

#### ENGINEERING

and

# M E M O R A N D U M

TO:	Mayor Laurel L. Prussing and Members of the City Council
FROM:	William R. Gray, Public Works Director Bradley M. Bennett, Assistant City Engineer
DATE:	December 8, 2016
RE:	Crystal Lake Park Intergovernmental Agreement for Sediment Removal a Disposal Project

#### **Action Requested**

Approval of a resolution authorizing the mayor and clerk to sign the intergovernmental agreement with the Urbana Park District for the removal and disposal of the sediment from the forebay in Crystal Lake. Exhibit A from the intergovernmental agreement is available at <a href="http://www.urbanaillinois.us/node/6134">http://www.urbanaillinois.us/node/6134</a> on the City website under the Government\Public Works\Projects\Crystal Lake Sediment Removal Project webpage. Exhibit A from the intergovernmental agreement is 172 pages so it was not included along with this memo to conserve paper.

#### **Background and Facts**

Crystal Lake was created in 1907. It consists primarily of an oxbow of the Saline Branch that was cut off from the relocated channel via earthen dams, and subsequently widened and deepened. The upstream watershed of Crystal Lake is entirely urbanized, with land uses ranging from single-family residential, multiple-family residential, and commercial uses. Carle Hospital is located immediately southwest of Crystal Lake and the Champaign County Fairgrounds are located immediately west of Crystal Lake.

A comprehensive study of Crystal Lake performed in the early 1980s revealed that a considerable amount of sediment had accumulated within the lake since its initial construction. As a result, Crystal Lake was renovated in 1985 to remove the accumulated sediment and to make other repairs and improvements. One of the improvements was the installation of a sediment trapping basin (forebay) within the northeast portion of the lake. The forebay was intended to trap a significant portion of the sediment being discharged by the 54-inch diameter, City-owned storm sewer and to prevent that sediment from entering the remainder of Crystal Lake. At the time of construction it was estimated that sediment would need to be removed from the forebay on intervals of 10 to 15 years. It has now been 29 years since the forebay was installed, and sediment has never been removed from the forebay. The forebay location is shown on Exhibit A.

The Urbana Park District retained the engineering firm of Berns, Clancy and Associates (BCA) in 2014 to evaluate the forebay's capacity and recommend options for sediment removal and disposal. Measurements of current conditions were taken and compared with "as-constructed" basin conditions documented in 1985. BCA's investigations revealed that approximately 4,000 cubic yards of sediment had been deposited within the forebay from 1985 to 2014. The average depth of sediment was approximately 6.5 feet.

Representative grab samples of the sediment were taken and sent to a laboratory for analysis. The samples were tested for over 125 semi-volatile organic compounds, pesticides, polychlorinated biphenyls, and metals. In general, the samples were well within acceptable ranges for the existence of background contaminants, with one significant exception: several of the polynuclear aromatic hydrocarbon (PAH) chemical levels were found to be as much as two to six times above the background level amounts normally found within urban areas.

The sediment contaminated with PAHs consisted of granular bits of asphalt that have eroded or weathered from asphalt pavements and driveways and have settled near the outlet of the 54-inch diameter, City-owned storm sewer. The existence of the high levels of PAH chemicalswas unexpected and will complicate the work needed to remove the sediments from Crystal Lake.

BCA recommended that the accumulated sediment within the Crystal Lake sediment basin be removed and disposed of off-site. The accumulated sediment within the basin now exceeds the capacity of the basin and is long overdue to be cleaned. After the sediment is removed, it will be transported to a temporary disposal site for drying. The Champaign-Urbana Solid Waste Disposal System (CUSWDS) 24-acre landfill adjacent to the Landscape Recycling Facility (LRC) was recommended as the location for the temporary disposal site. The CUSWDS disposal site's location is shown on Exhibit B.

The drying process may remove excess levels of PAH chemicals that have accumulated within the sediment allowing the sediment to be used to repair portions of the landfill cap at the CUWDS site. Sediment still contaminated with PAHs after the drying process is completed will be removed from the CUSWDS site and disposed of in an active licensed sanitary landfill.

The Park District presented the plan to temporarily store excavated sediments from Crystal Lake on the CUSWDS 24-acre landfill site adjacent to the LRC to the CUSWDS chairpersons (Mayor Prussing and Champaign City Manager Dorothy David) on October 25, 2016. The CUSWDS chairpersons approved the plan to store the sediments at the site and to use any non-contaminated sediments for repair of the north slope of the landfill cap at the CUSWDS 24-acre site.

