CWCB Loan Feasibility Study Delta Water Storage Project

Fort Morgan Farms, LLC

Prepared For: Colorado Water Conservation Board June 2020

FEASIBILITY STUDY APPROVAL

Pursuant to Colorado Revisad Statutes 37-60-121 &122, and the Pursuant to Colorado Revisad Statu

signed

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# 1.0 Background

### **Purpose**

Eastern Colorado agriculture has a significant water shortage and large amounts of arable land are currently unused or underutilized. Due to seasonality, significant amounts of water flow through the region without being utilized for agriculture or other purposes. The Delta Water Storage will provide water storage capacity to allow temporary capture and storage of water and enable the productive use of several thousand acres of unused or underutilized farmland.

The primary objective of the project is to increase the quantity and availability of water for agriculture at Fort Morgan Farms. Fort Morgan Farms is located five miles west of Fort Morgan in Morgan County. Fort Morgan Farms grows corn, wheat and hay and has 2260 acres of arable land located south of the South Platte River. Currently, 780 acres are dry land and are not used productively for agriculture. The remaining 1480 acres are currently used for agriculture but most of these fields currently do not have sufficient water available and could be significantly more productive with supplemental water. Fort Morgan Farms would use the water storage to provide augmentation for these existing farms. The increased water availability will enable Fort Morgan Farms to increase production and profitability. This will allow crop production to continue many years in the future.

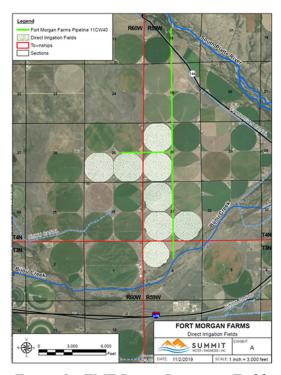


Figure 1 - FMF Direct Irrigation Fields

Figure 1 shows Fort Morgan Farms' direct irrigation fields. These seven fields are located south of the South Platte River and can utilize direct irrigation. However, only two of the seven fields have sufficient allotments of water to allow productive use every year. Figure 1 also shows the Fort Morgan Farms Pipeline which is under construction and will support future irrigation and augmentation by allowing water to be moved from the South Platte River to the fields and augmentation sites.

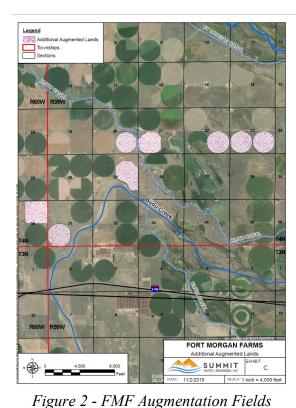


Figure 2 shows the locations of Fort Morgan Farms' eight addition fields which are currently unused because of lack of water. These fields rely on well water for irrigation. Augmentation that could be provided via upstream water storage and release would allow these fields to be used productively for agriculture. With augmentation in place, Fort Morgan Farms can support these fields with multiple existing junior water decrees.

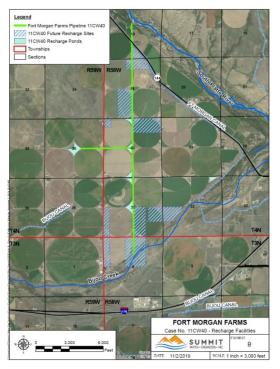


Figure 3 - FMF Pipeline and Recharge Sites

Figure 3 shows the FMF 11CW40 Pipeline along with existing and future recharge sites to allow augmentation to occur in closer proximity to the fields requiring augmentation water.

Fort Morgan Farms has filed for junior water rights to allow water storage of up to 12,000 acre-feet of water. The application would allow diversion from both the South Platte and the Cache La Poudre Rivers. The application allows the stored water to be used for irrigation, augmentation, and recharge. The irrigation, augmentation and recharge of the Fort Morgan Farms' fields is supported using a pumping station and pipeline stipulated in the 11WC40 decree.

# Study Area Description

The Delta Water Storage Project is shown in Figure 4. It is located in central Weld County approximately four miles east of Greeley and three miles northwest of Kersey at the confluence of the Poudre and South Platte Rivers. The Cache La Poudre River flows past the project on the north and east sides of the project and flows into the South Platte on the east side. The South Platte flows along the south and south-east sides of the project and flows east after the confluence with the Cache La Poudre. The total capacity for the entire reservoir site is ~12,000 acre-feet. This study is for the first phase of the project, which is the western half of the overall project with an estimated storage capacity of 6,000 acre-feet.

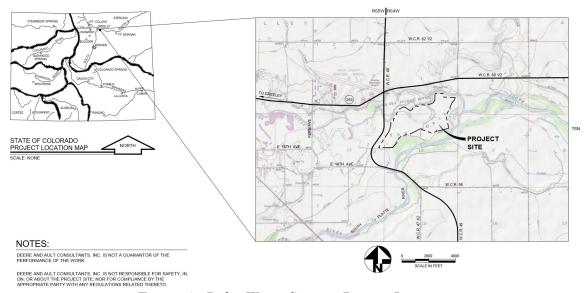


Figure 4 - Delta Water Storage Project Location

The topology of the land is flat with the elevation of the site varying between 4600 and 4610 feet. The southwest portion of the reservoir, approximately 80% of the reservoir surface area, is flat farmland. The northeast portion, approximately 20% of the reservoir surface area, is also flat with some wooded areas, particularly near the rivers. Figure 5 shows a photo of the area looking west from W.C.R. 49, also called Weld County Parkway.



Figure 5 - Google Maps Street View of Delta Water Storage from WCR49

Figure 6 shows the location of the Delta Water Storage Reservoir relative to Fort Morgan Farms' fields which are located in Morgan County. The pipeline which supports irrigation and augmentation is shown in blue in Figure 3. Morgan County and the population in the region are supported by agriculture. In 2017, Morgan County had a population of 28,123, median household income of \$51,456 and a poverty rate of 9.33%. The Delta Water Storage Reservoir and similar projects which support the water infrastructure in Northeast Colorado improve the economy and stability of these communities.



Figure 6 - Google Maps View of Greeley and Fort Morgan with Project Sites

### 2.0 Project Sponsor

Fort Morgan Farms, LLC is a private entity which was established on March 28, 2000 and is 100% owned by Robert L. Graves. Fort Morgan Farms (FMF) owns and operates land in Morgan County, Colorado. Fort Morgan Farms also leases fields from High Plains Grazing for additional operations. High Plains Grazing, LLC is a private entity which was established on May 12, 1965 as a grazing association but is now 100% owned by Robert L. Graves.

FMF has 1480 acres of farmland that currently have junior water rights that provide some water for irrigation. FMF owns an additional 780 acres of farmland that have minimal existing water available due to junior water rights which utilize wells. These fields require well water which is highly unreliable without augmentation from a reliable source.

FMF has multiple junior water rights associated with the existing fields in Morgan County. FMF has operated since 2000 and grows corn, wheat, hay and straw. FMF also receives some revenue by renting unused fields to second parties. In 2019, FMF produced 243,000 bushels of corn, 63,500 bushels of wheat and 866 tons of hay and straw.

FMF owns existing water rights as shown below,

- 723 CBT shares
- 36.5 Jackson Lake Shares
- 342 Bijou District Acres

Junior Water Rights as follows,

- Beauprez Well 91CW066,
- Fort Morgan Farms 00CW261,
- Furst Decree 07CW291,
- McCracken Decree 08CW104,
- Fort Morgan Farms 19CW193246,
- Old Central Well

#### 3.0 Water Rights

# 3.1 Water Availability

The Delta Water Storage Reservoir will divert water from the adjacent Cache La Poudre and South Platte Rivers for storage. Fort Morgan Farms, LLC and High Plains Grazing, LLC have applied for junior water rights which will allow water to be pumped into the reservoir when flows exceed calls by senior water downstream.

The application is a maximum of 12,000 acre-feet of storage for the entire reservoir complex (~5750 AF is the capacity for initial the reservoir) and allows for conditional diversions of 100 cfs from the South Platte River and 100 cfs from the Cache La Poudre River. The application has a maximum simultaneous rate of diversion of 200 cfs.

Deere and Ault Consulting conducted a study based on historical data from 2000-2018. The study indicates that with a storage capacity of 12,000 AF, water would have been available for storage and use in the Delta Water Storage Reservoir during 17 years of the 19 year study. The proposed first phase reservoir with a storage capacity of ~6,000 AF would have increased water availability in 16 years of the 19 year study.

### 3.2 Water Supply Demands

Water demand for Fort Morgan Farms, including land leased from High Plains Grazing, is summarized by Deere & Ault Consultants in the following analysis,

In order to inform the claim for a storage water right on behalf of Fort Morgan Farms, LLC and High Plains Grazing, LLC (Applicants), we have conducted an analysis of the potential unmet augmentation demand, and the ability of the proposed DPG Reservoir to satisfy that demand. The proposed claim contemplates a diversion capacity of up to 100 cfs, and a reservoir volume of 12,000 acre-feet.

The Applicants own 2,119 acres of potentially irrigated land that is supplied with water by irrigation wells included in existing and contemplated augmentation plans. The potential depletion for all of the Applicants' wells was calculated based on the potential evapotranspiration (PET) of alfalfa and corn near Wiggins, Colorado. We used climate data from the NCWCD Wiggins Station, the ASCE Standardized Penman-Monteith method, the alfalfa reference crop, and crop coefficients from Hoffman, et al. (2007) to calculate the net water requirement (NWR) for corn and alfalfa for the 1992 through 2018 period. NWR is defined as the potential evapotranspiration of the crop less effective precipitation. The results are summarized below:

Table 1 - Summary of Annual Net Water Requirements

# Summary of Annual Net Water Requirement for Alfalfa and Corn near Wiggins, Colorado (all values in inches)

Crop	Average NWR	Maximum NWR (2012)
Alfalfa	32.35	44.84
Corn	22.95	32.27

The maximum NWR during this study period was 32.27 inches for corn and 44.84 inches for alfalfa in 2012. Assuming a crop mix of 50 percent corn and 50 percent alfalfa, the average net water requirement on the Applicants' 2,119 acres is 4,883 acre-feet per year, and the maximum net water requirement is 6,808 acre-feet per year. Assuming groundwater depletions will consist of 92 percent crop consumptive use and 8 percent consumptive losses, such as plant interception and spray evaporation (Schneider and Howell, 1993), the groundwater depletion resulting from full crop irrigation would average 5,307 acre-feet, with a maximum of 7,400 acre-feet per year, based on 2012.

In order to evaluate the Applicants' need for the subject water supplies, we developed a preliminary reservoir operating model. The study period for this model was from January, 2000 through December, 2018. The NWR was calculated as described above using the ASCE Standardized Penman-Monteith method. The groundwater depletion was calculated as the NWR with 8 percent spray loss. The replacement amounts attributable to The Applicants' augmentation supplies was calculated for each water supply as follows:

- 05CW346 Consumptive Use. The projectable consumptive use and winter depletions described in the decree in this case were applied to every year. Return flow obligations estimates were included as depletions in the winter.
- Weldon Valley Recharge Credits. The historical recharge credits from the accounting for Case No. 02CW377 dating back to November, 2009. For January, 2000 through October, 2009, monthly averages were used.
- Bijou Recharge Accounts. The historical credit available to the Applicants from accounts owned or leased long-term was used for the period of record, beginning in January, 2001.
- FMRIC Recharge Accounts. The historical credit available to the Applicants from accounts owned or leased long-term was used for the period of record, beginning in January, 2001.

The available replacement sources average 872 acre-feet per year during the study period. The maximum yield of the Applicants augmentation supplies is 1,651 acre-feet in 2016. The preliminary reservoir operation model was used to evaluate the performance of the proposed reservoir in satisfying the augmentation demands from the augmented wells that could not be met with the Applicants' existing augmentation supplies. The model assumes an evaporative loss from the reservoir of 729 acre-feet per year, based on an average surface area of 192.8 acres. In addition, we applied a transmission loss of 12.5% based on 50 miles of river transit at a rate of 0.25% per mile.

The results from the preliminary model, as represented by volume of water in storage in the reservoir, are summarized in the attached table. As you can see, there is a significant period from 2002 through 2006 when the reservoir is not able to provide a full augmentation supply to the Applicants, and is empty. As a result, we conclude that the claimed diversion rate of 100 cfs and storage volume of 12,000 acre-feet can be fully utilized by the Applicants, and are not speculative claims.

Table 2 - Average Volume in Storage for 12,000 AF Capacity

							(						
	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
•	2000	2,697	8,087	11,846	12,000	11,858	11,195	10,482	9,767	9,071	8,381	7,750	8,353
	2001	11,846	12,000	12,000	12,000	11,959	11,907	11,566	11,072	11,441	12,000	12,000	12,000
	2002	12,000	12,000	12,000	11,932	11,304	10,644	9,826	9,006	8,204	7,409	6,681	6,020
	2003	5,391	4,822	4,245	3,584	2,882	2,415	1,822	1,087	369	0	0	0
	2004	0	0	0	0	0	0	0	0	13	10	0	0
	2005	0	0	0	25	0	1,890	2,650	1,999	1,357	1,096	729	202
	2006	0	58	302	565	21	0	0	0	0	0	0	146
	2007	1,670	3,321	3,100	2,660	6,079	10,556	10,574	9,809	9,059	8,313	7,631	7,655
	2008	11,085	11,739	11,212	10,616	9,962	9,297	8,631	8,227	7,913	7,271	6,686	6,679
	2009	7,636	7,181	6,716	6,630	7,141	10,147	11,873	11,895	11,537	12,000	12,000	12,000
	2010	12,000	11,896	11,951	11,998	12,000	11,998	11,589	11,394	10,970	10,483	11,220	10,647

12,000

9.994

1,938

12.000

12,000

11,996

11,964

11,920

12,000

9.209

1,248

11.840

12,000

11,628

11,495

11,561

11,900

8.418

555

11.971

11,899

11,021

10,896

10,947

11.754

7,644

1,111

12.000

11,757

10.423

10,431

10,346

12,000

6.874

6,126

12.000

12,000

9,832

11,758

9,753

12,000

6,172

9,677

12.000

12,000

9,300

11,791

9,224

12,000

5.540

11,394

12.000

12,000

10,311

11,731

8,758

11,571

10.774

2,627

11.916

12,000

12,000

11,333

11,724

11.519

11.536

3,302

11.981

11,984

12,000

11,436

11,849

11,707

12.000

4,953

12.000

12,000

12,000

12,000

12,000

2011

2012

2013

2014

2015

2016

2017

2018

12,000

12.000

4,438

12.000

12,000

12,000

11,989

12,000

11,945

11.994

3,913

12.000

12,000

12,000

11,923

12,000

Average Volume in Storage for 12,000 AF Capacity

The table below shows the average volume if the capacity is 6,000 acre-feet which corresponds with the estimated capacity of the first half of the Delta Water Storage Reservoir. For the 6,000 AF Capacity, water is available for the majority of crop years but is reduced from the availability associated with the full 12,000 AF Capacity.

Table 3 - Average Volume in Storage for 6,000 AF Capacity

Average Volume in Storage for 6,000 AF Capacity

	(acre-feet)											
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2000	2,697	6,000	6,000	6,000	5,858	5,195	4,482	3,767	3,071	2,381	1,750	2,353
2001	5,846	6,000	6,000	6,000	5,959	5,907	5,566	5,072	5,441	6,000	6,000	6,000
2002	6,000	6,000	6,000	5,932	5,304	4,644	3,826	3,006	2,204	1,409	681	20
2003	0	0	0	0	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0	13	10	0	0
2005	0	0	0	25	0	1,890	2,650	1,999	1,357	1,096	729	202
2006	0	58	302	565	21	0	0	0	0	0	0	146
2007	1,670	3,321	3,100	2,660	6,000	6,000	6,000	5,235	4,485	3,739	3,057	3,081
2008	6,000	6,000	5,473	4,877	4,223	3,558	2,892	2,488	2,174	1,532	947	940
2009	1,897	1,442	977	891	1,402	4,408	6,000	6,000	5,642	6,000	6,000	6,000
2010	6,000	5,896	5,951	5,998	6,000	5,998	5,589	5,394	4,970	4,483	5,220	4,647
2011	5,707	6,000	5,945	5,519	5,571	6,000	6,000	5,900	5,754	6,000	6,000	6,000
2012	6,000	6,000	5,994	5,536	4,774	3,994	3,209	2,418	1,644	874	172	0
2013	0	0	0	0	0	0	0	0	556	5,571	6,000	6,000
2014	6,000	6,000	6,000	5,981	5,916	6,000	5,840	5,971	6,000	6,000	6,000	6,000
2015	6,000	6,000	6,000	5,984	6,000	6,000	6,000	5,899	5,757	6,000	6,000	6,000
2016	6,000	6,000	6,000	6,000	6,000	5,996	5,628	5,021	4,423	3,832	3,300	4,311
2017	6,000	5,989	5,923	5,436	5,333	5,964	5,495	4,896	4,431	5,758	5,791	5,731
2018	6,000	6,000	6,000	5,849	5,724	5,920	5,561	4,947	4,346	3,753	3,224	2,758

#### **4.0 Alternatives Analysis**

#### Alternative 1 – No Action

Under this alternative, Fort Morgan Farms would not develop the Delta Water Storage Reservoir and would rely on existing water supplies increase availability of water for irrigation and augmentation. With this alternative, water storage capacity and water availability will not be increased. Under this alternative, it is very unlikely that water would be available for irrigation of existing dry farmland.

# Alternative 2 – Purchase Existing Reservoir

Under this alternative, Fort Morgan Farms would purchase existing water storage capacity to provide water for dry farmland. Costs for recently built reservoirs have been in the range of \$5000-\$6500 per acre-foot of storage. Accordingly, a similarly sized 5750 acre-feet reservoir, if it could be purchased, would cost approximately \$30M-\$39M to acquire. In addition, the location of a purchased reservoir is important in terms of providing a proper location to capture and subsequently release water for the downstream agricultural operations. The Pioneer Reservoir, which is under development, is located at an appropriate location, with an initial planned cost of \$4300 per AF, although final costs could include contingency costs (10% increase) at ~\$4700 per AF. This alternative is ~2X-3X more expensive than Alternative 3 and does not create any incremental water storage which would improve water storage for Northeast Colorado.

## Alternative 3 – Build Delta Water Storage Reservoir

The Delta Water Storage Reservoir would be located in central Weld County at the confluence of the Cache La Poudre and South Platte Rivers. This alternative is the construction of a new reservoir with 5750 AF capacity. The Delta Water Reservoir will be completed in three phases:

- Phase 1 Vertical slurry wall construction down to the underlying bedrock will create ground water isolation and create a reservoir volume capable of storing over 5750 AF of water.
- Phase 2 Sand and gravel mining will remove the material on the interior of the reservoir volume. The mining occurs inside the reservoir perimeter but excludes an interior 3:1 sloped wall from the vertical slurry wall to the bedrock floor.
- Phase 3 Completion of inlet/outlet infrastructure that allows water to be transporter to and from the South Platte River and Cache La Poudre River. The water will be transported via pipelines or canals with 50 cfs pumping stations.

The Delta Water Storage Reservoir will be built on agricultural and undeveloped land in the region between the South Platte and Cache La Poudre Rivers. The Reservoir will divert water to and from the South Platte and Cache La Poudre rivers under a junior water right filed in 2019. Upon completion, the Delta Water Storage Reservoir increases water storage for agriculture in Northeastern Colorado by approximately 6,000 AF. A study of historical water availability and

demands (2000-2018) indicates that the reservoir would have been able to supplement water during 16 of 19 years. The estimated cost for the Delta Water Storage Reservoir is summarized in the table below. With an overall cost per AF of \$2500, the Delta Water Storage Reservoir is significantly more cost effective than purchasing an existing reservoir. Operating costs for the reservoir will be nominal relative to other reservoirs due to the proximity to the Cache La Poudre and South Platte Rivers.

Costs are summarized in Table 4. The largest cost is the construction of the vertical slurry wall which is \$9.33M including a 10% contingency. The funding request for this project is to finance the design, construction and testing of the vertical slurry wall which creates the isolated storage basin. Fort Morgan Farms will fund and build a portion of the pumping infrastructure in 2021 and the remainder of the pumping infrastructure after mining operations are completed in approximately 2031.

Table 4 - Probable Cost for Delta Water Storage Project

		r Storage Res	ervoir Project			
	Description	Unit	Quantity	Unit Cost	Markup (%)	Cost
	PRECON	STRUCTION	SERVICES			,
1.1	Develop and Maintain Preconstruction Schedule	1	LS	\$ 2,500.00	12.000%	\$ 2,800.00
1.2	Meetings	1	LS	\$ 18,561.00	18.528%	\$ 22,000.00
1.3a	Exploratory Geotechnical Investigation	1	LS	\$ 52,536.00	10.400%	\$ 58,000.00
1.3b	Geotechnical Investigation and Report	1	LS	\$ 127,233.77	10.034%	\$ 140,000.00
1.4	Environmental and Regulatory Permits	1	LS	\$ 10,072.50	14.172%	\$ 11,500.00
1.5	Plans, Technical Specifications and Design Report	1	LS	\$ 56,300.00	10.124%	\$ 62,000.00
	CONS	TRUCTION SE	RVICES			
2.1	Dramaya Culumittala fay Oumay Daviau	1	1.6	¢ 0 222 26	26.4289/	¢ 11 800 00
2.1	Prepare Submittals for Owner Review  Mobilization and Demobilization	1	LS LS	\$ 9,333.36 \$ 944,617.10	26.428% 12.681%	\$ 11,800.00 \$ 1,064,400.00
2.3	Clearing, Grubbing, Work Platform Grading	1	LS	\$ 271,745.62	10.729%	\$ 300,900.00
2.4	Trench Excavation and Soil-Bentonite Backfill for reaches of the wall that are less than 78 ft to top of bedrock.	305,828	SF	\$ 3.80	27.745%	\$ 1,483,265.80
2.5	Trench Excavation and cementitious backfill for reaches of the wall that are <b>more</b> than 78 ft depth to bedrock. Assume cement addition for full depth (ground surface to bottom of key).	436,528	SF	\$ 8.30	20.515%	\$ 4,366,464.73
2.6	Quality Control Testing	1	LS	\$ 176,414.48	10.819%	\$ 195,500.00
2.7	Permanent Slurry Wall Clay Cap	8,900	LF	\$ 4.50	20.018%	\$ 48,060.00
2.8	Site Restoration and Cleanup	1	LS	\$ 46,769.87	10.327%	\$ 51,600.00
2.9	Utility Protection	1	LS	\$ 19,193.41	22.438%	\$ 23,500.00
2.10	General Conditions	1	LS	\$ 267,465.05	23.754%	\$ 331,000.00
2.11	Insurance and Bonding	1	LS	\$ 126,283.25	0.013%	\$ 126,300.00
	POSTCO	NSTRUCTION	SERVICES			
3.1	90-day leak test and Acceptance	1	LS	\$107,691.84	27.77%	\$137,600.00
3.2	As-Built Drawings and Construction Report	1	LS	\$42,200.00	9.95%	\$46,400.00
		•	•		11	
	Slurry Wall Subtota					\$8,483,090.53
	Slurry Wall Contingency	<u> </u>			10%	\$848,309
	Slurry Wall Total with Con	tingency				\$9,331,400
	Pumping Infrastructure					
	50 cfs Inlet Pumping Station - South Platte	LS	1	\$400,000		\$400,000
	Inlet Canal from South Platte	LS	1	\$150,000		\$150,000
	50 cfs Inlet Pumping Station - Cache La Poudre	LS	1	\$400,000		\$400,000
	Inlet Canal from Cache La Poudre	LS	1	\$50,000		\$50,000
	10 cfs Outlet Pumping Station - Cache la Poudre	LS	1	\$150,000		\$150,000
	12 inch Outlet Pipeline - Cache La Poudre	LS	1	\$100,000		\$100,000
	Infrastructure Subto	tal				\$1,250,000
	Infrastructure Contingend				10%	\$125,000
	Infrastructure Total with Co		\$1,375,000			
	Project To	ntal				\$10,706,400

O&M Costs for the Delta Water Storage Reservoir are relatively low. Because DPG will continue to own the underlying land and use it for recreational activities, DPG is responsible for taxes associated with the property. Fort Morgan Farms is responsible for O&M expenses as shown in Table 5.

Table 5 - Annual O&M Costs (1000 AF Transfers)

Delta Water	Storage Re	servoir Project						
Operation and Maintenance Costs (1000 AF Transfers)								
Description	Unit Quantity		Unit Cost	Cost				
Vertical Slurry Water Inspection & Maintenance	LF	8800	\$0.50	\$4,400				
Pumping Infrastructure O&M								
50 cfs Platte Inlet Pumping Station - Electrical	AF	500	\$2.17	\$1,085				
50 cfs Platte Inlet Pumping Station - Maintenance	LS	1	\$500	\$500				
Inlet Canal from South Platte - Maintenance	LS	1	\$3,000	\$3,000				
50 cfs Poudre Inlet Pumping Station - Electrical	AF	500	\$2.17	\$1,085				
50 cfs Poudre Inlet Pumping Station - Maintenance	LS	1	\$500	\$500				
Inlet Canal from Poudre - Maintenance	LS	1	\$1,500	\$1,500				
10 cfs Poudre Outlet Pumping Station - Electrical	AF	1000	\$6.52	\$6,520				
10 cfs Poudre Outlet Pumping Station - Maintenance	LS	1	\$500	\$500				
12 inch Outlet Pipeline - Maintenance	LS	2500	\$1.00	\$2,500				
Infrastructure O&M Subtotal				\$17,190				
Total O&M Costs				\$21,590				

#### 5.0 Delta Water Storage Reservoir

The Delta Water Storage Reservoir will be located in central Weld County at the confluence of the Cache La Poudre and South Platte Rivers as shown in Figure 7. When completed, the western reservoir (western half of project site) will provide ~5750 AF of water storage for supporting agriculture in Northeast Colorado.

