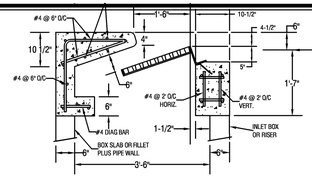
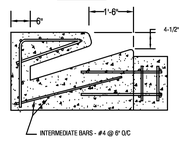
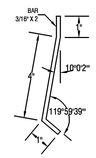


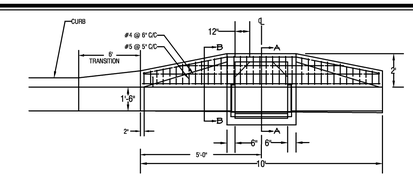
SECTION A-A



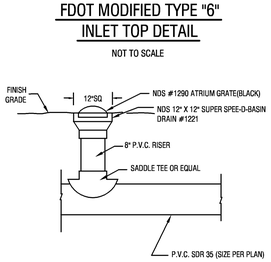
SECTION B-B



ANCHOR DETAIL

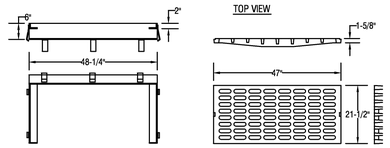


TOP VIEW



COMMERCIAL YARD DRAIN DETAIL

NOT TO SCALE



STEEL ANGLE FRAME

CAST IRON COVER

GENERAL NOTES

ALL STRUCTURAL SPECIFICATIONS SHALL MEET OR EXCEED F.D.O.T. INDEX NO. 211

1. THE FINISHED GRADE AND SLOPE OF THE INLET TOPS ARE TO CONFORM WITH THE FINISHED CROSS SLOPE AND GRADE OF THE PROPOSED SIDEWALK AND/OR PARKWAY.

2. WHEN UNITS ARE TO BE CONSTRUCTED ON A CURVE, REFER TO THE PLANS TO DETERMINE THE RADIUS AND, WHERE NECESSARY, MODIFY THE INLET DETAILS ACCORDINGLY. BEND STEEL WHEN NECESSARY.

3. ALL REINFORCING STEEL SHALL HAVE 1-1/4" MINIMUM COVER UNLESS OTHERWISE SHOWN. INLET TOPS SHALL BE CAST-IN-PLACE OR PRECAST CONCRETE.

4. PRECASTING OF THIS INLET TOP WILL BE PERMITTED. PRECAST UNITS SHALL CONFORM TO THE THE DIMENSIONS SHOWN.

5. CONCRETE MEETING THE REQUIREMENTS OF A.S.T.M. C 478 (4,000 P.S.I.) MAY BE USED IN LIEU OF CLASS I CONCRETE FOR PRECAST UNITS MANUFACTURED IN PLANTS WHICH ARE UNDER STANDARD OPERATING PROCEDURES FOR THE INSPECTION OF PRECAST CONCRETE PRODUCTS.

6. THE CORNER FILLETS SHOWN FOR RECTANGULAR THROATS ARE NECESSARY ONLY WHEN THROATS ARE TO BE USED IN CONJUNCTION WITH CIRCULAR INLET BOTTOMS OR WHEN USED ON SKEW WITH RECTANGULAR INLET BOXES.

7. FOR INLET BOXES SEE DETAIL SD-7.

8. THESE INLETS TOPS ARE DESIGNED FOR USE WITH STANDARD CURB AND GUTTER TYPE F. LOCATE OUTSIDE OF PEDESTRIAN CROSSWALK WHERE PRACTICAL.

9. ALL STEEL USED FOR THE GRATING FRAME SHALL MEET THE REQUIREMENTS OF A.S.T.M. A-36.

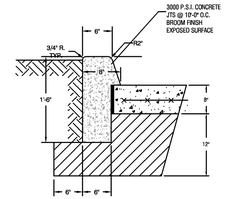
10. CAST IRON COVERS SHALL BE USED. IRON COVERS SHALL BE CLASS NO. 30 CASTINGS IN ACCORDANCE WITH A.S.T.M. A-48.

