Stormwater Task Force
Public Forum: Status Update

7.09.22

Agenda

Time	Topic	Presenter
10:00 – 10:15	Welcome & Taskforce Overview	Taskforce Chair
10:15 – 10:30	Annual Stormwater Work Summary Stormwater Financial Expenses & Grants	Boro Staff
10:30 – 11:00	Long Term Projects Overview & Status - Oblock - Center Beach	KU Resources
~~11:00 – 11:30~~	~~Stream Smarts~~	Penn State Extension
11:30 – 12:00	Public Comment/Question & Answer Forum	Participants
12:00	Meeting Adjournment	
	Stream Smarts Onsite Demo (Location: TBD)	

Stormwater Task Force Overview (Dave Odom)

Background

In 2019, our community was affected by disastrous flooding on July 21st and 22nd. Rainstorms reportedly contributed to an average of 3 inches of water.

In many places the water rose quickly, resulting in road closures and multiple vehicles submerged underwater.

Numerous properties (both business and residential) in Plum sustained damage.

Purpose

This report is designed to serve as a vehicle to inform citizens on what actions the task force has taken over the last year to include:

- Accomplishments that have been made
- Initiatives that are in progress
- What is being planned for the future

Stormwater Task Force Goals (1)

1. Establish a charter that defines the mission and objectives/goals of the task force committee.
2. Review history of the Borough's development and the existing/non-existing stormwater management systems to include the results of the 2010 study on stormwater issues in the Borough.
3. Review the Boro's current processes, procedures and planning for stormwater management.
4. Review the Boro's current sources of funds that can be used for stormwater management projects, and potential sources of additional funds.

Stormwater Task Force Goals (2)

5. Review/identify the locations of the most recent flooding area and categorize whether these are known problem areas or new issues.
6. Determine root cause of flooding in each area, including whether there may be new causes or contributors to known problem areas.
7. Define scope of the Boro's responsibility as compared to Homeowners, County and State.
8. Determine potential solutions/mitigations for each of the affected areas.

Stormwater Task Force Goals (3)

9. Prioritize which solutions can be implemented based on: technical feasibility, implementation time, costs/available funding, and the nature and scope of the solution.
10. Implement an educational program that provides residents with information basic stormwater concepts and best practices for stormwater mitigation.
11. Set realistic timelines for implementation/completion of any solutions in line with anticipated manpower, regulatory and funding realities.
12. Recommend solutions to the Borough Council for their consideration to implement.
13. Communicate progress and results to the public through a report at the monthly Council voting meeting.

Committee Members and Formation

- 3 Council Members
- 1 Plum Borough Streets and Roads Supervisor
- 1 Plum Borough Staff Member (Planning/Assist Manager/Manager or designate)
- 1 Plum Borough Engineer
- 5 At-Large Plum Borough Residents

