Processing Materials

- Work copies of applicant-submitted information
- Deficiency letter
- Deficiency response
- Correct & complete determination
- Any correspondence with the applicant after application receipt and prior to sending the Draft PD

Processing Materials

THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

DIRECTOR'S OFFICE: (406) 444-2074
PO BOX 201601

1539 ELEVENTH AVENUE
HELENA, MONTANA 59620-1601

GOVERNOR GREG GIANFORTE

DNRC DIRECTOR AMANDA KASTER

June 11th, 2025

Richland County Conservation District

2745 West Holly St.

Sidney, MT 59270

Subject: Correct and Complete Application for Conservation District Water Reservation Based Change No. 40S 30165373

Dear Applicant,

The Department of Natural Resources and Conservation (Department) has determined that your application is correct and complete pursuant to ARM 36.12.1601. Please remember that correct and complete **does not mean that your application will be granted.** The purpose of this letter is to indicate that the Department has enough information to analyze your water right application.

The Department will issue a Draft Preliminary Determination within 60 days of the date of this letter per 85-2-307(2)(b), MCA.

Following issuance of the Draft Preliminary Determination, you (Applicant) will have 15 business days to request an extension of time to submit additional information, if desired pursuant to §85-2-307(3)(a), MCA.

If no extension of time is requested and the Draft Preliminary Determination decision is to grant your application or grant your application in modified form, the Department will prepare a notice of opportunity to provide public comment, per §85-2-307(4)(a), MCA.

If no extension of time is requested and the Draft Preliminary Determination decision is to deny your application, the Department will adopt the Draft Preliminary Determination as the final determination per §85-2-307(3)(d)(ii), MCA.

If you have any questions or concerns about the application process, please contact me.

Best,

Kailee Ingalls

Kailee Ingalls | Water Resource Specialist
Water Resources Division, Havre Regional Office
Montana Department of Natural Resources and Conservation
Physical| 210 6th Ave | Havre MT 59501
Mailing| PO Box 1828 | Havre MT 59501
DESK: 406-808-7126 **EMAIL**: kailee.ingalls@mt.gov

CC: Teresa Olson <tolson@hydrosi.com>

2912 7th Ave. N.

Billings, MT 59101-0906

Application Materials

- Application
- Any information submitted with Application including maps

Application Materials

CONSERVATION DISTRICT APPLICATION TO CHANGE WATER RESERVATION

§85-2-316, MCA

Form No. 606-CD *(Revised 01/2024)*

RECEIVED

For Department Use Only

JUN 04 2025

DNRC WATER RESOURCES
HAVRE REGIONAL OFFICE

Application # 30165373 Basin 40S

Priority Date _____ Time _____ AM/PM

Rec'd By DH

Fee Rec'd $ 1000- Check # 8840

Deposit Receipt # HVS 2525291

Payor Richland County Conservation District

Refund $ _____ Date _____

When to use this form:

- Use Form 606-CD to add a point of diversion, place of use, or place of storage to a Conservation District Water Reservation.
- Complete this form if the point of diversion, or any portion of the proposed place of use or place of storage ***was not*** included in the original public notice.
- For a change in purpose, use Form 606, Application to Change a Water Right, instead.

Filing fee:

- The filing fee for Form 606-CD is $2500 ***without*** *the filing fee reduction.*
- The filing fee for Form 606-CD is $1500 ***with*** *the filing fee reduction.*
- Please make checks payable to DNRC.

Important Information:

- An application will be eligible for a filing fee reduction and expedited timelines if the applicant completes a preapplication meeting with the Department (ARM 36.12.1302(1)), which includes submitting any follow-up information identified by the Department (ARM 36.12.1302(3)(c)) and receiving either Department-completed technical analyses or Department review of applicant-submitted technical analyses (ARM 36.12.1302(4) and (5)). An application for the proposed project also must be submitted within 180 days of delivery of Department technical analyses or scientific credibility review and no element on the submitted application can be changed from the completed preapplication meeting form (ARM 36.12.1302(6)).

---

1. Conservation District (CD): Richland County Conservation District

   Mailing Address: 2745 West Holly ST City Sidney State MT Zip 59270

   Phone Numbers: Work 406-943-3001 Cell _____

   Email Address: richlandcd@gmail.com

2. Producer Name: Patrick W. Colgan

   Mailing Address: 30678 County Road 149 City Poplar State MT Zip 59255-9505

   Phone Numbers: Home 406-525-3515 Work _____ Cell 406-688-9435

   Email Address: _____

3. Project Completion – The Department will set the project completion deadline to December 31 of the year set by the Conservation District in its authorization.

4. Affidavit – A Conservation District Board Member Must Sign

5. "Sage Grouse Habitat Project Review" required if the diversion and/or place of use are located within an area designated as sage grouse habitat. (https://sagegrouse.mt.gov/)

CHANGE APPLICATION INFORMATION

This application may only be used to add a point of diversion, place of use, or place of storage to include a project that was not included in the original Water Reservation public notice.

Yes ☐ No ☒ Was the point of diversion included in the original public notice?
Yes ☐ No ☒ Was the entire place of use included in the original public notice? If not, complete this form.

Section A. Water Reservation Details

A.1 61.05 CFS How much flow rate remains for this CD water reservation prior to this application?
A.2 14,518.15 AF How much volume remains for this CD water reservation prior to this application?
A.3 4/1-10/31 What is the typical period of diversion the CD authorizes?
A.4 2.5 AF What volume per acre (AF/AC) does the CD typically authorize?

Section B. Application Details

B.1 ☒ Submit a copy of the Conservation District Application from the Producer.
B.2 ☒ Submit a signed copy of the Reserved Water Use Authorization from the Conservation District.
B.3 ☒ Submit a copy of the CD Public Notice from the Conservation District.
B.4 ☒ Submit a copy of the Affidavit of Publication from the Conservation District
B.5 ☒ Submit a copy of the public notice Certificate of Service from the Conservation District.
B.6 ☒ Yes ____ No _x_ Did the public notice of the Application receive any objections?
If Yes, attach a copy.

Section C. Project Location

C.1 **Point of Diversion:** Describe the location of the proposed diversion(s) to the nearest 10 acres. Include additional Points of Diversion on a separate sheet.

POD #1 NW 1/4 SE 1/4 SE 1/4 Sec 27 Twp 27N N/S Rge 51E E/W County Richland

Lot_____ Block_____ Tract No._____ Subdivision Name _____

Government Lot 5 Latitude _____ Longitude _____

POD #2 ____ 1/4 ____ 1/4 ____ 1/4 Sec____ Twp ____ N/S Rge ____ E/W County_____

Lot_____ Block_____ Tract No._____ Subdivision Name _____

Government Lot _____ Latitude _____ Longitude _____

C.2 **Place of Use:** Describe the location of the proposed Place of Use to the nearest 10 acres. Include additional Places of Use on a separate sheet.

ACRES IRRIGATED. Describe to the nearest 10 acres. Include additional Places of Use on a separate sheet.

3.18 Acres _____ Lot _____ Block E2 1/4 SW 1/4 SW 1/4 Sec 27 Twp 27N N/S Rge 51E E/W
25.80 Acres _____ Lot _____ Block _____ 1/4 SE 1/4 SW 1/4 Sec 27 Twp 27N N/S Rge 51E E/W
3.85 Acres _____ Lot _____ Block E2 1/4 NW 1/4 NW 1/4 Sec 34 Twp 27N N/S Rge 51E E/W
38.12 Acres _____ Lot _____ Block _____ 1/4 NE 1/4 NW 1/4 Sec 34 Twp 27N N/S Rge 51E E/W

Continued on additional sheet (enclosed)

Section D. Supplemental Water Rights

When two or more water rights overlap the proposed place of use, the water rights are considered supplemental.

D.1 Yes ☐ No ☒ Are there any water rights that overlap the place of use proposed in this application? If yes, identify those rights. If no, skip to Section D.

Water Right No. & Basin	*Priority Date*

D.2 Why is this water reservation needed to supplement the acres?

D.3 Explain how all of the supplemental water rights will be collectively operated.

Section E. Map – ARM 36.12.111

E.1 ☒ Provide a map depicting the proposed point of diversion, means of conveyance, place of use, and place of storage.

E.2 ☐ N/A If there are supplemental water rights, provide one map depicting all of the historic points of diversion, means of conveyance, and places of use. Label each point of diversion with the water right number.

Section F. Adverse Effect – ARM 36.12.1903

The determination of whether adverse effect will occur is based on the details of the proposed project. If the CD is adding a point of diversion or place of use, the CD needs to show that the proposed project will not create an adverse effect to junior or senior water rights. In some cases, adding a point of diversion may require the physical and legal demands on the source be known. If a legal demand analysis is needed and the legal demands exceed the amount of water physically available, the CD may need to provide a mitigation plan.

The Department will review the proposed project and contact the CD if mitigation is required or if other information is required to address possible adverse effects.

Section G. Adequate Diversion Means and Operation - ARM 36.12.1904

G.1 Describe the preliminary design plans and specifications for the proposed diversion and conveyance facilities and the equipment used to put the water to beneficial use.

Water will be pumped with a Cornell 6H pump powered by a John Deere 4045T stationary diesel engine. Water will be conveyed in 10" 80# PIP pipe with #2 aluminum cable connection to a Valley Center Pivot system. Sprinkler design documents are enclosed.

G.2 Yes ☒ No ☐ Are there other water rights that use the same diversion from the source, such as a ditch? If yes, explain why this water right will not exceed the capacity of the diversion works.

An existing pivot is connected to the diversion pump. It is 40S 30001844 (RI-017M). The pump capacity will not be exceeded in operating the 2 pivots, they may be operated at once, or individually, depending on field needs.

Section H. Beneficial Use – ARM 36.12.1801

H.1 How does the water use benefit you, other persons, or the public?

Agricultural development benefits the individual producer and regional economy.

H.2 How did you determine the flow rate needed for the project?

Based on sprinkler irrigation system needs and pump capacity.

H.3 How did you determine the acre-feet needed for the project?

Based on the sprinkler irrigation system and crop needs.

The information provided for this application is to the best of my knowledge true and correct. I have possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use.

I declare under penalty of perjury and under the laws of the state of Montana that the foregoing is true and correct.

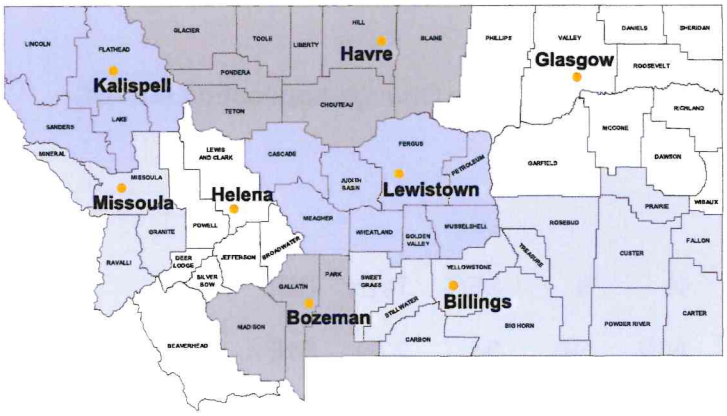
Printed Name Shawn D. Conradsen

Applicant Signature _____ Date: 5-22-2025

Printed Name _____

Applicant Signature _____ Date: _____

WATER RESOURCES REGIONAL OFFICES



BILLINGS
Airport Industrial Park, 1371 Rimtop Dr
Billings, MT 59105-9702

PHONE 406-247-4415 FAX 406-247-4416
EMAIL DNRCBillingsWater@mt.gov

Big Horn, Carbon, Carter, Custer, Fallon, Powder River, Prairie, Rosebud, Stillwater, Sweet Grass, Treasure, and Yellowstone Counties

BOZEMAN
2273 Boot Hill Court, Suite 110
Bozeman, MT 59715-7249

PHONE 406-586-3136 FAX 406-587-9726
EMAIL DNRCBozemanWater@mt.gov

Gallatin, Madison, and Park Counties

GLASGOW
222 6th Street South, PO Box 1269
Glasgow, MT 59230-1269

PHONE 406-228-2561
EMAIL DNRCGlasgowWater@mt.gov

Daniels, Dawson, Garfield, McCone, Phillips, Richland, Roosevelt, Sheridan, Valley, and Wibaux Counties

HAVRE
210 6th Ave., PO Box 1828
Havre, MT 59501-1828

PHONE 406-265-5516
EMAIL DNRCHavreWater@mt.gov

Blaine, Chouteau, Glacier, Hill, Liberty, Pondera, Teton, and Toole Counties

HELENA
1424 9th Ave., PO Box 201601,
Helena, MT 59620-1601

PHONE 406-444-6999 FAX 406-444-9317
EMAIL DNRCHelenaWater@mt.gov

Beaverhead, Broadwater, Deer Lodge, Jefferson, Lewis and Clark, Powell, and Silver Bow Counties

KALISPELL
655 Timberwolf Parkway, Suite 4
Kalispell, MT 59901-1215

PHONE 406-752-2288
EMAIL DNRCKalispellWater@mt.gov

Flathead, Lake, Lincoln, and Sanders Counties

LEWISTOWN
613 Northeast Main St., Suite E
Lewistown, MT 59457-2020

PHONE 406-538-7459
EMAIL DNRCLewistownWater@mt.gov

Cascade, Fergus, Golden Valley, Judith Basin, Meagher, Musselshell, Petroleum, and Wheatland Counties

MISSOULA
2705 Spurgin Rd. Bldg. C, PO Box 5004
Missoula, MT 59806-5004

PHONE 406-721-4284 FAX 406-542-5899
EMAIL DNRCMissoulaWater@mt.gov

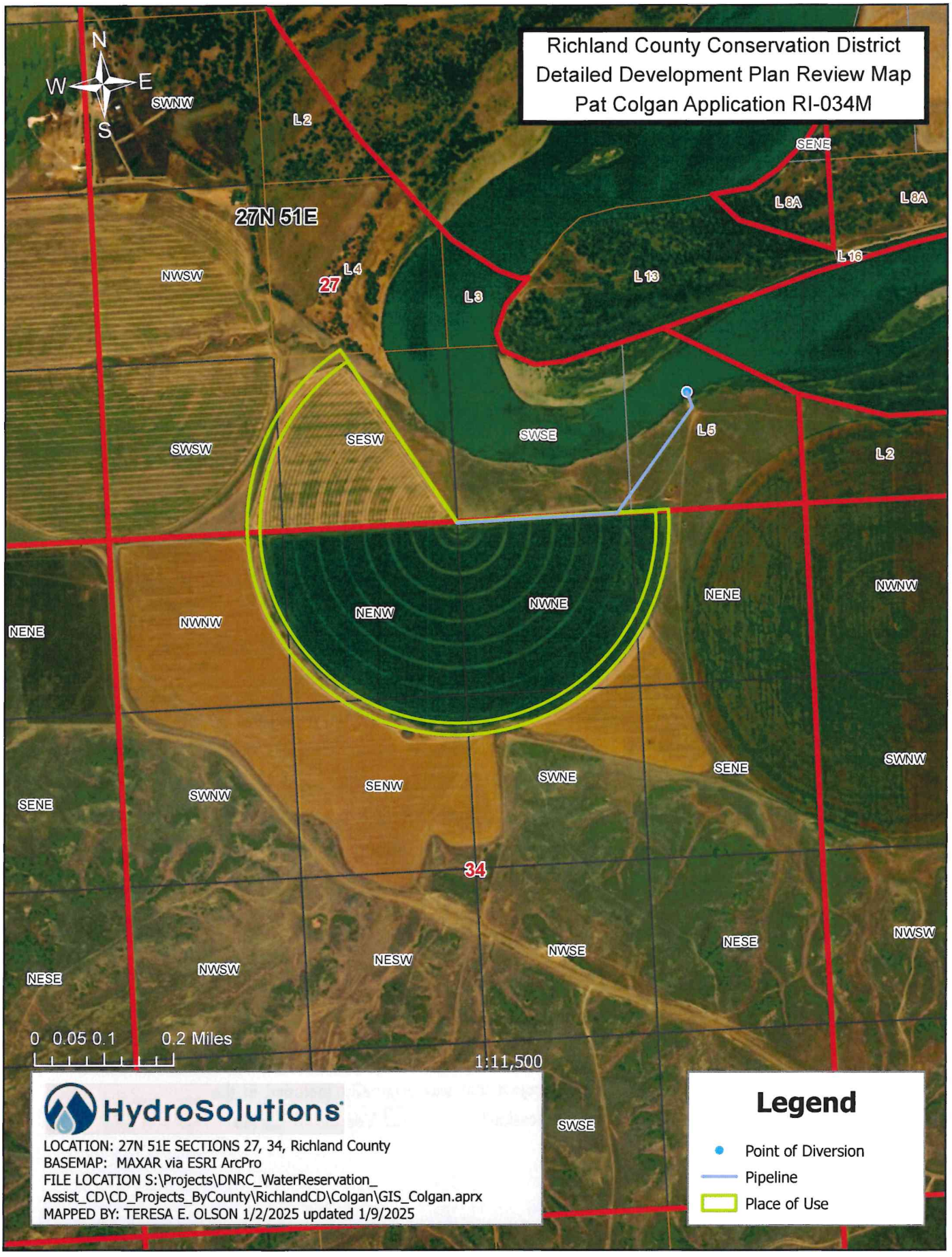
Granite, Mineral, Missoula, and Ravalli Counties

Richland Conservation District- Colgan Change Application 606-CD

Place of Use Additional:

ACRES	¼	¼	¼	SEC	TWN	RGE
38.22		NW	NE	34	27N	51E
4.35	N2	SW	NE	34	27N	51E
4.34	N2	SE	NW	34	27N	51E
4.14	E2	NE	NE	34	27N	51E

122 TOTAL ACRES


Richland County Conservation District
Detailed Development Plan Review Map
Pat Colgan Application RI-034M
N
W
E
S
27N 51E
27
34
SWNW
L2
SENE
L8A
L8A
L16
L13
L4
L3
NWSW
SWSW
SESW
SWSE
L5
L2
NENE
NWNW
NENW
NWNE
NENE
NWNW
SENE
SWNW
SENW
SWNE
SENE
SWNW
NESE
NWSW
NESW
NWSE
NESE
NWSW
SWSE
0 0.05 0.1 0.2 Miles
1:11,500
HydroSolutions
LOCATION: 27N 51E SECTIONS 27, 34, Richland County
BASEMAP: MAXAR via ESRI ArcPro
FILE LOCATION S:\Projects\DNRC_WaterReservation_Assist_CD\CD_Projects_ByCounty\RichlandCD\Colgan\GIS_Colgan.aprx
MAPPED BY: TERESA E. OLSON 1/2/2025 updated 1/9/2025
Legend
Point of Diversion
Pipeline
Place of Use

Form 102 *APPLICATION FOR RESERVED WATER USE* 9/96

RICHLAND COUNTY CONSERVATION DISTRICT

For District Use Only
Application No. RI-0411 Date Received 4 17 2023 Time 9:40
Fee Received $ ____ Received By Kross

Please Print or Type:

1. Applicant Name Pat Colgan
   Mailing Address 30678 County Road 149
   City or Town Poplar State MT Zip ______
   Home Phone (406) 525-3515 Other Phone (406) 688-9435
2. Applying for (check one): ☒ New Irrigation, ☐ Supplemental, ☐ Both
3. Source of Water: Missouri River
4. Describe Irrigation System: Valley Center Pivot
5. Crops to be Grown: Alfalfa, Corn, Wheat, hay Barley
   Point of Diversion Description (to the nearest 10 acres): County Richland
   government lot ____, SE ¼, SE ¼, NE ¼, sec 27, twp 27 N/S, rge 51 E/W
7. Point of Discharge Description (to the nearest 10 acres): County N/A
   government lot ____, ____¼, ____¼, ____¼, sec ____, twp ____N/S, rge ____E/W
8. Place of Use Description: County See attached, New (n) or Supplemental (s)
   acres____, gvt. lot____, ____¼, ____¼, ____¼, sec____, twp____N/S, rge____E/W, n/s
   acres____, gvt. lot____, ____¼, ____¼, ____¼, sec____, twp____N/S, rge____E/W, n/s
   TOTAL acres ________ (addendum sheet is attached if more room is needed for place of use)
9. Volume Requested: 294 acre-feet, Volume of Discharge: ________ acre-feet
10. Flow Rate Requested: ______ cubic ft. per second (cfs), or 800 gallons per minute (gpm)
11. Diversion Means: ☒ Pump: Type & Power Cornell 100 HP 6H, ☐ Other ________
12. Conveyance Means: ☒ Pipeline, Other ________
13. Period of Use: Month/Day 4/1 to Month/Day 10/31
14. Reserved Water Rights Projects: Is this a project that was originally included in the Conservation District water reservation application? ☐ Yes ☒ No

15. Location Map: A map showing the following must accompany this application:

A. Township and range
B. Section numbers and corners
C. Scale of map in inches
D. Project location and general layout
E. Points of diversion and discharge
F. Place of use

NOTE: Please be sure to attach an accurate map. Lack of an accurate map results in an incomplete application. The application will be returned for completion. A copy of an ASCS aerial photo or a USGS topographic map is required. Please use a dark pencil or pen when writing on the map. Assistance is available from the District or the Resource Development Bureau, DNRC in completing these forms.

~~16.~~ Soils Map: Include a copy of the soils map and suitability evaluation for your project. Indicate on the map the location of the project, point(s) of diversion, and point(s) of discharge.

17. Engineering Details: All available engineering data must be submitted with this application:

A. General layout plans for point of diversion structures
B. Placement plans of pumping plant/diversion structure
C. Control structures design and placement
D. Typical cross-section for dikes
E. Conveyance and delivery ditch designs
F. Reservoir cross-section and capacities
G. Structural tables
H. Pipeline designs
I. Yardage figures for land leveling and design grid
J. Method of water use measurement
K. Water availability and water quality evaluation
L. Other information applicable to the project as deemed necessary by the District

18. Project Completion Date: TBD

19. The Reserved Water Development Manual which governs Reserved Water Use Authorization for the Conservation District is on file in the district office and available for review.

20. ***IMPORTANT NOTICE: No person may appropriate water or commence construction on any project facilities prior to the approval of the project by the District and the receipt of a Reserved Water Use Authorization!***

21. The applicant certifies that the statements above and documents attached are to the best of his/her knowledge true and correct.

Pat W 2-14-23

Applicant's Signature — Date

Prepared By: Justin Candee 4/12/2023

Date

Submit Application and Fee to: ***Richland County Conservation District, 2745 West Holly Street, Sidney, MT 59270***

RICHLAND COUNTY CONSERVATION DISTRICT

CONTINUED FROM PAGE 1 – PLACE OF USE ADDENDUM

8. Place of Use Description: County Richland, New (n) or Supplemental (s)

acres 40, gvt. lot_____, _____¼, NW¼, NE¼, sec 34, twp 27 (N)/S, rge 51 (E)/W, n/s

acres 40, gvt. lot_____, _____¼, NE ¼, NW ¼, sec 34, twp 27 (N)/S, rge 51 (E)/W, n/s

acres 40, gvt. lot_____, _____¼, SE ¼, SW ¼, sec 27, twp 27 (N)/S, rge 51 (E)/W, n/s

acres 2, gvt. lot_____, _____¼, NE ¼, NE ¼, sec 34, twp 27 (N)/S, rge 51 (E)/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

acres______, gvt. lot_____, _____¼, _____¼, _____¼, sec_____, twp_____N/S, rge_____E/W, n/s

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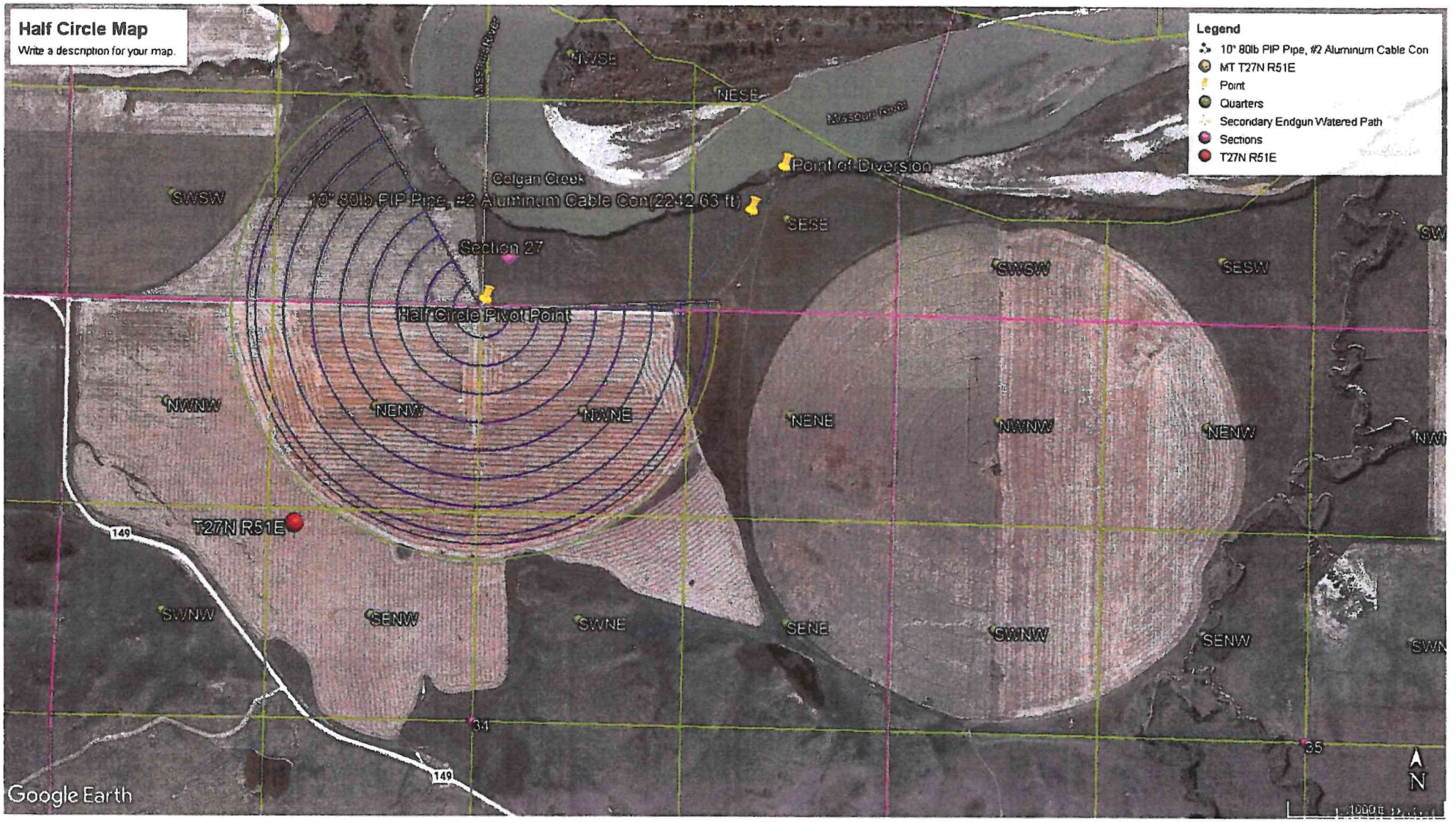
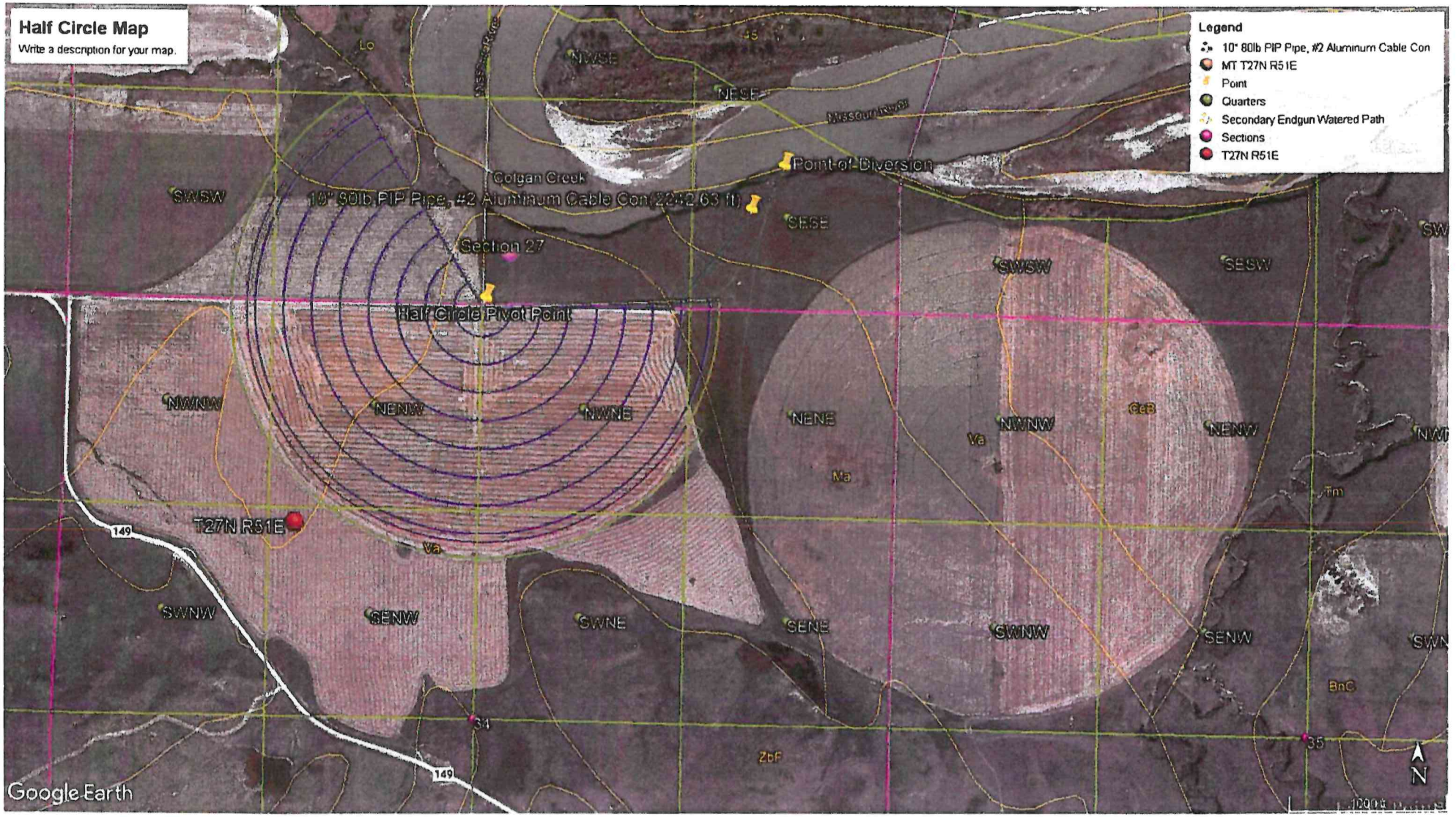
TOTAL ACRES 122


Half Circle Map
Write a description for your map.
Legend
10" 80lb PIP Pipe, #2 Aluminum Cable Con
MT T27N R51E
Point
Quarters
Secondary Endgun Watered Path
Sections
T27N R51E
Point of Diversion
Celgan Creek
10" 80lb PIP Pipe, #2 Aluminum Cable Con(2242.63 ft)
Section 27
Half Circle Pivot Point
T27N R51E
149
34
35
N
Google Earth


Half Circle Map
Write a description for your map.
Legend
10" 80lb PIP Pipe, #2 Aluminum Cable Con
MT T27N R51E
Point
Quarters
Secondary Endgun Watered Path
Sections
T27N R51E
Point of Diversion
Colgan Creek
10" 80lb PIP Pipe, #2 Aluminum Cable Con (2242.63 ft)
Section 27
Half Circle Pivot Point
T27N R51E
NWSE
NESE
SWSW
SESE
SWSW
SESW
NWNW
NENW
NWNE
NENE
NWNW
NENW
SWNW
SENW
SWNE
SENE
SWNW
SENW
GeB
Va
Ma
Tm
BnC
ZbF
149
149
34
35
N
Google Earth

Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (Ksat), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (Ksat) is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of organic matter in a soil can be maintained by returning crop residue to the soil.

Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and Ksat. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. (http://soils.usda.gov)

Report—Physical Soil Properties

Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Physical Soil Properties–Richland County, Montana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
Ma—Marias silty clay														
Marias	0-5	- 5-	-45-	40-50- 60	1.25-1.35 -1.45	0.42-1.00-1.40	0.14-0.16-0. 18	6.0- 7.5- 8.9	0.5- 1.3- 2.0	.24	.24	5	4	86
	5-14	- 5-	-45-	40-50- 60	1.30-1.40 -1.50	0.01-0.21-0.42	0.12-0.14-0. 16	6.0- 7.5- 8.9	0.5- 0.8- 1.0	.32	.32			
	14-60	- 5-	-45-	40-50- 60	1.30-1.43 -1.55	0.01-0.21-0.42	0.12-0.14-0. 16	6.0- 7.5- 8.9	0.0- 0.3- 0.5	.32	.32			
Va—Vanda clay														
Vanda	0-8	-22-	-28-	40-50- 60	1.25-1.35 -1.45	0.01-0.21-0.42	0.08-0.10-0. 12	6.0- 7.5- 8.9	0.5- 1.3- 2.0	.17	.17	5	4	86
	8-60	-23-	-29-	35-48- 60	1.30-1.40 -1.50	0.01-0.21-0.42	0.08-0.10-0. 12	6.0- 7.5- 8.9	0.0- 0.3- 0.5	.28	.28			

Data Source Information

Soil Survey Area: Richland County, Montana
Survey Area Data: Version 20, Aug 29, 2022

Irrigation - General and Sprinkler

This table shows the degree and kind of soil limitations that affect irrigation systems on mineral soils. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Irrigation systems are used to provide supplemental water to crops, orchards, vineyards, and vegetables in area where natural precipitation will not support desired production of crops being grown.

