

PRELIMINARY PLAT APPLICATION FOR

19076

Meadowlark Ranch Subdivision, Phase V
Belgrade, Montana



Community
Planning

Landscape and
Placemaking

Infrastructure
Engineering

Surveying and
Mapping

Branding

August 2020

SANDERSON
STEWART



ENDURING COMMUNITY DESIGN

Meadowlark Ranch Subdivision, Phase V Preliminary Plat Application

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Belgrade City-County Planning Office

APPLICATION FOR CONDITIONAL USE PERMIT

1. Name of Property Owner: Meadowlark Ranch Inc.
2. Name of Applicant: Meadowlark Ranch Inc.
3. Address of Applicant: 175 North 27th Street, Suite 900; Billings, MT 59101
4. Phone # of Applicant: (406) 248-3641
5. Legal description of subject property: Lt 14, Blk 7, Meadowlark Ranch Sub, Phase IV
6. General location: North of previous phases of Meadowlark Ranch Subdivision
7. Current Zoning: R1 and R1T Land Area: 73.13 acres
8. Conditional Use Permit request is for the following: Requesting a Planned Unit Development (PUD) for Meadowlark Ranch Subdivision, Phase V. The PUD will include a waiver for zoning relaxations to allow for a 50-foot wide right of way (with 5-foot wide sidewalk easement on each side), a reduction of the minimum lot size for the R1 zoned portion of the subdivision to be 8,500 square feet and the overall average lot size to be 10,400 square feet, and to allow for a minimum lot width of less than 80-feet.

(Use Additional Pages if Necessary)

In addition to the above, submit a plot plan drawn to scale on paper not larger than 11"x17" which includes all existing and proposed structures and proposed variance measurements, a list of names and mailing addresses of all property owners within 300 ft of the subject property, and a **\$650 filing fee**. The application will not be considered until all required information is submitted.

I hereby certify that the above information is true and correct and that I am the Owner Owner's Agent Leasee of the above described property.

[Handwritten Signature] v.p. 8/13/2020
Applicant's Signature
Meadowlark Ranch, Inc. By: Lanky Loop v.p.

For office use only

Date filed: _____ Filing Fee: _____
P.Board Hearing: _____ Action taken: _____
City Council Hearing: _____ Action taken: _____



GALLATIN COUNTY

Preliminary Plat Subdivision Application

APPLICATION PROCESS

1. Subdivider hires a qualified professional to prepare the plat and application materials.
2. Subdivider and professional submit one (1) complete preliminary plat application and fee to the Planning Department for element review.
3. Planning Staff will review the submitted application for element completeness within 5 working days.
4. Planning Staff will request the required number of complete application copies for sufficiency review.
5. Subdivider supplies required number of application copies.
6. Planning Staff will review and route to other agencies the submitted application for sufficiency within 15 working days.
7. Planning Staff will schedule the applicable public meetings/hearings within the statutory time limits (35 working days for a minor, 60 working days for a subsequent minor or major and 85 working days for a major over 50 lots).
8. Planning Department publishes legal notice, and notifies adjoining property owners via first class mail (minor subdivision) or certified mail (subsequent minor or major subdivision).
9. Planner sends subdivider a copy of the staff report, with proposed conditions of approval.
10. Subdivider attends applicable public meeting(s)/hearing(s).
11. County Commission makes a decision to conditionally approve, deny or continue the subdivision.
12. Planner prepares the written findings of fact conclusions of law and order and schedules before the County Commission for final review and signature.
13. County Commission signs and approves the written findings of fact conclusions of law and order. Planner sends a signed copy to the subdivider.
14. Subdivider has up to three years to complete all the conditions of approval and apply for final plat approval.

TYPES OF SUBDIVISIONS

First Minor Subdivision

- Pursuant to 76-3-609, MCA, “ If the tract of record proposed to be subdivided has not been subdivided or created by a subdivision under this chapter or has not resulted from a tract of record that has had more than five parcels created from that tract of record under 76-3-201 or 76-3-207 since July 1, 1973, then the proposed subdivision is a first minor subdivision from a tract of record and, when legal and physical access to all lots is provided, must be reviewed” as a first minor.
- See Section 4 of the Gallatin County Subdivision Regulations for process and requirements.
- First minor subdivisions do not require parkland dedication or the preparation of an environmental assessment.

Subsequent Minor Subdivision

- A subsequent minor subdivision is a division of five (5) or less lots that does not qualify as a first minor subdivision.
- Subsequent minor subdivisions fall under Section 3 of the Gallatin County Subdivision Regulations and are reviewed as a major subdivision, but does not require parkland dedication or the preparation of an environmental assessment.

Major Subdivision

- A major subdivision is a division of six (6) or more lots.
- See Section 3 of the Gallatin County Subdivision Regulations for process and requirements.



GALLATIN COUNTY Subdivision Preliminary Plat Application

1. Applicant Name: _____ Date: _____
2. Subdivision Name: _____
3. Subdivision Type: First Minor Subdivision from a Tract of Record (substantiated)
 First Minor Subdivision from a Tract of Record with a Variance
 Second or Subsequent Minor Subdivision from a Tract of Record
 Major Subdivision
4. Total Number of Lots: _____ Total Acreage: _____
5. Type of Development: Single-Family Multi-Family
 Condominium Commercial/Industrial
 Other _____
6. Assessor Parcel# **R** _____ _____ _____ _____ _____ _____ _____

 DOR# **06** _____ _____ _____ _____ _____ _____ _____

 (2) (4) (2) (1) (2) (2) (4)
7. Project Location (legal) _____
8. Project Location (common) _____
9. Project Description _____
10. Current Land Use _____
11. Zoning District _____ Zoning Designation _____
12. Fire District _____ School District _____
13. Property Owner Name _____

 Address _____ Phone _____

 City _____ State _____ Zip _____

 Email _____
14. Applicant Name _____

 Address _____ Phone _____

 City _____ State _____ Zip _____

 Email _____

15. Preparer/Agent Name _____
Address _____ Phone _____
City _____ State _____ Zip _____
Email _____

16. Surveyor/Engineer Name _____
Address _____ Phone _____
City _____ State _____ Zip _____
Email _____

17. A preliminary plat submittal must include specific topics and materials. Please refer to the Gallatin County Subdivision Regulations Section 5.E for the specific requirements. Any item considered “non-applicable” must be explained in a narrative and any supporting information included. Only applications containing all required elements will be accepted for processing.

18. The Certified List of Adjacent Property Owners shall be prepared as follows:
- Prepare a certified list of the names, mailing addresses, and legal descriptions of each of the property owners adjacent to the affected property(s). “Adjacent” property owners include owners of parcels across public roads, streets, alleys, watercourses and other public ways, and the Montana Department of Transportation if the site is adjacent to a state highway.
 - Mailing Labels. Prepare three sets of mailing labels for each adjoining property owner.*
 - Please provide labels smaller than 1" x 2-5/8" (similar to Avery 5160 or 30 per sheet) so that they are the proper size for the certified mail.

*If the application is for a first minor subdivision only one set of labels is required and no certified mail fee is included.

19. Provide a digital copy of the complete application.

20. Satisfactory completion of the elements review by the Planning Staff is written confirmation to the Applicant that the application submittal contains the elements required by the Subdivision Regulations pursuant to Section 76-3-604(2)(a), MCA.

The completed and signed application is notification to the Applicant that the Planning Department may send copies of the submittal, and other correspondence pertaining to the application, to any of the agencies on the attached “Reviewing Agency List” for the purpose of obtaining their assistance in determining if the submittal elements contain detailed, supporting information sufficient to allow an adequate review pursuant to Section 76-3-604(2)(c), MCA.

MEADOWLARK RANCH INC.

1601

Vendor ID: CITY

Vendor Name: CITY OF BELGRADE

Invoice No.	Date	Invoice Amount	Amount Paid	Discounts Taken	Credits Taken	Net Amount
8.3.2020 PREL PLAT	08/03/20	6853.00	6853.00	0.00	0.00	6853.00
						Net Check Amt 6853.00

MEADOWLARK RANCH INC.
 WELLS FARGO CENTER
 175 NORTH 27TH STREET, SUITE 900
 BILLINGS, MT 59101
 (406) 248-3641

Stockman Bank
 402 N BROADWAY - PO BOX 2507
 BILLINGS, MT 59101
 93-524/929

1601

***** Six Thousand Eight Hundred Fifty Three & 00/100 Dollars *****

DATE	08/03/20	AMOUNT	*****6,853.00
------	----------	--------	---------------

PAY TO THE ORDER OF
CITY OF BELGRADE
 91 E CENTRAL
 BELGRADE, MT 59714-3710

Shield

MEADOWLARK RANCH INC.

⑈00000⑈ ⑆092905249⑆ ⑆00005024⑈



Security Features Included. Details on bank.

SUMMARY OF PROBABLE IMPACTS AND COMMUNITY IMPACT REPORT

PROBABLE IMPACTS CRITERIA

1. Effects on agriculture and proposed mitigation of impacts

- a. Number of acres in type of production. There historically has been approximately 62 acres of usable dryland area, but that area is not currently in production. No irrigation is used within this area, but two drainage ways cut through the parcel.
- b. Agricultural operations in the vicinity. The nearest agricultural activities take place directly to the north and east.

2. The Effect on agricultural water user facilities and proposed mitigation of impacts

- a. Type, description, ownership and users of facilities. There are no agricultural water user facilities on this site. Water rights for surface water were previously transmitted to the City of Belgrade with previous phases of Meadowlark Ranch Subdivision.

3. The effect on local services and proposed mitigation of impacts

- a. Methods of water supply and sewage disposal. The subdivision will connect to public water and sewer mains. Please see Appendix A of this report for a detailed description of the methods to be used.
- b. Provision of law enforcement services and fire protection services, and projected costs to providers. The Belgrade Police Department will provide law enforcement for the development. Fire protection will be provided by the Central Valley Fire Department. With the inclusion of a requirement for sprinkler systems in each individual home, the fire department does not foresee any problems serving this development.
- c. Costs of upgrading or extending off-site public roads. Previous phases of Meadowlark Ranch Subdivision, Ryen Glenn Subdivision and East Gallatin Commercial Center have been required to upgrade area roads and intersections.
- d. Provision of educational services and projected costs to providers. As indicated with previous phases of the subdivision and in the school districts' response letter, the Belgrade School District states that the current facilities will not be burdened with the anticipated students.
- e. Current amount of property taxes, projected amount land and improvements will pay in local taxes. According to the County Assessor's office, the property currently pays \$590.3 in general taxes.

With improvements, it is estimated that each lot would have an average market value of \$320,000, the total taxable value for the property would be \$28,160,000. The total taxable value of the property would be derived by multiplying the market value by the tax rate of 1.35% (value obtained from the State of Montana for 2018), resulting in a potential revenue generated for 2020 of \$380,160.

- f. Provision of utilities and easements. The developer has contacted Northwestern Energy, Century Link and Charter Spectrum for availability of their services. The previous phases of Meadowlark Ranch are served by these utilities and it is anticipated that this phase will also connect to these utilities. In anticipation of service, the developer is granting all necessary easements and they are depicted on the Preliminary Plat drawings.

4. **The effect on the natural environment and proposed mitigation of impacts.**

- a. Road drainage and erosion. Road drainage in Meadowlark Ranch Subdivision will be controlled by paved streets with concrete curb and gutter. Storm runoff will be collected by the gutters and transported to stormwater inlets. From the inlets, the stormwater will be conveyed to onsite stormwater detention ponds. Erosion of the road will be prevented due to the impervious paved surface. Erosion of the non-paved right-of-way areas impacted during construction will be mitigated through reseeding affected areas after construction is complete.
- b. Terrain and surface runoff effects. Individual lots in Meadowlark Ranch Subdivision will be graded to drain to the streets where possible. This will allow the road stormwater system to convey the surface runoff away from the lots. The lots will be graded to provide positive drainage away from any structures to reduce the possibility of flooding.
- c. Grading and drainage plan. The general topography of the Meadowlark Ranch site slopes from south to north at approximately 1-2%. Grading in areas that will be affected during construction will be done as to not adversely affect adjacent lands with stormwater runoff from the subdivision. The stormwater management plan for Meadowlark Ranch has been designed in accordance with the standards of the City of Belgrade and the Montana Department of Environmental Quality Design Circular DEQ-8.
- d. Effects on native vegetation, soils, quality or quantity of surface or ground waters. The soils located within Meadowlark Ranch are very gravelly and dry as the area receives less than 14 inches of precipitation per year. The effect on native vegetation will be limited to the developed areas. Revegetation of affected areas will be done as development occurs.

Meadowlark Ranch Phase V contains wetland areas, as shown on the preliminary plat, that will be protected during and after construction of the subdivision, or appropriate steps will be taken to minimize any disturbance. A wetland study was conducted by Restoration Engineering, LLC and is contained in Appendix I. This study delineates the wetland and surface water areas that exist on the development. Effects on the quality and quantity of wetland and surface water will be mitigated by designing around these areas if possible. The recommendations from the Restoration Engineering, LLC report will be followed.

- e. Weed Control. A noxious weed assessment was conducted at Meadowlark Ranch Phase IV to determine the existing noxious weed species present on the site and is valid from April 26, 2018 to April 26, 2021. Meadowlark Ranch Phase V is located within the Meadowlark Ranch Phase IV assessment area. The following noxious weeds were identified on the property: Houndstongue, Canada Thistle; Musk Thistle, Mullein, Fan

Weed, Mustards and Poison Hemlock. Based on these findings, a management plan has been prepared and approved. The Noxious Weed Management and Revegetation Plan is contained in Appendix E.

5. Wildlife and Wildlife Habitat.

- a. Proximity to area of significant wildlife habitat or critical wildlife areas. Trees, shrubs and primary wildlife habitat areas will be preserved. Wildlife will be allowed access to the trail along the abandoned railroad grade and to the adjacent wetland areas.
- b. Expected effects of pets and human activity on wildlife. Pets and their owners will have access to the trail and other park spaces. It is suggested that pets be kept on leashes while in these areas. Wildlife will continue to be allowed access to the trail, wetland areas, open water and all other park spaces.
- c. Effects on fisheries. No effect on fisheries is expected from this subdivision.
- d. Effects on public access to public lands, trails, hunting or fishing areas. The subdivision does not impact access to public lands and trails. There are no public lands and trails adjacent to or near the development. The location of the proposed subdivision will not hinder access to hunting or fishing areas.

6. The effect on public health and safety and proposed mitigation of impacts.

- a. Potential natural hazards: The property does include a flood plain designation of Zone A. This is located across the subdivision and lots in Phase V. Restoration Engineering has performed a study to further define the flood plain and the study is currently been reviewed and received an approved Conditional letter of Map Revision (CLOMR) by FEMA. Per the approved CLOMR, the flood plain will be confined to the east drainageway across the property. As an extra precaution against flooding, all houses will be required to be built so that the finished floor elevation is two feet above the top of curb at the finished street grade and a statement on the plat will discourage basements.

The topography of the site (1-2% slopes) is not conducive to snow or rockslides. All structures built in Meadowlark Ranch will conform to building standards which will prevent hazards caused by high winds that may occur. Wildfire in the area is not a concern due to the lack of fuel and the availability of fire protection in the subdivision. There are no excessive slopes on the property that may be a potential hazard.

- b. Potential man-made hazards: Based on known and observed information, Meadowlark Ranch Subdivision does not appear to contain typical man-made hazards. There is an existing oil pipeline (Yellowstone Pipeline Company) traversing the northeast corner of Phase V. The preliminary plat has been laid out to maintain a 50-foot wide easement area clear of buildings and structures as requested by the pipeline operator.

COMMUNITY IMPACTS

1. **Water Supply**

- a. Description of Use. The water distribution system serving Meadowlark Ranch Subdivision, Phase V will be an extension of the public water supply network within the City of Belgrade. There is an existing 8-inch main in Oriole Drive and Falcon Ridge Boulevard which will be extended through Phase V and loop to connect with the existing 8-inch main located in Melissa Way. A 1-inch domestic service will be provided to each lot within the proposed development.

2. **Sewage Disposal**

- a. Method. Connection to the sanitary sewer main will be designed according to the City of Belgrade Design Standards and Specifications Policy. The service connections for each of lots will be 4-inch diameter PVC with a minimum slope of 1/4-inch per foot and a maximum slope of 1/2-inch per foot.

The sewage lift station was designed and constructed with Phase I of Meadowlark Ranch Subdivision and was designed for the entire Meadowlark Ranch Subdivision development. The sanitary sewer lift station contemplated 430 units, which includes the 87 single family lots in Phase V. The estimated peak design flow for the lift station was 283 gpm. The existing lift station is expected to have ample capacity for the proposed phase as intended.

3. **Solid Waste Disposal**

- a. Collector System. Please see attached letter to Republic Waste Services in Appendix D, to date no response has been received.

4. **Roads**

- a. Description. Primary access to the subdivision will be from Oriole Drive, Falcon Ridge Boulevard, and Melissa Way. A traffic impact study (TIS) conducted for the subdivision is included in Appendix B. Oriole Drive, Falcon Ridge Boulevard, and Melissa Way will connect Phase V with the previous phases of Meadowlark Ranch with internal streets serving the internal lots.

The roads in the development will be constructed to the standards required by the City of Belgrade with some minor relaxation requests (See Part III) and will be inspected by a Professional Engineer during and after construction.

- b. Access to Arterial. No arterial routes can be directly accessed from Meadowlark Ranch Subdivision lots. Dwellings within the subdivision will have access to the interior local streets that allow access to arterial routes.
- c. Modification of the Existing Roads. Please refer to the traffic study included in Appendix B for a complete analysis.

The analysis has shown that Phase V of Meadowlark Ranch Subdivision will generate a modest volume of new traffic demand for area streets and intersections. Existing study area intersections operate well during peak periods and the addition of site-generated traffic is not expected to cause any substantial deficiencies in the short term. Crash data from MDT was utilized for a crash history analysis. The TIS analysis showed that crash and severity rates are generally low for all study area intersections.

In the TIS, Table 5 presents the results of the Design Year (2025) scenario intersection capacity calculations. All study intersections and approaches are projected to operate at or above LOS C during both the AM and PM peak hours. In addition, queuing is projected to remain minimal at all study area intersections

In the TIS, most of the recommendations made for auxiliary left and right turn lanes at various intersections were triggered based on existing roadway volumes, as opposed to being triggered due to new traffic generated by Phase V.

There are ways to evaluate “intersection contributions” at study intersections. In one method, percentage contributions are calculated relative to a “threshold” critical lane sum for through and left-turn movements. For example, a 4-approach intersection would be based on a volume of 1,200 vehicles and a 3-approach intersection on a volume of 1,140 vehicles. The percentage contribution is then determined by calculating the maximum of the AM and PM peak hour critical lane sum increases caused by a trip generator. By evaluating the amount of new through and left-turn traffic at intersections, a more accurate intersection impact can be calculated when existing/background volumes are already triggering improvements. By evaluating left and through volumes at area intersections, the following percentages due to Phase V traffic are found:

Intersection	Percent Contribution
Frontage Road and Airport Road	3.07%
Airport Road and Tubb Road	3.95%
Dry Creek Road and Cruiser Lane	0.61%
Dry Creek Road and Penwell Bridge Road	0.44%
Penwell Bridge Road and Powers Boulevard	0.44%
Baseline Road and Tubb Road	3.60%
Baseline Road and Melissa Way	4.12%

- d. Dust. Dust will not be an issue as the roads in Meadowlark Ranch Subdivision will be paved. Dust produced from construction activities will be minimized by spray application of water or other approved suppressants.
- e. Pollution and Erosion. Runoff from the roads in Meadowlark Ranch will be conveyed to onsite storm detention ponds and inlet structures. The ponds and structures will allow for any pollutants carried off the road to be filtered out controlling the contamination of any groundwater or surface water. Erosion will be controlled through the use of paved roads and the re-seeding of areas affected during construction.

- f. Installation and Maintenance. The developers of Meadowlark Ranch will incur the cost of installation for all interior roads. The Homeowners Association will be responsible for all maintenance costs.
- g. Traffic Generation. Please refer to the traffic report contained in Appendix B for the traffic generation analysis.
- h. Capacity. Please refer to the traffic impact study in Appendix B for the capacity analysis.
- i. Year-Round Access. Year-round access will be provided to Meadowlark Ranch via the collector streets that serve the subdivision. Interior roads will be maintained to provide year-round access to all lots within the subdivision.
- j. Private access. No private access ownership to the subdivision exists.

5. Utilities

- a. Affected Utilities. The subdivision will have service from Northwestern Energy, Century Link Communications, and Charter Spectrum Communications. Letters of availability of service to these utility providers have been requested and are contained in Appendix D.
- b. Descriptions. Utilities including electricity, natural gas, telephone, and cable television (when available) will be provided to Meadowlark Ranch and will be installed in utility easements located throughout the development.

6. Emergency Services

- a. Describe the emergency services available to the subdivision such as:
 - 1. Fire protection. Is the proposed subdivision in an urban or rural fire district. The subdivision is within the boundary of the Central Valley Fire District.
 - 2. Police Protection. Police Protection will be provided by the Belgrade Police Department.
 - 3. Ambulance services. Ambulance service will be provided by American Medical Response.
 - 4. Medical Services. Medical services can be provided by either the Belgrade Clinic and Urgent Care facility in Belgrade, or Bozeman Health Deaconess Hospital in Bozeman.
- b. Give the estimated response time of services. Based on known information, fire protection: 5 minutes. Police protection: 5 minutes. Ambulance: 17 minutes 90% of the time.
- c. Can the needs of the proposed subdivision for each of the above services be met by present personnel and facilities? Letters have been sent to service providers requesting comment on the ability to provide service. Copies of those letters are located in Appendix D. To date, some responses have been received which are also supplied in Appendix D.

Those that have been receive indicate no issues for providing their services to the subdivision.

7. Schools

- a. Available Facilities. The subdivision falls within the boundaries of School District #44. The school district has two elementary schools serving grades K-4, In addition the district has an intermediate school serving 4-6, a middle school serving 7-8 and a high school serving grades 9-12.
- b. School Children. Based on the response from the school, it is estimated that the number of K-12 students will be approximately 74. A request for comment has been sent to the School District, and the response can be found in Appendix D.

8. Land Use

- a. Planning. The property is within the jurisdiction of the Belgrade City/County Planning Department. The Belgrade Area Plan designates this property as medium density:

Areas that are generally oriented to major roads and within a reasonable distance to schools and area businesses. New subdivisions should be adjacent to existing development with consideration given to the existing characteristics of the area. Central water and sewer systems are recommended. Commercial uses (i.e. retail or light manufacturing) should be adequately buffered from residential areas. Existing agricultural land, especially land removed from existing development, should be preserved whenever practical.

The property is currently zoned as R-1, with R-1T zoning on the north and east property boundary to provide a lower density transition to the adjacent agricultural land.

In addition, restrictive covenants will be filed which will control the types of construction and housing that can be located on the property. The covenants will also allow for architectural and site plan review.

- b. Public Lands. The subdivision does not impact access to public lands. There are no public lands adjacent to or near the development.
- c. Adjacent Land Use. The previous Phases of Meadowlark Ranch Subdivision border the project to the south. Residential development Ryen Glenn Estates subdivision is adjacent to the west, as well as vacant land owned by the Gallatin Airport Authority. North and east of this property is agricultural land. Given the existing land uses around the development, the proposed plan is complementary to the surrounding land uses. Lower density residential development, with the R-1T designation and park spaces will provide a seamless transition into the agricultural ground to the east.
- d. Hazards. There is currently a flood plain located within the subdivision. The floodplain is being evaluated by Restoration Engineering and based on their analysis the floodplain will be confined to east of the drainage. The floodplain is currently being reviewed by FEMA. After the flood plain is remapped, it is anticipated that the lots or streets within Phase V

will be located outside the floodplain. Therefore, no flood hazard is anticipated with development of Phase V.

- e. Nuisance. No on-site or off-site land uses create a nuisance.

9. Housing

- a. Uses. Meadowlark Ranch Phase V will have 87 single family lots, 3 open space lots and 1 large lot that will be developed in the future.
- b. Is the Subdivision Planned as a Second Home or Recreational Subdivision?
The project is not planned as a second home or recreational subdivision.

10. Parks and Recreation Facilities.

The subdivision contains approximately 2.25 acres of dedicated open space that will be in the control of the Homeowners Association. The drainage way will account for most of the dedicated open space with natural grasses and features.

The abandoned railroad bed is located on the southern border of the subdivision and is used as part of the overall subdivision park system. A trail has been built at the top of the bed, allowing for access through the entire property from east to west. It will also have intermittent trails and sidewalks tying to it, to allow connection to the different neighborhood areas. The trails will all be well maintained by the Homeowners Association and will promote a healthy and active lifestyle in a natural setting.

In addition, the existing entry corridors are landscaped and feature attractive project signage. Boulevards and medians within right-of-way will also be landscaped and assist in providing a well-defined corridor through the neighborhood. Previous phases of the development include park development such as gazebos, playgrounds and park benches.

Planned Unit Developments (PUDs) are required to reserve 40% of the site as open space. The regulations define open space as any area that is not occupied by a street, buildings, or parking. The 73.15-acre parcel owned by Meadowlark Ranch Inc. is proposed to be subdivided as follows:

Total Tract Acreage: 73.13 acres
Residential Lots: 23.37 acres
Future Lot Development: 41.89 acres
Dedicated right-of-way: 5.62 acres
Open Space: 2.25 acres - 3%

In order to meet the Open Space requirements, 40% of the gross area (73.13 acres) must be free of roads, buildings, or parking. For calculation purposes, it is assumed that each lot has a 50' x 50' or 2,500 square foot building envelope and a 50' x 24' driveway (1,200 square foot) for a total of 3,700 square foot for each lot being occupied by a building or parking. Excluding the large lot that will be subdivided in the future, this produces a total of 7.39 acres that do not qualify as open space. When combined with the dedicated right-of-way area (5.62 acres), a total of 13.01 acres of

the gross acreage does not qualify, leaving 18.32 acres of open space, or 58.6% of the entire site (excluding the large lot that will be subdivided in the future). Therefore, the Open Space requirement of 40% of gross area as free of roads, buildings, or parking is sufficiently met with this subdivision.

11. Taxation

- a. Acreage Parcel number REG16126 includes approximately 73.13 acres.
- b. Existing Taxes According to the Montana Department of Revenue office, the property currently pays \$590.3 in general taxes.
- c. Anticipated Taxes The projected general tax revenue when developed will be approximately \$380,160, as described in Section 3 of the Probable Impacts Criteria response.

12. Accessibility of Service Systems and Facilities: Provide total distances over road types to each of the following

Service	Graveled	Paved	Total	Located
Fire Protection	0	4.7	4.7	Belgrade
Police	0	4.7	4.7	Belgrade
Hospital	0	14.4	14.4	Bozeman
Elementary Sch.	0	3.8	3.8	Belgrade

13. Effects on Agriculture: Supply the following information

- a. The number of acres in production of crops. The subdivision has historically been farmed but has ceased production within the area.
- b. The productivity of the land. The property is not currently being farmed.
- c. Whether or not the property is part of a viable farm unit. Was the property under production during the last regular season? The property is not currently being farmed.
- d. The other uses of land in the general locality. Other uses in the general locality consist of proposed residential to the south and west, and agricultural activity takes place to the north and east.
- e. What measures will be taken, if any, to control family pets. The covenants and Homeowners Association as well as existing City leash laws will control family pets. In addition, a standard fencing program will be enacted that will require rear yard fencing.
- f. Describe any existing fence lines around the subdivision. Post and wire fences exist around the perimeter of the property.

14. Effects on Agricultural Water User Facilities

- a. Type, description of facility. As mentioned earlier, there are no water use facilities within the Meadowlark Ranch property.

**MEADOWLARK RANCH PHASE V
PLANNED UNIT DEVELOPMENT RELAXATION REQUESTS**

Introduction

The City of Belgrade Subdivision Regulations and Zoning Ordinance allow for the creation of a Planned Unit Development (PUD).

Subdivision Regulations, Section 11 Planned Unit Development

A. The intent of this section is to provide flexibility in certain of the Design and Improvement Standards. By using a Planned Unit Development (PUD) which clusters development, subdivisions may be planned so as to promote creativity in subdivision design; to provide economies in the supply of public services; to enhance and preserve open space and unique natural features; and to enable the planning of a tract for a single use or for a harmonious combination of uses, such as a mixture of residential and commercial"

The following relaxations from the City of Belgrade Design Standard and Specifications Policy are being requested as part of the Planned Development process.

V.E. Table 5 - Right-of-Way Width. The right-of-way width that is required for all the streets within Meadowlark Ranch Subdivision is 60', as they are all local roads.

We are proposing 50' rights-of-way for all roads. In Meadowlark Ranch Subdivision, the sidewalks do not completely follow the road alignment. As such the sidewalk is proposed to be in a separate public easement outside and in addition to the right-of-way dedication. When the sidewalk easements of 5' on each side of the street are added to the 50' road right-of-way dedication, the standard 60' is still being provided for, as is the requirement for public sidewalks. The 60' is provided for in three separate dedications rather than one large dedication.

B. Zoning Ordinance, PUD Development

In a similar fashion, the Zoning Ordinance intends to allow flexibility in the strict ordinance text in exchange for creative design. The exact text from the Zoning Ordinance is as follows:

"11.31.010 Intent. The purpose of the Planned Unit Development (PUD) is to allow maximum flexibility and innovation in development design and land utilization through the relaxation of zoning and subdivision regulations. In view of these relaxations, a PUD should provide a more desirable environment than could be achieved within the existing zoning and subdivision ordinance in terms of:

- 1) More economical and efficient use of the land.
- 2) A choice in the types of physical environment, occupancy tenure, building types, types of ownership and community facilities available to existing and potential residents or tenants.
- 3) Usable open space, recreation areas, bike paths, pedestrian networks, etc., in excess of existing subdivision and zoning requirements.
- 4) Preservation of natural topographical, geological features with emphasis upon:
 - a) Prevention of soil erosion.
 - b) Conservation of existing surface and subsurface water.
 - c) Preservation of major trees or other environment enhancing features.

- 5) An efficient network of streets and utilities (underground utilities where feasible).
- 6) Aesthetic appeal."

11.08.030 - *Lot Area and Width.*

Per City of Belgrade code, the minimum lot area for R-1 zoned area is 10,000 square feet and the minimum lot area for R-1T zoned area is 20,000 square feet. Fifty (57%) of the lots within Meadowlark Ranch Subdivision, Phase V fall below the 10,000-square foot minimum, with the smallest lot being 8,500 square feet in size. We are proposing a minimum lot size of 8,500 square feet and an average lot size of 10,400 square feet. The average lot size is 11,700 square feet. Lot 32 was excluded from the average as it will be a future expansion of Meadowlark Ranch Subdivision.

The minimum lot width is 80 feet in a R-1 zoned area. Due to the "coved" layout of Meadowlark Ranch P.U.D. Subdivision, there are a few irregularly shaped lots that result in an average lot width that is less than 80 feet. This is mitigated by the open space derived from the coving, because the minimum side yard setbacks are only at a single corner of any structure, which creates the sense of overall openness. It is the mandatory setback from the street that gives the large lot look and feel, not the lot width. Since all coved lots meander, and the streets wind through with little relationship to a constant (minimum) setback, the sense of scale is enhanced.

1). *More economical and efficient use of the land.*

The Meadowlark Ranch Subdivision, Phase V achieves an average lot size of approximately 11,700 square feet while also providing a range of lot sizes which allows for economical lot pricing and home size flexibility which provides an opportunity for a larger portion of the citizenry to realize home ownership. Without the relaxation requested for average lot size standards rather than minimum lot size standards, up to 20% of additional roads, water, and sewer would be necessary to serve the same number of lots, all of which would be the same size with little or no creativity or innovation possible. This relaxation request does not increase the density of the development, as the same number of completely square 11,700 square foot lots would fit into the land area that the proposed range of lot sizes requires.

2). *A choice in the types of physical environment, occupancy tenure, building types, types of ownership and community facilities available to existing and potential residents or tenants.*

While this is a single use PUD rather than mixed use, no two lots are the same, allowing a choice in home site qualities for the potential residents including lot size and proximity to parks, trails, or active recreation. The proposed subdivision layout preserves existing features of the land, including natural amenities to enhance the property.

3). *Usable open space, recreation areas, bike paths, pedestrian networks, etc., in excess of existing subdivision and zoning requirements.*

The Meadowlark Subdivision has a large amount of usable open space, recreation trails and natural areas in excess of subdivision requirements. For this subdivision, 2.50 acres of park land is required, and 2.25 acres of open space are proposed. The plan calls for trails, multiple sidewalk interconnections, and active recreation areas.

4). *Preservation of natural topographical, geological features with emphasis upon:*

- a). *Prevention of soil erosion.* The subdivision has been designed to require less street

area, by up to 20%, and therefore less storm water run-off is generated.

b). *Conservation of existing surface and subsurface water.* All existing surface waters and wetlands are being protected within park areas. The connection to the City water system will protect the groundwater from being depleted.

c). *Preservation of major trees or other environment enhancing features.* Through the site planning, preservation of a natural drainage has been identified as an important piece of this development.

5). *An efficient network of streets and utilities (underground utilities where feasible).*

One of the main concepts behind "coving" is to design the development with fewer streets and utility corridors. The coving method has been documented to use up to 20% fewer streets and corresponding utilities. The Meadowlark development goes one step further in designing an efficient sidewalk system. Most planning techniques create streets to walk on or along and with standard sidewalk planning, where you must follow the road route exactly, the sidewalks are not used as often as they should be. Meadowlark walkways make it easy to enjoy the neighborhood utilizing its beautiful and safe meandering system that cuts through blocks to enhance connectivity, and therefore livability.

6). *Aesthetic appeal.*

Meadowlark Ranch Subdivision has been designed with aesthetics in mind, including standard street signage program, driveway light program and entry sign program, all of which have common design elements and are complementary to each other.

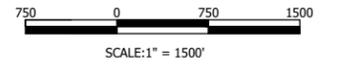
VICINITY MAP

WITHIN
MEADOWLARK RANCH SUBDIVISION, PHASE V

PREPARED FOR : MEADOWLARK RANCH INC.

PREPARED BY : **SANDERSON STEWART**

AUGUST, 2020
BELGRADE, MONTANA



SITE AERIAL / VEGETATION MAP

WITHIN
MEADOWLARK RANCH SUBDIVISION, PHASE V

PREPARED FOR : MEADOWLARK RANCH INC.

PREPARED BY : **SANDERSON STEWART** 

AUGUST, 2020
BELGRADE, MONTANA



SOILS MAP

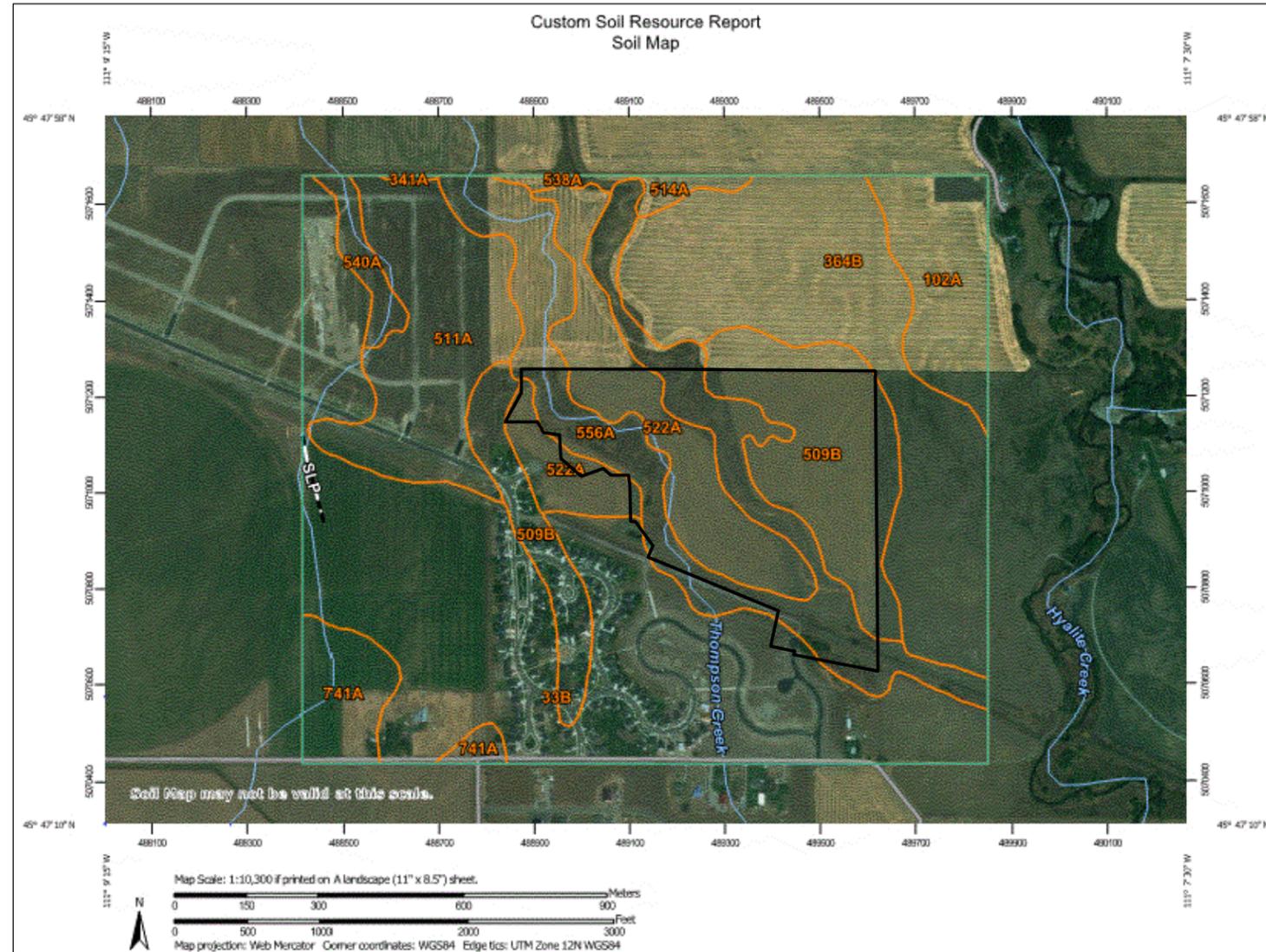
WITHIN
MEADOWLARK RANCH SUBDIVISION, PHASE V

PREPARED FOR : MEADOWLARK RANCH INC.

PREPARED BY : **SANDERSON STEWART**

AUGUST, 2020

BELGRADE, MONTANA



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
33B	Attewan clay loam, 0 to 4 percent slopes	135.4	31.2%
102A	Havre loam, 0 to 2 percent slopes, rare flooding	21.2	4.9%
341A	Beaverell-Beavwan loams, moderately wet, 0 to 2 percent slopes	0.3	0.1%
364B	Straw silty clay loam, 0 to 4 percent slopes	72.9	16.8%
509B	Enbar loam, 0 to 4 percent slopes	49.1	11.3%
511A	Fairway silt loam, 0 to 2 percent slopes	39.7	9.1%
514A	Soapcreek silty clay loam, 0 to 2 percent slopes	2.6	0.6%
522A	Enbar clay loam, 0 to 2 percent slopes	37.0	8.5%
538A	Tetonview silt loam, 0 to 2 percent slopes	1.5	0.4%
540A	Tetonview-Newman complex, 0 to 2 percent slopes	5.3	1.2%
556A	Threeriv-Bonebasin loams, 0 to 2 percent slopes	55.3	12.7%
741A	Beaverell-Beavwan complex, 0 to 2 percent slopes	13.9	3.2%
Totals for Area of Interest		434.3	100.0%

**WATER AND WASTEWATER
INFRASTRUCTURE DESIGN REPORT
FOR
MEADOWLARK RANCH SUBDIVISION, PHASE V
BELGRADE, MONTANA**

PROJECT BACKGROUND

Introduction

The purpose of this design report is to quantify the water and wastewater improvements for Meadowlark Ranch Subdivision, Phase V, an 87-lot residential subdivision in the City of Belgrade, Montana. Meadowlark Ranch Subdivision, Phase V is located on Lot 14, Block 7 of Meadowlark Ranch Subdivision, Phase IV, in Section 32, Township 1 North, Range 5 East, Principal Meridian Montana, Gallatin County, Montana. The subdivision is generally located north and east of the existing phases of Meadowlark Ranch Subdivision.

Previous phases of Meadowlark Ranch Subdivision currently exist to the south and west of Phase V. The previous phases are served by City of Belgrade water and sanitary sewer. In anticipation of future subdivision, previous phases of Meadowlark Ranch Subdivision stubbed 8-inch water main and 8-inch sanitary sewer main to Phase V. The sanitary sewer for Phase V flow to the existing sanitary sewer lift station located near the intersection of Oriole Drive and Powers Boulevard. The lift station was designed to include this portion of Meadowlark Ranch Subdivision.

Zoning, Land use and Service Area

Meadowlark Ranch Subdivision, Phase V will be included in a Planned Unit Development and is located within the jurisdictional limits of the City of Belgrade. The lots in Meadowlark Ranch Subdivision Phase V will contain single family residences.

The Phase V area will be serviced by new water, sewer and street infrastructure. Phase V will contain 87 residential lots, as well as two stormwater detention basins and a portion of undevelopable land containing an existing drainage. Meadowlark Ranch Subdivision, Phase V is currently zoned R1 and R1T.

Design Standards

The City of Belgrade's Design Standards and Specifications Policy (2017) will be used to design the water mains, sanitary sewer mains, stormwater drainage systems and street infrastructure required for the development. Additional design standards and requirements of the Montana Department of Environmental Quality's Circulars DEQ-1 and DEQ-2 will be utilized where applicable to the design, and not otherwise specified in the City of Belgrade's Standards. The City of Belgrade will assume operation and maintenance of the storm drain, wastewater, and water systems and appurtenances upon construction and acceptance of the installation.

It is anticipated that the utility and street infrastructure will be constructed in accordance with the City of Belgrade's Modifications to the Montana Public Works Standard Specifications, Sixth Edition July 2017 and the Montana Public Works Standard Specifications, Sixth Edition (April 2010).

SANITARY SEWER SYSTEM

On-site Projected Wastewater Flows

Sanitary sewer flows for the Meadowlark Ranch Subdivision, Phase V were projected based on flows identified in the City of Belgrade Design Standards and Specifications Policy. Residential zoning requires a flow rate of 90 gallons per capita per day with an average occupancy of 2.5 people per dwelling unit. Based on 87 total residential lots (Meadowlark Ranch Subdivision, Phase V), the equivalent population of the development is 220 people. The total daily wastewater flow is estimated to be 19,800 gallons per day (13.75 gpm).

Based on an equivalent population of 220 people, the peaking factor is calculated as shown in the following:

$$\text{Peaking Factor} = \frac{Q_{max}}{Q_{ave}} = \frac{18 + P^{1/2}}{4 + P^{1/2}} = \frac{18 + (220/1000)^{1/2}}{4 + (220/1000)^{1/2}} = 4.13$$

The peak design flow from the development is expected to be 57 gpm using 13.75 gpm average daily flow and a peak factor of 4.13.

Infiltration

In addition to wastewater flows, the City's Design Standards require calculation of infiltration into the sewer system to evaluate pipe capacities. Based on an estimated 50 gallons per acre per day, at 73.15 acres. Infiltration is estimated to be 3,657.5 gallons per day or 2.5 gallons per minute. With infiltration, the total daily flow is estimated to be 23,457.5 gallons per day, an average of 16 gallons per minute, with a peak flow of 67 gpm.

Collection System

The sanitary sewer collection system for Meadowlark Ranch Subdivision, Phase V will consist of 8-inch diameter polyvinyl chloride (PVC) mains installed at the minimum required slope of 0.004 feet per foot to keep the mains as deep as possible to serve the Meadowlark Ranch Subdivision lots. The 8-inch sanitary sewer at 0.004 feet per foot has a capacity of 344 gpm. With the estimated peak flow of 57 gpm, the 8-inch sanitary sewer main will flow approximately 28 percent full during peak hour conditions. This is well within the guideline that new sewer lines shall be sized to flow at no more than 75% of full capacity at peak hour conditions. Each proposed lot within the development will have one 4-inch service connection to the sanitary sewer main. The sanitary sewer main extensions within the development are designed to convey the peak daily flow plus infiltration per City of Belgrade Design Standards and Specifications Policy.

The manholes used in the on-site collection system will be 48-inch barrel sections with a maximum spacing of 400 feet. All manholes will be constructed with full-depth channels and will meet the requirements of applicable design standards.

Service Connection

Connection to the sanitary sewer main will be designed according to the City of Belgrade Design Standards and Specifications Policy. The service connections for each of lots will be 4-inch diameter PVC with a minimum slope of 1/4-inch per foot and a maximum slope of 1/2-inch per foot.

Existing Sanitary Sewage Lift Station Capacity

The sewage lift station was designed and constructed with Phase I of Meadowlark Ranch Subdivision and was designed for the entire Meadowlark Ranch Subdivision development. The sanitary sewer lift station contemplated 430 units, which includes the 87 residential lots in Phase V. The estimated peak design flow for the lift station was 283 gpm. The existing lift station is expected to have ample capacity for the proposed phase as intended.

WATER SYSTEM

Distribution System

The water distribution system serving Meadowlark Ranch Subdivision, Phase V will be an extension of the public water supply network within the City of Belgrade. There is an existing 8-inch main in Oriole Drive, Falcon Ridge Boulevard, and Melissa Way which will be extended through Phase V. With Phase V the 8-inch water main will loop to the existing 8-inch main located in Melissa Way. A 1-inch domestic service will be provided to each lot within the proposed development.

Projected Water Demands

The projected water usage for Meadowlark Ranch Subdivision, Phase V was estimated using the same population as the sewer flow estimate, 220 people and an average daily water usage of 102 gallons per person per day. A peak day factor of 2.31 and a peak hour factor of 3.19 were used in accordance with

the City of Belgrade Design Standards and Specifications Policy for modeling demands. The estimated average day water usage is 22,440 gallons per day (gpd) with a peak day and peak hour demand of 51,836 gpd (36 gpm) and 71,584 gpd (50 gpm) respectively.

Water System Capacity

In-field flow tests were performed on Meadowlark Ranch Subdivision Phase IV fire hydrants on November 30, 2018 and within Meadowlark Ranch Subdivision Phase I fire hydrants on July 10, 2015. Static and residual pressures were determined in Falcon Ridge Boulevard and East Baseline Road by flowing fire hydrants and monitoring the pressure drop at a given flow. The flow tests resulted in the following measured flow rates and pressures:

Hydrant Field Test Results 7/10/2015

System Static Pressure = 82 psi (greater than DEQ minimum of 35 psi)

Flow from one hydrant open $Q = 1,340 \text{ gpm} \rightarrow 70 \text{ psi}$ residual measured in the system

Measured flow from two hydrants open $Q=2,250 \text{ gpm} \rightarrow 57 \text{ psi}$ residual measured in the system

Hydrant Field Test Results 11/30/2018

System Static Pressure = 94 psi (greater than DEQ minimum of 35 psi)

Flow from one hydrant open $Q=1,060 \text{ gpm} \rightarrow 66 \text{ psi}$ residual measured in the system

The static pressure in East Baseline Road water main was used to model and calculate the pressure at the furthest fire hydrant based off the ability to more accurately show the flow data in the system with having measured flow from two open fire hydrants.

Bentley's WaterCAD was used to model the flows for the fully built Meadowlark Ranch Phases II, III, IV, and V. A total flow of 1,583 gpm (1,500 gpm, fire flow and 83 gpm peak hour flow), a "C" Factor of 130 (per the City of Belgrade Design Standards), and minor losses in the fittings were used in the WaterCAD calculations. A model overview exhibit and model results are attached in the appendix. The above noted hydrant tests done on East Baseline Road were conducted to calibrate the model.

The measured flow rates and static pressure were used as points to define a pump curve within WaterCAD. Using the three points collected, a pump curve was developed to predict pressures under a variety of flow scenarios. Fire flow scenarios, using a flow of 1,500 gpm, were modeled at the most hydraulically distant hydrants in the proposed subdivision in addition to the maximum day demand applied to all model junctions as required by DEQ. The model exhibits the following minimum pressures under a 1,500 gpm fire flow and maximum daily demand:

$$\text{Junction 34} = 39.1 \text{ psi}$$

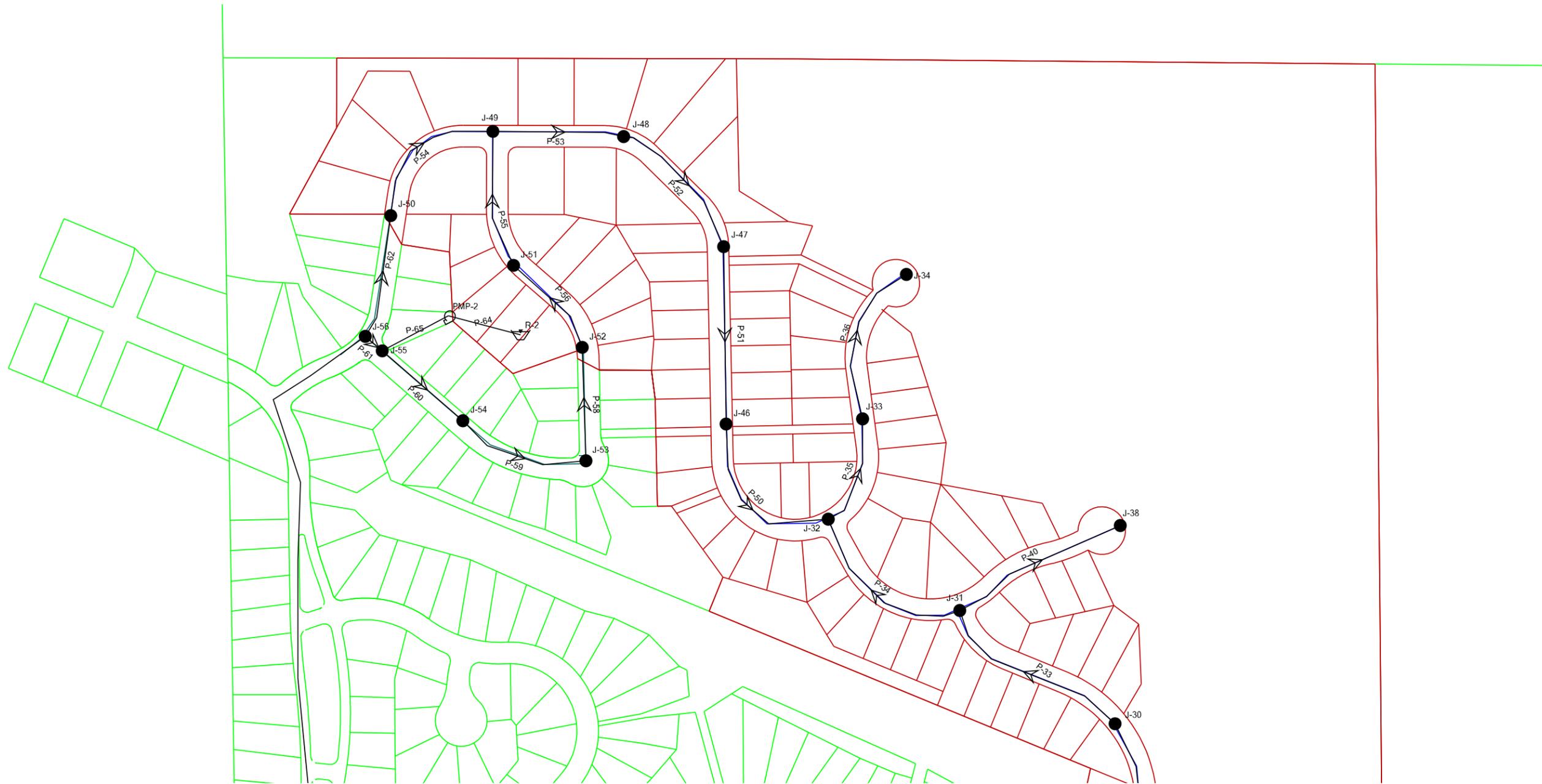
These pressures are more than the minimum required pressure of 20 psi at the modeled flow of 1,500 gpm minimum fire flow for single family residences. Based on field tests, the existing system is capable of at least 1,583 gpm while maintaining a system pressure of 57 psi. Therefore, the existing system at the tie-in points meets the 1,500 gpm minimum fire flow for single family residences.

CONCLUSION

Existing and proposed water and sewer infrastructure is sufficient to serve the 87 lots in Meadowlark Ranch Subdivision, Phase V.

APPENDIX
WATERCAD MODEL RESULTS

Scenario: Base



FlexTable: Junction Table

ID	Label	Elevation (ft)	Zone	Demand Collection	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
34	J-3	4,417.00	Zone - 1	<Collection: 1 items>	6	4,569.76	66.1
53	J-12	4,415.80	Zone - 1	<Collection: 1 items>	6	4,569.16	66.4
55	J-13	4,416.80	Zone - 1	<Collection: 1 items>	6	4,568.67	65.7
57	J-14	4,415.60	Zone - 1	<Collection: 1 items>	6	4,568.22	66.0
59	J-15	4,414.00	Zone - 1	<Collection: 1 items>	6	4,567.59	66.5
61	J-16	4,414.00	Zone - 1	<Collection: 1 items>	6	4,567.12	66.2
63	J-17	4,415.60	Zone - 1	<Collection: 1 items>	6	4,566.54	65.3
65	J-18	4,416.20	Zone - 1	<Collection: 1 items>	6	4,566.17	64.9
67	J-19	4,417.60	Zone - 1	<Collection: 1 items>	6	4,565.78	64.1
69	J-20	4,420.00	Zone - 1	<Collection: 1 items>	6	4,565.44	62.9
71	J-21	4,419.70	Zone - 1	<Collection: 1 items>	6	4,563.77	62.3
73	J-22	4,418.50	Zone - 1	<Collection: 1 items>	6	4,557.15	60.0
75	J-23	4,418.10	Zone - 1	<Collection: 1 items>	6	4,555.71	59.5
77	J-24	4,417.80	Zone - 1	<Collection: 1 items>	6	4,552.58	58.3
79	J-25	4,419.20	Zone - 1	<Collection: 1 items>	6	4,557.15	59.7
81	J-26	4,420.50	Zone - 1	<Collection: 1 items>	6	4,567.10	63.4
83	J-27	4,421.10	Zone - 1	<Collection: 1 items>	6	4,567.99	63.6
85	J-28	4,421.00	Zone - 1	<Collection: 1 items>	6	4,567.99	63.6
87	J-29	4,419.50	Zone - 1	<Collection: 1 items>	6	4,569.40	64.9
98	J-30	4,415.60	Zone - 1	<Collection: 1 items>	4	4,546.23	56.5
99	J-31	4,410.90	Zone - 1	<Collection: 1 items>	4	4,538.15	55.1
106	J-32	4,410.50	Zone - 1	<Collection: 1 items>	4	4,530.83	52.1
108	J-33	4,409.50	Zone - 1	<Collection: 1 items>	4	4,517.16	46.6
110	J-34	4,408.30	Zone - 1	<Collection: 1 items>	1,504	4,498.78	39.1
118	J-38	4,411.50	Zone - 1	<Collection: 1 items>	4	4,538.15	54.8
136	J-46	4,405.30	Zone - 1	<Collection: 1 items>	4	4,535.26	56.2
138	J-47	4,406.10	Zone - 1	<Collection: 1 items>	4	4,539.52	57.7
140	J-48	4,403.50	Zone - 1	<Collection: 1 items>	4	4,543.47	60.6
142	J-49	4,402.30	Zone - 1	<Collection: 1 items>	4	4,546.87	62.6
144	J-50	4,404.20	Zone - 1	<Collection: 1 items>	4	4,548.46	62.4
146	J-51	4,404.00	Zone - 1	<Collection: 1 items>	4	4,547.51	62.1
148	J-52	4,405.00	Zone - 1	<Collection: 1 items>	4	4,547.95	61.8
151	J-53	4,405.90	Zone - 1	<Collection: 0 items>	0	4,548.45	61.7
153	J-54	4,406.30	Zone - 1	<Collection: 0 items>	0	4,549.04	61.8
155	J-55	4,404.60	Zone - 1	<Collection: 0 items>	0	4,549.51	62.7
157	J-56	4,404.00	Zone - 1	<Collection: 0 items>	0	4,549.65	63.0

FlexTable: Pipe Table

ID	Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Has Check Valve?	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Has User Defined Length?	Length (User Defined) (ft)
33	P-2	134	R-1	PMP-1	30.0	PVC	150.0	False	0.000	1,664	0.76	0.000	True	30
35	P-3	171	PMP-1	J-3	30.0	PVC	150.0	False	0.000	1,664	0.76	0.000	True	30
54	P-12	325	J-3	J-12	8.0	PVC	130.0	False	2.000	265	1.69	0.002	False	0
56	P-13	276	J-12	J-13	8.0	PVC	130.0	False	2.000	259	1.65	0.002	False	0
58	P-14	257	J-13	J-14	8.0	PVC	130.0	False	2.000	253	1.61	0.002	False	0
60	P-15	401	J-14	J-15	8.0	PVC	130.0	False	2.000	247	1.58	0.002	False	0
62	P-16	305	J-15	J-16	8.0	PVC	130.0	False	2.000	241	1.54	0.002	False	0
64	P-17	411	J-16	J-17	8.0	PVC	130.0	False	2.000	235	1.50	0.001	False	0
66	P-18	257	J-17	J-18	8.0	PVC	130.0	False	2.000	228	1.46	0.001	False	0
68	P-19	287	J-18	J-19	8.0	PVC	130.0	False	2.000	222	1.42	0.001	False	0
70	P-20	262	J-19	J-20	8.0	PVC	130.0	False	2.000	216	1.38	0.001	False	0
72	P-21	50	J-20	J-21	8.0	PVC	130.0	False	2.000	875	5.59	0.034	False	0
74	P-22	402	J-21	J-22	8.0	PVC	130.0	False	2.000	869	5.55	0.016	False	0
76	P-23	37	J-22	J-23	8.0	PVC	130.0	False	2.000	857	5.47	0.039	False	0
78	P-24	164	J-23	J-24	8.0	PVC	130.0	False	2.000	850	5.43	0.019	False	0
80	P-25	160	J-22	J-25	8.0	PVC	130.0	False	2.000	6	0.04	0.000	False	0
82	P-26	128	J-20	J-26	8.0	PVC	130.0	False	2.000	-665	4.25	0.013	False	0
84	P-27	37	J-26	J-27	8.0	PVC	130.0	False	2.000	-671	4.29	0.024	False	0
86	P-28	246	J-27	J-28	12.0	PVC	130.0	False	2.000	6	0.02	0.000	False	0
88	P-29	1,036	J-27	J-29	12.0	PVC	130.0	False	2.000	-684	1.94	0.001	False	0
89	P-30	190	J-3	J-29	12.0	PVC	130.0	False	2.000	690	1.96	0.002	False	0
104	P-32	398	J-24	J-30	8.0	PVC	130.0	False	2.300	844	5.39	0.016	False	0
105	P-33	465	J-30	J-31	8.0	PVC	130.0	False	4.300	841	5.37	0.017	False	0
107	P-34	420	J-31	J-32	8.0	PVC	130.0	False	4.200	834	5.32	0.017	False	0
109	P-35	262	J-32	J-33	8.0	PVC	130.0	False	2.400	1,507	9.62	0.052	False	0
111	P-36	388	J-33	J-34	8.0	PVC	130.0	False	2.300	1,504	9.60	0.047	False	0
119	P-40	424	J-31	J-38	8.0	PVC	130.0	False	2.300	4	0.02	0.000	False	0
137	P-50	404	J-32	J-46	8.0	PVC	130.0	False	2.900	-677	4.32	0.011	False	0
139	P-51	409	J-46	J-47	8.0	PVC	130.0	False	2.000	-681	4.35	0.010	False	0
141	P-52	358	J-47	J-48	8.0	PVC	130.0	False	2.400	-684	4.37	0.011	False	0
143	P-53	304	J-48	J-49	8.0	PVC	130.0	False	2.100	-688	4.39	0.011	False	0
145	P-54	360	J-49	J-50	8.0	PVC	130.0	False	2.400	-420	2.68	0.004	False	0
147	P-55	320	J-49	J-51	8.0	PVC	130.0	False	2.400	-271	1.73	0.002	False	0
149	P-56	253	J-51	J-52	8.0	PVC	130.0	False	0.400	-275	1.76	0.002	False	0
152	P-58	262	J-52	J-53	8.0	PVC	130.0	False	1.000	-279	1.78	0.002	False	0
154	P-59	317	J-53	J-54	8.0	PVC	130.0	False	1.000	-279	1.78	0.002	False	0
156	P-60	247	J-54	J-55	8.0	PVC	130.0	False	1.000	-279	1.78	0.002	False	0
158	P-61	52	J-55	J-56	8.0	PVC	130.0	False	1.000	-279	1.78	0.003	False	0
159	P-62	288	J-56	J-50	8.0	PVC	130.0	False	1.000	424	2.71	0.004	False	0
160	P-63	2,760	J-3	J-56	8.0	PVC	150.0	False	0.000	702	4.48	0.007	False	0
163	P-64	173	R-2	PMP-2	30.0	PVC	150.0	False	0.000	0	0.00	0.000	True	30
164	P-65	173	PMP-2	J-55	30.0	PVC	150.0	False	0.000	0	0.00	0.000	True	30

MEADOWLARK RANCH PHASE V TRAFFIC IMPACT STUDY

19076

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Community
Planning

Landscape and
Placemaking

Infrastructure
Engineering

Surveying and
Mapping

Branding



August 2020

SANDERSON
STEWART



ENDURING COMMUNITY DESIGN

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INTRODUCTION

This traffic impact study (TIS) summarizes the projected impacts associated with the proposed development of Phase V of the Meadowlark Ranch Subdivision in Belgrade, Montana. The purpose of the study is to assess the traffic-related impacts that the project may have on the surrounding transportation system and to provide recommendations to mitigate any such impacts. The methodology and analysis procedures used in this study employ the latest technology and nationally accepted standards in the areas of site development and transportation impact assessment. Recommendations made in this report are based on professional judgment and these principles.

