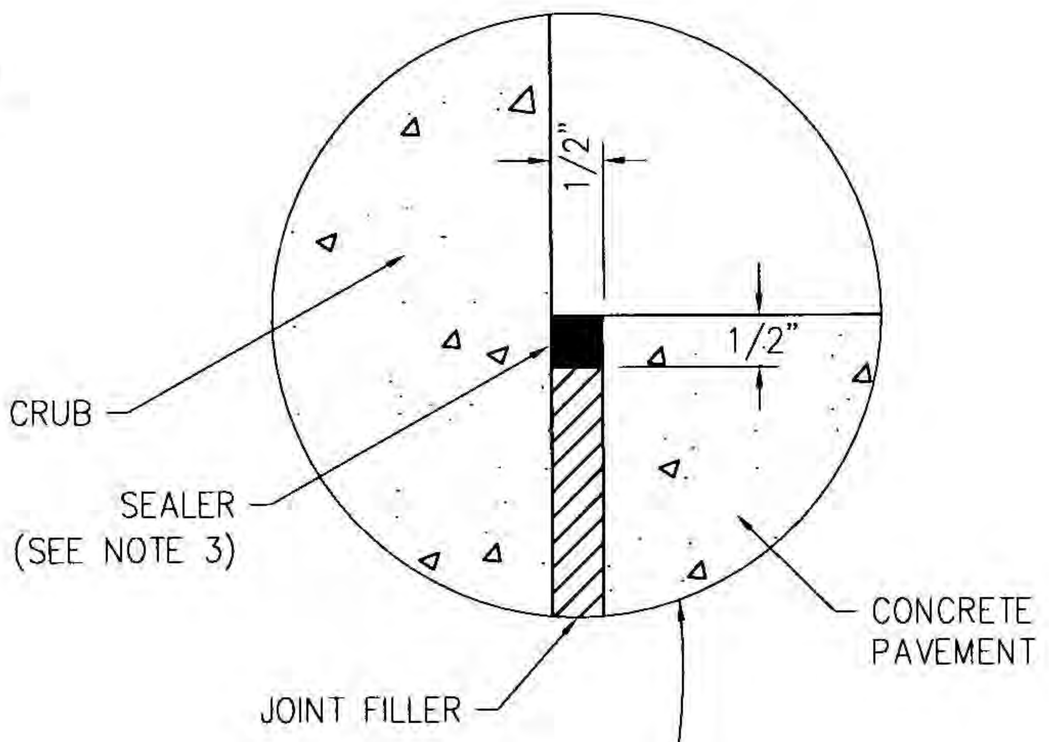
ALL CURB SHOULD BE 3000 PSI CONCRETE

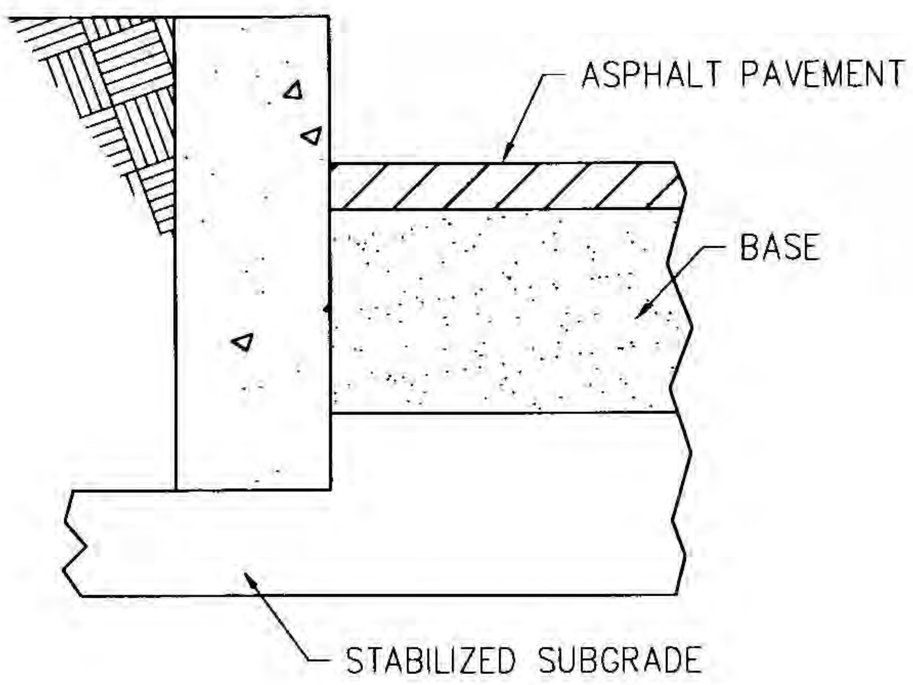
City of St. Augustine
PUBLIC WORKS DEPARTMENT

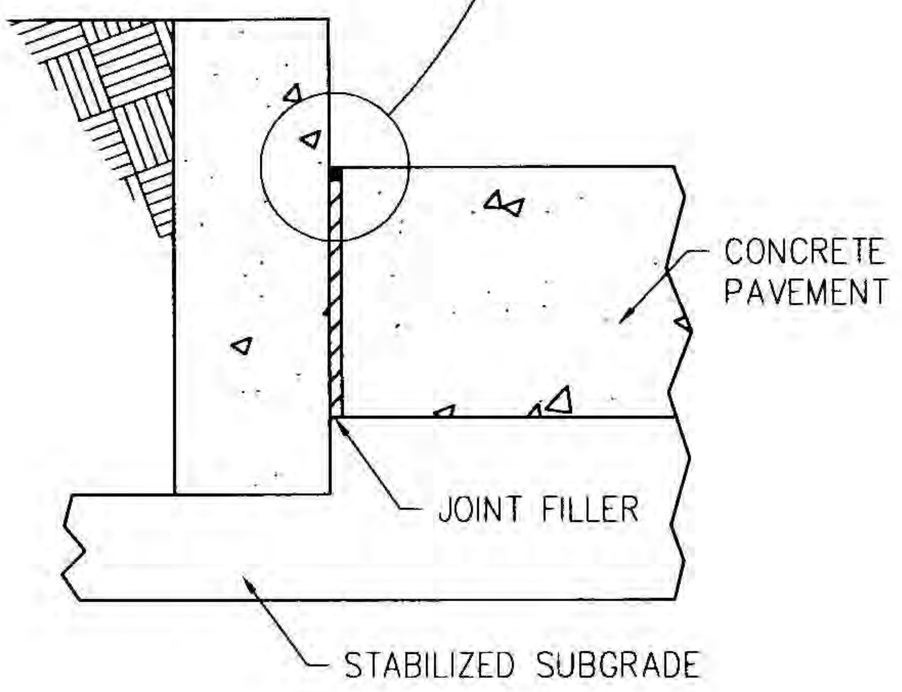
Paving and Drainage Details PD-02B

DESC:	DATE	REVISED
CITY OF ST. AUGUSTINE HISTORIC CURB	1/8/90	10/4/07









NOTES:

1. NEW OR REPLACED CURB SHALL BE 3000 PSI CONCRETE OR AN APPROVED MIX OF COQUINA SHELL.

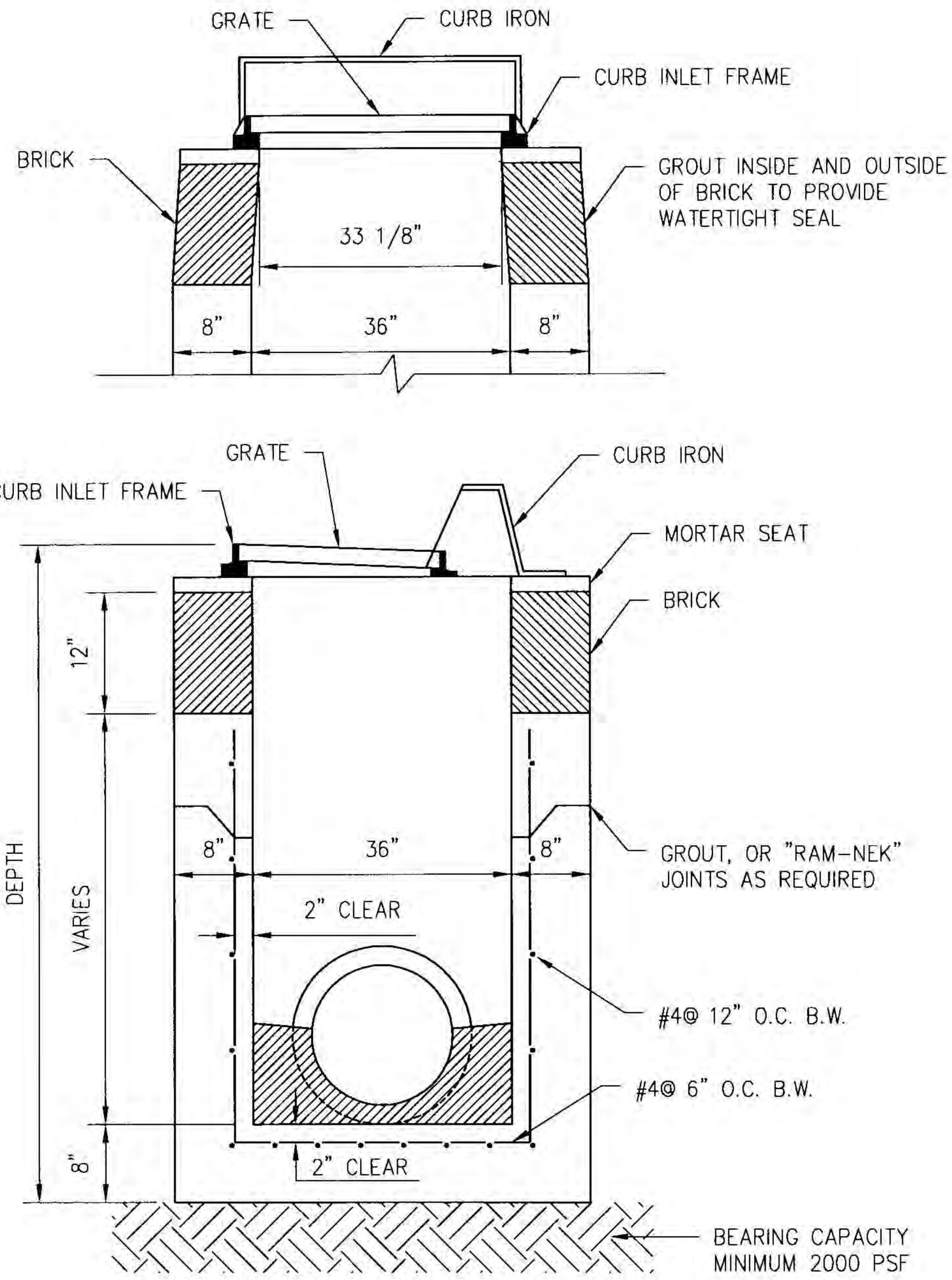
2. ENDS OF CURB SHALL TRANSITION FROM FULL TO ZERO HEIGHTS IN THREE FEET.

3. SEALER SHALL BE 1/2" THICK AND SHALL NOT BE OVERPOURED. SEALER SHALL HAVE A SLIGHT DEPRESION SO THAT IT WILL NOT BE AT THE SAME LEVEL AS THE PAVEMENT.

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-03A**

DESCRIPTION	**STORM SEWER CURB INLET**	DATE 1/7/08	REVISED 1/7/08

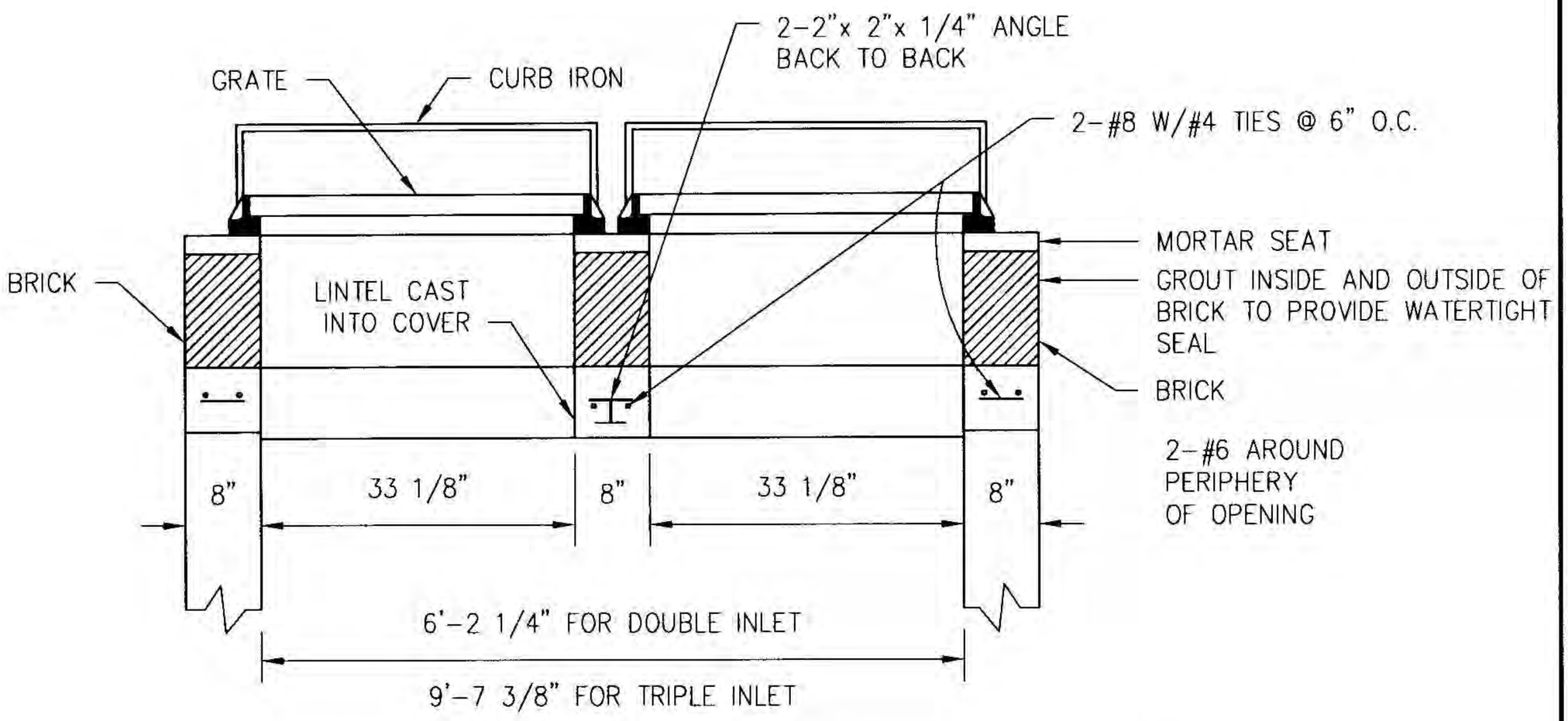


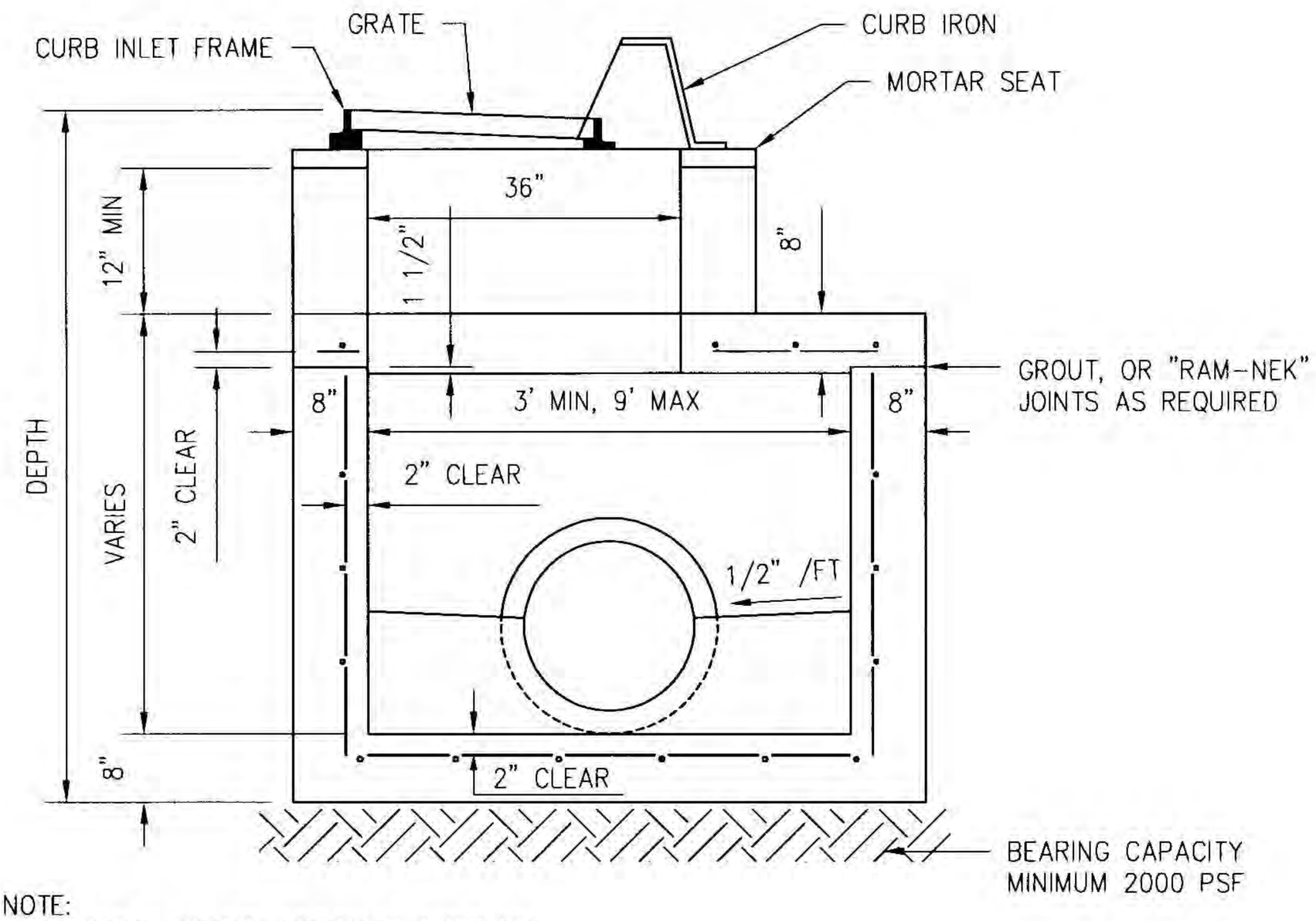
NOTE:
1. CONCRETE DESIGN STRENGTH 4,000 PSI
2. PIPE SHALL NOT BE IN CONST. JOINT
3. PIPES SHALL BE FLUSH WITH INSIDE WALL AND PROVIDE WATERTIGHT SEAL
4. 6" UNDERDRAIN STUBOUTS, UNDERDRAIN SHALL BE INSTALLED MIN. 10 FEET
5. INVERTS SHALL BE POURED TO ALLOW FOR POSITIVE DRAINAGE

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-03B**

DESCRIPTION	DATE	REVISED
STORM SEWER DOUBLE AND TRIPLE CURB INLET	1/7/08	1/7/08



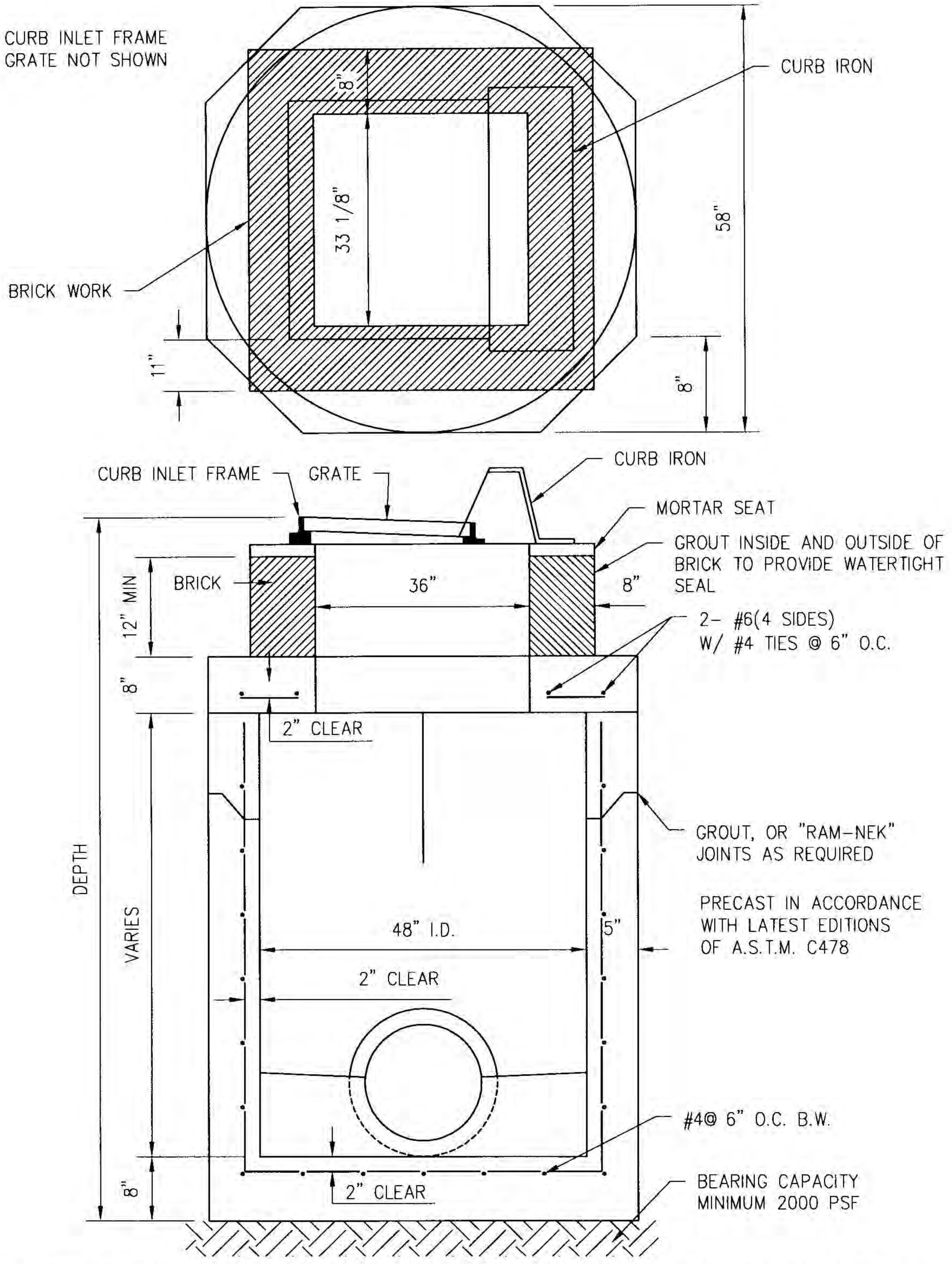


NOTE:
1. CONCRETE DESIGN STRENGTH 4,000 PSI
2. PIPE SHALL NOT BE IN CONST. JOINT
3. PIPES SHALL BE FLUSH WITH INSIDE WALL AND PROVIDE WATERTIGHT SEAL
4. 6" UNDERDRAIN STUBOUTS, UNDERDRAIN SHALL BE INSTALLED MIN. 10 FEET
5. INVERTS SHALL BE POURED TO ALLOW FOR POSITIVED DRAINAGE

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details PD-03C

DESCRIPTION	DATE	REVISED
STORM SEWER 48" I.D. CURB INLET	1/7/08	1/7/08



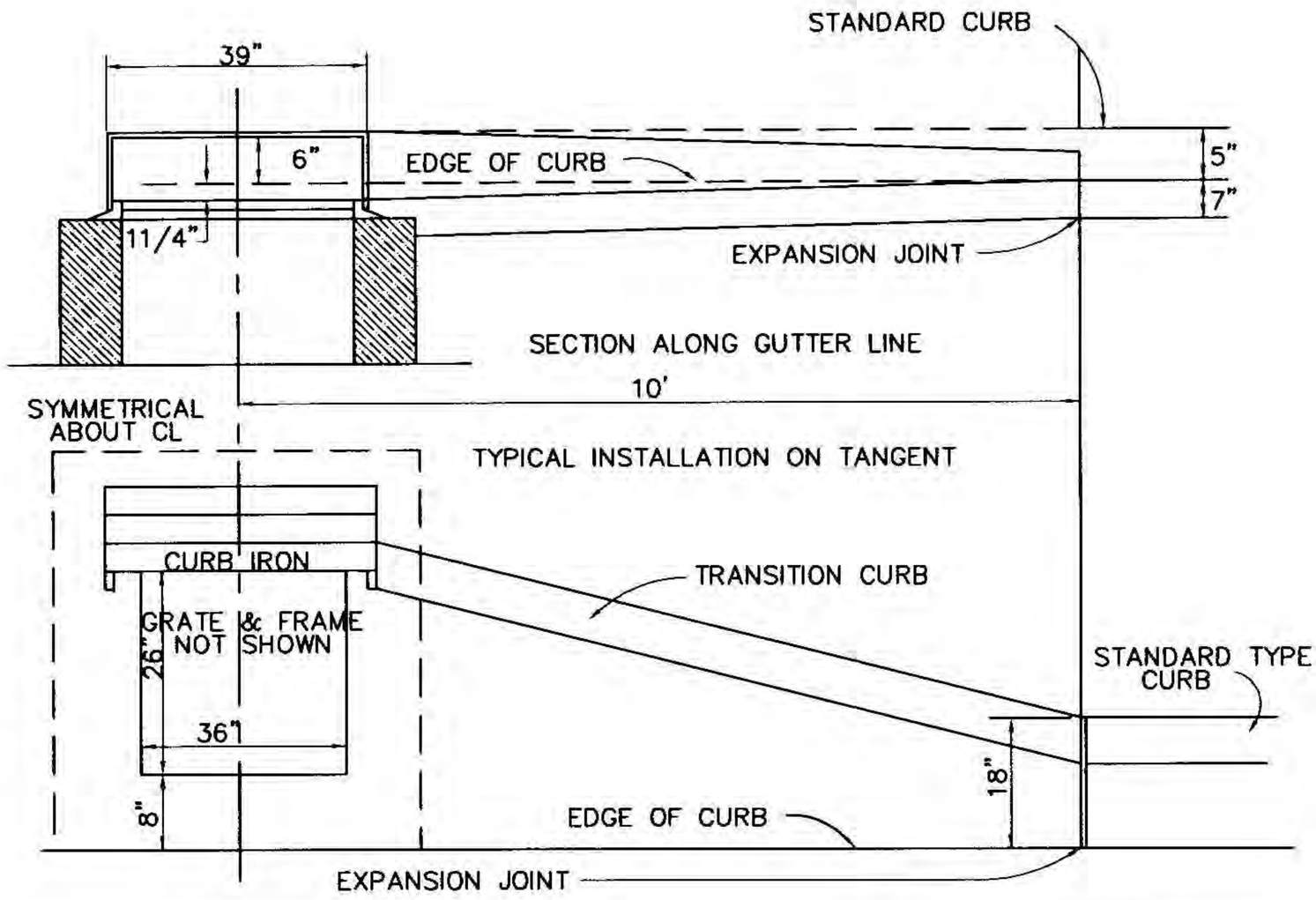
NOTE:

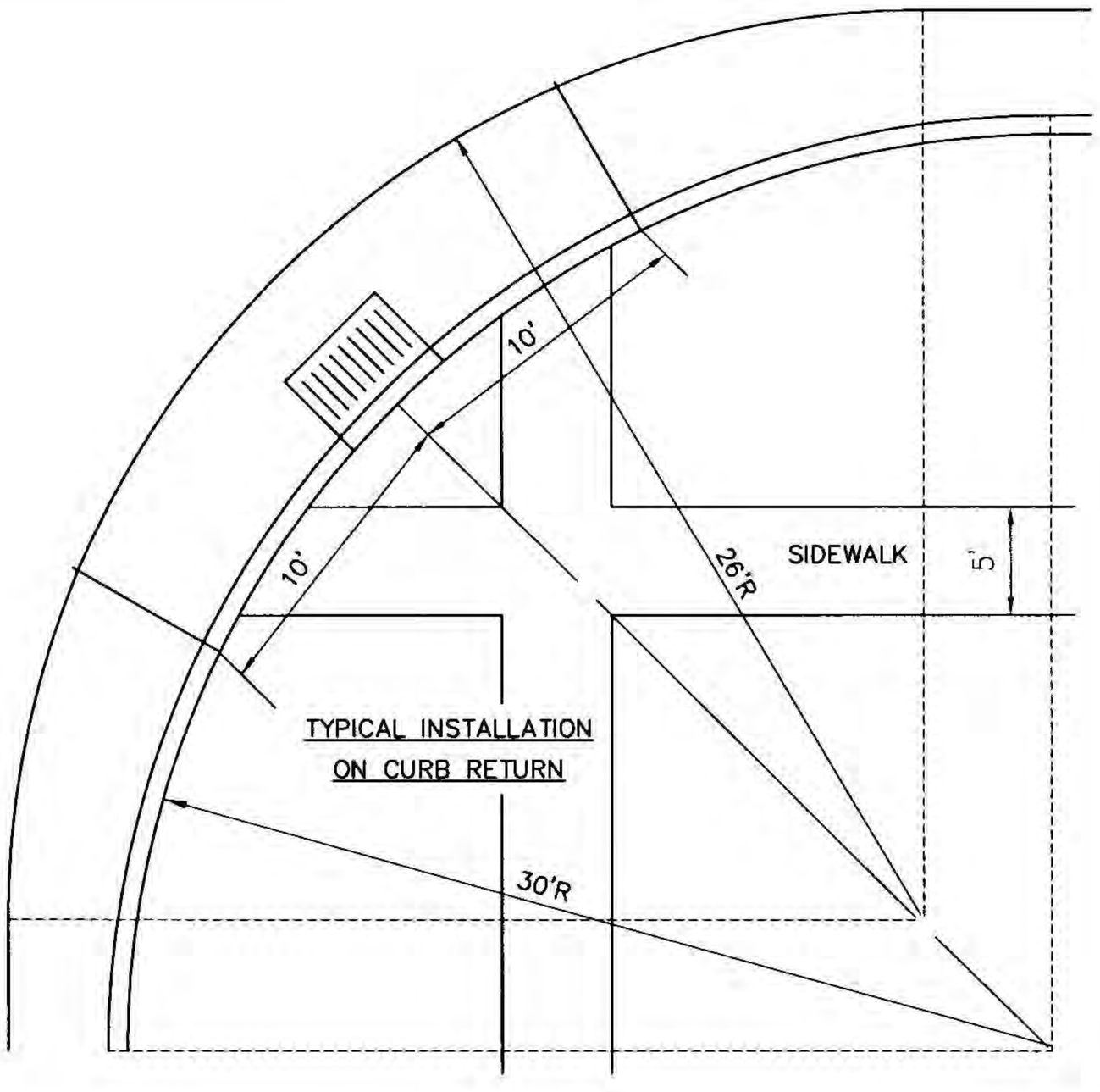
1. CONCRETE DESIGN STRENGTH 4,000 PSI
2. PIPE SHALL NOT BE IN CONST. JOINT
3. PIPES SHALL BE FLUSH WITH INSIDE WALL AND PROVIDE WATERTIGHT SEAL.
4. 6" UNDERDRAIN STUBOUTS, UNDERDRAIN SHALL BE INSTALLED MIN. 10 FEET
5. INVERTS SHALL BE POURED TO ALLOW FOR POSITIVED DRAINAGE

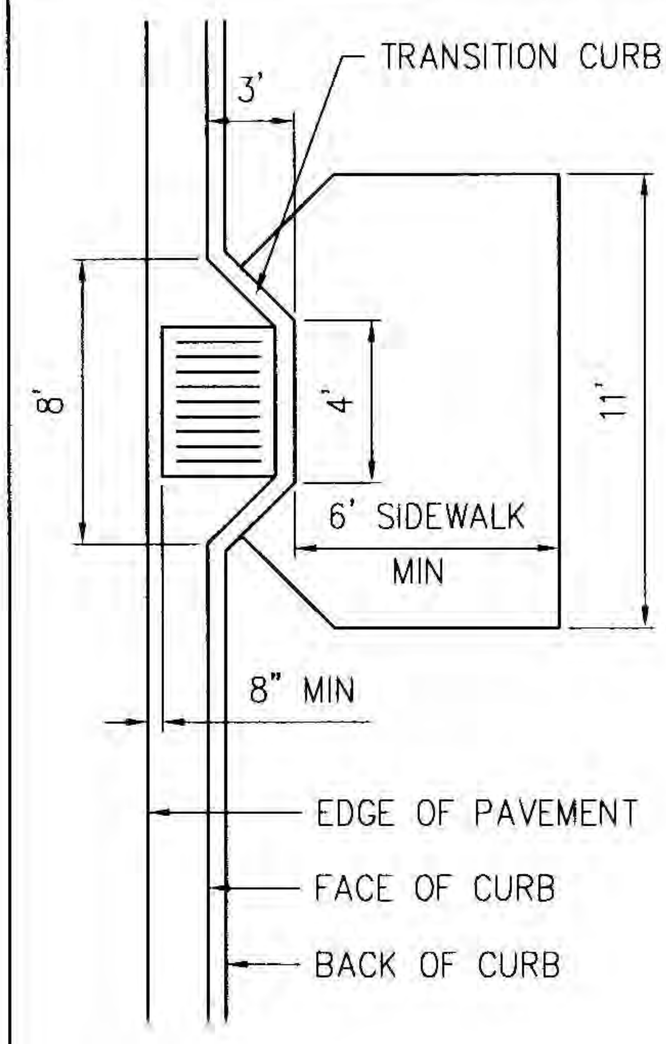
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details PD-03D

DESCRIPTION	DATE	REVISED
STANDARD CURB INLET INSTALLATION	1/8/08	1/8/08





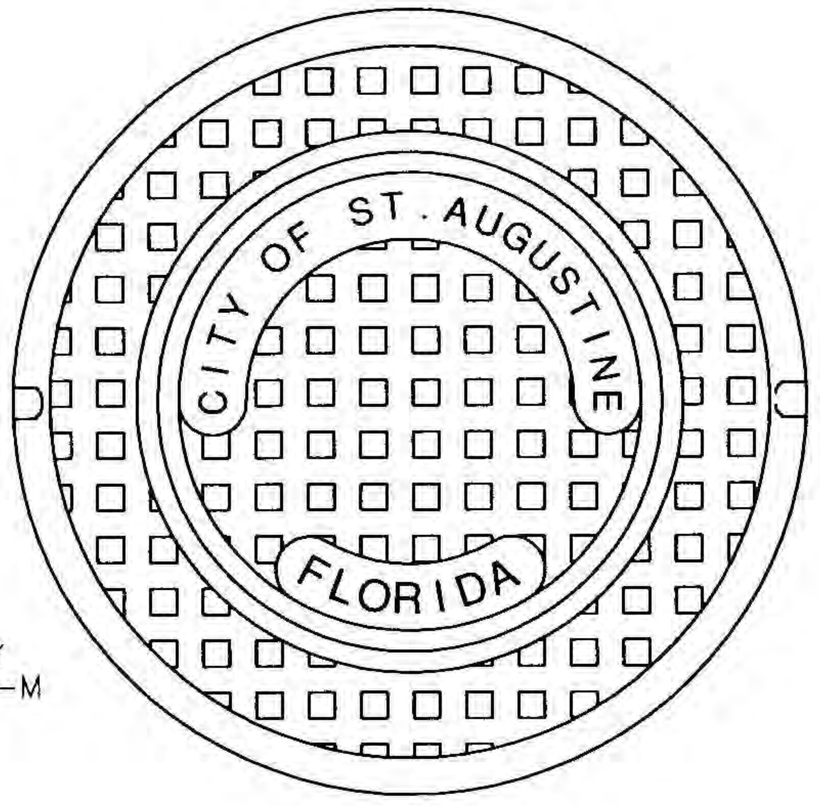


MODIFIED RECESSED CURB INLET

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-03E**

DESCRIPTION **STORM SEWER MANHOLE**	DATE 1/7/08	REVISED 1/7/08



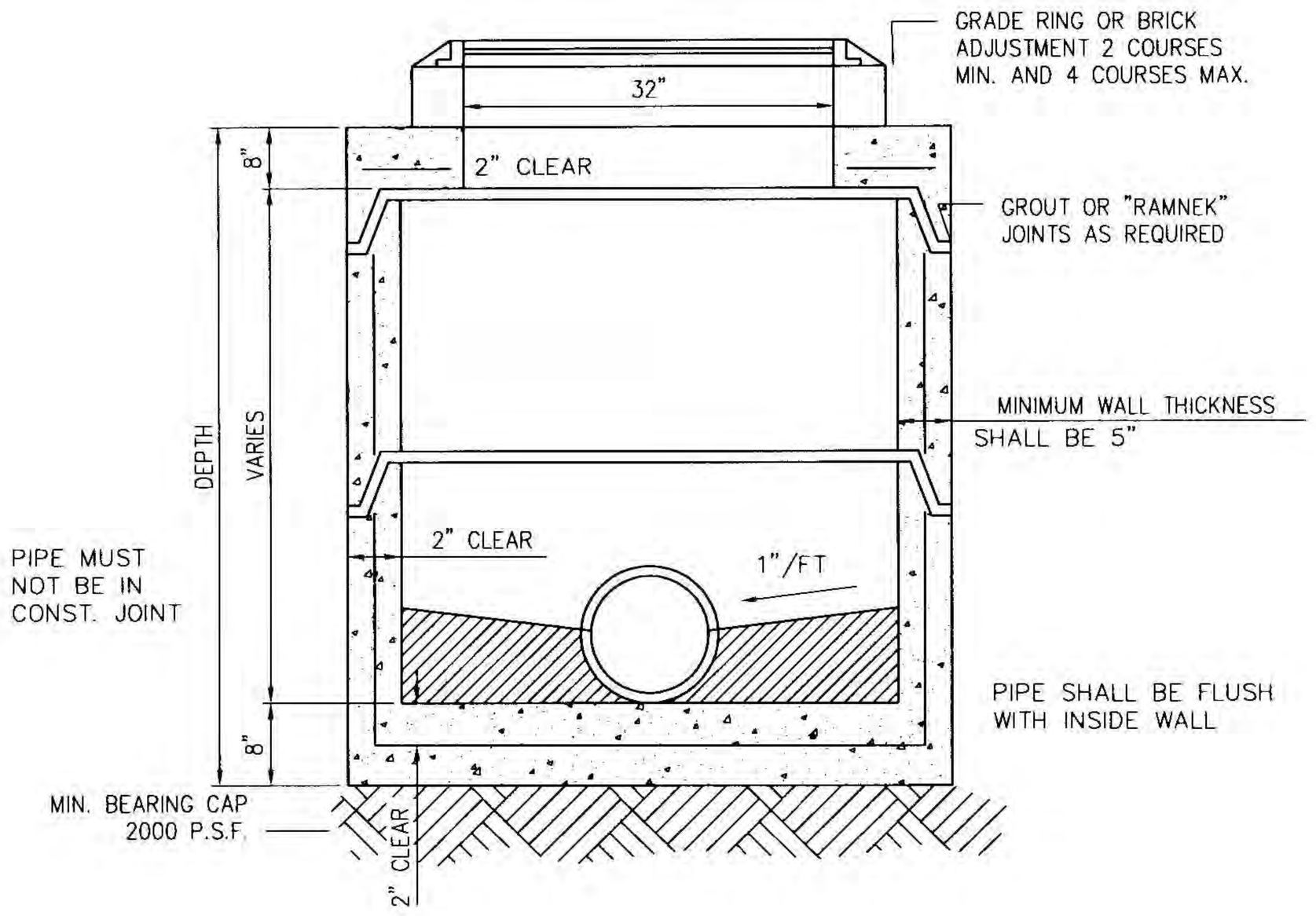
U.S. FOUNDRY
USF-655-CW-M

PLAN

PRECAST IN ACCORDANCE WITH LATEST EDITIONS OF ASTM C 478

2-CONCEALED PICKHOLES

NOTE:
FRAME & COVER SHALL BE MACHINED OR GROUND AT ALL BEARING SURFACES SO AS TO SEAT FIRMLY AND PREVENT ROCKING.

