

ENGINEERING

LANDSCAPE ARCHITECTURE

LAND PLANNING



**DREAM DESIGN**  
INTERNATIONAL, INC.

CONSTRUCTION OBSERVATION

REAL ESTATE DEVELOPMENT

PROPERTY MANAGEMENT

Kent Hagg  
Hagg Development, Inc.  
601 West Boulevard  
Rapid City SD 57709

July 29, 2015

**Re: TID No. 70 Necessary and Convenient Costs - Regional Detention Ponds**

Dear Mr. Hagg,

Having reviewed the project plan for TID #70, I believe it is imperative that the regional detention ponds proposed within the Moon Meadows Drive Extension project qualify as a Necessary and Convenient line item cost to the Contract, as approved in the TID #70 Project Plan. Specifically, much of the construction of both retention ponds has already been completed by the construction of the culverts and drainage designed for the Promise Road sanitary sewer main as set forth in the approved contract. For relatively low cost, the installation of the regional retention ponds have a much broader positive effect to the TID district and the City of Rapid City as a whole, making the construction of the ponds clearly "necessary and convenient".

The approved Project Plan identifies the purpose of TID #70 to "assist in the development of commercial property located along South U.S. Highway and Moon Meadows Drive through the development of public infrastructure improvements". As simply put as possible, the proposed detention ponds have already been identified as necessary public infrastructure for the existing and proposed commercial properties in the South U.S. Highway 16 and Moon Meadows Drive area by the East Highway 79/Landfill Drainage Basin Design Plan, prepared for the City of Rapid City by Ferber Engineering Company, Inc. in October 2005. Now is the most cost effective and efficient time to install the ponds and therefore convenient by any definition.

This alone provides justification enough to say that the detention ponds will provide a regional benefit, no different than the construction of Moon Meadows Drive (identified on the Major Street Plan) and the sewer main extension (identified in the Master Utility Plan). The inclusion of the ponds within the Project Plan will have many wide ranging benefits; a few of them are:

1. The proposed drainage ponds are identified in the East Highway 79/Landfill Drainage Basin Design Plan prepared for the City of Rapid City by Ferber Engineering Company, Inc. as required public infrastructure. The purpose and need for the proposed regional detention ponds has already been well documented and studied. They have been, through the adopted drainage basin

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plan, shown to be necessary to the community as a whole and specifically to the TID district as essential public infrastructure. The inclusion of the detention ponds into the TID project plan facilitates their construction which will provide public infrastructure and encourage growth. Growth that we all know is a necessity for any municipality.

2. The inclusion of the regional detention ponds into the TID project plan will allow the construction of the detention ponds through private capital, freeing tight city resources for other public projects.
3. The proposed regional ponds are much more efficient, in everything from purpose to maintenance requirements, than the other accepted alternative of onsite BMP's (best management practices) which are much harder to monitor and enforce maintenance on after construction. The reliance on private landowners to provide the necessary maintenance for onsite BMP's is simply proving to be unreliable, leading to the degradation of water quality and stormwater runoff control. The identification of failing BMP's and enforcement of maintenance actions requires that the City of Rapid City provide already scarce resources and in the worst case scenario takes away from other vital city needs.
4. The proposed regional ponds eliminate on-site BMP's. This allows for valuable tax producing commercial ground to be utilized to its "highest and best use" and developed at higher densities. Adding additional value to the City of Rapid City.
5. The proposed regional detention ponds will be designed to provide storm water quality in addition to the required quantity control. As required by the EPA and adopted by the City of Rapid City in the Stormwater Quality Manual any project that increases runoff (with few exceptions) needs to provide stormwater quality control. The proposed detention ponds would accomplish this and help treat and remove contaminants from stormwater that already flows through the area from existing developments, improving the quality of one of Rapid City's most treasured assets, its streams and rivers.

I hope that this letter helps to clarify my position that the regional drainage ponds should be eligible for inclusion into the TID #70 Project Plan as a necessary and convenient cost. Their construction has a wide ranging regional benefit to the TID and community as a whole. Please do not hesitate to contact the office with any additional questions or comments.

Sincerely,



Kyle Treloar  
Dream Design International Inc.

