

S-5A SUMMARY:

PREDEVELOPMENT:
TOTAL DRAINAGE AREA = 7.98 ACRES
APPROXIMATE IMPERVIOUS AREA = 5.19 ACRES

POSTDEVELOPMENT:
TOTAL DRAINAGE AREA = 4.87 ACRES *
APPROXIMATE IMPERVIOUS AREA = 3.16 ACRES

BMP SIZING:

REQUIRED AREA = 3,446 S.F.
PROVIDED AREA = 5,542 S.F.

WATER QUALITY TREATMENT:

POST DEVELOPMENT POLLUTANT LOAD = 7.05 (LBS-TP/YR)
POLLUTANT REMOVAL EFFICIENCY = 50%

TOTAL ESTIMATED POLLUTANT REMOVAL = 3.52 (LBS-TP/YR)

HYDROLOGIC SUMMARY:

	2-YEAR	10-YEAR	100-YEAR
	CFS	CFS	CFS
PRE-DEVELOPMENT	8.14	21.44	51.09
POST-DEVELOPMENT (UNROUTED)	14.20	24.54	44.18
POST-DEVELOPMENT (ROUTED)	4.87	15.60	29.44
POST-DEVELOPMENT AT DOWNSTREAM COMPLIANCE NODE**	6.02	16.86	33.75

ROUTED PEAK ELEVATIONS:

	2-YEAR	10-YEAR	100-YEAR
	FT	FT	FT
POST-DEVELOPMENT	656.87	658.23	658.74

*APPROXIMATELY 2.60 ACRES OF THE PREDEVELOPMENT DRAINAGE AREA DIRECTED TO L-1.

**APPROXIMATELY 1.05 ACRES OF APPROVED GOLF DRIVE ROADWAY DRAINAGE NOT DIRECTED TO S-5A; HOWEVER, FLOWS FROM THE 1.05 ACRES ARE INCLUDED IN DOWNSTREAM ROUTED FLOWS TO ENSURE THESE PEAKS ARE ACCOUNTED FOR AT OUTFALL COMPLIANCE.

S-5B SUMMARY:

PREDEVELOPMENT:
TOTAL DRAINAGE AREA = 4.06 ACRES
APPROXIMATE IMPERVIOUS AREA = 0.00 ACRES

POSTDEVELOPMENT:
TOTAL DRAINAGE AREA = 3.52 ACRES*
APPROXIMATE IMPERVIOUS AREA = 2.29 ACRES

BMP SIZING:

REQUIRED AREA = 2,491 S.F.
PROVIDED AREA = 2,894 S.F.

WATER QUALITY TREATMENT:

POST DEVELOPMENT POLLUTANT LOAD = 5.09 (LBS-TP/YR)
POLLUTANT REMOVAL EFFICIENCY = 50%

TOTAL ESTIMATED POLLUTANT REMOVAL = 2.55 (LBS-TP/YR)

