AGENDA
MORGAN COUNTY BOARD OF COUNTY COMMISSIONERS
Assembly Room, Administration Building
231 Ensign Street, Fort Morgan, CO 80701
Thursday, October 15, 2020

The County Will Be Abiding By the Social Distancing Requirements in Public Health Order 20-28 for This Meeting. Due To Limited Space In The Assembly Room, Remote Attendance Is Encouraged. If You Have Any Questions Regarding Attending The Meeting, Please Contact Karla Powell at 970-542-3500.

To participate in the Citizen's Comment Period you must connect via Zoom Conferencing Access Information: https://us02web.zoom.us/j/84870066867 If you cannot connect via Zoom, you may submit written public comment to bccmorganc@co.morgan.co.us by email by 3 p.m. on Wednesday October 14, 2020.

To participate in Public Hearings you may connect via Zoom Conferencing Access Information: https://us02web.zoom.us/j/84870066867 or to listen via phone, please dial: 1-312-626-6799, Meeting ID: 848 7006 6867

To watch and/or listen to the meeting but not participate, you may do so by connecting via Zoom Conferencing Access Information: https://us02web.zoom.us/j/83445694959 or to listen via phone, please dial: 1-312-626-6799, Meeting ID: 848 7006 6867

9:00 A.M.

A. WELCOME – CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL:
Commissioner Arndt
Commissioner Becker
Commissioner Zwetzig

B. ADOPTION OF THE AGENDA

C. PUBLIC HEARING

Continued from September 10, 2020

1. Erin Kress and Travis Hertneky/THEnginering, LLC – Applicant
Bullseye Holdings, LLC/Kevin Lamb- Landowner

*Any meeting or event scheduled to be held at the Commissioners' Offices (218 West Kiowa Avenue, Fort Morgan, CO) will be relocated to a site with handicapped access upon request. For special assistance for the Morgan County Board of Commissioners meeting, please notify us at least 48 hours before the scheduled agenda item. Please call (970)542-3500, extension 1410, to request accommodations for any of the two locations.

PREPARED BY: Karla Powell, Administrative Services Manager
AGENDA POSTED ON October 14, 2020

Legal Description- Located in the W ½, and South and West of the Bijou Canal, Section 26, T3N, R 58W of the 6th PM, Morgan County, aka 16098 County Rd O, Fort Morgan, CO 80701

Reason- Use by Special Review Application to operate and re-establish a Confined Animal Feeding Operation for no more than 9000 head pursuant to Section 3-180 (O) and Appendix B Table 3 of the Morgan County Zoning Regulations

D ADJOURNMENT

*Any meeting or event scheduled to be held at the Commissioners' Offices (218 West Kiowa Avenue, Fort Morgan, CO) will be relocated to a site with handicapped access upon request. For special assistance for the Morgan County Board of Commissioners meeting, please notify us at least 48 hours before the scheduled agenda item. Please call (970)542-3500, extension 1410, to request accommodations for any of the two locations.

PREPARED BY: Karla Powell, Administrative Services Manager
AGENDA POSTED ON October 14, 2020

THE ENGINEERING, LLC

September 3, 2020

Pam Cherry
Morgan County Planning Administrator
231 Ensign Street, Box 596
Fort Morgan, CO 80701

Re: Bullseye Holdings, LLC Feedlot Special Use Permit

Dear Ms. Cherry:

Since our last public hearing with the Morgan County Commissioners on August 5, 2020 we have worked to clarify and address concerns raised by the Commissioners and Bijou Irrigation District & Company (Bijou). We revised portions of our stormwater containment design and presented that to Bijou at an in person meeting on August 14, 2020, and in a follow up letter dated August 24, 2020. This proposal was reviewed by Bijou's engineer and comments are included in the enclosed letter.

As per the requests for clarification of water usage and the additional stormwater containment measures proposed, we have modified the plan to be a phased approach. This does not change the ultimate plan or applied for capacity, but allows for the delayed implementation of these more capital intensive improvements and more clearly outlines the water availability and associated capacities.

From the August 5, 2020 public hearing I had the following items noted to clarify and follow-up on per the Commissioners' concerns:

1. *Financial assurance.*

   A letter of financial assurance from Bullseye Holdings, LLC's financial institution has been provided that demonstrates adequate financial resources to complete the project.

2. *Clearer diversion of stormwater conveyance without the usage of concrete bunkline for stormwater diversion or freeboard.*

   The area directly adjacent to Bijou Canal and south of Pond #3 where a bunk prohibits the construction of a continuous earthen berm will have the concrete bunkline removed and re-located to the extent practical. The removal of this bunk allows the elevation of the earthen berm/road to be continuous and also allows the construction of an open channel that will discreetly convey stormwater from Pond #3 to Pond #1. This provides a discrete constructed channel that will convey stormwater and the capacity can be easily quantified.

   Further details of this revised system can be found in the enclosures.

3. *Clearer outline of available water resources and proposed usages.*

The currently available water usage and proposed usage at full buildout has been reviewed and details are included in the enclosures. Bullseye is proposing a phased approach with matches the stormwater containment phases. These phases represent currently available water resources, proposed additional water resources to be determined in water court, and water necessity for 365 day occupation at proposed maximum animal capacity.

Animal capacities presented for each phase are not based on maximum capacity occupied for 365 days, but rather maximum capacities based on a 120 or 180 day feeding schedule. The intent is the feedlot will likely feed the outlined headcounts for the fall feeding season, but maintain minimal cattle during the summer season. The feedlot has a water plan already being implemented to adequately water the permitted 9,000 head for 180 days. The final phase assumes additional water resources can be obtained that allow the maximum animal capacity for 365 days.

4. *Review concerns from Thaine Kramer email to Pam Cherry dated July 13, 2020.*

Thaine Kramer with the Environmental Ag Program provided the Ag Program's response to the Stewart Environmental Consulting Group letter dated July 6, 2020.

While most of what was provided was informational in nature related to the applicable regulations to CAFOs and the extent of the Ag Program's regulatory authority, Mr. Kramer's email was reviewed and the feedlot as proposed meets or exceeds the CAFO regulatory requirements outlined in his email.

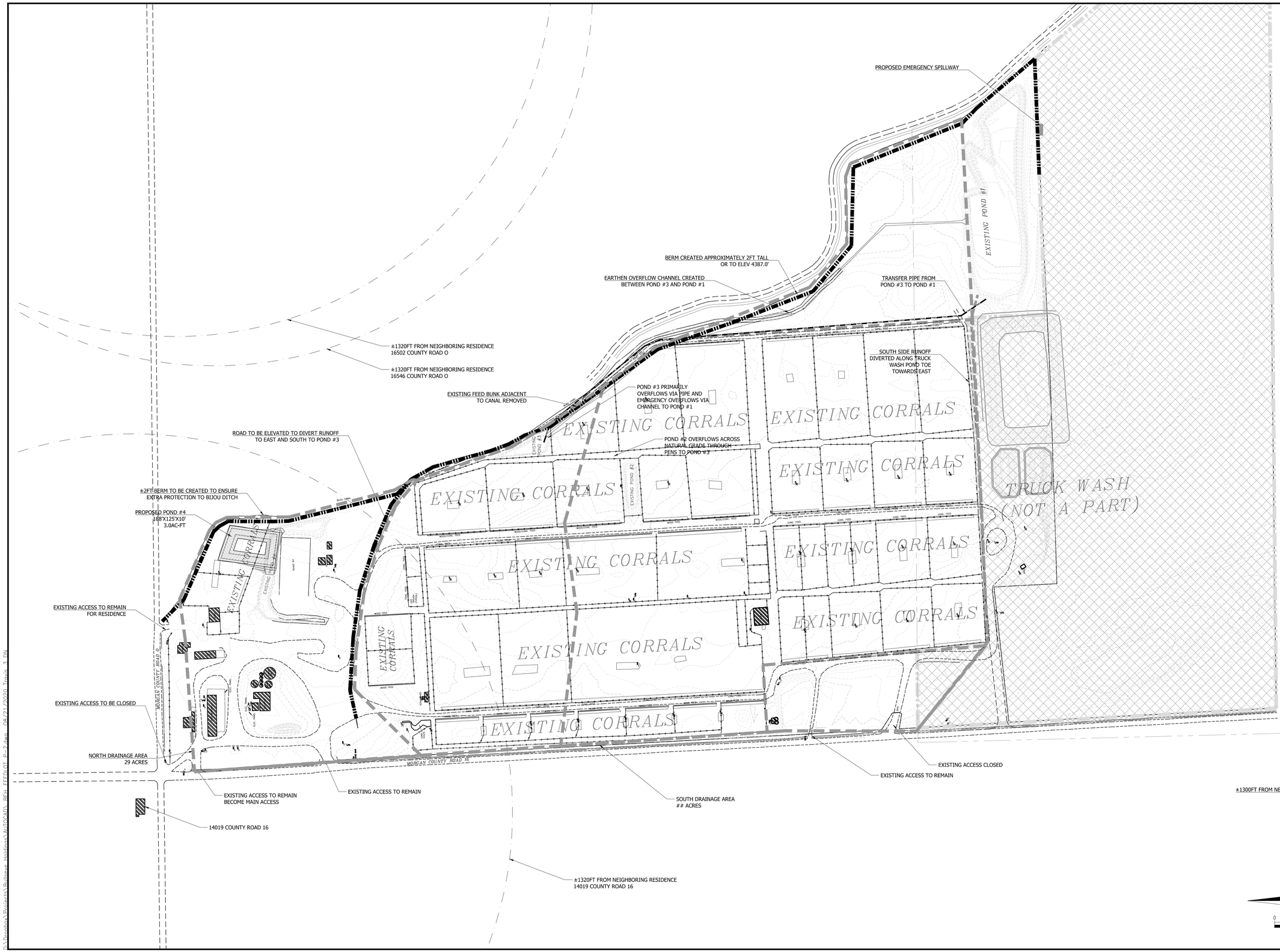
As previously discussed, Bullseye Holdings intends to register as a CAFO with the Ag Program once the facility reaches 1,000 head.

As always, if you have any questions or concerns please don't hesitate to call.

Travis Hertneky, PE
Agricultural Engineer

CC: Kevin Lamb, Bullseye Holdings, LLC
Bijou Irrigation District & Company

Enclosures: Bullseye Feedlot site plan, revised 8/21/2020
Bullseye Feedlot phasing map
Letter Bijou, 8/24/2020
Bijou Letter Attachments
Steward Environmental response letter
Phased implementation details
Water availability



		Date
Designed	TRAVIS HERTNEKY	2/26/2020
Drawn	TRAVIS HERTNEKY	2/26/2020
Revised	TRAVIS HERTNEKY	7/30/2020
Revised	TRAVIS HERTNEKY	8/21/2020

BULLSEYE HOLDING, LLC

FEEDLOT

PARTS OF THE W $\frac{1}{2}$ SEC 26, T 3N, R 58W, OF THE 6TH P.M., MORGAN COUNTY, COLORADO

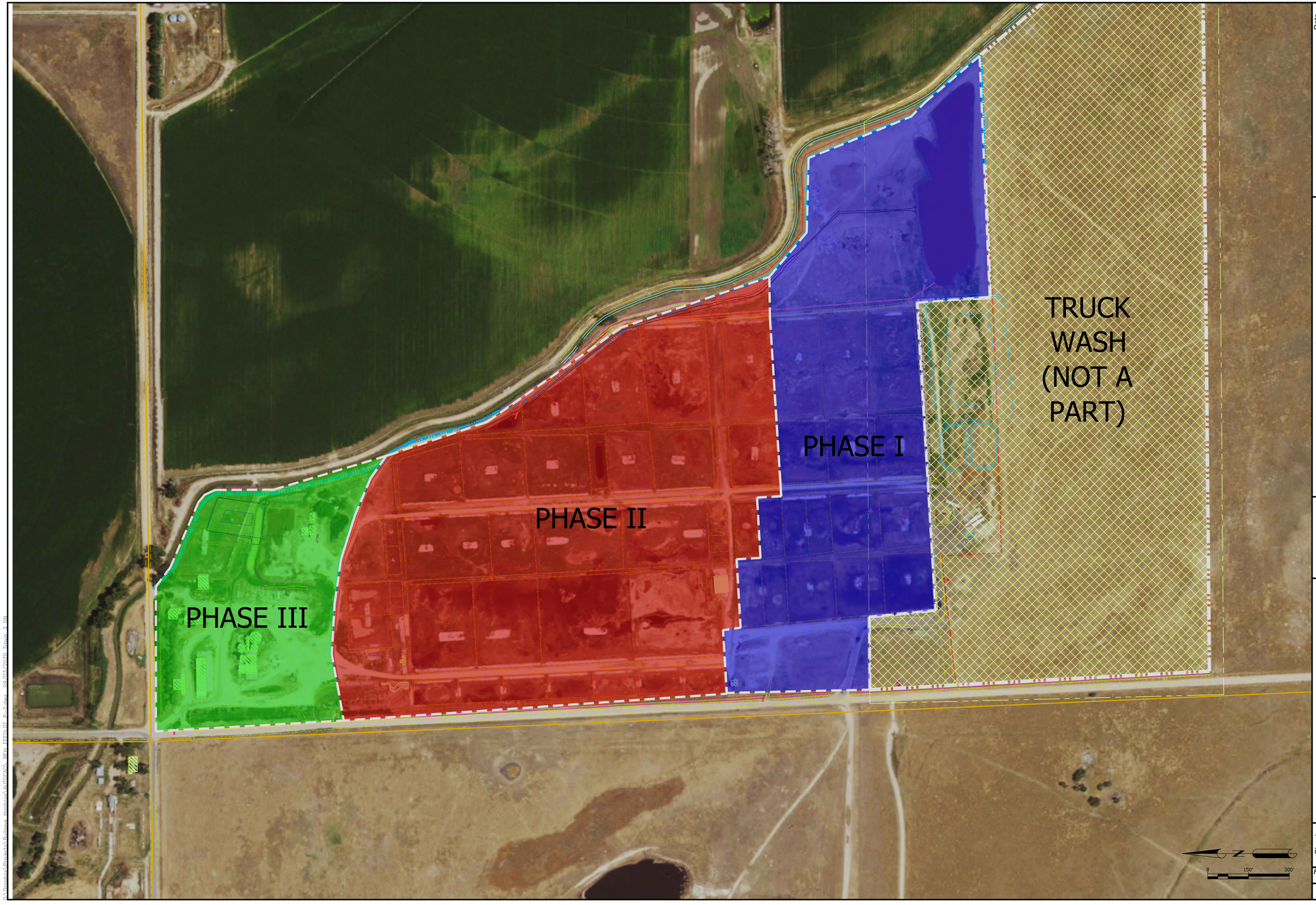
NGINEERING, LLC
719-661-6209
Greeley, CO

