



TETRA TECH, INC.

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FAX

Date: November 16, 2005

Number of pages (including this page): 5

(If you do not receive all pages, call (810) 220-2112)

To: Mr. Michael Cicchella, Supervisor & Northfield Township Board

Company: Northfield Township

Fax Number: 734.449.0123

From: Donald E. Lund, P.E., President

Phone Number: (810) 220-2112 Fax Number: (810) 220-0094

Subject: Northfield Township, MI, WWTP Improvements, Opinion of Probable Project Cost

Project Number:

REMARKS:

- Urgent
- For your review
- Reply ASAP
- Please comment

Please find attached the above referenced information. Hard copies will follow in the mail. Thank you.



TETRA TECH, INC.

November 15, 2005

Mr. Michael Cicchella, Supervisor
& Northfield Township Board
Northfield Township
75 Barker Road
P.O. Box 576
Whitmore Lake, MI 48189-0576

**Re: Northfield Township, MI
WWTP Improvements
Opinion of Probable Project Cost**

Dear Board Members:

Please find attached our opinion of probable project cost for the proposed WWTP improvements that will expand the current 1.3 mgd capacity to 2.25 mgd. These proposed improvements will provide the 780,000 gpd of additional capacity requested by Green Oak Township as well as provide for the continued growth within the currently established sewer districts in Northfield Township.

Our cost opinion for the plant expansion is \$12,617,000 which includes \$866,750 for miscellaneous work identified during our site visit and discussions with WWTP staff. A separate description and cost breakdown of those improvements are provided for your information


Our cost opinion is based upon an ENR index of 7875 which corresponds to a project construction mid-point of January 2007 which would require design to be initiated in the next 2-3 months which may not be realistic. We understand this schedule is dependent upon both Northfield and Green Oak Township reaching agreement on capacity and cost allocations which will take time.

These costs are being used in preparing the wastewater cost of service study which will be presented with you for review soon. This information should permit your discussions to proceed with Green Oak Township to reach agreement on capital costs for sanitary sewer service. We are available to review this information with you and to assist in your discussions with Green Oak Township about cost and schedule issues.

**Mr. Michael Cicchella, Supervisor
& Northfield Township Board
Northfield Township, MI
November 15, 2005
Page 2**

Please advise when you are available to discuss this information.

Very truly yours,


Donald E. Lund, P.E.
President

:be

Attachment

CC: Cindy Wilson
Michelle Manning
Jim Cox

K:\Letters\Northfield Twp WWTP Cost Opinion.doc

OPINION OF PROBABLE CONSTRUCTION COST TETRA TECH MPS

710 Avls Drive, Ann Arbor, MI 48108

Telephone: (734) 665-6000 FAX: (734) 665-2570

PROJECT: WASTEWATER TREATMENT PLANT IMPROVEMENTS
 LOCATION: NORTHFIELD TOWNSHIP, MICHIGAN
 BASIS FOR ESTIMATE: CONCEPTUAL PRELIMINARY FINAL
 WORK: Entire Plant Expansion

