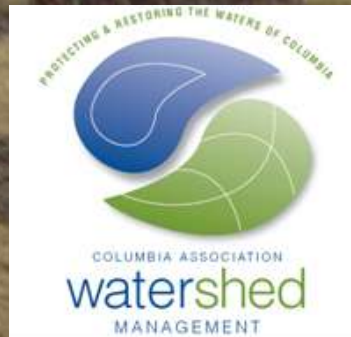




Watershed Management Program Update  
10/27/11

# CA Capital Projects



- ❖ Status CA FY11-FY12 projects
- ❖ Grants from State of Maryland and other sources

<b>Columbia Association</b>				
<b>Watershed Project Status</b>				
<b>FY11 - FY12 Budget</b>				
<b>Project</b>			<b>Budget</b>	<b>Status</b>
<b>Number</b>	<b>Location</b>	<b>Item</b>	<b>Year</b>	
RT4		WL Shoreline - engineering funds	2011	Waiting Survey
RT5		WL Shoreline - construction funds	2011	Waiting Survey
RT6	LE-RRI-002	Watershed retrofit	2011	In Design
RT7	LE-RRI-003	Watershed retrofit	2011	<b>Design Complete</b> Design Build RFP
RT8	LE-RRI-011	Watershed retrofit	2011	in Development
RT9	LE-RRI-012	Watershed retrofit	2011	In Design
RU1	LE-RRI-013	Watershed retrofit	2011	In Design
RU2	LE-RRI-015	Watershed retrofit	2011	State and Federal Permits approved

**Project** **Budget Status**  
**Number Location Item** **Year**  
**Columbia Association**  
**Watershed Project Status**  
**FY11 - FY12 Budget**

<b>Project</b>				<b>Budget</b>	<b>Status</b>
<b>Number</b>	<b>Location</b>	<b>Item</b>	<b>Year</b>		
RU3	LE-RRI-019	Watershed retrofit	2011	State and Federal Permits approved	
RU4	LE-RRI-020	Watershed retrofit	2011	Waiting permits	
RU5	LE-RRI-024	Watershed retrofit	2011	Design finished	
RU6	LE-RRI-026	Watershed retrofit	2011	In Design	
RU7	LE-RRI-504	Watershed retrofit	2011	Projected Construction start 10/11	
RU8	Dockside Lane	Watershed retrofit	2011	Complete	
RV8	LE-RRI-001	off Brush Run Road	2012	In Design	
RV9	LE-RRI-501	behind Celebration Church	2012	In Design	
RW4	LE-RRI-506	off Garland Lane	2012	State and Federal Permits approved	
RW5	LE-RRI-507	off Bugledrum	2012	State and Federal Permits approved	
RW2	LE-RRI-502	Dobbin, behind Playwise Kids	2012	Contract for design in review	
RW3	LE-RRI-503	Dobbin, in front of Playwise Kids	2012	Contract for design in review	

# Status CA FY11-FY12 projects

- ❖ 6 Projects being designed
- ❖ 7 Projects engineering designs finished
- ❖ RU8 is finished
- ❖ RU7 construction start 11/11
- ❖ All completed designs reviewed and approved by Village Boards and affected HOA's.
- ❖ State and Federal permits for four of the five outfall stabilization projects approved.