Sheet: P-1

File Name: BEH_FEEDLOT_P-2.DWG

Sheet 1 of 1

D:\Dropbox\Projects\Bullseye Holdings\AUTOCAD_BEH_FEEDLOT_P-2.dwg 08/21/2020 Travis 3_DN



BULLSEYE HOLDING, LLC
FEEDLOT
PARTS OF THE W $\frac{1}{2}$ SEC 26, T 3N, R 58W, OF THE 6TH P.M., MORGAN COUNTY, COLORADO

		Date
Designed	TRAVIS HERTNEKY	2/26/2020
Drawn	TRAVIS HERTNEKY	2/26/2020
Revised	TRAVIS HERTNEKY	7/30/2020
Revised	TRAVIS HERTNEKY	8/21/2020

THE ENGINEERING, LLC
719-661-6209
Greeley, CO

Sheet: P-1

File Name: BEH_FEEDLOT_P-2.DWG

Sheet 1 of 1

THENGINEERING, LLC

August 24, 2020

Bijou Irrigation District & Company
PO Box 972
Fort Morgan, CO 80701

Re: Bullseye Feedlot Special Use Permit Issues

Dear Board,

This letter is in response to Bijou's concerns throughout the Bullseye Feedlot special use permit process and more specifically our meeting on August 14, 2020. This letter is in addition to THEngineering's letter dated July 30, 2020, outlining many concessions and agreements.

We have reviewed the proposed stormwater containment system and made the following modifications.

1. *Emergency Spillway Location*

   We have reviewed the emergency spillway and have determined that a safe overflow structure is essential for reasons previously outlined. We have looked at locations and have found a suitable location on the south edge of Pond #1 that will overflow into the adjacent property controlled by the truck wash.

   An additional overflow point for the north portion of the Feedlot will overflow to the north at the existing driveway location along County Road O as a result of containment modifications which we will discuss further below.

2. *Design Storm Containment*

   The Feedlot is regulated by CDPHE and EPA to contain the 25year-24hour storm event of 3.35in. As a result of previous correspondence with Bijou, we designed the containment to contain the 100year-24hr storm event. We have since revised the design to provide additional containment as outlined below.

   North Runoff Area: The north runoff area consisting of the feed area has an existing pond that is adjacent to the silage pad. This pond was going to be lined and utilized for stormwater containment before it could be pumped to Pond #1. At the request for additional containment we have revised the design to include a dedicated pond with more capacity. This proposed pond will have a capacity at top of berm of 3.0ac-ft and will meet the regulatory requirements from CDPHE and the additional requests from Bijou before overtopping.

North Runoff Area				
Watershed	13	ac		
25yr-24hr Storm Event	3.35	in	0.9	ac-ft
100yr-24hr Storm Event	4.43	in	1.54	ac-ft
Bijou Requested	7.00	in	1.89	ac-ft
Volume at 2ft Freeboard			2.0	ac-ft
Volume at Top of Berm			3.0	ac-ft

South Runoff Area: The south runoff area consisting of the majority of corrals will remain largely as is with a few key modifications. As previously planned, Ponds #1, #2, and #3 will remain with Pond #2 being lined and the current seepage certifications remaining for Ponds #1 and #3.

The additional berm that is planned for the east side of the Feedlot will remain and will be elevated an additional foot higher than previously planned along Pond #1. This additional foot of freeboard will create volume that will not normally be utilized except in extreme circumstances to provide the greater stormwater protections requested by Bijou.

This berm was previously proposed as a partial berm in the area where the current feed bunk does not allow the berm to continue and the concrete feed bunk would be used as a berm to provide additional freeboard when Pond #3 overflows to Pond #1. As a result of concerns with the use of this bunk as part of the berm by the Morgan County Commissioners, this portion of bunk will be removed to allow for a continuous berm along east edge. The removal of this bunk will also allow the construction of a discrete overflow channel that will convey the overflow from Pond #3 to Pond #1 without it flowing through the corrals. Projected runoff flows and channel capacity have been calculated and are included as an enclosure to this letter.

South Runoff Area				
Watershed	68	ac		
25yr-24hr Storm Event	3.35	in	12.93	ac-ft
100yr-24hr Storm Event	4.43	in	18.7	ac-ft
Bijou Requested	7.00	in	27.07	ac-ft
Volume at 2ft Freeboard			27.5	ac-ft
Volume at Top of Berm			57.1	ac-ft

3. Additional Liner Testing of Pond #1

Pond #1 has been tested to meet the regulatory seepage standard several times with the most recent test in 2018 when the pond was almost full as a result of its use for truck washing at that time. These multiple tests indicate that Pond #1 does meet the seepage requirements and we are not proposing re-testing the Pond again.

The Pond will normally be operated below the freeboard mark where the Pond will start to back out of its banks and the only time the Pond would be above this mark is a result of an extraordinary rainfall event as requested by Bijou. As per our meeting, we understand the concern is potential seepage from the Pond into the Bijou Canal from this 1000year storm event backing water up to higher elevations.

As discussed at the August 14, 2020 meeting, Bullseye agrees to construct the new portions of the berm directly adjacent to Pond #1 and the Bijou Canal to further limit seepage. Construction will be tested and the seepage rate documented.

I believe this adequately addresses the concerns raised during the special use permit hearing process and our August 14, 2020 meeting.

As always, if you have any questions or concerns please don't hesitate to call.

Sincerely,

Travis Hertneky, PE
Agricultural Engineer

Enclosures: Precipitation frequency estimates
North area waste storage computations
North pond proposed stage storage curve
South area waste storage computations
South pond proposed stage storage curve
Channel capacity calculations
Revised site plan

RECTANGULAR WASTE STORAGE POND DESIGN COMPUTATIONS

Project Name: Bullseye Feedlot
Location: Feed Area pond

Computed By: THE
Date: 8/21/2020

Checked By:
Date:

Climate Station: Fort Morgan, ave. year

BASIC DATA				
Solids & Slurry Inflow :	0	cu. ft. /day		
Other Liquid Waste Inflow:	0	gal. /day		
Contributing Roof Area:	50,172	sq. ft.		
Contributing Paved Lot Area:	0	sq. ft., CN =	59	
Contributing Earth Lot Area:	12	Acres, CN =	59	
25yr-24hr Precipitation Depth:	3.35	inches		
Bijou Requested Precipitation Depth:	7.00	inches		
Annual FWS Evaporation:	48	inches		

POND DESIGN VOLUME		
Max Working Storage:	1.08	Acre-ft
Design Storm Runoff:	0.90	Acre-ft
Design Requirement:	1.98	Acre-ft
Available Storage:	103%	of design
Storage Safety Factor:	1.5	
(w/ freeboard)		

RECTANGULAR STORAGE POND DESIGN DIMENSIONS

VOLUMES OVERWRITTEN WITH ACTUAL FROM SURVEY AND PLANNED

Freeboard:	0.0	ft.	Design Surface Area:	23,438	sq. ft.
Inside Slope:	4	H:1V	Available Storage Volume:	2.0	Acre-ft
Evaporation Area:	4,838	sq.ft.	Freeboard Volume:	1.0	Acre-ft
Seepage Rate:	0.000	inches/day	Total Volume:	3.0	Acre-ft
Seepage Area:	7146	sq.ft.			

AVERAGE ANNUAL MASS BALANCE FOR ESTIMATING MAXIMUM WORKING STORAGE REQUIREMENTS

	MONTHLY POND INFLOW											MONTHLY POND OUTFLOW					WORKING STORAGE	
	Monthly Contribution to Working Storage from Precipitation								Waste Inflow		Total	Surface		Seepage	Planned	Total	Monthly	Accumulated
	Precip.	Earth Lot Runoff		Paved Lot Runoff		Roof Runoff		On Pond	Solids	Liquids	Inflow	Evaporation		Loss	Drawdown	Outflow	In - Out	Storage
Month	(inches)	(inches)	(Acre-ft)	(inches)	(Acre-ft)	(inches)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(inches)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)
Jan.	0.23	0.00	0.00	0.60	0.0000	0.09	0.0087	0.0103	0.0000	0.0000	0.02	1.44	0.0133	0.0000	0.00	0.01	0.01	0.90
Feb.	0.17	0.00	0.00	0.63	0.0000	0.05	0.0048	0.0076	0.0000	0.0000	0.01	1.68	0.0155	0.0000	0.00	0.02	0.00	0.90
Mar.	0.71	0.00	0.00	0.38	0.0000	0.51	0.0492	0.0318	0.0000	0.0000	0.08	2.64	0.0244	0.0000	0.00	0.02	0.06	0.95
Apr.	1.20	0.22	0.22	0.22	0.0000	0.99	0.0946	0.0538	0.0000	0.0000	0.37	4.32	0.0400	0.0000	0.25	0.29	0.08	1.03
May	2.63	0.00	0.00	0.00	0.0000	2.40	0.2304	0.1179	0.0000	0.0000	0.35	5.76	0.0533	0.0000	0.25	0.30	0.05	1.08
June	2.15	0.04	0.04	0.04	0.0000	1.92	0.1846	0.0964	0.0000	0.0000	0.32	6.96	0.0644	0.0000	0.50	0.56	-0.25	0.83
July	1.80	0.09	0.09	0.09	0.0000	1.58	0.1513	0.0807	0.0000	0.0000	0.32	7.20	0.0666	0.0000	0.40	0.47	-0.15	0.69
Aug.	1.49	0.15	0.15	0.15	0.0000	1.27	0.1219	0.0668	0.0000	0.0000	0.34	6.48	0.0600	0.0000	0.25	0.31	0.03	0.71
Sep.	1.13	0.24	0.24	0.24	0.0000	0.92	0.0880	0.0507	0.0000	0.0000	0.38	4.80	0.0444	0.0000	0.25	0.29	0.08	0.79
Oct.	0.66	0.00	0.00	0.40	0.0000	0.47	0.0447	0.0296	0.0000	0.0000	0.07	3.36	0.0311	0.0000	0.00	0.03	0.04	0.84
Nov.	0.38	0.00	0.00	0.52	0.0000	0.21	0.0203	0.0170	0.0000	0.0000	0.04	1.92	0.0178	0.0000	0.00	0.02	0.02	0.86
Dec.	0.27	0.00	0.00	0.58	0.0000	0.12	0.0116	0.0121	0.0000	0.0000	0.02	1.44	0.0133	0.0000	0.00	0.01	0.01	0.87
Totals:	12.82	0.74	0.73	3.86	0.00	10.53	1.01	0.57	0.00	0.00	2.32	48.00	0.44	0.00	1.90	2.34		

RAINFALL AND RUNOFF ESTIMATION FOR WASTE STORAGE POND DESIGN				
	Earth Areas	**Paved Areas**	**Roofed Areas**	**Pond Surface**
	25yr-24hr Storm Event			
1 day Curve Numbers:	59	59	100	100 %
25yr-24hr Rainfall:	3.35 inches	3.35 inches	3.35 inches	3.35 inches
25yr-24hr Runoff:	0.43 inches	0.43 inches	3.35 inches	3.35 inches
Runoff Volume:	0.43 Acre-ft	0.00 Acre-ft	0.32 Acre-ft	0.15 Acre-ft
	Total 24hr-25yr Event Runoff Volume:			0.90 Acre-ft
	Chronic Storm (10 day event)			
10 day Curve Numbers:	41	41	100	100 %
10yr-10day Rainfall:	7.0 inches	7.0 inches	7.0 inches	7.00 inches
10yr-10day Runoff:	0.92 inches	0.92 inches	7.00 inches	7.00 inches
Runoff Volume:	0.91 Acre-ft	0.00 Acre-ft	0.67 Acre-ft	0.31 Acre-ft
	Total 10yr-10day Event Runoff Volume:			1.89 Acre-ft
	Average Monthly Runoff Contribution to Working Storage			
30 day Curve Numbers:	41	41	98	100 %
Monthly Runoff:	(see computations in monthly mass balance table above)			
Average Annual Rainfall:	12.8 inches	12.8 inches	12.8 inches	12.8 inches
Average Annual Runoff:	0.74 inches	3.86 inches	10.53 inches	12.82 inches
Runoff as % of Rainfall:	6%	30%	82%	100.0%

RECTANGULAR WASTE STORAGE POND DESIGN COMPUTATIONS

Project Name: Bullseye Feedlot
Location: South main pond

Computed By: THE
Date: 8/21/2020

Checked By:
Date:

Climate Station: Fort Morgan, ave. year

BASIC DATA				
Solids & Slurry Inflow :	0	cu. ft. /day		
Other Liquid Waste Inflow:	0	gal. /day		
Contributing Roof Area:	0	sq. ft.		
Contributing Paved Lot Area:	496,584	sq. ft., CN =	55	
Contributing Earth Lot Area:	57	Acres, CN =	90	
Precipitation Depth:	3.35	inches		
Bijou RequestedPrecipitation Depth:	7.00	inches		
Annual FWS Evaporation:	48	inches		

POND DESIGN VOLUME		
Max Working Storage:	14.05	Acre-ft
Design Storm Runoff:	12.93	Acre-ft
Design Requirement:	26.97	Acre-ft
Available Storage:	102%	of design
Storage Safety Factor:	1.6	
(w/ freeboard)		

RECTANGULAR STORAGE POND DESIGN DIMENSIONS					
VOLUMES OVERWRITTEN WITH ACTUAL FROM SURVEY AND PLANNED					
Freeboard:	0.0	ft.	Design Surface Area:	274,336	sq. ft.
Inside Slope:	4	H:1V	Available Storage Volume:	27.5	Acre-ft
Evaporation Area:	122,600	sq.ft.	Freeboard Volume:	17.0	Acre-ft
Seepage Rate:	0.000	inches/day	Total Volume:	44.5	Acre-ft
Seepage Area:	1280	sq.ft.			