11. CURB INLET FRAME AND GRATE SHALL BE US FOUNDRY # 5160 OR EQUAL.

12. COVERS ARE TO BE GROUTED IN ACCORDANCE WITH THE GROUTING DETAIL IN LIEU OF TACK WELDING.

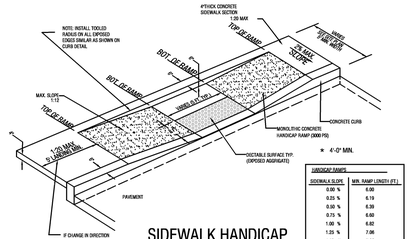
FDOT MODIFIED TYPE "6" INLET TOP DETAIL

NOT TO SCALE



TRENCH CURB

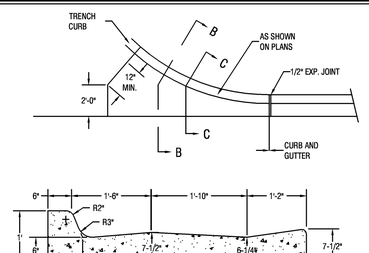
NOT TO SCALE

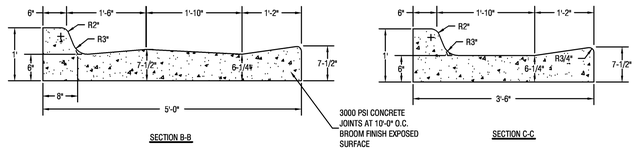


HANDICAP RAMPS	
SIDEWALK SLOPE	MIN. RAMP LENGTH (FT.)
0.00 %	6.00
0.25 %	6.19
0.50 %	6.39
0.75 %	6.60
1.00 %	6.82
1.25 %	7.06
1.50 %	7.32
1.75 %	7.60
2.00 %	7.90

SIDEWALK HANDICAP RAMP DETAIL

NOT TO SCALE

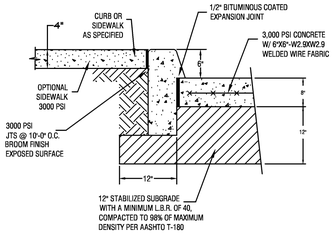




SECTION B-B

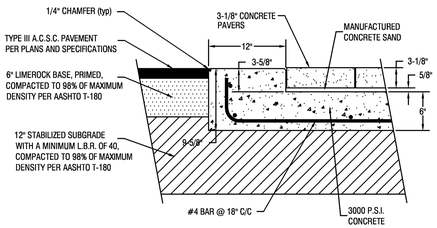
SECTION C-C

TYPE F CURB TO TRENCH CURB TRANSITION DETAIL



CONCRETE PAVEMENT DETAIL

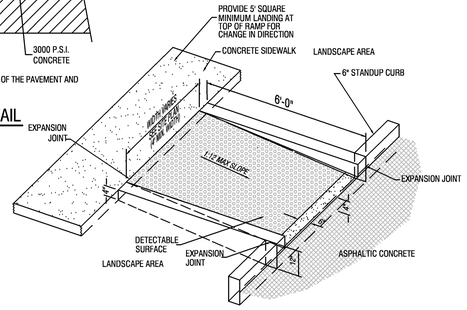
NO SCALE



PAVER BASE SHALL BE CONSTRUCTED AFTER PLACEMENT OF THE PAVEMENT AND LIMEROCK BASE FOR ROADWAY.
PAVER PATTERN AND COLOR TO BE SUPPLIED BY OWNER