SITE LOCATION AND DESCRIPTION

Phase V of the Meadowlark Ranch Subdivision is located approximately 1.25 miles northeast of Bozeman Yellowstone International Airport on 73.15 acres in Belgrade, Montana. The site is bordered by previous phases of Meadowlark Ranch Subdivision and East Baseline Road to the south, Ryen Glenn Estates subdivision to the west, and undeveloped properties to the north and east. Figure 1 on the following page depicts the study area.

SITE DEVELOPMENT PLAN

The site development plan for Phase V of Meadowlark Ranch Subdivision proposes construction of 87 single-family residential lots. Access to Phase V of Meadowlark Ranch Subdivision is proposed via connections to Melissa Way and Oriole Drive, both of which are existing streets within the subdivision. Figure 2 (page 3) shows the current proposed site plan for Phase V of Meadowlark Ranch Subdivision.

EXISTING CONDITIONS

Streets

The following paragraphs describe the existing area roadways that are most likely to be affected by the development of Phase V of Meadowlark Ranch Subdivision.

I-90 Frontage Road

The I-90 Frontage Road is classified as a minor arterial via the local functional classification system. It has a two-lane typical section in the project area (near Airport Road). There are approximately 3-foot paved shoulders on both sides and no bicycle or pedestrian facilities. The posted speed limit is 50 mph.

Dry Creek Road

Dry Creek Road is classified as an urban minor arterial near the project intersections with Penwell Bridge Road and Cruiser Lane. Dry Creek Road has a two-lane typical section with turn lanes at some intersections and 4-6-foot paved shoulders. There is a gravel multi-use path on the west side of the road south of Cameron Avenue. The posted speed limit in the project area is 55 mph.

Airport Road

Airport Road is classified as a major collector and has a two-lane typical section. Airport Road has approximately 2-foot paved shoulders and no bicycle or pedestrian facilities. The posted speed limit in the project area is 45 mph.

Tubb Road

Tubb Road is classified as a local road and has a two-lane typical section with narrow paved shoulders. There is no posted speed limit on Tubb Road.



Figure 1. Study Area



Figure 2. Site Layout

Meadowlark Ranch TIS Phase V

East Baseline Road

East Baseline Road is classified as a local road. East of Tubb Road, East Baseline Road has curb and gutter on both sides and boulevard-separated sidewalk on the north side of the road. West of Tubb Road, East Baseline Road is a gravel road. The posted speed limit is 25 mph east of Tubb Road.

Penwell Bridge Road

Penwell Bridge Road is classified as a major collector west of Lagoon Road and a minor collector east of Lagoon Road. Penwell Bridge Road has a two-lane typical section with an eastbound shoulder-separated bike lane between Dry Creek Road and Lagoon Road. The posted speed limit is 45 mph.

Powers Boulevard

Powers Boulevard is classified as a local road and has a paved surface width of approximately 35 feet with curb and gutter and boulevard-separated sidewalk on both sides. The posted speed limit is 25 mph.

Melissa Way

Melissa Way is classified as a local road and has a paved surface width of approximately 35 feet with curb and gutter and boulevard-separated sidewalk on both sides of the road. There is no posted speed limit on Melissa Way.

Cruiser Lane

Cruiser Lane is classified as a major collector east of Jackrabbit Lane and a local road west of Jackrabbit Lane. Cruiser Lane has a paved surface width of approximately 30 feet and 8-foot gravel shoulders with sidewalk on the south side and no curb and gutter. Parallel parking is allowed on the unpaved shoulders. The posted speed limit is 25 mph.

Intersections

The following paragraphs describe the existing major study area intersections that are most likely to realize traffic-related impacts as a result of development of Phase V of Meadowlark Ranch subdivision:

I-90 Frontage Road/Airport Road

The intersection of I-90 Frontage Road and Airport Road has three legs and is stop-controlled on the north leg (Airport Road). There are no auxiliary turn lanes and all approaches allow for all turning movements.

Airport Road/Tubb Road

The intersection of Airport Road and Tubb Road has three legs and is stop-controlled on the west leg (Tubb Road). There are no auxiliary turn lanes and all approaches allow for all turning movements.

Dry Creek Road/Cruiser Lane

The intersection of Dry Creek Road and Cruiser Lane has three legs and is stop-controlled on the west leg (Cruiser Lane). The west approach has dedicated left- and right-turn lanes separated by a painted median (gore area). There are no auxiliary turn lanes on Dry Creek Road.

Dry Creek Road/Penwell Bridge Road

The intersection of Dry Creek Road and Penwell Bridge Road has three legs and is stop-controlled on the east leg (Penwell Bridge Road). There are no auxiliary turn lanes and all approaches allow for all turning movements.

Penwell Bridge Road/Powers Boulevard

The intersection of Penwell Bridge Road and Powers Boulevard has three legs and is stop-controlled on the south leg (Powers Boulevard). There are no auxiliary lanes and all approaches allow for all turning movements.

Tubb Road/East Baseline Road

The intersection of Tubb Road and East Baseline Road has three legs and is stop-controlled on the south leg (Tubb Road). There are no auxiliary lanes and all approaches allow for all turning movements.

East Baseline Road/Melissa Way

The intersection of East Baseline Road and Melissa Way has three legs and is stop-controlled on the north leg (Melissa Way). There are no auxiliary lanes and all approaches allow for all turning movements.

Bicycle/Pedestrian Facilities

Bicycle and pedestrian facilities are limited within the study area. There are boulevard-separated sidewalks along some internal streets in Meadowlark Ranch Subdivision. There is a multi-use path that extends south along the west side of Dry Creek Road from Cameron Avenue. There is also an eastbound shoulder-separated bike lane on Penwell Bridge Road between Dry Creek Road and Lagoon Road.

Traffic Volumes

Weekday AM and PM peak hour turning movement counts were collected for study area intersections on Wednesday, October 16, Tuesday, October 22, Thursday, October 31, and Tuesday, November 5, 2019. The traffic data was collected using Miovision Scout video-based systems. In general, the weekday AM and PM peak hour periods were found to occur from 7:30 to 8:30 AM and 5:00 to 6:00 PM, except at the intersection of I-90 Frontage Road and Airport Road, where the PM peak hour occurred from 4:30 to 5:30 PM. Raw count data was adjusted for seasonal variation using MDT seasonal adjustment factors. Figure 3 on page 6 summarizes the calculated Existing Conditions (2019) peak hour turning movement volumes for the AM and PM peak hours. Detailed traffic count data worksheets are included in Appendix A.

Intersection Capacity

Existing Conditions (2019) intersection capacity calculations were performed for the study area intersections using Highway Capacity Software (HCS7), which is based on the Highway Capacity Manual, 6th Edition (Transportation Research Board, 2016). Level of service (LOS) is defined as a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience. LOS is a quantitative measure of the performance of an intersection with values ranging from LOS A, indicating good operation and low vehicle delays, to LOS F, which indicates congestion and longer vehicle delays. LOS C is typically considered a minimum acceptable threshold for operations in Montana-based communities, though exceptions are made in certain cases.

The results of the Existing Conditions (2019) intersection capacity calculations showed that all intersection approaches operate at LOS B or better during both the AM and PM peak hours. Queues are minimal at all study area intersection approaches. Table 1 on page 7 presents the results of the Existing Conditions (2019) intersection capacity calculations. Capacity calculation worksheets for each of the study area intersections can be found in Appendix B.

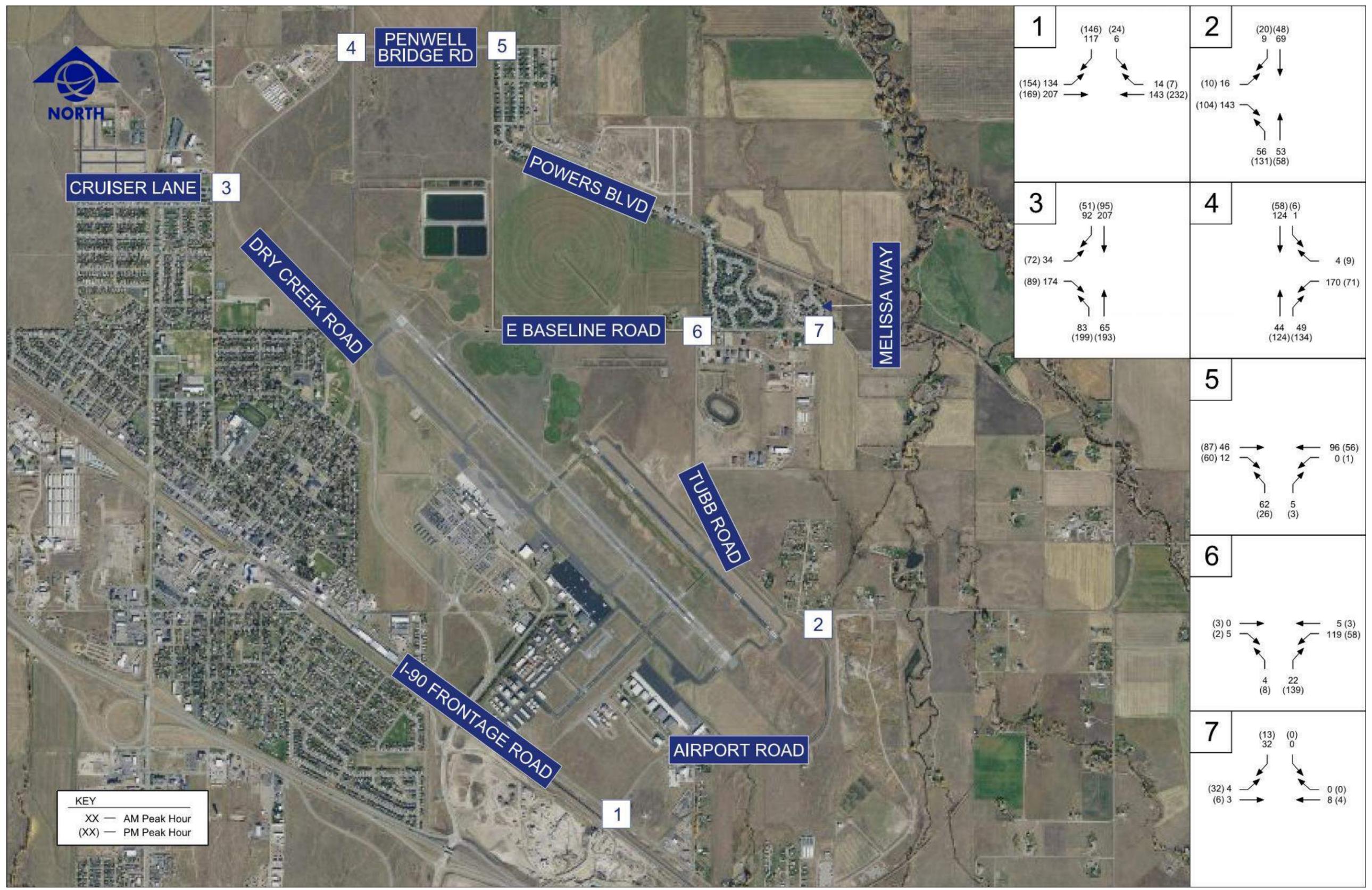


Figure 3. Existing Conditions (2019) Peak Hour Traffic Volumes

Table 1. Existing Conditions (2019) Intersection Capacity Calculations Summary

Intersection	Approach	Existing (2019)					
		AM Peak			PM Peak		
		Avg Delay (s/veh)	LOS	95th % Queue (veh)	Avg Delay (s/veh)	LOS	95th % Queue (veh)
<i>Intersection Control</i>		<i>One-Way Stop-Control (SB)</i>					
I-90 Frontage Road & Airport Road	EB	3.9	A	1	4.5	A	1
	WB	--	--	--	--	--	--
	SB	11.0	B	1	12.8	B	2
<i>Intersection Control</i>		<i>One-Way Stop-Control (EB)</i>					
Airport Road & Tubb Road	EB	10.0	B	1	9.4	A	1
	NB	4.1	A	1	5.5	A	1
	SB	--	--	--	--	--	--
<i>Intersection Control</i>		<i>One-Way Stop-Control (EB)</i>					
Dry Creek Road & Cruiser Lane	EB	11.5	B	1	14.6	B	2
	NB	4.8	A	1	4.8	A	1
	SB	--	--	--	--	--	--
<i>Intersection Control</i>		<i>One-Way Stop-Control (WB)</i>					
Dry Creek Road & Penwell Bridge Road	WB	11.4	B	2	11.0	B	1
	NB	--	--	--	--	--	--
	SB	0.1	A	0	0.8	A	0
<i>Intersection Control</i>		<i>One-Way Stop-Control (NB)</i>					
Penwell Bridge Road & Powers Boulevard	EB	--	--	--	--	--	--
	WB	0.0	A	0	0.1	A	0
	NB	10.2	B	1	10.0	B	1
<i>Intersection Control</i>		<i>One-Way Stop-Control (NB)</i>					
Tubb Road & East Baseline Road	EB	--	--	--	--	--	--
	WB	7.2	A	1	7.0	A	1
	NB	9.0	A	1	9.0	A	1
<i>Intersection Control</i>		<i>One-Way Stop-Control (SB)</i>					
East Baseline Road & Melissa Way	EB	4.4	A	0	6.1	A	1
	WB	--	--	--	--	--	--
	SB	8.5	A	1	8.4	A	1

Crash History

Historical crash data was obtained from MDT for the 5-year period from January 1, 2014 through December 31, 2018 for all seven study area intersections. Note that no crashes were reported at the intersections of Tubb Road/East Baseline Road or East Baseline Road/Melissa Way. The crash data was analyzed for the purpose of calculating intersection crash and severity rates and evaluating collision type trends. Tables 2 and 3 on pages 8 and 9, respectively, illustrate the results of that analysis.

Intersection crash frequency rates were calculated on the basis of crashes per million vehicles entering (MVE). The MVE metric was estimated based on published historical ADT volumes from the MDT website and 2019 peak hour counts. The highest crash rate was observed to be 0.63 crashes/MVE at the intersection of Dry Creek Road and Penwell Bridge Road. The highest number of reported crashes (10) occurred at the intersection of I-90 Frontage Road and Airport Road (resulting in a rate of 0.56 crashes/MVE). Crash rates for the other study area intersections ranged from 0.00 crashes/MVE to 0.25 crashes/MVE.

As a means of evaluating the relative significance of the calculated historical crash rates, Sanderson Stewart also calculated an expected rate using the predictive crash rate formulas in the American Association of State Highway and Transportation

Officials (AASHTO) Highway Safety Manual (HSM). The process involves calculating the number of crashes predicted in a year based on traffic demand (AADTs) and various physical and traffic environment-based conditions, such as lane configurations and traffic signal phasing. The calculation results in a crashes-per-year prediction. Sanderson Stewart then back-calculated a frequency rate on the basis of MVE for the sake of comparison with the actual historical crash rate at the intersection. The results of the calculations for this study showed that the predicted rates are higher than or the same as the historical rate at four intersections. The predicted rate is 66% of the historical rate at the I-90 Frontage Road/Airport Road intersection, 62% at the Dry Creek Road/Penwell Bridge Road intersection, and 50% at the Penwell Bridge Road/Powers Boulevard intersection. This means that there were approximately 1.5 times more crashes reported at the I-90 Frontage Road/Airport Road intersection that would be expected based on HSM methodology. However, the crash rates are generally low relative to intersections with similar attributes that Sanderson Stewart has analyzed around the state over the years. The HSM rate predictions and 5-year crash totals for each intersection are summarized in Table 2 below.

Severity rate and severity index were also calculated for all study area intersections based on standard MDT protocols. A severity index gives an indication of relative crash severity for a location based on the number of fatal, injury, and property damage only (PDO) crashes. Severity rate is defined as the crash rate multiplied by the severity index. The severity rates were found to be relatively low except at the Dry Creek Road/Penwell Bridge Road intersection (1.73 crashes/MVE) where there was one fatal crash involving an impaired driver. The severity rates are also shown in Table 2.

Table 2. Crash History – Frequency and Severity Statistics

Intersection	2014-2018 DEV ¹	Reported Crashes ²	Crash Type			Crash Rates (per MVE ³)		HSM Predictions ⁴	
			PDO	Injury	Fatality	Frequency	Severity	Annual Crashes	Frequency (crashes/MVE)
I-90 Frontage Road & Airport Road	9755	10	6	4	0	0.56	1.01	1.3	0.37
Airport Road & Tubb Road	3962	1	0	1	0	0.14	0.42	0.5	0.35
Dry Creek Road & Cruiser Lane	4383	2	1	1	0	0.25	0.50	0.5	0.31
Dry Creek Road & Penwell Bridge Road	3473	4	3	0	1	0.63	1.73	0.5	0.39
Penwell Bridge Road & Powers Boulevard	2322	1	1	0	0	0.24	0.24	0.1	0.12
Tubb Road & East Baseline Road	1882	0	0	0	0	0.00	N/A	0.2	0.29
East Baseline Road & Melissa Way	522	0	0	0	0	0.00	N/A	0.0	0.00

¹ Daily Entering Volume (DEV) estimated from 2019 peak hour counts and 2014 through 2018 MDT published ADTs

² Crashes reported from January 1, 2014 to December 31, 2018

³ Crash and severity rates expressed as crashes per million vehicles entering (MVE) based on MDT severity factors

⁴ Rates calculated using Highway Safety Manual (HSM) 1st Edition predictive methodology

Sanderson Stewart also evaluated collision type for the purpose of identifying any significant trends in the crash data. Table 3 on the following page presents the results of that analysis. Rear-end crashes were the most commonly reported collision type at the I-90 Frontage Road/Airport Road intersection (70%) and right-angle crashes were the most commonly reported collision type at the Dry Creek Road/Penwell Bridge Road intersection (50%). There were no notable collision type trends at other study area intersections due to low total crash numbers. Rear-end and right-angle collisions are often the most common type at unsignalized high-speed intersections. Rear-end crashes on I-90 Frontage Road could be due to vehicles slowing to make turns onto Airport Road without the benefit of auxiliary turn lanes on the mainline approaches. Additionally, three of the crashes at I-90 Frontage Road and Airport Road and two at Dry Creek Road and Penwell Bridge Road were attributed to poor weather and/or road surface conditions (wet, icy, snow, slush, etc.). It is important to note that these evaluations are speculative in nature. More detailed information about individual crashes would be needed to determine exact causes for each collision.

Table 3. Crash History – Collision Type

Intersection	Collision Type							Totals
	Rear End	Right-Angle	Sideswipe, SD	LT OD	Fixed Object	Rollover	Head On	
I-90 Frontage Road & Airport Road	7	1	1	0	1	0	0	10
Airport Road & Tubb Road	0	0	0	0	0	0	1	1
Dry Creek Road & Cruiser Lane	0	1	0	1	0	0	0	2
Dry Creek Road & Penwell Bridge Road	0	2	1	0	0	1	0	4
Penwell Bridge Road & Powers Boulevard	0	0	1	0	0	0	0	1

TRIP GENERATION

An accurate estimate of site-generated traffic must be made to analyze the impacts of a new development. This study utilized Trip Generation, 10th Edition, published by the Institute of Transportation Engineers (ITE), which is the most widely accepted source in the United States for determining trip generation projections. For the purposes of this study, Land Use Code 210 – Single-Family Detached Housing was utilized to project trip generation for Phase V of Meadowlark Ranch Subdivision. Table 4 below illustrates the results of the trip generation calculations for the site. At full buildout, Phase V of Meadowlark Ranch subdivision is projected to generate a total of 831 gross average weekday trips with 65 trips (16 entering/49 exiting) generated during the AM peak hour and 87 trips (55 entering/32 exiting) generated during the PM peak hour.

Trip generation projections provide an estimate of the total number of trips that would be generated by a proposed development. However, to estimate the net number of new trips made by personal vehicles external to the site, adjustments must often be made to account for internal capture trips, pass-by trips, and trips made by alternate modes. Internal capture (IC) trips are those trips that do not have origins or destinations external to a project site. Since IC trips occur internally, they do not have an impact on external traffic operations. IC trips most often occur in mixed-use developments where residential, commercial, and office-related land uses exhibit a high rate of internal trip exchange. Since this site contains only one land use, IC trips were assumed to be negligible for the purposes of this study.

Pass-by trips are those trips that are made as intermediate stops on the way from a point of origin to a primary trip destination. Pass-by trips are attracted from traffic “passing by” on an adjacent street that offers direct access to that site. Pass-by trips are primarily attracted by commercial type land uses such as restaurants, convenience markets, and gas stations and were therefore also not calculated for this study.

Trips made by alternate modes (walking, biking, transit) are not anticipated to be prevalent for this site due to the lack of bicycle and pedestrian facilities that access services as well as the distance to bus stops, and thus were considered as negligible for the analysis.

Table 4. Trip Generation Summary

Land Use	Independent Variable		Average Weekday			AM Peak Hour			PM Peak Hour		
	Intensity	Units	total	enter	exit	total	enter	exit	total	enter	exit
Single-Family Detached Housing ¹	87	Dwelling Units	821	411	410	64	16	48	86	54	32
Total New External Trips			821	411	410	64	16	48	86	54	32

(1) Single-Family Detached Housing - Land Use 210*

Average Weekday:

Peak Hour of the Adjacent Street, One Hour between 7 and 9 AM:

Peak Hour of the Adjacent Street, One Hour between 4 and 6 PM:

*Trip Generation, 10th Edition, Institute of Transportation Engineers, 2017

Units = Dwelling Units

Average Rate = 9.44 (50% entering/50% exiting)

Average Rate = 0.74 (25% entering/75% exiting)

Average Rate = 0.99 (63% entering/37% exiting)

TRIP DISTRIBUTION

Trip distribution is an estimate of site-generated trip routing, which can be determined by several methods, such as computerized travel demand models, calculation of travel time for various available routes, and/or simple inspection of existing traffic patterns within the project area. For this study, Sanderson Stewart utilized distribution percentages from a previous phase of Meadowlark Ranch Subdivision to supplement percentages calculated from existing traffic volumes from this study with consideration given to the location of the development in relation to the greater Belgrade and Gallatin Valley area. Figure 4 on the following page presents the trip distribution scheme for this study.

TRAFFIC ASSIGNMENT

Traffic assignment is the procedure whereby site-generated vehicle trips are assigned to study area streets, intersections, and site access driveways based on the calculated trip distribution and the physical attributes of the development site. Using this approach, site-generated trips for Phase V of Meadowlark Ranch Subdivision were assigned to the study area intersections for the purposes of projecting future traffic volumes for analysis. The results of the traffic assignment exercise for the AM and PM peak hours are also illustrated in Figure 4.

TRAFFIC IMPACTS

Traffic Volumes

Based on information from the client, a buildout year of 2025 was utilized for the purposes of calculating future traffic projections for this study. In addition to site-generated trips, background traffic volumes will also likely increase for study area streets and intersections due to general growth. To account for that growth, Sanderson Stewart analyzed historical MDT traffic data and determined that an annual background growth rate of 3.5% would be conservatively appropriate for modeling ambient growth. Design Year (2025) traffic projections for Phase V of Meadowlark Ranch Subdivision were then calculated by combining existing traffic volumes with anticipated background growth and site-generated traffic assignments. Figure 5 on page 12 illustrates the resulting AM and PM peak hour traffic volume projections.

Intersection Capacity

Sanderson Stewart performed intersection capacity calculations for the Design Year (2025) scenario based on the AM and PM peak hour traffic volume projections presented in Figure 5. Peak hour factors (PHFs) for the design year were assumed to be 0.92 for all intersections, as that is the default value utilized by the HCM. The assumed values were utilized so as to not overestimate future congestion in the study area.

Table 5 on page 13 presents the results of the Design Year (2025) scenario intersection capacity calculations. All intersections and approaches are projected to operate at or above LOS C during both the AM and PM peak hours in the Design Year (2025). Queuing is projected to remain minimal at all study area intersections. Detailed intersection capacity calculation worksheets for the Design Year (2025) traffic projection scenario are included in Appendix C.

Mitigation Alternatives

Sanderson Stewart evaluated a variety of potential mitigation improvement options to address existing concerns and/or projected impacts for study area streets and intersections. The following paragraphs provide details on that analysis.

Auxiliary right and left-turn lane warrants were evaluated based on the methodology outlined in the MDT Traffic Engineering Manual (November 2007) for both the Existing Conditions (2019) and Design Year (2025) analysis scenarios. It was found that an eastbound left-turn lane is warranted at the intersection of I-90 Frontage Road and Airport Road, a northbound left-turn lane and southbound right-turn lane are warranted at the intersection of Dry Creek Road and Cruiser Lane, and a



Figure 4. Design Year (2025) Trip Distribution & Traffic Assignment Summary



Figure 5. Design Year (2025) Traffic Projections

Table 5. Design Year (2025) Capacity Calculations Summary

Intersection	Approach	Design Year (2025)					
		AM Peak			PM Peak		
		Avg Delay (s/veh)	LOS	95th % Queue (veh)	Avg Delay (s/veh)	LOS	95th % Queue (veh)
<i>Intersection Control</i>		<i>One-Way Stop-Control (SB)</i>					
I-90 Frontage Road & Airport Road	EB	4.1	A	1	5.3	A	1
	WB	--	--	--	--	--	--
	SB	12.8	B	2	19.4	C	3
<i>Intersection Control</i>		<i>One-Way Stop-Control (EB)</i>					
Airport Road & Tubb Road	EB	10.5	B	2	10.2	B	1
	NB	4.4	A	1	6.1	A	1
	SB	--	--	--	--	--	--
<i>Intersection Control</i>		<i>One-Way Stop-Control (EB)</i>					
Dry Creek Road & Cruiser Lane	EB	13.2	B	2	20.0	C	3
	NB	5.1	A	1	5.1	A	1
	SB	--	--	--	--	--	--
<i>Intersection Control</i>		<i>One-Way Stop-Control (WB)</i>					
Dry Creek Road & Penwell Bridge Road	WB	12.3	B	2	11.6	B	1
	NB	--	--	--	--	--	--
	SB	0.1	A	0	0.9	A	0
<i>Intersection Control</i>		<i>One-Way Stop-Control (NB)</i>					
Penwell Bridge Road & Powers Boulevard	EB	--	--	--	--	--	--
	WB	0.0	A	0	0.1	A	0
	NB	10.3	B	1	10.2	B	1
<i>Intersection Control</i>		<i>One-Way Stop-Control (NB)</i>					
Tubb Road & East Baseline Road	EB	--	--	--	--	--	--
	WB	7.3	A	1	7.1	A	1
	NB	9.0	A	1	9.5	A	1
<i>Intersection Control</i>		<i>One-Way Stop-Control (SB)</i>					
East Baseline Road & Melissa Way	EB	6.2	A	0	6.8	A	1
	WB	--	--	--	--	--	--
	SB	8.6	A	1	8.5	A	1

northbound right-turn lane is warranted at the intersection of Dry Creek Road and Penwell Bridge Road all based on the Existing Conditions (2019) scenario. Additionally, a northbound left-turn lane is projected to be warranted at the intersection of Airport Road and Tubb Road for the Design Year (2025) scenario. These turn lanes are all considered warranted based on traffic volumes and were not evaluated due to any capacity deficiencies. The final decision to install any turn lanes should be made by MDT and the City of Belgrade after evaluation of what impacts they may have to other aspects of the intersections or adjacent intersections. Auxiliary turn lane warrant worksheets for Existing Conditions (2019) and Design Year (2025) scenarios can be found in Appendix D and Table 6 on page 14 shows a summary of the turn warrant analysis.

Traffic signal warrants were evaluated for the intersection of I-90 Frontage Road and Airport Road based on criteria outlined in the Manual on Uniform Traffic Control Devices (MUTCD) for Existing Conditions (2019) and Design Year (2025) traffic scenarios. The MUTCD presents several different warrants that can be considered, including warrants based on traffic demand, pedestrian demand, proximity to school crossings, crash history, and others. For the purposes of this analysis, the Pedestrian Volume, School Crossing, and Intersection Near a Grade Crossing warrants were not considered applicable since there are no pedestrian facilities, schools, or railroad crossings near the intersection. One of the three traffic volume-based warrants (Eight-Hour Vehicular Volume) was shown to be met for the Existing Conditions (2019) scenario. All three volume-based warrants (Eight-Hour Vehicular Volume, Four-Hour Vehicular Volume, and Peak Hour) are projected to be met for the

Table 6. Turn Warrant Summary

TURN LANE WARRANTS		I-90 Frontage Road & Airport Road		Airport Road & Tubb Road		Dry Creek Road & Cruiser Lane		Dry Creek Road & Penwell Bridge Road	
		AM	PM	AM	PM	AM	PM	AM	PM
2019	NB Right-Turn Lane							NO	YES
	NB Left-Turn Lane			NO	NO	NO	YES		
	SB Right-Turn Lane			NO	NO	YES	NO		
	SB Left-Turn Lane							NO	NO
	EB Right-Turn Lane								
	EB Left-Turn Lane	YES	YES						
	WB Right-Turn Lane	NO	NO						
	WB Left-Turn Lane								
2025	NB Right-Turn Lane							NO	YES
	NB Left-Turn Lane			NO	YES	YES	YES		
	SB Right-Turn Lane			NO	NO	YES	NO		
	SB Left-Turn Lane							NO	NO
	EB Right-Turn Lane								
	EB Left-Turn Lane	YES	YES						
	WB Right-Turn Lane	NO	NO						
	WB Left-Turn Lane								

Design Year (2025) scenario. However, the MUTCD also directs that when the minor approach volumes have a high percentage of right-turn movements that are made from a dedicated right-turn lane, the engineer should use judgement as to whether all or a portion of those movements should be considered in the traffic signal warrant evaluation. This is because those movements can often be made with minimal conflict or associated delay. Although there is not currently a dedicated southbound right-turn lane on Airport Road at the I-90 Frontage Road intersection, southbound right turns make up over 80% of movements from the north intersection leg. If a right-turn lane were to be constructed, a substantial reduction in the minor approach traffic volume demand would likely be justifiable given the high proportion of right turns. Therefore, Sanderson Stewart also evaluated traffic signal warrants with a 50% and 100% reduction in right turns from that minor approach. Note that the 50% reduction level was not chosen based on any traffic volume characteristics or industry standard recommendations, but purely to demonstrate the impacts of a mid-line reduction. These analyses showed that no traffic signal warrants would be met for the Existing Conditions (2019) scenario with either 50% or 0% of right turns included. For the Design Year (2025) scenario, all three volume-based warrants are still projected to be met with 50% of right turns removed, although the thresholds are only very nearly met. No warrants are projected to be met with 0% of right turns included. Based on these results, and because there are no projected capacity deficiencies or substantial safety concerns for the intersection for either the Existing Conditions (2019) or Design Year (2025) scenarios, it is Sanderson Stewart’s professional opinion that a southbound dedicated right-turn lane should be installed at this intersection and that traffic signal warrants should be considered as not met on the basis of a justifiable right-turn reduction if the right-turn lane is constructed. Although traffic signals can be extremely beneficial under heavy traffic demand conditions, they also inherently introduce delay for vehicles on the mainline approaches and may also increase risk for certain crash types including rear-end crashes which are already prevalent at the intersection. Traffic signal warrant worksheets for both the Existing Conditions (2019) and Design Year (2025) scenarios can be found in Appendix D.

The mitigation-level analysis for this study showed that all study area intersections are projected to operate with acceptable LOS metrics and minimal queuing with installation of the previously discussed auxiliary turn lanes. However, it is important to also note again that all of the study area intersections are also projected to operate with excellent operational metrics without installation of any of those improvements. The results of the capacity calculations with mitigation-level improvements are shown in Table 7 on the following page and detailed capacity calculation worksheets for those configurations can be found in Appendix E.

Table 7. Design Year (2025) Improved Capacity Calculations Summary

Intersection	Approach	Design Year (2025) Improvements					
		AM Peak			PM Peak		
		Avg Delay (s/veh)	LOS	95th % Queue (veh)	Avg Delay (s/veh)	LOS	95th % Queue (veh)
<i>Intersection Control</i>		<i>One-Way Stop-Control (SB), EB LT, SB RT Lanes</i>					
I-90 Frontage Road & Airport Road	EB	3.3	A	1	4.4	A	1
	WB	--	--	--	--	--	--
	SB	11.6	B	1	14.7	B	2
<i>Intersection Control</i>		<i>One-Way Stop-Control (EB), NB LT Lane</i>					
Airport Road & Tubb Road	EB	10.5	B	2	10.2	B	1
	NB	4.2	A	1	5.8	A	1
	SB	--	--	--	--	--	--
<i>Intersection Control</i>		<i>One-Way Stop-Control (EB), NB LT, SB RT Lanes</i>					
Dry Creek Road & Cruiser Lane	EB	12.3	B	2	18.9	C	2
	NB	4.7	A	1	4.1	A	1
	SB	--	--	--	--	--	--
<i>Intersection Control</i>		<i>One-Way Stop-Control (WB), NB RT Lane</i>					
Dry Creek Road & Penwell Bridge Road	WB	11.8	B	2	10.7	B	1
	NB	--	--	--	--	--	--
	SB	0.1	A	0	0.9	A	0

The Belgrade Long Range Transportation Plan (LRTP) [October 2018] provides the following two recommendations for improvements to streets and intersections in the study area (note that neither of the suggested improvements are thought to be programmed in terms of design or construction funding as of the writing of this report):

1. Evaluation of traffic signal or roundabout improvements for the Dry Creek Road/Cruiser Lane intersection (“as traffic increases in that area”).
2. Installation of an eastbound left-turn lane at the intersection of I-90 Frontage Road and Airport Road. It is noted in the LRTP that this project could be combined with a recommended major street network improvement which would reconstruct I-90 Frontage Road to a rural minor arterial standard with one travel lane in each direction, widened shoulders, and recoverable side slopes, and that would connect the East Belgrade Interchange project with the recently completed slope flattening project ending at Hyalite Creek.

In considering other developments and their impacts in the area of the Meadowlark Subdivision, Sanderson Stewart reviewed traffic impact studies for Prescott Ranch Subdivision (600 units), Bridger Heights Subdivision (700 units), and Story Creek Subdivision (276 units), all completed by Morrison Maierle. The Dry Creek Road/Cruiser Lane intersection is the only overlapping intersection between these studies and the Meadowlark Ranch study area. The Story Creek Subdivision TIS (2017, expected project completion 2025) recommended that a northbound left-turn lane at the Dry Creek Road/Cruiser Lane intersection should be considered based on existing conditions at the time of the study. In the study, the intersection was projected to operate at or above LOS C in 2025 without installation of the turn lane. The Bridger Heights Subdivision TIS (2018) for phases 1-4 projected that the intersection will operate at LOS D or below starting in 2030 with the current configuration. At this point a single-lane roundabout was recommended for installation and is projected to operate at LOS B or better through 2040. This study also noted that a northbound left-turn lane at the Dry Creek Road/Cruiser Lane intersection was warranted based on the existing conditions, but that a single-lane roundabout should be installed by 2030 in lieu of turn lanes on Dry Creek Road. The Prescott Property TIS (2018, included Prescott Ranch and Bridger Heights Subdivision analysis) also recommended that, even though the minimum thresholds for signal warrants are not projected to be met, a single-lane roundabout should be installed by 2030 at the Dry Creek Road/Cruiser Lane intersection to maintain acceptable LOS conditions, and in lieu of auxiliary turn lanes on Dry Creek Road.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The preceding analysis has shown that construction of Phase V of Meadowlark Ranch Subdivision will generate a moderate volume of new traffic demand for area streets and intersections. Through the planned development, it is estimated that approximately 831 new vehicle trips could be generated on a daily basis.

An evaluation of Existing Conditions (2019) intersection capacity showed that all intersections/intersection approaches currently operate at LOS B or better. A crash history analysis showed that crash and severity rates are generally low for all study area intersections. Rear-end collisions were found to be the most common amongst historical crashes at the I-90 Frontage Road/Airport Road intersection, which is not unusual for unsignalized, high-speed intersections that do not have auxiliary turn lanes.

Initial intersection capacity analysis results for the Design Year (2025) scenario (with no anticipated improvements) projected that all study area intersections will continue to operate with acceptable LOS metrics and minimal queuing during both peak hours. Although there are no projected capacity deficiencies at the study area intersections, auxiliary turn lane and traffic signal warrants were evaluated for various study area intersections given the existing and projected traffic demand levels at those locations. Sanderson Stewart evaluated auxiliary turn lane warrants at several study area intersections and traffic signal warrants at the intersection of I-90 Frontage Road and Airport Road. Turn lanes were found to be warranted based on traffic volumes at the I-90 Frontage Road/Airport Road, Airport Road/Tubb Road, Dry Creek Road/Cruiser Lane, and Dry Creek Road/Penwell Bridge Road intersections based on the application of MDT Traffic Engineering Manual criteria. Traffic signal warrants were initially shown to be met at the intersection of I-90 Frontage Road and Airport Road for the Existing Conditions (2019) scenario. However, given that a very high percentage (86%-95% for existing conditions) of the minor approach traffic demand at that intersection is made up of right turns, Sanderson Stewart performed additional analysis of traffic signal warrants to determine if a reduction in the right-turn demand on the minor approach would change the results of the analysis. It was found that a 50% right-turn reduction would result in no warrants being met for Existing Conditions (2019), but that all three volume-based warrants would still be met for the Design Year (2025) scenario, albeit only barely meeting the minimum warrant thresholds. With all right turns removed, no traffic signal warrants were shown to be met for either scenario. Based on this analysis and given the inherent drawbacks that come with installation of a traffic signal (primarily the introduction of delay for mainline vehicles), it may be more appropriate in this situation to install a minor approach dedicated right-turn bay that would allow right-turn movements to be made irrespective of queuing for left-turn movements and therefore a greater than 50% reduction in right-turning vehicles in warrant calculations.

The Belgrade Long Range Transportation Plan provides improvement recommendations for the Dry Creek Road/Cruiser Lane intersection (consideration of a future roundabout or traffic signal) and the I-90 Frontage Road/Airport Road intersection (installation of an eastbound auxiliary left-turn lane).

Traffic impact studies completed by Morrison Maierle for three subdivision developments on the Prescott Property (Story Creek, Bridger Heights, and Prescott Ranch Subdivisions) concluded that a roundabout will not be warranted by 2025, but that one should be installed at the Dry Creek Road/Cruiser Lane intersection by 2030 in lieu of turn lanes on Dry Creek Road to maintain acceptable LOS conditions.

Recommendations

The following list of recommendations is based on the analysis results from this study and the professional judgment of the author:

- MDT should consider the installation of an eastbound auxiliary left-turn lane at the intersection of I-90 Frontage Road and Airport Road to improve the intersection based on Existing Conditions (2019) warrants from this study. Although warranted with existing traffic volumes, it may be beneficial to tag a proportionate share contribution

from Meadowlark Subdivision Phase V to include into the design/construction of a larger corridor project. As noted in the LRTP, it is planned to upgrade the roadway to a recommended major street network to a 3-lane rural, minor arterial.

- City of Belgrade should consider a dedicated southbound right-turn lane at the I-90 Frontage Road and Airport Road intersection to separate left-turn and right-turn movements on that approach, thereby reducing delay for the right-turn movement. This improvement is recommended as an improvement in lieu of installation of a traffic signal or roundabout at the intersection. If deemed appropriate at this intersection, a proportionate share contribution from Meadowlark Subdivision Phase V should be calculated.
- Traffic volume demands for the Dry Creek Road and Cruiser Lane intersection should be monitored by the City of Belgrade going forward relative to the Belgrade LRTP recommendation (future traffic signal or roundabout installation) and Prescott Property Subdivision TIS recommendation (future roundabout). In the interim, MDT could consider the installation of a northbound auxiliary left-turn lane and southbound auxiliary right-turn lane at the intersection. The final design of the intersection design (2030 volumes) will be made by MDT and whatever intersection improvements are deemed appropriate at this intersection, a proportionate share contribution from Meadowlark Subdivision Phase V should be calculated.
- MDT should consider the installation of a northbound auxiliary right-turn lane at the Dry Creek Road/Penwell Bridge Road intersection based on Existing Conditions (2019) warrants from this study. MDT may decide the intersection characteristics and safety considerations would not benefit from this additional right-turn lane. If deemed appropriate at this intersection, a proportionate share contribution from Meadowlark Subdivision Phase V should be calculated.
- City of Belgrade should consider the installation of a northbound auxiliary left-turn lane at the Airport Road/Tubb Road intersection based on Design Year Conditions (2025) warrants from this study. A turn lane at this location would likely increase the northbound travel speeds and possibly create sight restrictions for eastbound (Tubb Road) traffic. If deemed appropriate at this intersection, a proportionate share contribution from Meadowlark Subdivision Phase V should be calculated.
- Any proposed improvements to I-90 Frontage Road or Dry Creek Road should be coordinated with LRTP and MDT area projects.
- All transportation-related improvements shall be designed in accordance with City of Belgrade and/or MDT standards (where applicable) and the Manual on Uniform Traffic Control Devices (MUTCD).

FINANCIAL CONTRIBUTION CALCULATIONS

Financial contributions toward improvement costs at impacted intersections can be calculated based on the developer’s contribution of site generated entering traffic compared to the total entering volume at failing capacity for the intersection. The basis behind this form of development share of critical intersection volumes uses HCM traffic volumes thresholds, per lane, based on through and left-turning vehicles conflicting movements, which are the critical movements for intersection operations. The benefit of this type of calculation, compared to the share of total entering volume (TEV), is it takes both background growth and area development growth out of the equation. This style of contribution calculation method has been used by the City of Billings for several years, to fairly distribute improvement cost shares between multiple parties where intersection improvements (turn lanes, signals, roundabouts, etc.) are a factor of several developments.

Based on trip generation and traffic assignment described in this study, the proposed contributions were calculated based on the sum of critical lane (left-turning and thru movements) volumes generated by this development compared to capacity thresholds based on the HCM. This development’s portion of the critical volumes for impacted intersections are as follows:

- Frontage Road & Airport Road – 3.07%
- Airport Road & Tubb Road – 3.95%
- Dry Creek Road & Cruiser Lane – 0.61%
- Dry Creek Road & Penwell Bridge Road – 0.44%
- Penwell Bridge Road & Powers Boulevard – 0.44%
- Baseline Road & Tubb Road – 3.60%
- Baseline Road & Melissa Way – 4.12%

The City of Belgrade may want to consider any above contribution percentages less than the background growth rate used of 3.5% as incidental to normal growth. The conversion of these percentages into dollar figures will depend upon what level of improvements are prescribed for each intersection as the baseline for determining contributions. Detailed financial contribution calculation worksheets are included in Appendix F.

TRAFFIC VOLUME DATA

APPENDIX A

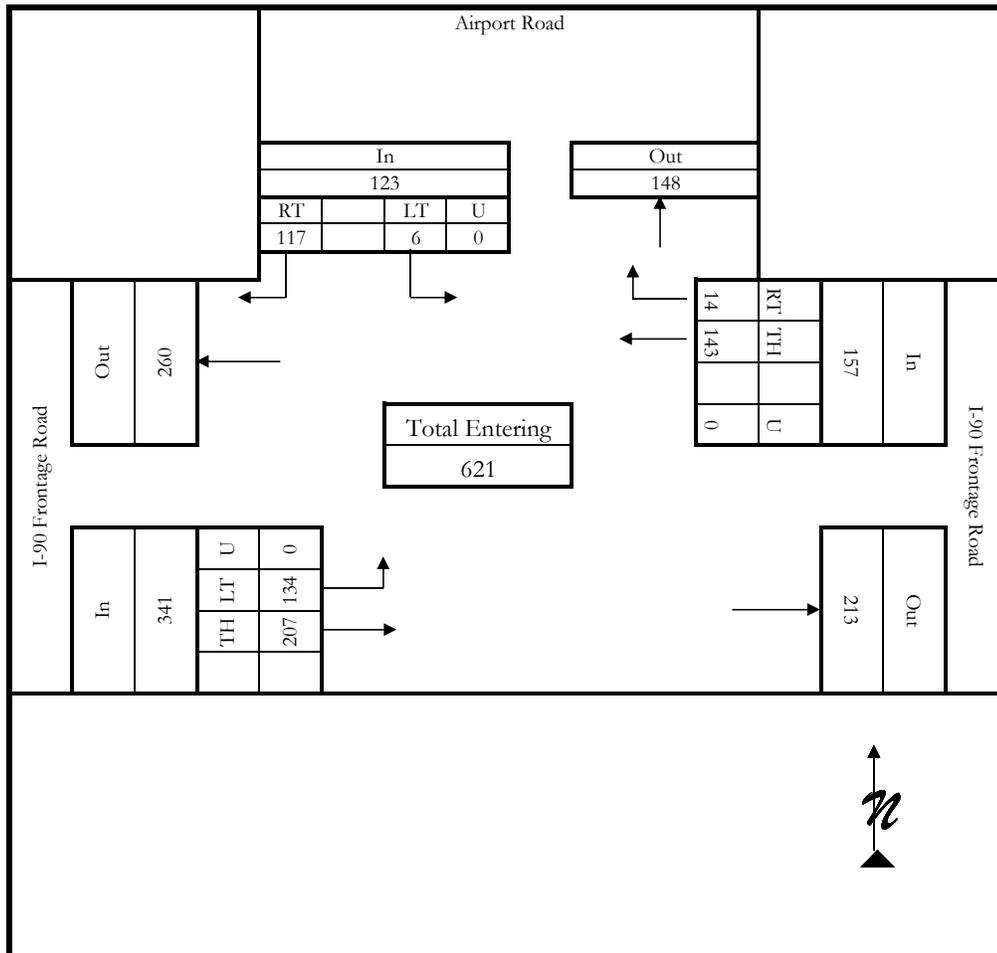
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By: A Stoltzfus	Intersection: I-90 Frontage Road & Airport Road
Agency/Company: Sanderson Stewart	Jurisdiction: City of Belgrade/Gallatin County/MDT
Date Performed: Thursday, October 31, 2019	
Count Time Period: AM Peak Hour (7:30 - 8:30 AM)	
Project Number: 19076	Project Description: Meadowlark Ranch
North/South Street: Airport Road	East/West Street: I-90 Frontage Road

Vehicle Volumes and Adjustments

Start Time	Airport Road Southbound					Airport Road Northbound					I-90 Frontage Road Eastbound					I-90 Frontage Road Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	0.90	0.90	0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90	0.90	0.90		
7:30 AM	17	0	2	0	19					0	0	57	23	0	80	4	44	0	0	48	147
7:45 AM	42	0	1	0	43					0	0	68	46	0	114	5	43	0	0	48	205
8:00 AM	36	0	2	0	38					0	0	33	36	0	69	2	36	0	0	38	145
8:15 AM	22	0	1	0	23					0	0	49	29	0	78	3	20	0	0	23	124
Grand Total	117	0	6	0	123	0	0	0	0	0	0	207	134	0	341	14	143	0	0	157	621
Medium Truck %	1.7	0.0	0.0	0.0	1.6					0.0	0.0	0.0	0.7	0.0	0.3	0.0	2.1	0.0	0.0	1.9	
Heavy Truck %	2.6	0.0	16.7	0.0	3.3					0.0	0.0	2.9	2.2	0.0	2.6	0.0	4.9	0.0	0.0	4.5	
Total Truck %	4.3	0.0	16.7	0.0	4.9					0.0	0.0	2.9	3.0	0.0	2.9	0.0	7.0	0.0	0.0	6.4	
Total %	18.8	0.0	1.0	0.0	19.8	0.0	0.0	0.0	0.0	0.0	0.0	33.3	21.6	0.0	54.9	2.3	23.0	0.0	0.0	25.3	100.0
PHF	0.72	0.72	0.72								0.75	0.75	0.75			0.81	0.81	0.81			0.76



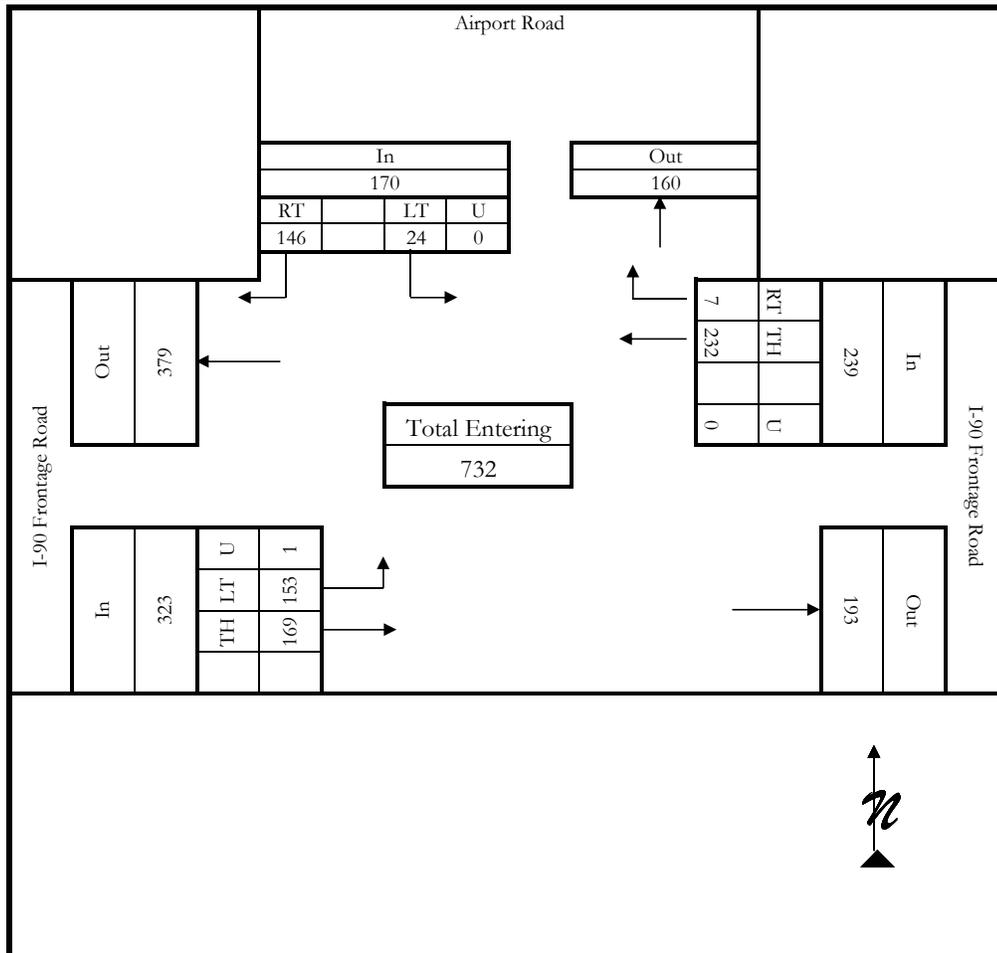
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	A Stoltzfus	Intersection:	I-90 Frontage Road & Airport Road
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Belgrade/Gallatin County/MDT
Date Performed:	Thursday, October 31, 2019		
Count Time Period:	PM Peak Hour (4:30 - 5:30 PM)		
Project Number:	19076	Project Description:	Meadowlark Ranch
North/South Street:	Airport Road	East/West Street:	I-90 Frontage Road

Vehicle Volumes and Adjustments

Start Time	Airport Road Southbound					Airport Road Northbound					I-90 Frontage Road Eastbound					I-90 Frontage Road Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	0.90	0.90	0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90	0.90	0.90		
4:30 PM	38	0	10	0	48					0	0	41	37	0	78	1	47	0	0	48	174
4:45 PM	37	0	5	0	42					0	0	48	34	1	83	2	50	0	0	52	177
5:00 PM	41	0	5	0	46					0	0	40	42	0	82	0	70	0	0	70	198
5:15 PM	30	0	4	0	34					0	0	40	40	0	80	4	65	0	0	69	183
Grand Total	146	0	24	0	170	0	0	0	0	0	0	169	153	1	323	7	232	0	0	239	732
Medium Truck %	0.7	0.0	0.0	0.0	0.6					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	5.5	0.0	0.0	0.0	4.7					0.0	0.0	5.3	3.3	0.0	4.3	28.6	3.0	0.0	0.0	3.8	
Total Truck %	6.2	0.0	0.0	0.0	5.3					0.0	0.0	5.3	3.3	0.0	4.3	28.6	3.0	0.0	0.0	3.8	
Total %	19.9	0.0	3.3	0.0	23.2	0.0	0.0	0.0	0.0	0.0	0.0	23.1	20.9	0.1	44.1	1.0	31.7	0.0	0.0	32.7	100.0
PHF	0.92	0.92	0.92								0.98	0.98	0.98			0.85	0.85	0.85			0.92



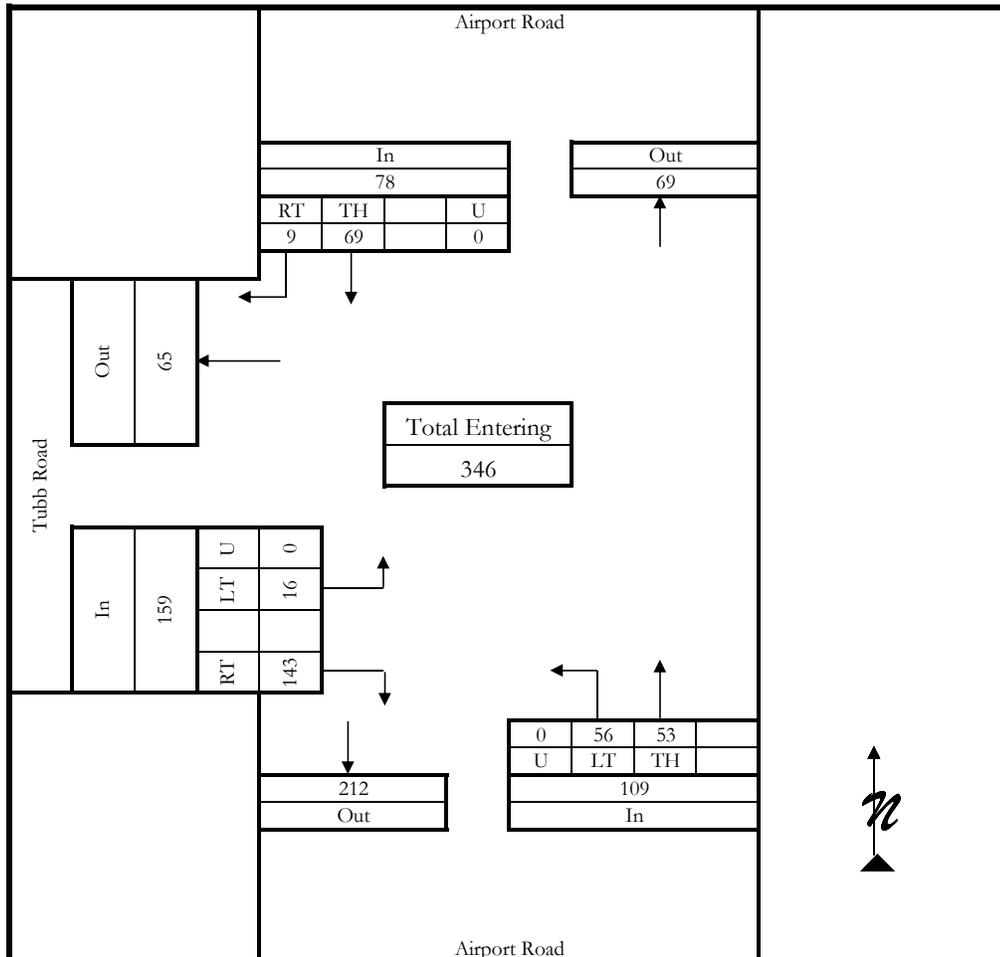
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By: A Stoltzfus	Intersection: Airport Road & Tubb Road
Agency/Company: Sanderson Stewart	Jurisdiction: City of Belgrade/Gallatin County
Date Performed: Wednesday, October 16, 2019	
Count Time Period: AM Peak Hour (7:30 - 8:30 AM)	
Project Number: 19076	Project Description: Meadowlark Ranch
North/South Street: Airport Road	East/West Street: Tubb Road

Vehicle Volumes and Adjustments

Start Time	Airport Road Southbound					Airport Road Northbound					Tubb Road Eastbound					Tubb Road Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	0.87	0.87	0.87	0.87		0.87	0.87	0.87	0.87		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
7:30 AM	3	16	0	0	19	0	9	14	0	23	39	0	5	0	44					0	86
7:45 AM	2	30	0	0	32	0	11	15	0	26	49	0	3	0	52					0	110
8:00 AM	4	13	0	0	17	0	16	11	0	27	26	0	5	0	31					0	75
8:15 AM	0	10	0	0	10	0	17	16	0	33	29	0	3	0	32					0	75
Grand Total	9	69	0	0	78	0	53	56	0	109	143	0	16	0	159	0	0	0	0	0	346
Medium Truck %	0.0	1.4	0.0	0.0	1.3	0.0	0.0	1.8	0.0	0.9	0.7	0.0	0.0	0.0	0.6					0.0	
Heavy Truck %	0.0	2.9	0.0	0.0	2.6	0.0	7.5	5.4	0.0	6.4	2.8	0.0	6.3	0.0	3.1					0.0	
Total Truck %	0.0	4.3	0.0	0.0	3.8	0.0	7.5	7.1	0.0	7.3	3.5	0.0	6.3	0.0	3.8					0.0	
Total %	2.6	19.9	0.0	0.0	22.5	0.0	15.3	16.2	0.0	31.5	41.3	0.0	4.6	0.0	46.0	0.0	0.0	0.0	0.0	0.0	100.0
PHF	0.62	0.62	0.62			1.00	1.00	1.00			0.76	0.76	0.76								0.79



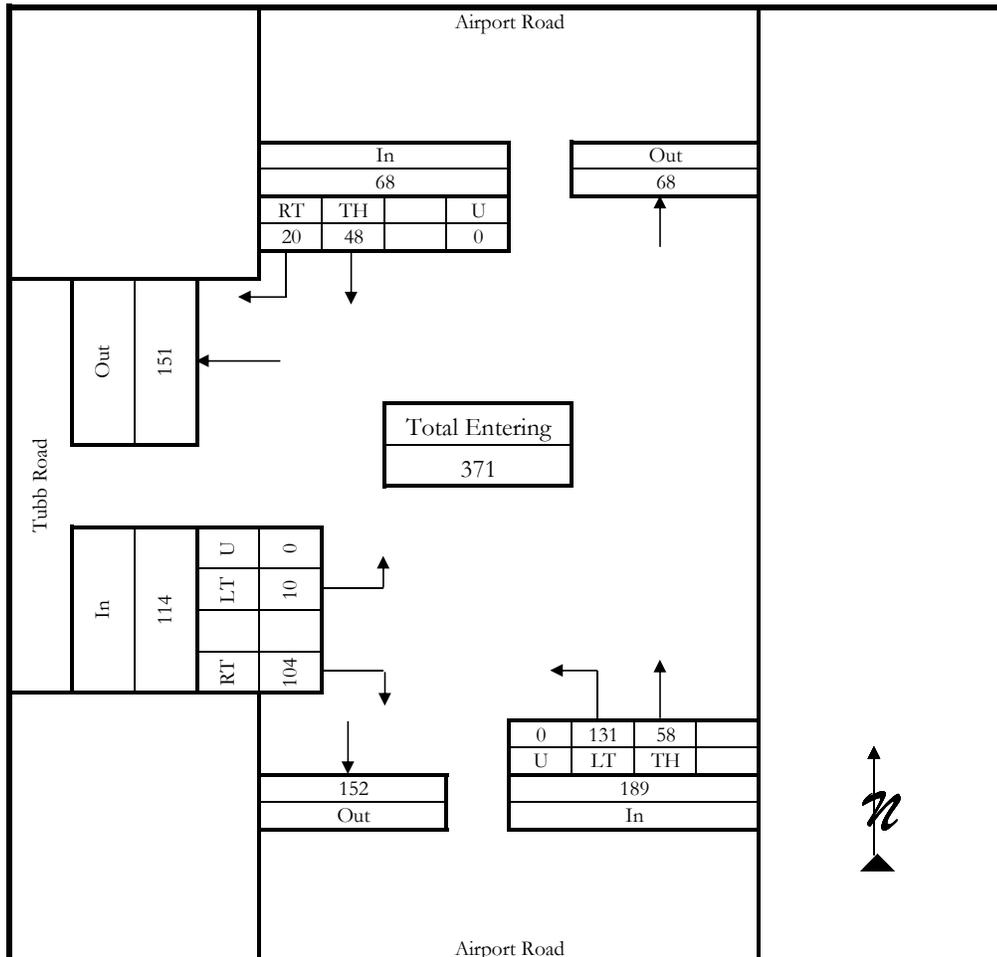
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By: A Stoltzfus	Intersection: Airport Road & Tubb Road
Agency/Company: Sanderson Stewart	Jurisdiction: City of Belgrade/Gallatin County
Date Performed: Wednesday, October 16, 2019	
Count Time Period: PM Peak Hour (5:00 - 6:00 PM)	
Project Number: 19076	Project Description: Meadowlark Ranch
North/South Street: Airport Road	East/West Street: Tubb Road