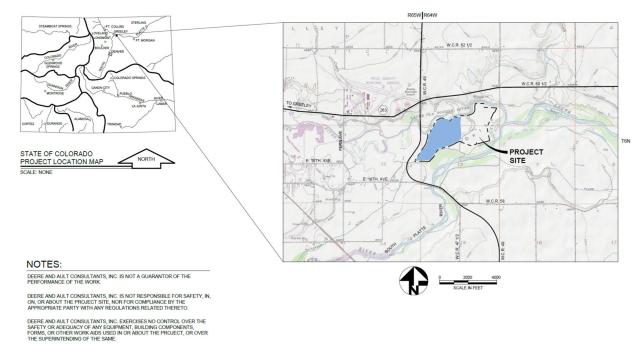


Figure 7 - Location of Delta Water Storage Site

The project will be completed in three phases:

- Phase 1 Vertical slurry wall construction down to the underlying bedrock will create ground water isolation and create a reservoir volume capable of storing 5750 AF of water.
- Phase 2 Sand and gravel mining will remove the material on the interior of the reservoir volume. The mining occurs inside the reservoir perimeter but excludes an interior 3:1 sloped wall from the vertical slurry wall to the bedrock floor.
- Phase 3 Completion of inlet/outlet infrastructure that allows water to be transporter to and from the South Platte River and Cache La Poudre River. The water will be transported to the reservoir using canals or pipelines with 50 cfs pumping stations.
   Water will be transported from the reservoir to the Cache La Poudre River using a canal or 12" pipeline and a 10 cfs pumping station.

Water stored in the reservoir will be used to support agricultural irrigation for Fort Morgan Farms, LLC and potentially other farmers in Morgan County. This proposal is for funding to complete Phase 1, Vertical Slurry Wall Construction. The Slurry Wall will have an 8800 linear feet perimeter and will be vertically constructed to penetration four feet into bedrock.

Sand and gravel mining (Phase 2 of the 5750 AF reservoir) will be started after the Vertical Slurry Wall is completed. During Phase 2, In-situ water storage of approximately 750 AF will be available to allow some water storage. This in-situ water can be utilized to support incremental agricultural production during the mining period. The in-situ storage will utilize the unmined lowest levels of the isolated storage basin. Water will be pumped from the river into an augmentation pond where mining is not in process. Water in the augmentation pond will be absorbed by the underlying ground. Water can be pumped out of the in-situ storage using a well structure and dewatering pumps which are required for the mining operation. The in-situ storage will not be available for several years at the end of the mining phase when the lowest levels of the reservoir are being mined.

Water will be transferred into the reservoir via canals and/or pipelines using pump stations at each river. The elevation of the rivers and the elevation of the upper rim of the reservoir are basically identical, at  $\sim 4605$  feet. The canal between the Cache La Poudre River and the reservoir will be approximately 200 feet long while the canal between the South Platte River and the reservoir will be approximately 1000 feet. 125 hp pumps located in pumping stations at each river diversion will allow up to 50 cfs of water to be diverted into the reservoir via the canals.

Water will be transferred out of the reservoir via a 12" pipeline to the Cache La Poudre, which flows into the South Platte at the east side of the site, approximately 4000' downstream. The outlet will utilize a 200 hp pump to enable up to 10 cfs through the outlet pipeline. The size of the pump and pipeline for augmentation can be relatively small because the flow rates to support irrigation and augmentation are lower than the anticipated diversion rates.

DPG Farms, LLC owns the land where the Delta Water Storage Reservoir complex will be built. The original design was comprised of Reservoirs 1-4 as shown in Figure 8. This proposal is to develop the western half of the complex which consists of reservoirs 1 & 2. Reservoirs 1 & 2 will be combined into a single reservoir utilizing a single slurry wall around the perimeter of the merged reservoirs. Deere and Ault Consultants, Inc is performing design work for the reservoir. Forgen LLC is the contractor selected to build the Vertical Slurry Walls for Phase 1. After the slurry walls are completed, J-2 Contracting Co., will initiate mining to remove the fill inside the reservoir.

The Delta Water Storage Reservoir Complex has been approved by multiple regulatory agencies in Weld County. The Weld County Planning Commission approved the development plan in 2019. The Weld County Commissioners approved the development plan in February 2020, with minor stipulations related to the traffic intersection for the mining operation. J-2 Contracting Co. has obtained permit number M2019028 for the mining the DPG Pit.

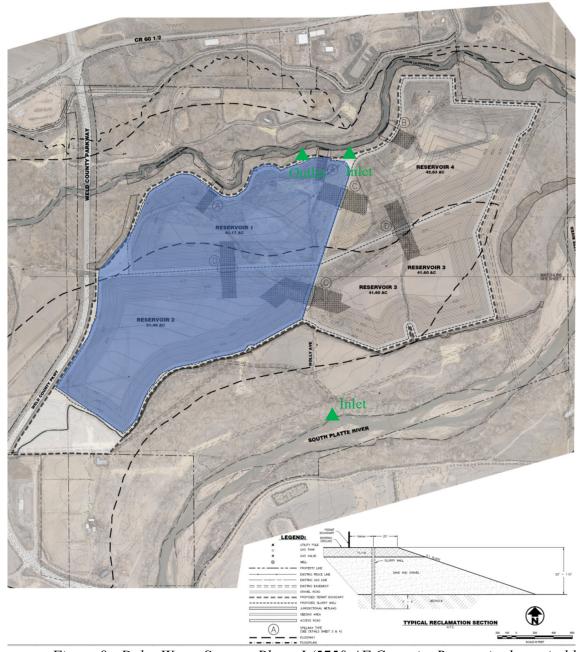


Figure 8 - Delta Water Storage Phase I (5750 AF Capacity Reservoir shown in blue)

The next several pages provide details on the site and the vertical slurry wall. The existing conditions for the project site are shown in Figure 9. Results from borings and test pits are shown in Figures 10-13. The slurry wall alignment plan is shown in Figure 14 and the cross section of the vertical slurry wall is shown in Figure 15. Figure 16 shows the reclamation plan and Figure 17 shows details for the slurry wall.

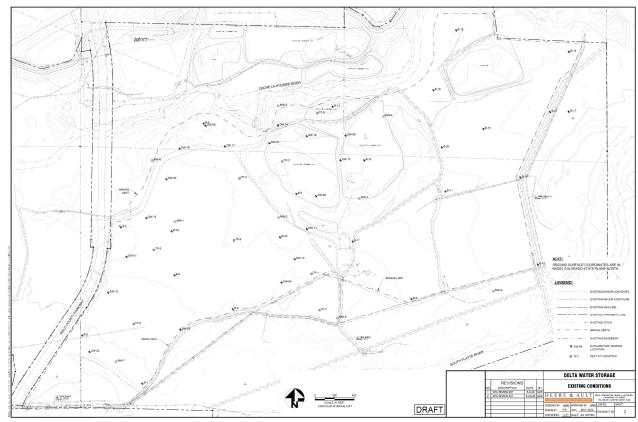


Figure 9 - Delta Water Storage Site Existing Conditions

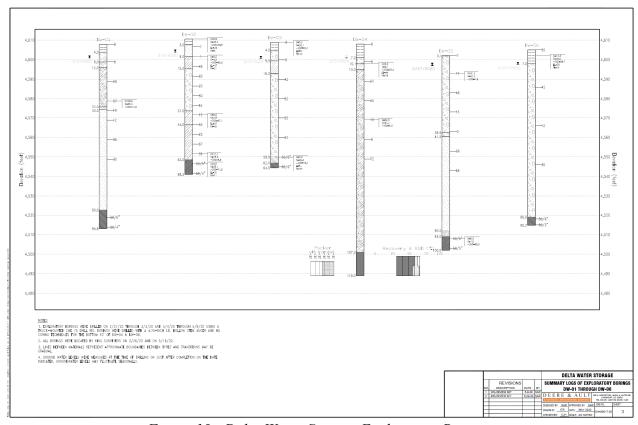


Figure 10 - Delta Water Storage Exploratory Borings

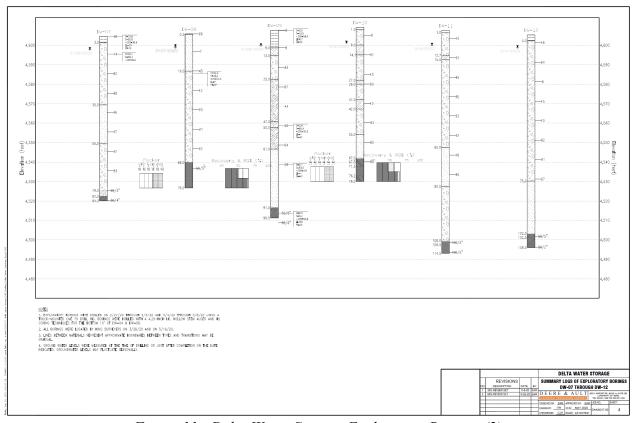


Figure 11 - Delta Water Storage Exploratory Borings (2)

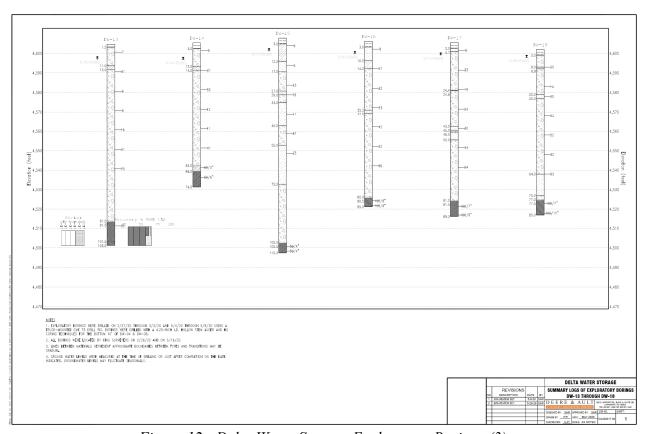


Figure 12 - Delta Water Storage Exploratory Borings (3)

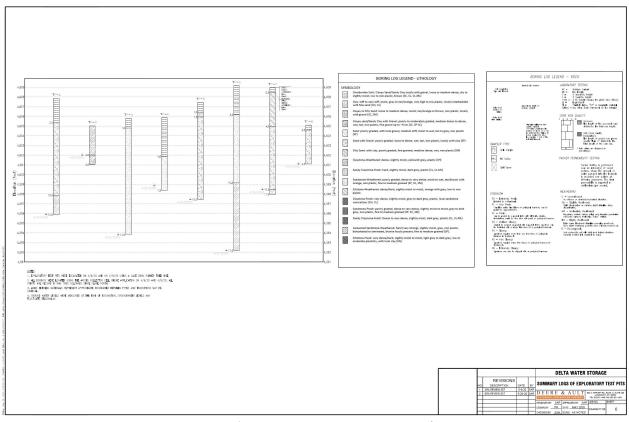


Figure 13 - Delta Water Storage Summary of Test Pits

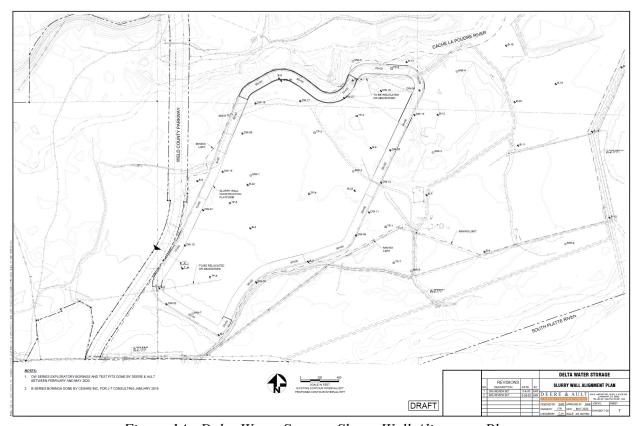


Figure 14 - Delta Water Storage Slurry Wall Alignment Plan

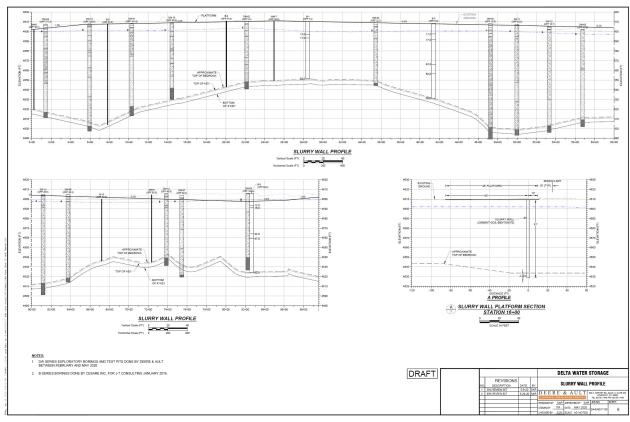


Figure 15 - Delta Water Storage Slurry Wall Profile

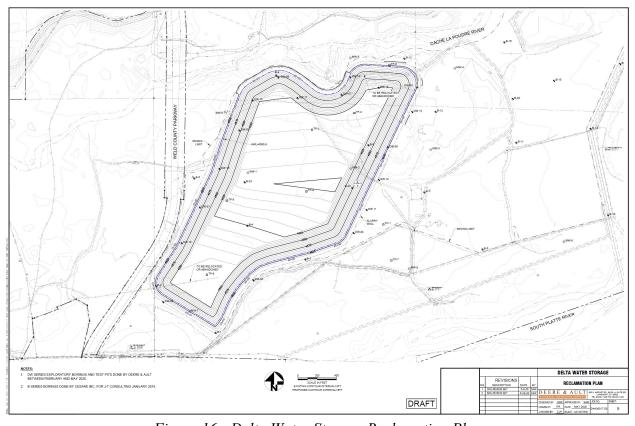


Figure 16 - Delta Water Storage Reclamation Plan

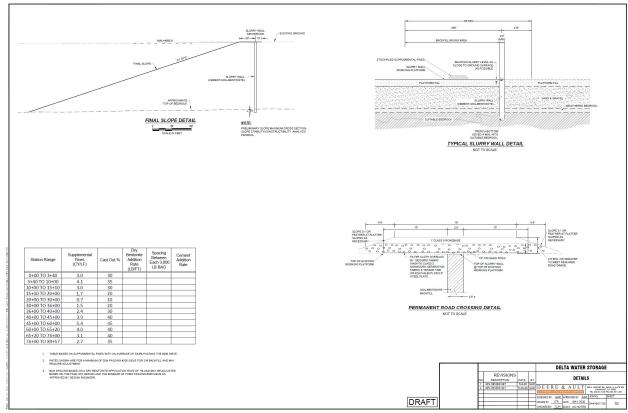


Figure 17 - Delta Water Storage Details

# 5.1 Cost Estimate

The overall project costs were listed in Table 4 with a project total of \$10.7M. This funding request is for \$9.424M to design, construct and test of the vertical slurry wall. The funding request includes the \$8.483M for Forgen plus a 10% contingency and 1% origination fee.

Figure 18 is the 30% design complete bid schedule from Forgen detailing the costs associated with the design, construction and testing. After the slurry wall is built and tested, mining operations will commence and require approximately 10 years to create the water storage basin.

Figure 18- Vertical Slurry Wall Bid Schedule from Forgen (without 10% contingency)



	BID	SCHEDULE							
Delta Water Storage Reservoirs									
Sch. No.	Description	Quantity	Unit		Unit Cost (\$)	Markup (%)		Total Price (\$)	
	PRECONST	RUCTION SERVICES	91	20		100			
1.1	Develop and Maintain Preconstruction Schedule	1	LS	\$	2,500.00	12.000%	\$	2,800.00	
1.2	Meetings	1	LS	\$	18,561.00	18.528%	\$	22,000.00	
1.3a	Exploratory Geotechnical Investigation	1	LS	\$	52,536.00	10.400%	\$	58,000.00	
1.3b	Geotechnical Investigation and Report	1	LS	\$	127,233.77	10.034%	\$	140,000.00	
1.4	Environmental and Regulatory Permits	1	LS	\$	10,072.50	14.172%	\$	11,500.00	
1.5	Plans, Technical Specifications and Design Report	1	LS	\$	56,300.00	10.124%	\$	62,000.00	
	CONSTR	UCTION SERVICES	37	3/4		VC 0			
2.1	Prepare Submittals for Owner Review	1	LS	\$	9.333.36	26.428%	\$	11.800.00	
2.2	Mobilization and Demobilization	1	LS	\$	944,617.10	12.681%	\$	1,064,400.00	
2.3	Clearing, Grubbing, Work Platform Grading	1	LS	\$	271,745.62	10.729%	\$	300,900.00	
2.4	Trench Excavation and Soil-Bentonite Backfill for reaches of the wall that are less than 78 ft to top of bedrock.	305,828	SF	\$	3.80	27.745%	\$	1,483,265.80	
2.5	Trench Excavation and cementitious backfill for reaches of the wall that are more than 78 ft depth to bedrock. Assume cement addition for full depth (ground surface to bottom of key).	436,528	SF	\$	8.30	20.515%	\$	4,366,464.7	
2.6	Quality Control Testing	1	LS	\$	176,414.48	10.819%	\$	195,500.00	
2.7	Permanent Slurry Wall Clay Cap	8,900	LF	\$	4.50	20.018%	\$	48,060.00	
2.8	Site Restoration and Cleanup	1	LS	\$	46,769.87	10.327%	\$	51,600.00	
2.9	Utility Protection	1	LS	\$	19,193.41	22.438%	\$	23,500.00	
2.10	General Conditions	1	LS	\$	267,465.05	23.754%	\$	331,000.00	
2.11	Insurance and Bonding	1	LS	\$	126,283.25	0.013%	\$	126,300.00	
	POSTCONS	TRUCTION SERVICES							
3.1	90-day leak test and Acceptance	1	LS	\$	107,691.84	27.772%	\$	137,600.00	
3.2	As-Built Drawings and Construction Report	1	LS	\$	42,200.00	9.953%	\$	46,400.00	
	·		•	•	TOTA	i	Ś	8,483,090.53	

The pumping infrastructure will be built and financed by Fort Morgan Farms. The pumping infrastructure construction will occur in two distinct periods. The infrastructure from the Cache La Poudre River will be built in 2021 to enable in-situ storage while mining operations are in progress from 2021 – 2031. The cost of this infrastructure is \$495,000 including a 10% contingency. J-2 Contracting will provide dewatering infrastructure for removing water from the isolated basin during the mining period. This infrastructure will be utilized to release water from in-situ storage.

The remaining pumping infrastructure will be built in 2031 after mining operations have been completed. This infrastructure includes the pumping station and canal to move water to the reservoir from the South Platte River. It also includes the final infrastructure to replace the dewatering infrastructure for releasing water from the reservoir into the Cache La Poudre River. The cost of the 2031 infrastructure is \$880,000 including a 10% contingency.

#### 5.2 Implementation Schedule

The preliminary schedule for the slurry wall construction is shown in Figure 19. J-2 Contracting will start mining after the slurry wall testing is complete. The mining operation will take 10 years to remove the material inside the reservoir basin.

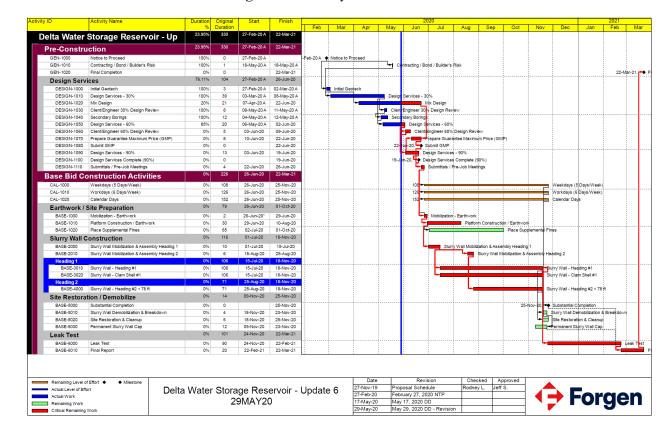


Figure 19 - Slurry Wall Schedule

#### 5.3 Institutional Feasibility

Fort Morgan Farms, LLC has water storage rights and a permanent easement to operate the reservoir. Fort Morgan Farms has filed for junior water rights to allow diversion of water for storage and subsequent release for irrigation and augmentation. DPG Farms and J-2 Contracting have mining rights and permits to excavate the property associated with the Delta Water Storage Reservoir.

Weld County Planning approved the reservoir complex plan in 2019. The Weld County Commissioners have reviewed and approved with stipulation to modify the traffic intersection for the mining phase.

### **6.0 Financial Feasibility**

#### 6.1 Loan Amount

Total project costs for the Delta Water Storage Vertical Slurry Wall are estimated at \$9,331,000 including a 10% contingency. A 30-year term loan of \$9,424,000 is requested with an interest rate of 1.35%.

Pumping infrastructure will be built and financed by Fort Morgan Farms after the slurry wall construction and mining operations are completed. A portion of this infrastructure will be built in 2021 and the remainder will be built in 2031. The estimated cost for the pumping infrastructure is \$1.375M, including a 10% contingency.

# **6.2** Financing Sources

The Delta Water Storage Reservoir will be funded by two funding sources,

- CWCB Loan
- Fort Morgan Farms, LLC

The initial costs for the Vertical Slurry Wall will be financed using the CWCB loan. The cost of the pumping infrastructure will be paid by Fort Morgan Farms after the slurry wall construction and mining are completed.

### 6.3 Revenue and Expenditure Projects

Revenue and Expenditure projections are shown in Table 6. The in-situ 750 AF storage capability will enable Fort Morgan Farms to increase earnings by 25% starting in 2022 until 2029. For 2030-2032, the in-situ water capacity will decrease as mining occurs at depths previously used for in-situ storage. Then incremental earning will jump significantly after the full reservoir capacity is available in 2033. The increased FMF earnings will be used to cover a portion of the loan repayments with the remainder paid by Fort Morgan Farms and Morning Fresh Dairy. Starting in 2033, the incremental earnings from increased production should be able to cover the entire loan payment.

#### <u>6.4</u> Loan Repayment Sources

The loan repayment will be provided by Fort Morgan Farms, LLC and Morning Fresh Dairy, LLC. Both companies are owned and operated by Robert L. Graves. In 2019, both companies had positive operating income at levels that allows them to meet annual loan payments.

Fort Morgan Farms cashflow and operating earnings will improve as water storage capacity becomes available after completion of the slurry wall (750AF in 2022-2029) and after mining and pumping infrastructure are completed in 2032 (5750 AF from 2033 onward).

Table 6 – Delta Water Storage Annual Revenue and Expenditures

\$ 9,424,000 Loan Amount
30 Year Term
1.35% Interest Rate
\$ 21,590 Annual O&M Costs
2.5% Inflation
2.0% Interest Rate on Reserves

	2.0% Interest Rate on Reserves																				
				Annual R											ıal Expendit						
Year		cremental	FMF	Funds		D Funds		Total		Loan	08	&M Costs	Reserve	Reserve		Inte	erest on	Infr	astructure	Total Costs	
	FM	IF Earnings	for F	roject	for	Project	F	Revenue	P	ayment	_		Fund		Balance	R	eserve		Costs		
2020									\$	-											
2021			\$ 4	69,174	\$	469,174	\$	938,348	\$	384,115	\$	21,590	\$ 38,411	\$	38,411	\$	768	\$	495,000	\$	938,348
2022	\$	170,989	\$ 1	36,065	\$	136,065	\$	443,119	\$	384,115	\$	22,130	\$ 38,411	\$	76,823	\$	1,536			\$	443,119
2023	\$	175,264	\$ 1	.33,820	\$	133,820	\$	442,904	\$	384,115	\$	22,683	\$ 38,411	\$	115,234	\$	2,305			\$	442,904
2024	\$	179,646	\$ 1	31,529	\$	131,529	\$	442,703	\$	384,115	\$	23,250	\$ 38,411	\$	153,646	\$	3,073			\$	442,703
2025	\$	184,137	\$ 1	.29,190	\$	129,190	\$	442,516	\$	384,115	\$	23,831	\$ 38,411	\$	192,057	\$	3,841			\$	442,516
2026	\$	188,740	\$ 1	26,802	\$	126,802	\$	442,344	\$	384,115	\$	24,427	\$ 38,411	\$	230,469	\$	4,609			\$	442,344
2027	\$	193,459	\$ 1	24,364	\$	124,364	\$	442,186	\$	384,115	\$	25,038	\$ 38,411	\$	268,880	\$	5,378			\$	442,186
2028	\$	198,295	\$ 1	21,874	\$	121,874	\$	442,044	\$	384,115	\$	25,664	\$ 38,411	\$	307,292	\$	6,146			\$	442,044
2029	\$	203,252	\$ 1	19,332	\$	119,332	\$	441,917	\$	384,115	\$	26,305	\$ 38,411	\$	345,703	\$	6,914			\$	441,917
2030	\$	138,750	\$ 1	51,528	\$	151,528	\$	441,807	\$	384,115	\$	26,963	\$ 38,411	\$	384,115	\$	7,682			\$	441,807
2031	\$	71,110	\$ 1	.66,480	\$	166,480	\$	404,069	\$	384,115	\$	27,637	\$ -	\$	384,115	\$	7,682			\$	404,069
2032	\$	-	\$ 6	42,380	\$	642,380	\$	1,284,760	\$	384,115	\$	28,328	\$ -	\$	384,115	\$	7,682	\$	880,000	\$	1,284,760
2033	\$	566,786	\$	-	\$	-	\$	566,786	\$	384,115	\$	29,036	\$ -	\$	384,115	\$	7,682			\$	405,468
2034	\$	580,955	\$	-	\$	-	\$	580,955	\$	384,115	\$	29,762	\$ -	\$	384,115	\$	7,682			\$	406,194
2035	\$	595,479	\$	-	\$	-	\$	595,479	\$	384,115	\$	30,506	\$ -	\$	384,115	\$	7,682			\$	406,938
2036	\$	610,366	\$	-	\$	-	\$	610,366	\$	384,115	\$	31,269	\$ -	\$	384,115	\$	7,682			\$	407,701
2037	\$	625,625	\$	-	\$	-	\$	625,625	\$	384,115	\$	32,050	\$ -	\$	384,115	\$	7,682			\$	408,483
2038	\$	641,266	\$	-	\$	-	\$	641,266	\$	384,115	\$	32,852	\$ -	\$	384,115	\$	7,682			\$	409,284
2039	\$	657,298	\$	-	\$	-	\$	657,298	\$	384,115	\$	33,673	\$ -	\$	384,115	\$	7,682			\$	410,105
2040	\$	673,730	\$	-	\$	-	\$	673,730	\$	384,115	\$	34,515	\$ -	\$	384,115	\$	7,682			\$	410,947
2041	\$	690,573	\$	-	\$	-	\$	690,573	\$	384,115	\$	35,378	\$ -	\$	384,115	\$	7,682			\$	411,810
2042	\$	707,838	\$	-	\$	-	\$	707,838	\$	384,115	\$	36,262	\$ -	\$	384,115	\$	7,682			\$	412,694
2043	\$	725,534	\$	-	\$	-	\$	725,534	\$	384,115	\$	37,169	\$ -	\$	384,115	\$	7,682			\$	413,601
2044	\$	743,672	\$	-	\$	-	\$	743,672	\$	384,115	\$	38,098	\$ -	\$	384,115	\$	7,682			\$	414,530
2045	\$	762,264	\$	-	\$	-	\$	762,264	\$	384,115	\$	39,050	\$ -	\$	384,115	\$	7,682			\$	415,483
2046	\$	781,320	\$	-	\$	-	\$	781,320	\$	384,115	\$	40,027	\$ -	\$	384,115	\$	7,682			\$	416,459
2047	\$	800,853	\$	-	\$	-	\$	800,853	\$	384,115	\$	41,027	\$ -	\$	384,115	\$	7,682			\$	417,460
2048	\$	820,875	\$	-	\$	-	\$	820,875	\$	384,115	\$	42,053	\$ -	\$	384,115	\$	7,682			\$	418,485
2049	\$	841,397	\$	-	\$	-	\$	841,397	\$	384,115	\$	43,104	\$ -	\$	384,115	\$	7,682			\$	419,537
2050	\$	862,431	\$	-	\$	-	\$	862,431	\$	384,115	\$	44,182	\$ -	\$	384,115	\$	7,682			\$	420,614
2051	\$	883,992	\$	-	\$	-	\$	883,992	\$	-	\$	45,286	\$ -	\$	384,115	\$	7,682			\$	37,604
Totals	\$	15,275,896	\$ 2,4	52,539	\$2,	452,539	\$ 2	0,180,973	\$1	1,523,439	\$	993,146	\$ 384,115			\$ :	203,581	\$	1,375,000	\$	14,072,118

#### 6.5 Financial Impacts

The Delta Water Storage Project will increase the debt of Fort Morgan Farms by \$9.42M. For the next 10 years, Fort Morgan Farms and Morning Fresh Dairy will need to provide funding to pay a portion of the \$444,000-\$450,000 for annual loan payments, O&M and reserve fund. Fort Morgan Farms and Morning Fresh Dairy will also need to provide funds to finance pumping infrastructure in 2021 and 2032.

