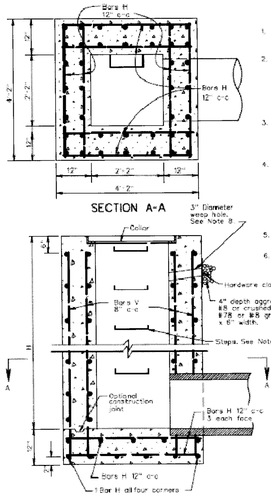


NOTES

1. DEPTH OF INLET (H) TO BE SHOWN ON PLANS. MAXIMUM DEPTH (H) TO BE 20'. FOR DEPTHS LESS THAN 10' USE STANDARD DI-1.
2. THE "H" DIMENSION SHOWN ON THE STANDARDS AND SPECIFIED ON THE PLANS WILL BE MEASURED FROM THE INVERT OF THE OUTFALL PIPE TO THE TOP OF THE STRUCTURE. PLAN "H" DIMENSIONS ARE APPROXIMATE ONLY FOR ESTIMATING PURPOSES AND THE ACTUAL DIMENSIONS SHALL BE DETERMINED BY THE CONTRACTOR FROM FIELD CONDITIONS.
3. WHEN SPECIFIED ON THE PLANS THE INVERT IS TO BE SHAPED IN ACCORDANCE WITH STANDARD DI-1, THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE SHAPING IS TO BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.
4. IN THE EVENT THE INVERT OF THE OUTFALL PIPE IS HIGHER THAN THE BOTTOM OF THE STRUCTURE, THE INVERT OF THE STRUCTURE SHALL BE SHAPED WITH CEMENT MORTAR TO PREVENT STANDING OR PONDING OF WATER IN THE STRUCTURE. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE SHAPING IS TO BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.
5. STEPS ARE REQUIRED. FOR DETAILS SEE STANDARD ST-1.
6. THIS ITEM MAY BE PRECAST OR CAST-IN-PLACE.
7. ⊗ 4" X 8" SMOOTH DOWELS AT APPROXIMATELY 12" C-C TO BE PLACED IN ALL AREAS ADJACENT TO ABUTTING CONCRETE TO PREVENT SETTLEMENT. IN LIEU OF DOWELS A 2" X 4" NOTCH MAY BE PROVIDED. SEE STANDARD T-12.2, 4 FOR ALTERNATE DESIGN.
8. 3" DIAMETER WEEP HOLE WITH 12"X12" PLASTIC HARDWARE CLOTH, 1/4" MESH OR GALVANIZED STEEL WIRE, MINIMUM WIRE DIAMETER 0.031, NUMBER 4 MESH HARDWARE CLOTH ANCHORED FIRMLY TO THE OUTSIDE OF THE STRUCTURE.
9. ALL REINFORCING STEEL SHALL HAVE A MIN. COVER OF 2".
10. ALL REINFORCING STEEL TO BE CUT CLEAR OF ALL OPENINGS BY 2".
11. CAST-IN PLACE CONCRETE IS TO BE CLASS A3 (3000 PSI). PRECAST CONCRETE IS TO BE 4000 PSI.
12. ALL SPLICES IN BARS V TO BE A MINIMUM OF 40 DIAMETERS (20").
13. IF OPTIONAL CONSTRUCTION JOINT IS USED, IT IS TO BE KEYED.
14. FOR DETAILS AND DIMENSIONS, ETC. OF GRATE AND STEEL OR CAST IRON COLLAR SEE STANDARD DI-1.

REINFORCING STEEL SCHEDULE

MARK	SIZE	NO. REQ'D	LENGTH
Bars H	#5	SxH+21	3'-10"
Bars V	#4	40	H+4'

APPROXIMATE QUANTITIES FOR MINIMUM (10') DEPTH

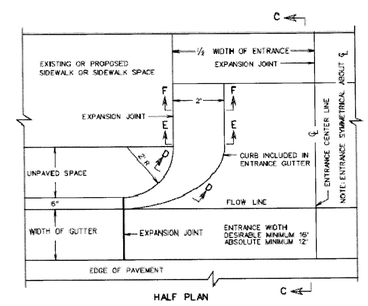
CONCRETE PIPE DIAMETER	CONCRETE	REINF. STEEL
	Cu. Yds.	Lbs.
12"	5.318	650
15"	5.163	601
18"	5.053	647
24"	5.089	639

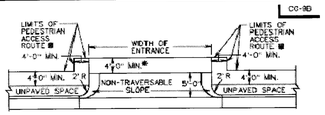
Increments to be added for each additional foot of depth (H):
0.465 Cu. Yds. of concrete
38.7 Lbs. of reinforcing steel

1 STANDARD DROP INLET DETAIL

SCALE: N.T.S.