DATE: 11/2/2005
 PROJECT NO. 0198136T.01
 ESTIMATOR: WJN
 CHECKED BY: TLE
 CURRENT ENR: 7700

ITEM NO.	DESCRIPTION	QUANT.	UNIT	UNIT AMOUNT	TOTAL AMOUNT
1	Equalization Basin with Grit and Screen Bldg.	1	LS	\$1,848,000.00	\$1,848,000.00
2	Primary Clarifiers	2	EA	\$175,000.00	\$350,000.00
3	Aeration Basin and Equipment	1	LS	\$630,000.00	\$630,000.00
4	Final Clarifier	1	EA	\$400,000.00	\$400,000.00
5	Filter Building	2,925	SF	\$122.00	\$356,850.00
6	Sand Filters	360	SF	\$350.00	\$126,000.00
7	Sludge Storage	388,000	GAL	\$1.22	\$483,600.00
8	Digester	225,000	GAL	\$1.85	\$438,750.00
9	Flow Splitting	2	EA	\$30,000.00	\$60,000.00
10	Repair Existing Digester Piping	1	LS	\$50,000.00	\$50,000.00
11	Ultraviolet Disinfection	1	LS	\$250,000.00	\$250,000.00
12	Roadway Repairs	1	LS	\$80,000.00	\$80,000.00
13	Natural Gas Generator	1	LS	\$220,000.00	\$220,000.00
14	Programming and Controls	1	LS	\$200,000.00	\$200,000.00
15	Yard Piping	1	LS	\$186,000.00	\$186,000.00
16	Mechanical	1	LS	\$1,127,640.00	\$1,127,640.00
17	Electrical	1	LS	\$845,730.00	\$845,730.00
18	Miscellaneous Work	1	LS	\$886,750.00	\$886,750.00
19					
20	General Requirements				\$848,800.00
21					
22	10% cont.				\$834,800.00
23					
24	Subtotal				\$10,282,920.00
25					
26	15% Engineering				\$1,542,400.00
27	5% Legal				\$514,100.00
28					
29	Total at ENR 7700 (Projected July 06)				\$12,339,400.00
30					
31	Update to ENR 7875 (Projected Jan 07) - ADD				\$277,600.00
TOTAL CONSTRUCTION COST					\$12,617,000.00

OPINION OF PROBABLE CONSTRUCTION COST

TETRA TECH MPS

710 Avls Drive, Ann Arbor, MI 48108

Telephone: (734) 665-6000 FAX: (734) 665-2570

PROJECT: WASTEWATER TREATMENT PLANT IMPROVEMENTS
 LOCATION: NORTHFIELD TOWNSHIP, MICHIGAN
 BASIS FOR ESTIMATE: CONCEPTUAL PRELIMINARY FINAL
 WORK: Miscellaneous Work at Existing Facilities

DATE: 10/11/2005
 PROJECT NO. 0196155T.01
 ESTIMATOR: WJN
 CHECKED BY: _____
 CURRENT ENR: 7563

ITEM NO.	DESCRIPTION	QUANT.	UNIT	UNIT AMOUNT	TOTAL AMOUNT
1					
2	Remove and Replace Handrails at Various Tanks	600	LF	\$45.00	\$27,000.00
3	Remove and Replace Sidewalks	600	SF	\$8.00	\$4,800.00
4	Remove and Replace Roofs on Existing Buildings	11,500	SF	\$7.00	\$80,500.00
5	Remove and Replace Primary Settling Tank Equipmt.	1	LS	\$50,000.00	\$50,000.00
6	Remove and Replace Guardrail	2,500	LF	\$15.00	\$37,500.00
7	Dome Cover on Trickling Filter	1	LS	\$200,000.00	\$200,000.00
8	Laboratory Expansion	450	SF	\$233.00	\$104,850.00
9	Concrete Repairs	1	LS	\$20,000.00	\$20,000.00
10	Sludge Heating Piping Repair / Rework	1	LS	\$20,000.00	\$20,000.00
11	Sludge Bed Removal	1	LS	\$50,000.00	\$50,000.00
12	Digester Insulation (3" => R21)	1,200	SF	\$8.00	\$8,600.00
13	Security Enhancements				
14	Security System w/Fob entrance and door contacts	1	LS	\$35,000.00	\$35,000.00
15	Video Monitoring System (includes 4 cameras)	1	LS	\$30,000.00	\$30,000.00
16	10' Chain link (1") fence w/ 3 strand barb wire	1,700	LF	\$75.00	\$127,500.00
17	Motorized Gate	1	LS	\$10,000.00	\$10,000.00
18	Trailer Mounted Vector	1	LS	\$40,000.00	\$40,000.00
19	Equipment Storage	1	LS	\$40,000.00	\$40,000.00
20					
21					
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27					
28					
29					
30					
31					
TOTAL CONSTRUCTION COST					\$886,750.00