Enclosure

ENGINEERING

LANDSCAPE ARCHITECTURE

LAND PLANNING



**DREAM DESIGN**  
INTERNATIONAL, INC.

CONSTRUCTION OBSERVATION

REAL ESTATE DEVELOPMENT

PROPERTY MANAGEMENT

November 30, 2015

Community Planning & Development Services  
City of Rapid City  
300 Sixth Street  
Rapid City, SD 57701

**RE: Moon Meadows Drive Extension TIF  
Stormwater Detention Facility Design  
DDI Project No. 12-0653**

Dear Review Engineer:

We are working for Mr. Kent Hagg on the design of the stormwater management plan for the Moon Meadows Drive Extension project. Please be advised the design of the project's stormwater detention facilities will provide a level of performance generally consistent with and satisfying the intent of the recommendations presented in the City's *East Highway 79/Landfill Drainage Basin Design Plan*. The detention facilities proposed will generally function, when appropriate, as regional facilities and accommodate storm runoff from upstream areas, as necessary, and regulate the discharge rates to provide flow rates in the downstream conveyances consistent with the Design Plan's recommendations.

If you have questions or comments regarding this letter, please do not hesitate to contact Kyle or me at (605) 348-0538 or [gregb@dreamdesigninc.com](mailto:gregb@dreamdesigninc.com).

Sincerely,  
DREAM DESIGN INTERNATIONAL, INC.