DI-1A

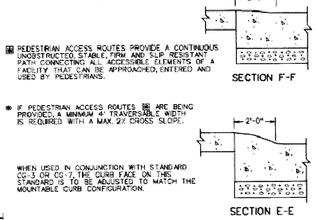




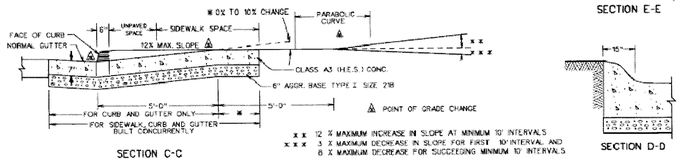
ADDITIONAL RIGHT-OF-WAY IS REQUIRED IF THE LIMITS OF PEDESTRIAN ACCESS ROUTE ▣ EXTEND BEYOND EXISTING OR PROPOSED VDOT RIGHT-OF WAY.

▣ PEDESTRIAN ACCESS ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS.

* IF PEDESTRIAN ACCESS ROUTES ▣ ARE BEING PROVIDED, A MINIMUM 4' TRAVERSABLE WIDTH IS REQUIRED WITH A MAX. 2% CROSS SLOPE.



WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB CONFIGURATION.

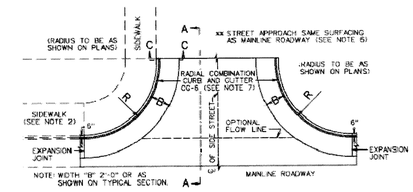


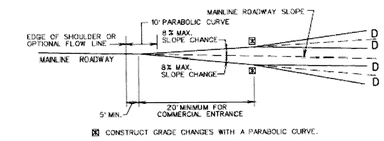
x x 12 % MAXIMUM INCREASE IN SLOPE AT MINIMUM 10' INTERVALS
x x x 3 % MAXIMUM DECREASE IN SLOPE FOR FIRST 10' INTERVAL AND 8 % MAXIMUM DECREASE FOR SUCCEEDING MINIMUM 10' INTERVALS

2 STANDARD ENTRANCE GUTTER FOR USE WITH UNPAVED SPACE BETWEEN CURB & SIDEWALK

SCALE: N.T.S.

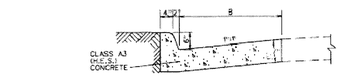
CG-9B





▣ CONSTRUCT GRADE CHANGES WITH A PARABOLIC CURVE.

SECTION A - A



GENERAL NOTES

1. WHEN CG-11IS USED FOR STREET CONNECTIONS, THE CONNECTION MUST BE DESIGNED IN ACCORDANCE WITH AASHTO POLICY AND THE APPLICABLE REQUIREMENTS OF THE VDOT ROAD DESIGN MANUAL INCLUDING SIGHT DISTANCE REQUIREMENTS.
2. WHEN THE ENTRANCE RADII CANNOT ACCOMODATE THE TURNING REQUIREMENTS OF ANTICIPATED HEAVY TRUCK TRAFFIC, THE DEPTH FOR SIDEWALK & CURB RAMPS WITHIN THE LIMITS OF THE RADII SHOULD BE INCREASED TO 7'.
3. WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB CONFIGURATION.
4. SEE STANDARD CG-12 FOR CURB RAMP DESIGN TO BE USED WITH THIS STANDARD.
5. OPTIONAL FLOWLINE MAY REQUIRE WARPING OF A PORTION OF GUTTER TO PRECLUDE PONDING OF WATER.

ENTRANCE NOTES

6. PLANS ARE TO INDICATE WHEN CONSTRUCTION OF A FLOW LINE IS REQUIRED TO PROVIDE POSITIVE DRAINAGE ACROSS THE ENTRANCE.
7. MAINLINE PAVEMENT SHALL BE CONSTRUCTED TO THE R/W LINE (EXCEPT ANY SUBGRADE STABILIZATION REQUIRED FOR MAINLINE PAVEMENT WHICH CAN BE OMITTED IN THE ENTRANCE.)
8. RADIAL CURB OR COMBINATION CURB AND GUTTER SHALL NOT BE CONSTRUCTED BEYOND THE R/W LINE EXCEPT FOR REPLACEMENT PURPOSES.
9. THE DESIRABLE AND MAXIMUM ENTRANCE GRADE CHANGES "D" ARE LISTED IN THE ALLOWABLE ENTRANCE GRADE TABLE. THESE VALUES ARE NOT APPLICABLE TO STREET CONNECTIONS.