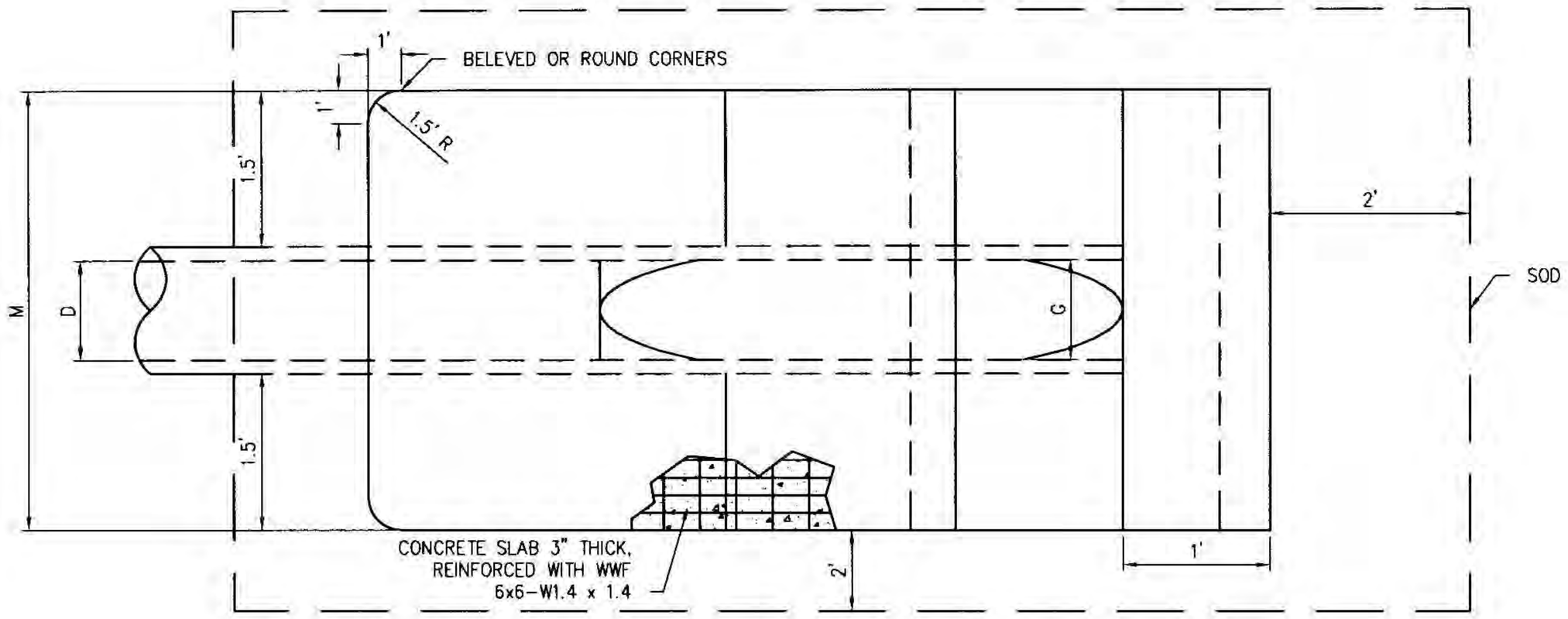


STORM DRAIN MANHOLE

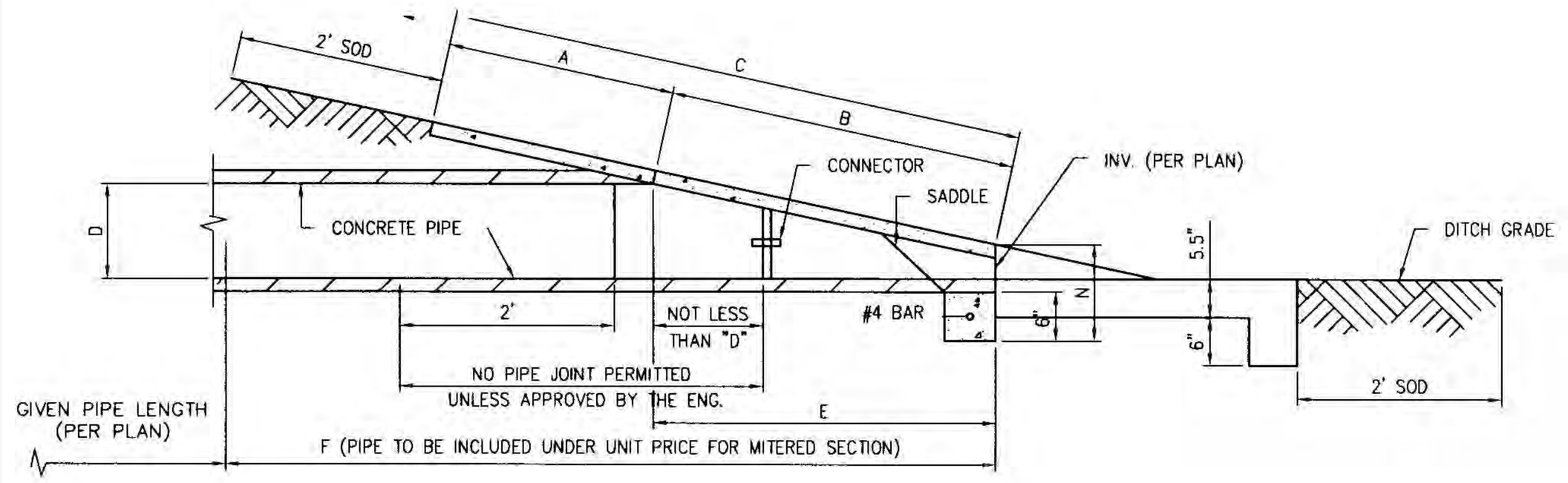
N.T.S.

NOTE:
1. CONCRETE DESIGN STRENGTH 4,000 PSI
2. PIPE SHALL NOT BE IN CONST. JOINT
3. PIPES SHALL BE FLUSH WITH INSIDE WALL AND PROVIDE WATERTIGHT SEAL
4. 6" UNDERDRAIN STUBOUTS, UNDERDRAIN SHALL BE INSTALLED MIN. 10 FEET
5. INVERTS SHALL BE POURED TO ALLOW FOR POSITIVE DRAINAGE

DESCRIPTION	MITERED END SECTION	DATE 1/8/08	REVISED 3/10/08



TOP VIEW – SINGLE PIPE



SECTION

D	A	B	C	E	F	G	M	N	X	CONC.(CY)	SOD(SY)
8"	2.5'	0.72'	3.22'	0.7'	4.0'	0.58'	3.75'	1.04'	–	0.52	7
15"	2.5'	3.09'	5.59'	3.0'	7.0'	1.23'	4.33'	1.04'	–	0.64	8
18"	2.5'	4.12'	6.62'	4.0'	8.0'	1.41'	4.58'	1.04'	–	0.69	9
24"	2.5'	6.18'	8.68'	6.0'	10.0'	1.73'	5.08'	1.04'	–	0.83	10
30"	2.5'	8.25'	10.75'	8.0'	12.0'	2.00'	5.58'	1.04'	–	0.96	11
36"	2.5'	10.31'	12.81'	10.0'	14.0'	2.24'	6.08'	1.04'	–	1.08	12

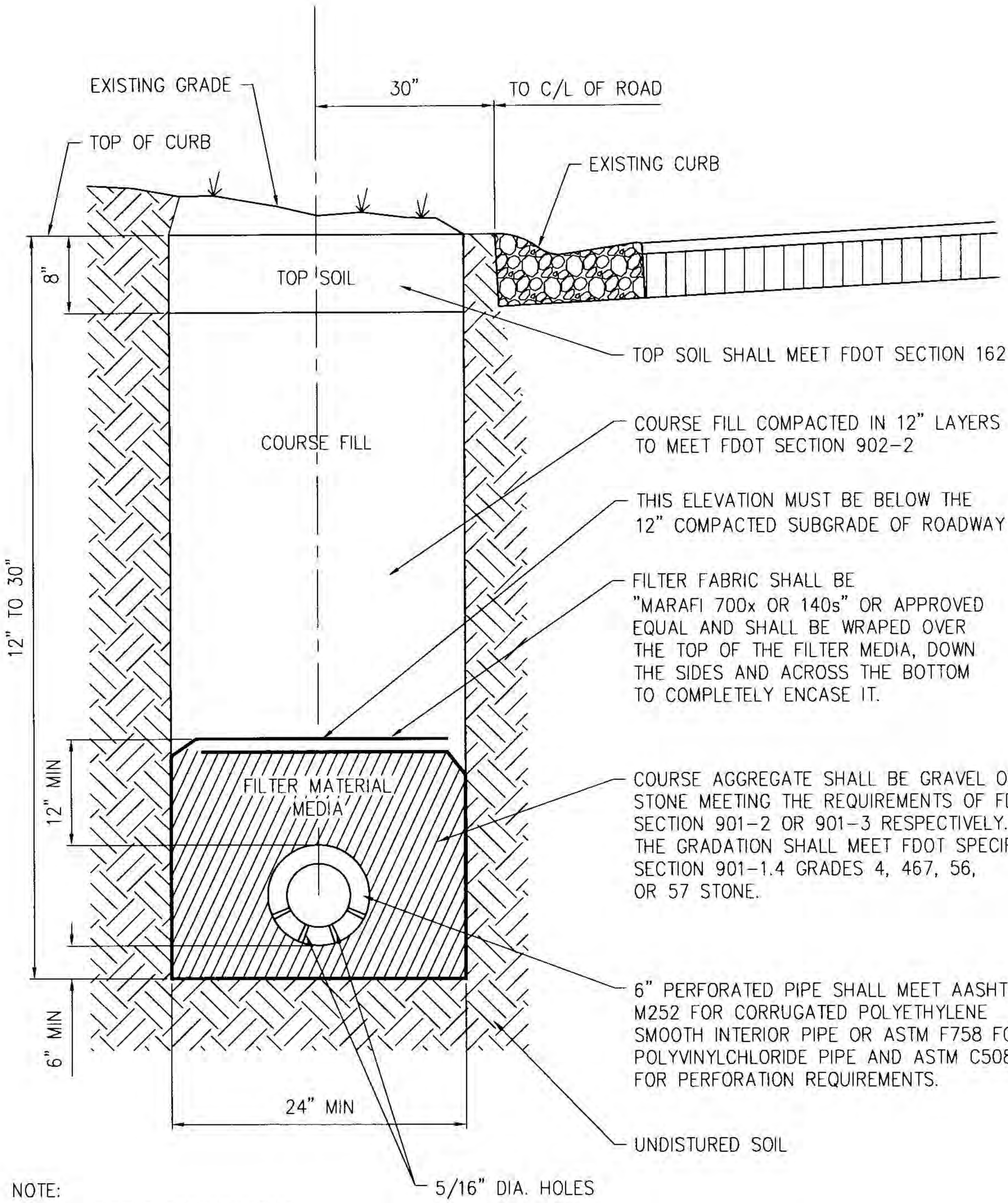
MITERED END SECTION

N.T.S.

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-04A**

DESCRIPTION **UNDERDRAIN TYPE I**	DATE 1/8/08	REVISED 1/8/08



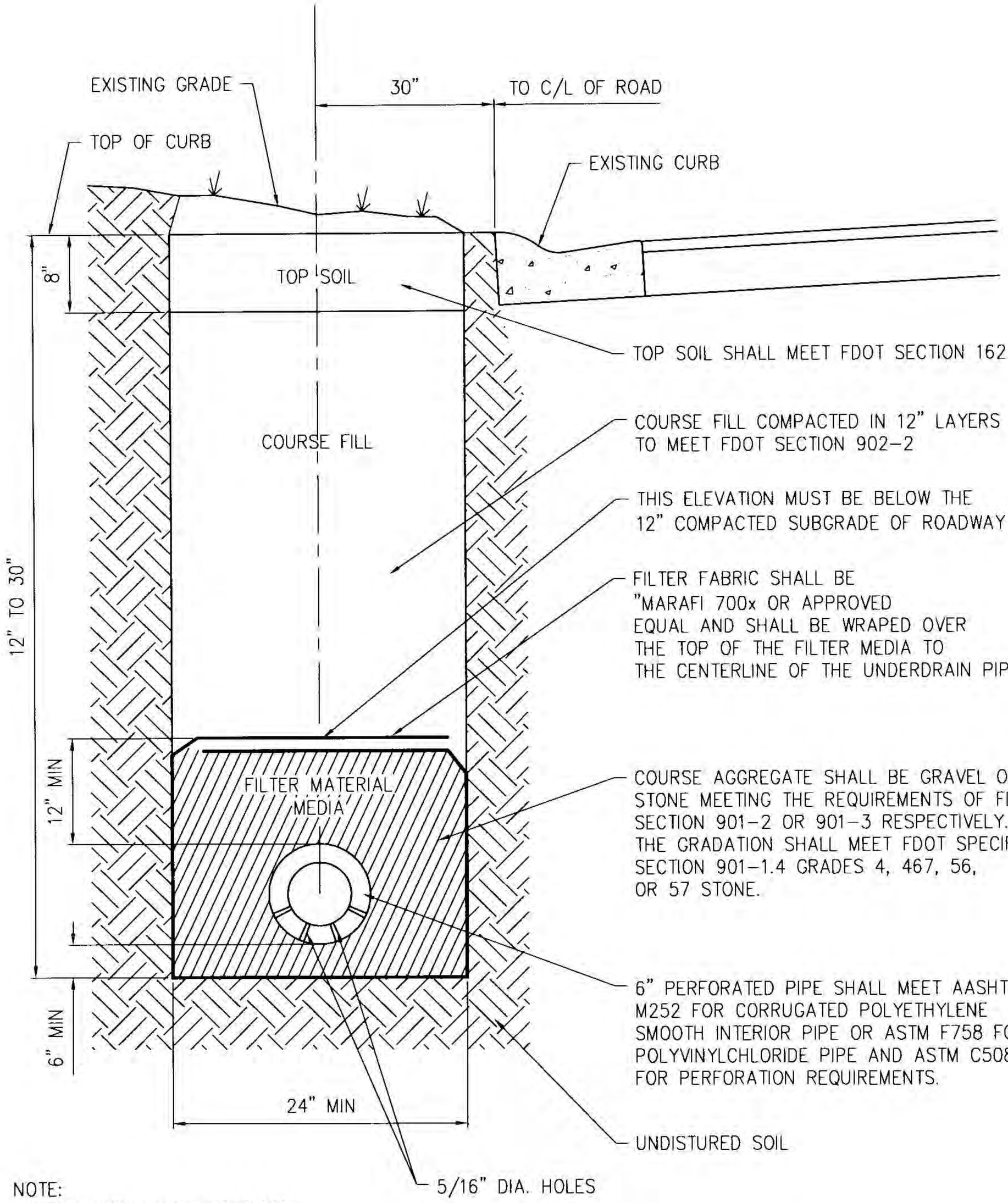
NOTE:
MINIMUM PIPE SLOPE OF 0.02%

TYPE I UNDERDRAIN WITH "MARAFI 700x" IS TO BE USED WHERE MODERATE CHEMICAL CLOGGING OF FILTER MATERIAL IS EXPECTED.

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details PD-04B

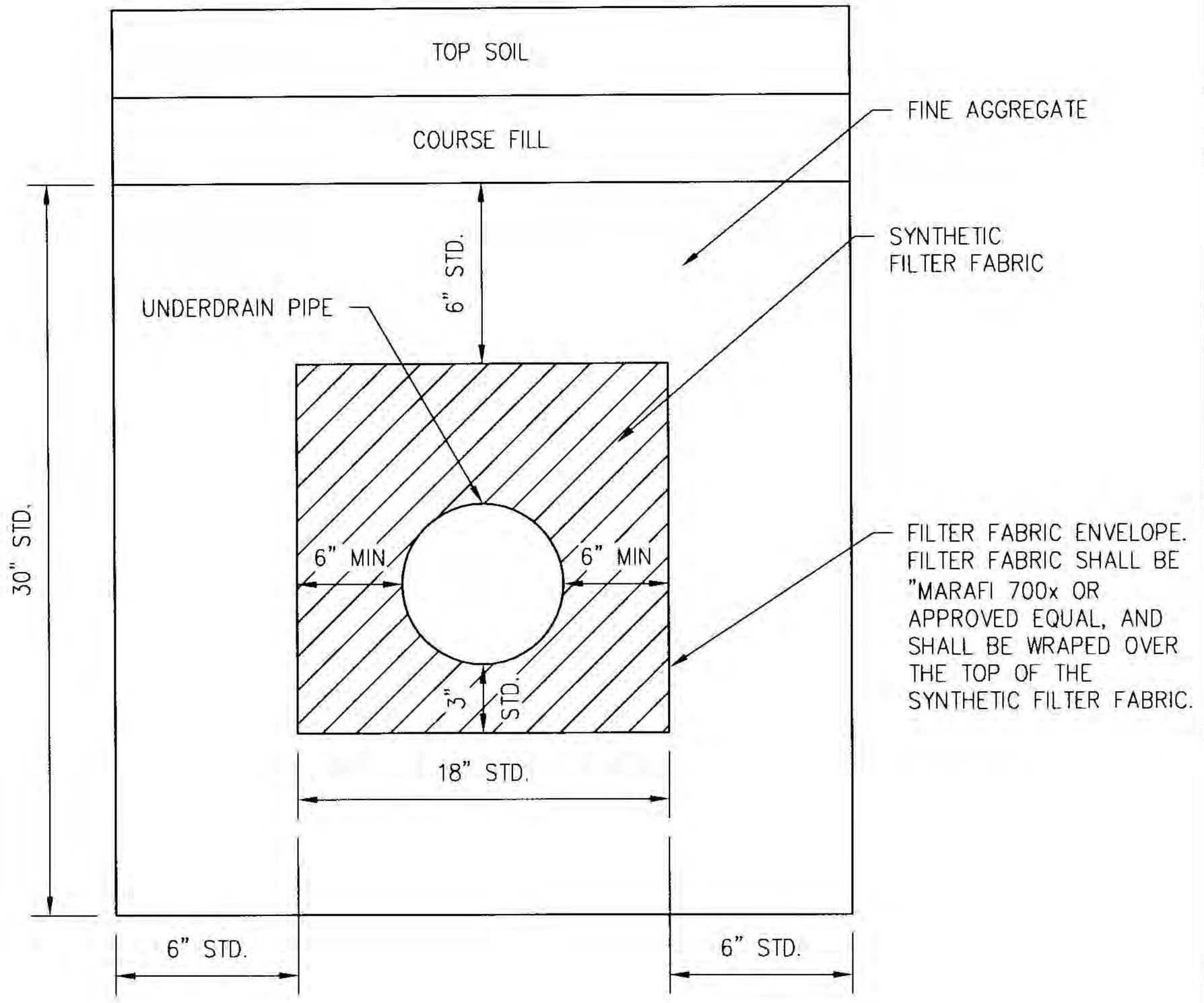
DESCRIPTION **UNDERDRAIN TYPE II**	DATE 1/8/08	REVISED 1/8/08



NOTE:
MINIMUM PIPE SLOPE OF 0.02%

TYPE II UNDERDRAIN IS TO BE USED WHERE
CHEMICAL CLOGGING OF FILTER FABRIC IS ANTICIPATED.

DESCRIPTION **UNDERDRAIN TYPE III**	DATE 1/7/08	REVISED 1/7/08



TYPE III
GENERAL NOTES FOR UNDERDRAIN

1. TYPE III UNDERDRAIN IS INTENDED FOR MAXIMUM WATER REMOVAL CONDITIONS. THE FILTER FABRIC SEPARATION IS REQUIRED BETWEEN THE COARSE AGGREGATE OR FINE AGGREGATE INCLUDING THOSE DESCRIBED IN GENERAL NOTES 2 AND 3. WHERE REACTIVE CONDITIONS MAY CREATE CHEMICAL CLOGGING, THE USE OF AN INERT MATERIAL AND/OR ELIMINATION OF THE FILTER FABRIC MAY BE NECESSARY.

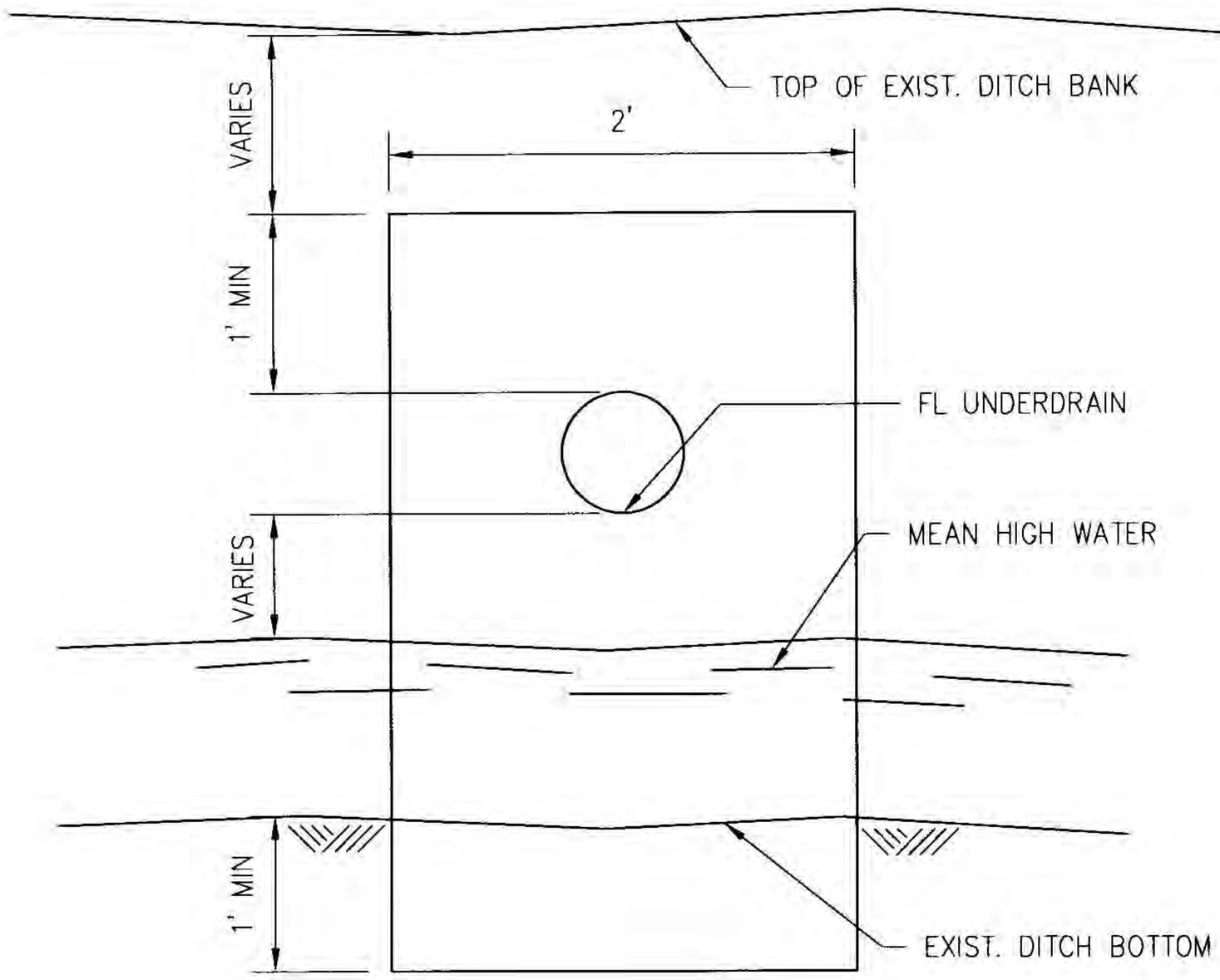
2. FINE AGGREGATE SHALL BE QUARTZ SAND MEETING THE FDOT REQUIREMENTS OF SECTION 902-4 OF THE STANDARD SPECIFICATIONS.

3. COARSE AGGREGATE SHALL BE GRAVEL OR STONE MEETING THE REQUIREMENTS OF FDOT SPECIFICATIONS SECTION 901-2 OR 901-3 RESPECTIVELY. THE GRADATION SHALL MEET SECTION 901-6. GRADES 4, 467, 5, 56, OR 57 STONE UNLESS RESTRICTED IN THE PLANS.

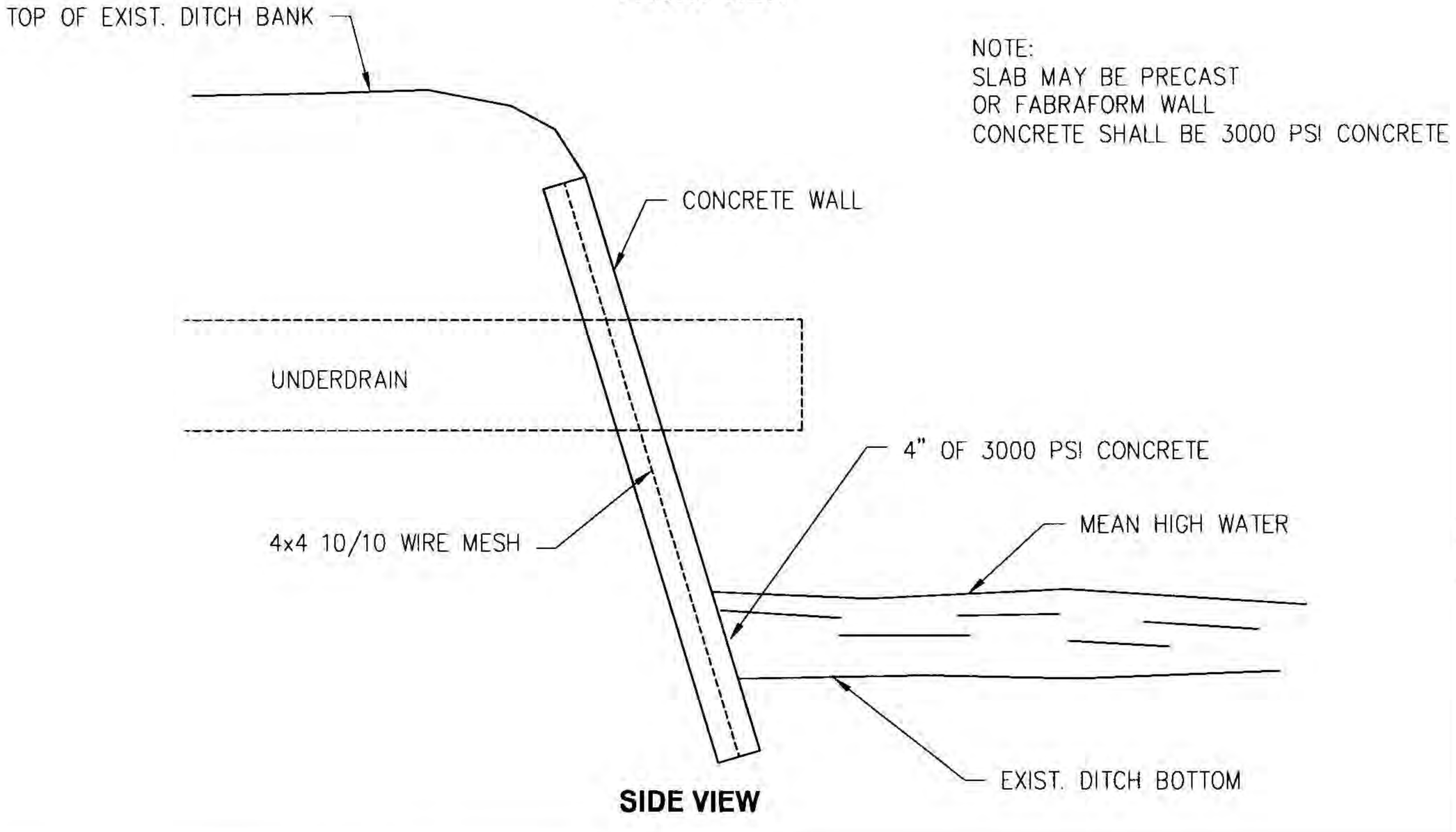
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details PD-04D

DESCRIPTION	DATE	REVISED
CONCRETE OUTFALL FOR UNDERDRAIN	1/7/08	1/7/08



FRONT VIEW



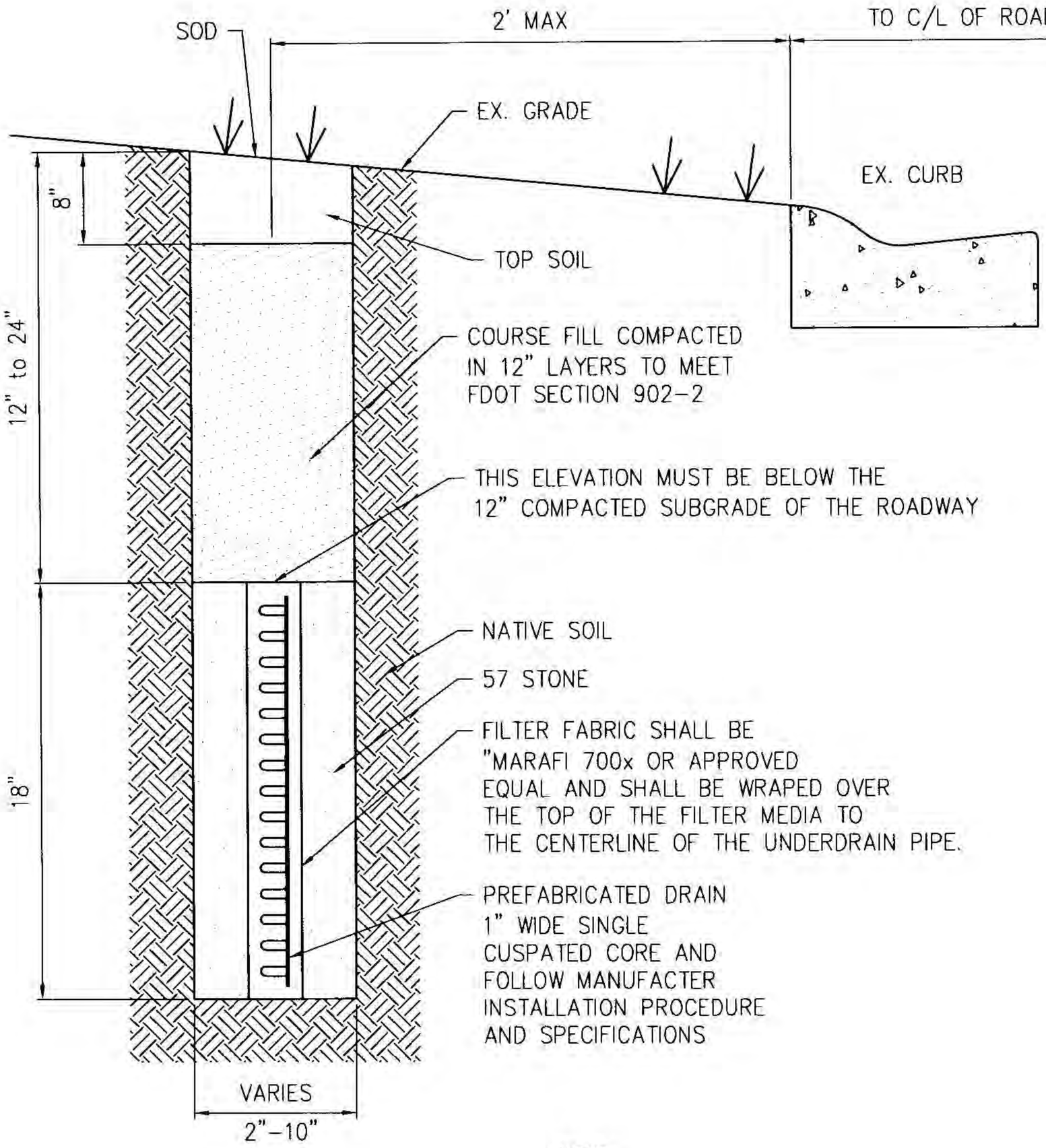
SIDE VIEW

NOTE:
SLAB MAY BE PRECAST
OR FABRAFORM WALL
CONCRETE SHALL BE 3000 PSI CONCRETE

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-04E**

DESCRIPTION	DATE	REVISED
PREFABRICATED EDGE DRAIN DETAIL	1/8/08	1/8/08

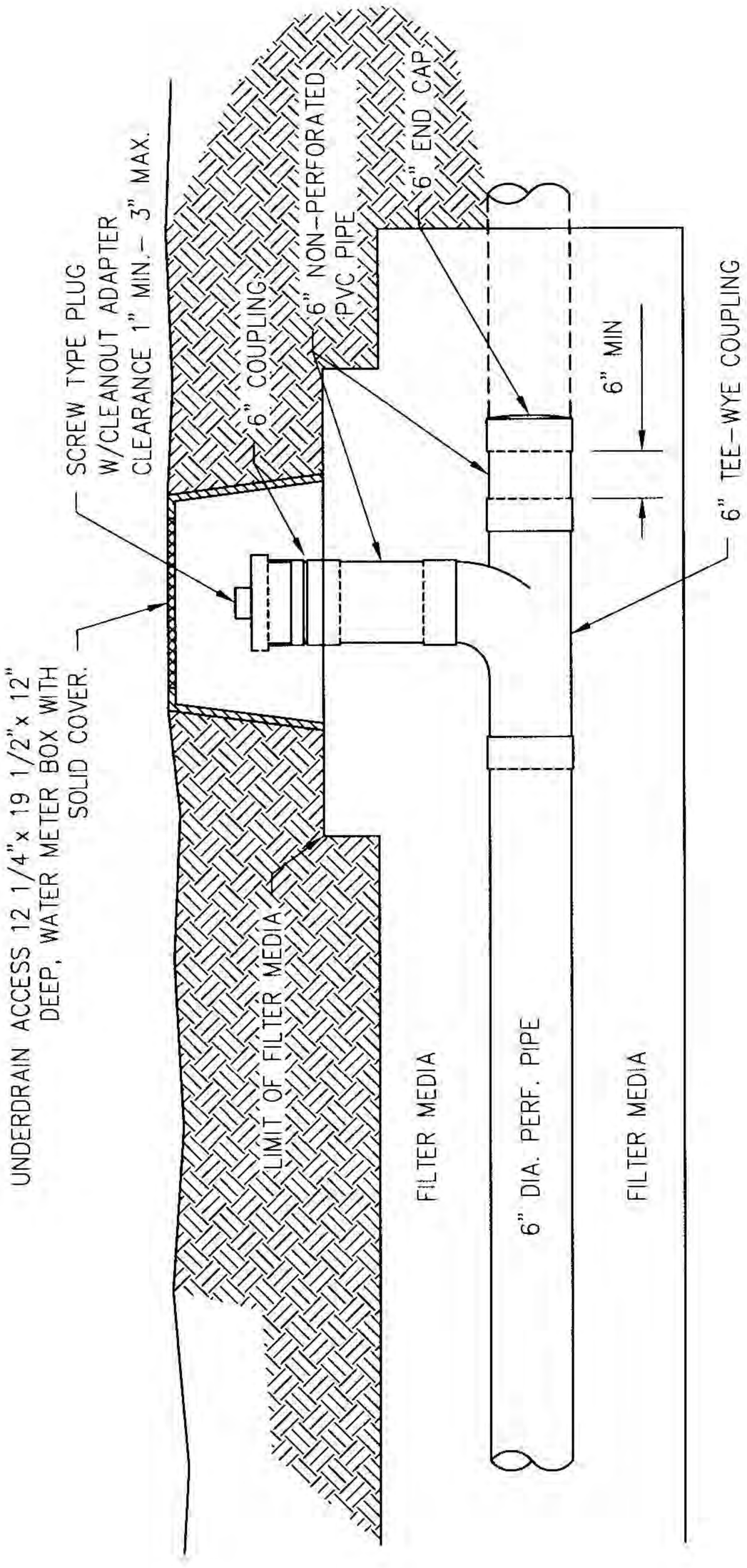


NOTE:
MINIMUM PIPE SLOPE OF 0.02%

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-04F**

DESCRIPTION	**UNDERDRAIN CLEANOUT DETAIL**	DATE 1/7/08	REVISED 1/7/08



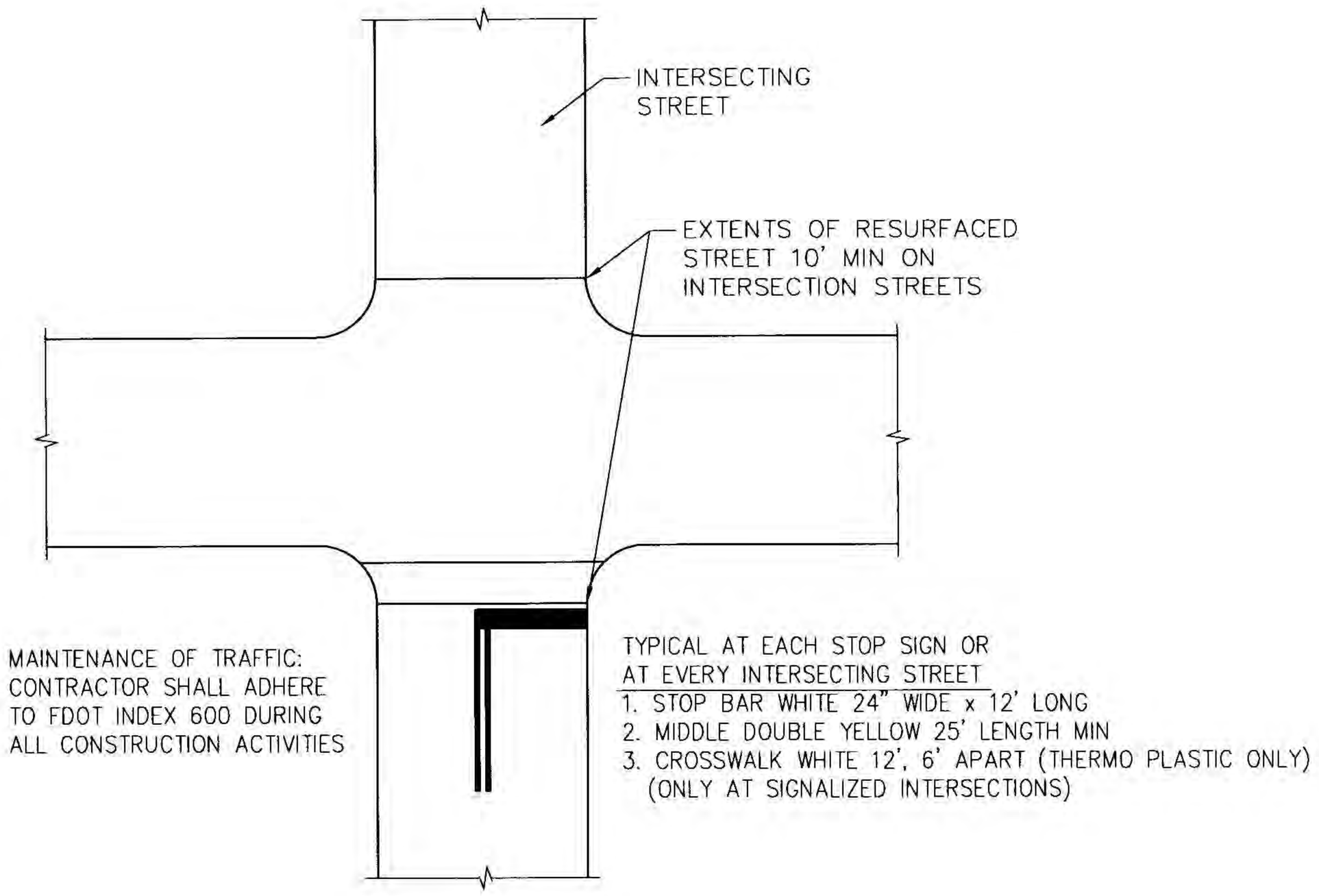
NOTE:
ALL PIPE AND FITTINGS TO MEET ASTM F758-82 SPECIFICATIONS.
300' MAXIMUM DISTANCE BETWEEN CLEANOUTS

