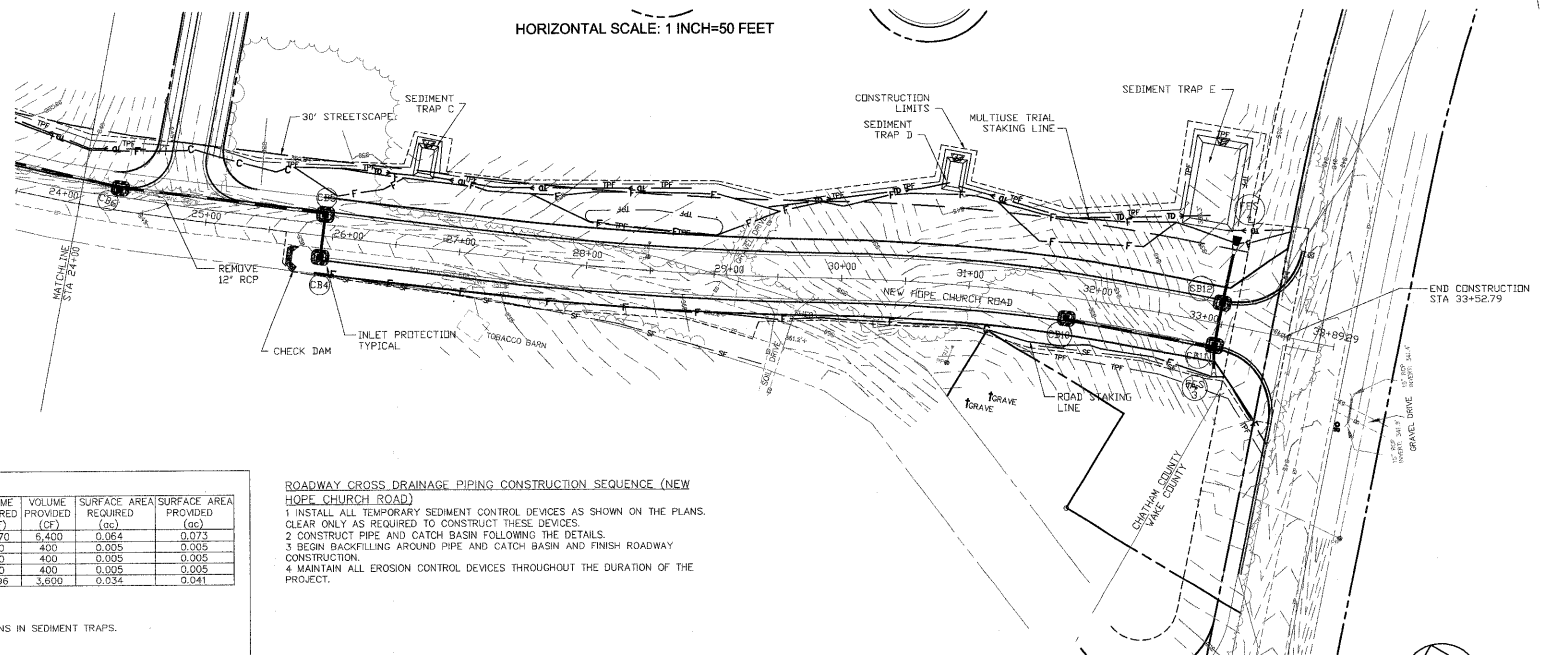


HORIZONTAL SCALE: 1 INCH=50 FEET  
HORIZONTAL SCALE: 1 INCH=50 FEET



**ROADWAY CROSS DRAINAGE PIPING CONSTRUCTION SEQUENCE (NEW HOPE CHURCH ROAD)**  
1. INSTALL ALL TEMPORARY SEDIMENT CONTROL DEVICES AS SHOWN ON THE PLANS. CLEAR ONLY AS REQUIRED TO CONSTRUCT THESE DEVICES.  
2. CONSTRUCT PIPE AND CATCH BASIN FOLLOWING THE DETAILS.  
3. BEGIN BACKFILLING AROUND PIPE AND CATCH BASIN AND FINISH ROADWAY CONSTRUCTION.  
4. MAINTAIN ALL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THE PROJECT.

GRAVEL & RIP RAP BASIN/SEDIMENT TRAP

STRUCTURE #	DRAINAGE AREA (AC)		SIZE (MINIMUM)			WEIR		VOLUME REQUIRED (CF)	SURFACE AREA REQUIRED (SQ)	SURFACE AREA PROVIDED (SQ)
	DEDUCE	ADJ	WIDTH (FT)	LENGTH (FT)	DEPTH (FT)	LENGTH (FT)				
A	2.7	1.2	40	80	3	8	2,070	5,400	0.064	0.073
B	0.2	0.2	10	20	3	3	360	400	0.005	0.005
C	0.2	0.2	10	20	3	3	360	400	0.005	0.005
D	0.2	0.2	10	20	3	3	360	400	0.005	0.005
E	1.4	0.7	30	60	3	3	1,296	3,600	0.034	0.041

\*INCLUDES 1' OF FREE BOARD.  
1) CONTRACTOR TO CONSTRUCT SEDIMENT TRAPS TO COLLECT RUNOFF FROM EACH STORMWATER DISCHARGE LOCATION.  
2) CONTRACTOR TO SUPPLY TEMPORARY RIP RAP AT DISCHARGE LOCATIONS IN SEDIMENT TRAPS.

**STRUCTURE FLOWS**  
GIVEN: C: 0.5 Runoff Coefficient  
I: 4.76 IN/HR (2-HR STORM - 10 min duration)  
H: 6 INCHES (WAKE COUNTY REQUIREMENT)  
Cw: 3  
L =  $Q / (Cw \cdot H^{3/2})$  (MALCOM, ELEMENTS OF STORMWATER DESIGN)

STRUCTURE	AREA	Q (CFS)	WEIR (FT)
A	2.7	6.378	6
B	0.2	0.476	4
C	0.2	0.476	4
D	0.2	0.476	4
E	1.4	3.590	4

03-SB-012 APPROVED TOWN OF CARY  
Approved by: DRC Date: 8-2-09  
Planning: BP Date: 8-27-09  
Engineering: TS Date: 8-20-09

**CHAS. H. SELLS, INC.**  
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**The Peninsula at Amberly**  
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REVISIONS

1/5/04	REVISED PER TOC COMMENTS
2/23/04	REVISED PER TOC COMMENTS
4/5/04	REVISED PER TOC COMMENTS

PROJECT #: 02423 DATE: 11/03/03  
DRAWN BY: SLS CHECKED BY: JBE  
TITLE  
**NEW HOPE CHURCH ROAD EROSION CONTROL PLAN**  
SHEET  
**C7.0.10**