Fort Ward Park

Interim Drainage Design Solutions

T&ES

May 26, 2011

Meeting Objective

- To discuss the interim drainage design in order to address drainage problems in and around Ft. Ward Park and Marlboro Estates

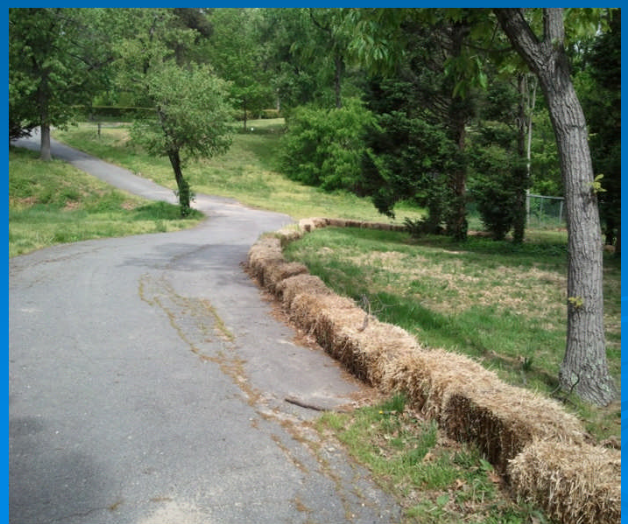
Short Term Issues:

- Erosion/Flooding/Drainage – Oakland Baptist Church Cemetery
- Flooding / Drainage – Marlboro Estates

Short Term Issues: Aerial View

What has been done

- Debris Removal From the Drainage Paths within Ft. Ward Park after rain events
- "No Mow" designated areas within the park (Natural habitat restoration)
- Straw Application to reduce erosion and velocity

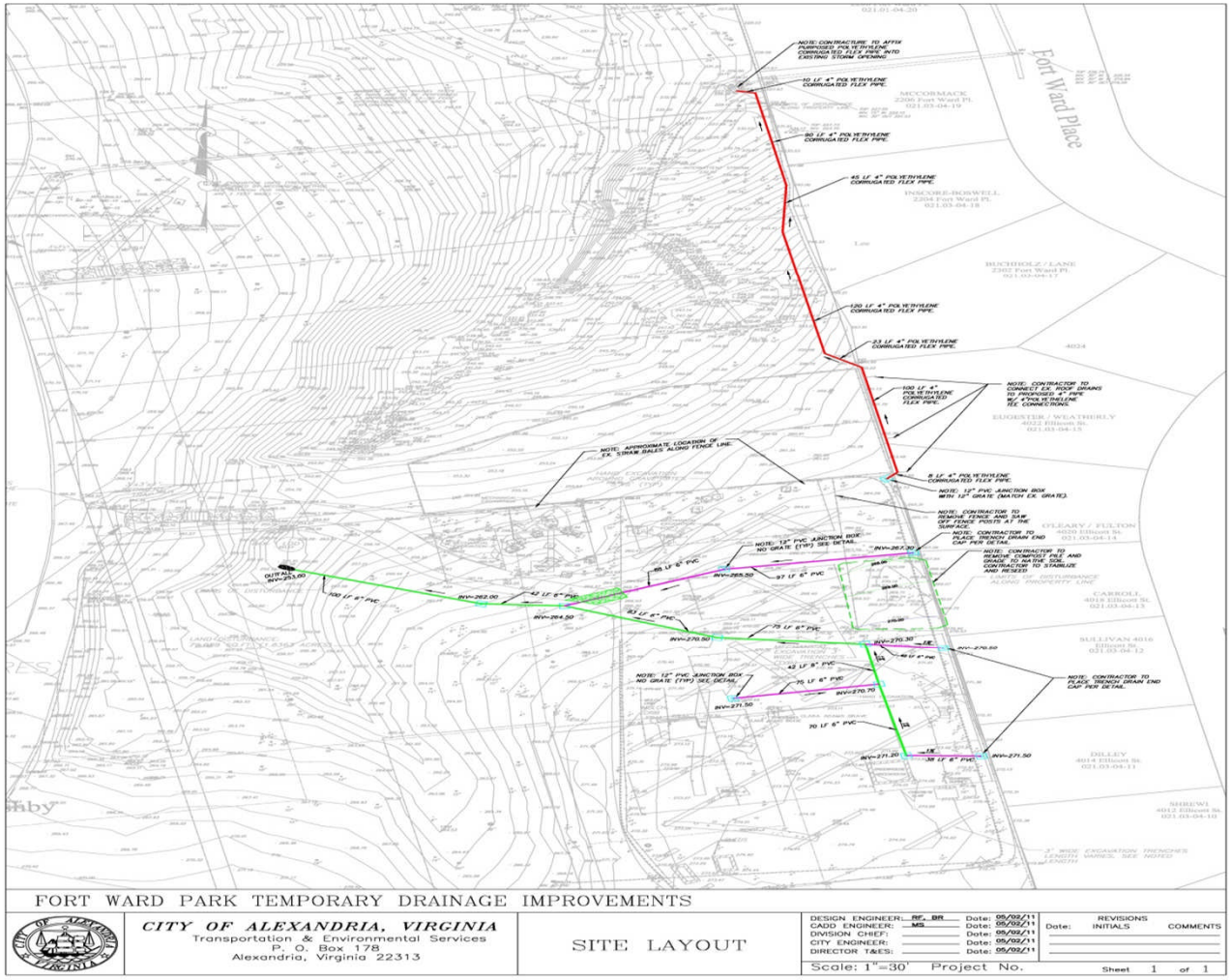


Interim Solutions

Short Term:

1. Installation of storm structures and drainage pipes, as shown in the preliminary plan
2. Perimeter diversion with sandbags in vicinity of cemetery, if needed
3. Funding for long term storm water study

Project Design in Plan View



Potential Solutions

Long Term:

1. Increase capacity of ditches and re-vegetate to mitigate erosion
2. Install additional drainage structures for stormwater relief
3. Construct stormwater vault or other stormwater detention facility

Suggestions For Private Property Owners

1. Connect down spouts and sump pumps to proposed storm pipes
2. Remove obstructions, blockages, and debris from Natural Drainage Course
3. Obtain positive drainage if necessary with slight regrading of rear and/or side yards
4. Re-vegetate with plants that are conducive to wet environments
5. Implement Low Impact Development (LID) practices by installing either a rain barrel, cistern, or other rainwater catchment system

Next Steps

1. Propose a collective Best Management Practice Plan to address the long term potential solutions
2. Continue coordinating with Office of Historic Alexandria (OHA) and RPCA given the high probability of shallow graves within Ft. Ward Park
3. Consult with a floodplain and hydrologic consultant to begin an overall stormwater management study for Ft. Ward Park watershed and adjacent drainage area
4. Work with community group to be established

Schedule

- Project scheduled to begin late Summer/early Fall of 2011, beginning with shovel test Archaeology verifications
- Duration of shovel tests 1 to 2 weeks.
- Duration of interim drainage improvement construction 1 to 2 weeks.
- All construction activities are weather permitting.
- Shovel test excavations by specialty Archaeology Contractor. All other improvements performed by City staff.

THANK YOU!

QUESTIONS