Irrigation – general evaluates a soil's limitation(s) for installation and use of non-specific irrigation methods and is intended to provide initial planning information. Additional interpretations provide more specific information. This interpretation does not apply if the crop planned for irrigation is rice or other crops with unique plant physiological characteristics (such as cranberries). The ratings are for soils in their natural condition and do not consider present land use.

The soil properties and qualities important in design and management of irrigation systems are sodium adsorption ratio, depth to high water table, available water holding capacity, permeability, slope, calcium carbonate content, ponding, and flooding. Soil properties and qualities that influence installation are stones, depth to bedrock or cemented pan, and depth to a high water table. The properties and qualities that affect performance of the irrigation system are depth to bedrock or to a cemented pan, the sodium adsorption ratio, salinity, and soil reaction.

Irrigation, sprinkler (close spaced outlets drops) evaluates a soil for installation and use of sprinkler irrigation systems equipped with close spaced outlets on drops. The ratings are for soils in their natural condition and do not consider present land use.

Sprinkler irrigation systems equipped with low pressure spray nozzles mounted on close spaced drops apply water close to the ground surface. These systems are generally found on linear move or center pivot systems and they have separate slope criteria from other sprinkler systems due to their higher application rate which increase risk of runoff and irrigation-induced erosion on steeper slopes. Examples of these types of systems include Low Pressure in Canopy (LPIC), Low Energy Precision Application (LEPA), Low Elevation Spray Application (LESA), and Mid-Elevation Spray Application (MESA) systems. These types of irrigation systems are generally suitable for small grains, row crops, and vegetables.

The soil properties and qualities important in the design and management of sprinkler irrigation systems utilizing close spaced spray nozzles on drops are depth, available water holding capacity, sodium adsorption ratio, surface coarse fragments, permeability, salinity, slope, wetness, and flooding. The features that affect performance of the system and plant growth are surface texture, surface rocks, salinity, sodium adsorption ratio, wetness, erosion potential, and available water holding capacity.

Irrigation, sprinkler (general) evaluates a soil for installation and use of sprinkler irrigation systems excluding those equipped with close spaced outlets on drops. The ratings are for soils in their natural condition and do not consider present land use.

Sprinkler irrigation systems apply irrigation water to a field through a series of pipes and nozzles and can be either solid set or mobile. Generally, this type of irrigation system is suitable for small grains, row crops, vegetables, and orchards.

The soil properties and qualities important in the design and management of sprinkler irrigation systems are depth, available water holding capacity, sodium adsorption ratio, surface coarse fragments, permeability, salinity, slope, wetness, and flooding. The features that affect performance of the system and plant growth are surface rocks, salinity, sodium adsorption ratio, wetness, and available water holding capacity.

Information in this table is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this table. Local ordinances and regulations should be considered in planning, in site selection, and in design. The irrigation interpretations are not designed or intended to be used in a regulatory manner.

Report—Irrigation - General and Sprinkler

[The information in this table provides irrigation interpretations for mineral soils. Onsite investigation may be needed to validate the interpretations and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Irrigation - General and Sprinkler–Richland County, Montana							
Map symbol and soil name	Pct. of map unit	Irrigation (general)		Irrigation, Sprinkler (close spaced outlet drops)		Irrigation, Sprinkler (general)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ma—Marias silty clay							
Marias	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Excess Salt	0.50	Slow water movement	0.99	Slow water movement	0.99
		Excess Sodium	0.09	Surface clay	0.50	Surface clay	0.50
				Excess Salt	0.50	Excess Salt	0.50
				Excess Sodium	0.09	Excess Sodium	0.09
Va—Vanda clay							
Vanda	90	Very limited		Very limited		Very limited	
		Excess Sodium	1.00	Excess Sodium	1.00	Excess Sodium	1.00
		Excess Salt	0.50	Slow water movement	0.99	Slow water movement	0.99
		Low water holding capacity	0.16	Surface clay	0.50	Surface clay	0.50
		Slope	0.01	Excess Salt	0.50	Excess Salt	0.50
				Low water holding capacity	0.16	Low water holding capacity	0.16

Data Source Information

Soil Survey Area: Richland County, Montana
Survey Area Data: Version 20, Aug 29, 2022

V-Chart

Valley Dealer

Agri Industries
1775 S CENTRAL AVE
Sidney, MT 59270-5524
UNITED STATES

Customer

PAT COLGAN
30678 COUNTY ROAD 149
POPLAR, MT 59255
UNITED STATES OF AMERICA

Dealer No.

00910337

Field Name

Parent Order No. 10996758
Sprinkler Order No. 10996845

Plant McCook Manufacturing

Dealer PO
Order Date 05/01/2013
Load Date 05/10/2013
Method Of Shipment W/SYS (10996758)

8 Span Valley Standard Pivot 7000
Machine Flow 800 GPM
Pivot Pressure 24 PSI

Parent Order No 10996758

Dealer Agri Industries

Sprinkler Order No 10996845

Customer PAT COLGAN

Field Name

Valley Standard Pivot 7000 Machine Summary

Span and Overhang

Model	Qty	Length Ft	Pipe O.D. In	Coupler Spacing	Coupler Qty	D. U. Profile	Tire
7000	8	180.0	6 5/8	108	20	Standard	11.2 x 38
7000	1	54.0	6 5/8	110	8		

Field Area

91.3 Acres Total
80.8 Acres: Pivot 180°
10.5 EG on 100%
1497.3 Ft. Machine Length
93.9 Ft. End Gun Radius

Flow

800 Gallons Per Minute
8.76 GPM/Acre
0.46 In/Day App Rate
0.155 In. App Depth @ 100%
91.6 GPM End Gun

Messages

Caution:
None

Dealer:
None

Pressure

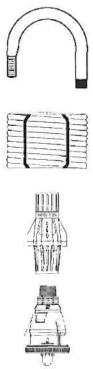
24 PSI Pivot Pressure
Calculated Pressure
0.0 Ft. Highest Elevation
0.0 Ft. Lowest Elevation

LRDU Drive Train

34 RPM Center Drive @ 60 Hz freq.
11.2 x 38 Tire
52:1Wheel GB Ratio, LRDU Dist 1442.4 Ft.
8.0 Hrs/180° @ 100% (9.45) Ft/Min

Sprinkler -- Computer Spacing

Sprinkler Configuration	Range (ft)
Valley U-Pipe 6 Galvanized 3/4 M NPT x 3/4 M Hose	All
Blue Premium Hose Drop Variable Length 48" Ground Clr	
Nelson Regulator Blue Acme 10 3/4 F NPT	
Valley Slip Weight 26 2.0 Poly	
Nelson S3000 D8 - Yellow 3/4 F Acme	



1893.05 Ft Total Drop Hose Length

Parent Order No 10996758

Dealer Agri Industries

Sprinkler Order No 10996845

Customer PAT COLGAN

Field Name

Valley Standard Pivot 7000 Machine Summary

Pressure Loss

Pipe Length Ft	Pipe I.D. In	Pipe Finish	C-Factor	Loss PSI
1469.9	6.42	Galvanized	150	10.8
27.4	3.79	Galvanized	150	0.5
			Total =	11.3

Nelson SR100 End Gun
0.7 Nozzle
Berkeley 2 HP Booster Pump

Span Flow

Span Number	Irrigated Length	Acres	Rqd GPM	Act GPM	Rqd GPM/Acre	Act GPM/Acre	% Deviation
1	179.9	1.2	10.3	13.0	8.64	10.85	25.6
2	180.1	3.5	30.5	30.5	8.64	8.62	-0.2
3	180.1	5.9	50.8	50.9	8.64	8.66	0.2
4	180.1	8.2	71.0	71.0	8.64	8.64	-0.0
5	180.1	10.6	91.2	91.3	8.64	8.65	0.1
6	180.1	12.9	111.4	111.3	8.64	8.63	-0.1
7	180.1	15.2	131.6	131.5	8.64	8.63	-0.1
8	179.8	17.5	151.6	151.8	8.64	8.65	0.1
O/H	54.8	5.8	51.2	51.3	8.80	8.82	0.2
EG	93.9	10.5	91.7	91.6	8.77	8.76	0.0
Totals		91.3		794.2			
	Drain Sprinkler		8.8	8.7			
		Total Machine Flow		802.9			

Advanced Options

```
Drain Sprinkler = Senninger Directional
Last Sprinkler Coverage = 1.0 ft
Sprinkler Coverage Length = 1498.3 ft
Use Last Coupler= YES
Minimum Mainline Pressure = 6.0 PSI
```

Shipping Options

```
Ship Drop Hardware
Do not ship Endgun Nozzle
Do not ship Endgun & Hardware
Do not ship Endgun Valve / Nozzle Valve Hardware
Do not ship Boosterpump Hardware
```

Parent Order No 10996758

Dealer Agri Industries

Customer PAT COLGAN

Field Name

Sprinkler Order No 10996845

Valley Standard Pivot 7000 Machine Sprinkler Chart

Cpl No	Dist From Pivot	Spk No	Dist Last Spk	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length	Regulator	Line PSI	Spk PSI	Rqd GPM	Act GPM
1	6.5			Gauge						24.0			
		Sprinkler : Nelson Spinner											
2	15.5	1		10	Beige	S3000	Beige	116	Blue Acme 10L	23.6	11.6	0.1	0.6
3	24.5	2	9.0	10	Beige	S3000	Beige	123	Blue Acme 10L	23.3	11.6	0.1	0.6
4	33.5	3	9.0	10	Beige	S3000	Beige	129	Blue Acme 10L	22.9	11.6	0.2	0.6
5	42.5	4	9.0	10	Beige	S3000	Beige	134	Blue Acme 10L	22.7	11.6	0.2	0.6
6	51.5	5	9.0	10	Beige	S3000	Beige	138	Blue Acme 10L	22.4	11.6	0.3	0.6
7	60.5	6	9.0	10	Beige	S3000	Beige	142	Blue Acme 10L	22.2	11.6	0.3	0.6
8	69.5	7	9.0	10	Beige	S3000	Beige	145	Blue Acme 10L	22.0	11.6	0.4	0.6
9	78.5	8	9.0	10	Beige	S3000	Beige	147	Blue Acme 10L	21.8	11.6	0.4	0.6
10	87.5	9	9.0	10	Beige	S3000	Beige	148	Blue Acme 10L	21.6	11.6	0.5	0.6
11	96.4	10	8.9	10	Beige	S3000	Beige	148	Blue Acme 10L	21.5	11.6	0.5	0.6
12	105.4	11	9.0	10	Beige	S3000	Beige	148	Blue Acme 10L	21.4	11.6	0.6	0.6
13	114.4	12	9.0	11	Beige/Gold	S3000	Beige	146	Blue Acme 10L	21.4	11.5	0.6	0.7
14	123.4	13	9.0	11	Beige/Gold	S3000	Beige	144	Blue Acme 10L	21.3	11.5	0.7	0.7
15	132.4	14	9.0	11	Beige/Gold	S3000	Beige	142	Blue Acme 10L	21.3	11.5	0.7	0.7
16	141.3	15	8.9	12	Gold	S3000	Beige	138	Blue Acme 10L	21.4	11.5	0.8	0.8
17	150.3	16	9.0	12	Gold	S3000	Beige	134	Blue Acme 10L	21.4	11.5	0.8	0.8
18	159.3	17	9.0	12	Gold	S3000	Beige	128	Blue Acme 10L	21.5	11.5	0.9	0.8
19	168.3	18	9.0	13	Gold/Lime	S3000	Beige	122	Blue Acme 10L	21.6	11.5	0.9	1.0
20	177.3	19	9.0	13	Gold/Lime	S3000	Beige	116	Blue Acme 10L	21.8	11.4	1.0	1.0
	182.0		Tower Number : 1		Span Length : 179.9								
21	186.6	20	9.3	13	Gold/Lime	S3000	Beige	116	Blue Acme 10L	21.6	11.4	1.1	1.0
22	195.6	21	9.0	14	Lime	S3000	Beige	123	Blue Acme 10L	21.3	11.4	1.1	1.1
23	204.6	22	9.0	14	Lime	S3000	Beige	129	Blue Acme 10L	20.9	11.4	1.1	1.1
24	213.6	23	9.0	15	Lime/Lavender	S3000	Beige	135	Blue Acme 10L	20.6	11.4	1.2	1.3
25	222.6	24	9.0	14	Lime	S3000	Beige	140	Blue Acme 10L	20.4	11.4	1.2	1.1
26	231.6	25	9.0	15	Lime/Lavender	S3000	Beige	144	Blue Acme 10L	20.1	11.4	1.3	1.3
27	240.6	26	9.0	15	Lime/Lavender	S3000	Beige	147	Blue Acme 10L	19.9	11.3	1.3	1.3
28	249.6	27	9.0	16	Lavender	S3000	D8 - Yellow	149	Blue Acme 10L	19.7	11.3	1.4	1.5
29	258.6	28	9.0	16	Lavender	S3000	D8 - Yellow	151	Blue Acme 10L	19.6	11.3	1.5	1.5

Parent Order No 10996758

Dealer Agri Industries

Customer PAT COLGAN

Field Name

Sprinkler Order No 10996845

Valley Standard Pivot 7000 Machine Sprinkler Chart

Cpl No	Dist From Pivot	Spk No	Dist Last Spk	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length	Regulator	Line PSI	Spk PSI	Rqd GPM	Act GPM
30	267.6	29	9.0	16	Lavender	S3000	D8 - Yellow	152	Blue Acme 10L	19.4	11.3	1.5	1.5
31	276.5	30	8.9	16	Lavender	S3000	D8 - Yellow	152	Blue Acme 10L	19.3	11.3	1.5	1.5
32	285.5	31	9.0	17	Lavender/Gray	S3000	D8 - Yellow	151	Blue Acme 10L	19.3	11.3	1.6	1.7
33	294.5	32	9.0	17	Lavender/Gray	S3000	D8 - Yellow	149	Blue Acme 10L	19.2	11.3	1.7	1.7
34	303.5	33	9.0	17	Lavender/Gray	S3000	D8 - Yellow	147	Blue Acme 10L	19.2	11.3	1.7	1.7
35	312.5	34	9.0	17	Lavender/Gray	S3000	D8 - Yellow	144	Blue Acme 10L	19.2	11.3	1.7	1.7
36	321.4	35	8.9	18	Gray	S3000	D8 - Yellow	140	Blue Acme 10L	19.3	11.2	1.8	1.9
37	330.4	36	9.0	18	Gray	S3000	D8 - Yellow	135	Blue Acme 10L	19.4	11.2	1.9	1.9
38	339.4	37	9.0	18	Gray	S3000	D8 - Yellow	129	Blue Acme 10L	19.5	11.2	1.9	1.9
39	348.4	38	9.0	18	Gray	S3000	D8 - Yellow	123	Blue Acme 10L	19.6	11.2	2.0	1.9
40	357.4	39	9.0	19	Gray/Turquoise	S3000	D8 - Yellow	116	Blue Acme 10L	19.8	11.2	2.0	2.1
	362.1		Tower Number : 2		Span Length : 180.1								
41	366.7	40	9.3	19	Gray/Turquoise	S3000	D8 - Yellow	116	Blue Acme 10L	19.7	11.2	2.1	2.1
42	375.7	41	9.0	19	Gray/Turquoise	S3000	D8 - Yellow	123	Blue Acme 10L	19.3	11.2	2.1	2.1
43	384.7	42	9.0	20	Turquoise	S3000	D8 - Yellow	129	Blue Acme 10L	19.0	11.2	2.2	2.3
44	393.7	43	9.0	19	Gray/Turquoise	S3000	D8 - Yellow	135	Blue Acme 10L	18.7	11.2	2.2	2.1
45	402.7	44	9.0	20	Turquoise	S3000	D8 - Yellow	140	Blue Acme 10L	18.4	11.1	2.3	2.3
46	411.7	45	9.0	20	Turquoise	S3000	D8 - Yellow	144	Blue Acme 10L	18.2	11.1	2.3	2.3
47	420.7	46	9.0	20	Turquoise	S3000	D8 - Yellow	147	Blue Acme 10L	18.0	11.1	2.4	2.3
48	429.7	47	9.0	21	Turq/Yellow	S3000	D8 - Yellow	149	Blue Acme 10L	17.8	11.1	2.4	2.5
49	438.7	48	9.0	21	Turq/Yellow	S3000	D8 - Yellow	151	Blue Acme 10L	17.6	11.1	2.5	2.5
50	447.7	49	9.0	21	Turq/Yellow	S3000	D8 - Yellow	152	Blue Acme 10L	17.5	11.1	2.5	2.5
51	456.6	50	8.9	21	Turq/Yellow	S3000	D8 - Yellow	152	Blue Acme 10L	17.4	11.1	2.5	2.5
52	465.6	51	9.0	21	Turq/Yellow	S3000	D8 - Yellow	151	Blue Acme 10L	17.4	11.1	2.6	2.5
53	474.6	52	9.0	22	Yellow	S3000	D8 - Yellow	149	Blue Acme 10L	17.3	11.1	2.7	2.8
54	483.6	53	9.0	22	Yellow	S3000	D8 - Yellow	147	Blue Acme 10L	17.3	11.1	2.7	2.8
55	492.6	54	9.0	22	Yellow	S3000	D8 - Yellow	144	Blue Acme 10L	17.4	11.1	2.7	2.8
56	501.5	55	8.9	22	Yellow	S3000	D8 - Yellow	140	Blue Acme 10L	17.4	11.0	2.8	2.8
57	510.5	56	9.0	22	Yellow	S3000	D8 - Yellow	135	Blue Acme 10L	17.5	11.0	2.9	2.8
58	519.5	57	9.0	23	Yellow/Red	S3000	D8 - Yellow	129	Blue Acme 10L	17.6	11.0	2.9	3.0
59	528.5	58	9.0	23	Yellow/Red	S3000	D8 - Yellow	123	Blue Acme 10L	17.8	11.0	3.0	3.0
60	537.5	59	9.0	23	Yellow/Red	S3000	D8 - Yellow	116	Blue Acme 10L	17.9	11.0	3.1	3.0
	542.2		Tower Number : 3		Span Length : 180.1								
61	546.8	60	9.3	23	Yellow/Red	S3000	D8 - Yellow	116	Blue Acme 10L	17.9	11.0	3.1	3.0

Parent Order No 10996758

Dealer Agri Industries

Customer PAT COLGAN

Field Name

Sprinkler Order No 10996845

Valley Standard Pivot 7000 Machine Sprinkler Chart

Cpl No	Dist From Pivot	Spk No	Dist Last Spk	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length	Regulator	Line PSI	Spk PSI	Rqd GPM	Act GPM
62	555.8	61	9.0	23	Yellow/Red	S3000	D8 - Yellow	123	Blue Acme 10L	17.5	11.0	3.1	3.0
63	564.8	62	9.0	24	Red	S3000	D8 - Yellow	129	Blue Acme 10L	17.2	11.0	3.2	3.3
64	573.8	63	9.0	24	Red	S3000	D8 - Yellow	135	Blue Acme 10L	16.9	11.0	3.2	3.3
65	582.8	64	9.0	24	Red	S3000	D8 - Yellow	140	Blue Acme 10L	16.7	11.0	3.3	3.3
66	591.8	65	9.0	24	Red	S3000	D8 - Yellow	144	Blue Acme 10L	16.4	10.9	3.3	3.3
67	600.8	66	9.0	24	Red	S3000	D8 - Yellow	147	Blue Acme 10L	16.2	10.9	3.4	3.3
68	609.8	67	9.0	25	Red/White	S3000	D8 - Yellow	149	Blue Acme 10L	16.1	10.9	3.4	3.6
69	618.8	68	9.0	24	Red	S3000	D8 - Yellow	151	Blue Acme 10L	15.9	10.9	3.5	3.3
70	627.8	69	9.0	25	Red/White	S3000	D8 - Yellow	152	Blue Acme 10L	15.8	10.9	3.5	3.6
71	636.7	70	8.9	25	Red/White	S3000	D8 - Yellow	152	Blue Acme 10L	15.8	10.9	3.6	3.5
72	645.7	71	9.0	25	Red/White	S3000	D8 - Yellow	151	Blue Acme 10L	15.7	10.8	3.6	3.5
73	654.7	72	9.0	26	White	S3000	D8 - Yellow	149	Blue Acme 10L	15.7	10.8	3.7	3.8
74	663.7	73	9.0	25	Red/White	S3000	D8 - Yellow	147	Blue Acme 10L	15.7	10.8	3.7	3.5
75	672.7	74	9.0	26	White	S3000	D8 - Yellow	144	Blue Acme 10L	15.7	10.8	3.8	3.8
76	681.6	75	8.9	26	White	S3000	D8 - Yellow	140	Blue Acme 10L	15.8	10.8	3.8	3.8
77	690.6	76	9.0	26	White	S3000	D8 - Yellow	135	Blue Acme 10L	15.9	10.8	3.9	3.8
78	699.6	77	9.0	26	White	S3000	D8 - Yellow	129	Blue Acme 10L	16.0	10.7	3.9	3.8
79	708.6	78	9.0	27	White/Blue	S3000	D8 - Yellow	123	Blue Acme 10L	16.2	10.7	4.0	4.1
80	717.6	79	9.0	27	White/Blue	S3000	D8 - Yellow	116	Blue Acme 10L	16.4	10.7	4.1	4.1
	722.3		Tower Number : 4		Span Length : 180.1								
81	726.9	80	9.3	27	White/Blue	S3000	D8 - Yellow	116	Blue Acme 10L	16.3	10.7	4.1	4.1
82	735.9	81	9.0	27	White/Blue	S3000	D8 - Yellow	123	Blue Acme 10L	16.0	10.7	4.1	4.1
83	744.9	82	9.0	27	White/Blue	S3000	D8 - Yellow	129	Blue Acme 10L	15.7	10.6	4.2	4.1
84	753.9	83	9.0	28	Blue	S3000	D8 - Yellow	135	Blue Acme 10L	15.4	10.6	4.2	4.5
85	762.9	84	9.0	27	White/Blue	S3000	D8 - Yellow	140	Blue Acme 10L	15.2	10.6	4.3	4.1
86	771.9	85	9.0	28	Blue	S3000	D8 - Yellow	144	Blue Acme 10L	15.0	10.6	4.3	4.4
87	780.9	86	9.0	28	Blue	S3000	D8 - Yellow	147	Blue Acme 10L	14.8	10.6	4.4	4.4
88	789.9	87	9.0	28	Blue	S3000	D8 - Yellow	149	Blue Acme 10L	14.7	10.6	4.4	4.4
89	798.9	88	9.0	28	Blue	S3000	D8 - Yellow	151	Blue Acme 10L	14.5	10.6	4.5	4.4
90	807.9	89	9.0	28	Blue	S3000	D8 - Yellow	152	Blue Acme 10L	14.4	10.6	4.5	4.4
91	816.8	90	8.9	28	Blue	S3000	D8 - Yellow	152	Blue Acme 10L	14.4	10.5	4.6	4.4
92	825.8	91	9.0	29	Blue/Dark Brown	S3000	D8 - Yellow	151	Blue Acme 10L	14.4	10.5	4.6	4.7
93	834.8	92	9.0	29	Blue/Dark Brown	S3000	D8 - Yellow	149	Blue Acme 10L	14.4	10.5	4.7	4.7
94	843.8	93	9.0	29	Blue/Dark Brown	S3000	D8 - Yellow	147	Blue Acme 10L	14.4	10.5	4.7	4.7

Parent Order No 10996758 | Dealer Agri Industries | Sprinkler Order No 10996845

Customer PAT COLGAN

Field Name

Valley Standard Pivot 7000 Machine Sprinkler Chart

Cpl No	Dist From Pivot	Spk No	Dist Last Spk	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length	Regulator	Line PSI	Spk PSI	Rqd GPM	Act GPM
95	852.8	94	9.0	29	Blue/Dark Brown	S3000	D8 - Yellow	144	Blue Acme 10L	14.4	10.5	4.8	4.7
96	861.7	95	8.9	29	Blue/Dark Brown	S3000	D8 - Yellow	140	Blue Acme 10L	14.5	10.4	4.8	4.7
97	870.7	96	9.0	30	Dark Brown	S3000	D8 - Yellow	135	Blue Acme 10L	14.6	10.4	4.9	5.0
98	879.7	97	9.0	30	Dark Brown	S3000	D8 - Yellow	129	Blue Acme 10L	14.8	10.4	4.9	5.0
99	888.7	98	9.0	30	Dark Brown	S3000	D8 - Yellow	123	Blue Acme 10L	15.0	10.4	5.0	5.0
100	897.7	99	9.0	30	Dark Brown	S3000	D8 - Yellow	116	Blue Acme 10L	15.2	10.4	5.1	5.0
	902.4		Tower Number : 5		Span Length : 180.1								
101	907.0	100	9.3	30	Dark Brown	S3000	D8 - Yellow	116	Blue Acme 10L	15.1	10.3	5.2	5.0
102	916.0	101	9.0	30	Dark Brown	S3000	D8 - Yellow	123	Blue Acme 10L	14.8	10.3	5.1	5.0
103	925.0	102	9.0	31	Dk Brown/Orange	S3000	D8 - Yellow	129	Blue Acme 10L	14.5	10.3	5.2	5.3
104	934.0	103	9.0	31	Dk Brown/Orange	S3000	D8 - Yellow	135	Blue Acme 10L	14.3	10.3	5.2	5.3
105	943.0	104	9.0	31	Dk Brown/Orange	S3000	D8 - Yellow	140	Blue Acme 10L	14.1	10.3	5.3	5.3
106	952.0	105	9.0	31	Dk Brown/Orange	S3000	D8 - Yellow	144	Blue Acme 10L	13.9	10.3	5.3	5.3
107	961.0	106	9.0	31	Dk Brown/Orange	S3000	D8 - Yellow	147	Blue Acme 10L	13.7	10.2	5.4	5.3
108	970.0	107	9.0	31	Dk Brown/Orange	S3000	D8 - Yellow	149	Blue Acme 10L	13.6	10.2	5.4	5.3
109	979.0	108	9.0	32	Orange	S3000	D8 - Yellow	151	Blue Acme 10L	13.5	10.2	5.5	5.7
110	988.0	109	9.0	32	Orange	S3000	D8 - Yellow	152	Blue Acme 10L	13.4	10.2	5.5	5.7
111	996.9	110	8.9	31	Dk Brown/Orange	S3000	D8 - Yellow	152	Blue Acme 10L	13.4	10.2	5.6	5.3
112	1005.9	111	9.0	32	Orange	S3000	D8 - Yellow	151	Blue Acme 10L	13.3	10.1	5.6	5.7
113	1014.9	112	9.0	32	Orange	S3000	D8 - Yellow	149	Blue Acme 10L	13.4	10.1	5.7	5.7
114	1023.9	113	9.0	32	Orange	S3000	D8 - Yellow	147	Blue Acme 10L	13.4	10.1	5.7	5.7
115	1032.9	114	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	144	Blue Acme 10L	13.5	10.1	5.8	6.0
116	1041.8	115	8.9	32	Orange	S3000	D8 - Yellow	140	Blue Acme 10L	13.6	10.1	5.8	5.7
117	1050.8	116	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	135	Blue Acme 10L	13.7	10.1	5.9	6.0
118	1059.8	117	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	129	Blue Acme 10L	13.9	10.1	5.9	6.0
119	1068.8	118	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	123	Blue Acme 10L	14.1	10.1	6.0	6.0
120	1077.8	119	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	116	Blue Acme 10L	14.3	10.0	6.2	6.0
	1082.5		Tower Number : 6		Span Length : 180.1								
121	1087.1	120	9.3	34	Dark Green	S3000	D8 - Yellow	116	Blue Acme 10L	14.3	10.0	6.2	6.4
122	1096.1	121	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	123	Blue Acme 10L	14.0	10.0	6.1	6.0
123	1105.1	122	9.0	34	Dark Green	S3000	D8 - Yellow	129	Blue Acme 10L	13.7	10.0	6.2	6.4
124	1114.1	123	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	135	Blue Acme 10L	13.5	10.0	6.3	6.0
125	1123.1	124	9.0	34	Dark Green	S3000	D8 - Yellow	140	Blue Acme 10L	13.3	9.9	6.3	6.4
126	1132.1	125	9.0	34	Dark Green	S3000	D8 - Yellow	144	Blue Acme 10L	13.1	9.9	6.4	6.3

Parent Order No 10996758

Dealer Agri Industries

Customer PAT COLGAN

Field Name

Sprinkler Order No 10996845

Valley Standard Pivot 7000 Machine Sprinkler Chart

Cpl No	Dist From Pivot	Spk No	Dist Last Spk	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length	Regulator	Line PSI	Spk PSI	Rqd GPM	Act GPM
127	1141.1	126	9.0	34	Dark Green	S3000	D8 - Yellow	147	Blue Acme 10L	13.0	9.9	6.4	6.3
128	1150.1	127	9.0	35	Dk Green/Purple	S3000	D8 - Yellow	149	Blue Acme 10L	12.9	9.9	6.5	6.7
129	1159.1	128	9.0	34	Dark Green	S3000	D8 - Yellow	151	Blue Acme 10L	12.8	9.9	6.5	6.3
130	1168.1	129	9.0	35	Dk Green/Purple	S3000	D8 - Yellow	152	Blue Acme 10L	12.7	9.9	6.5	6.7
131	1177.0	130	8.9	35	Dk Green/Purple	S3000	D8 - Yellow	152	Blue Acme 10L	12.7	9.9	6.6	6.7
132	1186.0	131	9.0	35	Dk Green/Purple	S3000	D8 - Yellow	151	Blue Acme 10L	12.7	9.9	6.7	6.7
133	1195.0	132	9.0	35	Dk Green/Purple	S3000	D8 - Yellow	149	Blue Acme 10L	12.7	9.8	6.7	6.7
134	1204.0	133	9.0	35	Dk Green/Purple	S3000	D8 - Yellow	147	Blue Acme 10L	12.8	9.8	6.8	6.7
135	1213.0	134	9.0	35	Dk Green/Purple	S3000	D8 - Yellow	144	Blue Acme 10L	12.9	9.8	6.8	6.7
136	1221.9	135	8.9	35	Dk Green/Purple	S3000	D8 - Yellow	140	Blue Acme 10L	13.0	9.8	6.8	6.7
137	1230.9	136	9.0	36	Purple	S3000	D8 - Yellow	135	Blue Acme 10L	13.2	9.9	6.9	7.0
138	1239.9	137	9.0	36	Purple	S3000	D8 - Yellow	129	Blue Acme 10L	13.3	9.9	7.0	7.0
139	1248.9	138	9.0	36	Purple	S3000	D8 - Yellow	123	Blue Acme 10L	13.6	9.9	7.0	7.0
140	1257.9	139	9.0	36	Purple	S3000	D8 - Yellow	116	Blue Acme 10L	13.8	9.9	7.2	7.0
	1262.6		Tower Number : 7		Span Length : 180.1								
141	1267.2	140	9.3	37	Purple/Black	S3000	D8 - Yellow	116	Blue Acme 10L	13.8	9.9	7.2	7.5
142	1276.2	141	9.0	36	Purple	S3000	D8 - Yellow	123	Blue Acme 10L	13.5	9.9	7.2	7.0
143	1285.2	142	9.0	37	Purple/Black	S3000	D8 - Yellow	129	Blue Acme 10L	13.3	9.9	7.2	7.5
144	1294.2	143	9.0	36	Purple	S3000	D8 - Yellow	135	Blue Acme 10L	13.0	9.9	7.3	7.0
145	1303.2	144	9.0	37	Purple/Black	S3000	D8 - Yellow	140	Blue Acme 10L	12.9	9.9	7.3	7.5
146	1312.2	145	9.0	37	Purple/Black	S3000	D8 - Yellow	144	Blue Acme 10L	12.7	9.9	7.4	7.5
147	1321.2	146	9.0	37	Purple/Black	S3000	D8 - Yellow	147	Blue Acme 10L	12.6	9.9	7.4	7.5
148	1330.2	147	9.0	37	Purple/Black	S3000	D8 - Yellow	149	Blue Acme 10L	12.5	9.9	7.5	7.5
149	1339.2	148	9.0	37	Purple/Black	S3000	D8 - Yellow	151	Blue Acme 10L	12.4	9.9	7.5	7.5
150	1348.2	149	9.0	37	Purple/Black	S3000	D8 - Yellow	152	Blue Acme 10L	12.4	9.9	7.5	7.5
151	1357.1	150	8.9	37	Purple/Black	S3000	D8 - Yellow	152	Blue Acme 10L	12.4	9.9	7.6	7.5
152	1366.1	151	9.0	37	Purple/Black	S3000	D8 - Yellow	151	Blue Acme 10L	12.4	9.9	7.7	7.5
153	1375.1	152	9.0	37	Purple/Black	S3000	D8 - Yellow	149	Blue Acme 10L	12.4	9.9	7.7	7.5
154	1384.1	153	9.0	38	Black	S3000	D8 - Yellow	147	Blue Acme 10L	12.5	9.9	7.8	7.9
155	1393.1	154	9.0	38	Black	S3000	D8 - Yellow	144	Blue Acme 10L	12.6	9.9	7.8	7.9
156	1402.0	155	8.9	38	Black	S3000	D8 - Yellow	140	Blue Acme 10L	12.7	9.9	7.8	7.9
157	1411.0	156	9.0	38	Black	S3000	D8 - Yellow	135	Blue Acme 10L	12.9	9.9	7.9	7.9
158	1420.0	157	9.0	38	Black	S3000	D8 - Yellow	129	Blue Acme 10L	13.1	9.9	8.0	7.9
159	1429.0	158	9.0	38	Black	S3000	D8 - Yellow	123	Blue Acme 10L	13.3	9.9	8.0	7.9