Vehicle Volumes and Adjustments

Start Time	Airport Road Southbound					Airport Road Northbound					Tubb Road Eastbound					Tubb Road Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	0.87	0.87	0.87	0.87		0.87	0.87	0.87	0.87		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
5:00 PM	4	11	0	0	15	0	18	30	0	48	31	0	2	0	33					0	96
5:15 PM	8	10	0	0	18	0	20	40	0	60	16	0	4	0	20					0	98
5:30 PM	5	14	0	0	19	0	14	33	0	47	30	0	2	0	32					0	98
5:45 PM	3	13	0	0	16	0	6	28	0	34	27	0	2	0	29					0	79
Grand Total	20	48	0	0	68	0	58	131	0	189	104	0	10	0	114	0	0	0	0	0	371
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0	
Heavy Truck %	0.0	2.1	0.0	0.0	1.5	0.0	0.0	0.8	0.0	0.5	1.0	0.0	0.0	0.0	0.9					0.0	
Total Truck %	0.0	2.1	0.0	0.0	1.5	0.0	0.0	0.8	0.0	0.5	1.0	0.0	0.0	0.0	0.9					0.0	
Total %	5.4	12.9	0.0	0.0	18.3	0.0	15.6	35.3	0.0	50.9	28.0	0.0	2.7	0.0	30.7	0.0	0.0	0.0	0.0	0.0	100.0
PHF	0.94	0.94	0.94			0.79	0.79	0.79			1.00	1.00	1.00								0.93



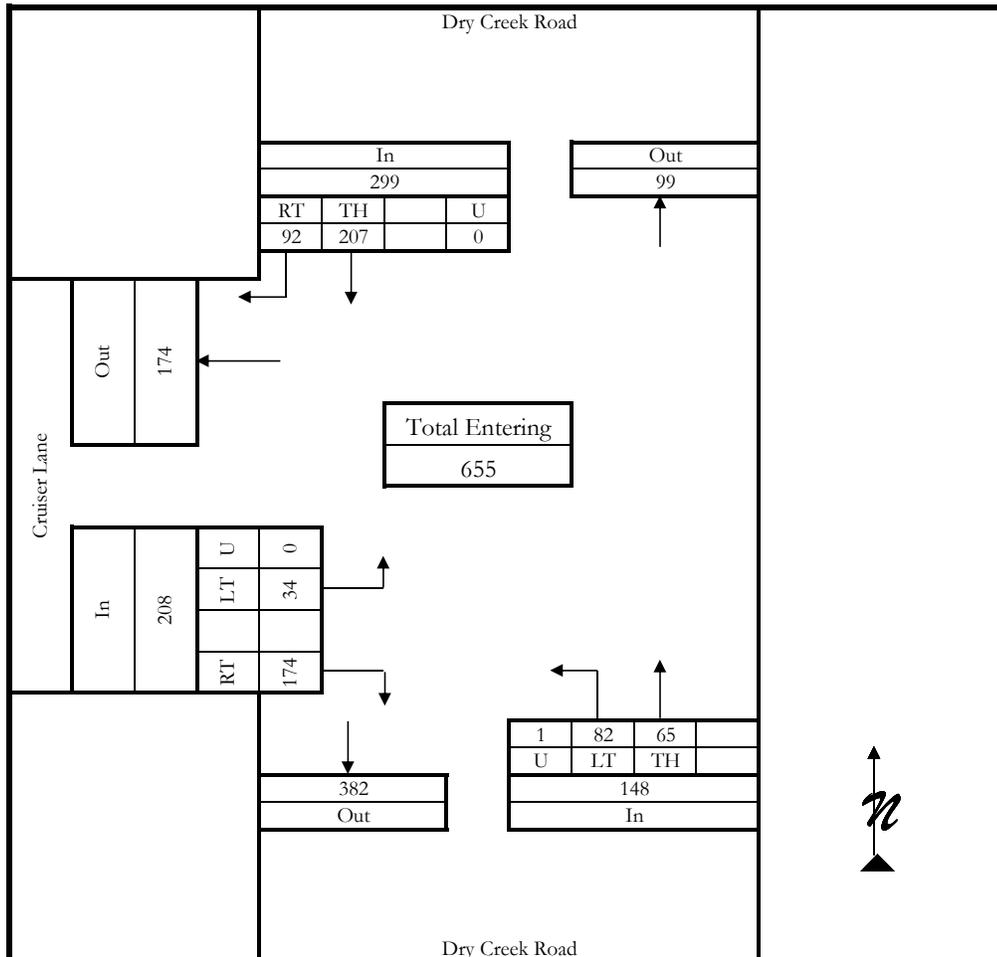
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	A Stoltzfus	Intersection:	Dry Creek Road & Cruiser Lane
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Belgrade/Gallatin County/MDT
Date Performed:	Tuesday, November 5, 2019	Project Description:	Meadowlark Ranch
Count Time Period:	AM Peak Hour (7:30 - 8:30 AM)	North/South Street:	Dry Creek Road
Project Number:	19076	East/West Street:	Cruiser Lane

Vehicle Volumes and Adjustments

Start Time	Dry Creek Road Southbound					Dry Creek Road Northbound					Cruiser Lane Eastbound					Cruiser Lane Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	0.94	0.94	0.94	0.94		0.94	0.94	0.94	0.94		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
7:30 AM	22	61	0	0	83	0	4	16	0	20	69	0	4	0	73					0	176
7:45 AM	28	56	0	0	84	0	17	22	1	40	41	0	10	0	51					0	175
8:00 AM	31	47	0	0	78	0	18	26	0	44	33	0	11	0	44					0	166
8:15 AM	11	43	0	0	54	0	26	18	0	44	31	0	9	0	40					0	138
Grand Total	92	207	0	0	299	0	65	82	1	148	174	0	34	0	208	0	0	0	0	0	655
Medium Truck %	1.1	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.5					0.0	
Heavy Truck %	1.1	3.4	0.0	0.0	2.7	0.0	15.4	4.9	0.0	9.5	1.1	0.0	5.9	0.0	1.9					0.0	
Total Truck %	2.2	4.3	0.0	0.0	3.7	0.0	15.4	4.9	0.0	9.5	1.1	0.0	8.8	0.0	2.4					0.0	
Total %	14.0	31.6	0.0	0.0	45.6	0.0	9.9	12.5	0.2	22.6	26.6	0.0	5.2	0.0	31.8	0.0	0.0	0.0	0.0	0.0	100.0
PHF	0.89	0.89	0.89			0.92	0.92	0.92			1.00	1.00	1.00								0.93



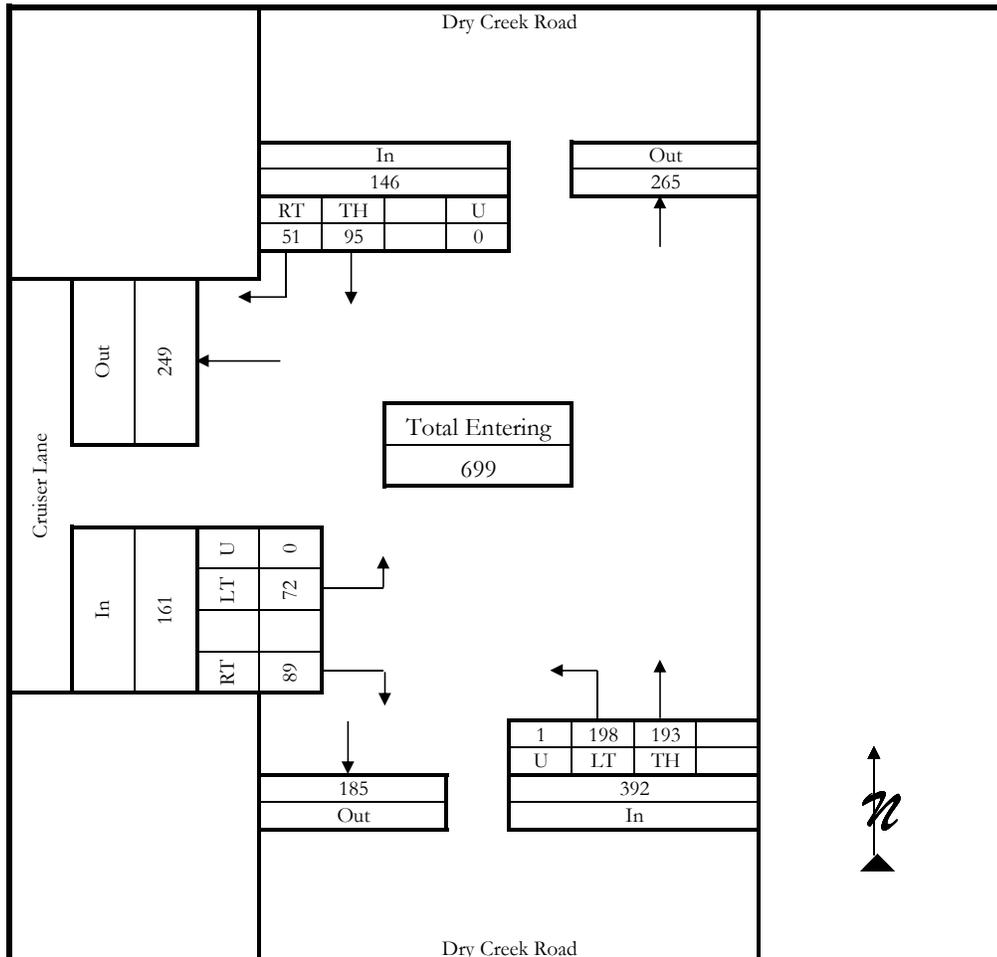
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	A Stoltzfus	Intersection:	Dry Creek Road & Cruiser Lane
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Belgrade/Gallatin County/MDT
Date Performed:	Tuesday, November 5, 2019	Project Description:	Meadowlark Ranch
Count Time Period:	PM Peak Hour (5:00 - 6:00 PM)	North/South Street:	Dry Creek Road
Project Number:	19076	East/West Street:	Cruiser Lane

Vehicle Volumes and Adjustments

Start Time	Dry Creek Road Southbound					Dry Creek Road Northbound					Cruiser Lane Eastbound					Cruiser Lane Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	0.94	0.94	0.94	0.94		0.94	0.94	0.94	0.94		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
5:00 PM	15	15	0	0	30	0	37	43	0	80	29	0	25	0	54					0	164
5:15 PM	11	33	0	0	44	0	44	49	1	94	27	0	21	0	48					0	186
5:30 PM	16	29	0	0	45	0	64	55	0	119	15	0	15	0	30					0	194
5:45 PM	9	18	0	0	27	0	48	51	0	99	18	0	11	0	29					0	155
Grand Total	51	95	0	0	146	0	193	198	1	392	89	0	72	0	161	0	0	0	0	0	699
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0	
Heavy Truck %	0.0	2.1	0.0	0.0	1.4	0.0	0.0	1.0	0.0	0.5	0.0	0.0	1.4	0.0	0.6					0.0	
Total Truck %	0.0	2.1	0.0	0.0	1.4	0.0	0.0	1.0	0.0	0.5	0.0	0.0	1.4	0.0	0.6					0.0	
Total %	7.3	13.6	0.0	0.0	20.9	0.0	27.6	28.3	0.1	56.1	12.7	0.0	10.3	0.0	23.0	0.0	0.0	0.0	0.0	0.0	100.0
PHF	0.81	0.81	0.81			0.82	0.82	0.82			1.00	1.00	1.00								0.90



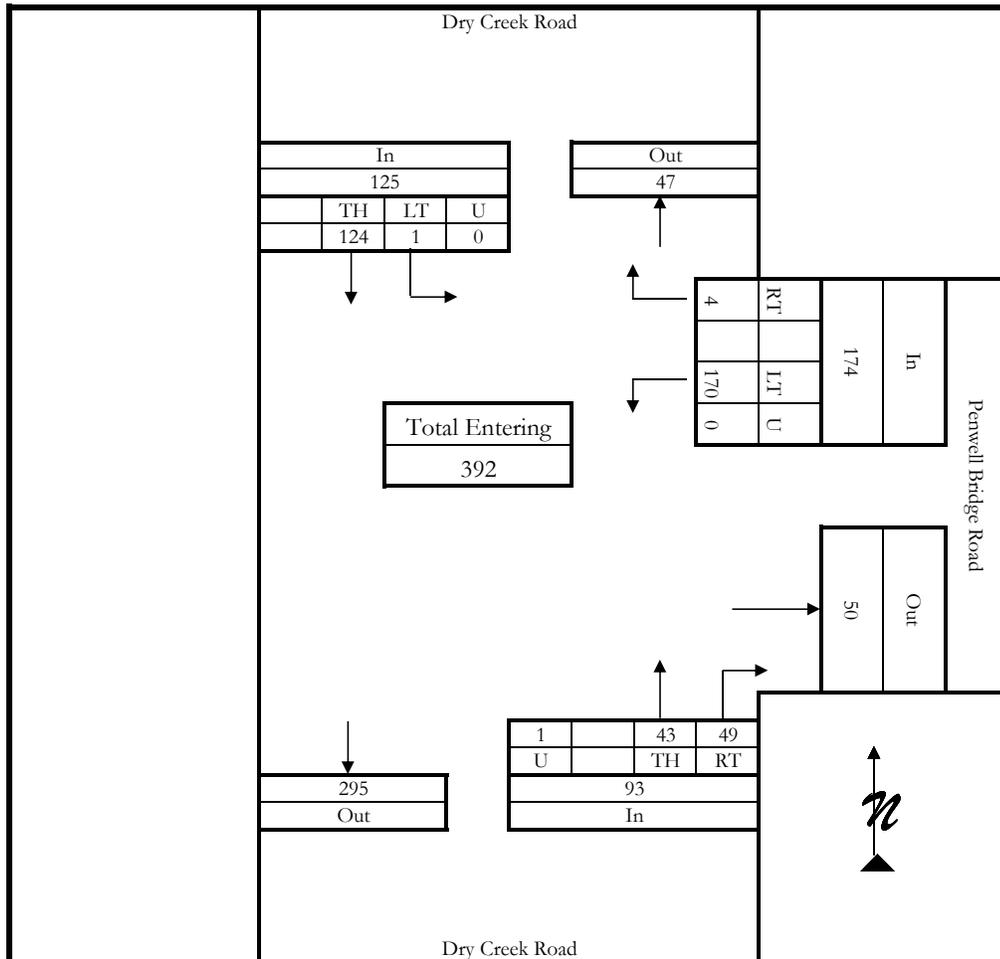
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By: A. Stoltzfus	Intersection: Dry Creek Road & Penwell Bridge Road
Agency/Company: Sanderson Stewart	Jurisdiction: City of Belgrade/Gallatin County/MDT
Date Performed: Tuesday, November 5, 2019	Project Description: Meadowlark Ranch
Count Time Period: AM Peak Hour (7:30 - 8:30 AM)	Project Number: 19076
North/South Street: Dry Creek Road	East/West Street: Penwell Bridge Road

Vehicle Volumes and Adjustments

Start Time	Dry Creek Road Southbound					Dry Creek Road Northbound					Penwell Bridge Road Eastbound					Penwell Bridge Road Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	0.94	0.94	0.94	0.94		0.94	0.94	0.94	0.94		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
7:30 AM	0	42	0	0	42	3	4	0	0	7					0	0	0	38	0	38	87
7:45 AM	0	30	1	0	31	19	6	0	0	25					0	2	0	56	0	58	114
8:00 AM	0	25	0	0	25	11	19	0	0	30					0	2	0	50	0	52	107
8:15 AM	0	27	0	0	27	16	14	0	1	31					0	0	0	26	0	26	84
Grand Total	0	124	1	0	125	49	43	0	1	93	0	0	0	0	0	4	0	170	0	174	392
Medium Truck %	0.0	0.8	0.0	0.0	0.8	2.0	0.0	0.0	0.0	1.1					0.0	0.0	0.0	1.2	0.0	1.1	
Heavy Truck %	0.0	3.2	0.0	0.0	3.2	8.2	16.3	0.0	0.0	11.8					0.0	0.0	0.0	1.8	0.0	1.7	
Total Truck %	0.0	4.0	0.0	0.0	4.0	10.2	16.3	0.0	0.0	12.9					0.0	0.0	0.0	2.9	0.0	2.9	
Total %	0.0	31.6	0.3	0.0	31.9	12.5	11.0	0.0	0.3	23.7	0.0	0.0	0.0	0.0	0.0	1.0	0.0	43.4	0.0	44.4	100.0
PHF	1.00	1.00	1.00			0.94	0.94	0.94								0.75	0.75	0.75			0.86



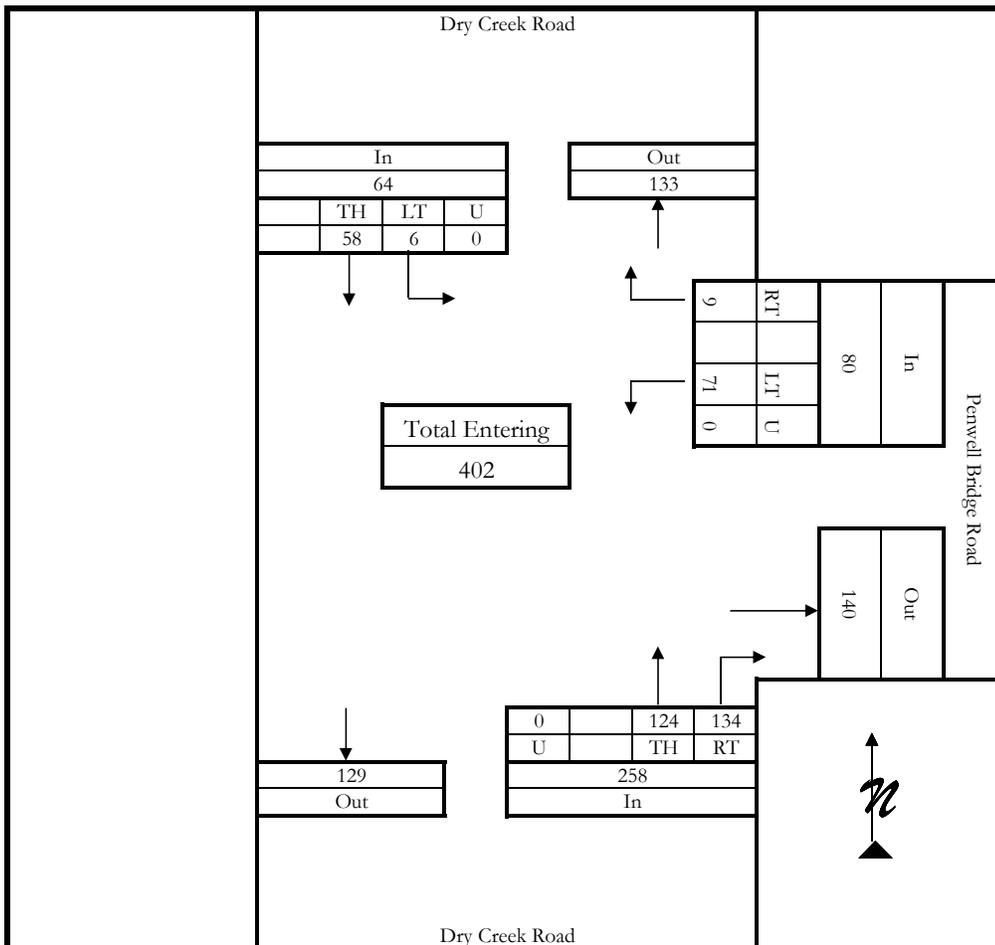
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By: A. Stoltzfus	Intersection: Dry Creek Road & Penwell Bridge Road
Agency/Company: Sanderson Stewart	Jurisdiction: City of Belgrade/Gallatin County/MDT
Date Performed: Tuesday, November 5, 2019	
Count Time Period: PM Peak Hour (5:00 - 6:00 PM)	
Project Number: 19076.	Project Description: Meadowlark Ranch
North/South Street: Dry Creek Road	East/West Street: Penwell Bridge Road

Vehicle Volumes and Adjustments

Start Time	Dry Creek Road Southbound					Dry Creek Road Northbound					Penwell Bridge Road Eastbound					Penwell Bridge Road Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	0.94	0.94	0.94	0.94		0.94	0.94	0.94	0.94		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
5:00 PM	0	11	0	0	11	30	31	0	0	61					0	4	0	18	0	22	94
5:15 PM	0	19	3	0	22	32	31	0	0	63					0	1	0	24	0	25	110
5:30 PM	0	18	2	0	20	40	36	0	0	76					0	1	0	20	0	21	117
5:45 PM	0	10	1	0	11	32	26	0	0	58					0	3	0	9	0	12	81
Grand Total	0	58	6	0	64	134	124	0	0	258	0	0	0	0	0	9	0	71	0	80	402
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavy Truck %	0.0	1.7	16.7	0.0	3.1	0.0	1.6	0.0	0.0	0.8					0.0	0.0	0.0	1.4	0.0	1.3	
Total Truck %	0.0	1.7	16.7	0.0	3.1	0.0	1.6	0.0	0.0	0.8					0.0	0.0	0.0	1.4	0.0	1.3	
Total %	0.0	14.4	1.5	0.0	15.9	33.3	30.8	0.0	0.0	64.2	0.0	0.0	0.0	0.0	0.0	2.2	0.0	17.7	0.0	19.9	100.0
PHF	0.81	0.81	0.81			0.84	0.84	0.84								0.94	0.94	0.94			0.85



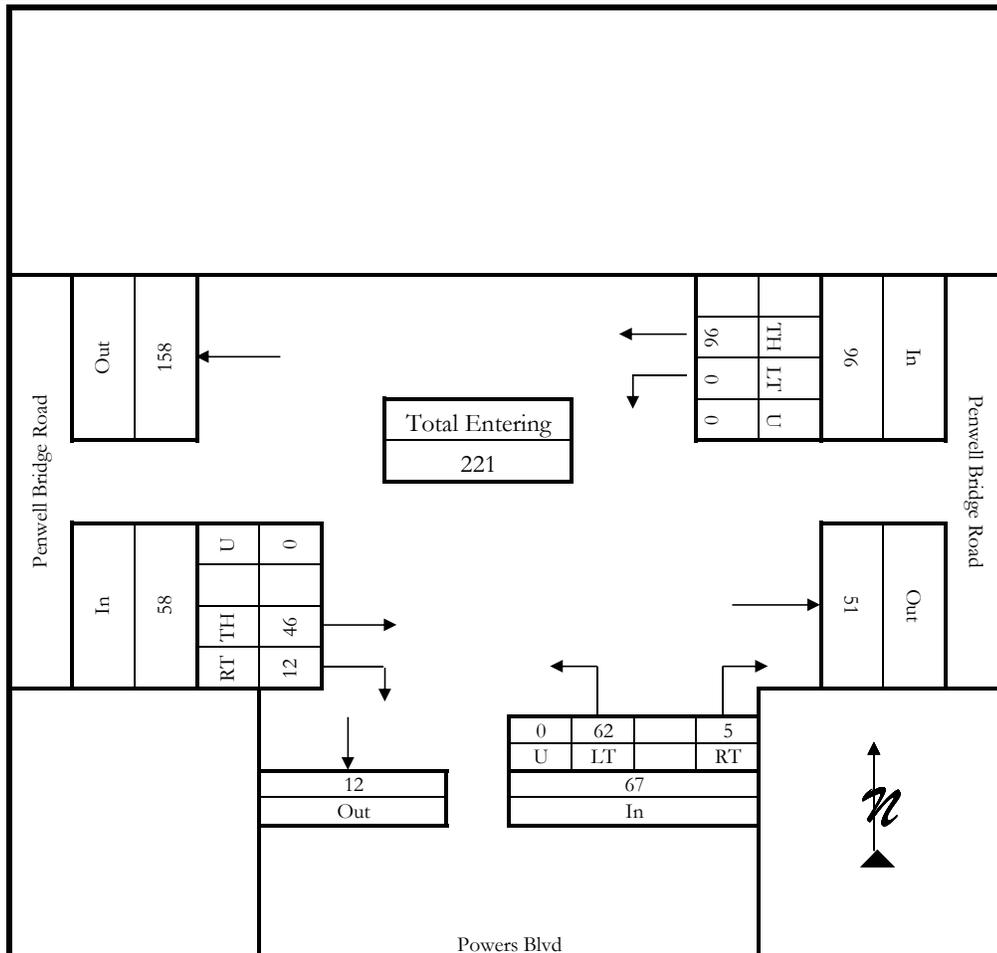
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By: A Stoltzfus	Intersection: Penwell Bridge Road & Powers Blvd
Agency/Company: Sanderson Stewart	Jurisdiction: City of Belgrade/Gallatin County
Date Performed: Tuesday, October 22, 2019	
Count Time Period: AM Peak Hour (7:30 - 8:30 AM)	
Project Number: 19076	Project Description: Meadowlark Ranch
North/South Street: Powers Blvd	East/West Street: Penwell Bridge Road

Vehicle Volumes and Adjustments

Start Time	Powers Blvd Southbound					Powers Blvd Northbound					Penwell Bridge Road Eastbound					Penwell Bridge Road Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
7:30 AM					0	3	0	17	0	20	1	5	0	0	6	0	19	0	0	19	45
7:45 AM					0	1	0	18	0	19	1	8	0	0	9	0	27	0	0	27	55
8:00 AM					0	0	0	19	0	19	2	11	0	0	13	0	38	0	0	38	70
8:15 AM					0	1	0	8	0	9	8	22	0	0	30	0	12	0	0	12	51
Grand Total	0	0	0	0	0	5	0	62	0	67	12	46	0	0	58	0	96	0	0	96	221
Medium Truck %					0.0	0.0	0.0	3.2	0.0	3.0	8.3	2.2	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %					0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	3.4	0.0	1.0	0.0	0.0	1.0	
Total Truck %					0.0	0.0	0.0	3.2	0.0	3.0	8.3	6.5	0.0	0.0	6.9	0.0	1.0	0.0	0.0	1.0	
Total %	0.0	0.0	0.0	0.0	0.0	2.3	0.0	28.1	0.0	30.3	5.4	20.8	0.0	0.0	26.2	0.0	43.4	0.0	0.0	43.4	100.0
PHF						0.88	0.88	0.88			1.00	1.00	1.00			0.63	0.63	0.63			0.78



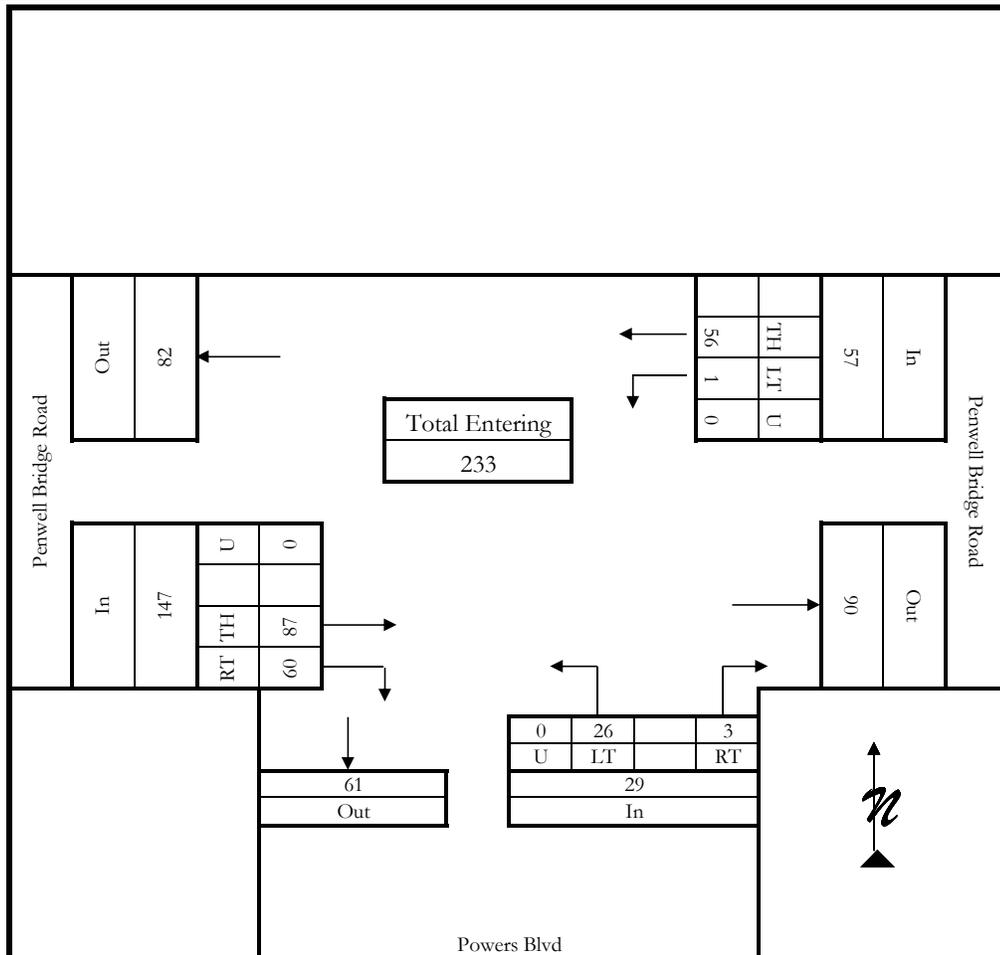
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	A Stoltzfus	Intersection:	Penwell Bridge Road & Powers Blvd
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Belgrade/Gallatin County
Date Performed:	Tuesday, October 22, 2019	Project Description:	Meadowlark Ranch
Count Time Period:	PM Peak Hour (5:00 - 6:00 PM)	Project Number:	19076
North/South Street:	Powers Blvd	East/West Street:	Penwell Bridge Road

Vehicle Volumes and Adjustments

Start Time	Powers Blvd Southbound					Powers Blvd Northbound					Penwell Bridge Road Eastbound					Penwell Bridge Road Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
5:00 PM					0	1	0	5	0	6	15	15	0	0	30	0	14	0	0	14	50
5:15 PM					0	1	0	6	0	7	11	24	0	0	35	0	13	0	0	13	55
5:30 PM					0	0	0	5	0	5	11	23	0	0	34	0	14	0	0	14	53
5:45 PM					0	1	0	10	0	11	23	25	0	0	48	0	15	1	0	16	75
Grand Total	0	0	0	0	0	3	0	26	0	29	60	87	0	0	147	0	56	1	0	57	233
Medium Truck %					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %					0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	
Total Truck %					0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	1.3	0.0	11.2	0.0	12.4	25.8	37.3	0.0	0.0	63.1	0.0	24.0	0.4	0.0	24.5	100.0
PHF						0.66	0.66	0.66			0.77	0.77	0.77			0.90	0.90	0.90			0.78



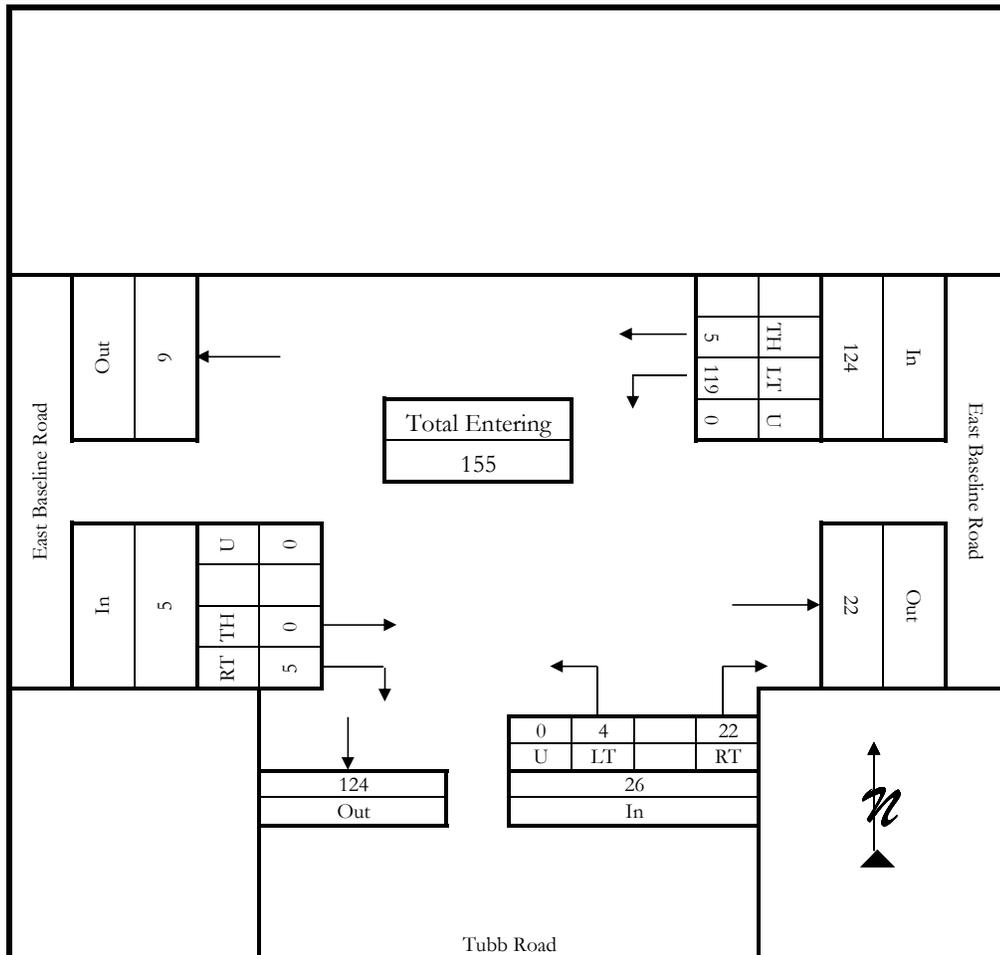
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	A Stoltzfus	Intersection:	East Baseline Road & Tubb Road
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Belgrade/Gallatin County
Date Performed:	Wednesday, October 16, 2019		
Count Time Period:	AM Peak Hour (7:30 - 8:30 AM)		
Project Number:	19076	Project Description:	Meadowlark Ranch
North/South Street:	Tubb Road	East/West Street:	East Baseline Road

Vehicle Volumes and Adjustments

Start Time	Tubb Road Southbound					Tubb Road Northbound					East Baseline Road Eastbound					East Baseline Road Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
7:30 AM					0	4	0	0	0	4	2	0	0	0	2	0	0	41	0	41	47
7:45 AM					0	9	0	0	0	9	2	0	0	0	2	0	4	35	0	39	50
8:00 AM					0	3	0	3	0	6	1	0	0	0	1	0	1	24	0	25	32
8:15 AM					0	6	0	1	0	7	0	0	0	0	0	0	0	19	0	19	26
Grand Total	0	0	0	0	0	22	0	4	0	26	5	0	0	0	5	0	5	119	0	124	155
Medium Truck %					0.0	4.5	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.8	
Heavy Truck %					0.0	4.5	0.0	25.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.6	
Total Truck %					0.0	9.1	0.0	25.0	0.0	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	2.4	
Total %	0.0	0.0	0.0	0.0	0.0	14.2	0.0	2.6	0.0	16.8	3.2	0.0	0.0	0.0	3.2	0.0	3.2	76.8	0.0	80.0	100.0
PHF						0.72	0.72	0.72			0.63	0.63	0.63			0.79	0.79	0.79			0.78



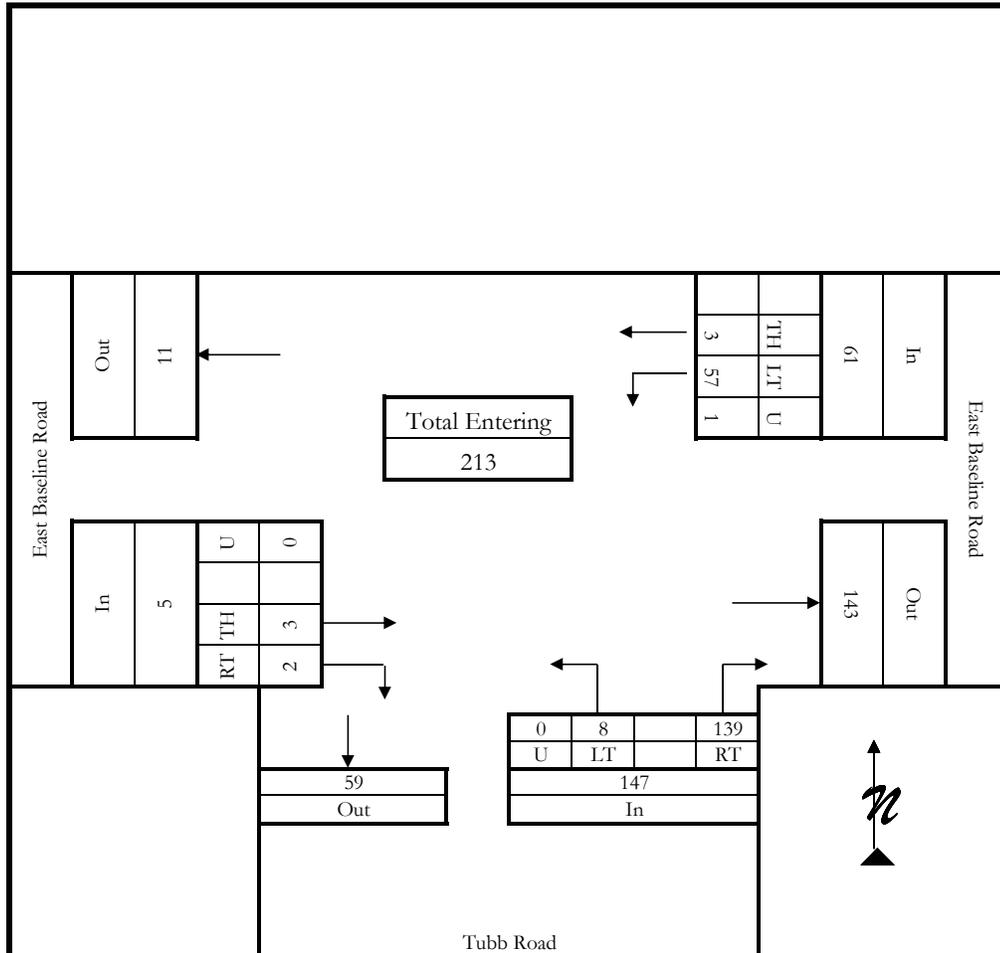
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	A Stoltzfus	Intersection:	East Baseline Road & Tubb Road
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Belgrade/Gallatin County
Date Performed:	Wednesday, October 16, 2019		
Count Time Period:	PM Peak Hour (5:00 - 6:00 PM)		
Project Number:	19076	Project Description:	Meadowlark Ranch
North/South Street:	Tubb Road	East/West Street:	East Baseline Road

Vehicle Volumes and Adjustments

Start Time	Tubb Road Southbound					Tubb Road Northbound					East Baseline Road Eastbound					East Baseline Road Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
5:00 PM					0	33	0	4	0	37	1	0	0	0	1	0	0	13	0	13	51
5:15 PM					0	42	0	2	0	44	0	1	0	0	1	0	1	15	1	17	62
5:30 PM					0	38	0	1	0	39	1	2	0	0	3	0	1	13	0	14	56
5:45 PM					0	26	0	1	0	27	0	0	0	0	0	0	1	16	0	17	44
Grand Total	0	0	0	0	0	139	0	8	0	147	2	3	0	0	5	0	3	57	1	61	213
Medium Truck %					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %					0.0	0.7	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1.6	
Total Truck %					0.0	0.7	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1.6	
Total %	0.0	0.0	0.0	0.0	0.0	65.3	0.0	3.8	0.0	69.0	0.9	1.4	0.0	0.0	2.3	0.0	1.4	26.8	0.5	28.6	100.0
PHF						0.84	0.84	0.84			1.00	1.00	1.00			0.90	0.90	0.90			0.86



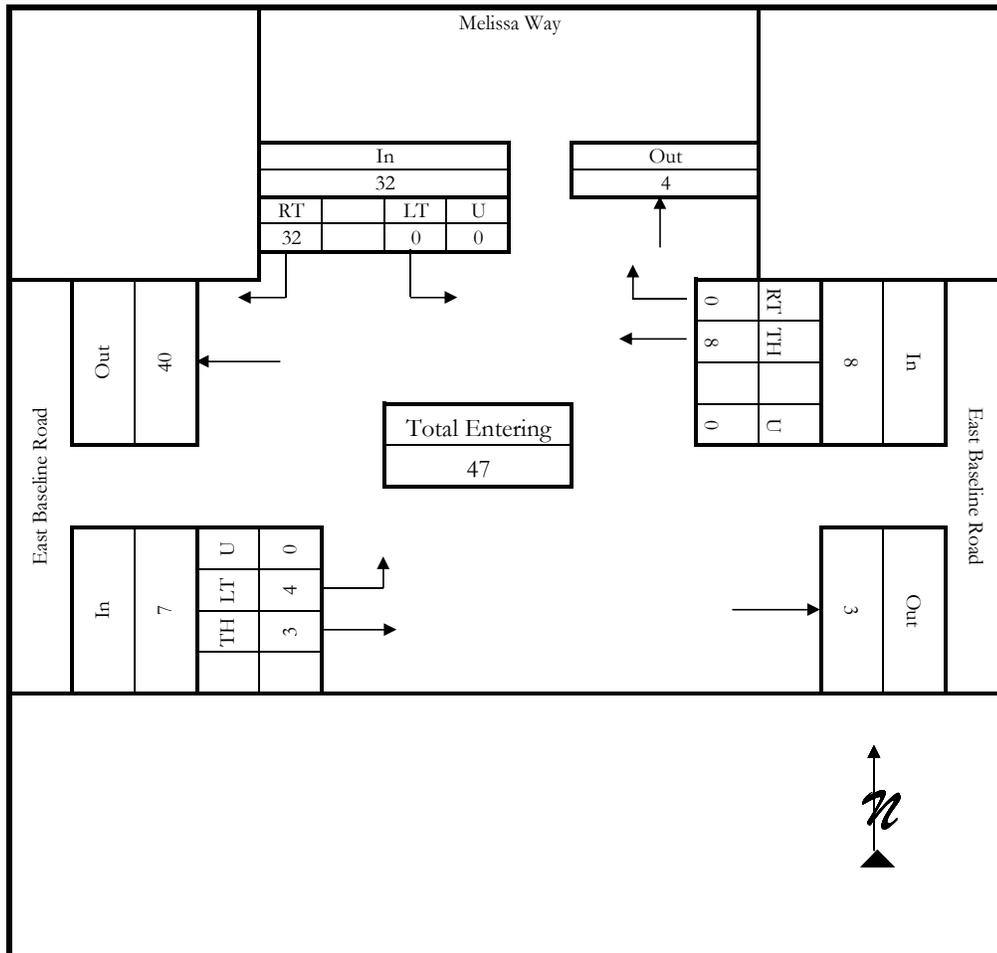
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	A Stoltzfus	Intersection:	East Baseline Road & Melissa Way
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Belgrade/Gallatin County
Date Performed:	Wednesday, October 16, 2019		
Count Time Period:	AM Peak Hour (7:30 - 8:30 AM)		
Project Number:	19076	Project Description:	Meadowlark Ranch
North/South Street:	Melissa Way	East/West Street:	East Baseline Road

Vehicle Volumes and Adjustments

Start Time	Melissa Way Southbound					Melissa Way Northbound					East Baseline Road Eastbound					East Baseline Road Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
7:30 AM	10	0	0	0	10					0	0	1	2	0	3	0	1	0	0	1	14
7:45 AM	10	0	0	0	10					0	0	1	2	0	3	0	0	0	0	0	13
8:00 AM	9	0	0	0	9					0	0	1	0	0	1	0	3	0	0	3	13
8:15 AM	3	0	0	0	3					0	0	0	0	0	0	0	4	0	0	4	7
Grand Total	32	0	0	0	32	0	0	0	0	0	0	3	4	0	7	0	8	0	0	8	47
Medium Truck %	0.0	0.0	0.0	0.0	0.0					0.0	0.0	0.0	75.0	0.0	42.9	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Truck %	0.0	0.0	0.0	0.0	0.0					0.0	0.0	0.0	75.0	0.0	42.9	0.0	0.0	0.0	0.0	0.0	
Total %	68.1	0.0	0.0	0.0	68.1	0.0	0.0	0.0	0.0	0.0	0.0	6.4	8.5	0.0	14.9	0.0	17.0	0.0	0.0	17.0	100.0
PHF	0.80	0.80	0.80								0.58	0.58	0.58			1.00	1.00	1.00			0.84



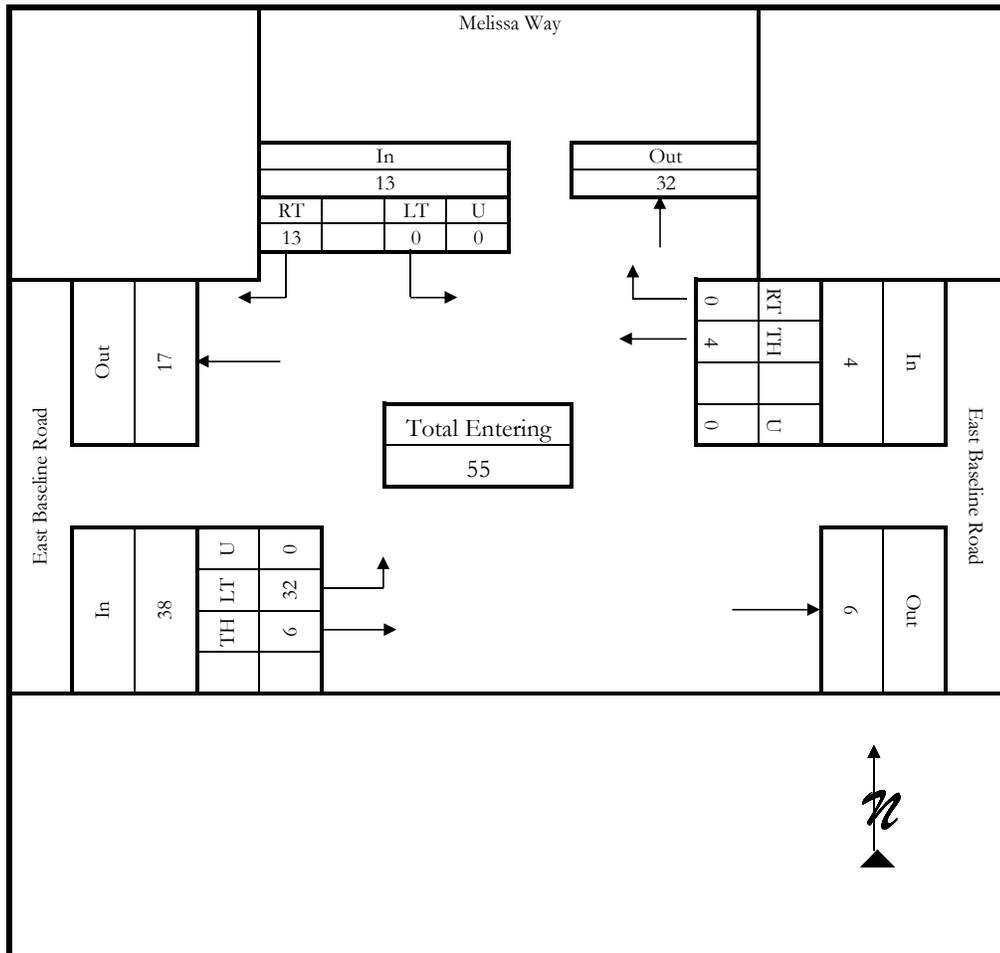
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By: A Stoltzfus	Intersection: East Baseline Road & Melissa Way
Agency/Company: Sanderson Stewart	Jurisdiction: City of Belgrade/Gallatin County
Date Performed: Wednesday, October 16, 2019	
Count Time Period: PM Peak Hour (5:00 - 6:00 PM)	
Project Number: 19076	Project Description: Meadowlark Ranch
North/South Street: Melissa Way	East/West Street: East Baseline Road

Vehicle Volumes and Adjustments

Start Time	Melissa Way Southbound					Melissa Way Northbound					East Baseline Road Eastbound					East Baseline Road Westbound					Int. Total
	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
5:00 PM	3	0	0	0	3					0	0	1	3	0	4	0	1	0	0	1	8
5:15 PM	4	0	0	0	4					0	0	2	14	0	16	0	0	0	0	0	20
5:30 PM	3	0	0	0	3					0	0	1	11	0	12	0	1	0	0	1	16
5:45 PM	3	0	0	0	3					0	0	2	4	0	6	0	2	0	0	2	11
Grand Total	13	0	0	0	13	0	0	0	0	0	0	6	32	0	38	0	4	0	0	4	55
Medium Truck %	0.0	0.0	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Truck %	0.0	0.0	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total %	23.6	0.0	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.0	0.0	10.9	58.2	0.0	69.1	0.0	7.3	0.0	0.0	7.3	100.0
PHF	0.81	0.81	0.81								0.59	0.59	0.59			1.00	1.00	1.00			0.69



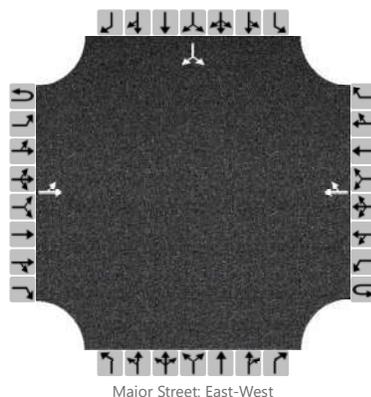
**CAPACITY CALCULATIONS –
EXISTING CONDITIONS (2019)**

APPENDIX B

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	I-90 Frontage & Airport
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	11/6/2019	East/West Street	I-90 Frontage Road
Analysis Year	2019	North/South Street	Airport Road
Time Analyzed	AM Peak	Peak Hour Factor	0.76
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		134	207				143	14						6		117
Percent Heavy Vehicles (%)		3												17		4
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.57		6.24
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.65		3.34

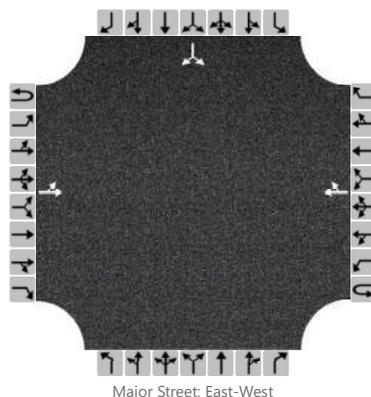
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		176														162
Capacity, c (veh/h)		1358														764
v/c Ratio		0.13														0.21
95% Queue Length, Q ₉₅ (veh)		0.4														0.8
Control Delay (s/veh)		8.0														11.0
Level of Service, LOS		A														B
Approach Delay (s/veh)	3.9												11.0			
Approach LOS													B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	I-90 Frontage & Airport
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	11/6/2019	East/West Street	I-90 Frontage Road
Analysis Year	2019	North/South Street	Airport Road
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		154	169				232	7						24		146
Percent Heavy Vehicles (%)		3												0		6
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.40		6.26
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.50		3.35

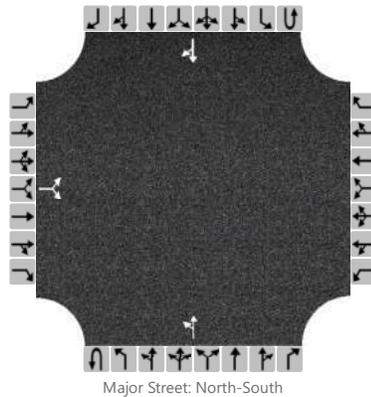
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		167														185
Capacity, c (veh/h)		1297														647
v/c Ratio		0.13														0.29
95% Queue Length, Q ₉₅ (veh)		0.4														1.2
Control Delay (s/veh)		8.2														12.8
Level of Service, LOS		A														B
Approach Delay (s/veh)	4.5												12.8			
Approach LOS													B			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Audrey Stoltzfus			Intersection	Airport Road & Tubb Road		
Agency/Co.	Sanderson Stewart			Jurisdiction	Belgrade/Gallatin/MDT		
Date Performed	10/31/2019			East/West Street	Tubb Road		
Analysis Year	2019			North/South Street	Airport Road		
Time Analyzed	AM Peak			Peak Hour Factor	0.79		
Intersection Orientation	North-South			Analysis Time Period (hrs)	1.00		
Project Description	Meadowlark Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0		0	1	0		0	1	0
Configuration			LR							LT						TR
Volume, V (veh/h)		16		143						56	53				69	9
Percent Heavy Vehicles (%)		7		4						7						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

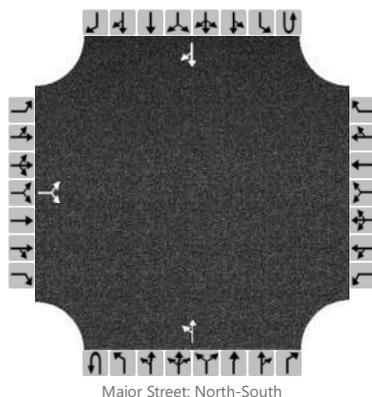
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			201							71						
Capacity, c (veh/h)			915							1466						
v/c Ratio			0.22							0.05						
95% Queue Length, Q ₉₅ (veh)			0.8							0.2						
Control Delay (s/veh)			10.0							7.6						
Level of Service, LOS			B							A						
Approach Delay (s/veh)	10.0								4.1							
Approach LOS	B															

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Audrey Stoltzfus			Intersection	Airport Road & Tubb Road		
Agency/Co.	Sanderson Stewart			Jurisdiction	Belgrade/Gallatin/MDT		
Date Performed	10/31/2019			East/West Street	Tubb Road		
Analysis Year	2019			North/South Street	Airport Road		
Time Analyzed	PM Peak			Peak Hour Factor	0.93		
Intersection Orientation	North-South			Analysis Time Period (hrs)	1.00		
Project Description	Meadowlark Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0	
Configuration			LR								LT						TR
Volume, V (veh/h)		10		104							131	58				48	20
Percent Heavy Vehicles (%)		0		1							1						
Proportion Time Blocked																	
Percent Grade (%)		0															
Right Turn Channelized		No					No					No					
Median Type/Storage		Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																	
Critical Headway (sec)																	
Base Follow-Up Headway (sec)																	
Follow-Up Headway (sec)																	

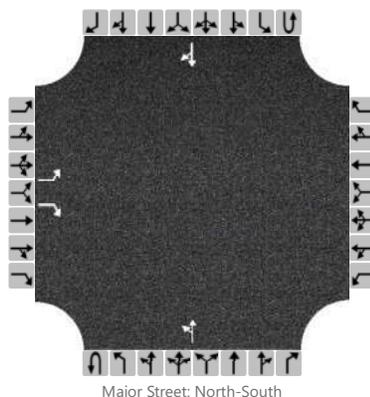
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			123							141							
Capacity, c (veh/h)			935							1531							
v/c Ratio			0.13							0.09							
95% Queue Length, Q ₉₅ (veh)			0.5							0.3							
Control Delay (s/veh)			9.4							7.6							
Level of Service, LOS			A							A							
Approach Delay (s/veh)		9.4										5.5					
Approach LOS		A															

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Dry Creek & Cruiser
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	11/11/2019	East/West Street	Cruiser Lane
Analysis Year	2019	North/South Street	Dry Creek Road
Time Analyzed	AM Peak	Peak Hour Factor	0.93
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0		0	1	0		0	1	0
Configuration		L		R						LT						TR
Volume, V (veh/h)		34		174						83	65				207	92
Percent Heavy Vehicles (%)		9		1						5						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.49		6.21						4.15						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.58		3.31						2.24						

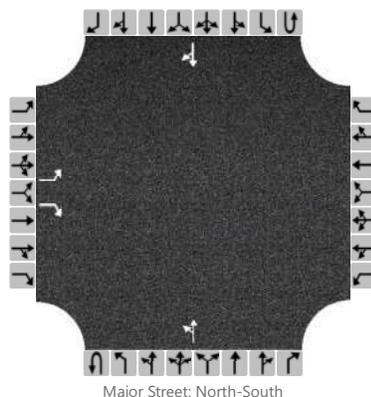
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		37		187						89						
Capacity, c (veh/h)		468		769						1224						
v/c Ratio		0.08		0.24						0.07						
95% Queue Length, Q ₉₅ (veh)		0.3		1.0						0.2						
Control Delay (s/veh)		13.4		11.2						8.2						
Level of Service, LOS		B		B						A						
Approach Delay (s/veh)	11.5								4.8							
Approach LOS	B															

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Dry Creek & Cruiser
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	11/11/2019	East/West Street	Cruiser Lane
Analysis Year	2019	North/South Street	Dry Creek Road
Time Analyzed	PM Peak	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0		0	1	0		0	1	0
Configuration		L		R						LT						TR
Volume, V (veh/h)		72		89						199	193				95	51
Percent Heavy Vehicles (%)		2		0						1						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.20						4.11						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.30						2.21						

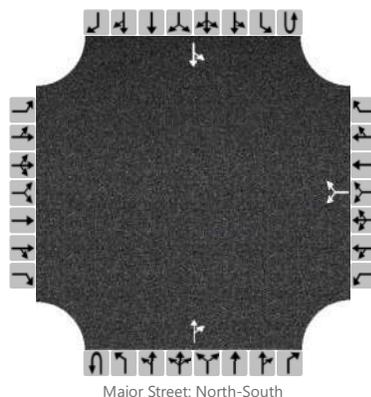
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		80		99						221						
Capacity, c (veh/h)		303		920						1421						
v/c Ratio		0.26		0.11						0.16						
95% Queue Length, Q ₉₅ (veh)		1.1		0.4						0.6						
Control Delay (s/veh)		21.1		9.4						8.0						
Level of Service, LOS		C		A						A						
Approach Delay (s/veh)	14.6								4.8							
Approach LOS	B															

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Dry Creek & Penwell
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	11/11/2019	East/West Street	Penwell Bridge Road
Analysis Year	2019	North/South Street	Dry Creek Road
Time Analyzed	AM Peak	Peak Hour Factor	0.86
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0	
Configuration							LR					TR		LT			
Volume, V (veh/h)						170		4			44	49		1	124		
Percent Heavy Vehicles (%)						3		0						0			
Proportion Time Blocked																	
Percent Grade (%)					0												
Right Turn Channelized	No				No				No				No				
Median Type/Storage	Undivided																