Gregory T. Barbeauld

X:\650-699\653 Moon Meadows PUD\Drainage\Letter NOV2015.doc

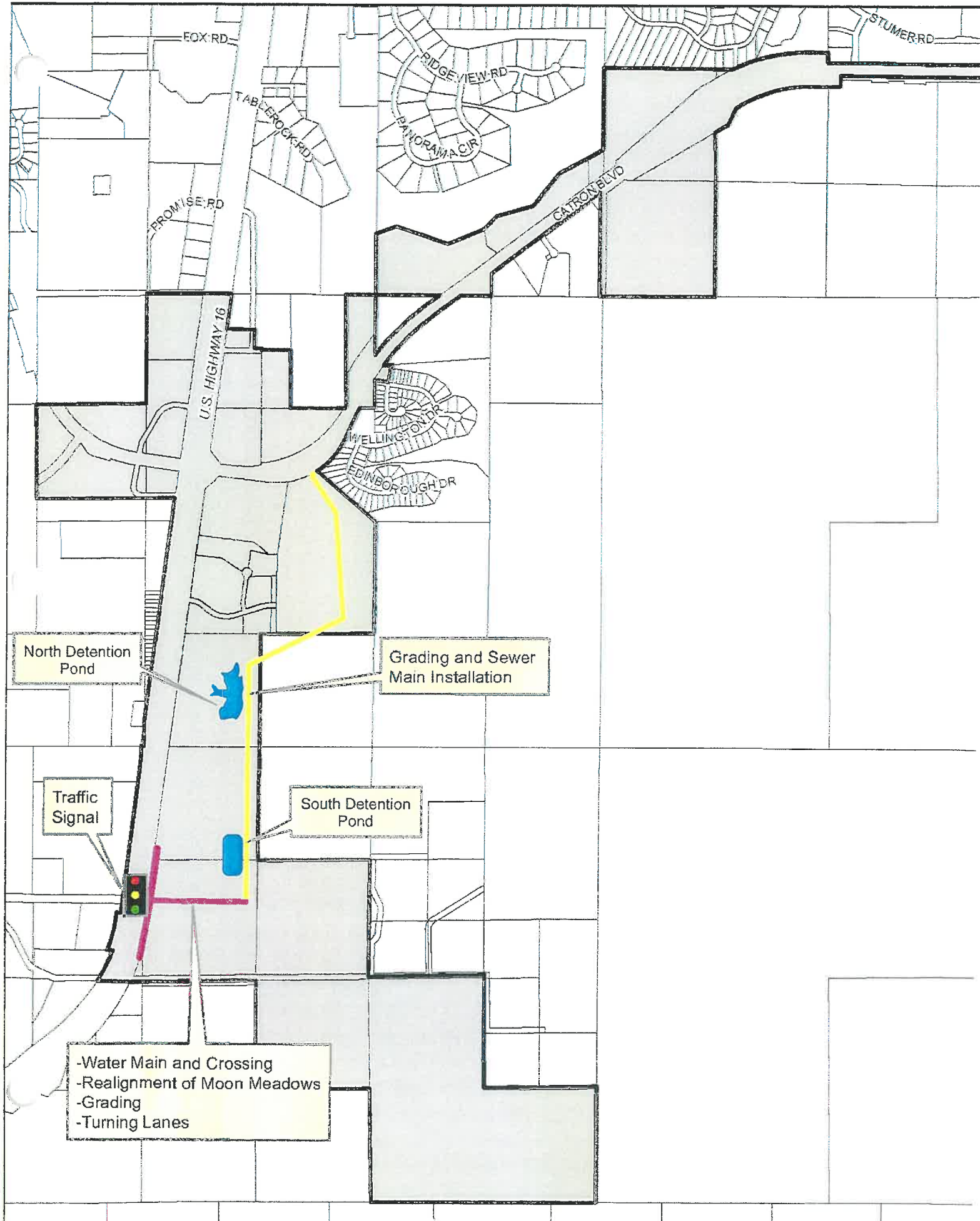


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