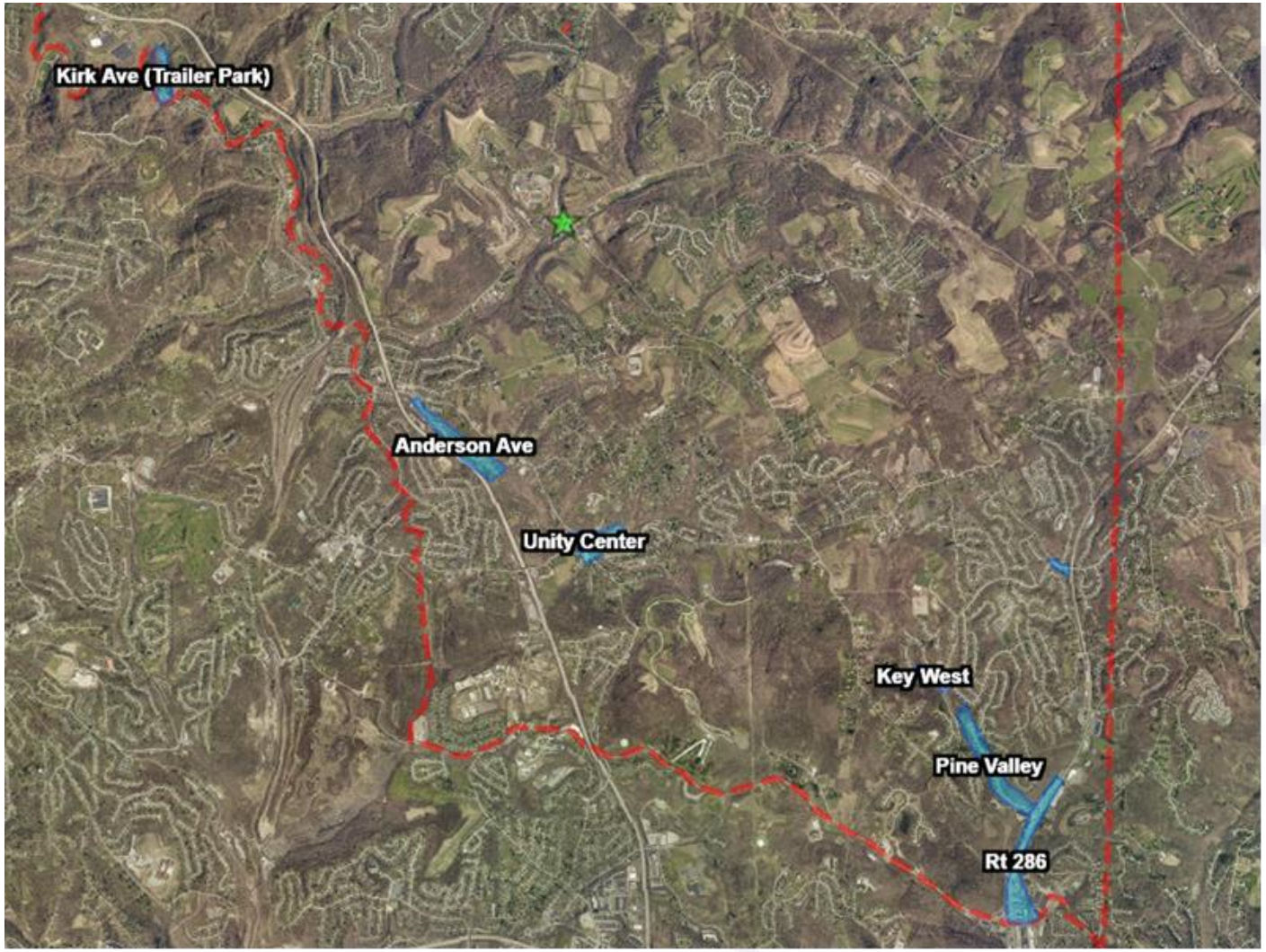
Task Force Committee Members

Name	Role
Paul Dern	Councilman
Dave Seitz	Councilman
Dave Vento	Councilman
Mike Thomas	Borough Manager
Dave Soboslay	Asst. Borough Manager
Bill Bonura	Municipal/Water Authority
Mike Diguilio	Municipal/Water Authority

Name	Role
Bill Chapla	Borough Resident
Terry Siefers	Borough Resident
Ron Costa	Borough Resident
<Vacant>	Borough Resident
Bob Mitall	Borough Engineer
Tysen Miller	KU Resources
Charles Prokopik	KU Resources

Map of Impacted Areas

More than 250 Homes & Businesses	
Kirk Drive	30 Homes
Anderson Ave	10 Homes
Unity Center	10 Businesses
Key West	10 Homes
Pine Valley	65 Homes
Holiday Park Drive	10 Homes
Route 286	30 Businesses
Additional Areas	
Chapparal Dr	
Leroy St	
Short St	
Harborview Dr	
Nassau Dr	
Leechburg Rd	
New Texas Rd	



