



MEMORANDUM

TO: Lake County Stormwater Management Commission

FROM: Sharon Østerby, Water Resource Professional
Mike Warner, Executive Director

DATE: May 17, 2019

RE: Stormwater Infrastructure Repair Fund (SIRF)
Lake Villa Township – Academy and Columbia Bay Drive Drainage Improvements

ACTION REQUESTED: APPROVAL OF AMENDED AGREEMENT AND AWARD OF \$50,000

SMC staff recommends approval of the Amended FY17 SIRF Agreement for the Lake Villa Township's Academy Drive and Columbia Bay Drive Drainage Improvements Project. The project includes the permitting and construction of a storm sewer outlet and detention basin to reduce structural damage and flooding within and adjacent to a flood-prone area.

Consistent with SIRF program objectives, the project will benefit multiple jurisdictions, provide beneficial results during flood events up to and to include the 10-year storm event, and alleviate flood damages. A total of eighteen properties will benefit from the proposed improvements, which will reduce flood elevations to a level below that which cause nuisance flooding and flood-related structural damages during events up to and including the 10-year storm event. Finally, the project includes a public education and outreach component to educate residents on phosphorus reduction efforts through newsletters and information available on the township website.

The original estimated project cost was \$875,000; however, the scope of work has been modified. The new estimated project cost is now \$272,000, of which \$222,000 will be the Township's share. The Township is requesting \$50,000 of FY2017 SIRF funds.

This project previously received Eligibility Authorization at the January 2018 SMC meeting.

Attached is the Agreement for the project. If you should have any questions about this project, please feel free to contact Sharon Østerby at 847-377-7706 or sosterby@lakecountyil.gov

AMENDMENT
to
INTERGOVERNMENTAL PROJECT AGREEMENT
between the
LAKE COUNTY STORMWATER MANAGEMENT COMMISSION
and the
Lake Villa Township
for
West Columbia Bay and Academy Drive Drainage Improvements

THIS IS AN AGREEMENT by and between the LAKE COUNTY STORMWATER MANAGEMENT COMMISSION, 500 W. Winchester Road, Libertyville, Illinois 60048 (hereinafter called the SMC) and the LAKE VILLA TOWNSHIP, 37908 North Fairfield Road Lake Villa, IL 60046 (hereinafter called the TOWNSHIP).

PROJECT DESCRIPTION

This project is considered phase one of two phases and involves work at Academy Drive and W. Columbia Bay Drive in Lake Villa Township. The phase two project would be accomplished at a later date, when funding becomes available. The phase one project includes construction of the following improvements:

- 1) Removal of 15" pipe along the northern property line of 38104 N. Academy Drive.
- 2) Construction of 15" storm sewer outlet pipe on W. Columbia Bay Drive.
- 3) Construction of a 30" storm sewer pipe crossing on N. Academy Drive.
- 4) Construction of detention basin at 38104 N. Academy Drive and 25253 W. Columbia Bay Drive

The project also includes a public education and outreach effort. The TOWNSHIP will include educational information on their website about phosphorus reduction efforts such as decreasing the amount of fertilizer applied to lawns, using phosphorus-free fertilizers, and encouraging the establishment of buffer strips along lake shores, stream banks and wetland areas.

The construction of the detention basin and storm sewers at N. Academy and N. Columbia Bay Drive will reduce annual flooding from storm events resulting in damage to approximately 20 residences, three township roadways and nuisance flooding to other residents in the area. This work is hereinafter called the PROJECT.

SCOPE OF WORK

1. The scope of work and the deliverables for the PROJECT are described above and attached as Columbia Bay Project Phase 1. The TOWNSHIP will act as project manager overseeing the design and completion of the PROJECT.
2. The TOWNSHIP will, at the PROJECT outset, provide SMC with a detailed work plan for the PROJECT describing the tasks to be completed and a detailed PROJECT schedule.