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-05A**

DESC. **MILLING/RESURFACING DETAIL- INTERSECTION AND GUTTERS WITHIN RESURFACING AREA**

DATE 10/3/07 | REVISED 10/3/07

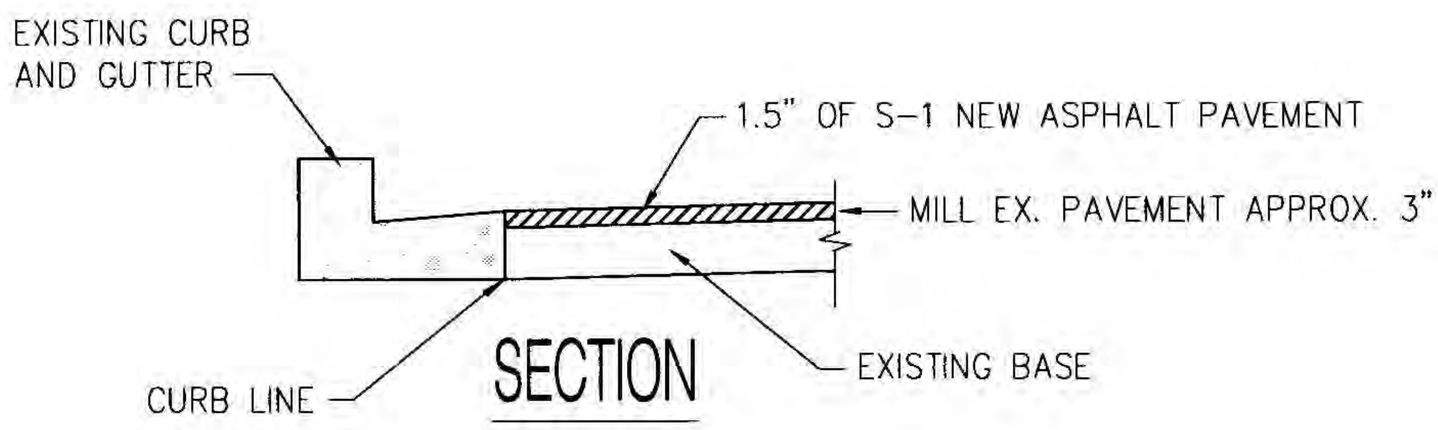


MAINTENANCE OF TRAFFIC:
CONTRACTOR SHALL ADHERE TO FDOT INDEX 600 DURING ALL CONSTRUCTION ACTIVITIES

TYPICAL AT EACH STOP SIGN OR AT EVERY INTERSECTING STREET

1. STOP BAR WHITE 24" WIDE x 12' LONG
2. MIDDLE DOUBLE YELLOW 25' LENGTH MIN
3. CROSSWALK WHITE 12', 6' APART (THERMO PLASTIC ONLY) (ONLY AT SIGNALIZED INTERSECTIONS)

PLAN

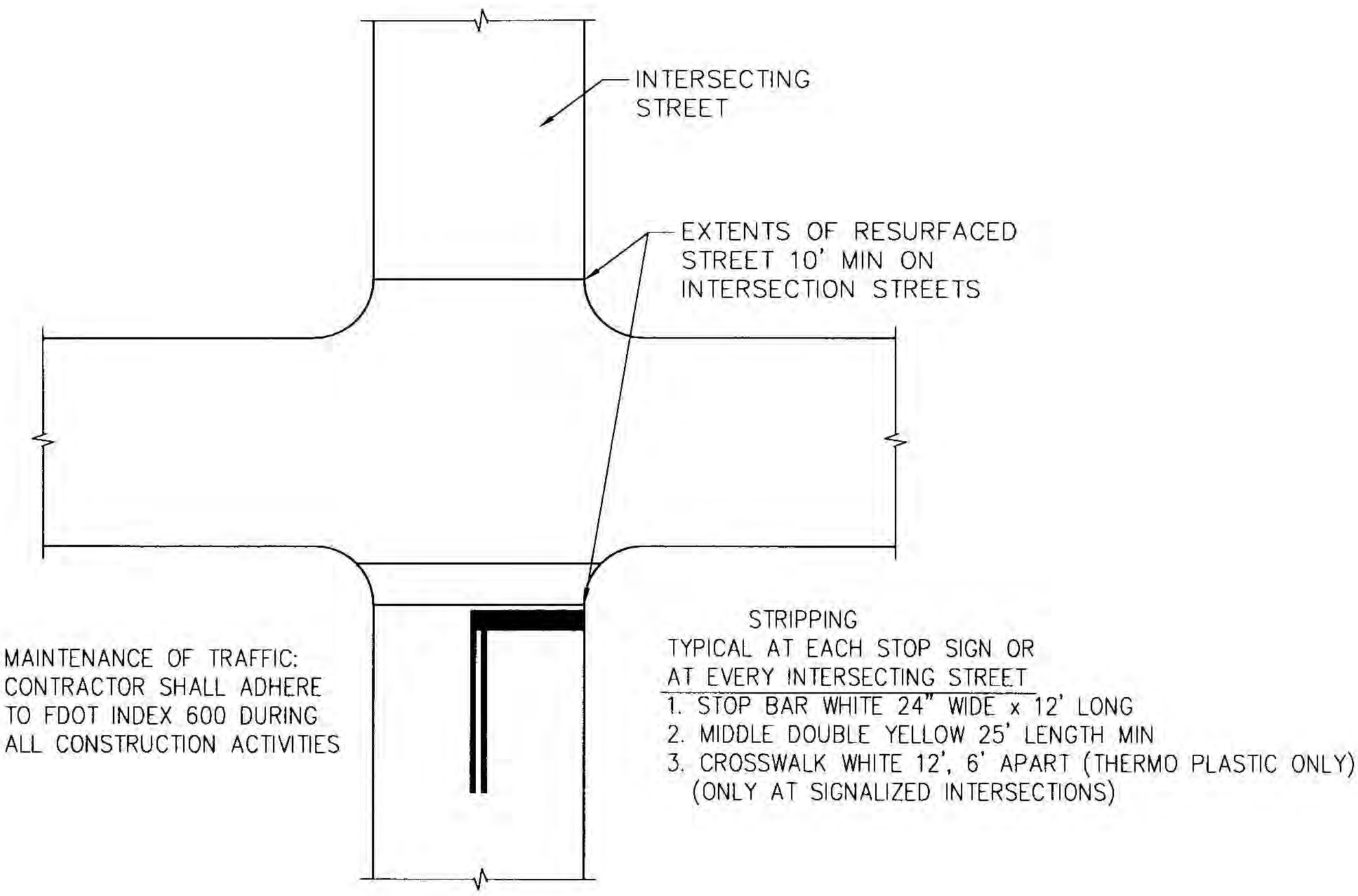


SECTION

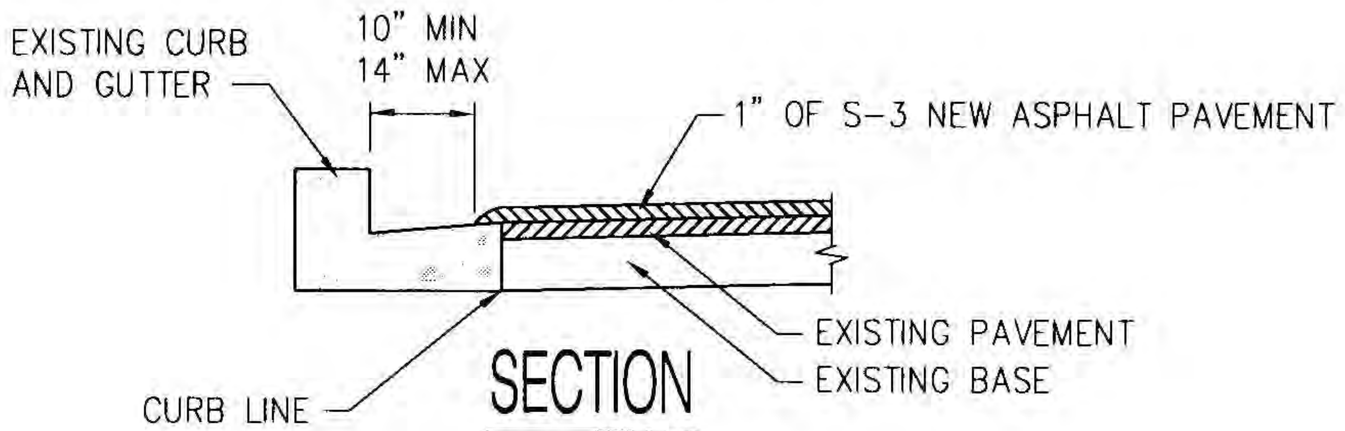
NOTES:

NEW ASPHALT OVER MILLED SURFACE SHALL BE PLACED SUCH THAT THERE REMAINS A SMOOTH AND LEVEL TRANSITION AT CURB LINE AND STREET STRUCTURES.

DESC. RESURFACING DETAIL- INTERSECTION & GUTTERS WITHIN RESURFACING AREA	DATE 10/3/07	REVISED 10/3/07



PLAN



SECTION

NOTES:

IN AREAS WHERE THE EXISTING PAVEMENT WAS PLACED ACROSS THE GUTTER TO THE CURB FACE, THE PAVEMENT ON THE GUTTER SHALL BE CONSIDERED TO BE THE GUTTER AND THE NEW PAVEMENT WILL BE TERMINATED 10" TO 14" FROM THE CURB FACE AS SHOWN.

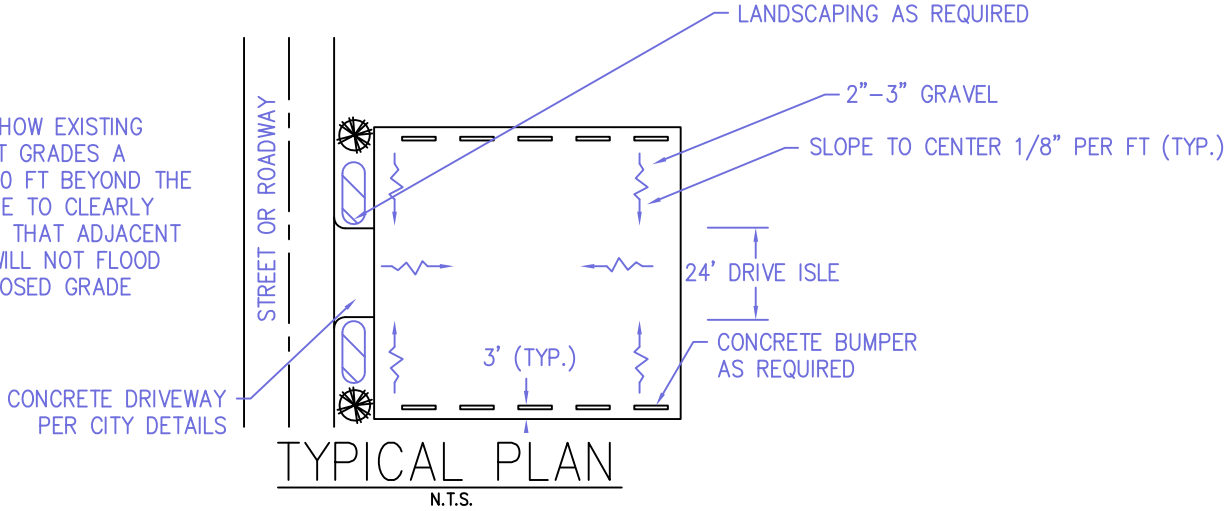
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-05C**

DESCRIPTION	DATE:	REVISED:
GRAVEL PARKING LOT CONSTRUCTION DETAILS	10/22/85	JUL. 2017

FOR PARKING LOTS WITH A MAXIMUM OF 10 SPACES OR EQUIVALENT

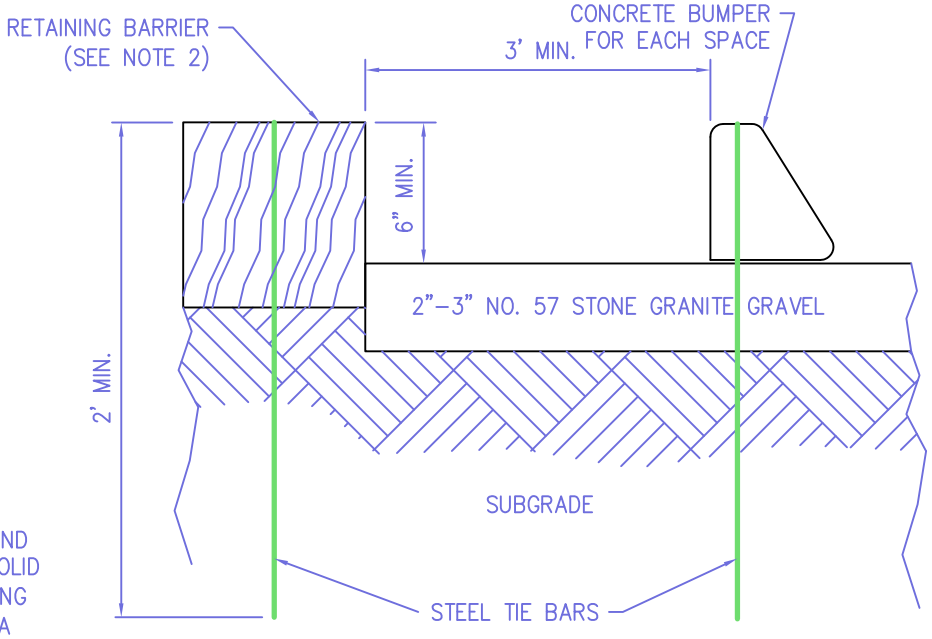
PLAN MUST SHOW EXISTING ADJACENT LOT GRADES A MINIMUM OF 10 FT BEYOND THE PROPERTY LINE TO CLEARLY DEMONSTRATE THAT ADJACENT PROPERTIES WILL NOT FLOOD DUE TO PROPOSED GRADE CHANGES.



TYPICAL PLAN
N.T.S.

PARKING SPACE ANGLE IN DEGREES	ONE WAY TRAFFIC AISLE WIDTH IN FT	TWO WAY WIDTH IN FT
0	13	24
30	13	24
45	13	24
60	18	24
90	24	24

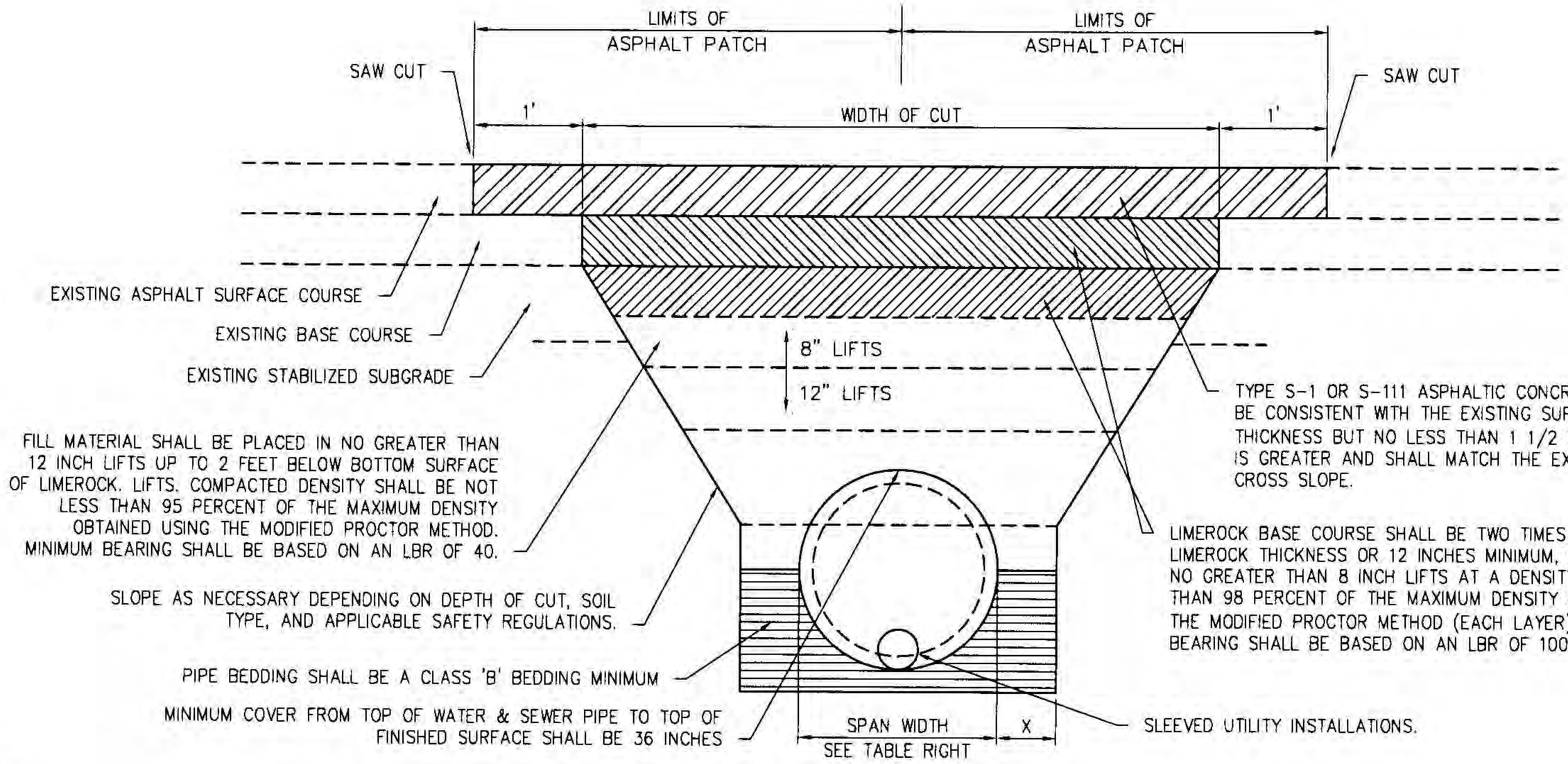
1. TYPICAL PARKING SPACE 9 1/2' WIDE X 19' LONG
2. COMPACT PARKING SPACE 8' WIDE x 18' LONG
3. HANDICAP PARKING SPACE AND ACCESS AISLE MUST BE A SOLID SURFACE: 12' WIDE X 19' LONG WITH 5' WIDE SIDEWALK AREA ADJACENT TO SPACE.



TYPICAL SECTION
N.T.S.

NOTES:

1. UN–PAVED PARKING LOTS ARE GENERALLY DISCOURAGED AND MUST RECEIVE SPECIAL APPROVAL BY PUBLIC WORKS DIRECTOR.
2. SLOPE AREA TO ITS CENTER AS SHOWN IN PLAN ABOVE. PARKING AREA MUST BE ENCLOSED WITH A PERIMETER BARRIER. SECTION ABOVE IS SHOWN WITH RAILROAD TIES AS PERIMETER BARRIER; OTHER BARRIERS INCLUDE CURBS, BERMS, OR OTHER MATERIALS SUITABLE BY THE PUBLIC WORKS DIRECTOR.
3. GRAVEL MATERIALS SHALL BE AS SPECIFIED ON THIS DETAIL AND SHALL BE APPROVED BY THE PUBLIC WORKS DIRECTOR PRIOR TO PLACEMENT.
4. GRAVEL MUST BE #57 STONE GRANITE TYPE MATERIAL OR EQUIVALENT APPROVED IN ADVANCE BY THE PUBLIC WORKS DIRECTOR. LIMEROCK GRAVEL IS NOT AN ACCEPTABLE MATERIAL.



NOTES:

1. OPEN ROAD CUTS ARE GENERALLY NOT AN ACCEPTABLE MEANS OF CONSTRUCTION UNLESS APPROVED IN ADVANCE BY THE DEVELOPMENT REVIEW DEPARTMENT AND/OR THE ENGINEERING RIGHT OF WAY DIVISION. SEE NOTE #3.

2. MATERIALS, MIX PROPORTIONS, PRODUCTION, PLACING, CONSTRUCTION REQUIREMENTS, AND ACCEPTANCE OF FLOWABLE FILL SHALL BE IN ACCORDANCE WITH THIS MANUAL.

3. ALL OPEN CUTS SHALL REQUIRE A PERMIT AND A 48 HOUR ADVANCE NOTICE TO THE INSPECTION STAFF PRIOR TO COMMENCEMENT OF CONSTRUCTION. A REPRESENTATIVE FROM THE HIGHWAY INSPECTION STAFF MUST BE PRESENT AT THE TIME OF INSTALLATION OF THE UTILITY.

4. PUBLIC SAFETY SHALL BE MAINTAINED DURING CONSTRUCTION IN ACCORDANCE WITH THE PROVISIONS OF PART 6, WORK ZONE TRAFFIC CONTROL, OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

5. THE CONTRACTOR SHALL PROVIDE TO THE HIGHWAY INSPECTOR CERTIFICATION OF THE MIX DESIGN FROM THE SUPPLIER AT THE TIME OF CONSTRUCTION.

6. AN OVERLAY UP TO 100' IS REQUIRED ON ALL OPEN ROAD CUTS AND WILL BE DETERMINED AT THE TIME OF PERMIT APPLICATION REVIEW.

PIPE DIAMETER OR SPAN WIDTH	"X"
≤ 12"	12" INCHES
≤ 30"	30" INCHES
≤ 42"	42" INCHES
≤ 48"	48" INCHES
≤ 60"	60" INCHES
> 60"	60" INCHES

TYPICAL TRENCHING DETAIL

N.T.S.

City of St. Augustine
PUBLIC WORKS DEPARTMENT

DESCRIPTION **TYPICAL TRENCHING DETAIL**

DATE 1/8/08

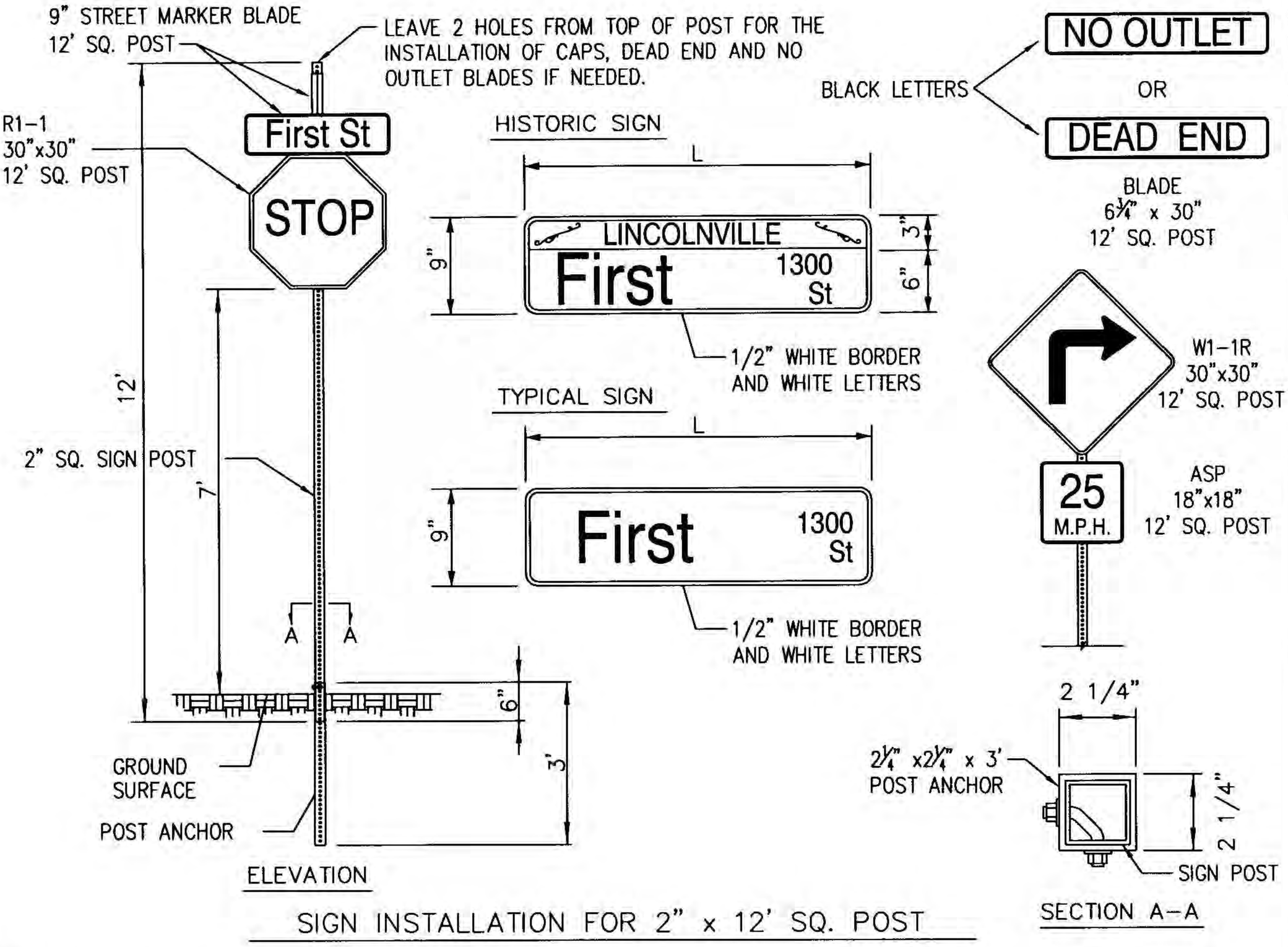
REVISED 3/10/08

Paving and Drainage Details **PD-05D**

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details PD-06A

DESCRIPTION	DATE	REVISED
SIGNS DETAILS	10/3/07	10/3/07



SIGN INSTALLATION FOR 2" x 12' SQ. POST

NOTES:

1. STREET NAME TO BE: 6" ARIAL MEDIUM (SERIES "B" UPPER CASE AND LOWER CASE).
2. BLOCK NUMBERS AND RD., ST., AVE., ETC... TO BE: 2.5" SERIES "B" LETTERS UPPER AND LOWER CASE AND NUMBERS.
3. FOR PUBLIC STREETS: ALL SHEETING TO BE GREEN E C FILM COVERED OVER HIGH INTENSITY GRADE.
4. FOR PRIVATE STREETS: ALL SHEETING TO BE BLUE E C FILM COVERED OVER HIGH INTENSITY GRADE.
5. FOR NO OUTLET OR DEADEND SIGNS: ALL SHEETING TO BE YELLOW E C FILM COVERED OVER HIGH INTENSITY GRADE.
6. SIGN BLANK TO BE 0.125" THICK ALUMINUM.
7. BORDER TO BE 1/2" SILVER HIGH INTENSITY.
8. SIGNS TO BE A MINIMUM OF 9"x30" TO A MAXIMUM OF 9"x48". THE SIZE OF THE SIGN SHALL BE INCREASED IN 6" INCREMENTS ONLY.
9. HISTORIC SIGN SHEETING TO BE 6" GREEN 3" BROWN WITH SCROLL A FORTY FIVE DEGREE IN CORNERS.

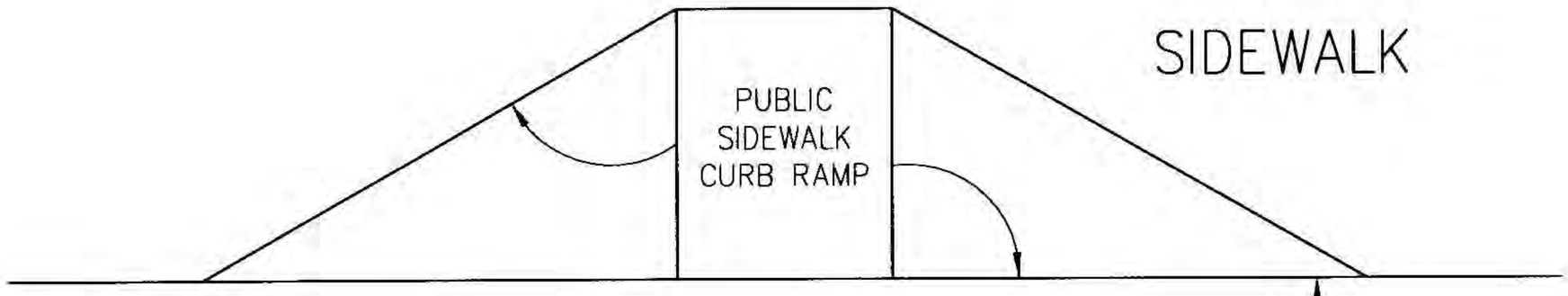
SIGNING GENERAL NOTES:

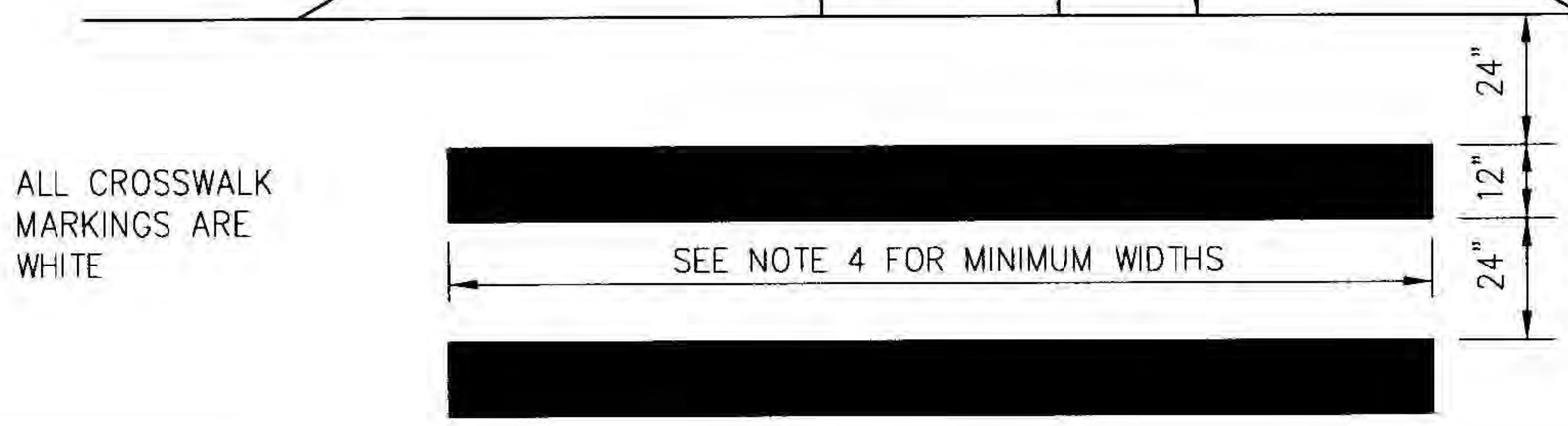
1. FOR SIGN DETAILS USE THE MANUAL OF STANDARD HIGHWAY SIGNS, AS PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION AND THE U.S. DEPARTMENT OF TRANSPORTATION (1979) AND AS SPECIFIED BY THE MUTCH. FOR FTP SIGN DETAILS, REFER TO FLORIDA DEPT OF TRANSPORTATION STANDARD INDEX 17355, JAN 2004.
2. PUBLIC WORKS DEPT MAY REQUIRE THE CONTRACTOR TO FIELD ADJUST THE LOCATION OF ANY SIGN TO ENSURE PROPER VISIBILITY.
3. OUTSIDE CORNERS OF SIGN FACES TO BE CUT CONCENTRIC WITH BORDER. BORDER SHALL BE PARALLEL TO THE EDGE OF THE SIGN.
4. ALL STREET SIGNS SHALL INCLUDE BLOCK NUMBERS AND SHALL BE INSTALLED ABOVE STOP SIGNS.
5. ALL GROUND MOUNTED SIGNS SHALL HAVE SQUARE POSTS.
6. SIGNS MUST BE LOCATED TO AVOID DRIVEWAYS. AND LINE OF SIGHT FROM INTERSECTIONS AND DRIVEWAYS.
7. ALL SINGLE COLUMN SIGNS SHALL BE INSTALLED AT A HEIGHT OF 7' ABOVE GROUND IN ACCORDANCE WITH FDOT INDEX NO. 17302 AND INDEX NO. 11865

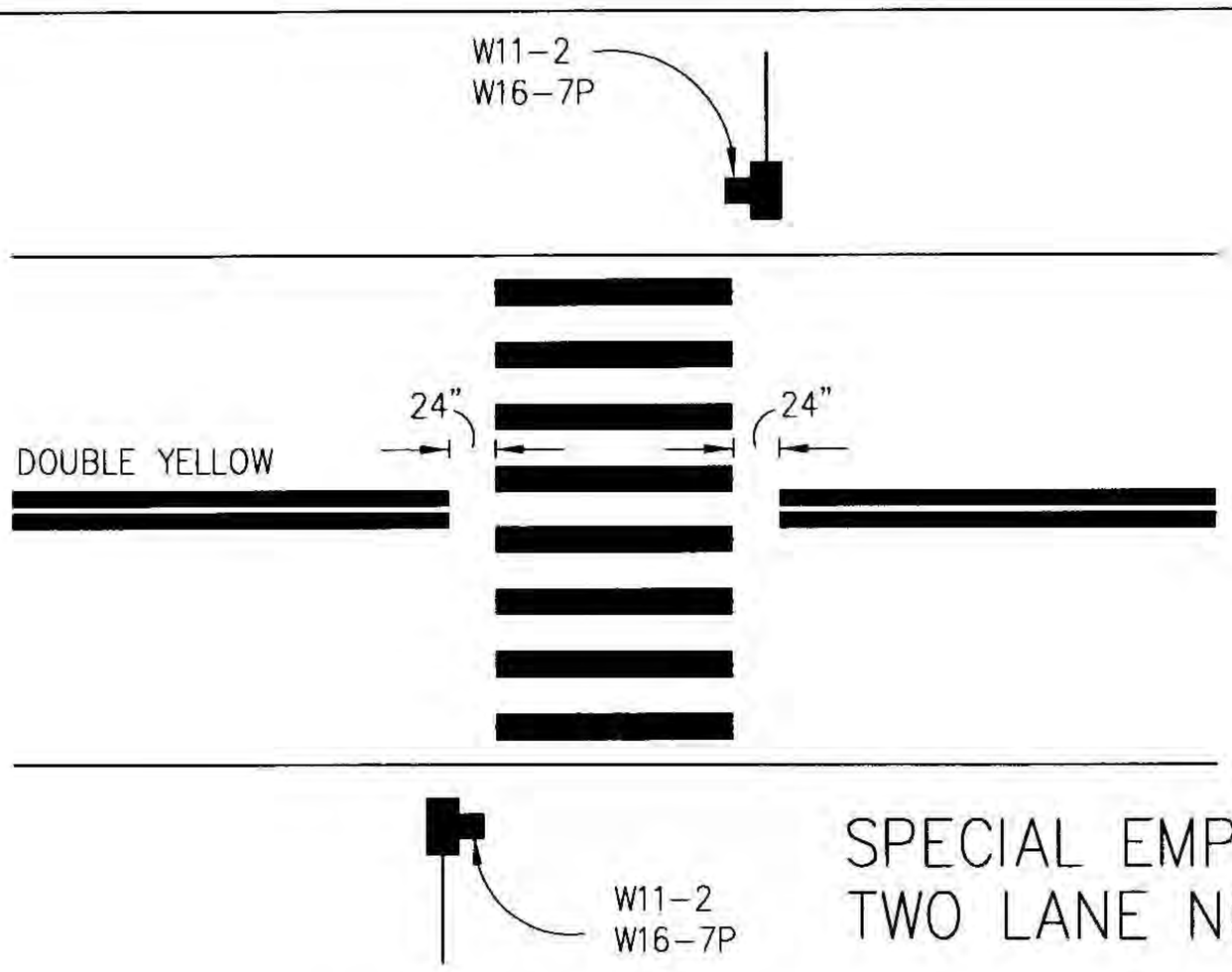
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details PD-06B

DESCRIPTION	DATE	REVISED
SPECIAL EMPHASIS CROSSWALK	**1/7/08**	**1/7/08**







SPECIAL EMPHASIS CROSSWALK
TWO LANE NONSIGNALIZED

GENERAL NOTES

1. FOR TRAFFIC AND PEDESTRAIN SIGNAL INSTALLATION, REFER TO FDOT INDEX No. 17721 THROUGH 17890.

2. FOR PUBLIC SIDEWALK CURB RAMPS, REFER TO FDOT INDEX. No. 304.

3. FOR PAVEMENT MARKING AND SIGN INSTALLATION, REFER TO FDOT INDEXES 11200 THROUGH 17356.

4. CROSSWALK MINIMUM WIDTHS: MIDBLOCK CROSSWALK 10', INTERSECTION CROSSWALK 6'.

5. YELLOW CURB 5' PAST EACH TRANSITION OF HANDICAP RAMP.

DESCRIPTION	DATE	REVISED
SIDEWALKS AND DRIVEWAYS SPECIFICATIONS	11/12/96	10/4/07

DESCRIPTION:
The work specified in this section consists of construction of concrete sidewalks and driveways within the City's rights of way.