The annual expenditures decrease to \$412,000 in 2032 after the reserve fund is sufficiently funded and continue at that level (adjusting O&M expenses for inflation) until 2051. After 2033, the incremental income from increased production will be adequate to cover the loan and operating expenses. Additional funding from Fort Morgan Farms and Morning Fresh Dairy should not be necessary after 2033.

#### 6.6 Collateral

Fort Morgan Farms will provide collateral consisting of a lien on the reservoir improvements and shares of CBT (Colorado Big Thompson) project to meet the CWCB collateral requirements.

# <u>6.7</u> Sponsor Creditworthiness

Fort Morgan Farms and Morning Fresh Dairy have both operated as LLCs since 2000. Both entities have strong cashflow and strong balance sheets. The combined net worth of the two entities exceeds \$20M.

# 7.0 Conclusions and Recommendation

The Delta Water Storage Reservoir is the most effective solution for enabling Fort Morgan Farms to restore agricultural production on existing farmland that currently lacks sufficient water. The construction and completion of the 5750 Acre-Feet reservoir would enable Fort Morgan Farms to increase the availability of water and will significantly increase agricultural production and revenue. The feasibility of the project is high due to existing contracts and approvals by companies and regulatory agencies. Also, detailed studies and engineering designs have been completed to validate the feasibility of the reservoir. Fort Morgan Farms and Morning Fresh Dairy have sufficient financial assets and cashflow to repay the loan obligations associated with the project.

# **Appendices**

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Appendix	1 _	- Loan	Ant	าโาตล	t10n
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Appendix 2 – Fort Morgan Farms Articles of Incorporation

Appendix 3 – Fort Morgan Farms Operating Agreement

Appendix 4 – Morning Fresh Dairy Operating Agreement

Appendix 5 – Morning Fresh Dairy Articles of Incorporation

Appendix 6 – Delta Water Storage 60% Review Set

Appendix 7 – Delta Water Storage Water Rights Filing

Appendix 8 – J-2 Contracting Reclamation Permit Letter

Appendix 9 – Deere & Ault Analysis of DPG Reservoir Claims

Appendix 10 – Weld County Commissioners Approval

Appendix 11 – Confidential Financial Data



Department of Natural Resources

# Water Project Loan Program

Projects financed by the Water Project Loan Program must align with the goals identified in Colorado's Water Plan and its measurable

Application Type	All Production of the last of								
Prequalification (Attach 3 years of finance Agency/Company Information	ial statements)	oan Approval (Attach Loan F	easibility Study)						
Company / Borrower Name: Fort Morgan Farms, LLC									
	Authorized Agent &Title: Robert L. Graves, 100% Owner								
Address: 5821 W CR 54E, Bellvue, C	olorado 80512								
Phone: ( 970 ) 980-1147	Email: rob@morr	ningfreshdairy.com							
Organization Type: ☐ Ditch Co,☐ Dist  ✓ other: Agricult		у	Incorporated?	✓ YES					
County: Larimer		Number of Shares/Taps:							
Water District:		Avg. Water Diverted/Yr		acre-feet					
Number of Shareholders/Customers Ser	ved:	Current Assessment per							
Federal ID Number: 84-1550136		Average monthly water	bill \$	_ (Municipality)					
Contact Information									
Project Representative: Kurt Spears									
Phone: ( 970 ) 218-6860 Email: Kurt@morningfreshdairy.com									
Engineer: Alan Overton									
Phone: ( 970 ) 301-0985	Email: Alan.O@m	orningfreshdairy.com							
Attorney: John P. Justus									
Phone: ( 970 ) 986-3400	Email: jjustus	@hfak.com		/					
Project Information									
Project Name: Delta Water Storage									
Brief Description of Project: (Attach se	parate sheets if nee	eded)							
Delta Water Storage Project will build	a 5500-6000 A-F w	ater storage reservoir at	the confluence	of the Cache La					
Poudre and South Platte Rivers in Cent	ral Weld County (4	miles east of Greeley).	The water stora	ige will be used					
by Fort Morgan Farms for agricultural a	ugmentation and								
irrigation  Project Start Date(s) Design: Nove	mber 2019 Con	nstruction: July 20	20						
General Location: (Attach Map of Area)									
East of Greeley at the Confluence of the Cache L	a Poudre and South Pla	atte Rivers.							
Project Costs - Round to the nearest t	housand Other Cost	ts: Leak Test / Construction Re	eport cost \$184,000						
Estimated Engineering Costs: \$296,000		Estimated Construction	Costs: \$8,851,000	(w/ 10% contingency)					
Other Costs (Describe Above): \$184,000		Estimated Total Project							
Requested Loan Amount: \$9,424,000	(including 1% origination fee)	Requested Loan Term(10	0, 20, or 30 year ears	s):					
Signature									
Sanatura / Title	5-3/-20	Return to: Finance Secti 1313 Sherman S Denver, CO 802 Ph. 303/866.34 e-mail: matthe	st #718 03						

For office use only 031

20001063733 M 50.003 SECRETARY OF STATE 03-28-2000 15:00:30

Mail to: Secretary of State Corporations Section 1560 Broadway, Suite 200 Denver, CO 80202 (303) 894-2251 Fax (303) 894-2242

MUST BE TYPED FILING FEE: \$50.00 MUST SUBMIT TWO COPIES

Please include a typed self-addressed envelope

ARTICLES OF ORGANIZATION

I/We the unde under the Cold	rsigned natural person(s) of the age of eighteen yea orado Limited Liability Company Act, adopt the follow	rs or more, acting as org ring Articles of Organiza	enizer(s) of a limited liability company								
FIRST:	The name of the limited liability company is:	Fort Morgan Farms	C: Such inflitted liability company:								
SECOND:	Principal place of business (if known):	5821 County Road 54	Belleview, CO 80512								
THIRD:	The street address of the initial registered office o		nany is:								
	The mailing address (if different from above ) of the Same	ne initial registered office	of the limited liability company is:								
	The name of its proposed registered agent in Cold	erado at that address is:									
FOURTH:	The management is vested in ma										
FIFTH:	The names and business addresses of the initial manager or managers or if the management is vested in the members, rather than managers, the names and addresses of the members or members are:										
	NAME		clude zip codes)								
	Robert Lawrence Graves	5821 County R	oad 54, Belleview, CO 80512								
SIXTH:	The name and address of each organizer is:										
	NAME	ADDRESS (inc	clude zip code)								
	Robert Lawrence Graves	5821 County ⊰	oad 54. Belleview. CO 80512								

Revised 7/95

# **OPERATING AGREEMENT**

# Fort Morgan Farms, LLC

THIS AGREEMENT is made and entered into this 1st day of February 2002, by and between Fort Morgan Farms, LLC a Colorado Limited Liability Company (the "Company"), and Robert Graves hereinafter referred to as "Member" or "Members."

#### WITNESSETH:

IT IS AGREED, in consideration of the promises, covenants, performance, and mutual consideration herein as follows:

# I FORMATION OF COMPANY

- 1.1 Articles of Organization. This Company is organized pursuant to the provisions of the Colorado Limited Liability Company (C.R.S. § 7-80-101 et seq.), and pursuant to Articles of Organization filed with the Secretary of State of Colorado. The rights and obligations of the Company and the Members shall be provided in the Articles of Organization and this Operating Agreement.
- 1.2 Conflict Between Articles of Organization and This Agreement. If there is any conflict between the provisions of the Articles of Organization and this Operating Agreement, this Operating Agreement shall control.

TT

#### **OFFICE**

- 2.1 Office. The principal office of the company in the State of Colorado will be located at 5821 County Road 54, Bellvue, CO 80512. The Company may have other offices, either within or without the State of Colorado, as the Members may designate or as the business of the Company may require. The registered office of the Company required by the Colorado Limited Liability Company Act to be maintained in the State of Colorado may be, but need not be, identical with the principal office, and may be changed from time to time by the members.
- 2.2 **Duration of the Company.** The Company commenced effective the date of filing the Articles of Organization with the Colorado Secretary of State and will continue, unless terminated by operation of law or by agreement among the members. The members agree for themselves and their successors, assigns and heirs, that their participation is considered a long-term investment and that the commitment to advance funds is enforceable by the company.

# III CAPITAL CONTRIBUTIONS: LOANS

- 3.1 Additional Capital Contributions. In the event that the cash funds of the Company are insufficient to meet its operating expenses or to finance new investments deemed appropriate to the scope and purpose of the Company as determined by the Members and, if the Members deem it appropriate to make additional contributions, the Members shall make additional capital contributions, such contributions to be divided pro-rata between the Members proportional to their respective capital accounts. The amount of the additional capital required by the Company and the period during which such additional capital shall be retained by the Company shall be determined by the Members.
- 3.2 Loans. In lieu of voting an additional assessment of capital to meet operating expenses or to finance new investments, the Company may, as determined by the Members, borrow money from one or any of the Members or third persons. In the event that a loan agreement is negotiated with a Member, he or she shall be entitled to receive interest at a rate and upon such terms to be determined by the Members, excluding the Member making said loan, if applicable, and said loan shall be repaid to the Member, with unpaid interest, if any, as soon as the affairs of the Company will permit. The loan shall be evidenced by a promissory Note obligating the assets of the Company. Such interest and repayment of the amounts so loaned are to be entitled to priority of payment over the divisions and distribution of capital contributions and profit among Members.

IV

# ALLOCATIONS OF PROFIT AND LOSS; DISTRIBUTIONS

4.1 Allocations among Initial Members. Until such time as additional Members are admitted or any Member withdraws, the profits and gains of the Company shall be divided and the losses, deductions, and credits of the Company shall be borne in the following proportion:

(Name) (Percent)

Robert Graves 100%

#### 4.2 **Distribution of Assets.**

- 4.2.1 All distributions of assets of the Company, including cash, shall be made in the same allocations among Members as described in Section 4.1.
- 4.2.2 The Members shall determine, in their discretion, whether distributions of assets of the Company should be made to the Members; provided, however, that no distribution of assets may be made to a Member if, after giving effect to the distribution, all liabilities of the Company, other than

liabilities to Members on account of their capital and income accounts, would exceed the fair value of the Company assets.

4.2.3 A Member has no right to demand and receive any distribution from the Company in any form other than cash.

#### $\mathbf{V}$

# RULES RELATING TO THE MEMBERS

- 5.1. Admission of New Members. Additional Members may be admitted upon the unanimous written consent of all Members.
- 5.2. Voting of Members. Each Member shall be entitled to one vote for each percentage of ownership he or she has in the Company. A Member may vote in person or by proxy at any meeting of the Members. All decision of the Members shall be by a majority vote based on the percentage of ownership in the Company, (i.e. more than 50 percent of the ownership) at a properly called meeting of the Members at which a quorum is present or by unanimous written consent of the Members.
  - 5.3. Meetings of Members.
- 5.3.1. Meeting of Members may be held at such time and place, either within or without the State of Colorado, as may be determined by the Members or the person or persons calling the meeting.
- 5.3.2. An annual meeting of the Members shall be held on the 1st Monday in January in each year.
- 5.3.3. A Special meeting of the Members may be called by any Member entitled to vote at the meeting.
- 5.3.4. Written notice stating the place, day and hour of the meeting and, in the case of a special meeting, the purpose for which the meeting is called, shall be delivered not less than ten (10) days nor more than fifty (50) days before the date of the meeting, either personally or by mail, by or at the direction of the Members or any other person calling the meeting, to each Member of record entitled to vote at such meeting. A waiver of notice in writing, signed by the Member before, at, or after the time of the meeting stated in the notice shall be equivalent to the giving of such notice.
- 5.3.5. By attending a meeting, a Member waives objection to the lack of notice or defective notice unless the Member, at the beginning of the meeting, objects to the holding of the meeting or the transacting of business at the meeting. A Member who attends a meeting also waives objection to consideration at such meeting of a particular matter not within the purpose described in the notice unless the Member objects to considering the matter when it is presented.
- 5.4. Quorum and Adjournment. A majority of the Members entitled to vote shall constitute a quorum at the meeting of Members. If a quorum is not represented at any meeting of the Members, such meeting may be adjourned for a period not to exceed sixty (60) days at any one adjournment; provided, however, that if the adjournment is for more than thirty (30) days, a notice of the adjourned meeting shall be given to each Member entitled to vote at the meeting.
  - 5.5. Members. The Management of the Company shall be vested in its Members.
  - 5.6. Duties of Members.
- 5.6.1. The Members shall have the duties and responsibilities of Members and Managers, if any, as described in the Colorado Limited Liability Company Act, as amended from time to time.
- 5.6.2. The Members may designate any one of the Members or delegate an employee or agent to be responsible for the daily and continuing operations of the business affairs of the

Company. The Members may designate any one of the Members or designate an employee, agent or officer to be responsible for the daily and continuing operations of the business affairs of the Company.

- 5.6.3. Any Member may draw checks upon the bank accounts of the Company and may make, deliver, accept, or endorse any commercial paper in connection with the business affairs of the Company.
- 5.6.4. Any Member has the full power and authority to sell, purchase, encumber or otherwise transfer or acquire real estate or property or any interest in real estate or property (subject to the requirement that such transactions require a vote of the Members, pursuant to section 5.6.2 of this Agreement). In furtherance of that power and authority, any Member may execute, in the name of the Company any or all of the following instruments: contracts of purchase or sale, deeds with or without warranty, deeds of trust, mortgages, promissory notes, assumption documents, transfers of escrow funds and of insurance policies, closing and settlement statements, applications for loans, and any other documents containing such terms and conditions and such warranties and covenants as the Member deems necessary or convenient in order to complete any such authorized transaction. Any Member also is authorized and empowered to receive and collect funds and documents and sign receipts for such funds and documents and to endorse and deposit checks or drafts.
- 5.7. **Devotion to Duty**. At all times during the term of a Member, the Member shall give reasonable time, attention, and attendance to, and use reasonable efforts in the business of the said Company; and shall, with reasonable skill and power, exert himself or herself for the joint interest, benefit, and advantage of said Company; and shall truly and diligently pursue the Company objectives.
- 5.8. **Indemnification**. Members, employees and agents of the Company shall be entitled to be indemnified by the Company to the extent provided in the Colorado Limited Liability Company Act, as amended from time to time, and shall be entitled to the advance of expenses, including attorneys' fees, in the defense or prosecution of a claim against him or her in the capacity of Member, employee, or agent.

#### VI

#### BOOKS

- 6.1. Location of Records. The books of the Company shall be maintained at the principal office of the Company or at such other place as the Members by vote or consent shall designate.
- 6.2. Access to Records and Accounting. Each Member shall at all times have access to the books and records of the Company for inspection and copying. Each Member shall also be entitled:
- 6.2.1. To obtain from the Members upon reasonable demand for any purpose such information reasonably related to the Member Membership Interest in the Company;
- 6.2.2. To have true and full information regarding the state of the business and financial condition and any other information regarding the affairs of the Company;
- 6.2.3. To have a copy of the Company's federal, state, and local income tax returns for each year promptly after they are available to the Company; and

- 6.2.4. To have a formal accounting of the Company affairs whenever circumstances render an accounting just and reasonable.
- 6.3. Accounting Rules. The books shall be maintained on a cash basis. The fiscal year of the Company shall be the calendar year. Distributions to income accounts shall be made at least annually. The books shall be closed and balanced at the end of each calendar year and, if an audit is determined to be necessary by vote or consent of the Members, it shall be made as of the closing date. The Members may authorize the preparation of year-end profit-and-loss statements, balance sheets, and tax returns by a public accountant.

# VII DISSOLUTION

- 7.1. Causes of Dissolution. The Company shall be immediately dissolved upon the occurrence (the "effective date") of the following events:
  - 7.1.1. At any time by unanimous agreement of the Members;
- 7.1.2. Upon the expiration of the period fixed for the duration of the Company in its Articles of Organization or this Agreement; or
- 7.1.3. Upon the death, retirement, resignation, expulsion, bankruptcy, or dissolution of a Member.
- 7.2. Continuation of Business. Notwithstanding a dissolution of the Company under Section 7.1.3, within 90 days the Members may elect to continue the business of the Company, so long as there are at least two Members remaining who then consent to do so, by purchasing the deceased, retired, resigned, expelled, or bankrupt Member ("Withdrawn Member") Membership.
- 7.3. Purchase of Withdrawn Member's Membership Interest. If the Members elect to continue the business under Section 7.2, the purchase price of the withdrawn Member Membership Interest shall be the Membership Interest Share Value ("Share Value") shall be determined in accordance with Section 7.3.1.
- 7.3.1 Share Value. The Share Value for the purposes of this Agreement shall be its fair market value to be established as hereafter described. The Share Value shall include the value of the goodwill of the Company as a going concern. For the purpose of determining the Share Value in the event of the disability or death of a Member, the proceeds of any insurance policy subject to the terms and conditions of this Agreement insuring the disabled or deceased Member, in excess of such policy's cash value immediately prior to disability or death, shall not be taken into consideration.
- 7.3.1.1 <u>Initial Determination</u>. At the time of the execution hereof, the parties agree that the Share Value is as set forth upon Schedule A.
- 7.3.1.2 <u>Periodic Redetermination</u>. The parties may, by unanimous agreement, periodically redetermine the Share Value and shall endorse each such value on Schedule A hereof. Such determination should be made at least annually within one hundred twenty (120) days after the end of the fiscal year of the Company.
- 7.3.1.3 Expiration of Prior Share-Value Determination. Each determination of the Share Value shall be valid for twenty-four (24) months from the date of such valuation, or until the next valuation, whichever shall first occur.

- 7.3.1.4 <u>Determination of Share Value by Unanimous Agreement</u>. Notwithstanding any provision of this Agreement to the contrary, the Share Value may be as unanimously agreed upon, at any time and from time to time, by the parties.
- 7.3.1.5 <u>Appraisal</u>. If the period has elapsed during which the last prior valuation applies, and if the Share Value cannot be determined by unanimous agreement, then the Share Value shall be determined by and independent appraisal. The Share Value so determined shall, unless otherwise unanimously agreed, be binding on all parties for the purposes of this Agreement for twenty-four (24) months following the effective date of such appraisal or until the next determination of value, whichever shall first occur.
- 7.3.2. Election to Pay by Installments. In the event of a determination of purchase price pursuant to Section 7.3.1, the Managers may elect to pay for the withdrawing Member's interest on an installment basis by paying 20 percent in cash within 60 days after the purchase and the remainder amortized in monthly payments with a 10 year amortization with interest at the treasury bill rate quoted by the Wall Street Journal plus 2 points, adjusted annually on January 1st of every third year after the Effective Date. The initial interest rate shall be the interest of the treasury bill rate as quoted by the Wall Street Journal on the Effective Date plus 2 percent. There shall be no prepayment penalty. Nothing in this paragraph shall prevent the Company from paying cash for the withdrawing Member's interest. The debt shall be reflected by a promissory note signed by the Company on the Colorado Real Estate Commission approved form (with the "right to cure", and if the Company owns real estate, the said promissory note shall be secured by a deed of trust on Colorado Real Estate Commission approved form (strict due on transfer), subject only to the deeds of trusts existing on the Effective Date. In exchange for the promissory note and deed of trust, the withdrawing Member shall transfer all his interest to the Company.
- 7.3.3. The Effective Date shall be the date of death of a deceased Member, the date personal notice is received, or the date the certified mail is postmarked, in the case of a retired, resigned, or expelled Member, or the date the notice is delivered to the Withdrawn Member or to a place of business of the Company in case of bankruptcy of a Member.
- 7.4. Distribution of Assets if Business is not Continued. In the event of dissolution of the Company and if the Members do not elect to or are unable to continue the business of the Company under Section 7.2, the Members shall proceed with reasonable promptness to sell the real and personal property owned by the Company and to liquidate the business of the Company. Upon dissolution, the assets of the Company business shall be used and distributed in the following order:
  - 7.4.l. Any liabilities and liquidating expenses of the Company will first be paid;
- 7.4.2. The reasonable compensation and expenses of the Managers in liquidation shall be paid;
- 7.4.3. The amount then remaining shall be paid to and divided among the Members in accordance with the statutory scheme for distribution and liquidation of the Company under the Colorado Limited Liability Company Act, as amended from time to time.

# VIII EXPULSION OF A MEMBER

- 8.1. Causes of Expulsion.
- 8.1.1. If a Member shall violate any of the provisions of this Agreement; or
- 8.1.2. If a Member's Membership Interest shall be subject to a charging order or tax lien, which is not dismissed or resolved to the satisfaction of the other Members of the Company within thirty (30) days after assessment or attachment.
- 8.2. Notice of Expulsion. Upon the occurrence of an event described in this Section, written notice of expulsion shall be given to the violating Member either by serving the same by personal delivery or by mailing the same by certified mail to his or her last known place of residence, as shown on the books of said Company. Upon the receipt of personal notice, or the date of the postmark for certified mail, the violating Member shall be considered expelled, and shall have no further rights as a Member of the Company, except to receive the amounts to which he is entitled under Sections 7.3 or 7.4.

## IX BANKRUPTCY OF A MEMBER

- 9.1. Bankruptcy Defined. A Member shall be considered "bankrupt" if the Member files a petition in bankruptcy (or an involuntary petition in bankruptcy is filed against the Member and the petition is not dismissed within sixty (60) days or makes an assignment for the benefit of creditors or otherwise takes any proceeding or enters into any agreement for compounding his or her debts other than by the payment of them in the full amount thereof, or is otherwise regarded as insolvent under any Colorado insolvency act.
- 9.2. Effective Date for Bankruptcy. The Effective Date of a Member's bankruptcy shall be the date that the Members, having learned of the Member's bankruptcy, give notice in writing stating that the Member is regarded as bankrupt under this Agreement, such notice to be served personally or by leaving the same at the place of business of the Company. As of the Effective Date, the bankrupt Member shall have no further rights as a Member of the Company, except to receive the amounts to which he or she is entitled under Section 7.3 or 7.4, as applicable.

# X RETIREMENT OR RESIGNATION OF A MEMBER

- 10.1. Right to Retire or Resign. A Member shall have the right, at any time, to retire or resign as a Member of the Company by giving three (3) months' notice to the Company at the Company's place of business.
- 10.2. Consequence of Retirement or Resignation if the Business is Continued. Upon giving notice of an intention to retire or resign, the Withdrawn Member shall be entitled to have his or her Membership Interest purchased as provided in Section 7.3 if the remaining Members elect to continue the business of the Company under Section 7.2. Upon the receipt of notice of the remaining Members' election to continue the business, the Membership Interest of the Withdrawn Member in the Company shall cease and terminate, and the Withdrawn Member shall only be entitled to the payments provided in Section 7.3.

#### XI DEATH OF A MEMBER

- 11.1. **Death of a Member.** Upon the death of a Member, the deceased Member's rights as Member of the Company shall cease and terminate except as provided in this Article XI.
- 11.2. Consequence of Death if Business is Continued. If the surviving Members elect to continue the business as provided in Section 7.2, the Members shall serve notice in writing of such election, within three (3) months after the death of the decedent, upon the executor or administrator of the decedent, or, if at the time of such election no legal representative has been appointed, upon any one of the known legal heirs of the decedent at the last know address of such heir. The Company shall purchase the Membership Interest of the deceased Member as provided in Section 7.3, and the closing of such purchase shall be within sixty (60) days of the notice of such election, except in the event the Company has life insurance on the decedent, in which event the amount and method of payment for the Membership Interest of the deceased Member will be as provided in Section 11.3.
- 11.3. **Insurance.** The Company may contract for life insurance on the lives of each of the Members, in any amount not disproportionate to the value of each Member's Membership Interest. In the event of death of a Member, insurance proceeds paid to the Company will be used to purchase the Membership Interest of the deceased Member. The purchase price shall be the amount determined under Section 7.3. The payment of the purchase price to the decedent's representatives or heirs shall be made within sixty (60) days following receipt of the insurance proceeds by the Company. If the surviving Members do not elect to continue the business of the Company, or are unable to do so by law, the proceeds of any life insurance shall be treated as an asset of the Company for liquidation.
- 11.4. Consequences of Death if the Business is Not Continued. If the surviving Members do not elect to continue the business, or are unable to do so by law, the deceased Member shall only be entitled to his or her interest in liquidation as stated in Section 7.4.

#### XII

#### SALE OF A MEMBER'S INTEREST

12.1. **Provisions Restricting Sale of Membership Interests.** In the event that a Member desires to sell, assign, or otherwise transfer his or her Membership Interest in the Company and has obtained a bona fide offer for the sale thereof made by some person not a member of this Company, he or she shall first offer to sell, assign, or otherwise transfer the Membership Interest to the other Members at the price and on the same terms as previously offered him or her or the purchase price determined pursuant to Section 7.3 herein, whichever is less, and each of the other Members shall have the right to purchase his or her proportionate share of the selling Member's Membership Interest. If the entire Membership Interest is not purchased by the other Members, the selling Member may then sell, assign, or otherwise transfer his or her entire Membership Interest in the Company to the person making the said offer at the price offered. A purchaser of a Membership Interest of the company shall not become a Member without the unanimous consent of the non-selling Members, but shall be entitled to receive the share of profits, gains, losses, deductions, credits, and distributions to which the selling Member would be entitled.