Critical and Follow-up Headways

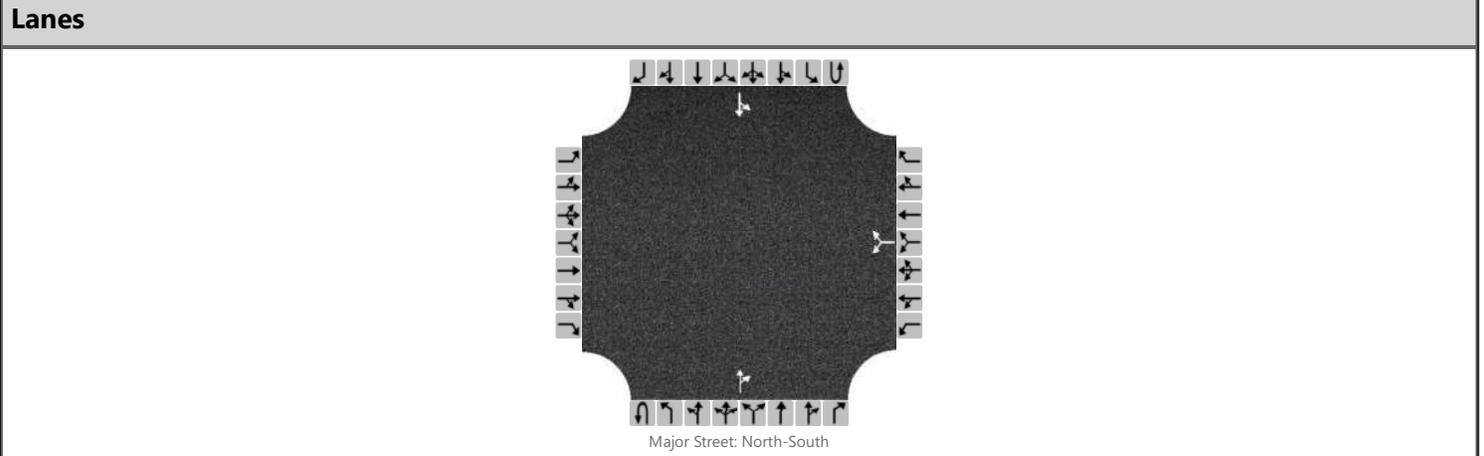
Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.43		6.20							4.10		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.53		3.30							2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						203									1		
Capacity, c (veh/h)						763									1495		
v/c Ratio						0.27									0.00		
95% Queue Length, Q ₉₅ (veh)						1.1									0.0		
Control Delay (s/veh)						11.4									7.4		
Level of Service, LOS						B									A		
Approach Delay (s/veh)					11.4								0.1				
Approach LOS					B												

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Dry Creek & Penwell
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	11/11/2019	East/West Street	Penwell Bridge Road
Analysis Year	2019	North/South Street	Dry Creek Road
Time Analyzed	PM Peak	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0		0	1	0		0	1	0
Configuration							LR					TR			LT	
Volume, V (veh/h)						71		9			124	134		6	58	
Percent Heavy Vehicles (%)						2		0						17		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.20						4.27		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.30						2.35		

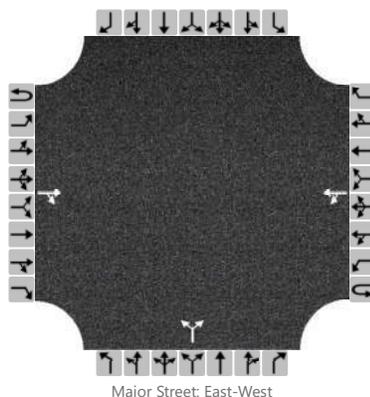
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						95								7		
Capacity, c (veh/h)						694								1178		
v/c Ratio						0.14								0.01		
95% Queue Length, Q ₉₅ (veh)						0.5								0.0		
Control Delay (s/veh)						11.0								8.1		
Level of Service, LOS						B								A		
Approach Delay (s/veh)					11.0								0.8			
Approach LOS					B											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Penwell Bridge & Powers
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	10/31/2019	East/West Street	Penwell Bridge Road
Analysis Year	2019	North/South Street	Powers Boulevard
Time Analyzed	AM Peak	Peak Hour Factor	0.78
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			46	12		0	96			62		5				
Percent Heavy Vehicles (%)						0				3		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.10				7.13		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.53		3.30				

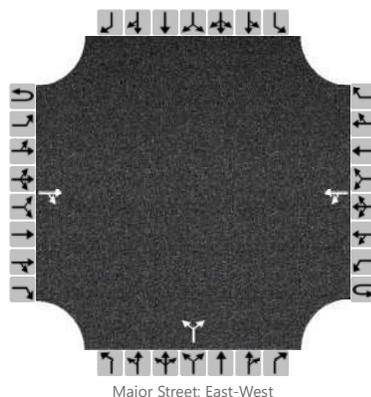
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0					85					
Capacity, c (veh/h)						1539					780					
v/c Ratio						0.00					0.11					
95% Queue Length, Q ₉₅ (veh)						0.0					0.4					
Control Delay (s/veh)						7.3					10.2					
Level of Service, LOS						A					B					
Approach Delay (s/veh)					0.0				10.2							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Penwell Bridge & Powers
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	10/31/2019	East/West Street	Penwell Bridge Road
Analysis Year	2019	North/South Street	Powers Boulevard
Time Analyzed	PM Peak	Peak Hour Factor	0.78
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			87	60		1	56			26		3				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.10				7.10		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.30				

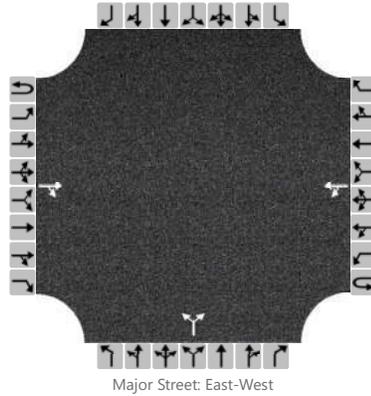
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1					37					
Capacity, c (veh/h)						1397					751					
v/c Ratio						0.00					0.05					
95% Queue Length, Q ₉₅ (veh)						0.0					0.2					
Control Delay (s/veh)						7.6					10.0					
Level of Service, LOS						A					B					
Approach Delay (s/veh)					0.1				10.0							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	E Baseline Rd & Tubb Rd
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	10/31/2019	East/West Street	East Baseline Road
Analysis Year	2019	North/South Street	Tubb Road
Time Analyzed	AM Peak	Peak Hour Factor	0.78
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			0	5		119	5			4		22				
Percent Heavy Vehicles (%)						3				25		9				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

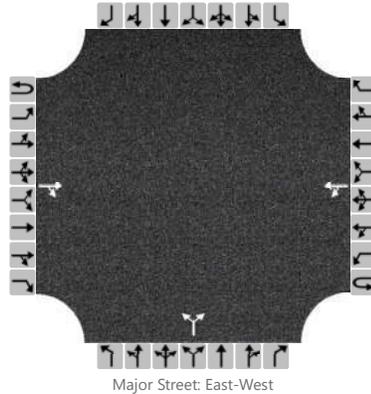
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						153						33				
Capacity, c (veh/h)						1606						931				
v/c Ratio						0.10						0.04				
95% Queue Length, Q ₉₅ (veh)						0.3						0.1				
Control Delay (s/veh)						7.5						9.0				
Level of Service, LOS						A						A				
Approach Delay (s/veh)					7.2				9.0							
Approach LOS									A							

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	E Baseline Rd & Tubb Rd
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	10/31/2019	East/West Street	East Baseline Road
Analysis Year	2019	North/South Street	Tubb Road
Time Analyzed	PM Peak	Peak Hour Factor	0.86
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			3	2		58	3			8		139				
Percent Heavy Vehicles (%)						0				0		1				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

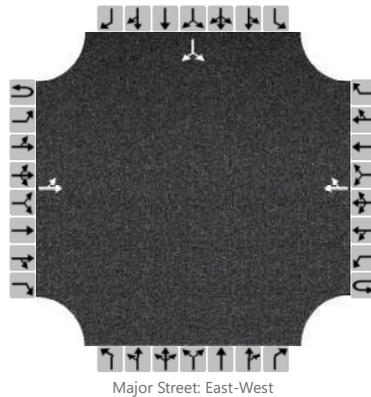
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						67						171				
Capacity, c (veh/h)						1630						1063				
v/c Ratio						0.04						0.16				
95% Queue Length, Q ₉₅ (veh)						0.1						0.6				
Control Delay (s/veh)						7.3						9.0				
Level of Service, LOS						A						A				
Approach Delay (s/veh)					7.0				9.0							
Approach LOS									A							

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	E Baseline Rd & Melissa W
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	10/31/2019	East/West Street	East Baseline Road
Analysis Year	2019	North/South Street	Melissa Way
Time Analyzed	AM Peak	Peak Hour Factor	0.84
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		4	3				8	0						0		32
Percent Heavy Vehicles (%)		75												0		0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

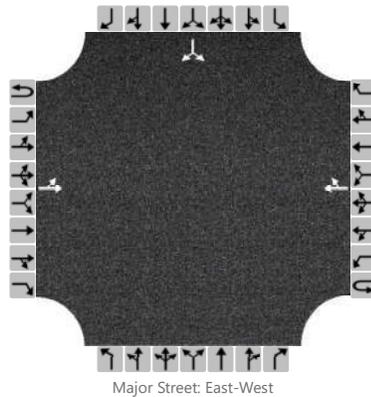
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5														38
Capacity, c (veh/h)		1238														1077
v/c Ratio		0.00														0.04
95% Queue Length, Q ₉₅ (veh)		0.0														0.1
Control Delay (s/veh)		7.9														8.5
Level of Service, LOS		A														A
Approach Delay (s/veh)	4.4												8.5			
Approach LOS													A			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	E Baseline Rd & Melissa W
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	10/31/2019	East/West Street	East Baseline Road
Analysis Year	2019	North/South Street	Melissa Way
Time Analyzed	PM Peak	Peak Hour Factor	0.69
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		32	6				4	0						0		13
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		46														19
Capacity, c (veh/h)		1628														1083
v/c Ratio		0.03														0.02
95% Queue Length, Q ₉₅ (veh)		0.1														0.1
Control Delay (s/veh)		7.3														8.4
Level of Service, LOS		A														A
Approach Delay (s/veh)	6.1												8.4			
Approach LOS													A			

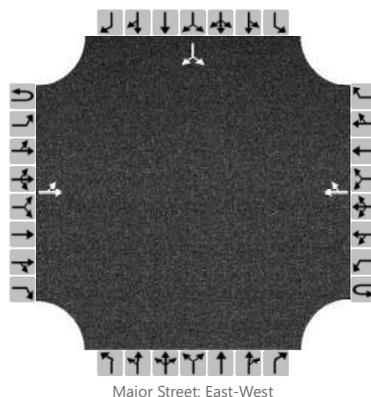
**CAPACITY CALCULATIONS –
DESIGN YEAR (2025)**

APPENDIX C

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	I-90 Frontage & Airport
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/20/2020	East/West Street	I-90 Frontage Road
Analysis Year	2025	North/South Street	Airport Road
Time Analyzed	AM Peak Future	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6	7	8	9		10	11	12	
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	0	0	0		0	1	0	
Configuration		LT						TR							LR	
Volume, V (veh/h)		172	254				176	23						24		167
Percent Heavy Vehicles (%)		2												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.53		3.33

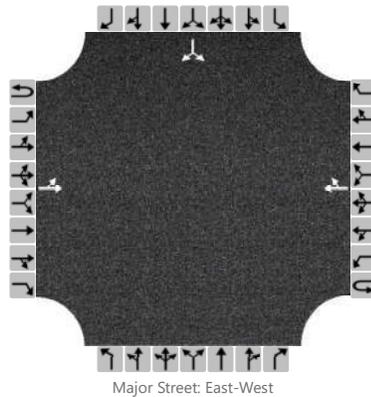
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		187														208
Capacity, c (veh/h)		1353														670
v/c Ratio		0.14														0.31
95% Queue Length, Q ₉₅ (veh)		0.5														1.3
Control Delay (s/veh)		8.1														12.8
Level of Service, LOS		A														B
Approach Delay (s/veh)	4.1												12.8			
Approach LOS													B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	I-90 Frontage & Airport
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/20/2020	East/West Street	I-90 Frontage Road
Analysis Year	2025	North/South Street	Airport Road
Time Analyzed	PM Peak Future	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		214	208				285	28						41		194
Percent Heavy Vehicles (%)		2												0		4
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.40		6.24
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.50		3.34

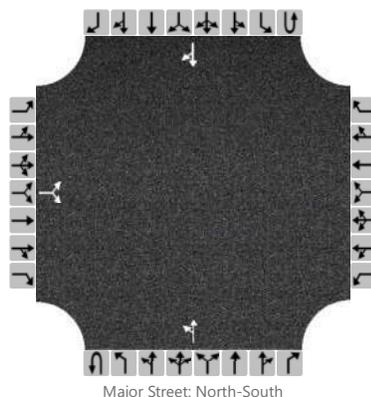
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		233														256
Capacity, c (veh/h)		1218														506
v/c Ratio		0.19														0.51
95% Queue Length, Q ₉₅ (veh)		0.7														3.0
Control Delay (s/veh)		8.7														19.4
Level of Service, LOS		A														C
Approach Delay (s/veh)	5.3												19.4			
Approach LOS													C			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Airport Road & Tubb Road
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/20/2020	East/West Street	Tubb Road
Analysis Year	2025	North/South Street	Airport Road
Time Analyzed	AM Peak Future	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0		0	1	0		0	1	0
Configuration			LR							LT						TR
Volume, V (veh/h)		22		216						82	65				85	12
Percent Heavy Vehicles (%)		4		2						4						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.44		6.22						4.14						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.54		3.32						2.24						

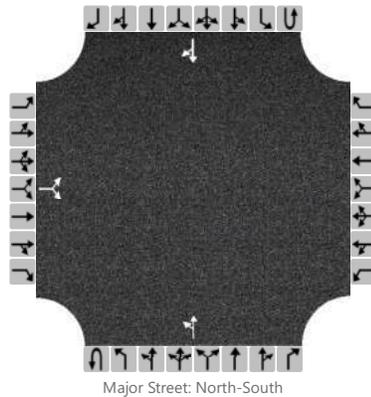
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			259							89						
Capacity, c (veh/h)			909							1472						
v/c Ratio			0.29							0.06						
95% Queue Length, Q ₉₅ (veh)			1.2							0.2						
Control Delay (s/veh)			10.5							7.6						
Level of Service, LOS			B							A						
Approach Delay (s/veh)	10.5								4.4							
Approach LOS	B															

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Audrey Stoltzfus			Intersection	Airport Road & Tubb Road		
Agency/Co.	Sanderson Stewart			Jurisdiction	Belgrade/Gallatin/MDT		
Date Performed	7/20/2020			East/West Street	Tubb Road		
Analysis Year	2025			North/South Street	Airport Road		
Time Analyzed	PM Peak Future			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	1.00		
Project Description	Meadowlark Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound							
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R				
Movement																				
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6				
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0				
Configuration			LR							LT							TR			
Volume, V (veh/h)		14		154						205	71					59	28			
Percent Heavy Vehicles (%)		0		1						1										
Proportion Time Blocked																				
Percent Grade (%)		0																		
Right Turn Channelized		No					No					No					No			
Median Type/Storage		Undivided																		

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1							
Critical Headway (sec)		6.40		6.21						4.11							
Base Follow-Up Headway (sec)		3.5		3.3						2.2							
Follow-Up Headway (sec)		3.50		3.31						2.21							

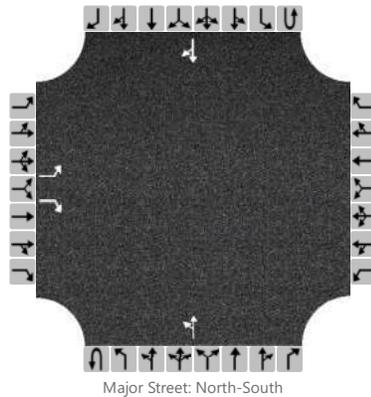
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			182							223							
Capacity, c (veh/h)			877							1506							
v/c Ratio			0.21							0.15							
95% Queue Length, Q ₉₅ (veh)			0.8							0.5							
Control Delay (s/veh)			10.2							7.8							
Level of Service, LOS			B							A							
Approach Delay (s/veh)		10.2								6.1							
Approach LOS		B								A							

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Dry Creek & Cruiser
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/20/2020	East/West Street	Cruiser Lane
Analysis Year	2025	North/South Street	Dry Creek Road
Time Analyzed	AM Peak Future	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0		0	1	0		0	1	0
Configuration		L		R						LT						TR
Volume, V (veh/h)		43		214						102	81				258	114
Percent Heavy Vehicles (%)		7		1						4						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.47		6.21						4.14						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.56		3.31						2.24						

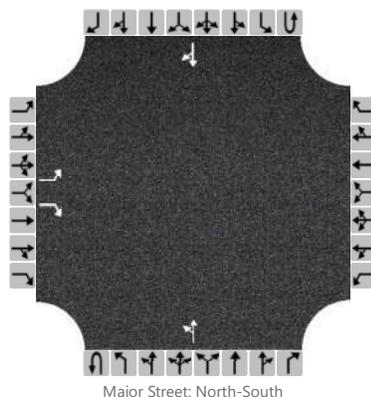
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		47		233						111						
Capacity, c (veh/h)		384		703						1142						
v/c Ratio		0.12		0.33						0.10						
95% Queue Length, Q ₉₅ (veh)		0.4		1.5						0.3						
Control Delay (s/veh)		15.7		12.7						8.5						
Level of Service, LOS		C		B						A						
Approach Delay (s/veh)	13.2								5.1							
Approach LOS	B															

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Dry Creek & Cruiser
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/20/2020	East/West Street	Cruiser Lane
Analysis Year	2025	North/South Street	Dry Creek Road
Time Analyzed	PM Peak Future	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0		0	1	0		0	1	0
Configuration		L		R						LT						TR
Volume, V (veh/h)		91		109						245	242				120	64
Percent Heavy Vehicles (%)		1		0						1						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

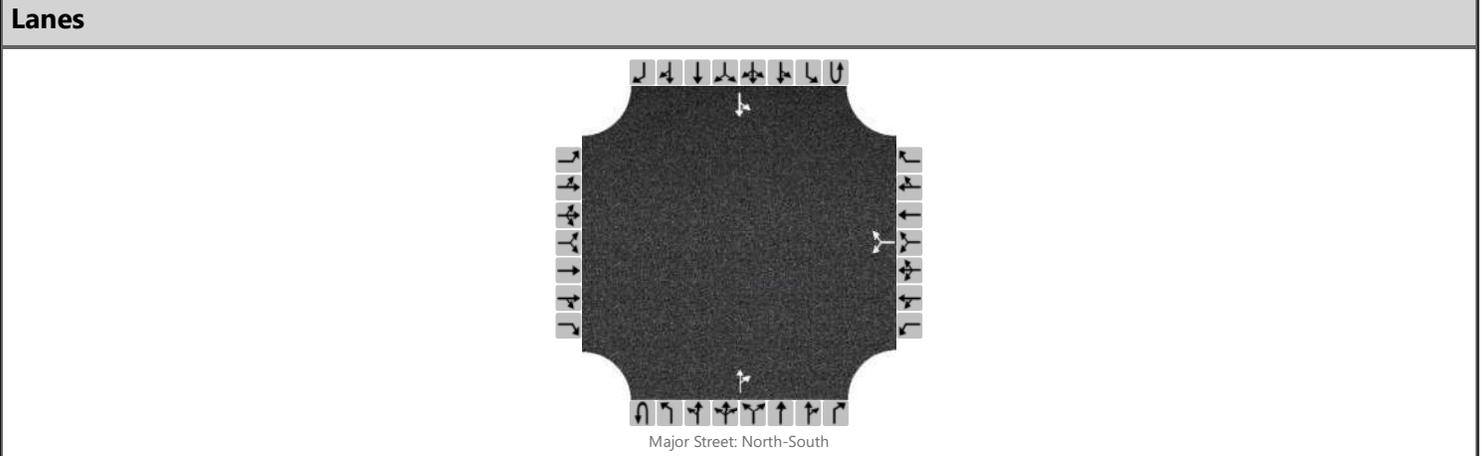
Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.41		6.20						4.11						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.51		3.30						2.21						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		99		118						266						
Capacity, c (veh/h)		231		885						1378						
v/c Ratio		0.43		0.13						0.19						
95% Queue Length, Q ₉₅ (veh)		2.2		0.5						0.7						
Control Delay (s/veh)		32.2		9.7						8.2						
Level of Service, LOS		D		A						A						
Approach Delay (s/veh)	20.0								5.1							
Approach LOS	C															

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Dry Creek & Penwell
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/20/2020	East/West Street	Penwell Bridge Road
Analysis Year	2025	North/South Street	Dry Creek Road
Time Analyzed	AM Peak Future	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0		0	1	0		0	1	0
Configuration							LR					TR			LT	
Volume, V (veh/h)						214		6			54	62		1	152	
Percent Heavy Vehicles (%)						2		0						0		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

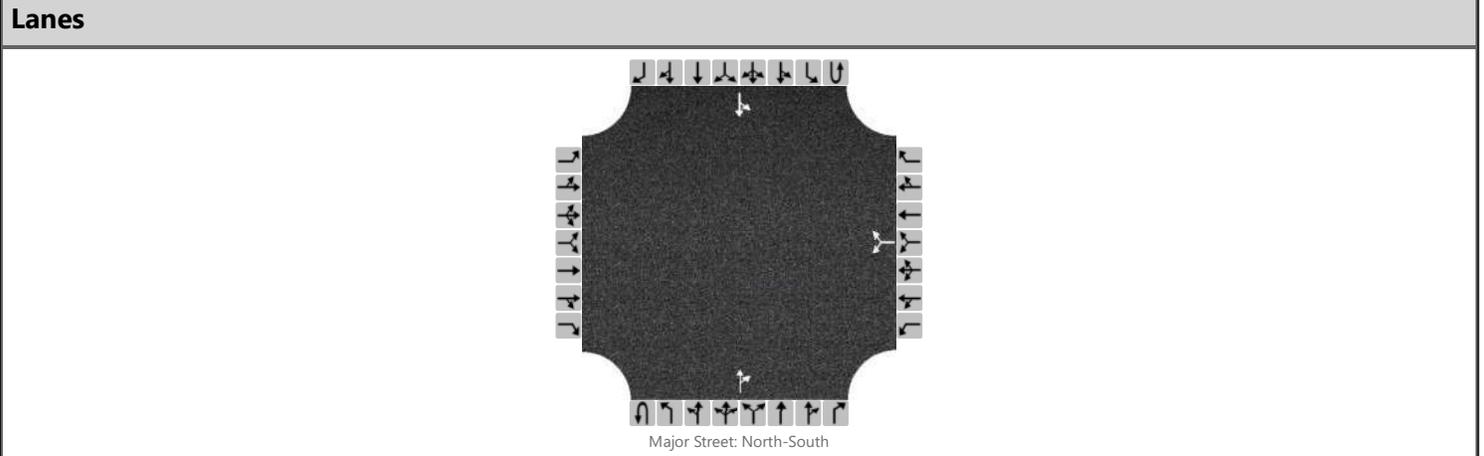
Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.20						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.30						2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						240								1		
Capacity, c (veh/h)						733								1473		
v/c Ratio						0.33								0.00		
95% Queue Length, Q ₉₅ (veh)						1.5								0.0		
Control Delay (s/veh)						12.3								7.4		
Level of Service, LOS						B								A		
Approach Delay (s/veh)					12.3								0.1			
Approach LOS					B											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Dry Creek & Penwell
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/20/2020	East/West Street	Penwell Bridge Road
Analysis Year	2025	North/South Street	Dry Creek Road
Time Analyzed	PM Peak Future	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0		0	1	0		0	1	0
Configuration							LR					TR			LT	
Volume, V (veh/h)						91		11			152	172		8	71	
Percent Heavy Vehicles (%)						1		0						13		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.41		6.20						4.23		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.51		3.30						2.32		

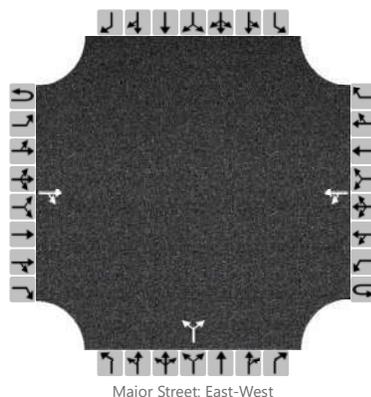
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						111								9		
Capacity, c (veh/h)						654								1147		
v/c Ratio						0.17								0.01		
95% Queue Length, Q ₉₅ (veh)						0.6								0.0		
Control Delay (s/veh)						11.6								8.2		
Level of Service, LOS						B								A		
Approach Delay (s/veh)					11.6								0.9			
Approach LOS					B											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Penwell Bridge & Powers
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/20/2020	East/West Street	Penwell Bridge Road
Analysis Year	2025	North/South Street	Powers Boulevard
Time Analyzed	AM Peak Future	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			57	17		0	118			81		7				
Percent Heavy Vehicles (%)						0				2		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.10				7.12		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.52		3.30				

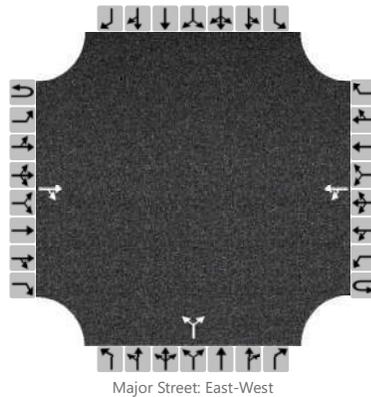
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0					96					
Capacity, c (veh/h)						1531					775					
v/c Ratio						0.00					0.12					
95% Queue Length, Q ₉₅ (veh)						0.0					0.4					
Control Delay (s/veh)						7.4					10.3					
Level of Service, LOS						A					B					
Approach Delay (s/veh)					0.0				10.3							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Penwell Bridge & Powers
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/20/2020	East/West Street	Penwell Bridge Road
Analysis Year	2025	North/South Street	Powers Boulevard
Time Analyzed	PM Peak Future	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			107	81		1	69			36		4				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.10					7.10		6.20			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.20					3.50		3.30			

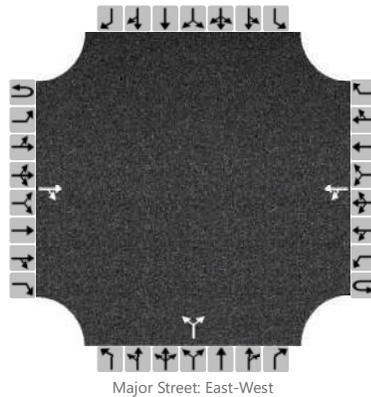
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1					43					
Capacity, c (veh/h)						1380					734					
v/c Ratio						0.00					0.06					
95% Queue Length, Q ₉₅ (veh)						0.0					0.2					
Control Delay (s/veh)						7.6					10.2					
Level of Service, LOS						A					B					
Approach Delay (s/veh)					0.1				10.2							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	E Baseline Rd & Tubb Rd
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/20/2020	East/West Street	East Baseline Road
Analysis Year	2025	North/South Street	Tubb Road
Time Analyzed	AM Peak Future	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			0	6		188	7			5		41				
Percent Heavy Vehicles (%)						2				20		4				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				7.30		6.24				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.68		3.34				

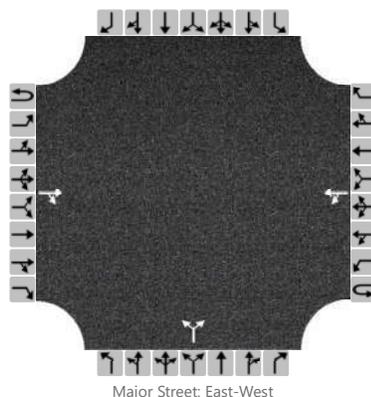
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						204					50					
Capacity, c (veh/h)						1612					948					
v/c Ratio						0.13					0.05					
95% Queue Length, Q ₉₅ (veh)						0.4					0.2					
Control Delay (s/veh)						7.6					9.0					
Level of Service, LOS						A					A					
Approach Delay (s/veh)					7.3				9.0							
Approach LOS									A							

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	E Baseline Rd & Tubb Rd
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/20/2020	East/West Street	East Baseline Road
Analysis Year	2025	North/South Street	Tubb Road
Time Analyzed	PM Peak Future	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			5	2		99	4			10		218				
Percent Heavy Vehicles (%)						0				0		1				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.10				7.10		6.21				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.31				

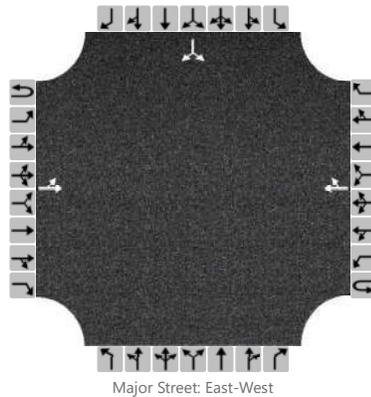
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						108						248				
Capacity, c (veh/h)						1627						1054				
v/c Ratio						0.07						0.24				
95% Queue Length, Q ₉₅ (veh)						0.2						0.9				
Control Delay (s/veh)						7.4						9.5				
Level of Service, LOS						A						A				
Approach Delay (s/veh)					7.1				9.5							
Approach LOS									A							

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	E Baseline Rd & Melissa W
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/20/2020	East/West Street	East Baseline Road
Analysis Year	2025	North/South Street	Melissa Way
Time Analyzed	AM Peak Future	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		19	4				10	0						0		82
Percent Heavy Vehicles (%)		10												0		0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.20												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.29												3.50		3.30

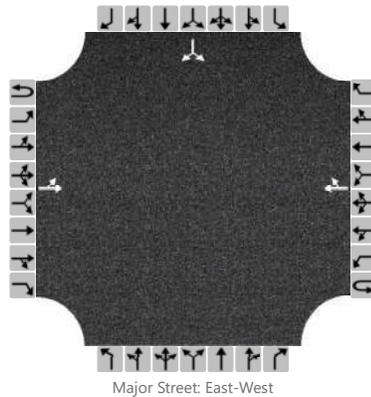
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		21														89
Capacity, c (veh/h)		1558														1076
v/c Ratio		0.01														0.08
95% Queue Length, Q ₉₅ (veh)		0.0														0.3
Control Delay (s/veh)		7.3														8.6
Level of Service, LOS		A														A
Approach Delay (s/veh)	6.2												8.6			
Approach LOS													A			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	E Baseline Rd & Melissa W
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/20/2020	East/West Street	East Baseline Road
Analysis Year	2025	North/South Street	Melissa Way
Time Analyzed	PM Peak Future	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		87	7				5	0						0		44
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		95														48
Capacity, c (veh/h)		1630														1084
v/c Ratio		0.06														0.04
95% Queue Length, Q ₉₅ (veh)		0.2														0.1
Control Delay (s/veh)		7.3														8.5
Level of Service, LOS		A														A
Approach Delay (s/veh)	6.8												8.5			
Approach LOS													A			

**AUXILIARY TURN LANE AND
TRAFFIC SIGNAL WARRANT WORKSHEETS**

APPENDIX D

Existing Traffic Volumes (2019) - Right-Turn Lanes at Unsignalized Intersections on 2-Lane Highway:

Approach	Time	Total DHV (veh/hr)	Right-Turn Volume During DHV (veh/hr, one direction)	Required Right-Turn Volume for Warranted Lane	Warranted Right- Turn Lane? (Y/N)
Frontage & Airport WB	AM weekday	157	14	99	N
	PM weekday	239	7	88	N
Airport & Tubb SB	AM weekday	78	9	110	N
	PM weekday	68	20	111	N
Dry Creek & Cruiser SB	AM weekday	299	92	80	Y
	PM weekday	146	51	101	N
Dry Creek & Penwell NB	AM weekday	93	49	108	N
	PM weekday	258	134	86	Y

Speed Limit at	
Approach	Adjustment
50	0
50	0
45	0
45	0
55	0
55	0
55	0
55	0

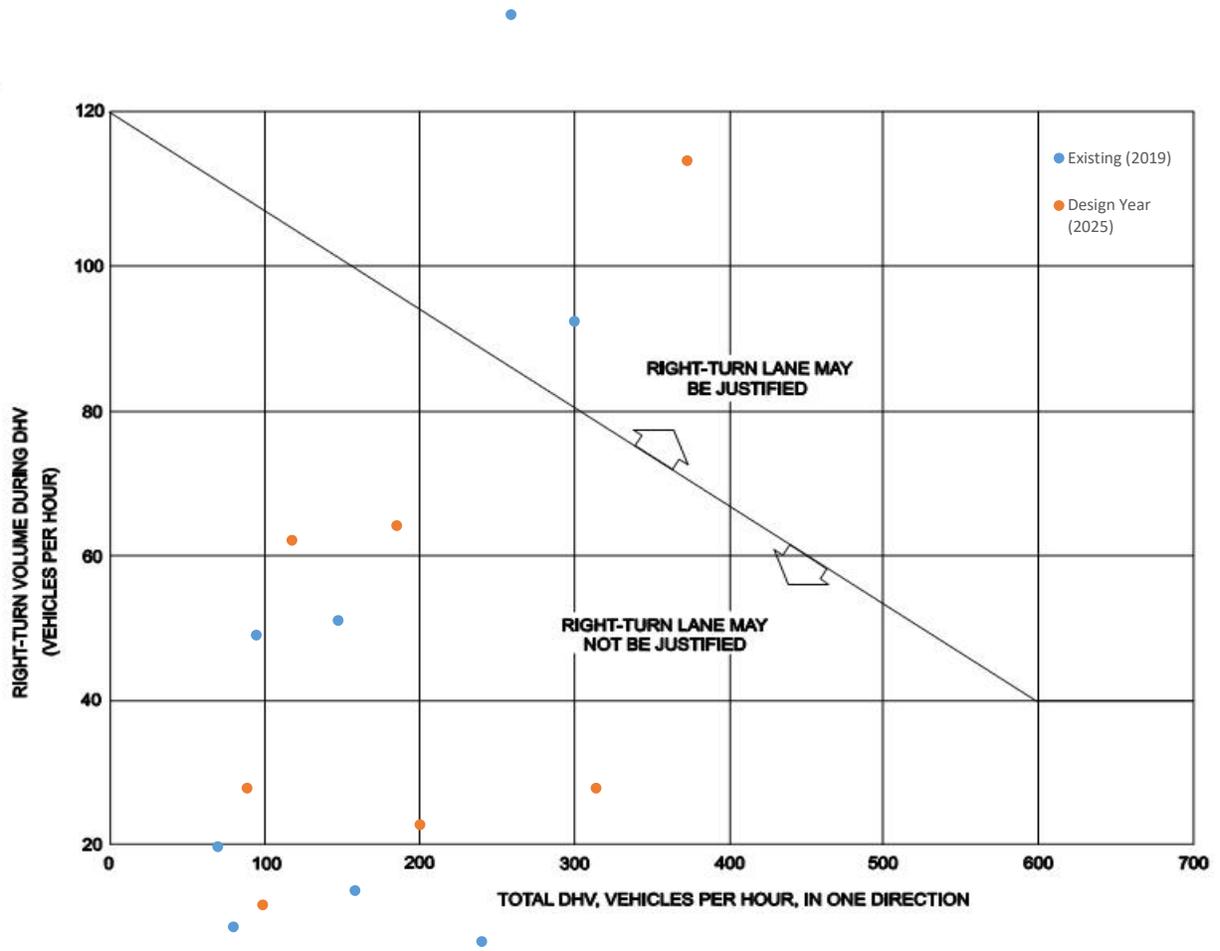
Future Traffic Volumes (2025) - Right-Turn Lanes at Unsignalized Intersections on 2-Lane Highways:

Approach	Time	Total DHV (veh/hr)	Right-Turn Volume During DHV (veh/hr, one direction)	Required Right-Turn Volume for Warranted Lane	Warranted Right- Turn Lane? (Y/N)
Frontage & Airport WB	AM weekday	199	23	93	N
	PM weekday	313	28	78	N
Airport & Tubb SB	AM weekday	97	12	107	N
	PM weekday	87	28	108	N
Dry Creek & Cruiser SB	AM weekday	372	114	70	Y
	PM weekday	184	64	95	N
Dry Creek & Penwell NB	AM weekday	116	62	105	N
	PM weekday	324	172	77	Y

Speed Limit at

Approach	Adjustment
50	0
50	0
45	0
45	0
55	0
55	0
55	0
55	0

Guidelines for Right-Turn Lanes at Unsignalized Intersections
on 2-Lane Highways (Figure 28.4A)



Existing Traffic Volumes (2019) - Left-Turn Lanes at Unsignalized Intersections on 2-Lane Highways

Approach	Time	Va = Total advancing traffic volume	Val = Total left-turn volume in advancing traffic	Percent left-turns in Va	Vo = Total opposing traffic volume	Warranted Left-Turn Lane? (Y/N)
Frontage & Airport EB	AM weekday	341	134	39.3%	157	Y
	PM weekday	323	154	47.7%	239	Y
Airport & Tubb NB	AM weekday	109	56	51.4%	78	N
	PM weekday	189	131	69.3%	68	N
Dry Creek & Cruiser NB	AM weekday	148	83	56.1%	299	N
	PM weekday	392	199	50.8%	146	Y
Dry Creek & Penwell SB	AM weekday	125	1	0.8%	93	N
	PM weekday	64	6	9.4%	258	N

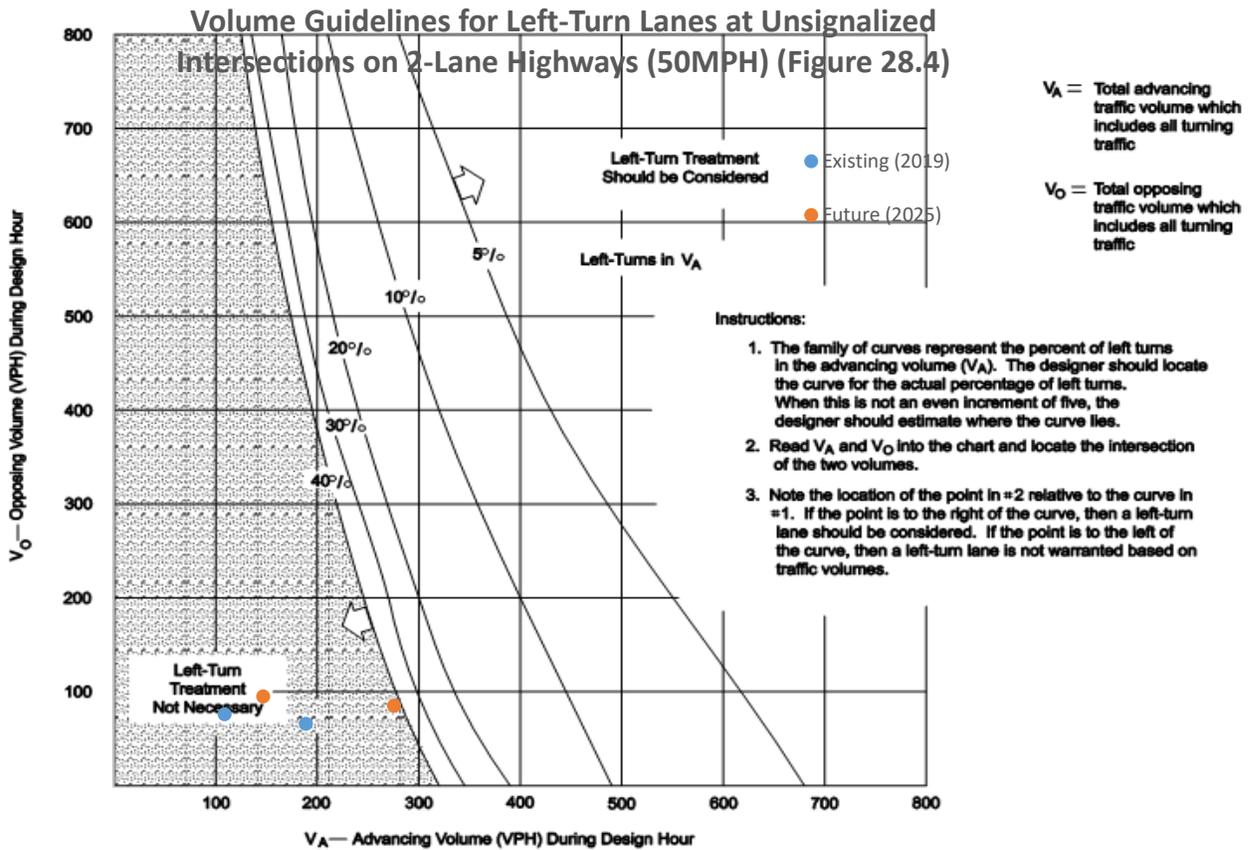
Speed
Limit at
Approach
50
50
45
45
55
55
55
55

Future Traffic Volumes (2025) - Left-Turn Lanes at Unsignalized Intersections on 2-Lane Highways

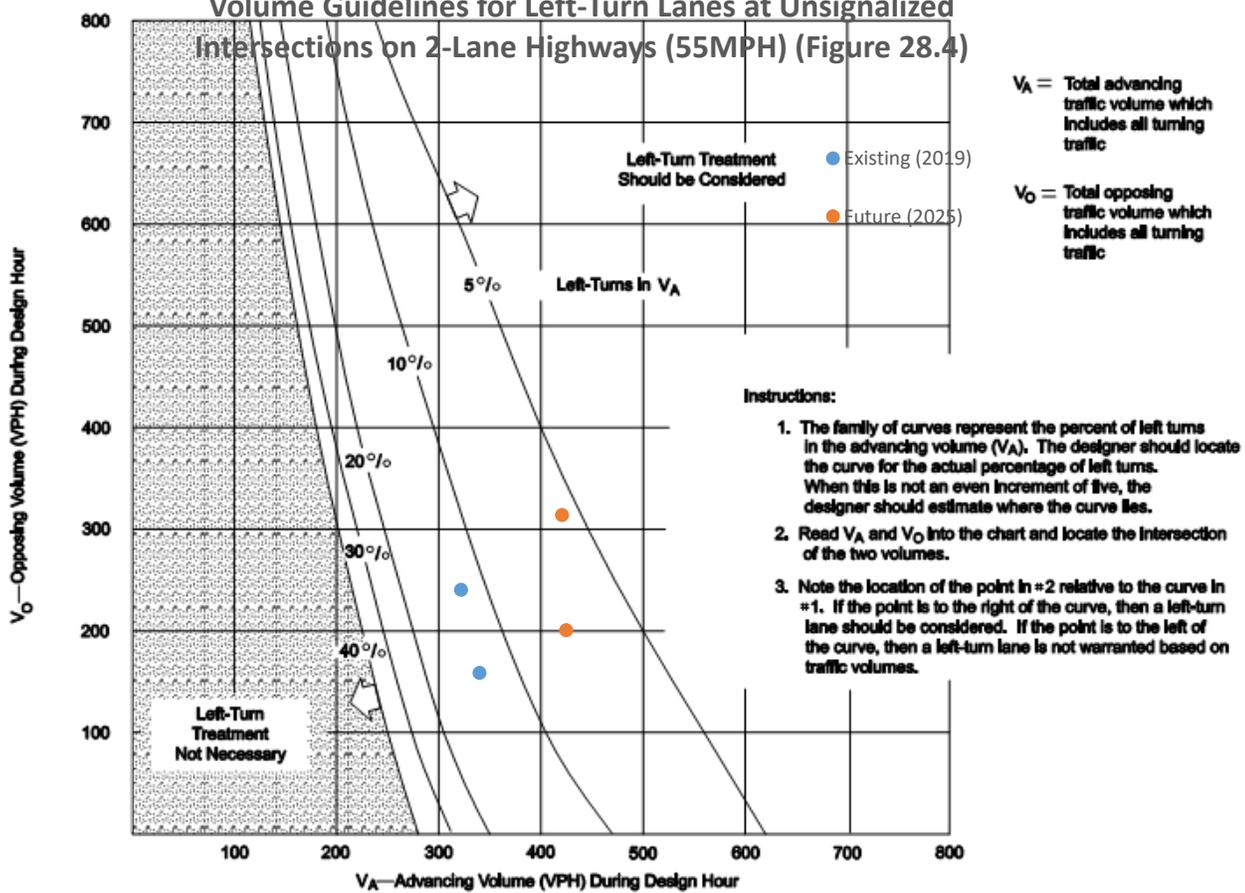
Approach	Time	Va = Total advancing traffic volume	Val = Total left-turn volume in advancing traffic	Percent left-turns in Va	Vo = Total opposing traffic volume	Warranted Left-Turn Lane? (Y/N)
Frontage & Airport EB	AM weekday	426	172	40.4%	199	Y
	PM weekday	422	214	50.7%	313	Y
Airport & Tubb NB	AM weekday	147	82	55.8%	97	N
	PM weekday	276	205	74.3%	87	Y
Dry Creek & Cruiser NB	AM weekday	183	102	55.7%	372	Y
	PM weekday	487	245	50.3%	184	Y
Dry Creek & Penwell SB	AM weekday	153	1	0.7%	116	N
	PM weekday	79	8	10.1%	324	N

Speed Limit at Approach
 50
 50
 45
 45
 55
 55
 55
 55

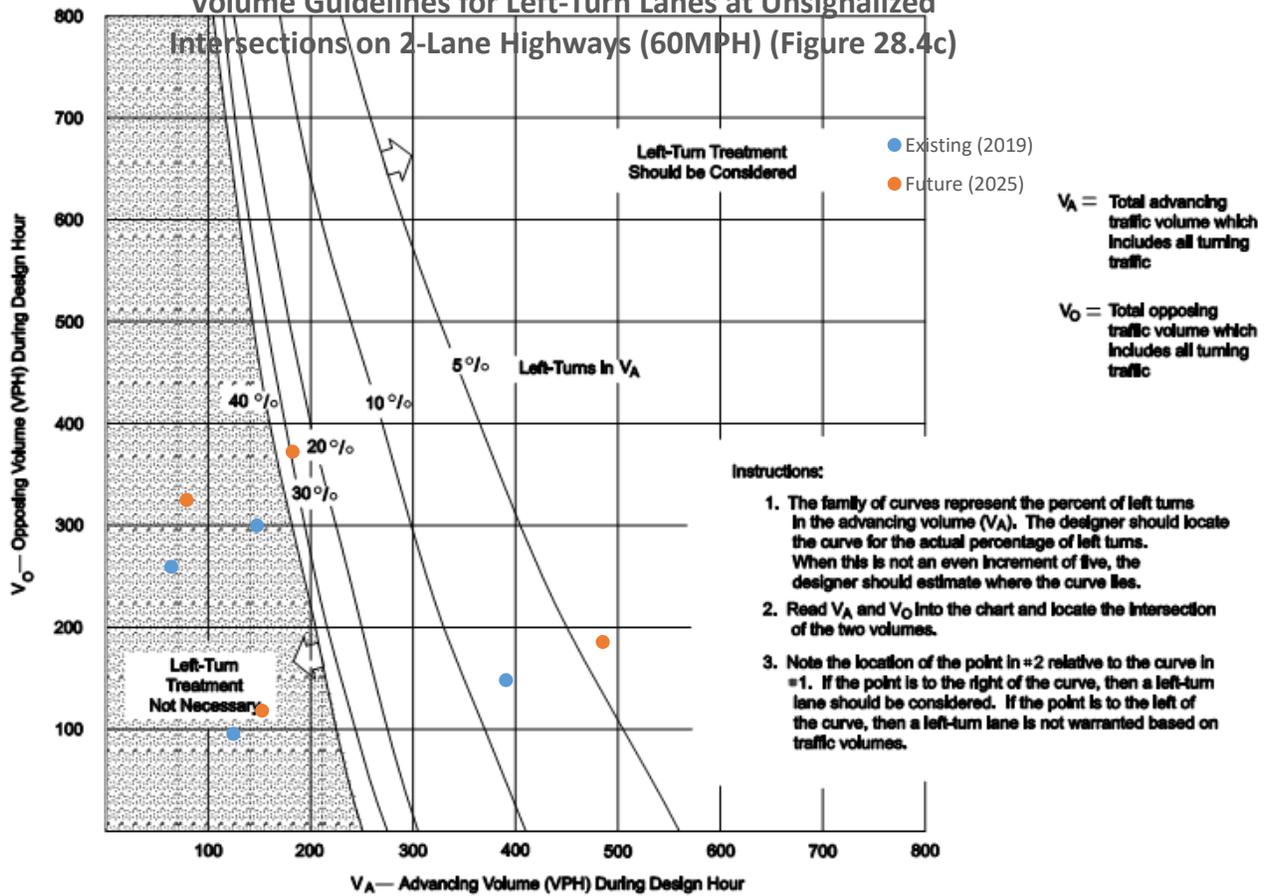
Volume Guidelines for Left-Turn Lanes at Unsignalized Intersections on 2-Lane Highways (50MPH) (Figure 28.4)

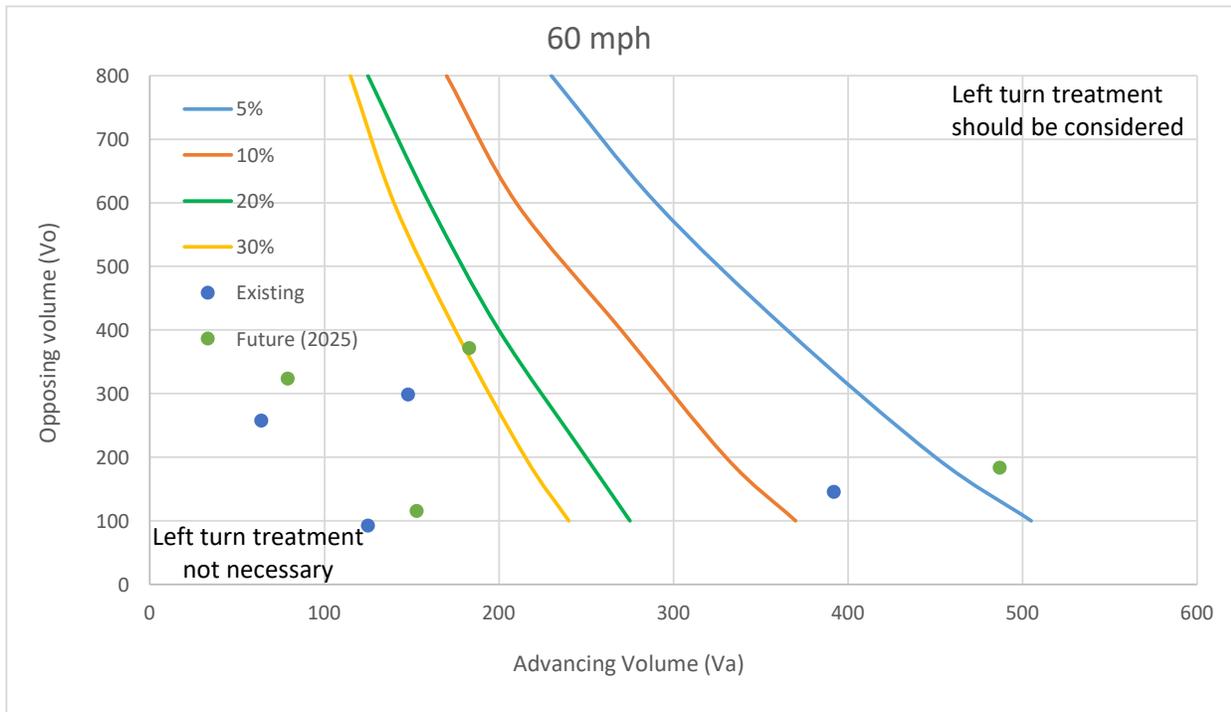
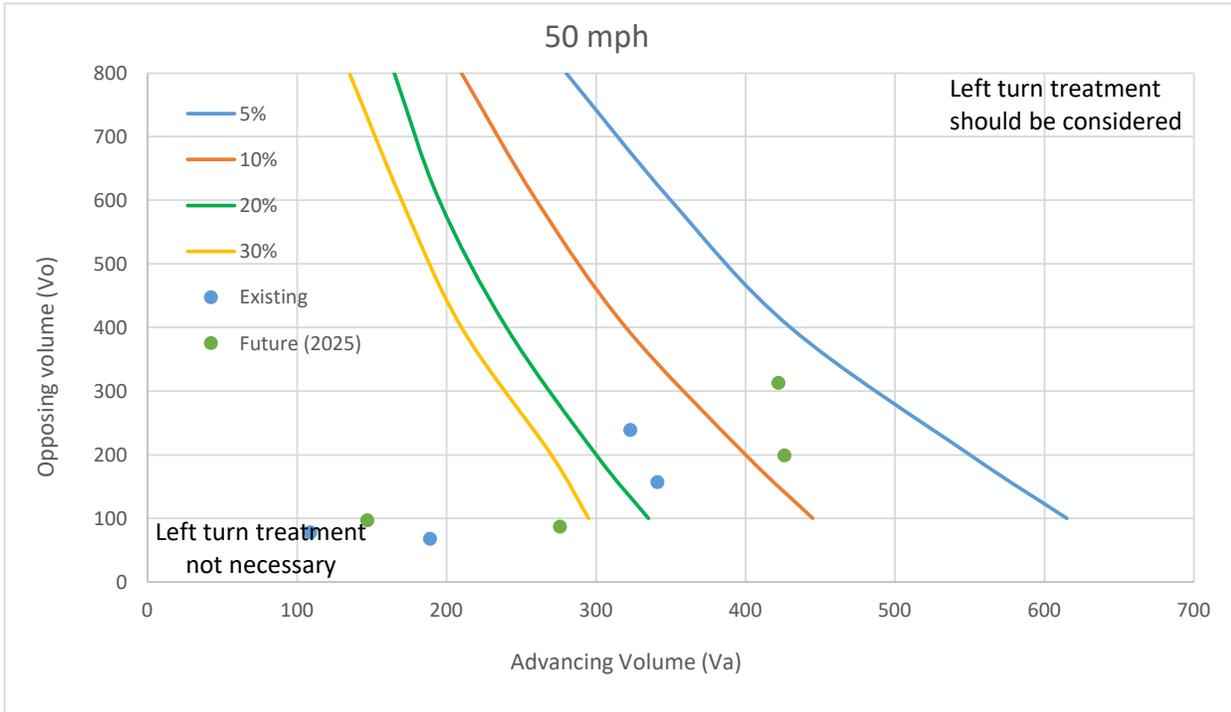


Volume Guidelines for Left-Turn Lanes at Unsignalized Intersections on 2-Lane Highways (55MPH) (Figure 28.4)



Volume Guidelines for Left-Turn Lanes at Unsignalized Intersections on 2-Lane Highways (60MPH) (Figure 28.4c)





TRAFFIC SIGNAL WARRANTS	Existing Volumes (2019)			Design Year (2025)		
	I-90 Frontage Road & Airport Road	I-90 Frontage Road & Airport Road (50% RTs)	I-90 Frontage Road & Airport Road (0% RTs)	I-90 Frontage Road & Airport Road	I-90 Frontage Road & Airport Road (50% RTs)	I-90 Frontage Road & Airport Road (0% RTs)
1. Eight-Hour Vehicular Volume	✓	x	x	✓	✓	x
2. Four-Hour Vehicular Volume	x	x	x	✓	✓	x
3. Peak Hour	x	x	x	✓	✓	x
4. Pedestrian Volume	--	--	--	--	--	--
5. School Crossing	--	--	--	--	--	--
6. Coordinated Signal System	x	x	x	x	x	x
7. Crash History	x	x	x	x	x	x
8. Roadway Network	x	x	x	x	x	x
9. Intersection Near a Grade Crossing	--	--	--	--	--	--
Signals Warranted	Yes			✓	✓	
	No	x	x			x

Warrant 1: Eight-Hour Vehicular Volume

General Information

Agency/Company: Sanderson Stewart
 Date: 11/13/2019
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Existing (2019)

Hour Begin	Avg. Entering Volume				Major Street Total (Both Approaches)	Higher Volume Minor Approach
	NB	SB	EB	WB		
0:00	0	0	0	0	0	0
1:00	0	0	0	0	0	0
2:00	0	0	0	0	0	0
3:00	0	0	0	0	0	0
4:00	0	0	0	0	0	0
5:00	0	33	45	23	68	33
6:00	0	72	151	59	210	72
7:00	0	108	318	135	453	108
8:00	0	109	286	124	410	109
9:00	0	99	228	110	338	99
10:00	0	98	217	116	333	98
11:00	0	129	222	111	333	129
12:00	0	142	271	159	430	142
13:00	0	115	269	168	437	115
14:00	0	117	257	159	416	117
15:00	0	140	268	181	449	140
16:00	0	159	308	207	515	159
17:00	0	142	295	242	537	142
18:00	0	106	228	149	377	106
19:00	0	66	112	74	186	66
20:00	0	42	112	70	182	42
21:00	0	0	0	0	0	0
22:00	0	0	0	0	0	0
23:00	0	0	0	0	0	0
TOTAL	0	1677	3587	2087	5674	1677

Condition A - Minimum Vehicular Volume (70% Columns):

Major Street Total > 350 and Higher Minor Street Total > 105 for 8 hours? Yes (8 hrs)

Condition B - Interruption of Continuous Traffic (70% Columns):

Major Street Total > 525 and Higher Minor Street Total > 53 for 8 hours? No (1 hrs)

Combination of Conditions A & B (56% Columns):

Major Street Total > 280 and Higher Minor Street Total > 84 for 8 hours? Yes (12 hrs)

Major Street Total > 420 and Higher Minor Street Total > 42 for 8 hours? No (7 hrs)

Warrant 1 Satisfied? **Yes**

Warrant 1: Eight-Hour Vehicular Volume

General Information

Agency/Company: Sanderson Stewart
 Date: 11/13/2019
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Existing (2019) 50% SB RTs

Hour Begin	Avg. Entering Volume				Major Street Total (Both Approaches)	Higher Volume Minor Approach
	NB	SB	EB	WB		
0:00	0	0	0	0	0	0
1:00	0	0	0	0	0	0
2:00	0	0	0	0	0	0
3:00	0	0	0	0	0	0
4:00	0	0	0	0	0	0
5:00	0	19	45	23	68	19
6:00	0	36	151	59	210	36
7:00	0	57	318	135	453	57
8:00	0	57	286	124	410	57
9:00	0	52	228	110	338	52
10:00	0	56	217	116	333	56
11:00	0	69	222	111	333	69
12:00	0	75	271	159	430	75
13:00	0	67	269	168	437	67
14:00	0	66	257	159	416	66
15:00	0	80	268	181	449	80
16:00	0	91	308	207	515	91
17:00	0	77	295	242	537	77
18:00	0	57	228	149	377	57
19:00	0	36	112	74	186	36
20:00	0	23	112	70	182	23
21:00	0	0	0	0	0	0
22:00	0	0	0	0	0	0
23:00	0	0	0	0	0	0
TOTAL	0	918	3587	2087	5674	918

Condition A - Minimum Vehicular Volume (70% Columns):

Major Street Total > 350 and Higher Minor Street Total > 105 for 8 hours? **No (0 hrs)**

Condition B - Interruption of Continuous Traffic (70% Columns):

Major Street Total > 525 and Higher Minor Street Total > 53 for 8 hours? **No (1 hrs)**

Combination of Conditions A & B (56% Columns):

Major Street Total > 280 and Higher Minor Street Total > 84 for 8 hours? **No (1 hrs)**

Major Street Total > 420 and Higher Minor Street Total > 42 for 8 hours? **No (6 hrs)**

Warrant 1 Satisfied? No

Warrant 1: Eight-Hour Vehicular Volume

General Information

Agency/Company: Sanderson Stewart
 Date: 11/13/2019
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Existing (2019) 0% SB RTs

Hour Begin	Avg. Entering Volume				Major Street Total (Both Approaches)	Higher Volume Minor Approach
	NB	SB	EB	WB		
0:00	0	0	0	0	0	0
1:00	0	0	0	0	0	0
2:00	0	0	0	0	0	0
3:00	0	0	0	0	0	0
4:00	0	0	0	0	0	0
5:00	0	4	45	23	68	4
6:00	0	0	151	59	210	0
7:00	0	6	318	135	453	6
8:00	0	5	286	124	410	5
9:00	0	6	228	110	338	6
10:00	0	14	217	116	333	14
11:00	0	9	222	111	333	9
12:00	0	8	271	159	430	8
13:00	0	19	269	168	437	19
14:00	0	16	257	159	416	16
15:00	0	20	268	181	449	20
16:00	0	24	308	207	515	24
17:00	0	13	295	242	537	13
18:00	0	8	228	149	377	8
19:00	0	6	112	74	186	6
20:00	0	4	112	70	182	4
21:00	0	0	0	0	0	0
22:00	0	0	0	0	0	0
23:00	0	0	0	0	0	0
TOTAL	0	162	3587	2087	5674	162

Condition A - Minimum Vehicular Volume (70% Columns):

Major Street Total > 350 and Higher Minor Street Total > 105 for 8 hours? **No (0 hrs)**

Condition B - Interruption of Continuous Traffic (70% Columns):

Major Street Total > 525 and Higher Minor Street Total > 53 for 8 hours? **No (0 hrs)**

Combination of Conditions A & B (56% Columns):

Major Street Total > 280 and Higher Minor Street Total > 84 for 8 hours? **No (0 hrs)**

Major Street Total > 420 and Higher Minor Street Total > 42 for 8 hours? **No (0 hrs)**

Warrant 1 Satisfied? No

Warrant 1: Eight-Hour Vehicular Volume

General Information

Agency/Company: Sanderson Stewart
 Date: 7/22/2020
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Design Year (2025)

Hour Begin	Avg. Entering Volume				Major Street Total (Both Approaches)	Higher Volume Minor Approach
	NB	SB	EB	WB		
0:00	0	0	0	0	0	0
1:00	0	0	0	0	0	0
2:00	0	0	0	0	0	0
3:00	0	0	0	0	0	0
4:00	0	0	0	0	0	0
5:00	0	48	57	30	87	48
6:00	0	105	193	76	269	105
7:00	0	157	406	174	580	157
8:00	0	159	365	160	525	159
9:00	0	144	291	142	433	144
10:00	0	143	277	150	427	143
11:00	0	188	284	143	427	188
12:00	0	206	346	206	552	206
13:00	0	167	344	217	561	167
14:00	0	170	328	206	534	170
15:00	0	204	342	234	576	204
16:00	0	231	393	268	661	231
17:00	0	206	377	313	690	206
18:00	0	154	291	193	484	154
19:00	0	96	143	96	239	96
20:00	0	61	143	90	233	61
21:00	0	0	0	0	0	0
22:00	0	0	0	0	0	0
23:00	0	0	0	0	0	0
TOTAL	0	2439	4580	2698	7278	2439

Condition A - Minimum Vehicular Volume (70% Columns):

Major Street Total > 350 and Higher Minor Street Total > 105 for 8 hours? Yes (12 hrs)

Condition B - Interruption of Continuous Traffic (70% Columns):

Major Street Total > 525 and Higher Minor Street Total > 53 for 8 hours? Yes (8 hrs)

Combination of Conditions A & B (56% Columns):

Major Street Total > 280 and Higher Minor Street Total > 84 for 8 hours? Yes (12 hrs)

Major Street Total > 420 and Higher Minor Street Total > 42 for 8 hours? Yes (12 hrs)

Warrant 1 Satisfied? **Yes**

Warrant 1: Eight-Hour Vehicular Volume

General Information

Agency/Company: Sanderson Stewart
 Date: 7/22/2020
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Design Year (2025) 50% SB RT's

Hour Begin	Avg. Entering Volume				Major Street Total (Both Approaches)	Higher Volume Minor Approach
	NB	SB	EB	WB		
0:00	0	0	0	0	0	0
1:00	0	0	0	0	0	0
2:00	0	0	0	0	0	0
3:00	0	0	0	0	0	0
4:00	0	0	0	0	0	0
5:00	0	29	57	30	87	29
6:00	0	55	193	76	269	55
7:00	0	87	406	174	580	87
8:00	0	87	365	160	525	87
9:00	0	79	291	142	433	79
10:00	0	85	277	150	427	85
11:00	0	105	284	143	427	105
12:00	0	114	346	206	552	114
13:00	0	102	344	217	561	102
14:00	0	100	328	206	534	100
15:00	0	121	342	234	576	121
16:00	0	138	393	268	661	138
17:00	0	117	377	313	690	117
18:00	0	87	291	193	484	87
19:00	0	55	143	96	239	55
20:00	0	35	143	90	233	35
21:00	0	0	0	0	0	0
22:00	0	0	0	0	0	0
23:00	0	0	0	0	0	0
TOTAL	0	1396	4580	2698	7278	1396

Condition A - Minimum Vehicular Volume (70% Columns):

Major Street Total > 350 and Higher Minor Street Total > 105 for 8 hours? No (5 hrs)

Condition B - Interruption of Continuous Traffic (70% Columns):

Major Street Total > 525 and Higher Minor Street Total > 53 for 8 hours? Yes (8 hrs)

Combination of Conditions A & B (56% Columns):

Major Street Total > 280 and Higher Minor Street Total > 84 for 8 hours? Yes (11 hrs)

Major Street Total > 420 and Higher Minor Street Total > 42 for 8 hours? Yes (12 hrs)

Warrant 1 Satisfied? **Yes**

Warrant 1: Eight-Hour Vehicular Volume

General Information

Agency/Company: Sanderson Stewart
 Date: 7/22/2020
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Design Year (2025) 0% SB RTs

Hour Begin	Avg. Entering Volume				Major Street Total (Both Approaches)	Higher Volume Minor Approach
	NB	SB	EB	WB		
0:00	0	0	0	0	0	0
1:00	0	0	0	0	0	0
2:00	0	0	0	0	0	0
3:00	0	0	0	0	0	0
4:00	0	0	0	0	0	0
5:00	0	9	57	30	87	9
6:00	0	0	193	76	269	0
7:00	0	13	406	174	580	13
8:00	0	11	365	160	525	11
9:00	0	13	291	142	433	13
10:00	0	30	277	150	427	30
11:00	0	19	284	143	427	19
12:00	0	17	346	206	552	17
13:00	0	41	344	217	561	41
14:00	0	35	328	206	534	35
15:00	0	43	342	234	576	43
16:00	0	52	393	268	661	52
17:00	0	28	377	313	690	28
18:00	0	17	291	193	484	17
19:00	0	13	143	96	239	13
20:00	0	9	143	90	233	9
21:00	0	0	0	0	0	0
22:00	0	0	0	0	0	0
23:00	0	0	0	0	0	0
TOTAL	0	350	4580	2698	7278	350

Condition A - Minimum Vehicular Volume (70% Columns):

Major Street Total > 350 and Higher Minor Street Total > 105 for 8 hours? **No (0 hrs)**

Condition B - Interruption of Continuous Traffic (70% Columns):

Major Street Total > 525 and Higher Minor Street Total > 53 for 8 hours? **No (0 hrs)**

Combination of Conditions A & B (56% Columns):

Major Street Total > 280 and Higher Minor Street Total > 84 for 8 hours? **No (0 hrs)**

Major Street Total > 420 and Higher Minor Street Total > 42 for 8 hours? **No (2 hrs)**

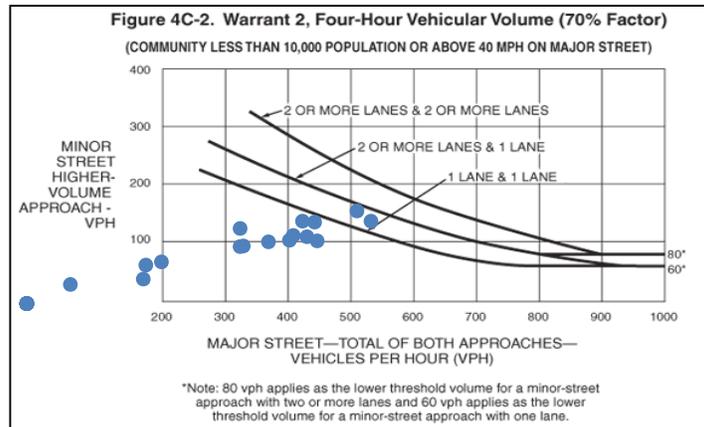
Warrant 1 Satisfied? No

Warrant 2: Four-Hour Vehicular Volume

General Information

Agency/Company: Sanderson Stewart
 Date: 11/13/2019
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Existing (2019)

Hour Begin	Avg. Entering Volume				Major Street Total (Both Approaches)	Higher Volume Minor Approach
	NB	SB	EB	WB		
0:00	0	0	0	0	0	0
1:00	0	0	0	0	0	0
2:00	0	0	0	0	0	0
3:00	0	0	0	0	0	0
4:00	0	0	0	0	0	0
5:00	0	33	45	23	68	33
6:00	0	72	151	59	210	72
7:00	0	108	318	135	453	108
8:00	0	109	286	124	410	109
9:00	0	99	228	110	338	99
10:00	0	98	217	116	333	98
11:00	0	129	222	111	333	129
12:00	0	142	271	159	430	142
13:00	0	115	269	168	437	115
14:00	0	117	257	159	416	117
15:00	0	140	268	181	449	140
16:00	0	159	308	207	515	159
17:00	0	142	295	242	537	142
18:00	0	106	228	149	377	106
19:00	0	66	112	74	186	66
20:00	0	42	112	70	182	42
21:00	0	0	0	0	0	0
22:00	0	0	0	0	0	0
23:00	0	0	0	0	0	0
TOTAL	0	1677	3587	2087	5674	1677



Meets warrant criteria on graph for minimum of 4 hours (100% thresholds)?