The Sediment Removal and Disposal Project would contribute towards the City's NPDES permit requirement to improve water quality by ensuring that the forebay continues to capture sediment and other associated pollutants from the City's stormwater before it reaches the Saline Branch.

## **Financial Impact**

The City would cost share 50 percent of the project costs, up to a maximum City contribution of \$200,000, for the Sediment Removal and Disposal Project. Total estimated project costs are presented in Exhibit C. A budget amendment transfer of \$200,000 from the MCORE Project Storm Sewer budget line item (A10 1 0400-0200) is proposed to cover the City's cost share of the Sediment and Removal Project. Funds for the MCORE storm sewers are not anticipated to be needed until Fiscal Year (FY)

 $ENVIRONMENTAL \ SUSTAINABILITY \bullet EQUIPMENT \ SERVICES \bullet OPERATIONS$ 

2017-2018. The \$200,000 funding for the MCORE storm sewers will be restored in the FY 2017-2018 budget by eliminating the Colorado Avenue Storm Sewer Extension project (\$110,000), reducing storm sewer cleaning/televising by \$50,000 and reducing storm sewer repairs by \$40,000 from the funding levels proposed in the Capital Improvements Plan.

#### **Recommendations**

It is recommended that a Resolution Approving an Intergovernmental Agreement between the City of Urbana and the Urbana Park District (Agreement for Removal of Sediment from Crystal Lake Sediment Basin) be approved.

Attachments:

Exhibit A -Sediment Removal Project Location

Exhibit B –CUSWDS Disposal Site

Exhibit C – Estimated Project Costs

A RESOLUTION APPROVING AN INTERGOVERNMENTAL AGREEMENT BETWEEN THE CITY OF URBANA AND THE URBANA PARK DISTRICT (Agreement for Removal of Sediment from Crystal Lake Sediment Basin)

AN INTERGOVERNMENTAL AGREEMENT PROVIDING FOR THE COOPERATION IN THE REMOVAL AND DISPOSAL OF SEDIMENTS FROM CRYSTAL LAKE IN CRYSTAL LAKE PARK

AN ORDINANCE REVISING THE ANNUAL BUDGET ORDINANCE FOR FY2016/17 (Crystal Lake Sediment Removal)

#### RESOLUTION NO. 2016-12-069R

#### A RESOLUTION APPROVING AN INTERGOVERNMENTAL AGREEMENT BETWEEN THE CITY OF URBANA AND THE URBANA PARK DISTRICT

#### (Agreement for Removal of Sediment from Crystal Lake Sediment Basin)

WHEREAS, the City of Urbana, Illinois (the "City") is a municipal corporation and a home-rule unit of local government pursuant to Article VII, Section of the Illinois Constitution of 1970; and

WHEREAS, the Urbana Park District (the "Park District") is a municipal corporation and a unit of local government; and

10 of Article WHEREAS, Section VII of the Illinois Constitution of 1970 and the Illinois Intergovernmental Cooperation Act, 5 ILCS 220/1 et seq. enables the City and the Park District to enter into agreements among themselves and provide authority for intergovernmental cooperation; and,

WHEREAS, the City and the Park District seek to enter into an Intergovernmental Agreement Providing for Cooperation in the Removal and Disposal of Sediments from Crystal Lake in Crystal Lake Park (the "Agreement"); and

WHEREAS, the City and the Park District have determined that it would be advantageous to temporarily stockpile, dry, and test the sediments prior to their final disposition; and

WHEREAS, the City and the Park District have determined that some or all of the sediment removed from the Crystal Lake sediment basin may be suitable for improvements at the Champaign-Urbana Solid Waste Disposal System site which consists of 24 acres; and

WHEREAS, the City and the Park District have determined that it would be mutual beneficial for them to share in the cost of removing and hauling the sediment from the Crystal Lake basin.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Urbana, Champaign County, Illinois, as follows:

#### Section 1.

An Intergovernmental Agreement Providing for Cooperation in the Removal and Disposal of Sediments from Crystal Lake in Crystal Lake Park in substantially the form in the exhibit appended hereto and incorporated herein by reference shall be and the same is hereby authorized and approved.

Section 2.