Annual Stormwater Work Summary
+
Financial Expenses and Grants

Annual Storm Water Work Summary

Storm Water Expenses as a percentage of total spending for all Boro Services

Service	5-Year Avg.	% of Total EX	2022	2021	2020	2019	2018
Police	$ 5,333,523	35.8%	$ 5,789,219	$ 5,725,499	$ 5,185,058	$ 5,179,908	$ 4,787,931
Storm Water	**$ 2,154,281**	**14.5%**	**$ 1,454,220**	**$ 4,298,405**	**$ 932,105**	**$ 3,069,160**	**$ 1,017,514**
Sanitation	$ 2,092,819	14.1%	$ 2,067,871	$ 2,122,767	$ 2,133,400	$ 2,108,103	$ 2,031,952
Public Works	$ 1,659,999	11.1%	$ 1,749,746	$ 1,621,243	$ 1,749,977	$ 1,662,321	$ 1,516,710
Road Resurfacing	$ 1,086,474	7.3%	$ 1,005,000	$ 900,000	$ 1,553,444	$ 889,756	$ 1,084,171
Administration	$ 1,266,971	8.5%	$ 1,278,326	$ 1,254,160	$ 1,307,615	$ 1,253,095	$ 1,241,660
Fire Safety Services	$ 704,090	4.7%	$ 683,749	$ 695,906	$ 716,722	$ 741,441	$ 682,634
Community Development	$ 593,034	4.0%	$ 661,282	$ 619,944	$ 613,797	$ 545,733	$ 524,412
Total Spending	**$ 14,891,191**						

Storm Water Projects 10-yr. avg.	**$ 1,622,814**

Annual Storm Water Work Summary

Sources of Storm Water Expenses since 2010

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
General Fund	$ 650,000	$ 632,000	$ 560,000	$ 548,000	$ 548,000								
Street Improvement Fund	$ 130,679	$ 136,887	$ 144,152	$ 372,908	$ 130,447	$ 304,626	$ 330,000	$ 82,102	$ -	$ -	$ 55,000	$ 30,000	
Flood Mitigation Fund						$ 740,717	$ 628,855	$ 647,283	$ 804,964	$ 850,760	$652,699	$ 935,293	$ 717,302
Capital Projects								$ 148,800	$ -				
Debt-funded projects*	$ 2,000,000									$2,000,000		$3,102,535	$ 500,000
Equipment & Maintenance**	$ 165,750	$ 171,600	$ 177,450	$ 183,300	$ 189,150	$ 195,000	$ 200,850	$ 206,700	$ 212,550	$ 218,400	$224,406	$ 230,577	$ 236,918
Total	$ 2,946,429	$ 940,487	$ 881,602	$1,104,208	$ 867,597	$1,240,343	$ 1,159,705	$1,084,885	$1,017,514	$3,069,160	$932,105	$4,298,405	$ 1,454,220
											Total		**$ 20,996,660.20**

*In 2010 the Boro borrowed $2,000,000 for storm water projects

**30% of avg annual equipment costs & 15% of maintenance costs

Grants

Grant Dollars for Storm Water 2020-2022

Project	Date	Award*
Oakmont East	2020	$200,000.00
Holiday Park Phase 1	2020	$100,000.00
Holiday Park Phase 2	2021	$150,000.00
Holiday Park Phase 3	*2022*	*$150,000.00*
O'Block Pond Expansion	*2022*	*$403,523.00*
Center Beach	2022	$100,000.00

*Projects in italics have not been awarded as of this date

Plum Boro Stormwater Management Long Term Projects Status Update (KU Resources)

Project Review List

- Miscellaneous Projects
- Long Term Stormwater Projects
- Future Stormwater Projects

Miscellaneous Projects

- Malabar Culvert – Paving Next week!
- Holiday Park Phases 2-3 (Phase 2 complete)
- Center New Texas (Repair completed this winter)
- Barnes Road Landslide
- Inlet Maintenance/Repair
- Stormwater Upgrades

