# POST-DEVELOPMENT

MASTER DESIGN STORM SUMMARY

Network Storm Collection: Loudoun County

| Return Event | Total Depth in | Rainfall Type | | RNF ID |
|---|---|---|---|---|
| Dev 2 | 3.5000 | Synthetic Curve | Typell | 24hr |
| Dev 10 | 5.2500 | Synthetic Curve | Typell | 24hr |
| Dev100 | 7.5000 | Synthetic Curve | Typell | 24hr |

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

| Node ID | Type | Return Event | HYG Vol ac-ft | Trun | Qpeak hrs | Qpeak cfs | Max WSEL ft | Pond ac-ft | Max Storage |
|---|---|---|---|---|---|---|---|---|---|
| AREA A | AREA | 2 | .410 | | 11.9500 | 7.02 | | | |
| AREA A | AREA | 10 | .920 | | 11.9500 | 16.58 | | | |
| AREA A | AREA | 100 | 1.689 | | 11.9500 | 30.48 | | | |
| AREA B | AREA | 2 | .105 | | 11.9500 | 1.85 | | | |
| AREA B | AREA | 10 | .227 | | 11.9500 | 4.10 | | | |
| AREA B | AREA | 100 | .408 | | 11.9000 | 7.37 | | | |
| AREA C | AREA | 2 | .159 | | 11.9500 | 2.85 | | | |
| AREA C | AREA | 10 | .329 | | 11.9500 | 5.94 | | | |
| AREA C | AREA | 100 | .575 | | 11.9000 | 10.41 | | | |
| JUNC | JCT | 2 | .991 | | 11.9500 | 5.40 | | | |
| JUNC | JCT | 10 | 2.156 | | 12.2000 | 11.84 | | | |
| JUNC | JCT | 100 | 3.882 | | 12.0000 | 42.31 | | | |
| OFFSITE | AREA | 2 | .177 | | 12.0000 | 2.01 | | | |
| OFFSITE | AREA | 10 | .565 | | 12.0000 | 9.14 | | | |
| OFFSITE | AREA | 100 | 1.250 | | 11.9500 | 21.96 | | | |

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

| Node ID | Type | Return Event | HYG Vol ac-ft | Trun | Qpeak hrs | Qpeak cfs | Max WSEL ft | Pond ac-ft | Max Storage |
|---|---|---|---|---|---|---|---|---|---|
| ONSITE POND IN | POND | 2 | .729 | | 12.0000 | 9.84 | | | |
| ONSITE POND IN | POND | 10 | 1.601 | | 12.0000 | 22.53 | | | |
| ONSITE POND IN | POND | 100 | 2.900 | | 11.9500 | 41.23 | | | |
| ONSITE POND OUT | POND | 2 | .728 | | 12.7500 | 1.29 | 528.29 | | .384 |
| ONSITE POND OUT | POND | 10 | 1.600 | | 12.2000 | 10.13 | 529.59 | | .629 |
| ONSITE POND OUT | POND | 100 | 2.899 | | 12.1000 | 29.38 | 530.38 | | .812 |
| PURCE VILLAGE | AREA | 2 | .319 | | 12.1000 | 3.90 | | | |
| PURCE VILLAGE | AREA | 10 | .680 | | 12.1000 | 8.71 | | | |
| PURCE VILLAGE | AREA | 100 | 1.211 | | 12.1000 | 15.56 | | | |
| *STUDY PNT | JCT | 2 | 1.168 | | 12.0000 | 7.25 | | | |
| *STUDY PNT | JCT | 10 | 2.721 | | 12.0000 | 20.93 | | | |
| *STUDY PNT | JCT | 100 | 5.132 | | 12.0000 | 63.28 | | | |

TIME OF CONCENTRATION CALCULATOR

Segment #1: Tc: User Defined

Segment #1 Time: .0960 hrs

AREA A Total Tc: .0960 hrs

Segment #1: Tc: User Defined

Segment #1 Time: .0833 hrs

AREA B Total Tc: .0833 hrs

Segment #1: Tc: User Defined

Segment #1 Time: .0833 hrs

AREA C Total Tc: .0833 hrs

Segment #1: Tc: User Defined

Segment #1 Time: .1000 hrs

OFFSITE Total Tc: .1000 hrs

Segment #1: Tc: User Defined

Segment #1 Time: .3300 hrs

VILLAGES OF PURCELLVILLE POND Total Tc: .3300 hrs

RUNOFF CURVE NUMBER DATA

| Soil/Surface Description | CN | acres | Area %C | Impervious Adjustment %UC | Adjusted CN |
|---|---|---|---|---|---|
| | 69 | | 5.360 | | 69.00 |
| COMPOSITE AREA & WEIGHTED CN ---> | | | 5.360 | | 69.00 (69) |

| Soil/Surface Description | CN | acres | Area %C | Impervious Adjustment %UC | Adjusted CN |
|---|---|---|---|---|---|
| | 71 | | 1.180 | | 71.00 |
| COMPOSITE AREA & WEIGHTED CN ---> | | | 1.180 | | 71.00 (71) |

| Soil/Surface Description | CN | acres | Area %C | Impervious Adjustment %UC | Adjusted CN |
|---|---|---|---|---|---|
| | 74 | | 1.340 | | 74.00 |
| COMPOSITE AREA & WEIGHTED CN ---> | | | 1.340 | | 74.00 (74) |

| Soil/Surface Description | CN | acres | Area %C | Impervious Adjustment %UC | Adjusted CN |
|---|---|---|---|---|---|
| | 55 | | 6.130 | | 55.00 |
| COMPOSITE AREA & WEIGHTED CN ---> | | | 6.130 | | 55.00 (55) |

| Soil/Surface Description | CN | acres | Area %C | Impervious Adjustment %UC | Adjusted CN |
|---|---|---|---|---|---|
| | 72 | | 3.410 | | 72.00 |
| COMPOSITE AREA & WEIGHTED CN ---> | | | 3.410 | | 72.00 (72) |


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MECHANICAL/ELECTRICAL:
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Washington, DC 20016
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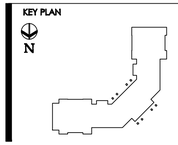
PURCELLVILLE FIRE AND RESCUE

500 NORTH MAPLE AVENUE
PURCELLVILLE, VIRGINIA

SWM COMPUTATIONS POST- DEVELOPMENT

KEY PLAN




REVISIONS:

ISSUES:
09-26-07 BID SET

STAMP AND SEAL:

DATE: 09-26-07
SCALE: AS NOTED
PROJECT NO. 0611
SHEET: C-123