Parent Order No **10996758**

Dealer **Agri Industries**

Customer **PAT COLGAN**

Field Name

Sprinkler Order No **10996845**

Valley Standard Pivot 7000 Machine Sprinkler Chart

Cpl No	Dist From Pivot	Spk No	Dist Last Spk	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length	Regulator	Line PSI	Spk PSI	Rqd GPM	Act GPM
160	1438.0	159	9.0	38	Black	S3000	D8 - Yellow	116	Blue Acme 10L	13.6	9.9	8.1	7.9
161	1441.8		3.8	B.P.									
	1442.4		Tower Number : 8		Span Length : 179.8								
162	1447.0	160	9.0	39	Black/Dk Turq	S3000	D8 - Yellow	114	Blue Acme 10L	13.6	9.9	8.2	8.4
163	1456.1	161	9.1	39	Black/Dk Turq	S3000	D8 - Yellow	118	Blue Acme 10L	13.5	9.9	8.3	8.4
164	1465.3	162	9.2	39	Black/Dk Turq	S3000	D8 - Yellow	123	Blue Acme 10L	13.3	9.9	8.3	8.4
165	1468.9		3.5	Plug									
166	1474.4	163	9.1	39	Black/Dk Turq	S3000	D8 - Yellow	127	Blue Acme 10L	13.1	9.9	8.4	8.4
167	1483.6	164	9.1	39	Black/Dk Turq	S3000	D8 - Yellow	131	Blue Acme 10L	12.9	9.9	8.5	8.4
168	1492.7	165	9.2	41	Dk Turq/Mustard	S3000	D8 - Yellow	136	Blue Acme 10L	12.7	9.9	9.4	9.3
		Sprinkler : Senninger Spray											
169	1496.3	166	3.5	19	Black	Directional				12.4	12.4	8.8	8.7
	1497.3			Overhang	Span Length : 54.8								
		Sprinkler : Nelson Endgun											
170	1497.3	167	1.0	0.7		SR100				12.4	43.1	91.7	91.6

Endgun Arc Settings: Forward Angle: 45 Reverse Angle: 85

802.7

Parent Order No 10996758

Dealer Agri Industries

Customer PAT COLGAN

Field Name

Sprinkler Order No 10996845

Valley Standard Pivot 7000 Percent Timer Data

Setup Information - Valley Computer Control Panel Water Application Constants: Minimum Application = 0.155 Hours Per Revolution = 8.0

Based on Inches

Inches Per 180 Degrees	Pivot % Timer	Hours Per 180 Degrees
0.155	100.0	8.0
0.20	77.4	10.3
0.30	51.6	15.5
0.40	38.7	20.7
0.50	31.0	25.8
0.60	25.8	31.0
0.70	22.1	36.2
0.80	19.4	41.2
0.90	17.2	46.5
1.00	15.5	51.6
1.25	12.4	64.5
1.50	10.3	77.7
1.75	8.9	89.9
2.00	7.7	103.9
2.50	6.2	129.0
3.00	5.2	153.8

Based on % Timer

Pivot % Timer	Inches Per 180 Degrees	Hours Per 180 Degrees
100.0	0.155	8.0
90.0	0.17	8.9
80.0	0.19	10.0
70.0	0.22	11.4
60.0	0.26	13.3
50.0	0.31	16.0
45.0	0.34	17.8
40.0	0.39	20.0
35.0	0.44	22.9
30.0	0.52	26.7
25.0	0.62	32.0
20.0	0.77	40.0
17.5	0.89	45.7
15.0	1.03	53.3
12.5	1.24	64.0
10.0	1.55	80.0
7.5	2.07	106.7
5.0	3.10	160.0

Field Area

91.3 Acres Total
80.8 Acres: Pivot 180°
10.5 EG on 100%
1497.3 Ft. Machine Length
93.9 Ft. End Gun Radius

Flow

800 Gallons Per Minute
8.76 GPM/Acre
0.46 In/Day App Rate
0.155 In. App Depth @ 100%
91.6 GPM End Gun

Pressure

24 PSI Pivot Pressure
Calculated Pressure
0.0 Ft. Highest Elevation
0.0 Ft. Lowest Elevation

LRDU Drive Train

34 RPM Center Drive @ 60 Hz freq.
11.2 x 38 Tire
52:1 Wheel GB Ratio, LRDU Dist 1442.4 Ft.
8.0 Hrs/180 @ 100% (9.45)Ft/Min

Disclaimer

The information presented in the attached Percent Timer Report is based on variables which cannot be totally controlled by Valmont (including, but not limited to; pivot pressure, inside pipeline surface, end gun throw, end gun arc setting, tire slippage, tire pressure, field slopes, soil variations, sprinkler package installation, well capacity, center drive motor voltage, center drive motor frequency, climatic conditions and other elements and circumstances beyond Valmont's reasonable control). Valmont recommends monitoring the machine for at least one pass through field to obtain an accurate rotation time.

November 15, 2024

To whom it may concern:

This is an agreement between Larry and Laurie Handy Trust and Patrick Colgan addressing the irrigation of 40 acres in Section 27, Twp 27 N, Range 51 E. Larry and Lauri Handy Trust own the property in Section 27, Twp 27N, Range 51E and Patrick Colgan owns the pivot to convey the irrigation water on the property. We agree that Patrick Colgan can apply for Reserved Water through the Richland County Conservation District on this property.

Larry and Lauri Handy Trust

Larry Handy 12-2-24

Larry Handy, Trustee Date

Lauri Handy 12/3/24

Lauri Handy, Trustee Date

We, Tom and Marquieta Colgan own the N2 of Sec 34, T27N, R51E in Richland County, Montana. Patrick Colgan has a lifetime lease on this property. He owns the pivot on the property. We agree that he can apply for reserved water through the Richland County Conservation District on this property.

Tom Colgan 10-31-24

Tom Colgan Date

Marquieta Colgan 10-31-2024

Marquieta Colgan Date

CONSERVATION DISTRICT RESERVED WATER USE AUTHORIZATION
§85-2-316, MCA
Form No. 102 (Revised 02/2024)

When to use this form:
This form is for the issuance of a Reserved Water Use Authorization.

Conservation District Name: Richland County Conservation District

CD Water Reservation No: 40S 84500-00

Upon determination that the criteria for issuance of a reserved water use authorization have been met, this Authorization is hereby issued to:

1. Applicant Name: Pat Colgan
   Mailing Address: 30678 County Rd 149 City Poplar State MT Zip 59255
   Phone Numbers: 406-525-3515 Cell 406-688-9435
   Email Address: _____
2. Authorization Number: RI-034M Internal Priority Date: 04-17-2023 9:40am
3. Source of Water Supply: Missouri River
   A tributary of _____
4. Total Amount: 800 gpm (1.8 cfs) up to 294 acre-ft per Anum
5. Period of Use: 4/1 Month/Day to 10/31 Month/Day
6. Point of Diversion:

LOT	¼	¼	¼	SEC	TWP N/S	RGE E/W	COUNTY
5	NW	SE	SE	27	27N	51E	Richland

7. Place of Use:

N = New S = Supplemental

ACRES	LOT	¼	¼	¼	SEC	TWP N/S	RGE E/W	COUNTY	N/S
93				N2	34	27N	51E	Richland	N
29				S2SW	27	27N	51E	Richland	N

8. Means of Diversion: Pump
9. Means of Flow Measurement: Operation records such as electricity use, crop use requirements, or water measuring device
10. Standard and Special Terms, Conditions, Restrictions, and Limitations:

STANDARD TERMS:

Completion:
The diversion and distribution work for this use shall be completed, and water shall be applied to a beneficial use as specified above, on or before January 10th, 20 28, or within any authorized extension of time. The Notice of Completion of Water Development, Form 106, shall be filed on or before January 10th, 20 28.

Compliance with Board and Conservation District Rules, Regulations, and Requirements:
Authorization is subject to the order, rules, regulations, and requirements governing the water reservation and the laws of the State of Montana. Further, this Authorization is subject to the administrative rules, regulations, and procedures adopted by the Conservation District governing the water reservations, which by the reference is made a condition of the Authorization.

Control:
The Conservation District has exclusive control over the reservation by the Board. The authorization holder receives no right, title, ownership, control, or interest in the water reservation.

Revocations:
Failure to comply with the provisions of the Authorization including submission of the annual water user report, may result in revocation of the Authorization.

Senior Rights:
This Authorization is subject to all prior existing water rights in the source of supply. Further, this Authorization is subject to any final determination of existing water rights, as provided by Montana law.

Transfer of Authorization:
Upon a change in ownership of all or any portion of land associated with this Authorization, the person receiving the interest shall file a Notice of Transfer of Reserved Water Use Authorization, Form 109, with the Conservation District.

Water Status Annual Report
Notify the Conservation District whether any water had been used under the authorization or not. Complete and submit Water User Annual Status Report, Form 103, by November 1 annually. If the infrastructure for the use of the water have not been completed, give details of progress toward completion and if an extension of time is required, fill out and submit Application for Extension of Time, Form 108, to the Conservation District.

SPECIAL TERMS:

This Authorization is subject to the type of water use measuring device or water use estimation technique required by the Conservation District. The water user shall maintain the measuring device, so it always operates properly and measures flow rate and volume accurately. The water user shall keep written records of the flow rate and volume of water used. Records shall be submitted by November 15 of each year and upon request at

other times during the year. Failure to submit the *Water Use Annual Status Report* (Form 103) may be cause for revocation of this Authorization. The annual status report must be sent to the Conservation District Office.

Others:

The diversion is shared with authorization RI-017 which was issued with an inaccurate legal land description. The CD and CDB will work to correct the DNRC and CD records so they match.

Additionally, an associated remark shall be added to the DNRC record for both authorizations.

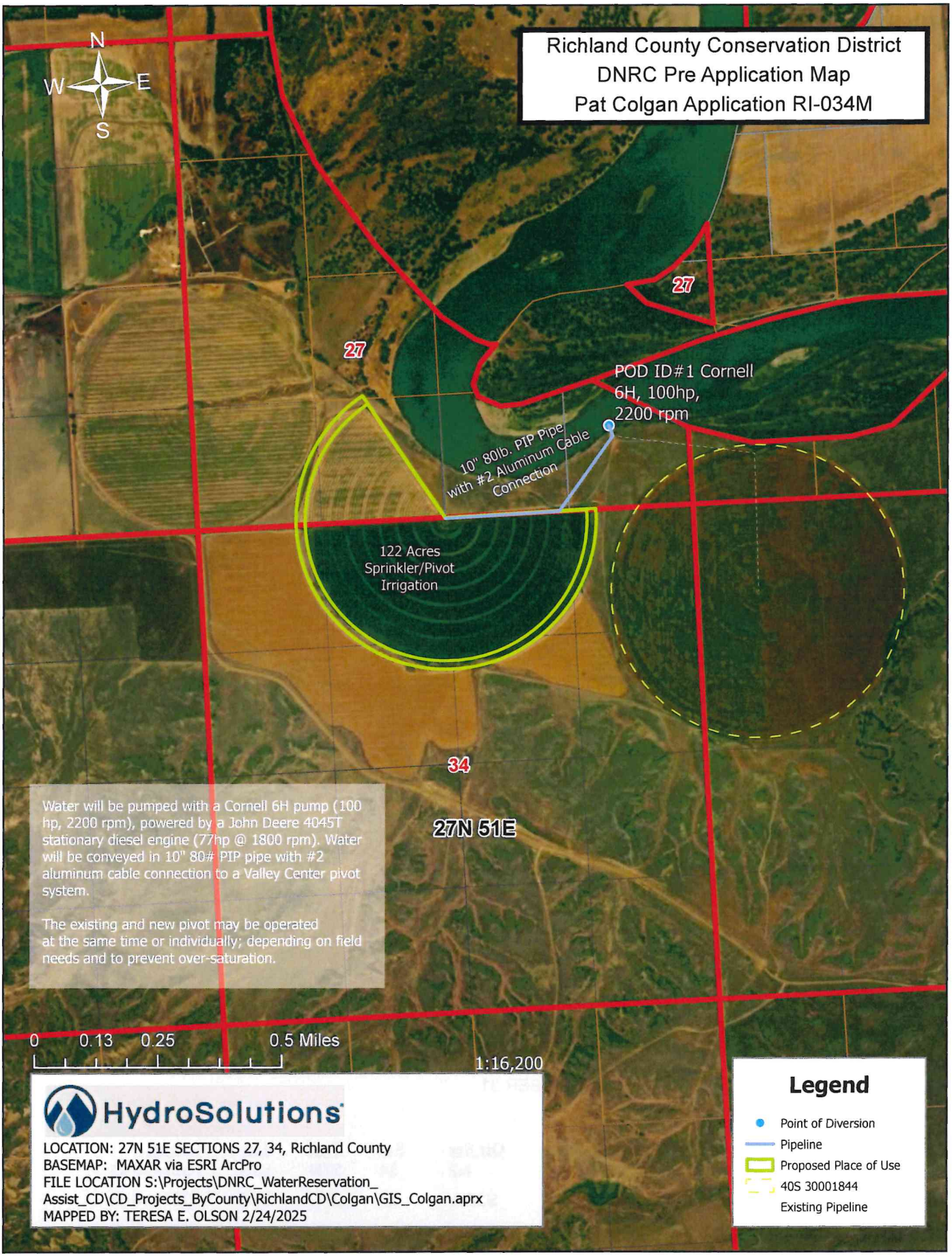
APPROVAL:

Shawn Conradsen — Chairman Printed Name — 1-10-2025 — Date

Chairman Signature — 1-10-2025 — Date

Julie Goss — District Administrator Printed Contact Name — 1-10-2025 — Date

Julie Goss — District Administrator Signature — 1-10-2025 — Date


Richland County Conservation District
DNRC Pre Application Map
Pat Colgan Application RI-034M
N
W
E
S
27
27
POD ID#1 Cornell
6H, 100hp,
2200 rpm
10" 80lb. PIP Pipe
with #2 Aluminum Cable
Connection
122 Acres
Sprinkler/Pivot
Irrigation
34
27N 51E
Water will be pumped with a Cornell 6H pump (100 hp, 2200 rpm), powered by a John Deere 4045T stationary diesel engine (77hp @ 1800 rpm). Water will be conveyed in 10" 80# PIP pipe with #2 aluminum cable connection to a Valley Center pivot system.
The existing and new pivot may be operated at the same time or individually; depending on field needs and to prevent over-saturation.
0
0.13
0.25
0.5 Miles
1:16,200
HydroSolutions
LOCATION: 27N 51E SECTIONS 27, 34, Richland County
BASEMAP: MAXAR via ESRI ArcPro
FILE LOCATION S:\Projects\DNRC_WaterReservation_Assist_CD\CD_Projects_ByCounty\RichlandCD\Colgan\GIS_Colgan.aprx
MAPPED BY: TERESA E. OLSON 2/24/2025
Legend
Point of Diversion
Pipeline
Proposed Place of Use
40S 30001844
Existing Pipeline

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O. BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number: 40S 30165160 CONSERVATION DISTRICT RECORD **CD Number:** RI-034 M

Version: 1 -- ORIGINAL RIGHT

Version Status: ACTIVE

Owners:

PATRICK W COLGAN
30678 COUNTY RD 149
POPLAR, MT 59255

RICHLAND COUNTY CONSERVATION DISTRICT
2745 W HOLLY
SIDNEY, MT 59270

Priority Date: JULY 1, 1985 at 08:00 A.M.

Enforceable Priority Date: JULY 1, 1985 at 08:00 A.M.

Internal Priority Date: APRIL 17, 2023 AT 09:40 A.M.

Purpose (Use): IRRIGATION

Maximum Flow Rate: 1.80 CFS

Maximum Volume: 294.00 AC-FT

Maximum Acres: 122.00

Source Name: MISSOURI RIVER

Source Type: SURFACE WATER

Point of Diversion and Means of Diversion:

ID	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1	5	NWSESE	27	27N	51E	RICHLAND

Period of Diversion: APRIL 1 TO OCTOBER 31 **Flow Rate:** 1.80 CFS

Diversion Means: PUMP

Purpose (Use): IRRIGATION

Irrigation Type: SPRINKLER

Climatic Area: 2 - MODERATELY HIGH

Volume:

Perfected Flow Rate:

Perfected Volume:

Period of Use: APRIL 1 to OCTOBER 31

Place of Use:

ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1	93.00		N2	34	27N	51E	RICHLAND
2	29.00		S2SW	27	27N	51E	RICHLAND
Total:	122.00						

Geocodes/Valid: -- NO VALID GEOCODES --

Remarks:

ASSOCIATED RIGHT

THE DIVERSION IS SHARED WITH 40S 3001844 (RI-017)

CONSERVATION DISTRICT REMARK

THE SHARED DIVERSION WAS ISSUED WITH AN INACCURATE LEGAL LAND DESCRIPTION. THIS WILL BE CORRECTED BY THE CD AND CONSERVATION DISTRICTS BUREAU. - MH 1/13/2025

CONSERVATION DISTRICT WATER MEASUREMENT

METHOD OF WATER USE MEASUREMENT WILL BE BY FLOWMETER. THE MEASUREMENT OF WATER USED WILL BE RECORDED AND REPORTED TO THE CONSERVATION DISTRICT ANNUALLY BY NOVEMBER 15.

PUBLIC NOTICE

Notice to Water Users

THE FOLLOWING APPLICATION HAS BEEN SUBMITTED FOR RESERVED WATER USE TO THE **RICHLAND COUNTY CONSERVAITON DISTRICT.**

Remarks

Important Information:

- During the Public Notice of a new Reserved Water Use Authorization application, objections may be submitted for a 30-day period to the Conservation District using Objection to Application for Reserved Water Use Authorization, Form 107. Objections received outside this period will not be accepted or considered valid.

NAME:	Patrick Colgan
APPLICATION NO:	RI-034M
DATE FILED:	4/17/2023
INTERNAL PRIORITY DATE:	7/1/1985
WATER SOURCE:	Missouri River
TOTAL AMOUNT:	294 AF
PERIOD OF APPROPRIATION:	4/1/ to 10/31
DIVERSION POINT:	L5 Section 27, 27N 51E Richland County
DIVERSION MEANS:	Cornell 6H 100 HP Pump
USE:	Irrigation
PLACE OF USE:	122 acres in the N2 Sec 34, 27N, 51E and S2SW Sec 27, 27N, 51E

COMMENTS OR OBJECTIONS to the issuance of an authorization under this application must be received by the Richland County Conservation District , 2745 W Holly ST, Sidney, MT 59270 (address), 406-433-2103 x 3 (phone number), on or

Before _____ (date). Objection forms are available from the Richland County Conservation District. The Conservation District will review this application and any objections at their _____, (date) meeting at 4:00 PM (time), at the district office.

Assistance or questions regarding this application should be directed to the Richland County Conservation District, 2745 W Holly ST, Sidney, MT 59270 , (address), 4 0 6 -433-2103 (phone number).

PUBLISHED IN THE **Roundup** (publication name) on _____(date).

AFFIDAVIT OF PUBLICATION

Linda Wells, being first duly sworn, deposes and says that she is the agent to the Publisher of The Roundup Newspaper printed and published one day a week in the City of Sidney, County of Richland, State of Montana. That the notice, a copy of which is hereto attached and submitted by:

Richland County Conservation District
Julie Goss, Administrator
2745 West Holly Street
Sidney, MT 59270

was printed and published in the regular and entire issue of said The Roundup, 111 West Main, Sidney, MT 59270, 406-433-3306 for
1 issue(s), that said publication was made on each of the following dates to with:
December 11, 2024
It was also published in said paper
_____, 2024
It was also published in said paper
_____, 2024
It was also published in said paper
_____, 2024

Linda Wells

Linda Wells

State of Montana)
ss
County of Richland)

Subscribed and sworn to before me this
11th day of December, 2024.

Debbie Schieffer
Notary Public for the State of Montana

DEBBIE SCHIEFFER NOTARIAL SEAL STATE OF MONTANA

DEBBIE SCHIEFFER
NOTARY PUBLIC for the
State of Montana
Residing at Sidney, Montana
My Commission Expires
May 15, 2025

PUBLIC NOTICE
Notice to Water Users

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USE: Irrigation
PLACE OF USE: 122 acres in the N2 Sec 34, 27N, 51E and S2SW Sec 27, 27N, 51E

COMMENTS OR OBJECTIONS to the issuance of an authorization under this application must be received by the Richland County Conservation District, 2745 W Holly ST, Sidney, MT 59270, 406-433-2103 x 3, on or before January 10th, 2025. Objection forms are available from the Richland County Conservation District.

The Conservation District will review this application and any objections at their January 10th, 2025, meeting at 4:00 PM, at the district office.

Assistance or questions regarding this application should be directed to the Richland County Conservation District, 2745 W Holly ST, Sidney, MT 59270, 406-433-2103.

MNAXLP
(Publish December 11, 2024)

CERTIFICATE OF SERVICE – MISSOURI

This certifies a true and correct copy of the public notice for the Conservation District Reserved Water Use Application number RI-034M was served upon all individuals listed below. Notices were served as specified or by first class mail at the addresses shown.

Mike Moss — 12-9-2024

Conservation District Administrator — Date

MT Department of Environmental Quality DEQ Headquarters ATTN: Water Quality Division 1520 East Sixth Avenue Helena, MT 59601	Bureau of Indian Affairs Rocky Mountain Regional Office ATTN: Water Rights and Resources 2021 4th Avenue North Billings, MT 59101
US Fish & Wildlife Service Montana Fish and Wildlife Conservation Office 4052 Bridger Canyon Road Bozeman, MT 59715	Bureau of Reclamation Montana Area Office PO Box 30137 Billings, MT 59107-0137
MT Department of Fish, Wildlife and Parks ATTN: Fisheries Division 1420 East Sixth Avenue PO Box 200701 Helena, MT 59620-0701	US Department of the Interior Billings Field Office ATTN: Office of the Solicitor 2021 4th Avenue North, Suite 112 Billings, MT 59101-1405
MT Department of Fish, Wildlife and Parks Region 6 ATTN: Fisheries Division 1 Airport Road Glasgow, MT 59230	Fort Peck Tribes ATTN: Water Resources Office PO Box 1027 Poplar, MT 59255
MT Department of Natural Resources and Conservation Glasgow Regional Office PO Box 1269 Glasgow, MT 59230-1269	Roosevelt County Conservation District PO Box 517 Culbertson, MT 59218
Montana-Dakota Utilities Co 5181 Southgate Dr. Billings, MT 59101	Richland County Conservation District 2745 West Holly ST Sidney, MT 59270
US Army Corps of Engineers Fort Peck, MT 59223	Patrick Colgan 30678 County Road 149 Poplar MT 59255

INDIVIDUAL NOTICES – sent to all water right owners in the notice area (list names and addresses)	
MARQUIETA M COLGAN 30761 COUNTY RD 149 POPLAR, MT 59255	
ANGELA J CANDEE & TROY CANDEE 31265 COUNTY ROAD 143 POPLAR, MT 59255-9512	
LARRY D JOHNSTON 14148 HIGHWAY 480 POPLAR, MT 59255-9502	
THOMAS F COLGAN 30761 COUNTY RD 149 POPLAR, MT 59255	

Technical Analyses Report/ Scientific Credibility Review

- Departmental Technical Analyses Report/ Scientific Credibility Review
- Any correspondence relating to the Technical Analyses Report

Technical Analyses Report / Scientific Credibility Review

THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

DIRECTOR'S OFFICE: (406) 444-2074
PO BOX 201601

1539 ELEVENTH AVENUE
HELENA, MONTANA 59620-1601

GOVERNOR GREG GIANFORTE

DNRC DIRECTOR AMANDA KASTER

May 1st, 2025

Richland County Conservation District
2745 West Holly St.
Sidney, MT 59270

Subject: Completed Technical Analyses Report for Conservation District Water Reservation Based Change Preapplication No. 40S 30165373

Dear Applicant,

As designated on the submitted Preapplication Meeting Form per §85-2-302(3)(b), MCA, the Department of Natural Resources and Conservation (DNRC or Department) has completed the technical analyses for Beneficial Water Use Change Preapplication No. 40S 30165373 based on the information provided in your Preapplication Meeting Form accepted by the Department on March 21st, 2025. The technical analyses can be found in the attached report.

This Technical Analyses Report **IS**: A collection of facts that the DNRC has gathered, including content provided in the Preapplication Meeting Form materials. The Department will use this data to analyze the criteria in §85-2-316, MCA if you submit an application for the project described in the completed Preapplication Meeting Form.

This Technical Analyses Report **IS NOT**: An analysis or discussion of whether the Preapplication Meeting Form as filed meets the criteria (§85-2-316, MCA).

You have 180 days to submit the Conservation District Application to Change Water Reservation Application Form 606-CD considering the information provided in the technical analyses and Preapplication Meeting Form. If the Application Form is not submitted to the Havre Regional Office by October 28th, 2025, a new preapplication meeting will be required to process the Application with expedited timelines (ARM 36.12.1302(6)(b)). If any details described in the submitted Application are changed from that of the submitted Preapplication Meeting Form, the discounted filing fee and expedited timelines will not apply (ARM 36.12.1302(6)(a)). Please note that the technical analyses will expire one year from the date of this letter (ARM 36.12.1302(8)).

Please let me know if you have any questions.

Best,

Kailee Ingalls

Kailee Ingalls | Water Resource Specialist
Water Resources Division, Havre Regional Office
Montana Department of Natural Resources and Conservation
Physical| 210 6th Ave | Havre MT 59501
Mailing| PO Box 1828 | Havre MT 59501
DESK: 406-808-7126 **EMAIL**: kailee.ingalls@mt.gov

CC: Teresa Olson <tolson@hydrosi.com>

2912 7th Ave. N.

Billings, MT 59101-0906

Conservation District Application to Change Water Reservation Technical Analyses Report

Department of Natural Resources and Conservation (DNRC or Department)
Water Resources Division
Kailee Ingalls, Water Resource Specialist, Havre Regional Office

Application No.	40S 30165373	**Proposed Point of Diversion**	NWSESE, Section 27, Lot 05, T27N, R51E, Richland County.
Applicant	Richland County Conservation District		

Overview

This report analyzes data submitted by the Applicant in support of the above-mentioned water right application. This report provides technical analyses as required under the Administrative Rules of Montana (ARM) 36.12.1303 in support of the water rights criteria assessment as required in §85-2-311, Montana Code Annotated (MCA). This report was completed by regional office staff.

This Conservation District Application to Change Water Reservation Technical Analyses Report contains the following sections:

1.0 Application Details

This application adds a point of diversion and places of use to the Richland County Conservation District Water Reservation (40S 84500-00) that was not included in the original water reservation public notice. The Applicant proposes to divert water from the Missouri River, by means of a pump, from April 1 through October 31 at 1.8 CFS up to 294 AF, from a point in the NWSESE, Section 27, Lot 05, T27N, R51E, Richland County, for Sprinkler Irrigation use from April 1 through October 31. The place of use includes:

Table 1: Proposed Place of Use

QTR	LOT	SECTION	TWN	RANGE	COUNTY
N2		34	27N	51E	RICHLAND
S2SW		27	27N	51E	RICHLAND

The Richland County Conservation District Water Reservation (40S 84500-00) has a flow rate of 61.05 CFS and a volume of 14,518.15 AF remaining in their water reservation prior to this application.

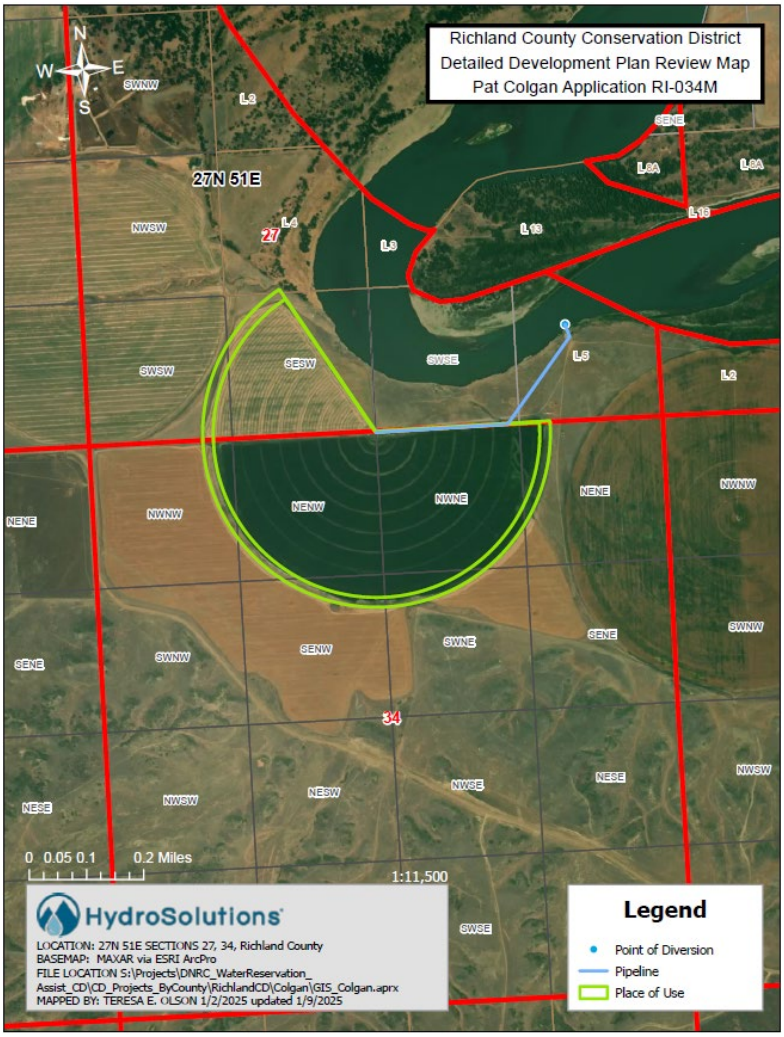

Figure 1: Applicant Provided Map of Proposed Point of Diversion and Place of Use for CD Change Pre-Application No. 40S 30165373

2.0 Historical Use Analysis

2.1 Historical Field Consumed and Applied Volumes

This water right is not supplemental to any other water rights.

Historical place of use, historical acres irrigated, method of irrigation, and historical storage are not considered in this change authorization. This is a new use under the Richland County Conservation District's water reservation, and this section does not apply.

2.2 Historical Conveyance Losses

No historical conveyance losses are considered for the historical use pertaining to this change authorization because this is a new use under the Richland County Conservation District's water reservation, and this section does not apply.

2.3 Historical Diverted Volume

There is no historical diverted volume associated with this change authorization because this is a new use under the Richland County Conservation District's water reservation, and this section does not apply.

2.4 Summary of Historical Use

This application is to change a portion of the water reservation not yet put to use and therefore no historical use for the amount of water being changed exists.

The Department will consider the following values when evaluating the historical use of Richland County Conservation District for the adverse effect criterion: None.

3.0 Surface Water Analysis

3.1 Summary of Proposed Use

The Applicant proposes to use a non-perfected portion of Water Reservation No. 40S 84500-00. The proposed consumed and field applied volumes have been calculated with the inputs shown in Table 2 following the methods described below in ARM 36.12.115 and ARM 36.12.1902.

Proposed Consumptive Volume ((without Irrecoverable Losses (IL)) (AF) =

$$\frac{\text{Wolf Point Seasonal Evapotranspiration } (\frac{\text{in}}{\text{acre}})}{\text{Roosevelt County Management Factor x Proposed Acres x 12 } (\frac{\text{in}}{\text{ft}})}$$

Applied Field Volume = $\frac{Proposed\ Consumptive\ Volume (without\ Irrecoverable\ Losses)}{On-Farm\ Efficieny}$

Proposed Irrecoverable Losses = $\frac{Volume_{proposed\ consumptive\ use}}{On\ Farm\ Efficiency}$ x (5% Flood Irrigation or 10% Sprinkler Irrigation)

Table 2: Proposed Irrigation POU that's located outside the project area identified in the original water reservation application public notice.

Irrigation Method	Acres	IWR (in)[1]	Mgmt. Factor[2]	Field Efficiency	Crop Consumption (AF)	Applied Field Volume (AF)	Irrecoverable Losses (AF)	Total Consumptive Volume (AF)	Non-Consumptive Volume (AF)
Sprinkler	122.00	27.03	74.60	70%	205.00	292.86	29.29	234.29	58.57
Total	122.00	-	-	-	205.00	292.86	29.29	234.29	58.57

[1]Wolf Point IWR Weather Station
[2]Roosevelt County Proposed Use Management Factor 1997-2006

Total Diverted Volume: 292.86 AF

Total Consumptive Volume: 234.29 AF

The following are hydraulically connected surface waters for the purpose of evaluating return flows: There are no return flows to evaluate for this change because this application is to irrigate new acres under a water reservation.

