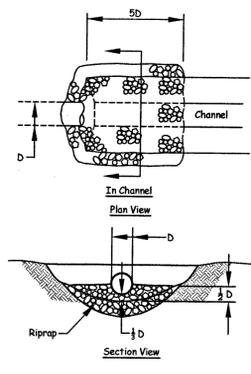


Figure 4

**New Residential Road or Residential Collector Road and Existing State Maintained Road**

Not to Scale

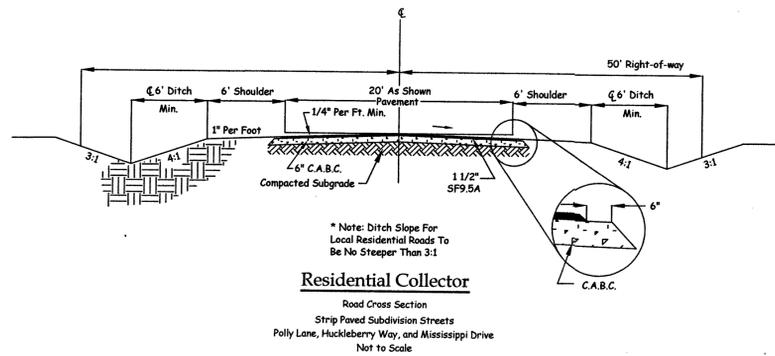


Median Stone Diameter = 6" unless otherwise noted on Erosion and Sedimentation Control Plan.

1. D = Inside Diameter or width of culvert.
  2. Minimum stone thickness to be two times specified stone diameter.
  3. Fabric to be installed under riprap located in swale.
  4. Finished grade of riprap shall be at invert elevation of pipe.
- \*Not placed on top of ground at invert.\*

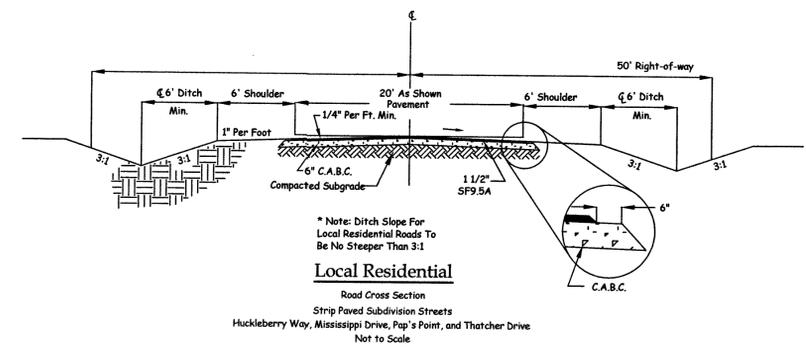
**Permanent Riprap Apron**

Not to Scale



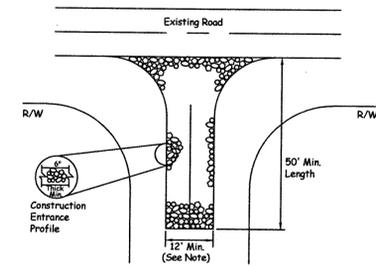
**Residential Collector**

Road Cross Section  
Strip Paved Subdivision Streets  
Polly Lane, Huckleberry Way, and Mississippi Drive  
Not to Scale



**Local Residential**

Road Cross Section  
Strip Paved Subdivision Streets  
Huckleberry Way, Mississippi Drive, Pop's Point, and Thatcher Drive  
Not to Scale

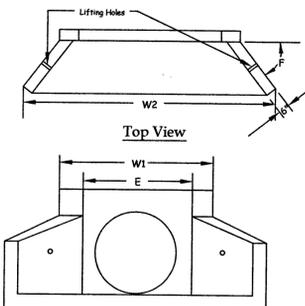


**Temporary Stabilized Construction Entrance**

Not to Scale

**Construction Specifications**

1. Aggregate size - Use 2-3 inch washed stone.
2. Length - As effective, but not less than 50 feet.
3. Thickness - Not less than six (6) inches.
4. Width - Not less than full width of all points of ingress or egress. Minimum of 12'.
5. Install filter fabric under entire footprint of the construction entrance.
6. Washing - When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch, or watercourse through use of sandbags, gravel, boards or other approved methods.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and / or cleanout of any measures used to trap sediment. All sediment, spilled, dropped, washed or tracked onto public rights-of-way must be removed.