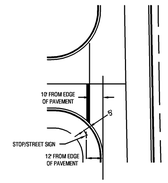
BRICK PAVER DETAIL

NO SCALE

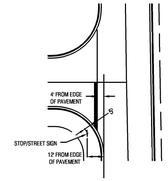


RETURNED CURB HANDICAP RAMP DETAIL

NOT TO SCALE



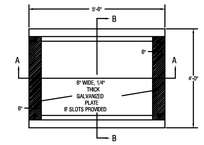
STREET INTERSECTION



COMMERCIAL DRIVEWAY CONNECTION

STOP SIGN, STOP BAR & STREET NAME SIGN LOCATION DETAIL

NOT TO SCALE



TOP VIEW

GENERAL NOTES

1. INLET TO BE PRECAST CONSTRUCTION. THIS INLET CAN BE USED WITH ALT. "B" STRUCTURE BOTTOMS, FLORIDA DOT INDEX NO. 200.

2. CONCRETE WHICH MEETS THE REQUIREMENTS OF ASTM C-478 SHALL BE USED FOR PRECAST UNITS MANUFACTURED IN PLANTS WHICH ARE UNDER STANDARD OPERATING PROCEDURES FOR THE INSPECTION OF PRECAST CONCRETE PRODUCTS.

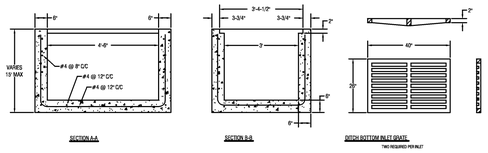
3. CAST IRON DITCH BOTTOM INLET GRATE SHALL BE US FOUNDRY NO. 6290 OR EQUAL.

4. ALL EXPOSED CORNERS AND EDGES OF CONCRETE ARE TO BE CHAMFERED 3/4".

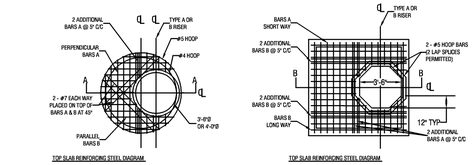
5. REFER TO FLORIDA DOT INDEX NO. 200 FOR USE WITH ALT "B" STRUCTURE BOTTOMS.

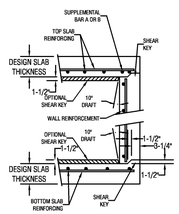
6. REINFORCEMENT SHALL COMPLY WITH FLORIDA DOT INDEX NO. 201, SHEET 4 OF 6.

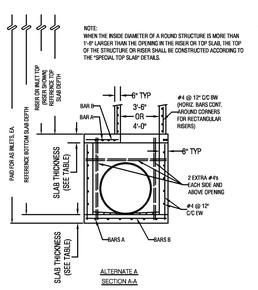
7. SLOTS FOR TYPE "C" INLETS SHALL BE TOPPED WITH A 6" WIDE, 1/4" THICK GALVANIZED PLATE AND SECURED WITH BOLTS TO THE INLET STRUCTURE.

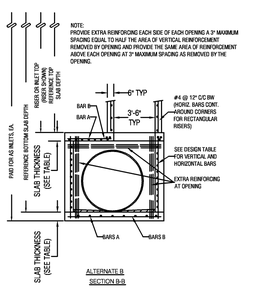


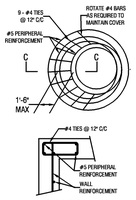
TYPE E DITCH BOTTOM INLET











1. SLAB REINFORCEMENT IS APPROPRIATE FOR TOP, INTERMEDIATE, AND BOTTOM SLABS.

2. WALL DEPTH IS MEASURED TO THE TOP OF THE BOTTOM SLAB FOR BOXES AND TO THE TOP OF THE INTERMEDIATE SLAB FOR RISERS.

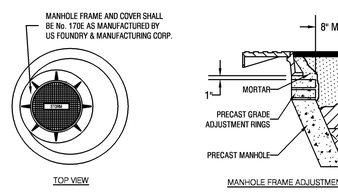
3. WALL HEIGHT IS THE DISTANCE BETWEEN THE TOP OF THE LOWER SLAB TO BOTTOM OF UPPER SLAB.