AVERAGE ANNUAL MASS BALANCE FOR ESTIMATING MAXIMUM WORKING STORAGE REQUIREMENTS

	MONTHLY POND INFLOW											MONTHLY POND OUTFLOW					WORKING STORAGE	
	Monthly Contribution to Working Storage from Precipitation								Waste Inflow		Total	Surface		Seepage	Planned	Total	Monthly	Accumulated
	Precip.	Earth Lot Runoff		Paved Lot Runoff		Roof Runoff		On Pond	Solids	Liquids	Inflow	Evaporation		Loss	Drawdown	Outflow	In - Out	Storage
Month	(inches)	(inches)	(Acre-ft)	(inches)	(Acre-ft)	(inches)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(inches)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)
Jan.	0.23	0.05	0.24	0.60	0.5673	0.09	0.0000	0.1207	0.0000	0.0000	0.93	1.44	0.3377	0.0000	0.00	0.34	0.59	12.00
Feb.	0.17	0.07	0.33	0.63	0.5964	0.05	0.0000	0.0892	0.0000	0.0000	1.02	1.68	0.3940	0.0000	0.00	0.39	0.63	12.63
Mar.	0.71	0.00	0.02	0.38	0.3654	0.51	0.0000	0.3726	0.0000	0.0000	0.76	2.64	0.6192	0.0000	0.00	0.62	0.14	12.76
Apr.	1.20	0.10	0.48	0.22	0.2104	0.99	0.0000	0.6298	0.0000	0.0000	1.32	4.32	1.0132	0.0000	1.00	2.01	-0.69	12.07
May	2.63	0.83	3.90	0.00	0.0041	2.40	0.0000	1.3803	0.0000	0.0000	5.28	5.76	1.3510	0.0000	2.00	3.35	1.93	14.00
June	2.15	0.53	2.51	0.04	0.0369	1.92	0.0000	1.1284	0.0000	0.0000	3.68	6.96	1.6324	0.0000	2.00	3.63	0.05	14.05
July	1.80	0.35	1.64	0.09	0.0829	1.58	0.0000	0.9447	0.0000	0.0000	2.66	7.20	1.6887	0.0000	2.00	3.69	-1.02	13.02
Aug.	1.49	0.21	0.97	0.15	0.1408	1.27	0.0000	0.7820	0.0000	0.0000	1.90	6.48	1.5198	0.0000	2.00	3.52	-1.62	11.40
Sep.	1.13	0.08	0.38	0.24	0.2296	0.92	0.0000	0.5931	0.0000	0.0000	1.21	4.80	1.1258	0.0000	0.90	2.03	-0.82	10.58
Oct.	0.66	0.00	0.01	0.40	0.3840	0.47	0.0000	0.3464	0.0000	0.0000	0.74	3.36	0.7881	0.0000	0.00	0.79	-0.05	10.53
Nov.	0.38	0.02	0.08	0.52	0.4985	0.21	0.0000	0.1994	0.0000	0.0000	0.78	1.92	0.4503	0.0000	0.00	0.45	0.33	10.86
Dec.	0.27	0.04	0.19	0.58	0.5484	0.12	0.0000	0.1417	0.0000	0.0000	0.88	1.44	0.3377	0.0000	0.00	0.34	0.54	11.40
Totals:	12.82	2.28	10.76	3.86	3.66	10.53	0.00	6.73	0.00	0.00	21.15	48.00	11.26	0.00	9.90	21.16		

RAINFALL AND RUNOFF ESTIMATION FOR WASTE STORAGE POND DESIGN				
	Earth Areas	**Paved Areas**	**Roofed Areas**	**Pond Surface**
	25yr-24hr Storm Event			
1 day Curve Numbers:	90	55	100	100 %
25yr-24hr Rainfall:	3.35 inches	3.35 inches	3.35 inches	3.35 inches
25yr-24hr Runoff:	2.31 inches	0.30 inches	3.35 inches	3.35 inches
Runoff Volume:	10.89 Acre-ft	0.28 Acre-ft	0.00 Acre-ft	1.76 Acre-ft
	Total 24hr-25yr Event Runoff Volume:			12.93 Acre-ft
	Chronic Storm (10 day event)			
10 day Curve Numbers:	81	41	100	100 %
10yr-10day Rainfall:	7.0 inches	7.0 inches	7.0 inches	7.00 inches
10yr-10day Runoff:	4.78 inches	0.92 inches	7.00 inches	7.00 inches
Runoff Volume:	22.53 Acre-ft	0.87 Acre-ft	0.00 Acre-ft	3.67 Acre-ft
	Total 10yr-10day Event Runoff Volume:			27.07 Acre-ft
	Average Monthly Runoff Contribution to Working Storage			
30 day Curve Numbers:	77	41	98	100 %
Monthly Runoff:	(see computations in monthly mass balance table above)			
Average Annual Rainfall:	12.8 inches	12.8 inches	12.8 inches	12.8 inches
Average Annual Runoff:	2.28 inches	3.86 inches	10.53 inches	12.82 inches
Runoff as % of Rainfall:	18%	30%	82%	100.0%

Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Friday, Aug 21 2020

Bullseye Channel to pond #1

Trapezoidal

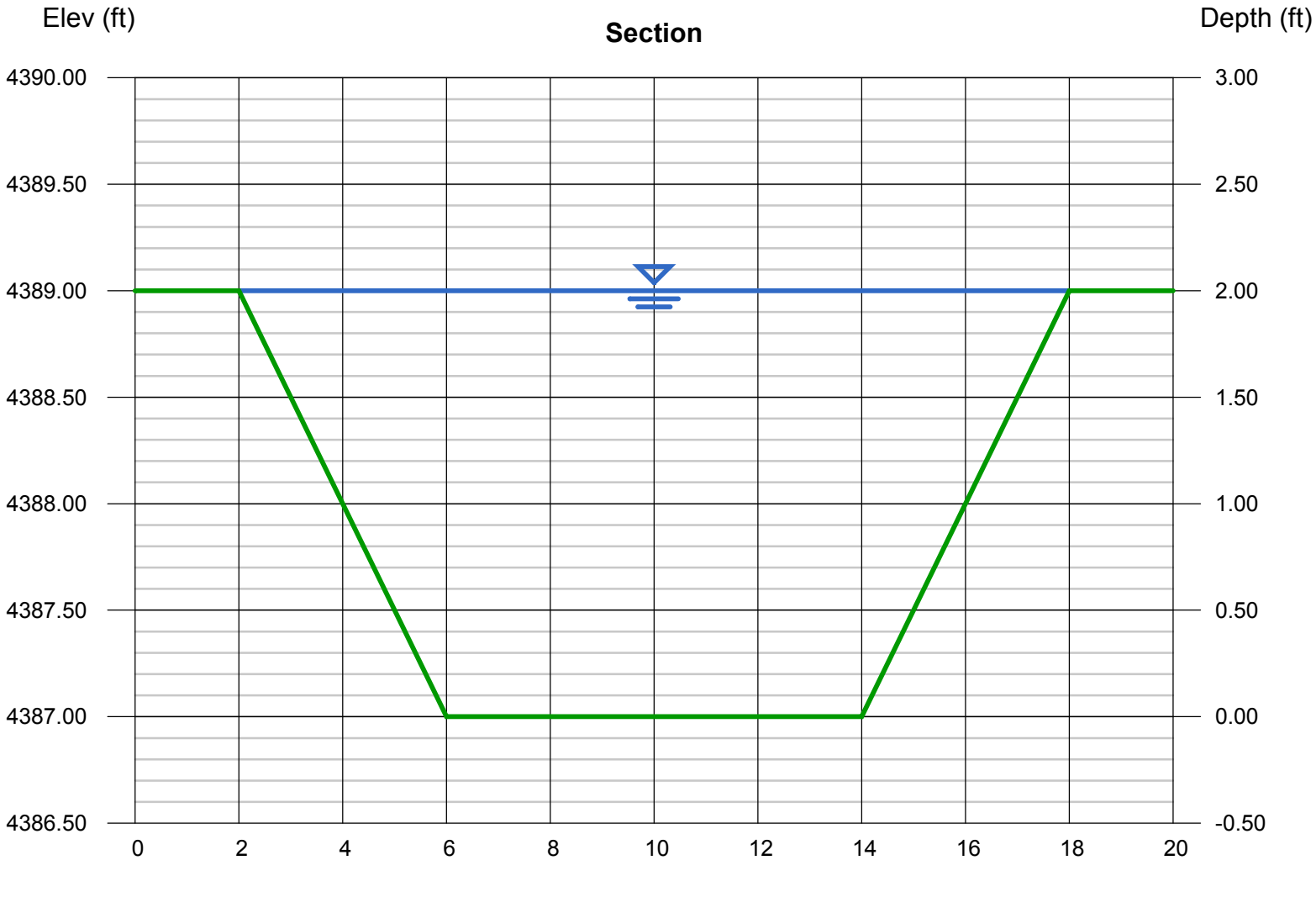
Bottom Width (ft)	= 8.00
Side Slopes (z:1)	= 2.00, 2.00
Total Depth (ft)	= 2.00
Invert Elev (ft)	= 4387.00
Slope (%)	= 0.18
N-Value	= 0.026

Calculations

Compute by:	Q vs Depth
No. Increments	= 12

Highlighted

Depth (ft)	= 2.00
Q (cfs)	= 73.41
Area (sqft)	= 24.00
Velocity (ft/s)	= 3.06
Wetted Perim (ft)	= 16.94
Crit Depth, Yc (ft)	= 1.24
Top Width (ft)	= 16.00
EGL (ft)	= 2.15



Depth	Q	Area	Veloc	Wp
(ft)	(cfs)	(sqft)	(ft/s)	(ft)
0.17	0.987	1.389	0.71	8.75
0.33	3.169	2.889	1.10	9.49
0.50	6.307	4.500	1.40	10.24
0.67	10.33	6.222	1.66	10.98
0.83	15.21	8.056	1.89	11.73
1.00	20.93	10.00	2.09	12.47
1.17	27.49	12.06	2.28	13.22
1.33	34.91	14.22	2.45	13.96
1.50	43.20	16.50	2.62	14.71
1.67	52.36	18.89	2.77	15.45
1.83	62.43	21.39	2.92	16.20
2.00	73.41	24.00	3.06	16.94

Yc	TopWidth	Energy
(ft)	(ft)	(ft)
0.08	8.67	0.17
0.17	9.33	0.35
0.27	10.00	0.53
0.37	10.67	0.71
0.47	11.33	0.89
0.57	12.00	1.07
0.68	12.67	1.25
0.79	13.33	1.43
0.90	14.00	1.61
1.01	14.67	1.79
1.13	15.33	1.97
1.24	16.00	2.15

Client: Bullseye
County: Morgan_1 MSE1 State: CO
Practice: Diversion
Calculated By: TEH Date: 8/21/2020
Checked By: _____ Date: _____

Drainage Area:	16	Acres (user entered value)
Curve Number:	90	(user entered value)
Watershed Length:	1290	Feet
Watershed Slope:	3	Percent
Time of Concentration:	0.26	Hours (calculated value)
Rainfall Type:	II	

Storm Number	1	2	3	4	5	6	7
Frequency (yrs)	1	2	5	10	25	100	1000
24-Hr rainfall (in)	1.57	1.83	2.31	2.74	3.35	4.43	6.6
Ia/P Ratio	00.14	00.12	00.10	00.08	00.07	00.05	00.03
Used	00.14	00.12	00.10	00.10	00.10	00.10	00.10
Runoff (in)	.74	.95	1.36	1.75	2.31	3.33	5.43
(ac-ft)	00.99	01.27	01.81	02.33	03.08	04.44	07.24
Unit Peak Discharge (cfs/acre/in)	01.091	01.107	01.124	01.124	01.124	01.124	01.124
Peak Discharge (cfs)	13	17	25	31	42	60	98