INCORPORATED REGULATIONS:
Americans with Disabilities Act: Standards for Accessible Design Criteria
Federal Highway Administration ADAAG Detectable Warnings
FDOT ADA / Accessibility Program
FDOT Design Standards and Standard Specifications for Road and Bridge Construction 2008
City of St. Augustine Standard Details and Specifications

CONCRETE:
All concrete shall be 3,000 psi concrete unless otherwise noted. A coquina mix concrete shall be required in all historic areas.

JOINTS:
The sidewalk shall have expansion and construction joints as specified herein, or as shown on the plans.

Expansion joints shall be performed joint fillers meeting the requirements of AASHTO M153 or AASHTO 213 and cut to the true shape of the cross section, set to line and grade and held true while the concrete is being placed. The joint shall be edged and finished in a workmanlike manner as required by the City. Expansion joint material shall be placed at each cold joint, aganist ajacent structures, and around all structures or objects located within the concrete, or as specified by the City. On driveways, expansion joint material shall be placed adjacent to the paving, curb and driveway aprons or as specified by the City.

Construction joints shall be saw-cut or placed and formed by means of an approved jointer template. The stem of the jointer shall be pressed into the freshly finished concrete forming a groove 0.75 inches deep. The edges of the groove and adjacent surface shall be neatly finished in a workmanlike manner with proper tools in the hands of skillful workmen. Unless otherwise shown on the plans or designated by the City, these joints shall appear at 5-foot intervals between expansion joints.

SCREEDING:
The concrete shall be struck-off by means of a wood or metal screed, used perpendicular to the forms, in order to obtain the required grade and remove surplus water and laitance.

CONCRETE SURFACE REQURIEMENTS:
The concrete shall be given a broom finish. The surface variations shall not be more than ¼ inch under a ten foot straightedge, nor more than 1/8 inch on a five foot transverse section. The edge of the sidewalk shall be carefully finished with an edging tool having a radius of ½ inch. Coquina mix concrete shall have a washed surface with agregate surface exposed not to exceed 1/4" in surface deviation.

CONCRETE CURING, SOIL COMPACTION AND FORMS:
Concrete shall reach a minimum strength at 28 days. Excavations shall be made to the required depth, and the foundation material upon which the sidewalk is to be installed and shall be compacted to reach a minimum of 95% maximum dry density under the sidewalk or driveway. The soil should be a firm, even surface, true to grade and cross section, and shall be moist at the time that the concrete is placed. The concrete shall be placed in the forms to the required depth, and shall be tamped and spaded until concrete entirely covers its surface.

THICKNESS AND WIDTH:
Sidewalks shall be constructed at a standard width of 60 inches in all areas and a minimum of 4 inches thick. Sidewalk directly adjacent to the curb shall be 72 inches wide, 4 inches thick. If right of way is limited then the sidewalk may be reduced to a minimum of 36" wide and 4" thick. When sidewalk passes by an obstruction, the sidewalk may be reduced to a minimum width of 32" for a maximum distance of 24".

DRIVEWAYS AND SIDEWALKS WITHIN DRIVEWAYS:
Driveways and sidewalk adjustments shall be built of one course of monolithic construction. Driveways shall be constructed at a minimum of six inches (6") thick and a minimum width of eight feet (8') . The apron shall have a maximum width of 60' and a minimum width of 14' at the curb. Driveway aprons larger than 30' at the curb shall be considered as exceptions. Sidewalks that cross the driveway shall be constructed at a minimum of six inches (6") thick. Expansion joints shall be placed adjacent to existing curb and/or otherwise directed by the City.

TREES OR OBSTRUCTIONS:
During repairs or replacement of sidewalks, efforts should be made to prevent further damage to the sidewalks and the existing Trees. The City Parks Division should be notified to inspect the tree and roots to see if roots may be removed from under the sidewalk or if the sidewalk should be ramped above the roots, meandering sidewalk around obstructions or the sidewalk removed and a mid block crosswalk installed. All stumps and/or non-tree roots in the sidewalk space, whether above or below ground, and visible or not, shall be removed 12 inches below the bottom of the sidewalk.

DESCRIPTION	DATE	REVISED
SIDEWALKS AND DRIVEWAYS SPECIFICATIONS	11/12/96	10/4/07

FENCES OR WALLS:
Sidewalks will be replaced or repaired while protecting the existing walls or fences. If the fence or wall creates a limited space where a minimum 60 inches wide sidewalk is impossible, refer to the thickness and width section.

SIDEWALKS AND DRIVEWAYS SUBJECT TO VEHICULAR MOVEMENTS:
The area should be graded to match existing grade, the sidewalk and or driveway should be poured to a minimum depth of 6 inches with additional expansion or control joints as directed by the City.

HEDGE OR LARGE SHRUBBERY:
The contractor will trim or remove, with care, any hedge of large shrubbery, which is found to encroach upon the area of construction. Such hedge or large shrubbery shall be replanted in the immediate vicinity outside the construction area and within the right of way. If determined by the City that the hedge or large shrubbery is to be removed and disposed of. Tree roots and trees adjacent to sidewalks will be evaluated by the City Parks Division prior to installing sidewalks.

REMOVAL AND REPLACEMENT OF TILE OR BRICK SIDEWALK:
Any tile or brick pavers which may be encountered during the process of construction will be removed and stored by the City for future use. All grades upon final completion of the brick or tile sidewalks shall be within a tolerance of + or − 0.25 inches. If replacing a brick or tile sidewalk refer to the latest City specifications and details.

VALVE COVER AND MANHOLE ADJUSTMENTS:
All adjustments to valve covers and manholes and any other structure located within the proposed sidewalk area shall be adjusted to final sidewalk grade within a tolerance of + or − 0.25 inches following the latest City specifications and details.

SURVEY AND GRADE WORK:
All survey: vertical and horizontal control should be utilized to determine and assure that the sidewalk allows for positive drainage and is constructed in accordance with the most recent ADA specifications and details. The final grade of sidewalk should be installed at a grade 2% (no more than 5%) above the top of curb and sloped at a maximum of 2% toward the center of the right of way. Handicap ramps shall be necessary at each intersection and at each crosswalk.

NEW CONSTRUCTION:
All construction, redevelopment, impacts to the City's rights of way, driveway modifications or additions, sidewalk modifications or additions shall be permitted with the Public Works Department in the form or a right of way permit application. All new construction shall be subject to construction of a sidewalk in front of his lot, where the same fronts on any traveled street of the city, to the full extent of the frontage of such lot on such traveled street in accordance with the latest ADA and COSA standards and specifications and or be required to repair, rebuild or modify the existing sidewalk in accordance with the latest ADA and COSA standards and specifications.

SIDEWALK REPAIRS AFTER EXCAVATIONS:
If it is necessary to remove and replace the sidewalk in an area, the sidewalk shall be replaced in accordance with the latest ADA standards to the extent, as required by the permit or a minimum of 10 feet in either direction of the excavation.

HANDRAIL
Drop off conditions greater than 10" shall require handrail. Handrail shall be built in accordance with FDOT index No: 850 for Steel Pedestrian / Bicycle Picket Railing. The handrail shall be powder coated black semigloss.

HANDICAP RAMPS AND CROSSWALKS :
All of the most recent ADA standard details and specifications for construction of sidewalks, handicap ramps and access points shall be followed. The detectable warning surface on handicap ramps shall extend the entire width of the ramps and in the direction of travel 24" from the back of curb. Transition slopes shall not have a detectable warning surface. The detectable warning surface shall be painted the color black. There shall not be any expansion joints within the ramp or within the landing. Crosswalks shall be installed at signalized intersections and shall be striped with white thermoplastic: two 12−inch wide stripes placed at a minimum of 6 feet apart. When midblock crosswalks are installed, use special emphasis crosswalks in thermoplastic, with signs noting the crosswalk.

EVALUATIONS OF EXISTING SIDEWALK:
The severity categories are based on the ADA determination for Ground and floor surfaces (ADA 4.5.1 and 4.5.2).

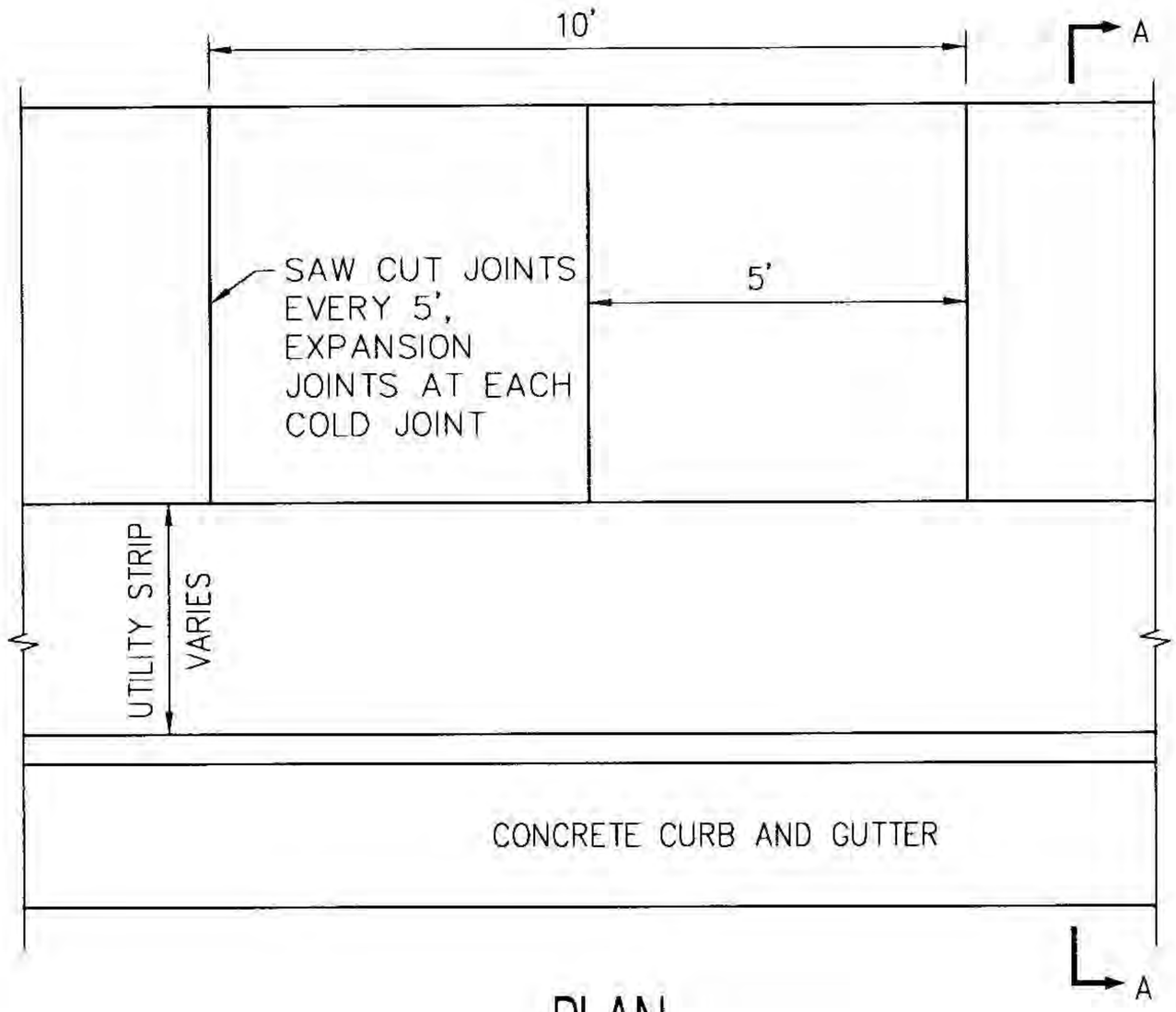
1. Severity of the Hazard
a. Changes in level greater than 0.75 inches shall be ground, replaced or a ramp constructed. (COSA)
b. Changes in level greater than 0.5 inches shall be addressed either by means of a ramp that complies with latest ADA requirements of a ramp or replacement of the sidewalk. Curb ramps and interior or exterior ramps to be constructed on sites or in existing buildings or facilities where space limitations prohibit the use of a 1:12 slope or less may have slopes and rises as follows: (i) A slope between 1:10 and 1:12 is allowed for a maximum rise of 6 inches (150 mm); (ii) a slope between 1:8 and 1:10 is allowed for a maximum rise of 3 inches (75 mm). (iii) A slope steeper than 1:8 is not allowed. (ADA)
c. Changes in level between 0.25 inches and 0.5 inches shall be beveled with a slope no greater than 1:2 (ADA). The sidewalk shall be beveled with a slope no greater than 1:2. This treatment should not be used more than two times in the same area and should not reduce the overall thickness of the concrete more than fifty percent. The beveled area should provide a smooth transition and be smooth to the touch, with all jagged edges removed from the beveled surface in accordance with the latest ADA standards.
d. Changes in level up to 0.25 inches may be vertical and without edge treatment. (ADA)

MAINTENANCE OF TRAFFIC:
All of the latest FDOT specifications and details shall be followed with regard to maintenance of traffic, providing access, lane closures, sidewalk closures and detours. All MOT plans and road closures shall be coordinated with the Public Works Department.

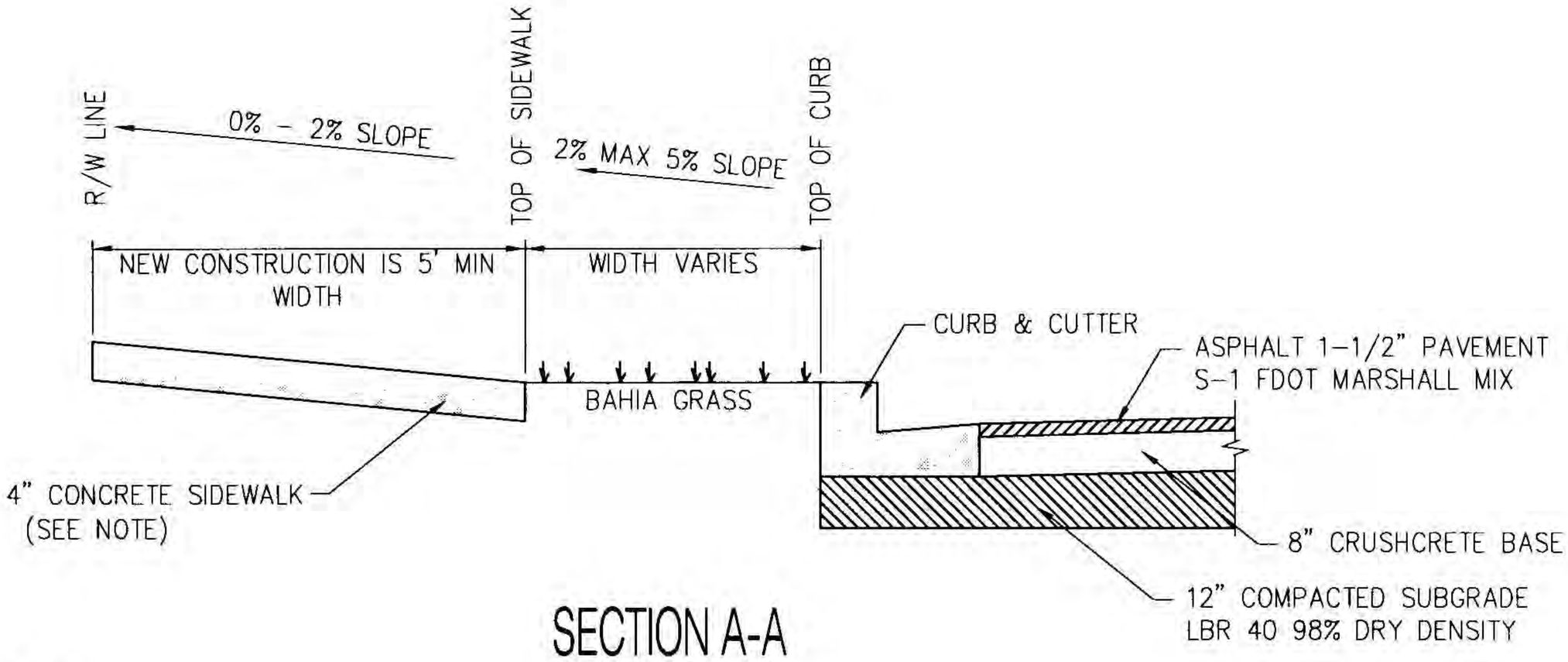
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details PD-07A

DESCRIPTION **TYPICAL SIDEWALK DETAIL**	DATE 11/12/96	REVISED 10/4/07



PLAN



SECTION A-A

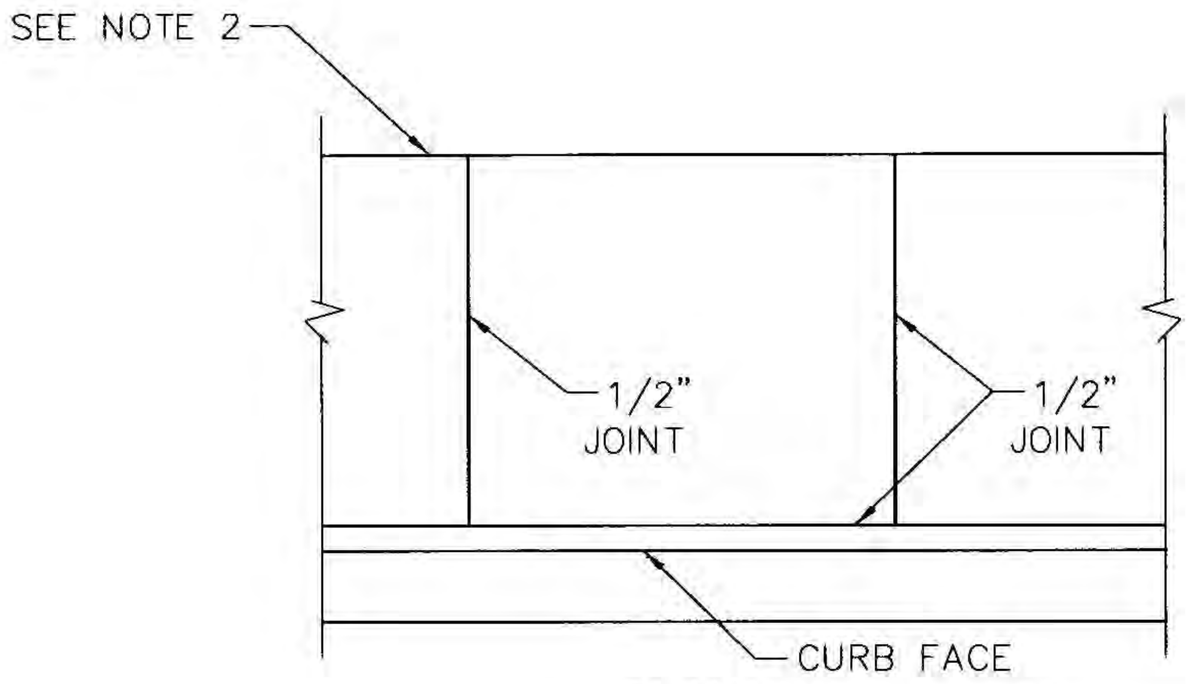
NOTE:

1. NEW OR REPLACED SIDEWALKS SHALL BE A MINIMUM OF 4" THICK 3000 PSI DOT CONCRETE, OR APPROVED MIX OF COQUINA SHELL CONCRETE. SURFACE SHALL BE SMOOTH BROOM FINISH.

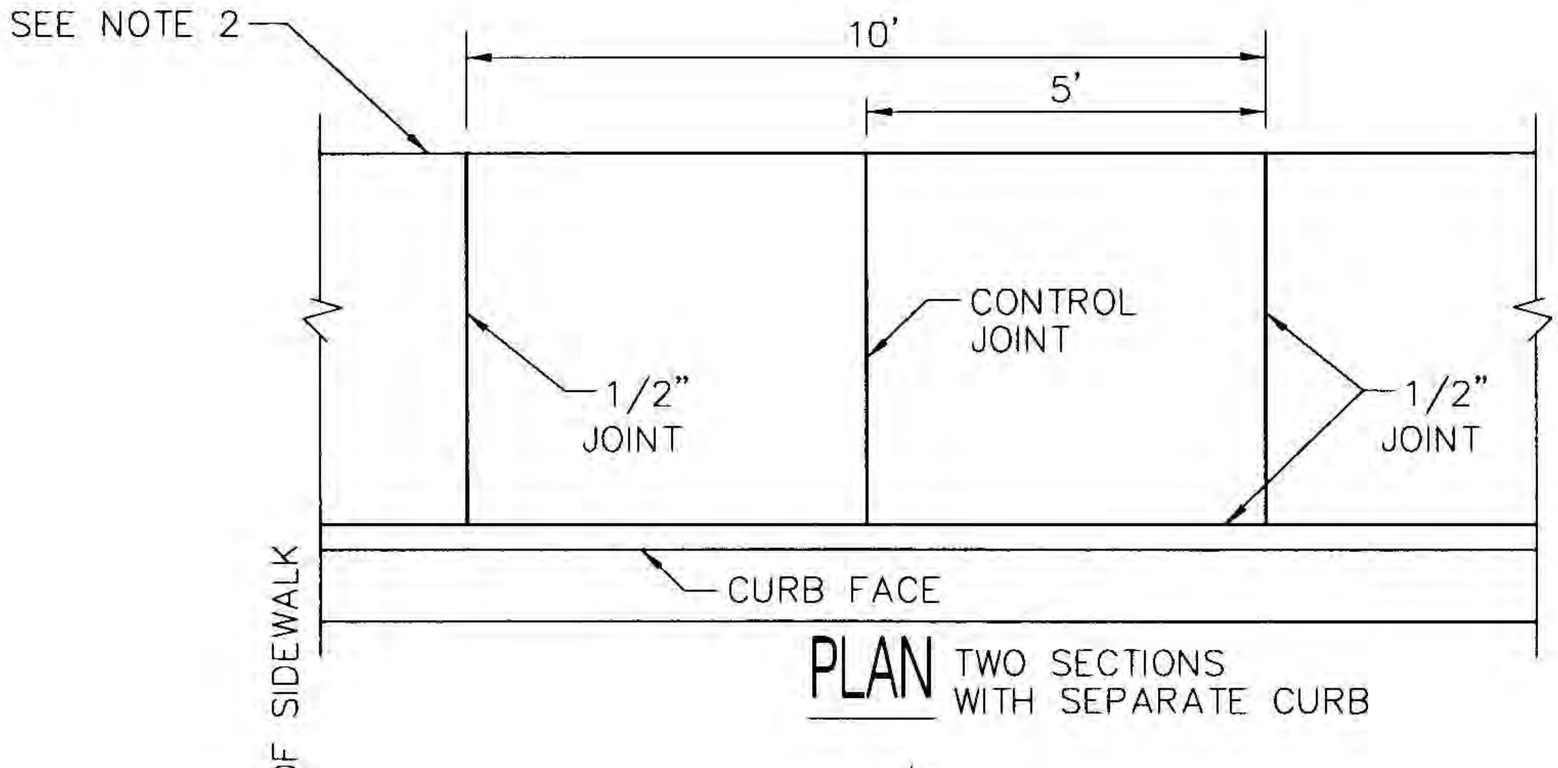
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-07B**

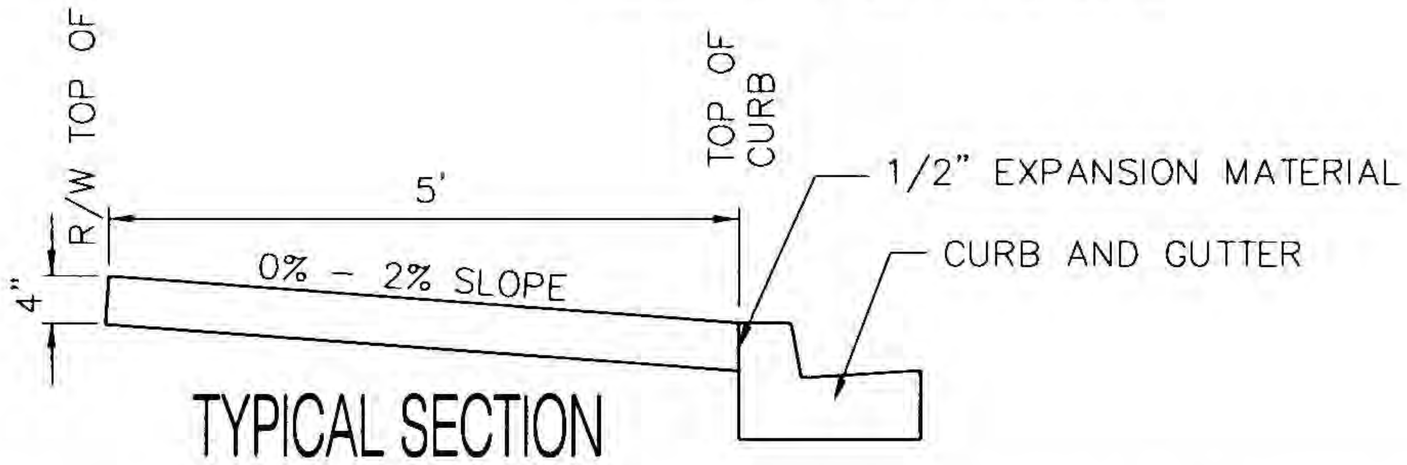
DESCRIPTION	DATE	REVISED
SIDEWALK ADJACENT TO CURB	10/11/85	10/11/08



PLAN SINGLE SECTION WITH SEPARATE CURB



PLAN TWO SECTIONS WITH SEPARATE CURB



TYPICAL SECTION

NOTES:

1. NEW OR REPLACED SIDEWALKS SHALL BE A MINIMUM OF 4" THICK 3000 PSI CONCRETE, OR APPROVED MIX OF COQUINA SHELL CONCRETE. SURFACE SHALL BE SMOOTH BROOM FINISH.

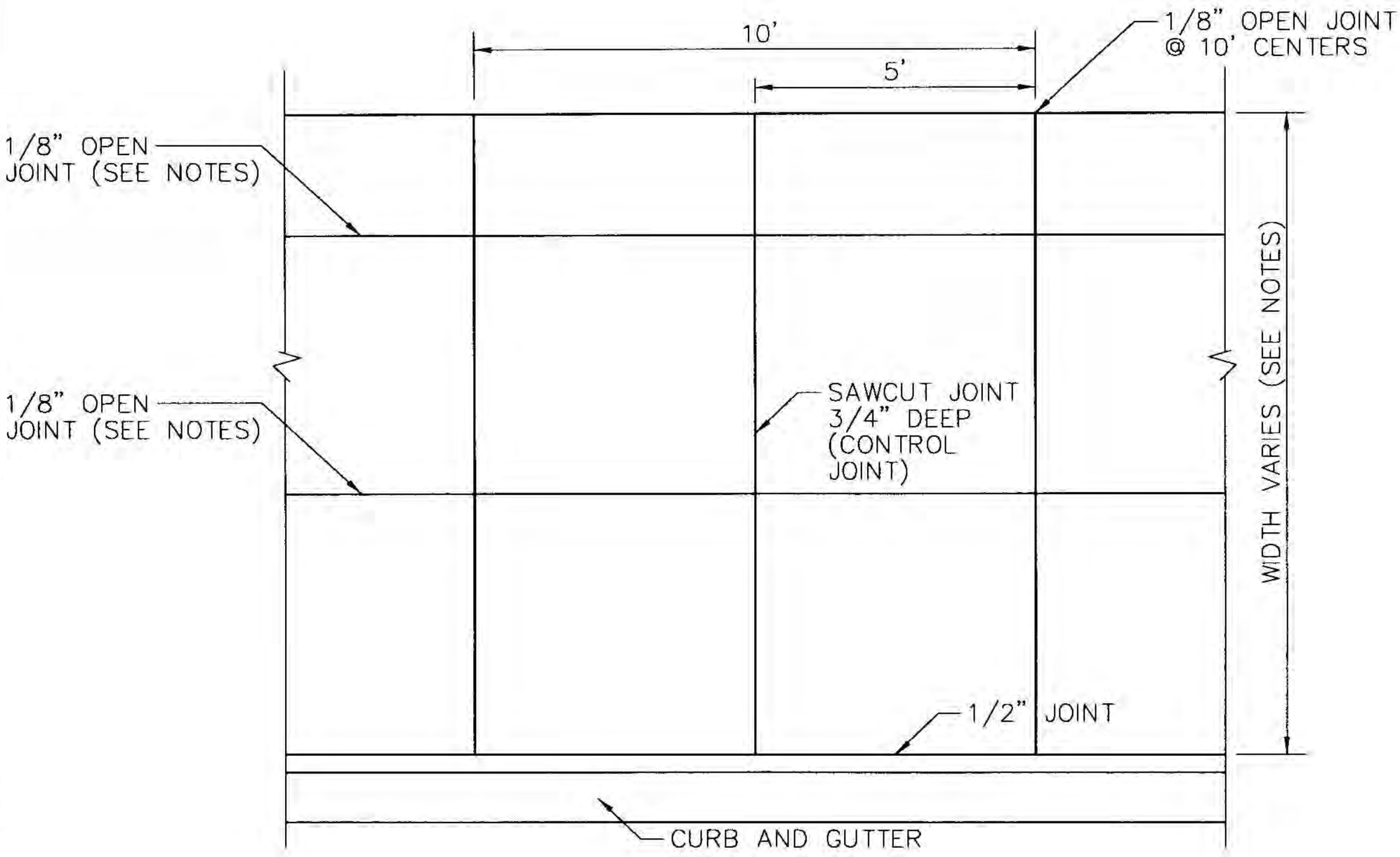
2. WHEN BACK OF SIDEWALK ABUTS A FIXED STRUCTURE, USE 1/2" EXPANSION MATERIAL BETWEEN SIDEWALK AND STRUCTURE.

3. JOINT PLACEMENT FOR ODD NUMBER OF REPLACEMENT SECTIONS SHALL BE AS FOLLOWS: BEGINNING AT ONE END OF EXISTING SIDEWALK WITH 1/2" EXPANSION MATERIAL, JOINTS SHALL ALTERNATE BETWEEN CONTROL JOINTS AND 1/2" EXPANSION JOINTS THEREAFTER. BOTH JOINTS ADJACENT TO EXISTING SIDEWALK SHALL BE 1/2" EXPANSION JOINTS. LENGTH OF SIDEWALK SECTIONS BETWEEN JOINTS SHALL BE CONSISTENT WITH SURROUNDING SIDEWALK.

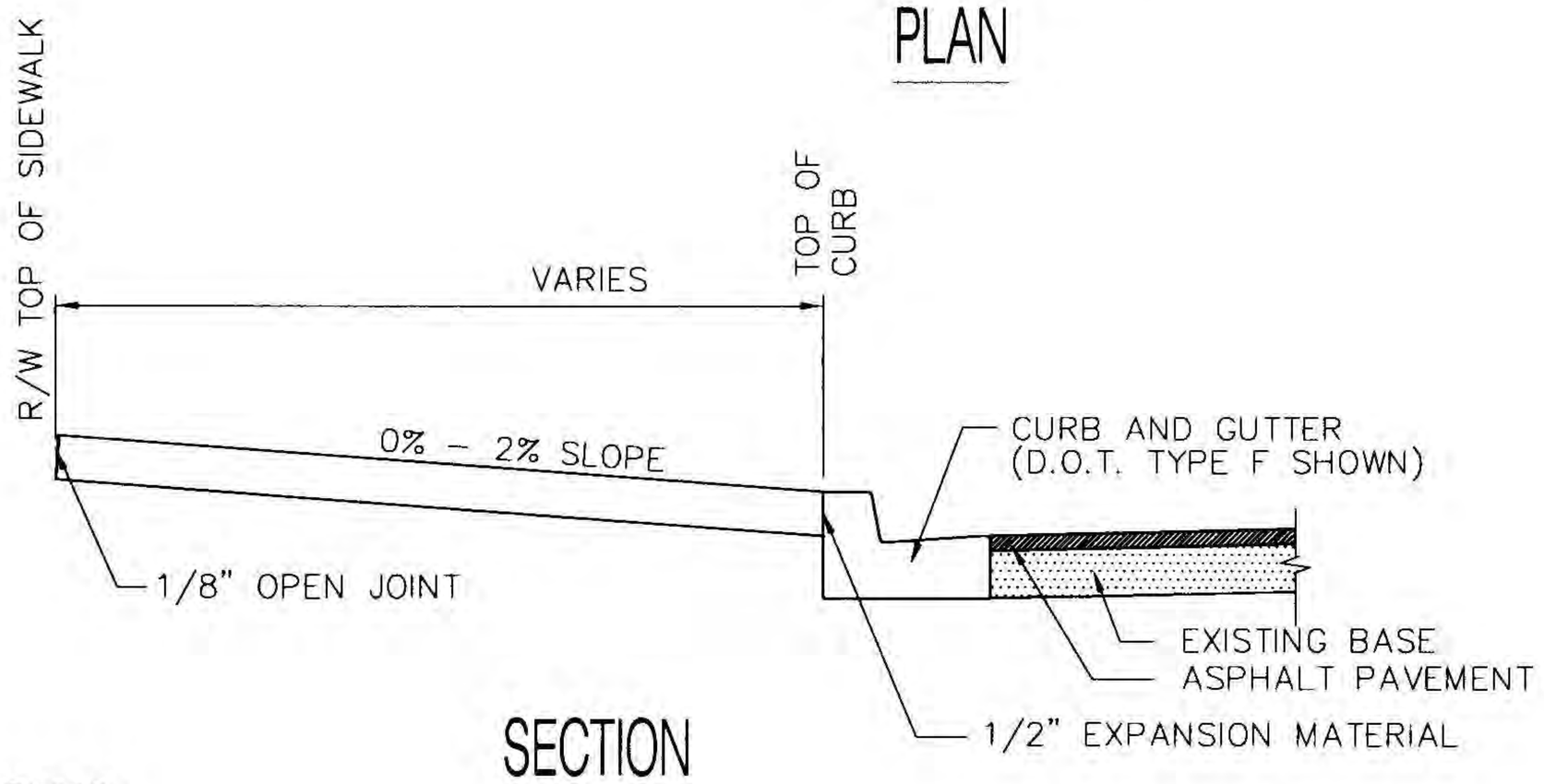
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details PD-07C

DESCRIPTION	DATE	REVISED
SIDEWALK CONSTRUCTION DETAIL FOR SIDEWALKS WIDER THAN 5'	02/28/85	1/14/08



PLAN



SECTION

NOTES:

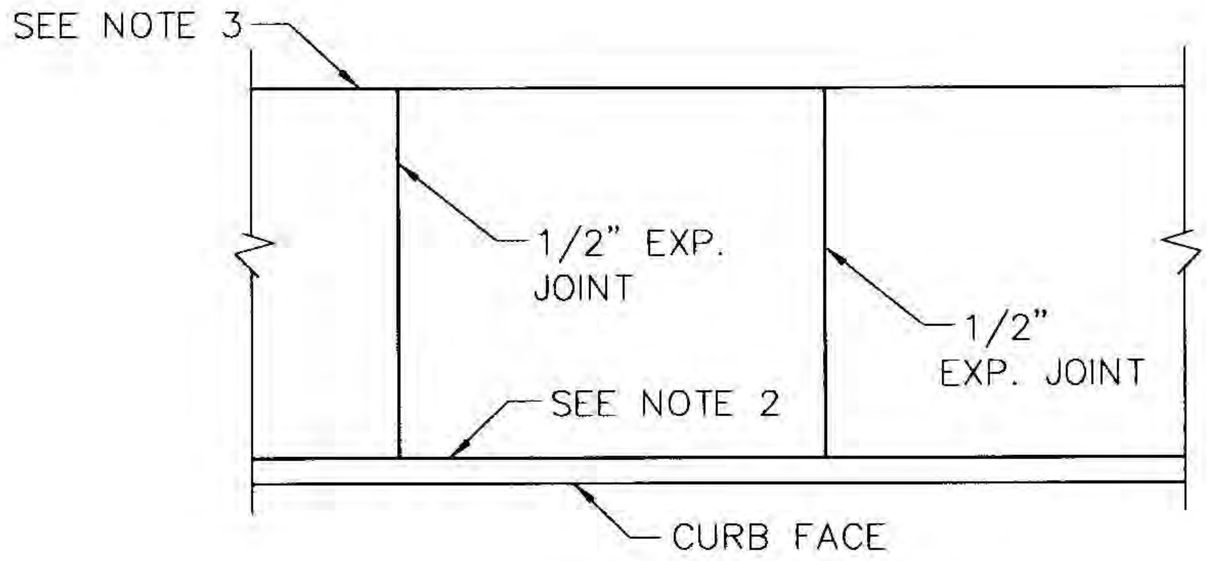
1. NEW OR REPLACED SIDEWALKS SHALL BE A MINIMUM OF 4" 3000 PSI CONCRETE, OR APPROVED MIX OF COQUINA SHELL CONCRETE. SURFACE SHALL BE SMOOTH BROOM FINISH.