3.2 Source Description

Proposed Source of Water: Missouri River

Proposed Source Type: Perennial

Proposed Point of Diversion: NWSESE, Section 27, Lot 05, T27N, R51E, Richland County.

3.3 Method of Estimation

Gage Name: USGS Missouri River near Culbertson

Gage Number: #06185500

Period of Record: 1958-2024

Why this gage is considered an appropriate data source: According to ARM 6.12.1702, available stream gage records will be used to quantify physical availability using the median of the mean monthly flow rate and volume during the proposed months of diversion. USGS Gage #06185500, Missouri River near Culbertson, is the nearest gage to the proposed POD and is approximately 49 river miles downstream of the POD. The date range includes the entire period of record for this gage.

3.4 Monthly Flow Rate and Volume

Methodology: The physical availability of the Missouri River water at the POD will be quantified monthly. Department practice for physical availability analyses where the gage used is downstream of the POD is to add the monthly flow rates of existing water rights between the gage and the POD to the median of the mean monthly flows at the gage. The DNRC used the method below to quantify physically available monthly flows and volumes at the POD during the proposed period of diversion:

1. The Department calculated the median of the mean monthly flow rates in cubic feet per second (CFS) for the Missouri River using USGS Gage #06185500 records for each month of the proposed period of diversion (Table 3, column B). Those flows were converted to monthly volumes in AF (Table 3, column C) using the following equation found on DNRC Form 615: median of the mean monthly flow (CFS) × 1.98 (AF/day/1 CFS) × days per month = AF/month.
2. The Department calculated the monthly flows appropriated by existing users upstream of the gage on the source (Table 3, column D) by:
    i. Generating a list of existing water rights from the Missouri River POD to USGS Gage #06185500 (list is included in the application file and available upon request);

ii. Calculating the flow rate of all livestock direct from source water rights drinking from the reach of interest using either 30 GPD/AU for Statements of Claim or 15 GPD/AU for all other water rights and adding 35 GPM.

iii. Calculating a volume for all livestock direct from source rights without a designated volume by multiplying the number of AU by 30 GPD/AU for Statements of Claim or 15 GPD/AU for all other water rights.

iv. Calculating a volume for all irrigation rights without a designated volume by multiplying the number of acres by 2.5 AF/AC per Department water use standards for a moderate consumptive use climatic area.

v. Assuming that the flow rate of each existing right is continuously diverted throughout each month of the period of diversion. This assumption is necessary due to the difficulty of differentiating the distribution of appropriated volume over the period of diversion. The Department has determined that this leads to an overestimation of existing uses from the source.

3. Since the gage used is downstream of the POD, the Department added in the flow rates of the existing rights between USGS Gage #06185500 and the POD on the Missouri River (Table 3, column D) to the median of the mean monthly gage values (Table 3, column B) to determine physical availability at the POD (Table 3, column F). Physically available monthly flows were then converted to monthly volumes (Table 3, column G).

Table 3: Physical Availability at the Point of Diversion on the Missouri River

A	B	C	D	E	F	G
Month	**Median of the Mean Monthly Flow at Gage 06185500 (CFS)**	**Median of the Mean Monthly Volume at Gage 06185500 (AF)**	**Existing Rights from Gage 06185500 to POD (CFS)**	**Existing Rights from the POD to Gage 06185500 (AF)**	**Physically Available Water at POD (CFS)**	**Physically Available Water at POD (AF)**
April	8,000	475,200	241.94	3,882.18	8,241.94	479,082.18
May	8,656	531,305	305.20	4,827.53	8,961.20	536,132.81
June	9,547	567,092	323.48	5,117.60	9,870.48	572,209.40
July	9,371	575,192	323.48	5,117.60	9,694.48	580,309.58
August	8,973	550,763	323.48	5,117.60	9,296.48	555,880.34
September	7,836	465,458	317.68	4,946.33	8,153.68	470,404.73
October	6,976	428,187	256.06	4,166.77	7,232.06	432,353.65

4.0 Area of Potential Impact Analysis

The Area of Potential Impact for this application is: The area of potential impact is approximately 49 river miles downstream of the proposed point of diversion. A total of 95 surface water rights exists within the reach. A list of rights can be found in Appendix A.

Why this is an appropriate Area of Potential Impact: The proposed point of diversion is located approximately 49 river miles upstream of the USGS Missouri River near Culbertson. A total of 95 surface water rights exists within the reach, which includes the Montana Fish Wildlife & Parks instream flow right (40S 30017671), and the Fort Peck Tribal Reserved Claim (Fort Peck-Montana Compact, MCA §85-20-201, Article III F.1) (Table 4). A list of rights can be found in Appendix A.

Methodology: A list of water rights that divert from the Missouri River in the location between the point of diversion (NWSESE, Section 27, Lot 05, T27N, R51E, Richland County) and the USGS Missouri River near Culbertson (Section 03, T27N, R56E, Richland County) were compiled using the DNRC GIS web application Converge. Water rights could include all active claims, exempt notices, permits, perfected conservation district reservations, instream flow, tribal rights, and hydropower water rights.

Review

This document has been reviewed by the Department on April 17, 2025.

References

Department Standard Practice for Determining Physical Availability of Surface Water
Department Standard Practice for Determining Area of Potential Impact

Appendix A: Water Rights within the Area of Potential Impact

APPENDIX A				
Water Right #	**Flow (CFS)**	**Volume (AF)**	**Period of Diversion**	**Water Right Type**
MCA 85-20-201	See Table 4	See Table 4	01/01 to 12/31	Reserved Claim
40S 30017671	5,178	3,748,500	01/01 to 12/31	Water Reservation
40S 184965 00*	0.1	7	01/01 to 12/31	Statement of Claim
40S 30142616*	0.1	2	01/01 to 12/31	Statement of Claim
40S 30073870	0.1	1	01/01 to 12/31	Reserved Claim
40S 30142619*	0.1	0	01/01 to 12/31	Statement of Claim
40S 1549 00	1.8	257	01/01 to 12/31	Statement of Claim
40S 30073871	0	304	01/01 to 12/31	Reserved Claim
40S 142790 00	0.5	135	01/01 to 12/31	Statement of Claim
40S 30142621*	0.1	0.03	01/01 to 12/31	Statement of Claim
40S 30051664	2.25	270.6	01/01 to 12/31	Provisional Permit
40S 30142621*	0.08	0.03	01/01 to 12/31	Statement of Claim
40S 30142628*	0.08	0.54	01/01 to 12/31	Statement of Claim
40S 214733 00	0.17	2.5	01/01 to 12/31	Statement of Claim
40S 30142617*	0.08	0.88	01/01 to 12/31	Statement of Claim
40S 30142620*	0.08	1.6	01/01 to 12/31	Statement of Claim
40S 30148233	4.9	3	01/01 to 12/31	Provisional Permit
40S 1508 00**	3.8	348	03/01 to 12/04	Statement of Claim
40S 30046592**	7.4	685	03/01 to 12/04	Statement of Claim
40S 5257 00	3.34	600	03/15 to 11/15	Provisional Permit
40S 101303 00**	1.2	80	04/01 to 09/30	Statement of Claim
40S 2400 00**	4.23	230	04/01 to 09/30	Statement of Claim
40S 30025552	2.8	228	04/01 to 10/01	Conservation District Record
40S 80553 00	4.46	741	04/01 to 10/01	Provisional Permit
40S 46549 00**	3.34	465	04/01 to 10/04	Statement of Claim
40S 30150186	0.8	69	04/01 to 10/15	Conservation District Record
40S 30012791	6	414	04/01 to 10/15	Conservation District Record
40S 30027588	3.9	273	04/01 to 10/15	Conservation District Record
40S 30044041	1.8	177	04/01 to 10/15	Conservation District Record
40S 114741 00	6.55	312.5	04/01 to 10/15	Conservation District Record
40S 116904[34]	6.7	68	04/01 to 10/15	Conservation District Record
40S 30002059	4.9	569	04/01 to 10/15	Conservation District Record
40S 30027595	4.1	283.6	04/01 to 10/15	Conservation District Record
40S 30072073	1.73	224	04/01 to 10/15	Conservation District Record
40S 30104412	1.1	161	04/01 to 10/15	Conservation District Record
40S 30104519	5.08	242.5	04/01 to 10/15	Conservation District Record
40S 30104520	1.57	75	04/01 to 10/15	Conservation District Record

Water Right #	Flow (CFS)	Volume (AF)	Period of Diversion	Water Right Type
40S 30001844	2.6	364	04/01 to 10/15	Conservation District Record
40S 30030883	6.2	0	04/01 to 10/31	Provisional Permit
40S 178507 00**	1.1	70	04/01 to 10/31	Statement of Claim
40S 10761 00	2.2	640	04/01 to 10/31	Provisional Permit
40S 130506 00**	2.89	200	04/01 to 10/31	Statement of Claim
40S 130507 00**	5.67	392.5	04/01 to 10/31	Statement of Claim
40S 182909 00**	3.6	237.5	04/01 to 10/31	Statement of Claim
40S 30151578**	11.49	795	04/01 to 10/31	Statement of Claim
40S 30159245	2.23	220	04/01 to 10/31	Conservation District Record
40S 38071 00	1.07	162	04/01 to 10/31	Provisional Permit
40S 163084 00**	1.9	104	04/01 to 10/31	Statement of Claim
40S 30030881	2.7	0	04/01 to 10/31	Provisional Permit
40S 78203 00	4.5	1202	04/01 to 10/31	Provisional Permit
40S 168965 00**	9.36	682.5	04/01 to 10/31	Statement of Claim
40S 70237 00	7.8	454	04/01 to 10/31	Provisional Permit
40S 89101 00**	3.34	358.78	04/01 to 10/31	Provisional Permit
40S 178504 00**	1.8	400	04/01 to 11/01	Statement of Claim
40S 125402 00**[3]	x	275	04/01 to 11/19	Statement of Claim
40S 214734 00*	0.17	6.868	04/01 to 11/30	Statement of Claim
40S 30043641	0.5	60	04/11 to 11/01	Conservation District Record
40S 57404 00	2.79	486	04/11 to 11/01	Provisional Permit
40S 172266 00	9	1095	04/15 to 10/04	Statement of Claim
40S 101074 00	5.8	927	04/15 to 10/15	Conservation District Record
40S 106990 00	4.2	636	04/15 to 10/15	Conservation District Record
40S 103671 00	2.5	360	04/15 to 10/15	Conservation District Record
40S 101055 00[5]	3.6	560	04/15 to 10/15	Conservation District Record
40S 101076 00	7.35	1272	04/15 to 10/15	Provisional Permit
40S 101092 00	3.6	636	04/15 to 10/15	Conservation District Record
40S 1666 00	4.46	99	04/15 to 10/15	Provisional Permit
40S 30005493	6	768	04/15 to 10/15	Conservation District Record
40S 30024907	2.2	272	04/15 to 10/15	Conservation District Record
40S 30152290	8.91	120	04/15 to 10/15	Provisional Permit
40S 66284 00	4.46	700	04/15 to 10/15	Provisional Permit
40S 106984 00	2.93	284	04/15 to 10/15	Conservation District Record
40S 30006748	1.6	125.95	04/15 to 10/15	Conservation District Record

Water Right #	Flow (CFS)	Volume (AF)	Period of Diversion	Water Right Type
40S 30063091	1.45	92	04/15 to 10/15	Conservation District Record
40S 91841 00	4.34	139.5	04/15 to 10/15	Provisional Permit
40S 42905 00**	1	68	04/15 to 10/19	Statement of Claim
40S 42906 00**	3.6	238	04/15 to 10/19	Statement of Claim
40S 96357 00	5.8	795	04/15 to 10/31	Provisional Permit
40S 11957 00**	1	100	05/01 to 09/19	Statement of Claim
40S 5134 00**	1.4	150	05/01 to 09/30	Statement of Claim
40S 13878 00	13.37	189	05/01 to 09/30	Provisional Permit
40S 5421 00	7.2	1290	05/01 to 09/30	Provisional Permit
40S 130565 00**[5]	x	145	05/01 to 09/30	Statement of Claim
40S 101292 00**	6.2	1738	05/01 to 10/19	Statement of Claim
40S 137 00	5.57	500	05/01 to 10/31	Provisional Permit
40S 89100 00	3.9	292.5	05/01 to 10/31	Provisional Permit
40S 17166 00[3]	x	x	05/01 to 11/01	Provisional Permit
40S 171797 00**	13.37	851.6	05/10 to 09/24	Statement of Claim
40S 46465 00**	11.14	473.25	05/10 to 10/19	Statement of Claim
40S 3215 00[34]	0.11	x	05/15 to 09/19	Statement of Claim
40S 17844 00	1.3	216	06/01 to 08/15	Provisional Permit
40S 30022924	1.3	232	06/01 to 09/01	Provisional Permit
40S 4947 00	1.9	350	06/01 to 09/01	Provisional Permit
40S 30022935	1.3	240	06/01 to 09/01	Provisional Permit
40S 171834 00**	6.68	337.5	06/01 to 09/19	Statement of Claim
40S 171835 00**	5.8	382.5	06/01 to 09/19	Statement of Claim

* These statements of claims were issued for livestock drinking directly from source. Flow rate and volume were not given; rather, these rights were assigned a consumptive rate of 30 gallons per day per animal unit. For legal availability purpose, volume is calculated by multiplying the number of animal units by 30 gallons by the number of days in the claimed period of use. Flow rate is then converted from the volume.

** These statements of claims were issued for irrigation in which a volume was not given. For legal availability purpose, volume is calculated by multiplying the number of acres by 2.5 AF/ac, an irrigation standard within those set by ARM 36.12.115(2)(e).

3 This water use authorization is issued in conjunction with water rights 40S W125402 and 40S P17166. The combined appropriation shall not exceed 6.7 CFS (3000 GPM). Use under this authorization if used alone is 6.7 CFS.

4 This water use authorization is issued supplemental to water right 40S W3215. They have overlapping places of use. If both rights are used to irrigate the overlapping acres, the total volume appropriated shall not exceed 68 acre-feet. This authorization used alone limits the volume appropriated to 68 acre-feet for the overlapping acres.

5 This authorization is used in conjunction with existing claim W130565. All waters are diverted by means of a shared diversion and shall not exceed 3.6 CFS (1600 GPM).

Table 4: Fort Peck-Montana Compact, MCA §85-20-201, Article III F.1 Volumes

Month	Fort Peck Tribal Right (AF)	Fort Peck Tribal Right (CFS)**
April	50,000	840
May	105,000	1708
June	145,000	2437
July	215,000	3497
August	180,000	2927
September	105,000	1765
October	50,000	813

** Flow rate in CFS is calculated by dividing monthly volume in AF by the number of days in the month by 1.98 AF/day.

Preapplication Materials

- Preapplication Meeting Request
- Preapplication Meeting Form
- All attachments
- All correspondence prior to application receipt

Preapplication Materials

PREAPPLICATION MEETING FORM
CHANGE

§ 85-2-302(3)(b)
Form No. 606P *(Revised 4/2024)*

For Department Use Only

Application # 40S 30165373 Basin 40S
Meeting Date 2/25/25 Time 1:30 AM/PM
Completed Form Deadline _____

RECEIVED
By Havre RO at 9:33 am, Mar 21, 2025

Completed Form Received _____
Fee Rec'd $ 500 Check # 8810
Deposit Receipt # HVS519055
Payor RICHLAND COUNTY CD
Refund $ _____ Date _____

PREAPPLICATION MEETING FEE
$ 500

FILING FEE REDUCTION & EXPEDITED TIMELINE
An application will be eligible for a filing fee reduction and expedited timelines if the applicant completes a preapplication meeting with the Department (ARM 36.12.1302(1)), which includes submitting any follow-up information identified by the Department (ARM 36.12.1302(3)(c)) and receiving either Department-completed technical analyses or Department review of applicant-submitted technical analyses (ARM 36.12.1302(4) and (5)). An application for the proposed project also must be submitted within 180 days of delivery of Department technical analyses or scientific credibility review and no element on the submitted application can be changed from the completed preapplication meeting form (ARM 36.12.1302(6)).

The Department will fill out Form No. 606P and will identify follow-up during the preapplication meeting. The Department and Applicant will sign the Preapplication Meeting Affidavit and Certification within five business days. Within 180 days of the preapplication meeting, the Applicant will complete identified follow-up on a separate document with the question numbers clearly labeled.

Applicant Information: *Add more as necessary.*

Applicant Name Richland County Conservation District
Mailing Address 2745 West Holly ST City Sidney State MT Zip 59270
Phone Numbers: Home _____ Work 406-943-3001 Cell _____
Email Address richlandcd@gmail.com

Applicant Name _____
Mailing Address _____ City _____ State _____ Zip _____
Phone Numbers: Home _____ Work _____ Cell _____
Email Address _____

Contact/Representative Information: *Add more as necessary.*

Contact/Representative is: ☐ Applicant ☑ Consultant ☐ Attorney ☐ Other (describe) _____
Contact/Representative Name Teresa Olson
Mailing Address 2912 7th Ave. N. City Billings State MT Zip 59101
Phone Numbers: Home _____ Work 406-366-6547 Cell _____
Email Address tolson@hydrosi.com

NOTE: *If a contact person is identified as an attorney, all communication will be sent only to the attorney unless the attorney provides written instruction to the contrary. If a contact person is identified as a consultant, employee, or lessee, the individual filing the water right form or objection form will receive all correspondence and a copy may be sent to the contact person.*

Meeting Attendees: *Add more as necessary.*

Name	Organization	Position
Julie Goss	RCCD	Applicant
Teresa Olson	HydroSolutions	Consultant
Matt Miles	DNRC WRD - Havre RO	Regional Manager
Kailee Ingalls	DNRC WRD - Havre RO	Water Resource Specialist

Table of Contents

Application Details

The following questions are mandatory and must be filled out before the Preapplication Meeting Form is determined to be complete. Narrative responses that are larger than the space provided can be answered in an attachment. If an attachment is used, mark the see attachment ("A") checkbox on this form and label the attachment with the question number. Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Label units in narrative responses. Responses in the form of a table may be entered into the table provided on this form or in an attachment. Responses in the form of a table that are larger than the table provided on this form should be placed in an attachment. If an attachment is used, the table must have the exact headings found on this form, and the see attachment ("A") checkbox must be marked. For tables in this form, circle correct unit at header of column when faced with a choice of units. For tables in attachments, label all units. Questions that require Applicant to submit items to the Department have a submitted ("S") checkbox, which is marked when the required item is attached to the Preapplication Meeting Form. Label all submitted items with the question number for which they were submitted. For all questions where follow-up is necessary, mark the "F" checkbox in the "Follow-Up" column and write the question number on the "Follow-Up Page".

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
1. Do you elect to have DNRC conduct Technical Analyses?	■ Y ☐ N	☐ F
2. Which water right(s) are proposed for change? Include water right number, currently authorized flow rate (GPM or CFS), and flow rate needed for project (GPM or CFS).	■ A	☐ F

Water Right Number	Current Flow Rate (GPM or CFS)	Flow Rate Needed for Project (GPM or CFS)
Conservation District # 8450000	N/A	1.8 CFS
New CD Record - 40S 30165160		

3. Is the proposed change on a non-filed water project?	☐ Y ■ N	☐ F
a. If yes, please submit a Non-Filed Water Project Addendum (Form 606/634-NFWPA). The project must meet the requirements of the addendum. The addendum is required before the Preapplication Meeting Form is completed.	☐ S	☐ F
4. How many change applications will be needed for this project? Please refer to ARM 36.12.1305 for more information. 1		☐ F
5. Please submit a historical use map created on an aerial photograph or topographic map that shows the following: section corners, township and range, a north arrow, all historical points of diversion (POD) labeled with a unique POD ID letter, all historical places of use (POU), all historical conveyance structures, all historical places of storage, and historical place of	☐ S	☐ F

N/A

use for all overlapping water rights.		
6. Please submit a proposed use map created on an aerial photograph or topographic map that shows the following: section corners, township and range, a north arrow, all proposed points of diversion labeled with a unique POD ID number, all proposed places of use, all proposed conveyance structures, all proposed places of storage, and proposed place of use for all overlapping water rights.	■ S	☐ F
7. Identify the water right elements proposed for change, with an "X", for each water right proposed for change.	■ A	☐ F

Water Right #							
Point of diversion	X						
Place of use	X						
Purpose of use							
Place of storage							

8. Does the change involve a change in point of diversion?	■ Y ☐ N	☐ F
a. If yes, describe the proposed location of the new point(s) of diversion to the nearest 10 acres, if source is groundwater (GW) or surface water (SW), source name, and means of diversion (e.g., pump, headgate, well). Label POD ID with the same numbers as the proposed use map (Question 6).	■ A	☐ F

POD #	**¼**	**¼**	**¼**	**Sec**	**Twp**	**Rge**	**County**	**Lot**	**Block**	**Tract**	**Subdivision**	**Gov Lot**	**GW or SW**	**Source Name**	**Means**
1	NW	SE	SE	27	27N	51E	RICHLAND					5	SW	MISSOURI RIVER	PUMP

9. Does the change involve a change in place of use?	■ Y ☐ N	☐ F
a. If yes,		
i. What are the geocodes of the proposed place of use?	☐ A	☐ F

N/A

N/A to CD WR Change	

ii. Describe the legal land description of the proposed place of use and, if the water rights being changed will have an irrigation or lawn and garden purpose, list the number of irrigated acres.	■ A	☐ F

Acres	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County
93				N2	34	27N	51E	RICHLAND
29			S2	SW	27	27N	51E	RICHLAND
122	***Total***							

b. Are you proposing to add a place of use on State of Montana Trust Land?	☐ Y ■ N	☐ F	
i. If yes, you must submit an Authorization for Temporary Change in Appropriation Right Consent Form from the DNRC Trust Lands Management Division before the Preapplication Meeting Form is complete. A change authorization to add a POU on Trust Land will be temporary for the duration of the lease term. Answer project-specific questions for temporary changes (question 99 to 105).	☐ S	☐ F	
10. Does the proposed change include a change in purpose of use? If yes, answer questions 106 to 109 for change in purpose of use.	☐ Y ■ N	☐ F	
11. Do you propose to add or modify one or more place(s) of storage (reservoir or pond) with a storage capacity greater than 0.1 acre-feet? If yes, answer questions 110 to 119.	☐ Y ■ N	☐ F	
12. Are conveyance ditches used for historical or proposed uses? If yes, answer ditch-specific questions 120 to 126.	☐ Y ■ N	☐ F	
13. Do you have ownership of the entire historical POU for the water right(s) being changed?	☐ Y ☐ N	☐ F	N/A
a. If no,			
i. List the water right(s) for which you do not own the entire historical POU. N/A to CD WR Change		☐ F	N/A
ii. Are the water right(s) listed in question 13.a.i severed from the historical POU?	☐ Y ☐ N	☐ F	N/A
1. If yes, do you own the entirety of the severed water right(s) proposed for change?	☐ Y ☐ N	☐ F	

iii. Are you filing on behalf of another entity? If yes, describe. N/A to CD WR Change	☐ Y ☐ N	☐ F	N/A
iv. Are all owners of the historical place of use willing to sign the application?	☐ Y ☐ N	☐ F	N/A
1. If no,			
a. A Form 641 or 642 to split the water right(s) being changed must be received and processed by the Department prior to application submittal	☐ S	☐ F	
b. Describe how the water right(s) will be split, and which part of the split water right(s) will be proposed for change. Question 13 N/A to CD WR Change	☐ A	☐ F	
14. Is the proposed use temporary? If yes, answer questions 99 to 105 for temporary changes.	☐ Y ■ N	☐ F	
15. Is the application to change the purpose of use or place of use of an appropriation of 4,000 or more acre-feet (AF) of water a year and 5.5 or more cubic feet per second (CFS)? If yes, you must submit a Reasonable Use Addendum (Form 606-B) with the application. The reasonable use criteria are found in §85-2-402(4-5), MCA.	☐ Y ■ N	☐ F	
16. Will you be transporting water for use outside of Montana? If yes, you will need submit an Out-of-State Use Addendum (Form 600/606- OSA) with the application. The out-of-state use criteria are outlined in §85-2-402(6), MCA.	☐ Y ■ N	☐ F	
17. Is the project located in designated sage grouse habitat? If yes, you must have a consultation with and review of your project by the Montana Sage Grouse Habitat Conservation Program. The review letter will be required at application submittal.	☐ Y ■ N	☐ F	
18. Does the application include the water marketing purpose? If yes, answer questions 127 to 134 for water marketing. A Water Marketing Purpose Addendum (Form 600/606-WMA) will be required with application submittal.	☐ Y ■ N	☐ F	
19. Does the proposed purpose include instream flow? If yes, answer questions 135 to 145 for Instream Flow Changes. A Change to Instream Flow Addendum (Form 606-IFA) will be required with application submittal.	☐ Y ■ N	☐ F	
20. Will the proposed use include salvage water? If yes, answer questions 146 to 150 for Salvage Water.	☐ Y ■ N	☐ F	

Historical Use

The following questions are mandatory and must be filled out for both Surface Water and Groundwater Applications before the Preapplication Meeting Form is determined to be complete.

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up	
21. What type of water right(s) are proposed for change? Answer question 22 for each Statement of Claim, 23 for each Provisional Permit, and 24 for other types of water rights. N/A to CD WR Change CD# 8450000	☐ A	☐ F	N/A
22. In the table below, write the water right number for each Statement of Claim proposed for change in the "Statement of Claim" column. If there is one or more previous change authorizations, write the application numbers for the change authorizations in the "Previous Change Authorization" column and if there are no previous change authorizations, write "none" instead. Write the date of the Project Completion Notice for each previous change authorization in the "Project Completion Notice" column and if the previous change authorization does not have a Project Completion Notice, write "none" instead. In the "Previous Historical Use Analysis" column, write "full" or "partial" if a historical use analysis was conducted for the previous change authorization, and "none" if no previous historical use analysis was conducted. In the "Use Historical Use Analysis for Current Application" column, write "yes" if the previous historical use analysis will be used for the current application and "no" if a new historical use analysis will be conducted.	☐ A	☐ F	N/A

Statement of Claim	Previous Change Authorization	Project Completion Notice	Previous Historical Use Analysis	Use Historical Use Analysis for Current Application
N/A to CD WR Change				

23. In the table below, write the water right number for each Provisional Permit proposed for change in the "Provisional Permit" column. If a Project Completion Notice has been submitted, write the date in the "Project Completion Notice" column, and if no Project Completion Notice has been submitted, write "none" instead. For each Provisional Permit proposed for change, if there are one or more previous change authorizations, write the application number for the change authorizations in the "Previous Change Authorization" column. If there are no previous change authorizations, write "none" in the "Previous Change Authorization" column and "NA" in all the remaining columns. Write the date of the Project	☐ A	☐ F	N/A

Completion Notice for each previous change authorization in the "Previous Change Project Completion Notice" column and if the previous change authorization does not have a Project Completion Notice, write "none" instead. In the "Previous Change Historical Use Analysis" column, write "full" or "partial" if a historical use analysis was conducted for the previous change authorization, and "none" if no previous historical use analysis was conducted. In the "Use Historical Use Analysis for Current Application" column, write "yes" if the previous historical use analysis will be used for the current application, "no" if a new historical use analysis will be conducted.

Provisional Permit	Project Completion Notice	Previous Change Authorization	Previous Change Project Completion Notice	Previous Change Historical Use Analysis	Use Historical Use Analysis for Current Application
N/A to CD WR Change					

24. In the table below, write the water right number for each water right with another type proposed for change, the type of water right, and the date of issuance.

■ A ☐ F

Other Water Right Type Number	Other Water Right Type Description	Date of Issuance
CD #8450000	CONSERVATION DISTRICT	JULY 1ST, 1985
New CD Record - 40S 30165160		

25. Are there previous Montana Water Court approved stipulations, Water Master reports, or prior Montana Water Court or Department decisions related to the water right(s) being changed?

☐ Y ■ N ☐ F

a. If yes, explain.

☐ A ☐ F

_____

_____

_____

_____

_____

_____

_____

26. Fill in the table below based on ARM 36.12.1902(1) and the information provided in questions 21 to 25. In column "Water Right Number" list all water rights proposed for change. Select one of the three options from column "Historical Use Analysis Options" and fill in the "Information Required for Historical Use" associated with that option. Select "Full Historical Use Analysis NA" only if an unperfected Provisional Permit will be used to serve as historical use in lieu of analysis. If the "Existing Historical Use Analysis" or "Full Historical Use Analysis NA" option is selected, skip to question 42 because this section is complete.	☐ A	☐ F	N/A

Water Right No. Proposed for Change	Historical Use Analysis Option and Information Required for Historical Use
	☐ New Historical Use Analysis. Date for new Historical Use Analysis: N/A to CD WR Change
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: N/A to CD WR Change
	☐ Full Historical Use Analysis NA. Water right number serving as historical use in lieu of analysis: N/A to CD WR Change
	☐ New Historical Use Analysis. Date for new Historical Use Analysis: N/A to CD WR Change
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: N/A to CD WR Change
	☐ Full Historical Use Analysis NA. Water right number serving as historical use in lieu of analysis: N/A to CD WR Change
	☐ New Historical Use Analysis. Date for new Historical Use Analysis: N/A to CD WR Change
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: N/A to CD WR Change
	☐ Full Historical Use Analysis NA. Water right number serving as historical use in lieu of analysis: N/A to CD WR Change

	☐ New Historical Use Analysis. Date for new Historical Use Analysis: N/A to CD WR Change
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: N/A to CD WR Change
	☐ Full Historical Use Analysis NA. Water right number serving as historical use in lieu of analysis: N/A to CD WR Change
	☐ New Historical Use Analysis. Date for new Historical Use Analysis: N/A to CD WR Change
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: N/A to CD WR Change
	☐ Full Historical Use Analysis NA. Water right number serving as historical use in lieu of analysis: N/A to CD WR Change
	☐ New Historical Use Analysis. Date for new Historical Use Analysis: N/A to CD WR Change
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: N/A to CD WR Change
	☐ Full Historical Use Analysis NA. Water right number serving as historical use in lieu of analysis: N/A to CD WR Change

27. Do you have actual knowledge of historical use?	☐ Y ☐ N	☐ F	N/A
a. If yes,			
i. Is this firsthand knowledge?	☐ Y ☐ N	☐ F	N/A
ii. Who has this knowledge and what was their role? N/A to CD WR Change	☐ A	☐ F	

b. If no,			
i. Where will the historical use data be derived? N/A to CD WR Change	☐ A	☐ F	N/A

Historical Use: Place of Use

28. The historical use map provided for question 5 must clearly identify the entire place of use for each overlapping water right that intersects the historical place of use. Does your historical use map meet this requirement?	☐ Y ☐ N	☐ F	N/A
29. Are you proposing to change all water right(s) associated with the historical place of use?	☐ Y ☐ N	☐ F	N/A
a. If no, identify the water right(s) associated with the historical place of use that are not included in this application. Provide the priority date for each water right and explain why all overlapping water rights are not included in the application. Include water received via contract from a company, district, or water users' association.	☐ A	☐ F	

Water Right No.	Priority Date	Reason Not Included in Change
		N/A to CD WR Change

30. Answer the questions below related to the historical purpose for each of the water right(s) being changed.			N/A
a. Irrigation			
i. Is the water right being changed a Statement of Claim?	☐ Y ☐ N	☐ F	N/A
1. If yes,			
a. Does the Water Resources Survey corroborate the acres irrigated listed on the abstract?	☐ Y ☐ N	☐ F	N/A
i. If no, provide aerial photograph(s) that can corroborate the historical place of use.	☐ S	☐ F	N/A
b. Does the legal land description from the abstract match the actual location of the historical place of use?	☐ Y ☐ N	☐ F	N/A
i. If no, provide documentation of a written request submitted to the Water Court for amendment of the Claim as well as information to substantiate the requested amendment.	☐ S	☐ F	N/A

2. If no, provide one or more aerial photographs that can corroborate the historical place of use.	☐ S	☐ F	N/A
b. Lawn and garden			
i. Provide aerial photographs that can corroborate the historical place of use.	☐ S	☐ F	N/A
c. Stock			
i. Provide aerial photographs, grazing records, or other records to corroborate the historical place of use.	☐ S	☐ F	N/A
ii. Did the stock drink direct from source or direct from ditch?	☐ Y ☐ N	☐ F	N/A
1. If no, provide data sources that make clear the location of the stock watering infrastructure.	☐ S	☐ F	N/A
d. Multiple domestic, domestic, municipal, mining, commercial, and other purposes			
i. Provide aerial photographs, deeds, other recorded documents or records, affidavits, or other published documents, such as magazine articles, to corroborate the historical place of use.	☐ S	☐ F	N/A

Historical Use: Point of Diversion

31. For all historical point(s) of diversion, identify the means, location (¼ ¼ ¼ section), and if they are proposed for change. Label using the same POD ID letter as for the Historical Use Map (question 5).	☐ A	☐ F	N/A