Bullseye Feedlot

Pond #1 **Berm raised 1 additional ft approx 5 highest**

Elev (ft)	Gauge Reading (ft)	Contour Area (ft^2)	Slice Volume (ft^3)	Cumulative Volume (ft^3)	Cumulative Volume (ac-ft)	
4371.9	**0.0**	0	0	0	0.0	
4372	**0.1**	4,244	212	212	0.0	
4373	**1.1**	16,029	10,137	10,349	0.2	
4374	**2.1**	55,157	35,593	45,942	1.1	
4375	**3.1**	76,436	65,797	111,738	2.6	
4376	**4.1**	86,363	81,400	193,138	4.4	
4377	**5.1**	96,329	91,346	284,484	6.5	
4378	**6.1**	109,125	102,727	387,211	8.9	
4379	**7.1**	116,600	112,863	500,073	11.5	
4380	**8.1**	123,840	120,220	620,293	14.2	
4380.1	**8.2**				14.5	Pump Down
4381	**9.1**	131,529	127,685	747,978	17.2	
4382	**10.1**	142,073	136,801	884,779	20.3	
4383	**11.1**	155,539	148,806	1,033,585	23.7	
4384	**12.1**	174,030	164,785	1,198,369	27.5	Freeboard mark
4385	**13.1**	674,192	424,111	1,622,480	37.2	
4386	**14.1**	322,866	498,529	2,121,009	48.7	Spillway Elevation
4387	**15.1**	408,010	365,438	2,486,447	57.1	Top of Berm

Based on topographical survey by Hammer Surveying and bottom profiling by THEngineering, LLC

at proposed 4ft berm

25/24	12.93	from 313	7in-10day STORM	27.07	from 313
Freeboard Volume	27.5	link to cell on this sheet	Spillway Volume	48.7	link to cell c
Pump Down Volume	14.6		Pump Down Volume	21.6	
Precip on surf	2.42	from 313	Precip on surf	2.42	from 313
Precip El	17.0		Precip El	24.0	

at proposed 5ft berm

25/24	13.31	from 313	7in-10day STORM	27.07	from 313
Freeboard Volume	27.5	link to cell on this sheet	Spillway Volume	48.7	link to cell c
Pump Down Volume	14.2		Pump Down Volume	21.6	
Precip on surf	2.42	from 313	Precip on surf	2.42	from 313
Precip El	16.6		Precip El	24.0	

THE ENGINEERING, LLC

Bullseye Feedlot

Pond #4 PLANNED 8/21/2020

Elev (ft)	Gauge Reading (ft)	Contour Area (ft^2)	Slice Volume (ft^3)	Cumulative Volume (ft^3)	Cumulative Volume (ac-ft)	
4377	**0.0**	4801	0	0	0.0	
4378	**1.0**	6,083	5,442	5,442	0.1	
4379	**2.0**	7,494	6,789	12,231	0.3	
4380	**3.0**	9,035	8,265	20,495	0.5	
4381	**4.0**	10,704	9,870	30,365	0.7	
4382	**5.0**	12,503	11,604	41,968	1.0	
4382.5	**5.5**				1.1	Pump Down
4383	**6.0**	14,432	13,468	55,436	1.3	
4384	**7.0**	16,489	15,461	70,896	1.6	
4385	**8.0**	18,676	17,583	88,479	2.0	Freeboard mark
4386	**9.0**	20,992	19,834	108,313	2.5	
4387	**10.0**	23,437	22,215	130,527	3.0	Top of Berm

Based on topographical survey by Hammer Surveying

STEWART ENVIRONMENTAL CONSULTING GROUP, LLC
ENGINEERING FOR LIFE

ACEC MEMBER

August 28, 2020

Mr. Travis Hertneky, PE
THEngineering, LLC
PO Box 337748
Greeley, CO 80633

Subject: Bullseye Feedlot Special Use Permit Issues
Job No.: 4926-001

Dear Mr. Hertneky,

Thank you for your letter dated August 24, 2020 regarding the Bullseye Feedlot Special Use Permit. As noted in your letter, this was in response to the meeting with the Bijou Irrigation Company board of directors on August 14, 2020. We appreciate your communication on this matter.

The first item in your letter is the location of the emergency spillway. The proposed location on the south side of the dike is not directly connected to the Bijou Canal. This is acceptable to the company.

As part of the emergency spillway and stormwater control proposal, THEngineering has proposed a continuous dike on the east side of the site without the use of the feed bunk. We agree with this design criteria to help prevent overflow of wastewater into the Bijou Canal.

We have reviewed the stormwater storage that you are proposing in the August 24 letter and agree that the proposed total volume of 57.1 acre feet to the top of the berm and 27.5 acre feet to the 2 foot of freeboard is acceptable to the company. Provided the ponds and wastewater are managed properly through pump down of the pond, this should help prevent any overflow from a long-term rain event into the Bijou Canal.

As part of the berm construction and the pond modification near Pond #1, you note that "Bullseye agrees to construct new portions of the berm directly adjacent to Pond #1 and the Bijou Canal to further limit seepage. Construction will be tested and the seepage rate documented." The testing of the seepage should be done by a geotechnical engineer by soil permeability testing.

As noted previously, Bullseye will be applying to the State of Colorado as a Large CAFO, regardless of the number of head that are located at the feedlot.

All of these issues should be part of your application to the Morgan County Planning for this Special Use Permit (SUP) and should be included as requirements in any approved permit.

Of note, the company still has significant concerns about the noted leakage into the Bijou Canal from the existing Pond #1 liner. It is open to further discussions about options to address this remaining concern.

We appreciate your efforts and look forward to resolving these issues.

Sincerely,

STEWART ENVIRONMENTAL CONSULTING GROUP, LLC

David R Stewart, PhD, PE
President

Bullseye Feedlot Phased implementation details

Phase I

- Will include southern most corrals that naturally drain to Pond #1

- Will include outside temporary feed storage and mixing in area north of Pond #1

- Improvements include

    1. Containment berm along east edge of occupied corrals
    2. Berm along pond
    3. Emergency spillway

Phase II

- Will include all corrals that drain to Pond #1, #2, #3

- Will include outside temporary feed storage and mixing in area north of Pond #1

- Improvements include Phase I improvements plus

    1. Containment berm along east and north edge of occupied corrals
    2. Removal of bunks by pond #3
    3. Construction of overflow ditch between Pond #3 and Pond #1
    4. Installation of overflow pipe between pond #3 and Pond #1
    5. Re-lining of Pond #2

Phase III

- Will include all corrals and feed area

- Feed storage and mixing will be re-located to existing mill and commodity barn along north edge

- Improvements include Phase I & II improvements plus

    1. Containment berm along east of commodity area.
    2. Enlargement and lining of pond #4

Phase IV

- Adds additional water resources only

- All improvements completed in Phase III

Phase V

- Adds additional water resources only

- All improvements completed in Phase III

	Water Availability	Capacity based on water	Bunk Available	Capacity based on bunk	Phase capacity	Days	Stormwater containment	Berm extent
	(ac-ft)	(hd)	(ft)	(hd)	**(hd)**	(days)		
Phase I	17.23	3119	2405	3607	**3119**	120	Pond 1	East of used pens to pond
Phase II	37.23	6740	7580	11369	**6740**	120	Ponds 1,2,3	All east & north of pens
Phase III	37.23	6740	7580	11369	**6740**	120	Ponds 1,2,3,4	All
Phase IV	77.23	9321	7906	11858	**9000**	180	Ponds 1,2,3,4	All
Phase V	152.23	9060	7906	11858	**9000**	365	Ponds 1,2,3,4	All

Bullseye Feedlot
Water Availability

Current, Phase I

Allocation	30	ac-ft	
Truck Wash usage	12.77	ac-ft	
Feedlot allocation	17.23	ac-ft	
Feedlot allocation	5,614,413	gal	
Feeder usage	15	gal/day	
Feeder days	374,294		
365 day stocking	1,025	hd	
120 day stocking	3,119	hd	

Phase II

Allocation	50	ac-ft	
Truck Wash usage	12.77	ac-ft	
Feedlot allocation	37.23	ac-ft	
Feedlot allocation	12,131,433	gal	
Feeder usage	15	gal/day	
Feeder days	808,762		
365 day stocking	2,216	hd	
120 day stocking	6,740	hd	

Phase III

Allocation	50	ac-ft	
Truck Wash usage	12.77	ac-ft	
Feedlot allocation	37.23	ac-ft	
Feedlot allocation	12,131,433	gal	
Feeder usage	15	gal/day	
Feeder days	808,762		
365 day stocking	2,216	hd	
180 day stocking	6,740	hd	

Phase IV

Allocation	90	ac-ft	
Truck Wash usage	12.77	ac-ft	
Feedlot allocation	77.23	ac-ft	
Feedlot allocation	25,165,473	gal	
Feeder usage	15	gal/day	
Feeder days	1,677,698		
365 day stocking	4,596	hd	
180 day stocking	9,321	hd	* 9000 max permit

Phase V

Allocation	165	ac-ft	
Truck Wash usage	12.77	ac-ft	
Feedlot allocation	152.23	ac-ft	
Feedlot allocation	49,604,298	gal	
Feeder usage	15	gal/day	
Feeder days	3,306,953		
365 day stocking	9,060	hd	* 9000 max permit

FIRST CENTRAL BANK

Todd Eichenberger
Co-Branch President

8-27-20

To Whom it May Concern:

Bullseye Holdings, through it manager, Kevin Lamb, has asked for a description of the relationship between First Central Bank and his entities.

Bullseye Livestock LLC, Bullseye Holdings, and WGC Trading Co. have maintained a relationship with First Central Bank since April, 2015. The relationship consisted of both checking and lending accounts.

First Central Bank is well aware of the Truck Wash and Feed yard located in Morgan County, Colorado. There are currently lending and checking accounts with the same. These accounts are planning to continue unless there is a change in the relationship. Upon approval of the SUP, which is under review with the Morgan County, CO., First Central Bank will, upon application from Bullseye Holdings LLc, review and evaluate a request for improvement funds needed for the completion of the SUP.

Sincerely,

Todd Eichenberger
Executive Vice President
First Central Bank

Cambridge Office
P.O. Box 280
Cambridge, NE 69022
phone: 308-697-4344
fax: 308-697-4196

Arapahoe Office
P.O. Box 637
Arapahoe, NE 68922
phone: 308-962-7255
fax: 308-962-7254
www.firstcentral.com

Edison Office
P.O. Box 128
Edison, NE 68936
phone: 308-927-2575

CAMBRIDGE
ARAPAHOE
EDISON
MEMBER FDIC

MORGAN COUNTY
PLANNING AND BUILDING DEPARTMENT

BOARD OF MORGAN COUNTY COMMISSIONERS
FILE SUMMARY
September 4, 2020
September 10, 2020 (Hearing)
Continued from August 5, 2020

This application was considered by the Board of County Commissioners at a public hearing on August 5, 2020 and continued to today, September 10, 2020 to provide the applicant opportunity to obtain a letter from his bank on financing of the project. The letter from the bank is included, in addition a letter from Scott Miller of Water Law.

I will present the entire File Summary on this project as the report on August 5, inadvertently did not include the Planning Commission recommendation.

APPLICANT: Kevin Lamb, Manager Bullseye Holdings, LLC
LANDOWNERS: Bullseye Holdings, LLC
CONSULTANT: Travis Hertneky, THEngineering

The Planning Commission considered this application in a public hearing on July 13, 2020 and received a recommendation of approval on a vote of 6-1. In addition, on July 20, 2020 the Board of Adjustment approved a variance request to reduce the setback from a CAFO to an occupied structure from 1,320 feet to 708 feet, approximately 612 feet.

The Planning Commission requested that the applicant meet with Bijou to discuss drainage concerns. The applicant's representative met with Bijou. There is a letter in your packets that was prepared by THEngineering documenting the meeting. An email is included in the packet to clarify the use of the term "head" compared to "animal units". It is a like for like exchange; 9,000 head is had been used interchangeably with 9,000 animal units.

This application is for a Special Use Permit to operate a Confined Animal Feeding Operation in the "A" Agriculture Production Zone District. Section 3-180(O) of the Morgan County Zoning Regulations lists livestock confinement operations in excess of the allowed animal unit densities … as a Use by Special Review; this operation proposes a maximum of 9,000 head which exceeds permitted numbers of 4 animal units per acre, this property is 90.87 acres and would be permitted 363 animal units. The property is located on the southeast corner of County Road O and County Road 16 in the West ½ of Section 26, Township 3N, Range 58W of the 6th P.M. and south and west of the Bijou Canal, Morgan County, Colorado.

This application is to re-establish a confined animal feeding operation of no more than 9,000 head. The facility began operations prior to 1989 (see historic imagery in packet). The facility currently has livestock on it and does not exceed the use by right permitted number. Sections in the Design Report will be presented by the applicant and/or consultant at the public hearings. These sections contain specific information on regulations and potential impacts related to:

1. Regulation Applicability (Colorado and Morgan County)
2. Hydrology and Hydraulics (A system of ponds and diversions to protect adjacent properties – Bijou Ditch)
3. Manure Management (combination of methods proposed)
4. Traffic (tables on anticipated vehicle trips in appendix)
5. Nuisance Management (pests, air quality and noise)
6. Appendices (aerial maps, topo, soils map, floodplain map, pond size spread sheet, pond stage storage curves, pond line certifications, hydrology, manure generation calculation traffic, O&G wells, emergency action plan).