3. The TOWNSHIP shall obtain all land rights necessary to complete the PROJECT, and to maintain the constructed drainage improvements thereafter.
4. Work within public road rights-of-way shall not be performed without appropriate permits or authorization from the jurisdictional road authority.
5. The TOWNSHIP will obtain all permits and conduct all consultations necessary to complete the PROJECT, including, but not limited to, if necessary, a wetland permit from the US Army Corps of Engineers (USACE), a Watershed Development Permit from SMC or, if applicable, the appropriate certified community, a construction stormwater permit from the Illinois Environmental Protection Agency (IEPA), and a consultation with the Illinois Department of Natural Resources (IDNR) regarding state listed threatened and endangered species. Please note that all permit and consultation fees are the responsibility of TOWNSHIP and are not reimbursable under this AGREEMENT; however, such permit fees may count toward TOWNSHIP'S share of the total PROJECT cost.
6. If requested, SMC will provide limited technical assistance to the TOWNSHIP during the project. This may include discussion of construction methods and review of consultant reports or specifications prepared as part of the PROJECT.
7. During the PROJECT, the TOWNSHIP will prepare and submit to SMC a brief one-to two-page written update report and, upon completion of the PROJECT, a brief one-to two-page written final report. Photographic documentation of before and after construction must be included.

SCHEDULE

A PROJECT status update and schedule shall be submitted by the TOWNSHIP to the SMC before August 1st, 2019.

The TOWNSHIP shall complete the PROJECT on or before November 30, 2020. If necessary, the TOWNSHIP may request in writing an extension from SMC prior to such date.

The final request for reimbursement for eligible expenses shall be submitted by the TOWNSHIP before November 30, 2020. If necessary, an extension may be requested in writing by the TOWNSHIP prior to this date. Requests for reimbursement submitted after this date without prior approval of the extension will not be honored.

COMPENSATION

1. The total cost of the PROJECT is estimated at \$272,000 as shown in the attached cost estimate.
2. SMC will reimburse the TOWNSHIP for 50 percent of eligible PROJECT expenditures made after the date of this signed agreement, or \$50,000, whichever is less.

3. Payment of reimbursable expenditures shall be due and payable by SMC after the receipt of a written request for reimbursement from the TOWNSHIP for the requested reimbursement amount, complete with adequate documentation of PROJECT expenditures (i.e., invoice and supporting documentation), including in-kind labor and local match. All requests for reimbursement are subject to approval by the SMC Director.

TERMS AND CONDITIONS

1. The terms of this AGREEMENT are valid until November 30, 2020.
2. Either party may terminate this AGREEMENT upon a 30-day written notice to the other party. In the event of such termination, SMC shall reimburse the TOWNSHIP for up to 50% of eligible documented PROJECT costs incurred up to November 30, 2020, or \$50,000, whichever is less.
3. All adjustments, additions, and/or deletions to this AGREEMENT, including changes in the PROJECT scope, are subject to the written approval of both parties.
4. This AGREEMENT shall be governed by and construed according to the laws of the State of Illinois.
5. This AGREEMENT supersedes any and all other agreements, oral or written, between the parties hereto with respect to the subject matter hereof.
6. SMC authorization and financial support for the PROJECT is conditioned on compliance with all applicable federal, state and local statutes and regulations.
7. The TOWNSHIP will include in any publications created for general external circulation, including brochures, newsletters, and website and presentation materials, the following phrase: *"Funding for this project was provided in part by the Lake County Stormwater Management Commission."*

SIGNATURES

IN WITNESS WHEREOF, the parties have caused this AGREEMENT to be executed, as evidenced by the signatures of their duly authorized representative as affixed below.