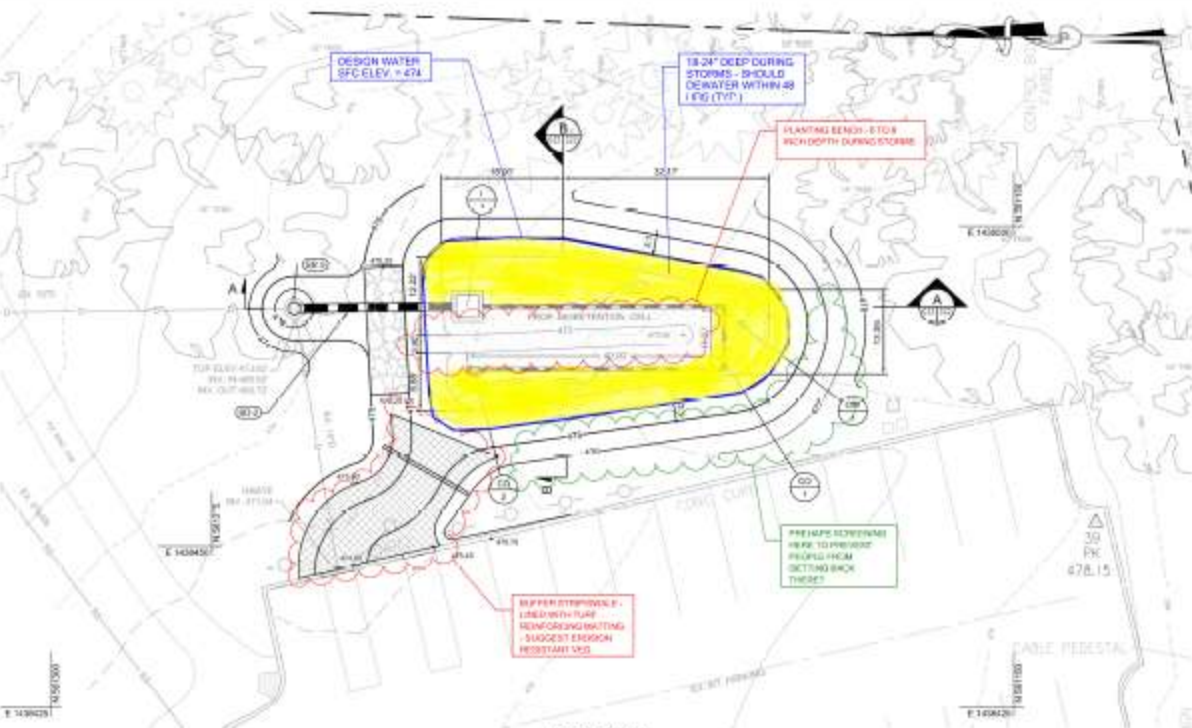
# Grants to CA

Fund Source	Scope of Work	Amount	Available
Chesapeake Bay 2010 Trust Fund, State of Maryland	Continued supplemental funding for watershed retrofits and rain gardens in the Elkhorn Watershed	\$500,000	Awarded
Natural Filters Program, MD DNR	Buffer reforestation in Open Space	\$197,000	Awarded
Natural Filters Program, MD DNR	Bioretention Facility and demonstration rain gardens at Kahler Hall and the Athletic Club	\$110,000	Awarded
Chesapeake Bay Trust	Marketing Survey for Rain Gardens	\$50,000	Awarded

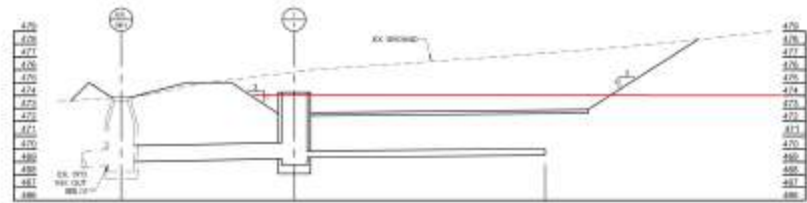
**STORMWATER MANAGEMENT NOTES**

- SD1 NEW 18" RIBBED DUCT ILL. & VIEW
- SD2 NEW 12" RCP TIE
- SD3 NEW 8" RCP TIE

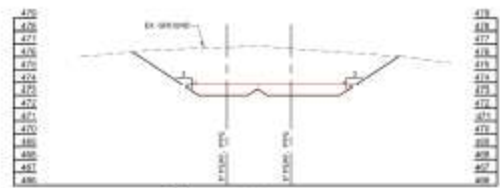
STORMWATER MANAGEMENT SCHEDULE				
NO.	DESCRIPTION	AMT/O	WEIR	COORDINATE
CO-1	6" PVC CLEANOUT, SEE DETAIL THIS SHEET	-	N/A	801784.52 1330478.84
CO-2	6" PVC CLEANOUT, SEE DETAIL THIS SHEET	-	N/A	801234.80 1330477.44
ST	8" RCP 1500' X 12' YARD INLET	-	-	801235.70 1330487.51
OW-1	OBSERVATION WELL, SEE DET. THIS SHEET	-	N/A	801782.30 1330490.52



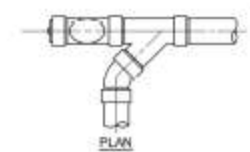
**PART PLAN**  
SCALE 1/4" = 1'-0"



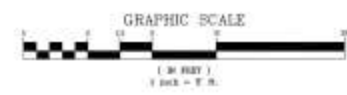
**SECTION A**  
SCALE 3/8" HORIZ. 1" = 10' VERT. 1" = 8'