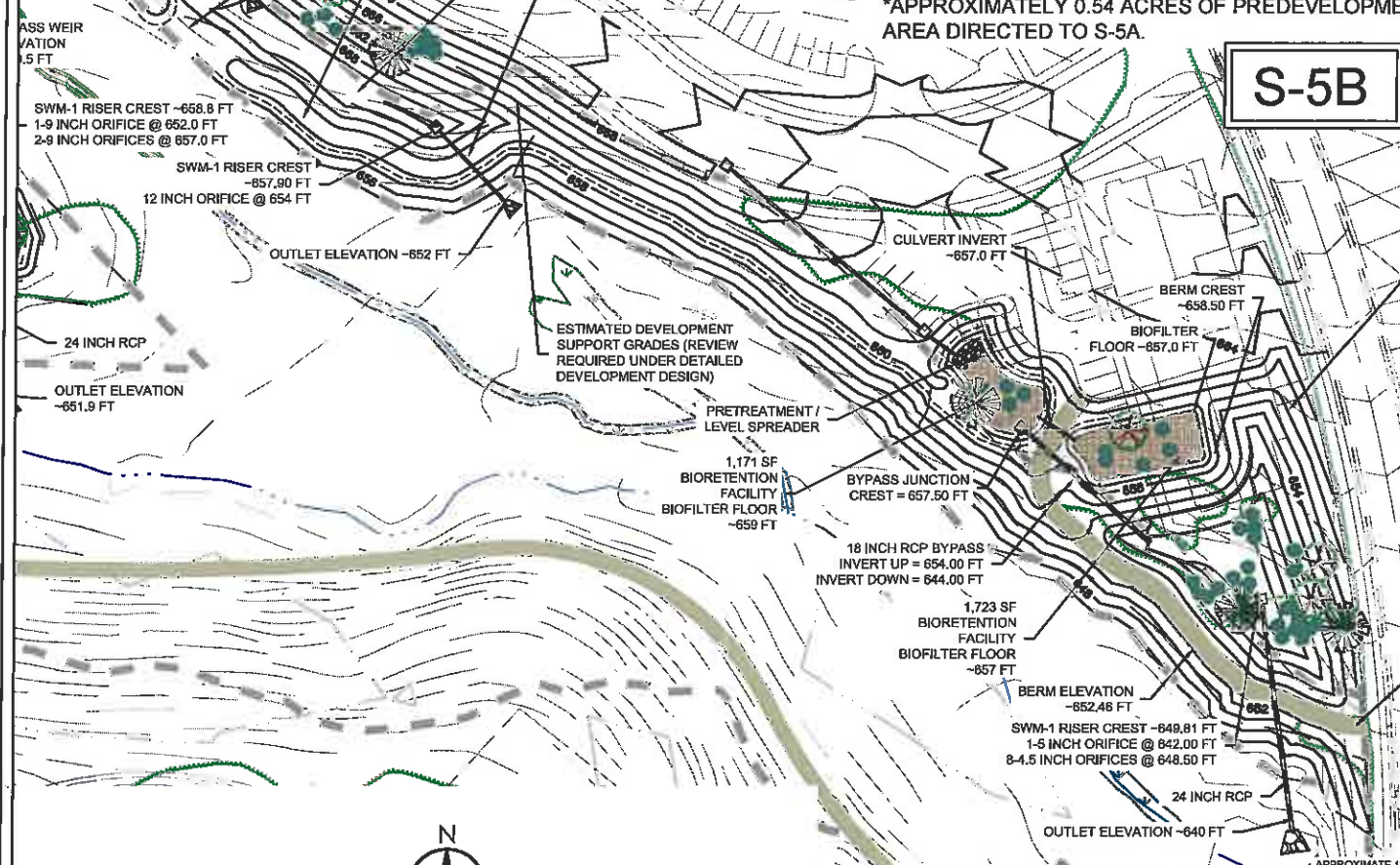
HYDROLOGIC SUMMARY:

	2-YEAR	10-YEAR	100-YEAR
	CFS	CFS	CFS
PRE-DEVELOPMENT	1.66	6.59	19.78
POST-DEVELOPMENT (UNROUTED)	12.01	19.67	33.75
POST-DEVELOPMENT (ROUTED)*	1.63	6.39	27.62

ROUTED PEAK ELEVATIONS:

	2-YEAR	10-YEAR	100-YEAR
	FT	FT	FT
POST-DEVELOPMENT	648.37	649.80	650.46

*APPROXIMATELY 0.54 ACRES OF PREDEVELOPMENT S-5B DRAINAGE AREA DIRECTED TO S-5A.



LEGEND

- PROJECT LIMITS
- EXISTING CONTOURS
- APPROXIMATE LOCATION OF EXISTING STREAM BUFFER
- PROPOSED TRAIL
- PROPOSED GRADES
- PROPOSED BIORETENTION FOOTPRINT
- PROPOSED STORM SEWER NETWORK
- COUNTY CRITICAL SLOPES (2007)

REORIENT PROPOSED DEVELOPMENT (I.E. MOVE OR SACRIFICE BUILDINGS & PARKING FOOTPRINT) SWM TO BE INTEGRATED AT FINAL LANDPLAN

PEDESTRIAN TRAIL/MAINTENANCE ACCESS

NOTE: MAINTENANCE ACCESS (10' MINIMUM) SHALL BE PROVIDED PER ALBEMARLE COUNTY REQUIREMENTS. FACILITIES MAY BE ACCESSED FROM ADJACENT ROADWAY AND ALONG PROPOSED BERM LIMITS.



5209 Center Street
Williamsburg, VA 23188
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FOR:
OLD TRAIL
STORMWATER MANAGEMENT
MASTER PLAN

JOB NUMBER: 203400430
DRAWN BY: AJT

FIGURE:
S-5A & S5-B BIORETENTION
LAYOUTS
18

CHECKED BY: JGM
APPROVED BY: JGM
DATE: 02/05/2016