- Notes:
1. Precast Concrete Headwall To Be Pre-Engineered and Prefabricated by Old Castle or Approved Equivalent.
  2. All Concrete to be 4000 P.S.I.
  3. Reinforcement Steel Meets ASTM 615 Grade 60 With 2" Min. Clearance.
  4. Reinforcement Set 12" C. On C. Both Ways Typical.
  5. All Exposed Edges Chamfered 3/4".
  6. Pipe to be Grouted Into Headwall or Pipe Inserted Into Headwall.
  7. Precast Headwall Structures Should be Positioned Around an Existing Pipe or Pipe Inserted Into Headwall. Headwall Structure Should be Placed on 24" Min. #57 Stone.

Old Castle  
P.O. Box 27077  
Raleigh, NC 27611  
(910) 774-0301  
Fax (910) 771-1209

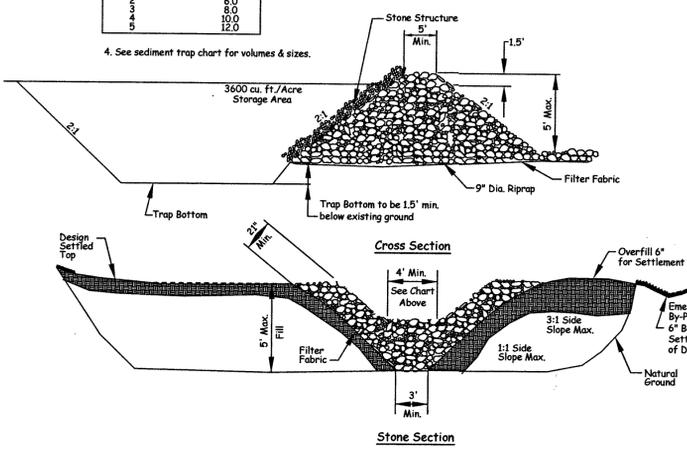
Headwall Dimensions For Concrete Pipe											
Pipe Size I.D.	Hole Size	Reinf.	W1	W2	H1	H2	H3	D	E	F	WT.
12" 10"	18" 21"	#4	3'-2"	4'-11"	1'-3"	3'-1"	1'-3"	1'-9"	49"	1392	
18"	27"	#4	3'-6"	6'-0"	1'-9"	3'-7"	1'-6"	2'-3"	49"	1950	
24"	33"	#5	4'-4"	7'-3"	2'-0"	4'-3"	1'-10"	2'-10"	49"	2827	
30" 30"	39" 48"	#6	5'-0"	10'-10"	3'-3"	5'-9"	1'-11"	4'-3"	49"	5988	
42" 48"	56" 63"	#6	6'-7"	12'-6"	3'-8"	6'-8"	1'-4"	5'-2"	49"	7640	
54" 60"	72" 81"	#6	8'-9"	13'-10"	4'-9"	8'-0"	1'-4"	7'-9"	50"	9584	
66" 72"	89" 92"	#6	9'-2"	14'-2"	4'-9"	9'-0"	1'-4"	7'-10"	50"	10,070	

**Concrete Headwall Detail**

Not to scale

- NOTES:
1. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to 1/2 the design volume of the trap. Sediment removed from the basin shall be deposited in a suitable area and in such a manner that it will not erode.
  2. The structure shall be checked regularly to insure that it is structurally sound and has not been damaged by erosion or construction equipment. The height of the outlet should be checked to insure that its center is at least 1.5 feet below the top of the embankment.
  3. Weir Length  

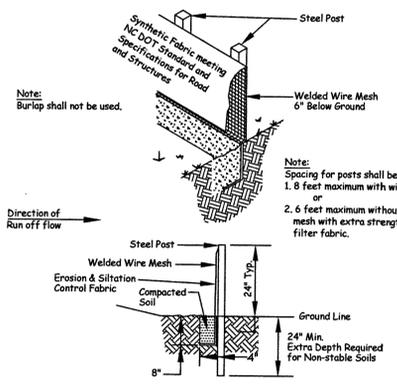
Drainage Area (Acres)	Weir Length (Feet)
1	4.0
2	6.0
3	8.0
4	10.0
5	12.0
  4. See sediment trap chart for volumes & sizes.