Long Term Stormwater Projects

- O'Block Road
  - Existing Pond Retrofit
  - Conservation District / PADEP Permitting
- Center-Beach
  - Flood Control Impoundment, Passive Recreation
  - Conservation District / PADEP Permitting

Methodology

- Estimate Land Cover Conditions from Available GIS Data
  - Property lines, contours, aerial images, roads, buildings, forest
- Rainfall data for Peak Volumes
  - 99th Percentile Storm – 2.1”
  - 90th Percentile Storm – 1”
  - 80th Percentile Storm – 0.7”
- “Streamstats" for Peak Flow estimation

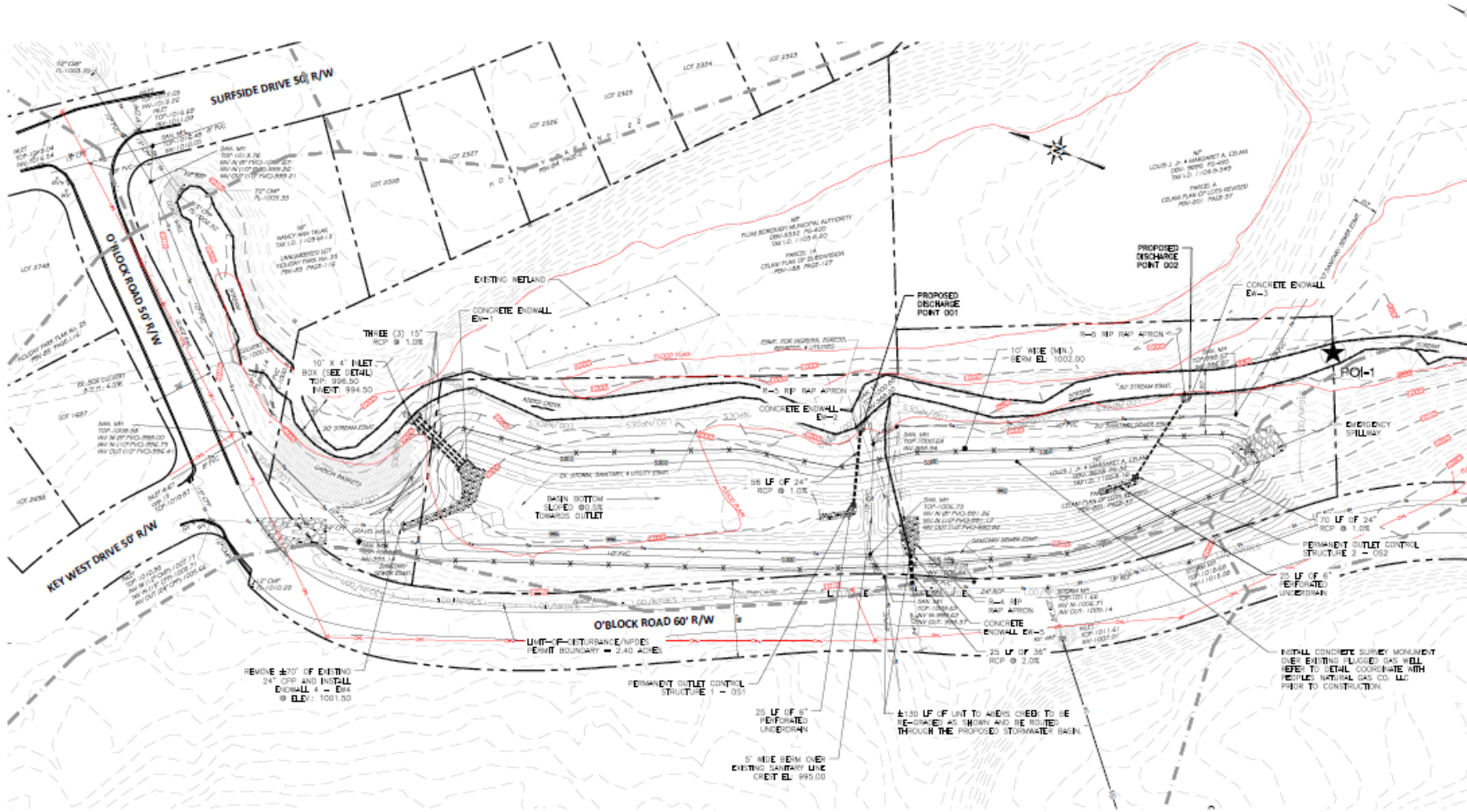
O’Block Road

- Drainage Area = 1.4 mi^2 (896 Ac.)
- 80th Percentile Storm = 151,000 CF
- 90th Percentile Storm = 260,000 CF
- 99th Percentile Storm = 1,782,000 CF

- Property acquisition in negitiation

PERMIT STATUS:

- NPDES Permit:
  - Technical review complete
- Joint Permit:
  - Under technical review. Stream Mitigation under design



LEGEND

EXISTING UTILITY POLE	
EXISTING GUY WIRE	
EXISTING SANITARY SEWER	
EXISTING SANITARY MANHOLE	
EXISTING STORM SEWER	
EXISTING STORM MANHOLE	
EXISTING STORM INLETS	
EXISTING WATERLINE	