**LAKE COUNTY STORMWATER
MANAGEMENT COMMISSION:**

TOWNSHIP OF LAKE VILLA:

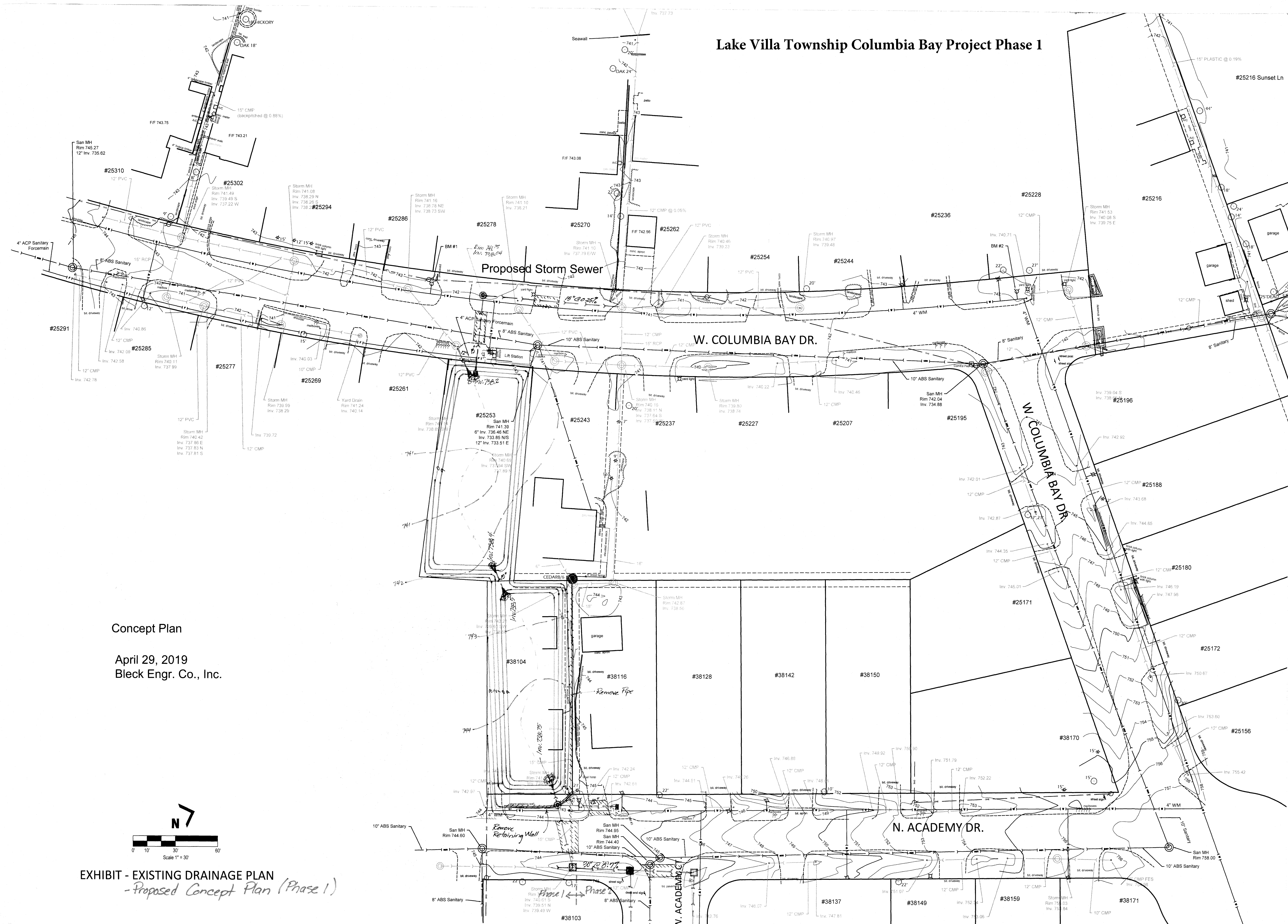
Michael D. Warner, Executive Director

Daniel Venturi, Township Supervisor

Date:

Date:

Lake Villa Township W. Columbia Bay Dr. and Academy Court Drainage Improvement						5/14/2019		Buy-out/lot excavtion - outlet Phase 1		Academy Ct Drainage Improvements Phase 2	
Estimate of Probable Construction Cost						Job No. 120-050					
SMC - Buy out											
Item	Description	Quantities	Units	Unit Price	Cost	Quantities	Cost	Quantities	Cost		
1	Demo House	1	LS	\$ 25,000.00	\$ 25,000.00	1	\$ 25,000.00	0	\$ -		
2	Demo Garage & Shed	1	LS	\$ 5,000.00	\$ 5,000.00	1	\$ 5,000.00	0	\$ -		
3	Concrete Driveway Removal	310	Sy	\$ 10.00	\$ 3,100.00	310	\$ 3,100.00	0	\$ -		
4	Disconnect Utilities	1	LS	\$ 2,500.00	\$ 2,500.00	1	\$ 2,500.00	0	\$ -		
5	Remove Fence	400	Ft	\$ 5.00	\$ 2,000.00	400	\$ 2,000.00	0	\$ -		
6	Tree Removal	100	in-dia	\$ 75.00	\$ 7,500.00	100	\$ 7,500.00	0	\$ -		
7	Remove Retaining Wall	54	Ft	\$ 20.00	\$ 1,080.00	54	\$ 1,080.00	0	\$ -		
8	Earth Excavation	2200	Cy	\$ 35.00	\$ 77,000.00	2200	\$ 77,000.00	0	\$ -		
9	Furnish and Place Top Soil, 4"	3500	Sy	\$ 5.00	\$ 17,500.00	2200	\$ 11,000.00	1300	\$ 6,500.00		
10	Mulch	3500	Sy	\$ 3.00	\$ 10,500.00	2200	\$ 6,600.00	1300	\$ 3,900.00		
11	Seeding Class 1	1500	SY	\$ 2.50	\$ 3,750.00	200	\$ 500.00	1300	\$ 3,250.00		
12	Seeding Class 5	2000	SY	\$ 5.00	\$ 10,000.00	2000	\$ 10,000.00	0	\$ -		
13	Erosion Control Blanket, NAG S75	3500	SY	\$ 3.00	\$ 10,500.00	2200	\$ 6,600.00	1300	\$ 3,900.00		
14	Silt Fence	1000	Ft	\$ 3.50	\$ 3,500.00	1000	\$ 3,500.00	0	\$ -		
15	Inlet Protection	6	Ea	\$ 200.00	\$ 1,200.00	6	\$ 1,200.00	0	\$ -		
16	Trench Backfill	200	CY	\$ 40.00	\$ 8,000.00	50	\$ 2,000.00	150	\$ 6,000.00		
17	Temporary Stone Driveway Access	100	TON	\$ 40.00	\$ 4,000.00	20	\$ 800.00	80	\$ 3,200.00		
18	Remove & Replace HMA Pavement	300	SY	\$ 35.00	\$ 10,500.00	20	\$ 700.00	280	\$ 9,800.00		
19	Remove & Replace HMA Driveway	100	SY	\$ 30.00	\$ 3,000.00	10	\$ 300.00	90	\$ 2,700.00		
20	Aggregate Shoulder	25	TON	\$ 45.00	\$ 1,125.00	5	\$ 225.00	20	\$ 900.00		
21	30" Storm Sewer, RCCP	430	LF	\$ 90.00	\$ 38,700.00	60	\$ 5,400.00	370	\$ 33,300.00		
22	18" Storm Sewer, RCCP	200	LF	\$ 75.00	\$ 15,000.00	0	\$ -	200	\$ 15,000.00		
23	15" Storm Sewer, RCCP	225	LF	\$ 55.00	\$ 12,375.00	225	\$ 12,375.00	0	\$ -		
24	12" Storm Sewer, RCCP	55	LF	\$ 45.00	\$ 2,475.00	15	\$ 675.00	40	\$ 1,800.00		
25	30" PRC FES with Grate	2	EA	\$ 2,500.00	\$ 5,000.00	1	\$ 2,500.00	1	\$ 2,500.00		
26	15" PRC FES	3	EA	\$ 900.00	\$ 2,700.00	3	\$ 2,700.00	0	\$ -		