POD ID	Means	Location (¼ ¼ ¼ Section)	Proposed for Change?
		N/A to CD WR Change	

32. Does the legal land description from the abstract match the actual location of the historical point(s) of diversion?	☐ Y ☐ N	☐ F	N/A
a. If no, do you have aerial photograph(s) that clearly show the location of the historical point(s) of diversion?	☐ Y ☐ N	☐ F	N/A
i. If yes,			
1. Provide the photograph(s).	☐ S	☐ F	N/A
2. Provide an explanation for the discrepancy and, if a Statement of Claim, provide documentation of a written request submitted to the Water Court for amendment of the Claim.	☐ S	☐ F	N/A
33. Answer questions below related to the diversion means for each of the historical point(s) of diversion.			
a. Headgate			
i. For each headgate, provide dimensions in feet (FT), slope of the channel at the headgate (%), material of the headgate, estimated historical capacity in gallons per minute (GPM) or CFS and the method used to estimate historical capacity. Label using the same POD ID letter as for the Historical Use Map (question 5).	☐ A	☐ F	N/A

POD ID	Dimensions (FT)	Slope (%)	Material	Estimated Capacity (GPM or CFS)	Method
					N/A to CD WR Change

b. Pump, dike, dam, or other surface water point of diversion			
i. For each pump, dike, dam, or other surface water point of diversion, provide an estimate of the historical capacity (GPM or CFS) and the method used to estimate the historical capacity. Label using the same POD ID letter as for the Historical Use Map (question 5).	☐ A	☐ F	N/A

POD ID	Estimated Capacity (GPM or CFS)	Method
		N/A to CD WR Change

c. Well, pit, or other groundwater point of diversion			
i. For each well, pit, or other groundwater point of diversion, provide an estimate of the historical capacity (GPM or CFS) and the method used to estimate the historical capacity. Label using the same POD ID letter as for the Historical Use Map (question 5).	☐ A	☐ F	N/A

POD ID	Estimated Capacity (GPM or CFS)	Method
		N/A to CD WR Change

34. Do other water rights share the point(s) of diversion?	■ Y ☐ N	☐ F
a. If yes, list the water rights, their flow rates (GPM or CFS), and the nature of the relationship. Label using the same POD ID letter as for the Historical Use Map (question 5).	■ A	☐ F

POD ID	Water Right No.	Flow (GPM or CFS)	Relationship
1	40S 30001844	2.6CFS	SHARE THE SAME POINT OF DIVERSION
			Note: 04/01- 10/31 - New CD Change POD/POU

Historical Use: Period of Diversion

35. Are the period of diversion and the period of use the same?	■ Y ☐ N	☐ F
a. If no,		
i. Why are they different? _____ _____	☐ A	☐ F
ii. Is there a place of storage?	☐ Y ☐ N	☐ F
36. When was water diverted for the purpose(s) of the water right(s) being changed? Reservation #8450000 per Final Order	■ A	☐ F

Start Date (Month (MM)/Day (DD))	End Date (MM/DD)
04/01	10/31

37. Does the Department have a standard, found in ARM 36.12.112, for the period of diversion for the purposes for which water is used? 04/01 - 10/31 Climatic Area II	■ Y ☐ N	☐ F
a. If yes, does the period of diversion fall within Department standards?	■ Y ☐ N	☐ F
b. If no or if the period of diversion falls outside Department standards, explain how the period of diversion is reasonable for the purpose. _____ _____ _____ _____	☐ A	☐ F
38. If the water right(s) being changed have an irrigation purpose, answer the following questions.		N/A
a. What were the crop(s) grown? N/A to CD WR Change		☐ F

i. If the crop(s) grown include hay, how many cuttings were there per season and how many days did they last? N/A to CD WR Change		☐ F	
b. Did diversions ever temporarily cease within the period of use? This may include water shortages or calls based on priority date.	☐ Y ☐ N	☐ F	N/A
i. If yes, please explain. N/A to CD WR Change	☐ A	☐ F	

Historical Use: Historical Diverted Volume

39. Answer the questions below related to the historical purposes of the water rights being changed.			N/A
a. Irrigation			
i. Do you want ARM 36.12.1902(11) to be used to calculate historical diverted volume?	☐ Y ☐ N	☐ F	N/A
1. If no, provide a Historical Water Use Addendum (Form 606-HUA). Form 606-HUA must be submitted to the Department before the Preapplication Meeting Form is completed.	☐ S	☐ F	N/A
b. Non-irrigation			
i. How often was water historically diverted? N/A to CD WR Change		☐ F	N/A
ii. What was the duration of each historical diversion? N/A to CD WR Change		☐ F	N/A
iii. Was wastewater historically discharged? If yes, what amount was discharged? N/A to CD WR Change	☐ Y ☐ N	☐ F	N/A
iv. What is the volume of water historically diverted (AF)? N/A to CD WR Change		☐ F	N/A
v. How did you determine the volume of water historically diverted? N/A to CD WR Change	☐ A	☐ F	N/A
vi. Did the historical diverted volume serve more than one purpose of use?	☐ Y ☐ N	☐ F	N/A

1. If yes, how much of the diverted volume served each purpose of use and how did you determine this? N/A to CD WR Change	☐ A	☐ F	N/A

Historical Use: Historical Consumed Volume

40. Answer the questions below related to the historical purpose of the water rights being changed.			N/A
a. Irrigation			
i. Will you use Department standards for historical consumptive use as defined in ARM 36.12.1902?	☐ Y ☐ N	☐ F	N/A
1. If no,			
a. What method will you use to determine historical consumptive use? N/A to CD WR Change	☐ A	☐ F	N/A
b. Provide a Historical Water Use Addendum (Form 606-HUA) to the Department. Form 606-HUA must be submitted to the Department before the Preapplication Meeting Form is completed.	☐ S	☐ F	N/A
2. If yes,			
a. What is the historical irrigation method type and subtype? Irrigation method types include flood and sprinkler. Flood irrigation subtypes include level border, graded border, furrow, contour ditch, or wild flood. Sprinkler subtypes include wheel line and center pivot. N/A to CD WR Change	☐ A	☐ F	N/A
b. What was the slope of the historical place of use? N/A to CD WR Change		☐ F	N/A
c. Are there any factors beyond irrigation method type/subtype and place of use slope that may influence percent efficiency of irrigation?	☐ Y ☐ N	☐ F	N/A
i. If yes, provide evidence to support the modified percent efficiency of irrigation in the Historical Water Use Addendum (Form 606-HUA). These factors may include infrastructure age, soil characteristics, or field improvements. Form 606-HUA must be submitted to the Department before the Preapplication Meeting Form is	☐ S	☐ F	N/A

completed.			
d. Based on answers to the above questions, what is the percent efficiency of irrigation? N/A to CD WR Change		☐ F	N/A
e. What is the County Management Factor? N/A to CD WR Change		☐ F	N/A
f. What is evapotranspiration (ET) based on the irrigation method and county? N/A to CD WR Change		☐ F	N/A
g. What percent of applied water are irrecoverable losses per ARM 36.12.1902(17)? N/A to CD WR Change		☐ F	N/A
h. Do other water rights supplement or overlap the historical place of use that contribute to the irrigation water demand?	☐ Y ■ N	☐ F	
i. If yes,			
1. How were the water rights operated to serve the irrigation purpose?	☐ A	☐ F	
2. For each supplemental or overlapping water right, please list the average period of diversion and use (MM/DD-MM/DD), flow rate (GPM or CFS), and the volume of water (AF) contributed to the total irrigation water demand.	☐ A	☐ F	

Water Right No.	Avg. Period of Diversion (MM/DD-MM/DD)	Avg. Period of Use (MM/DD-MM/DD)	Flow Rate (GPM or CFS)	Volume Contributed (AF)

b. Lawn and garden			N/A
i. Will you use the Department standards for historical consumptive use volume for lawn and garden? Department standards include 2.5 acre-feet per acre, or a calculated volume based on Irrigation Water Requirements for turf grass.	☐ Y ☐ N	☐ F	
1. If yes, which standard? _____		☐ F	
2. If no, please provide an estimate of historical water use based on expert analysis and methods used to determine this estimate. _____ _____	☐ A	☐ F	
c. Stock			N/A
i. Which volume standard for animal units applies to historical use and why? The standards are either 15 or 30 gallons per animal unit per day. _____		☐ F	
ii. How many animal units were historically served? _____		☐ F	
iii. Did these animal units rely entirely on the water right(s) proposed for change for their full water demand?	☐ Y ☐ N	☐ F	
1. If no, explain. _____ _____	☐ A	☐ F	
d. Domestic and multiple domestic			N/A
i. How many households were served? _____		☐ F	
ii. Will the Department standard of 1 acre-foot per household be used? The same standard shall be applied to historical and proposed uses.	☐ Y ☐ N	☐ F	
1. If no, what standard will be used? _____		☐ F	
iii. Did the historical use include wastewater disposal and treatment?	☐ Y ☐ N	☐ F	

	1. If yes, which of the following best describes the wastewater disposal and treatment system? Individual drain fields, central treatment facility with minimal consumption, or evaporation basin or land application? _____	☐ A	☐ F
e. Municipal				N/A
	i. What is the volume of water (AF) historically consumed for municipal purposes? _____		☐ F
	ii. Provide evidence to support historical municipal use such as commercial, lawn and garden, and/or multiple domestic uses. The data sources may include records that tie water use to the U.S Census, estimates of historical system capacity and estimates of leakage.	☐ S	☐ F
f. Other				N/A
	i. What is the volume of water (AF) historically consumed for other purposes? _____		☐ F
	ii. Please submit to the Department evidence to support the volume of water historically consumed.	☐ S	☐ F

Historical Use: Historical Places of Storage

41. Did the historical use include one or more place(s) of storage, which may include reservoirs, ponds, and pits that are greater than 0.1 acre-feet in volume?	☐ Y ■ N	☐ F
a. If yes, for each historical place of storage please provide the surface area in acres (AC), capacity (AF), annual net evaporation (FT/year), and number of times per year the place of storage was filled.	☐ A	☐ F

ID	Surface Area (AC)	Capacity (AF)	Annual Net Evaporation (FT/YR)	# of Annual Fillings

Surface Water

■ **Applicable**, move on to question 42. ☐ **Not Applicable**, skip to question 67.

The following questions are mandatory for changes to surface water rights and must be filled out before the Preapplication Meeting Form is determined to be complete.

Surface Water: Return Flow Analysis

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up	
42. Do the purposes of the water rights proposed for change include irrigation?	■ Y ☐ N	☐ F	
a. If yes, does the proposed change include a change in place of use *and/or* a change in purpose? A change in place of use includes retiring acres in the historical place of use and adding any new acres outside the historical place of use.	☐ Y ■ N	☐ F	
i. If yes, a return flow analysis is required. Move on to answer question 43.			
ii. If no, this section is complete, and you may skip to question 51.			
43. Does the proposed change include a change in purpose?	☐ Y ■ N		
a. If yes, what is the consumptive use for the proposed non-irrigation purpose? Please explain. _____ _____ _____ _____ _____ _____	☐ A	☐ F	
44. Does the proposed change include a change in place of use? If yes, move on to question 45. If no, this section is complete, and you may skip to question 51.	■ Y ☐ N		
45. Provide a map showing the historical and proposed places of use created on an aerial photograph or topographic map with section corners, township and range, and a north arrow.	☐ S	☐ F	N/A
46. How many acres, if any, will be retired from the historical place of use? 0		☐ F	
47. Are irrigated acres proposed that are outside the historical place of use?	☐ Y ☐ N	☐ F	N/A
a. If yes,			
i. How many acres? N/A to CD WR Change		☐ F	

ii.	What is the proposed irrigation method type (e.g., flood or sprinkler) and subtype (e.g., level border, graded border, furrow, contour ditch, wild flood, center pivot, or wheel line) for the new acres? SPRINKLER - CENTER PIVOT		☐ F
iii.	What is the slope of the new place of use? <1%		☐ F
iv.	Based on 47.a.ii to 47.a.iii, what is the percent efficiency of irrigation for the new acres? 70%		☐ F
v.	What is the County Management Factor for the new acres? ROOSEVELET COUNTY 64.9%		☐ F
vi.	What is the ET based on the irrigation method and county for the new acres? Sprinkler: Culbertson 23.73 Wolf Point: 27.03 ; Choose what is most representative		☐ F
vii.	What percent of applied water are irrecoverable losses for new acres per ARM 36.12.1902(17)? Sprinkler: 10%		☐ F
viii.	Do other water rights supplement or overlap the new place of use that contribute to the irrigation water demand?	☐ Y ■ N	☐ F
1.	If yes,		
a.	How will the water rights be operated to serve the irrigation purpose?	☐ A	☐ F
b.	For each supplemental or overlapping water right, please list the average period of diversion and use (MM/DD-MM/DD), flow rate (GPM or CFS), and the volume of water (AF) contributed to the total irrigation water demand.	☐ A	☐ F

Water Right No.	Avg. Period of Diversion (MM/DD-MM/DD)	Avg. Period of Use (MM/DD-MM/DD)	Flow Rate (GPM or CFS)	Volume Contributed (AF)

48. Do you have information for the Department to consider about the source and location where return flows historically accrued?	☐ Y ☐ N	☐ F	N/A
a. If yes, explain. N/A to CD WR Change	☐ A	☐ F	
49. Based on the preliminary data provided by the Department at this preapplication meeting, to what surface water sources do return flows accrue before and after the proposed change? **Return flow data provided by the Department at the preapplication meeting is preliminary and is subject to change during the Technical Analysis.* N/A to CD WR Change	☐ A	☐ F	N/A
50. If an analysis of impacts to identified surface water rights is required as part of the return flow analysis, pursuant to ARM 36.12.1303(3)(c)(iii), do you elect to answer non-mandatory questions 161 to 163 to provide information required for this extended return flow analysis?	☐ Y ☐ N	☐ F	N/A
a. If yes, go to question 161. If an analysis of impacts to identified surface water rights is required, this information will be used for the analysis.			
b. If no, did you elect in question 1 for the Department to conduct technical analyses?	☐ Y ☐ N	☐ F	N/A
i. If yes, do you elect for the Department to use publicly available water quantity data for the analysis of impacts to identified surface water rights? If the extended return flow analysis is required and sufficient publicly available water quantity data is not available, then the Department will not be able to conduct the extended analysis. You will still have to prove a lack of adverse effect from the proposed change.	☐ Y ☐ N	☐ F	N/A
ii. If no, an analysis of impacts to identified surface water rights will need to be completed as part of the extended return flow analysis. The Department will include the extended analysis in its scientific credibility review of the Technical Analyses.			

Surface Water: Mitigation Analysis

51. Are you changing the purpose to mitigation to meet the criteria of issuance for another application? If yes, answer the questions in this section (questions 52 to 60). If no, this section is complete, and you can skip to question 61.	☐ Y ■ N	☐ F

52. Identify the water right(s) proposed for change to a mitigation purpose, the water right(s) identified as needing mitigation and the application number for the water right(s) identified as needing mitigation. _____	☐ A	☐ F
53. What source(s) have been identified as needing mitigation water? _____		☐ F
54. By what means will mitigation water be made available (e.g., infiltration gallery, water left instream)? You must provide a copy of all relevant discharge permits at application submittal (§85-2-364, MCA). _____ _____ _____	☐ A	☐ F
55. What is the location (¼ ¼ ¼ section of start and end of reach) and length (FT) of the mitigation reach? _____		☐ F
56. What is the amount, timing, and location (¼ ¼ ¼ section) of water needed for mitigation?	☐ A	☐ F

Month	Days	Amount	Location	Month	Days	Amount	Location
January				July			
February				August			
March				September			
April				October			
May				November			
June				December			

57. How do the priority dates of the water rights proposed for change to mitigation compare to other water rights on the source? _____ _____ _____	☐ A	☐ F
58. Do you have measurement records or Water Commissioner records that show the reliability of the water right(s) proposed for change to a mitigation purpose?	☐ Y ☐ N	☐ F

a. If yes, describe and submit them to the Department. _____ _____ _____ _____	☐ S	☐ F
59. Do the water rights proposed for change to mitigation have a period of use that is greater than or equal to the period when mitigation is necessary?	☐ Y ☐ N	☐ F
a. If no, how will mitigation water be made available during the entire period when mitigation is necessary? _____ _____	☐ A	☐ F
60. Will other water rights contribute to mitigation water?	☐ Y ☐ N	☐ F
a. If yes, what amount, at what timing, and at which location (¼ ¼ ¼ section) will they contribute?	☐ A	☐ F

Month	Days	Amount	Location	Month	Days	Amount	Location
January				**July**			
February				**August**			
March				**September**			
April				**October**			
May				**November**			
June				**December**			

Surface Water: Aquifer Recharge Analysis

61. Are you changing the purpose to aquifer recharge to serve a current purpose or changing the purpose to marketing for mitigation/aquifer recharge for a future mitigation purpose? If yes, answer the questions in this section (questions 62 to 66). If no, this section is complete, and you can skip to question 67.	☐ Y ■ N	☐ F
62. Is this aquifer recharge for a current mitigation need or marketing for mitigation/aquifer recharge for a future mitigation need? _____		☐ F
63. What sources have been identified as having net depletions in need of mitigation or as benefiting from marketing for mitigation/aquifer recharge water? _____		☐ F

64. By what means will aquifer recharge water be made available? You must provide a copy of all relevant discharge permits at application submittal (§85-2-364, MCA). _____ _____ _____ _____ _____	☐ A	☐ F
65. How do the priority dates of the water rights proposed for change to aquifer recharge compare to other water rights on the source? _____ _____ _____	☐ A	☐ F
66. Do you have measurement records or Water Commissioner records that show the reliability of the water rights proposed for change to aquifer recharge?	☐ Y ☐ N	☐ F
a. If yes, describe and submit them to the Department. _____ _____ _____ _____	☐ S	☐ F

Groundwater

☐ **Applicable**, move on to question 67. ☒ **Not Applicable**, skip to question 99.

The following questions are mandatory for changes to groundwater rights and must be filled out before the Preapplication Meeting Form is determined to be complete.

Groundwater: Adequacy of Diversion

Questions, Narrative Responses, and Tables	**Check-boxes**	**Follow-Up**
67. What is the flow rate (GPM or CFS), volume (AF), and period of diversion (MM/DD-MM/DD) required at each new groundwater point of diversion? Label using the same POD ID number as the Proposed Use Map (question 6) to match this information with the location information.	☐ A	☐ F

POD #	**Flow Rate (GPM or CFS)**	**Volume (AF)**	**Period of Diversion (MM/DD-MM/DD)**

68. Will the monthly pumping schedule differ from an allocation of diverted volume by the number of days in the month for year-round uses or the IWR 80% net irrigation requirements for irrigation/lawn & garden uses (IWR, NRCS 2003)?	☐ Y ☐ N	☐ F
a. If yes, provide the monthly pumping schedule in the table below. Label using the same POD ID number as the Proposed Use Map (question 6).	☐ A	☐ F

Month	**POD #**	**Volume (AF)**	**Month**	**POD #**	**Volume (AF)**
January			**July**		
February			**August**		
March			**September**		
April			**October**		
May			**November**		
June			**December**		

69. Answer the following questions specific to the means of groundwater diversion.					
Well/Pit	Questions 70 to 71	**Developed Spring**	Question 72	**Pond**	Questions 73 to 76

Groundwater: Adequacy of Diversion: Well/Pit

☐ Applicable ☐ Not Applicable

70. Have you submitted a completed Form 633 to DNRC for review?	☐ Y ☐ N	☐ F
a. If no, submit Form 633 to DNRC for review. Form 633 is required by the time the Preapplication Meeting Form is deemed complete.	☐ S	☐ F
b. If yes, did the Department identify deficiencies?	☐ Y ☐ N	☐ F
1. If yes, are variances from ARM 36.12.121 needed?	☐ Y ☐ N	☐ F
a. If yes,		
i. Do you have data for aquifer characteristics?	☐ Y ☐ N	☐ F
1. If yes, provide the data to the Department.	☐ S	☐ F
ii. Have you submitted Form 653 to the Department?	☐ Y ☐ N	☐ F
1. If yes, was the variance granted?	☐ Y ☐ N	☐ F
71. Have all the wells/pits been constructed?	☐ Y ☐ N	☐ F
a. If yes, provide a map with the location of each well/pit labeled, the well/pit depth, and, if available, the GWIC ID. Create map on an aerial photograph or topographic map and include the following: well/pit location, well/pit depth, GWIC ID (if available), section corners, township and range, and a north arrow.	☐ S	☐ F
b. If no,		
i. When will the wells/pits be constructed? _____		☐ F
ii. Do you have an initial map with the proposed location of wells/pits?	☐ Y ☐ N	☐ F
1. If yes, provide an initial map to the Department. Create map on an aerial photograph or topographic map and include the following: proposed well/pit location, section corners, township and range, and a north arrow.	☐ S	☐ F
iii. What is the anticipated depth for each new well/pit? Label on the initial map if the proposed location is known. Otherwise provide the depth(s) here: _____ _____	☐ S	☐ F
iv. Is the requested volume for each new well/pit known?	☐ Y ☐ N	☐ F
1. If no, what is the total requested volume (AF) and the number of new PODs? _____		☐ F

Groundwater: Adequacy of Diversion: Developed Spring

☐ Applicable ☐ Not Applicable

72. Have you measured the source?	☐ Y ☐ N	☐ F
a. If yes,		
i. Submit measurements to the Department.	☐ S	☐ F
ii. With what method were measurements collected? _____ _____	☐ A	☐ F
iii. What is the interval of measurements? _____		☐ F
iv. Is the interval of measurements sufficient to comply with ARM 36.12.1703(1)?	☐ Y ☐ N	☐ F
b. If no, or if measurements do not comply with ARM 36.12.1703(1),		
i. When do you plan to measure? _____		☐ F
ii. With what method and at what interval will measurements be collected? _____ _____	☐ A	☐ F

Groundwater: Adequacy of Diversion: Pond

☐ Applicable ☐ Not Applicable

73. Have you submitted Form 653 to apply for a variance from ARM 36.12.121 for the Aquifer Test?	☐ Y ☐ N	☐ F
a. If yes, did the Department approve the variance request?	☐ Y ☐ N	☐ F
74. Submit pond bathymetry data, survey, or engineering plans to the Department.	☐ S	☐ F
75. Submit a map identifying the location of the proposed pond to the Department. Create map on an aerial photograph or topographic map and include the following: pond location, section corners, township and range, and a north arrow.	☐ S	☐ F
76. If you are conducting Technical Analyses, what is your plan to determine depth, surface area, and net evaporation of the pond? If the Department is conducting Technical Analyses, write N/A. _____ _____	☐ A	☐ F

Groundwater: Adverse Effect to Existing Groundwater Rights

All information to calculate the one-foot drawdown contour was collected in previous questions.

Groundwater: Adverse Effect to Surface Water Rights

Groundwater: Adverse Effect to Surface Water Rights: Surface Water Depletion Analysis

77. Does the proposed change include a change in point of diversion or a change in place of use or purpose that will lead to a change in consumptive use or pumping schedule? If you do not know if a change in place of use or purpose will lead to a change in consumptive use or pumping schedule, work through this with the Department. If yes, a surface water depletion analysis is required; move on to question 78. If no, this section is complete; skip to question 80.	☐ Y ☐ N	☐ F
78. Based on the preliminary data provided by the Department at this preapplication meeting, what are the hydraulically connected surface water sources before and after the proposed change? **Net depletion data provided by the Department at the preapplication meeting is preliminary and is subject to change during the Technical Analysis.* _____ _____ _____ _____	☐ A	☐ F
79. If an analysis of impacts to identified surface water rights is required as part of the surface water depletion analysis, pursuant to ARM 36.12.1903(2)(f), do you elect to answer non-mandatory questions 166 to 168 to provide information required for this extended surface water depletion analysis?	☐ Y ☐ N	☐ F
a. If yes, go to question 166. If an analysis of impacts to identified surface water rights is required for the surface water depletion analysis, this information will used for the analysis.		
b. If no, did you elect in question 1 for the Department to conduct technical analyses?	☐ Y ☐ N	☐ F
i. If yes, do you elect for the Department to use publicly available water quantity data for the analysis of impacts to identified surface water rights for the surface water depletion analysis? If this extended surface water depletion analysis is required and sufficient publicly available water quantity data is not available, then the Department will not be able to conduct the extended surface water depletion analysis. You will still have to prove a lack of adverse effect from the proposed change.	☐ Y ☐ N	☐ F
ii. If no, you may still include the analysis of impacts to identified surface water rights with the surface water depletion analysis. The Department will include the extended analysis in its scientific credibility review of the Technical Analyses.		

Groundwater: Adverse Effect to Surface Water Rights: Return Flow Analysis

80. Do the purposes of the water rights proposed for change include irrigation?	☐ Y ☐ N	☐ F
a. If yes, does the proposed change include a change in place of use *and/or* a change in purpose? A change in place of use includes retiring acres in the historical place of use and adding any new acres outside the historical place of use.	☐ Y ☐ N	☐ F
i. If yes, a return flow analysis is required. Move on to answer question 81.		
ii. If no, this section is complete, and you may skip to question 89.		
81. Does the proposed change include a change in purpose?	☐ Y ☐ N	
a. If yes, what is the consumptive use for the proposed non-irrigation purpose? Please explain. _____ _____ _____ _____ _____ _____	☐ A	☐ F
82. Does the proposed change include a change in place of use? If yes, move on to question 83. If no, this section is complete, and you may skip to question 89.	☐ Y ☐ N	
83. Provide a map showing the historical and proposed places of use. Create map on an aerial photograph or topographic map that shows the following: section corners, township and range, and a north arrow.	☐ S	☐ F
84. How many acres, if any, will be retired from the historical place of use? _____		☐ F
85. Are irrigated acres proposed that are outside the historical place of use?	☐ Y ☐ N	☐ F
a. If yes,		
i. How many acres? _____		☐ F
ii. What is the proposed irrigation method type and subtype (e.g., level border, graded border, furrow, contour ditch, or wild flood) for the new acres? _____		☐ F
iii. What is the slope of the new place of use? _____		☐ F
iv. Based on question 85.a.ii to 85.a.iii, what is the percent efficiency of irrigation for the new acres? _____		☐ F

v. What is the County Management Factor for the new acres? _____		☐ F
vi. What is the ET based on the irrigation method and county for the new acres? _____		☐ F
vii. What percent of applied water are irrecoverable losses for new acres? _____		☐ F
viii. Do other water rights supplement or overlap the new place of use that contribute to the irrigation water demand?	☐ Y ☐ N	☐ F
1. If yes,		
a. How will the water rights be operated to serve the irrigation purpose? _____ _____ _____ _____ _____ _____ _____	☐ A	☐ F
b. For each supplemental or overlapping water right, please list the average period of diversion and use (MM/DD-MM/DD), flow rate (GPM or CFS), and the volume of water (AF) contributed to the total irrigation water demand.	☐ A	☐ F

Water Right No.	Avg. Period of Diversion (MM/DD-MM/DD)	Avg. Period of Use (MM/DD-MM/DD)	Flow Rate (GPM or CFS)	Volume Contributed (AF)

86. Do you have information for the Department to consider about the source and location where return flows historically accrued?	☐ Y ☐ N	☐ F

a. If yes, explain. _____ _____ _____	☐ A	☐ F
87. Based on the preliminary data provided at this preapplication meeting, to what surface water sources will return flows accrue before and after the proposed change? **Return flow data provided by the Department at the preapplication meeting is preliminary and is subject to change during the Technical Analysis.* _____ _____ _____	☐ A	☐ F
88. If an analysis of impacts to identified surface water rights is required as part of the return flow analysis, pursuant to ARM 36.12.1303(5)(d)(iii), do you elect to answer non-mandatory questions 161 to 163 to provide information required for this extended analysis?	☐ Y ☐ N	☐ F
a. If yes, go to question 161. If an analysis of impacts to identified surface water rights is required as part of the return flow analysis, this information will used for the analysis.		
b. If no, did you elect in question 1 for the Department to conduct technical analyses?	☐ Y ☐ N	☐ F
i. If yes, do you elect for the Department to use publicly available water quantity data for the analysis of impacts to identified surface water rights? If this extended return flow analysis is required and sufficient publicly available water quantity data is not available, then the Department will not be able to conduct the extended analysis. You will still have to prove a lack of adverse effect from the proposed change.	☐ Y ☐ N	☐ F
ii. If no, an analysis of impacts to identified surface water rights will need to be completed as part of the return flow analysis. The Department will include the extended analysis in its scientific credibility review of the Technical Analyses.		

Groundwater: Mitigation

89. Do you require mitigation water to meet the criteria of issuance for this change application or for a different application? If yes, answer the questions in this section (questions 90 to 98). If no, this section is complete, and you can skip to question 99.	☐ Y ☐ N	☐ F
90. Please identify the water rights proposed for change to a mitigation purpose and the water rights identified as needing mitigation. _____	☐ A	☐ F

91. What sources have been identified as needing mitigation water? _____		☐ F
92. By what means will mitigation water be made available? _____ _____	☐ A	☐ F
93. What is the location (¼ ¼ ¼ section of start and end of reach) and length (feet) of the mitigation reach? _____		☐ F
94. What is the amount, timing, and location (¼ ¼ ¼ section) of water needed for mitigation?	☐ A	☐ F

Month	Days	Amount	Location	Month	Days	Amount	Location
January				**July**			
February				**August**			
March				**September**			
April				**October**			
May				**November**			
June				**December**			

95. How do the priority dates of the water rights proposed for change to mitigation compare to other water rights on the source? _____ _____	☐ A	☐ F
96. Do you have measurement records or Water Commissioner records that show the reliability of the water right(s) proposed for change to a mitigation purpose?	☐ Y ☐ N	☐ F
a. If yes, describe and submit them to the Department. _____ _____ _____	☐ S	☐ F
97. Do the water rights proposed for change to mitigation have a period of use that is greater than or equal to the period when mitigation is necessary?	☐ Y ☐ N	☐ F

a. If no, how will mitigation water be made available during the entire period when mitigation is necessary? _____ _____ _____	☐ A	☐ F
98. Will other water rights contribute to mitigation water?	☐ Y ☐ N	☐ F
a. If yes, what amount, at what timing, and at which location (¼ ¼ ¼ section) will they contribute?	☐ A	☐ F

Month	Days	Amount	Location (¼ ¼ ¼ Section)	Month	Days	Amount	Location (¼ ¼ ¼ Section)
January				**July**			
February				**August**			
March				**September**			
April				**October**			
May				**November**			
June				**December**			

Project-Specific Questions

The following questions are mandatory when applicable and must be filled out before the Preapplication Meeting Form is determined to be complete.

Temporary Change

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
99. Does the proposal include a temporary change? If yes, please answer the questions in this section (questions 100 to 105) for each water right being changed. If no, or if you answered these questions earlier in the preapplication meeting, this section is complete and you can skip to question 106.	☐ Y ■ N	☐ F
100. What element(s) of the water right(s) are being temporarily changed? _____		☐ F
101. For how many years will the water right(s) be temporarily changed? _____		☐ F
102. Will the temporary change be intermittent over the years?	☐ Y ☐ N	☐ F
a. If yes, explain. _____	☐ A	☐ F
103. For what purpose will the water rights be temporarily used? _____		☐ F

104. Is the quantity of water subject to the temporary change being made available from the development of a new water conservation or storage project?	☐ Y ☐ N	☐ F
a. If yes, explain the water conservation or storage project. _____ _____ _____	☐ A	☐ F
105. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 10 if you are proposing to add a place of use on State of Montana Trust Land and question 15 if you are proposing a temporary change that does not involve State of Montana Trust Land. If you are answering in consecutive order, go to question 106.		

Change in Purpose

106. Does the project involve a change in purpose? If yes, answer the questions in this section (questions 107 to 109). If no, of if you answered these questions earlier in the preapplication meeting, this section is complete and you can skip to question 110.	☐ Y ■ N	☐ F
107. Identify the proposed new purpose, flow rate (GPM or CFS), volume (AF), and period of use (MM/DD-MM/DD) for each purpose.	☐ A	☐ F

Purpose	Flow Rate (GPM or CFS)	Volume (AF)	Period of Use Start (MM/DD-MM/DD)	Period of Use End (MM/DD-MM/DD)
N/A to CD WR Change				

108. Explain why the requested flow rate and volume is the amount needed for the purpose. _____ _____ _____	☐ A	☐ F
109. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 11 and if you are answering in consecutive order, go to question 110.		

Change in Place of Storage

110. Does the project involve a change in place of storage? If yes, answer the questions in this section (questions 111 to 119) for each individual place of storage (use additional Change in Place of Storage sheet for additional places of storage). If no, or if you answered these questions earlier in the preapplication meeting, this section is complete; skip to question 120.	☐ Y ■ N	☐ F
111. Submit a map showing the location of the place of storage. Create map on an aerial photograph or topographic map that shows the following: place of storage, section corners, township and range, and a north arrow.	☐ S	☐ F
112. Is this application to add a new place of storage or change an existing place of storage? _____		☐ F
a. If application is to change an existing place of storage, list the water rights that include the place of storage and a short description of the proposed change. _____ _____	☐ A	☐ F
113. Is the place of storage located on-stream?	☐ Y ☐ N	☐ F
a. If no, explain the conveyance means to and from the off-stream place of storage and any losses that may occur with that conveyance. _____ _____	☐ A	☐ F
114. What is the proposed capacity of the place of storage? Use bathymetry data, survey, or engineering plans for capacity. Submit the data source used with this form. In lieu of these data sources, use the following equation: *Surface Acres x Maximum Depth (FT) x 0.5 (0.4-0.6 depending on side slope) = Capacity (AF)* _____	☐ S	☐ F
115. Will the place of storage include primary and/or emergency spillways? Preliminary design specifications for primary and emergency spillways must be included with application submittal (ARM 36.12.113).	☐ Y ☐ N	☐ F
116. Will the place of storage be lined?	☐ Y ☐ N	☐ F
117. What is the annual net evaporation of water from the place of storage using the standards in ARM 36.12.116(1) and the Department's Gridded Net Evaporation Layer? _____		☐ F
118. Is the place of storage capacity calculated to be greater than 50 acre-feet?	☐ Y ☐ N	☐ F
a. If yes, have you made an application to the DNRC Water Operations Bureau for a determination of whether the dam or reservoir is a high-hazard dam?	☐ Y ☐ N	☐ F

119. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 12 and if you are answering in consecutive order, go to question 120.		