4. SLAB AND WALL REINFORCEMENT SHALL BE AS SHOWN IN FLORIDA D.O.T. INDEX No. 200.

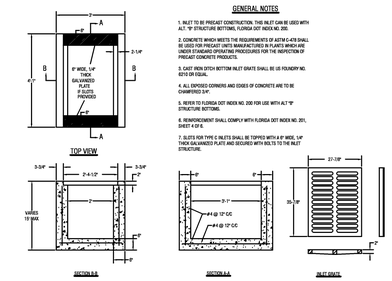
5. FOR SUPPLEMENTAL DETAILS REFER TO FLORIDA D.O.T. INDEX No. 201.

TYPE "J" AND TYPE "P" INLET BOTTOM DETAIL

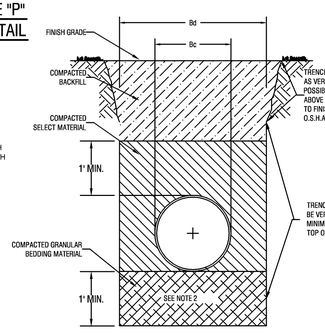
NOT TO SCALE



MANHOLE FRAME ADJUSTMENT IN PAVED AREAS



TYPE C DITCH BOTTOM INLET

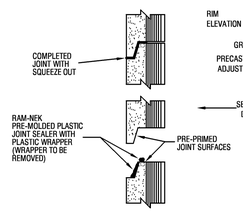


NOTES: FOR BEDDING AND TRENCHING

1. Dimension Bc = Pipe O.D.
   Dimension Bd = Trench Width at Top of Pipe
   Maximum Bd = Bc + 30"
   Minimum Bd = Maximum Dimension of Bell + 8" (Unsheeted Trench)
2. DEPTH FOR REMOVAL FOR UNSUITABLE MATERIAL SHALL BE AS REQUIRED TO REACH SUITABLE FOUNDATION. FOR ROCK OR OTHER NON-CUSHIONING MATERIAL, DEPTH SHALL BE 12" BELOW BOTTOM OF UTILITY.
3. ALL BACKFILL AND SELECT MATERIAL UNDER ALL ROADWAYS, DRIVES (INCLUDING DIRT DRIVES), AND PARKING AREAS SHALL BE COMPACTED TO 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. (AASHTO T-180). BACKFILL AND SELECT MATERIAL UNDER ALL OTHER AREAS SHALL BE COMPACTED AS FOLLOWS: FROM BOTTOM OF TRENCH TO 12" ABOVE TOP OF PIPE - 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T-180). FROM 12" ABOVE TOP OF PIPE TO TOP OF BACKFILL - 90% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T-180). FROM 12" ABOVE TOP OF PIPE TO TOP OF BACKFILL - 90% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T-180)

BEDDING AND TRENCHING DETAIL

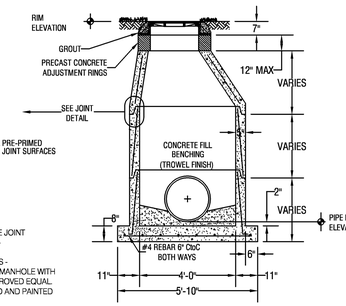
NOT TO SCALE



TONGUE AND GROOVE JOINT TYPICAL DETAIL

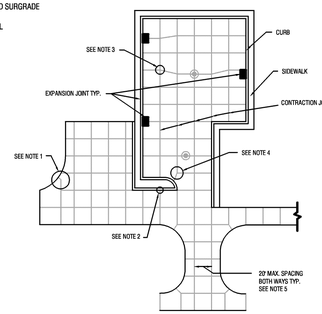
- MANHOLE NOTES -
1. SEAL ALL PIPE OPENINGS IN PRECAST MANHOLE WITH "EMBECO" NON-SHRINK GROUT OR APPROVED EQUAL.
2. MANHOLE COVERS SHALL BE CLEANED AND PAINTED WITH BLACK RUST-INHIBITING PAINT.
3. SET COVERS FLUSH IN PAVED AREAS. 0.1' ABOVE GRADE IN UNPAVED AREAS, AND 0.75' BELOW GRADE IN GRADED AREAS.

