GENERAL NOTES:
1- DOUBLE CATCH BASIN ONLY FOR USE IN TOWN MAINTAINED STREETS.
   INSTALLATION ON STREETS IN YNC EMBAYED MAINTAINED R/B REQUIRES A MIN. OF ONE 4' LONG SECTION OF REINF. CONC. PIPE BETWEEN CATCH BASINS.
2- SEE SCDOT STD. FOR DETAILS BASED ON PIPE SIZE PER CROSS-SECTION.
3- CONSTRUCT 3 SINGLE BASINS PER SCDOT STD. IN DOUBLE INTERIOR WALL.
4- ALL CONC. TO BE 3,600 P.S.I COMpressive STRENGTH.
5- SLAB TO BE MONOLITHIC.
6- SEE APPLICABLE STD. FOR PLACEMENT OF CATCH BASIN.
7- RCP PIPE SECTION 3 CONNECTING CATCH BASINS SHALL HAVE A MIN. DIA. SAME AS OF OUTLET PIPE D3.
8- ALL REINF. STEEL SHOWN ON STDS IS TO BE PROVIDED AS CONTINUOUS MEMBERS. (NO LAPS, USED AS A SINGLE CONTINUOUS BAR IN THE SLAB)
GENERAL NOTES:
1. In the 4" conc. paved ditches place 1/2" E.J. at 30' intervals & at all other points where proposed ditches abut rigid objects. Place grooved joints 1" deep at 10' intervals between EJs.
2. Width & shape of proposed 4" conc. paved ditches as shown or as directed by the town engineer.
3. All conc. to be 3600 p.s.i. compressive strength.

SLOPE DRAIN, BASE DITCH OR BERM DRAINAGE

OUTLET DITCH (N.T.S.)

BERM DITCH

MEDIAN DITCH

GROOVED JOINT

N.T.S.

EXPANSION JOINT

N.T.S.

Berm ditch

MEDIAN OR BERM DITCH

N.T.S.

LONGITUDINAL SECTION OF PAVED DITCH

2' CURTAIN WALL REQ. AT EACH END

SHOULDER POINT

SIDE DITCH

N.T.S.
18" VERTICAL CURB

CURB & GUTTER EJ & CJ

1. CJ's SHALL BE SPACED AT 10' INTERVALS TO PREVENT UNCONTROLLED CRACKING. JOINT SPACING MAY BE ALTERED BY THE ENGINEER.
2. CJ's MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. SPACING MAY BE ALTERED BY THE ENGINEER.
3. ALL EJs SHALL BE SPACED AT 50' INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS. JOINTS SHALL MATCH LOCATIONS W/ JOINTS IN ABUTTING SIDEWALK.
4. CONC. COMPRESSIVE STRENGTH SHALL BE 3,600 P.S.I. IN 28 DAYS.
5. CURB SHALL BE DEPRESSED AT INTERSECTIONS TO PROVIDE FOR FUTURE ACCESSIBLE RAMPS.
6. TOP 6" OF SUBGRADE BENEATH CURB SHALL BE COMPACTED TO 100% STD. PROCTOR DENSITY.
7. DETAIL MAY BE USED FOR PRIVATE DRIVES, PARKING LOTS, AND INTERIOR CIRCULATION DRIVE.

NOTES:

CATCH BASIN FRAME IN VALLEY GUTTER

(PLAN VIEW) N.T.S.

NOTES:

1. WHERE 2'-6" C&G IS USED, CATCH BASINS MAY BE LOCATED AT END OF RADIUS.
2. RADIUS AT INTERSECTION MAY VARY.

CATCH BASIN PLACEMENT AT INTERSECTIONS

(PLAN VIEW) N.T.S.

NOTE:

1. WHERE 2'-6" C&G IS USED, CATCH BASINS MAY BE LOCATED AT END OF RADIUS.
2. RADIUS AT INTERSECTION MAY VARY.

DRAINAGE DETAILS

TOP OF BERM CONTOUR

GRADING AT DROP INLET

N.T.S.
### GENERAL NOTES:

1. **SEE SCDOT STDs. FOR DETAILS.**
2. **REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONC. PIPE OF LIKE DIAM. PER AASHTO M170, TABLE 2, WALL B.**
3. **ALL CON. TO BE 4,000 P.S.I COMPRESSIVE STRENGTH.**
4. **PROVIDE TONGUE OR SPIGOT JOINT AT INLET END SECTION.**
5. **PROVIDE GROOVE OR BELL JOINT AT OUTLET END SECTION.**
6. **THE DIMENSIONS FOR END SECTIONS SHALL SUBSTANTIALLY AGREE W/ THE TABLE. MINOR VARIATIONS WILL BE PERMITTED ON THE MANUFACTURER'S STDs FORMS & TEMPLATES.**
7. **NOT TO BE USED IN SCDOT MAINTAINED R/W.**

### FLARED END SECTIONS 12" TO 72"

#### SIDE VIEW

![Side View](image)

#### END VIEW

![End View](image)

#### TOP VIEW

![Top View](image)

#### TABLE OF DIMENSIONS

<table>
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<th>T</th>
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OFFSET CATCH BASIN EXIST. UTILITY CONFLICT

N.T.S.