ALLOWABLE ENTRANCE GRADE CHANGES

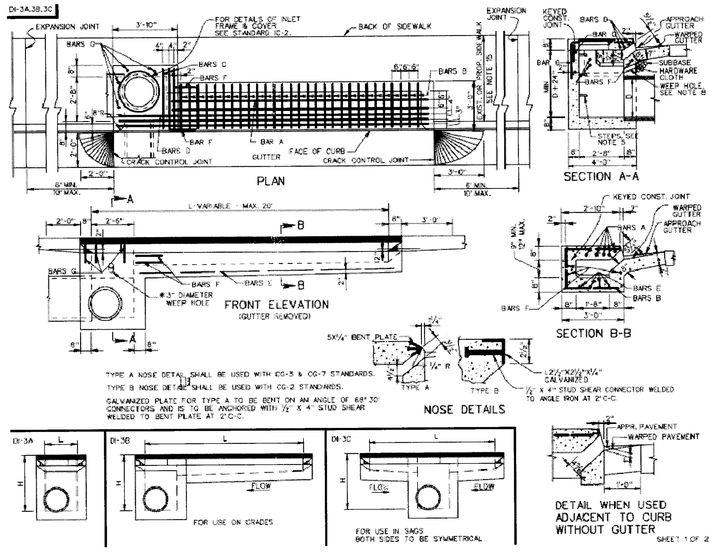
ENTRANCE VOLUME		GRADE CHANGE "D"	
		DESIRABLE	MAXIMUM
HIGH	MORE THAN 1500 VPD	0 %	3 %
MEDIUM	500-1500 VPD	≤ 3 %	6 %
LOW	LESS THAN 500 VPD	≤ 6 %	8 %

NOTE: ALLOWABLE ENTRANCE GRADE TABLE IS NOT APPLICABLE TO STREET CONNECTIONS.

3 METHOD OF TREATMENT – CONNECTION FOR STREET INTERSECTIONS & COMMERCIAL ENTRANCES

SCALE: N.T.S.

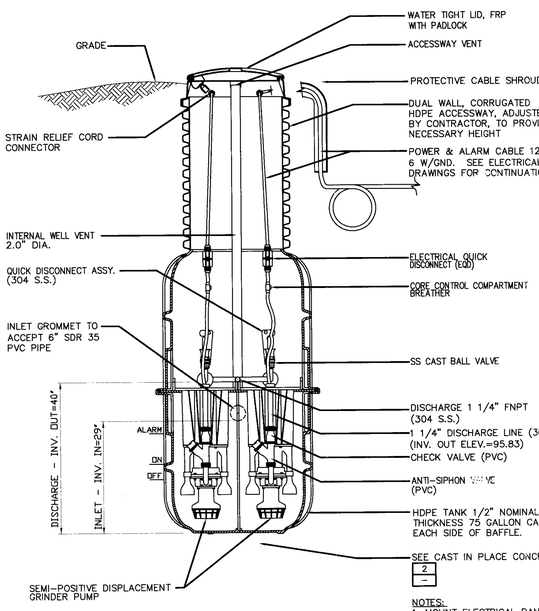
CG-11



6 STANDARD CURB DROP INLET 12"–30" PIPE: MAXIMUM DEPTH (H) = 8'

SCALE: N.T.S.

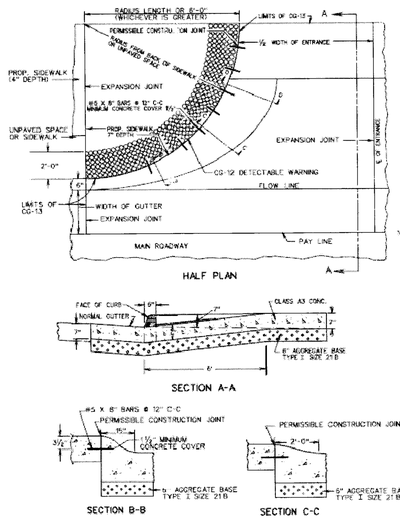
DI-3A DI-3B DI-3C

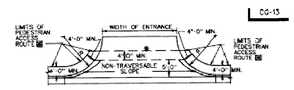


NOTES:
1. MOUNT ELECTRICAL PANEL IN ISLAND ADJACENT TO PUMP STATION.
2. PROVIDE ALL POWER AND CONTROL WIRING BETWEEN PUMP STATION AND PANEL AS REQUIRED BY MANUFACTURER.

4 GRINDER PUMP STATION DETAIL

SCALE: N.T.S.





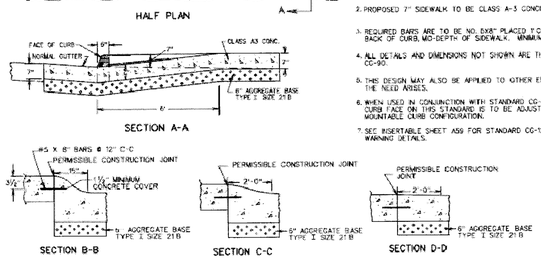
ADDITIONAL RIGHT-OF-WAY IS REQUIRED IF THE LIMITS OF PEDESTRIAN ACCESS ROUTE ▣ EXTEND BEYOND EXISTING OR PROPOSED VDOT RIGHT-OF WAY.