# XIII MEMBERS' COVENANTS

- 13.1 Member's Personal Debts. In order to protect the property and assets of the Company from any claim against any Member for personal debts owed by such Member, each Member shall promptly pay all debts owing by him or her as they come due and shall indemnify the Company from any claim that might be made to the detriment of the Company by any personal creditor of such Member.
- 13.2 Alienation of Membership Interest. No Member shall, except as provided in Article XII, sell, assign, mortgage, or otherwise encumber his or her Membership Interest in the Company or in its capital assets or property; or enter into any agreement of any kind that will result in any person, firm, or other organization becoming interested with him or her in the Company; or do any act detrimental to the best interests of the Company.

## XIV MISCELLANEOUS PROVISIONS

- 14.1. Inurement. This Agreement shall be binding upon the parties hereto and their respective heirs, executors, administrator, successors, and assigns, and each person entering into this Agreement acknowledges that this Agreement constitutes the sole and complete representation made to him or her regarding the Company, its purpose and business, and that no oral or written representations or warranties of any kind or nature have been made regarding the proposed investments, nor any promises, guarantees, or representations regarding income or profit to be derived from any future investment.
- 14.2. Modification. This Agreement may be modified from time to time as necessary only by the written agreement of the Company, acting through the vote or consent of its Members.
- 14.3. Severability. The provisions of this Agreement are severable and separate, and if one or more is voidable or void by statute or rule of law, the remaining provisions shall be severed therefrom and shall remain in full force and effect.
- 14.4. Governing Law. This Agreement and its terms are to be construed according to the laws of the State of Colorado.
- 14.5. Counterparts. This Agreement has been executed in counterparts and each such counterpart shall be deemed an original of the Agreement for all purposes.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on the day first written above, in Steamboat Springs, Colorado.

Member:

Robert Graves

Fort Morgan Farms, LLC

## For office use only

FILE!

031

Mail to: Secretary of State Corporations Section 1560 Broadway, Suite 200 Denver, CO 80202 (303) 894-2251 Fax (303) 894-2242

MUST BE TYPED FILING FEE: \$50.00 MUST SUBMIT TWO COPIES

Please include a typed ARTICLES OF ORGANIZATION

SECRETARY OF STATE 03-28-2000 15:00:30

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I/We the und under the Ci	dersigned natural person(s) of the age of eighteen ye olorado Limited Liability Company Act, adopt the follow	ears or more, acting as or owing Articles of Organiza	c inizer(s) of a limited liability compan
FIRST:	The name of the limited liability company is:	Fort Morgan Farms, L	. C
SECOND:	Principal place of business (if known):	5821 County Road 54	Belleview, CO 80512
THIRD:	The street address of the initial registered office		
	5821 County Road 54, Belleview, CO 8	0540	
	The mailing address (if different from above ) of Same	the initial registered office	of the limited liability company is:
	The name of its proposed registered agent in Co		
FOURTH:	The management is vested in n		
FIFTH:	The names and business addresses of the initial immembers, rather than managers, the names and a		
	NAME		clude zip codes)
	Robert Lawrence Graves	5821 County	oad 54, Belleview, CQ 80512
SIXTH:	The name and address of each organizer is:		
	NAME	ADDRESS (ii-	clude zip code)
	Robert Lawrence Graves		oad 54. Belleview CO ansig

Revised 7/95

#### OPERATING AGREEMENT

## Morning Fresh Dairy Farm, LLC

THIS AGREEMENT is made and entered into this 10 day of 2002 by and between Morning Fresh Dairy Farm, LLC a Colorado Limited Liability Company (the "Company"), and Robert Graves hereinafter referred to as "Member" or "Members."

#### WITNESSETH:

IT IS AGREED, in consideration of the promises, covenants, performance, and mutual consideration herein as follows:

#### I FORMATION OF COMPANY

- 1.1 Articles of Organization. This Company is organized pursuant to the provisions of the Colorado Limited Liability Company (C.R.S. § 7-80-101 et seq.), and pursuant to Articles of Organization filed with the Secretary of State of Colorado. The rights and obligations of the Company and the Members shall be provided in the Articles of Organization and this Operating Agreement.
- 1.2 Conflict Between Articles of Organization and This Agreement. If there is any conflict between the provisions of the Articles of Organization and this Operating Agreement, this Operating Agreement shall control.

#### II

#### **OFFICE**

- 2.1 Office. The principal office of the company in the State of Colorado will be located at 5821 County Road 54, Bellvue, CO 80512. The Company may have other offices, either within or without the State of Colorado, as the Members may designate or as the business of the Company may require. The registered office of the Company required by the Colorado Limited Liability Company Act to be maintained in the State of Colorado may be, but need not be, identical with the principal office, and may be changed from time to time by the members.
- 2.2 **Duration of the Company.** The Company commenced effective the date of filing the Articles of Organization with the Colorado Secretary of State and will continue, unless terminated by operation of law or by agreement among the members. The members agree for themselves and their successors, assigns and heirs, that their participation is considered a long-term investment and that the commitment to advance funds is enforceable by the company.

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- 3.1 Additional Capital Contributions. In the event that the cash funds of the Company are insufficient to meet its operating expenses or to finance new investments deemed appropriate to the scope and purpose of the Company as determined by the Members and, if the Members deem it appropriate to make additional contributions, the Members shall make additional capital contributions, such contributions to be divided pro-rata between the Members proportional to their respective capital accounts. The amount of the additional capital required by the Company and the period during which such additional capital shall be retained by the Company shall be determined by the Members.
- 3.2 Loans. In lieu of voting an additional assessment of capital to meet operating expenses or to finance new investments, the Company may, as determined by the Members, borrow money from one or any of the Members or third persons. In the event that a loan agreement is negotiated with a Member, he or she shall be entitled to receive interest at a rate and upon such terms to be determined by the Members, excluding the Member making said loan, if applicable, and said loan shall be repaid to the Member, with unpaid interest, if any, as soon as the affairs of the Company will permit. The loan shall be evidenced by a promissory Note obligating the assets of the Company. Such interest and repayment of the amounts so loaned are to be entitled to priority of payment over the divisions and distribution of capital contributions and profit among Members.

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# ALLOCATIONS OF PROFIT AND LOSS; DISTRIBUTIONS

4.1 Allocations among Initial Members. Until such time as additional Members are admitted or any Member withdraws, the profits and gains of the Company shall be divided and the losses, deductions, and credits of the Company shall be borne in the following proportion:

(Name) (Percent)

Robert Graves 100%

## 4.2 Distribution of Assets.

4.2.1 All distributions of assets of the Company, including cash, shall be made in the same allocations among Members as described in Section 4.1.

4.2.2 The Members shall determine, in their discretion, whether distributions of assets of the Company should be made to the Members; provided, however, that no distribution of assets may be made to a Member if, after giving effect to the distribution, all liabilities of the Company, other than

liabilities to Members on account of their capital and income accounts, would exceed the fair value of the Company assets.

4.2.3 A Member has no right to demand and receive any distribution from the Company in any form other than cash.

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- 5.1. Admission of New Members. Additional Members may be admitted upon the unanimous written consent of all Members.
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  - 5.3. Meetings of Members.
- 5.3.1. Meeting of Members may be held at such time and place, either within or without the State of Colorado, as may be determined by the Members or the person or persons calling the meeting.
- 5.3.2. An annual meeting of the Members shall be held on the 1st Monday in January in each year.
- 5.3.3. A Special meeting of the Members may be called by any Member entitled to vote at the meeting.
- 5.3.4. Written notice stating the place, day and hour of the meeting and, in the case of a special meeting, the purpose for which the meeting is called, shall be delivered not less than ten (10) days nor more than fifty (50) days before the date of the meeting, either personally or by mail, by or at the direction of the Members or any other person calling the meeting, to each Member of record entitled to vote at such meeting. A waiver of notice in writing, signed by the Member before, at, or after the time of the meeting stated in the notice shall be equivalent to the giving of such notice.
- 5.3.5. By attending a meeting, a Member waives objection to the lack of notice or defective notice unless the Member, at the beginning of the meeting, objects to the holding of the meeting or the transacting of business at the meeting. A Member who attends a meeting also waives objection to consideration at such meeting of a particular matter not within the purpose described in the notice unless the Member objects to considering the matter when it is presented.
- 5.4. Quorum and Adjournment. A majority of the Members entitled to vote shall constitute a quorum at the meeting of Members. If a quorum is not represented at any meeting of the Members, such meeting may be adjourned for a period not to exceed sixty (60) days at any one adjournment; provided, however, that if the adjournment is for more than thirty (30) days, a notice of the adjourned meeting shall be given to each Member entitled to vote at the meeting.
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- 5.6.2. The Members may designate any one of the Members or delegate an employee or agent to be responsible for the daily and continuing operations of the business affairs of the Company. The Members may designate any one of the Members or designate an employee, agent or officer to be responsible for the daily and continuing operations of the business affairs of the Company.
- 5.6.3. Any Member may draw checks upon the bank accounts of the Company and may make, deliver, accept, or endorse any commercial paper in connection with the business affairs of the Company.
- 5.6.4. Any Member has the full power and authority to sell, purchase, encumber or otherwise transfer or acquire real estate or property or any interest in real estate or property (subject to the requirement that such transactions require a vote of the Members, pursuant to section 5.6.2 of this Agreement). In furtherance of that power and authority, any Member may execute, in the name of the Company any or all of the following instruments: contracts of purchase or sale, deeds with or without warranty, deeds of trust, mortgages, promissory notes, assumption documents, transfers of escrow funds and of insurance policies, closing and settlement statements, applications for loans, and any other documents containing such terms and conditions and such warranties and covenants as the Member deems necessary or convenient in order to complete any such authorized transaction. Any Member also is authorized and empowered to receive and collect funds and documents and sign receipts for such funds and documents and to endorse and deposit checks or drafts.
- 5.7. **Devotion to Duty**. At all times during the term of a Member, the Member shall give reasonable time, attention, and attendance to, and use reasonable efforts in the business of the said Company; and shall, with reasonable skill and power, exert himself or herself for the joint interest, benefit, and advantage of said Company; and shall truly and diligently pursue the Company objectives.
- 5.8. **Indemnification**. Members, employees and agents of the Company shall be entitled to be indemnified by the Company to the extent provided in the Colorado Limited Liability Company Act, as amended from time to time, and shall be entitled to the advance of expenses, including attorneys' fees, in the defense or prosecution of a claim against him or her in the capacity of Member, employee, or agent.

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#### **BOOKS**

- 6.1. Location of Records. The books of the Company shall be maintained at the principal office of the Company or at such other place as the Members by vote or consent shall designate.
- 6.2. Access to Records and Accounting. Each Member shall at all times have access to the books and records of the Company for inspection and copying. Each Member shall also be entitled:
- 6.2.1. To obtain from the Members upon reasonable demand for any purpose such information reasonably related to the Member Membership Interest in the Company;
- 6.2.2. To have true and full information regarding the state of the business and financial condition and any other information regarding the affairs of the Company;

- 6.2.3. To have a copy of the Company's federal, state, and local income tax returns for each year promptly after they are available to the Company; and
- 6.2.4. To have a formal accounting of the Company affairs whenever circumstances render an accounting just and reasonable.
- 6.3. Accounting Rules. The books shall be maintained on a cash basis. The fiscal year of the Company shall be the calendar year. Distributions to income accounts shall be made at least annually. The books shall be closed and balanced at the end of each calendar year and, if an audit is determined to be necessary by vote or consent of the Members, it shall be made as of the closing date. The Members may authorize the preparation of year-end profit-and-loss statements, balance sheets, and tax returns by a public accountant.

## VII DISSOLUTION

- 7.1. **Causes of Dissolution.** The Company shall be immediately dissolved upon the occurrence (the "effective date") of the following events:
  - 7.1.1. At any time by unanimous agreement of the Members;
- 7.1.2. Upon the expiration of the period fixed for the duration of the Company in its Articles of Organization or this Agreement; or
- 7.1.3. Upon the death, retirement, resignation, expulsion, bankruptcy, or dissolution of a Member.
- 7.2. Continuation of Business. Notwithstanding a dissolution of the Company under Section 7.1.3, within 90 days the Members may elect to continue the business of the Company, so long as there are at least two Members remaining who then consent to do so, by purchasing the deceased, retired, resigned, expelled, or bankrupt Member ("Withdrawn Member") Membership.
- 7.3. **Purchase of Withdrawn Member's Membership Interest.** If the Members elect to continue the business under Section 7.2, the purchase price of the withdrawn Member Membership Interest shall be the Membership Interest Share Value ("Share Value") shall be determined in accordance with Section 7.3.1.
- 7.3.1 Share Value. The Share Value for the purposes of this Agreement shall be its fair market value to be established as hereafter described. The Share Value shall include the value of the goodwill of the Company as a going concern. For the purpose of determining the Share Value in the event of the disability or death of a Member, the proceeds of any insurance policy subject to the terms and conditions of this Agreement insuring the disabled or deceased Member, in excess of such policy's cash value immediately prior to disability or death, shall not be taken into consideration.
- 7.3.1.1 <u>Initial Determination</u>. At the time of the execution hereof, the parties agree that the Share Value is as set forth upon Schedule A.
- 7.3.1.2 <u>Periodic Redetermination</u>. The parties may, by unanimous agreement, periodically redetermine the Share Value and shall endorse each such value on Schedule A hereof. Such determination should be made at least annually within one hundred twenty (120) days after the end of the fiscal year of the Company.

- 7.3.1.3 Expiration of Prior Share-Value Determination. Each determination of the Share Value shall be valid for twenty-four (24) months from the date of such valuation, or until the next valuation, whichever shall first occur.
- 7.3.1.4 <u>Determination of Share Value by Unanimous Agreement</u>. Notwithstanding any provision of this Agreement to the contrary, the Share Value may be as unanimously agreed upon, at any time and from time to time, by the parties.
- 7.3.1.5 <u>Appraisal</u>. If the period has elapsed during which the last prior valuation applies, and if the Share Value cannot be determined by unanimous agreement, then the Share Value shall be determined by and independent appraisal. The Share Value so determined shall, unless otherwise unanimously agreed, be binding on all parties for the purposes of this Agreement for twenty-four (24) months following the effective date of such appraisal or until the next determination of value, whichever shall first occur.
- 7.3.2. Election to Pay by Installments. In the event of a determination of purchase price pursuant to Section 7.3.1, the Managers may elect to pay for the withdrawing Member's interest on an installment basis by paying 20 percent in cash within 60 days after the purchase and the remainder amortized in monthly payments with a 10 year amortization with interest at the treasury bill rate quoted by the Wall Street Journal plus 2 points, adjusted annually on January 1st of every third year after the Effective Date. The initial interest rate shall be the interest of the treasury bill rate as quoted by the Wall Street Journal on the Effective Date plus 2 percent. There shall be no prepayment penalty. Nothing in this paragraph shall prevent the Company from paying cash for the withdrawing Member's interest. The debt shall be reflected by a promissory note signed by the Company on the Colorado Real Estate Commission approved form (with the "right to cure", and if the Company owns real estate, the said promissory note shall be secured by a deed of trust on Colorado Real Estate Commission approved form (strict due on transfer), subject only to the deeds of trusts existing on the Effective Date. In exchange for the promissory note and deed of trust, the withdrawing Member shall transfer all his interest to the Company.
- 7.3.3. The Effective Date shall be the date of death of a deceased Member, the date personal notice is received, or the date the certified mail is postmarked, in the case of a retired, resigned, or expelled Member, or the date the notice is delivered to the Withdrawn Member or to a place of business of the Company in case of bankruptcy of a Member.
- 7.4. **Distribution of Assets if Business is not Continued.** In the event of dissolution of the Company and if the Members do not elect to or are unable to continue the business of the Company under Section 7.2, the Members shall proceed with reasonable promptness to sell the real and personal property owned by the Company and to liquidate the business of the Company. Upon dissolution, the assets of the Company business shall be used and distributed in the following order:
  - 7.4.1. Any liabilities and liquidating expenses of the Company will first be paid;
- 7.4.2. The reasonable compensation and expenses of the Managers in liquidation shall be paid;
- 7.4.3. The amount then remaining shall be paid to and divided among the Members in accordance with the statutory scheme for distribution and liquidation of the Company under the Colorado Limited Liability Company Act, as amended from time to time.

## VIII EXPULSION OF A MEMBER

- 8.1. Causes of Expulsion.
- 8.1.1. If a Member shall violate any of the provisions of this Agreement; or
- 8.1.2. If a Member's Membership Interest shall be subject to a charging order or tax lien, which is not dismissed or resolved to the satisfaction of the other Members of the Company within thirty (30) days after assessment or attachment.
- 8.2. **Notice of Expulsion.** Upon the occurrence of an event described in this Section, written notice of expulsion shall be given to the violating Member either by serving the same by personal delivery or by mailing the same by certified mail to his or her last known place of residence, as shown on the books of said Company. Upon the receipt of personal notice, or the date of the postmark for certified mail, the violating Member shall be considered expelled, and shall have no further rights as a Member of the Company, except to receive the amounts to which he is entitled under Sections 7.3 or 7.4.

## IX BANKRUPTCY OF A MEMBER

- 9.1. **Bankruptcy Defined.** A Member shall be considered "bankrupt" if the Member files a petition in bankruptcy (or an involuntary petition in bankruptcy is filed against the Member and the petition is not dismissed within sixty (60) days or makes an assignment for the benefit of creditors or otherwise takes any proceeding or enters into any agreement for compounding his or her debts other than by the payment of them in the full amount thereof, or is otherwise regarded as insolvent under any Colorado insolvency act.
- 9.2. **Effective Date for Bankruptcy.** The Effective Date of a Member's bankruptcy shall be the date that the Members, having learned of the Member's bankruptcy, give notice in writing stating that the Member is regarded as bankrupt under this Agreement, such notice to be served personally or by leaving the same at the place of business of the Company. As of the Effective Date, the bankrupt Member shall have no further rights as a Member of the Company, except to receive the amounts to which he or she is entitled under Section 7.3 or 7.4, as applicable.

# X RETIREMENT OR RESIGNATION OF A MEMBER

- 10.1. **Right to Retire or Resign.** A Member shall have the right, at any time, to retire or resign as a Member of the Company by giving three (3) months' notice to the Company at the Company's place of business.
- 10.2. Consequence of Retirement or Resignation if the Business is Continued. Upon giving notice of an intention to retire or resign, the Withdrawn Member shall be entitled to have his

or her Membership Interest purchased as provided in Section 7.3 if the remaining Members elect to continue the business of the Company under Section 7.2. Upon the receipt of notice of the remaining Members' election to continue the business, the Membership Interest of the Withdrawn Member in the Company shall cease and terminate, and the Withdrawn Member shall only be entitled to the payments provided in Section 7.3.

#### XI DEATH OF A MEMBER

- 11.1. **Death of a Member.** Upon the death of a Member, the deceased Member's rights as Member of the Company shall cease and terminate except as provided in this Article XI.
- 11.2. Consequence of Death if Business is Continued. If the surviving Members elect to continue the business as provided in Section 7.2, the Members shall serve notice in writing of such election, within three (3) months after the death of the decedent, upon the executor or administrator of the decedent, or, if at the time of such election no legal representative has been appointed, upon any one of the known legal heirs of the decedent at the last know address of such heir. The Company shall purchase the Membership Interest of the deceased Member as provided in Section 7.3, and the closing of such purchase shall be within sixty (60) days of the notice of such election, except in the event the Company has life insurance on the decedent, in which event the amount and method of payment for the Membership Interest of the deceased Member will be as provided in Section 11.3.
- 11.3. **Insurance.** The Company may contract for life insurance on the lives of each of the Members, in any amount not disproportionate to the value of each Member's Membership Interest. In the event of death of a Member, insurance proceeds paid to the Company will be used to purchase the Membership Interest of the deceased Member. The purchase price shall be the amount determined under Section 7.3. The payment of the purchase price to the decedent's representatives or heirs shall be made within sixty (60) days following receipt of the insurance proceeds by the Company. If the surviving Members do not elect to continue the business of the Company, or are unable to do so by law, the proceeds of any life insurance shall be treated as an asset of the Company for liquidation.
- 11.4. **Consequences of Death if the Business is Not Continued.** If the surviving Members do not elect to continue the business, or are unable to do so by law, the deceased Member shall only be entitled to his or her interest in liquidation as stated in Section 7.4.

## XII SALE OF A MEMBER'S INTEREST

12.1. **Provisions Restricting Sale of Membership Interests.** In the event that a Member desires to sell, assign, or otherwise transfer his or her Membership Interest in the Company and has obtained a bona fide offer for the sale thereof made by some person not a member of this Company, he or she shall first offer to sell, assign, or otherwise transfer the Membership Interest to the other Members at the price and on the same terms as previously offered him or her or the purchase price determined pursuant to Section 7.3 herein, whichever is less, and each of the other Members shall have the right to purchase his or her proportionate share of the selling Member's Membership Inter-

est. If the entire Membership Interest is not purchased by the other Members, the selling Member may then sell, assign, or otherwise transfer his or her entire Membership Interest in the Company to the person making the said offer at the price offered. A purchaser of a Membership Interest of the company shall not become a Member without the unanimous consent of the non-selling Members, but shall be entitled to receive the share of profits, gains, losses, deductions, credits, and distributions to which the selling Member would be entitled.

## XIII MEMBERS' COVENANTS

- 13.1 **Member's Personal Debts.** In order to protect the property and assets of the Company from any claim against any Member for personal debts owed by such Member, each Member shall promptly pay all debts owing by him or her as they come due and shall indemnify the Company from any claim that might be made to the detriment of the Company by any personal creditor of such Member.
- 13.2 Alienation of Membership Interest. No Member shall, except as provided in Article XII, sell, assign, mortgage, or otherwise encumber his or her Membership Interest in the Company or in its capital assets or property; or enter into any agreement of any kind that will result in any person, firm, or other organization becoming interested with him or her in the Company; or do any act detrimental to the best interests of the Company.

## XIV MISCELLANEOUS PROVISIONS

- 14.1. **Inurement.** This Agreement shall be binding upon the parties hereto and their respective heirs, executors, administrator, successors, and assigns, and each person entering into this Agreement acknowledges that this Agreement constitutes the sole and complete representation made to him or her regarding the Company, its purpose and business, and that no oral or written representations or warranties of any kind or nature have been made regarding the proposed investments, nor any promises, guarantees, or representations regarding income or profit to be derived from any future investment.
- 14.2. **Modification.** This Agreement may be modified from time to time as necessary only by the written agreement of the Company, acting through the vote or consent of its Members.
- 14.3. Severability. The provisions of this Agreement are severable and separate, and if one or more is voidable or void by statute or rule of law, the remaining provisions shall be severed therefrom and shall remain in full force and effect.
- 14.4. **Governing Law.** This Agreement and its terms are to be construed according to the laws of the State of Colorado.
- 14.5. **Counterparts.** This Agreement has been executed in counterparts and each such counterpart shall be deemed an original of the Agreement for all purposes.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on the day first written above, in Steamboat Springs, Colorado.

Member:

Robert Graves

Morning Fresh Dairy Farm, LLC a Colorado Limited Liability Company

Member

#### **EXHIBIT A**

# INITIAL DETERMINATION OF PURCHASE PRICE

1. **Determination of Purchase Price.** The Purchase Price for each ONE PERCENT (1%) membership interest in the Company be \$\_\_\_\_\_.00.

#### 2. Miscellaneous.

- (a) **Dispute Resolution.** In the event of a dispute between or among any of the parties concerning the construction or interpretation of this Agreement or the performance or breach of any party, the dispute shall in all events be resolved by binding arbitration subject to the rules and procedures of the American Arbitration Association then pertaining, except as follows:
  - (1) The situs of arbitration shall be Steamboat Springs, Colorado;
  - (2) There shall be three (3) arbitrators whose majority decision shall be final;
- (3) The proceedings shall be confidential and a condition to an arbitrator being appointed shall be the agreement by the arbitrator to maintain the confidentiality of the proceedings;
  - (4) There shall be discovery as permitted by the Colorado Rules of Civil Procedure;
- (5) The arbitrators shall be bound to apply and follow the laws of the State of Colorado as they exist by statute, court decision and otherwise;
- (6) The arbitrators shall have the right to compel specific performance of this Agreement, in addition to and not in lieu of any other remedy that may be available, as it is agreed that a remedy at law for failure of a party to perform as required under this Agreement might be inadequate as the Company is a closely-held corporation; and

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- (7) The arbitrators shall be empowered to award attorneys' fees, costs and expenses of arbitration to any party they deem, by majority decision, reasonable and appropriate. Arbitration shall commence by the written demand of any party, served upon the other party as notice is required to be served under this Agreement. If a civil action is maintained in breach of this provision, the defending party shall be entitled to attorneys' fees and costs.
- (b) Entire Agreement. This instrument contains the entire agreement among the parties as to the subject matter hereof and supersedes all prior oral or written agreements, commitments or understandings with respect to the matters provided for herein, and no modification shall be binding upon the party affected unless set forth in writing and duly executed by each party affected.
- (c) Inurement. All of the covenants and agreements in this Agreement by or on behalf of any of the parties hereto shall bind and inure to the benefit of their respective heirs, guardians, personal and legal representatives, successors and assigns.
- (d) Governing Law. This Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of the State of Colorado.
- (e) Headings. The descriptive headings and paragraphs of this Agreement are inserted for convenience only and do not constitute a Part of this Agreement.

IN WITNESS WHEREOF, the undersigned, constituting all of the Members of the Company, have executed this Agreement to be effective the day and year first set forth above and, by their signatures below, whether in the form of an original signature or a facsimile of an original signature, certify that they have read the foregoing and that they ratify, approve and consent to all of the terms, conditions and provisions set forth above. This Agreement may be executed in one or more counterparts, each of which shall be deemed as a duplicate original but all of which together shall constitute one and the same agreement.