The Substitute Water Supply Plan has been submitted to the State Engineer's office for review. The plan will remain in place pending the outcome of Water Court Case #16CW3028.
The following criteria are to be used by the Planning Commission and the Board of County Commissioners when reviewing an application for a Special Use Permit.

(A) The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan.
The location is south of the intersection of County Road O and County Road 16; located in the South Central Planning area as defined by the Morgan County Comprehensive Plan 2008. In this area the goal is to preserve and protect existing agriculture uses south of County Road Q. A feeding operation is an agriculture use.

Agriculture is a highly valued resource in Morgan County. Conservation of agricultural resources and land is paramount, and such land and resources must be protected from adverse impacts resulting from uncontrolled and undirected business, commercial, industrial and residential uses.

(B) All the application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County.

(C) The Site Plan conforms to the district design standards of these Regulations.

(D) All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures.
All adjoining properties are also zoned Agriculture Production and one property is also a feeding operation.

(E) The special use proposed has been made compatible with the surrounding uses and adequately buffered as determined by the County.
Buffering is not required as adjacent land uses are compatible.

(F) The special use poses only the minimum amount of risk to the public health, safety and welfare as set by federal, state or county regulation, whichever is the strictest.
Engineering reports and studies have been conducted for the property and submitted to the Colorado Department of Public Health and Environment (CDPHE) as well as the State Engineer's office for review.

(G) The special use proposed is not planned to be developed on a non-conforming parcel.

(H) The applicant has adequately documented a public need for the project, all pertinent technical information, and adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review.
There are a number of feeding operations in the county that support the local economy.

(I) For any Use by Special Review requiring a supply of water that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity and reliability and in the case of human consumption, quantity, quality, and reliability. *The State of Colorado Division of Water Resources response to request for comment is attached. The Division of Water Resources has permitted well number 80348-F to not more than 24.27 acre-feet, or the amount covered under a substitute water supply plan that was approved on October 15, 2019 based on 1,000 head per month for a one year period that ends on September 30, 2020 until a decree is obtained for a permanent plan for augmentation. Water Court Case #2016CW3028 is currently in review by the state.*

Property taxes are current.

Recommended conditions of approval:

1. The facility shall not commence operations until it has received approval from all agencies with jurisdiction over the operation and all required permits have been issued.
2. The facility shall not commence operations until all improvements set forth in the application have been constructed and are operational.
3. The facility shall operate the Bullseye 3T well, Permit No. 80348-F in compliance with all well permit conditions and the applicable substitute water supply plan and/or permanent augmentation plan as determined by the State.
4. Generally accepted best management practices as recommended by the Natural Resources Conservation Service and established in applicable publications of Colorado State University for land application of manure and waste water shall be followed.
5. Any increase to the 9,000 head as proposed by this application shall require an amendment to this permit
6. The applicant shall obtain necessary permits and comply with the requirements and conditions of those permits as determined by other governmental agencies with jurisdiction over this operation.
7. Bijou Irrigation shall be granted access to the Bijou ditch for the purpose of inspection and maintenance of the irrigation ditch.

The Planning Commission recommends an additional condition:

8. An investigation into an alternate spillway.

The Planning Commission considered this application in a public hearing on July 13, 2020 and received a recommendation of approval on a vote of 5-1 with one member recusing himself.

Pam Cherry
Planning Administrator
Morgan County

THE ENGINEERING, LLC

September 3, 2020

Pam Cherry
Morgan County Planning Administrator
231 Ensign Street, Box 596
Fort Morgan, CO 80701

Re: Bullseye Holdings, LLC Feedlot Special Use Permit

Dear Ms. Cherry:

Since our last public hearing with the Morgan County Commissioners on August 5, 2020 we have worked to clarify and address concerns raised by the Commissioners and Bijou Irrigation District & Company (Bijou). We revised portions of our stormwater containment design and presented that to Bijou at an in person meeting on August 14, 2020, and in a follow up letter dated August 24, 2020. This proposal was reviewed by Bijou's engineer and comments are included in the enclosed letter.

As per the requests for clarification of water usage and the additional stormwater containment measures proposed, we have modified the plan to be a phased approach. This does not change the ultimate plan or applied for capacity, but allows for the delayed implementation of these more capital intensive improvements and more clearly outlines the water availability and associated capacities.

From the August 5, 2020 public hearing I had the following items noted to clarify and follow-up on per the Commissioners' concerns:

1. *Financial assurance.*

   A letter of financial assurance from Bullseye Holdings, LLC's financial institution has been provided that demonstrates adequate financial resources to complete the project.

2. *Clearer diversion of stormwater conveyance without the usage of concrete bunkline for stormwater diversion or freeboard.*

   The area directly adjacent to Bijou Canal and south of Pond #3 where a bunk prohibits the construction of a continuous earthen berm will have the concrete bunkline removed and re-located to the extent practical. The removal of this bunk allows the elevation of the earthen berm/road to be continuous and also allows the construction of an open channel that will discreetly convey stormwater from Pond #3 to Pond #1. This provides a discrete constructed channel that will convey stormwater and the capacity can be easily quantified.

   Further details of this revised system can be found in the enclosures.

3. *Clearer outline of available water resources and proposed usages.*

The currently available water usage and proposed usage at full buildout has been reviewed and details are included in the enclosures. Bullseye is proposing a phased approach with matches the stormwater containment phases. These phases represent currently available water resources, proposed additional water resources to be determined in water court, and water necessity for 365 day occupation at proposed maximum animal capacity.

Animal capacities presented for each phase are not based on maximum capacity occupied for 365 days, but rather maximum capacities based on a 120 or 180 day feeding schedule. The intent is the feedlot will likely feed the outlined headcounts for the fall feeding season, but maintain minimal cattle during the summer season. The feedlot has a water plan already being implemented to adequately water the permitted 9,000 head for 180 days. The final phase assumes additional water resources can be obtained that allow the maximum animal capacity for 365 days.

4. *Review concerns from Thaine Kramer email to Pam Cherry dated July 13, 2020.*

Thaine Kramer with the Environmental Ag Program provided the Ag Program's response to the Stewart Environmental Consulting Group letter dated July 6, 2020.

While most of what was provided was informational in nature related to the applicable regulations to CAFOs and the extent of the Ag Program's regulatory authority, Mr. Kramer's email was reviewed and the feedlot as proposed meets or exceeds the CAFO regulatory requirements outlined in his email.

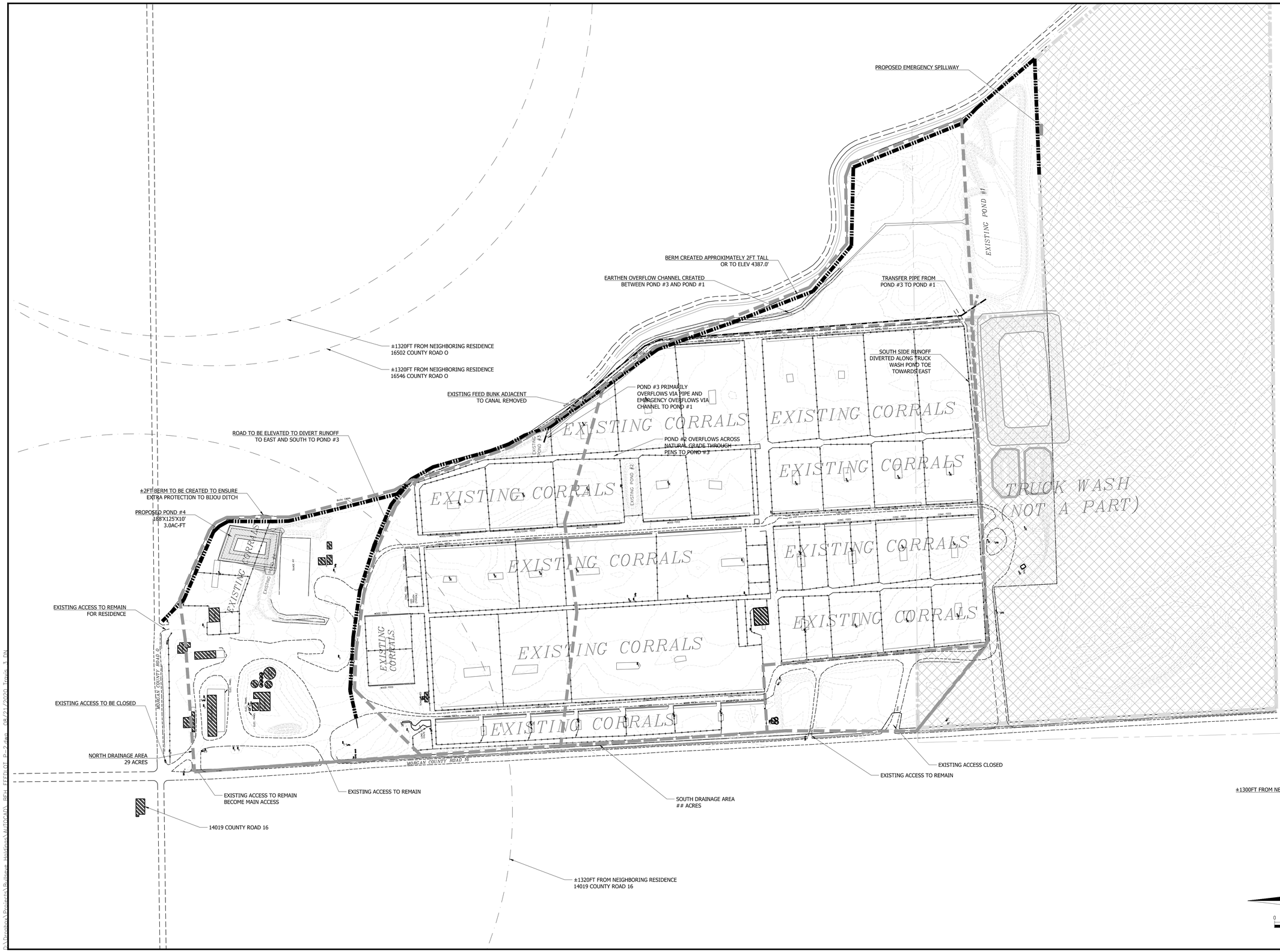
As previously discussed, Bullseye Holdings intends to register as a CAFO with the Ag Program once the facility reaches 1,000 head.

As always, if you have any questions or concerns please don't hesitate to call.

Travis Hertneky, PE
Agricultural Engineer

CC: Kevin Lamb, Bullseye Holdings, LLC
Bijou Irrigation District & Company

Enclosures: Bullseye Feedlot site plan, revised 8/21/2020
Bullseye Feedlot phasing map
Letter Bijou, 8/24/2020
Bijou Letter Attachments
Steward Environmental response letter
Phased implementation details
Water availability



		Date
Designed	TRAVIS HERTNEKY	2/26/2020
Drawn	TRAVIS HERTNEKY	2/26/2020
Revised	TRAVIS HERTNEKY	7/30/2020
Revised	TRAVIS HERTNEKY	8/21/2020