No (2 hrs)

Warrant 2 Satisfied?

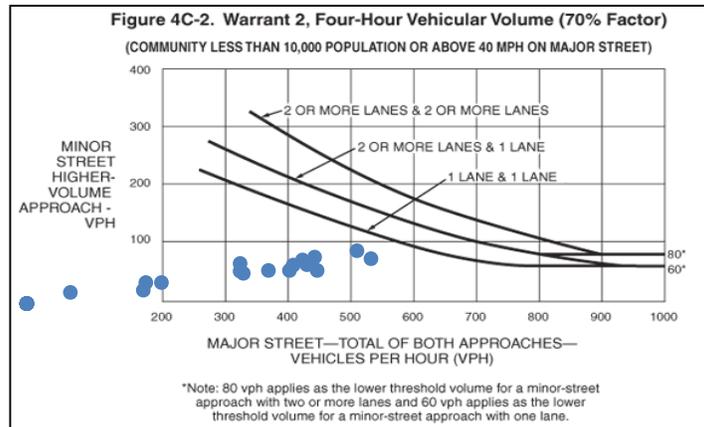
No

Warrant 2: Four-Hour Vehicular Volume

General Information

Agency/Company: Sanderson Stewart
 Date: 11/13/2019
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Existing (2019) 50% SB RTs

Hour Begin	Avg. Entering Volume				Major Street Total (Both Approaches)	Higher Volume Minor Approach
	NB	SB	EB	WB		
0:00	0	0	0	0	0	0
1:00	0	0	0	0	0	0
2:00	0	0	0	0	0	0
3:00	0	0	0	0	0	0
4:00	0	0	0	0	0	0
5:00	0	19	45	23	68	19
6:00	0	36	151	59	210	36
7:00	0	57	318	135	453	57
8:00	0	57	286	124	410	57
9:00	0	52	228	110	338	52
10:00	0	56	217	116	333	56
11:00	0	69	222	111	333	69
12:00	0	75	271	159	430	75
13:00	0	67	269	168	437	67
14:00	0	66	257	159	416	66
15:00	0	80	268	181	449	80
16:00	0	91	308	207	515	91
17:00	0	77	295	242	537	77
18:00	0	57	228	149	377	57
19:00	0	36	112	74	186	36
20:00	0	23	112	70	182	23
21:00	0	0	0	0	0	0
22:00	0	0	0	0	0	0
23:00	0	0	0	0	0	0
TOTAL	0	918	3587	2087	5674	918



Meets warrant criteria on graph for minimum of 4 hours (100% thresholds)?

No (0 hrs)

Warrant 2 Satisfied?

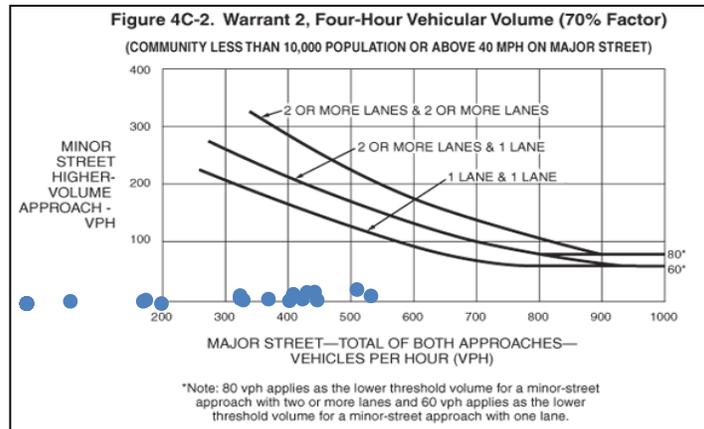
No

Warrant 2: Four-Hour Vehicular Volume

General Information

Agency/Company: Sanderson Stewart
 Date: 11/13/2019
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Existing (2019) 0% SB RT's

Hour Begin	Avg. Entering Volume				Major Street Total (Both Approaches)	Higher Volume Minor Approach
	NB	SB	EB	WB		
0:00	0	0	0	0	0	0
1:00	0	0	0	0	0	0
2:00	0	0	0	0	0	0
3:00	0	0	0	0	0	0
4:00	0	0	0	0	0	0
5:00	0	4	45	23	68	4
6:00	0	0	151	59	210	0
7:00	0	6	318	135	453	6
8:00	0	5	286	124	410	5
9:00	0	6	228	110	338	6
10:00	0	14	217	116	333	14
11:00	0	9	222	111	333	9
12:00	0	8	271	159	430	8
13:00	0	19	269	168	437	19
14:00	0	16	257	159	416	16
15:00	0	20	268	181	449	20
16:00	0	24	308	207	515	24
17:00	0	13	295	242	537	13
18:00	0	8	228	149	377	8
19:00	0	6	112	74	186	6
20:00	0	4	112	70	182	4
21:00	0	0	0	0	0	0
22:00	0	0	0	0	0	0
23:00	0	0	0	0	0	0
TOTAL	0	162	3587	2087	5674	162



Meets warrant criteria on graph for minimum of 4 hours (100% thresholds)?
Warrant 2 Satisfied?

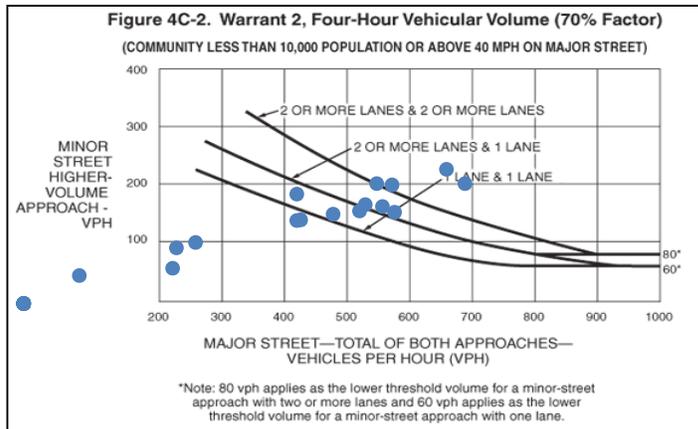
No (0 hrs)
No

Warrant 2: Four-Hour Vehicular Volume

General Information

Agency/Company: Sanderson Stewart
 Date: 7/22/2020
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Design Year (2025)

Hour Begin	Avg. Entering Volume				Major Street Total (Both Approaches)	Higher Volume Minor Approach
	NB	SB	EB	WB		
0:00	0	0	0	0	0	0
1:00	0	0	0	0	0	0
2:00	0	0	0	0	0	0
3:00	0	0	0	0	0	0
4:00	0	0	0	0	0	0
5:00	0	48	57	30	87	48
6:00	0	105	193	76	269	105
7:00	0	157	406	174	580	157
8:00	0	159	365	160	525	159
9:00	0	144	291	142	433	144
10:00	0	143	277	150	427	143
11:00	0	188	284	143	427	188
12:00	0	206	346	206	552	206
13:00	0	167	344	217	561	167
14:00	0	170	328	206	534	170
15:00	0	204	342	234	576	204
16:00	0	231	393	268	661	231
17:00	0	206	377	313	690	206
18:00	0	154	291	193	484	154
19:00	0	96	143	96	239	96
20:00	0	61	143	90	233	61
21:00	0	0	0	0	0	0
22:00	0	0	0	0	0	0
23:00	0	0	0	0	0	0
TOTAL	0	2439	4580	2698	7278	2439



Meets warrant criteria on graph for minimum of 4 hours (100% thresholds)?

Yes (10 hrs)

Warrant 2 Satisfied?

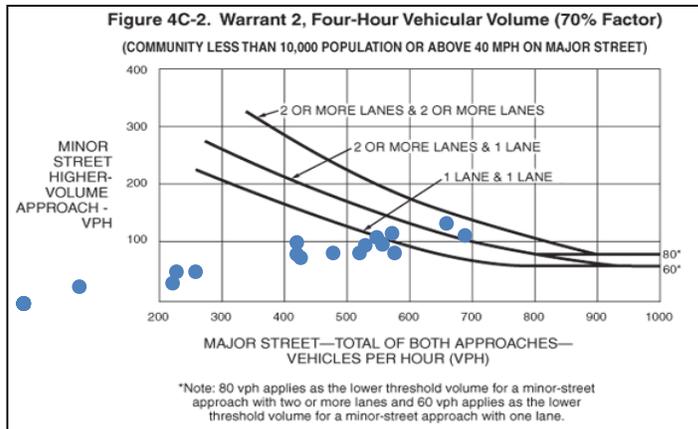
Yes

Warrant 2: Four-Hour Vehicular Volume

General Information

Agency/Company: Sanderson Stewart
 Date: 7/22/2020
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Design Year (2025) 50% SB RT's

Hour Begin	Avg. Entering Volume				Major Street Total (Both Approaches)	Higher Volume Minor Approach
	NB	SB	EB	WB		
0:00	0	0	0	0	0	0
1:00	0	0	0	0	0	0
2:00	0	0	0	0	0	0
3:00	0	0	0	0	0	0
4:00	0	0	0	0	0	0
5:00	0	29	57	30	87	29
6:00	0	55	193	76	269	55
7:00	0	87	406	174	580	87
8:00	0	87	365	160	525	87
9:00	0	79	291	142	433	79
10:00	0	85	277	150	427	85
11:00	0	105	284	143	427	105
12:00	0	114	346	206	552	114
13:00	0	102	344	217	561	102
14:00	0	100	328	206	534	100
15:00	0	121	342	234	576	121
16:00	0	138	393	268	661	138
17:00	0	117	377	313	690	117
18:00	0	87	291	193	484	87
19:00	0	55	143	96	239	55
20:00	0	35	143	90	233	35
21:00	0	0	0	0	0	0
22:00	0	0	0	0	0	0
23:00	0	0	0	0	0	0
TOTAL	0	1396	4580	2698	7278	1396



Meets warrant criteria on graph for minimum of 4 hours (100% thresholds)?

Yes (4 hrs)

Warrant 2 Satisfied?

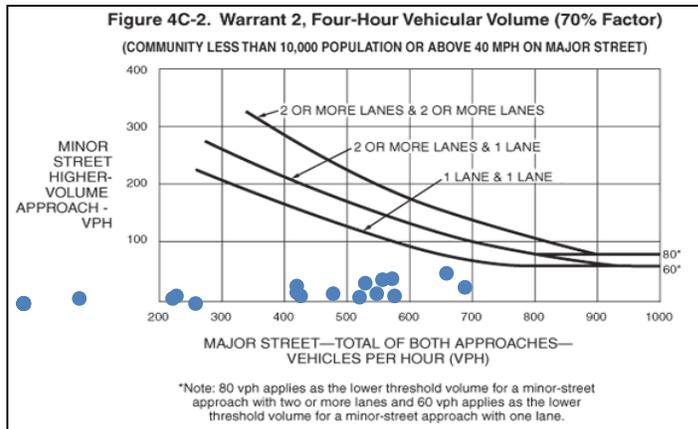
Yes

Warrant 2: Four-Hour Vehicular Volume

General Information

Agency/Company: Sanderson Stewart
 Date: 7/22/2020
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Design Year (2025) 0% SB RT's

Hour Begin	Avg. Entering Volume				Major Street Total (Both Approaches)	Higher Volume Minor Approach
	NB	SB	EB	WB		
0:00	0	0	0	0	0	0
1:00	0	0	0	0	0	0
2:00	0	0	0	0	0	0
3:00	0	0	0	0	0	0
4:00	0	0	0	0	0	0
5:00	0	9	57	30	87	9
6:00	0	0	193	76	269	0
7:00	0	13	406	174	580	13
8:00	0	11	365	160	525	11
9:00	0	13	291	142	433	13
10:00	0	30	277	150	427	30
11:00	0	19	284	143	427	19
12:00	0	17	346	206	552	17
13:00	0	41	344	217	561	41
14:00	0	35	328	206	534	35
15:00	0	43	342	234	576	43
16:00	0	52	393	268	661	52
17:00	0	28	377	313	690	28
18:00	0	17	291	193	484	17
19:00	0	13	143	96	239	13
20:00	0	9	143	90	233	9
21:00	0	0	0	0	0	0
22:00	0	0	0	0	0	0
23:00	0	0	0	0	0	0
TOTAL	0	350	4580	2698	7278	350



Meets warrant criteria on graph for minimum of 4 hours (100% thresholds)?
Warrant 2 Satisfied?

No (0 hrs)
No

Warrant 3: Peak Hour

General Information

Agency/Company: Sanderson Stewart
 Date: 11/13/2019
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Existing (2019)

AM Peak Hour 7:30-8:30 AM

High Minor Total Stopped Time Delay (hrs)	0.38
Total Volume of Major Approaches (vehs)	498
High Minor Approach Volume (vehs)	123
Total Entering Volume (vehs)	621

PM Peak Hour 4:30-5:30 PM

High Minor Total Stopped Time Delay (hrs)	0.60
Total Volume of Major Approaches (vehs)	562
High Minor Approach Volume (vehs)	170
Total Entering Volume (vehs)	732

Category A: Peak Period: PM

Total stopped time delay for minor approach > 4 veh-hrs? **No (0.60)**

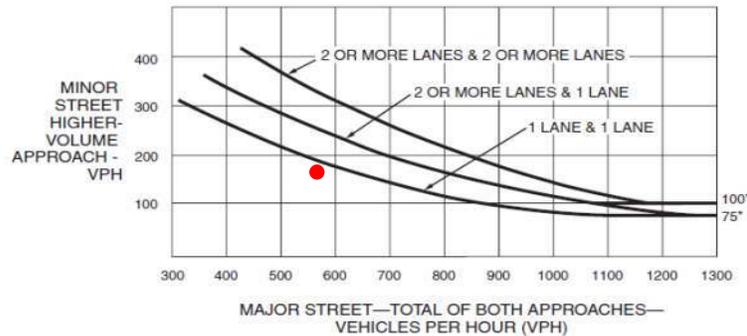
High minor approach volume > 100 for peak hour? **Yes (170)**

Total entering volume > 800 for peak hour? **No (732)**

Category A warrant satisfied? **No**

Category B:

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Meets warrant criteria on graph for minimum of one hour (100% thresholds)? **No**

Warrant 3 Satisfied? **No**

Warrant 3: Peak Hour

General Information

Agency/Company: Sanderson Stewart
 Date: 11/13/2019
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Existing (2019) 50% SB RTs

AM Peak Hour 7:30-8:30 AM

High Minor Total Stopped Time Delay (hrs)	0.20
Total Volume of Major Approaches (vehs)	498
High Minor Approach Volume (vehs)	65
Total Entering Volume (vehs)	563

PM Peak Hour 4:30-5:30 PM

High Minor Total Stopped Time Delay (hrs)	0.34
Total Volume of Major Approaches (vehs)	562
High Minor Approach Volume (vehs)	97
Total Entering Volume (vehs)	659

Category A: Peak Period: PM

Total stopped time delay for minor approach > 4 veh-hrs? **No (0.34)**

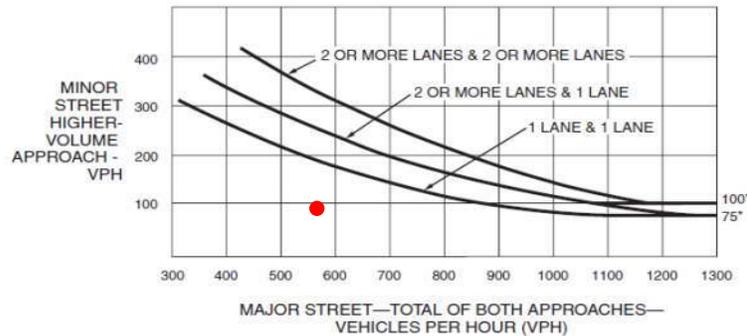
High minor approach volume > 100 for peak hour? **No (97)**

Total entering volume > 800 for peak hour? **No (659)**

Category A warrant satisfied? **No**

Category B:

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Meets warrant criteria on graph for minimum of one hour (100% thresholds)? **No**

Warrant 3 Satisfied? **No**

Warrant 3: Peak Hour

General Information

Agency/Company: Sanderson Stewart
 Date: 11/13/2019
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Existing (2019) 0% SB RTs

AM Peak Hour 7:30-8:30 AM

High Minor Total Stopped Time Delay (hrs)	0.03
Total Volume of Major Approaches (vehs)	498
High Minor Approach Volume (vehs)	6
Total Entering Volume (vehs)	504

PM Peak Hour 4:30-5:30 PM

High Minor Total Stopped Time Delay (hrs)	0.12
Total Volume of Major Approaches (vehs)	562
High Minor Approach Volume (vehs)	24
Total Entering Volume (vehs)	586

Category A: Peak Period: PM

Total stopped time delay for minor approach > 4 veh-hrs? No (0.12)

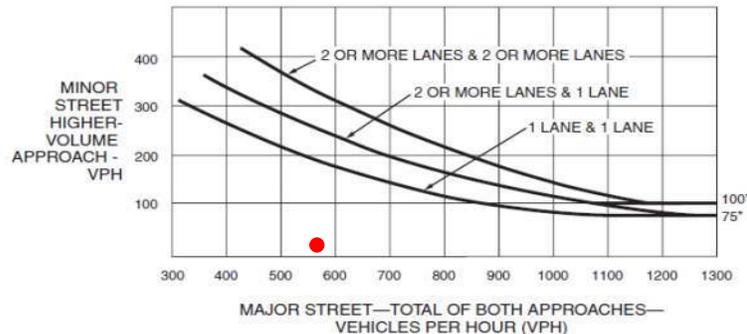
High minor approach volume > 100 for peak hour? No (24)

Total entering volume > 800 for peak hour? No (586)

Category A warrant satisfied? No

Category B:

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Meets warrant criteria on graph for minimum of one hour (100% thresholds)? No

Warrant 3 Satisfied? No

Warrant 3: Peak Hour

General Information

Agency/Company: Sanderson Stewart
 Date: 7/22/2020
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Design Year (2025)

AM Peak Hour 7:30-8:30 AM

High Minor Total Stopped Time Delay (hrs)	0.68
Total Volume of Major Approaches (vehs)	625
High Minor Approach Volume (vehs)	191
Total Entering Volume (vehs)	816

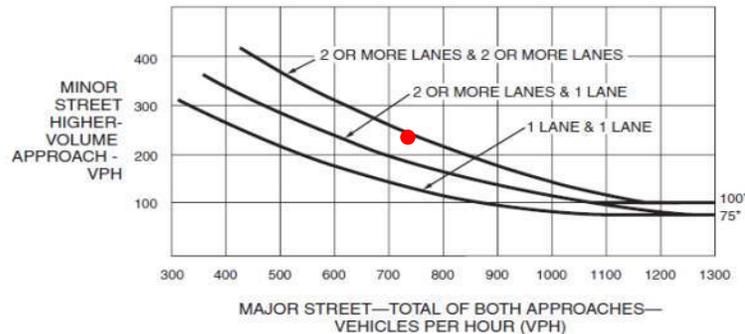
PM Peak Hour 4:30-5:30 PM

High Minor Total Stopped Time Delay (hrs)	1.27
Total Volume of Major Approaches (vehs)	735
High Minor Approach Volume (vehs)	235
Total Entering Volume (vehs)	970

Category A: Peak Period: PM
 Total stopped time delay for minor approach > 4 veh-hrs? No (1.27)
 High minor approach volume > 100 for peak hour? Yes (235)
 Total entering volume > 800 for peak hour? Yes (970)
 Category A warrant satisfied? No

Category B:

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Meets warrant criteria on graph for minimum of one hour (100% thresholds)? Yes

Warrant 3 Satisfied? Yes

Warrant 3: Peak Hour

General Information

Agency/Company: Sanderson Stewart
 Date: 7/22/2020
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Design Year (2025) 50% SB RTs

AM Peak Hour 7:30-8:30 AM

High Minor Total Stopped Time Delay (hrs)	0.38
Total Volume of Major Approaches (vehs)	625
High Minor Approach Volume (vehs)	108
Total Entering Volume (vehs)	733

PM Peak Hour 4:30-5:30 PM

High Minor Total Stopped Time Delay (hrs)	0.70
Total Volume of Major Approaches (vehs)	735
High Minor Approach Volume (vehs)	138
Total Entering Volume (vehs)	873

Category A: Peak Period: PM

Total stopped time delay for minor approach > 4 veh-hrs? **No (0.70)**

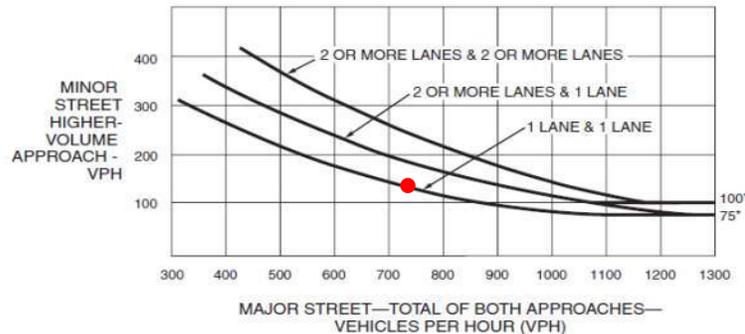
High minor approach volume > 100 for peak hour? **Yes (138)**

Total entering volume > 800 for peak hour? **Yes (873)**

Category A warrant satisfied? **No**

Category B:

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Meets warrant criteria on graph for minimum of one hour (100% thresholds)? **Yes**

Warrant 3 Satisfied? **Yes**

Warrant 3: Peak Hour

General Information

Agency/Company: Sanderson Stewart
 Date: 7/22/2020
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Design Year (2025) 0% SB RTs

AM Peak Hour 7:30-8:30 AM

High Minor Total Stopped Time Delay (hrs)	0.13
Total Volume of Major Approaches (vehs)	625
High Minor Approach Volume (vehs)	24
Total Entering Volume (vehs)	649

PM Peak Hour 4:30-5:30 PM

High Minor Total Stopped Time Delay (hrs)	0.30
Total Volume of Major Approaches (vehs)	735
High Minor Approach Volume (vehs)	41
Total Entering Volume (vehs)	776

Category A: Peak Period: PM

Total stopped time delay for minor approach > 4 veh-hrs? No (0.30)

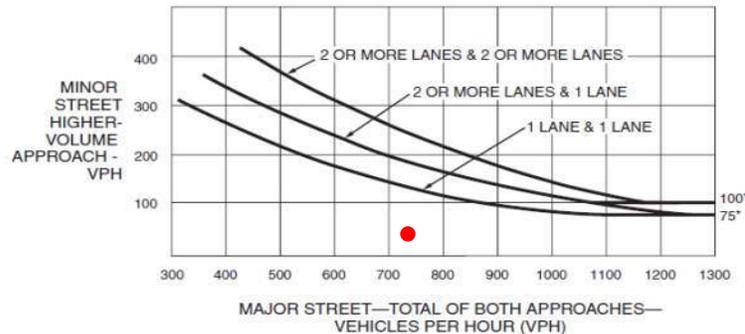
High minor approach volume > 100 for peak hour? No (41)

Total entering volume > 800 for peak hour? No (776)

Category A warrant satisfied? No

Category B:

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Meets warrant criteria on graph for minimum of one hour (100% thresholds)? No

Warrant 3 Satisfied? No

General Information

Agency/Company:	Sanderson Stewart
Date:	11/13/2019
Project Number:	19076
Project Description:	Meadowlark Ranch Subdivision
Jurisdiction:	City of Belgrade/Gallatin County/MDT
Major Street Speed Limit:	50 mph
Major Street (Approach Lanes):	I-90 Frontage Road (1 lane)
Minor Street (Approach Lanes):	Airport Road (1 lane)
Analysis Year/Case:	Existing (2019)

Warrant 5: School Crossing

This warrant is intended for application where the fact that school children (elementary through high school students) cross the major street is the principle reason to consider installing a traffic signal. This warrant shall not be applied at locations where the distance to the nearest traffic control signal along the major street is less than 300 feet, unless it can be shown that the proposed traffic signal would not restrict the progressive movement of traffic.

Is the number of adequate gaps in the major crossing traffic stream during the primary crossing period less than the number of minutes in that crossing period? **N/A**

Do 20 or more students cross at this location during the highest crossing hour? **N/A**

Warrant 5 Satisfied? N/A

Warrant 6: Coordinated Signal System

This warrant is intended for application where installation of a traffic signal would help to provide proper platooning of vehicles and therefore provide progressive movement in a coordinated signal system.

Are any adjacent traffic signals located so far away that they do not provide a necessary degree of platooning and/or progressive operation? **No**

Warrant 6 Satisfied? No

Warrant 7: Crash Experience

This warrant is intended for application where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal

Have adequate trials of alternatives failed to reduce the crash frequency? **N/A**

Have 5 or more crashes, of types susceptible to correction by a signal, occurred within a 12-month period? **No**

Is Condition A criterion met for 56% columns of Warrant 1 met? **Yes**

Is Condition B criterion met for 56% columns of Warrant 1 met? **No**

Are observed pedestrian volumes equal to or greater than 80% of what is required for Warrant 4? **No**

Warrant 7 Satisfied? No

General Information

Agency/Company:	Sanderson Stewart
Date:	7/22/2020
Project Number:	19076
Project Description:	Meadowlark Ranch Subdivision
Jurisdiction:	City of Belgrade/Gallatin County/MDT
Major Street Speed Limit:	50 mph
Major Street (Approach Lanes):	I-90 Frontage Road (1 lane)
Minor Street (Approach Lanes):	Airport Road (1 lane)
Analysis Year/Case:	Design Year (2025)

Warrant 5: School Crossing

This warrant is intended for application where the fact that school children (elementary through high school students) cross the major street is the principle reason to consider installing a traffic signal. This warrant shall not be applied at locations where the distance to the nearest traffic control signal along the major street is less than 300 feet, unless it can be shown that the proposed traffic signal would not restrict the progressive movement of traffic.

Is the number of adequate gaps in the major crossing traffic stream during the primary crossing period less than the number of minutes in that crossing period? **N/A**

Do 20 or more students cross at this location during the highest crossing hour? **N/A**

Warrant 5 Satisfied? N/A

Warrant 6: Coordinated Signal System

This warrant is intended for application where installation of a traffic signal would help to provide proper platooning of vehicles and therefore provide progressive movement in a coordinated signal system.

Are any adjacent traffic signals located so far away that they do not provide a necessary degree of platooning and/or progressive operation? **No**

Warrant 6 Satisfied? No

Warrant 7: Crash Experience

This warrant is intended for application where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal

Have adequate trials of alternatives failed to reduce the crash frequency? **N/A**

Have 5 or more crashes, of types susceptible to correction by a signal, occurred within a 12-month period? **No**

Is Condition A criterion met for 80% columns of Warrant 1 met? **Yes**

Is Condition B criterion met for 80% columns of Warrant 1 met? **Yes**

Are observed pedestrian volumes equal to or greater than 80% of what is required for Warrant 4? **No**

Warrant 7 Satisfied? No

General Information

Agency/Company: Sanderson Stewart
 Date: 11/13/2019
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Existing (2019)

Warrant 8: Roadway Network

This warrant is intended for application where installation of a traffic signal could be justified in order to encourage concentration and organization of traffic flow on a roadway network

Do two or more of the intersecting routes at this location have at least one of the following characteristics:

- A. It is part of the street or highway system that serves as the principal roadway network for through traffic flow; or
- B. It includes rural or suburban highways outside, entering, or traversing a City; or
- C. It appears as a major route on an official plan.

Yes

Does this intersection have an existing or immediately projected total entering volume of a least 1000 vehicles during a weekday typical peak hour and have a 5-year projected traffic volume that meets one or more of Warrants 1, 2, and 3 during an average weekday?

No

Does this intersection have an existing or immediately projected total entering volume of at least 1000 vph for each of any 5 hours of a Saturday or Sunday?

N/A

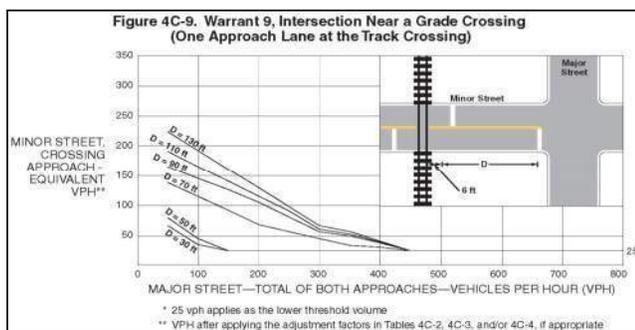
Warrant 8 Satisfied? **No**

Warrant 9: Intersection Near a Grade Crossing

This warrant is intended for application where none of the conditions described in the other eight traffic signal warrants are met, but the proximity to the intersection of a grade crossing on an intersection approach controlled by a STOP or YIELD sign is the principal reason to consider installing a traffic signal.

Does a grade crossing exist on an approach controlled by a STOP or YIELD sign whereby the center of the track nearest to the intersection is within 140 feet of the stop or yield line?

No



During the highest traffic volume hour during which the rail traffic uses the crossing, does the plotted point representing vehicles per hour on the major street and the corresponding vehicles per hour on the minor-street approach that crosses the track fall above the applicable curve in Figure 4C-9 or 4C-10 (whichever is applicable) for the existing combination of approach lanes over the track and the distance D, which is the clear storage distance?

N/A

Warrant 9 Satisfied? **N/A**

General Information

Agency/Company: Sanderson Stewart
 Date: 7/22/2020
 Project Number: 19076
 Project Description: Meadowlark Ranch Subdivision
 Jurisdiction: City of Belgrade/Gallatin County/MDT
 Major Street Speed Limit: 50 mph
 Major Street (Approach Lanes): I-90 Frontage Road (1 lane)
 Minor Street (Approach Lanes): Airport Road (1 lane)
 Analysis Year/Case: Design Year (2025)

Warrant 8: Roadway Network

This warrant is intended for application where installation of a traffic signal could be justified in order to encourage concentration and organization of traffic flow on a roadway network

Do two or more of the intersecting routes at this location have at least one of the following characteristics:

- A. It is part of the street or highway system that serves as the principal roadway network for through traffic flow; or
- B. It includes rural or suburban highways outside, entering, or traversing a City; or
- C. It appears as a major route on an official plan.

Yes

Does this intersection have an existing or immediately projected total entering volume of a least 1000 vehicles during a weekday typical peak hour and have a 5-year projected traffic volume that meets one or more of Warrants 1, 2, and 3 during an average weekday?

No

Does this intersection have an existing or immediately projected total entering volume of at least 1000 vph for each of any 5 hours of a Saturday or Sunday?

N/A

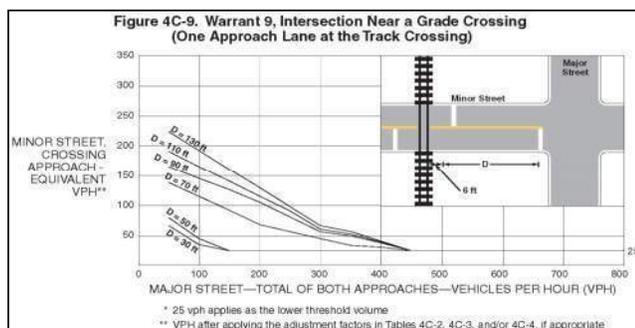
Warrant 8 Satisfied? **No**

Warrant 9: Intersection Near a Grade Crossing

This warrant is intended for application where none of the conditions described in the other eight traffic signal warrants are met, but the proximity to the intersection of a grade crossing on an intersection approach controlled by a STOP or YIELD sign is the principal reason to consider installing a traffic signal.

Does a grade crossing exist on an approach controlled by a STOP or YIELD sign whereby the center of the track nearest to the intersection is within 140 feet of the stop or yield line?

No



During the highest traffic volume hour during which the rail traffic uses the crossing, does the plotted point representing vehicles per hour on the major street and the corresponding vehicles per hour on the minor-street approach that crosses the track fall above the applicable curve in Figure 4C-9 or 4C-10 (whichever is applicable) for the existing combination of approach lanes over the track and the distance D, which is the clear storage distance?

N/A

Warrant 9 Satisfied? **N/A**

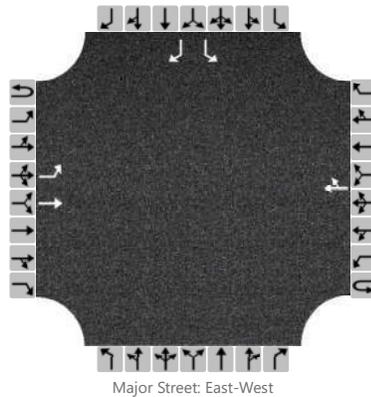
**CAPACITY CALCULATIONS –
IMPROVED**

APPENDIX E

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	I-90 Frontage & Airport
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/22/2020	East/West Street	I-90 Frontage Road
Analysis Year	2025	North/South Street	Airport Road
Time Analyzed	AM Peak Future Turn Lanes	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	T					TR						L		R
Volume, V (veh/h)		172	254				176	23						24		167
Percent Heavy Vehicles (%)		2												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.53		3.33

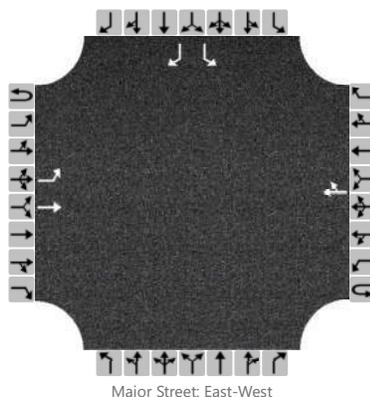
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		187												26		182
Capacity, c (veh/h)		1353												282		834
v/c Ratio		0.14												0.09		0.22
95% Queue Length, Q ₉₅ (veh)		0.5												0.3		0.8
Control Delay (s/veh)		8.1												19.0		10.5
Level of Service, LOS		A												C		B
Approach Delay (s/veh)	3.3												11.6			
Approach LOS													B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	I-90 Frontage & Airport
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/22/2020	East/West Street	I-90 Frontage Road
Analysis Year	2025	North/South Street	Airport Road
Time Analyzed	PM Peak Future Turn Lanes	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6	7	8	9		10	11	12	
Priority																
Number of Lanes	0	1	1	0	0	0	1	0	0	0	0		1	0	1	
Configuration		L	T					TR						L		R
Volume, V (veh/h)		214	208				285	28						41		194
Percent Heavy Vehicles (%)		2												0		4
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.40		6.24
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.50		3.34

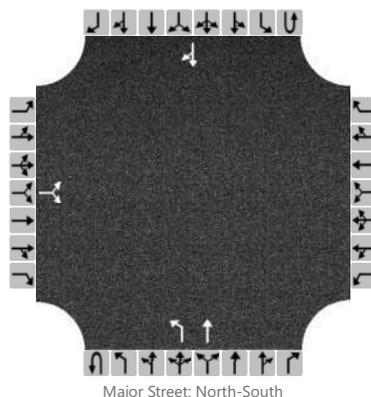
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		233												45		211
Capacity, c (veh/h)		1218												215		711
v/c Ratio		0.19												0.21		0.30
95% Queue Length, Q ₉₅ (veh)		0.7												0.8		1.3
Control Delay (s/veh)		8.7												26.2		12.2
Level of Service, LOS		A												D		B
Approach Delay (s/veh)	4.4												14.7			
Approach LOS													B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Airport Road & Tubb Road
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/22/2020	East/West Street	Tubb Road
Analysis Year	2025	North/South Street	Airport Road
Time Analyzed	AM Peak Future Turn Lanes	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound					
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		
Movement																		
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6		
Number of Lanes		0	1	0		0	0	0		0	1	1	0		0	0	1	0
Configuration			LR							L	T						TR	
Volume, V (veh/h)		22		216						82	65					85	12	
Percent Heavy Vehicles (%)		4		2						4								
Proportion Time Blocked																		
Percent Grade (%)	0																	
Right Turn Channelized	No				No				No				No					
Median Type/Storage	Undivided																	

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1							
Critical Headway (sec)		6.44		6.22						4.14							
Base Follow-Up Headway (sec)		3.5		3.3						2.2							
Follow-Up Headway (sec)		3.54		3.32						2.24							

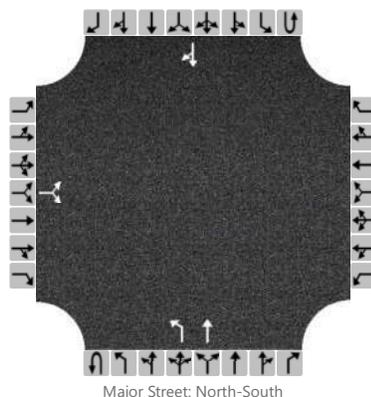
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			259														
Capacity, c (veh/h)			909														
v/c Ratio			0.29														
95% Queue Length, Q ₉₅ (veh)			1.2														
Control Delay (s/veh)			10.5														
Level of Service, LOS			B														
Approach Delay (s/veh)	10.5								4.2								
Approach LOS	B																

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	Audrey Stoltzfus			Intersection	Airport Road & Tubb Road		
Agency/Co.	Sanderson Stewart			Jurisdiction	Belgrade/Gallatin/MDT		
Date Performed	7/22/2020			East/West Street	Tubb Road		
Analysis Year	2025			North/South Street	Airport Road		
Time Analyzed	PM Peak Future Turn Lanes			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	1.00		
Project Description	Meadowlark Ranch						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound					
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		
Movement																		
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6		
Number of Lanes		0	1	0		0	0	0		0	1	1	0		0	0	1	0
Configuration			LR							L	T						TR	
Volume, V (veh/h)		14		154						205	71					59	28	
Percent Heavy Vehicles (%)		0		1						1								
Proportion Time Blocked																		
Percent Grade (%)	0																	
Right Turn Channelized	No				No				No				No					
Median Type/Storage	Undivided																	

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1							
Critical Headway (sec)		6.40		6.21						4.11							
Base Follow-Up Headway (sec)		3.5		3.3						2.2							
Follow-Up Headway (sec)		3.50		3.31						2.21							

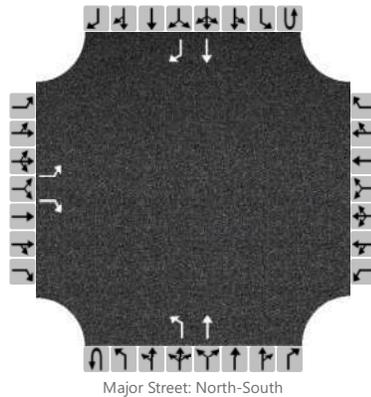
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			182									223					
Capacity, c (veh/h)			877									1506					
v/c Ratio			0.21									0.15					
95% Queue Length, Q ₉₅ (veh)			0.8									0.5					
Control Delay (s/veh)			10.2									7.8					
Level of Service, LOS			B									A					
Approach Delay (s/veh)	10.2								5.8								
Approach LOS	B																

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Dry Creek & Cruiser
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/22/2020	East/West Street	Cruiser Lane
Analysis Year	2025	North/South Street	Dry Creek Road
Time Analyzed	AM Peak Future Turn Lanes	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0		1	1	0		0	1	1
Configuration		L		R						L	T				T	R
Volume, V (veh/h)		43		214						102	81				258	114
Percent Heavy Vehicles (%)		7		1						4						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.47		6.21						4.14						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.56		3.31						2.24						

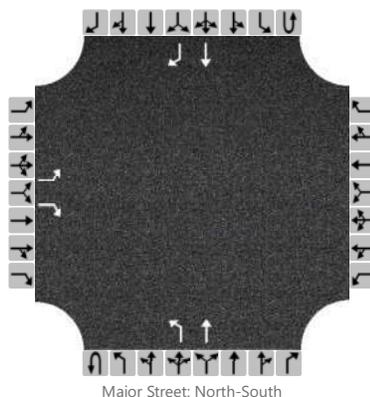
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		47		233						111						
Capacity, c (veh/h)		417		761						1142						
v/c Ratio		0.11		0.31						0.10						
95% Queue Length, Q ₉₅ (veh)		0.4		1.3						0.3						
Control Delay (s/veh)		14.7		11.8						8.5						
Level of Service, LOS		B		B						A						
Approach Delay (s/veh)	12.3								4.7							
Approach LOS	B															

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Dry Creek & Cruiser
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/22/2020	East/West Street	Cruiser Lane
Analysis Year	2025	North/South Street	Dry Creek Road
Time Analyzed	PM Peak Future Turn Lanes	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		1	0	1		0	0	0		0	1	1	0		0	0	1
Configuration		L		R						L	T				T	R	
Volume, V (veh/h)		91		109						245	242				120	64	
Percent Heavy Vehicles (%)		1		0						1							
Proportion Time Blocked																	
Percent Grade (%)	0																
Right Turn Channelized	No				No				No				No				
Median Type/Storage	Undivided																

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.41		6.20						4.11						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.51		3.30						2.21						

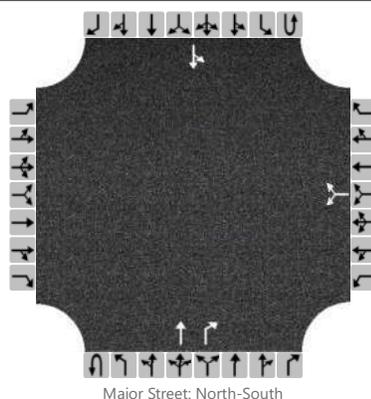
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		99		118						266						
Capacity, c (veh/h)		242		925						1378						
v/c Ratio		0.41		0.13						0.19						
95% Queue Length, Q ₉₅ (veh)		2.0		0.4						0.7						
Control Delay (s/veh)		30.1		9.5						8.2						
Level of Service, LOS		D		A						A						
Approach Delay (s/veh)	18.9								4.1							
Approach LOS	C															

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Dry Creek & Penwell
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/22/2020	East/West Street	Penwell Bridge Road
Analysis Year	2025	North/South Street	Dry Creek Road
Time Analyzed	AM Peak Future Turn Lanes	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	1	0	0	1	0
Configuration							LR				T	R		LT		
Volume, V (veh/h)						214		6			54	62		1	152	
Percent Heavy Vehicles (%)						2		0						0		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.20						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.30						2.20		

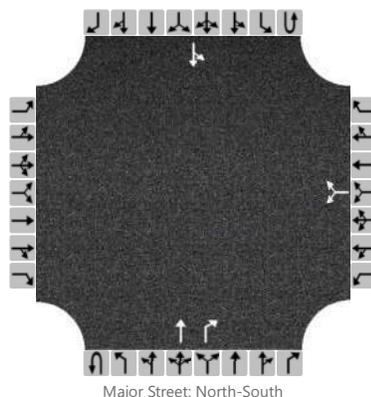
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						240								1		
Capacity, c (veh/h)						767								1473		
v/c Ratio						0.31								0.00		
95% Queue Length, Q ₉₅ (veh)						1.4								0.0		
Control Delay (s/veh)						11.8								7.4		
Level of Service, LOS						B								A		
Approach Delay (s/veh)					11.8								0.1			
Approach LOS					B											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Audrey Stoltzfus	Intersection	Dry Creek & Penwell
Agency/Co.	Sanderson Stewart	Jurisdiction	Belgrade/Gallatin/MDT
Date Performed	7/22/2020	East/West Street	Penwell Bridge Road
Analysis Year	2025	North/South Street	Dry Creek Road
Time Analyzed	PM Peak Future Turn Lanes	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Meadowlark Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		0	1	0	0	0	1	1	0	0	1	0	
Configuration							LR				T	R		LT			
Volume, V (veh/h)						91		11			152	172		8	71		
Percent Heavy Vehicles (%)						1		0						13			
Proportion Time Blocked																	
Percent Grade (%)					0												
Right Turn Channelized	No				No				No				No				
Median Type/Storage	Undivided																

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2								4.1	
Critical Headway (sec)						6.41		6.20								4.23	
Base Follow-Up Headway (sec)						3.5		3.3								2.2	
Follow-Up Headway (sec)						3.51		3.30								2.32	

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						111										9	
Capacity, c (veh/h)						740										1147	
v/c Ratio						0.15										0.01	
95% Queue Length, Q ₉₅ (veh)						0.5										0.0	
Control Delay (s/veh)						10.7										8.2	
Level of Service, LOS						B										A	
Approach Delay (s/veh)					10.7								0.9				
Approach LOS					B												

FINANCIAL CONTRIBUTION CALCULATIONS

APPENDIX F

Intersection: Frontage Road & Airport Road

Approach		AM Peak		PM Peak		Number of Lanes
		Mvmt Vol.	Lane Vol.	Mvmt Vol.	Lane Vol.	
NB	T		0		0	1
	L		0		0	1
SB	T		0		0	1
	L	17	17	11	11	1
EB	T	0	0	0	0	1
	L	7	7	25	25	1
WB	T	0	0	0	0	1
	L		0		0	1
Critical Lane Sum Increase:			24		36	
Critical Lane Sum:			1140		1140	
Peak Hour %:			2.11%		3.16%	
Highest %:					3.16%	

<--- 1200 for 4-leg intersection,
1140 for 3-leg intersection

Intersection: Airport Road & Tubb Road

Approach		AM Peak		PM Peak		Number of Lanes
		Mvmt Vol.	Lane Vol.	Mvmt Vol.	Lane Vol.	
NB	T	0	0	0	0	1
	L	13	13	44	44	1
SB	T	0	0	0	0	1
	L		0		0	1
EB	T		0		0	1
	L	2	2	2	2	1
WB	T		0		0	1
	L		0		0	1
Critical Lane Sum Increase:		15		46		
Critical Lane Sum:		1140		1140		
Peak Hour %:		1.32%		4.04%		
Highest %:				4.04%		

<--- 1200 for 4-leg intersection,
1140 for 3-leg intersection

Intersection: Dry Creek Road & Cruiser Lane

Approach		AM Peak		PM Peak		Number of Lanes
		Mvmt Vol.	Lane Vol.	Mvmt Vol.	Lane Vol.	
NB	T	1	1	5	5	1
	L	0	0	0	0	1
SB	T	4	4	3	3	1
	L		0		0	1
EB	T		0		0	1
	L	1	1	2	2	1
WB	T		0		0	1
	L		0		0	1
Critical Lane Sum Increase:		5		7		
Critical Lane Sum:		1140		1140		
Peak Hour %:		0.44%		0.61%		
Highest %:		0.61%				

<--- 1200 for 4-leg intersection,
1140 for 3-leg intersection

Intersection: Dry Creek Road & Penwell Bridge Road

Approach		AM Peak		PM Peak		Number of Lanes
		Mvmt Vol.	Lane Vol.	Mvmt Vol.	Lane Vol.	
NB	T	0	0	0	0	1
	L		0		0	1
SB	T	0	0	0	0	1
	L	0	0	1	1	1
EB	T		0		0	1
	L		0		0	1
WB	T		0		0	1
	L	5	5	4	4	1
Critical Lane Sum Increase:		5		5		
Critical Lane Sum:		1140		1140		
Peak Hour %:		0.44%		0.44%		
Highest %:		0.44%				

<--- 1200 for 4-leg intersection,
1140 for 3-leg intersection

Intersection: Penwell Bridge Road & Powers Boulevard

Approach		AM Peak		PM Peak		Number of Lanes
		Mvmt Vol.	Lane Vol.	Mvmt Vol.	Lane Vol.	
NB	T		0		0	1
	L	5	5	4	4	1
SB	T		0		0	1
	L		0		0	1
EB	T	0	0	0	0	1
	L		0		0	1
WB	T	0	0	0	0	1
	L	0	0	0	0	1
Critical Lane Sum Increase:		5		4		
Critical Lane Sum:		1140		1140		
Peak Hour %:		0.44%		0.35%		
Highest %:		0.44%				

<--- 1200 for 4-leg intersection,
1140 for 3-leg intersection

Intersection: E Baseline Road & Tubb Road

Approach		AM Peak		PM Peak		Number of Lanes
		Mvmt Vol.	Lane Vol.	Mvmt Vol.	Lane Vol.	
NB	T		0		0	1
	L	0	0	0	0	1
SB	T		0		0	1
	L		0		0	1
EB	T	0	0	1	1	1
	L		0		0	1
WB	T	1	1	0	0	1
	L	42	42	28	28	1
Critical Lane Sum Increase:		42		29		
Critical Lane Sum:		1140		1140		
Peak Hour %:		3.68%		2.54%		
Highest %:		3.68%				

<--- 1200 for 4-leg intersection,
1140 for 3-leg intersection

Intersection: E Baseline Road & Melissa Way

Approach		AM Peak		PM Peak		Number of Lanes
		Mvmt Vol.	Lane Vol.	Mvmt Vol.	Lane Vol.	
NB	T		0		0	1
	L		0		0	1
SB	T		0		0	1
	L	0	0	0	0	1
EB	T	0	0	0	0	1
	L	14	14	48	48	1
WB	T	0	0	0	0	1
	L		0		0	1
Critical Lane Sum Increase:			14		48	
Critical Lane Sum:			1140		1140	
Peak Hour %:			1.23%		4.21%	
Highest %:			4.21%			

<--- 1200 for 4-leg intersection,
1140 for 3-leg intersection

ENDURING
COMMUNITY
DESIGN

SANDERSONSTEWART.COM

SANDERSON STEWART



...and we're just getting started



GALLATIN COUNTY Certification of Property Owners List

I, Chad Schreiner, applicant for the attached proposal, hereby certify that:

- To the best of my knowledge, the attached list shows all property owners and purchasers under contract for property:
 - According to the notice requirements of the applicable zoning regulation.
- The names on the list are from the Gallatin County Clerk and Recorder's most recent records.
- The addresses on the list are from Montana Departments of Revenue's most recent tax records, available on the internet at <http://svc.mt.gov/msl/mtcadastral>.
- I understand that an inaccurate list may delay review of the project.

A handwritten signature in black ink, appearing to read "Chad Schreiner", written over a horizontal line.