2. SIDEWALKS WIDER THAN 5' SHALL BE FORMED IN 5' WIDE SECTIONS. WIDTH OF THE SECTION FURTHEREST FROM THE CURB VARIES, UP TO 5' MAXIMUM.

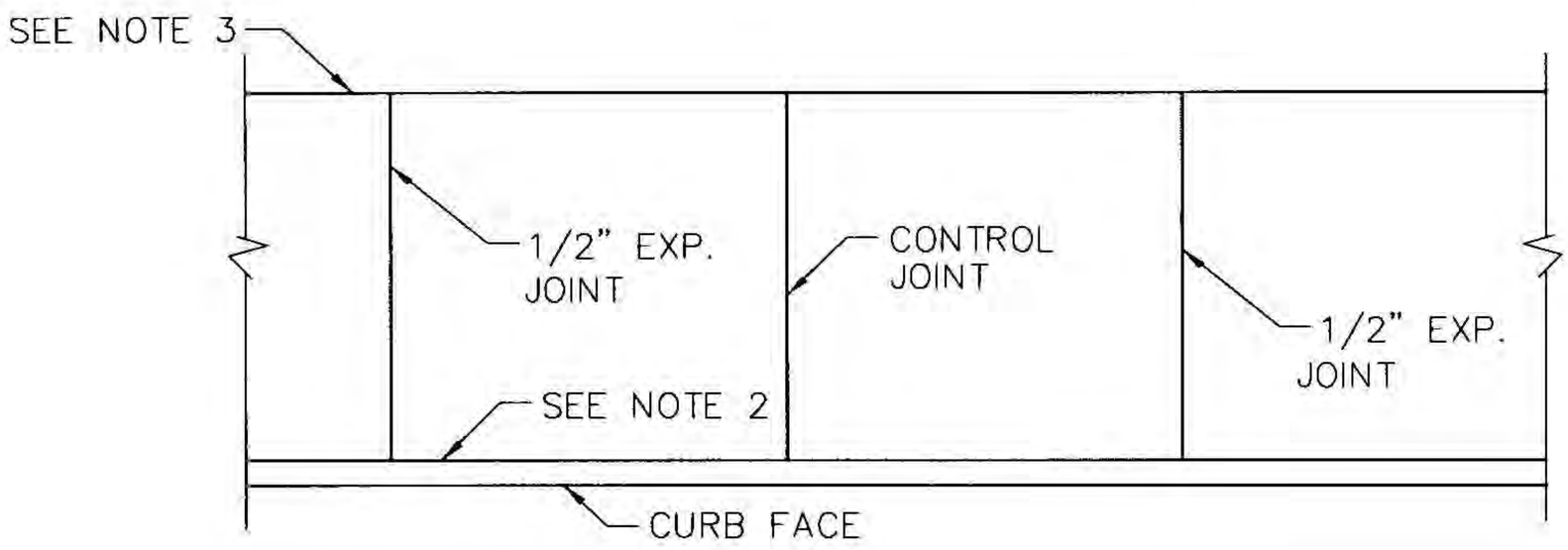
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details PD-07D

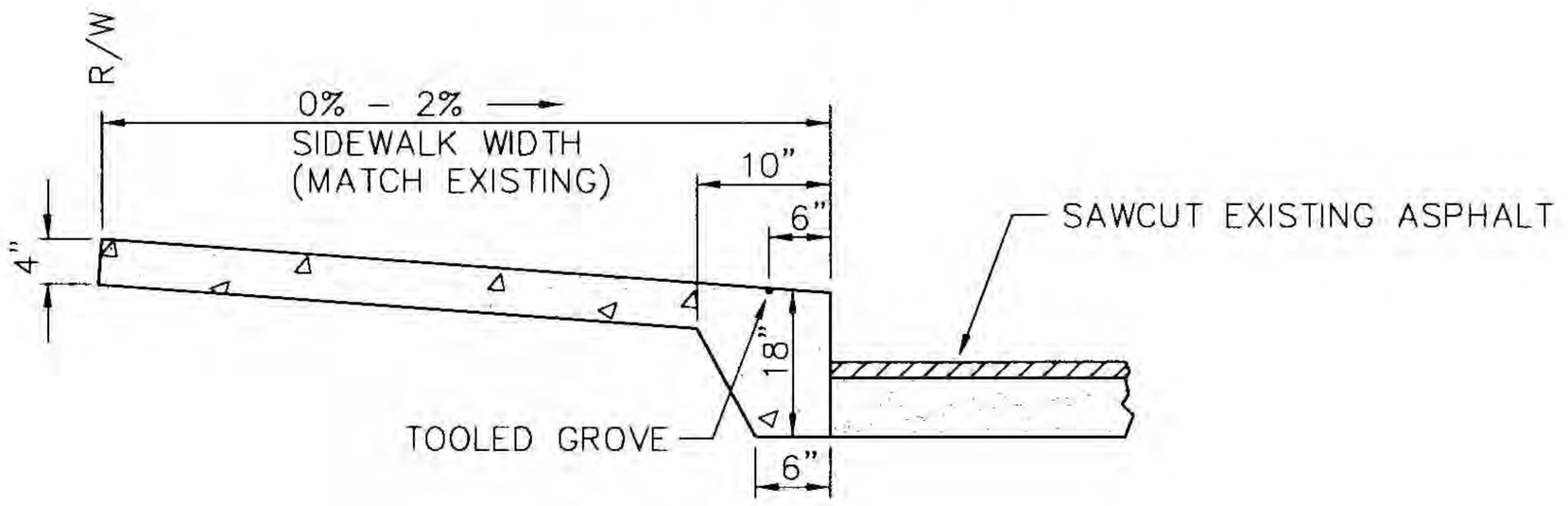
DESCRIPTION	DATE	REVISED
SIDEWALK REPLACEMENT FOR MONOLITHIC CURB/SIDEWALK	10/12/85	3/14/08



PLAN SINGLE SECTION WITH MONOLITHIC CURB



PLAN TWO SECTIONS WITH MONOLITHIC CURB



TYPICAL SECTION

NOTES:

1. NEW OR REPLACED SIDEWALKS SHALL BE A MINIMUM OF 4" THICK 3000 PSI CONCRETE, CLASS II OR APPROVED MIX OF COQUINA SHELL CONCRETE. SURFACE SHALL BE SMOOTH BROOM FINISH. (SEE GENERAL SPECIFICATIONS).

2. WHEN BACK OF SIDEWALK ABUTS A FIXED STRUCTURE, USE 1/2" EXPANSION MATERIAL BETWEEN SIDEWALK AND STRUCTURE.

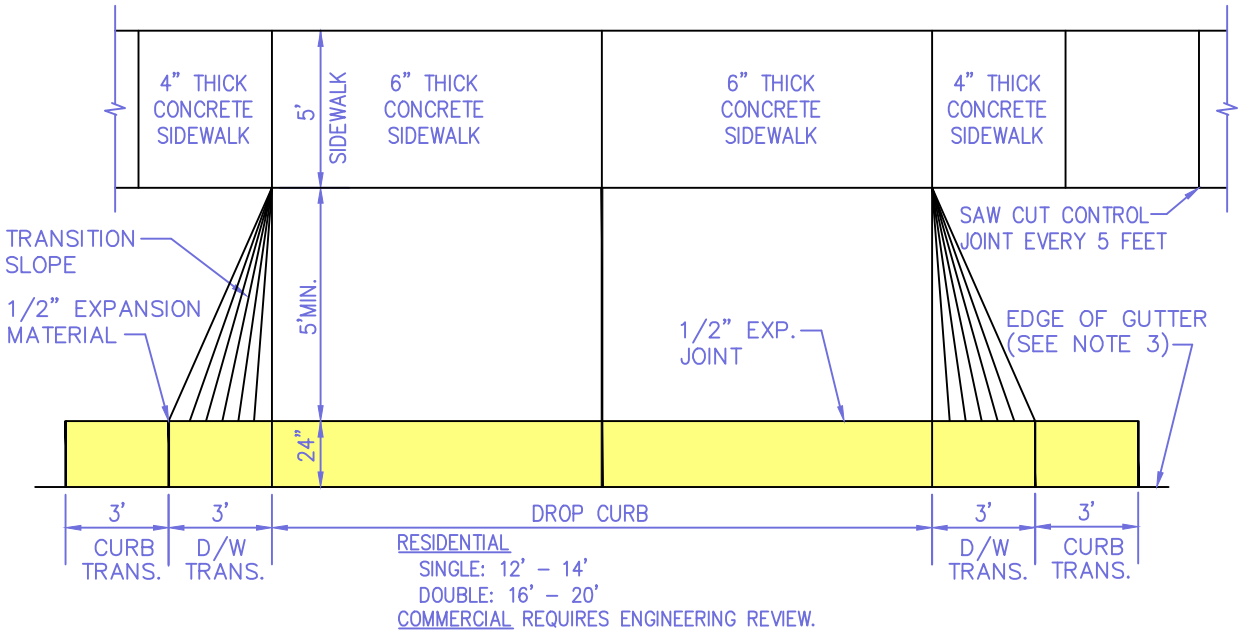
3. JOINT PLACEMENT FOR ODD NUMBER OF REPLACEMENT SECTIONS SHALL BE AS FOLLOWS: BEGINNING AT ONE END OF EXISTING SIDEWALK WITH 1/2" EXPANSION MATERIAL, JOINTS SHALL ALTERNATE BETWEEN CONTROL JOINTS AND 1/2" EXPANSION JOINTS THEREAFTER. BOTH JOINTS ADJACENT TO EXISTING SIDEWALK SHALL BE 1/2" EXPANSION JOINTS. LENGTH OF SIDEWALK SECTIONS BETWEEN JOINTS SHALL BE CONSISTENT WITH SURROUNDING SIDEWALK.

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-08A**

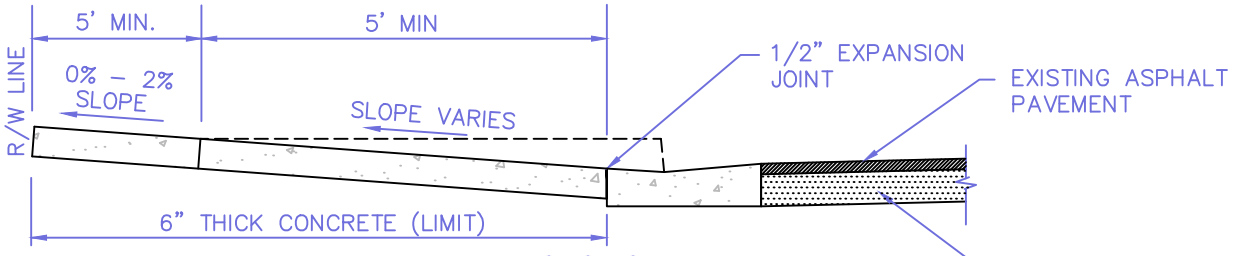
DESC. **DRIVEWAY WITH CURB, SIDEWALK AND HAS CONCRETE OR ASPHALT CONNECTION TO PRIVATE**

DATE	REVISED
3/5/85	1/23/14



PLAN

PROFILE



SECTION

NOTES:

1. NEW OR REPLACED DRIVEWAYS SHALL BE A MINIMUM OF 6" 3000 PSI CONCRETE, OR APPROVED MIX OF COQUINA SHELL (SEE GENERAL SPECIFICATIONS).

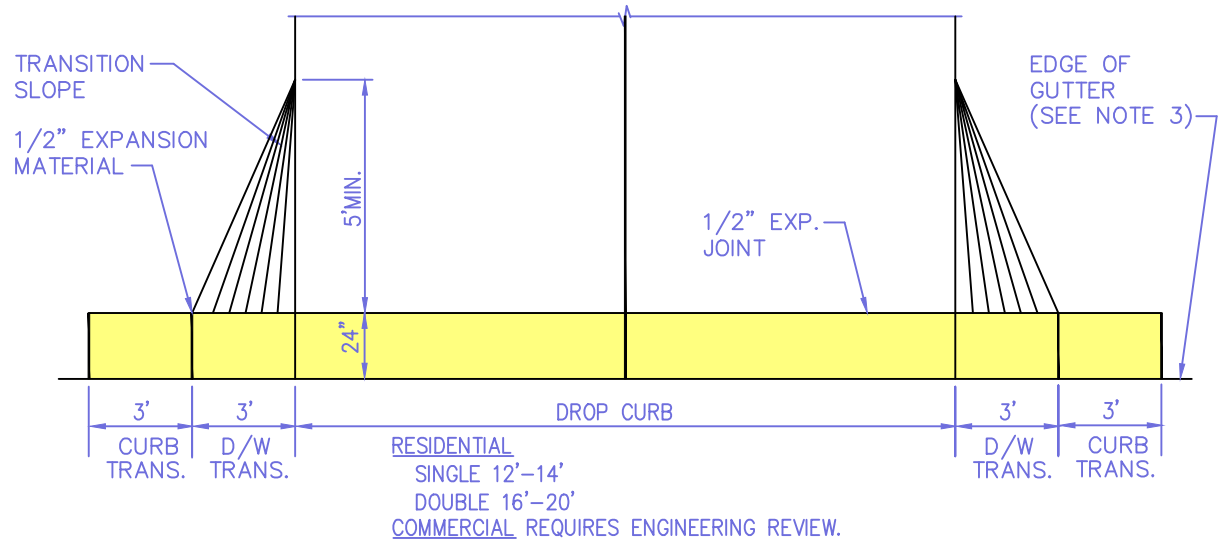
3. FOR DRIVEWAY REPLACEMENT OR NEW DRIVEWAY PLACEMENT ON EXISTING PAVED STREETS, SAW CUT ASPHALT FROM LIMITS OF CURB TRANSITIONS AT A DISTANCE OF 24" FROM BACK OF CURB, REMOVE ALL EXISTING MATERIALS CONTAINED THEREIN (SEE SHADED AREA ON PLAN) AND REPLACEMENT WITH NEW CURB AND GUTTER AS REQUIRED. USE 1/2" EXPANSION MATERIAL BETWEEN EXISTING CONCRETE CURB AND GUTTER AND NEW CONCRETE CURB AND GUTTER AS APPLICABLE. USE ADDITIONAL 3' CURB TRANSITION SECTION BEYOND END OF DRIVEWAY TRANSITION TO MATCH NEW CURB TO EXISTING CURB ON EACH SIDE OF DRIVEWAY. NEW CURB AND GUTTER SHALL BE FDOT TYPE "F". NEW CURB AND GUTTER IS REQUIRED FOR EXISTING STREETS WHICH DO NOT PRESENTLY HAVE CONCRETE GUTTERS.

City of St. Augustine
PUBLIC WORKS DEPARTMENT

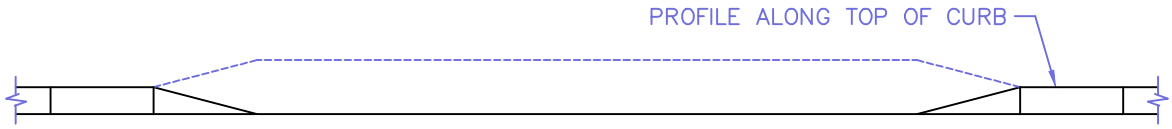
Paving and Drainage Details **PD-08B**

DESC. **DRIVEWAY WITH CURB, WITHOUT SIDEWALK AND HAS CONCRETE OR ASPHALT CONNECTION TO PRIVATE**

DATE	REVISED
3/5/85	1/23/14



PLAN



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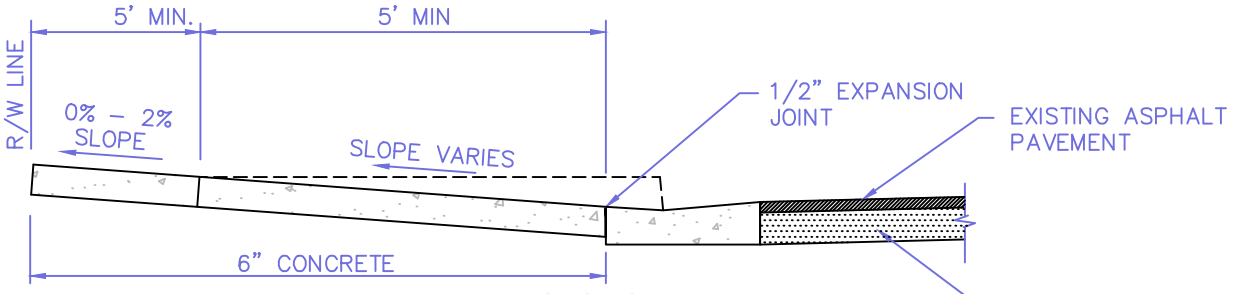


SECTION

NOTES:

1. NEW OR REPLACED DRIVEWAYS SHALL BE A MINIMUM OF 6" 3000 PSI CONCRETE, OR APPROVED MIX OF COQUINA SHELL (SEE GENERAL SPECIFICATIONS).

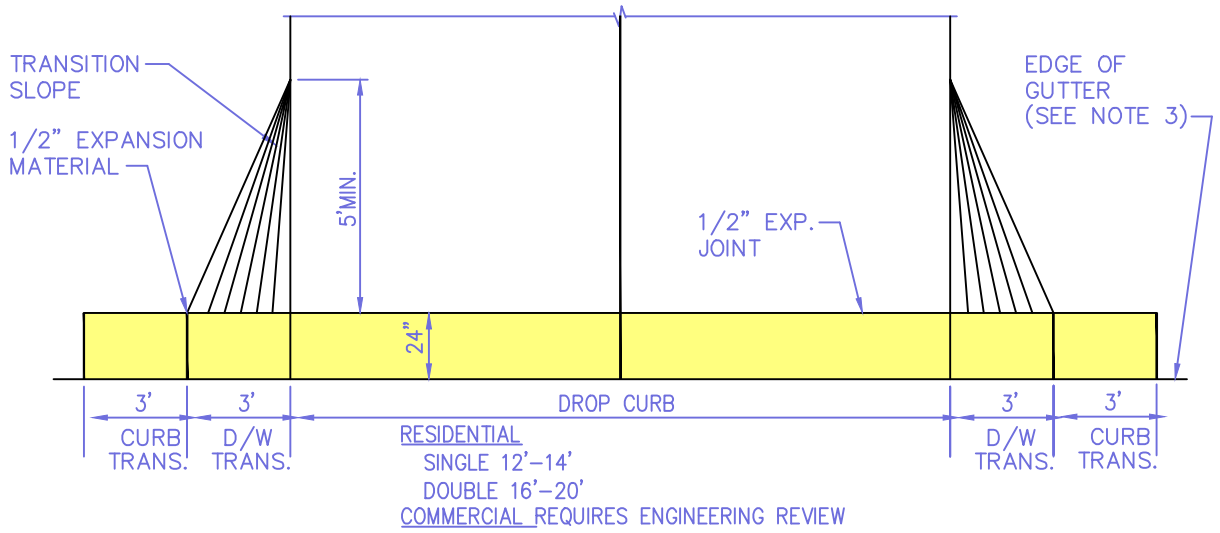
3. FOR DRIVEWAY REPLACEMENT OR NEW DRIVEWAY PLACEMENT ON EXISTING PAVED STREETS, SAW CUT ASPHALT FROM LIMITS OF CURB TRANSITIONS AT A DISTANCE OF 24" FROM BACK OF CURB, REMOVE ALL EXISTING MATERIALS CONTAINED THEREIN (SEE SHADED AREA ON PLAN) AND REPLACEMENT WITH NEW CURB AND GUTTER AS REQUIRED. USE 1/2" EXPANSION MATERIAL BETWEEN EXISTING CONCRETE CURB AND GUTTER AND NEW CONCRETE CURB AND GUTTER AS APPLICABLE. USE ADDITIONAL 3' CURB TRANSITION SECTION BEYOND END OF DRIVEWAY TRANSITION TO MATCH NEW CURB TO EXISTING CURB ON EACH SIDE OF DRIVEWAY. NEW CURB AND GUTTER SHALL BE FDOT TYPE "F". NEW CURB AND GUTTER IS REQUIRED FOR EXISTING STREETS WHICH DO NOT PRESENTLY HAVE CONCRETE GUTTERS.

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-08C**

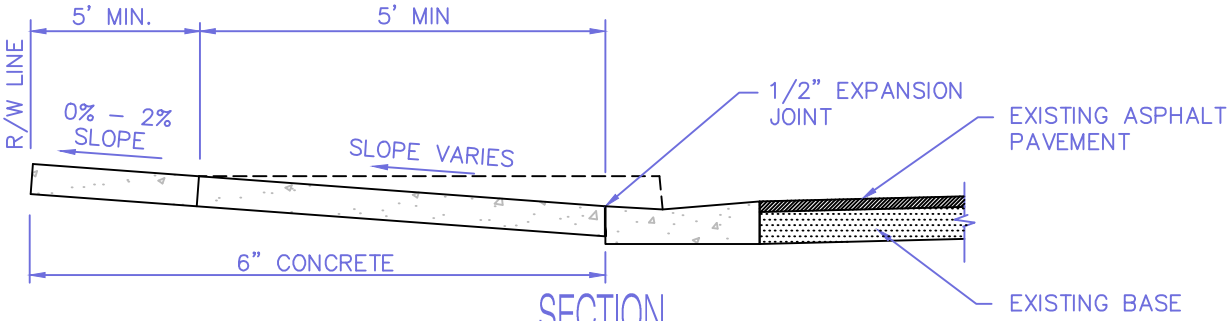
DESC. **DRIVEWAY WITHOUT SIDEWALK AND CURB WITH CONCRETE OR ASPHALT CONNECTION TO PRIVATE**

DATE	REVISED
11/6/96	1/23/14



PLAN

PROFILE



SECTION

NOTES:

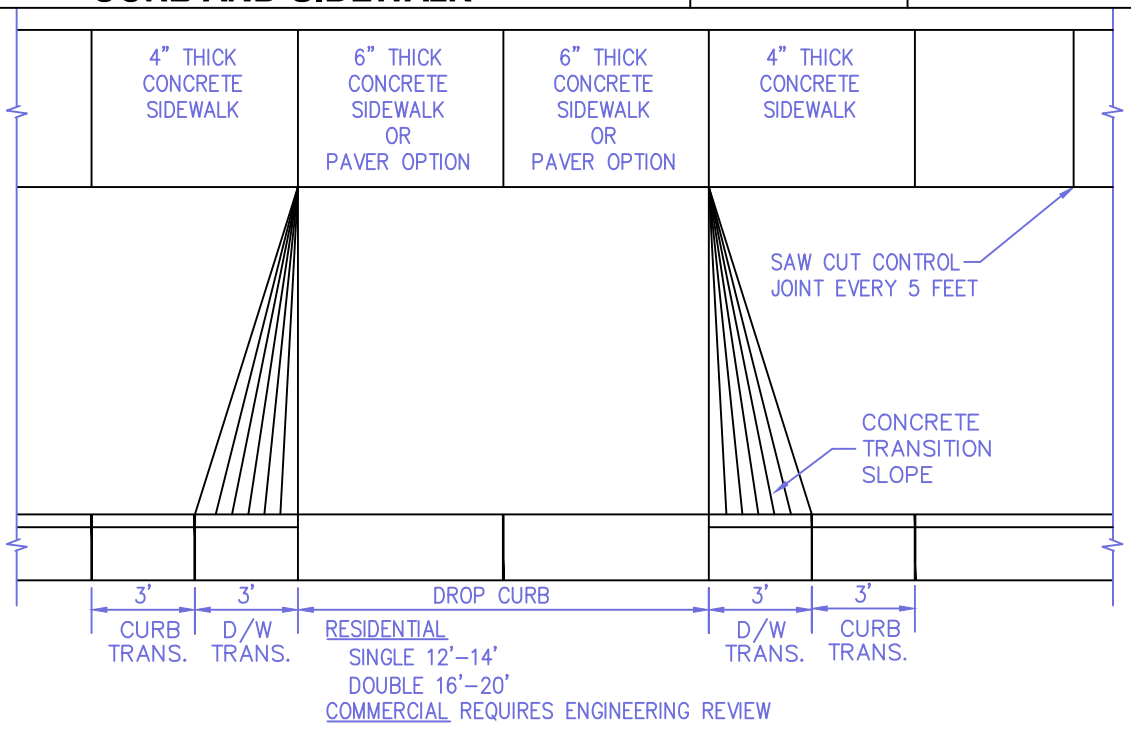
1. NEW OR REPLACED DRIVEWAYS SHALL BE A MINIMUM OF 6" 3000 PSI CONCRETE, OR APPROVED MIX OF COQUINA SHELL (SEE GENERAL SPECIFICATIONS).

3. FOR DRIVEWAY REPLACEMENT OR NEW DRIVEWAY PLACEMENT ON EXISTING PAVED STREETS, SAW CUT ASPHALT FROM LIMITS OF CURB TRANSITIONS AT A DISTANCE OF 24" FROM BACK OF CURB, REMOVE ALL EXISTING MATERIALS CONTAINED THEREIN (SEE SHADED AREA ON PLAN) AND REPLACEMENT WITH NEW CURB AND GUTTER AS REQUIRED. USE 1/2" EXPANSION MATERIAL BETWEEN EXISTING CONCRETE CURB AND GUTTER AND NEW CONCRETE CURB AND GUTTER AS APPLICABLE. USE ADDITIONAL 3' CURB TRANSITION SECTION BEYOND END OF DRIVEWAY TRANSITION TO MATCH NEW CURB TO EXISTING CURB ON EACH SIDE OF DRIVEWAY. NEW CURB AND GUTTER SHALL BE FDOT TYPE "F". NEW CURB AND GUTTER IS REQUIRED FOR EXISTING STREETS WHICH DO NOT PRESENTLY HAVE CONCRETE GUTTERS.

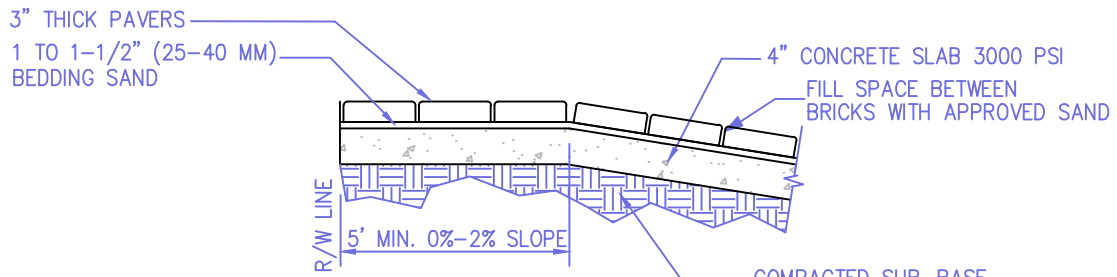
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-08D**

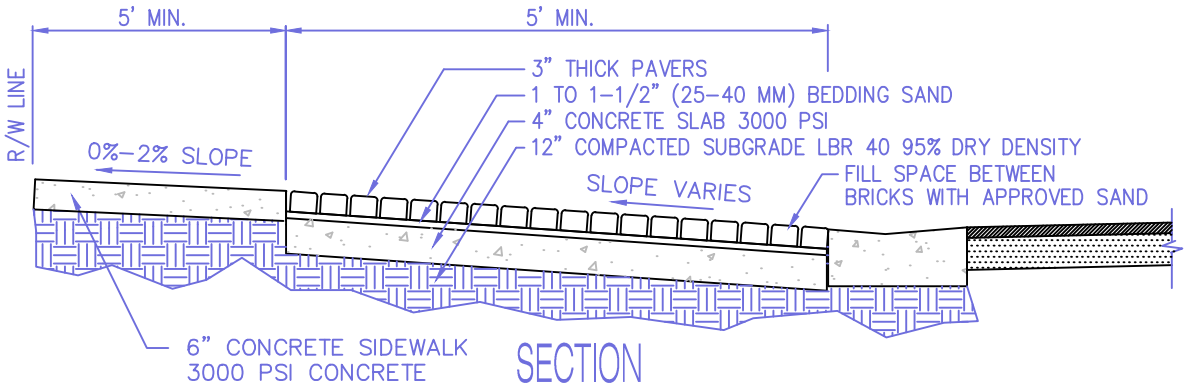
DESCRIPTION	DRIVEWAY WITH BRICK PAVERS, CURB AND SIDEWALK	DATE 11/12/96	REVISED 1/23/14



PLAN



PAVER PROFILE
SIDEWALK & DRIVEWAY

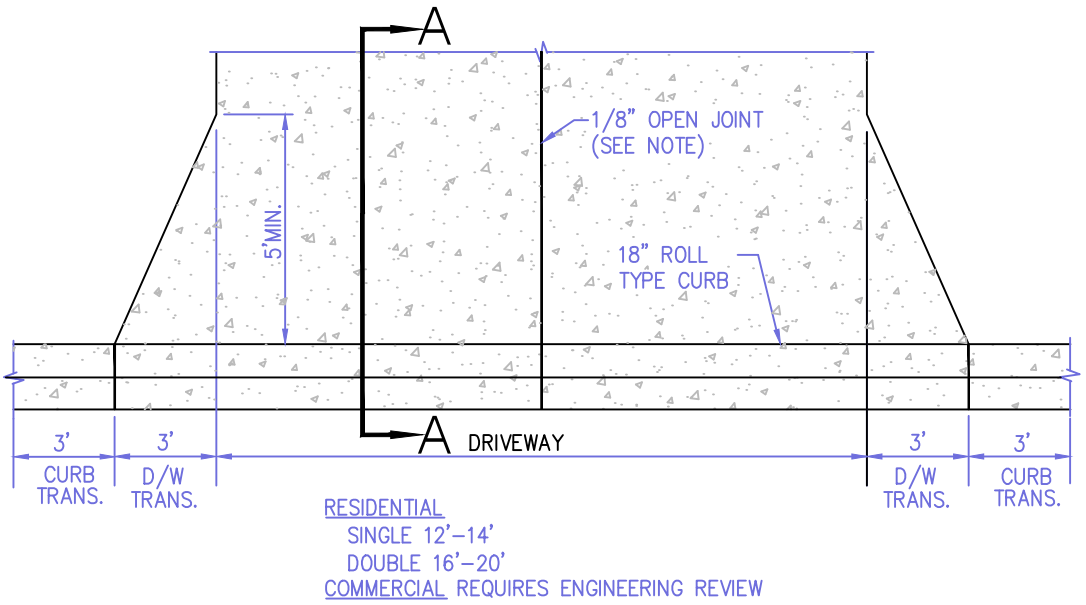


SECTION
PAVER DRIVEWAY WITH CONCRETE SIDEWALK PROFILE

City of St. Augustine
PUBLIC WORKS DEPARTMENT

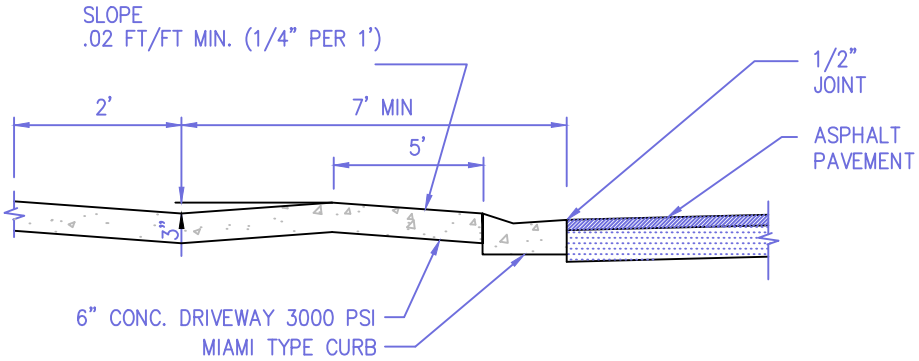
Paving and Drainage Details **PD-08E**

DESCRIPTION	DRIVEWAY WITH CURB, WITHOUT SIDEWALK AND HAS SOIL CONNECTION TO PRIVATE	DATE 11/12/96	REVISED 1/23/14



RESIDENTIAL
SINGLE 12'–14'
DOUBLE 16'–20'
COMMERCIAL REQUIRES ENGINEERING REVIEW

PLAN



SECTION AA

NOTES:

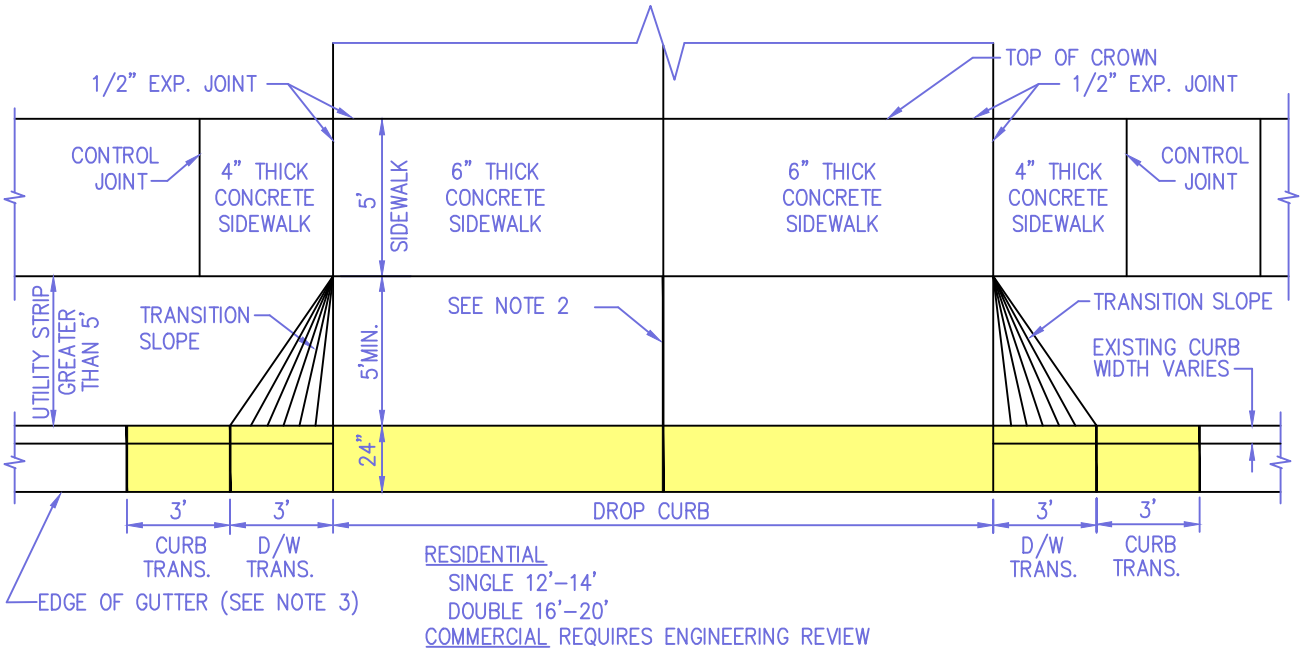
1. 1/8" OPEN JOINTS PLACED AT EQUAL (20' MAX.) INTERVALS FOR DRIVEWAYS OVER 20' WIDE.

City of St. Augustine
PUBLIC WORKS DEPARTMENT

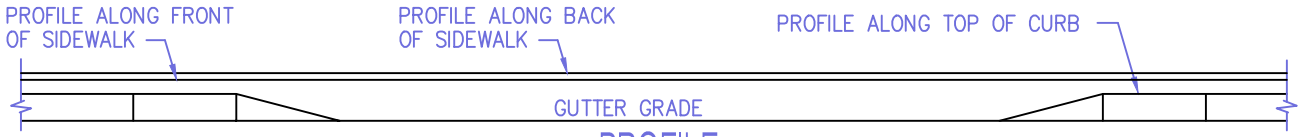
Paving and Drainage Details **PD-08F**

DESC. **DRIVEWAY WITH CURB, SIDEWALK AND HAS SOIL CONNECTION TO PRIVATE**

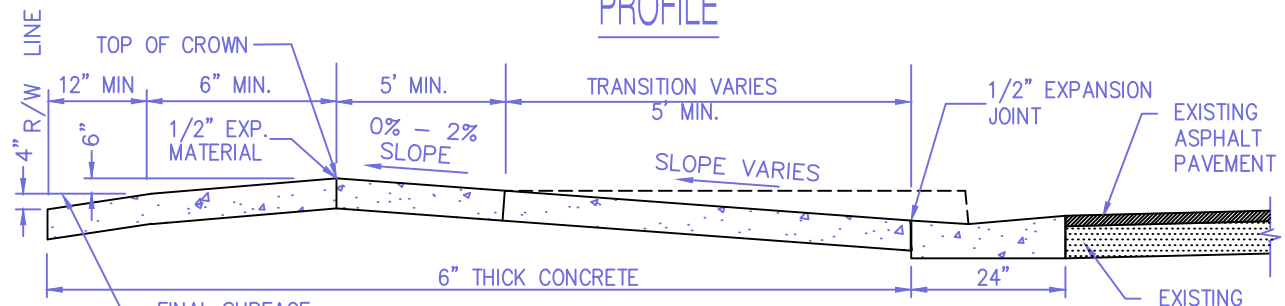
DATE	REVISED
11/6/90	1/23/14



PLAN



PROFILE



SECTION

NOTES:

1. NEW OR REPLACED DRIVEWAY SHALL BE A MINIMUM OF 6" 3000 PSI CONCRETE, OR APPROVED MIX OF COQUINA SHELL (SEE GENERAL SPECIFICATIONS).

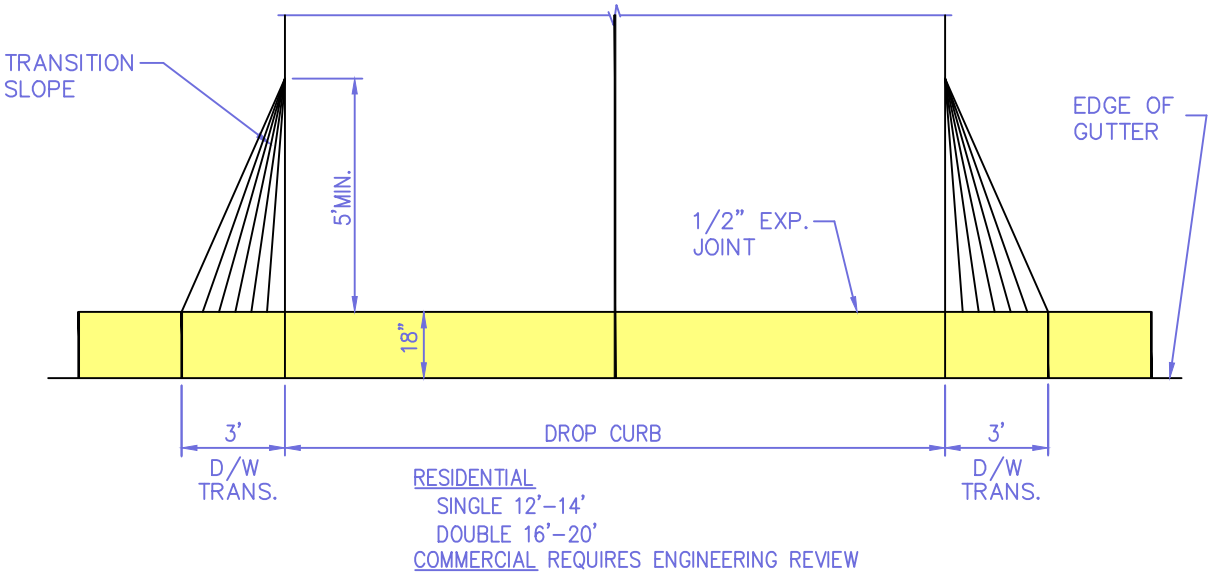
2. 1/2" EXPANSION MATERIAL SHALL BE PLACED AT EQUAL (20' MAX.) INTERVALS FOR DRIVEWAYS OVER 20' WIDE. JOINTS IN CURB AND GUTTER SHALL MATCH JOINTS IN DRIVEWAY.