The Mayor of the City of Urbana, Illinois, shall be and hereby is authorized to execute on behalf of the City of Urbana, Illinois and deliver to the City Clerk of the City of Urbana, Illinois, for attestation the said Agreement in substantially the form appended hereto and made a part hereof.

PASSED BY THE CITY COUNCIL this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_.

AYES:

NAYES:

ABSENT:

ABSTENTIONS:

Phyllis D. Clark, City Clerk

APPROVED BY THE MAYOR this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_.

Laurel Lunt Prussing, Mayor

#### AN INTERGOVERNMENTAL AGREEMENT PROVIDING FOR THE COOPERATION IN THE REMOVAL AND DISPOSAL OF SEDIMENTS FROM CRYSTAL LAKE IN CRYSTAL LAKE PARK

This Intergovernmental Agreement (hereinafter, the "Agreement"), including any exhibits and attachments appended hereto and incorporated herein, is made and entered into as of this \_\_\_\_\_ day of \_\_\_\_\_, 2016 by and between the City of Urbana, an Illinois Municipal Corporation (hereinafter, the "City") and the Urbana Park District, an Illinois body corporate and politic (hereafter, the "Park District").

WHEREAS, the City is a home-rule unit of local government pursuant to Article VII, Section of the Illinois Constitution of 1970; and

**WHEREAS,** Section 10 of Article VII of the Illinois Constitution of 1970 and the Illinois Intergovernmental Cooperation Act, 5 ILCS 220/1 *et seq.* enable the parties hereto to make and enter into agreements by and between themselves and provide authority for intergovernmental cooperation; and,

WHEREAS, the Park District plans to remove and dispose of sediment from the sediment forebay located in Crystal Lake at Crystal Lake Park (hereafter, the "Project");

WHEREAS, the sediment sought to be removed from the said sediment forebay is deposited in the said sediment forebay from the stormwater sewer system owned, operated and maintained by the City; and

**WHEREAS,** it has been determined that it would be advantageous to temporarily stockpile, dry, and test the sediments prior to any final disposal, and

WHEREAS, the Champaign-Urbana Solid Waste Disposal System (CUSWDS) 24 Acre Landfill Site is a safe and suitable location for the temporary stockpiling of the removed sediments, and

WHEREAS, a portion of the sediment may be suitable for improvements at the CUSWDS 24 Acres Landfill Site, and

**WHEREAS** the removal and disposal of the sediment as provided for herein will require a method to properly allocate the costs and expenses of the shared effort among the parties hereto.

NOW therefore, in consideration of the exchange of good, valuable and mutual consideration which each party hereto acknowledges as having in hand received and for the exchange of the terms, provisions and conditions contained in this Agreement, the parties hereto agree as follows:

1. The Park District is authorized to act as contracting agent for and on behalf of itself and the City to do that which is necessary to undertake the Project.

2. Exhibit A (which consists of the Project Request For Proposal documents) attached hereto shall be and hereby is incorporated into and made a part of this Agreement as if fully set forth herein, for the purpose of specifically defining the scope of the Project. Provisions set forth in Exhibit A may be modified and/or supplemented prior to letting the bid as contemplated in Section 6 of this Agreement.

3. Notwithstanding anything to the contrary provided for in this Agreement, the City shall be responsible for reimbursing the Park District 50% of costs up to a maximum City contribution of \$200,000 for the Project.

4. The City and the Park District acknowledge that during the course of the Project it may become necessary to issue change orders to the Park District's contract with the successful bidder to address unforeseen conditions. The Park District agrees to provide the City Engineer with an opportunity to review and approve change orders prior to their approval by the Park

District that are relevant to and govern the Project. If the City Engineer approves any change order, the City shall be responsible for 50% of the cost of any such change order but, in all events, the City's contribution to the Project, including any change orders, if any, shall not exceed the \$200,000 amount provided in Section 3 of this Agreement. If the City Engineer does not approve a proposed change order, and the City and the Park District do not agree to modification of the proposed change order, the Park District may proceed and implement the change order in the form submitted to the City; provided, in such event the City will be relieved of any obligation to pay any portion of the costs for performing the work specifically provided in any such change order the City Engineer did not approve.