Signature

07/30/2020

Date

	Legal Description Adjacent Property Owners List	Owner	Mailing Address	City	State	ZIP
1	S31, T01 N, R05 E, COS 2495, TRACT 1A	KT RANCH LLC	3800 N LAKE SHORE DR	CHICAGO	IL	60613-3301
2	S32, T01 N, R05 E, COS 2582C, TRACT 1A	BENJAMIN C PIERCE & UNDIV 79.09% INT	1029 N TWO WATERS WAY	BELGRADE	MT	59714-7707
3	SO5, T01 S, R05 E, COS 2582A, TRACT 2	DAVIG EDWARD A & KATHY C TRUSTEES	1734 E BASELINE RD	BELGRADE	MT	59714-8518
4	MEADOWLARK RANCH SUB 2ND FILING, PARK AREAS PLAT J-586	MEADOWLARK RANCH RESIDENTIAL OWNERS ASSOICATION INC.	175 N 27TH ST STE 900	BILLINGS	MT	59101-2065
5	MEADOWLARK RANCH SUB 1ST FILING, S31, T01 N, R05 E, ACRES 4.992, COMMON AREAS PLAT J-490	MEADOWLARK RANCH RESIDENTIAL OWNERS ASSOICATION INC.	175 N 27TH ST STE 900	BILLINGS	MT	59101-2065
6	MEADOWLARK RANCH SUB 4TH FILING, S31, T01 N, R05 E, COMMON AREAS PLAT J-641	MEADOWLARK RANCH RESIDENTIAL OWNERS ASSOICATION INC.	175 N 27TH ST STE 900	BILLINGS	MT	59101-2065
7	MEADOWLARK RANCH SUB 4TH FILING, BLOCK 3, LOT 92 PLAT J-641	ANDERSON TIMOTHY R & CAROLYN J	1100 FALCON RIDGE BLVD	BELGRADE	MT	59714
8	MEADOWLARK RANCH SUB 4TH FILING, BLOCK 3, LOT 93 PLAT J-641	TIKKANEN ANNE & JOHN	1102 FALCON RIDGE BLVD	BELGRADE	MT	59714
9	MEADOWLARK RANCH SUB 4TH FILING, BLOCK 3, LOT 94 PLAT J-641	MEADOWLARK RANCH INC	175 N 27TH ST STE 900	BILLINGS	MT	59101-2065
10	MEADOWLARK RANCH SUB 4TH FILING, BLOCK 3, LOT 95 PLAT J-641	MEADOWLARK RANCH INC	175 N 27TH ST STE 900	BILLINGS	MT	59101-2065
11	MEADOWLARK RANCH SUB 4TH FILING, BLOCK 7, LOT 13 PLAT J-641	EICKERT DOMINIC & SARAH	1105 FALCON RIDGE BLVD	BELGRADE	MT	59714
12	MEADOWLARK RANCH SUB 4TH FILING, BLOCK 7, LOT 9 PLAT J-641	MARTIN AMY L	1007 FALCON RIDGE BLVD	BELGRADE	MT	59714
13	MEADOWLARK RANCH SUB 4TH FILING, BLOCK 7, LOT 8 PLAT J-641	RUSSELL BRADLEY K &	1005 FALCON RIDGE BLVD	BELGRADE	MT	59714
14	MEADOWLARK RANCH SUB 4TH FILING, BLOCK 7, LOT 7 PLAT J-641	NORINE JON	1003 FALCON RIDGE BLVD	BELGRADE	MT	59714
15	MEADOWLARK RANCH SUB 4TH FILING, BLOCK 7, LOT 6 PLAT J-641	ROSEEN KAY H & ROBERT E	1001 FALCON RIDGE BLVD	BELGRADE	MT	59714
16	MEADOWLARK RANCH SUB 4TH FILING, BLOCK 7, LOT 5 PLAT J-641	SAMUEL G WOODSON	2100 ORIOLE DRIVE	BELGRADE	MT	59714
17	MEADOWLARK RANCH SUB 4TH FILING, BLOCK 7, LOT 4 PLAT J-641	KAMMERAAD JAKOB DARBY	2102 ORIOLE DRIVE	BELGRADE	MT	59714
18	MEADOWLARK RANCH SUB 4TH FILING, BLOCK 7, LOT 3 PLAT J-641	CHAD BREZNAY	2104 ORIOLE DRIVE	BELGRADE	MT	59714
19	MEADOWLARK RANCH SUB 4TH FILING, BLOCK 6, LOT 6 PLAT J-641	TYREE BRIAN &	2105 ORIOLE DRIVE	BELGRADE	MT	59714-5001

KT RANCH LLC
3800 N LAKE SHORE DR
CHICAGO, IL 60613-3301

BENJAMIN C PIERCE & UNDIV 79.09% INT
1029 N TWO WATERS WAY
BELGRADE, MT 59714-7707

DAVIG EDWARD A & KATHY C TRUSTEES
1734 E BASELINE RD
BELGRADE, MT 59714-8518

ANDERSON TIMOTHY R & CAROLYN J
1100 FALCON RIDGE BLVD
BELGRADE, MT 59714

TIKKANEN ANNE & JOHN
1102 FALCON RIDGE BLVD
BELGRADE, MT 59714

EICKERT DOMINIC & SARAH
1105 FALCON RIDGE BLVD
BELGRADE, MT 59714

MARTIN AMY L
1007 FALCON RIDGE BLVD
BELGRADE, MT 59714

RUSSELL BRADLEY K &
1005 FALCON RIDGE BLVD
BELGRADE, MT 59714

NORINE JON
1003 FALCON RIDGE BLVD
BELGRADE, MT 59714

ROSEEN KAY H & ROBERT E
1001 FALCON RIDGE BLVD
BELGRADE, MT 59714

MEADOWLARK RANCH INC
175 N 27TH ST STE 900
BILLINGS, MT 59101-2065

MEADOWLARK RANCH INC
175 N 27TH ST STE 900
BILLINGS, MT 59101-2065

MEADOWLARK RANCH RESIDENTIAL
OWNERS ASSOCIATION
175 N 27TH ST STE 900
BILLINGS, MT 59101-2065

MEADOWLARK RANCH RESIDENTIAL
OWNERS ASSOCIATION
175 N 27TH ST STE 900
BILLINGS, MT 59101-2065

TYREE BRIAN &
2015 ORIOLE DRIVE
BELGRADE, MT 59714-5001

SAMUEL G WOODSON
2100 ORIOLE DRIVE
BELGRADE, MT 59714

KAMMERAAD JAKOB DARBY
2102 ORIOLE DRIVE
BELGRADE, MT 59714

CHAD BREZNAY
2104 ORIOLE DRIVE
BELGRADE, MT 59714

MEADOWLARK RANCH RESIDENTIAL
OWNERS ASSOCIATION INC.
175 N 27TH ST STE 900
BILLINGS, MT 59101-2065

November 21, 2019

Mr. Steve Klotz
Public Works Director
City of Belgrade
91 E. Central Avenue
Belgrade, MT 59714

**Reference: MEADOWLARK RANCH SUBDIVISION, PHASE V
PROJECT NO. 19076**

Dear Mr. Klotz:

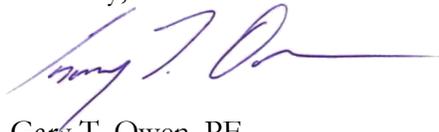
We are soliciting your comments regarding a proposed single-family subdivision within the City of Belgrade. The project would create 147 single family lots, public right-of-way, and open space on a 73.133-acres. These single-family lots would be served by the City of Belgrade water and sanitary sewer systems.

The project is located within the city of Belgrade and will be accessed via Oriole Drive and Melissa Way. It is located on Lot 14, Block 7 of Meadowlark Subdivision, Phase 4, in the E ½ SE ¼ of Section 31 and W ½ SW ¼ of Section 32, T. 1N., R. 5E., P.M.M., in the city of Belgrade, Gallatin County, Montana.

As part of the subdivision application process, we are soliciting comments you may have regarding the proposed subdivision. Should you have any comments or questions, we would appreciate a written response to this letter by December 20, 2019.

If you have and further questions or comments, please do not hesitate to call me at (406) 869-3342 or email at gowen@sandersonstewart.com.

Sincerely,



Gary T. Owen, PE
Senior Engineer/Project Manager

GTO/trt
P:19076_Utility_Agency_Letters

November 21, 2019

Ms. Jana Harmon
Century Link
2825 W. Main Street
Bozeman, MT 59718

**Reference: MEADOWLARK RANCH SUBDIVISION, PHASE V
PROJECT NO. 19076**

Dear Ms. Jana Harmon:

We are soliciting your comments regarding a proposed single-family subdivision within the City of Belgrade. The project would create 147 single family lots, public right-of-way, and open space on a 73.133-acres. These single-family lots would be served by the City of Belgrade water and sanitary sewer systems.

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Sincerely,



Gary T. Owen, PE
Senior Engineer/Project Manager

GTO/trt
P:19076_Utility_Agency_Letters

November 21, 2019

Mr. Matthew Tilstra
Northwestern Energy
121 E. Griffin Drive
Bozeman, MT 59771

**Reference: MEADOWLARK RANCH SUBDIVISION, PHASE V
PROJECT NO. 19076**

Dear Mr. Tilstra:

We are soliciting your comments regarding a proposed single-family subdivision within the City of Belgrade. The project would create 147 single family lots, public right-of-way, and open space on a 73.133-acres. These single-family lots would be served by the City of Belgrade water and sanitary sewer systems.

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If you have and further questions or comments, please do not hesitate to call me at (406) 869-3342 or email at gowen@sandersonstewart.com.

Sincerely,



Gary T. Owen, PE
Senior Engineer/Project Manager

GTO/trt
P:19076_Utility_Agency_Letters

November 21, 2019

Mr. Jared Phillips
Charter Spectrum
201 Evergreen Suite B
Bozeman, MT 59715

**Reference: MEADOWLARK RANCH SUBDIVISION, PHASE V
PROJECT NO. 19076**

Dear Mr. Phillips:

We are soliciting your comments regarding a proposed single-family subdivision within the City of Belgrade. The project would create 147 single family lots, public right-of-way, and open space on a 73.133-acres. These single-family lots would be served by the City of Belgrade water and sanitary sewer systems.

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If you have and further questions or comments, please do not hesitate to call me at (406) 869-3342 or email at gowen@sandersonstewart.com.

Sincerely,



Gary T. Owen, PE
Senior Engineer/Project Manager

GTO/trt
P:19076_Utility_Agency_Letters

November 21, 2019

Mr. Bruce Hennequin
Fire Marshal
Central Valley Fire District
205 E. Main Street
Belgrade, MT 59714

**Reference: MEADOWLARK RANCH SUBDIVISION, PHASE V
PROJECT NO. 19076**

Dear Mr. Hennequin:

We are soliciting your comments regarding a proposed single-family subdivision within the City of Belgrade. The project would create 147 single family lots, public right-of-way, and open space on a 73.133-acres. These single-family lots would be served by the City of Belgrade water and sanitary sewer systems.

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Sincerely,



Gary T. Owen, PE
Senior Engineer/Project Manager

GTO/trt
P:19076_Utility_Agency_Letters

November 21, 2019

Mr. Terrance Gots
Republic Waste Services
8600 Huffine Lane
Bozeman, MT 59718

**Reference: MEADOWLARK RANCH SUBDIVISION, PHASE V
PROJECT NO. 19076**

Dear Mr. Gots:

We are soliciting your comments regarding a proposed single-family subdivision within the City of Belgrade. The project would create 147 single family lots, public right-of-way, and open space on a 73.133-acres. These single-family lots would be served by the City of Belgrade water and sanitary sewer systems.

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If you have and further questions or comments, please do not hesitate to call me at (406) 869-3342 or email at gowen@sandersonstewart.com.

Sincerely,



Gary T. Owen, PE
Senior Engineer/Project Manager

GTO/trt
P:19076_Utility_Agency_Letters

November 21, 2019

Mr. Godfrey Saunders
Superintendent
Belgrade School District 44
312 N. Weaver
P.o. Box 166
Belgrade, MT 59714

**Reference: MEADOWLARK RANCH SUBDIVISION, PHASE V
PROJECT NO. 19076**

Dear Mr. Saunders:

We are soliciting your comments regarding a proposed single-family subdivision within the City of Belgrade. The project would create 147 single family lots, public right-of-way, and open space on a 73.133-acres. These single-family lots would be served by the City of Belgrade water and sanitary sewer systems.

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Sincerely,



Gazy T. Owen, PE
Senior Engineer/Project Manager

GTO/trt
P:19076_Utility_Agency_Letters

November 21, 2019

Mr. EJ Clark Jr.
Chief
Belgrade Police Department
91 E. Central Avenue
Belgrade, MT 59714

**Reference: MEADOWLARK RANCH SUBDIVISION, PHASE V
PROJECT NO. 19076**

Dear Mr. Clark:

We are soliciting your comments regarding a proposed single-family subdivision within the City of Belgrade. The project would create 147 single family lots, public right-of-way, and open space on a 73.133-acres. These single-family lots would be served by the City of Belgrade water and sanitary sewer systems.

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If you have and further questions or comments, please do not hesitate to call me at (406) 869-3342 or email at gowen@sandersonstewart.com.

Sincerely,



Gary T. Owen, PE
Senior Engineer/Project Manager

GTO/trt
P:19076_Utility_Agency_Letters

November 21, 2019

Operations Manager
American Medical Response
2101 Industrial Drive
Bozeman, MT 59715

**Reference: MEADOWLARK RANCH SUBDIVISION, PHASE V
PROJECT NO. 19076**

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If you have and further questions or comments, please do not hesitate to call me at (406) 869-3342 or email at gowen@sandersonstewart.com.

Sincerely,



Gary T. Owen, PE
Senior Engineer/Project Manager

GTO/trt
P:19076_Utility_Agency_Letters

November 21, 2019

Ms. Juile Cunningham
Wildlife Biologist
Montana Fish, Wildlife, and Parks
1400 S. 19th Avenue
Bozeman, MT 59718

**Reference: MEADOWLARK RANCH SUBDIVISION, PHASE V
PROJECT NO. 19076**

Dear Ms. Cunningham:

We are soliciting your comments regarding a proposed single-family subdivision within the City of Belgrade. The project would create 147 single family lots, public right-of-way, and open space on a 73.133-acres. These single-family lots would be served by the City of Belgrade water and sanitary sewer systems.

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As part of the subdivision application process, we are soliciting comments you may have regarding the proposed subdivision. Should you have any comments or questions, we would appreciate a written response to this letter by December 20, 2019.

If you have and further questions or comments, please do not hesitate to call me at (406) 869-3342 or email at gowen@sandersonstewart.com.

Sincerely,



Gary T. Owen, PE
Senior Engineer/Project Manager

GTO/trt
P:19076_Utility_Agency_Letters

November 21, 2019

Mr. Damon Murdo
Cultural Records Manager
Montana Historical Society
225 N. Roberts Street
P.O. Box 201201
Helena, MT 59620-1201

**Reference: MEADOWLARK RANCH SUBDIVISION, PHASE V
PROJECT NO. 19076**

Dear Mr. Murdo:

We are soliciting your comments regarding a proposed single-family subdivision within the City of Belgrade. The project would create 147 single family lots, public right-of-way, and open space on a 73.133-acres. These single-family lots would be served by the City of Belgrade water and sanitary sewer systems.

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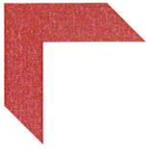
If you have and further questions or comments, please do not hesitate to call me at (406) 869-3342 or email at gowen@sandersonstewart.com.

Sincerely,



Gary T. Owen, PE
Senior Engineer/Project Manager

GTO/trt
P:19076_Utility_Agency_Letters



November 27th, 2019

Sanderson Stewart
Gary T Owen, PE
1300 North Transtech Way
Billings, MT 59102

RE: Meadowlark Ranch Subdivision, Phase 5

Gary,

Regarding your letter dated November 21, 2019, Northwestern Energy is willing and able to provide natural gas and electric service to the Meadowlark Ranch Subdivision Phase 5, which includes 147 single family residential lots. These services can be provided in accordance with applicable Montana Public Services rules and regulations and the current Northwestern Energy tariff schedule.

Northwestern Energy shall determine the locations of all transformers, underground lines and equipment to provide for maintenance and installation. These facilities shall be located on front lot lines and there shall be a minimum of 10' wide utility easement on front lot lines.

Please call me if you have any questions or concerns at 223-9730, also, we require having a copy of the approved plat of this proposed area prior to providing a cost to bring in these services. If installation is required prior to approval of the plat, it will be your responsibility to keep us informed of any changes which would alter our utility design and installation. To request a cost estimate we would also require a signed application for new service along with an electronic layout of the subdivision.

Sincerely,

Matt Tilstra
Contract Engineer
Bozeman Division

Matt Tilstra

Contract Engineer
Bozeman Division

matthew.tilstra@contractor.northwestern.com

C 406-223-9730

Teri Tritz

Subject: FW: Impact Statement

From: Godfrey Saunders <gsaunders@bsd44.org>

Sent: Wednesday, November 27, 2019 3:05 PM

To: Gary Owen <gowen@sandersonstewart.com>

Subject: Impact Statement

Dear Gary,

Regarding the impact of the Meadowlark Ranch Subdivision, Phase V Project No. 19076, it will mean approximately 74 new students for the Belgrade School District. This increase may or may not necessitate the need for more buses and drivers to accommodate the estimated number of additional students. Either way, it should not be a burden on the School District. The construction of cul-de-sacs and roadways for buses to safely travel into and out of the subdivision will enhance the drop off and pick up process for bus drivers, however.

Please let us know if there are any changes to the proposed development as this could modify the above impact projection.

Thanks,

Godfrey Saunders



December 3, 2019

Gary T. Owen
Sanderson Stewart
1300 N Transtech Way
Billings MT 59102

RE: MEADOWLARK RANCH SUBDIVISION, PHASE V, BELGRADE. SHPO Project #: 2019120302

Dear Mr. Owen:

I have conducted a cultural resource file search for the above-cited project located in Sections 31, 32, T1N R5E. According to our records there have been no previously recorded sites within the designated search locales. The absence of cultural properties in the area does not mean that they do not exist but rather may reflect the absence of any previous cultural resource inventory in the area, as our records indicated none.

It is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are to be altered and are over fifty years old, we would recommend that they be recorded, and a determination of their eligibility be made.

Based on previous ground disturbance within the proposed project area we feel that there is a low likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time. However, should structures need to be altered or if cultural materials be inadvertently discovered during this project we would ask that our office be contacted, and the site investigated.

If you have any further questions or comments, you may contact me at (406) 444-7767 or by e-mail at dmurdo@mt.gov. I have attached an invoice for the file search. Thank you for consulting with us.

Sincerely,

Damon Murdo
Cultural Records Manager
State Historic Preservation Office

File: LOCAL/SUBDIVISIONS/2019



Gallatin County Weed District
903 North Black
Bozeman, MT 59715
406.582.3265
www.gallatin.mt.gov
weeddistrict@gallatin.mt.gov

April 26, 2018

Meadowlark Development LLC
175 N. 27th Street, Suite 900
Billings, MT 59101-2065

Dear Property Owner,

The Weed Management Plan (WMP) for Meadowlark Ranch Phase 4 Subdivision is approved and is valid from **April 26, 2018 – April 26, 2021**. If a Memorandum of Understanding is not obtained from our office by **April 26, 2021**, a 3-year extension to the WMP is required.

Requirements for Final Plat:

- Implement this Weed Management Plan
- Document all weed control activities - *see checklist on back page (all are required)*
- Provide a copy of the required covenants regarding Noxious Weed control
- Obtain a Memorandum of Understanding with the Weed District

Required covenants regarding Noxious Weed control can be found in Section 6 Part O of the Gallatin County Subdivision Regulations and are posted on our website (www.gallatin.mt.gov).

This Weed Management Plan is a binding agreement between the landowner and the Gallatin County Weed District (MCA 7-22-2152). **Failure to provide documentation of annual weed control will be considered a breach of agreement and will result in a denial of the Memorandum of Understanding from our office.**

Sincerely,

A handwritten signature in blue ink, appearing to read "John Anderson", with a long horizontal flourish extending to the right.

Gallatin County Weed District

Required Documentation

Year 1

- Name of person or business that treated the land (applicator)
- Contact information for the applicator
- Date(s) and type of treatment
 - Chemical: Trade name and rates of herbicide used
 - Mowing: Dates mowed
 - Bio Control: Provide details
- Noxious Weed species treated
- Total acres treated and a map of area treated
- Seed mix and seeding rates used
- If contracted, a copy of the invoice
- If self-treated, a copy of receipts for herbicides purchased

Year 2

- Name of person or business that treated the land (applicator)
- Contact information for the applicator
- Date(s) and type of treatment
 - Chemical: Trade name and rates of herbicide used
 - Mowing: Dates mowed
 - Bio Control: Provide details
- Noxious Weed species treated
- Total acres treated and a map of area treated
- Seed mix and seeding rates used
- If contracted, a copy of the invoice
- If self-treated, a copy of receipts for herbicides purchased

Year 3

- Name of person or business that treated the land (applicator)
- Contact information for the applicator
- Date(s) and type of treatment
 - Chemical: Trade name and rates of herbicide used
 - Mowing: Dates mowed
 - Bio Control: Provide details
- Noxious Weed species treated
- Total acres treated and a map of area treated
- Seed mix and seeding rates used
- If contracted, a copy of the invoice
- If self-treated, a copy of receipts for herbicides purchased

The Memorandum of Understanding will be denied if all the documentation is not received with the MOU application.

Date Received 4/25/18



Gallatin County Weed District
903 North Black
Bozeman, MT 59715
406.582.3265
www.gallatin.mt.gov
weeddistrict@gallatin.mt.gov

406-539-0397
will pick up

NOXIOUS WEED MANAGEMENT PLAN

This plan is valid and effective upon approval by the Board or Board's Representative for 3 years from date of approval or until land ownership changes. The Landowner/Landowner's Representative agrees that the Board shall have the right to revise this plan and any Memorandum of Understanding as necessary to effectuate the purposes of the Gallatin County Weed Management Plan or Montana Noxious Weed Control Act. The Landowner/Landowner's Representative will provide documentation that the Weed Management Plan has been implemented.

The property owner agrees that the Weed District may inspect the property prior to granting approval of the Weed Management Plan, and if approved, such reasonable inspections as necessary to determine compliance with this plan.

Approval of any extensions or final plat for a SUBDIVISION plan may be denied or delayed if noxious weeds have not been properly controlled.

Documentation of weed management activities is required to be submitted with extension or final plat applications.

Requirements for SUBDIVISION or TRANSMISSION LINE plan approval include:

- Brief Cover letter stating current and future uses of the property
- Plat map detailing distribution and species of noxious weeds present
- Property inspection by Weed District personnel
- Review Fee: (1-5 lots Minor \$150) (≥ 6 lots Major \$300)
- Completion of this application

CHECK TYPE OF WEED MANAGEMENT PLAN (check all that apply)

- Subdivision (Review Fee Required)
- Transmission Line (Telecommunications/Cell Tower/Gas/Liquid/Electric/etc...)

I have read and understand all the relevant sections of the Gallatin County Weed Management Plan. I understand that Final Plat may be denied if this plan is not implemented.

DocuSigned by:
Landy Keep
249A101236EE4BC...

Landowner/Landowner's Representative Signature

Landowner	Landowner's Representative (If Applicable)
Landowner: <u>Meadowlark Development, LLC</u> Mail Address: <u>175 N. 27th Street, Suite 900</u> City: <u>Billings</u> State: <u>MT</u> ZIP: <u>59715 9101-2065</u> Phone(s): <u>406-248-3641</u> Email: <u>lleep@oaklandcompanies.com</u>	Company: <u>none</u> Contact: _____ Mail Address: _____ City: _____ State: _____ ZIP: _____ Phone(s): _____ Email: _____

PROJECT DESCRIPTION (Please complete all that apply)

Project Name: Meadowlark Ranch Phase 4
 Physical Address: TBD Oriole Drive, Belgrade MT
 Legal Description: T 1N NS R 5E EW Sec 31 1/4 e 1/4 se
 Number of Lots: 29
 Total Acres in Project: 11.257 acres
 Total Road Miles in Project: 0.23

Landowner contact prior to property inspection: Yes No

PROJECT OVERVIEW (Describe what the intentions are for developing this property)

Expansion of detached single residence subdivision within the City Limits of Belgrade

NOXIOUS WEED MANAGEMENT PLAN

Noxious Weed Species on Property (provide plat map with weed inventory):

Houndstongue, Canada Thistle, Musk Thistle, Mullen, Fan Weed, Mustards, Poison Hemlock

METHOD OF WEED CONTROL YOU INTEND TO USE (mark all that apply):

CHEMICAL MECHANICAL CULTURAL BIOLOGICAL

Describe specific control measures (if using herbicides, include type of herbicide and rates) and timing of control for 3 years. **Attach additional pages if necessary / incorporate by reference:**
May 2018: Application of Cimarron Plus @0.03 oz/ac with LV-6 @ 1pt/AC

June-July 2018: Application of Grazon NXT @ 2 pt/AC

repeat for 2 more years

ESTIMATED COSTS OF WEED CONTROL FOR 3 YEARS. (Specify cost for each year)

Who will complete work: Self Contracted

Contractor Name (if applicable) Western Conservation Services, Inc

Year	Herbicide/Applicator Cost	Cultural/Mechanical Cost	Biological Cost
1	\$2500		
2	\$1500		
3	\$1000		
Total	\$5000		

***** Documentation of weed management is required to be submitted with extension or final plat applications.**

REVEGETATION PLAN

Are any disturbances planned? Yes No

If yes, complete the following re-vegetation section.

MANDATORY REVEGETATION REQUIREMENTS: Areas disturbed during subdivision development (road construction, pond construction, service/utility/gas/electric/telephone line installation) will have a layer of topsoil redistributed onto disturbed areas. Disturbed areas will be seeded to an appropriate grass seed mix for the site. During the first and second years of grass establishment, areas seeded to grass will be mowed as appropriate to prevent weed seed development and dispersal.

PLANNED DISTURBANCES (mark all that apply):

Utility/Service line Pond Road Park Trail Central Septic Other (list type)

Describe in detail, the revegetation to mitigate all disturbances that will occur on this property (list type and amount of seed/sod, seeding methods and timing, and fertilization): *Attach additional pages if necessary incorporate by reference:*

All disturbed areas seeded back to native grass mix plus rye grass, planted via ground seeders and hydro-seeding as necessary

ESTIMATED COSTS OF REVEGETATION FOR 3 YEARS. (Specify cost for each year)

Work will be done by: Self Contracted

Contractor Name (if applicable) Western Conservation Services, Inc.

Year	Revegetation Cost
1	\$3000
2	\$1500
3	\$1000
Total	\$5500

PLEASE COMPLETE THE FOLLOWING SECTIONS THAT APPLY:

GRAVEL SOURCE (If using outside supply of gravel)

List source of gravel/pit run/road mix/topsoil/etc... brought on-site for disturbance mitigation and/or construction.

Name of Gravel Pit: TMC

Location: Alaska Road

Contact Person: Ron Pike

***Be aware that gravel sources and topsoil may contain noxious weed seeds; therefore, we recommend using a source that is actively controlling noxious weeds on their property, consistent with an approved Weed Management Plan.**

STATUS

APPROVED NOT APPROVED

RECOMMENDATIONS AND/OR CONDITIONS: Noxious weeds shall be treated
by July 15 of each year with a follow-up treatment in the fall
by October 15 of each year (if needed).

Additional terms and conditions apply – see attached

Compliance with laws and regulations. LANDOWNER/LANDOWNER'S REPRESENTATIVE has an affirmative duty to take notice of, observe, and strictly comply with all existing laws, rules and regulations and any laws, rules and regulations that may be adopted after the date of this agreement. Whether or not the same are expressly stated in the agreement, the LANDOWNER/LANDOWNER'S REPRESENTATIVE shall strictly comply with all applicable state, federal and local laws and regulations.

LANDOWNER/LANDOWNER'S REPRESENTATIVE agree that this plan is supported by good valid consideration and this plan constitutes a *binding contract* and may be enforced as such.

John Ansley
(Signature of Weed Board Chairman/Representative)

(Signature of Landowner's Representative)

John Ansley
(Type/Print name of Chairman/Representative)

(Type/Print name of Landowner's Representative)

4/26/2018
(Date)

(Date)
DocuSigned by:
Landy Leep
249A101236EE4BC...

(Signature of Landowner)

Landy Leep, on behalf of Meadowlark
Development, LLC

(Type/Print name of Landowner)

4/23/2018

(Date)



United States
Department of
Agriculture

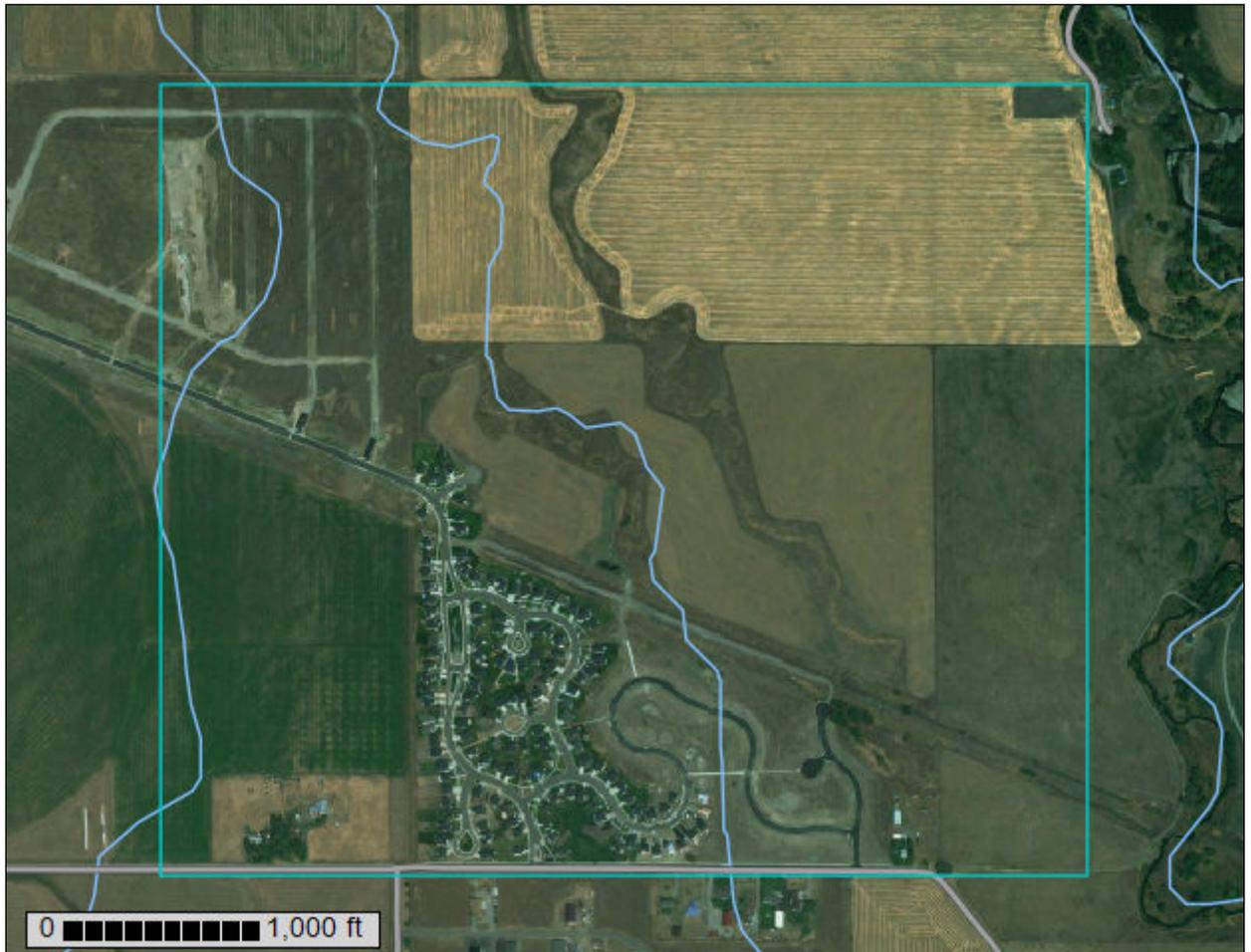
NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Gallatin County Area, Montana**

Meadowlark Ranch Subdivision, Phase V



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

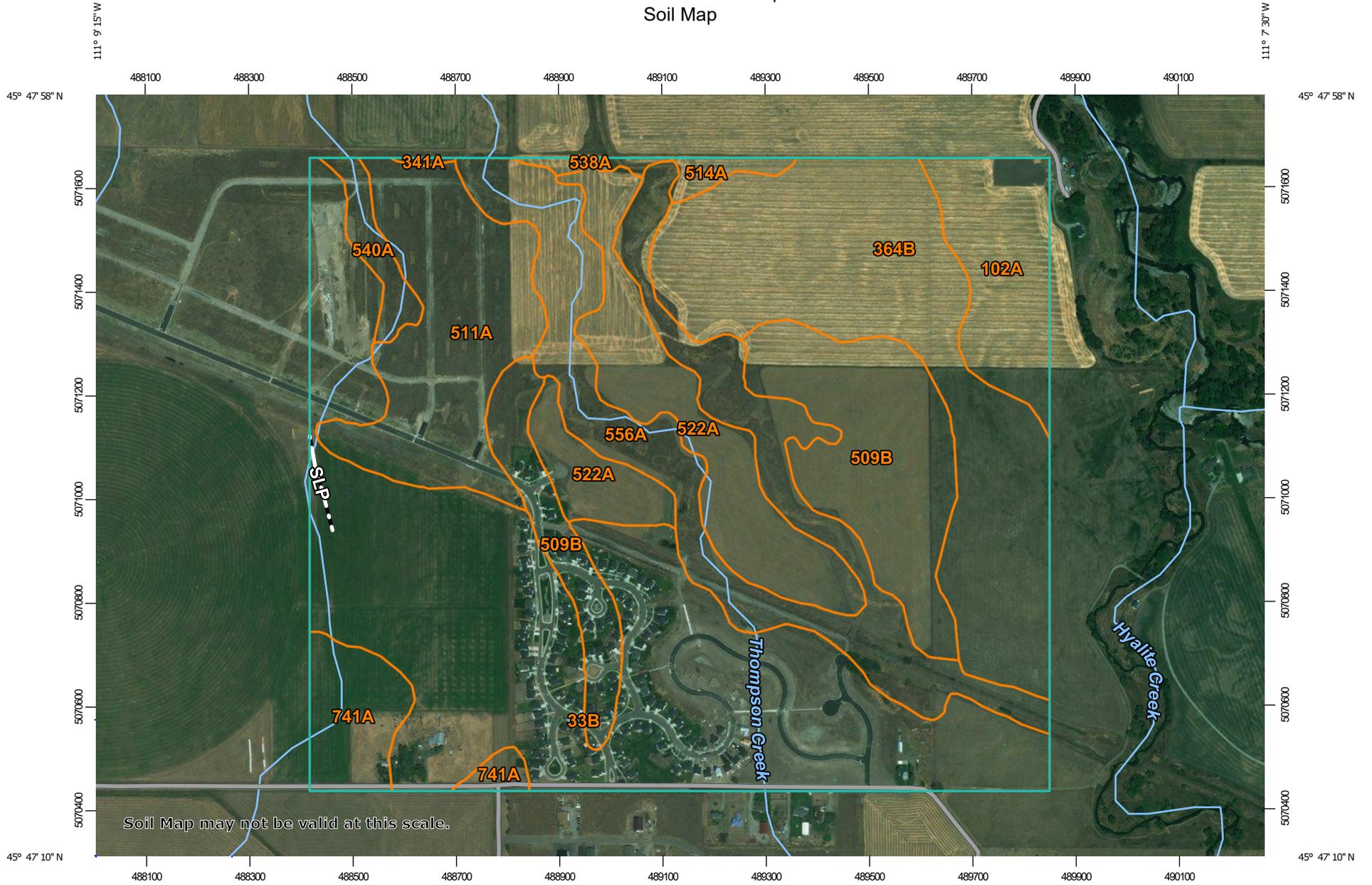
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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

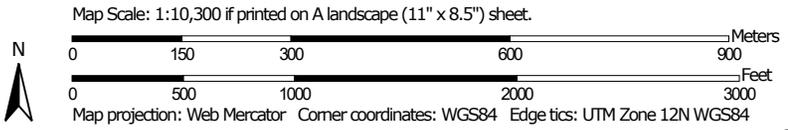
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Gallatin County Area, Montana
 Survey Area Data: Version 23, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 10, 2012—Nov 12, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
33B	Attewan clay loam, 0 to 4 percent slopes	135.4	31.2%
102A	Havre loam, 0 to 2 percent slopes, rare flooding	21.2	4.9%
341A	Beaverell-Beavwan loams, moderately wet, 0 to 2 percent slopes	0.3	0.1%
364B	Straw silty clay loam, 0 to 4 percent slopes	72.9	16.8%
509B	Enbar loam, 0 to 4 percent slopes	49.1	11.3%
511A	Fairway silt loam, 0 to 2 percent slopes	39.7	9.1%
514A	Soapcreek silty clay loam, 0 to 2 percent slopes	2.6	0.6%
522A	Enbar clay loam, 0 to 2 percent slopes	37.0	8.5%
538A	Tetonview silt loam, 0 to 2 percent slopes	1.5	0.4%
540A	Tetonview-Newtman complex, 0 to 2 percent slopes	5.3	1.2%
556A	Threeriv-Bonebasin loams, 0 to 2 percent slopes	55.3	12.7%
741A	Beaverell-Beavwan complex, 0 to 2 percent slopes	13.9	3.2%
Totals for Area of Interest		434.3	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

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Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion

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of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Gallatin County Area, Montana

33B—Attewan clay loam, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 56q2
Elevation: 4,150 to 4,650 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 37 to 45 degrees F
Frost-free period: 95 to 115 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Attewan and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Attewan

Setting

Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 6 inches: clay loam
Bt - 6 to 12 inches: clay loam
Bk - 12 to 26 inches: gravelly loam
2C - 26 to 60 inches: very gravelly loamy sand

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: Clayey (Cy) 9-14" p.z. (R044XS330MT), Upland Grassland (R044BP818MT)
Hydric soil rating: No

Minor Components

Beaverell

Percent of map unit: 5 percent
Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Shallow to Gravel (SwGr) 9-14" p.z. (R044XS338MT)
Hydric soil rating: No

Beavwan

Percent of map unit: 5 percent
Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Shallow to Gravel (SwGr) 9-14" p.z. (R044XS338MT)
Hydric soil rating: No

102A—Havre loam, 0 to 2 percent slopes, rare flooding

Map Unit Setting

National map unit symbol: 56ld
Elevation: 4,150 to 4,800 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 37 to 45 degrees F
Frost-free period: 95 to 115 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Havre and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Havre

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

A - 0 to 8 inches: loam
C - 8 to 60 inches: stratified fine sandy loam to clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained

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Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: Rare

Frequency of ponding: None

Calcium carbonate, maximum in profile: 10 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Ecological site: Silty (Si) 9-14" p.z. (R044XS339MT), Bottomland (R044BP801MT)

Hydric soil rating: No

Minor Components

Glendive

Percent of map unit: 5 percent

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Sandy (Sy) 9-14" p.z. (R044XS335MT)

Hydric soil rating: No

Straw

Percent of map unit: 3 percent

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Silty (Si) 15-19" p.z. (R044XS355MT)

Hydric soil rating: No

Fairway

Percent of map unit: 2 percent

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Saline Subirrigated (SSb) 9-14" p.z. (R044XS333MT)

Hydric soil rating: No

341A—Beaverell-Beavwan loams, moderately wet, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 56q3

Elevation: 4,100 to 4,750 feet

Mean annual precipitation: 10 to 14 inches

Mean annual air temperature: 37 to 45 degrees F

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Frost-free period: 95 to 115 days

Farmland classification: Farmland of local importance

Map Unit Composition

Beaverell and similar soils: 60 percent

Beavwan and similar soils: 30 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Beaverell

Setting

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium

Typical profile

A - 0 to 7 inches: loam

B - 7 to 20 inches: very cobbly clay loam

2Bk1 - 20 to 24 inches: extremely cobbly coarse sandy loam

2Bk2 - 24 to 60 inches: extremely cobbly loamy coarse sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 48 to 96 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 15 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): 4s

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B

Ecological site: Shallow to Gravel (SwGr) 9-14" p.z. (R044XS338MT), Upland Grassland (R044BP818MT)

Hydric soil rating: Unranked

Description of Beavwan

Setting

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium

Typical profile

A - 0 to 5 inches: loam

Bt1 - 5 to 15 inches: clay loam

2Bt2 - 15 to 23 inches: extremely cobbly sandy clay loam

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2Bk - 23 to 60 inches: extremely cobbly loamy sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: About 48 to 96 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 10 percent

Available water storage in profile: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: Shallow to Gravel (SwGr) 9-14" p.z. (R044XS338MT), Upland Grassland (R044BP818MT)

Hydric soil rating: No

Minor Components

Beaverell

Percent of map unit: 5 percent

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Shallow to Gravel (SwGr) 9-14" p.z. (R044XS338MT)

Hydric soil rating: No

Attewan

Percent of map unit: 3 percent

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Shallow to Gravel (SwGr) 9-14" p.z. (R044XS338MT)

Hydric soil rating: No

Beavwan, channeled

Percent of map unit: 2 percent

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Shallow to Gravel (SwGr) 9-14" p.z. (R044XS338MT)

Hydric soil rating: No

364B—Straw silty clay loam, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 56qv
Elevation: 4,400 to 5,100 feet
Mean annual precipitation: 15 to 19 inches
Mean annual air temperature: 37 to 45 degrees F
Frost-free period: 90 to 110 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Straw and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Straw

Setting

Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

A - 0 to 18 inches: silty clay loam
Bk - 18 to 60 inches: loam

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: Clayey (Cy) 15-19" p.z. (R044XS350MT), Upland Grassland (R044BP818MT)
Hydric soil rating: No

Minor Components

Enbar

Percent of map unit: 10 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Subirrigated (Sb) 15-19" p.z. (R044XS359MT)
Hydric soil rating: No

Sudworth

Percent of map unit: 5 percent
Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Clayey (Cy) 15-19" p.z. (R044XS350MT)
Hydric soil rating: No

509B—Enbar loam, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 56vp
Elevation: 4,400 to 6,000 feet
Mean annual precipitation: 15 to 19 inches
Mean annual air temperature: 37 to 45 degrees F
Frost-free period: 90 to 110 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Enbar and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Enbar

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

A - 0 to 22 inches: loam
Cg - 22 to 49 inches: sandy loam
2C - 49 to 60 inches: very gravelly loamy sand

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained

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Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 24 to 42 inches

Frequency of flooding: Rare

Frequency of ponding: None

Calcium carbonate, maximum in profile: 10 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): 3w

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C

Ecological site: Subirrigated (Sb) 15-19" p.z. (R044XS359MT), Bottomland (R044BP801MT)

Hydric soil rating: No

Minor Components

Nythar

Percent of map unit: 10 percent

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Wet Meadow (WM) 15-19" p.z. (R044XS365MT)

Hydric soil rating: Yes

Straw

Percent of map unit: 5 percent

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Silty (Si) 15-19" p.z. (R044XS355MT)

Hydric soil rating: No

511A—Fairway silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 56vv

Elevation: 4,100 to 4,950 feet

Mean annual precipitation: 12 to 18 inches

Mean annual air temperature: 39 to 45 degrees F

Frost-free period: 90 to 110 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Fairway and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fairway

Setting

Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

A - 0 to 15 inches: silt loam
Cg - 15 to 46 inches: silt loam
2Cg - 46 to 60 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 3.0 mmhos/cm)
Available water storage in profile: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: Subirrigated (Sb) 9-14" p.z. (R044XS343MT), Subirrigated Grassland (R044BP815MT)
Hydric soil rating: No

Minor Components

Blossberg

Percent of map unit: 10 percent
Landform: Terraces
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Wet Meadow (WM) 15-19" p.z. (R044XS365MT)
Hydric soil rating: Yes

Meadowcreek

Percent of map unit: 5 percent
Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Subirrigated (Sb) 15-19" p.z. (R044XS359MT)
Hydric soil rating: No

514A—Soapcreek silty clay loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 56vz
Elevation: 4,200 to 6,000 feet
Mean annual precipitation: 12 to 18 inches
Mean annual air temperature: 39 to 45 degrees F
Frost-free period: 90 to 110 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Soapcreek and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Soapcreek

Setting

Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium

Typical profile

A - 0 to 15 inches: silty clay loam
Bk - 15 to 46 inches: silty clay loam
Bg - 46 to 60 inches: stratified fine sandy loam to silty clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 3.0 mmhos/cm)
Available water storage in profile: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): 4w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: D
Ecological site: Subirrigated (Sb) 9-14" p.z. (R044XS343MT), Subirrigated Grassland (R044BP815MT)
Hydric soil rating: No

Minor Components

Meadowcreek

Percent of map unit: 10 percent

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Saline Subirrigated (SSb) 9-14" p.z. (R044XS333MT)

Hydric soil rating: No

Blossberg

Percent of map unit: 5 percent

Landform: Terraces

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Wet Meadow (WM) 15-19" p.z. (R044XS365MT)

Hydric soil rating: Yes

522A—Enbar clay loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 56w9

Elevation: 4,300 to 5,850 feet

Mean annual precipitation: 15 to 19 inches

Mean annual air temperature: 37 to 45 degrees F

Frost-free period: 90 to 110 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Enbar and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Enbar

Setting

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loamy alluvium

Typical profile

A - 0 to 16 inches: clay loam

Cg - 16 to 53 inches: clay loam

2C - 53 to 60 inches: very gravelly loamy sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Somewhat poorly drained

Custom Soil Resource Report

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: About 24 to 42 inches

Frequency of flooding: Rare

Frequency of ponding: None

Calcium carbonate, maximum in profile: 10 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): 3w

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C

Ecological site: Subirrigated (Sb) 15-19" p.z. (R044XS359MT), Bottomland (R043BP801MT)

Hydric soil rating: No

Minor Components

Sudworth

Percent of map unit: 5 percent

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Clayey (Cy) 15-19" p.z. (R044XS350MT)

Hydric soil rating: No

Straw

Percent of map unit: 5 percent

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Silty (Si) 15-19" p.z. (R044XS355MT)

Hydric soil rating: No

Nythar

Percent of map unit: 5 percent

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Wet Meadow (WM) 15-19" p.z. (R044XS365MT)

Hydric soil rating: Yes

538A—Tetonview silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 56wq

Elevation: 4,150 to 4,450 feet

Mean annual precipitation: 12 to 18 inches

Mean annual air temperature: 37 to 45 degrees F

Custom Soil Resource Report

Frost-free period: 90 to 110 days

Farmland classification: Farmland of local importance

Map Unit Composition

Tetonview and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tetonview

Setting

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loamy alluvium

Typical profile

O_i - 0 to 2 inches: slightly decomposed plant material

A - 2 to 10 inches: silt loam

B_{kg} - 10 to 36 inches: silt loam

C_g - 36 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (K_{sat}): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: About 12 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 35 percent

Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

Available water storage in profile: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: C/D

Ecological site: Wet Meadow (WM) 9-14" p.z. (R044XS349MT), Subirrigated
Grassland (R044BP815MT)

Hydric soil rating: Yes

Minor Components

Newtonman

Percent of map unit: 5 percent

Landform: Terraces

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Wet Meadow (WM) 9-14" p.z. (R044XS349MT)

Hydric soil rating: Yes

Saypo

Percent of map unit: 5 percent

Landform: Stream terraces

Down-slope shape: Linear

Custom Soil Resource Report

Across-slope shape: Linear
Ecological site: Saline Subirrigated (SSb) 9-14" p.z. (R044XS333MT)
Hydric soil rating: No

Lamoose

Percent of map unit: 5 percent
Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Wet Meadow (WM) 9-14" p.z. (R044XS349MT)
Hydric soil rating: No

540A—Tetonview-Newtman complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 56wv
Elevation: 4,100 to 5,150 feet
Mean annual precipitation: 12 to 18 inches
Mean annual air temperature: 37 to 45 degrees F
Frost-free period: 90 to 110 days
Farmland classification: Farmland of local importance

Map Unit Composition

Tetonview and similar soils: 50 percent
Newtman and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tetonview

Setting

Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
A - 2 to 10 inches: silt loam
Bkg - 10 to 36 inches: silt loam
Cg - 36 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None

Custom Soil Resource Report

Calcium carbonate, maximum in profile: 35 percent
Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Available water storage in profile: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Ecological site: Wet Meadow (WM) 9-14" p.z. (R044XS349MT), Subirrigated
Grassland (R044BP815MT)
Hydric soil rating: No

Description of Newtown

Setting

Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

Oe - 0 to 9 inches: mucky peat
A - 9 to 15 inches: silty clay loam
Cg - 15 to 24 inches: silty clay loam
2Cg - 24 to 60 inches: very gravelly sandy clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 3.0 mmhos/cm)
Available water storage in profile: High (about 10.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Ecological site: Wet Meadow (WM) 9-14" p.z. (R044XS349MT), Bottomland
(R044BP801MT)
Hydric soil rating: Yes

Minor Components

Water

Percent of map unit: 4 percent

Saypo

Percent of map unit: 3 percent
Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear

Custom Soil Resource Report

Ecological site: Saline Subirrigated (SSb) 9-14" p.z. (R044XS333MT)
Hydric soil rating: No

Threeriv

Percent of map unit: 3 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Wet Meadow (WM) 15-19" p.z. (R044XS365MT)
Hydric soil rating: Yes

556A—Threeriv-Bonebasin loams, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 56x4
Elevation: 4,000 to 6,100 feet
Mean annual precipitation: 12 to 18 inches
Mean annual air temperature: 39 to 45 degrees F
Frost-free period: 90 to 110 days
Farmland classification: Not prime farmland

Map Unit Composition

Threeriv and similar soils: 45 percent
Bonebasin and similar soils: 45 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Threeriv

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

Oe - 0 to 4 inches: moderately decomposed plant material
Ag - 4 to 9 inches: loam
Cg - 9 to 29 inches: stratified sandy loam to silty clay loam
2Cg - 29 to 60 inches: extremely gravelly loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: Rare
Frequency of ponding: None

Custom Soil Resource Report

Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Available water storage in profile: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Ecological site: Wet Meadow (WM) 15-19" p.z. (R044XS365MT), Bottomland (R044BP801MT), Bottomland (R043BP801MT)
Hydric soil rating: Yes

Description of Bonebasin

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

Oa - 0 to 4 inches: muck
A - 4 to 15 inches: loam
Cg - 15 to 25 inches: stratified sandy loam to silty clay loam
2C - 25 to 60 inches: very gravelly coarse sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Available water storage in profile: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: B/D
Ecological site: Wet Meadow (WM) 15-19" p.z. (R044XS365MT), Bottomland (R044BP801MT), Bottomland (R043BP801MT)
Hydric soil rating: Yes

Minor Components

Threeriv

Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Wet Meadow (WM) 15-19" p.z. (R044XS365MT)
Hydric soil rating: No

Blossberg

Percent of map unit: 5 percent
Landform: Marshes
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Wet Meadow (WM) 15-19" p.z. (R044XS365MT)
Hydric soil rating: Yes

741A—Beaverell-Beavwan complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 570q
Elevation: 4,100 to 5,000 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 37 to 45 degrees F
Frost-free period: 95 to 115 days
Farmland classification: Farmland of local importance

Map Unit Composition

Beaverell and similar soils: 55 percent
Beavwan and similar soils: 30 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Beaverell

Setting

Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 7 inches: cobbly loam
B - 7 to 20 inches: very cobbly clay loam
2Bk1 - 20 to 24 inches: extremely cobbly coarse sandy loam
2Bk2 - 24 to 60 inches: extremely cobbly loamy coarse sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent

Custom Soil Resource Report

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): 6e

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B

Ecological site: Shallow to Gravel (SwGr) 9-14" p.z. (R044XS338MT), Upland Grassland (R044BP818MT)

Hydric soil rating: No

Description of Beavwan

Setting

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium

Typical profile

A - 0 to 5 inches: loam

Bt1 - 5 to 15 inches: clay loam

2Bt2 - 15 to 22 inches: extremely cobbly sandy clay loam

2Bk1 - 22 to 28 inches: extremely cobbly sandy loam

2Bk2 - 28 to 60 inches: very gravelly coarse sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 10 percent

Available water storage in profile: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: Shallow to Gravel (SwGr) 9-14" p.z. (R044XS338MT), Upland Grassland (R044BP818MT)

Hydric soil rating: No

Minor Components

Beaverell, channeled

Percent of map unit: 5 percent

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Shallow to Gravel (SwGr) 9-14" p.z. (R044XS338MT)

Hydric soil rating: No

Custom Soil Resource Report

Attewan

Percent of map unit: 5 percent

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Clayey (Cy) 9-14" p.z. (R044XS330MT)

Hydric soil rating: No

Beaverell

Percent of map unit: 5 percent

Landform: Stream terraces

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Draft Shallow to Gravel (SwGr) RRU 46-C 13-19" p.z.
(R046XC507MT)

Hydric soil rating: No

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When Recorded, Return to:
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Billings, Montana 59101

**DECLARATION OF COVENANTS, CONDITIONS
AND RESTRICTIONS**

FOR

**MEADOWLARK RANCH SUBDIVISION, PHASE 4
AND SUBSEQUENT PHASES**

AND THE

**MEADOWLARK RANCH NORTH OWNERS'
ASSOCIATION, INC.**

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DRAFT

INTRODUCTION

It is the general intent of this Document to establish the Declaration of Covenants, Conditions, and Restrictions for all the lands within the Plat of Meadowlark Ranch Subdivision, Phase 4 (Plat Reference J-641) and Subsequent Phases, which Subdivision includes Meadowlark Ranch Subdivision, Phase 4 and future phases to be platted, and to establish the Meadowlark Ranch North Owners' Association, Board of Directors, and Building and Landscaping Review Committee. Meadowlark Ranch Subdivision, Phase 4 and Subsequent Phases are also referred to as the "Subdivision."

The Meadowlark Ranch North Owners' Association is so named to distinguish the Association from the Meadowlark Ranch Subdivision Residential Owners Association, which is comprised of the Plat of Meadowlark Ranch Subdivision, First Filing (Plat Reference J-490), Plat of Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586) and the Amended Plat of Lots 23 and 27 of Block 3, Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586-A), and, for clarity, this Declaration does not apply to the foregoing Plats.

The Declaration of Covenants, Conditions, and Restrictions describes how the lands within the Meadowlark Ranch Subdivision Phase 4 and Subsequent Phases are to be developed and maintained beyond the minimum City of Belgrade requirements. More specifically, the Declaration defines how single-family residential homes are to be designed and landscaped, and how Common Area and Open Space are to be used, managed, and maintained, among other things.

When a Lot is purchased in Meadowlark Ranch Subdivision Phase 4 and Subsequent Phases to be platted, the owner automatically becomes a member of the Meadowlark Ranch North Owners' Association ("Association"). The Association is run by a Board of Directors.

**DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS
FOR
MEADOWLARK RANCH SUBDIVISION PHASE 4 AND SUBSEQUENT PHASES
AND THE
MEADOWLARK RANCH NORTH OWNERS' ASSOCIATION**

This Declaration of Covenants, Conditions and Restrictions, is made this ____ day of _____, 20____, by Meadowlark Ranch, Inc., or assigns, with its principal office in Billings, Montana, hereinafter referred to as "Declarant."

RECITALS

WHEREAS, Declarant is the owner of the following described land in City of Belgrade, Gallatin County, Montana:

See Exhibit "A" attached hereto and incorporated herein by reference.

("Property").

WHEREAS, the Declaration of Covenants, Conditions and Restrictions for the Meadowlark Ranch Subdivision, Phase 4 and Subsequent Phases to be platted and the Meadowlark Ranch North Owners' Association herein set forth and referred to as the "Declaration", each and all of which is and are for the benefit of said property, lots, and subdivisions and the owners thereof, and shall run with the land, applying to and binding the present owners and all future owners and successors in interest.

NOW THEREFORE, Declarant does hereby establish, dedicate, publish, and impose upon the Property the following Declaration of Covenants, Conditions, and Restrictions, which shall run with the land and shall be binding upon and be for the benefit of all persons claiming such property, their grantors, legal representatives, heirs, successors, and assigns, and shall be for the purpose of maintaining a uniform and stable value, character, architectural design, use, and development of the Meadowlark Ranch Subdivision, Phase 4 and Subsequent Phases, and all improvements placed or erected thereon, unless otherwise specifically excepted, as herein mentioned, and this Declaration of Covenants, Conditions, and Restrictions shall inure to and pass with each and every parcel, tract, lot, or division.

ARTICLE I DEFINITIONS

1.1 "Architect" shall mean a person holding a certificate of registration to practice architecture in the State of Montana or any State in the United States.

1.2 "Association" or "Owners' Association" shall mean the Association for the Meadowlark Ranch Subdivision, Phase 4 and Subsequent Phases, named the Meadowlark Ranch North Owners' Association, Inc. and which Subdivision includes Meadowlark Ranch Subdivision Phase 4 and future phases to be platted. The Association shall be incorporated as a Montana nonprofit corporation with the residential Lot Owners as its Members.

1.3 "Board of Directors" or "Directors" or "Board" shall mean the initial Board of Directors appointed by the Declarant, and the duly and qualified members of the Board of Directors of the Association, which shall be the sole governing body of the Association.

1.4 "Building and Landscape Review Committee" or "BLRC" shall mean the committee, appointed by the Board of Directors, whose function is to review and approve or disapprove applications, plans, materials, and specifications for Improvements to be constructed or erected on any Lot or anywhere on the Property, and alterations thereto. The Board of Directors shall serve as the BLRC until the Association is turned over to the Members.

1.5 "Capital Improvement(s)" shall mean an Improvement or two or more interdependent Improvements of a substantial nature benefitting the Association, Common Area, Park Land or Property as a whole which, when undertaken, may reasonably be anticipated to require a projected expenditure by the Association of a total amount greater than \$10,000.00.

1.6 "Common Area" and "Open Space" shall mean all of the Property conveyed to the Association for use by the Association and its Members and Owners in common, which is subject to the Shared Use and Maintenance Agreement, and Common Area and Open Space Management Plan, and not the Lots owned by Owners.

1.7 "Common Area and Open Space Management Plan" shall mean the management plan for the Common Area and Open Space conveyed to the Association for use by the Association and its Members and the Owners in common.

1.8 "Coved Design" or "Coving" shall mean and refer to the unique building setback lines that are required for each individual Lot. 1.10 "Declaration" shall mean this Declaration of Covenants, Conditions and Restrictions for the Meadowlark Ranch Subdivision, Phase 4 and Subsequent Phases and the Meadowlark Ranch North Owners' Association, as it may, from time to time, be amended or supplemented.

1.9 "Declarant" shall mean Meadowlark Ranch, Inc., or assigns, and shall not mean a

purchaser of a Lot from the Declarant.

1.10 "Declaration" shall mean this Declaration of Covenants, Conditions and Restrictions for the Meadowlark Ranch Subdivision, Phase 4 and Subsequent Phases and the Meadowlark Ranch North Owners' Association, as it may, from time to time, be amended or supplemented.

1.11 "Developer", "Building Contractor", and "Home Builder" shall mean any person or entity buying one or more Lots from the Declarant for the purpose of building single family residences.

1.12 "Improvement(s)" shall include, but not exclusively, all buildings, outbuildings, bridges, roads, trails, pathways, driveways, parking areas, fences, screening walls and barriers, retaining walls, stairs, decks, water lines, sewer lines, springs, ponds, swimming pools, tennis courts, lagoons, storm drainage ditches, detention tanks and ponds, viaducts and electrical, gas and TV distribution facilities, hedges, windbreaks, natural or planted trees and shrubs, poles, signs, loading areas and all other structures, installations and landscaping of every type and kind, whether above or below the land surface.

1.13 "Individual Lot Site Plan" shall mean the plan of each individual Lot, which shall be maintained by the Declarant, BLRC, Association, or manager, for the purposes of the BLRC review of applications for compliance with design criteria herein, showing the perimeter Lot boundaries and the locations of: 1) building setbacks; 2) buried utilities including water, sewer, electric, and television services; 3) fencing locations and types; 4) locations of and setbacks from sidewalks, trails, driveways and easements.

1.14 "Lot" shall mean the smallest subdivided unit of land for sale within the Property as shown on the Plat or Plats for Meadowlark Ranch Subdivision Phase 4 and future phases to be platted.

1.15 "Manufactured Home" or "Mobile Home" shall collectively mean and refer to a factory assembled structure or structures, equipped with the service connections necessary to be used as a dwelling unit, and constructed to be readily moveable as a unit or units either on its own running gear or other system. The construction of these units is regulated by the federal Manufactured Housing Construction and Safety Standards Act as determined by the Department of Housing and Urban Development (HUD), and the units are not constructed in accordance with the standards set forth in the Uniform Building Code, or International Residential/Building Code.

1.16 "Master Plan" shall mean and refer to the official Planned Unit Development documents that are of Record with the City of Belgrade.

1.17 "Member" shall mean any person or entity owning or purchasing a Lot in Meadowlark Ranch Subdivision, Phase 4 or Subsequent Phases, which Subdivision includes Meadowlark Ranch Subdivision, Phase 4 and future phases to be platted. Each Lot Owner shall be a member of the Association and agrees to abide by and be bound by this Declaration and any amendments thereto, and the Articles of Incorporation, Bylaws, Rules, and Resolutions of the Association, as they may be adopted from time to time.

1.18 "Modular Home" shall mean and refer to new dwelling unit constructed in accordance with the standards set forth in the International Residential/Building Code and bearing the insignia of the state, applicable to site-built homes, and composed of components assembled in a manufacturing plant and transported to the building site for final assembly on a permanent foundation.

1.19 "Mortgage" shall mean a Trust Indenture as well as a Mortgage.

1.20 "Mortgagee" shall mean a beneficiary under, or holder of, a Trust Indenture as well as a Mortgagee under a Mortgage.

1.21 "Move-on Home" shall mean and refer to an existing, older home that was either partially or wholly de-constructed in order to be moved and reassembled at a new location.

1.22 "Occupant" shall mean a tenant, lessee, or licensee of an Owner, or any other person or entity other than an Owner in lawful possession of a Lot or Lots with the permission of the Owner.

1.23 "Owner" shall mean the legal title holders, or contract purchasers, whether one or more persons or entities, owning or purchasing a fee simple title to any Lot, but excluding those having an interest merely as security for the performance of an obligation; provided, however, that prior to the first conveyance of each Lot, owner shall mean Declarant.

1.24 "Planned Unit Development" or "PUD" shall mean and refer to development that is occurring under a conditional use permit approved by the City of Belgrade whereby specific uses, other than those specifically allowed in a zoning district, are allowed under certain safeguards or conditions.

1.25 "Plat" or "Meadowlark Ranch Subdivision Plat" shall mean and refer to the plat or plats of the Property and Improvements that are subject to this Declaration. More than one subdivision plat or supplement thereto may be recorded, and if so, then the term "Plat" shall collectively mean and refer to all plats and supplements thereto.

1.26 "Project" shall mean the organization, division, improvement, operation and sale of property in Meadowlark Ranch Subdivision, Phase 4 and Subsequent Phases, which Subdivision includes Meadowlark Ranch Subdivision, Phase 4 and future phases to be platted.

1.27 "Property" shall mean all of the real property described and platted as Meadowlark Ranch Subdivision, Phase 4 and future phases to be platted on Lot 14, Block 7 of the Plat, according to the Certificate of Surveys or official subdivision plats thereof filed of record in the office of the Clerk and Recorder of Gallatin County, Montana, more particularly described at Exhibit A.

1.28 "Record", "recording", "recorded", or "recordation", shall mean, with respect to any document, the recordation of said document in the office of the Clerk and Recorder of Gallatin County, Montana.

1.29 "Site Built Home" shall mean and refer to a dwelling unit that is constructed in accordance with the standards set forth in the International Residential/Building Code and bearing the insignia of the state and that has 85% or more of the unit constructed in the Lot where construction materials are delivered and are assembled on a permanent foundation.

1.30 "Supplemental Declaration" shall mean a declaration recorded pursuant to Section 3.2 of this Declaration.