EXISTING HYDRANT	
EXISTING GASLINE	
EXISTING UNDERGROUND ELECTRIC	
EXISTING OVERHEAD LINES	
EXISTING SIGN	
EXISTING PROPERTY LINE	
EASEMENT	
EXISTING 2' CONTOUR	
EXISTING 10' CONTOUR	
EXISTING FENCE LINE	
EXISTING GUIDERAIL	
EXISTING ASPHALT/CONC PAVING	Asphalt <or> Concrete
EXISTING GRAVEL PAVING	Gravel
STREET NAMES (EXISTING)	STREET NAME
SMALL DETAILS (EXISTING)	Ex. Conc. Mon.
PA DOT INFORMATION	
EXISTING WATERCOURSE	STREAM
PROPOSED STORM SEWER	
PROPOSED STORM MANHOLE	
PROPOSED STORM INLETS	
PROPOSED 2' CONTOUR	
PROPOSED 10' CONTOUR	
PROPOSED LIMIT-OF-DISTURBANCE / NPDES PERMIT BOUNDARY	LOD/NPDES
PROPOSED COMPOST FILTER SOCK	CFS-18"
POINT-OF-INTEREST (POI)	

SCALE 1" = 40' FEET

0 40 80 120

PCSM PLAN
For
O'Block Road
Made For
PLUM BOROUGH
Situated In
PLUM BOROUGH
COUNTY OF ALLEGHENY PENNSYLVANIA

SCALE	1"=40'
DRAWN	JTD
CHECKED	TOM
FILE	20363-XREF
DATE	12/30/2020
PROJECT No.	20-363
SHEET	

REVISIONS:

APR. 2021 - PER DEPOSITED COMMENTS

JUNE 2021 - PER ACCD COMMENTS

Mitall Division of KU Resources, Inc.
117 Sagamore Hill Road Pittsburgh, PA 15239
Tel: (724) 327-7474 FAX: (724) 325-2734