3. FOR DRIVEWAY REPLACEMENT OR NEW DRIVEWAY PLACEMENT ON EXISTING PAVED STREETS, SAW CUT ASPHALT FROM LIMITS OF CURB TRANSITIONS AT A DISTANCE OF 24" FROM BACK OF CURB, REMOVE ALL EXISTING MATERIALS CONTAINED THEREIN (SEE SHADED AREA ON PLAN) AND REPLACE WITH NEW CURB AND GUTTER AS REQUIRED. USE 1/2" EXPANSION MATERIAL BETWEEN EXISTING CONCRETE CURB AND GUTTER AND NEW CONCRETE CURB AND GUTTER AS APPLICABLE. USE ADDITIONAL 3' CURB TRANSITION SECTION BEYOND END OF DRIVEWAY TRANSITION TO MATCH NEW CURB TO EXISTING CURB ON EACH SIDE OF DRIVEWAY. NEW CURB AND GUTTER SHALL BE FDOT TYPE "F". NEW CURB AND GUTTER IS REQUIRED FOR EXISTING STREETS WHICH DO NOT PRESENTLY HAVE CONCRETE GUTTERS.

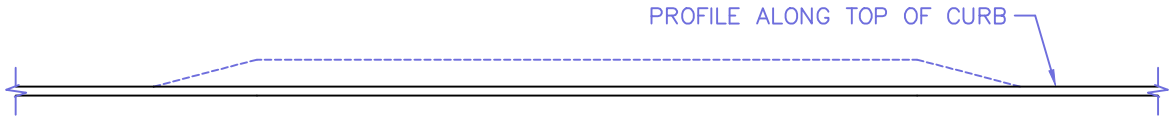
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-08G**

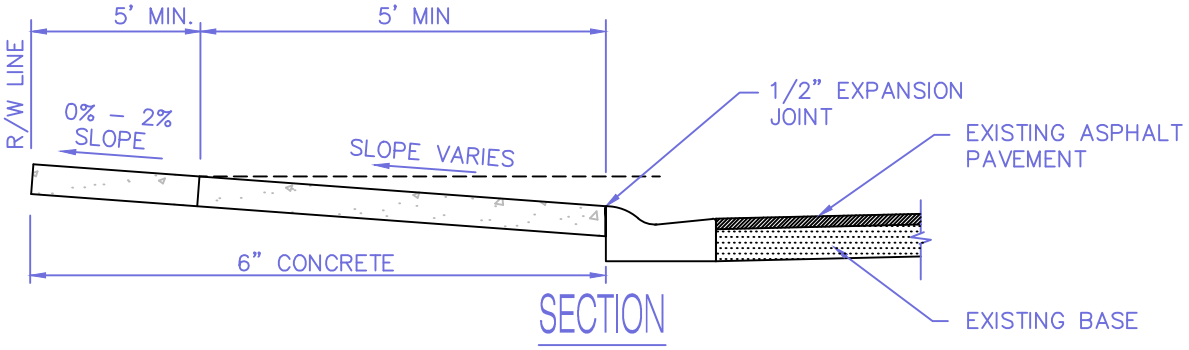
DESC.	DRIVEWAY WITH PREEXISTING MIAMI CURB & GUTTER WITHOUT SIDEWALK & HAS CONCRETE OR ASPHALT CONNECTION TO PRIVATE	DATE 11/25/08	REVISED 1/23/14



PLAN



PROFILE



SECTION

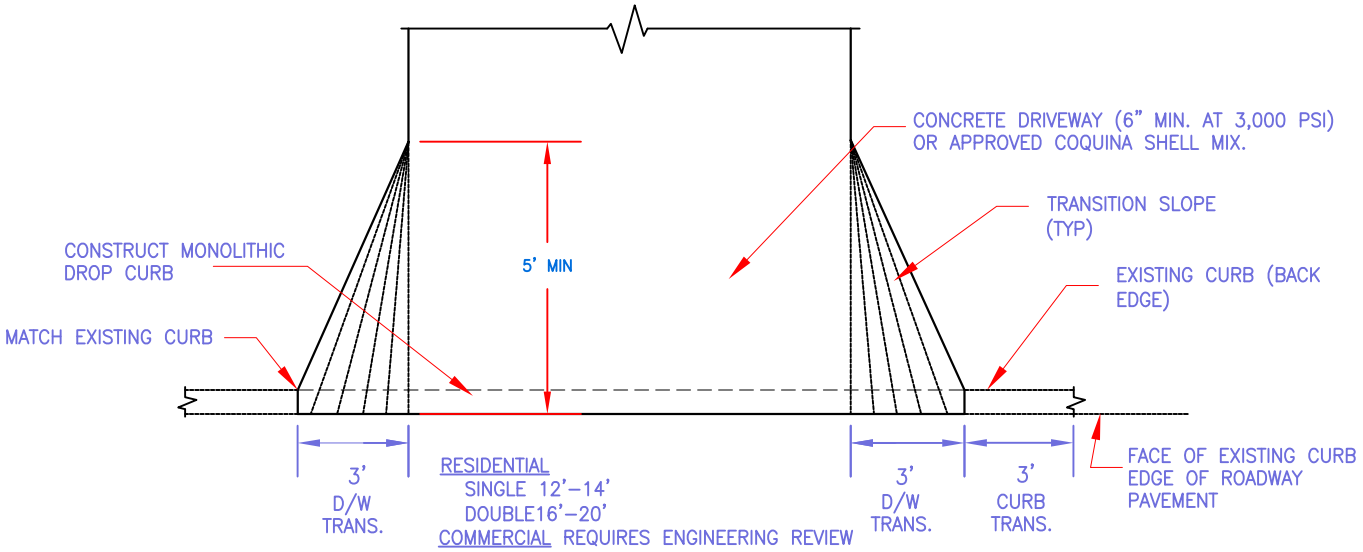
NOTES:

1. NEW OR REPLACED DRIVEWAYS SHALL BE A MINIMUM OF 6" 3000 PSI CONCRETE, OR APPROVED MIX OF COQUINA SHELL (SEE GENERAL SPECIFICATIONS).

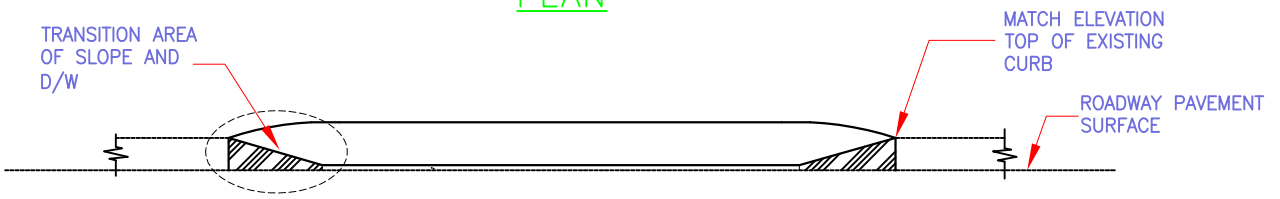
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-08H**

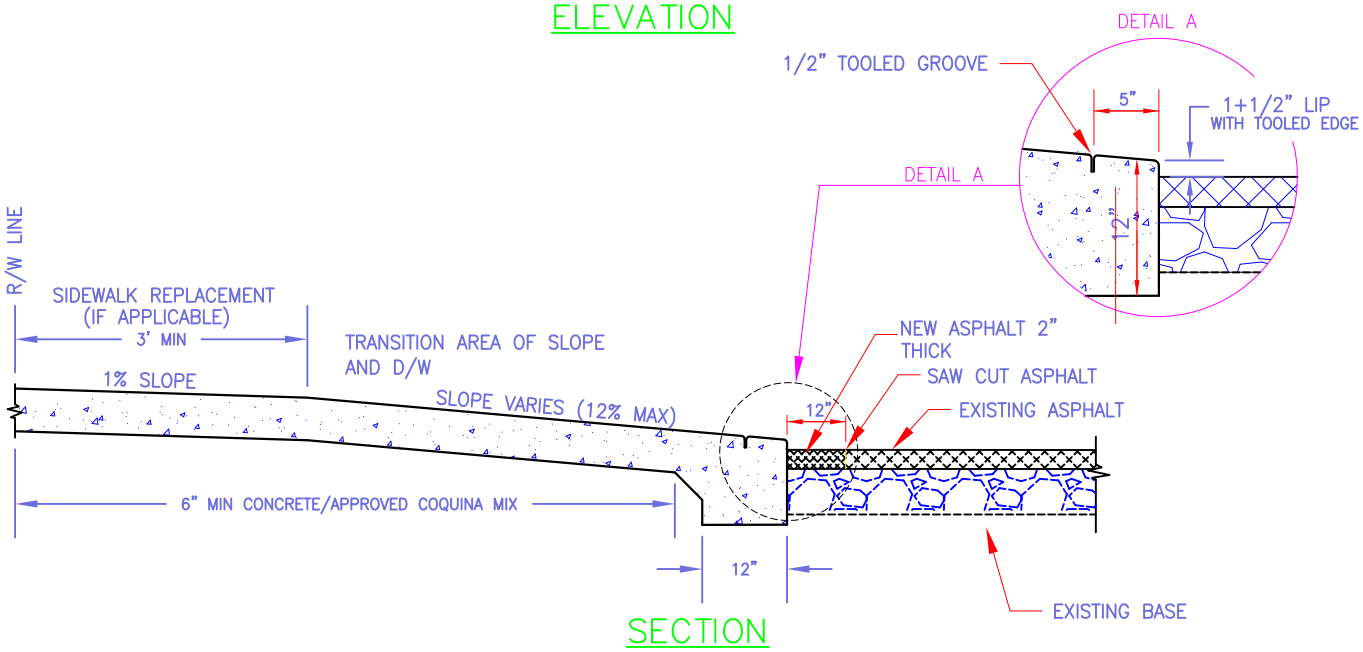
DESC.	MONOLITHIC CONCRETE DRIVEWAY WITH / WITHOUT SIDEWALK	DATE 5/15/13	REVISED 1/28/14



PLAN



ELEVATION



SECTION

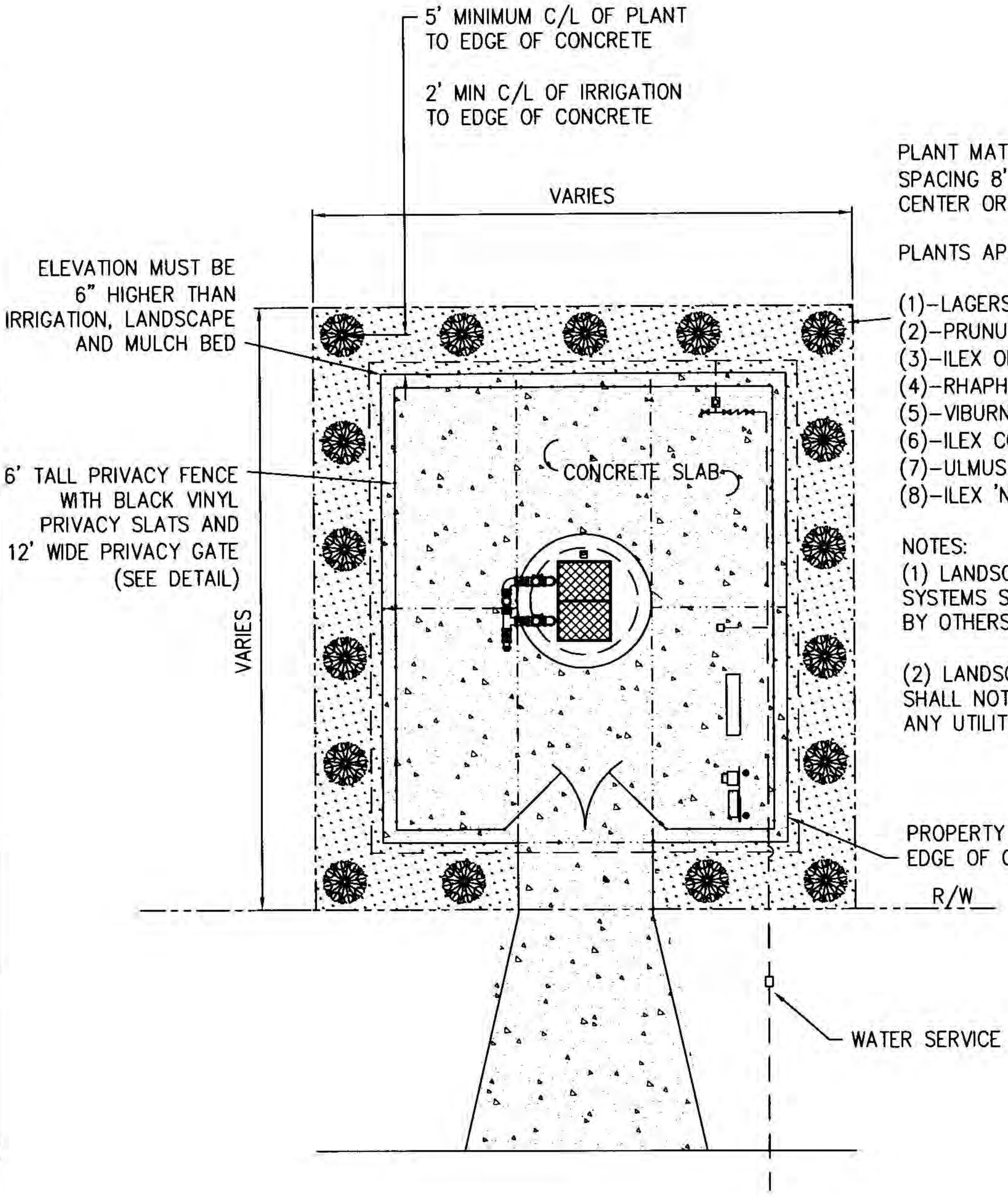
NOTES:

1. NEW OR REPLACED DRIVEWAYS SHALL BE A MINIMUM OF 6" THICK 3000 P.S.I. CONCRETE, OR APPROVED MIX OF COQUINA SHELL.
2. FOR DRIVEWAY REPLACEMENT OR CONSTRUCTION OF A NEW DRIVEWAY ON EXISTING PAVED STREETS, SAW CUT ASPHALT FROM LIMITS OF CURB TRANSITIONS AT A DISTANCE OF 12" FROM FACE OF CURB, REMOVE EXISTING ASPHALT AND CONSTRUCT NEW HOT MIX ASPHALT TYPE S–1 AT A MINIMUM THICKNESS OF 2" ON TOP OF COMPACTED ROADWAY BASE.

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-09B**

DESCRIPTION	**PUMP STATION LANDSCAPE REQUIREMENTS**	DATE 1/8/08	REVISED 1/8/08



PLANT MATERIALS AS SHOWN SPACING 8' CENTER TO CENTER OR GREATER

PLANTS APPROVED FOR USE LISTED:

(1)–LAGERSTROEMIA INDICA
(2)–PRUNUS LAUROCERASUS
(3)–ILEX OPACA
(4)–RHAPHIOLEPIS INDICA
(5)–VIBURNUM SUSPENSUM LINDL
(6)–ILEX CORNUTA 'BURFORDII'
(7)–ULMUS PARVIFOLIA, 'DRAKE'
(8)–ILEX 'NELLIE R. STEVENS'

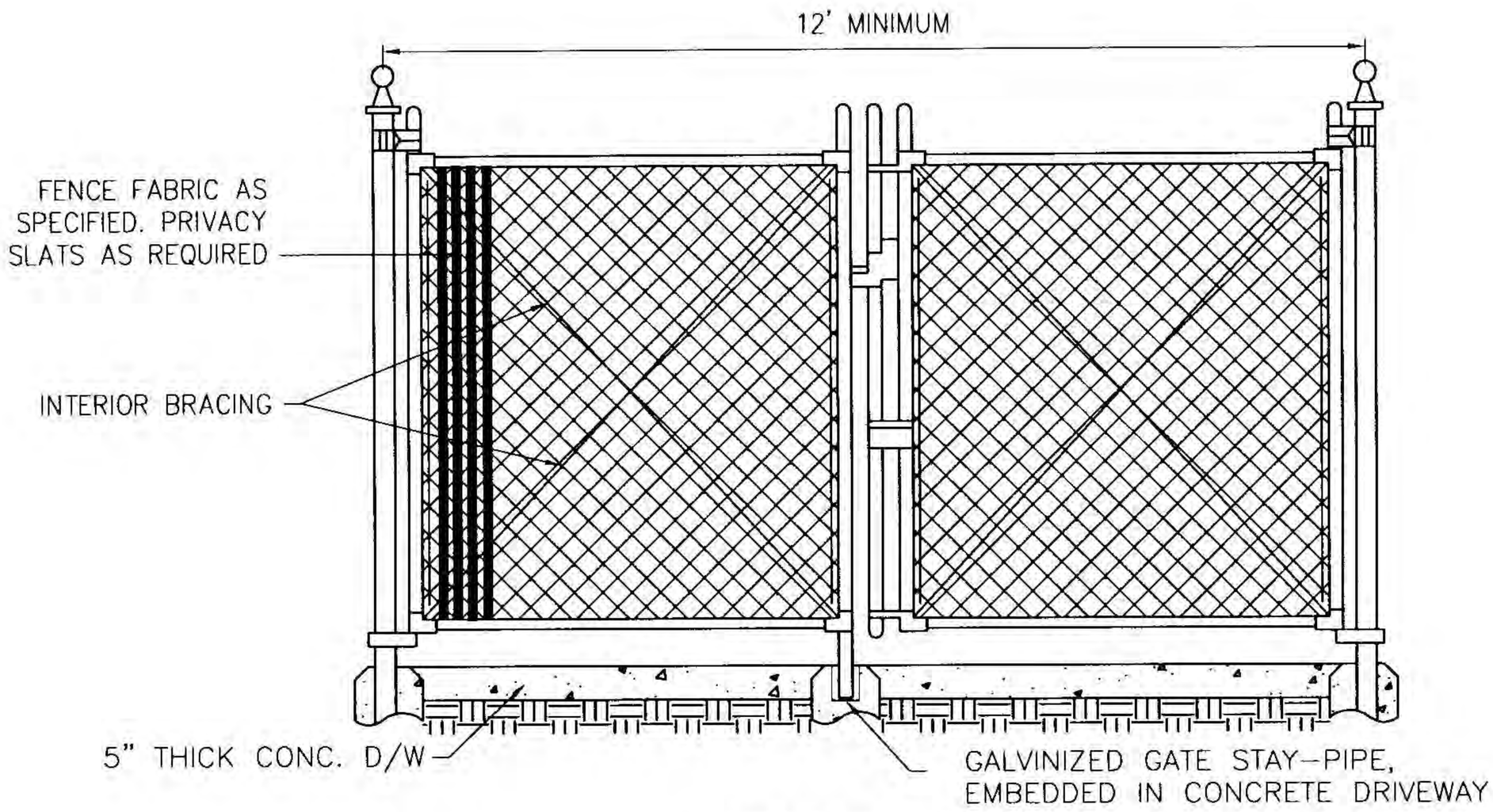
NOTES:
(1) LANDSCAPE AND IRRIGATION SYSTEMS SHALL BE MAINTAINED BY OTHERS.

(2) LANDSCAPE AND IRRIGATION SHALL NOT BE PLACED OVER ANY UTILITIES.

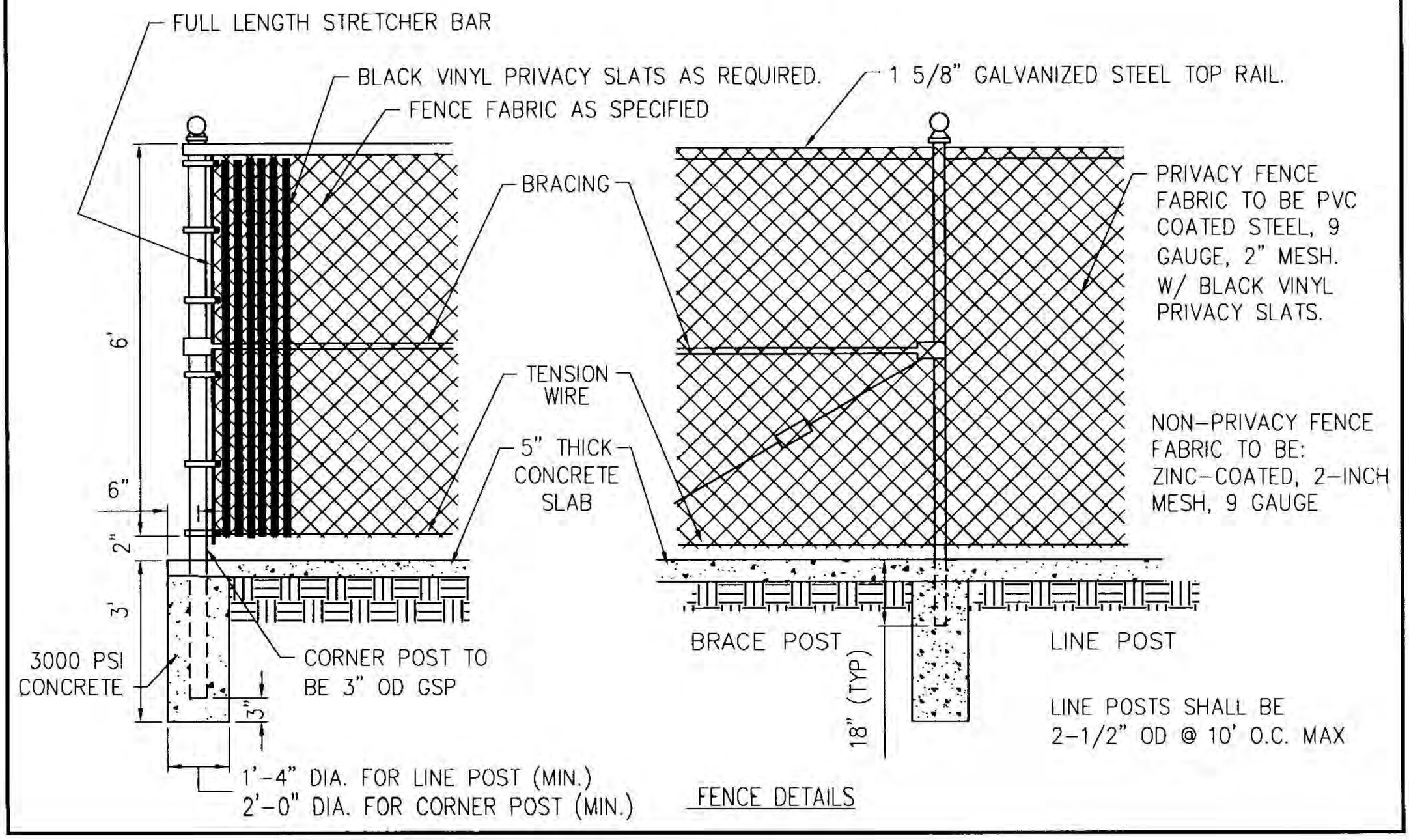
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-09C**

DESCRIPTION **FENCE AND FENCE GATE DETAIL**	DATE 1/8/08	REVISED 1/8/08

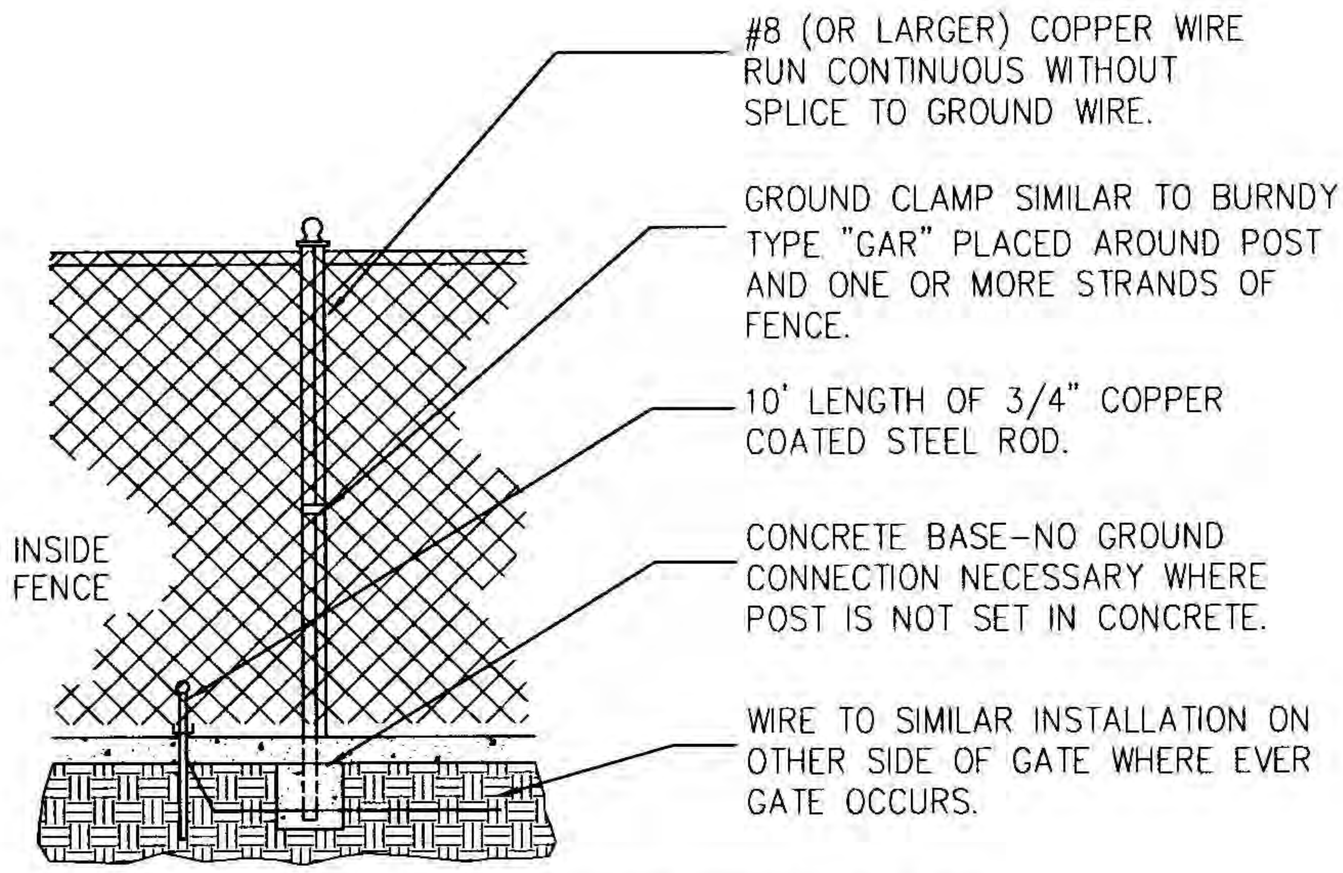


DOUBLE GATE DETAIL



FENCE DETAILS

DESCRIPTION	FENCE GROUNDING DETAIL	DATE 1/8/08	REVISED 1/8/08



FENCE GROUNDING DETAIL

FENCE NOTES

1) FENCE TO BE INSTALLED AS INDICATED ON SITE PLAN.

2) GATE POST TO BE 4" O.D. GALVANIZED STEEL PIPE.
CORNER POST TO BE 3" O.D. GALVANIZED STEEL PIPE.
LINE POST TO BE 2 1/2" O.D. GALVANIZED STEEL PIPE.

3) ALL FENCE SHALL BE GROUNDED AT LEAST EVERY 1000 FT.

4) EVERY FENCE SHALL HAVE AT LEAST ONE GROUND.

5) GROUND SHALL BE INSTALLED AT EVERY POINT WHERE POWER LINES OF 2300 VOLTS OR MORE CROSS FENCE AND AN ADDITIONAL GROUND 150 FT. EACH SIDE OF THIS POINT.

6) GROUND WIRE SHOULD BE TIED TO STEEL FENCE POSTS AT 2 FT. INTERVALS.

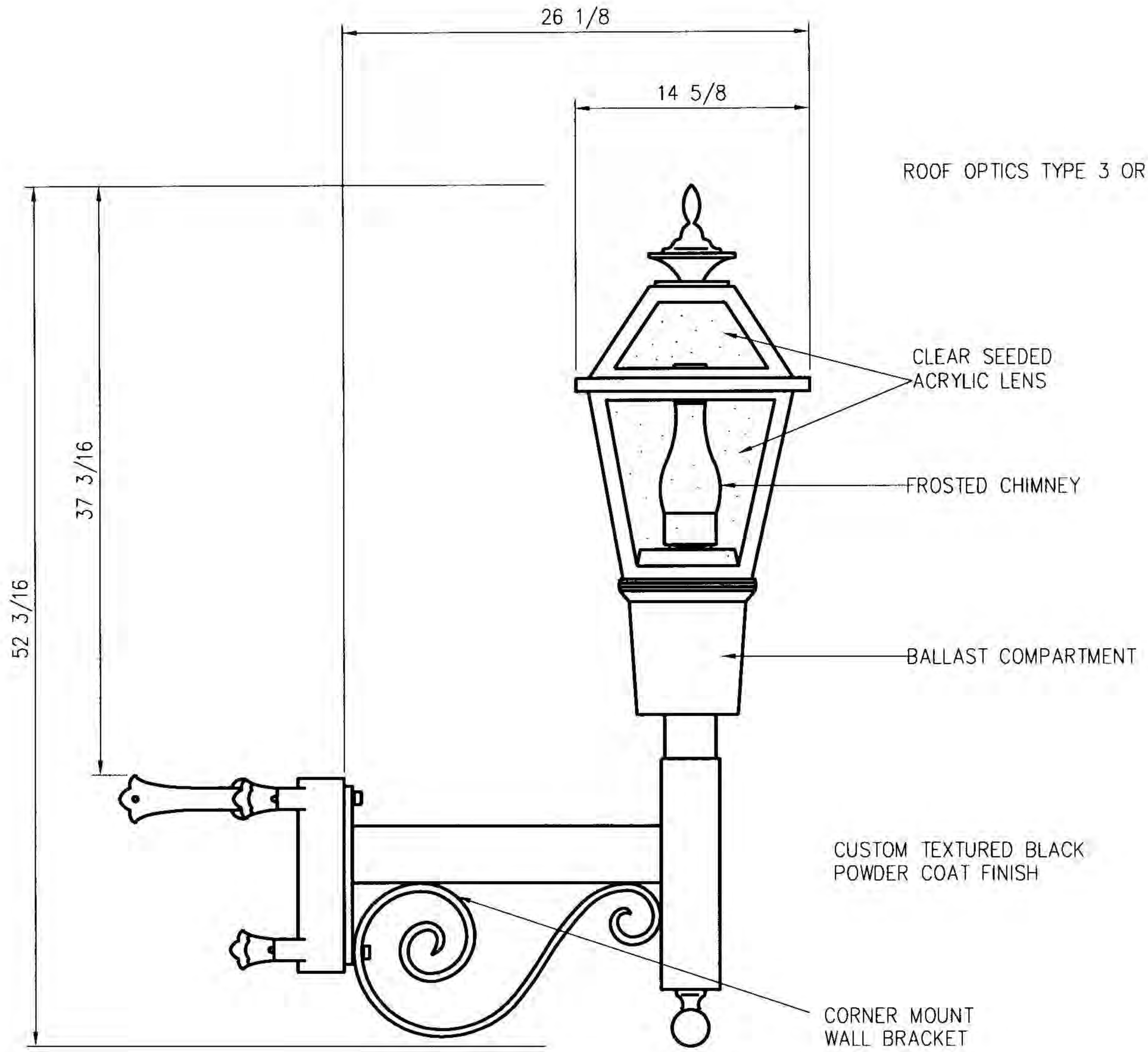
7) BONDING WIRE BETWEEN GATE POST NEED NOT BE INSTALLED WHERE EXISTING ROAD PAVING OR RAILROAD TRACKS WOULD MAKE INSTALLATION IMPRACTICAL.

8) EMBEDDED CONCRETE PORTION OF FENCE POST SHALL HAVE MASTIC SEAL COATING TO A MINIMUM OF 6" ABOVE FINISH GRADE.