ARTICLE II AUTHORITY

2.1 Authority. This Declaration and the Plat or Plats for the Meadowlark Ranch Subdivision Phase 4 and Subsequent Phases, which Subdivision includes Meadowlark Ranch Subdivision Phase 4 and future phases to be platted, as recorded at the Gallatin County Courthouse. Declarant hereby declares that the entire Property, more particularly described at Exhibit A, is, and shall be, conveyed, hypothecated, encumbered, leased, occupied, built upon or otherwise used, improved or transferred in whole or in part, subject to this Declaration. All of the covenants, conditions and restrictions set forth herein are declared and agreed to be in furtherance of a general plan for the division, improvement and sale of the Property and are established for the purpose of enhancing, conserving, and protecting the value, desirability and attractiveness of the Property and every part thereof. The covenants, conditions and restrictions shall run with the entire Property and shall be binding upon and inure to the benefit of the Declarant, the Association and all Owners, occupants, and their successors in interest as set forth in this Declaration.

ARTICLE III PLAN OF DEVELOPMENT

3.1 Property Initially Subject to Declaration. Declarant intends by this Declaration (i) to impose upon the Property mutually beneficial covenants, conditions and restrictions under a general plan of improvement and desires to provide a flexible and reasonable procedure for the overall development of the Property and (ii) to establish a method for the administration, maintenance, preservation, use and enjoyment of the Property. Declarant hereby declares that all

the Property shall be held, sold, used and conveyed subject to the covenants, conditions and restrictions set forth in this Declaration, which are for the purpose of protecting the value and desirability of the Property, and which shall run with the Property. Declarant further declares that this Declaration shall be binding upon all persons having any right, title or interest in the Property or any part thereof, their successors, successors in title and assigns shall inure to the benefit of each Owner thereof, the Declaration and the Association, and, with respect to the provisions related to the Declarant, the Declaration, the Assessments, other obligations, Common Area and Open Space, and any obligations of the Association arising out of or in connection with the Declaration, shall inure to the benefit of the Association and the Declarant. By acceptance of a deed or by acquiring any interest in any of the Property subject to this Declaration, each Person, for himself, herself, or itself, heirs, personal representatives, successors, transferees and assigns, binds himself, herself, or itself, heirs, personal representatives, successors, transferees and assigns, consents to all of the provisions, restrictions, covenants, conditions, rules, criteria, and regulations now or hereafter imposed by this Declaration and any amendments thereto. In addition, each such Person by so doing thereby acknowledges that this Declaration sets forth a general scheme for the development, sale, lease and use of the Property and Lots therein, and hereby evidences the intent that all the conditions, covenants, and restrictions, contained in this Declaration shall run with the land and are binding on all subsequent and future Owners, grantees, purchasers, assignees, lessees and transferees thereof. Furthermore, each such Person fully understands and acknowledges that this Declaration shall be mutually beneficial, prohibitive, and enforceable by the Association and all Owners and to the extent provided by Article XV, and other particular sections of this Declaration. Declarant, its successors, assigns and grantees, covenant and agree that the Lots and the membership in the Association and the other rights and obligations created by this Declaration shall not be separated or separately conveyed, and each shall be deemed to be conveyed and encumbered with its respective Lot even though the description in the instrument of conveyance or encumbrance may refer only to the Lot.

3.2 Supplemental Declaration. Declarant reserves the right, but not the obligation, to record one or more Supplemental Declarations against portions of the Property. A Supplemental Declaration may (i) designate Common Area, (ii) impose such additional covenants, conditions and restrictions as the Declarant determines to be appropriate (iii) establish assessments pursuant to Article VII of this Declaration for Additional Property annexed pursuant to Section 3.3 below, and (iv) impose any additional covenants, conditions and restrictions as Declarant deems reasonably necessary and appropriate, for Additional Property annexed pursuant to Section 3.3 below provided that the terms, covenants, conditions and restrictions set forth in such Supplemental Declaration are not inconsistent with the plan of this Declaration. In no event, however, shall any such Supplemental Declaration revoke or modify the covenants established by this Declaration.

3.3 Annexation of Additional Property.

a) At any time on or before the date that is twenty-five (25) years after the date of the

Recording of this Declaration, the Declarant shall have the right to annex and subject to this Declaration all or any portion of the additional property without the consent of any Owner (other than the Owner of such additional property if other than the Declarant) or person or the Association. No portion of the additional property shall be annexed and subjected to this Declaration (i) unless subject to (or concurrently subjected to) the Declaration, and (ii) until a Plat has been recorded covering such portion of the additional property. The annexation of all or any portion of the additional property shall be affected by the Declarant recording an amendment to this Declaration setting forth the legal description of the additional property being annexed, stating that such portion of the additional property is annexed and subjected to the Declaration and describing any portion of the additional property being annexed that will be Common Area. Unless a later effective date is set forth in the amendment annexing additional property, the annexation shall become effective upon the Recording of the amendment. An amendment Recorded pursuant to this Declaration may divide the portion of the additional property being annexed into separate phases and provide for a separate effective date with respect to each phase. If an amendment annexing a portion of the additional property divides the annexed portion of the additional property into phases, the Declarant shall have the right to amend any such amendment to change the description of the phases within the annexed property, except that the Declarant may not change any phase in which a Lot has been conveyed to a purchaser.

- b) The additional property may be annexed in separate parcels and at different times, or the additional property may never be annexed, and there are no limitations upon the order of annexation of the boundaries thereof. Additional property annexed by the Declarant pursuant to this Article III need not be contiguous with other property in the Project, and the exercise of the right of annexation as to any additional property shall not bar the further exercise of the right of annexation as to any other additional property. The Declarant makes no assurances that additional property will or will not be annexed.

3.4 Declarant Approval Required. Notwithstanding any provision of this Article III to the contrary, no action shall be taken to annex or to Record a Supplemental Declaration (or any modification thereof) pursuant to this Article without the prior written approval of the Declarant, so long as the Declarant owns, or holds an option to purchase, any portion of the Property, and thereafter without the prior written approval of the Owners' Association, which may be given or withheld by the Declarant (or, the Association, when applicable) for any reason in its sole and absolute discretion. The approval of the Declarant or, the Owners' Association, as applicable, shall be evidenced on the Supplemental Declaration or other Recorded instrument effecting annexation or modifying a Supplemental Declaration, and any such Supplemental Declaration or other instrument Recorded without the approval of the Declarant or Owners' Association, as applicable, evidenced thereon shall be void and of no force or effect.

3.5 Disclaimer of Implied Covenants. Nothing contained in this Declaration and nothing which may be represented to a purchaser by real estate brokers or salespersons representing the Declarant or an affiliate of Declarant shall be deemed to create any implied covenants, servitudes or restrictions with respect to the use of any Property subject to this Declaration or additional property owned by Declarant or an affiliate of Declarant.

3.6 Planned Unit Development. Except as provided herein, with respect to approval rights reserved by Declarant or the Owners' Association, the Declarant, without obtaining the consent of any other Owner, person or the Association, shall have the right to make changes or modifications to the Planned Unit Development (PUD) with respect to any Property owned by the Declarant or an Affiliate of Declarant in any way that the Declarant desires, including changing the density of all or any portion of the Property owned by the Declarant or an affiliate of Declarant or changing the nature or extent of the uses to which the property may be devoted.

3.7 Disclaimer of Representations. Declarant makes no representations or warranties whatsoever that: (i) the Project will be completed in accordance with the Plat or PUD for the Project as they exist on the date this Declaration is Recorded; (ii) any Property subject to this Declaration will be committed to or developed for a particular use or for any use; or, (iii) the use of any Property subject to this Declaration will not be changed in the future.

ARTICLE IV GENERAL COVENANTS

4.1 Owner's Right to Common Area, Open Space, Trails and Roads. Every Owner shall have a right to use the Common Area and Open Space, Trails, and Roads as shown on the approved final Plat for Meadowlark Ranch Subdivision Phase 4, and Plats for any subsequent and future phases to be platted, and the Meadowlark Ranch Subdivision [Meadowlark Ranch Subdivision, First Filing (Plat Reference J-490), Plat of Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586) and the Amended Plat of Lots 23 and 27 of Block 3, Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586-A)] Common Area and Open Space, Trails, and Roads pursuant to a Shared Use and Maintenance Agreement agreed upon and executed by the respective Associations. The Owner's right to use the Common Area, Open Space, Trails, and Roads shall be appurtenant to and shall pass with the title to every Lot, subject to the following Provisions:

- a) The right of the Association to provide reasonable restrictions on the use of the Common Area and Open Space and Improvements thereon, Trails, and Roads for the overall benefit of the Association and its Members including limitations on the number of guests permitted to use the Common Area and Open Space and restrictions or prohibitions on the type of activity and use therein including, but not limited to, the use of firearms, fireworks, all motor driven vehicles, boats, loud music, and loud parties or as otherwise specified in the Common Area and Open

Space Management Plan;

- b) The Common Area and Open Space Management Plan and any other reasonable restrictions or rules on the use of the Common Area and Open Space shall be enforced and implemented by the Board of Directors;
- c) The right of the Association to charge reasonable fees for the disproportionate use by Owners or others of any recreational or other facility situated upon the Common Area or Open Space;
- d) The right of the Association to suspend the voting rights and right to use of the Common Area and Open Space and Improvements thereon and recreational or other facilities of the Association by any Owner and/or Occupant for any period during which any assessment or other charge against a Lot remains unpaid and for any infraction of these covenants, conditions, and restrictions and any adopted rules and regulations during the time in which the assessments or charges remain unpaid or the infraction remains ongoing; and
- e) The right of the Association to dedicate or transfer all or any part of its right to the Common Area and Open Spaces to any public agency, authority, utility, person, corporation or other entity for such purposes and subject to such conditions as may be agreed to by the Association. No such dedication or transfer shall be effective unless approved by sixty seven percent (67%) of the Directors.

4.2 Nuisance. No Owner, Occupant, guest or invitee may use or occupy the Common Area, Open Space, Improvements thereon, or any Lot in such a manner as to disturb or interfere with the peaceful use, occupancy or enjoyment of any other Owners and occupants. Violations shall be enforced as provided in Article XV of this Declaration.

4.3. Control and Management. The Association shall have the exclusive right and obligation to manage, control, and maintain all Improvements within the Common Area and Open Space, including but not limited to the layout, design, and installation of any Improvements in accordance with the Common Area and Open Space Management Plan and the Shared Use and Maintenance Agreement with the Residential Owners Association for the Meadowlark Ranch Subdivision [Meadowlark Ranch Subdivision, First Filing (Plat Reference J-490), Plat of Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586) and the Amended Plat of Lots 23 and 27 of Block 3, Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586-A)].

4.4 Reservation of Easements. The Declarant reserves the right to grant and/or dedicate an easement or easements in the streets, roads or at any other location on, over or across any Lot or Common Area for pedestrian rights-of-way, water, sewer, natural gas, electrical, telephone, cable TV, or other utilities for the installation, maintenance and repair of all such new

or existing services and utilities.

4.5 Right of Access. The Association or its delegated representatives, or the Declarant shall have the irrevocable right to access and cross a Lot or Lots from time to time during reasonable hours as may be necessary for the inspection, maintenance, repair, or replacement of any Improvements thereon in accordance with Articles VIII and XV. Such right of access shall be for the purpose of ensuring compliance with these covenants, conditions and restrictions and BLRC approvals as provided herein. All damage to Lots or Improvements resulting from this Right of Access, upon written documentation thereof, shall be remedied or restored to substantially the same condition in which such Lot or Improvement existed prior to the Association's exercise of its Right of Access.

4.6 Condition of Property. The Owner and Occupant of any Lot shall at all times keep the Lot and Improvements and appurtenances thereon in a safe, clean, good and operable condition and comply, at Owner's or Occupant's own expense, and in all respects with all applicable governmental, health, fire and safety ordinances, regulations, requirements and directives. The Owner or Occupant shall at regular and frequent intervals remove at its own expense any rubbish of any character whatsoever that may accumulate upon such Lot.

4.7 Landscaping Installation, Maintenance of Landscaping, Lots and Improvements thereon. Upon completion of construction of the primary residential dwelling unit upon any Lot, all landscaping shall be installed within a reasonable length of time (not to exceed one (1) growing season) after completion of construction. Once installed, the landscaping, including lawn, trees, shrubs, etc., shall be cared for and maintained and not allowed to deteriorate or become unsightly and detract from other Lots or the Subdivision. Except for Improvements owned by the Association or used by the Association for its benefit or that of its Members, all maintenance, repairs, or replacements on any Lot or on any structure thereon belonging to any Owner shall, except as otherwise provided herein, be at the expense and responsibility of the Owner thereof, including, but not limited to maintenance and repair of all Improvements, including dwelling units, accessory structures, parking areas, driveways, sidewalks and other walkways, and all landscaping. Such maintenance and repair shall include, without limitation:

- a) Maintenance of all parking areas, driveways and walkways in a good, operable, clean and safe condition, including the paving and repairing or resurfacing of such areas when necessary with the type of material originally installed thereon or such substitute therefore as shall, in all respects, be equal thereto in quality, appearance and durability; the removal of debris and waste material and the washing and sweeping of paved areas as required;
- b) Cleaning, maintenance and relamping of any external lighting fixtures and street address markers except such fixtures as may be the property of any public utility or government body;

- c) Performance of all necessary maintenance to maintain in good condition all landscaping including trimming, watering, weed removal and fertilization of all grass, ground cover, shrubs or trees, removal of dead or waste materials, replacement of any dead or diseased grass, ground cover, shrubs or trees, within the confines of each Owner's Lot boundaries, which includes the Lot area between the front sidewalk and the edge of the street surface;

Unless the Owner or Occupant performs the maintenance required hereunder, each Owner and Occupant shall contract with the Declarant, the Association, or other contractor for performance of all landscaping maintenance required hereby.

- 4.8 Lawn Care and Weed Control. Owners shall be responsible for the care and maintenance Owner's Lot including weed control, in particular control of County declared noxious weeds in accordance with approved methods and means. Both unimproved and improved Lots shall be kept free of weeds. Weeds shall be controlled in the Open Space and Common Area by the Association in accordance with the Gallatin County Weed Management Plan.

The control of noxious weeds by the Association on those areas for which the Association is responsible and the control by individual Owners on their respective Lots shall be as set forth and specified under the Montana Noxious Weed Control Act, §87-22-2101, et. seq., MCA and the rules and regulation of the Gallatin County Weed Control District Subdivision Noxious Weed Planning Requirements.

Failure to provide the care and maintenance and weed control as provided in this Section shall subject the Lot and Owner or Owners to the Remedies for Failure to Maintain and Repair as provide in Section 4.9, the Enforcement provisions of Article XV, and any all such other remedies as allowed by law, this Declaration and the Bylaws.

- 4.9 Remedies for Failure to Install, Maintain and Repair, and Control Weeds.

- a) Remedies. If any Owner shall fail to perform the installation, maintenance and repair required by Section 4.7, or the lawn care and weed control provided by Section 4.8, then Declarant and/or Association, shall demand such Owner perform such installation, maintenance or repair. Such demand shall include written notice detailing the specifics of the nonconformance or violation and demand remedy thereof within thirty (30) days of the written notice to the Lot Owner. If the Lot Owner does not respond to such notice or does not remedy the nonconformance or violation with such thirty (30) day period, absent extension thereof, the Declarant or Association shall have the right, but not the obligation, to perform such maintenance and repair and to charge the delinquent Owner with the cost of such

work together with interest thereon at an annual rate equal to the maximum rate allowed under Montana law, from the date of Declarant's and/or Association's advancement of funds for such work to the date of reimbursement of Declarant and/or Association by Owner, or otherwise impose fines on the Lot and Owner in accordance with this Declaration and the Bylaws. If the nonconformance or violation cannot be remedied within the thirty (30) day period, Owner shall request extension of the deadline by the Declarant or the Association, as applicable, which extension shall not be unreasonably withheld. All such charges and fines shall become an additional assessment, referred to herein as a Default Assessment, recoverable as such. If the delinquent Owner fails to reimburse Declarant and/or Association for such costs or pay fines imposed and such costs fines remain unpaid for three (3) months, Declarant and/or Association may file for and Record a claim of lien for the amount of such charges and fines as Default Assessments, together with interest thereon. The lien created by this section shall be effective to establish a lien against the interest of the delinquent Owner and Owner's Lot together with interest at the rate provided above on the amount of such advance from the date thereof, in addition to recording fees, costs of title search obtained in connection with such lien or the foreclosure thereof and court costs and reasonable attorney's fees which may be incurred in the enforcement of such a lien. Such lien shall be for the benefit of Declarant and/or Association and may be enforced and foreclosed as provided by law.

- b) Notice of Noncompliance. Declarant and/or Association upon taking such action as provided in Section 4.9.a, shall record a notice of noncompliance against the Lot providing notice that the Lot or Improvements thereon are not in compliance with Declaration or other governing documents and shall put prospective purchasers on notice of such noncompliance and may provide such other steps as may be necessary to bring the Lot or Improvements thereon into compliance with the Declaration or other governing documents.
- c) Cure. If a default to which a notice of claim of lien was filed is cured, Declarant and/or Association shall file or Record a rescission or removal of such notice of noncompliance, upon payment by the defaulting Owner of the cost of preparing and filing or recording such rescission or notice, and other reasonable costs, interest or fees which have been incurred.
- d) Nonexclusive Remedy. The foregoing lien and the rights to foreclose thereunder shall be in addition to, and not in substitution for, all other rights and remedies which any party may have hereunder and by law, including any suit to recover a money judgement for unpaid assessments.

4.10 Condemnation of Common Area or Open Space. If at any time, or from time to time, all or any portion of Common Area or Open Space, or any interest therein, be taken for any

public or quasi-public use, under any statute, by right of eminent domain or by private purchase in lieu of eminent domain, the entire award in condemnation shall be paid to the Association and deposited into either the operating fund or other such Association fund as the Association may, in its sole discretion, determine. No Owner shall be entitled to participate as a party, or otherwise, in any proceeding relating to such condemnation, such right or participation being herein reserved exclusively to the Association which shall, in its name alone, represent the interests of all Owners.

4.11 Recreational Facilities in Common Area. The Association shall have the right to construct such recreational facilities in any portion of the Common Area that may be approved by a majority vote of the Board of Directors.

4.12 General Maintenance of Common Area and Open Space. All maintenance, alterations, repairs, and replacements of the Common Area, Improvements thereon, and Open Space shall be the common expense of the Association, shared by and with the Residential Owners Association for Meadowlark Ranch Subdivision [Meadowlark Ranch Subdivision, First Filing (Plat Reference J-490), Plat of Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586) and the Amended Plat of Lots 23 and 27 of Block 3, Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586-A)] in accordance with the Shared Use and Maintenance Agreement, and all of the Owners; provided, however, if such damage is caused by a negligent or tortious act of any Owner, Owner's family, Occupant, agents, employees, invitee(s), or licensee(s), then such Owner shall be responsible and liable for all such damage. Such maintenance, alteration, replacement and/or repair of the Common Area, includes, but is not limited to, all landscaping, storm drain improvements and appurtenances, including detention basins, culverts, and facilitates and stormwater manholes, outfall ditches and roadside ditches. The Association, as part of its responsibility, shall maintain, repair and provide for snow removal and maintenance activities on all Common Area and Open Space.

4.13 General Maintenance of Stormwater Improvements and Appurtenances. The maintenance of the onsite stormwater collection, detention and discharge release appurtenances and facilities shall be the shared responsibility of the Association, shared by and with the Residential Owners Association for Meadowlark Ranch Subdivision [Meadowlark Ranch Subdivision, First Filing (Plat Reference J-490), Plat of Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586) and the Amended Plat of Lots 23 and 27 of Block 3, Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586-A)] in accordance with the Shared Use and Maintenance Agreement, with such maintenance integrated as part of the duties of maintenance personnel responsible for normal grounds keeping. Duties shall include routine inspections to ensure that debris, yard waste, and seasonal ice does not impede operation of the detention ponds, culverts, manholes, ditches and discharge structures. These inspections shall occur after each major runoff event and on a continued monthly basis throughout the year. All results shall be recorded and kept on file for future verification by regulatory agencies. In addition to the routine inspections, annual inspections shall assess and mitigate, if necessary, performance of the detention ponds, and release structures. Criteria shall include accumulation

of sediment and debris in the detention ponds, culverts, manholes and release structures as well as any weather or vandalism related damage. Detention ponds and ditches shall be mowed on a regular basis during the growing season so as to remain free of vegetation that might impede their storage capacity or conveyance capacity.

4.14 Lot Splitting; Consolidation.

- a) Two or more contiguous Lots within Meadowlark may be combined through the process required by and with the approval of the City of Belgrade, provided notice of intention to consolidate such Lots is filed with the BLRC and the requirements of (b) and (c) below are met. Such consolidated lots may thereafter be treated as one Lot, with one allowable building site, and such building site shall be subjected to these covenants, conditions and restrictions the same as a single Lot except for the purpose of levying and collecting assessments which will be for two Lots.
- b) No residential Lot shall be split or divided or subdivided, unless such Lot as split is then consolidated with a contiguous Lot, and unless the resulting area to be built upon shall be larger than one Lot.
- (c) Any change in Lot configuration shall be not be effective until approved by the BLRC and appropriate governmental authorities (City of Belgrade, Gallatin County, State of Montana) and an amended Plat recorded, all costs of which shall be the sole responsibility of the party requesting such change.

4.16 Public Utilities. Declarant and/or Association reserve the right to grant consents for the construction and operation of public utilities including, but not limited to lines for electricity, telephone or telegraph, above or below ground conduits, and gas pipes in and upon any and all streets now existing or hereafter established upon any portion of the Property. Declarant and/or Association reserve the right to grant consents and to petition the proper authorities for any and all street Improvements such as grading, seeding, tree planting, sidewalks, paving, sewer and water installation, whether it be on the surface or subsurface, which in the opinion of Declarant and/or Association are necessary on or to the Property. Notwithstanding the provisions of this Section and Section 4.17, Declarant and/or Association reserve the right to approve above ground utility lines across the Property or any portion thereof on a temporary basis for the purpose of construction, and such lines shall be permitted when required by a government agency. The BLRC shall approve the designs and construction of all public utility Improvements within Meadowlark.

4.17 Utility Lines and Antennas. No sewer, drainage, or utility lines or wires or other devices for the transmission of electric current, power, or signals including telephone, television, microwave or radio signals, shall be constructed, placed, or maintained anywhere in or upon any portion of the Property other than within buildings or structures unless the same shall be contained in conduits or cables constructed, placed or maintained underground or concealed in or

under buildings or other structures. No antenna for the transmission or reception of telephone; television, microwave or radio signals or the like shall be placed on any Lot within the Property without the prior written approval of Declarant and/or Association. Ham radio type antennae are specifically prohibited. Nothing contained herein shall be deemed to forbid the erection or use of temporary power or telephone facilities incidental to the construction or repair of buildings on the Property.

4.18 Waterways. Uses and activities of Owners, Owner's family, occupants, or Owner's agents, employees, invitee(s), or licensee(s) shall at all times be in a manner that will preserve the integrity of waterways (including all wetlands, ponds, ditches, drainages, or any other natural feature associated with the conveyance or storage of water) within the Common Areas, including the prevention of: 1) any degradation of water quality; 2) any reduction or increase in the flow of said waterways; and, 3) any damage to the stream bed or banks of said waterways. The Owner or Owner's family, occupants, or Owner's agents, employees, invitee(s), or licensee(s) shall not conduct or permit the conduct of the following activities:

- a) The discharge of any liquid, solid, or gas into waterways;
- b) The use of any fertilizers or herbicides other than those specifically approved by Declarant or Association; or the polluting of waterways; or
- c) Any refuse encouraging activities.

4.19 Domestic Pets. No domestic animals or fowl shall be maintained on any Lot except as provided herein. No more than two (2) dogs and two (2) cats may be maintained. Such animals shall at all times be restrained or leashed and shall not chase or otherwise harass wildlife or people. Such domestic animals may be subject to the provisions of the Common Area and Open Space Management Plan, and other such limitations as may from time to time be set forth in the Bylaws of the Association or other rules and regulations adopted in accordance with this Declaration or the Bylaws. Under no circumstances shall domestic animals be allowed within any wetland areas or waterways (including all ponds, ditches, drainages, or any other natural feature associated with the conveyance or storage of water). If any animals are caught or identified as being at large or within any wetland areas or waterways, or chasing or otherwise harassing wildlife or people, an Owner or the Association shall contact the local animal control authority. No Owner of any animal or animals impounded, for being at large and not restrained or leashed or chasing or harassing wildlife or people shall have the right of action against the Association or any member thereof, for such impoundment.

4.20 Fireworks and Open Burning. No fireworks or firearms of any kind shall be discharged within the confines of the Subdivision. No open burning shall be permitted within the Subdivision. Open burning of organic debris generated from the Common Area and Open Space may be allowed in accordance with local burning regulations, but only by someone authorized by the Board.

4.21 Assignment of Powers. Any and all of the rights and powers vested in Declarant pursuant to this Declaration may be delegated, transferred, assigned, conveyed or released by Declarants to the Association, and the Association shall accept the same, effective upon the recording by the Declarants of a notice of such delegation, transfer, assignment, conveyance or release.

4.22 Variances. The BLRC may grant reasonable variances or deviations from the requirements of this Declaration, upon written application of an Owner accompanied by plans, materials, specifications, and supporting documentation, in order to overcome practical difficulties and prevent unnecessary hardships. The BLRC grant variances in regard to the requirements contained in Article XIV, for the purpose of enhancing views, utilizing a Lot to better advantage, preventing the removal of trees, and enhancing the placement of Improvements on a Lot, provided such variances are in conformity with the intent and purpose of this Declaration and are not materially detrimental or injurious to other Lots or Improvements, and based on other such criteria as the Board shall adopt by resolution. Applications for a variance shall explain practical difficulties, hardship, or other basis for the variance requested as provided in this section, and shall be accompanied by plans, materials and specifications to support the variance request and other supporting information to demonstrate the practical difficulties, hardship or other basis for the variance request. The variance application process, timeframe, and appeal process shall be the same as for the BLRC review in Section 8.4, or as otherwise approved by the Board of Directors. Notwithstanding the foregoing provision, no variance shall be allowed which has the effect of creating additional Lots.

4.23. Motorized Vehicles. Only properly licensed and insured motorized vehicles shall be operated on the streets within the Subdivision.

ARTICLE V MEADOWLARK RANCH NORTH OWNERS' ASSOCIATION

5.1 Creation and Turnover by Declarant. The Association shall be created pursuant to the Articles and Bylaws prior to the conveyance of any Lots. The Declarant shall have all the authority vested in the Association until all Lots are sold in Meadowlark Ranch Subdivision Phase 4 and Subsequent Phases, provided however that Declarant may turnover such authority to the Association at an earlier time at the discretion of Declarant pursuant to Section 6.1.

5.2 Purpose of Association. The Association has been formed as a non-profit corporation in accordance with Chapter 2 of Title 35, Montana Code Annotated for the purpose of enforcing these covenants, conditions and restrictions and operating the Association for the benefit of all Members.

5.3 Bylaws of and for Association. The Bylaws of and for Meadowlark Ranch North Owners' Association establish membership in and the duties, powers, operations, and rights of

the Association and the members therein. The Association shall be governed by and empowered to act in accordance with the Bylaws, the Articles and this Declaration.

5.4 Membership in Association. Every Owner of a Lot in the Subdivision on file and of Record in the office of the County Clerk and Recorder of Gallatin County, Montana, shall be a Member of the Association. By this provision, each tract or Lot as shown on the Plat and amendments thereto shall entitle the Owner of one membership interest in the Association. Membership interest shall run with the land so that said interest is an incident to Lot ownership beginning when ownership rights are acquired and terminating when such rights are divested. Accordingly, no member shall be expelled, nor shall he be permitted to withdraw or resign while possessing a membership interest.

5.5 Voting Rights. The Association shall have one (1) class of voting membership. Members shall be all Owners with the exception of the Declarants. Members shall be entitled to one (1) vote for each Lot owned. When more than one (1) person holds an interest in any Lot, all such persons shall be Members, however they collectively shall only have one (1) vote, which vote for such Lot shall be exercised as they among themselves determine. In no event shall more than one (1) vote be cast with respect to any Lot.

ARTICLE VI BOARD OF DIRECTORS

6.1 Membership. The Board of Directors (“Board” or “Directors”) shall be five (5), three (3) of which shall be Owners of residential property within the Subdivision. The initial Board shall be three (3) persons as provided in the Articles of Incorporation who shall serve until all Lots are sold in Meadowlark Ranch Subdivision Phase 4 and Subsequent Phases after which time the Board may be increased to five (5) members. Three (3) of the five (5) Directors shall be residents of Gallatin County, Montana.

Until all of the Lots in Meadowlark Ranch Subdivision Phase 4 and Subsequent Phases have been sold and title transferred to Owners, the Declarant reserves the right to appoint and remove all members of the Board and to exercise the powers and responsibilities otherwise assigned by the Declaration of the Association. By express written declaration, Declarant shall have the option to at any time turn over to management and operation of the Association to the Members and a duly elected Board of Directors.

The Board and their officers, assistant officers, agents and employees acting in good faith on behalf of the Association:

- (1) shall not be liable to the Owners as a result of their activities as such for any mistake of judgement, negligence or otherwise, except for their own willful misconduct or bad faith;

(2) shall have no personal liability in contract to an Owner or any other person or entity under any agreement, instrument or transaction entered into by them on behalf of the Association in their capacity as such;

(3) shall have no personal liability in tort to any Owner or any person or entity, except for their own willful misconduct or bad faith;

(4) shall have no personal liability arising out of the use, misuse or condition of the Property which might in any way be assessed against or imputed to them as a result of or by virtue of their capacity as such.

6.2 Notice and Quorum for Any Authorized Action. All Director meetings called for the transaction of business shall require the presence of a majority of the number of Directors as provided in the Bylaws.

6.3 Meetings. There shall be a minimum of one (1) meeting per year immediately following the first annual meeting and each subsequent annual meeting of Members. In addition, the President of the Board of Directors has the right to call as many meetings as deemed necessary in order to perform all functions of the Directors in an efficient and professional manner and as provided in the Bylaws. Special Meetings of the Board may be called as provided in the Bylaws.

6.4 Hired Officers and Contractual Agreements. The Directors shall have the authority to hire personnel as deemed necessary for the smooth, efficient, and professional functioning of the Association and in accordance with the Bylaws. This may include, but is not limited to, a manager, or management company, secretary, treasurer, accountant, and maintenance personnel. The Directors shall also have the authority to make contractual arrangements with outside entities, including but not limited to an attorney, accountant, engineer, maintenance contractors, and Developers to provide for the smooth, efficient, and professional functioning of the Association in accordance with the Bylaws.

ARTICLE VII ASSESSMENTS

7.1 Assessments. The Association, acting through the Board of Directors, shall have the power to establish and levy all assessments and impose such charges as necessary to carry out the purposes of the Association and as provided for herein and in the Bylaws.

7.2 Creation of Lien and Personal Obligation of Assessments. The Declarant, for each Lot owned within the properties, hereby covenants and each Owner of any Lot by acceptance of a deed thereof, whether or not it shall be so expressed in such deed, is deemed to covenant and agree to pay to the Association: a) Regular assessments; b) Special assessments; and c) Default Assessments as provided in this Declaration and the Bylaws;

All such assessments are to be established and collected as hereinafter provided and shall be a charge on the land and shall be a continuing lien upon the property against which each such assessment is made. Each such assessment, together with interest, costs, and reasonable attorney's fees shall be the personal obligation of the person who was the Owner of such property at the time when the assessment fell due.

7.3 Purpose of Assessments. The assessments levied by the Association shall be used to promote the recreation, health, safety, and welfare of the Owners, the Association, and Meadowlark Ranch Subdivision Phase 4 and Subsequent Phases, which Subdivision includes Meadowlark Ranch Subdivision Phase 4 and future phases to be platted, and for the improvement, repair, maintenance, and protection of the Open Space, Common Area, Common Area facilities and Improvements, trails, wetland areas, parks, conservation of the natural amenities on the Property, and for use in such Open Space and Common Areas in Meadowlark Ranch Subdivision [Meadowlark Ranch Subdivision, First Filing (Plat Reference J-490), Plat of Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586) and the Amended Plat of Lots 23 and 27 of Block 3, Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586-A)] as provided in the Shared Use and Maintenance Agreement, and the Property generally for the interest of the Owners therein. Assessments shall be used for maintenance of and insurance for Common Area, Open Space and Trails in Meadowlark Ranch [Meadowlark Ranch Subdivision, First Filing (Plat Reference J-490), Plat of Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586) and the Amended Plat of Lots 23 and 27 of Block 3, Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586-A)] by agreement of the respective Associations pursuant to the Shared Use and Maintenance Agreement. The purposes for Assessments may also include, but shall not be limited to, funding for: the payment of taxes; the purchase of insurance for the Open Space and Common Area and risks involving the Association or its Directors; utilities, streams, creeks, storm water drainage ditches and detention tanks, ponds, trails, bridges and other Improvements or easements owned by the Association or used by the Owners in common; the establishment, maintenance and protection of, streams, creeks, storm water drainage ditches and detention tanks, ponds, floodplain areas, and lagoons within the Property; the planting, cultivating, mowing, maintenance, harvesting and cutting of grass and weed control within Common Area and Open Space; the construction, maintenance and repair of all Improvements, including, but not limited to, buildings, structures, ponds, trails, bridges, lagoons, storm water drainage ditches and detention tanks, utilities, recreational facilities and Improvements owned by the Association and constructed on the Open Space and Common Area or elsewhere for the benefit of the Association; and the cost of labor, equipment, services, materials, management, protection and supervision of the assets and interests of the Association.

7.4 Annual Assessments. Annual assessment shall be determined by the Directors in an amount estimated to cover the normal operating expenses of the Association for each year as determined in conformity with standard accounting practices, together with such additional amounts as may, in their reasonable judgement, be necessary to cover any past deficits from operations of the Association. Annual assessments shall be apportioned among the individual

Lot Owners equally regardless of home size, Lot size, proximity to the Common Area, percentage of street use, or any other variables which may be deemed more or less favorable to an individual home.

7.5 Special Assessments. In addition to an annual assessment to cover the Association's operating expenses, the Association, by an action of its Board of Directors, may levy, in any assessment year, one or more special assessments for the purpose of reserving or paying for, in whole or in part, the cost of any construction, reconstruction, maintenance, repair or replacement of a Capital Improvement, or any improvement deemed necessary by the Board upon any Common Area or Open Space {located in Meadowlark Ranch Subdivision [Meadowlark Ranch Subdivision, First Filing (Plat Reference J-490), Plat of Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586) and the Amended Plat of Lots 23 and 27 of Block 3, Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586-A)] and Meadowlark Ranch Subdivision Phase 4 and future phases to be platted, pursuant to the Shared Use and Maintenance Agreement} including fixtures and personal property related thereto, and for such other purposes or projects benefitting the Association and its interests provided that any such assessment shall have the assent of simple majority of the votes of the Board of Directors at a meeting called for this purpose. Nothing stated herein shall restrict the right of the Association to provide for the repayment of the special assessment, and upon terms and conditions it deems appropriate, including the collection of interest on the deferred balance.

7.6 Notice and Quorum for Any Action Authorized in Sections 7.3, 7.4 and 7.5. Written notice of any meeting called for the purpose of taking any action authorized under Sections 7.3, 7.4. and 7.5 of Article VII shall be sent to all Directors and Owners not less than fifteen (15) days nor more than forty (40) days in advance of the meeting. Such notice shall include a notice of assessments, amount thereof, and the purpose for which Assessments are made, whether regular or special, an annual budget for expenditures and operation, and due date and shall be delivered directly to each Director and Owner, either personally or by first-class mail, postage prepaid. A majority of the number of Directors shall constitute a quorum for the transaction of business.

7.7 Uniform Rate of Assessment. Except as the Board may determine is more equitable, all assessments must be fixed in equal amounts at the same uniform rate for all Lots provided, however, when in the judgement of the Board, an Improvement uniquely restores damages or provides value or benefit only to certain individual Lots then, to the extent determined by the Board that such Improvements are not beneficial to the Association as a whole or to the Owners of Lots in general, such portion of costs of such Improvements which solely contribute to those certain individual Lots may be prorated, scheduled and assessed among only those Owners of Lots affected.

7.8 Default Assessment. Notwithstanding anything to the contrary contained herein, if the expense of the Association is caused by a) the negligence or misconduct of an Owner, Owner's family, Occupant, employee, agent, Licensee or Invitee, or b) a violation of these

covenants, conditions and restrictions, the Bylaws, or Articles, or any rules and regulations adopted in accordance therewith, by an Owner, Owner's family, Occupant, employee, agent, Licensee or Invitee, the Association may, if it deems necessary or advisable, levy an assessment, penalties, charges, fees or fines against such Owner or Lot in accordance with this Declaration and the Bylaws. Any such assessment levied by the Association, and each penalty, fee, fine or other charge imposed upon an Owner or Lot as a result thereof are referred to as a "Default Assessment" and shall be recoverable in the same manner as other assessments as provide for herein.

7.9 Notice; Payment; Due Dates. Annual assessments shall be assessed on a quarterly calendar basis, or as otherwise determined by the Board, as provided herein. The first assessment shall be adjusted according to the number of months remaining in the calendar year. The Board shall fix the amount of assessment against each Lot at least thirty (30) days in advance of each annual period. Written notice of the assessment shall be sent to every Owner subject thereto. Assessments shall be levied and due and payable within thirty (30) days of the date of mailing of notice of assessments, after which assessment shall be delinquent. Such notice shall include the amount of the assessment(s) and the purpose for which assessments are made, whether regular or special, and due date and shall be delivered directly to each Owner, either personally or by first-class mail, postage prepaid. Special and Default assessment shall be payable as determined by the Board with notice provided to the Owners subject to such assessments. The Board shall, upon demand, and for a reasonable charge, furnish a certificate signed by an Officer setting forth whether the assessments on a specific Lot have been paid.

7.10 Effect of Nonpayment of Assessments; Remedies of the Association; Liens. Any assessment not paid within thirty (30) days after the due date shall be subject to a late charge and interest at the highest rate allowable by law. The Association, upon notice thereof being filed of record in the Office of the Gallatin County Clerk and Recorder, may record a Notice of Lien against the Lot for which the assessments are unpaid, and bring an action at law against the Owner to recover such unpaid assessments, and foreclose the lien as provided by law, and the Association shall be entitled in any such actions or foreclosure proceedings to recover its costs, expenses and reasonable attorney's fees. No Owner may waive or otherwise avoid liability for the assessments provided for herein by nonuse of the Common Area or abandonment of an Owner's Lot.

7.11 Subordination of Lien to Mortgages. The liens as provided for herein shall be subordinate to the lien of any mortgage or mortgages. Sale or transfer shall not relieve a Lot or Owner from liability for any assessments due.

7.12 Declarant Assessments. For the purpose of assessments, any Property owned by the Declarant shall be subject to the same assessments and provisions of these Articles of any other Owner.

ARTICLE VIII ARCHITECTURAL REVIEW AND CONTROL

8.1 Intent. The architectural and design requirements, standards, criteria and process which follow are intended to provide for a consistency and quality of design of buildings and Improvements within the Property, and alterations thereto. Specifically, these criteria address the building design and location, landscaping, Lot density, and other Improvements. The further intent of these criteria is to provide flexibility while at the same time defining a minimum level of quality and consistency of building design which will be consistent with and maximize the quality of the overall Project. Unique design elements proposed by the Developer, Building Contractor, Architect, Home Builder, and Owners for landscaping and buildings will be considered by the BLRC, and individual expression is encouraged, provided such expression is harmonious with the overall plan of the Project. The Project is a “coved” design that requires unique building setback lines for each Lot which further enhances the overall development by ensuring that each home is sited on the Lot in a way that maximizes space and view sheds. No construction or alteration of any improvement or any work affecting the external appearance of any Improvement shall be made, erected, altered, placed or permitted to remain upon the Lot until a site plan, floor plans, building elevations, exterior details, specifications and landscaping showing the design, location, material(s), and color(s) together with the name of the contractor shall have been submitted to and approved in writing by the BLRC. The BLRC shall review all plans, materials and specifications submitted to it for any proposed Improvement or alterations to a Lot or Improvement thereon, including landscaping to determine compliance with the requirements, standards, and criteria provided in Articles IX, X and XI.

8.2 Membership of Building and Landscape Review Committee. The BLRC shall consist of three (3) members appointed by the Directors. The Directors shall serve as the BLRC until their initial terms expire in accordance with the Articles.

8.3 Standards for Review. It shall be the applicant’s responsibility to ensure that all proposed construction shall comply with the International Building Code as adopted by the City of Belgrade, National Plumbing Code and the National Electrical Code, and the Building Criteria, and requirements provided herein. All plans, materials and specifications must be harmonious with the overall plan for the development. All plans, materials and specifications for Improvements must be suitable to the site, adjacent Lots and the Property as a whole, and compatible with the surrounding Lots so as not to impair or degrade property or aesthetic values.

8.4 Approval or Disapproval by Building and Landscape Review Committee. The BLRC shall approve or disapprove plans, materials and specifications for an Improvement or alterations to a Lot or Improvement thereon, including landscaping, within fifteen (15) days of receipt of complete plans, specifications and materials. Such review shall be for conformance with the requirements, standards, and criteria as set forth in Articles IX through XI. This fifteen (15) day review period shall commence upon the BLRC’s determination that plans, materials and specifications are complete as provided by written notice to the applicant, which plans, materials

and specifications shall include the detailed site plan, floor plans, building elevations, roof plans, exterior details, project specifications, color samples, sample materials and landscaping plans. The fifteen (15) day review period shall be adjusted accordingly if plans, materials and specifications are submitted during any holidays. The BLRC may request additional plans, project specifications, color samples, sample materials or landscaping plans as needed to make a decision, which request shall be in writing, and the fifteen (15) day review period shall commence upon the BLRC's receipt of such additional information and written notice to the applicant. Approval or disapproval of any plan submittal shall require a majority vote by the BLRC. Any denial shall be based upon noncompliance with the requirements, standards, and criteria as set forth in Articles IX through XI, or the variance criteria as provided in Section 4.22, or the deviation criteria as provided in Section 8.5 below. The grounds for the denial shall be provided in written findings to the applicant within fifteen (15) days of such decision. Denials may be appealed to the Board of Directors in writing, which denial shall be submitted to the Board within thirty (30) days of the written findings. Upon the BLRC's approval and prior to commencing construction, the Owner shall also secure all required permits from other agencies having jurisdiction, including Gallatin County, and the City of Belgrade, among others as needed. Upon securing the BLRC approval letter and the permits from Gallatin County and the City of Belgrade, and others as needed, the Owner may commence construction in accordance with the approved plan, materials and specifications.

8.5 Inspection of Work and Deviation from Approved Plans, Materials and Specifications. Upon the completion of any Improvement or alterations thereto, if the BLRC finds that such work was not done in strict compliance with all approved plans, materials and specifications, it shall notify the Owner and the Directors of such noncompliance in writing, with specific reference to the applicable requirements, standards, or criteria as set forth in Articles IX through XI related to the noncompliance. Any deviation from the approved plans, materials and specifications which, in the judgement of the BLRC, is substantial deviation from the requirements, standards, or criteria as set forth in Articles IX through XI or that is otherwise a detriment to the appearance of the Lot, Improvement, or to the surrounding area shall be promptly corrected to conform with the submitted plans, materials and specifications by the Owner or corrected by the Association at the Owner's expense as provided in this Declaration, unless a variance is granted by the BLRC. Upon receipt of a written variance request pursuant to Section 4.22, the BLRC may determine such deviation from the approved plans, materials and specifications is not detrimental to the appearance of the Lot, Improvement, or surrounding areas and, upon the submission of plans, materials and specifications conformation with such alteration or Improvement as required herein, approve the deviation. Absent a variance, the BLRC shall require the Owner to remedy the same. If, upon the expiration of seven (7) days from the date of such written notification of noncompliance, the Owner has failed to commence to remedy such deviation or noncompliance, the BLRC shall determine the nature and extent of noncompliance thereof and the estimated cost of correction. The BLRC shall notify the Owner in writing of the nature and extent of the noncompliance and estimated cost of correction or removal. The Owner shall then only have five (5) days to commence such remedy and thirty (30) days to complete such remedy, unless such deadlines are extended by the BLRC, in writing upon the written

request of the Owner which shall include the justification for the requested extension, and good cause appearing. If the Owner still does not complete the remedial action within the required period, the BLRC shall notify the Directors in writing of the nature and extent of the noncompliance and estimated cost of correction or removal. The Board of Directors shall hold a meeting to determine whether the Association shall have the noncomplying Improvement removed or otherwise remedy the noncompliance, and the Owner shall reimburse the Association upon demand for all expenses incurred in connection therewith. Notice of such Directors' meeting shall be provided to the Owner ten (10) days in advance, and the Owners shall have the opportunity to be heard and provide evidence. The Board of Directors may also seek alternative dispute resolution, the cost of which shall be responsibility of the Owner, unless otherwise determined by the Board of Directors. Expenses incurred by the Association for correction or resolution of such noncompliance, including the aforementioned alternative dispute resolution, shall become an additional assessment, referred to herein as a Default Assessment, recoverable as provided in the Declaration. If the Owner fails to reimburse the Association for such costs and such costs remain unpaid for three (3) months, the Association may file for and Record a claim of lien for the amount of such expenses as Default Assessments. The Committee may inspect work in progress and give notice of noncompliance in writing as provided above.

8.6 Application for Architectural Design Review Submittal. All applications to the BLRC for Architectural Design Review shall include, at minimum, the following elements.

- a) The Individual Lot Site Plan, as obtained from the Declarant or the BLRC, which shall be amended to include the locations and dimensions of all proposed and existing building, all landscaping, driveways, fences, sidewalks, decks, and any other Improvements, all of which shall be drawn in the same scale as the original BLRC Individual Lot Site Plan;
- b) Complete construction drawings - Two (2) sets shall be submitted to the Committee for approval. Each set shall include floor plans, exterior elevations of all sides, roof design, specifications and any construction details. (scale 1/4" = 1'-0");
- c) Samples of all exterior materials with their respective color proposals in an adequate size to evaluate properly; and
- d) A review fee may be required at the time of submission of all the design submittal documents and materials. The purpose of the design review fee shall be to defray the Association's cost of review of proposed site plans and the expenses of inspections and enforcement of this Declaration. The architectural design review fee shall be set by the Board of Directors.

8.7 Start of Construction. Under no circumstances shall construction be initiated without the required approvals or variance from the BLRC, the City of Belgrade, Gallatin

County and any other necessary approvals. The City of Belgrade and Gallatin County are to be provided a copy of the BLRC letter with any request for review by the City and/or County . Upon completion, all building construction and landscaping must conform to both the final approved plans by the BLRC, the City of Belgrade, and Gallatin County.

8.8 Vacant Lots. All vacant Lots shall be maintained by the Owner at the Owner's expense in accordance with this Declaration including, at a minimum, mowing for fire safety and the control of noxious weeds.

8.9 Completion. Once started, all work on any Improvement on any Lot must be conducted on a continuous and diligent basis until complete, which shall not exceed one (1) year, unless the construction period has been specifically extended by the BLRC in writing upon request of an Owner.

ARTICLE IX BUILDING AND SITE DEVELOPMENT

9.1 Intent of Design Criteria. The primary goal is to ensure that the proposed Project design and Lot Improvements, including landscaping, maintain or exceed the general level of quality, size, appearance, and marketability commensurate with the high-quality residential lots and homes adjacent to it and high-quality homes in general. All initial or subsequent Improvements or alterations to Lots are subject to the architectural, building and landscaping requirements and criteria as provided in Articles IX, X and XI. Approval by the BLRC shall be obtained prior to application to the City of Belgrade and/or Gallatin County for a building permit. The submittal requirements for review by the BLRC are specified in Article VIII. The BLRC shall have no power to approve any structure failing to meet, at minimum, the requirements and criteria set forth in this Declaration, unless otherwise provided herein.

9.2 General Regulations. All lands within Property are subject to the zoning regulations of the City of Belgrade and applicable County regulations.

In addition to those regulations and these criteria, building design may be regulated by State and Federal regulatory agencies having jurisdiction. The Owner, or his or her agent, are responsible for conformance with any applicable regulations, and must consult with the City of Belgrade, Gallatin County, and the State of Montana, as needed to verify that the most recently adopted edition of any applicable regulation is being used. No construction of, or alteration to any Improvements, whether temporary or permanent shall be commenced on any Lot prior to receiving the written approval of the BLRC, the City of Belgrade, and Gallatin County as applicable.

Site Built Homes are expected to be the primary building type and no Move-on, Mobile, or Manufactured Home, as defined herein, is allowed to be placed on any Lot.

Interior modification and/or changes that do not alter the exterior appearance of a building, or other Improvements, shall not require the approval of the BLRC. Owners are responsible for consulting with the City of Belgrade and all other applicable governing bodies and agencies with respect to any other approval required.

9.3 Density, Plat Restrictions, Allowable Uses, Allowable Buildable Areas and Setbacks.

- a) Density. No more than one (1) single family dwelling unit may be built on each residential Lot.
- b) Plat Restrictions. All property restrictions and conditions included on the Recorded Plat or Plats are incorporated herein.
- c) Allowable Uses. Each residential Lot shall be used exclusively for residential purposes, and no more than one (1) family shall occupy such residence, provided however that nothing in this subparagraph shall be deemed to prevent:

An Owner from pursuing the Owner's calling upon the Lot or dwelling unit, so long as Owner resides on the Lot, is self-employed, and has no employees working on such Lot or in such dwelling unit, and does not advertise any product, work for sale, or service provided to the public upon such Lot or dwelling unit, subject to any applicable Zoning, or other local, state or federal regulations.

The leasing of any Lot and or Improvements from time-to-time by the Owner thereof is subject to this Declaration, the Bylaws, and any other rules, regulations or restrictions as may be adopted from time-to-time by the Association.

- d) Buildable Areas and Setbacks. All Improvements, other than landscaping and fencing, shall be limited to the buildable area or building envelope, as defined by the Plat, the Individual Lot Site Plan, and the PUD Chapter of the Belgrade Zoning Ordinance. Specifically, the exterior perimeter walls of all dwelling units, exterior decks, deck piers and deck foundations, patios, driveways, walkways, slabs, arbors, gazebos, garden sheds or other such buildings or yard elements shall not be constructed nor located outside of the buildable area or building envelope as stipulated on the Plat and the Individual Lot Site Plan. The Setbacks or buildable area or building envelope may only be modified by approval of an amendment to the Plat by the City of Belgrade, which may be requested by the Declarant or the BLRC, and only in the event that such modifications are fully compliant with all City of Belgrade Zoning Ordinance and Planned Unit Development Subdivision requirements.

Overhanging roof eaves may exceed buildable area or building envelope by not

more than twenty-four inches (24") as measured horizontally from the exterior finish wall material to the outermost edge of eave or gutter, if allowed by the City of Belgrade Zoning Ordinance.

- 9.4 Height Limits. The maximum building height for any building is twenty-four feet (24') measured from the average elevation of the proposed finished grade at the front of a building to the highest point of a flat roof, the deck line of a mansard roof, and the mean height between the eaves and the ridge for gable, hip, and gambrel roofs or as provided by the City of Belgrade Zoning Ordinance, whichever is more restrictive. Chimneys and other architectural elements may extend above the maximum roof height, provided that such elements are approved by the BLRC, and the City of Belgrade if required.
- 9.5 Minimum and Maximum Dwelling Sizes.
- a) Minimum. Each Lot shall provide the minimum living space exclusive of garages, decks, porches, patios and carports of 1,200 square feet, of which, a minimum of 800 square feet shall comprise the ground floor.
- b) Maximum. Maximum dwelling size shall not exceed the requirements the City of Belgrade Zoning Ordinance or other City requirements.
- 9.6 Foundation Design. All building foundations shall be permanent, constructed of concrete, and according to the final site grading plan stipulated by the Individual Lot Site Plan. Due to the potential for high groundwater tables in the area of the Subdivision, structures with full depth basements should not be constructed without first consulting a professional engineer licensed in the State of Montana.

ARTICLE X BUILDING CRITERIA

10.1 Intent. The intent of the following Building Criteria is to provide for continuity throughout the Property, while allowing personal taste in choice of housing style. Furthermore, the intent is to establish minimum standards and a minimum level of quality and continuity in building design to maximize the quality of the overall Project.

10.2 Exterior Siding. Exterior siding of all buildings shall consist of wood, wood look-alikes or wood products, brick, stone, or stucco. Other good quality manufactured exterior materials may be allowed with the written approval of the BLRC. No sheet or panel metal siding nor cement block siding is allowed. No plywood sheet siding is allowed unless used as an accent and only then if specifically approved in writing by the BLRC.

10.3 Roofs. Roof materials shall be wood or asphalt shake, tile or shingle in muted

colors, and no rolled roofing shall be allowed. Exposed aluminum or silver flashing around the chimneys or roof valleys shall not be allowed unless colored, textured or painted to match the roof design and color. Rain gutters are allowed, provided they match the trim color or color of the roof. Steel galvanized gutters are not allowed. The main portion of the roof of residential structures shall have a minimum pitch of 6/12. Further, roof overhangs and gable ends must be a minimum of six inches (6") and roof fascia trim shall extend downward on the roof and be visible for at least six inches (6"). No bright colored roofs are allowed, such as white or light gray. Solar arrays, solar shingles, and solar roof systems are allowed.

10.4. Foundations. All foundations for residential structures constructed on the real property which is the subject of this Declaration shall be permanent and made of concrete. No wooden foundations are allowed.

10.5. Colors. Exterior colors of all buildings shall be muted colors including earth tones, pastels, white, neutral, or wood tones. No bright or shiny colors on exterior siding are allowed, including, but not limited to bright oranges, royal blues, pinks, purples and the like. "Craftsman" colors such as dark muted reds and greens are encouraged, however all colors shall be compatible and harmonious with the surrounding neighborhood. Trim colors shall compliment the main body color of the building.

10.6. Accessory Buildings, outbuildings and other structures. All accessory buildings, outbuildings and other structures, such as garages and storage buildings, shall be architecturally compatible with the dwelling unit on the Lot. Exterior design, style, materials, and colors of each of accessory buildings, outbuildings and structures on a Lot shall conform with the design, style, materials, and colors of the primary dwelling unit. Roof fascia trim shall extend downward on the roof and be visible for at least six inches (6").

10.7. Decks. Low level decks shall be skirted to grade.

10.8. Sight Distance at Intersections. For elimination of traffic hazards and to promote traffic safety, no fence, wall, tree, hedge or shrub that obstructs sight lines at elevations between two (2) and ten (10) feet above streets shall be placed or permitted to remain on any corner Lot within the triangular area formed by the street corner curbs and a line connecting them at points forty (40) feet from the property corner.

10.9. Construction Completion. All Improvements, construction, reconstruction, alterations, or remodeling requiring the approval of the BLRC must be completed in compliance with the plans and specifications approved by the BLRC within one (1) year from the date construction is commenced.

10.10. Garages and Parking. Each dwelling unit is required to have a minimum of an attached two (2) car garage with sectional roll up door(s). There shall be no long-term storage of cars or other vehicles outside the garage. Parking of cars, trucks, or any other vehicle in the

street is discouraged.

10.11 Energy Considerations. All structures shall be designed so that the primary source of heat is natural gas or electricity. The use of wood, wood bi-products or coal burning appliances as the major source of heat is prohibited. All wood burning devices except fireplaces shall be fitted with catalytic converters.

10.12 Exterior Lighting and Outdoor Lighting.

- a) All street lighting shall be provided by the City of Belgrade Street Lighting District.
- b) All Outdoor Lighting (non-street lighting) shall meet the City of Belgrade's requirements. In addition, all Outdoor Lighting shall be free of Glare, and shall be Fully Shielded Lights, or shall be Indirect Lighting, as those terms are defined below. Recessed or canned lighting is encouraged for porches, main entrances and other exterior applications to achieve softer, non-Glare, lighting effects. Clear glass or translucent panels allowing horizontal projection of light are specifically disallowed. Honey glass or amber glass panels are encouraged as an alternative, as are "down light" type fixtures. Fixtures revealing exposed light bulbs shall not be permitted.
- c) No lighting shall be beyond a property's lot line. No unshielded lights shall be permitted. No mercury vapor lights shall be permitted. For purposes of this paragraph, the following definitions shall apply:
 - 1) Fully Shielded Lights: Outdoor residential light fixtures shielded or constructed so that no light rays are emitted by the installed fixture at angles above the horizontal plane as certified by a photometric test expert;
 - 2) Indirect Light: Direct light that has been reflected or has scattered off of other surfaces;
 - 3) Glare: Light emitting from a luminary with an intensity great enough to reduce a viewer's ability to see, and in extreme cases, causing momentary blindness; and
 - 4) Outdoor Lighting: The nighttime illumination of an outside area or object by any man-made device located outdoors that produces light by any means.

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ARTICLE XI SITE DEVELOPMENT AND LANDSCAPE CRITERIA

All Improvements and alterations shall be reviewed and approved in writing by the BLRC prior to commencement of construction or alteration, including, but not limited to, site development and landscaping. BLRC approval is a prerequisite to the City of Belgrade building permit applications. Replacement of dead or dying vegetation and the addition of trees, shrubs or other landscaping features, providing that such additions are consistent with the Site Development and Landscape Criteria, shall not require submittal of plans and approval.

11.1 Driveways. All driveways and parking areas shall be surfaced with asphalt or concrete and shall be located as stipulated in the Individual Lot Site Plan.

11.2 Driveway Swale Prohibitions. No Lot Owner shall fill or obstruct the natural flow of any barrow ditch or drainage swale with the exception of the materials placed as part of the location of the driveway culvert. No barrow ditches may be filled.

11.3 Sidewalks. Sidewalks are required to provide opportunities for interior neighborhood walking loops and pedestrian circulation within the Property. All sidewalks shall be installed and maintained by individual Lot Owners. Sidewalks must be constructed to City standards, which require a minimum six-inch (6") slab thickness within the driveway areas and shall be installed at the time dwelling units are constructed on individual Lots at the Owner's expense. Sidewalks shall be located as stipulated in the Individual Lot Site Plan and shall be five (5) feet in width. Upon the third (3rd) anniversary of the final Plat recordation, any Owners who have not constructed their sidewalks shall be required to install sidewalks on their Lots, regardless of whether a dwelling unit is constructed on the Lot.

11.4 Kennels and Dog Runs. Only one (1) kennel or dog run is allowed, which shall not exceed three hundred (300) square feet. Kennels or dog runs must be placed within the rear yard and shall be integrated into (attached to) the dwelling to avoid isolation and to provide as much aesthetic appeal and compatibility as possible. The height of kennels or dog runs shall not exceed six (6) feet in height and must be built using the same building materials as Privacy Screening. Chain link kennels or dog runs may be allowed within a fenced rear yard. All kennels and dog runs must be approved in writing by the BLRC.

11.5 Fencing. Fencing is encouraged on all Lots within the Property. If fencing is installed on a Lot, the fencing must be installed on the property line and shall not extend beyond the front building setback and must connect to the dwelling unit. To ensure consistency throughout the Property, all fencing must be constructed with brown treated six-inch by six-inch (6"x6") posts secured in the ground with concrete and spaced at no more than eight feet (8') apart, with a minimum of two (two) brown treated two by four (2"x4") horizontal rails and five-inch (5") wide by one half inch (1/2") thick cedar slats attached vertically on the rails installed between each eight-foot (8') post section. Fencing must be stained with waterproof transparent

acrylic stained within one (1) year of installation. The top of the fence may not be more than six feet (6') above the ground. BLRC shall review and approve all fencing designs and no fence shall be installed without written approval from the BLRC. The BLRC may grant variances from these specific fencing requirements. Neighbors are encouraged to share in the costs of installing fences on common sides or rear yard Lot lines.

11.6 Privacy Screening. Privacy screening will be allowed but must be an integrated part of the primary dwelling and constructed of the same materials. The height of privacy screening shall not exceed seven (7') feet. Plans for privacy screening must be approved in writing by the BLRC prior to construction.

11.7 Antennas and Satellite Dishes. Satellite dishes not exceeding two feet (2") in diameter may be allowed. Satellite dishes must be located to minimize unsightliness as viewed from street frontages and neighboring Lots. The installation and placement of satellite dishes exceeding two feet (2") and antennas must be approved in writing by the BLRC. All satellite dishes and antenna are subject to the City of Belgrade Zoning Ordinance and any airport regulations, requirements, or restrictions.

11.8 Utilities. All utilities including, but not limited to, natural gas, electricity, telephone and cable shall be located underground.

11.9 Storage Sheds. A single storage shed is allowed in Lot rear yards, subject to Section 10.6, and so long as the storage shed does not exceed ninety-six (96) square feet, with a maximum height of twelve feet (12') measured to the highest point on the shed. All sheds must be approved in writing by BLRC prior to construction.

11.10 Temporary Structures. No temporary structures, trailers, campers, motor homes, tents, shacks, or similar structures shall be used as a residence on the Lot.