NOTES

1. PRIOR APPROVAL FROM THE TOWN ENGINEER IS REQUIRED.
2. THIS STRUCTURE IS TO ONLY BE USED ON TOWN MAINTAINED STREETS & NOT ON SC DOT STREETS W/O THEIR PERMISSION.
1. Class or median size of riprap & length, width & depth of apron to be designed by the Engineer.
2. Refer to the SCDOT Storm Water Design Manual for riprap apron design stds.
3. Riprap should extend up both sides of the apron & around the end of the pipe or culvert at the discharge outlet at a max. slope of 2:1 & a height not > 25% the pipe diam. or culvert height.
4. There shall be no overflow from the end of the apron to the surface of the receiving channel. The area to be paved or ripraped shall be undercut so that the invert of the apron shall be at the same grade (flush) with the surface of the receiving channel. The apron shall have a cutoff or toe wall at the downstream end.
5. The width of the end of the apron shall be equal to the bottom width of the receiving channel max. taper to receiving channel 3:1.
6. All subgrade for structure to be compacted to 95% or greater.
7. The placing of fill, either loose or compacted in the receiving channel shall not be allowed.
8. No bends or curves in the horizontal alignment of the apron will be permitted.
9. Filter fabric shall be installed on compacted subgrade prior to placement of rip rap.
10. Any disturbed area from end of apron to receiving channel must be stabilized.

Use USDA nomograph from SC Sediment & Erosion Control Manual.

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<th>OUTLET</th>
<th>Lq</th>
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<th>W2</th>
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Riprap Summary Chart
GENERAL NOTES:
1. IF BEDROCK IS ENCOUNTERED WITHIN THE LIMITS OF THE TOEWALL, BEGIN TOEWALL ON THE BEDROCK OR AS DIRECTED BY THE ENGINEER.
2. WHERE ONLY ONE SIDE REQUIRES RIP RAP CLASS I OR II, LIST STATION & SIDE OF SAME.
3. CHANNEL & RIP RAP SIZE TO BE DESIGNED BY THE ENGINEER.
4. DEPENDING ON SOIL CONDITIONS, WASHED STONE AND FILTER FABRIC MAY BE NECESSARY UNDER RIP RAP.
5. CHANNEL DEPTH "H" SHALL INCLUDE A MIN. 6" OF FREEBOARD.

NOTE: "D" = DIAM. OF PIPE OR BOTTOM WIDTH OF CHANNEL.
TOP 6" OF SUB-GRADE BENEATH THE C&G SHALL BE COMPACTED TO 100% STD. PROCTOR DENSITY.

CJs SHALL BE SPACED AT 10' INTERVALS TO PREVENT UNCONTROLLED CRACKING. JOINT SPACING MAY BE ALTERED BY THE ENGINEER.

1. CJs MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER.

2. ALL EJs SHALL BE SPACED AT 50' INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS. JOINTS SHALL MATCH LOCATIONS W/ JOINTS IN ABUTTING SIDEWALK.

3. CONC. COMpressive STRENGTH SHALL BE 3,600 P.S.I. IN 28 DAYS.

4. CURB SHALL BE DEPRESSED AT INTERSECTIONS TO PROVIDE FOR FUTURE ACCESSIBLE RAMPS.

5. TOP 6" OF SUBGRADE BENEATH CURB SHALL BE COMPACTED TO 100% STD. PROCTOR DENSITY.

6. DETAIL MAY BE USED FOR PRIVATE DRIVES, PARKING LOTS, AND INTERIOR CIRCULATION DRIVE.

NOTES:

1. WHERE 2'-6" C&G IS USED, CATCH BASINS MAY BE LOCATED AT END OF RADIUS.

2. RADIUS AT INTERSECTION MAY VARY.

CATCH BASIN FRAME IN VALLEY GUTTER
(PLAN VIEW) N.T.S.

18" VERTICAL CURB
N.T.S.

CURB & GUTTER EJ & CJ
N.T.S.
NOTE:

1. This detail is only to be used when outfall has a continuous flow of water & w/ prior approval of the county engineer.

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<th>A</th>
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CROSS SECTION A-A

PLAN VIEW

18" INTERMEDIATE RIP RAP

8" GRAVEL ON FILTER FABRIC

FLARED END SECTION OR END WALL

D+12"
GENERAL NOTES:
1. IN THE 4" CONC. PAVED DITCHES PLACE 1/2" E.J. AT 30' INTERVALS & AT ALL OTHER POINTS WHERE PROPOSED DITCHES ABUT RIGID OBJECTS. PLACE GROOVED JOINTS 1" DEEP AT 10' INTERVALS BETWEEN EJs.
2. WIDTH & SHAPE OF PROPOSED 4" CONC. PAVED DITCHES AS SHOWN OR AS DIRECTED BY THE TOWN ENGINEER.
3. ALL CONC. TO BE 3600 P.S.I. COMPRESSIVE STRENGTH.