CHMP, INC. 5198 TERRITORIAL ROAD GRAND BLANC, MI 48439



MEMORANDUM

Date: September 2, 2014

To: Sue Kubic

Genesee County Drain Commission Surface Water Management Division

From: Kevin Cook

CHMP, Inc.

Re: Revision/Addition to Preliminary Design Report

Lum Drain & Extension, Branch #1, #0138

Summary of Option #3

Construct 260 feet of 42" storm sewer from south side of Grand Blanc Road (approximately ¼ mile east of Elms Road) north along common property line of Lots 6 and 7 of Myers Acres to northerly corner of said lots. Construct 60 feet of 12" storm sewer from existing catch basin on north side of Grand Blanc Road west to proposed 42" sewer. Construct 1,400 feet of 48" storm sewer from said property corner northwesterly to west side of Elms Road (approximately 750 feet north of Grand Blanc Road) and continue north 280 feet in existing ditch bottom. Widen and deepen existing road side ditch on west side of Elms Road from 48-inch storm sewer outlet to existing drain (3,500 feet north of Grand Blanc Road). Widen and deepen existing ditch (Lum Drain) from Elms Road to Reid Road. Replace existing 72-inch culvert under Reid Road with 108-inch (or equivalent) culvert. Widen and deepen existing ditch from Reid Road north to outlet.

Estimated Cost = \$268,690.00

SEP 0 2 2014

CHMP, INC.

architecture, engineering planning, interior design landscapre acrhitecture surveying

IV. Cost Estimate

ENGINEER'S COST ESTIMATE

OPTION #3

The drain improvement cost estimates are summarized below as follows:

Item No.	Description	Quantity	Unit	Unit Price	Amount
1	12" Dia. RCP Pipe	70	L.F.	\$40.00	\$2,800.00
2	42" Dia. RCP Pipe	260	L.F.	\$100.00	\$26,000.00
3	48" Dia. RCP Pipe	1,400	L.F.	\$120.00	\$168,000.00
4	Open Ditch Excavation - Roadway Ditch	2,500	L.F.	\$6.00	\$15,000.00
5	Open Ditch Excavation - Widen & Deepen	2,000	L.F.	\$6.00	\$12,000.00
6	108" Dia. CSP Culvert	60	L.F.	\$500.00	\$30,000.00
7	Leveling Spoits	6,290	L.F.	\$1.00	\$6,290.00
8	Seed, Class B (125 lbs. per acre)	600	LB	\$4.00	\$2,400.00
9	Mulch	10	TON	\$500.00	\$5,000.00
10	Fertilizer	600	LB	\$2.00	\$1,200.00
	TOTAL COST - OPTION #3				\$268,690.00