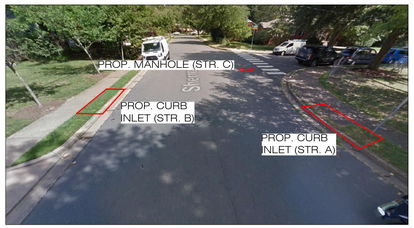


LOOKING SOUTHEAST ALONG SHERROW AVENUE TOWARD THE LOCATIONS OF TWO PROPOSED CURB INLETS (IMAGE FROM GOOGLE STREET VIEW, JULY 2017)

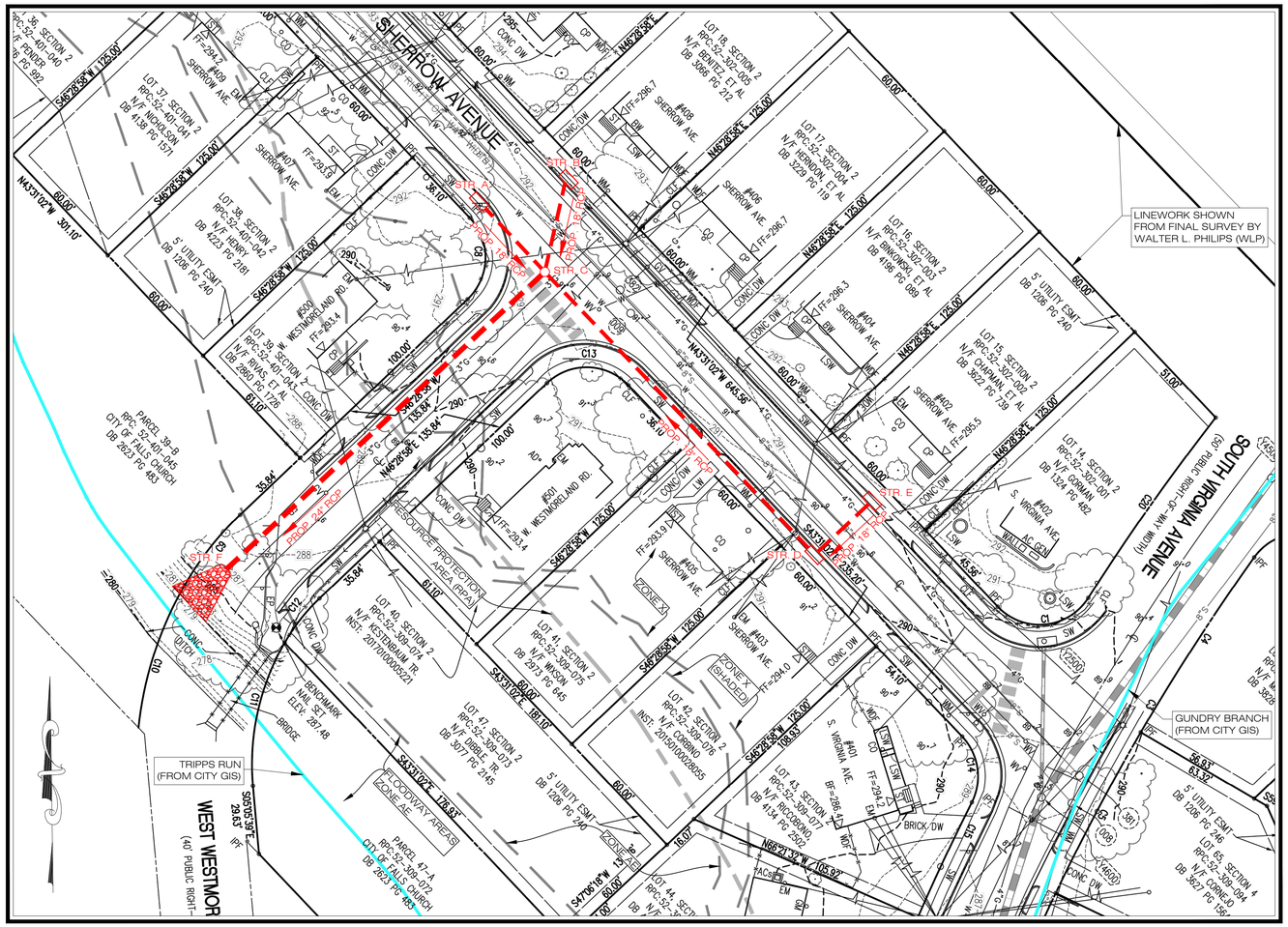
LOOKING NORTHWEST ALONG SHERROW AVENUE TOWARD THE LOCATIONS OF TWO PROPOSED CURB INLETS (IMAGE FROM GOOGLE STREET VIEW, JULY 2017)