DETAIL TO BE USED WHEN THE COMBINED WIDTH OF UNPAVED SPACE AND SIDEWALK SPACE IS LESS THAN 7'.

▣ PEDESTRIAN ACCESS ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS.

* IF PEDESTRIAN ACCESS ROUTES ▣ ARE BEING PROVIDED, A MINIMUM 4' TRAVERSABLE WIDTH IS REQUIRED WITH MAX. 2% CROSS SLOPE.

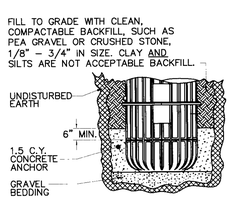
NOTES:
1. PROP. 7" SIDEWALK IS TO BE POURED MONOLITHICALLY WITH ENTRANCE OR BY USING PERMISSIBLE CONSTRUCTION JOINT WITH REQUIRED BARS.
2. PROPOSED 7" SIDEWALK TO BE CLASS A-3 CONCRETE.
3. REQUIRED BARS ARE TO BE NO. 6X8" PLACED 7" CENTER TO CENTER ALONG BACK OF CURB, MID-DEPTH OF SIDEWALK. MINIMUM CONCRETE COVER 2½".
4. ALL DETAILS AND DIMENSIONS NOT SHOWN ARE THE SAME AS STANDARD CG-9D.
5. THIS DESIGN MAY ALSO BE APPLIED TO OTHER ENTRANCE STANDARDS AS THE NEED ARISES.
6. WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB CONFIGURATION.
7. SEE INSERTABLE SHEET A59 FOR STANDARD CG-12 DETECTABLE WARNING DETAILS.



5 COMMERCIAL ENTRANCE (HEAVY TRUCK TRAFFIC ANTICIPATED)

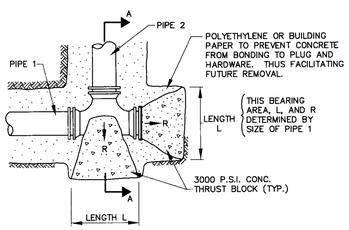
SCALE: N.T.S.

CG 13



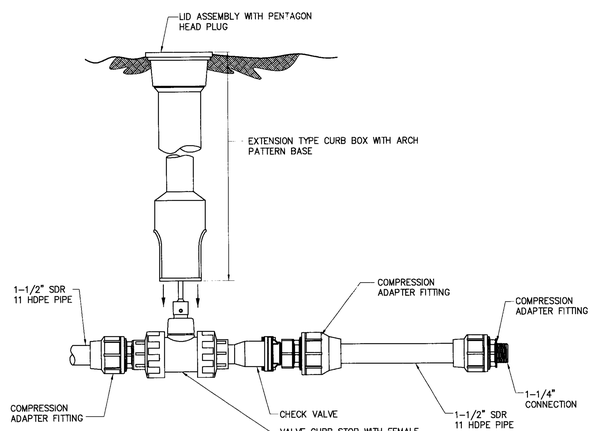
7 CAST IN PLACE CONCRETE DETAIL

SCALE: N.T.S.



8 TEE WITH PLUG

SCALE: N.T.S.



NOTES:
1. PRESSURE RATING: 150 PSI
2. ASSEMBLY TO BE USED WITH 1-1/2" SDR 11 PIPE ONLY

9 LATERAL ASSEMBLY DETAIL

SCALE: N.T.S.

REVISIONS

DATE	DESCRIPTION
12-14-07	County Comments
01-24-08	VDOT Comments
02-26-08	VDOT Comments

COMMONWEALTH OF VIRGINIA
DAVID J. HARBOUR
LIC. NO. 31636
PROFESSIONAL ENGINEER

CLOUGH HARBOUR & ASSOCIATES LLP
10800 Midlothian Turnpike, The Winchester Building, Suite 303 - Richmond, VA 23235-4700
Main: (804) 897-3564 - www.cloughharbour.com

LOWE'S HOME CENTERS, INC.
P.O. BOX 1111
N. WILKESBORO, NC 28656
336.658.4000 (V) 336.658.3257 (F)

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LOWE'S

SITE DETAILS
LOWE'S OF PRINCE GEORGE, VA
117 K SUPER WIDE
PRINCE GEORGE, VA

PROJECT No: 16984 | DRAWN BY: KAW | CHECKED BY: ISH

ORIGINAL ISSUE DATE: 11-05-07
PERMIT SET ISSUE DATE: 12-14-07
CONSTRUCTION SET ISSUE DATE:
DRAWING NUMBER:

C-113

File: K:\16984\CADD\ACAD\D-SITE\PLANS\100-PERCEN\16984_C-111_C-114.DWG
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