Ditch-Specific Questions

120. Does the historical use of water include at least one conveyance ditch? If yes, answer questions 121 to 122. If no, or if you answered these questions earlier in the preapplication meeting, skip to question 123.	☐ Y ■ N	☐ F
121. Submit a Historical Use Ditch Map that shows every ditch conveying water for the historical use of all water right(s) proposed for change. Label the ditch name(s), POD(s), the POU(s), and the ditch measurement locations (requested in question 122.d). The map should be created on an aerial photograph or topographic map with the following: section corners, township and range, and a north arrow.	☐ S	☐ F
122. For each historical conveyance ditch, answer question 122.a to 122.h. If there is more than one historical conveyance ditch, use an Additional Historical Ditch Sheet for each additional ditch.		
a. What is the ditch name? _____		☐ F
b. List the water right(s) proposed for change that were conveyed by the ditch. _____		☐ F
c. What is the distance water was historically carried by the conveyance ditch? Only include segments between the POD and start of the POU; do not include segments within the POU. _____	☐ A	☐ F
d. Provide at least one set of ditch measurements, which include width (FT), depth (FT), and slope (%). Discuss ditch characteristics with DNRC to determine the minimum number of ditch measurements. Include the location of each measurement, labeled with the 2-digit measurement ID number, used on the map submitted for question 121.	☐ S	☐ F

ID #	Width (FT)	Depth (FT)	Slope (%)	Date of Measurement

e. What is a reasonable Manning's n value? List the factors used for estimation. If you do not know this value, please work through estimation with the Department. _____ _____	☐ A	☐ F

f. What type of soils compose the historical conveyance ditch? For lined ditches, write "lined" instead. _____ _____	☐ A	☐ F
g. Are other water rights conveyed by the historical conveyance ditch?	☐ Y ☐ N	☐ F
i. If yes,		
1. What are the water right numbers? _____ _____ _____	☐ A	☐ F
2. What is the sum of the flow rates (GPM or CFS) for all water rights conveyed? _____ _____ _____	☐ A	☐ F
3. Provide a map with your best estimate of the historical POUs for the other water rights conveyed by the historical conveyance ditch. Include only POUs between the historical POD and your historical POU. If you do not know this information, the Department can help you create the map. The map should be created on an aerial photograph or topographic map and show the following: section corners, township and range, and a north arrow.	☐ S	☐ F
h. Were any water rights proposed for change part of one historical water right that was split?	☐ Y ☐ N	☐ F
i. If yes, were all split water rights split in such a way to ensure each post-split water right could stand alone and not be reliant on the others for carriage water?	☐ Y ☐ N	☐ F
1. If no, do any of the water right(s) proposed for change have a carriage water requirement?	☐ Y ☐ N	☐ F
a. If yes,		
i. List the water right(s) with a carriage water requirement _____		☐ F
ii. Update your Historical Use Ditch Map to label the ditch segments where a carriage water requirement exists for a water right proposed for change. Also, use your best estimate to label the POUs for all water rights included in the carriage water requirement. If you do not know this information, the Department can help you update the map.	☐ S	☐ F
123. Does the proposed use include at least one existing or new conveyance ditch? If yes, answer questions 124 to 126. If no, or if you answered these questions earlier in the preapplication meeting, this section is complete; skip to question 127.	☐ Y ■ N	☐ F

124. Submit a Proposed Use Ditch Map that shows every ditch conveying the water right(s) proposed for change, including any unchanged portions. Label all unchanged and proposed PODs, all unchanged and proposed POUs, and additional ditch measurement locations (requested in question 125.e). The map should be created on an aerial photograph or topographic map with the following: section corners, township and range, and a north arrow.	☐ S	☐ F
125. For each proposed use conveyance ditch, answer the questions 125.a to 125.i. If there is more than one proposed use conveyance ditch, use an Additional Proposed Use Ditch Sheet for each additional ditch.		
a. What is the ditch name? _____		☐ F
b. Is this ditch a historical conveyance ditch detailed in questions 121 to 122?	☐ Y ☐ N	☐ F
i. If yes, have any of the following details changed, to the best of your knowledge, from historical conditions: ditch length, distance water conveyed, ditch lining, or water rights conveyed by the ditch?	☐ Y ☐ N	☐ F
1. If yes, answer questions 125.c to 125.i using current data.		
2. If no, do not answer questions 125.c to 125.i for this ditch because the information remains unchanged. Move on to the next proposed use conveyance ditch, or if none remain, skip to question 127.		
c. List the water right(s) proposed for change that are going to be conveyed by the ditch. _____		☐ F
d. What is the distance water will be carried by the conveyance ditch? Only include segments between the POD and start of the POU; do not include segments within the POU. _____ _____	☐ A	☐ F
e. Provide at least one set of ditch measurements, which include width (FT), depth (FT), and slope (%). Discuss ditch characteristics with DNRC to determine the minimum number of ditch measurements. Include the location of each measurement, labeled with the 2-digit measurement ID number, used on the map submitted for question 124.	☐ S	☐ F

ID #	Width (FT)	Depth (FT)	Slope (%)	Date of Measurement

f. What is a reasonable Manning's n value? List the factors used for estimation. If you do not know this value, please work through estimation with the Department. _____ _____	☐ A	☐ F
g. What type of soils compose the proposed conveyance ditch? For lined ditches, write "lined" instead. _____ _____	☐ A	☐ F
h. Are other water rights conveyed by the proposed conveyance ditch?	☐ Y ☐ N	☐ F
i. If yes,		
1. What are the water right numbers? _____ _____ _____	☐ A	☐ F
2. What is the sum of the flow rates (GPM or CFS) for all water rights conveyed? _____ _____ _____	☐ A	☐ F
3. Provide a map with your best estimate of the current POUs for the other water rights conveyed by the proposed conveyance ditch. Include only POUs between the POD and your proposed POU. If you do not know this information, the Department can help you create the map. The map should be created on an aerial photograph or topographic map and show the following: section corners, township and range, and a north arrow.	☐ S	☐ F
i. Were any water right(s) proposed for change identified as having a carriage water requirement in question 122.h.i.1.a.i?	☐ Y ☐ N	☐ F
i. If yes, update your Proposed Use Ditch Map to label the ditch segments where a carriage water requirement exists for a water right proposed for change. Also, use your best estimate to label the POUs for all water rights included in the carriage water requirement. If you do not know this information, the Department can help you update the map.	☐ S	☐ F
126. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 13 and if you are answering in consecutive order, go to question 127.		

Water Marketing

127. Does this project involve water marketing? If yes, answer the questions in this section (questions 128 to 134). If no, or if you answered these questions earlier in the preapplication meeting, this section is complete; skip to question 135.	☐ Y ■ N	☐ F
128. Identify the flow rate (GPM or CFS) and volume of water (AF) that will be marketed. _____		☐ F
129. Will the marketed water return to the source?	☐ Y ☐ N	☐ F
a. If yes, explain how that determination was made. _____ _____ _____	☐ A	☐ F
130. For what purpose(s) will the marketed water be used? _____ _____	☐ A	☐ F
131. How will you control or limit access to the water? _____ _____	☐ A	☐ F
132. Do you have contracts for the entire volume and flow rate sought?	☐ Y ☐ N	☐ F
133. Provide a service area map. Create map on an aerial photograph or topographic map and shows the following: general service area boundary, section corners, township and range, and a north arrow.	☐ S	☐ F
134. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 19 and if you are answering in consecutive order, go to question 135.		

Instream Flow Change

135. Does the project involve an instream flow change? If yes, answer the questions in this section (questions 136 to 145). If no, or if you answered these questions earlier in the preapplication meeting, this section is complete; skip to question 146.	☐ Y ■ N	☐ F
136. Is the proposal to retire all the use from the historical purpose throughout the entire period of use?	☐ Y ☐ N	☐ F
a. If no, describe why not in detail. _____ _____ _____	☐ A	☐ F

137. What is the name of the source of water where streamflow will be maintained or enhanced? _____		☐ F
138. Provide specific information on the location (¼ ¼ ¼ section of start and end of reach) and length (FT) of the stream reach in which the streamflow is to be maintained or enhanced. _____	☐ A	☐ F
139. Does the protected reach begin at the existing point of diversion?	☐ Y ☐ N	☐ F
a. If no, does the proposed protected reach begin upstream of or downstream from the existing point of diversion? _____		☐ F
140. Does return flow go back to the source of supply? The Department provides an initial estimate of the sources where return flow historically accrued at the preapplication meeting.	☐ Y ☐ N	☐ F
141. Describe the way the streamflow is to be maintained or enhanced. _____ _____ _____	☐ A	☐ F
142. Provide initial details about a streamflow measuring plan, which include the points where measurements occur, the interval of measurement, and the methods and equipment used. A complete streamflow measuring plan will be required for the application. _____ _____ _____ _____ _____	☐ A	☐ F
143. Provide initial details about an operation plan, which include the proposed flow rate (GPM or CFS) to be protected up to the proposed volume (AF) and the period when protection is to occur. If there is a "trigger flow" associated with your operation plan, please explain. A complete operation plan, based on the Technical Analysis, will be required for the application. _____ _____ _____ _____ _____	☐ A	☐ F

144. Is the amount of water proposed for change in the application made available through creation of a "water saving method," as defined in ARM 36.12.101?	☐ Y ☐ N	☐ F
a. If yes, complete the Salvage Water section (questions 146 to 150).	☐ S	☐ F
145. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 20 and if you are answering in consecutive order, go to question 146.		

Salvage Water

146. Does this project involve salvage water? Salvage water does not include destroying phreatophytes, removing vegetation, converting to a less consumptive crop, or converting to a partial irrigation schedule. If yes, answer the questions in this section (questions 147 to 150). If no, or if you answered these questions earlier in the preapplication meeting, this section is complete and you can skip to question 151.	☐ Y ■ N	☐ F
147. What water saving method was implemented? This may include lining an unlined ditch or canal, converting unlined ditch or canal to pipeline, converting high profile or high-pressure sprinklers to low pressure, and other (explain). _____ _____	☐ A	☐ F
148. How much water was salvaged from creation of the water saving method? Include flow rate (GPM or CFS) and volume (AF). _____		☐ F
149. How did you determine the amount of water salvaged? _____ _____ _____ _____ _____ _____	☐ A	☐ F
150. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 21 and if you are answering in consecutive order, go to question 151.		

Non-Mandatory Questions for Criteria Analysis

The following questions are not mandatory. They should be discussed in the Preapplication Meeting, but do not need to be filled out before the Preapplication Meeting Form is determined to be complete.

Adverse Effect

Questions, Narrative Responses, and Tables	Check-boxes
151. Once the historical use analysis is complete for the application, be ready to compare the historical use with the proposed use. Do you have evidence the proposed use exceeds the historical use for flow rate, consumed volume, or diverted volume?	☐ Y ☐ N
a. If yes, what is your plan to address this with the permitting process? N/A to CD WR Change	▬ A
152. Describe your plan to ensure that existing water rights will be satisfied during times of water shortage. Any calls made by Sr. water rights will be honored by CD.	▬ A
153. Explain how you can control your diversion in response to call being made. Pump can be turned off.	▬ A
154. Are you aware of any calls that have been made on the source of supply or depleted surface water source?	☐ Y ▬ N
a. If yes, explain.	☐ A
155. Does a water commissioner distribute water or oversee water distribution on your proposed source or depleted surface water source?	☐ Y ▬ N
156. Will the proposed use change the ability for you to make call?	☐ Y ▬ N

N/A

157. When was the last time water was appropriated and used beneficially? Water proposed is apart of the unperfected reservation. If there has been a period of nonuse, explain below:		
a. Why the water right was not used. Water proposed is apart of the unperfected reservation.	■ A	
b. Why a resumption of use will not adversely affect other water users. Water has already been granted by board.	■ A	
c. Is the period of nonuse greater than 10 years?	☐ Y ☐ N	N/A
d. Have water rights been authorized to use the source during the period of nonuse?	☐ Y ☐ N	N/A
158. For point of diversion changes:		N/A
a. Is the proposed point of diversion upstream or downstream of the historical point of diversion? N/A to CD WR Change		
b. Are there intervening water users between the historical and proposed point of diversion?	☐ Y ☐ N	N/A
c. Does the proposed point of diversion allow for diverting water longer during times of shortage?	☐ Y ☐ N	N/A
159. For place of use changes, will changes to the rate, location, volume, or timing of return flows adversely affect other appropriators?	☐ Y ■ N	

Adverse Effect: Evaluation of Impacts to Identified Water Rights for Return Flow Analysis

160. Respond to questions in this section if you elected in questions 50 or 88 to answer optional questions 161 to 163. If you did not elect to answer these questions or answered these questions earlier in the preapplication meeting, this section is complete; skip to question 165.		N/A
161. For each surface water source receiving return flows, is gage data available?	☐ Y ☐ N	N/A
a. If yes, answer the following questions for the number of stream gages that are available.		
i. One stream gage is available		
1. What is the gage name? N/A to CD WR Change		
2. Who operates and maintains the gage? N/A to CD WR Change		

3. Is the stream gage upstream or downstream of the point(s) of diversion? N/A to CD WR Change	
4. Is there a limiting or controlling factor that would make the Drainage Area Method not practical? This includes dams that control the flow and streams with large gaining and/or losing reaches. If you have questions about this, please contact the Regional Hydro-Specialist or the Water Sciences Bureau.	☐ Y ☐ N
5. Is the period of record greater than or equal to 10 years?	☐ Y ☐ N
6. How frequently is stage data recorded? N/A to CD WR Change	
7. If data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?	☐ Y ☐ N
8. Was the rating curve established and maintained throughout the duration of the period of record using measurements taken near the reference gage and stage recorder according to USGS protocols?	☐ Y ☐ N
9. Were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N
10. Does the gage data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N
a. If yes, skip to question 163.	
b. If no, answer question 161.b.	
ii. More than one stream gage is available	
1. List the gage names. N/A to CD WR Change	
2. Who operates and maintains the gages? N/A to CD WR Change	
3. Is one stream gage upstream and one downstream of point(s) of diversion?	☐ Y ☐ N
4. Do the stream gages have similar periods of record?	☐ Y ☐ N
5. Are the periods of record each greater than or equal to 10 years?	☐ Y ☐ N
6. How frequently is stage data recorded at each gage? N/A to CD WR Change	
7. For each gage, if data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?	☐ Y ☐ N

8. Were the rating curves established and maintained throughout the duration of the period of record using measurements taken near the reference gages and stage recorders according to USGS protocols?	☐ Y ☐ N
9. For each gage, were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N
10. Does the gage data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N
a. If yes, skip to question 163.	
b. If no, answer question 161.b.	
b. If no gage data is available or if available gage data does not meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion, is the source otherwise measured?	☐ Y ☐ N
i. If yes,	
1. Submit measurements to the Department.	☐ S
2. Who collected the measurements? N/A to CD WR Change	☐ A
3. With what method was the data collected? N/A to CD WR Change	☐ A
4. What is the period of record? N/A to CD WR Change	
5. What is the frequency of measurement? N/A to CD WR Change	
6. Are there gaps in the data?	☐ Y ☐ N
a. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality? N/A to CD WR Change	☐ A
7. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N

a. If yes, explain. N/A to CD WR Change		☐ A
8. Does available measurement data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?		☐ Y ☐ N
a. If yes, skip to question 163.		
b. If no, answer question 162.		
162. For each surface water source receiving return flows, does the available measurement data, gage and/or otherwise measured, meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for validation of a department-accepted estimation technique?		☐ Y ☐ N
a. If yes, describe the estimation technique. N/A to CD WR Change		☐ A
b. If no, will measurements be collected prior to submission of a completed Form No. 606P that meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for validation of a department-accepted estimation technique?		☐ Y ☐ N
i. If yes,		
1. With what method will the data be collected? N/A to CD WR Change		☐ A
2. What will be the interval of measurement? N/A to CD WR Change		

N/A

3. Describe the proposed estimation technique. N/A to CD WR Change	☐ A	
ii. If no, describe your plan supply measurements for return flow receiving sources. N/A to CD WR Change	☐ A	
163. If you are conducting Technical Analysis, how will the Area of Potential Adverse Effect be defined for evaluating return flow impacts? If the Department is conducting Technical Analyses, write N/A.	☐ A	N/A
164. If you went straight to this section when referenced, go back to question 51 for surface water changes and question 88 for groundwater changes. If you waited to answer in consecutive order and have completed all prior sections, move to question 165.		

Adverse Effect: Evaluation of Impacts to Identified Water Rights for Surface Water Depletion Analysis

165. Respond to questions in this section if you elected in question 79 to answer optional questions 166 to 168. If you did not elect to answer these questions or answered these questions earlier in the preapplication meeting, this section is complete; skip to question 170.		N/A
166. For each hydraulically connected surface water source, is gage data available?	☐ Y ☐ N	
a. If yes, answer the following questions for the number stream gages are available.		
i. One stream gage is available		
1. What is the gage name?		

2. Who operates and maintains the gage? _____	
3. Is the stream gage upstream or downstream of the start of the depletion? _____	
4. Is there a limiting or controlling factor that would make the Drainage Area Method not practical? This includes dams that control the flow and streams with large gaining and/or losing reaches. If you have questions about this, please contact the Regional Hydro-Specialist or the Water Sciences Bureau.	☐ Y ☐ N
5. Is the period of record greater than or equal to 10 years?	☐ Y ☐ N
6. How frequently is stage data recorded? _____	
7. If data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?	☐ Y ☐ N
8. Was the rating curve established and maintained throughout the duration of the period of record using measurements taken near the reference gage and stage recorder according to USGS protocols?	☐ Y ☐ N
9. Were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N
10. Does the gage data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N
a. If yes, skip to question 168.	
b. If no, answer question 166.b.	
ii. More than one stream gage is available	
1. List the gage names. _____	
2. Who operates and maintains the gages? _____	
3. Is one stream gage upstream and one downstream of the start of the depletion?	☐ Y ☐ N
4. Do the stream gages have similar periods of record?	☐ Y ☐ N
5. Are the periods of record each greater than or equal to 10 years?	☐ Y ☐ N
6. How frequently is stage data recorded at each gage? _____	

7. For each gage, if data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?	☐ Y ☐ N
8. Were the rating curves established and maintained throughout the duration of the period of record using measurements taken near the reference gages and stage recorders according to USGS protocols?	☐ Y ☐ N
9. For each gage, were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N
10. Does the gage data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N
a. If yes, skip to question 168.	
b. If no, answer question 166.b.	
b. If no gage data is available or if available gage data does not meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion, is the source otherwise measured?	☐ Y ☐ N
i. If yes,	
1. Submit available measurements to the Department	☐ S
2. Who collected the measurements? _____	☐ A
3. With what method was the data collected? _____ _____	☐ A
4. What is the period of record? _____	
5. What is the frequency of measurement? _____	
6. Are there gaps in the data?	☐ Y ☐ N
a. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality? _____ _____ _____ _____	☐ A
7. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N

a. If yes, explain. _____ _____ _____	☐ A
8. Does available measurement data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N
a. If yes, skip to question 168.	
b. If no, answer question 167.	
167. For each hydraulically connected surface water source, does the available measurement data, gage and/or otherwise measured, meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for validation of a department-accepted estimation technique?	☐ Y ☐ N
a. If yes, describe the estimation technique. _____ _____ _____ _____	☐ A
b. If no,	
i. Will measurements be collected prior to submission of a completed Form No. 606P that meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for validation of a department-accepted estimation technique?	☐ Y ☐ N
1. If yes,	
a. With what method will the data be collected? _____ _____ _____	☐ A
b. What will be the interval of measurement? _____	

c. Describe the proposed estimation technique. _____ _____ _____ _____	☐ A
2. If no, describe your plan to comply with the measurement requirements for hydraulically connected surface water sources. _____ _____ _____	☐ A
168. If you are conducting Technical Analysis, how will the Area of Potential Adverse Effect be defined for evaluating changes to net depletions? If the Department is conducting Technical Analyses, write N/A. _____ _____ _____ _____	☐ A
169. If you went straight to this section when referenced, go back to question 80. If you waited to answer in consecutive order and have completed all prior sections, move to question 170.	

Adequate Means of Diversion and Operation

170. Provide a diagram of how you will operate your system from the point of diversion to the place of use.	■ S
171. Describe specific information about the capacity of the diversionary structure(s). This may include, where applicable: pump curves and total dynamic head calculations, headgate design specifications, and dike or dam height and length. See Attachments for pump information. Cornell 6H pump (100 hp, 2200 rpm), powered by a John Deere 4045T stationary diesel engine (77hp @ 1800 rpm).	■ A
172. Is the diversion capable of providing the full amount requested through the period of diversion?	■ Y ☐ N

173. Describe the size and configuration of infrastructure to convey water from point of diversion to place of use. This may include, where applicable: ditch capacity and/or pipeline size and configuration. 10inch, 80# PIP pipe with #2 aluminum cable connection to a Valley Center pivot system.	■ A
174. Describe any losses related to conveyance. None - No ditches	■ A
175. Is the conveyance infrastructure capable of providing the required flow and volume and any losses?	■ Y ☐ N
176. Does the proposed conveyance require easements?	☐ Y ■ N
a. If yes, explain.	☐ A
177. Describe any places of storage, including whether drainage devices will be installed, and provide preliminary designs, if available. Preliminary designs will be required at application submittal. N/A	☐ A
178. Describe specific information about how water is delivered within the place of use. This may include, where applicable, the range of flow rates needed for a pivot and output and configuration of sprinkler heads. See Pre Application Map and Agri Industries Specification Sheets Water will be conveyed in 10" 80# PIP pipe with #2 aluminum cable connection to a Valley Center pivot system.	■ A
179. Is the water delivery system capable of providing the requested beneficial use?	■ Y ☐ N
180. Will your system be designed to discharge water from the project?	☐ Y ■ N
a. If yes, explain the way water will be discharged and the wastewater disposal method.	☐ A

181. Provide a plan of operations. All pivots can be operated at the same time, but can be operated independently for field needs. The existing and new pivot may be operated at the same time or individually; depending on field needs and to prevent over-saturation.	■ A
182. Can the plan of operations deliver the flow rate and volume for the beneficial use being requested?	■ Y ☐ N
183. Do you have any plans to measure your diversion and use?	■ Y ☐ N
a. If yes, describe the plan and the type of measurements you will take. Estimates his water use: (Number of inches applied over the season x Acres /12) WATER MEASUREMENT-MEETS CONSERVATION DISTRICT REQUIREMENT (See Remark)	■ A
184. Is the means of diversion a well?	☐ Y ■ N
a. If yes, are well log(s) available?	☐ Y ■ N
i. If yes, submit well log(s) to DNRC	☐ S
ii. If no, who drilled the well?	

Beneficial Use

185. Why is the requested flow rate and volume the amount needed for the purpose? Develop more lands for agricultural purposes based on crop needs.	■ A
186. Does the Department have a standard for the purposes for which water is used? Department standards can be found in ARM 36.12.112.	■ Y ☐ N
a. If yes, does the proposed beneficial use fall within Department standards?	■ Y ☐ N
187. If no standard or if proposed beneficial use falls outside of Department standards, explain how the use is reasonable for the purpose. N/A	☐ A N/A
188. Will your proposed project be subject to DEQ requirements for a public water supply (PWS) system or Certificate of Subdivision Approval (COSA)?	☐ Y ■ N

a. If yes,	
i. Have you researched or consulted with DEQ regarding those requirements?	☐ Y ☐ N
189. Are you proposing to use surface water for in-house domestic use?	☐ Y ■ N
a. If yes, does a COSA exist for the proposed place of use?	☐ Y ☐ N
i. If yes, please submit the COSA.	☐ S
ii. If no, have you researched or consulted with DEQ regarding their requirements?	☐ Y ☐ N

Possessory Interest

190. Do you have possessory interest, or the permission of the party with possessory interest, of the proposed place of use? Proof of possessory interest or permission of the party with possessory interest is required at application submittal.	☐ Y ☐ N
a. If no, explain. N/A to CD WR Change Reference attachments of two notes with written permissions.	■ A

N/A

40S-30165373 Colgan

FOLLOW-UP PAGE AFFIDAVIT & CERTIFICATION

"I/we attest that this preapplication meeting form, follow-up page, and amended responses page accurately portray my proposed project. I am aware that my application for this project will not qualify for a discounted filing fee and expedited timelines if upon submittal of the application to the department, I change any element of the proposed application from the preapplication meeting form and follow-up materials (ARM 36.12.1302(6)(a))."

Applicant Signature Richland County Conservation District Date 2-26-2025

Applicant Signature Date

"We confirm that the preapplication form and follow-up information are adequate for the Department to proceed with technical analyses in ARM 36.12.1303. If the applicant has elected to complete technical analyses, we confirm they have submitted each piece of technical analysis required based on the proposed project and the Department is able to proceed with the scientific credibility review (ARM 36.12.1303(8))."

Department Signature Date 02/27/2025

Department Signature Date

FOLLOW-UP PAGE

Applicant will provide all responses to questions marked for follow-up on a separate document entitled "Follow-up Responses" with the question number labeled. Answer questions in the same format as the form. For responses in the form of checkboxes, write "Y", "N", or "S". Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Label units in narrative responses and tables. Tables must have the exact headings found on the form. Questions that require items to be submitted to the Department may be marked "S" when the required item is attached to the Preapplication Meeting Form. Label all submitted items with the question number for which they were submitted. The Applicant may not alter the Preapplication Meeting Form signed at the Preapplication Meeting. Instead, the Applicant must use the Amended Responses procedure defined below. Do not include additional information for questions not marked for follow-up here; instead include any additional information pursuant to the process for amending responses defined below.

Questions marked for follow-up

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AMENDED RESPONSES PAGE

The Applicant may not alter the Preapplication Meeting Form signed at the Preapplication Meeting or the Follow-up Page. If a response has changed to a question answered at the preapplication meeting, the Applicant can provide a new response in a separate document entitled "Amended Responses" with the question number labeled. Answer questions in the same format as the form. For responses in the form of checkboxes, write "Y", "N", or "S". Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Label units in narrative responses and tables. Tables must have the exact headings found on the form. Questions that require items to be submitted to the Department may be marked "S" when the required item is attached to the Preapplication Meeting Form. Label all submitted items with the question number for which they were submitted. The Applicant will mark all question numbers with an amended response in the table below and note for each question whether the response will replace the response given at the preapplication meeting or will provide additional information to consider in conjunction with the response given at the preapplication meeting. The Applicant will return the "Amended Responses" document with the "Follow-up Responses" document and the signed Preapplication Meeting Form.

Questions with amended responses

-	-	-	-
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FOLLOW-UP PAGE AFFIDAVIT & CERTIFICATION

"I/we attest that this preapplication meeting form, follow-up page, and amended responses page accurately portray my proposed project. I am aware that my application for this project will not qualify for a discounted filing fee and expedited timelines if upon submittal of the application to the department, I change any element of the proposed application from the preapplication meeting form and follow-up materials (ARM 36.12.1302(6)(a))."

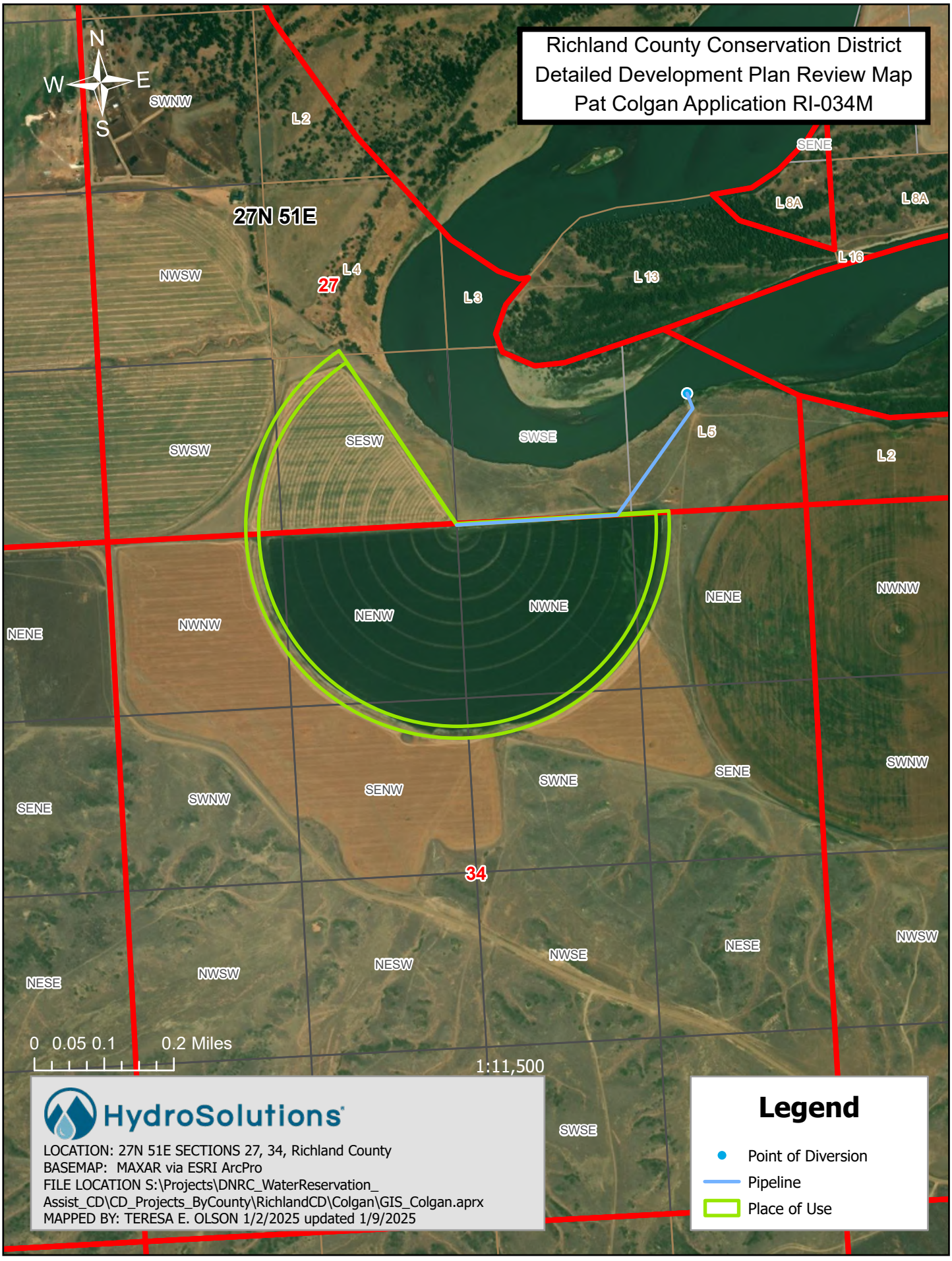
Applicant Signature — Richland County Conservation District — Date: 3-13-2025

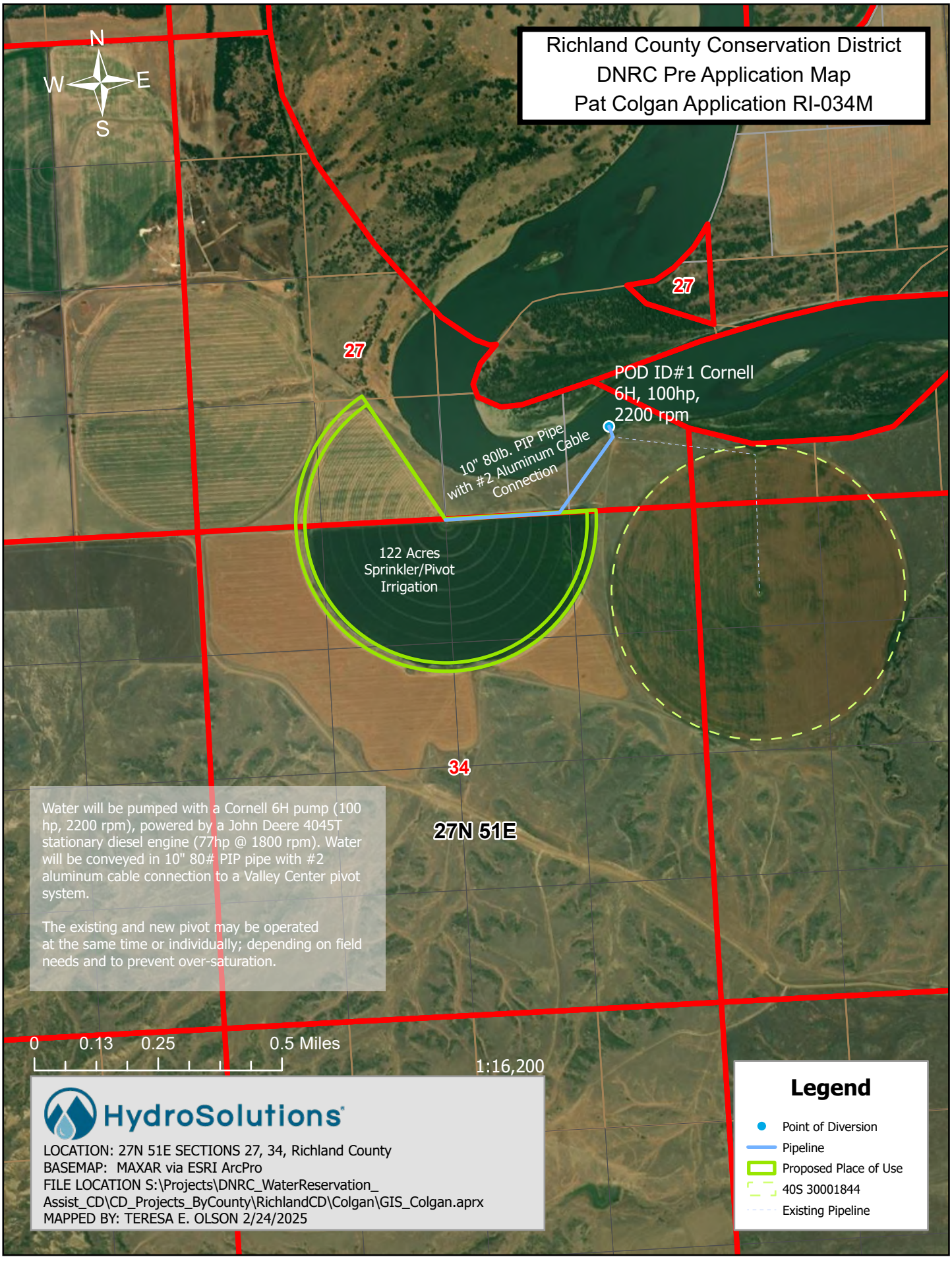
Applicant Signature — Date

"We confirm that the preapplication form and follow-up information are adequate for the Department to proceed with technical analyses in ARM 36.12.1303. If the applicant has elected to complete technical analyses, we confirm they have submitted each piece of technical analysis required based on the proposed project and the Department is able to proceed with the scientific credibility review (ARM 36.12.1303(8))."