LOOKING SOUTHWEST FROM SHERROW AVENUE TOWARD W. WESTMORELAND ROAD AND THE PROPOSED MANHOLE JUNCTION (IMAGE FROM GOOGLE STREET VIEW, JULY 2017)

LOOKING SOUTHWEST ALONG W. WESTMORELAND ROAD TOWARD THE PROPOSED LOCATION OF THE NEW OUTFALL INTO TRIPPS RUN (IMAGE FROM GOOGLE STREET VIEW, JULY 2014)

2/3 EXISTING CONDITIONS PHOTOS

NOT TO SCALE



1/3 SHERROW AVENUE PROJECT CONCEPTUAL LAYOUT

1" = 30'

GRAPHIC SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30 ft.

CONCEPTUAL PLAN NARRATIVE

THE GOAL OF THIS PROJECT IS TO ANALYZE THE AREA OF SIGNIFICANT FLOODING OCCURRING ON PROPERTIES 401 SHERROW AVENUE AND 406 AND 408 S. VIRGINIA AVENUE IN THE CITY OF FALLS CHURCH. THE STORM SEWER NETWORK IN THE SUBJECT PROBLEM AREA WILL BE MODELED TO DETERMINE THEIR CAPACITY DURING A 10-YEAR STORM EVENT.

THIS CONCEPTUAL PLAN CONSIDERS NEW STORM SEWER PIPES AND CURB INLETS ALONG SHERROW AVENUE TO PREVENT RUNOFF FROM FLOWING ALL THE WAY TO SOUTH VIRGINIA AVENUE, AND DAYLIGHTING THAT SYSTEM INTO TRIPPS RUN THROUGH WEST WESTMORELAND ROAD.

THE NEW STORM SYSTEM WILL BE DESIGNED TO CONVEY THE 10-YEAR DESIGN STORM AND IT WILL NOT BE INCLUDED IN THE XPSWMM MODEL.

CONCEPTUAL PLAN LEGEND

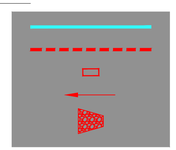
STREAM CENTERLINE

PROPOSED STORM SEWER PIPE

PROPOSED CURB INLET

DIRECTIONAL ARROW

PROPOSED RIPRAP



ALL INFORMATION HEREON, INCLUDING THE PLAN AND COST ESTIMATE, IS IN DRAFT FORM AT A CONCEPTUAL LEVEL OF DESIGN, PRODUCED AS AN INTERIM PRODUCT. INFORMATION WILL CHANGE AS SUBSEQUENT LEVELS OF DESIGN ARE COMPLETED.