5. The Park District shall make all payments to the contractor in accordance with the contract entered into with the winning bidder. The City shall reimburse the Park District for the cost of the City's portion of the Project. The City shall make payment to the Park District within sixty (60) days of receipt of an invoice from the Park District; provided payment shall be subject to approval of the City Engineer, which approval shall not be unreasonably withheld.

6. Prior to releasing the RFP to solicit bids for the Project, the Park District agrees to provide the City Engineer with a copy of the RFP and any and all exhibits and other documents, if any, to be released therewith. The City Engineer shall be provided with an opportunity to review, edit and comment on any modifications and/or supplements to the proposed contract, exhibits and other documents to be released with the RFP. The Park District shall receive the City Engineer's approval of the RFP documents prior to letting the bid.

7. The Park District shall indemnify, hold harmless and defend the City for any and all personal injury, bodily injury, and property damages which are directly or proximately caused by any unlawful or wrongful intentional, willful, wanton, grossly negligent, or negligent act or

omission committed by the Park District and/or any agent or contractor retained by the Park District to undertake and perform any work comprising the Project. The City's sole and limited obligation pursuant to this Agreement is to reimburse the Park District for costs of the Project on an equal (50%/50%) basis with the City's obligation capped at no more than the amount provided for in Section 3 of this Agreement.

8. The City shall allow for the temporary stockpile of the sediment at the CUSWDS 24 acre Landfill Site. The Park District shall stockpile the sediments and will allow such sediments to dry and be tested and disposed of in accordance with this Agreement and any relevant exhibit appended hereto. Notwithstanding anything to contrary contained in this Agreement, the Park District shall ensure that all storage, testing and disposal of all sediment shall be undertaken in a manner consistent with all applicable local, state and federal laws and regulations governing the storage and disposal of such sediment.

9. The Park District's contractor will video record or photograph the condition of the existing paved surfaces at the City's Landscape Recycling Center (LRC) facility, as indicated and described in Exhibit A, which will be used to transport the sediment to and from the CUSWDS landfill site prior to the start of any hauling activities . The CUSWDS and the LRC access routes, as indicated and described in Exhibit A, will be repaired and restored to substantially the condition documented by the video or photographs taken prior to the start of hauling activities in accordance with the contract documents. The Park District's contractor shall provide traffic control signage on haul routes as directed by City Engineer to slow vehicles speeds at the LRC site, and shall be responsible for any and all bodily injury, personal injury and property damage which is or may be directly or proximately caused by its hauling activities.

10. All-weather road surfaces to be constructed on the LRC and CUSWDS properties in

order to carry out the transfer and disposal of the said removed sediment shall be constructed by the Park District or its contractor in accordance with the terms, conditions and specifications provided for in Exhibit A. The all-weather road surfaces shall be left at the end of the Project.

11. The Park District or its contractor shall place soil cover materials approved by the City Engineer on top of any and all landfill waste exposed and left on LRC and/or CUSWDS property (hereinafter, referred to as "cap") in accordance with the terms, conditions and specifications provided for in Exhibit A. The existing landfill cap on which the sediment is temporarily stored shall be restored in accordance with the terms, conditions and specifications provided for in Exhibit A. The city Engineer shall inspect and approve that the existing landfill cap restoration was completed to the City's satisfaction. In the event that the Park District objects to the City Engineer's assessment of whether the Park District or its contractor complied with this Paragraph and the applicable terms, conditions and specifications of Exhibit A, the parties will seek to resolve their dispute in accordance with Section 17 of this Agreement,

12. Upon the written approval by the City Engineer, uncontaminated sediments may be used for landfill caps or repairs, as the case may be, on the north slope of the CUSWDS 24 Acre Landfill Site. The north slope shall be roughed graded prior to placement of any sediment material. The sediment shall be incorporated by disking it into the existing landfill cap and then the north slope shall be hydroseeded to restore vegetation in accordance with the applicable terms, conditions and specifications contained in Exhibit A. The City Engineer shall inspect and approve that the north slope landfill cap repairs were completed to the City's satisfaction. In the event that the Park District objects to the City Engineer's assessment of whether the Park District or its contractor complied with this Paragraph and the applicable terms, conditions and specifications of Exhibit A, the parties will seek to resolve their dispute in accordance with

Section 17 of this Agreement

13. Sediment may be transported to the CUSWDS site starting on January 1, 2017

through March 17, 2017. Dried sediment may be transported from the CUSWDS site starting on

July 3, 2017 to August 31, 2017. Any deviation from these dates must be approved by the City

Engineer.