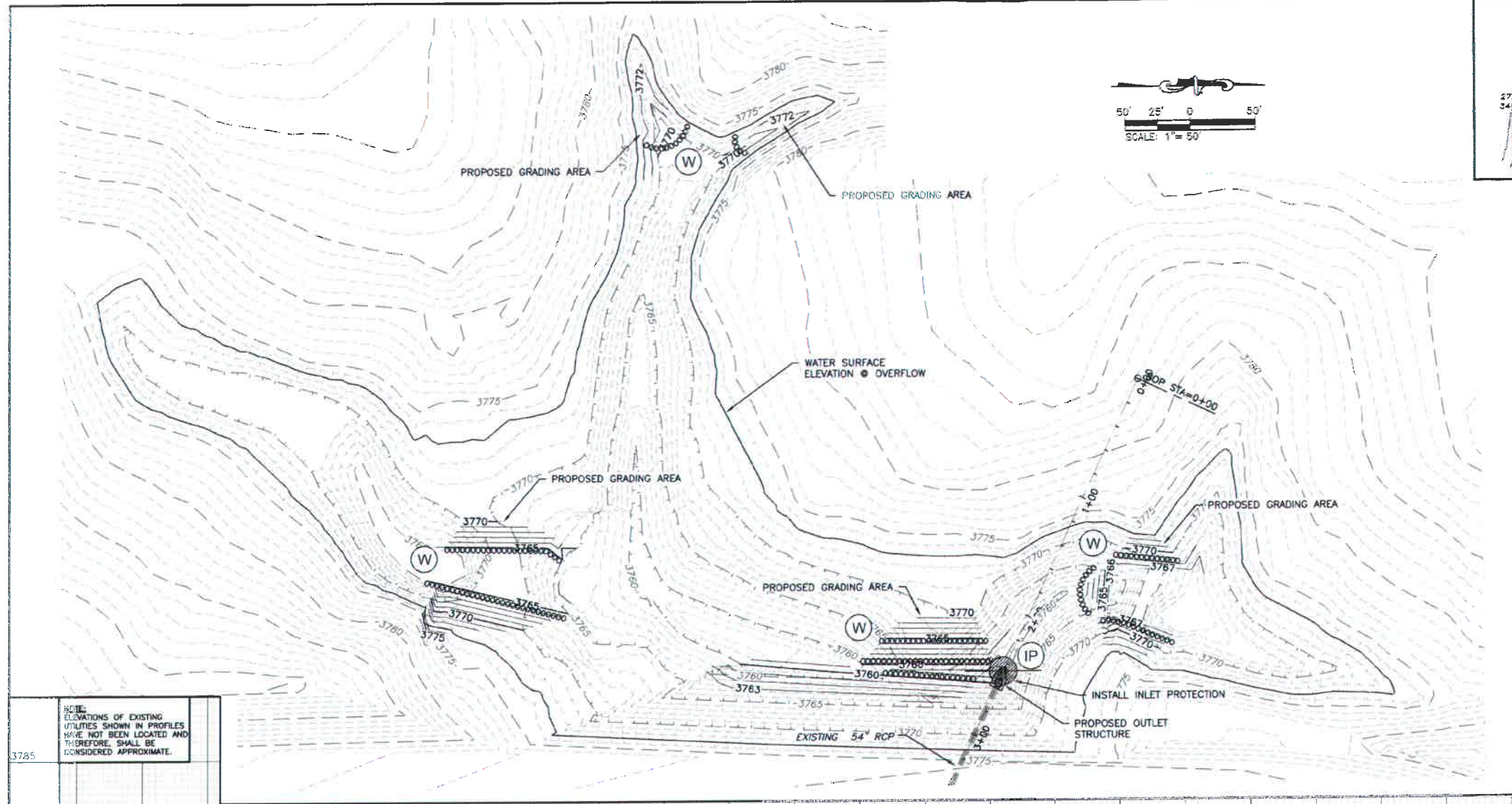
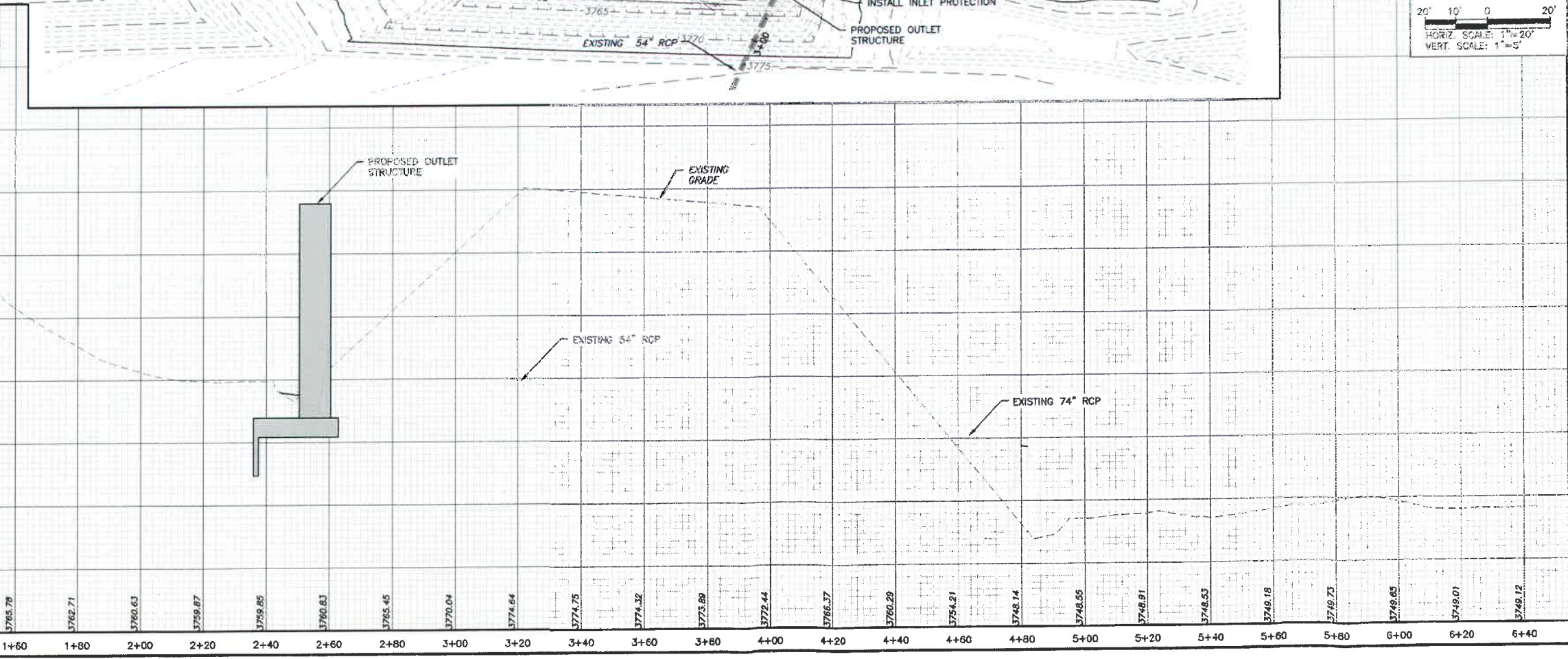
# Tax Increment District No. 70 - Highway 16 Sewer Public Improvements