COMPANY

Morning Fresh Dairy Farm,

Member

Robert Graves

Mail to: Secretary of State **Corporations Section** 1560 Broadway, Suite 200 Denver, CO 80202 (303) 894-2251 Fax (303) 894-2242

For office use only

031 FILED
DONETTA DAVIDSON
COLORADO SECRETARY OF STATE

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**MUST BE TYPED FILING FEE: \$50.00** MUST SUBMIT TWO COPIES

## Please include a typed self-addressed envelope

## **ARTICLES OF ORGANIZATION**

i/We the und the Colorado	dersigned natural person(s) of the age of eighteen o Limited Liability Company Act, adopt the followin	years or more, acting as organizer(s) of a limited liability company under g Articles of Organization for such limited liability company:								
FIRST:	The name of the limited liability company is:									
SECOND:		821 County Road 54, Belleview, Colorado 80512								
THIRD:	The street address of the initial registered office of the limited liability company is:									
	5821 County Road 54, Belleview, Colorado 80512									
	The mailing address (if different from above )	of the initial registered office of the limited liability company is:								
	The name of its proposed registered agent in	Colorado at that address is: Robert L. Graves								
FOURTH:	The management is vested in managers (check if appropriate)									
FIFTH:	The names and business addresses of the initial manager or managers or if the management is vested in the members, rather than managers, the names and addresses of the member or members are:									
	NAME	ADDRESS (include zip codes)								
Robert L. Gra	ves	5821 County Road 54, Belleview, Colorado 80512								
SIXTH:	The name and address of each organizer is:									
	NAME	ADDRESS (include zip code)								
Robert L. Grav	ves	5821 County Road 54, Belleview, Colorado 80512								
signed /		Signed								
Organizer		Organizer								

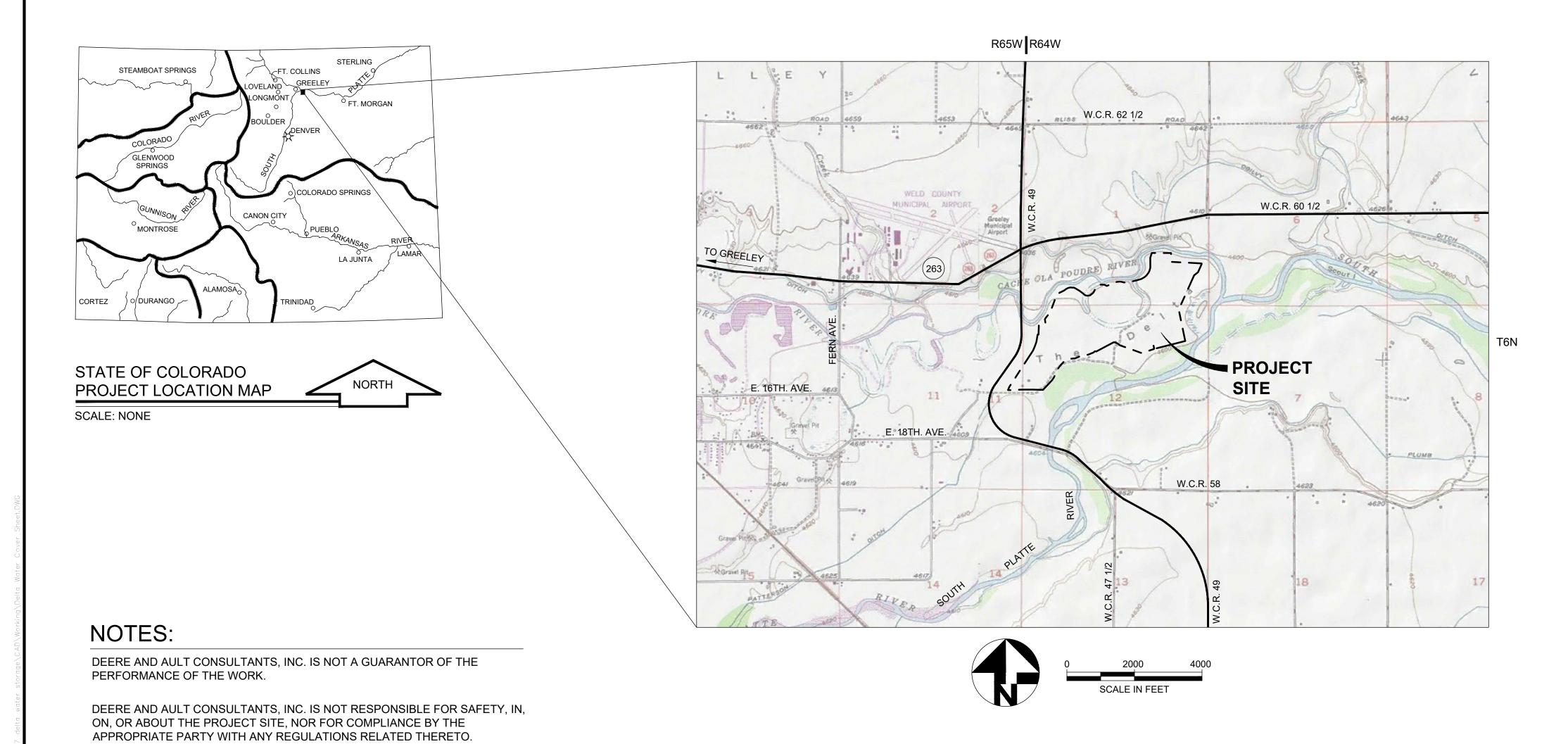
# CONSTRUCTION PLANS FOR

# DELTA WATER STORAGE

# PREPARED FOR:

OWNER: FORT MORGAN FARMS LLC 5821 WEST CR 54E BELLVUE, CO 80512

CONTRACTOR: FORGEN LLC 6025 S QUEBEC ST SUITE 300 CENTENNIAL, CO 80111



DEERE AND AULT CONSULTANTS, INC. EXERCISES NO CONTROL OVER THE

FORMS, OR OTHER WORK AIDS USED IN OR ABOUT THE PROJECT, OR OVER

WRITTEN SCALES ON PLAN ARE FOR FULL SIZED 22" x 34" PLANS AND DO

SAFETY OR ADEQUACY OF ANY EQUIPMENT, BUILDING COMPONENTS,

THE SUPERINTENDING OF THE SAME.

NOT APPLY TO REDUCED PLAN SETS.

# SHEET INDEX:

- COVER SHEET & VICINITY MAP
- 2 EXISTING CONDITIONS
- 3 SUMMARY LOGS OF EXPLORATORY BORINGS
- 4 SUMMARY LOGS OF EXPLORATORY BORINGS
- 5 SUMMARY LOGS OF EXPLORATORY BORINGS
- 6 SUMMARY LOGS OF EXPLORATORY TEST PITS
- 7 SLURRY WALL ALIGNMENT PLAN
- 8 SLURRY WALL PROFILE
- 9 RECLAMATION PLAN
- 10 DETAILS

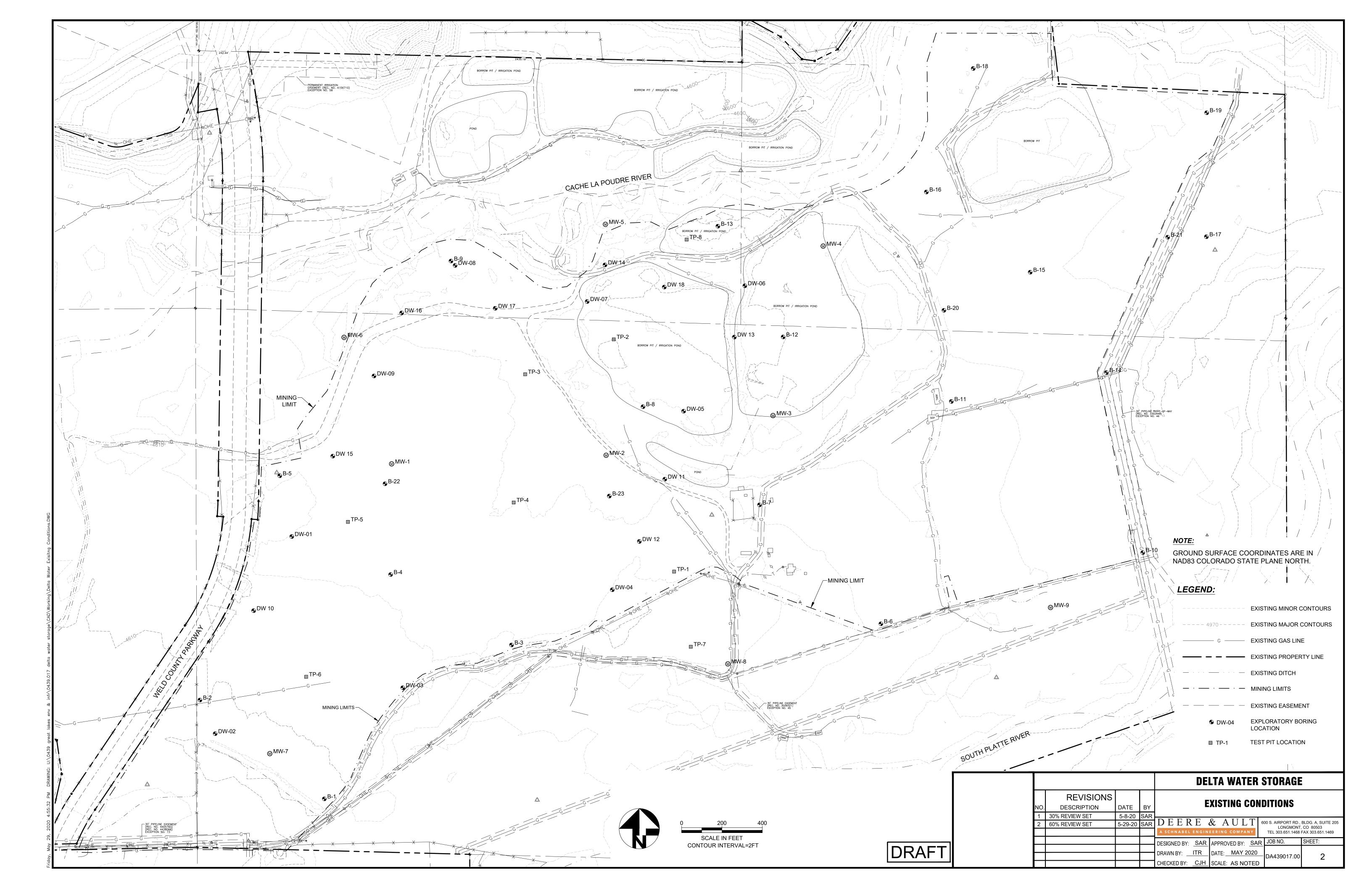
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CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

				DELTA WATER STORAGE
NO.	REVISIONS DESCRIPTION	DATE	BY	COVER SHEET & VICINITY MAP
1 2	30% REVIEW SET 60% REVIEW SET	5-8-20 5-29-20	SAR	DERE $&$ $AULT$ 600 S. AIRPORT RD., BLDG. A, SUITE 205
_	007011211211 021	0 20 20	Ο/ ti \	A SCHNABEL ENGINEERING COMPANY  LONGMONT, CO 80503 TEL 303.651.1468 FAX 303.651.1469
				DESIGNED BY: SAR APPROVED BY: SAR JOB NO. SHEET:
				DRAWN BY: <u>ITR</u> DATE: <u>MAY 2020</u> DA439017.00 <b>1</b>
				CHECKED BY: <u>CJH</u> SCALE: AS NOTED

DEERE & AULT CONSULTANTS, INC. ASSUMES NO
RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS (HORIZONTA
AND VERTICAL). THE EXISTING UTILITIES SHOWN ON THIS
DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE
INFORMATION. IT IS, HOWEVER, THE RESPONSIBILITY OF THE
CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL UTILITIE
PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION
ACTIVITIES.



<u>NOTES</u>

- 1. EXPLORATORY BORINGS WERE DRILLED ON 2/27/20 THROUGH 3/3/20 AND 5/4/20 THROUGH 5/8/20 USING A TRUCK-MOUNTED CME 75 DRILL RIG. BORINGS WERE DRILLED WITH A 4.25-INCH I.D. HOLLOW STEM AUGER AND HQ CORING TECHNIQUES FOR THE BOTTOM  $10^{\circ}$  OF DW-04 & DW-08.
- 2. ALL BORINGS WERE LOCATED BY KING SURVEYERS ON 3/26/20 AND ON 5/16/20.
- 3. LINES BETWEEN MATERIALS REPRESENT APPROXIMATE BOUNDARIES BETWEEN TYPES AND TRANSITIONS MAY BE GRADUAL.
- 4. GROUND WATER LEVELS WERE MEASURED AT THE TIME OF DRILLING OR JUST AFTER COMPLETION ON THE DATE INDICATED. GROUNDWATER LEVELS MAY FLUCTUATE SEASONALLY.

				DELTA WATER STORAGE
	REVISIONS			SUMMARY LOGS OF EXPLORATORY BORINGS
NO.	DESCRIPTION	DATE	BY	DW-01 THROUGH DW-06
1	30% REVIEW SET	5-8-20	SAR	
2	60% REVIEW SET	5-29-20	SAR	DEERE & AULT 600 S. AIRPORT RD., BLDG. A, SUITE 205 LONGMONT, CO 80503
				A SCHNABEL ENGINEERING COMPANY TEL 303.651.1468 FAX 303.651.1469
				DESIGNED BY: SAR APPROVED BY: SAR JOB NO. SHEET:
				DRAWN BY: ITR DATE: MAY 2020 DA439017.00 3
				CHECKED BY: CJH SCALE: AS NOTED

# <u>NOTES</u>

- 1. EXPLORATORY BORINGS WERE DRILLED ON 2/27/20 THROUGH 3/3/20 AND 5/4/20 THROUGH 5/8/20 USING A TRUCK-MOUNTED CME 75 DRILL RIG. BORINGS WERE DRILLED WITH A 4.25-INCH I.D. HOLLOW STEM AUGER AND HQ CORING TECHNIQUES FOR THE BOTTOM 10' OF DW-04 & DW-08.
- 2. ALL BORINGS WERE LOCATED BY KING SURVEYERS ON 3/26/20 AND ON 5/16/20.
- 3. LINES BETWEEN MATERIALS REPRESENT APPROXIMATE BOUNDARIES BETWEEN TYPES AND TRANSITIONS MAY BE GRADUAL.
- 4. GROUND WATER LEVELS WERE MEASURED AT THE TIME OF DRILLING OR JUST AFTER COMPLETION ON THE DATE INDICATED. GROUNDWATER LEVELS MAY FLUCTUATE SEASONALLY.

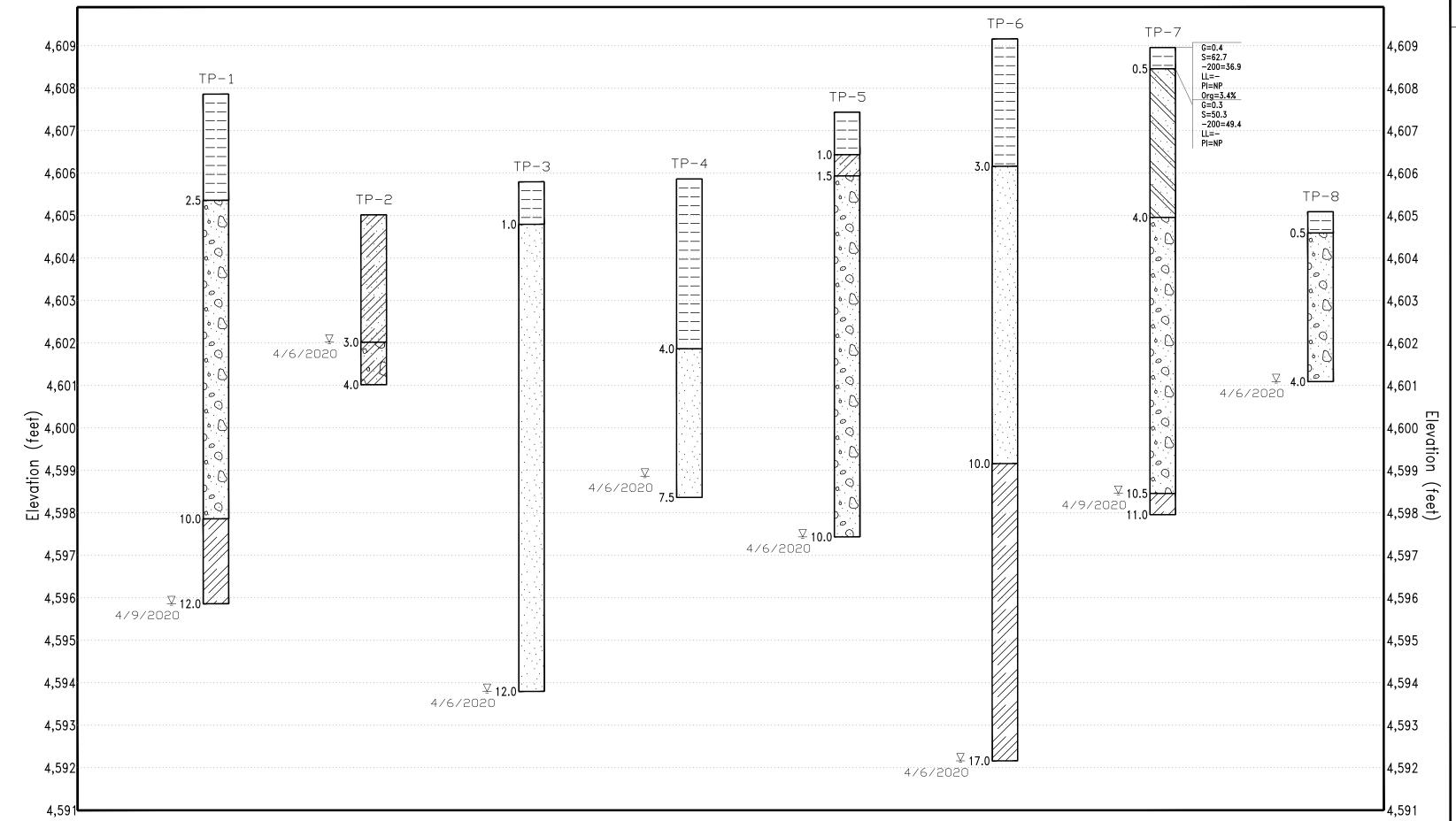
				DELTA WATER STORAGE
	REVISIONS			SUMMARY LOGS OF EXPLORATORY BORINGS
NO	. DESCRIPTION	DATE	BY	DW-07 THROUGH DW-12
1	30% REVIEW SET	5-8-20	SAR	
2	60% REVIEW SET	5-29-20	SAR	DEERE & AULT 600 S. AIRPORT RD., BLDG. A, SUITE 205 LONGMONT, CO 80503
				A SCHNABEL ENGINEERING COMPANY TEL 303.651.1468 FAX 303.651.1469
				DESIGNED BY: SAR APPROVED BY: SAR JOB NO. SHEET:
				DRAWN BY: ITR DATE: MAY 2020
				CHECKED BY: CJH SCALE: AS NOTED DA439017.00 4

. 2020 4:55:42 PM DRAWING: U:\0439 great lakes env & infr\0439.017 delta water storage\CAD\v

# NOTE:

- 1. EXPLORATORY BORINGS WERE DRILLED ON 2/27/20 THROUGH 3/3/20 AND 5/4/20 THROUGH 5/8/20 USING A TRUCK-MOUNTED CME 75 DRILL RIG. BORINGS WERE DRILLED WITH A 4.25-INCH I.D. HOLLOW STEM AUGER AND HQ CORING TECHNIQUES FOR THE BOTTOM 10' OF DW-04 & DW-08.
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				DELTA WATER STORAGE
	REVISIONS			SUMMARY LOGS OF EXPLORATORY BORINGS
NO.	DESCRIPTION	DATE	BY	DW-13 THROUGH DW-18
1	30% REVIEW SET	5-8-20	SAR	
2	60% REVIEW SET	5-29-20	SAR	DEERE & AULT 600 S. AIRPORT RD., BLDG. A, SUITE 205 LONGMONT, CO 80503
				A SCHNABEL ENGINEERING COMPANY TEL 303.651.1468 FAX 303.651.1469
				DESIGNED BY: SAR APPROVED BY: SAR JOB NO. SHEET:
				DDAMALBY: ITR DATE: MAY 2020
				CHECKED BY: CJH SCALE: AS NOTED DA439017.00 5



	BORING LOG LEGEND - LITHOLOGY
SYMB	OLOGY
	Overburden Soils: Clayey Sand/Sandy Clay locally with gravel, loose to medium dense, dry t slightly moist, low to non plastic, brown (SC, CL, CL-ML)
	Clay: stiff to very stiff, moist, grey to tan/orange, very high to low plastic, locally interbedde with fine sand (CH, CL)
	Clayey to Silty Sand: loose to medium dense, moist, tan/orange or brown, non plastic, local with gravel (SC, SM)
	Clayey sand/Sandy Clay with Gravel: poorly to moderately graded, medium dense to dense wet, tan, non plastic, fine gravel up to $^{\sim}4$ cm (SC, SP-SC)
	Sand: poorly graded, with local gravel, medium stiff, moist to wet, tan to grey, non plastic (SP)
000	Sand with Gravel: poorly graded, loose to dense, wet, tan, non plastic, locally with clay (SP)
	Silty Sand: with clay, poorly graded, fine grained, medium dense, wet, non plastic (SM)
	Claystone-Weathered: dense, slightly moist, yellowish grey, plastic (CH)
	Sandy Claystone-Fresh: hard, slightly moist, dark grey, plastic (CL, CL-ML)
	Sandstone-Weathered: poorly graded, dense to very dense, moist to wet, tan/brown with orange, non plastic, fine to medium grained (SP, SC, SM)
	Siltstone-Weathered: dense/hard, slightly moist to moist, orange with grey, low to non plastic
	Claystone-Fresh: very dense, slightly moist, grey to dark grey, plastic, local sandstone concretions (CH, CL)
	Sandstone-Fresh: poorly graded, dense to very dense, slightly moist to moist, grey to dark grey, non plastic, fine to medium grained (SP, SC, SM)
	Sandy Claystone-Fresh: Dense to very dense, slightly moist, dark grey, plastic (CL, CL-ML)
	Cemented Sandstone-Weathered: hard (very strong), slightly moist, grey, non plastic, bioturbated to laminated, bivalve fossils present, fine to medium grained (SP).
	Siltstone-Fresh: very dense/hard, slightly moist to moist, light grey to dark grey, low to moderate plasticity, with local clay (ML)

	Borehole I.D. Number	LABORATORY TESTING
Well Completion Type and Interval  Water level at time of	Approximate depth of geologic contact	MC = Moisture Content DD = Dry Density G = % Gravel By Weight S = % Sand By Weight -200 = % By Weight Passing the #200 Sieve LL = Liquid Limit PI = Plasticity Index, "NP" = Nonplastic Ma
drilling Water level		CORE RUN QUALITY
SAMPLER TYPE  Grab Sampl	Standard splitspoon blow counts. Number ("N-Value") indicates the number of blows of a 140 lb. hammer free falling 30 inches required to drive the sampler 1 foot of the indicated interval.	Recovery: The length of the recovered divided by the total run ler  RQD (Rock Quality Designation): The length of sound core progreater than 4" divided by total length of the core run  * Both values are displayed as percentages.
HQ HQ Coring		PACKER PERMEABILITY TESTING
Split Spoon		Packer testing is performed over an interval(s) of corec section, where the amount water pumped into the bed is recorded over a time at differing pressures. The fin permeability is reported in centimeters per second.
STRENGTH		WEATHERING
RO — Extremely W Indented by a thuml R1 — Very Weak: Crumbles under firm peeled by a pocket R2 — Weak:	onail. blows of geological hammer, can be	<ul> <li>U - Unweathered:         <ul> <li>No evidence of chemical/mechanical alteration.</li> </ul> </li> <li>SW - Slightly Weathered:         <ul> <li>Slight discoloration on surface; slight alteration along discontinuities.</li> </ul> </li> <li>MW - Moderately Weathered:         <ul> <li>Discoloring evident; Surface pitted and alteration pen</li> </ul> </li> </ul>
indentations made b R3 — Medium Stro Cannot be scraped be fractured with a	y firm blow with point of geological hammer.	well below surface; Weathering "halos" evident.  HW — Highly Weathered:  Entire mass discolored; Alteration pervading most roc some slight weathering pockets; some minerals leach  D — Decomposed:
hammer to fracture R5 — Very Strong Specimen requires n		Rock reduced to soil with relict rock texture/structur Generally molded and crumbled by hand.
fracture it. R6 — Extremely S	trong:	

<u>NOTES</u>

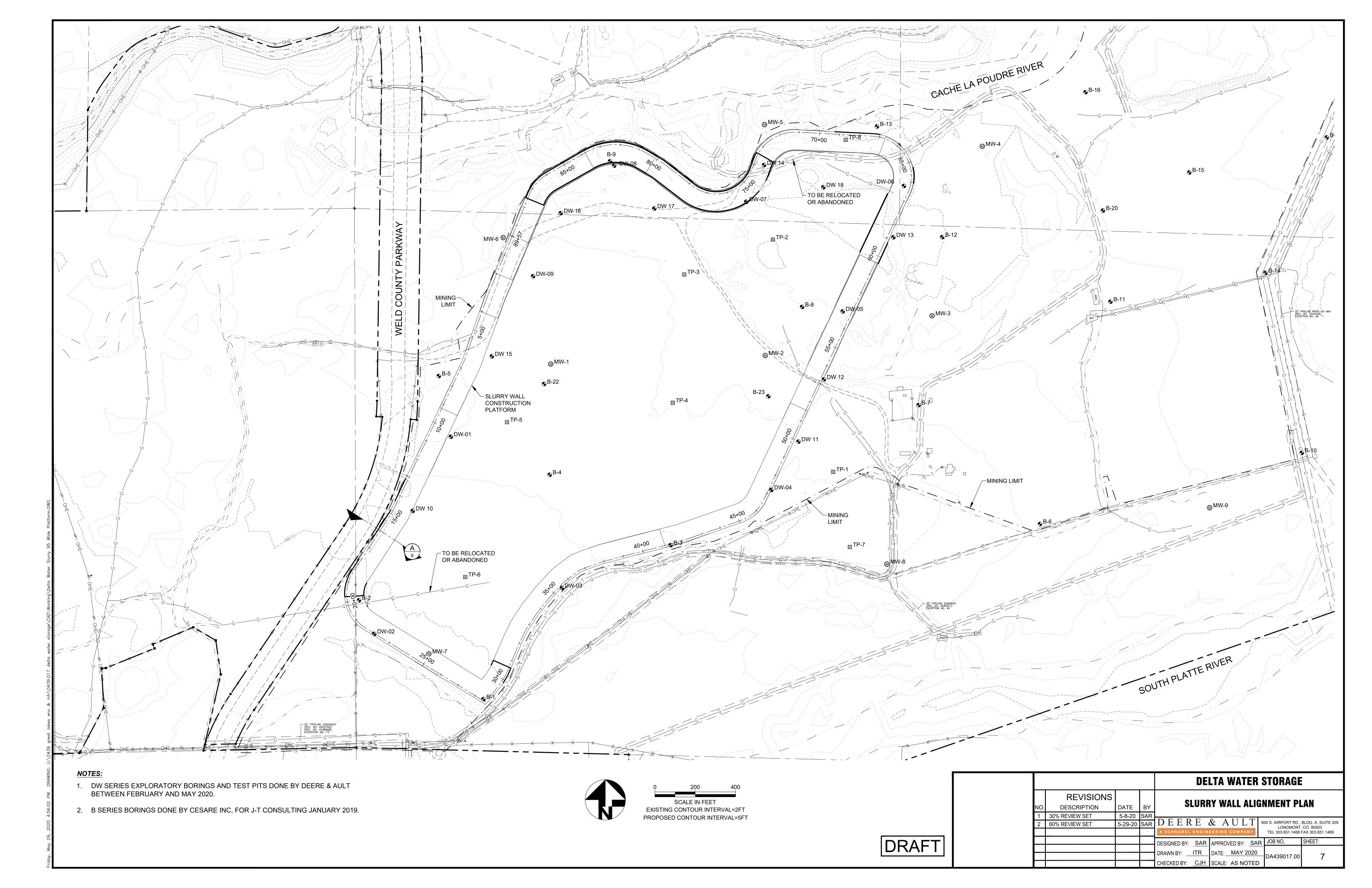
1. EXPLORATORY TEST PITS WERE EXCAVATED ON 4/6/20 AND ON 4/9/20 USING A CASE 580N RUBBER TIRED HOE.