14. The odor control bid alternative measures shall be implemented upon request of the

City Engineer within 48 hours of said request.

15. Notice given hereunder shall be given to:

The Park District at:	The City at:
Executive Director	City Engineer
Urbana Park District	City of Urbana
303 West University Avenue	706 South Glover Avenue
Urbana, IL 61801	Urbana, IL 61802

Notice shall be deemed effective:

a. If given by First Class Mail, four (4) days after placement with the U.S. Postal Service if placed in a properly addressed and stamped envelope.

b. If given by facsimile, the day after transmission if the sender's facsimile machine provides a printed receipt that the recipient's machine received the transmission.

c. If given by courier service, the day after delivery if the courier service provides, whether in hardcopy or electronically, a receipt stating that delivery was made.

16. In the event either party to this Agreement defaults (the "Defaulting Party") on any of its obligations provided in this Agreement, the other party (the "Non-Defaulting Party") shall have the right to give the Defaulting Party notice of any such default. All Notices of Default shall be in writing, describe the nature of the default and specify the paragraph of this Agreement or the exhibit designation and paragraph therein claimed to be in default. The Defaulting Party shall have seven (7) calendar days in which to (i) cure the default, (ii) provide a written statement to the Non-Defaulting Party which explains why the Defaulting Party is not in default; or (iii) provide the Non-Defaulting Party with a reasonable timetable in which it will cure the default if the same cannot reasonably be cured within the said seven (7) calendar-day period.

17. In the event of a dispute between the parties regarding the withholding of any approval, any terms provided for in this Agreement or any exhibit attached hereto and made a part hereof, or the performance of any obligation provided for in this Agreement, the parties shall meet face-to-face in an effort to resolve their dispute. If such face-to-face resolution effort fails, the parties to this Agreement shall agree to and shall participate in good faith in mediation. Should mediation fail, either party shall have the right to file and maintain an action in the Circuit Court for the Sixth Judicial Circuit, Champaign County, Illinois seeking the relief which the filing party deems appropriate. Any dispute regarding the construction, interpretation or application of any term contained in this Agreement or any exhibit appended hereto and any breach hereof shall be governed by the laws of the State of Illinois and City of Urbana ordinances.

18. This Agreement shall supersede and replace any prior agreement between the parties concerning the removal of sediment the Crystal Lake sediment forebay, whether such prior agreement was oral or in writing. The parties further represent and warrant to each other, that their governing body has duly approved this Agreement as required by law, and that each individual who executes this Agreement on behalf of his/her respective party has the requisite authority to do so.

IN WITNESS WHEREOF, the City and the District have executed this Agreement.