Department Signature — Date: 3/21/2025

Department Signature — Date


Richland County Conservation District
Detailed Development Plan Review Map
Pat Colgan Application RI-034M
N
W
E
S
27N 51E
27
34
SWNW
L2
SENE
L8A
L8A
L16
L13
L4
L3
NWSW
SESW
SWSE
L5
SWSW
L2
NENW
NWNE
NENE
NWNW
NENE
NWNW
SENE
SWNW
SENW
SWNE
SENE
SWNW
NESE
NWSW
NESW
NWSE
NESE
NWSW
SWSE
0 0.05 0.1 0.2 Miles
1:11,500
HydroSolutions
LOCATION: 27N 51E SECTIONS 27, 34, Richland County
BASEMAP: MAXAR via ESRI ArcPro
FILE LOCATION S:\Projects\DNRC_WaterReservation_
Assist_CD\CD_Projects_ByCounty\RichlandCD\Colgan\GIS_Colgan.aprx
MAPPED BY: TERESA E. OLSON 1/2/2025 updated 1/9/2025
Legend
Point of Diversion
Pipeline
Place of Use


Richland County Conservation District
DNRC Pre Application Map
Pat Colgan Application RI-034M
N
W
E
S
27
27
POD ID#1 Cornell
6H, 100hp,
2200 rpm
10" 80lb. PIP Pipe
with #2 Aluminum Cable
Connection
122 Acres
Sprinkler/Pivot
Irrigation
34
27N 51E
Water will be pumped with a Cornell 6H pump (100 hp, 2200 rpm), powered by a John Deere 4045T stationary diesel engine (77hp @ 1800 rpm). Water will be conveyed in 10" 80# PIP pipe with #2 aluminum cable connection to a Valley Center pivot system.
The existing and new pivot may be operated at the same time or individually; depending on field needs and to prevent over-saturation.
0
0.13
0.25
0.5 Miles
1:16,200
HydroSolutions
LOCATION: 27N 51E SECTIONS 27, 34, Richland County
BASEMAP: MAXAR via ESRI ArcPro
FILE LOCATION S:\Projects\DNRC_WaterReservation_Assist_CD\CD_Projects_ByCounty\RichlandCD\Colgan\GIS_Colgan.aprx
MAPPED BY: TERESA E. OLSON 2/24/2025
Legend
Point of Diversion
Pipeline
Proposed Place of Use
40S 30001844
Existing Pipeline

November 15, 2024

To whom it may concern:

This is an agreement between Larry and Laurie Handy Trust and Patrick Colgan addressing the irrigation of 40 acres in Section 27, Twp 27 N, Range 51 E. Larry and Lauri Handy Trust own the property in Section 27, Twp 27N, Range 51E and Patrick Colgan owns the pivot to convey the irrigation water on the property. We agree that Patrick Colgan can apply for Reserved Water through the Richland County Conservation District on this property.

Larry and Lauri Handy Trust

Larry Handy 12-2-24

Larry Handy, Trustee Date

Lauri Handy 12/3/24

Lauri Handy, Trustee Date

We, Tom and Marquieta Colgan own the N2 of Sec 34, T27N, R51E in Richland County, Montana. Patrick Colgan has a lifetime lease on this property. He owns the pivot on the property. We agree that he can apply for reserved water through the Richland County Conservation District on this property.

Tom Colgan 10-31-24

Tom Colgan Date

Marquieta Colgan 10-31-2024

Marquieta Colgan Date

DATA SHEET

6H-F

AVAILABLE MOUNTING CONFIGURATIONS

6H-RP-F REDI-PRIME FRAME MOUNT
6H-F FRAME MOUNT
6H-RP-EM REDI-PRIME ENGINE MOUNT
6H-EM ENGINE MOUNT
6H-VF VERTICAL FRAME MOUNT
6H-VC VERTICAL COUPLED

OPERATING LEVELS

MIN FLOW	500 GPM	113.5 m^3/h
MAX FLOW	3350 GPM	760.5 m^3/h
DISCHARGE SIZE	6"	152 mm
SUCTION SIZE	8"	203 mm
SOLIDS HANDLING	1.12"	2.8 cm
MAX SPEED	2200 RPM	2200 RPM
SHUT-OFF HEAD	365'	111.3 m
BEP HEAD	300'	91.4 m
BP FLOW	2600 GPM	590.2 m^3/h
BEP PERCENT	86%	86%

A typical picture of the pump is shown. Please contact Cornell Pump Company for further details. All information is approximate and for general guidance only.

PARTS	STANDARD MATERIAL (ALL IRON)	ALL IRON BRONZE FITTED
IMPELLER	CAST IRON ASTM A48 CL30	BRONZE SAE 40
VOLUTE	CAST IRON ASTM A48 CL30	CAST IRON ASTM A48 CL30
SHAFT	SAE 1144 "STRESSPROOF"	SAE 1144 "STRESSPROOF"
SHAFT SLEEVE	416 STAINLESS STEEL	BRONZE SAE 660
BEARING HOUSING	CAST IRON ASTM A48 CL30	CAST IRON ASTM A48 CL30
WEAR RINGS	CAST IRON ASTM A48 CL30	BRONZE SAE 660
SUCTION SPOOL	CAST IRON ASTM A48 CL30	CAST IRON ASTM A48 CL30
BACKPLATE	CAST IRON ASTM A48 CL30	CAST IRON ASTM A48 CL30
MECHANICAL SEAL (OPTIONAL)	T-1, BUNA, CARBON/CERAMIC/STAINLESS	T-1, BUNA, CARBON/CERAMIC/STAINLESS
PACKING	GRAPHITED ACRYLIC	GRAPHITED ACRYLIC

The 6H pump is designed with Cornell's renowned quality and durability. It features a 6" discharge, 8" suction, enclosed impeller, and flanged tangential double volute. Available in all-iron or bronze-fitted materials. Graphited acrylic packing is standard, with Cornell's patented Cycloseal available (with type 1 single mechanical seal). Grease lubrication standard - oil lubrication optional.

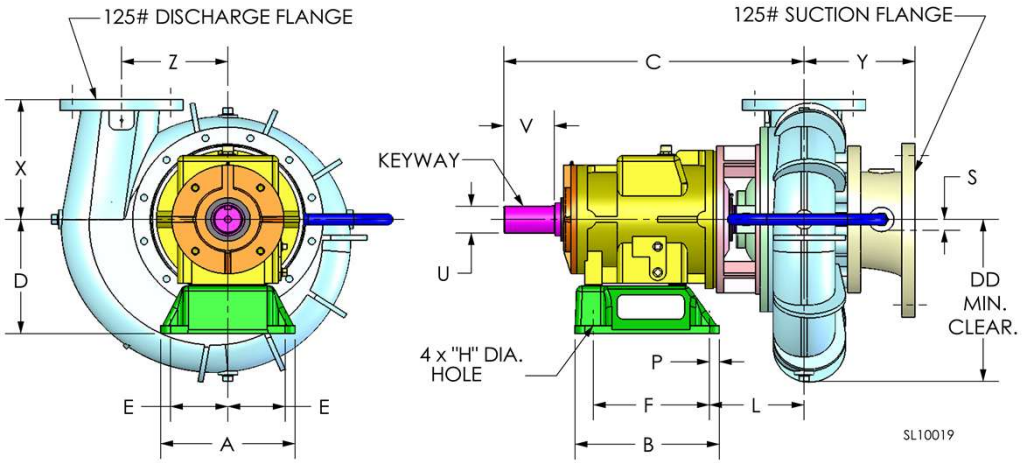
- External hydraulic balance line
- Back pullout design
- Replaceable hub & suction wear rings
- Replaceable shaft sleeve
- High efficiency hydraulics
- Low operating costs
- SAE #1, 2, 3, 4 & 5
- Modular bearing frame
- Oversized shaft and bearings
- Other mechanical seal (Cycloseal®) and material options available
- Two year warranty

AGRICULTURE FOOD INDUSTRIAL MINING MUNICIPAL OIL & GAS REFRIGERATION RENTAL

CORNELL
EFFICIENT BY DESIGN

DATA SHEET

6H-F



PUMP DIMENSIONS

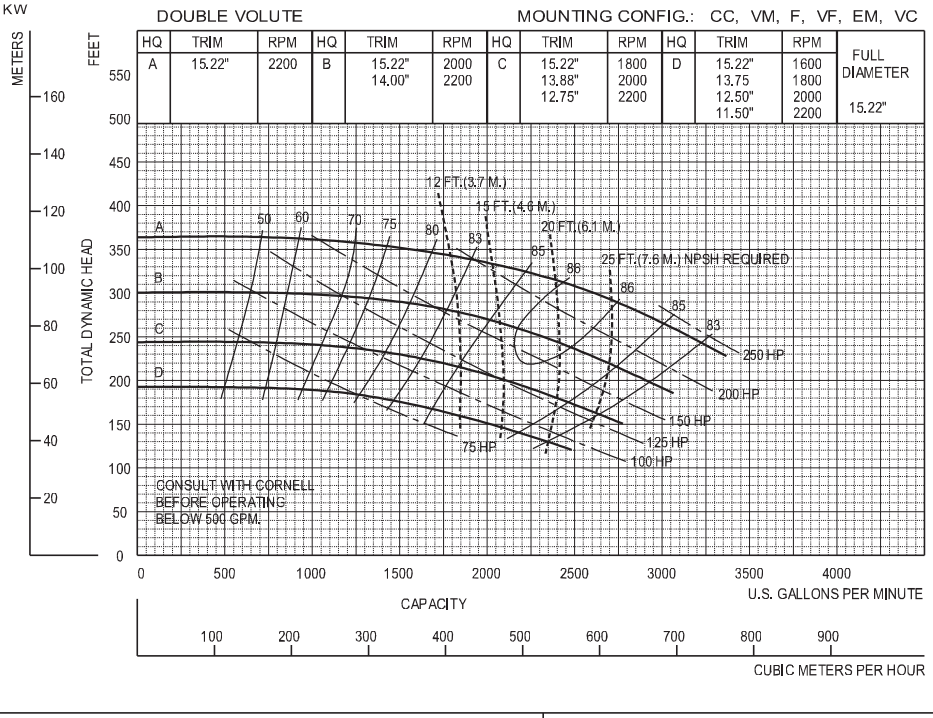
MODEL	FRAME	CONNECTION DISCH.	CONNECTION SUCT.	DISCH. INCR.	A	B	C	D	DD	E	F	H	L	P	S	U	V	X	Y	Z	KEYWAY
3HA	F18	3	6	90°	12	12.88	29.11	10.5	11.12	5.12	10.38	0.81	10.74	0.88	0.44	2.5	4.5	10	8.53	8.5	.62X.31
3HC	F18	3	6	90°	12	12.88	25.88	10.5	11.12	5.12	10.38	0.81	7.5	0.88	0.44	2.5	4.5	10	8.53	8.5	.62X.31
4HC	F18	4	8	90°	12	12.88	26.97	10.5	12.62	5.12	10.38	0.81	8.6	0.88	0.88	2.5	4.5	11	10.88	9.75	.62X.31
4HH	F18	4	6	90°	12	12.88	29.14	10.5	15	5.12	10.38	0.81	10.77	0.88	0.44	2.5	4.5	9.5	8.97	11.25	.62X.31
5H	F18	5	8	90°	12	12.88	29.17	10.5	14.75	5.12	10.38	0.81	10.8	0.88	0.88	2.5	4.5	13	9.66	11.62	.62X.31
5HH	F18	5	8	90°	12	12.88	29.84	10.5	16.25	5.12	10.38	0.81	11.47	0.88	0.44	2.5	4.5	11	10.56	10.25	.62X.31
6H	F18	6	8	90°	12	12.88	29.14	10.5	14.75	5.12	10.38	0.81	10.77	0.88	0.44	2.5	4.5	14	10.18	11.62	.62X.31
6HH	F18	6	8	90°	12	12.88	30.13	10.5	17.12	5.12	10.38	0.81	11.91	0.88	0.44	2.5	4.5	12	10.43	12	.62X.31
8H	F18	8	10	90°	12	12.88	30.41	10.5	16.75	5.12	10.38	0.81	12.03	0.88	0.75	2.5	4.5	13	10.41	11.5	.62X.31

Feet x .305 = Meters
Inches x 25.4 = Millimeters
GPM x .227 = Cubic Meters/Hour
GPM x 3.785 = Liters/Minute
HP x .746 = KW

Speed	Impeller Dia.	Style	Solids Dia.	N_S	Suction	Discharge	No. vanes
VARIOUS	V ARIOUS	ENCLOSED	1.12	1587	8"	6"	6

DOUBLE VOLUTE — MOUNTING CONFIG.: CC, VM, F, VF, EM, VC

HQ	TRIM	RPM	HQ	TRIM	RPM	HQ	TRIM	RPM	HQ	TRIM	RPM	FULL DIAMETER
A	15.22"	2200	B	15.22" 14.00"	2000 2200	C	15.22" 13.88" 12.75"	1800 2000 2200	D	15.22" 13.75 12.50" 11.50"	1600 1800 2000 2200	15.22"



Performances shown are for cool water, close-coupled electric configuration with Cydoseal.® Other mounting configurations, seal arrangements or liquids may require horsepower and/or performance adjustments.

9/15/99

NEW PAGE

6HVA

Cornell Pump Company • Portland, Oregon

6H - VARIOUS RPM

DS221-0930-GE

V-Chart

Valley Dealer

Agri Industries
1775 S CENTRAL AVE
Sidney, MT 59270-5524
UNITED STATES

Customer

PAT COLGAN
30678 COUNTY ROAD 149
POPLAR, MT 59255
UNITED STATES OF AMERICA

Dealer No.

00910337

Field Name

Parent Order No. 10996758
Sprinkler Order No. 10996845

Plant McCook Manufacturing

Dealer PO
Order Date 05/01/2013
Load Date 05/10/2013
Method Of Shipment W/SYS (10996758)

8 Span Valley Standard Pivot 7000
Machine Flow 800 GPM
Pivot Pressure 24 PSI

Parent Order No 10996758 Dealer Agri Industries Sprinkler Order No 10996845

Customer PAT COLGAN

Field Name

Valley Standard Pivot 7000 Machine Summary

Span and Overhang

Model	Qty	Length Ft	Pipe O.D. In	Coupler Spacing	Qty	D. U. Profile	Tire
7000	8	180.0	6 5/8	108	20	Standard	11.2 x 38
7000	1	54.0	6 5/8	110	8		

Field Area

91.3 Acres Total
80.8 Acres: Pivot 180°
10.5 EG on 100%
1497.3 Ft. Machine Length
93.9 Ft. End Gun Radius

Flow

800 Gallons Per Minute
8.76 GPM/Acre
0.46 In/Day App Rate
0.155 In. App Depth @ 100%
91.6 GPM End Gun

Messages

Caution:
None

Dealer:
None

Pressure

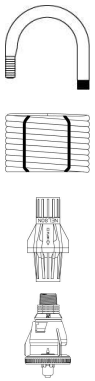
24 PSI Pivot Pressure
Calculated Pressure
0.0 Ft. Highest Elevation
0.0 Ft. Lowest Elevation

LRDU Drive Train

34 RPM Center Drive @ 60 Hz freq.
11.2 x 38 Tire
52:1 Wheel GB Ratio, LRDU Dist 1442.4 Ft.
8.0 Hrs/180° @ 100% (9.45) Ft/Min

Sprinkler -- Computer Spacing

Sprinkler Configuration	Range (ft)
Valley U-Pipe 6 Galvanized 3/4 M NPT x 3/4 M Hose	All
Blue Premium Hose Drop Variable Length 48" Ground Clr	
Nelson Regulator Blue Acme 10 3/4 F NPT	
Valley Slip Weight 26 2.0 Poly	
Nelson S3000 D8 - Yellow 3/4 F Acme	



1893.05 Ft Total Drop Hose Length

Parent Order No 10996758

Dealer Agri Industries

Sprinkler Order No 10996845

Customer PAT COLGAN

Field Name

Valley Standard Pivot 7000 Machine Summary

Pressure Loss

Pipe Length Ft	Pipe I.D. In	Pipe Finish	C-Factor	Loss PSI
1469.9	6.42	Galvanized	150	10.8
27.4	3.79	Galvanized	150	0.5
			Total =	11.3

Nelson SR100 End Gun

0.7 Nozzle

Berkeley 2 HP Booster Pump

Span Flow

Span Number	Irrigated Length	Acres	Rqd GPM	Act GPM	Rqd GPM/Acre	Act GPM/Acre	% Deviation
1	179.9	1.2	10.3	13.0	8.64	10.85	25.6
2	180.1	3.5	30.5	30.5	8.64	8.62	-0.2
3	180.1	5.9	50.8	50.9	8.64	8.66	0.2
4	180.1	8.2	71.0	71.0	8.64	8.64	-0.0
5	180.1	10.6	91.2	91.3	8.64	8.65	0.1
6	180.1	12.9	111.4	111.3	8.64	8.63	-0.1
7	180.1	15.2	131.6	131.5	8.64	8.63	-0.1
8	179.8	17.5	151.6	151.8	8.64	8.65	0.1
O/H	54.8	5.8	51.2	51.3	8.80	8.82	0.2
EG	93.9	10.5	91.7	91.6	8.77	8.76	0.0
Totals		91.3		794.2			
	Drain Sprinkler		8.8	8.7			
		Total Machine Flow		802.9			

Advanced Options

```
Drain Sprinkler = Senninger Directional
Last Sprinkler Coverage = 1.0 ft
Sprinkler Coverage Length = 1498.3 ft
Use Last Coupler= YES
Minimum Mainline Pressure = 6.0 PSI
```