BULLSEYE HOLDING, LLC

FEEDLOT

PARTS OF THE W $\frac{1}{2}$ SEC 26, T 3N, R 58W, OF THE 6TH P.M., MORGAN COUNTY, COLORADO

NGINEERING, LLC
719-661-6209
Greeley, CO

Sheet: P-1

File Name: BEH_FEEDLOT_P-2.DWG

Sheet 1 of 1

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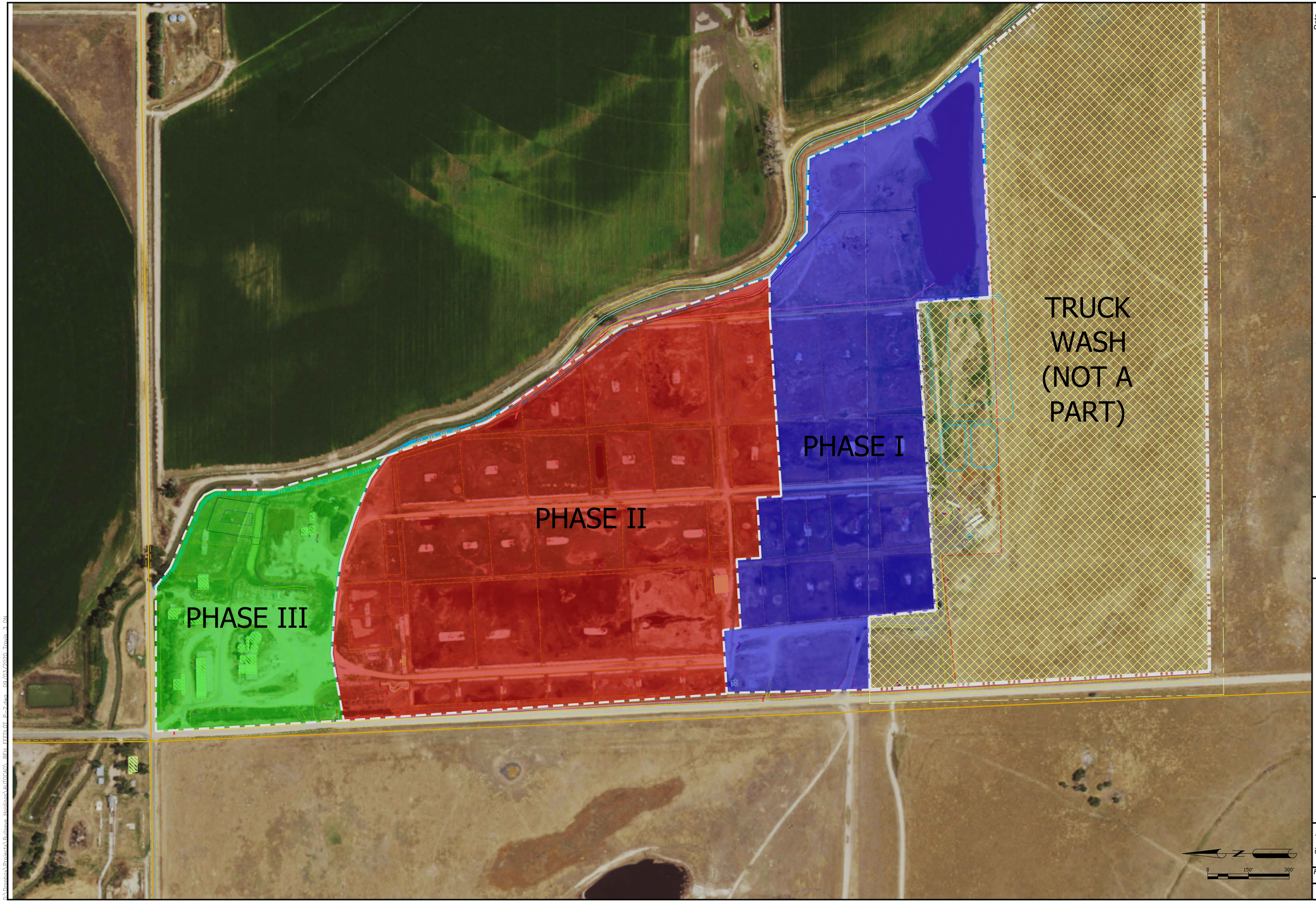


BULLSEYE HOLDING, LLC
FEEDLOT
PARTS OF THE W $\frac{1}{2}$ SEC 26, T 3N, R 58W, OF THE 6TH P.M., MORGAN COUNTY, COLORADO

		Date
Designed	TRAVIS HERTNEKY	2/26/2020
Drawn	TRAVIS HERTNEKY	2/26/2020
Revised	TRAVIS HERTNEKY	7/30/2020
Revised	TRAVIS HERTNEKY	8/21/2020

THE ENGINEERING, LLC
719-661-6209
Greeley, CO

Sheet: P-1

File Name: BEH_FEEDLOT_P-2.DWG

Sheet 1 of 1

THENGINEERING, LLC

August 24, 2020

Bijou Irrigation District & Company
PO Box 972
Fort Morgan, CO 80701

Re: Bullseye Feedlot Special Use Permit Issues

Dear Board,

This letter is in response to Bijou's concerns throughout the Bullseye Feedlot special use permit process and more specifically our meeting on August 14, 2020. This letter is in addition to THEngineering's letter dated July 30, 2020, outlining many concessions and agreements.

We have reviewed the proposed stormwater containment system and made the following modifications.

1. *Emergency Spillway Location*

   We have reviewed the emergency spillway and have determined that a safe overflow structure is essential for reasons previously outlined. We have looked at locations and have found a suitable location on the south edge of Pond #1 that will overflow into the adjacent property controlled by the truck wash.

   An additional overflow point for the north portion of the Feedlot will overflow to the north at the existing driveway location along County Road O as a result of containment modifications which we will discuss further below.

2. *Design Storm Containment*

   The Feedlot is regulated by CDPHE and EPA to contain the 25year-24hour storm event of 3.35in. As a result of previous correspondence with Bijou, we designed the containment to contain the 100year-24hr storm event. We have since revised the design to provide additional containment as outlined below.

   North Runoff Area: The north runoff area consisting of the feed area has an existing pond that is adjacent to the silage pad. This pond was going to be lined and utilized for stormwater containment before it could be pumped to Pond #1. At the request for additional containment we have revised the design to include a dedicated pond with more capacity. This proposed pond will have a capacity at top of berm of 3.0ac-ft and will meet the regulatory requirements from CDPHE and the additional requests from Bijou before overtopping.

North Runoff Area				
Watershed	13	ac		
25yr-24hr Storm Event	3.35	in	0.9	ac-ft
100yr-24hr Storm Event	4.43	in	1.54	ac-ft
Bijou Requested	7.00	in	1.89	ac-ft
Volume at 2ft Freeboard			2.0	ac-ft
Volume at Top of Berm			3.0	ac-ft

South Runoff Area: The south runoff area consisting of the majority of corrals will remain largely as is with a few key modifications. As previously planned, Ponds #1, #2, and #3 will remain with Pond #2 being lined and the current seepage certifications remaining for Ponds #1 and #3.

The additional berm that is planned for the east side of the Feedlot will remain and will be elevated an additional foot higher than previously planned along Pond #1. This additional foot of freeboard will create volume that will not normally be utilized except in extreme circumstances to provide the greater stormwater protections requested by Bijou.

This berm was previously proposed as a partial berm in the area where the current feed bunk does not allow the berm to continue and the concrete feed bunk would be used as a berm to provide additional freeboard when Pond #3 overflows to Pond #1. As a result of concerns with the use of this bunk as part of the berm by the Morgan County Commissioners, this portion of bunk will be removed to allow for a continuous berm along east edge. The removal of this bunk will also allow the construction of a discrete overflow channel that will convey the overflow from Pond #3 to Pond #1 without it flowing through the corrals. Projected runoff flows and channel capacity have been calculated and are included as an enclosure to this letter.

South Runoff Area				
Watershed	68	ac		
25yr-24hr Storm Event	3.35	in	12.93	ac-ft
100yr-24hr Storm Event	4.43	in	18.7	ac-ft
Bijou Requested	7.00	in	27.07	ac-ft
Volume at 2ft Freeboard			27.5	ac-ft
Volume at Top of Berm			57.1	ac-ft

3. Additional Liner Testing of Pond #1

Pond #1 has been tested to meet the regulatory seepage standard several times with the most recent test in 2018 when the pond was almost full as a result of its use for truck washing at that time. These multiple tests indicate that Pond #1 does meet the seepage requirements and we are not proposing re-testing the Pond again.

The Pond will normally be operated below the freeboard mark where the Pond will start to back out of its banks and the only time the Pond would be above this mark is a result of an extraordinary rainfall event as requested by Bijou. As per our meeting, we understand the concern is potential seepage from the Pond into the Bijou Canal from this 1000year storm event backing water up to higher elevations.

As discussed at the August 14, 2020 meeting, Bullseye agrees to construct the new portions of the berm directly adjacent to Pond #1 and the Bijou Canal to further limit seepage. Construction will be tested and the seepage rate documented.

I believe this adequately addresses the concerns raised during the special use permit hearing process and our August 14, 2020 meeting.

As always, if you have any questions or concerns please don't hesitate to call.

Sincerely,

Travis Hertneky, PE
Agricultural Engineer

Enclosures: Precipitation frequency estimates
North area waste storage computations
North pond proposed stage storage curve
South area waste storage computations
South pond proposed stage storage curve
Channel capacity calculations
Revised site plan

RECTANGULAR WASTE STORAGE POND DESIGN COMPUTATIONS

Project Name: Bullseye Feedlot
Location: Feed Area pond

Computed By: THE
Date: 8/21/2020

Checked By:
Date:

Climate Station: Fort Morgan, ave. year

BASIC DATA				
Solids & Slurry Inflow :	0	cu. ft. /day		
Other Liquid Waste Inflow:	0	gal. /day		
Contributing Roof Area:	50,172	sq. ft.		
Contributing Paved Lot Area:	0	sq. ft., CN =	59	
Contributing Earth Lot Area:	12	Acres, CN =	59	
25yr-24hr Precipitation Depth:	3.35	inches		
Bijou Requested Precipitation Depth:	7.00	inches		
Annual FWS Evaporation:	48	inches		

POND DESIGN VOLUME		
Max Working Storage:	1.08	Acre-ft
Design Storm Runoff:	0.90	Acre-ft
Design Requirement:	1.98	Acre-ft
Available Storage:	103%	of design
Storage Safety Factor:	1.5	
(w/ freeboard)		

RECTANGULAR STORAGE POND DESIGN DIMENSIONS

VOLUMES OVERWRITTEN WITH ACTUAL FROM SURVEY AND PLANNED

Freeboard:	0.0	ft.	Design Surface Area:	23,438	sq. ft.
Inside Slope:	4	H:1V	Available Storage Volume:	2.0	Acre-ft
Evaporation Area:	4,838	sq.ft.	Freeboard Volume:	1.0	Acre-ft
Seepage Rate:	0.000	inches/day	Total Volume:	3.0	Acre-ft
Seepage Area:	7146	sq.ft.			

AVERAGE ANNUAL MASS BALANCE FOR ESTIMATING MAXIMUM WORKING STORAGE REQUIREMENTS

	MONTHLY POND INFLOW											MONTHLY POND OUTFLOW					WORKING STORAGE	
	Monthly Contribution to Working Storage from Precipitation								Waste Inflow		Total	Surface		Seepage	Planned	Total	Monthly	Accumulated
	Precip.	Earth Lot Runoff		Paved Lot Runoff		Roof Runoff		On Pond	Solids	Liquids	Inflow	Evaporation		Loss	Drawdown	Outflow	In - Out	Storage
Month	(inches)	(inches)	(Acre-ft)	(inches)	(Acre-ft)	(inches)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(inches)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)
Jan.	0.23	0.00	0.00	0.60	0.0000	0.09	0.0087	0.0103	0.0000	0.0000	0.02	1.44	0.0133	0.0000	0.00	0.01	0.01	0.90
Feb.	0.17	0.00	0.00	0.63	0.0000	0.05	0.0048	0.0076	0.0000	0.0000	0.01	1.68	0.0155	0.0000	0.00	0.02	0.00	0.90
Mar.	0.71	0.00	0.00	0.38	0.0000	0.51	0.0492	0.0318	0.0000	0.0000	0.08	2.64	0.0244	0.0000	0.00	0.02	0.06	0.95
Apr.	1.20	0.22	0.22	0.22	0.0000	0.99	0.0946	0.0538	0.0000	0.0000	0.37	4.32	0.0400	0.0000	0.25	0.29	0.08	1.03
May	2.63	0.00	0.00	0.00	0.0000	2.40	0.2304	0.1179	0.0000	0.0000	0.35	5.76	0.0533	0.0000	0.25	0.30	0.05	1.08
June	2.15	0.04	0.04	0.04	0.0000	1.92	0.1846	0.0964	0.0000	0.0000	0.32	6.96	0.0644	0.0000	0.50	0.56	-0.25	0.83
July	1.80	0.09	0.09	0.09	0.0000	1.58	0.1513	0.0807	0.0000	0.0000	0.32	7.20	0.0666	0.0000	0.40	0.47	-0.15	0.69
Aug.	1.49	0.15	0.15	0.15	0.0000	1.27	0.1219	0.0668	0.0000	0.0000	0.34	6.48	0.0600	0.0000	0.25	0.31	0.03	0.71
Sep.	1.13	0.24	0.24	0.24	0.0000	0.92	0.0880	0.0507	0.0000	0.0000	0.38	4.80	0.0444	0.0000	0.25	0.29	0.08	0.79
Oct.	0.66	0.00	0.00	0.40	0.0000	0.47	0.0447	0.0296	0.0000	0.0000	0.07	3.36	0.0311	0.0000	0.00	0.03	0.04	0.84
Nov.	0.38	0.00	0.00	0.52	0.0000	0.21	0.0203	0.0170	0.0000	0.0000	0.04	1.92	0.0178	0.0000	0.00	0.02	0.02	0.86
Dec.	0.27	0.00	0.00	0.58	0.0000	0.12	0.0116	0.0121	0.0000	0.0000	0.02	1.44	0.0133	0.0000	0.00	0.01	0.01	0.87
Totals:	12.82	0.74	0.73	3.86	0.00	10.53	1.01	0.57	0.00	0.00	2.32	48.00	0.44	0.00	1.90	2.34		

RAINFALL AND RUNOFF ESTIMATION FOR WASTE STORAGE POND DESIGN				
	Earth Areas	**Paved Areas**	**Roofed Areas**	**Pond Surface**
	25yr-24hr Storm Event			
1 day Curve Numbers:	59	59	100	100 %
25yr-24hr Rainfall:	3.35 inches	3.35 inches	3.35 inches	3.35 inches
25yr-24hr Runoff:	0.43 inches	0.43 inches	3.35 inches	3.35 inches
Runoff Volume:	0.43 Acre-ft	0.00 Acre-ft	0.32 Acre-ft	0.15 Acre-ft
	Total 24hr-25yr Event Runoff Volume:			0.90 Acre-ft
	Chronic Storm (10 day event)			
10 day Curve Numbers:	41	41	100	100 %
10yr-10day Rainfall:	7.0 inches	7.0 inches	7.0 inches	7.00 inches
10yr-10day Runoff:	0.92 inches	0.92 inches	7.00 inches	7.00 inches
Runoff Volume:	0.91 Acre-ft	0.00 Acre-ft	0.67 Acre-ft	0.31 Acre-ft
	Total 10yr-10day Event Runoff Volume:			1.89 Acre-ft
	Average Monthly Runoff Contribution to Working Storage			
30 day Curve Numbers:	41	41	98	100 %
Monthly Runoff:	(see computations in monthly mass balance table above)			
Average Annual Rainfall:	12.8 inches	12.8 inches	12.8 inches	12.8 inches
Average Annual Runoff:	0.74 inches	3.86 inches	10.53 inches	12.82 inches
Runoff as % of Rainfall:	6%	30%	82%	100.0%