**Temporary Sediment Trap Detail**

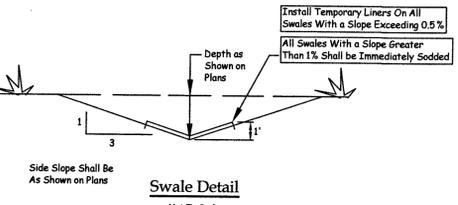
Not to scale

Field Book: Island Creek, Pg. 1-13, Island Creek 2 Pg. 1-7  
Data Collector: ISLAND CREEK 1, ISLAND CREEK 2, ISLAND CREEK 3, ISLAND CREEK 4, ISLAND CREEK 5, ISLAND CREEK 6, ISLAND CREEK 7, ISLAND CREEK 8  
Disk Name: Acad #2501  
Filename: IC-Preliminary Gen.dwg BLD  
Job No.:S140217-5746



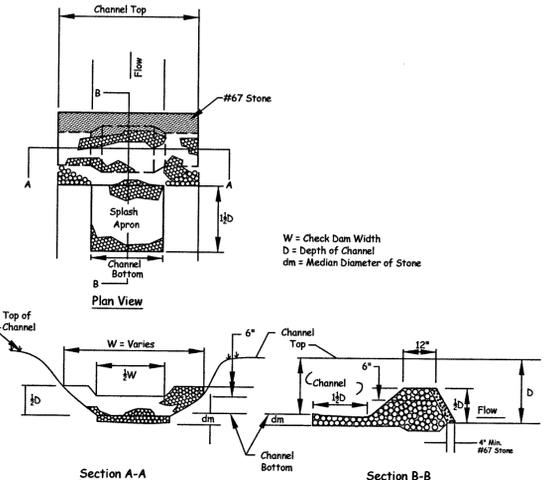
**Typical Installation of Temporary Silt Fence**

Not to Scale



**Swale Detail**

Not to Scale

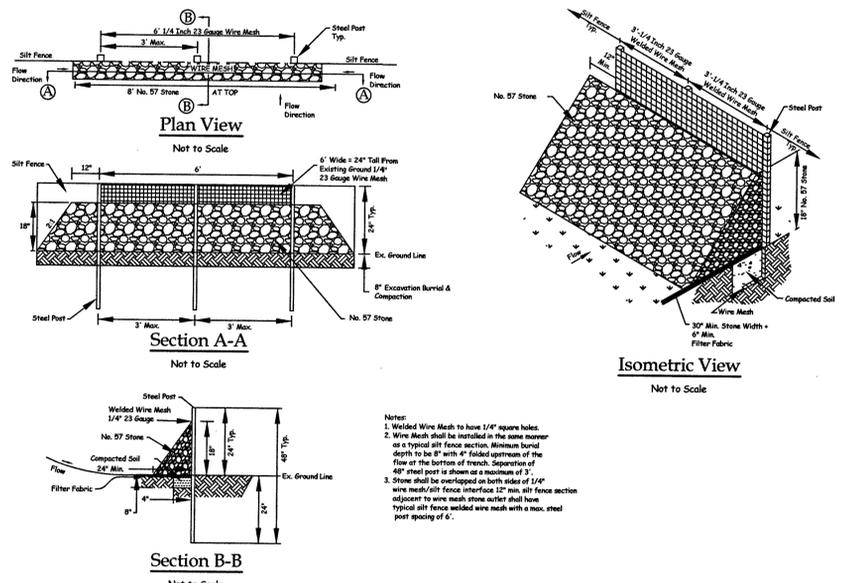


**Temporary Fortified Rock Check Dam**

Not to Scale

**Wire Mesh Stone Outlet**

Not to Scale



**Section B-B**

Not to Scale

- Notes:
1. Welded Wire Mesh to have 1/4\"/>

**Grading and Erosion Control Detail Sheet**

**THE RESERVE ON ISLAND CREEK**

Topsail Twp., Pender Co., North Carolina

Owner/Developer: **IC3 Partners, LLC**  
PO Box 7122  
Jacksonville, NC 28541  
(910) 455-6956

DATE: 10/17/14

SCALE: As Noted

**Parker & Associates, Inc.**  
Consulting Engineers - Land Surveyors - Land Planners  
P.O. Box 976 - 28641-0976  
306 New Bridge Street - 28540  
Jacksonville, North Carolina  
Phone (910) 455-2414 - Fax (910) 455-3441  
Firm License Number: F-0108