27	12" PRC FES	1	EA	\$ 600.00	\$ 600.00	1	\$ 600.00	0	\$ -		
28	Flush Inlet Box, 5'	4	EA	\$ 4,000.00	\$ 16,000.00	1	\$ 4,000.00	3	\$ 12,000.00		
29	RD Manhole, 5' Dia, Type A - R4342	1	EA	\$ 4,000.00	\$ 4,000.00	0	\$ -	1	\$ 4,000.00		
30	RD Manhole, 4' Dia, Type A - R4342	3	EA	\$ 3,000.00	\$ 9,000.00	1	\$ 3,000.00	2	\$ 6,000.00		
31	Inlet, 2' Dia, Type A-R4342	1	EA	\$ 1,000.00	\$ 1,000.00	0	\$ -	1	\$ 1,000.00		
32	Sanitary Service to be Adjusted	2	EA	\$ 1,000.00	\$ 2,000.00	0	\$ -	2	\$ 2,000.00		
33	Water Service to be Adjusted	2	EA	\$ 750.00	\$ 1,500.00	0	\$ -	2	\$ 1,500.00		
34	Remove, Salvage & Restore Mailboxes	3	LS	\$ 250.00	\$ 750.00	1	\$ 250.00	2	\$ 500.00		
35	Remove, Salvage & Restore Street Sign	2	EA	\$ 200.00	\$ 400.00	0	\$ -	2	\$ 400.00		
36	Stone Rip-Rap	12	SY	\$ 75.00	\$ 900.00	12	\$ 900.00	0	\$ -		
37	Storm Sewer & Pipe Culvert Removal	800	FT	\$ 10.00	\$ 8,000.00	150	\$ 1,500.00	650	\$ 6,500.00		
38	Remove Existing Structure	6	EA	\$ 300.00	\$ 1,800.00	1	\$ 300.00	5	\$ 1,500.00		
39	Traffic Control	1	LS	\$ 10,000.00	\$ 10,000.00	0.5	\$ 5,000.00	0.5	\$ 5,000.00		
Sub-total					\$ 338,955.00			\$ 205,805.00	\$ 133,150.00		
10% Contingency					\$ 33,895.50			\$ 20,580.50	\$ 13,315.00		
Total Estimate of Probable Construction Cost					\$ 372,850.50			\$ 226,385.50	\$ 146,465.00		
Design Engr. 10%					\$ 37,285.05			\$ 22,638.55	\$ 14,646.50		
Construction Engr. 10%					\$ 37,285.05			\$ 22,638.55	\$ 14,646.50		
Advertising					\$ 300.00			\$ 300.00	\$ 300.00		
Total					\$ 447,720.60			\$ 271,962.60	\$ 176,058.00		
Budget					\$ 448,000.00			\$ 272,000.00	\$ 176,000.00		



Concept Plan
April 29, 2019
Bleck Engr. Co., Inc.

EXHIBIT - EXISTING DRAINAGE PLAN
- Proposed Concept Plan (Phase 1)

BLECK

engineers | surveyors

Bleck Engineering Company, Inc.
1375 North Western Avenue
Lake Forest, Illinois 60045
T 847.295.5200 F 847.295.7081
www.bleckeng.com

Lake Villa Township
Columbia Bay Drainage

- BENCHMARK #1:
ARROW NUT ON HYDRANT
ELEVATION = 744.94
- BENCHMARK #2:
ARROW NUT ON HYDRANT
ELEVATION = 743.99
- BENCHMARK #3:
ARROW NUT ON HYDRANT
ELEVATION = 745.55

ISSUED DATE	ISSUED FOR
11.16.2018	BIDDING AND PERMIT

PROFESSIONAL SEAL

Patrick J. Bleck, PE
License No. 062/048078 Expires 11/30/19

Nov. 16, 2018

LAKE VILLA TOWNSHIP

120-050	Project No.
DJD	Drawn By
PJB	Checked By

Drawing No.
1

Drawing Name
Phase 1