CONCEPTUAL PLAN CONSTRAINTS

No.	Constraint	Cost	Schedule	Constructability	Comments
1	A portion of the proposed storm sewer system is in a Resource Protection Area (RPA)			●	Limits of disturbance will need to be restricted to the minimum area required for installation of improvements.
2	A portion of the downstream proposed storm sewer pipe is in the existing 100-year floodplain.			●	Limits of disturbance will need to be restricted to the minimum area required for installation of improvements.
3	Sanitary sewer, water, and gas lines exist along Sherrow Avenue that could impact potential installation of the storm sewer pipes and curb inlets located underneath and along the street.	●		●	Proposed pipe horizontal and vertical alignment will be located to minimimize conflicts with existing utilities; however, care must be taken in construction to protect existing pipe and avoid damage during excavation. If utilities are found to be in conflict, they may be relocated.
4	Overhead utility wires and a gas line exist along W. Westmoreland Road that could impact potential installation of the storm sewer pipe underneath the street.	●		●	Proposed pipe horizontal and vertical alignment will be located to minimimize conflicts with existing utilities; however, care must be taken in construction to protect existing pipe and avoid damage during excavation. If utilities are found to be in conflict, they may be relocated.
5	Once a full hydrologic and hydraulic analysis of the existing conditions has been completed, the results will determine feasibility of the project and the proposed design shown may be altered (i.e., lesser number of proposed curb inlets and length of storm sewer pipe).				To be determined.

Legend

●	Minimal Impact
●	Moderate Impact
●	Significant Impact

Project: City of Falls Curch Watershed Master Plan: Sherrow Avenue Project
Design Assumptions: New Curb Inlets and Pipes Along Sherrow Avenue to Outfall in Tripps Run
Estimate Type: Conceptual Construction Cost Estimate
Prepared by: GKY & Associates, Inc.
Date: January 21, 2020

#	ITEM	QUANTITY	UNIT	UNIT COST	COST
1	**EROSION & SEDIMENT CONTROL**				
2	Erosion and Sediment Controls	1	LS	$50,000 / LS	$50,000
3				**EROSION & SEDIMENT CONTROL SUB TOTAL:**	**$50,000**
4	**PROPOSED IMPROVEMENTS**				
5	18" RCP CL III Pipe	350	LF	$350 / LF	$122,500
6	24" RCP CL III Pipe	250	LF	$400 / LF	$100,000
7	ES-1 Flared End for 24" Pipe	1	EA	$8,000 / EA	$8,000
8	DI-2 Curb Drop Inlet for 12"-24" Pipe	4	EA	$25,000 / EA	$100,000
9	MH-1 Manhole for 12"-48" Pipe	1	EA	$20,000 / EA	$20,000
10	Class I Riprap at Outfall	40	SY	$200 / SY	$8,000
11	Pavement Restoration	1	LS	$150,000 / LS	$150,000
12				**PROPOSED IMPROVEMENTS SUB TOTAL:**	**$386,000**
13	**MISCELLANEOUS**				
14	Mobilization	1	EA	$25,000 / EA	$25,000
15	Maintenance of Traffic	1	LS	$40,000 / LS	$40,000
16	Utility Coordination and/or Relocation	1	LS	$90,000 / LS	$90,000
17	Construction Design, Survey, and Stakeout	1	LS	$75,000 / LS	$75,000
18				**MISCELLANEOUS SUB TOTAL:**	**$230,000**
19					
20				**PROJECT SUB TOTAL:**	**$666,000**
21				**CONTINGENCY (45% of PROJECT SUB TOTAL):**	**$299,700**
22				**PROJECT TOTAL:**	**$965,700**

3/3 SHERROW AVENUE PROJECT CONCEPTUAL COST ESTIMATE

GKY & Associates, inc.

GKY & ASSOCIATES, INC.
4229 LAFAYETTE CENTER DRIVE
SUITE 1850
CHANTILLY, VIRGINIA 20151
PHONE (703) 870-7000
FAX (703) 870-7039
www.gky.com

SHERROW AVENUE PROJECT
CONCEPTUAL PLAN

WATERSHED MANAGEMENT PLAN PROJECTS
CITY OF FALLS CHURCH, VIRGINIA

NOT FOR CONSTRUCTION

DATE	DESCRIPTION
.	.

H SCALE: 1" = 30'
H DATUM: NAD83
V SCALE: N/A
V DATUM: NGVD29

DESIGNED: SM/CA
DRAFTED: SM/AJ
CHECKED: BK

PROJECT#: 2016-006
CONTRACT#: TO#30

SHEET: 3 OF 9