SHEET
501

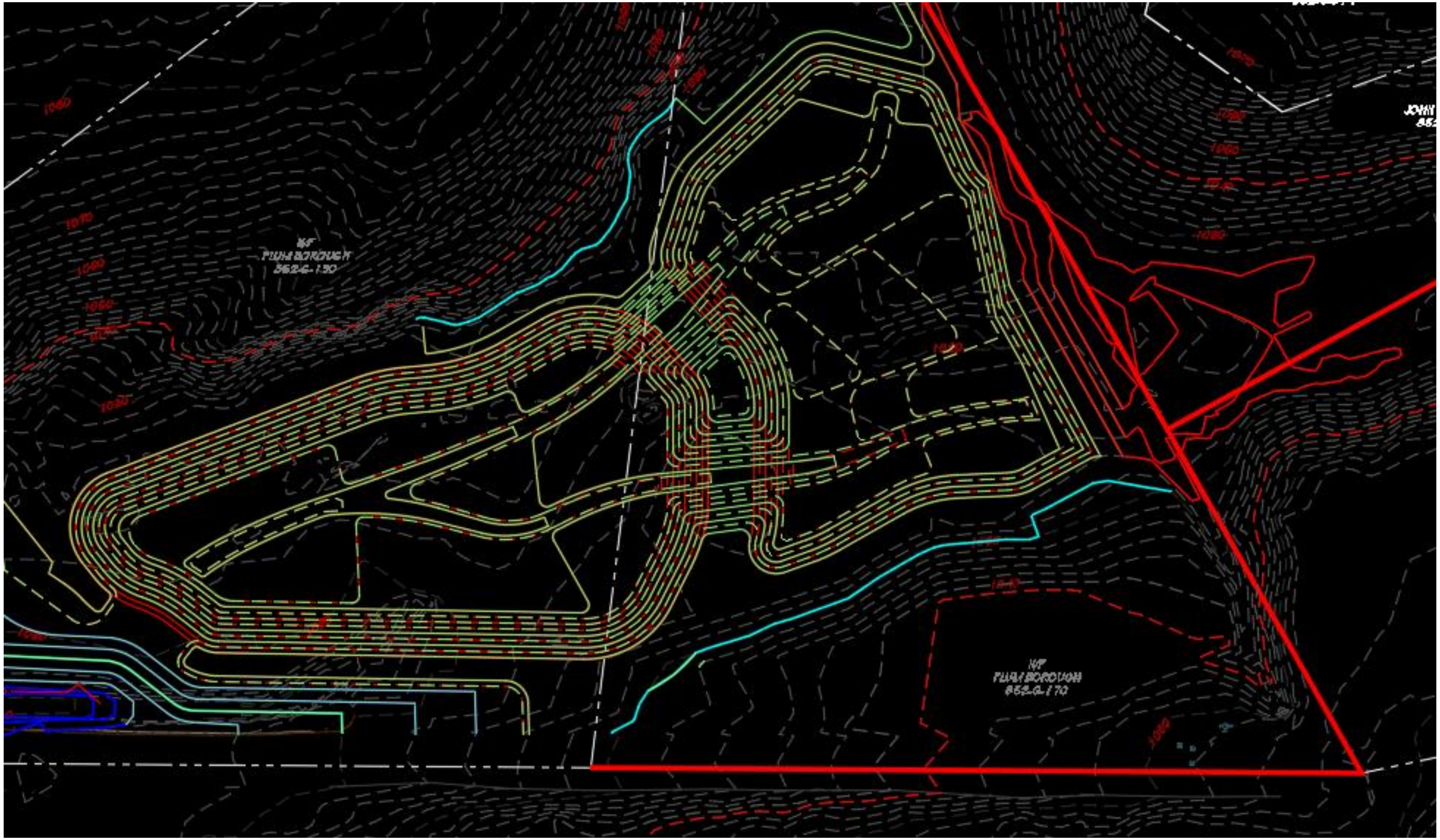
Center Beach

- Drainage Area = 0.7 mi^2

- Property acquired

PERMITS REQUIRED:

- NPDES Permit
- Joint Permit
- Dam Permit
  - This permit requires that flowage easements be obtained for each property that's inundated during rainfall events.



Future Stormwater Projects

- Anderson Ave
  - Flood Control Weirs
  - Turnpike Culvert Repairs
- College Ave
  - Stormwater Detention Pond

Public Comment
Question & Answer Forum

Summary

The Stormwater task force will continue to focus on pursuing proactive measures that improve the overall conditions in that effectively mitigate the risk of flooding in the Boro. We welcome input from the community. You can contact the taskforce via email:

plumstormwatertaskforce@plumboro.com

Thank You for Attending!

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