- ALTERNATE PRECAST MANHOLE TOPS -
1. APPROVE CONCENTRIC CONE DESIGN MAY BE USED AS AN ALTERNATIVE.
2. APPROVED FLAT SLAB TOP MAY BE USED AS AN ALTERNATE.



PRECAST STORM MANHOLE DETAIL

NOT TO SCALE



JOINTING NOTES

1. WHEN PAVEMENT AREAS HAVE DRAINAGE OR OTHER STRUCTURES, PLACE JOINTS TO APPROXIMATE THE CRACKING THAT WOULD OCCUR WITHOUT JOINTS. OF IMMEDIATE CONCERN ARE THE "CRITICAL JOINTS" WHICH ARE LOCATED AT NARROW AREAS, INTERIOR CORNERS, AREAS OF CURVING PAVEMENT IN CUL DE SACS AND AT FIXED OBJECTS WITHIN SLAB AREA (CATCH BASINS, EQUIPMENT FOUNDATIONS, PLANTERS, BASES FOR LIGHT AND SIGN POLES, ETC).

2. JOINTS MUST BE CONTINUOUS ACROSS THE SLAB UNLESS INTERRUPTED BY A FULL DEPTH JOINT AND MUST EXTEND THROUGH INTEGRAL CURBS.

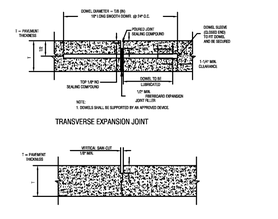
3. JOINT ALIGNMENT MAY BE SKEWED OR WARPED FROM THE NORMAL GRID PATTERN WHERE NECESSARY TO REACH POINTS OF STRESS CONCENTRATION NOT ON THE NORMAL PATTERN.

4. AVOID ACUTE ANGLES OF LESS THAN 45° BETWEEN INTERSECTING JOINTS. JOINT DOG LEGS OR FILLETS AT RADIUS POINTS SHOULD BE AT LEAST 10" LONG.

5. THE JOINT PATTERN RELATIONSHIP OF LENGTH TO WIDTH SHOULD NOT GENERALLY EXCEED A RATIO OF 1 TO 1 1/2

CONCRETE PAVEMENT JOINTING PLAN DETAIL

NOT TO SCALE

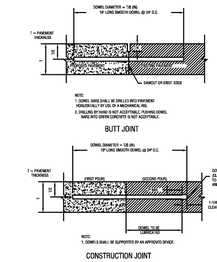


TRANSVERSE EXPANSION JOINT

CONTRACTION JOINT

CONCRETE PAVEMENT JOINTING PLAN DETAIL

NOT TO SCALE



BUTT JOINT

CONSTRUCTION JOINT

CONCRETE PAVEMENT JOINTING PLAN DETAIL

NOT TO SCALE

BY	REVISIONS	DATE

ENGINEERS
SURVEYORS
PLANNERS
FERNER BARLEY AND ASSOCIATES, INC.
Certificate of Authorization Number: 4709
4450 N.E. 83rd Road Wildwood, Florida 34785 (352) 748-3126

THE OAKS AT 138TH
SUMTER COUNTY, FLORIDA

PAVING AND DRAINAGE DETAILS

DATE 07-07-09
DRAWN BY DLB
CHKD BY JAH
FILE NAME DRAIN
JOB NO. 065146.0004

SHT. 10 OF 13

S:\SUMTERNON-VILLAGES PROJECTS\THE OAKS AT 138TH\CIVIL\CONSTRUCTION\010-OAKS-DRAIN DETAILS.dwg, 7/14/2009 11:12:39 AM, KIP6000.pc3, 1:100, Daniel