X:\600-699\603 Moon Meadows Ponds\Drawings\Storm\PLAN AND PROFILE-Storm.dwg 3/13/2015 9:22am

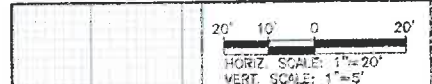
ELEVATIONS OF EXISTING UTILITIES SHOWN IN PROFILES HAVE NOT BEEN LOCATED AND THEREFORE, SHALL BE CONSIDERED APPROXIMATE.	
3785	3773.92
3780	3769.96 EXISTING ELEV (TYP)
3775	3765.78
3770	3762.71
3765	3760.63
3760	3759.87
3755	3759.85
3750	3760.83
3745	3765.45
3740	3770.04
	3774.64
	3774.75
	3774.32
	3773.89
	3772.44
	3766.37
	3760.29
	3754.21
	3748.14
	3748.55
	3748.91
	3748.53
	3749.18
	3749.73
	3749.65
	3749.01
	3748.12
	3740



STORM SEWER MAIN		
STATION	OFFSET	PIPE DESCRIPTION
2+55.84	0.00	OUTLET STRUCTURE
STATIONS ARE TO CENTER OF PROPOSED BOX		

GRADING QUANTITIES TABLE		
NORTH MOON MEADOWS DETENTION POND	1,382 CY	CUT
	233 CY	FILL
	153	NET
* 20% COMPACTION FACTOR ADDED		

TITLE	KEY	SYMBOL
STORM DRAIN INLET PROTECTION	IP	
SEDIMENT CONTROL WATTLE OR COMPOST SOCK	W	



KEY MAP

CITY OF RAPID CITY

Plans are prepared for general information with preliminary engineering standards. The City of Rapid City does not confer the suitability, adequacy or completeness of the plans or design, which are the responsibility of the engineer of record. All necessary permits shall be obtained prior to construction of this proposed public improvement.

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

Comments: \_\_\_\_\_

Revised: \_\_\_\_\_

Internal Job No: 12-0853  
Designed By: JH  
Drawn By: JWC  
Surveyed By: \_\_\_\_\_  
Survey Date: 08/2011

**PRELIMINARY FOR REVIEW ONLY**

**DREAM DESIGN**  
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**MOON MEADOWS DETENTION PONDS**  
RAPID CITY, SOUTH DAKOTA

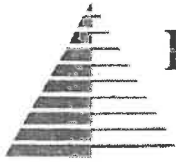
Sheet Name: \_\_\_\_\_

**NORTH POND PLAN & PROFILE**

1 of 2







**HEAVY**  
**CONSTRUCTORS, INC.**  
AND ITS DIVISIONS

**GUSTAFSON BUILDERS EXCAVATING SPECIALISTS**

April 29, 2015

Kyle Treloar  
Dream Design International, Inc.  
528 Kansas City St  
Rapid City, SD 57701

**Re: Moon Meadows Park**  
**Project Number: 12-0653 & 09-0556**

Dear Mr. Treloar:

Please find attached the pricing for the Detention Ponds for the above referenced project. As stated on attached sheet this pricing is for "Budget Purposes Only." Project will actually be bid when an approved set of plans is available.

We appreciate your cooperation and should you have any further questions, please do not hesitate in contacting myself.

Sincerely,

Jake Birrenkott  
Project Manager  
Heavy Constructors, Inc

Moon Meadows - Detention Ponds

BID ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
<b>GENERAL</b>					
	Mobilization	1	LS	\$ 6,223.26	\$ 6,223.26
	Incidental	1	LS	\$ 3,111.63	\$ 3,111.63
	Material Testing	1	LF	\$ 6,223.26	\$ 6,223.26
	Construction Staking	1	LS	\$ 6,223.26	\$ 6,223.26
	Traffic Control	1	LS	\$ 622.33	\$ 622.33
<b>REMOVAL</b>					
	Remove 36" RCP Flared End Section	1	EA	\$ 622.33	\$ 622.33
	Remove 54" RCP Flared End Section	1	EA	\$ 622.33	\$ 622.33
	Remove Turf Reinforcement Mat	355	SY	\$ 6.22	\$ 2,208.10
<b>STORM</b>					
	36" RCP, Class 3	13	LF	\$ 245.32	\$ 3,189.16
	54" RCP, Class 3	7	LF	\$ 332.25	\$ 2,325.75
	Outlet Structure	2	EA	\$ 27,175.73	\$ 54,351.46
<b>GRADING</b>					
	Unclassified Excavation	22640	CY	\$ 2.49	\$ 56,373.60
	Clear & Grubbing	1	LS	\$ 3,111.63	\$ 3,111.63
	Topsoil, Stockpile & Replace (6")	2673	CY	\$ 4.98	\$ 13,311.54
	Seeding (Road Ditch Mix), Fert. & Mulch	16037	SY	\$ 0.44	\$ 7,056.28
<b>EROSION CONTROL</b>					
	Erosion Control Wattles, 12"	700	LF	\$ 8.71	\$ 6,097.00
	Inlet Protection	2	EA	\$ 311.16	\$ 622.32
	Erosion Control Blanket, Type 3	48	SY	\$ 7.47	\$ 358.56
	Rock Construction Entrance	1	EA	\$ 933.49	\$ 933.49
				<b>TOTAL</b>	<b>\$ 173,587.29</b>

**Notes:** Numbers above are only for Budget Purposes Only. Job will  
be bid when approved plans are available.