**SECTION B**  
SCALE 3/8" HORIZ. 1" = 10' VERT. 1" = 8'

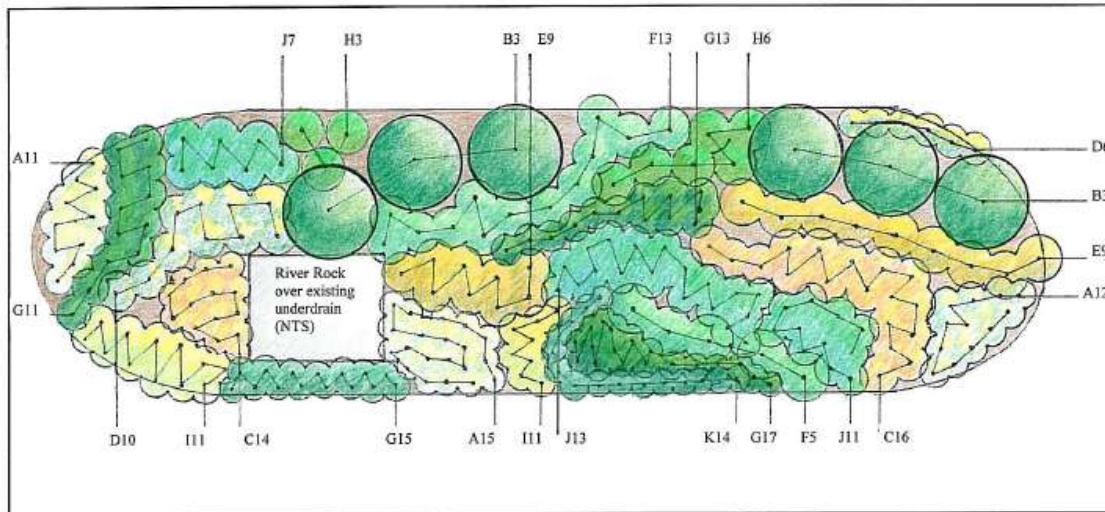


**6" CLEANOUT**  
NOT TO SCALE



PUSH GRADE  
6" PVC RIBBED DUCT ILL. & VIEW  
6" PVC CLEANOUT  
6" RCP TIE  
CONCRETE SIGNAL  
CABLE TELEVISION  
FIBERGLASS FIBER REINFORCED PLASTIC  
PRE-CAST SCREENING  
EX. GRIND  
PROG. SENSITIVE CELL  
SUPER STRENGTH FIBERGLASS FIBER REINFORCED PLASTIC

NO.	DATE	DESCRIPTION



Key	Latin Name	Common Name	Quantity	Size	Bloom Time	Color	Height
A	<i>Oenothera fruticosa</i>	Narrow leaf sundrops	36	1 gal	May-Sept	Yellow	1-3'
B	<i>Hamelia virginiana</i> OR <i>Cornus sericea</i>	Witchhazel OR Yellow Twigged Dogwood	6	3 gal	Winter	Yellow	4-5'
C	<i>Rudbeckia fulgida</i>	Black eyed Susan	30	1 gal	July-Sept	Yellow	1-3'
D	<i>Coreopsis verticillata</i>	Tickseed	16	1 gal	June-Fall	Yellow	1-2'
E	<i>Solidago rugosa</i> 'fireworks'	Goldenrod	18	1 gal	Fall	Yellow	3-4'
F	<i>Juncus effusus</i>	Soft rush	18	1 gal		Green	3'
G	<i>Carex stricta</i>	Tussock sedge	39	1 gal		Green	1-2'
H	<i>Panicum virgatum</i>	Switch grass	9	1 gal		Green	3-6'
I	<i>Heemerocallis</i> 'happy returns'	Day Lilly, Dwarf	22	1 gal	June-Oct	Yellow	1'
J	<i>Echinacea</i> 'envy green'	Coneflower	31	1 gal	July-August	Green	1-3'
K	<i>Heuchera</i> 'green and gold'	Green and gold	14	1 gal	June-Winter	Green/ Gold	1'
L	<i>Naturalizing Daffodil</i>	Daffodil	400	Bulbs	April	Yellow	1.5'

Wilde Lake High School  
 Raingarden/Conservation  
 Landscape Design,  
 Plant Plan  
 1/4"=1'  
 Approx 300 Sq Ft



**Natural Filters grant provides funds for the conversion of 26 acres of mowed open space areas to forest, planting will occur during the fall of 2011 and spring of 2012**

# Residential Participation Projects



❖ Rain Gardens



# Residential Rain Gardens

## Slow the Flow

RFP for a landscape firm to install rain gardens has been released





**Green**



**To Clean**