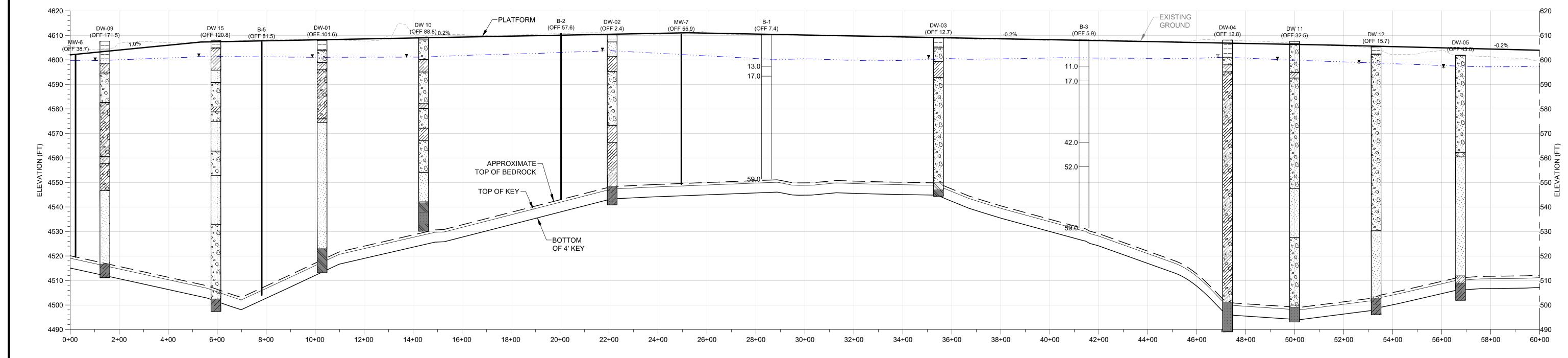
2. ALL BORINGS WERE LOCATED USING THE ARCGIS COLLECTOR CELL PHONE APPLICATION ON 4/6/20 AND 4/9/20. ALL POINTS ARE RECORD IN NAD 1983 COLORADO STATE PLANE NORTH.

3. LINES BETWEEN MATERIALS REPRESENT APPROXIMATE BOUNDARIES BETWEEN TYPES AND TRANSITIONS MAY BE GRADUAL.

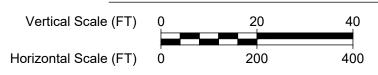
4. GROUND WATER LEVELS WERE MEASURED AT THE TIME OF EXCAVATION. GROUNDWATER LEVELS MAY FLUCTUATE SEASONALLY.

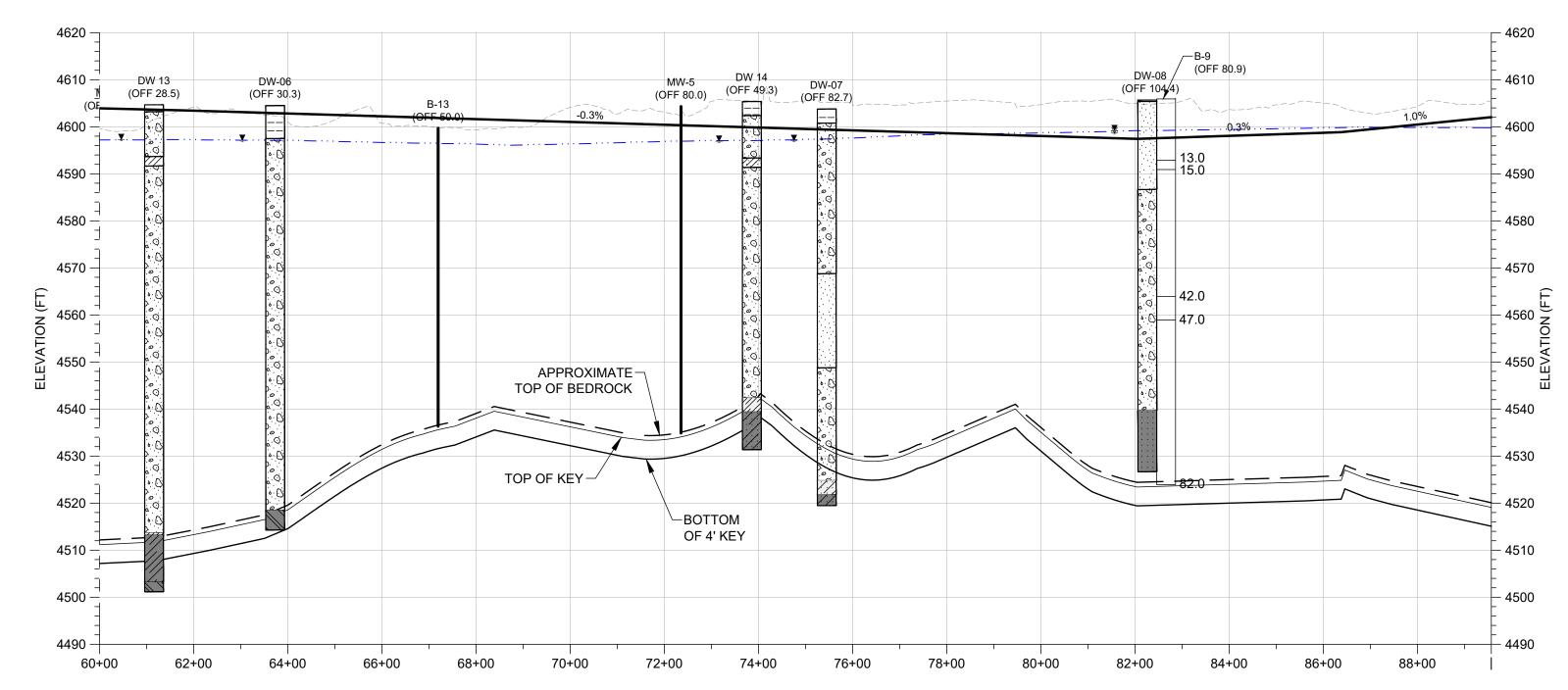
DELTA WATER STORAGE				
SUMMARY LOGS OF EXPLORATORY TEST	BY	DATE	REVISIONS DESCRIPTION	NO.
R DEEDE O ALLE	SAR	5-8-20	30% REVIEW SET	1
R DEERE & AULT 600 S. AIRPORT RD., BLDG. A, SL	SAR	5-29-20	60% REVIEW SET	2
A SCHNABEL ENGINEERING COMPANY TEL 303.651.1468 FAX 303.651				
DESIGNED BY: SAR APPROVED BY: SAR JOB NO. SHEET:				
DRAWN BY: ITR DATE: MAY 2020				
CHECKED BY: CJH SCALE: AS NOTED DA439017.00				

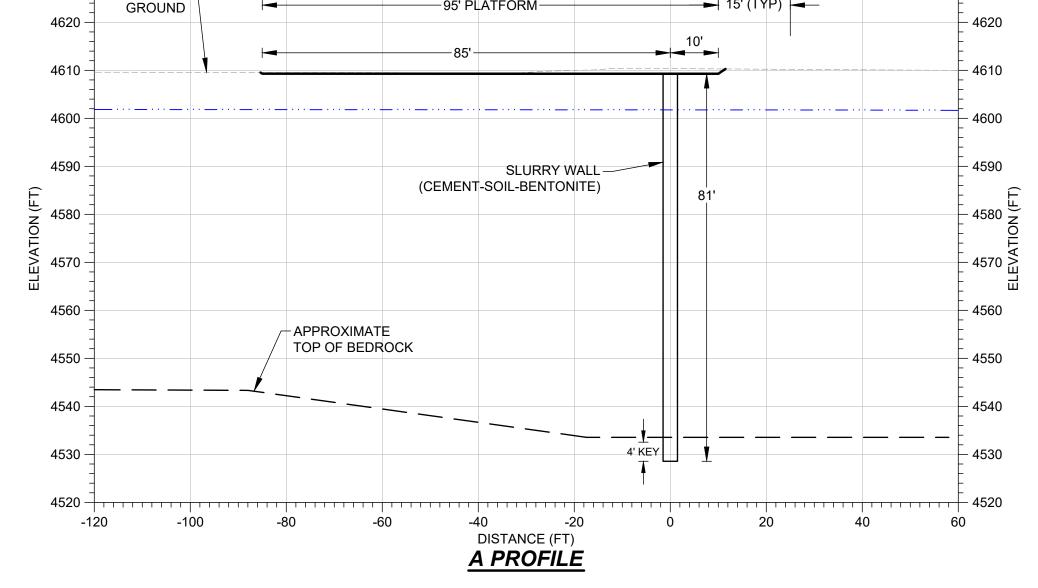








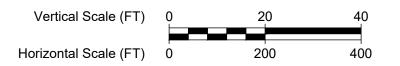




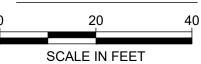
-95' PLATFORM-

EXISTING-

# SLURRY WALL PROFILE



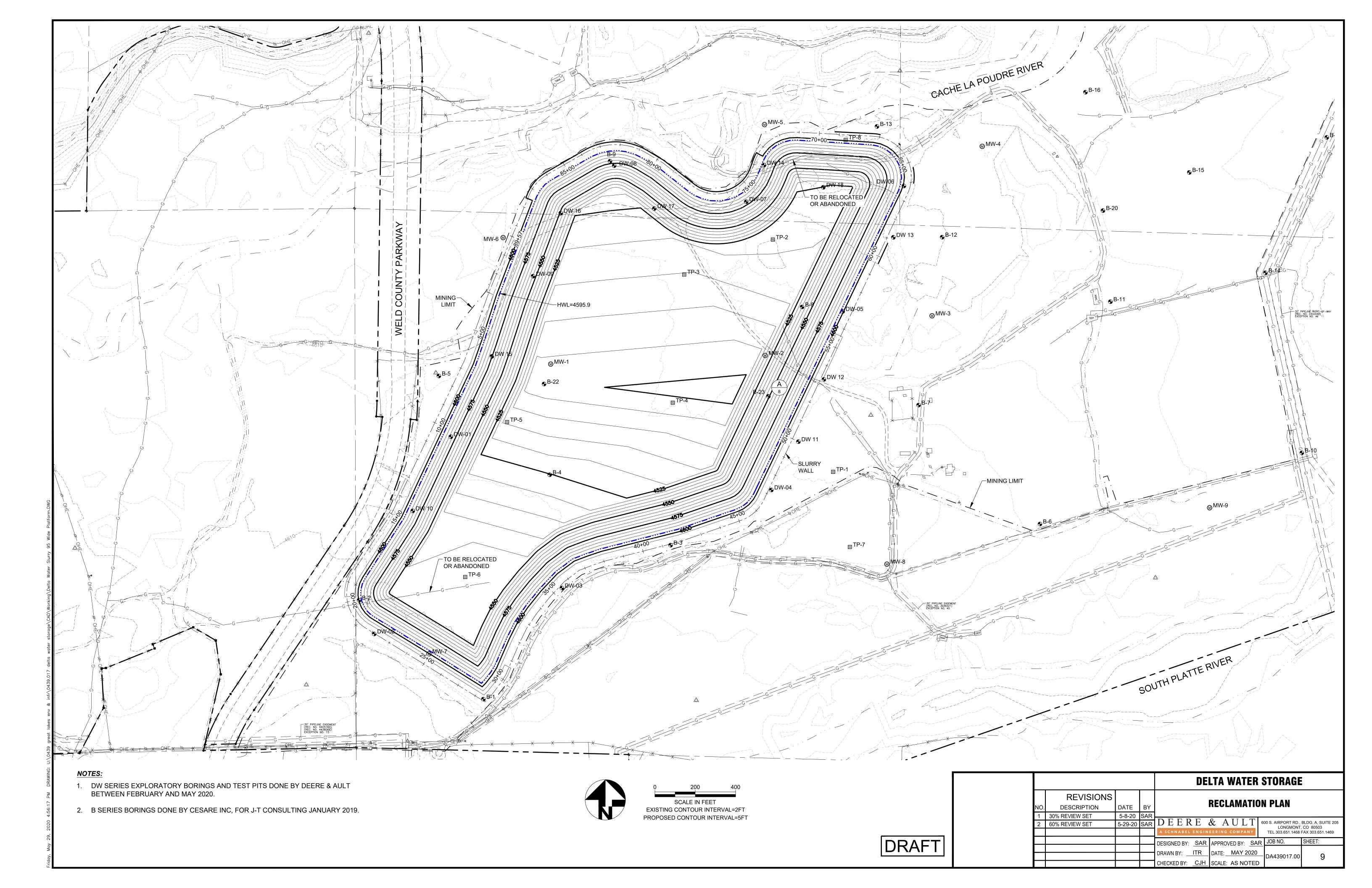
# A SLURRY WALL PLATFORM SECTION STATION 16+00



# NOTES:

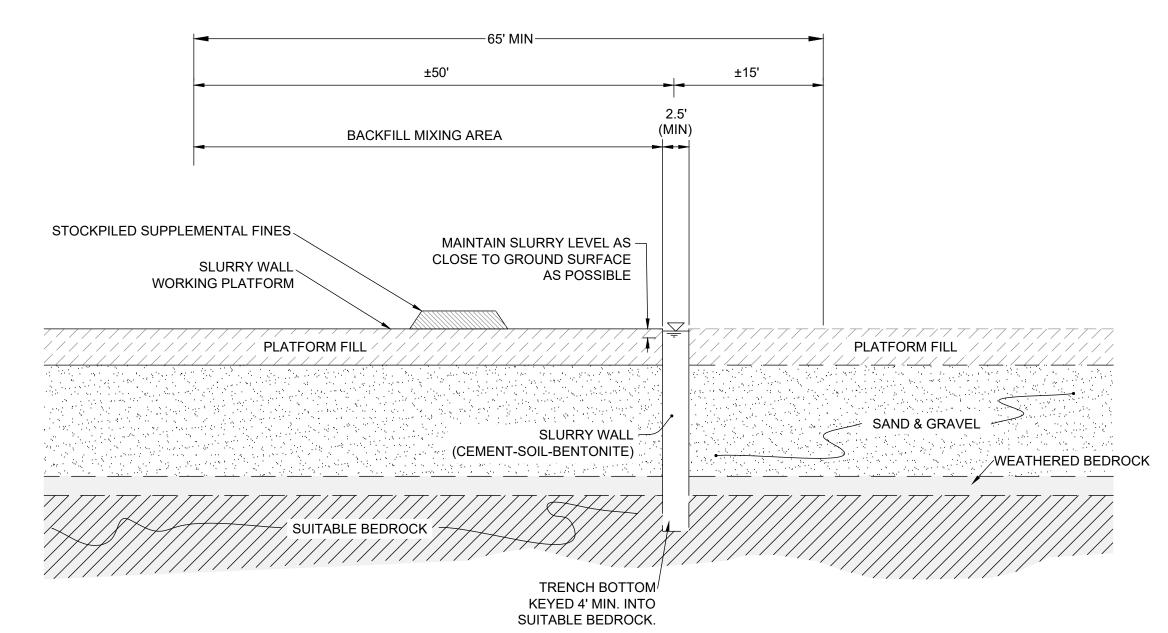
- 1. DW SERIES EXPLORATORY BORINGS AND TEST PITS DONE BY DEERE & AULT BETWEEN FEBRUARY AND MAY 2020.
- 2. B SERIES BORINGS DONE BY CESARE INC, FOR J-T CONSULTING JANUARY 2019.

DRAFT						DELTA WATER STORAGE
			REVISIONS DESCRIPTION	DATE	BY	SLURRY WALL PROFILE
		2	30% REVIEW SET 60% REVIEW SET	5-8-20 5-29-20	SAR SAR	DEERE & AULT 600 S. AIRPORT RD., BLDG. A, SUITE 205 LONGMONT, CO 80503 TEL 303.651.1468 FAX 303.651.1469
						DESIGNED BY: SAR APPROVED BY: SAR JOB NO. SHEET:
						DRAWN BY:ITRDATE:MAY 2020DA439017.008



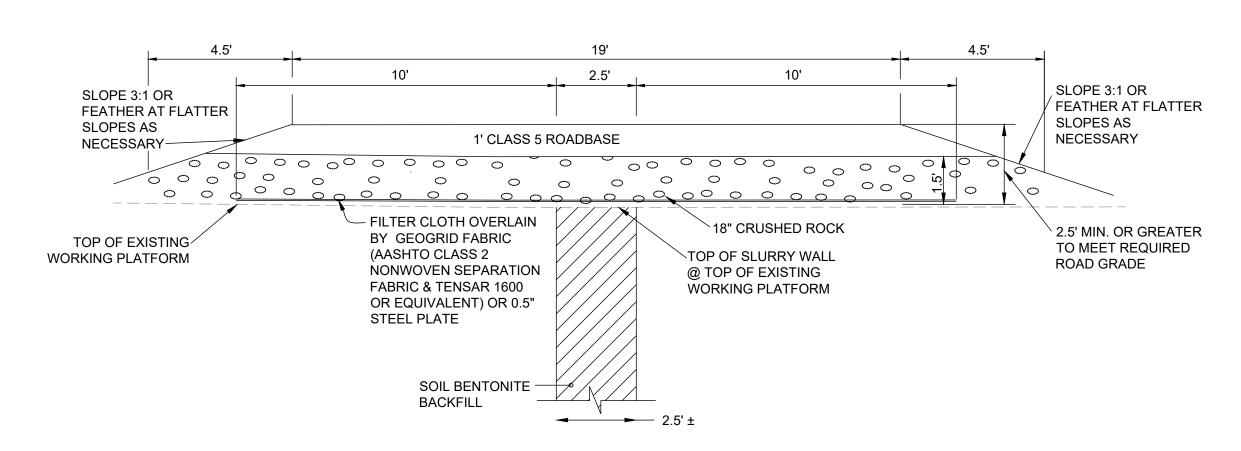
Station Range	Supplemental Fines (CY/LF)	Cast Out %	Dry Bentonite Addition Rate (LB/FT)	Spacing Between Each 3,000 LB BAG	Cement Addition Rate
0+00 TO 3+40	3.0	30			
3+40 TO 10+00	4.1	35			
10+00 TO 15+10	3.0	30			
15+10 TO 20+00	1.7	20			
20+00 TO 30+00	0.7	10			
30+00 TO 36+00	1.5	20			
36+00 TO 40+00	2.4	30			
40+00 TO 45+00	3.9	40			
45+00 TO 60+00	5.4	45			
60+00 TO 65+20	4.0	40			
65+20 TO 76+00	3.1	40			
76+00 TO 89+57	2.7	35			

- 1. TABLE BASED ON SUPPLEMENTAL FINES WITH AN AVERAGE OF **72.5%** PASSING THE #200 SIEVE.
- 2. RATES SHOWN ARE FOR A MINIMUM OF 30% PASSING #200 SIEVE FOR S-B BACKFILL AND MAY REQUIRE ADJUSTMENT.
- 3. BAG SPACING BASED ON A DRY BENTONITE APPLICATION RATE OF 1% AND MAY BE ADJUSTED BASED ON THE FINAL MIX DESIGN AND THE MINIMUM OF FINES PASSING #200 SIEVE AS APPROVED BY DESIGN ENGINEER.



# TYPICAL SLURRY WALL DETAIL

NOT TO SCALE



# PERMANENT ROAD CROSSING DETAIL

NOT TO SCALE

					DE	LTA WATER	STORAGE	
	NO.		DATE	BY	DETAILS  DEERE & AULT  600 S. AIRPORT RD., BLDG. A, SUITE 208 LONGMONT, CO 80503 TEL 303.651.1468 FAX 303.651.1469			
	2	30% REVIEW SET 60% REVIEW SET	5-8-20 5-29-20	SAR SAR				CO 80503
DRAFT					DESIGNED BY: SAR DRAWN BY: ITR CHECKED BY: CJH	DATE: MAY 2020	DA439017.00	SHEET:

DISTRICT COURT, WATER DIVISION NO. 1,

**COLORADO** 

Address: 901 9<sup>TH</sup> Avenue

Greeley, Colorado 80632

(970) 475-2400

CONCERING THE APPLICATION FOR WATER RIGHTS OF FORT MORGAN FARMS, LLC and

HIGH PLAINS GRAZING, LLC

#### IN WELD COUNTY

**Attorneys**: John P. Justus

Karoline M. Henning

Firm Name: HOSKIN FARINA & KAMPF

Professional Corporation 200 Grand Avenue, Suite 400

Post Office Box 40

Grand Junction, Colorado 81502-0040

**Telephone No.**: (970) 986-3400 **Fax No.**: (970) 986-3401

E-mail Address: jjustus@hfak.com; khenning@hfak.com

**Attorney Reg.Nos.** 40560, 49061

APPLICATION FOR CONDITIONAL WATER STORAGE RIGHTS

**▼**COURT USE ONLY **▼** 

Ctrm.\*

Case No. \*

Div.: \*

#### 1. Name, Address and Telephone Number of Applicants:

Fort Morgan Farms, LLC ("Fort Morgan Farms") c/o Robert Graves 5821 West County Road 54 Bellvue, CO 80512 (970) 482-5789

High Plains Grazing, LLC ("High Plains Grazing") c/o Robert Graves 5821 West County Road 54 Bellvue, CO 80512 (970) 482-5789

2. Overview: In coordination with permitted sand and gravel mining on a property located at the confluence of the South Platte and Cache La Poudre Rivers, Fort Morgan Farms will have the right to develop the resulting gravel pits on the property into a reservoir complex (the "Fort Morgan Farms Reservoir Complex"). Each storage vessel will be constructed with soil-bentonite slurry-trench cutoff wall(s) and/or any other impermeable barrier(s) including, but not limited to, earth-berms and/or clay liners that have been

designed, constructed and utilized to circumscribe, line and seal the former gravel pits, so that the water storage cells thus created meet and/or exceed the Construction and Performance Standards as set forth by the Office of the State Engineer in the "Design Standards" and the "Construction Standards" in the "State Engineer Guidelines for Lining Criteria for Gravel Pits," dated August 1999, as it may be amended or restated from time to time. Applicants requests approval of a conditional junior water rights for the Fort Morgan Farms Reservoir Complex with respect to water to be diverted in priority from the South Platte and Cache La Poudre Rivers for use for the irrigation of Applicants' lands described in paragraph 9.a, for delivery to recharge as described in paragraph 9.b, for the augmentation of structures and water rights used to irrigate Applicants' lands, as more fully described in paragraphs 9.c and d. of this Application. The Fort Morgan Farms Reservoir Complex will also serve as a storage vessel for other lawfully diverted and stored water and water rights belonging to others with whom Fort Morgan Farms may contract, as may be provided by separate decree, administrative approval, or substitute water supply plan.

- 3. <u>Name of Structure</u>: Fort Morgan Farms Reservoir Complex, currently consisting of four planned reservoir cells.
- 4. <u>Location of Complex</u>: Fort Morgan Farms Reservoir Complex will consist of a series of storage vessels located in the South Half of Section 1, the North Half of Section 12, and the Southeast Quarter of the Northeast Quarter of Section 11, Township 5 North, Range 65 West, 6<sup>th</sup> P.M., at the approximate locations shown in the figure attached as <u>Exhibit A</u>, which is at the confluence of the South Platte and Cache La Poudre Rivers. The currently proposed legal descriptions of each reservoir to be included in the Fort Morgan Farms Reservoir Complex are as follows:
  - a. The centroid for Reservoir 1 is approximately located at UTM coordinates (NAD 83 datum, Zone 13) 532621.72 Easting, 4474497.60 Northing. This location is in the NE1/4 of the NW1/4, Section 12, Township 5 North, Range 65 West, 6<sup>th</sup> P.M.
  - b. The centroid for Reservoir 2 is approximately located at UTM coordinates (NAD 83 datum, Zone 13) 532447.69 Easting, 4474197.436 Northing. This location is in the NW1/4 of the NW1/4, Section 12, Township 5 North, Range 65 West, 6<sup>th</sup> P.M.
  - c. The centroid for Reservoir 3 is approximately located at UTM coordinates (NAD 83 datum, Zone 13) 533340.36 Easting, 4474679.27 Northing. This location is in the SW1/4 of the SE1/4, Section 1, Township 5 North, Range 65 West, 6<sup>th</sup> P.M.
  - d. The centroid for Reservoir 4 is approximately located at UTM coordinates (NAD 83 datum, Zone 13) 533259.4531 Easting, 4474325.869 Northing. This location is in the NW1/4 of the NE1/4, Section 12, Township 5 North, Range 65 West, 6<sup>th</sup> P.M.