RECTANGULAR WASTE STORAGE POND DESIGN COMPUTATIONS

Project Name: Bullseye Feedlot
Location: South main pond

Computed By: THE
Date: 8/21/2020

Checked By:
Date:

Climate Station: Fort Morgan, ave. year

BASIC DATA				
Solids & Slurry Inflow :	0	cu. ft. /day		
Other Liquid Waste Inflow:	0	gal. /day		
Contributing Roof Area:	0	sq. ft.		
Contributing Paved Lot Area:	496,584	sq. ft., CN =	55	
Contributing Earth Lot Area:	57	Acres, CN =	90	
Precipitation Depth:	3.35	inches		
Bijou RequestedPrecipitation Depth:	7.00	inches		
Annual FWS Evaporation:	48	inches		

POND DESIGN VOLUME		
Max Working Storage:	14.05	Acre-ft
Design Storm Runoff:	12.93	Acre-ft
Design Requirement:	26.97	Acre-ft
Available Storage:	102%	of design
Storage Safety Factor:	1.6	
(w/ freeboard)		

RECTANGULAR STORAGE POND DESIGN DIMENSIONS					
VOLUMES OVERWRITTEN WITH ACTUAL FROM SURVEY AND PLANNED					
Freeboard:	0.0	ft.	Design Surface Area:	274,336	sq. ft.
Inside Slope:	4	H:1V	Available Storage Volume:	27.5	Acre-ft
Evaporation Area:	122,600	sq.ft.	Freeboard Volume:	17.0	Acre-ft
Seepage Rate:	0.000	inches/day	Total Volume:	44.5	Acre-ft
Seepage Area:	1280	sq.ft.			

AVERAGE ANNUAL MASS BALANCE FOR ESTIMATING MAXIMUM WORKING STORAGE REQUIREMENTS

	MONTHLY POND INFLOW											MONTHLY POND OUTFLOW					WORKING STORAGE	
	Monthly Contribution to Working Storage from Precipitation								Waste Inflow		Total	Surface		Seepage	Planned	Total	Monthly	Accumulated
	Precip.	Earth Lot Runoff		Paved Lot Runoff		Roof Runoff		On Pond	Solids	Liquids	Inflow	Evaporation		Loss	Drawdown	Outflow	In - Out	Storage
Month	(inches)	(inches)	(Acre-ft)	(inches)	(Acre-ft)	(inches)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(inches)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)	(Acre-ft)
Jan.	0.23	0.05	0.24	0.60	0.5673	0.09	0.0000	0.1207	0.0000	0.0000	0.93	1.44	0.3377	0.0000	0.00	0.34	0.59	12.00
Feb.	0.17	0.07	0.33	0.63	0.5964	0.05	0.0000	0.0892	0.0000	0.0000	1.02	1.68	0.3940	0.0000	0.00	0.39	0.63	12.63
Mar.	0.71	0.00	0.02	0.38	0.3654	0.51	0.0000	0.3726	0.0000	0.0000	0.76	2.64	0.6192	0.0000	0.00	0.62	0.14	12.76
Apr.	1.20	0.10	0.48	0.22	0.2104	0.99	0.0000	0.6298	0.0000	0.0000	1.32	4.32	1.0132	0.0000	1.00	2.01	-0.69	12.07
May	2.63	0.83	3.90	0.00	0.0041	2.40	0.0000	1.3803	0.0000	0.0000	5.28	5.76	1.3510	0.0000	2.00	3.35	1.93	14.00
June	2.15	0.53	2.51	0.04	0.0369	1.92	0.0000	1.1284	0.0000	0.0000	3.68	6.96	1.6324	0.0000	2.00	3.63	0.05	14.05
July	1.80	0.35	1.64	0.09	0.0829	1.58	0.0000	0.9447	0.0000	0.0000	2.66	7.20	1.6887	0.0000	2.00	3.69	-1.02	13.02
Aug.	1.49	0.21	0.97	0.15	0.1408	1.27	0.0000	0.7820	0.0000	0.0000	1.90	6.48	1.5198	0.0000	2.00	3.52	-1.62	11.40
Sep.	1.13	0.08	0.38	0.24	0.2296	0.92	0.0000	0.5931	0.0000	0.0000	1.21	4.80	1.1258	0.0000	0.90	2.03	-0.82	10.58
Oct.	0.66	0.00	0.01	0.40	0.3840	0.47	0.0000	0.3464	0.0000	0.0000	0.74	3.36	0.7881	0.0000	0.00	0.79	-0.05	10.53
Nov.	0.38	0.02	0.08	0.52	0.4985	0.21	0.0000	0.1994	0.0000	0.0000	0.78	1.92	0.4503	0.0000	0.00	0.45	0.33	10.86
Dec.	0.27	0.04	0.19	0.58	0.5484	0.12	0.0000	0.1417	0.0000	0.0000	0.88	1.44	0.3377	0.0000	0.00	0.34	0.54	11.40
Totals:	12.82	2.28	10.76	3.86	3.66	10.53	0.00	6.73	0.00	0.00	21.15	48.00	11.26	0.00	9.90	21.16		

RAINFALL AND RUNOFF ESTIMATION FOR WASTE STORAGE POND DESIGN				
	Earth Areas	**Paved Areas**	**Roofed Areas**	**Pond Surface**
	25yr-24hr Storm Event			
1 day Curve Numbers:	90	55	100	100 %
25yr-24hr Rainfall:	3.35 inches	3.35 inches	3.35 inches	3.35 inches
25yr-24hr Runoff:	2.31 inches	0.30 inches	3.35 inches	3.35 inches
Runoff Volume:	10.89 Acre-ft	0.28 Acre-ft	0.00 Acre-ft	1.76 Acre-ft
	Total 24hr-25yr Event Runoff Volume:			12.93 Acre-ft
	Chronic Storm (10 day event)			
10 day Curve Numbers:	81	41	100	100 %
10yr-10day Rainfall:	7.0 inches	7.0 inches	7.0 inches	7.00 inches
10yr-10day Runoff:	4.78 inches	0.92 inches	7.00 inches	7.00 inches
Runoff Volume:	22.53 Acre-ft	0.87 Acre-ft	0.00 Acre-ft	3.67 Acre-ft
	Total 10yr-10day Event Runoff Volume:			27.07 Acre-ft
	Average Monthly Runoff Contribution to Working Storage			
30 day Curve Numbers:	77	41	98	100 %
Monthly Runoff:	(see computations in monthly mass balance table above)			
Average Annual Rainfall:	12.8 inches	12.8 inches	12.8 inches	12.8 inches
Average Annual Runoff:	2.28 inches	3.86 inches	10.53 inches	12.82 inches
Runoff as % of Rainfall:	18%	30%	82%	100.0%

Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Friday, Aug 21 2020

Bullseye Channel to pond #1

Trapezoidal

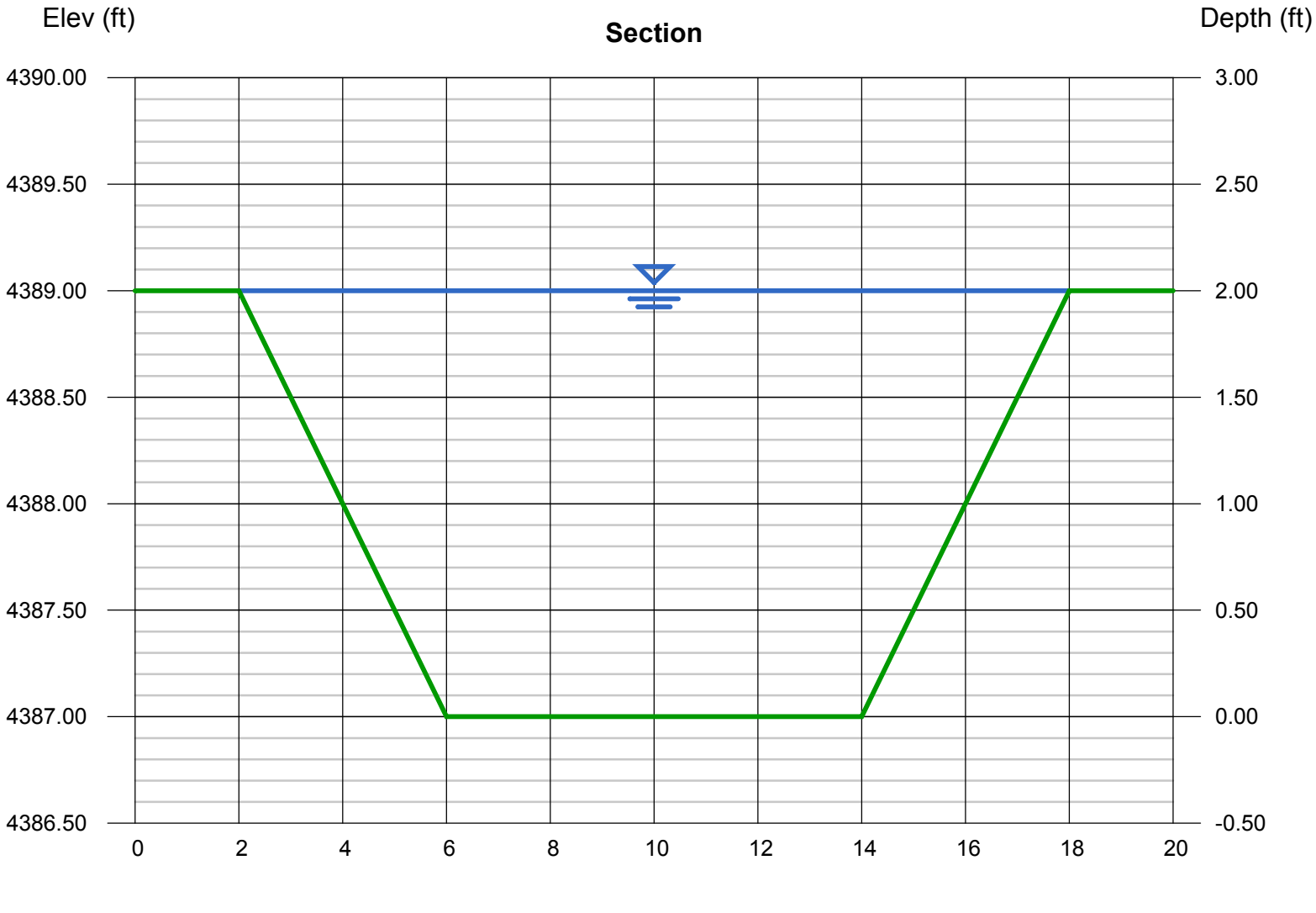
Bottom Width (ft)	= 8.00
Side Slopes (z:1)	= 2.00, 2.00
Total Depth (ft)	= 2.00
Invert Elev (ft)	= 4387.00
Slope (%)	= 0.18
N-Value	= 0.026

Calculations

Compute by:	Q vs Depth
No. Increments	= 12

Highlighted

Depth (ft)	= 2.00
Q (cfs)	= 73.41
Area (sqft)	= 24.00
Velocity (ft/s)	= 3.06
Wetted Perim (ft)	= 16.94
Crit Depth, Yc (ft)	= 1.24
Top Width (ft)	= 16.00
EGL (ft)	= 2.15



Depth	Q	Area	Veloc	Wp
(ft)	(cfs)	(sqft)	(ft/s)	(ft)
0.17	0.987	1.389	0.71	8.75
0.33	3.169	2.889	1.10	9.49
0.50	6.307	4.500	1.40	10.24
0.67	10.33	6.222	1.66	10.98
0.83	15.21	8.056	1.89	11.73
1.00	20.93	10.00	2.09	12.47
1.17	27.49	12.06	2.28	13.22
1.33	34.91	14.22	2.45	13.96
1.50	43.20	16.50	2.62	14.71
1.67	52.36	18.89	2.77	15.45
1.83	62.43	21.39	2.92	16.20
2.00	73.41	24.00	3.06	16.94

Yc	TopWidth	Energy
(ft)	(ft)	(ft)
0.08	8.67	0.17
0.17	9.33	0.35
0.27	10.00	0.53
0.37	10.67	0.71
0.47	11.33	0.89
0.57	12.00	1.07
0.68	12.67	1.25
0.79	13.33	1.43
0.90	14.00	1.61
1.01	14.67	1.79
1.13	15.33	1.97
1.24	16.00	2.15

Client: Bullseye
County: Morgan_1 MSE1 State: CO
Practice: Diversion
Calculated By: TEH Date: 8/21/2020
Checked By: _____ Date: _____

Drainage Area:	16	Acres (user entered value)
Curve Number:	90	(user entered value)
Watershed Length:	1290	Feet
Watershed Slope:	3	Percent
Time of Concentration:	0.26	Hours (calculated value)
Rainfall Type:	II	