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-10A**

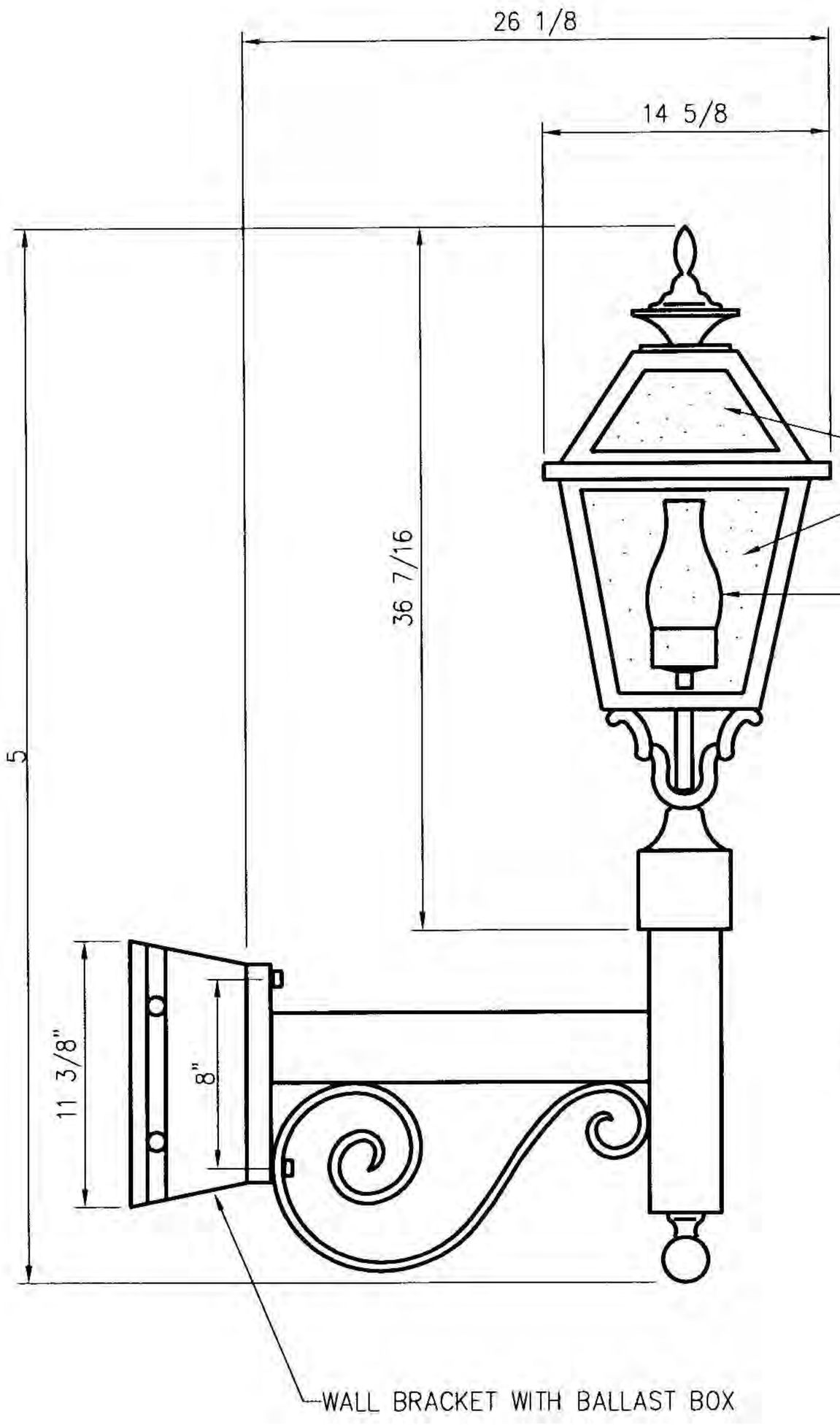
DESCRIPTION	DATE	REVISED
C.S.A. COLONIAL CORNERMOUNT STREETLIGHT	2/12/08	2/12/08



City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-10B**

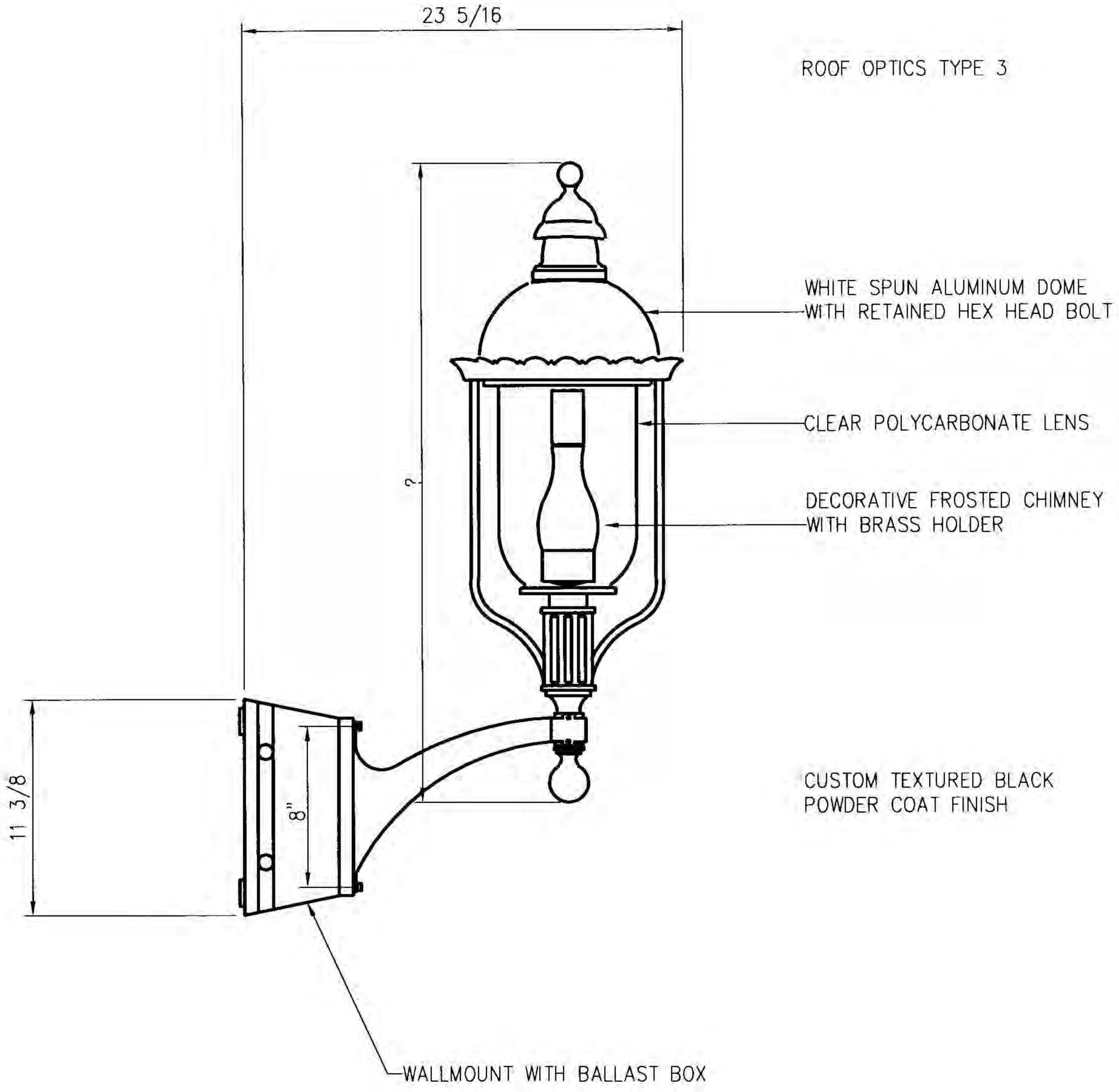
DESCRIPTION	**C.S.A. COLONIAL WALLMOUNTED STREETLIGHT**	DATE 2/12/08	REVISED 2/12/08



City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details PD-10C

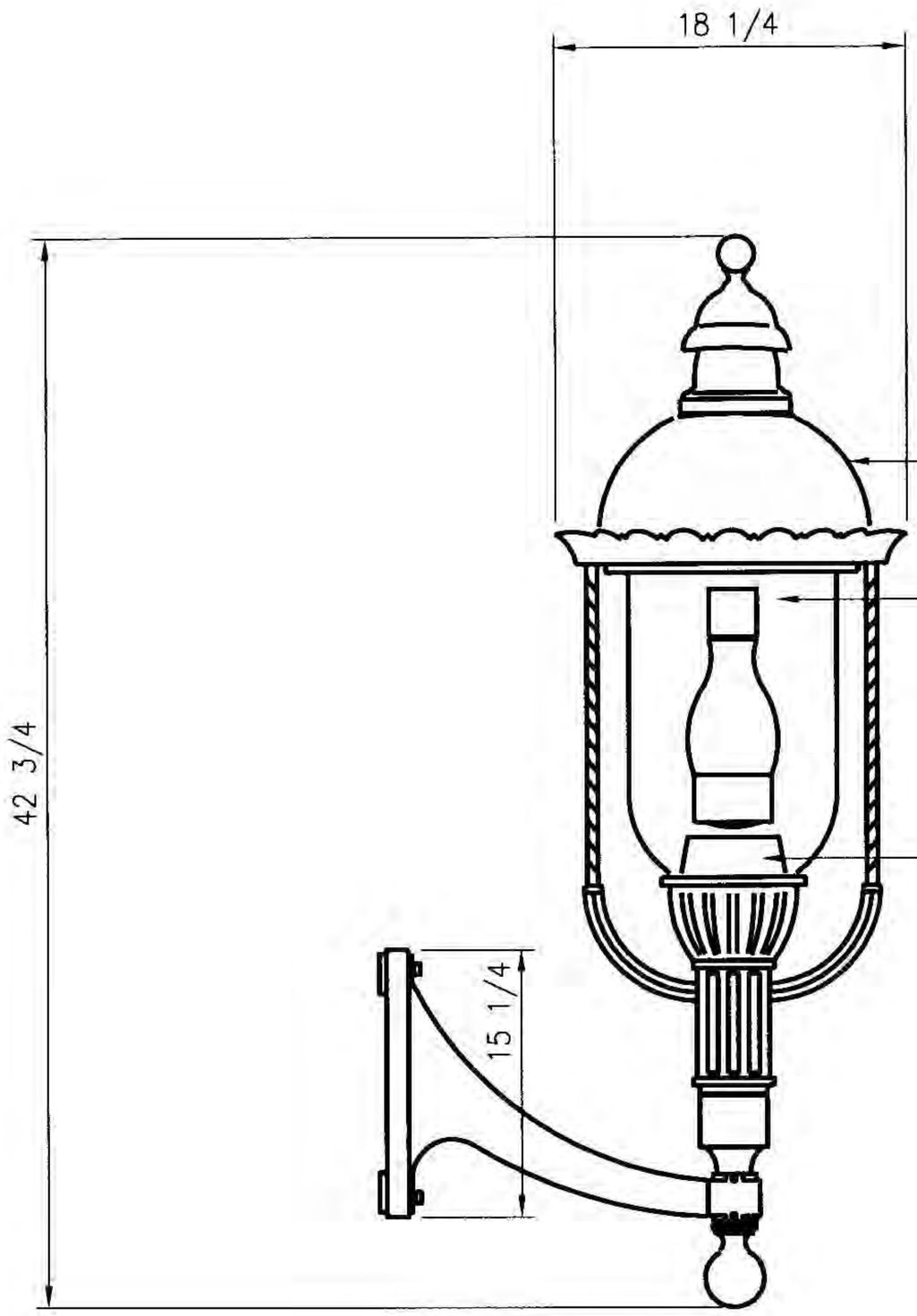
DESCRIPTION	DATE	REVISED
C.S.A. WALLMOUNTED GASLIGHT I	2/12/08	2/12/08



City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-10D**

DESCRIPTION **C.S.A. WALLMOUNTED GASLIGHT II**	DATE 2/12/08	REVISED 2/12/08



ROOF OPTICS TYPE 3

WHITE SPUN ALUMINUM DOME
WITH RETAINED HEX HEAD BOLT

DECORATIVE FROSTED CHIMNEY
WITH BRASS HOLDER

CLEAR CYLINDRICAL
POLYCARBONATE LENS

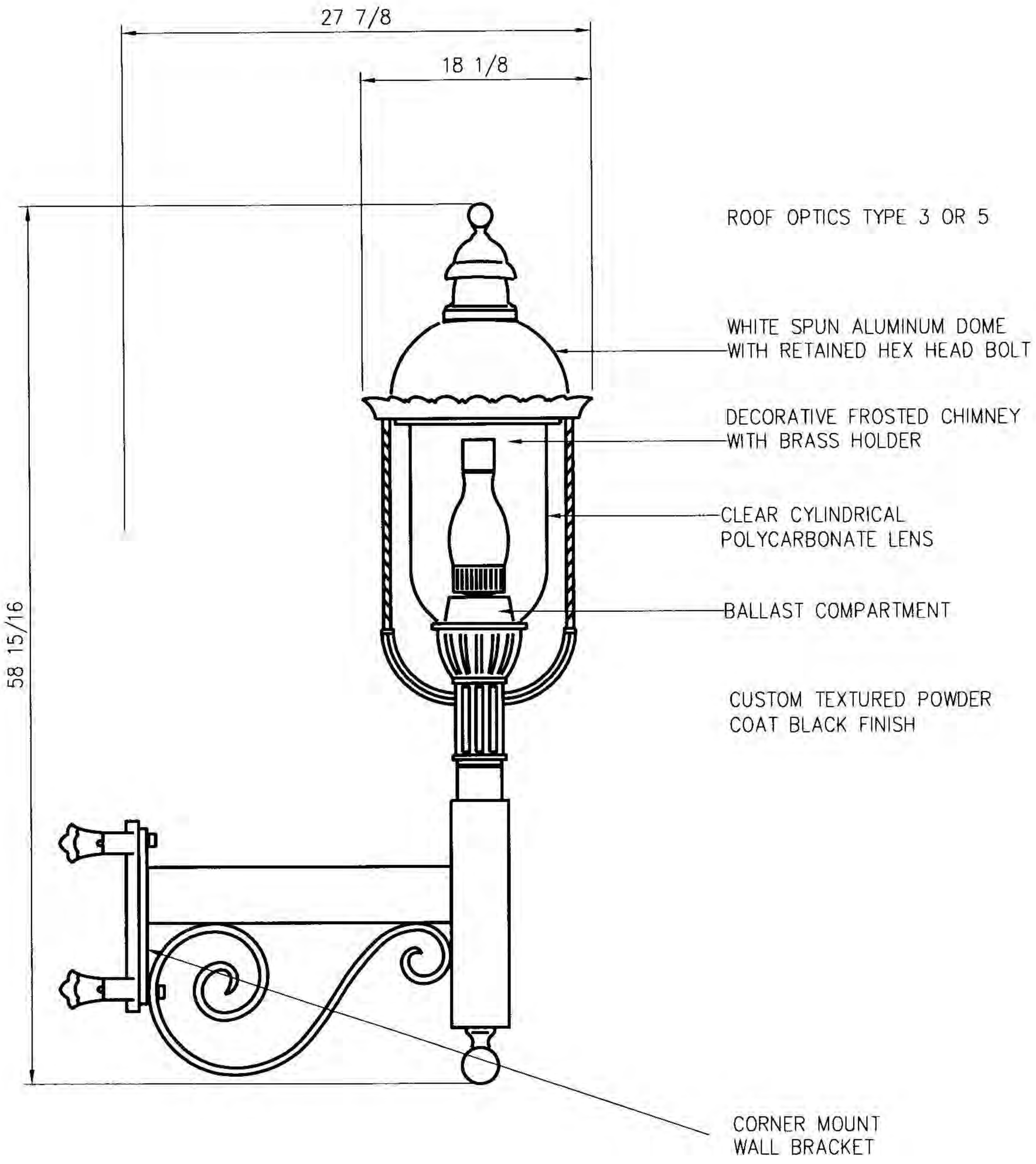
BALLAST COMPARTMENT

CUSTOM TEXTURED POWDER
COAT BLACK FINISH

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-10E**

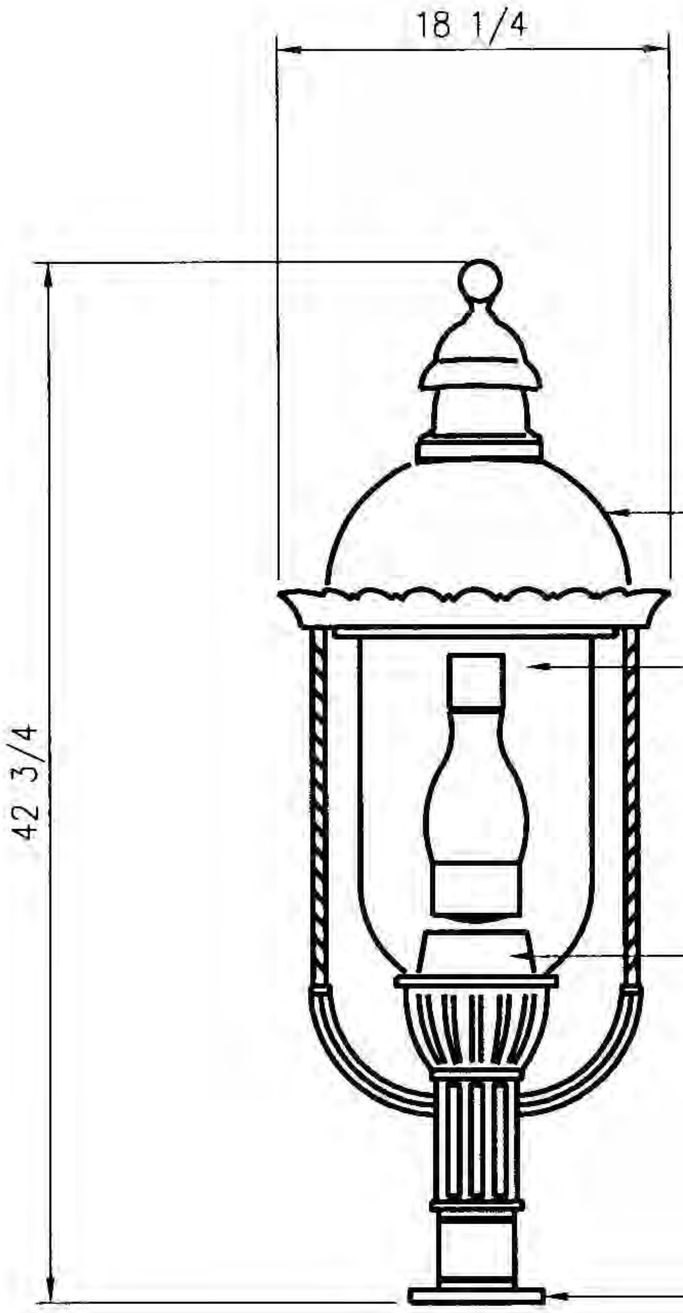
DESCRIPTION **C.S.A. CORNER MOUNTED GASLIGHT**	DATE 2/12/08	REVISED 2/12/08



City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-10F**

DESCRIPTION	**C.S.A. SINGLE HEAD GASLIGHT**	DATE 2/12/08	REVISED 2/12/08



ROOF OPTICS TYPE 3 OR 5

WHITE SPUN ALUMINUM ROOF
WITH RETAINED HEX HEAD BOLT

DECORATIVE FROSTED CHIMNEY
WITH BRASS HOLDER

CLEAR CYLINDRICAL
POLYCARBONATE LENS

BALLAST COMPARTMENT

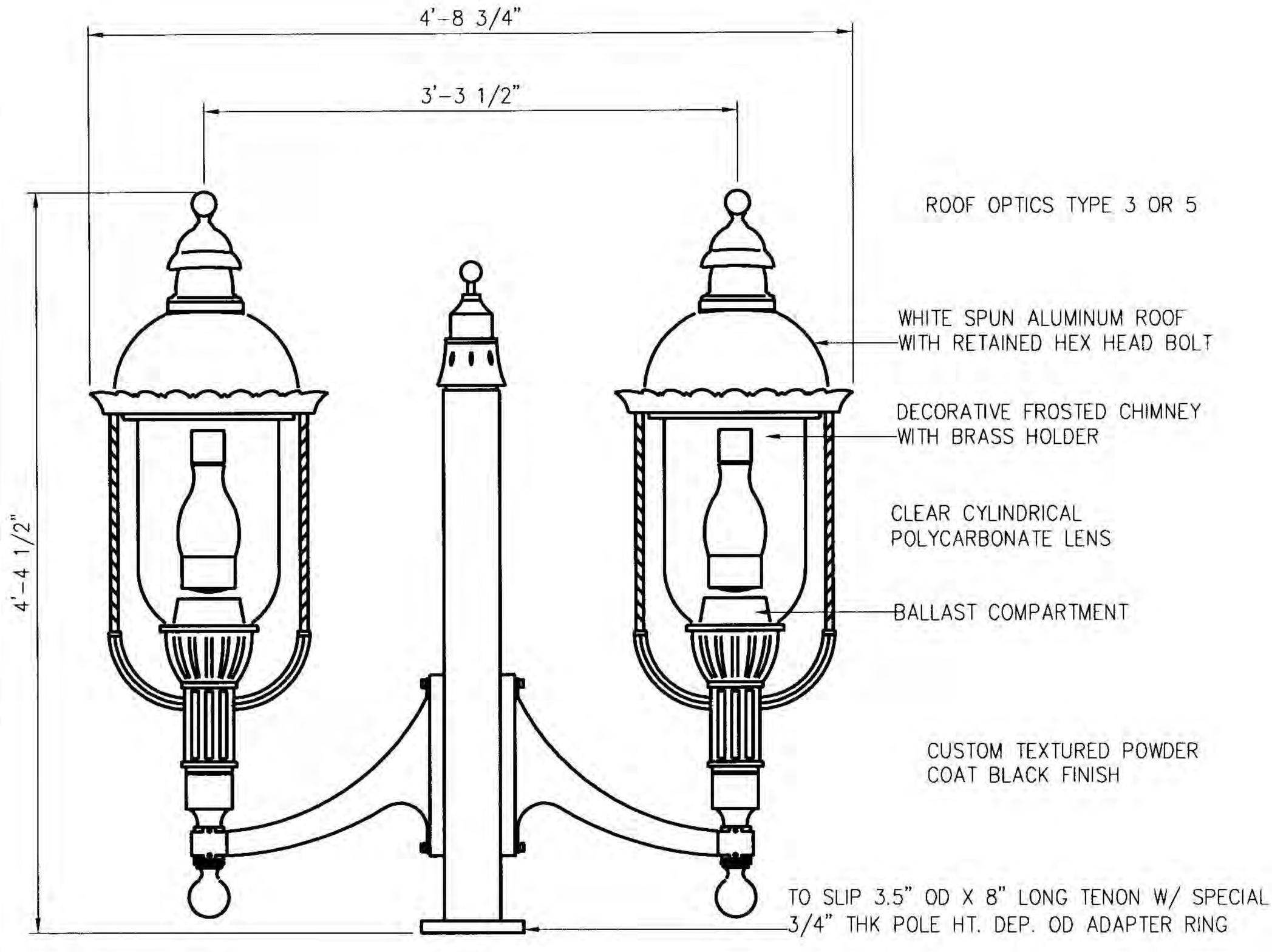
BLACK FINISH

TO SLIP 3" OD TENON W/ SPECIAL
3/4" THK POLE HT. DEP. OD ADAPTER RING

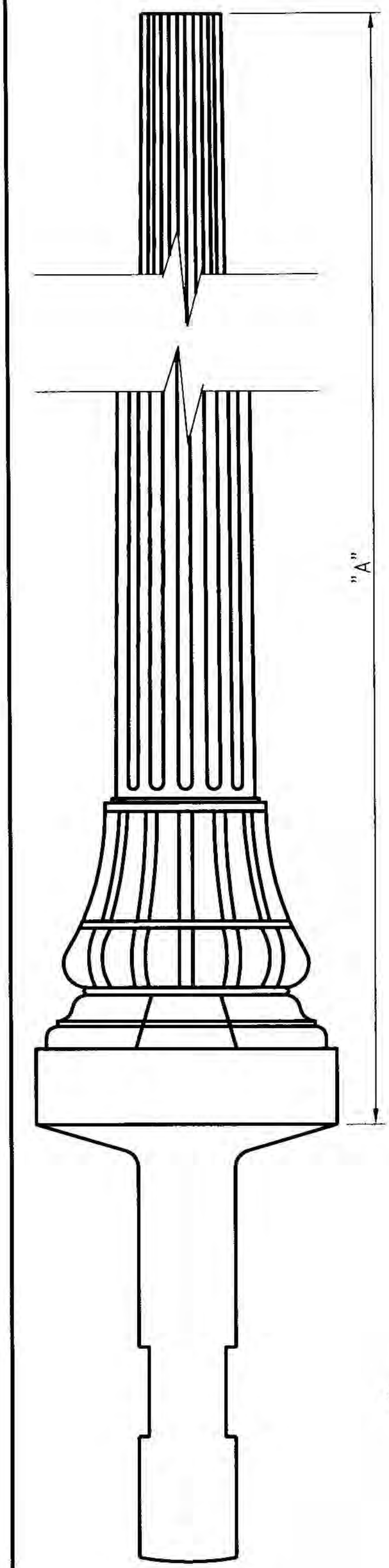
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-10G**

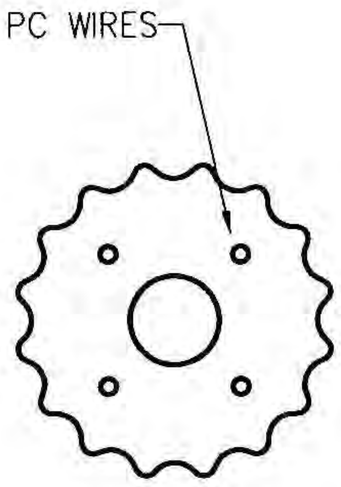
DESCRIPTION	DATE	REVISED
C.S.A. TWIN HEAD GASLIGHT	2/12/08	2/12/08



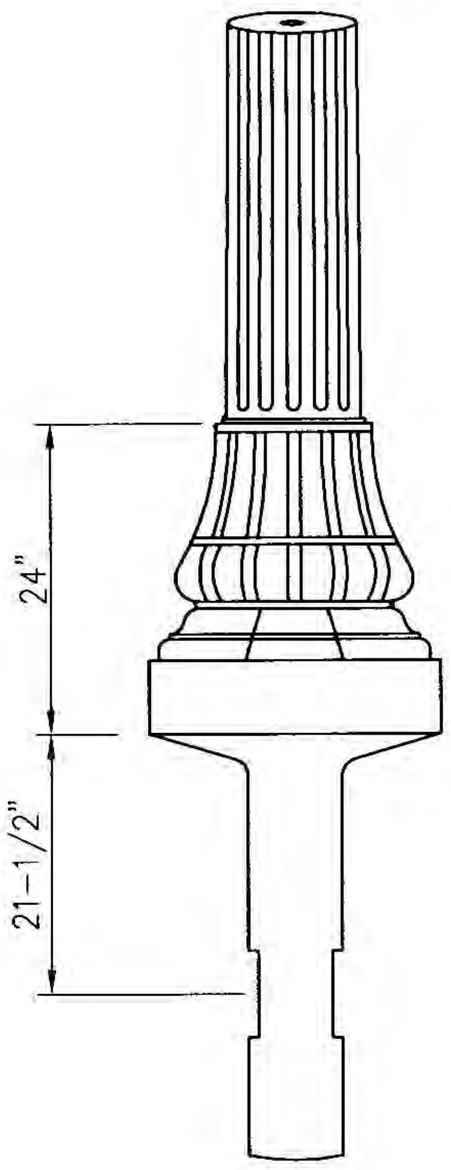
DESCRIPTION **LIGHT POLE DETAIL** | **DATE** 2/12/08 | **REVISED** 2/12/08



5-3/8" TOP O.D.
4-3/8" TOP O.D.
4-1/4" TOP O.D.



SHAFT CROSS SECTION DETAIL



ELEVATION

POLE HEIGHT "A"	BASE O.D.	EMBEDDED DEPTH "B"	OVERALL LENGTH "OL"	ULTIMATE G.L. MOMENT (FT. LBS.)	WEIGHT (LBS.)	MAXIMUM EPA/MPH (SQ FT)* 80	90	100
9'-6"	21"	4'-0"	13'-6"	7,500	710	12.0	10.0	8.0
12'-0"	21"	4'-0"	16'-0"	7,500	740	12.0	10.0	8.0
14'-6"	21"	4'-0"	18'-6"	7,500	770	7.0	6.0	5.0

*EPA BASED ON POST TOP MOUNTING. OTHER HEIGHTS PERMISSABLE UPON REQUEST.

NOTES:

SPECIFICATIONS

LUMINAIRE MOUNTING
SEE LUMINAIRE SECTION FOR MORE INFORMATION.

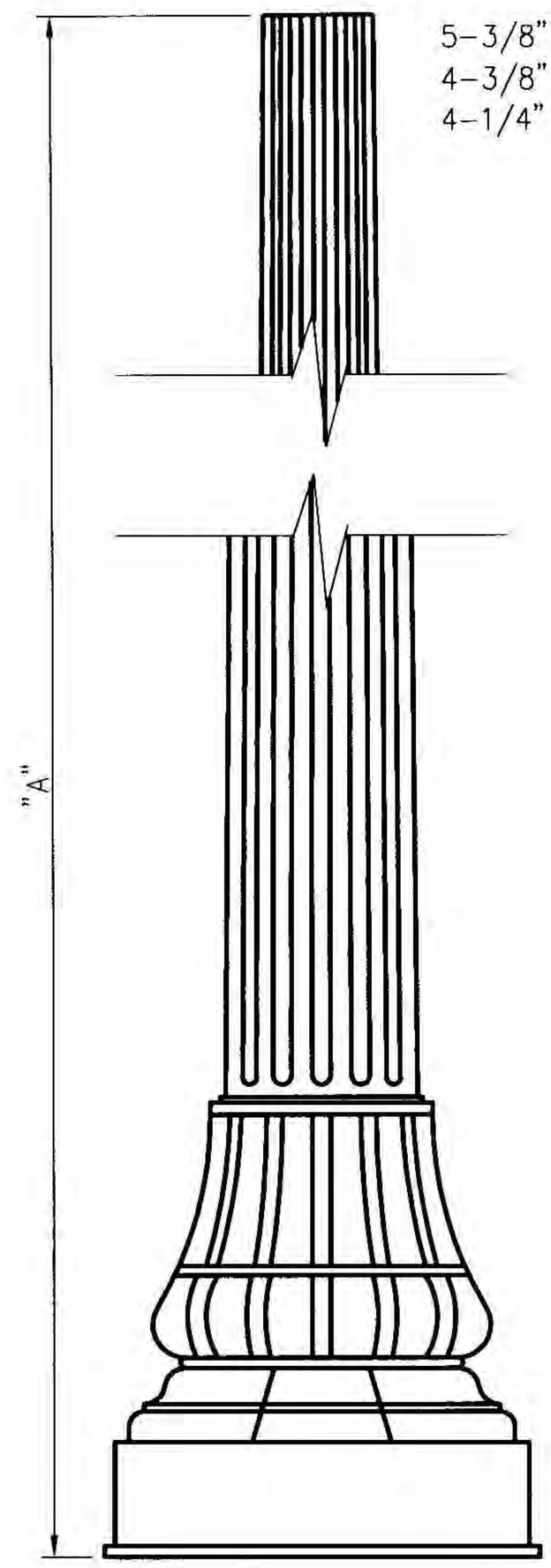
COLORS AND FINISHES
BLACK

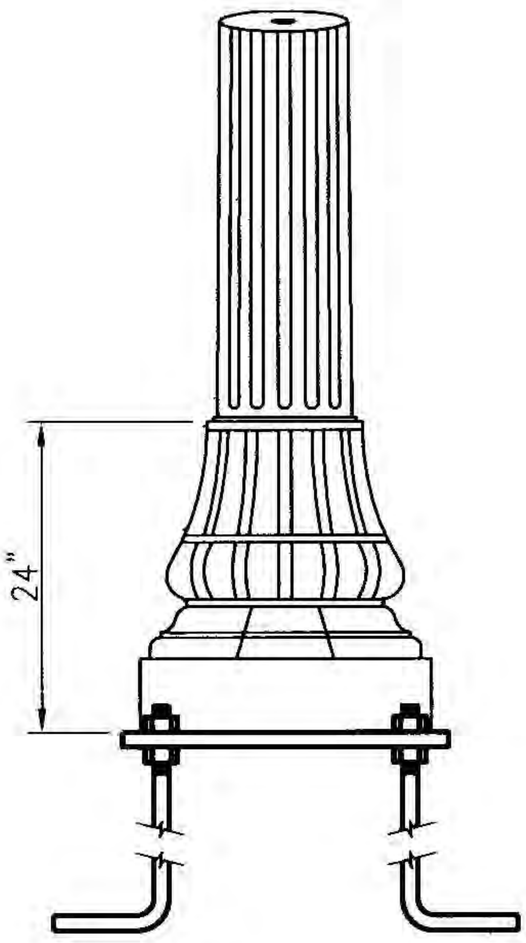
ANTI-GRAFFITI AND SEALER
MANDITORY

City of St. Augustine
PUBLIC WORKS DEPARTMENT

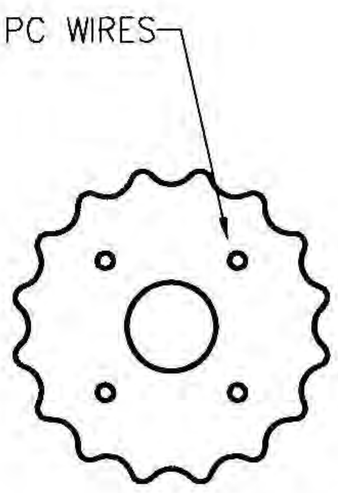
Paving and Drainage Details PD-101

DESCRIPTION	DATE	REVISED
LIGHT POLE DETAIL	2/12/08	2/12/08

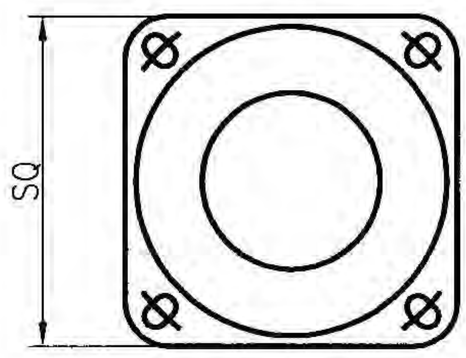




ELEVATION



SHAFT CROSS SECTION DETAIL



SLOTTED BASE PLATE

POLE HEIGHT "A"	BASE O.D.	ANCHOR BOLT	BOLT CIRCLE	BASE PLATE (SQ)	ULTIMATE G.L. MOMENT (FT. LBS.)	WEIGHT (LBS.)	MAXIMUM EPA/MPH (SQ FT)* 80	90	100
9'-6"	21"	3/4"x 18"x 4"	24"	22-1/2"	7,500	450	12.0	10.0	8.0
12'-0"	21"	3/4"x 18"x 4"	24"	22-1/2"	7,500	480	12.0	10.0	8.0
14'-6"	21"	3/4"x 18"x 4"	24"	22-1/2"	7,500	510	7.0	6.0	5.0

*EPA BASED ON POST TOP MOUNTING. OTHER HEIGHTS PERMISSABLE UPON REQUEST.

NOTES:

SPECIFICATIONS

LUMINAIRE MOUNTING
SEE LUMINAIRE SECTION
FOR MORE INFORMATION.

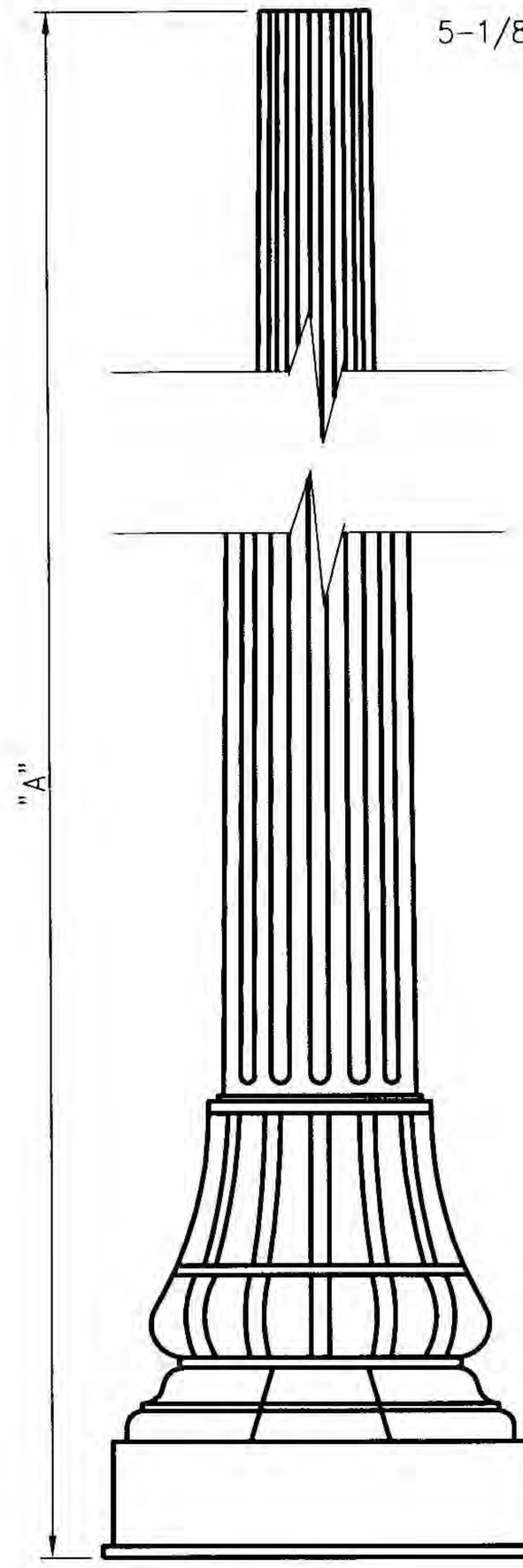
COLORS AND FINISHES
BLACK

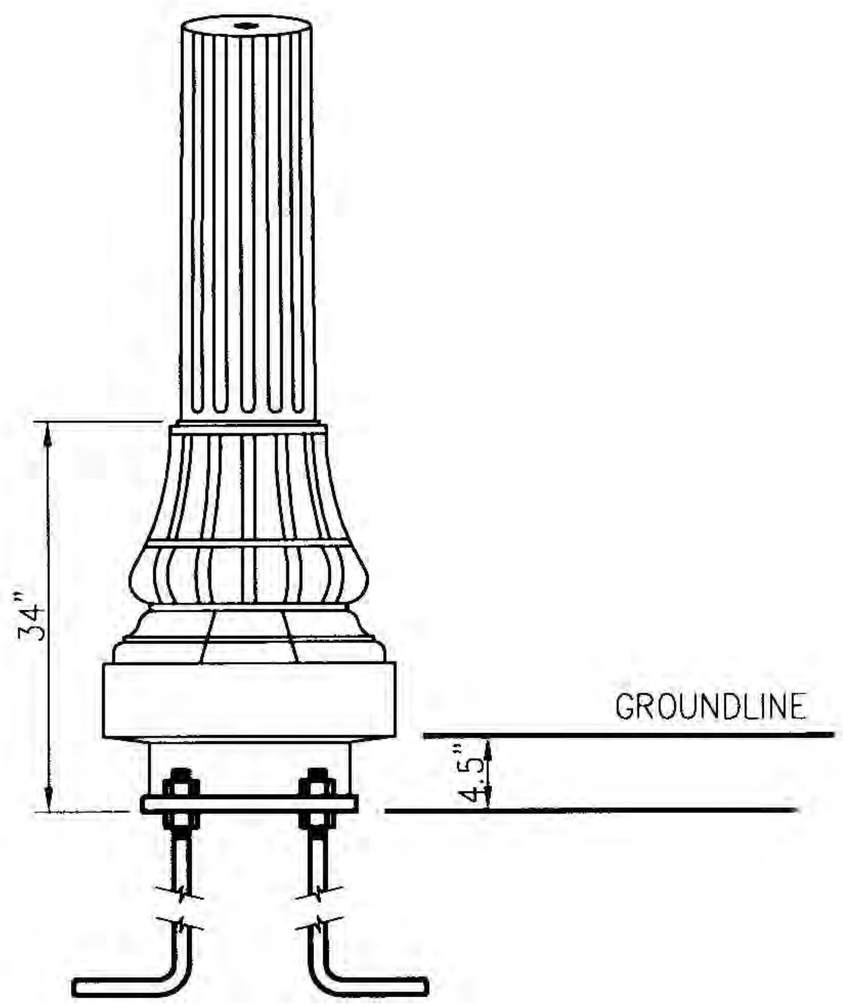
ANTI-GRAFFITI AND SEALER
MANDITORY

City of St. Augustine
PUBLIC WORKS DEPARTMENT

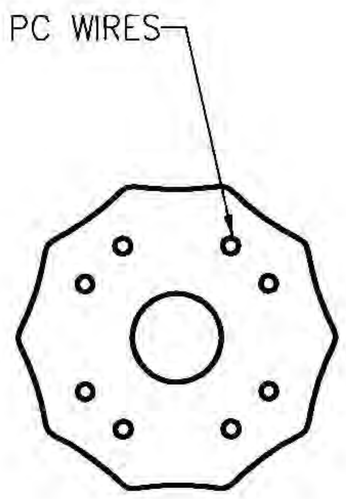
Paving and Drainage Details PD-10J

DESCRIPTION	DATE	REVISED
LIGHT POLE DETAIL	2/12/08	2/12/08

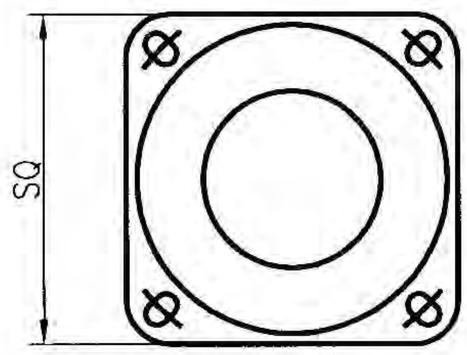




ELEVATION



SHAFT CROSS SECTION DETAIL



SLOTTED BASE PLATE

POLE HEIGHT "A"	BASE O.D.	ANCHOR BOLT	BOLT CIRCLE	BASE PLATE (SQ)	ULTIMATE G.L. MOMENT (FT. LBS.)	WEIGHT (LBS.)	MAXIMUM EPA/MPH (SQ FT)* 80	90	100
24'-7"	24"	1"x 36"x 6"	20"-21"	18"	24,300	1,300	12.0	10.0	8.0
29'-6"	24"	1"x 36"x 6"	20"-21"	18"	28,200	1,400	12.0	10.0	8.0

*EPA BASED ON POST TOP MOUNTING. OTHER HEIGHTS PERMISSABLE UPON REQUEST.

NOTES:

SPECIFICATIONS

LUMINAIRE MOUNTING
SEE LUMINAIRE SECTION
FOR MORE INFORMATION.

COLORS AND FINISHES
BLACK

ANTI-GRAFFITI AND SEALER
MANDITORY

DESCRIPTION	DATE	REVISED
EROSION CONTROL SPECIFICATIONS	11/12/96	10/4/07

CITY OF ST. AUGUSTINE EROSION NOTES:

1. NO CONSTRUCTION ACTIVITY INVOLVING EXCAVATION, DENUDING OR DEMOLITION OF ANY EARTHEN OR ERODIBLE MATERIALS SHALL BEGIN WITHOUT AN APPROVED PLAN AND/OR WRITTEN CONSENT BY THE CITY OF ST. AUGUSTINE ENGINEERING DEPARTMENT.