- e. The outlets from the Fort Morgan Farms Reservoir Complex will be to both the Cache La Poudre River and to the South Platte River at the following approximate locations:
  - i. Outlet to the Cache La Poudre River:
    - 1. UTM: (NAD 83 datum, Zone 13) 533025.90 Easting, 4474761.13 Northing.
    - 2. PLSS: SW1/4 of the SE1/4, Section 1, Township 5 North, Range 65 West, 6<sup>th</sup> P.M.
  - ii. Outlet to the South Platte River:
    - 1. UTM: (NAD 83 datum, Zone 13) 532998.40 Easting, 4473884.10 Northing.
    - 2. PLSS: SW1/4 of the NE1/4, Section 12, Township 5 North, Range 65 West, 6<sup>th</sup> P.M.
- 5. <u>Source(s)</u>: The Fort Morgan Farms Reservoir Complex will divert from both the South Platte River and the Cache La Poudre River.
- 6. <u>Points of Diversion</u>: The approximate points of diversion from the South Platte and Cache La Poudre Rivers are shown in <u>Exhibit A</u>, and are more specifically described as follows:
  - a. Name: FMF Reservoir Complex South Platte River Diversion:
    - i. Location:
      - 1. UTM: (NAD 83 datum, Zone 13) 533048.5 Easting, 4473909.4 Northing.
      - 2. PLSS: SW1/4 of the NE1/4 of Section 12, Township 5 North, Range 65 West, 6<sup>th</sup> P.M.
  - b. Name: FMF Reservoir Complex Cache La Poudre River Diversion:
    - i. Location:
      - 1. UTM: (NAD 83 datum, Zone 13) 532696.9 Easting, 4474643.3 Northing.
      - 2. PLSS: SE1/4 of the SW1/4 Section 1, Township 5 North, Range 65 West, 6<sup>th</sup> P.M.

#### 7. **Appropriation Information**:

- a. Date of Appropriation: August 6, 2019
- b. How appropriation was initiated: By the Applicant's formation of the intent to appropriate paired with overt acts sufficient to manifest Applicant's intent to appropriate water for beneficial use, demonstrating the taking of a substantial step towards the application of beneficial use, and constituting notice to interested parties of the nature and extent of the proposed demand on the water supply. Specifically, Applicant filed this application, and on or about August 6, 2019, Applicant undertook observable activities, and physical acts, including geophysical testing, drilling on the lands on which the reservoirs will be constructed, as well as mining preparation activities, that represent substantial steps and physical acts sufficient to place parties on notice.

#### 8. **Amount Claimed**:

a. *Amount Claimed*. Applicants are claiming a conditional water storage right of 12,000 acre-feet per year. The final constructed and available storage capacity of the Fort Morgan Farms Reservoir Complex may exceed this amount as a result of mining and reclamation have been completed, however, Applicants are only seeking conditional rights that may be stored in the reservoirs that comprise the Fort Morgan Farms Reservoir Complex in the amount above commensurate with their demonstrable non-speculative need.

#### b. Claimed Diversion Rates:

- i. FMF Reservoir Complex South Platte River Diversion: 100 cfs, conditional.
- ii. <u>FMF Reservoir Complex Cache La Poudre River Diversion</u>: 100 cfs, conditional.
- iii. Maximum Simultaneous Rate of Diversion will be: 200 cfs, conditional.
- 9. **Proposed Uses**: Irrigation, augmentation, and recharge.
  - a. Applicants will use water available from the Fort Morgan Farms Reservoir Complex for irrigation of lands lying in the West Half of Section 30, and in the Northwest Quarter and the South Half of Section 31, Township 4 North, Range 58 West of the 6<sup>th</sup> P.M.; lands lying in the Northwest Quarter and the Northwest Quarter of the Northeast Quarter of Section 6, Township 3 North, Range 58 West of the 6<sup>th</sup> P.M.; and lands lying in the South Half of Section 25, Township 4 North, Range 59 West of the 6<sup>th</sup> P.M., the location of which is shown in Exhibit B

- b. Applicant will use water available from the Fort Morgan Farms Reservoir Complex for groundwater recharge operations by release and subsequent rediversion at the Fort Morgan Farms Pumping Station described in the Decree entered on January 2, 2014 in Case No. 11CW40 by the District Court in and for Water Division 1 (the "11CW40 Decree") for delivery to the recharge facilities described in paragraph 18 of the 11CW40 Decree. Recharge accretions generated from such deliveries will be calculated in accordance with the 11CW40 Decree and used for the purposes described therein. The location of the Fort Morgan Farms Pumping Station and the recharge facilities are illustrated in <a href="Exhibit C">Exhibit C</a>.
- c. Applicants will use water available from the Fort Morgan Farms Reservoir Complex, including recharge credits generated from delivery to the recharge facilities operating pursuant to the 11CW40 Decree, for replacement of depletions in the following plans for augmentation, pursuant to the terms and conditions of those decrees: (1) The plan for augmentation approved in the Decree entered on September 16, 2008 in Case No. 2000CW261 by the District Court in and for Water Division 1 ("00CW261 Decree"); (2) the plan for augmentation approved in the Decree entered on November 13, 2013 in Case No. 2007CW291 by the District Court in and for Water Division 1 ("07CW291 Decree"); (3) the plan for augmentation approved in the Decree entered on October 10, 2018 in Case No. 2008CW104 by the District Court in and for Water Division 1 ("08CW104 Decree"); and (4) the plan for augmentation approved in the Decree entered on November 17, 1992 in Case No. 91CW066 by the District Court in and for Water Division 1 ("91CW66 Decree").
- d. Applicants will use water available from the Fort Morgan Farms Reservoir Complex, including recharge accretions generated by delivery to the facilities described in the 11CW40 Decree, for augmentation of, or supplemental augmentation of, structures legally permitted and/or decreed for the irrigation of the following lands that are either owned by Applicants, or under contract for purchase by Applicants, pursuant to a separately decreed plan or plans for augmentation:
  - i. Approximately 1,065 acres of irrigated land owned by Fort Morgan Farms lying in the South Half of Section 23, the Southeast Quarter of Section 22, the Southwest Quarter of Section 21, the Southeast Quarter of Section 20, the Northeast Quarter and the North Half of the Southeast Quarter of Section 29, and the Southwest Quarter of Section 31, Township 4 North, Range 59 West, 6<sup>th</sup> P.M.; lands lying in the Northeast Quarter of Section 36, Township 4 North, Range 60 West, 6<sup>th</sup> P.M.; and lands lying in the Northwest Quarter of Section 6, Township 3 North, Range 59 West, 6<sup>th</sup> P.M. The locations of these lands are shown in Exhibit D.

- 10. <u>Reservoir Surface Area</u>: The maximum combined surface area at the high-water line of the reservoirs comprising the Fort Morgan Farms Reservoir Complex is anticipated to be 207 acres, when completed, though portions of storage capacity will be completed in stages.
- 11. <u>Reservoir Capacity</u>. The estimated maximum total capacity of the Fort Morgan Farms Reservoir Complex is 12,000 acre-feet, all of which shall be active storage, and none of which is dead storage.
- 12. Owners of the land on which the complex and diversion structures will be located: DPG Farms, LLC, a Colorado limited liability company, whose principal office address is 3300 S Parker Rd. #300, Aurora, CO 80014, is the owner of the land on which the Fort Morgan Farms Reservoir Complex and its diversion structures will be located.

DATED this day of December, 2019.

HOSKIN FARINA & KAMPF Professional Corporation

By \_\_\_\_\_\_\_ John P. Justus, Reg. #40560 Karoline M. Henning, Reg. #49061 Attorneys for Applicant

## **VERIFICATION**

Being first duly sworn, I, Robert L. Graves, general manager of Fort Morgan Farms, LLC, and of High Plains Grazing, LLC, hereby state under oath that I have read this Application for Finding of Diligence filed on behalf of Fort Morgan Farms, LLC, and High Plains Grazing, LLC, and certify that the contents are true to the best of my knowledge.

		Robert Graves General Manager	Date
STATE OF COLODADO	,	Fort Morgan Farms, LLC	
STATE OF COLORADO	) ss.		
COUNTY OF	)		
The foregoing instru 2019, by Robert L. Graves.	ment was acknowl	ledged before me on this day o	of Decembe
Witness by hand and My commission expire			
		Notary Public	
		Robert Graves General Manager High Plains Grazing, LLC	Date
STATE OF COLORADO	)	5	
COUNTY OF	) ss. )		
The foregoing instru 2019, by Robert L. Graves.	ment was acknowl	edged before me on this day of	of Decembe
Witness by hand and My commission expire			
Notary	y Public		



October 3, 2019

Chris Leone J-2 Contracting Company 105 Coronado Ct. Unit A-101 Fort Collins, CO 80525

Re: DPG Pit, File No. M-2019-028, 112c Application Decision Letter, Financial and Performance Warranty Request - Construction Materials Operation

Mr. Leone:

On October 3, 2019, the Division of Reclamation, Mining and Safety (Division) approved your 112c reclamation permit application submitted for the DPG Pit.

The amount of financial warranty set by the Division for this operation is \$984,566.00. You must submit a financial warranty in this amount and a performance warranty (form enclosed) in order for us to issue a permit. Please select a type of financial warranty from Rule 4.3, then contact our Financial Assurance Specialist, Gabriel Benvenuti at 303-866-3567, ext. 8148 so we can provide you with the appropriate form. The financial warranty forms and performance warranty form are also available at our website: <a href="https://mining.state.co.us">https://mining.state.co.us</a>.

Additionally, as agreed upon during the application review, in lieu of submitting 100% of costs for installing the Phase 1 slurry wall, you must submit proof that sufficient water rights have been dedicated for long-term replacement of evaporative depletions resulting from the proposed groundwater exposure.

PLEASE NOTE THAT MINING OPERATIONS MAY NOT COMMENCE UNTIL A PERMIT HAS BEEN ISSUED BY THE DIVISION <u>AFTER</u> RECEIPT OF YOUR FINANCIAL WARRANTY, PERFORMANCE WARRANTY, AND PROOF OF SUFFICIENT DEDICATED WATER RIGHTS. A PERMIT WILL NOT BE ISSUED UNTIL WE VERIFY THE ADEQUACY OF THESE DOCUMENTS.

If you have any questions, you may contact me by telephone at 303-866-3567, ext. 8129, or by email at <a href="mailto:amy.eschberger@state.co.us">amy.eschberger@state.co.us</a>.

Sincerely,

Amy Eschberger

Chry Erchenger

**Environmental Protection Specialist** 

Encl: Performance Warranty Form

Cc: Michael Cunningham, DRMS





1313 Sherman Street, Room 215 Denver, CO 80203

#### **PERFORMANCE WARRANTY**

Permittee/Operator:	
Operation known as:	
Permit Number:	

This form is approved by the Colorado Mined Land Reclamation Board ("Board") pursuant to C.R.S. 34-32-117 of the Colorado Mined Land Reclamation Act and C.R.S. 34-32.5-117 of the Colorado Land Reclamation Act for the Extraction of Construction Materials.

All parties are on Notice from this Document that:

The above listed Operator provides this warranty to the Board in conjunction with a reclamation Permit to conduct the above described mining operation on certain lands in Colorado. The "Affected Lands" are described in the above listed reclamation Permit, and include any Permit Amendment(s) approved by the Division of Reclamation Mining and Safety ("Division").

The Colorado Mined Land Reclamation Act, C.R.S. 34-32-101 *et seq*. ("Hard Rock Act"), and the Colorado Land Reclamation Act for the Extraction of Construction Materials, C.R.S. 34-32.5-101 *et seq*. ("Construction Materials Act"), both require a permit issued by the Board to include a written promise by the Operator to comply with all requirements of the Hard Rock and Construction Materials Acts (referred to herein together as "Acts").

Through the terms and conditions of this performance warranty and Permit, the Operator agrees to be bound by all requirements of the Acts and all Mineral Rules and Regulations of the Board for Hard Rock, Metal, and Designated Mining Operations (2 C.C.R. 407-1) and all Mineral Rules and Regulations of the Board for the Extraction of Construction Materials (2 C.C.R. 407-4) (referred to herein together as "Rules").

The Operator hereby provides the Board warranties of performance pursuant to C.R.S. 34-32-117(2), (3), and (4)/C.R.S. 34-32.5-117(2), (3), and (4), and promises the Board it will comply with all applicable requirements of the Acts and Rules.

The Operator hereby promises the Board it will comply with all of the terms of the reclamation Permit, including any Permit Amendment(s) approved by the Division. This performance warranty obligation of the Operator shall continue until the Operator's liability is released by the Board.

The Operator promises to be responsible for reclamation costs up to the amount established by the Board and incorporates its financial warranty to this performance warranty. The Operator agrees to maintain a financial warranty (or warranties) in good standing for the reclamation costs for the entire life of the



Permit. The amount of the financial warranty shall be sufficient to assure the completion of reclamation of affected lands if the Division has to complete such reclamation due to forfeiture. If the Board determines the Operator is in default under this performance warranty and the Operator fails to cure such default, the Operator's financial warranty shall be subject to forfeiture pursuant to C.R.S. 34-32-118/34-32.5-118.

This performance warranty by the Operator is perpetual and shall remain in full force and effect until all obligations have been met and all associated financial warranty is released by the Board. Any release of liability in a succession of Operators shall comply with C.R.S. 34-32-119/34-32.5-119.

The provisions hereof shall bind and inure to the benefit of the parties hereto and their successors and assigns.

SIGNED, SEALED AND DATED this	day of		, 20
	Operator:		
	Signature:		
	Name:		
	Title:		
NOTARIZATION O	F OPERATOR'S ACKNO	WLEDGEMENT	
STATE OF)			
) ss. COUNTY OF)			
The foregoing instrument was acknowledged	before me thisday	y of	
by	(Day) as	(Month)	(Year)
(Name)		(Title)	
(Operator)		_•	
	NOTARY PUBL	JC	
	My Commission	expires:	
APPROVED: State of Colorado Mined Land Reclamation Board Division of Reclamation, Mining and Safety			
By:	Date:		
Division Director			

Rev. 7-2018



### **MEMORANDUM**

TO: John Justus, Hoskin Farina & Kampf

**Rob Graves, Fort Morgan Farms** 

FROM: Jason Brothers, P.E. Deere & Ault Consultants, Inc.

**DATE:** October 15, 2019

**RE:** Analysis of DPG Reservoir Claims

In order to inform the claim for a storage water right on behalf of Fort Morgan Farms, LLC and High Plains Grazing, LLC (Applicants), we have conducted an analysis of the potential unmet augmentation demand, and the ability of the proposed DPG Reservoir to satisfy that demand. The proposed claim contemplates a diversion capacity of up to 100 cfs, and a reservoir volume of 12,000 acre-feet.

The Applicants own 2,119 acres of potentially irrigated land that is supplied with water by irrigation wells included in existing and contemplated augmentation plans. The potential depletion for all of the Applicants' wells was calculated based on the potential evapotranspiration (PET) of alfalfa and corn near Wiggins, Colorado. We used climate data from the NCWCD Wiggins Station, the ASCE Standardized Penman-Monteith method, the alfalfa reference crop, and crop coefficients from Hoffman, et al. (2007) to calculate the net water requirement (NWR) for corn and alfalfa for the 1992 through 2018 period. NWR is defined as the potential evapotranspiration of the crop less effective precipitation. The results are summarized below:

Summary of Annual Net Water Requirement for Alfalfa and Corn near Wiggins, Colorado (all values in inches)

Crop	Average NWR	Maximum NWR (2012)
Alfalfa	32.35	44.84
Corn	22.95	32.27

The maximum NWR during this study period was 32.27 inches for corn and 44.84 inches for alfalfa in 2012. Assuming a crop mix of 50 percent corn and 50 percent alfalfa, the average net water requirement on the Applicants' 2,119 acres is 4,883 acre-feet per year, and the maximum net water requirement is 6,808 acre-feet per year. Assuming groundwater depletions will consist of 92 percent crop consumptive use and 8 percent consumptive losses, such as plant interception and spray evaporation (Schneider and Howell, 1993), the groundwater depletion resulting from

full crop irrigation would average 5,307 acre-feet, with a maximum of 7,400 acre-feet per year, based on 2012.

In order to evaluate the Applicants' need for the subject water supplies, we developed a preliminary reservoir operating model. The study period for this model was from January, 2000 through December, 2018. The NWR was calculated as described above using the ASCE Standardized Penman-Monteith method. The groundwater depletion was calculated as the NWR with 8 percent spray loss. The replacement amounts attributable to The Applicants' augmentation supplies was calculated for each water supply as follows:

- **05CW346 Consumptive Use**. The projectable consumptive use and winter depletions described in the decree in this case were applied to every year. Return flow obligations estimates were included as depletions in the winter.
- **Weldon Valley Recharge Credits**. The historical recharge credits from the accounting for Case No. 02CW377 dating back to November, 2009. For January, 2000 through October, 2009, monthly averages were used.
- **Bijou Recharge Accounts.** The historical credit available to the Applicants from accounts owned or leased long-term was used for the period of record, beginning in January, 2001.
- **FMRIC Recharge Accounts**. The historical credit available to the Applicants from accounts owned or leased long-term was used for the period of record, beginning in January, 2001.

The available replacement sources average 872 acre-feet per year during the study period. The maximum yield of the Applicants augmentation supplies is 1,651 acre-feet in 2016. The preliminary reservoir operation model was used to evaluate the performance of the proposed reservoir in satisfying the augmentation demands from the augmented wells that could not be met with the Applicants' existing augmentation supplies. The model assumes an evaporative loss from the reservoir of 729 acre-feet per year, based on an average surface area of 192.8 acres. In addition, we applied a transmission loss of 12.5% based on 50 miles of river transit at a rate of 0.25% per mile.

The results from the preliminary model, as represented by volume of water in storage in the reservoir, are summarized in the attached table. As you can see, there is a significant period from 2002 through 2006 when the reservoir is not able to provide a full augmentation supply to the Applicants, and is empty. As a result, we conclude that the claimed diversion rate of 100 cfs and storage volume of 12,000 acre-feet can be fully utilized by the Applicants, and are not speculative claims.

### Average Volume in Storage

(acre-feet)

Year	Jan	Feb	Mar	Apr	May	` Jun	Jul	Aug	Sep	Oct	Nov	Dec
2000	2,697	8,087	11,846	12,000	11,858	11,195	10,482	9,767	9,071	8,381	7,750	8,353
2001	11,846	12,000	12,000	12,000	11,959	11,907	11,566	11,072	11,441	12,000	12,000	12,000
2002	12,000	12,000	12,000	11,932	11,304	10,644	9,826	9,006	8,204	7,409	6,681	6,020
2003	5,391	4,822	4,245	3,584	2,882	2,415	1,822	1,087	369	0	0	0
2004	0	0	0	0	0	0	0	0	13	10	0	0
2005	0	0	0	25	0	1,890	2,650	1,999	1,357	1,096	729	202
2006	0	58	302	565	21	0	0	0	0	0	0	146
2007	1,670	3,321	3,100	2,660	6,079	10,556	10,574	9,809	9,059	8,313	7,631	7,655
2008	11,085	11,739	11,212	10,616	9,962	9,297	8,631	8,227	7,913	7,271	6,686	6,679
2009	7,636	7,181	6,716	6,630	7,141	10,147	11,873	11,895	11,537	12,000	12,000	12,000
2010	12,000	11,896	11,951	11,998	12,000	11,998	11,589	11,394	10,970	10,483	11,220	10,647
2011	11,707	12,000	11,945	11,519	11,571	12,000	12,000	11,900	11,754	12,000	12,000	12,000
2012	12,000	12,000	11,994	11,536	10,774	9,994	9,209	8,418	7,644	6,874	6,172	5,540
2013	4,953	4,438	3,913	3,302	2,627	1,938	1,248	555	1,111	6,126	9,677	11,394
2014	12,000	12,000	12,000	11,981	11,916	12,000	11,840	11,971	12,000	12,000	12,000	12,000
2015	12,000	12,000	12,000	11,984	12,000	12,000	12,000	11,899	11,757	12,000	12,000	12,000
2016	12,000	12,000	12,000	12,000	12,000	11,996	11,628	11,021	10,423	9,832	9,300	10,311
2017	12,000	11,989	11,923	11,436	11,333	11,964	11,495	10,896	10,431	11,758	11,791	11,731
2018	12,000	12,000	12,000	11,849	11,724	11,920	11,561	10,947	10,346	9,753	9,224	8,758

#### RESOLUTION

RE: APPROVE SITE SPECIFIC DEVELOPMENT PLAN AND USE BY SPECIAL REVIEW PERMIT, USR19-0071, FOR OPEN MINING (SAND, GRAVEL AND STONE) AND PROCESSING OF MINERALS, INCLUDING RECYCLE OPERATIONS FOR CONCRETE AND ASPHALT. ALSO INCLUDED IS A MINE OFFICE, SCALE HOUSE AND SCALE, A FUELING/LUBRICATING STATION, PORTABLE GENERATORS, MOBILE MINING EQUIPMENT PARKING AND STORAGE, AND EMPLOYEE AND VENDOR PARKING IN THE A (AGRICULTURAL) ZONE DISTRICT - DPG FARMS, LLC, AND CALVEN GOZA

WHEREAS, the Board of County Commissioners of Weld County, Colorado, pursuant to Colorado statute and the Weld County Home Rule Charter, is vested with the authority of administering the affairs of Weld County, Colorado, and

WHEREAS, the Board of County Commissioners held a public hearing on the 26th day of February, 2020, at the hour of 10:00 a.m., in the Chambers of the Board, for the purpose of hearing the application of DPG Farms, LLC, 3300 S. Parker Rd., Suite 300, Aurora, Colorado 80014, and Calven Goza, 1620 Holly Ave., Greeley, Colorado 80631 for a Site Specific Development Plan and Use by Special Review Permit, USR19-0071, for open mining (sand, gravel and stone) and processing of minerals, including recycle operations for concrete and asphalt. Also included is a mine office, scale house and scale, a fueling/lubricating station, portable generators, mobile mining equipment parking and storage, and employee and vendor parking in the A (Agricultural) Zone District, on the following described real estate, being more particularly described as follows:

Part of the S1/2 S1/2 and N1/2 SE1/4 of Section 1; and part of the NW1/4 SW1/4, and N1/2 of Section 12, all within Township 5 North, Range 65 West of the 6th P.M., Weld County, Colorado

**WHEREAS,** at said hearing, the applicant was represented by J.C. York, J and T Consulting Inc., 305 Denver Avenue, Suite D, Fort Lupton, Colorado 80621, and

**WHEREAS,** Section 23-2-230 of the Weld County Code provides standards for review of said Use by Special Review Permit, and

WHEREAS, the Board of County Commissioners heard all of the testimony and statements of those present, studied the request of the applicant and the recommendation of the Weld County Planning Commission and all of the exhibits and evidence presented in this matter and, having been fully informed, finds that this request shall be approved for the following reasons:

- 1. The submitted materials are in compliance with the application requirements of Section 23-2-260 of the Weld County Code.
- 2. It is the opinion of the Board of County Commissioners that the applicant has shown compliance with Section 23-2-230.B of the Weld County Code as follows:
  - A. Section 23-2-230.B.1 The proposed use is consistent with Chapter 22 and any other applicable code provisions or ordinance in effect.

cc: PL(KOITP), PW(MM(Da), EH(LL), ca(BC), appls 03186180

- 1) Section 22-2-10.D states: "Extraction of natural resources is an important part of the economy of the County. Such extraction operations should minimize the impacts to agricultural lands and agricultural operations." The County recognizes that mineral resource extraction is an essential industry. The availability and cost of materials, such as sand and gravel, have an effect on the successfulness of general construction and County Road and Highway construction industries. The grazing lands associated with the surface estate is underlain with a known viable aggregate deposit. With the completion of mining, the site will be reclaimed as water storage reservoirs.
- 2) Section 22-5-80.B (CM.Goal 2) states: "Promote the reasonable and orderly exploration and development of mineral resources." Commercial mineral deposits known to be located in the County include sand and gravel, coal, and uranium. High-quality sand and gravel deposits in the County are found along major drainage ways. This site is located adjacent to the Cache la Poudre River and north of the South Platte River corridors. The area is classified as Floodplain and Valley-fill deposits being water deposited gravel. sand, silt, and clay along present stream courses and consists of sands ranging from coarse, gravelly stream sands to fine-grained wind deposits. The project site is also adjacent to and within Stream-terrace deposits consisting of older stream deposits preserved as a bench flanking the present Cache la Poudre stream course and consists of gravels, relatively clean and sound, and includes unevaluated aggregates, per the Weld County Sand Gravel Resources map of 1974.
- 3) Section 22-5-80.C (CM.Goal 3) states: "Minimize the impacts of surface and subsurface mining activities on the surrounding land. land uses, roads and highways." The proposed mine may adversely impact the adjacent land uses, roads, and possibly highways. The rural nature of the area and the existing mining operations make the proposed mining operation and reclamation plan compatible with surrounding land uses. Lands east of Greeley, adjacent to the Cache la Poudre River corridor, have several open mining (sand, gravel, and stone) and processing of minerals, including recycle operations for concrete and asphalt, and may also include concrete and asphalt batch plants, permitted under Weld County Land Use Permit numbers USR-1760 (Varra Companies), AmSUP-345 (Varra Companies current operator), USR14-0023 (Varra Companies), and USR-1435 (Hall-Irwin, Burnco). Many, if not all, of these permitted facilities are located near or within the Cache la Poudre River floodway and floodplain. To address impact to the area roads, the Department of Public Works is requiring a Road Maintenance Agreement with Up-front Improvements required for

the proposed mine site, including the haul route from the mine entrance as a Condition of Approval to be accepted by the Board of County Commissioners prior to recording the USR map.

- Section 22-5-80.D (CM.Goal 4) states: "Minimize hazardous 4) conditions related to mining activities and the mining site." The proposed permit area is located east of the Weld County Parkway and near with Cache la Poudre floodplain and floodway. Aggregate materials within the proposed permit area are composed of stream and terrace deposits associated with the historic river corridor drainage system. The terrace deposits within the proposed permit area extend from the surface or near-surface to a variable depth of approximately 2.5 to 7.5 feet throughout the site. The gravel deposit thickness ranges from 50 to 110 feet below the ground surface. The aggregate material will be recovered using equipment typical for sand and gravel mining operations. Earth moving equipment may include, but are not limited to, dozers, loaders, scrapers, and excavators. The aggregate material from the pit will be temporarily stockpiled within the pit or transported directly to the processing facility. During mining and reclamation activities, watering trucks for dust control will be used as needed. Since the material is unconsolidated deposits, no explosives or blasting is required.
- 5) Section 22-5-80.E (CM.Goal 5) states: "Provide for timely reclamation of all mining sites and promote their beneficial reuse." Following temporary mining disturbances from the proposed DPG Pit, reclamation will take place concurrently with mining activities. The current land use on the DPG Pit property is irrigated agriculture lands and riparian corridor areas. The use of this land, from irrigated agriculture lands and riparian corridor lands, will change to water storage reservoirs and retain the riparian corridor areas for conveyance of waters associated with the Cache la Poudre River. Most of the land surrounding the proposed permit area has similar uses of river corridor, gravel mining, and commercial and industrial business to the north. With the river corridor being undeveloped land in the surrounding area, maintaining this land as a river corridor is of vital importance in helping preserve those qualities that make a river or stream suitable as a habitat for wildlife, a site for recreation, and a source for domestic and other water uses. These corridors also allow the free movement of wildlife from area to area within the region, help control erosion and river sedimentation, and help absorb floodwaters consistent with the more regional land uses and for the continuation of agricultural operations.