URBANA PARK DISTRICT

CITY OF URBANA, ILLINOIS

By

Michael W. Walker – Board President

Date:\_\_\_\_\_

By\_\_\_\_\_ Timothy A Partlatt Poord Sacrat

Timothy A. Bartlett, Board Secretary

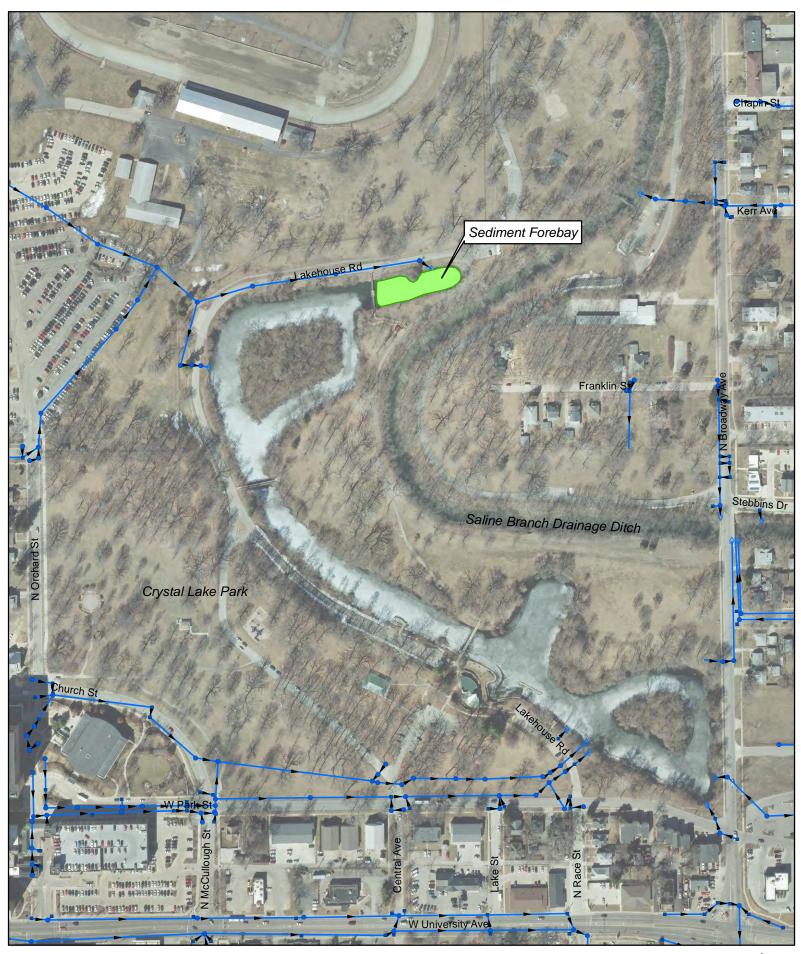
By\_\_\_\_\_

Laurel Lunt Prussing - Mayor

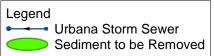
Date:\_\_\_\_\_

By\_\_\_\_

Phyllis D. Clark – City Clerk



# Sediment Removal Project Location Exhibit A







CUSWDS Disposal Site Exhibit B Legend Haul Route



Exhibit C - Estimated Project Costs

# BCA

# BERNS, CLANCY AND ASSOCIATES

PROFESSIONAL CORPORATION

ENGINEERS . SURVEYORS . PLANNERS

December 6, 2016

THOMAS BERNS EDWARD CLANCY CHRISTOPHER BILLING DONALD WAUTHIER GREGORY GUSTAFSON

ROGER MEYER JUSTIN HOUSTON ZACHARY SCHMIDT

MICHAEL BERNS OF COUNSEL

### ENGINEER'S OPINION OF PROJECT BUDGETARY COSTS CRYSTAL LAKE SEDIMENT REMOVAL PROJECT URBANA PARK DISTRCIT URBANA, CHAMPAIGN COUNTY, ILLINOIS

Item	Quantity	Unit	Unit Cost (\$)	Total	
At The Park					
1 Mobilization	1	LS	\$5,000	\$5,000	
2 Traffic Control	1	LS	\$5,000	\$5,000	
3 Temporary Erosion Control	1	LS	\$2,000	\$2,000	
4 Clearing / Tree Protection	1	LS	\$3,000	\$3,000	
5 Lake Level Control	1	LS	\$20,000	\$20,000	
6 Forebay Dewatering	1	LS	\$8,400	\$8,400	
7 54 inch Diameter Bypass Pumping	1	LS	\$10,000	\$10,000	
8 Sediment Excavation	4,000	CY	\$6	\$24,000	
9 Transport to Urbana Landfill	4,000	CY	\$14	\$56,000	
10 Surface Restoration (Grading & Seeding)	800	SY	\$4	\$3,200	
At Urbana Landfill					
11 Clearing and Grubbing	1.2	AC	\$4,500	\$5,400	
12 Perimeter Silt Fence	950	LF	\$12	\$11,400	
13 Upgrade Access Road	600	LF	\$22	\$13,200	
14 New Access on Landfill	500	LF	\$48	\$24,000	
15 Install Signage	1	LS	\$600	\$600	
16 Equipment at the Site	1	LS	\$10,000	\$10,000	
17 Roadway Maintenance and Repairs	1	LS	\$5,000	\$5,000	
18 Odor Control - Biosolve Pink	1.2	AC	\$13,000	\$15,600	
Final Disposal					
19 Transport to Danville Landfill	400	Trip	\$145	\$58,000	
20 Danville Disposal Fee	5,400	Ton	\$20	\$108,000	
21 Restore to Existing Conditions	1.2	AC	\$6,000	\$7,200	
22 Sediment Use On Site	1,000	CY	\$19	<u>\$19,300</u>	
Itemized Subtotal					
Itemized Contingency - 15%					
Total Se	ediment Rem	oval and	Disposal Costs	\$476,700	
Professional Services Fees					
Total Project Costs For Sediment Removal Project					

CB:blk

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