Shipping Options

```
Ship Drop Hardware
Do not ship Endgun Nozzle
Do not ship Endgun & Hardware
Do not ship Endgun Valve / Nozzle Valve Hardware
Do not ship Boosterpump Hardware
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Parent Order No 10996758 Dealer Agri Industries Sprinkler Order No 10996845

Customer PAT COLGAN

Field Name

Valley Standard Pivot 7000 Machine Sprinkler Chart

Cpl No	Dist From Pivot	Spk No	Dist Last Spk	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length	Regulator	Line PSI	Spk PSI	Rqd GPM	Act GPM
1	6.5			Gauge						24.0			
		Sprinkler : Nelson Spinner											
2	15.5	1		10	Beige	S3000	Beige	116	Blue Acme 10L	23.6	11.6	0.1	0.6
3	24.5	2	9.0	10	Beige	S3000	Beige	123	Blue Acme 10L	23.3	11.6	0.1	0.6
4	33.5	3	9.0	10	Beige	S3000	Beige	129	Blue Acme 10L	22.9	11.6	0.2	0.6
5	42.5	4	9.0	10	Beige	S3000	Beige	134	Blue Acme 10L	22.7	11.6	0.2	0.6
6	51.5	5	9.0	10	Beige	S3000	Beige	138	Blue Acme 10L	22.4	11.6	0.3	0.6
7	60.5	6	9.0	10	Beige	S3000	Beige	142	Blue Acme 10L	22.2	11.6	0.3	0.6
8	69.5	7	9.0	10	Beige	S3000	Beige	145	Blue Acme 10L	22.0	11.6	0.4	0.6
9	78.5	8	9.0	10	Beige	S3000	Beige	147	Blue Acme 10L	21.8	11.6	0.4	0.6
10	87.5	9	9.0	10	Beige	S3000	Beige	148	Blue Acme 10L	21.6	11.6	0.5	0.6
11	96.4	10	8.9	10	Beige	S3000	Beige	148	Blue Acme 10L	21.5	11.6	0.5	0.6
12	105.4	11	9.0	10	Beige	S3000	Beige	148	Blue Acme 10L	21.4	11.6	0.6	0.6
13	114.4	12	9.0	11	Beige/Gold	S3000	Beige	146	Blue Acme 10L	21.4	11.5	0.6	0.7
14	123.4	13	9.0	11	Beige/Gold	S3000	Beige	144	Blue Acme 10L	21.3	11.5	0.7	0.7
15	132.4	14	9.0	11	Beige/Gold	S3000	Beige	142	Blue Acme 10L	21.3	11.5	0.7	0.7
16	141.3	15	8.9	12	Gold	S3000	Beige	138	Blue Acme 10L	21.4	11.5	0.8	0.8
17	150.3	16	9.0	12	Gold	S3000	Beige	134	Blue Acme 10L	21.4	11.5	0.8	0.8
18	159.3	17	9.0	12	Gold	S3000	Beige	128	Blue Acme 10L	21.5	11.5	0.9	0.8
19	168.3	18	9.0	13	Gold/Lime	S3000	Beige	122	Blue Acme 10L	21.6	11.5	0.9	1.0
20	177.3	19	9.0	13	Gold/Lime	S3000	Beige	116	Blue Acme 10L	21.8	11.4	1.0	1.0
	182.0	Tower Number : 1		Span Length : 179.9									
21	186.6	20	9.3	13	Gold/Lime	S3000	Beige	116	Blue Acme 10L	21.6	11.4	1.1	1.0
22	195.6	21	9.0	14	Lime	S3000	Beige	123	Blue Acme 10L	21.3	11.4	1.1	1.1
23	204.6	22	9.0	14	Lime	S3000	Beige	129	Blue Acme 10L	20.9	11.4	1.1	1.1
24	213.6	23	9.0	15	Lime/Lavender	S3000	Beige	135	Blue Acme 10L	20.6	11.4	1.2	1.3
25	222.6	24	9.0	14	Lime	S3000	Beige	140	Blue Acme 10L	20.4	11.4	1.2	1.1
26	231.6	25	9.0	15	Lime/Lavender	S3000	Beige	144	Blue Acme 10L	20.1	11.4	1.3	1.3
27	240.6	26	9.0	15	Lime/Lavender	S3000	Beige	147	Blue Acme 10L	19.9	11.3	1.3	1.3
28	249.6	27	9.0	16	Lavender	S3000	D8 - Yellow	149	Blue Acme 10L	19.7	11.3	1.4	1.5
29	258.6	28	9.0	16	Lavender	S3000	D8 - Yellow	151	Blue Acme 10L	19.6	11.3	1.5	1.5

Parent Order No 10996758 Dealer Agri Industries Sprinkler Order No 10996845

Customer PAT COLGAN

Field Name

Valley Standard Pivot 7000 Machine Sprinkler Chart

Cpl No	Dist From Pivot	Spk No	Dist Last Spk	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length	Regulator	Line PSI	Spk PSI	Rqd GPM	Act GPM
30	267.6	29	9.0	16	Lavender	S3000	D8 - Yellow	152	Blue Acme 10L	19.4	11.3	1.5	1.5
31	276.5	30	8.9	16	Lavender	S3000	D8 - Yellow	152	Blue Acme 10L	19.3	11.3	1.5	1.5
32	285.5	31	9.0	17	Lavender/Gray	S3000	D8 - Yellow	151	Blue Acme 10L	19.3	11.3	1.6	1.7
33	294.5	32	9.0	17	Lavender/Gray	S3000	D8 - Yellow	149	Blue Acme 10L	19.2	11.3	1.7	1.7
34	303.5	33	9.0	17	Lavender/Gray	S3000	D8 - Yellow	147	Blue Acme 10L	19.2	11.3	1.7	1.7
35	312.5	34	9.0	17	Lavender/Gray	S3000	D8 - Yellow	144	Blue Acme 10L	19.2	11.3	1.7	1.7
36	321.4	35	8.9	18	Gray	S3000	D8 - Yellow	140	Blue Acme 10L	19.3	11.2	1.8	1.9
37	330.4	36	9.0	18	Gray	S3000	D8 - Yellow	135	Blue Acme 10L	19.4	11.2	1.9	1.9
38	339.4	37	9.0	18	Gray	S3000	D8 - Yellow	129	Blue Acme 10L	19.5	11.2	1.9	1.9
39	348.4	38	9.0	18	Gray	S3000	D8 - Yellow	123	Blue Acme 10L	19.6	11.2	2.0	1.9
40	357.4	39	9.0	19	Gray/Turquoise	S3000	D8 - Yellow	116	Blue Acme 10L	19.8	11.2	2.0	2.1
	362.1		Tower Number : 2		Span Length : 180.1								
41	366.7	40	9.3	19	Gray/Turquoise	S3000	D8 - Yellow	116	Blue Acme 10L	19.7	11.2	2.1	2.1
42	375.7	41	9.0	19	Gray/Turquoise	S3000	D8 - Yellow	123	Blue Acme 10L	19.3	11.2	2.1	2.1
43	384.7	42	9.0	20	Turquoise	S3000	D8 - Yellow	129	Blue Acme 10L	19.0	11.2	2.2	2.3
44	393.7	43	9.0	19	Gray/Turquoise	S3000	D8 - Yellow	135	Blue Acme 10L	18.7	11.2	2.2	2.1
45	402.7	44	9.0	20	Turquoise	S3000	D8 - Yellow	140	Blue Acme 10L	18.4	11.1	2.3	2.3
46	411.7	45	9.0	20	Turquoise	S3000	D8 - Yellow	144	Blue Acme 10L	18.2	11.1	2.3	2.3
47	420.7	46	9.0	20	Turquoise	S3000	D8 - Yellow	147	Blue Acme 10L	18.0	11.1	2.4	2.3
48	429.7	47	9.0	21	Turq/Yellow	S3000	D8 - Yellow	149	Blue Acme 10L	17.8	11.1	2.4	2.5
49	438.7	48	9.0	21	Turq/Yellow	S3000	D8 - Yellow	151	Blue Acme 10L	17.6	11.1	2.5	2.5
50	447.7	49	9.0	21	Turq/Yellow	S3000	D8 - Yellow	152	Blue Acme 10L	17.5	11.1	2.5	2.5
51	456.6	50	8.9	21	Turq/Yellow	S3000	D8 - Yellow	152	Blue Acme 10L	17.4	11.1	2.5	2.5
52	465.6	51	9.0	21	Turq/Yellow	S3000	D8 - Yellow	151	Blue Acme 10L	17.4	11.1	2.6	2.5
53	474.6	52	9.0	22	Yellow	S3000	D8 - Yellow	149	Blue Acme 10L	17.3	11.1	2.7	2.8
54	483.6	53	9.0	22	Yellow	S3000	D8 - Yellow	147	Blue Acme 10L	17.3	11.1	2.7	2.8
55	492.6	54	9.0	22	Yellow	S3000	D8 - Yellow	144	Blue Acme 10L	17.4	11.1	2.7	2.8
56	501.5	55	8.9	22	Yellow	S3000	D8 - Yellow	140	Blue Acme 10L	17.4	11.0	2.8	2.8
57	510.5	56	9.0	22	Yellow	S3000	D8 - Yellow	135	Blue Acme 10L	17.5	11.0	2.9	2.8
58	519.5	57	9.0	23	Yellow/Red	S3000	D8 - Yellow	129	Blue Acme 10L	17.6	11.0	2.9	3.0
59	528.5	58	9.0	23	Yellow/Red	S3000	D8 - Yellow	123	Blue Acme 10L	17.8	11.0	3.0	3.0
60	537.5	59	9.0	23	Yellow/Red	S3000	D8 - Yellow	116	Blue Acme 10L	17.9	11.0	3.1	3.0
	542.2		Tower Number : 3		Span Length : 180.1								
61	546.8	60	9.3	23	Yellow/Red	S3000	D8 - Yellow	116	Blue Acme 10L	17.9	11.0	3.1	3.0

Parent Order No 10996758 Dealer Agri Industries Sprinkler Order No 10996845

Customer PAT COLGAN

Field Name

Valley Standard Pivot 7000 Machine Sprinkler Chart

Cpl No	Dist From Pivot	Spk No	Dist Last Spk	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length	Regulator	Line PSI	Spk PSI	Rqd GPM	Act GPM
62	555.8	61	9.0	23	Yellow/Red	S3000	D8 - Yellow	123	Blue Acme 10L	17.5	11.0	3.1	3.0
63	564.8	62	9.0	24	Red	S3000	D8 - Yellow	129	Blue Acme 10L	17.2	11.0	3.2	3.3
64	573.8	63	9.0	24	Red	S3000	D8 - Yellow	135	Blue Acme 10L	16.9	11.0	3.2	3.3
65	582.8	64	9.0	24	Red	S3000	D8 - Yellow	140	Blue Acme 10L	16.7	11.0	3.3	3.3
66	591.8	65	9.0	24	Red	S3000	D8 - Yellow	144	Blue Acme 10L	16.4	10.9	3.3	3.3
67	600.8	66	9.0	24	Red	S3000	D8 - Yellow	147	Blue Acme 10L	16.2	10.9	3.4	3.3
68	609.8	67	9.0	25	Red/White	S3000	D8 - Yellow	149	Blue Acme 10L	16.1	10.9	3.4	3.6
69	618.8	68	9.0	24	Red	S3000	D8 - Yellow	151	Blue Acme 10L	15.9	10.9	3.5	3.3
70	627.8	69	9.0	25	Red/White	S3000	D8 - Yellow	152	Blue Acme 10L	15.8	10.9	3.5	3.6
71	636.7	70	8.9	25	Red/White	S3000	D8 - Yellow	152	Blue Acme 10L	15.8	10.9	3.6	3.5
72	645.7	71	9.0	25	Red/White	S3000	D8 - Yellow	151	Blue Acme 10L	15.7	10.8	3.6	3.5
73	654.7	72	9.0	26	White	S3000	D8 - Yellow	149	Blue Acme 10L	15.7	10.8	3.7	3.8
74	663.7	73	9.0	25	Red/White	S3000	D8 - Yellow	147	Blue Acme 10L	15.7	10.8	3.7	3.5
75	672.7	74	9.0	26	White	S3000	D8 - Yellow	144	Blue Acme 10L	15.7	10.8	3.8	3.8
76	681.6	75	8.9	26	White	S3000	D8 - Yellow	140	Blue Acme 10L	15.8	10.8	3.8	3.8
77	690.6	76	9.0	26	White	S3000	D8 - Yellow	135	Blue Acme 10L	15.9	10.8	3.9	3.8
78	699.6	77	9.0	26	White	S3000	D8 - Yellow	129	Blue Acme 10L	16.0	10.7	3.9	3.8
79	708.6	78	9.0	27	White/Blue	S3000	D8 - Yellow	123	Blue Acme 10L	16.2	10.7	4.0	4.1
80	717.6	79	9.0	27	White/Blue	S3000	D8 - Yellow	116	Blue Acme 10L	16.4	10.7	4.1	4.1
	722.3		Tower Number : 4		Span Length : 180.1								
81	726.9	80	9.3	27	White/Blue	S3000	D8 - Yellow	116	Blue Acme 10L	16.3	10.7	4.1	4.1
82	735.9	81	9.0	27	White/Blue	S3000	D8 - Yellow	123	Blue Acme 10L	16.0	10.7	4.1	4.1
83	744.9	82	9.0	27	White/Blue	S3000	D8 - Yellow	129	Blue Acme 10L	15.7	10.6	4.2	4.1
84	753.9	83	9.0	28	Blue	S3000	D8 - Yellow	135	Blue Acme 10L	15.4	10.6	4.2	4.5
85	762.9	84	9.0	27	White/Blue	S3000	D8 - Yellow	140	Blue Acme 10L	15.2	10.6	4.3	4.1
86	771.9	85	9.0	28	Blue	S3000	D8 - Yellow	144	Blue Acme 10L	15.0	10.6	4.3	4.4
87	780.9	86	9.0	28	Blue	S3000	D8 - Yellow	147	Blue Acme 10L	14.8	10.6	4.4	4.4
88	789.9	87	9.0	28	Blue	S3000	D8 - Yellow	149	Blue Acme 10L	14.7	10.6	4.4	4.4
89	798.9	88	9.0	28	Blue	S3000	D8 - Yellow	151	Blue Acme 10L	14.5	10.6	4.5	4.4
90	807.9	89	9.0	28	Blue	S3000	D8 - Yellow	152	Blue Acme 10L	14.4	10.6	4.5	4.4
91	816.8	90	8.9	28	Blue	S3000	D8 - Yellow	152	Blue Acme 10L	14.4	10.5	4.6	4.4
92	825.8	91	9.0	29	Blue/Dark Brown	S3000	D8 - Yellow	151	Blue Acme 10L	14.4	10.5	4.6	4.7
93	834.8	92	9.0	29	Blue/Dark Brown	S3000	D8 - Yellow	149	Blue Acme 10L	14.4	10.5	4.7	4.7
94	843.8	93	9.0	29	Blue/Dark Brown	S3000	D8 - Yellow	147	Blue Acme 10L	14.4	10.5	4.7	4.7

Parent Order No 10996758 Dealer Agri Industries Sprinkler Order No 10996845

Customer PAT COLGAN

Field Name

Valley Standard Pivot 7000 Machine Sprinkler Chart

Cpl No	Dist From Pivot	Spk No	Dist Last Spk	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length	Regulator	Line PSI	Spk PSI	Rqd GPM	Act GPM
95	852.8	94	9.0	29	Blue/Dark Brown	S3000	D8 - Yellow	144	Blue Acme 10L	14.4	10.5	4.8	4.7
96	861.7	95	8.9	29	Blue/Dark Brown	S3000	D8 - Yellow	140	Blue Acme 10L	14.5	10.4	4.8	4.7
97	870.7	96	9.0	30	Dark Brown	S3000	D8 - Yellow	135	Blue Acme 10L	14.6	10.4	4.9	5.0
98	879.7	97	9.0	30	Dark Brown	S3000	D8 - Yellow	129	Blue Acme 10L	14.8	10.4	4.9	5.0
99	888.7	98	9.0	30	Dark Brown	S3000	D8 - Yellow	123	Blue Acme 10L	15.0	10.4	5.0	5.0
100	897.7	99	9.0	30	Dark Brown	S3000	D8 - Yellow	116	Blue Acme 10L	15.2	10.4	5.1	5.0
	902.4		Tower Number : 5		Span Length : 180.1								
101	907.0	100	9.3	30	Dark Brown	S3000	D8 - Yellow	116	Blue Acme 10L	15.1	10.3	5.2	5.0
102	916.0	101	9.0	30	Dark Brown	S3000	D8 - Yellow	123	Blue Acme 10L	14.8	10.3	5.1	5.0
103	925.0	102	9.0	31	Dk Brown/Orange	S3000	D8 - Yellow	129	Blue Acme 10L	14.5	10.3	5.2	5.3
104	934.0	103	9.0	31	Dk Brown/Orange	S3000	D8 - Yellow	135	Blue Acme 10L	14.3	10.3	5.2	5.3
105	943.0	104	9.0	31	Dk Brown/Orange	S3000	D8 - Yellow	140	Blue Acme 10L	14.1	10.3	5.3	5.3
106	952.0	105	9.0	31	Dk Brown/Orange	S3000	D8 - Yellow	144	Blue Acme 10L	13.9	10.3	5.3	5.3
107	961.0	106	9.0	31	Dk Brown/Orange	S3000	D8 - Yellow	147	Blue Acme 10L	13.7	10.2	5.4	5.3
108	970.0	107	9.0	31	Dk Brown/Orange	S3000	D8 - Yellow	149	Blue Acme 10L	13.6	10.2	5.4	5.3
109	979.0	108	9.0	32	Orange	S3000	D8 - Yellow	151	Blue Acme 10L	13.5	10.2	5.5	5.7
110	988.0	109	9.0	32	Orange	S3000	D8 - Yellow	152	Blue Acme 10L	13.4	10.2	5.5	5.7
111	996.9	110	8.9	31	Dk Brown/Orange	S3000	D8 - Yellow	152	Blue Acme 10L	13.4	10.2	5.6	5.3
112	1005.9	111	9.0	32	Orange	S3000	D8 - Yellow	151	Blue Acme 10L	13.3	10.1	5.6	5.7
113	1014.9	112	9.0	32	Orange	S3000	D8 - Yellow	149	Blue Acme 10L	13.4	10.1	5.7	5.7
114	1023.9	113	9.0	32	Orange	S3000	D8 - Yellow	147	Blue Acme 10L	13.4	10.1	5.7	5.7
115	1032.9	114	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	144	Blue Acme 10L	13.5	10.1	5.8	6.0
116	1041.8	115	8.9	32	Orange	S3000	D8 - Yellow	140	Blue Acme 10L	13.6	10.1	5.8	5.7
117	1050.8	116	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	135	Blue Acme 10L	13.7	10.1	5.9	6.0
118	1059.8	117	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	129	Blue Acme 10L	13.9	10.1	5.9	6.0
119	1068.8	118	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	123	Blue Acme 10L	14.1	10.1	6.0	6.0
120	1077.8	119	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	116	Blue Acme 10L	14.3	10.0	6.2	6.0
	1082.5		Tower Number : 6		Span Length : 180.1								
121	1087.1	120	9.3	34	Dark Green	S3000	D8 - Yellow	116	Blue Acme 10L	14.3	10.0	6.2	6.4
122	1096.1	121	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	123	Blue Acme 10L	14.0	10.0	6.1	6.0
123	1105.1	122	9.0	34	Dark Green	S3000	D8 - Yellow	129	Blue Acme 10L	13.7	10.0	6.2	6.4
124	1114.1	123	9.0	33	Orange/Dk Green	S3000	D8 - Yellow	135	Blue Acme 10L	13.5	10.0	6.3	6.0
125	1123.1	124	9.0	34	Dark Green	S3000	D8 - Yellow	140	Blue Acme 10L	13.3	9.9	6.3	6.4
126	1132.1	125	9.0	34	Dark Green	S3000	D8 - Yellow	144	Blue Acme 10L	13.1	9.9	6.4	6.3

Parent Order No 10996758 Dealer Agri Industries Sprinkler Order No 10996845

Customer PAT COLGAN

Field Name

Valley Standard Pivot 7000 Machine Sprinkler Chart

Cpl No	Dist From Pivot	Spk No	Dist Last Spk	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length	Regulator	Line PSI	Spk PSI	Rqd GPM	Act GPM
127	1141.1	126	9.0	34	Dark Green	S3000	D8 - Yellow	147	Blue Acme 10L	13.0	9.9	6.4	6.3
128	1150.1	127	9.0	35	Dk Green/Purple	S3000	D8 - Yellow	149	Blue Acme 10L	12.9	9.9	6.5	6.7
129	1159.1	128	9.0	34	Dark Green	S3000	D8 - Yellow	151	Blue Acme 10L	12.8	9.9	6.5	6.3
130	1168.1	129	9.0	35	Dk Green/Purple	S3000	D8 - Yellow	152	Blue Acme 10L	12.7	9.9	6.5	6.7
131	1177.0	130	8.9	35	Dk Green/Purple	S3000	D8 - Yellow	152	Blue Acme 10L	12.7	9.9	6.6	6.7
132	1186.0	131	9.0	35	Dk Green/Purple	S3000	D8 - Yellow	151	Blue Acme 10L	12.7	9.9	6.7	6.7
133	1195.0	132	9.0	35	Dk Green/Purple	S3000	D8 - Yellow	149	Blue Acme 10L	12.7	9.8	6.7	6.7
134	1204.0	133	9.0	35	Dk Green/Purple	S3000	D8 - Yellow	147	Blue Acme 10L	12.8	9.8	6.8	6.7
135	1213.0	134	9.0	35	Dk Green/Purple	S3000	D8 - Yellow	144	Blue Acme 10L	12.9	9.8	6.8	6.7
136	1221.9	135	8.9	35	Dk Green/Purple	S3000	D8 - Yellow	140	Blue Acme 10L	13.0	9.8	6.8	6.7
137	1230.9	136	9.0	36	Purple	S3000	D8 - Yellow	135	Blue Acme 10L	13.2	9.9	6.9	7.0
138	1239.9	137	9.0	36	Purple	S3000	D8 - Yellow	129	Blue Acme 10L	13.3	9.9	7.0	7.0
139	1248.9	138	9.0	36	Purple	S3000	D8 - Yellow	123	Blue Acme 10L	13.6	9.9	7.0	7.0
140	1257.9	139	9.0	36	Purple	S3000	D8 - Yellow	116	Blue Acme 10L	13.8	9.9	7.2	7.0
	1262.6	Tower Number : 7		Span Length : 180.1									
141	1267.2	140	9.3	37	Purple/Black	S3000	D8 - Yellow	116	Blue Acme 10L	13.8	9.9	7.2	7.5
142	1276.2	141	9.0	36	Purple	S3000	D8 - Yellow	123	Blue Acme 10L	13.5	9.9	7.2	7.0
143	1285.2	142	9.0	37	Purple/Black	S3000	D8 - Yellow	129	Blue Acme 10L	13.3	9.9	7.2	7.5
144	1294.2	143	9.0	36	Purple	S3000	D8 - Yellow	135	Blue Acme 10L	13.0	9.9	7.3	7.0
145	1303.2	144	9.0	37	Purple/Black	S3000	D8 - Yellow	140	Blue Acme 10L	12.9	9.9	7.3	7.5
146	1312.2	145	9.0	37	Purple/Black	S3000	D8 - Yellow	144	Blue Acme 10L	12.7	9.9	7.4	7.5
147	1321.2	146	9.0	37	Purple/Black	S3000	D8 - Yellow	147	Blue Acme 10L	12.6	9.9	7.4	7.5
148	1330.2	147	9.0	37	Purple/Black	S3000	D8 - Yellow	149	Blue Acme 10L	12.5	9.9	7.5	7.5
149	1339.2	148	9.0	37	Purple/Black	S3000	D8 - Yellow	151	Blue Acme 10L	12.4	9.9	7.5	7.5
150	1348.2	149	9.0	37	Purple/Black	S3000	D8 - Yellow	152	Blue Acme 10L	12.4	9.9	7.5	7.5
151	1357.1	150	8.9	37	Purple/Black	S3000	D8 - Yellow	152	Blue Acme 10L	12.4	9.9	7.6	7.5
152	1366.1	151	9.0	37	Purple/Black	S3000	D8 - Yellow	151	Blue Acme 10L	12.4	9.9	7.7	7.5
153	1375.1	152	9.0	37	Purple/Black	S3000	D8 - Yellow	149	Blue Acme 10L	12.4	9.9	7.7	7.5
154	1384.1	153	9.0	38	Black	S3000	D8 - Yellow	147	Blue Acme 10L	12.5	9.9	7.8	7.9
155	1393.1	154	9.0	38	Black	S3000	D8 - Yellow	144	Blue Acme 10L	12.6	9.9	7.8	7.9
156	1402.0	155	8.9	38	Black	S3000	D8 - Yellow	140	Blue Acme 10L	12.7	9.9	7.8	7.9
157	1411.0	156	9.0	38	Black	S3000	D8 - Yellow	135	Blue Acme 10L	12.9	9.9	7.9	7.9
158	1420.0	157	9.0	38	Black	S3000	D8 - Yellow	129	Blue Acme 10L	13.1	9.9	8.0	7.9
159	1429.0	158	9.0	38	Black	S3000	D8 - Yellow	123	Blue Acme 10L	13.3	9.9	8.0	7.9

Parent Order No 10996758 Dealer Agri Industries Sprinkler Order No 10996845

Customer PAT COLGAN

Field Name

Valley Standard Pivot 7000 Machine Sprinkler Chart

Cpl No	Dist From Pivot	Spk No	Dist Last Spk	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length	Regulator	Line PSI	Spk PSI	Rqd GPM	Act GPM
160	1438.0	159	9.0	38	Black	S3000	D8 - Yellow	116	Blue Acme 10L	13.6	9.9	8.1	7.9
161	1441.8		3.8	B.P.									
	1442.4		Tower Number : 8		Span Length : 179.8								
162	1447.0	160	9.0	39	Black/Dk Turq	S3000	D8 - Yellow	114	Blue Acme 10L	13.6	9.9	8.2	8.4
163	1456.1	161	9.1	39	Black/Dk Turq	S3000	D8 - Yellow	118	Blue Acme 10L	13.5	9.9	8.3	8.4
164	1465.3	162	9.2	39	Black/Dk Turq	S3000	D8 - Yellow	123	Blue Acme 10L	13.3	9.9	8.3	8.4
165	1468.9		3.5	Plug									
166	1474.4	163	9.1	39	Black/Dk Turq	S3000	D8 - Yellow	127	Blue Acme 10L	13.1	9.9	8.4	8.4
167	1483.6	164	9.1	39	Black/Dk Turq	S3000	D8 - Yellow	131	Blue Acme 10L	12.9	9.9	8.5	8.4
168	1492.7	165	9.2	41	Dk Turq/Mustard	S3000	D8 - Yellow	136	Blue Acme 10L	12.7	9.9	9.4	9.3
			Sprinkler : Senninger Spray										

169	1496.3	166	3.5	19	Black	Directional				12.4	12.4	8.8	8.7
	1497.3		Overhang		Span Length : 54.8								
			Sprinkler : Nelson Endgun										

170	1497.3	167	1.0	0.7		SR100				12.4	43.1	91.7	91.6

Endgun Arc Settings: Forward Angle: 45 Reverse Angle: 85

802.7

Parent Order No 10996758

Dealer Agri Industries

Customer PAT COLGAN

Field Name

Sprinkler Order No 10996845

Valley Standard Pivot 7000 Percent Timer Data

Setup Information - Valley Computer Control Panel Water Application Constants: Minimum Application = 0.155 Hours Per Revolution = 8.0

Based on Inches

Inches Per 180 Degrees	Pivot % Timer	Hours Per 180 Degrees
0.155	100.0	8.0
0.20	77.4	10.3
0.30	51.6	15.5
0.40	38.7	20.7
0.50	31.0	25.8
0.60	25.8	31.0
0.70	22.1	36.2
0.80	19.4	41.2
0.90	17.2	46.5
1.00	15.5	51.6
1.25	12.4	64.5
1.50	10.3	77.7
1.75	8.9	89.9
2.00	7.7	103.9
2.50	6.2	129.0
3.00	5.2	153.8

Based on % Timer

Pivot % Timer	Inches Per 180 Degrees	Hours Per 180 Degrees
100.0	0.155	8.0
90.0	0.17	8.9
80.0	0.19	10.0
70.0	0.22	11.4
60.0	0.26	13.3
50.0	0.31	16.0
45.0	0.34	17.8
40.0	0.39	20.0
35.0	0.44	22.9
30.0	0.52	26.7
25.0	0.62	32.0
20.0	0.77	40.0
17.5	0.89	45.7
15.0	1.03	53.3
12.5	1.24	64.0
10.0	1.55	80.0
7.5	2.07	106.7
5.0	3.10	160.0

Field Area

91.3 Acres Total
80.8 Acres: Pivot 180°
10.5 EG on 100%
1497.3 Ft. Machine Length
93.9 Ft. End Gun Radius

Flow

800 Gallons Per Minute
8.76 GPM/Acre
0.46 In/Day App Rate
0.155 In. App Depth @ 100%
91.6 GPM End Gun

Pressure

24 PSI Pivot Pressure
Calculated Pressure
0.0 Ft. Highest Elevation
0.0 Ft. Lowest Elevation

LRDU Drive Train

34 RPM Center Drive @ 60 Hz freq.
11.2 x 38 Tire
52:1 Wheel GB Ratio, LRDU Dist 1442.4 Ft.
8.0 Hrs/180 @ 100% (9.45)Ft/Min

Disclaimer

The information presented in the attached Percent Timer Report is based on variables which cannot be totally controlled by Valmont (including, but not limited to; pivot pressure, inside pipeline surface, end gun throw, end gun arc setting, tire slippage, tire pressure, field slopes, soil variations, sprinkler package installation, well capacity, center drive motor voltage, center drive motor frequency, climatic conditions and other elements and circumstances beyond Valmont's reasonable control). Valmont recommends monitoring the machine for at least one pass through field to obtain an accurate rotation time.

REQUEST FOR PREAPPLICATION MEETING

ARM 36.12.1302(2)

(Revised 01/2024)

For Department Use Only

Date Received 1/13/2025

Received By Kailee Ingalls

Scheduled Meeting Date _____

Instructions

Use this optional form to submit a written request for a preapplication meeting, as required in ARM 36.12.1302(2) for applicants electing to complete a preapplication meeting with the department prior to submitting an application for a beneficial water use permit or change in appropriation right pursuant to §85-2-302, MCA. Use additional sheets as necessary.

Submit this form to the appropriate regional office; see contact information on the last page of this form.

---

1. Applicant Name Richland County Conservation District

Mailing Address 2745 West Holly ST

City Sidney State MT Zip 59270

Home Phone 406-943-3001 Other Phone _____

Email: Julie.Goss@mt.nacdnet.net

2. Representative Name (if other than Applicant) Teresa Olson

☒ Representative is Consultant ☐ Representative is Attorney ☐ Representative is Other

Mailing Address 2912 7th Ave. N.

City Billings State MT Zip 59101-0906

Home Phone _____ Other Phone 406-366-6547

Email: tolson@hydrosi.com

3. Are you requesting a preapplication meeting for a permit or change application?

☐ Permit ☒ Change

4. Identify the following elements of the proposed permit or change in appropriation.

a) The flow rate and volume of water required:

Flow Rate 1.8 ☐ GPM ☒ CFS Volume 294 Acre-Feet

b) The point of diversion:

Point of Diversion #1 NW 1/4 SE 1/4 SE 1/4 Section 27, Township 27 ☒ N ☐ S, Range 51 ☒ E ☐ W

County Richland

Lot/Tract Gov Lt 5 Block _____ Subdivision Name _____

Point of Diversion #2 ____ 1/4 ____ 1/4 ____ 1/4 Section ____, Township ____ ☐ N ☐ S, Range ____ ☐ E ☐ W

County _____

Lot/Tract _____ Block _____ Subdivision Name _____

c) The place of use:

93 Acres ____ Lot ____ Block ____ 1/4 ____ 1/4 N2 1/4 Sec 34, Twp 27 ☒ N ☐ S, Rge 51 ☒ E ☐ W

29 Acres ____ Lot ____ Block ____ 1/4 S2 1/4 SW 1/4 Sec 27, Twp 27 ☒ N ☐ S, Rge 51 ☒ E ☐ W

____ Acres ____ Lot ____ Block ____ 1/4 ____ 1/4 ____ 1/4 Sec ____, Twp ____ ☐ N ☐ S, Rge ____ ☐ E ☐ W

____ Acres ____ Lot ____ Block ____ 1/4 ____ 1/4 ____ 1/4 Sec ____, Twp ____ ☐ N ☐ S, Rge ____ ☐ E ☐ W

_____Acres ____ Lot ____ Block_____1/4 _____1/4 _____1/4 Sec ____, Twp ____ ☐ N ☐ S, Rge ____ ☐ E ☐ W

d) The source of water: Missouri River

e) The proposed purpose: Irrigation

f) For a change in appropriation right, the water right(s) proposed for change:

Type of water right CONSERVATION DISTRICT Basin _____ Water Right # 40S 84500-00

Type of water right Lower Missouri Water Reservation Basin _____ Water Right # _____

Type of water right _____ Basin _____ Water Right # _____

g) For a change in appropriation right, an explanation of historical use of the right(s) proposed for change:

Place of use and diversion are outside of the original application for reservation (projects) and all subsequent authorizations issued by the Richland County Conservation District.

h) Any proposed place of storage, if applicable (only if storage capacity is greater than 0.1 acre-feet): N/A

#1 Capacity: Surface Acres _____ x Max Depth (feet) _____ x (.4 for dams/.5 for pits) = _____Acre-Feet

Location: ____1/4 ____1/4 ____1/4 Section ___, Township ___ ☐ N ☐ S, Range ___ ☐ E ☐ W

#2 Capacity: Surface Acres _____ x Max Depth (feet) _____ x (.4 for dams/.5 for pits) = _____Acre-Feet

Location: ____1/4 ____1/4 ____1/4 Section ___, Township ___ ☐ N ☐ S, Range ___ ☐ E ☐ W

#3 Capacity: Surface Acres _____ x Max Depth (feet) _____ x (.4 for dams/.5 for pits) = _____Acre-Feet

Location: ____1/4 ____1/4 ____1/4 Section ___, Township ___ ☐ N ☐ S, Range ___ ☐ E ☐ W

i) For applications proposing a new well or wells, the well depth(s) and location: N/A

New Well #1 ____1/4 ____1/4 ____1/4 Section ____, Township _____ ☐ N ☐ S, Range _____ ☐ E ☐ W

County _____

Lot/Tract _____ Block_____ Subdivision Name_____

Estimated Well Depth _____ Feet

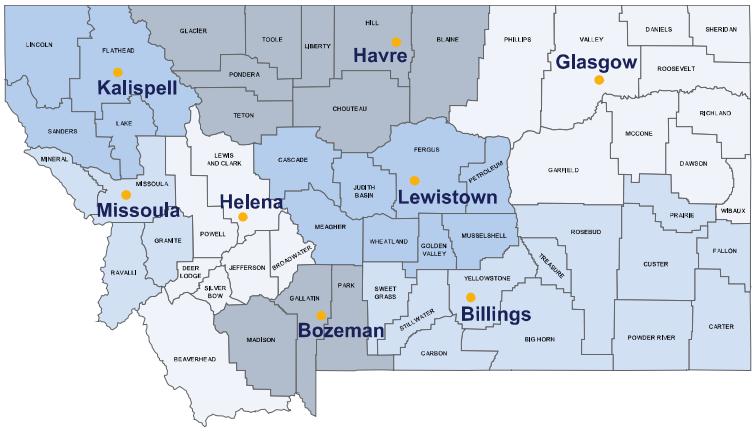
New Well #2 ____1/4 ____1/4 ____1/4 Section ____, Township _____ ☐ N ☐ S, Range _____ ☐ E ☐ W

County _____

Lot/Tract _____ Block_____ Subdivision Name_____

Estimated Well Depth _____ Feet

WATER RESOURCES REGIONAL OFFICES



BILLINGS
Airport Industrial Park, 1371 Rimtop Dr
Billings, MT 59105-9702

PHONE 406-247-4415 FAX 406-247-4416
EMAIL DNRCBillingsWater@mt.gov

Big Horn, Carbon, Carter, Custer, Fallon, Powder River, Prairie, Rosebud, Stillwater, Sweet Grass, Treasure, and Yellowstone Counties

BOZEMAN
2273 Boot Hill Court, Suite 110
Bozeman, MT 59715-7249

PHONE 406-586-3136 FAX 406-587-9726
EMAIL DNRCBozemanWater@mt.gov

Gallatin, Madison, and Park Counties

GLASGOW
222 6th Street South, PO Box 1269
Glasgow, MT 59230-1269

PHONE 406-228-2561
EMAIL DNRCGlasgowWater@mt.gov

Daniels, Dawson, Garfield, McCone, Phillips, Richland, Roosevelt, Sheridan, Valley, and Wibaux Counties

HAVRE
210 6th Ave., PO Box 1828
Havre, MT 59501-1828

PHONE 406-265-5516
EMAIL DNRCHavreWater@mt.gov

Blaine, Chouteau, Glacier, Hill, Liberty, Pondera, Teton, and Toole Counties

HELENA
1424 9th Ave., PO Box 201601,
Helena, MT 59620-1601

PHONE 406-444-6999 FAX 406-444-9317
EMAIL DNRCHelenaWater@mt.gov

Beaverhead, Broadwater, Deer Lodge, Jefferson, Lewis and Clark, Powell, and Silver Bow Counties

KALISPELL
655 Timberwolf Parkway, Suite 4
Kalispell, MT 59901-1215

PHONE 406-752-2288
EMAIL DNRCKalispellWater@mt.gov

Flathead, Lake, Lincoln, and Sanders Counties

LEWISTOWN
613 Northeast Main St., Suite E
Lewistown, MT 59457-2020

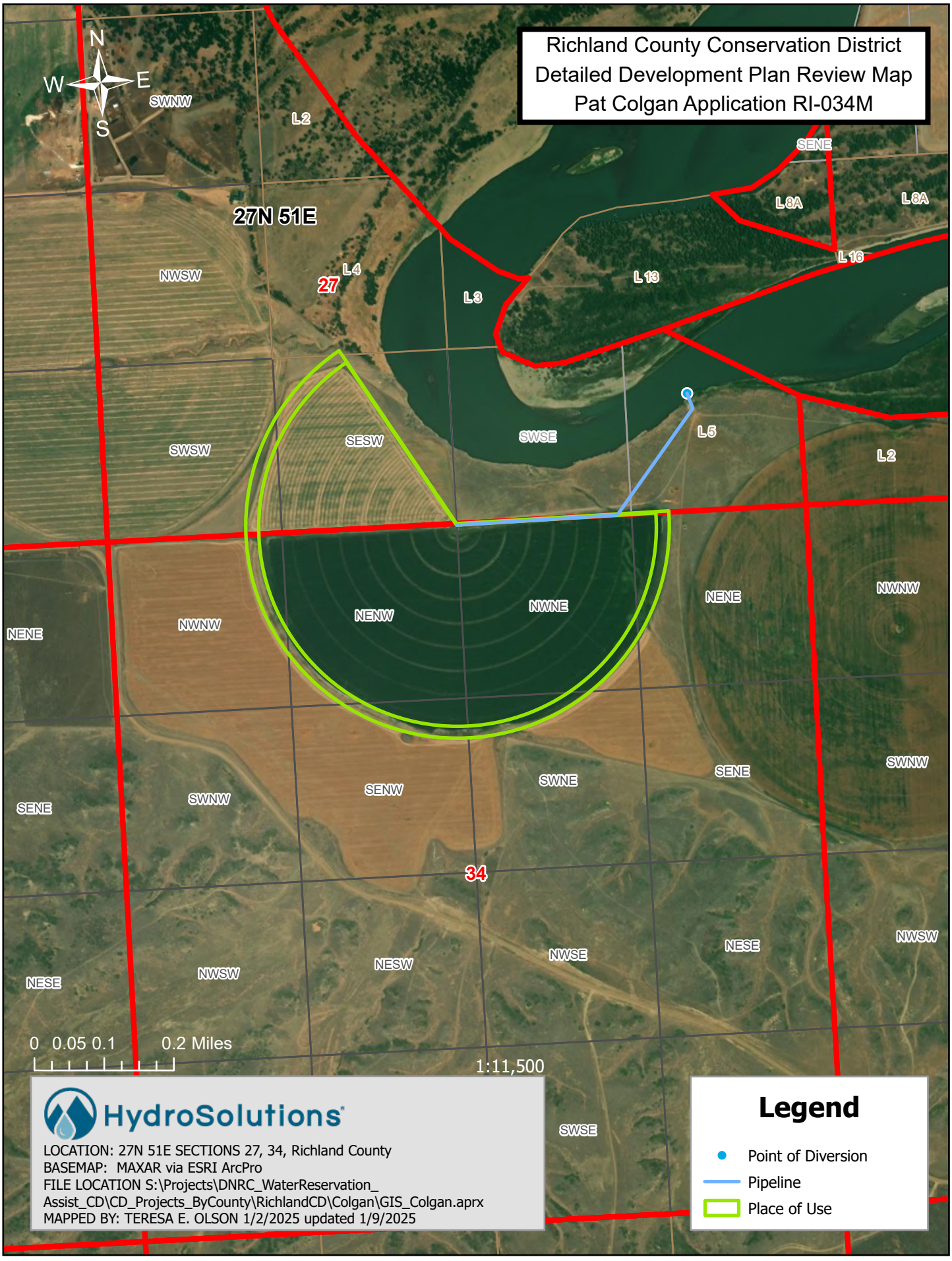
PHONE 406-538-7459
EMAIL DNRCLewistownWater@mt.gov

Cascade, Fergus, Golden Valley, Judith Basin, Meagher, Musselshell, Petroleum, and Wheatland Counties

MISSOULA
2705 Spurgin Rd. Bldg. C, PO Box 5004
Missoula, MT 59806-5004

PHONE 406-721-4284 FAX 406-542-5899
EMAIL DNRCMissoulaWater@mt.gov

Granite, Mineral, Missoula, and Ravalli Counties


Richland County Conservation District
Detailed Development Plan Review Map
Pat Colgan Application RI-034M
N
W
E
S
27N 51E
27
34
SWNW
L2
SENE
L8A
L8A
L16
L13
L4
L3
NWSW
SESW
SWSE
L5
SWSW
L2
NENW
NWNE
NENE
NWNW
NENE
NWNW
SENE
SWNW
SENW
SWNE
SENE
SWNW
NESE
NWSW
NESW
NWSE
NESE
NWSW
SWSE
0 0.05 0.1 0.2 Miles
1:11,500
HydroSolutions
LOCATION: 27N 51E SECTIONS 27, 34, Richland County
BASEMAP: MAXAR via ESRI ArcPro
FILE LOCATION S:\Projects\DNRC_WaterReservation_
Assist_CD\CD_Projects_ByCounty\RichlandCD\Colgan\GIS_Colgan.aprx
MAPPED BY: TERESA E. OLSON 1/2/2025 updated 1/9/2025
Legend
Point of Diversion
Pipeline
Place of Use

CONSERVATION DISTRICT RESERVED WATER USE AUTHORIZATION
§85-2-316, MCA
Form No. 102 (Revised 02/2024)

When to use this form:
This form is for the issuance of a Reserved Water Use Authorization.

Conservation District Name: Richland County Conservation District

CD Water Reservation No: 40S 84500-00

Upon determination that the criteria for issuance of a reserved water use authorization have been met, this Authorization is hereby issued to:

1. Applicant Name: Pat Colgan
   Mailing Address: 30678 County Rd 149 City Poplar State MT Zip 59255
   Phone Numbers: 406-525-3515 Cell 406-688-9435
   Email Address: _____
2. Authorization Number: RI-034M Internal Priority Date: 04-17-2023 9:40am
3. Source of Water Supply: Missouri River
   A tributary of _____
4. Total Amount: 800 gpm (1.8 cfs) up to 294 acre-ft per Anum
5. Period of Use: 4/1 Month/Day to 10/31 Month/Day
6. Point of Diversion:

LOT	¼	¼	¼	SEC	TWP N/S	RGE E/W	COUNTY
5	NW	SE	SE	27	27N	51E	Richland

7. Place of Use:

N = New S = Supplemental

ACRES	LOT	¼	¼	¼	SEC	TWP N/S	RGE E/W	COUNTY	N/S
93				N2	34	27N	51E	Richland	N
29				S2SW	27	27N	51E	Richland	N

8. Means of Diversion: Pump
9. Means of Flow Measurement: Operation records such as electricity use, crop use requirements, or water measuring device
10. Standard and Special Terms, Conditions, Restrictions, and Limitations:

STANDARD TERMS:

Completion:
The diversion and distribution work for this use shall be completed, and water shall be applied to a beneficial use as specified above, on or before January 10th, 20 28, or within any authorized extension of time. The Notice of Completion of Water Development, Form 106, shall be filed on or before January 10th, 20 28.

Compliance with Board and Conservation District Rules, Regulations, and Requirements:
Authorization is subject to the order, rules, regulations, and requirements governing the water reservation and the laws of the State of Montana. Further, this Authorization is subject to the administrative rules, regulations, and procedures adopted by the Conservation District governing the water reservations, which by the reference is made a condition of the Authorization.

Control:
The Conservation District has exclusive control over the reservation by the Board. The authorization holder receives no right, title, ownership, control, or interest in the water reservation.

Revocations:
Failure to comply with the provisions of the Authorization including submission of the annual water user report, may result in revocation of the Authorization.

Senior Rights:
This Authorization is subject to all prior existing water rights in the source of supply. Further, this Authorization is subject to any final determination of existing water rights, as provided by Montana law.

Transfer of Authorization:
Upon a change in ownership of all or any portion of land associated with this Authorization, the person receiving the interest shall file a Notice of Transfer of Reserved Water Use Authorization, Form 109, with the Conservation District.

Water Status Annual Report
Notify the Conservation District whether any water had been used under the authorization or not. Complete and submit Water User Annual Status Report, Form 103, by November 1 annually. If the infrastructure for the use of the water have not been completed, give details of progress toward completion and if an extension of time is required, fill out and submit Application for Extension of Time, Form 108, to the Conservation District.

SPECIAL TERMS:

This Authorization is subject to the type of water use measuring device or water use estimation technique required by the Conservation District. The water user shall maintain the measuring device, so it always operates properly and measures flow rate and volume accurately. The water user shall keep written records of the flow rate and volume of water used. Records shall be submitted by November 15 of each year and upon request at

other times during the year. Failure to submit the *Water Use Annual Status Report* (Form 103) may be cause for revocation of this Authorization. The annual status report must be sent to the Conservation District Office.

Others:

The diversion is shared with authorization RI-017 which was issued with an inaccurate legal land description. The CD and CDB will work to correct the DNRC and CD records so they match.

Additionally, an associated remark shall be added to the DNRC record for both authorizations.

APPROVAL:

Shawn Conradsen
Chairman Printed Name

1-10-2025
Date

Chairman Signature

1-10-2025
Date

Julie Goss
District Administrator Printed Contact Name

1-10-2025
Date

District Administrator Signature

1-10-2025
Date