- B. Section 23-2-230.B.2 The proposed use is consistent with the intent of the A (Agricultural) Zone District.
  - 1) Section 23-3-40.S of the Weld County Code provides for a Site Specific Development Plan and Use by Special Review Permit for open mining (sand, gravel and stone) and processing of minerals, including recycle operations for concrete and asphalt. Also included is a mine office/scale house and scale, a fueling/lubricating station, portable generators, mobile mining equipment parking and storage; employee and vendor parking in the A (Agricultural) Zone District.
- C. Section 23-2-230.B.3 - The uses which will be permitted will be compatible with the existing surrounding land uses. The adjacent lands consist of agricultural uses, mining, the river corridor, rural residences, commercial and industrial development, and uses including the Weld County CNG fueling station to the south and the Greeley-Weld County Airport to the north. The closest residence outside of the DRMS Permit boundary is about 50 feet south of Holly Avenue and is party to this permit. This structure may be utilized as part of the company operations and if the use is other than a residence a Change of Use Permit will be required through the Department of Building Inspection. The next closest residence is located approximately 800 feet west of the DRMS Permit boundary west of the Weld County Parkway, and the next nearest residence is located approximately 900 feet south of the DRMS Permit boundary. There are multiple USRs within one (1) mile of the site. As previously stated, there are Land Use Permits for mining operations, several oil and gas support and service facilities. guest farm and hunting facility, oil and gas production facilities, the Greeley Weld County Airport, the State of Colorado Shooting Range, Class II Injection well, water storage for beneficial use, several feedlots and construction businesses. The Weld County Department of Planning Services sent notice to 17 surrounding property owners. Planning staff received no written correspondence but did receive a telephone call of inquiry about the application, which was addressed. The location of the batch plant is to be located near the center of the mine permit area near the existing improvements associated with the existing ranch house and outbuildings and, per the associated permit maps, at the terminus of Holly Avenue. The applicant has been in contact with the surrounding property owners and conducted a community meeting on January 27, 2020. This invitation was sent by Certified Mail to 17 surrounding property owners. There were seven (7) owners present, in addition to the applicant's (property owners and miner) and their consultant. The application team provided background and mining information via a PowerPoint presentation to discuss and show what areas will be mined and reclaimed, traffic patterns and haul route, ground water modeling and monitor well locations, dust control and mitigation, noise study, and the location of a couple of downcast lights, in addition to the existing yard light at the existing buildings near the center of the property. The Conditions of Approval require that the applicant submit an Emergency Action and Safety Plan, an

accepted Noise Abatement Plan, an Improvements Agreement (for roads and traffic) a Lighting Plan and a Screening Plan. The Conditions of Approval and Development Standards will assist in mitigating the impacts of the facility on the adjacent properties and ensure compatibility with surrounding land uses and the region.

D. Section 23-2-230.B.4 – The uses which will be permitted will be compatible with future development of the surrounding area, as permitted by the existing zoning, and with the future development, as projected by Chapter 22 of the Weld County Code, and any other applicable code provisions or ordinances in effect, or the adopted Master Plans of affected municipalities. The site is located within a three (3) mile referral area of the Town of Kersey and City of Greeley, and is it located within the existing Intergovernmental Agreement Area and Coordinated Planning Area of the Town of Kersey. The Town of Kersey 2016 Comprehensive Plan Future Land Use – Large Scale map identifies this project site as Underdetermined Use. The Town has defined this category as "these areas are located outside the Urban Growth Areas. At this time, agriculture and agriculturerelated businesses are the primary land use. It will be some time before infrastructure can support urban-level development in these areas. Future land use will be determined in cooperation with the landowners at the time of development." The City of Greeley is also within the three (3) mile referral area but does not have an Intergovernmental Agreement or Coordinated Planning Area agreement with Weld County. The City of Greeley Comprehensive Plan entitled "Imagine Greeley" was adopted February 6, 2018. The City of Greeley Comprehensive Plan mapping identifies this area as having land's with known gravel resources, per the undated Gravel Resources and Mining map prepared May 26, 2016. The City of Greeley Land Use Guidance map, undated and prepared December 1, 2017, identifies the project area as open lands and natural area, ideally City owned per the Map Legend. The City of Greeley, City of Evans, and Town of Kersey submitted a joint referral dated January 8, 2019, stating that in 2019, Kersey, Evans, and Greeley adopted an Intergovernmental Agreement (KEG-IGA) related to land use in areas of shared interest, primarily along the South Platte River corridor. Because the subject site is located within the Kersey, Evans, and Greeley Cooperative Planning Area, the municipalities subject to the Intergovernmental Agreement have elected to provide a coordinated response to relay the collective perspective of the nearby localities. The agreement is specific to Land Use, growth boundaries and future annexations between Kersey, Evans and Greeley and is dated April 9, 2019, and recorded June 5, 2019. The January letter stated: "The municipalities recognize the right of landowners to develop, respect the authority of Weld County's jurisdiction regarding the proposal, and understand the State's interest in natural resource recovery..." There is additional narrative on the mine location, the importance of gravel extraction while incorporating efforts to preserve and restore the ecological value of the river system. The letter identifies several Land Use plans, the Land Use Guidance Map from the Imagine Greeley Comprehensive Plan, the Kersey Comprehensive Plan, and the Comprehensive Cache la Poudre Greenway Guide directing the requirement to "pay special attention to the recreational and ecological worth of the subject site by exploring and incorporating methods to minimize habitat disruption, maximize recreational opportunity, and mindfully restore ecological resources." The letter requests the applicant discuss preservation of open space with Kersey and Greeley staff; provide findings to Kersey, Evans, and Greeley on the "... ecological, cultural, and historically significant features of the site and identify preservation efforts ..." consider the KEG-IGA to " ... prohibit the industrial uses, such as batch plants and outdoor storage within the site; modify the state approved reclamation plan to primarily include wetlands and small natural-looking ponds..." and "work with Greeley staff to protect a route and establish an easement for the future construction of the Poudre Trail and a trail along the South Platte that are intended to join at the confluence per the 2016 Greeley Parks, Trails and Open Lands Master Plan." Weld County is not party to the 2019, Kersey, Evans, and Greeley adopted an Intergovernmental Agreement (KEG-IGA) related to Land Use in areas of shared interest, primarily along the South Platte River corridor. The applicant, applicant's consultant and property owner met on January 29, 2020, with representatives with the Town of Kersey and City of Greeley prior to the Planning Commission hearing to discuss the January 8, 2020. referral. Discussion between all parties addressed the concerns raised in the referral, specifically the value of the ongoing stewardship of the land. the family legacy of managing the resource and the potential for future uses on the land, including water storage and the potential of extending the Poudre River Trail out to the confluence of the Cache la Poudre and South Platte Rivers located to the east of the USR boundary. There was also discussion about a conservation easement on the land after mining activities and reclamation of the land. Per the application materials, the applicant is proposing to mine the property retaining the river corridor for the preservation of vegetation growing near the river, maintain wildlife habitats and wildlife migration corridors and will enhance water quality by filtering sediment from runoff; protect the existing river banks from erosion and provide storage of water during flood events. The reclamation plan approved by the Division of Reclamation Mining, Safety will result in several water storage reservoirs onsite and the longer term leases held for hunting by interested parties by the property owner.

E. Section 23-2-230.B.5 – The application complies with Chapter 23, Articles V and XI, of the Weld County Code. The property is not within the Geologic Hazard Overlay District or MS4 - Municipal Separate Storm Sewer System area. The project site is within a Special Flood Hazard Area according to the Federal Emergency Management Agency Flood Insurance Rate Map (FIRM) Community Panel No. 08123C1561E, revised January 20, 2016. Portions of the project site lie within Zone AE, which is within the 100-year floodplain. All structures will be anchored to protect against flooding and all electrical components will be installed a minimum

of one (1) foot above the 100-year flood elevation and the Greeley-Weld County Airport "Airport Layout Plan, Sheet 8 of 21 Airport Airspace Drawing" dated December 2016, and is identified as within the Airport Overlay District area. Building Permits issued on the lot will be required to adhere to the fee structure of the County-Wide Road Impact Fee, County Facility Fee and Drainage Impact Fee Programs.

- F. Section 23-2-230.B.6 The applicant has demonstrated a diligent effort to conserve Prime Agricultural Land in the locational decision for the proposed use. The proposed mine site is located entirely on "Other Land," per the 1979 Soil Conservation Service Important Farmlands of Weld County Map. There will be no prime agricultural land removed due to mining.
- G. Section 23-2-230.B.7 The Design Standards (Section 23-2-240, Weld County Code), Operation Standards (Section 23-2-250, Weld County Code), Conditions of Approval and Development Standards can ensure that there are adequate provisions for the protection of the health, safety, and welfare of the inhabitants of the neighborhood and County.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of County Commissioners of Weld County, Colorado, that the application of DPG Farms, LLC, and Calven Goza, for a Site Specific Development Plan and Use by Special Review Permit, USR19-0071, for open mining (sand, gravel and stone) and processing of minerals, including recycle operations for concrete and asphalt. Also included is a mine office, scale house and scale, a fueling/lubricating station, portable generators, mobile mining equipment parking and storage, and employee and vendor parking in the A (Agricultural) Zone District, on the parcel of land described above be, and hereby is, granted subject to the following conditions:

- 1. Prior to recording the map:
  - A. The applicant shall address the requirements of the Colorado Division of Water Resources, as stated in the referral response dated December 13, 2019. Written evidence of such shall be submitted to the Weld County Department of Planning Services.
  - B. A Communication Plan shall be submitted to, and approved by, the Department of Planning Services.
  - C. A Screening Plan shall be submitted to, and approved by, the Department of Planning Services that precludes chain-link fencing with slats and screens the scale house and outdoor storage areas from the surrounding property owners and public rights-of-way.
  - D. An Improvements and Road Maintenance Agreement with up-front, off-site improvements and triggered off-site improvements are required for this project. Road maintenance includes, but is not limited to, dust control and damage repair to specified haul routes. The Agreement shall include

- provisions addressing engineering requirements, submission of collateral, and testing and approval of completed improvements.
- E. As the existing On-Site Wastewater Treatment System (OWTS) for the residence (SP-1700268) may be utilized for business use, the OWTS shall be reviewed by a Colorado registered professional engineer to determine sizing limitations. The review shall consist of observation of the system and a technical review describing the system's ability to handle the proposed use. The review shall be submitted to the Environmental Health Services Division of the Weld County Department of Public Health and Environment. In the event the system is found to be inadequately sized for the proposed use, the system shall be brought into compliance with current OWTS regulations or a new OWTS may be installed.
- F. The existing domestic well permitted as #30883, shall be re-permitted to allow for Commercial Use.
- G. The applicant shall address the requirements of the Department of Building Inspection, as stated in the referral response dated January 21, 2020. Written evidence of such shall be submitted to the Weld County Department of Planning Services.
- H. The applicant shall submit, in writing, a request to vacate SUP-425.
- I. The map shall be amended to delineate the following:
  - 1) All sheets of the map shall be labeled USR19-0071.
  - 2) The attached Development Standards.
  - The map shall be prepared in accordance with Section 23-2-260.D of the Weld County Code.
  - 4) The applicant shall delineate the trash collection areas on the map. Section 23-3-350.H of the Weld County Code addresses the issue of trash collection areas.
  - 5) The map shall delineate the natural material stockpiles or trees used for screening, in accordance with the approved Screening Plan.
  - 6) The map shall delineate the on-site lighting for night-time operations, in accordance with the approved Lighting Plan, if applicable.
  - 7) All signs shall be shown on the map and shall adhere to Chapter 23, Article IV, Division 2 and Appendices 23-C, 23-D and 23-E of the Weld County Code.

- 8) The map shall delineate the parking area for the mine vehicles, mine equipment, vendors, and employees.
- 9) Holly Avenue is a paved road and is designated on the Weld County Functional Classification Map as a local road, which requires 60 feet of right-of-way at full buildout. The applicant shall delineate and label the future and existing right-of-way (along with the documents creating the existing right-of-way) and the physical location of the road on the site map or plat. All setbacks shall be measured from the edge of the right-of-way. This road is maintained by Weld County.
- The County Highway (County Road 49) is designated on the Weld County Functional Classification Map as an arterial road, which typically requires 140 feet of right-of-way at full buildout. The alignment of the road widening project varies along the section line for the corridor. The applicant shall contact the Department of Public Works for the location of the existing and future right-of-way and easements and delineate these on the site plan. This road is maintained by Weld County.
- The applicant shall show and label the approved access location. The applicant must obtain an Access Permit in the approved location, prior to construction.
- 12) The applicant shall show and label the approved tracking control on the site plan.
- 13) The applicant shall show and label the entrance gate, if applicable. An access approach that is gated shall be designed so that the longest vehicle (including trailers) using the access can completely clear the traveled way when the gate is closed. In no event shall the distance from the gate to the edge of the traveled surface be less than 35 feet.
- 14) The applicant shall show and label the drainage flow arrows.
- The applicant shall show and label the parking and traffic circulation flow arrows showing how the traffic moves around the property.
- The applicant shall show the floodplain and floodway (if applicable) boundaries on the map. The applicant shall label the floodplain boundaries with the FEMA Flood Zone and FEMA Map Panel Number or appropriate study.

- 17) Setback radiuses for existing oil and gas tank batteries and wellheads shall be indicated on the map, per the setback requirements of Section 23-3-50.E of the Weld County Code.
- 2. Upon completion of Condition of Approval #1 above, the applicant shall submit one (1) electronic copy (.pdf) of the map for preliminary approval to the Weld County Department of Planning Services. Upon approval of the map the applicant shall submit a Mylar map along with all other documentation required as Conditions of Approval. The Mylar map shall be recorded in the office of the Weld County Clerk and Recorder by the Department of Planning Services. The map shall be prepared in accordance with the requirements of Section 23-2-260.D of the Weld County Code. The Mylar map and additional requirements shall be submitted within one hundred twenty (120) days from the date of the Board of County Commissioners Resolution. The applicant shall be responsible for paying the recording fee.
- 3. In accordance with Weld County Code Ordinance #2012-3, approved April 30, 2012, should the map not be recorded within the required one hundred twenty (120) days from the date of the Board of County Commissioners Resolution, a \$50.00 recording continuance charge shall be added for each additional three (3) month period.

#### 4. Prior to Construction:

- A. The approved off-site improvements described in the Improvements and Road Maintenance Agreement with Up-front Improvements section and tracking control shall be constructed prior to on-site construction.
- B. If more than one (1) acre is to be disturbed for construction outside of the gravel mining area, a Weld County Grading Permit will be required.
- C. Any construction in the floodplain requires a Floodplain Permit.

### 5. Prior to Mining Operation:

- A. The applicant shall develop an Emergency Action and Safety Plan with the Office of Emergency Management and the Fire District. The plan shall be reviewed on an annual basis by the Facility operator, the Fire District and the Weld County Office of Emergency Management. The applicant shall submit evidence of acceptance to the Department of Planning Services.
- B. Accepted construction drawings and construction of the off-site roadway improvements are required prior to operation.
- C. The applicant shall submit written evidence that the Financial and Performance warranty has been submitted to, and accepted by, the Division of Mining, Reclamation and Safety.

## SPECIAL REVIEW PERMIT (USR19-0071) – DPG FARMS, LLC, AND CALVEN GOZA PAGE 11

6. The Use by Special Review is not perfected until the Conditions of Approval are completed and the map is recorded. Activity shall not occur, nor shall any building or electrical permits be issued on the property, until the Use by Special Review map is ready to be recorded in the office of the Weld County Clerk and Recorder or the applicant has been approved for an early release agreement.

The above and foregoing Resolution was, on motion duly made and seconded, adopted by the following vote on the 26th day of February, A.D., 2020.

BOARD OF COUNTY COMMISSIONERS WELD COUNTY, COLORADO

ATTEST: Gather & Mike Freeman, Chair

Mike Freeman, Chair

Mike Freeman, Chair

Steve Moreno, Pro-Tem

EXCUSED

Scott K. James

APPROVED AS TO FORM
Barbara Kirkmeyer

County Attorney

Date of signature: 03/10/20

Kevin D. Ross

### SITE SPECIFIC DEVELOPMENT PLAN USE BY SPECIAL REVIEW PERMIT DEVELOPMENT STANDARDS DPG FARMS, LLC, AND CALVEN GOZA USR19-0071

- 1. The Site Specific Development Plan and Use by Special Review USR19-0071, is for open mining (sand, gravel and stone) and processing of minerals, including recycle operations for concrete and asphalt. Also included is a mine office/scale house and scale, a fueling/lubricating station, portable generators, mobile mining equipment parking and storage, and employee and vendor parking in the A (Agricultural) Zone District, subject to the Development Standards stated hereon.
- 2. Approval of this plan may create a vested property right pursuant to Section 23-8-10 of the Weld County Code.
- 3. All sand and gravel operations shall be conducted during the hours of daylight, except in the case of a declared emergency disaster or in the case of a declaration requiring night construction, or to make necessary repairs to equipment. This restriction shall not apply to operation of administrative and executive offices located on the property.
- 4. Night operations will only occur when material is requested by cities, counties, or CDOT for projects. Operations will be considered "night operations" when they take place between the hours of one hour after sundown to one hour before sunrise. Depending on the request of the jurisdiction purchasing the material, night operations could occur seven (7) days a week. When the applicant becomes aware of projects that require night operations, they will email the Weld County Planning Director to let him/her know about the plans to operate outside of daylight hours, who the project is for, how long it will be occurring, and where the materials are being delivered.
- 5. The number of on-site employees shall be up to 20.
- The parking area for mine equipment, vendors and employees on the site shall be maintained.
- 7. All signs shall adhere to Chapter 23, Article IV, Division 2 and Appendices 23-C, 23-D and 23-E of the Weld County Code.
- 8. The proposed screening on the site shall be maintained in accordance with the approved Screening Plan.
- 9. The property owner shall maintain compliance with the Communication Plan.
- 10. Revisions as approved by the Colorado Division of Reclamation, Mining and Safety, may, as determined by Weld County staff, require an amendment to this USR permit.
- 11. The property owner or operator shall provide written evidence of an approved Emergency Action and Safety Plan on or before March 15th of any given year signed by

# DEVELOPMENT STANDARDS (USR19-0071) – DPG FARMS, LLC, AND CALVEN GOZA PAGE 2

- representatives for the Fire District and the Weld County Office of Emergency Management to the Department of Planning Services.
- 12. The property owner or operator shall be responsible for controlling noxious weeds on the site, pursuant to Chapter 15, Articles I and II, of the Weld County Code.
- 13. The access to the site shall be maintained to mitigate any impacts to the public road, including damages and/or off-site tracking.
- There shall be no parking or staging of vehicles on public roads. On-site parking shall be utilized.
- 15. Any work that may occupy and/or encroach upon any County rights-of-way or easement shall acquire an approved Right-of-Way Use Permit prior to commencement.
- 16. The applicant shall comply with all requirements provided in the executed Improvements and Road Maintenance Agreement with Up-front Improvements.
- 17. The Improvements Agreement for this site may be reviewed on an annual basis, including a site visit and possible updates.
- 18. The historical flow patterns and runoff amounts on the site will be maintained.
- 19. Weld County is not responsible for the maintenance of on-site drainage related features.
- 20. All liquid and solid wastes (as defined in the Solid Wastes Disposal Sites and Facilities Act, C.R.S. §30-20-100.5) shall be stored and removed for final disposal in a manner that protects against surface and groundwater contamination.
- 21. No permanent disposal of wastes shall be permitted at this site. This is not meant to include those wastes specifically excluded from the definition of a solid waste in the Solid Wastes Disposal Sites and Facilities Act, C.R.S. §30-20-100.5.
- 22. Waste materials shall be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate emissions, blowing debris, and other potential nuisance conditions. The facility shall operate in accordance with Chapter 14, Article I, of the Weld County Code and the accepted waste handling plan.
- 23. Fugitive dust should attempt to be confined on the property. Uses on the property shall comply with the Colorado Air Quality Commission's Air Quality Regulations and the accepted Dust Abatement Plan for the site.
- 24. The operation shall submit an Air Pollution Emission Notice (A.P.E.N.) and Emissions Permit Application and obtain a permit from the Air Pollution Control Division of the Colorado Department of Public Health and Environment, as applicable.

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- 25. The facility shall adhere to the maximum permissible noise levels allowed in the Industrial Zone, as delineated in C.R.S. §25-12-103. The facility shall operate in accordance with the accepted Noise Study.
- The operation shall remove, handle, and stockpile overburden, sand, soil and gravel from the facility area in a manner that prevents nuisance conditions.
- 27. Adequate drinking, handwashing, and toilet facilities shall be provided for employees and patrons of the facility, at all times. A permanent, adequate water supply shall be provided for drinking and sanitary purposes. The existing well (permit #30833) cannot be used for the business unless it is re-permitted for business use.
- 28. Sewage disposal for the facility shall be by septic system. Any septic system located on the property must comply with all provisions of the Weld County Code, pertaining to On-Site Wastewater Treatment Systems.
- 29. Portable toilets and bottled water are acceptable to provide drinking and sanitary services to the site. Records of maintenance and proper disposal for portable toilets shall be retained on a quarterly basis and available for review by the Weld County Department of Public Health and Environment. Portable toilets shall be serviced by a cleaner licensed in Weld County, contain hand sanitizers and shall be screened from residences within one half mile of the facility and high-volume roads in consultation with the Department of Public Works.
- 30. Any vehicle or equipment washing areas shall capture all effluent and prevent discharges in accordance with the Rules and Regulations of the Water Quality Control Commission, and the Environmental Protection Agency.
- 31. If applicable, the operation shall obtain a stormwater or other discharge permits from the Colorado Department of Public Health and Environment, Water Quality Control Division.
- 32. The facility shall comply with all provisions of the State Underground and Above Ground Storage Tank Regulations.
- 33. All chemicals must be handled in a safe manner, in accordance with product labeling. All chemicals must be stored secure, on an impervious surface, and in accordance with manufacturer's recommendations.
- The operation shall comply with all applicable rules and regulations of the Colorado Division of Reclamation, Mining and Safety.
- 35. The operation shall comply with the Mine Safety and Health Act (MSHA).
- 36. The facility shall notify the County of any revocation and/or suspension of any State-issued permit.
- 37. The operation shall comply with all applicable rules and regulations of state and federal agencies and the Weld County Code.

- 38. A Flood Hazard Development Permit is required for all construction or development occurring in the floodplain or floodway as delineated on Federal Emergency Management Agency (FEMA) FIRM Community Panel Map #08123C-1561E, effective date January 20, 2016 (South Platte River Floodplain). Any development shall comply with all applicable Weld County requirements, Colorado Water Conservation Board requirements as described in Rules and Regulations for Regulatory Floodplains in Colorado, and FEMA regulations and requirements as described in 44 CFR parts 59, 60, and 65. The FEMA definition of development is any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations, or storage of equipment and materials.
- 39. FEMA's floodplain boundaries may be updated at any time by FEMA. Prior to the start of any development activities, the owner should contact Weld County to determine if the floodplain boundaries have been modified.
- 40. Nighttime lighting shall be oriented 90 degrees to the ground plane.
- 41. Sources of light shall be shielded so that light rays will not shine directly onto adjacent properties. Sources of light should not cause a nuisance or interfere with the use on the adjacent properties in accordance with the map. Neither the direct, nor reflected, light from any light source may create a traffic hazard to operators of motor vehicles on public or private streets. No colored lights may be used which may be confused with, or construed as, traffic control devices.
- 42. Building permits may be required, for any new construction or set up manufactured structure, per Section 29-3-10 of the Weld County Code. A building permit application must be completed and submitted. Buildings and structures shall conform to the requirements of the various codes adopted at the time of permit application. Currently, the following has been adopted by Weld County: 2018 International Building Codes, 2006 International Energy Code, 2017 National Electrical Code, and Chapter 29 of the Weld County Code. A plan review shall be approved, and a permit must be issued prior to the start of construction.
- 43. As applicable, if any Single-Family Dwelling is utilized as commercial offices, the use will require a building permit for a change of use from Single-Family Dwelling to Commercial Offices and shall include a complete code analysis prepared by a registered design professional is required and shall be submitted with All Commercial Building Permit applications to Weld County. A Floor Plan shall be submitted showing room dimensions, uses, along with details showing compliance with Accessibility requirements and currently adopted building codes.
- The property owner or operator shall be responsible for complying with the Open-Mining Standards of Chapter 23, Division 4 of the Weld County Code.
- 45. Necessary personnel from the Weld County Departments of Planning Services, Public Works, and Public Health and Environment shall be granted access onto the property at any reasonable time in order to ensure the activities carried out on the property comply

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- with the Conditions of Approval and Development Standards stated herein and all applicable Weld County regulations.
- 46. The Use by Special Review area shall be limited to the plans shown hereon and governed by the foregoing standards and all applicable Weld County regulations. Substantial changes from the plans or Development Standards, as shown or stated, shall require the approval of an amendment of the Permit by the Weld County Board of County Commissioners before such changes from the plans or Development Standards are permitted. Any other changes shall be filed in the office of the Department of Planning Services.
- 47. RIGHT TO EXTRACT MINERAL RESOURCES STATEMENT: Weld County has some of the most abundant mineral resources, including, but not limited to, sand and gravel, oil, natural gas, and coal. Under Title 34, of the Colorado Revised Statutes, minerals are vital resources because (a) the state's commercial mineral deposits are essential to the state's economy; (b) the populous counties of the state face a critical shortage of such deposits; and (c) such deposits should be extracted according to a rational plan, calculated to avoid waste of such deposits and cause the least practicable disruption of the ecology and quality of life of the citizens of the populous counties of the state. Mineral resource locations are widespread throughout the County and persons moving into these areas must recognize the various impacts associated with this development. Oftentimes, mineral resource sites are fixed to their geographical and geophysical locations. Moreover, these resources are protected property rights and mineral owners should be afforded the opportunity to extract the mineral resource.
- 48. The Weld County Right to Farm Statement, as it appears in Section 22-2-20.J.2 of the Weld County Code, shall be placed on the map and recognized at all times.

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