2. THE CONTRACTOR SHALL ESTABLISH ALL EROSION CONTROL MEASURES PRIOR TO EXCAVATION, DENUDING OR DEMOLITION OF ANY SITE SURFACE OR DEMOLITION OF ANY SITE SURFACE OR STOCKPILING OF ANY EARTHEN OR ERODIBLE MATERIALS.

3. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE DEVELOPMENT OF THE PROJECT AND SHALL NOT REMOVE ANY EROSION CONTROL MEASURE UNTIL ALL CONTRIBUTING SITE SURFACES AND VEGETATION HAVE BEEN ESTABLISHED AND STABILIZED.

4. THE CONTRACTOR SHALL PERFORM DAILY CLEAN UP OF ALL SEDIMENT AND DEBRIS WHICH LEAVES THE PROJECT SITE(S).

5. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL CITY STORM DRAIN SYSTEMS WHICH RECEIVE SEDIMENT OR DEBRIS AS A RESULT OF CONTRUCTION, STOCKPILING OR DISPOSAL ACTIVITIES. CLEANING OF THE STORMDRAIN WILL OCCUR FROM THE POINT OF INTERCEPT TO THE OUTFALL OF THE SYSTEM OR TO A POINT WITHIN THE SYSTEM WHERE POINT WITHIN THE SYSTEM WHERE SEDIMENT OR DEBRIS IS NO LONGER PRESENT.

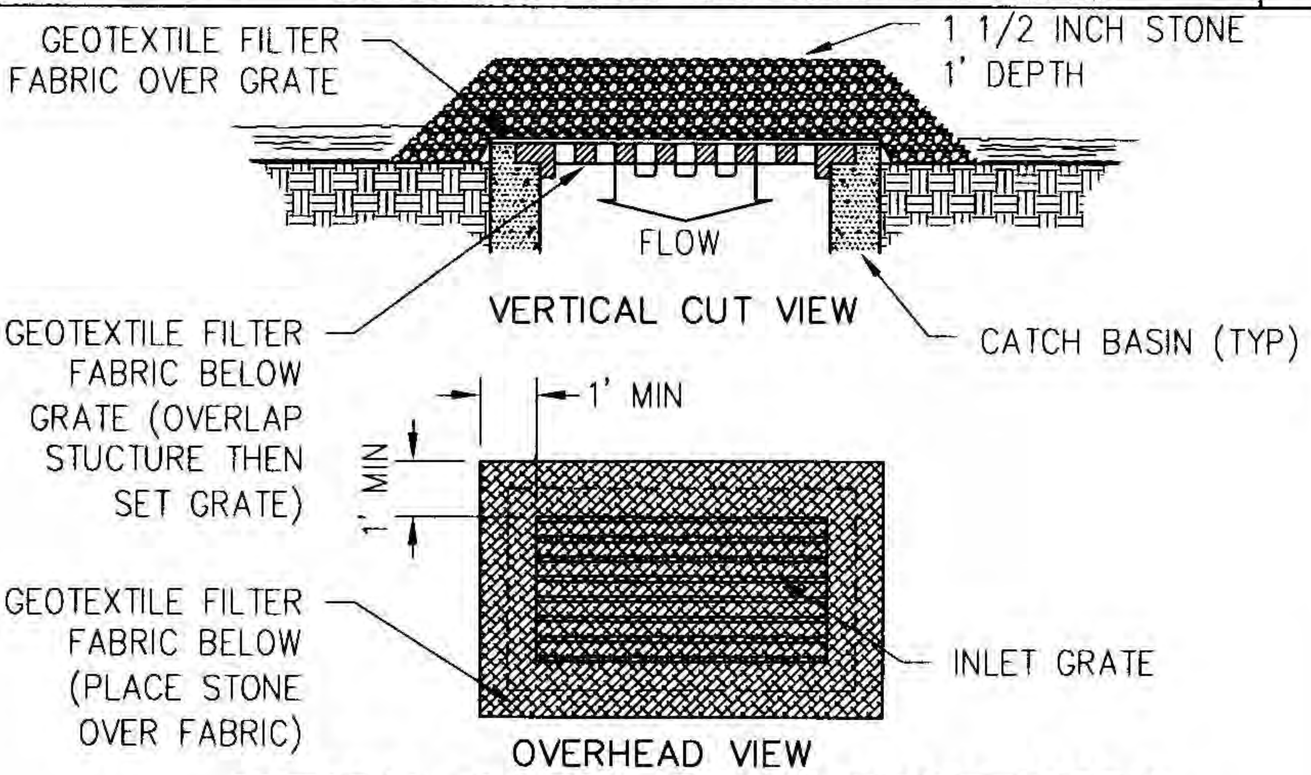
6. RAIN DAYS CLAIMED BY THE CONTRACTOR DOES NOT EXCUSE THE CONTRACTOR OF DAILY INSPECTION AND MAINTENANCE OF ALL SITE EROSION CONTROL MEASURES AND CLEANUP.

7. ALL SEDIMENT COLLECTION SYSTEMS MUST BE MUCKED OUT WHEN 3/4 FULL. MUCKED SEDIMENT SHALL BE PROPERLY CONTAINED AND DISPOSED.

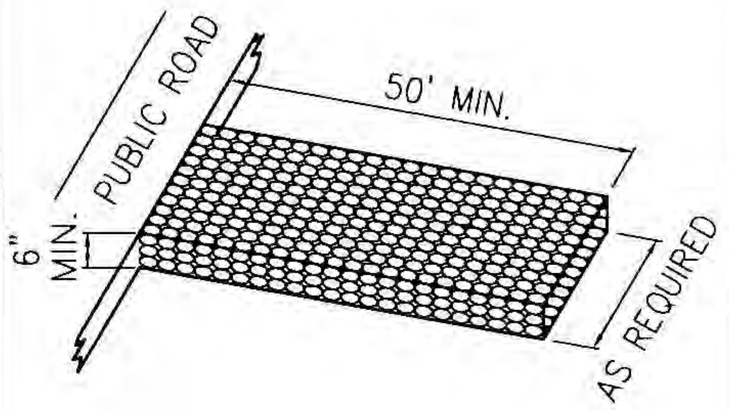
City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details PD-11A

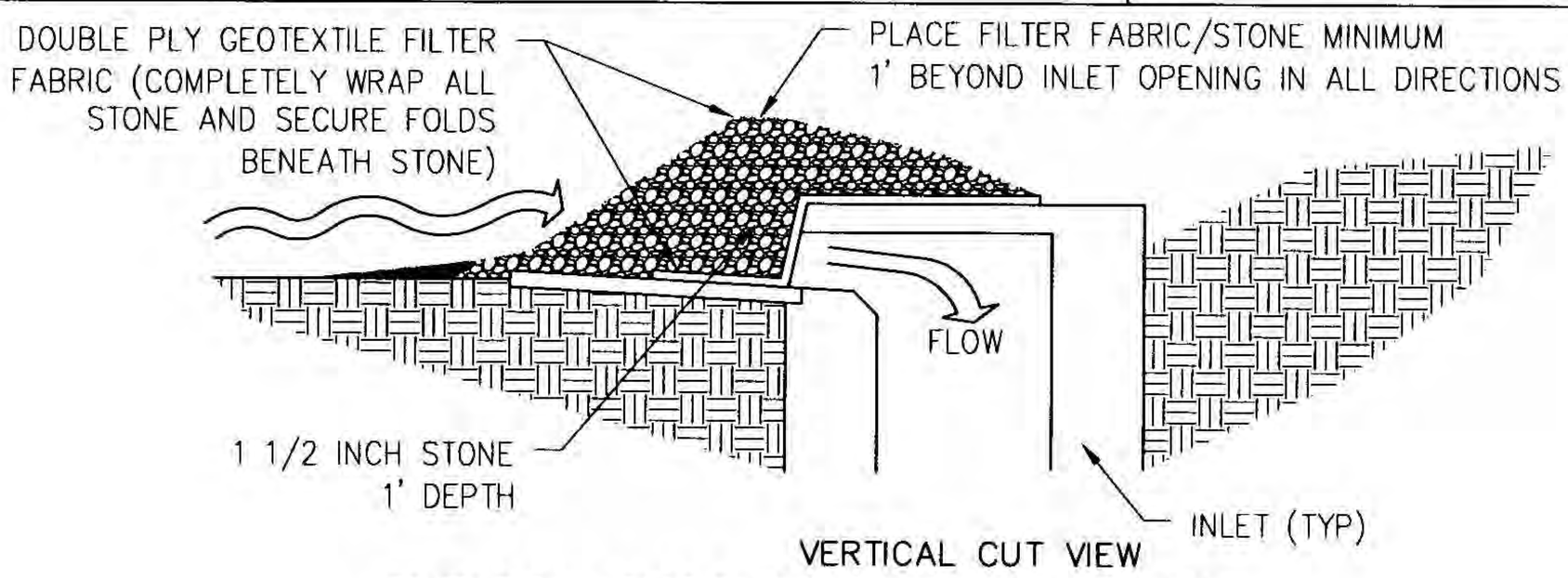
DESCRIPTION	DATE	REVISED
INLET PROTECTION & CONST. ENTRANCE DETAILS	1/8/08	3/10/08



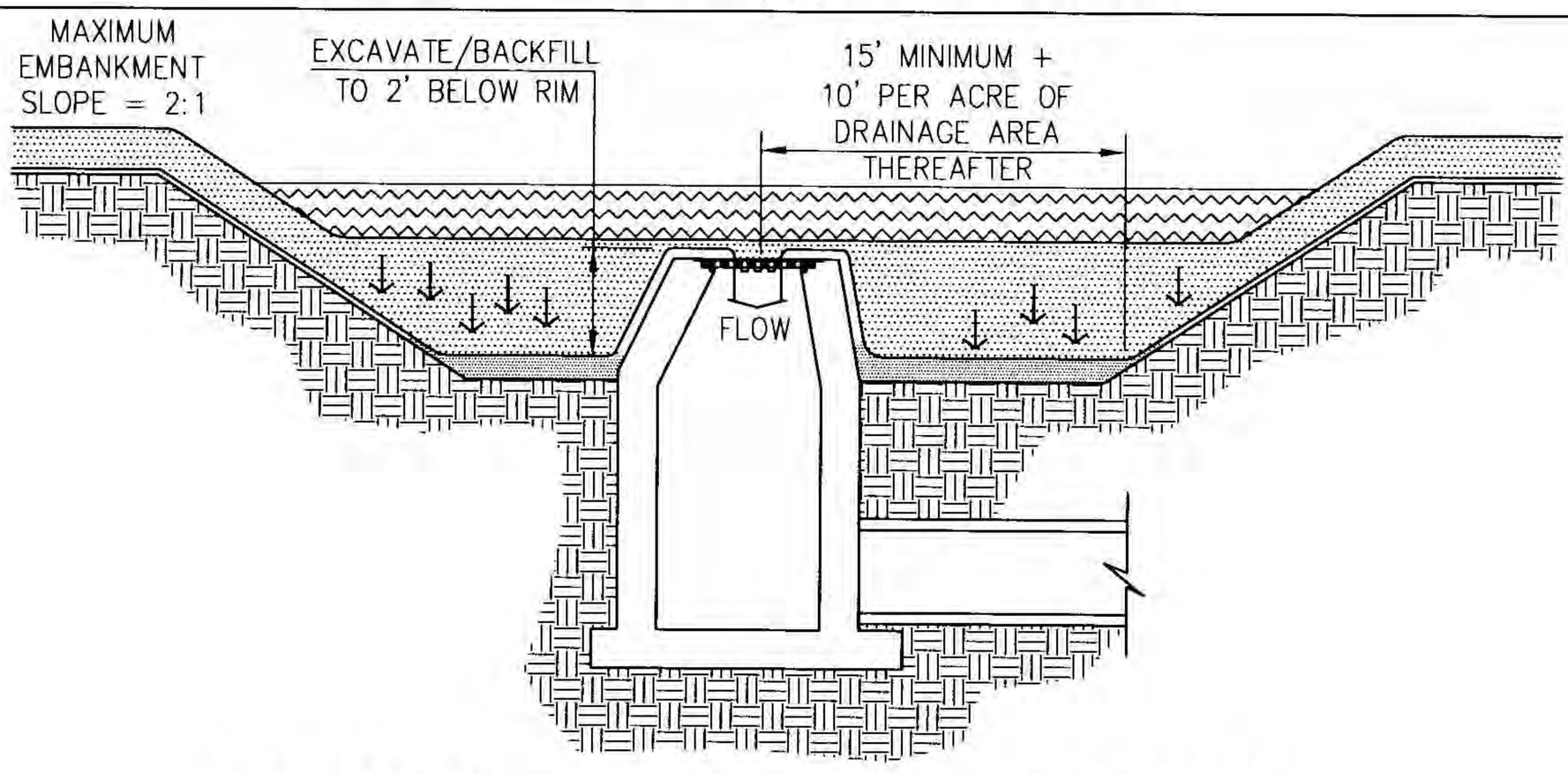
TYPICAL CATCH BASIN PROTECTION
N.T.S.



STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



TYPICAL CURB INLET PROTECTION
N.T.S.



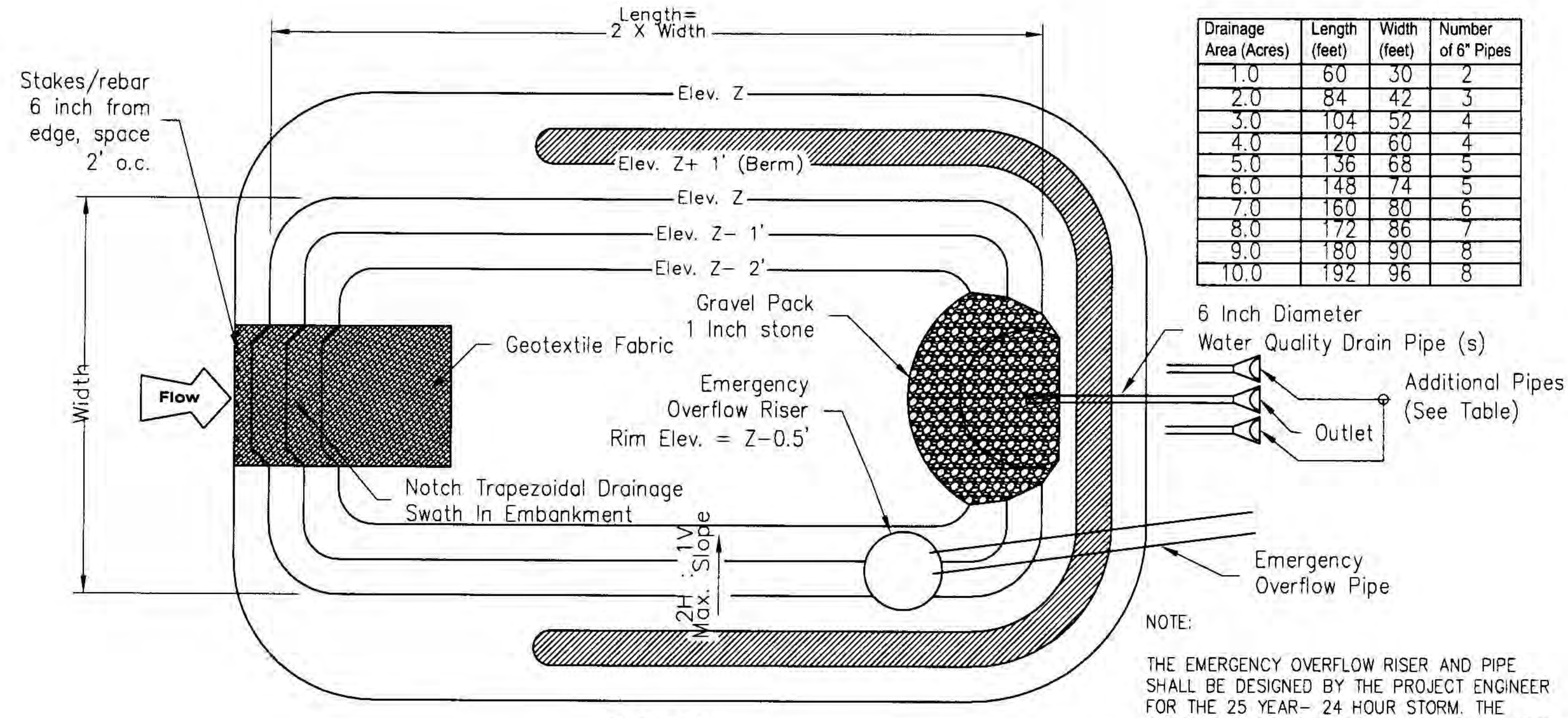
TEMPORARY INLET MANHOLE SEDIMENT TRAP
N.T.S.

City of St. Augustine
PUBLIC WORKS DEPARTMENT

Paving and Drainage Details **PD-11B**

DESCRIPTION **TEMPORARY SEDIMENT TRAP FOR AREAS GREATER THAN 1 ACRE**

DATE	REVISED
11/12/96	10/4/07

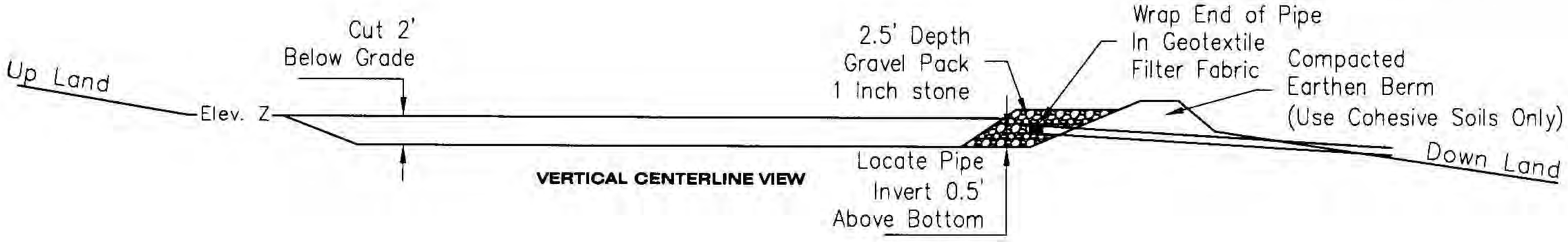


Drainage Area (Acres)	Length (feet)	Width (feet)	Number of 6" Pipes
1.0	60	30	2
2.0	84	42	3
3.0	104	52	4
4.0	120	60	4
5.0	136	68	5
6.0	148	74	5
7.0	160	80	6
8.0	172	86	7
9.0	180	90	8
10.0	192	96	8

NOTE:

THE EMERGENCY OVERFLOW RISER AND PIPE SHALL BE DESIGNED BY THE PROJECT ENGINEER FOR THE 25 YEAR- 24 HOUR STORM. THE WATER QUALITY DRAIN PIPES MAY NOT BE USED IN THE CALCULATIONS.

PLAN VIEW

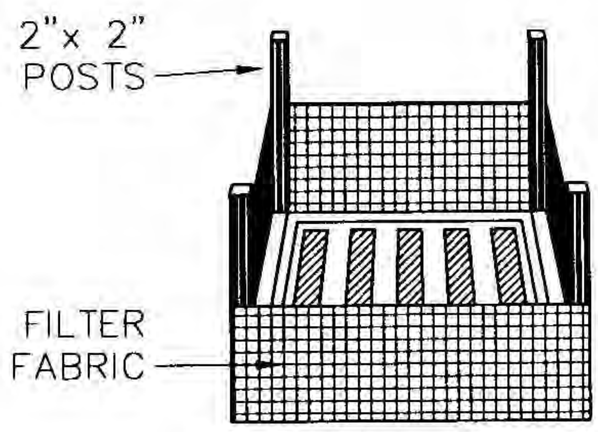


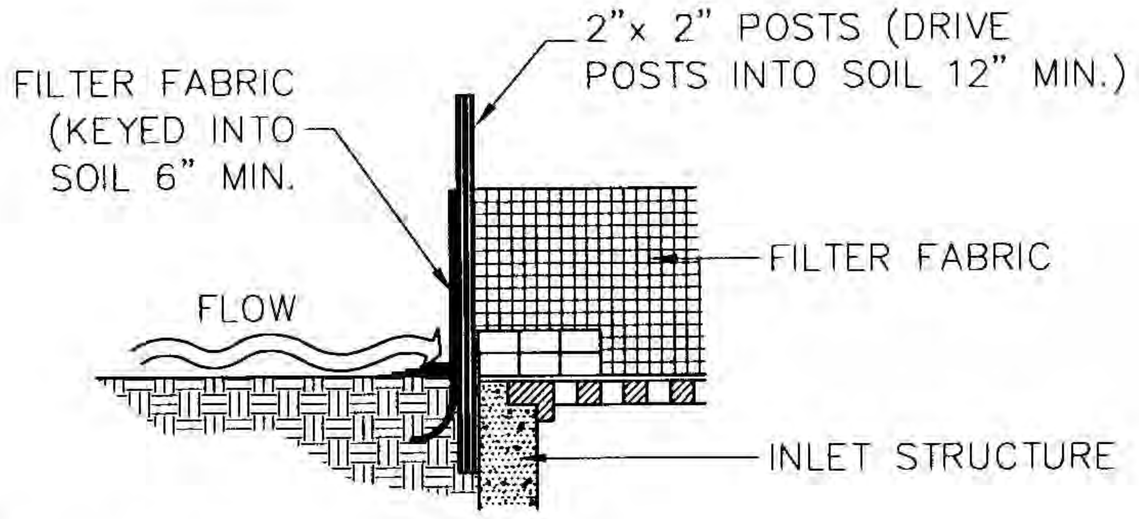
VERTICAL CENTERLINE VIEW

City of St. Augustine
PUBLIC WORKS DEPARTMENT

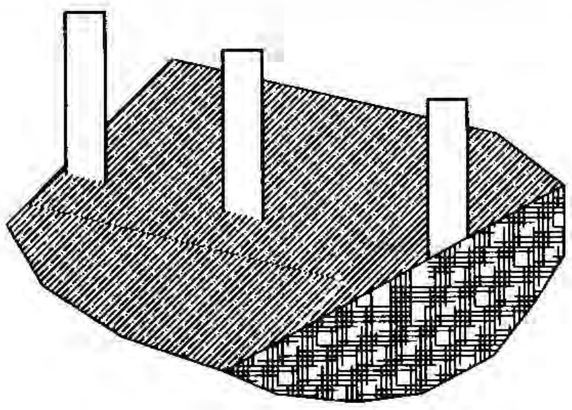
Paving and Drainage Details **PD-11C**

DESCRIPTION **FILTER BARRIER DETAIL**	DATE 11/12/96	REVISED 10/4/07

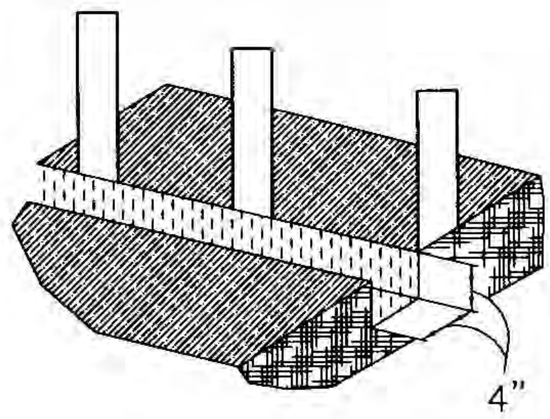




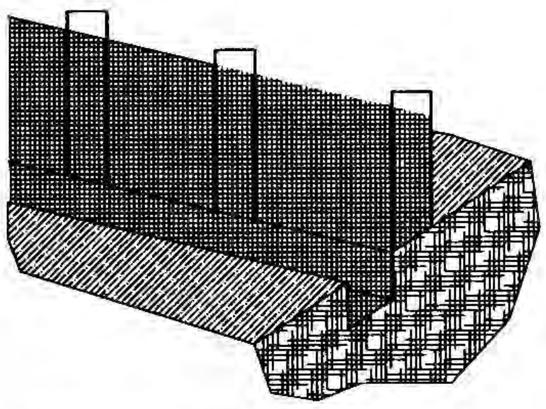
FILTER FABRIC BARRIER FOR CATCH BASINS



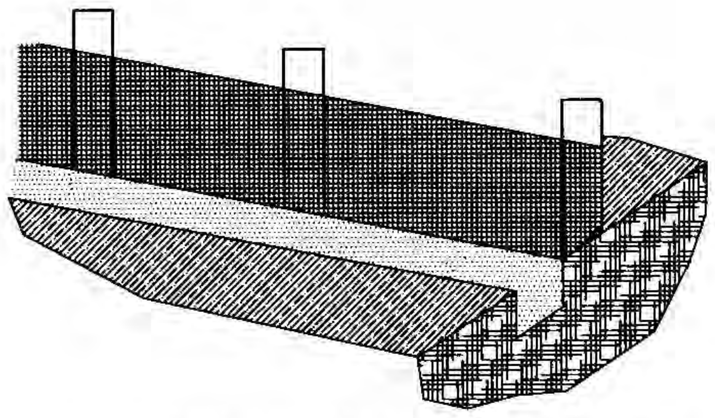
1. SET THE STAKES.



2. EXCAVATE A 4"x4" TRENCH UPSLOPE ALONG THE LINE OF STAKES.

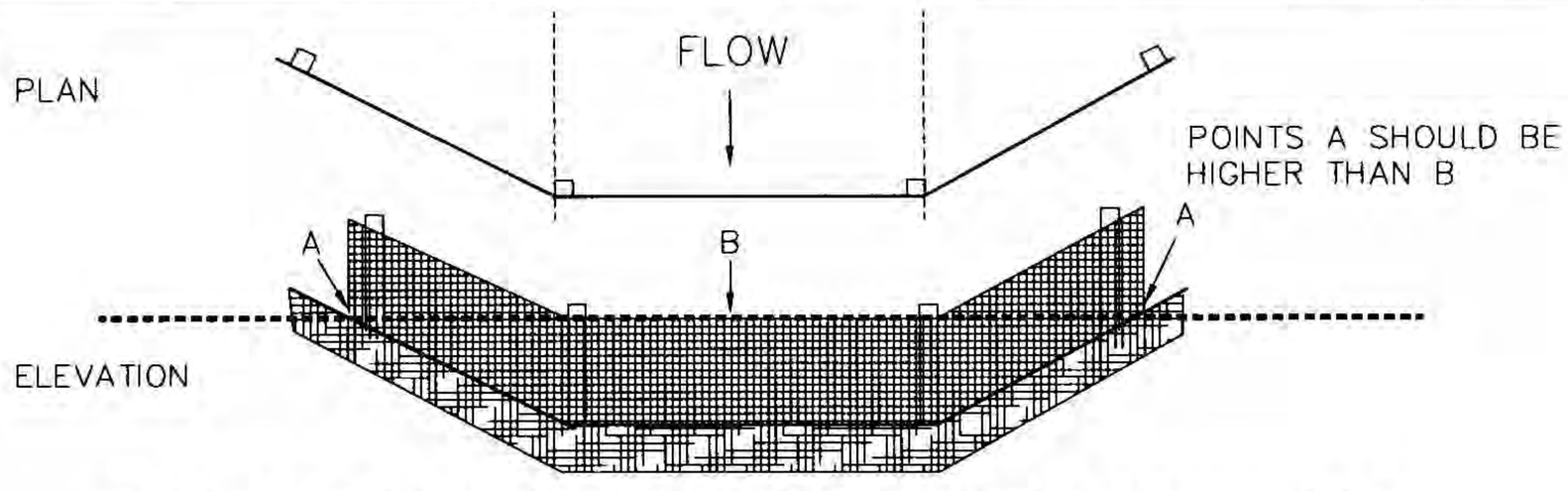


3. STAPLE FILTER MATERIAL TO STAKES AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.

CONSTRUCTION OF A FILTER BARRIER



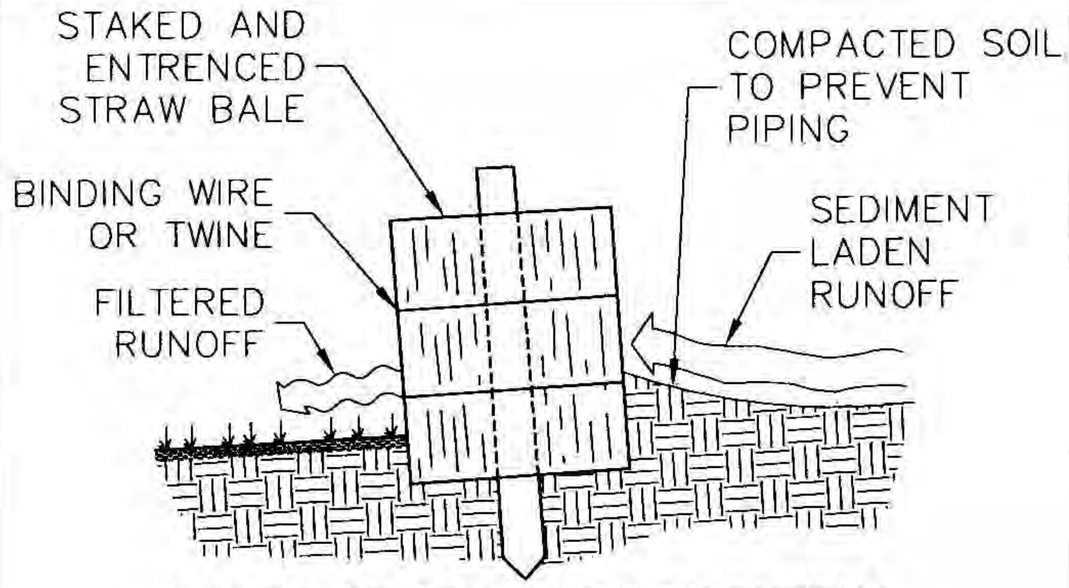
PROPER PLACEMENT OF FILTER BARRIER IN DRAINAGE WAY

City of St. Augustine
PUBLIC WORKS DEPARTMENT

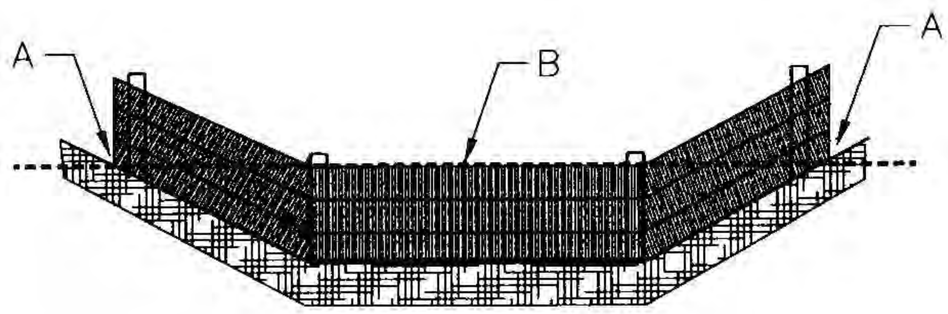
Paving and Drainage Details PD-11D

DESCRIPTION **FILTER BARRIER DETAIL**

DATE 11/12/96 **REVISED** 10/4/07

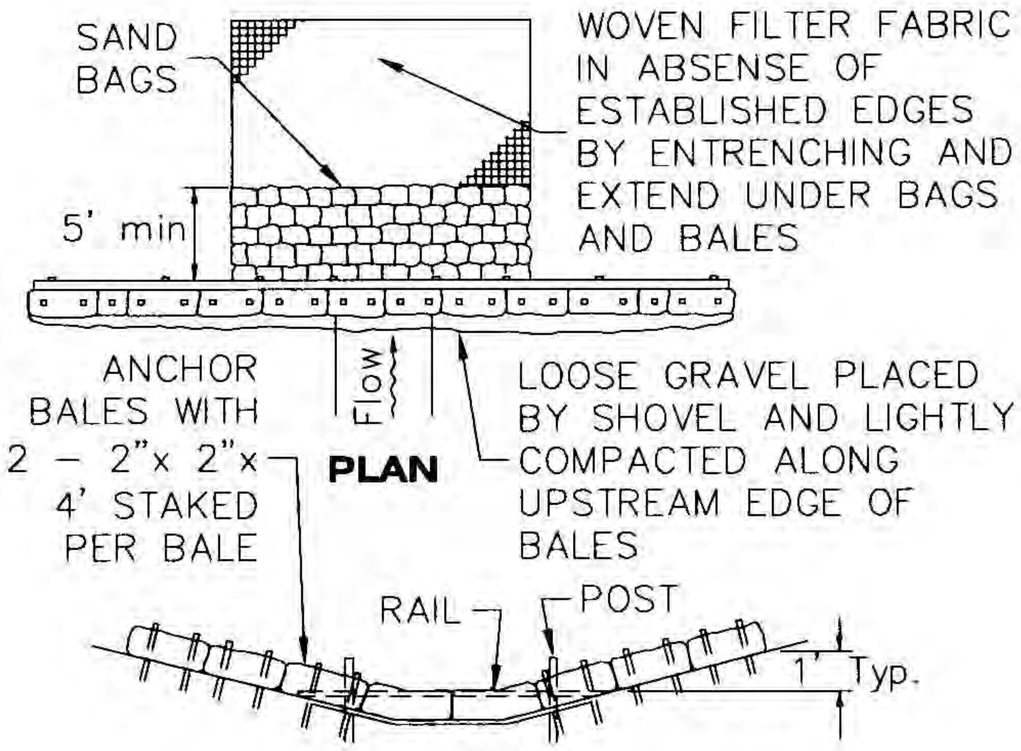


CROSS-SECTION OF A PROPERLY INSTALLED STRAW BALE
Staked Hay Bale

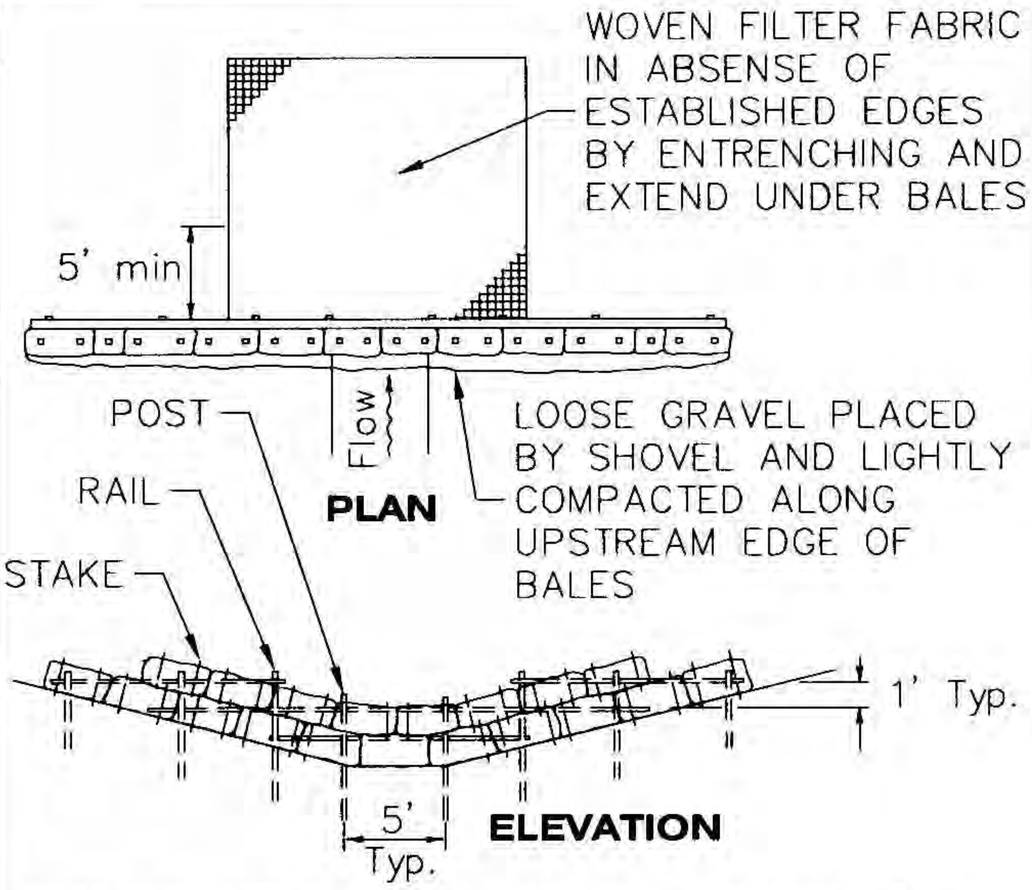


POINTS A SHOULD BE HIGHER THAN POINT B

PROPER PLACEMENT OF HAY BALE BARRIER IN DRAINAGE WAY
Hay Bale Construction Details

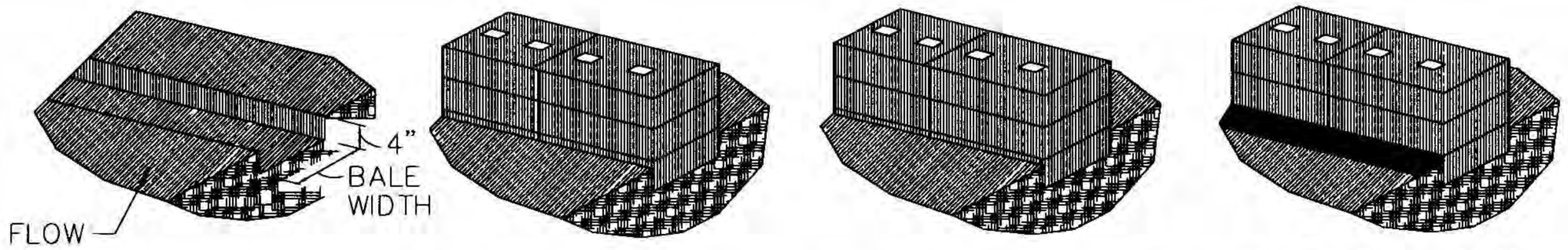


ELEVATION
BARRIER FOR PAVED DITCH



ANCHOR LOWER BALES WITH 2 – 2"x 2"x 4' STAKED PER BALES. ANCHOR TOP BALES TO LOWER BALES WITH 2 – 2"x 2"x 4' STAKED PER BALE. POSTS SHALL BE DRIVEN VERTICALLY INTO SOIL 1' PER LAYER OF HAY BALE.

BARRIER FOR UNPAVED DITCHES
Hay Bale Barrier



1. EXCAVATED THE TRENCH.

2. PLACE AND STAKE STRAW BALES.

3. WEDGE LOOSE STRAW BETWEEN BALES.

4. BACKFILL AND COMPACT THE EXCAVATED SOIL.

CONSTRUCTION OF A HAY BALE BARRIER