Storm Number	1	2	3	4	5	6	7
Frequency (yrs)	1	2	5	10	25	100	1000
24-Hr rainfall (in)	1.57	1.83	2.31	2.74	3.35	4.43	6.6
Ia/P Ratio	00.14	00.12	00.10	00.08	00.07	00.05	00.03
Used	00.14	00.12	00.10	00.10	00.10	00.10	00.10
Runoff (in)	.74	.95	1.36	1.75	2.31	3.33	5.43
(ac-ft)	00.99	01.27	01.81	02.33	03.08	04.44	07.24
Unit Peak Discharge (cfs/acre/in)	01.091	01.107	01.124	01.124	01.124	01.124	01.124
Peak Discharge (cfs)	13	17	25	31	42	60	98

Bullseye Feedlot

Pond #1 **Berm raised 1 additional ft approx 5 highest**

Elev (ft)	Gauge Reading (ft)	Contour Area (ft^2)	Slice Volume (ft^3)	Cumulative Volume (ft^3)	Cumulative Volume (ac-ft)	
4371.9	**0.0**	0	0	0	0.0	
4372	**0.1**	4,244	212	212	0.0	
4373	**1.1**	16,029	10,137	10,349	0.2	
4374	**2.1**	55,157	35,593	45,942	1.1	
4375	**3.1**	76,436	65,797	111,738	2.6	
4376	**4.1**	86,363	81,400	193,138	4.4	
4377	**5.1**	96,329	91,346	284,484	6.5	
4378	**6.1**	109,125	102,727	387,211	8.9	
4379	**7.1**	116,600	112,863	500,073	11.5	
4380	**8.1**	123,840	120,220	620,293	14.2	
4380.1	**8.2**				14.5	Pump Down
4381	**9.1**	131,529	127,685	747,978	17.2	
4382	**10.1**	142,073	136,801	884,779	20.3	
4383	**11.1**	155,539	148,806	1,033,585	23.7	
4384	**12.1**	174,030	164,785	1,198,369	27.5	Freeboard mark
4385	**13.1**	674,192	424,111	1,622,480	37.2	
4386	**14.1**	322,866	498,529	2,121,009	48.7	Spillway Elevation
4387	**15.1**	408,010	365,438	2,486,447	57.1	Top of Berm

Based on topographical survey by Hammer Surveying and bottom profiling by THEngineering, LLC

at proposed 4ft berm

25/24	12.93	from 313	7in-10day STORM	27.07	from 313
Freeboard Volume	27.5	link to cell on this sheet	Spillway Volume	48.7	link to cell c
Pump Down Volume	14.6		Pump Down Volume	21.6	
Precip on surf	2.42	from 313	Precip on surf	2.42	from 313
Precip El	17.0		Precip El	24.0	

at proposed 5ft berm

25/24	13.31	from 313	7in-10day STORM	27.07	from 313
Freeboard Volume	27.5	link to cell on this sheet	Spillway Volume	48.7	link to cell c
Pump Down Volume	14.2		Pump Down Volume	21.6	
Precip on surf	2.42	from 313	Precip on surf	2.42	from 313
Precip El	16.6		Precip El	24.0	

THE ENGINEERING, LLC

Bullseye Feedlot

Pond #4 PLANNED 8/21/2020

Elev (ft)	Gauge Reading (ft)	Contour Area (ft^2)	Slice Volume (ft^3)	Cumulative Volume (ft^3)	Cumulative Volume (ac-ft)	
4377	**0.0**	4801	0	0	0.0	
4378	**1.0**	6,083	5,442	5,442	0.1	
4379	**2.0**	7,494	6,789	12,231	0.3	
4380	**3.0**	9,035	8,265	20,495	0.5	
4381	**4.0**	10,704	9,870	30,365	0.7	
4382	**5.0**	12,503	11,604	41,968	1.0	
4382.5	**5.5**				1.1	Pump Down
4383	**6.0**	14,432	13,468	55,436	1.3	
4384	**7.0**	16,489	15,461	70,896	1.6	
4385	**8.0**	18,676	17,583	88,479	2.0	Freeboard mark
4386	**9.0**	20,992	19,834	108,313	2.5	
4387	**10.0**	23,437	22,215	130,527	3.0	Top of Berm

Based on topographical survey by Hammer Surveying

STEWART ENVIRONMENTAL CONSULTING GROUP, LLC
ENGINEERING FOR LIFE

ACEC MEMBER

August 28, 2020

Mr. Travis Hertneky, PE
THEngineering, LLC
PO Box 337748
Greeley, CO 80633

Subject: Bullseye Feedlot Special Use Permit Issues
Job No.: 4926-001

Dear Mr. Hertneky,

Thank you for your letter dated August 24, 2020 regarding the Bullseye Feedlot Special Use Permit. As noted in your letter, this was in response to the meeting with the Bijou Irrigation Company board of directors on August 14, 2020. We appreciate your communication on this matter.

The first item in your letter is the location of the emergency spillway. The proposed location on the south side of the dike is not directly connected to the Bijou Canal. This is acceptable to the company.

As part of the emergency spillway and stormwater control proposal, THEngineering has proposed a continuous dike on the east side of the site without the use of the feed bunk. We agree with this design criteria to help prevent overflow of wastewater into the Bijou Canal.

We have reviewed the stormwater storage that you are proposing in the August 24 letter and agree that the proposed total volume of 57.1 acre feet to the top of the berm and 27.5 acre feet to the 2 foot of freeboard is acceptable to the company. Provided the ponds and wastewater are managed properly through pump down of the pond, this should help prevent any overflow from a long-term rain event into the Bijou Canal.

As part of the berm construction and the pond modification near Pond #1, you note that "Bullseye agrees to construct new portions of the berm directly adjacent to Pond #1 and the Bijou Canal to further limit seepage. Construction will be tested and the seepage rate documented." The testing of the seepage should be done by a geotechnical engineer by soil permeability testing.

As noted previously, Bullseye will be applying to the State of Colorado as a Large CAFO, regardless of the number of head that are located at the feedlot.

All of these issues should be part of your application to the Morgan County Planning for this Special Use Permit (SUP) and should be included as requirements in any approved permit.

Of note, the company still has significant concerns about the noted leakage into the Bijou Canal from the existing Pond #1 liner. It is open to further discussions about options to address this remaining concern.

We appreciate your efforts and look forward to resolving these issues.

Sincerely,

STEWART ENVIRONMENTAL CONSULTING GROUP, LLC

David R Stewart, PhD, PE
President

Bullseye Feedlot Phased implementation details

Phase I

- Will include southern most corrals that naturally drain to Pond #1

- Will include outside temporary feed storage and mixing in area north of Pond #1

- Improvements include

    1. Containment berm along east edge of occupied corrals
    2. Berm along pond
    3. Emergency spillway

Phase II

- Will include all corrals that drain to Pond #1, #2, #3

- Will include outside temporary feed storage and mixing in area north of Pond #1

- Improvements include Phase I improvements plus

    1. Containment berm along east and north edge of occupied corrals
    2. Removal of bunks by pond #3
    3. Construction of overflow ditch between Pond #3 and Pond #1
    4. Installation of overflow pipe between pond #3 and Pond #1
    5. Re-lining of Pond #2

Phase III

- Will include all corrals and feed area

- Feed storage and mixing will be re-located to existing mill and commodity barn along north edge

- Improvements include Phase I & II improvements plus

    1. Containment berm along east of commodity area.
    2. Enlargement and lining of pond #4

Phase IV

- Adds additional water resources only

- All improvements completed in Phase III

Phase V

- Adds additional water resources only

- All improvements completed in Phase III

	Water Availability	Capacity based on water	Bunk Available	Capacity based on bunk	Phase capacity	Days	Stormwater containment	Berm extent
	(ac-ft)	(hd)	(ft)	(hd)	**(hd)**	(days)		
Phase I	17.23	3119	2405	3607	**3119**	120	Pond 1	East of used pens to pond
Phase II	37.23	6740	7580	11369	**6740**	120	Ponds 1,2,3	All east & north of pens
Phase III	37.23	6740	7580	11369	**6740**	120	Ponds 1,2,3,4	All
Phase IV	77.23	9321	7906	11858	**9000**	180	Ponds 1,2,3,4	All
Phase V	152.23	9060	7906	11858	**9000**	365	Ponds 1,2,3,4	All

Bullseye Feedlot
Water Availability

Current, Phase I

Allocation	30	ac-ft	
Truck Wash usage	12.77	ac-ft	
Feedlot allocation	17.23	ac-ft	
Feedlot allocation	5,614,413	gal	
Feeder usage	15	gal/day	
Feeder days	374,294		
365 day stocking	1,025	hd	
120 day stocking	3,119	hd	

Phase II

Allocation	50	ac-ft	
Truck Wash usage	12.77	ac-ft	
Feedlot allocation	37.23	ac-ft	
Feedlot allocation	12,131,433	gal	
Feeder usage	15	gal/day	
Feeder days	808,762		
365 day stocking	2,216	hd	
120 day stocking	6,740	hd	

Phase III

Allocation	50	ac-ft	
Truck Wash usage	12.77	ac-ft	
Feedlot allocation	37.23	ac-ft	
Feedlot allocation	12,131,433	gal	
Feeder usage	15	gal/day	
Feeder days	808,762		
365 day stocking	2,216	hd	
180 day stocking	6,740	hd	

Phase IV

Allocation	90	ac-ft	
Truck Wash usage	12.77	ac-ft	
Feedlot allocation	77.23	ac-ft	
Feedlot allocation	25,165,473	gal	
Feeder usage	15	gal/day	
Feeder days	1,677,698		
365 day stocking	4,596	hd	
180 day stocking	9,321	hd	* 9000 max permit

Phase V

Allocation	165	ac-ft	
Truck Wash usage	12.77	ac-ft	
Feedlot allocation	152.23	ac-ft	
Feedlot allocation	49,604,298	gal	
Feeder usage	15	gal/day	
Feeder days	3,306,953		
365 day stocking	9,060	hd	* 9000 max permit

WATERLAW

PATRICK | MILLER | NOTO

September 6, 2018

Scott C. Miller*
shareholder
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reply to Aspen office
*licensed in CO

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(*via E-mail*)

Re: Morgan County SUP Application for Bullseye Holdings, LLC

Dear counsel,

We represent Bullseye Holdings, LLC c/o Kevin Lamb ("Bullseye"), who recently filed a special use permit application with Morgan County, Colorado for a livestock truck washout operation ("SUP operation"). We write to address comments and to clear up any confusion regarding the ditch easement for the Bijou Canal on our client's property. Specifically, we understand the Bijou Irrigation Company ("Bijou") has commented to the County that Bijou has a 50 foot ditch easement on both sides of the Bijou Canal on Bullseye property, and that Bijou's ditch easement might be impacted by our client's requested SUP operation.

First, Bijou's ditch easement is not 50 feet wide on Bullseye property. We have reviewed the recorded documents extensively and find no evidence of any express easement granting Bijou a 50 foot easement on both sides of the canal. Bijou will need to produce the express, recorded document they rely upon for asserting a 50 feet easement encumbering our client's property, but until we see that, we assume it does not exist.

Second, despite the lack of an express 50 foot easement on our client's property, Bullseye recognizes that Bijou has an implied, historical ditch easement. However, the easement is *non-exclusive*, and is not based on any fixed width. In other words, the width of the ditch easement is based on historical practice and need (discussed further below); and the existence of the easement in and of itself does not preclude Bullseye from using and improving its property, even within the easement area whatever that may be. This is a bedrock principle of Colorado ditch easement law allowing landowners whose lands are burdened by ditches to use and enjoy their properties in manners consistent with existing ditch easements. See for example, *Lazy Dog v. Telluray Ranch Corp.*, 965 P.2d 1229 (Colo. 1998), which provides:

> An [non-exclusive] easement, regardless of the manner of its creation, does not carry any title to the land over which it is exercised, nor does it serve to dispossess the landowner. The owner of the servient estate

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> enjoys all the rights and benefits of proprietorship consistent with the burden of the easement. . . . *Id.* at 1234.

Lastly, because Bijou's easement is implied rather than an express, written easement, the scope and dimensions of the easement are determined by historical practice and reasonable needs, and not merely based on verbal representations by the ditch owner. On this point, our client understands that Bijou historically and presently accesses the canal for operations, maintenance, and repairs using the two-tract road on the opposite (northeastern) side of the canal. The access road is visible from aerial imagery, such as Google Earth. There is no similar ditch access road on Bullseye's property in the area where the proposed SUP operation will occur. Regardless of the SUP operation, Bijou will have the ability to continue reasonable access, operation, maintenance, and repair of the Bijou Canal from the opposite side of the canal as it has done historically. Thus, there will be no interference with Bijou's ability to operate, maintain and repair their canal from the SUP operation.

In conclusion and based on the above, Bijou does not "own" an 100'+ easement (50' on either side of the canal) across our client's property, and whatever the dimensions of the easement may be, it will not be impacted by Bullseye as a result of the SUP operation. We ask the County to please take these points into consideration in their review of the Bullseye SUP application.

If you have any questions or would like to discuss further, please contact me at your convenience at (970) 920-1030 or by email.

Very truly yours,

Patrick | Miller | Noto
A Professional Corporation

By: _____
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SCM/jmg
cc: Kevin Lamb