11.11 Solid Waste Containers. All rubbish, trash, and garbage shall be regularly removed from Lots and shall not be allowed to accumulate thereon. All solid waste containers must be stored out of view except during reasonable periods prior to and after pick-up, and only on the day of pick-up.

11.12 Recreational Vehicles. Trailers, motor homes, boats, snowmobiles, campers, motorcycles, and other recreational vehicles ("Recreational Vehicles") may be stored on the Lot as long as they are not used for habitation, and only if they are stored behind an approved fence. Recreational Vehicles may be stored in driveways for not more than four (4) consecutive days and no more than thirty (30) cumulative days per calendar year.

11.13. Mail Boxes. Individual mail boxes will not be allowed. Mail boxes will be clustered at strategic locations to simplify mail delivery and reduce streetscape clutter. Mail box clusters will be of a location approved by the local Postmaster and no parking will be allowed in

front of the mailbox clusters.

11.14 Construction Debris, Materials Storage and Clean-up. Construction materials shall not, at any time prior to or during construction, be placed or stored in the street or placed anywhere else so as to impede, obstruct, or interfere with pedestrians within the street right-of-way or sidewalks. All construction materials shall be removed from the Lot within thirty (30) days of substantial completion of construction.

Construction sites shall be kept clean, neat, and well organized at all times. Any construction debris shall be the responsibility of the Building Contractor and Owner and shall be kept clean and properly stored on a daily basis. Construction debris that blows onto another Owner's Lot shall be removed immediately upon notice thereof to the Building Contractor or neighboring Lot Owner from whose Lot the construction debris was blown. The Association may, at its discretion, strictly enforce this provision and reserves the right to fine negligent parties up to \$100.00 for failure to remedy a blowing construction debris infraction. Any construction debris, and most especially dirt, gravel, rocks, and concrete which find their way into the street shall be removed immediately from the street and the street must be brought back to a broom clean condition or the clean-up costs and the aforementioned fine may be levied and enforced against an Owner as a Default Assessment as provided herein.

11.15 Signs. Signs shall not be permitted on Lots or in Common Areas or Open Space, except as follows, and so long as such signs are consistent with the City of Belgrade sign regulation, and upon receipt of any necessary permits and payments of fees:

- a) One address placard / sign shall be allowed per residence, and such signage shall be mounted to the front elevation of the dwelling unit.
- b) One temporary construction sign no larger than two feet by two feet (2' x 2') shall be allowed on a Lot for which construction is taking place, which shall be removed upon substantial completion of such construction.
- c) One temporary sign advertising a Lot or home for sale shall be allowed, providing that it does not exceed six (6) square feet on any one face, which sign must be removed when the Lot or home is sold. Such signage is only allowed on the Lot that is for sale, except as provided at f) below.
- d) Directory signs and decorative subdivision entry signs may be placed within the Common Area or Open Space as the Board of Directors determines is necessary, which signs must be combined with landscaping features and comply with the City of Belgrade sign regulation.
- e) Signs to identify trail routes, direct human activity, or provide interpretive information are permitted within the Common Area and Open Space, not

to exceed a height of three (3) feet. Sign surface area shall not exceed two (2) square feet. All sign posts or support structures shall be of wood construction.

- f) During the period Lots are being sold, the Declarant may erect marketing signs in the Common Area or other locations as deemed necessary and appropriate, subject to the City of Belgrade regulations and any sign permit fee requirements.
- g) Election signs are allowed subject to any restrictions or limits on size, location, and time period as may be adopted by the Board of Directors.
- h) Temporary signs may be allowed under the particular circumstances as provided in this Declaration.

11.16 Landscaping. Landscaping is required pursuant to Article IV, to reduce stormwater runoff, for erosion control and reduction in soil degradation and to enhance the value of the property and the aesthetics of the Lot. The entire Lot shall be landscaped to the Lot boundaries, and up to and including the area between the front sidewalk and the edge of the street on the front of the Lot. Owners are required to maintain the landscaping on their Lots in good condition and shall replace dead or diseased grass, ground cover, shrubs, or trees, on the Lot as provided in Article IV. Landscape and grading plans shall be submitted to and approved by the BLRC concurrently with the completion of the dwelling unit. In locating bushes and trees, consideration must be given to surrounding Lots and view corridors. Rock and gravel type ground covers will be allowed on a case by case basis and only upon written approval of the BLRC. This limitation does not apply to large rocks or rock clusters include as a landscape feature, and which have been approved in writing by the BLRC as part of a landscape plan. Where a grass lawn is planted, the Owner must irrigate, mow, trim and otherwise maintain the grass lawn during the summer months.

11.17 Landscaping Maintenance. Lawns and landscaping shall be maintained in accordance with Article IV, in a manner which shall not detract from the appearance and value of the adjoining Lots or diminish the aesthetics of the Property. Enforcement shall be as provided in sections 4.9, 4.14 and Article XV of this Declaration.

11.18 Street Boulevard Trees. Owners must install and thereafter maintain a minimum of two (2) deciduous trees per Lot within two (2) years of occupancy, which trees shall be located in the front yard between the curb and front yard building setback. All trees will be a minimum of ten (10') feet in height with a minimum of one and a half inch to two-inch (1 ½"-2") caliper trunk dimensions. If Owners fail to install street boulevard trees within two (2) years of occupancy, the Association may install such trees and bill Owner, which shall become a default assessment if not paid, or the Association may seek enforcement as otherwise provided in this Declaration. Additional trees and tree types are allowed with ARC approval.

**ARTICLE XII
COMMON AREA AND OPEN SPACE MANAGEMENT PLAN**

12.1 Intent. The intent of the Common Area and Open Space Management Plan is to define appropriate uses of the Common Area and Open Space, and to provide for the management, maintenance, implementation, and protection thereof. The intent of the Common Area and Open Space within this Project is to provide:

- a) a general feeling of openness;
- b) buffer zones between Lot clusters and existing neighbors; and,
- c) corridors for trails networks.

The following standards apply to Common Area and Open Space within the Property.

12.2 Landscaping.

- a) Landscaping plantings shall feature native species but may incorporate non-native and ornamental species of trees and shrubs that will not contribute to wildlife depredation problems. Terrain modification may occur where needed to enhance opportunities for human activities, especially in conjunction with trails, or to improve the effectiveness of vegetative screening. The dominant theme for landscaping shall be open grassy areas with clusters of trees, especially along the stream and pond banks, to create visual backdrops and vegetated islands requiring little maintenance.

12.3 Riparian Area Management. Management and maintenance along wetland, stream and pond riparian areas is to protect and encourage the return of native plant and animal species. Domestic pets are prohibited from such areas. In all riparian habitats, wildlife enhancement projects shall be done in conjunction with public or private professional consultants, subject to the necessary approvals by any applicable governing body or agency. Examples of such projects includes improvement of nesting sites, fish habitat, structures, wetland ponds and stream bank stabilization.

12.4 Management Coordination. The Association may coordinate management of the Common Area and Open Space with management of the Association by a managing agent, which management shall be in accordance with the Shared Use and Maintenance Agreement with the Residential Owners Association for Meadowlark Ranch Subdivision, which is comprised of the Plat of Meadowlark Ranch Subdivision, First Filing (Plat Reference J-490), Plat of Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586) and the Amended Plat of Lots 23 and

27 of Block 3, Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586-A). The Association may solicit the advice or recommendations of professionals or agencies regarding management of the Common Area and Open Space.

12.5 Noxious Weeds. The Association, pursuant to the Shared Use and Maintenance Agreement with the Meadowlark Ranch Subdivision Residential Owners Association, which is comprised of the Plat of Meadowlark Ranch Subdivision, First Filing (Plat Reference J-490), Plat of Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586) and the Amended Plat of Lots 23 and 27 of Block 3, Meadowlark Ranch Subdivision, Second Filing (Plat Reference J-586-A), is responsible for control of noxious weeds in Common Area and Open Space. The preferred method is by introduction of desirable plant species that eliminate weeds. Interim measures permitted include herbicide applications, mowing and biological control. All herbicide applications shall be conducted according to applicable County and State laws, including the Gallatin County Noxious Weed Management Plan and the approved weed management plan for Meadowlark Ranch Subdivision Phase 4 and any approved weed management plans for future phases to be platted.

12.6 Animal Control.

- a) Domestic pets, limited to dogs and cats, shall not be allowed at any time in the Common Area or Open Space areas or trails unless on a leash or otherwise under the Owner's control.
- b) Temporary fencing and wrapping around shrubs and trees to prevent destruction by wildlife and domestic pets shall be permitted for the period of time necessary to ensure survival of the plantings.
- c) Rodents may be controlled if levels of depredation threaten the survival of plantings or constitute a health hazard. If poisons are used, they shall be applied only in accordance with applicable State laws and with prior approval of the Association, with notice of such application provide to Owners by mail or temporary signage in the Common Area or Open Space.
- d) Pesticides may be used to control insect populations that are a nuisance, threaten the survival of plantings, or constitute a health hazard. Pesticides may be applied only in accordance with applicable State laws and with the prior approval of the Association. The Owner or applicator shall post a temporary sign or signs at the time of the pesticide application providing notice thereof.
- e) Owners, Owner's family, occupants, or Owner's agents, employees, invitee(s), or licensee(s) shall not harass wildlife and should avoid areas

of wildlife concentration. Loud, offensive, or other behavior which harasses or frightens wildlife in Common Area or Open Space is prohibited.

12.7 Taking of Wildlife. The taking of any and all wildlife species by any means within Common Area and Open Space is prohibited. If control of specific animals determined to be causing damage to property or injury to persons (e.g. a beaver damming an irrigation ditch or a porcupine identified as girdling planted trees) is necessary, Montana Department of Fish, Wildlife and Parks shall be contacted. No hunting or shooting of firearms shall be allowed in the Common Area or Open Space.

12.8 Fencing. No fences shall be permitted that restrict the movement of wildlife. Temporary fences, as noted above, for animal control shall be permitted. Fences designed to restrict, or direct human activity shall be permitted in a very limited fashion provided that no wire or metal mesh is used, and they shall not exceed the height restriction as provided at Section 11.5.

12.9 Signing. Signs shall be permitted as provided in Section 11.15.

12.10 Prohibited Use. The following uses shall not be made of the Common Area or Open Space: personal gardens, storage, compost piles or landscape waste, refuse disposal and such other uses as determined inconsistent with the intent of this Common Area and Open Space Management Plan by the Board of Directors through adoption by resolution of additional rules and regulations of the use of Common Area and Open Space.

12.11 Wetlands Enhancement and Maintenance. It shall be the intent of the Association to maintain the jurisdictional wetlands. All wetland enhancement projects shall be done in accordance to plans, with plans to be drawn up by professional organizations specializing in such and in compliance with recommendations from the Montana Department of Fish, Wildlife and Parks. The Association shall have the authority to establish reasonable rules for operation and maintenance of enhanced wetlands areas consistent with the overall intent of the Common Area and Open Space Management Plan.

12.12 Additional Regulations and Restrictions.

- a) No feeding of wildlife other than birds.
- b) No introduction of non-native species of animals or fish.
- c) Maintenance of the Common Area and Open Space shall be the responsibility of the Association.
- d) No buildings or structures are allowed in the common open space areas

except those related to the function and intent of the Common Area and Open Space and as approved as provided in this Declaration.

- e) Motorized vehicles are prohibited within the common open space areas and trails except for maintenance and construction of landscaping, facilities or structures as provided herein.
- f) No fireworks or firearms of any kind shall be discharged within the Common Area and Open Space.
- g)) Open burning of organic debris generated from the Common Area and Open Spaces may be allowed in accordance with local burning regulations and only by someone authorized by the Board.

ARTICLE XIII SPECIAL IMPROVEMENT DISTRICTS

13.1 Waiver of Right to Protest Future Special Improvement Districts S.I.D.(s), Rural Improvement Districts (R.I.D.(s), and Special Improvement Lighting Districts (S.I.L.D.(s). A waiver of right to protest the creation of Rural Improvement Districts has been filed. If a Special Improvement District, Rural Improvement District, or a Special Improvement Lighting District is not used for these Improvements, then this Property or Lots therein may be subject to alternative financing methods to finance improvements on a fair share basis.

ARTICLE XIV DURATION AND MODIFICATION

14.1 Duration. This Declaration shall have a duration of fifteen (15) years with automatic renewal. Subsequent to the initial term of the Board of Directors as provided in Articles, eighty-five percent (85%) of Owners may vote to amend or modify this term, subject to the procedure provided in Section 14.2, excepting the percentage vote needed which shall be as provided in this Section.

14.2 Modification Procedure. Except as otherwise provided herein, this Declaration or any provision hereof, or any covenant, condition or restriction contained herein, may be terminated, extended, modified or otherwise amended, as to the whole of the subject property or any portion thereof, with the written consent of the Owners of sixty-seven (67%) of the Property, provided, however, that so long as Declarant owns at least twenty percent (20%) of the Property subject to these covenants, conditions and restrictions, or for a period of twenty (20) years from the

effective date hereof, whichever period is shorter, no such termination, extension, modification or other amendment shall be effective without the written approval of Declarant, which approval shall not be unreasonably withheld. No such termination, extension, modification or other amendment shall be effective until a proper instrument in writing has been executed, acknowledged and recorded.

Notwithstanding the foregoing, during the initial term of the Board of Directors as provided in Articles, this Declaration of Covenants, Conditions and Restrictions may be modified, amended and changed by the Declarant without the need or necessity of the consent of the then-owners of the real property which is the subject of this Declaration.

Notwithstanding the foregoing, any covenant, condition or restriction which is included herein which was also required as a condition of preliminary Plat approval and required by the City Council may not be amended or revoked without the mutual consent of the Owners in accordance with the amendment procedure set forth above, and the consent of the City of Belgrade.

ARTICLE XV ENFORCEMENT

15.1 Enforcement. If any Owner, Owner's family, Occupant, or Owner's agents, employees, invitee(s), or licensee(s), fails to pay assessments or fails to conform with or violates the criteria, standards, requirements and covenants herein, the Declarant, Association and/or an Owner or Owners may demand conformance or compliance therewith and take such further action as provided in this Section.

- a) Demand and Notice. Such demand shall include written notice detailing the specifics of the failure, nonconformance, or violation, identify the property, and demand compliance or remedy thereof within thirty (30) days of the written notice to the Lot Owner, and if such failure, nonconformance and violation is the failure to pay assessments, such demand and notice shall include the amount of assessments due and owing and any related charges, interest, or fees, including late charges. The demand shall also state the action that will be taken under this Section if the failure, nonconformance, or violation is not remedied within the timeframe herein provided. If the nonconformance or violation cannot be remedied within the thirty (30) day period, Owner shall request extension of the deadline by the Declarant or the Association, as applicable, which extension shall not be unreasonably withheld.
- b) Declarant's and Association's Right to Remedy. With the exception of an Owners failure to pay assessments, if the Lot Owner does not respond to such notice or does not remedy the nonconformance or violation with such thirty (30) day period, absent extension thereof, the Declarant and/or Association shall have the

right, but not the obligation, to remedy the violation or nonconformance, if feasible, and to charge the Owner with the cost of such remedy together with interest thereon at an annual rate equal to the maximum rate allowed under Montana law from the date of the Declarant and/or Association's advancement of funds for such remedy to the date of reimbursement of the Declarant and/or Association by Owner. Neither the Declarant, an Owner, or the Association shall be liable to any Owner, person, or entity for any entry, self-help, remedy, or abatement of a violation of the criteria, standards, requirements and covenants herein, and all Owners shall be deemed to have waived any and all rights or claims to or for damages for any loss or injury resulting from action taken to abate or remedy any nonconformance or violation, except for any loss or injury or damage resulting from intentionally wrongful acts on the part of an Owner, the Declarant or the Association.

- d) **Costs, Expenses, Fines, Default Assessment, Attorney's Fees and Liens.** The Declarant and/or Association may impose fines for failure, nonconformance or violations of the criteria, standards, requirements and covenants contained in the Declaration. All such charges, fines, fees, along with actual costs, expenses advanced by the Declarant or Association to remedy or abate a violation or nonconformance, and actual costs, expenses, and reasonable attorney's fees otherwise related to the correction, remedy, abatement, resolution, or removal of a violation or nonconformance of the criteria, standards, requirements and covenants herein, incurred either through litigation, entry or self-help shall become an additional assessment, referred to herein as Default Assessment, recoverable as such. Default Assessments shall constitute a claim by the Declarant or Association initiating such action against a nonconforming or violation Owner. Such claim shall be enforceable through appropriate court action or filing of a lien as provided herein. If the Owner fails to reimburse the Declarant and/or Association for the costs to remedy the violation or nonconformance, or pay the Default Assessments, and such Default Assessments, unpaid for three (3) months, the Association may file for and Record a claim of lien against the subject property for the amount of the Default Assessments together with interest thereon. Actual costs may include, but shall not be limited to, actual costs, expenses advanced by the Declarant or Association to remedy or abate a violation or nonconformance, costs associated enforcement of this Declaration, recording fees, costs of title search obtained in connection with filing of a lien, all costs related to the foreclosure of the lien, including court costs and reasonable attorney's fees, which may be incurred in the foreclosure and collection of such a lien. Such lien shall be for the benefit of the Association and may be enforced and foreclosed as provided by law.
- c) **Notice of Noncompliance.** Declarant and/or Association upon taking such action as provided in Section 15.1.a, shall record a notice of violation or noncompliance

against the Lot providing notice that the Lot or Improvements thereon are in violation of or not in compliance with Declaration or other governing documents and shall put prospective purchasers on notice of such violation or noncompliance and may provide such other steps as may be necessary to bring the Lot or Improvements thereon into compliance with the Declaration or other governing documents.

- c) Cure. If a default to which a notice of claim of lien was filed is cured, Declarant and/or Association shall file or Record a rescission or removal of such notice, upon payment by the defaulting Owner of the cost of preparing and filing or recording such rescission, and other reasonable costs, interest or fees which have been incurred.
- d) Nonexclusive Remedy. The foregoing lien and the rights to foreclose thereunder shall be in addition to, and not in substitution for, all other rights and remedies which any party may have hereunder and by law, including legal proceedings in a court of law or equity, injunctive relief and damages, any suit to recover a money judgement for unpaid assessments.

15.2 Abatement and Suit. The Owner of each Lot shall be primarily liable, and the Occupant, if any, secondarily liable for the violation or breach of any covenant, condition or restriction herein contained. Violation or breach of any covenant, condition or restriction herein contained shall give to Declarant, or the Association, following thirty (30) days written notice to the Owner or Occupant in question except in existing circumstances, the right, privilege and license to enter upon the Lot where said violation or breach exists and to abate and remove summarily, or abate or remove, at the expense of the Owner or Occupant thereof, any improvement, structure, thing or condition that may be or exist thereon contrary to the intent and meaning of the provisions hereof, or to prosecute a proceeding at law or in equity against the person or persons who have violated or are attempting to violate any of these covenants, conditions and restrictions to enjoin or prevent them from doing so, to cause said violation, following the notice as required in Section 15.1. No such entry by Declarant, the Association or their agents shall be deemed a trespass, and neither Declarant nor the Association nor their agents shall be subject to liability to the Owner or Occupant of said Lot for such entry and any action taken to remedy or remove a violation. The cost of any abatement, remedy or removal hereunder shall be a binding personal obligation or any Owner or Occupant in violation of any provision of this Declaration, as well as a lien (enforceable in the same manner as a trust indenture) upon the Lot in question. The lien provided for in this section shall not be valid as against a bona fide purchaser or Mortgagee for value of the Lot in question unless a suit to enforce said lien shall have been filed in a court of Record in Gallatin County, Montana, prior to the recordation of the deed or Mortgage conveying or encumbering the Lot in question to such purchase or Mortgage, respectively.

15.3 Right of Entry. During reasonable hours and upon reasonable notice, and subject

to reasonable security requirements, Declarant, the Association or their agents, shall have the right to enter upon and inspect any Lot and the Improvements thereon covered by this Declaration for the purpose of ascertaining whether or not the provisions of this Declaration have been or are being complied with, and to take such action as provided in Section 15.1, and neither Declarant nor the Association nor their agents shall be deemed to have committed a trespass or wrongful act by reason of such entry or inspection, or action as provided in Section 15.1.

15.4 Deemed to Constitute a Nuisance. The result of every act or omission whereby any covenant, condition or restriction herein contained is violated in whole or in part is hereby declared to be and to constitute a nuisance, and every remedy allowed by law or in equity against an Owner or Occupant, either public or private, shall be applicable against every such result and may be exercised by Declarant or the Association.

15.5 Attorney's Fees. In any legal or equitable proceeding for the enforcement of this Declaration or any provision hereof, whether it be an action for damages, declaratory relief or injunctive relief, or any other action, the losing party or parties shall pay the attorney's fees of the prevailing party or parties, in such reasonable amount as shall be fixed by the court in such proceedings or in a separate action brought for that purpose. The prevailing party shall be entitled to said attorney's fees even though said proceeding is settled prior to judgment. All remedies provided herein or at law or in equity shall be cumulative and not exclusive.

15.6 Failure to Enforce is No Waiver. The failure of Declarant and/or Association to enforce any requirement, restriction or standard herein contained shall in no event be deemed to be a waiver of the right to do so thereafter or in other cases, nor of the right to enforce any other restriction.

15.7 Indemnification. Each officer, director, and former officer and director of the Association shall be indemnified and held harmless by the Association against all expenses, claims, suits, clauses of action demands and judgements, liabilities, including attorney's fees, reasonably incurred by or imposed upon him in any proceeding to which he may be a party, or in which he may become involved by reason of his being or having been an officer or director of the Association, or any settlement thereof, whether or not he is an officer or director at the time such expenses are incurred, except in such cases wherein such officer, director or committee member is adjudged guilty of willful malfeasance in the performance of his duties. The Association may procure and maintain insurance against such liabilities, or such kind and amount as its Board of Directors may approve.

ARTICLE XVI ASSIGNMENT

Any and all of the rights, powers and reservations of Declarant herein contained may be assigned to any person, partnership, corporation or association which will assume the duties of Declarant pertaining to the particular rights, powers and reservations assigned, and upon any

such person, partnership, corporation or association evidencing its consent in writing to accept such assignment, have the same rights and powers and be subject to the same obligations and duties as are given to and assumed by Declarant herein. If at any time Declarant ceases to exist and has not made such an assignment, a successor to Declarant may be appointed in the same manner as this Declaration may be modified or amended under Article XIV. Any assignment or appointment made under this Article shall be in reasonable form and shall be recorded.

ARTICLE XVII CONSTRUCTIVE NOTICE AND ACCEPTANCE

17.1 Constructive Acceptance. Every person or entity who now or hereafter owns, occupies or acquires any right, title or interest in or to any portion of the Property is and shall be conclusively deemed to have consented and agreed to every covenant, condition and restriction contained herein, whether or not any reference to this Declaration is contained in the instrument by which such person acquired an interest in the Property.

17.2 Notices; Documents; Delivery. Any notice or other document permitted or required by this Declaration of shall be delivered either personally or by mail. If delivery is made by mail, it shall be deemed to have been delivered twenty-four (24) hours after a copy of same has been deposited in the United States mail, postage prepaid, addressed as follows: If to the Association or to the BLRC, at the registered office for the Association; if to an Owner, then at the address on file with the Declarant or Association, which address shall be updated as needed by the Owner; if to Declarant at Meadowlark Ranch, Inc., 175 N. 27th Street, Suite 900, Billings, Montana 59101; provided, however, that any such address may be changed from time to time by an Owner, by the BLRC, or by Declarant by notice in writing.

ARTICLE XVIII WAIVER

Neither Declarant or the Association nor their successors or assigns shall be liable to any Owner or Occupant of the Property by reason of any mistake in judgment, negligence, nonfeasance, action or inaction or for the enforcement or failure to enforce any provision of this Declaration.

The failure by any of the parties hereto or any subsequent Owner to enforce any condition, covenant, or restriction herein contained shall in no event be deemed a waiver of the right to do so thereafter or in other cases, nor of the right to enforce any other condition, covenant, or restriction, nor of the right to collect damages for any subsequent breach of covenant.

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**ARTICLE XIX
RUNS WITH LAND**

All covenants, conditions, restrictions and agreements herein contained are made for the direct, mutual and reciprocal benefit of each and every Lot of the Property; shall create equitable servitude upon each Lot in favor of every other Lot; shall create reciprocal rights and obligations between respective Owners and occupants of all Lots and privity of contract and estate between all grantees of said Lots, their heirs, successors and assigns; and shall, as to the Owner and Occupant of each Lot, his heirs, successors and assigns, operate as covenants running with the land, for the benefit of all other Lots, except as provided otherwise herein.

**ARTICLE XX
CAPTIONS**

The captions of articles and sections herein are used for convenience only and are not intended to be a part of this Declaration or in any way to define, limit or describe the scope and intent of the particular article or section to which they refer.

**ARTICLE XXI
SEVERABILITY**

If any part, term or provision of these covenants is held to be illegal or unenforceable, the validity of the remaining portions shall not be affected.

DATED this _____ day of _____, 20__.

DECLARANT

MEADOWLARK RANCH, INC,
A MONTANA CORPORATION

By: _____
Landy Leep
Its: Vice President

EXHIBIT "A"

LEGAL DESCRIPTION

Plat of Meadowlark Ranch Subdivision, Phase 4, Being Tract 1 of Certificate of Survey No. 2604, Situated in the E1/2 SE1/4 of Section 31 & the W1/2 SW1/4 of Section 32, T.1 N., R. 5 E., P.M.M., in the City of Belgrade, Gallatin County, Montana (Plat Reference J-641)

Lot 14, Block 7, Plat of Meadowlark Ranch Subdivision, Phase 4, Being Tract 1 of Certificate of Survey No. 2604, Situated in the E1/2 SE1/4 of Section 31 & the W1/2 SW1/4 of Section 32, T.1 N., R. 5 E., P.M.M., in the City of Belgrade, Gallatin County, Montana

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EXHIBIT “B”

OTHER PROPERTIES WHICH MAY BE ADDED TO THE DECLARATION

All or part of any real estate located within one half (1/2) mile in any direction from any portion of the perimeter boundary line of the Project, together with the Improvements located thereon, provided the owner of that real estate consents, and provided all other consents or votes required by this Declaration are first obtained.

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**ARTICLES OF INCORPORATION
OF AND FOR THE
MEADOWLARK RANCH
HOMEOWNERS ASSOCIATION, INC.
(A Nonprofit Corporation)**

The undersigned hereby executes these Articles of Incorporation for the purpose of forming a corporation under the Montana Nonprofit Corporation Act, Title 35, Chapter 2 of the Montana Code Annotated (MCA):

**ARTICLE 1
NAME**

The name of the corporation is the **Meadowlark Ranch North Homeowners Association** (“Association” or “Corporation”).

**ARTICLE 2
MUTUAL BENEFIT CORPORATION**

The corporation is a mutual benefit corporation.

**ARTICLE 3
PERIOD OF DURATION**

The period of its duration is perpetual.

**ARTICLE 4
DEFINITIONS**

The words and terms used herein shall be deemed to have the same definitions and meanings as in the Declaration of Covenants, Conditions and Restrictions for Meadowlark Ranch North and all amendments and supplements thereto as recorded or to be recorded in the public record (“Declaration”).

**ARTICLE 5
PURPOSES AND POWERS OF CORPORATION**

5.1 Purpose. The Association is a Mutual Benefit Corporation under the laws of the State of Montana, and the purposes for which said corporation is formed are as follows.

- (a) Any lawful purposes permitted under the Montana Non-Profit Corporation Act, or any successor corporation law;
- (b) To carry out and conduct all corporate responsibilities enumerated in the Montana Non-profit Corporation Act, as the same exists from time to time;
- (c) To carry out and conduct the business of a mutual benefit owners’ association;

(d) To act as the Association to operate and administer the Subdivision and carry out the functions and duties as set forth in the Declaration and Bylaws;

5.2 Powers. The Association shall have all powers as granted to it in the Bylaws and all powers granted to it under the Montana Nonprofit Corporation Act; and, the power to acquire, hold, convey and otherwise deal in and with real and personal property in this corporation's capacity as an owners association.

5.3 Earnings. No part of the net earnings of the Association shall inure to the benefit of or be distributable to or for the benefit of any director, officer or member of the Association, or any other individual (except that reasonable compensation may be paid for services rendered to or for the benefit of the Association affecting one or more of its purposes) and no director, officer or member, or any other individual, shall be entitled to share in any distribution of any of the corporate assets on dissolution of the Association or otherwise.

5.4 Dividends, Distribution, etc. The Association shall not pay any dividends. No distribution of the corporate assets to members (as such) shall be made.

ARTICLE 6 REGISTERED OFFICE AND AGENT

The operations of the Association shall be conducted within Gallatin County, Montana, as may, from time to time, be determined by the Board of Directors. The initial street and mailing address of the initial registered office of the corporation is 175 27th Street, Suite 900, Billings, Montana 59715, and the name of the corporation's initial registered agent is Jason Leep.

ARTICLE 7 INCORPORATOR

The name and business mailing address of the incorporator is as follows: Jason Leep, Declarant, 175 27th Street, Suite 900, Billings, Montana 59715.

ARTICLE 8 MEMBERSHIP AND VOTING

8.1 Membership. The corporation will have Members as Lots are created and made subject to the Declaration. Any person who holds title to a Lot in Meadowlark Ranch North shall be a Member of the Association. There shall be one (1) membership for each Lot owned within Meadowlark Ranch North.

8.2 Voting. The voting rights and other rights and privileges of Members and the method of collecting assessments shall be as set forth in the Declaration and Bylaws.

**ARTICLE 9
BOARD OF DIRECTORS**

The business and affairs of the Association shall be conducted, managed and controlled by a Board of Directors. The initial board of directors shall consist of three (3) persons. Thereafter, the number of directors shall be not less than three (3). The number and manner of selection of directors shall be fixed by the bylaws and may be altered from time to time by amendment to the bylaws in the manner provided therein.

**ARTICLE 10
LIMITATION OF DIRECTOR LIABILITY**

9.1 Liability. The directors hereby adopt the provisions of Section 35-2-447, MCA regarding the corporation's authority to indemnify the directors, and, in addition to any other limitation on director liability provided by law, no director shall be personally liable to the Corporation or its members for monetary damages for breach of his or her fiduciary duties as a director, except for the following matters:

- (a) breach of the director's duty of loyalty to the Corporation or its members;
- (b) acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of laws;
- (c) a transaction from which a director derived an improper personal economic benefit;
- (d) a distribution in violation of these Articles or any other provision of the law for which the director voted;
- (e) a transaction for which the director voted and from which such director derives an improper personal economic benefit; or
- (f) an unlawful loan to, or guaranty for, such director.

9.2 Indemnification. Those persons serving as directors of the Association shall be indemnified for their actions to the full extent allowed under Montana law, pursuant to Sections 35-2-446 through 35-2-454, MCA.

**ARTICLE 11
DISSOLUTION AND DISTRIBUTION OF ASSETS**

11.1 Dissolution. Dissolution shall be in accordance with Section 35-2-721, *et seq.*, MCA and its regulations as the same now exists or as it may be amended from time to time.

11.2 Distribution of Assets. Upon dissolution of the Association, the assets, both real and personal of the corporation, shall be granted, conveyed, and assigned to a master association that the Association may be a member of or any nonprofit corporation, association, trust or other organization to be devoted to purposes as nearly as practicable the same as those to which they were required to be devoted by the Association, and shall otherwise be distributed in accordance with federal and state law.

**ARTICLE 12
GOVERNANCE**

Governance and regulation of the Corporation are set forth in the Bylaws, and if not set forth therein, shall be controlled by the laws of the State of Montana, as the same exist from time to time.

**ARTICLE 13
AMENDMENT**

The Association may amend these Articles of Incorporation in the manner set forth in Sections 35-2-221, *et seq.* MCA.

IN WITNESS WHEREOF, Jason Leep, the person named above as incorporator, has, by his signature below, adopted these Articles of Incorporation, this _____ day of _____, 20 ____.

Meadowlark Ranch North Homeowners Association, Inc.

By: _____
Jason Leep, Incorporator

STATE OF _____)
: ss.
County of _____)

On this _____ day of _____, 20____, before me, a Notary Public for the State of _____, personally appeared Jason Leep known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

NOTARY PUBLIC for the State of _____

Print Name
Residing at: _____
My Commission expires: _____
Month/Day/Year

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BYLAWS OF MEADOWLARK RANCH NORTH HOA

ARTICLE I. INTRODUCTION

SECTION 1. Bylaws Definition. The Bylaws are a set of rules adopted by the Montana non-profit corporation for governing its meetings and affairs.

SECTION 2. Association Name. The name of the Montana non-profit corporation shall be Meadowlark Ranch North Homeowner's Association hereinafter referred to as the "Association."

SECTION 3. Organization and Operation. The provisions of these Bylaws shall apply to and govern the Association, established for the purpose of performing the rights, obligations and duties of the Association and the membership as set forth in these Bylaws, the Articles of Incorporation, and the Declaration of Covenants, Conditions and Restrictions for the Meadowlark Ranch North Subdivision and Planned Unit Development ("Declaration"). The Association is organized and shall be operated as a Montana public benefit membership nonprofit corporation, and these Bylaws are made and entered into, pursuant to the Montana Nonprofit Corporation Act ("Act"), Sections 35-2-113, *et seq.*, MCA.

SECTION 4. Purpose. The Association is a nonprofit Association. The Association shall have all the powers of a nonprofit corporation enumerated and set forth the Montana Nonprofit Corporation Act, Sections 35-2-113, *et seq.*, MCA and as set forth in the Articles and Declaration.

The function and purposes of the Association are to carry out and conduct all corporate responsibilities enumerated in the Montana Non-profit Corporation Act, to carry out and conduct the business of a mutual benefit owners' association, and as follows.

- A. Adoption and amendment of Bylaws for the governance of the Association;
- B. General administration and management of the Property and Association or contracting for the same;
- C. Maintenance, repair and replacement of or provision of maintenance, repair and replacement for the Common Area within the Property;
- D. Levying of assessments and establishing the means and methods of collecting assessments and charges;
- E. Administering of certain real property conveyed for the benefit of Owners and the Association in the Property;
- F. Appointment or designation of a committee to fulfill the Architectural Control, Building

and Site Development, Building Criteria, and Site Development and Landscape Criteria provisions of the Declaration, and other provisions as deemed necessary in accordance with the Declaration;

G. Entering into contracts or hiring of personnel for the management and administration of the affairs of the Association, including the maintenance, repair and replacement of common roads, including snowplowing and weed control, as described above; and,

H. Performance of all of the other powers, functions, and duties that may be required or permitted under these Bylaws, the Articles, Declaration, or rules and regulations, as may be adopted by the Board from time to time.

Except as to those matters specifically required to be performed by the Owners by the Act, Articles, Declaration, these Bylaws, or the rules and regulations adopted by the Board of Directors in accordance with these Bylaws, as the same may from time-to-time be adopted or amended, the foregoing responsibilities shall be performed by the Board of Directors (“Board”) or managing agent.

SECTION 5. Compliance. The Declarant and every Owner and Occupant shall comply with these Bylaws.

ARTICLE II. ASSOCIATION DEFINITIONS

SECTION 1. Definition of Terms. Definition of capitalized terms applicable to the Association, Owners, Members, Directors, and Committees and used and not defined herein shall be as defined, maintained, and updated as necessary in the Declaration.

ARTICLE III. PRINCIPAL OFFICE

SECTION 1. Location. The principal office of the Association shall be the Declarant’s or the Association’s property management company, or at such place as the Board of Directors may designate from time to time. The office location shall be reported in the Annual Report filed with the Montana Secretary of State.

ARTICLE IV. MEMBERSHIP, RIGHTS AND PRIVILEGES

AND VOTING RIGHTS

SECTION 1. All Owners shall automatically become a member of the Association and be subject to these Bylaws. Such membership shall terminate without any formal action by the Association whenever such person ceases to own a Lot in Meadowlark Ranch North however, such termination shall not relieve or release any such former Owner from any liability or obligation incurred under or in any way connected with the Association during the period of ownership and membership in the Association, or impair any rights or remedies of other Owners, either through the Board or directly, against a former Owner and member arising out of or in any way connected with ownership or membership and these Bylaws and the Declaration and obligations incident thereto. The membership rights and privileges of an Owner who is a natural person may be exercised by the Owner. The membership rights of an Owner that is a

corporation, partnership or other legal entity may be exercised by any officer, director, partner, or trustee, or by any other individual

A. Member. Member is defined in the Declaration, which definition shall apply to all references to “Member” in this document. Each Owner shall agree to abide and be bound by these Bylaws, the Articles of Incorporation, the Declaration and any resolutions of the Association.

B. Member in Good Standing. Member in Good Standing is defined in the Declaration. The Restrictive Covenant definition shall apply to all references to “Member in Good Standing” in this document.

C. Membership Quorum. A quorum of Owners shall consist of more than fifteen percent (15 %) of those Owners in person or by proxy in Good Standing with the Association.

SECTION 2. Voting Rights. The Association will have one (1) class of membership. Members shall be entitled to one (1) vote for each Lot owned. When more than one (1) person holds an interest in any Lot, all such persons shall be Members. The vote for such Lot shall be exercised as they among themselves determine, but in no event shall more than one (1) vote be cast with respect to any Lot. All of the persons or entities collectively named in the deed as owner(s) shall designate in writing to the Association the individual authorized to exercise voting rights for the Lot in any voting matter. The Association has the right through the Board of Directors to suspend the voting rights of any Member as provided herein.

SECTION 3. Member’s Rights, Privileges and Duties. Each Member shall have the rights, privileges, duties and obligations set forth in the Declaration, the Articles of Incorporation, these Bylaws, and any rules adopted by the Board of Directors by resolution in accordance with the Declaration and these Bylaws, as the same may from time to time be amended, including rights to access, use and enjoyment of the Common Area and facilities granted to the Members or Owners subject to such limitations as may be imposed in accordance therewith. No Member shall have the right, without the prior approval of the Board to exercise any of the powers or to perform any of the acts by these Bylaws or the Declaration delegated to the Board or the Association.

SECTION 4. Failure to Comply. Each Owner shall comply strictly with the provisions of the Declaration, these Bylaws, and any rules and regulations, decisions and resolutions of the Association or Board adopted pursuant thereto, as the same may be lawfully adopted or amended from time to time. Failure to comply with any of the same shall be grounds for an action to recover sums due, for damages or injunctive relief or both, and other action allowed by law, and for reimbursement of all costs, including attorney fees incurred in connection therewith, which action shall be maintainable by the Board or Association manager in the name of the Association, on behalf of the Owner, or in the proper case, by an aggrieved Owner.

SECTION 5. Termination of Membership. Upon the sale, transfer or other disposition of a person’s or entity’s ownership interest in the Lot, said person’s or entity’s membership in the Association shall automatically be transferred to the new Owner succeeding to such ownership

interest. Such termination shall not relieve any Owner of liability for obligations incurred while a Member of the Association.

SECTION 6. Transfer of Membership. Membership in this Association is appurtenant to the Lot giving rise to such membership and, accordingly, is non-transferable except to the successor in title to the Lot who satisfies the criteria for membership eligibility. Any transfer of title to a Lot shall operate automatically to transfer membership in the Association to the new Owner thereof, subject to payment of all unpaid dues or assessments levied by the Association against the transferred Lot. Each new Owner shall be responsible for advising the Association of his, hers, theirs, or its acquisition of ownership and current address.

SECTION 7. Proxies and Written Ballot. Any Member entitled to vote may do so in person, by proxy or by written ballot. No proxy shall be deemed valid for more than two (2) months after the date of execution thereof unless otherwise provided in the proxy instrument. All proxies must be in writing. Voting by proxy or by written ballot shall be in accordance with the Declaration and Bylaws.

SECTION 8. Resignation of Membership. As long as a Member has legal or equitable ownership in a Lot subject to the Declaration, such person or entity may not resign as a Member of the Association. By purchasing a Lot in Meadowlark Ranch North, the Owner agrees to remain a Member of the Association for the entire ownership period.

SECTION 9. Suspension of Voting Rights. The Board shall have the right to suspend the voting right of any Member of the Association for the period during which any assessment, charge or fine against the Lot owned by such Member remains unpaid and delinquent. Voting rights are suspended automatically by nonpayment of dues or liens. In addition, the Board shall have the right to suspend Member voting rights for violation of the Declaration or other rules and regulations lawfully established by the Board or Membership. Suspension is not an exclusive remedy and the Association shall have other rights and remedies available at law or equity. This suspension shall continue until such time as the Owner has paid such delinquent assessments, fines or charges, or such other violations have been cured. In the event of such suspension, the Declaration shall remain in full force and effect.

Any suspension of such voting rights shall be made by a majority of the Board only after a meeting of the Board at which a quorum of the Board is present, duly called and held for such purpose in the manner as provided in the Bylaws and Declaration for the notice. Written notice of such meeting shall be given to the Member whose rights are being sought to be suspended at least ten (10) days prior to the holding of such meeting. Such notice shall be given either by personal delivery, or deposited in the United States mail, certified or registered, postage and fees prepaid, return receipt requested, addressed to such Member at the address then on file with the Association. Such notice, if mailed, shall be deemed given and received four (4) days after being so deposited in the United States mail in the manner aforesaid, or if emailed, shall be deemed given and received upon sending the email, and said Member whose rights are being sought to be suspended shall be entitled to appear at such meeting and present the Member's case as to why such rights should not be suspended in accordance with the provisions of this Section. The decision to suspend a Member's rights shall be binding upon all Members of the Association. No action taken at such meeting shall be effective unless a quorum of the Board is present at such meeting.

ARTICLE V. MEMBERSHIP ASSESSMENTS, ENFORCEMENT
AND LIEN RIGHTS

SECTION 1. Membership Assessments. Annual assessments, special assessments, default assessments and fines as provided for in the Declaration and Bylaws shall be paid by the Members in accordance with the Declaration and these Bylaws. The Board shall fix, levy, collect and enforce such assessments and fines necessary to carry out the purposes of this Association and as provided for in accordance with the Declaration and these Bylaws.

SECTION 2. Enforcement. Enforcement of the Declaration shall be by proceedings either at law or in equity against any person or persons violating or attempting to violate any covenant, condition or restriction; and the legal proceedings may be either to restrain violation of the Declaration or to recover damages or both. In the event of any action to enforce the Declaration, the prevailing party shall be entitled to costs and a reasonable attorney's fee to be set by the Court. Any Owner, Declarant or the Association may enforce these Declaration. For the purpose of enforcing and collecting assessments, the Association shall have the lien rights set forth in the Declaration and shall be enforceable by the Board in the manner set forth in the Declaration and Bylaws. The Board shall be entitled to exercise all other rights and remedies set forth in the Declaration and Bylaws or otherwise provided for at law or in equity.

ARTICLE VI. DIRECTORS

SECTION 1. Number and Qualifications. The business and affairs of the Association shall be managed by a Board of Directors comprised of a minimum of three (3) and a maximum of five (5) Owners, each of whom shall be Members In Good Standing of the Association. The numbers of Directors may be increased or decreased by amendment to these Bylaws and the Declaration, but shall not be less than three (3).

SECTION 2. Election. Upon the expiration of the terms of the initial Board of Directors as provided in the Articles, the Membership of the Association shall elect the Board of Directors annually at an Annual Meeting. The Board of Directors shall be elected by Members or their proxies by written ballot, oral vote, or any other means as the Board may designate. Members receiving the largest number of votes shall be elected to the Board. Cumulative voting is not permitted.

SECTION 3. Officers. The Board shall elect officers from within the Board of Directors, a President, Vice-President, Treasurer, and Secretary at the Annual Board meeting following the Association Annual Meeting. Any of the duties of the officers may be delegated to the Association's property management company; however, the elected officer must ensure that the property management company completes the duties. Officers may not be combined and filled by one person. The duties of the Officers shall be:

- A. President.** The President shall preside over all meetings of the Association and over all Board meetings. The President shall be the general administrative and executive officer of the Association, and shall perform such duties as may be specified, and exercise such

powers and such other duties incident to the office of President as may arise and as may be prescribed or delegated by the Board.

B. Vice-President. The Vice-President shall serve on the Board and perform such duties as may be directed by the President in conducting Association business and duties. The Vice-President shall preside over any meeting in the absence of the President and shall perform such duties as may be specified, and exercise such powers as may be delegated by the Board.

C. Secretary. The Secretary shall provide written notice to the Membership of all meetings of the Association in accordance with these Bylaws and the Declaration. The Secretary shall keep records of the proceedings and minutes of all Board meetings and of Annual and Special meetings of the Owners called in accordance with these Bylaws or the Declaration, or shall cause to be kept by assigning this duty to the managing agent or someone else. The Secretary shall keep written records of all Membership addresses, phone numbers, e-mail addresses (if available), Lot owned, and be custodian of the Associations' books and records. The Secretary shall archive and maintain all historical Association records in chronological order, including historical Treasurer's records and, in general, perform all duties incident to the office of the Secretary and such other duties as from time-to-time may be assigned by the President or by the Board, and as otherwise provided in these Bylaws. The Secretary shall be authorized to sign or co-sign on a directive from the President, on behalf of the Association, all records, documents and instruments when such are authorized by the Board. The Secretary shall file in a timely manner the annual report required by the state of Montana.

D. Treasurer. The Treasurer shall keep and maintain accurate financial records and accounts of all financial and business transactions, including accounts of assets, liabilities, receipts, disbursements, gains and losses, and property records of the Association. The Treasurer deposit all monies in the name of the Association in such banks, trust companies or other depositories as the Board may from time-to-time select, and shall receive and prepare all bills for payment and verify adequate funding. The Treasurer shall send notice of levy of all dues or assessments and inform the Secretary of the names of all Owners delinquent in payment thereof, or assign this duty to the managing agent or accountant for the Association. The Treasurer shall present quarterly financial reports to the Board that are reconciled to the Association approved income/expense budget for the year. The Treasurer shall present an annual financial report at the Association Annual Meeting that reconciles income/expenses to the Association approved budget for the previous year, and shall present a budget for Member review and approval by the Membership for the ensuing year. The Treasurer shall render other accountings and reports as may be required by the Board, county, state and Federal Government, and shall establish and maintain such accounting and fiscal controls, including provision for annual financial statements and/or audits by outside accountants, if directed by the Board, and as in keeping with sound bookkeeping and accounting practices and the laws of the State of Montana; prepare, or assist outside tax preparers or accountants in the preparation of all required tax returns, and shall, in general, perform all of the duties incident to the office

of a treasurer and such other duties as from time-to-time may be assigned to by the President or the Board..

SECTION 4. Term and Vacancies. Subsequent to the initial terms as provided in the Articles, each Director shall be elected for a three (3) year term by the Members of the Association at the Annual Meeting. Any vacancies that result after the Annual Meeting shall be filled by the remaining members of the Board, and such appointed Director shall serve for the remainder of the term. A Director may serve two (2) or more terms in succession. Directors shall hold office until successors are elected and qualified. A member shall be in Good Standing within the Association in order to be eligible for election to any office, or to remain in office. Only one elected Director shall be permitted from each Lot.

SECTION 5. Removal and Vacancies. An elected Director may be removed from the Board, with or without cause, by a majority vote of the members. A Director may resign at any time by giving notice to the Board, the President, or the Secretary of the Association. Unless otherwise specified in the notice, the resignation shall take effect upon receipt thereof by the Board, or such officer, and acceptance of the resignation shall not be necessary to make it effective. In the event of death, resignation or removal of a Director, a successor shall be selected by the remaining members of the Board and shall serve for the remaining unexpired term of the Board member.

SECTION 6. Annual Meetings. The Board shall hold an annual Membership meeting once per fiscal year at the place designated in the meeting notice sent to Members by the Secretary, for the purpose of organization, election of Directors, and the transactions of other business. Annual meetings may be held telephonically.

SECTION 7. Board Meetings. Immediately following the first annual meeting and each subsequent annual meeting of members, the Board of Directors shall hold a regular meeting at the same place for the purpose of organization, election of officers, and the transactions of other business without additional notice other than these Bylaws. Other regular meetings of the Board of Directors may be held, at such place and hour as may be fixed from time to time by resolution of the Board. Notice shall be provided in the resolution of the time and place for the holding of additional regular meetings by mail, facsimile, telephone, hand delivery, or email, at least ten (10) days prior to the date of such meeting. Should said meeting fall upon a legal holiday, then that meeting shall be held at the same time on the next day which is not a legal holiday.

A. Special Meetings. Special meetings of the Board shall be held when called by the President of the Board, or by any two Directors, after not less than notice three days in advance to each Director and Board Member.

B. Meeting Quorum. A majority of the number of Directors shall constitute a quorum for the transaction of business. Every act or decision made by a majority of the Directors present at a duly held meeting at which a quorum is present shall be regarded as the act of the Board. Minutes of all Board Meeting shall record those present at the meeting.

C. Proxies. At all meetings of the Board, a Director may vote by proxy executed in writing by the Director or by his duly authorized attorney-in-fact. Such proxy shall be filed with the Secretary of the Association before or at the time of the meeting.

D. Action Without Meeting. The Directors shall have the right to take any action in the absence of a meeting which they could take at a meeting if such action is taken by all Directors, which must be evidenced by written description of the action taken by all Directors, signed by each Director, and by filing such approval with the Minutes of the proceedings of the Board within ten (10) days of the action so taken without a meeting. An action so approved shall have the same effect as if taken at a duly noticed and convened meeting of the Board at which a quorum was present.

E. Minutes. An accurate written record of all business transactions and meeting minutes shall be maintained by the Board Secretary. Minutes of all Board Meeting shall record those present at the meeting.

SECTION 8. Salaries or Compensation. All Directors and officers shall serve without salary and/or compensation, however, by resolution of the Board expenses for actual attendance at each regular or special meeting of the Board may be authorized.

SECTION 9. Powers and Duties. Subject to the limitations of the Articles of Incorporation, these Bylaws, and the Declaration as to action required to be taken, authorized or approved by the Members of the Association, or a portion or percentage thereof, all Association powers and duties including those set forth in the Declaration shall be exercised by the Board. Without limiting the generality of the foregoing, the Board shall in general:

- A. act for and carry on the administration and affairs of the Association as authorized and prescribed by the Articles, Declaration, and these Bylaws, and to do those things which are reasonable and necessary in order to carry out the governance and operation of the Association;
- B. carry out the duties and responsibilities of the Board in all other matters as may be authorized, needed or required by the Declaration;
- C. have all powers and duties referred to in the Articles, Declaration, or these Bylaws, or the laws of the State of Montana; and,
- D. enforce the provisions of the Declaration and these Bylaws.

In addition to these general powers, the Board of Directors shall have the powers and duties to:

- A. Call annual meetings of the Association and give due notice thereof.
- B. Pay the expenses of the Association, including taxes, assessments, and for the maintenance, repair and replacement of Common Areas and facilities and improvements therein, including snowplowing and weed control, and to approve payment vouchers at either regular or special meetings;
- C. Adopt and amend budgets for revenues, expenditures and reserves.
- D. As a part of the adoption of the regular budget the Board shall

include an amount which, in its reasonable business judgment, will establish and maintain a reserve fund for the replacement of those improvements that it is obligated to maintain, based upon age, remaining life, quantity and replacement cost;

- E. Collect assessments to the extent expressly permitted by the Declaration or delegate such collections;
- F. Hire and discharge a managing agent, provided that any agreement for professional management of Meadowlark Ranch North must provide for the termination by either party with or without cause and without payment of a termination fee or penalty upon thirty (30) days written notice;
- G. Hire and discharge employees, independent contractors and agents other than managing agents;
- H. Institute, defend or intervene in litigation or administrative proceedings or seek injunctive relief for violations of the Declaration or these Bylaws in the Association's name, on behalf of the Association; Other than for the collection of delinquent assessments or accounts, the Board shall not initiate any litigation or lawsuit without prior approval of at least two-thirds (2/3) of the aggregate interest of Owners;
- I. Enter into contracts on the Association's behalf and incur liabilities;
- J. Regulate the use, maintenance, repair, replacement and modifications of Common Area, and adopt rules and regulations, after written notice of the meeting called to adopt such rules and regulations is given to all Owners in accordance with these Bylaws, governing the administration, management, operation and use of Common Area, and to amend such rules and regulations from time to time. Such rules must be approved by two-thirds (2/3) of Owners at any Regular or Special meeting of the Association unless otherwise provided for herein or by the Declaration
- K. Cause additional improvements to be made to and as a part of the Common Area;
- L. Acquire, hold, encumber and convey, in the Association's name, any right, title or interest to real estate or personal property, but Common Area may be conveyed or subjected to a security interest only pursuant to state law or the terms of the Declaration;
- M. Grant easements for any period of time, including permanent easements, and grant leases, licenses and concessions, through or over Common Area;
- N. Impose and receive a payment, fee or charge for services provided

- and/or for the use, rental or operation of the Common Area;
- O. Impose a reasonable charge for late payment of assessments and, after notice and hearing, levy reasonable fines, charges, or assessments provided for or allowed in the Declaration or Bylaws;
 - P. Keep and maintain full and accurate books and records showing all of the receipts, expenses, or disbursements of the Association;
 - Q. Impose a reasonable charge as an assessment for the preparation and recording of amendments to the Declaration, liens, or statements of unpaid assessments;
 - R. Borrow funds in order to pay for any expenditure or outlay required pursuant to the authority granted by the provisions of the Declaration and these Bylaws, and to execute all such instruments evidencing such indebtedness as the Board may deem necessary and give security therefor;
 - S. Provide for the indemnification of the Association, Board and Officers and maintain Directors' and Officers' liability insurance;
 - T. Procure and maintain adequate liability and hazard insurance on Property owned by the Association and as further set forth in the Declaration;
 - U. Cause all Directors, Officers, employees or agents having fiscal responsibilities to be bonded or insured, as it may deem appropriate, and in such amounts as it may deem appropriate. Such expense shall be a cost to the Association;
 - V. Appoint committees;
 - W. Remove a Board member and declare the office of a member vacant in the event such member shall be regularly absent from meetings of the Board;
 - X. Exercise for the Association all powers, duties, rights and obligations in or delegated to the Association and not reserved to the membership by other provisions of these Bylaws, Articles or the Declaration; and
 - Y. Exercise any other powers conferred by the Declaration, Articles, these Bylaws or Montana law.

SECTION 10. Execution of Documents. All agreements, contracts, deeds, leases, checks, and other instruments of the Association for expenditures or obligations in excess of Five Hundred Dollars (\$500) shall be executed by two (2) Directors, as determined by the Board by resolution,

and those in the amount of Five Hundred Dollars (\$500), or less, may be executed by one (1) Director, as determined by the Board by resolution, or otherwise as provided for in these Bylaws.

SECTION 11. Enforcement of Bylaws and Declaration. The Board shall enforce the Bylaws and Declaration. To this end, the Board shall, directly or by delegation, establish forms, procedures, and standards for enforcement of the Bylaws and Declaration by resolution. The Board may hire counsel and other experts necessary for such enforcement, within the limitations of the Bylaws and Declaration.

ARTICLE VIII. COMMITTEES

SECTION 1. Building and Landscape Review Committee. The initial Board shall serve as the Building Landscape Review Committee (BLRC) until the initial Board terms expire, after which the Board shall appoint a minimum of three (3) Members to serve as the BLRC, subject to the requirements and limitations set forth in these Bylaws and the Declaration. All BLRC Members shall not be replaced in any one year, except under extenuating circumstances. The BLRC's purpose and function is to accept, review, approve and/or reject plans, materials, and specifications for improvements and alterations to a Lot as provided in the Declaration. The review, acceptance, or rejection of plans shall be in accordance with the requirements of the Declaration. The BLRC shall act by a majority of the Members. The BLRC shall notify the Secretary or President of the Board of Directors of any pending approvals on all new construction and alterations. Copies of all written approvals or denials shall be provided to the Board of Directors, upon request. A timeline record of all actions taken shall be maintained by the BLRC for all plans submitted. The BLRC shall archive and maintain a copy of all approved plans, review documents, and correspondence for a period of no less than five (5) years. The BLRC, at a time determined to be adequate for completion of their review functions, shall retire their inactive files to the Secretary of the Association for permanent archive retention.

SECTION 2. Other Committees. Other Committees may be appointed as needed.

SECTION 3. Powers and Duties. All appointed Committees shall have powers and duties in accordance with these the Bylaws, the Declaration, and the resolutions by which they are created.

SECTION 4. Conflict of Interest. A Member serving on a Committee where a potential conflict of interest arises shall be recused from acting on the matter that may be a conflict of interest, such as:

A. Building and Landscape Review Committee. In the event that a Member is serving on the BLRC and the Member's Lot is the subject of review, such Member shall recuse him or herself from such review so as to avoid a possible conflict of interest or lack of impartiality. The other two (2) Members shall perform the review process. In the event a tie vote, the Committee shall consult with the Board for final resolution, which may hire an architect, engineer or professional to aid the BLRC in their review.

SECTION 5. Compensation. All BLRC Members shall serve without salary and/or compensation for services rendered, however, by resolution of the Board of Directors a BLRC Member may be reimbursed for actual authorized expenses incurred in the performance of

duties. The Board of Directors may hire an architect, engineer or professional to aid the BRLC in their review of submissions.

ARTICLE IX. MEETING OF MEMBERS.

SECTION 1. Annual Meeting. An Annual Meeting of the Members shall be held at a date, time and location determined by the Board of Directors, which date, time and location of such meeting shall be contained in the notice of meetings described below at Section 4 of this Article. Subsequent regular Annual Meetings of the Members shall be held as close as practically possible during the same month of the year thereafter, and not on a legal holiday. The purpose of the annual meeting shall be for the election of the Board of Directors or filling any vacancies thereon, conducting an annual review of the Association's past and future business and current financial condition, presentation of reports, and for the transaction of such other business of the Association as may come before the meeting. Upon the termination of the initial Board terms as provided in the Articles, there shall be elected by the Members, a Board of Directors in accordance with the requirements of these Bylaws and the Declaration.

SECTION 2. Annual Meeting Order of Business. The order of business at an annual Membership meeting shall be, at a minimum as follows:

- (1) Call to order and determine that a quorum is present by Members present and proxies.
- (2) Reading of prior minutes, discussion, correction, and approval by Membership vote.
- (3) Treasurer's Annual Report, to include a summary of all income/expenses reconciled to the Association approved operating budget for the year completed, followed by discussion, correction, and Report approval by Membership vote.
- (4) Reports of other officers.
- (5) Old Business, to include a summary of all major actions taken or delayed by Board actions since last Annual Meeting.
- (6) New Business to include all actions pending Board Member action and those that are presented by Members present or by proxy request.
- (7) Budget presentation, to include income needs and estimated expenditures for the ensuing year.
- (8) Committee reports;
- (9) Election of Directors.
- (10) Adjournment.

SECTION 3. Special Meetings. Special meetings of the Members may be called at any time by the Board, or upon written request to the Board of Directors of twenty percent (20%) of the Members in Good Standing. Notice of any special meeting must specify the reason for the meeting and the matter(s) to be raised, as well as the place, date, and time of such meeting, which notice shall be in accordance with Section 4 of this Article. Only matters set forth in the notice may be brought before the special meeting.

SECTION 4. Notice of Meetings. Notice of all meetings, annual or special, shall be in writing, stating the date, time and location of the meeting, and, in the case of a special meeting, the

purpose or matter for which the meeting is called, and shall be mailed to every Owner of record at the Member's address of record at least fifteen (15) business and not more than forty (40) days before such meeting. Such notice shall be deemed to be delivered when deposited in the United States Mail, addressed to the Member(s) at the address as it appears in the books of the Association, with postage thereon prepaid. It is the duty of each Member to advise the Association Secretary of Member's current address. Personal delivery of such notice by the President or Secretary of the Association shall be considered as notice served. Written notice of any meeting called for the purpose of approving special assessments pursuant to the Declaration shall be given not less than fifteen (15) days or more than forty (40) days before such meetings. Such notice shall specify the place, day and hour of the meeting, and, in the case of a special meeting, the purpose of the meeting.

SECTION 5. Quorum. No meeting, annual or special, shall be conveyed to conduct business unless a quorum is present in person or by proxy. A quorum of Members for any Association meeting shall be fifteen percent (15 %) of the Members, including proxies submitted by absentee Members who are entitled to vote. If a quorum is not present at the first meeting called for the purpose conducting any Association business such meeting shall be adjourned forthwith, and another meeting shall be called subject to notice in accordance with Section 4 of this Article. The required quorum at the subsequent meeting shall be one-half (1/2) of the required quorum at the preceding meeting. No such subsequent meeting shall be held more than sixty (60) days following the preceding meeting.

SECTION 6. Action Without Meeting. Unless otherwise provided by law, the Declaration, or herein required, any action required to be taken at a meeting of the Members (except for the election or removal of officers) may be taken without notice of a meeting if a consent in writing, setting forth the actions so taken, signed all of the Members who would be entitled to vote at a meeting for such purpose and with respect to the subject matter thereof and by a representative of the Association, is filed with the Secretary of the Association within ten (10) days of the action so taken without a meeting.

SECTION 7. Proxies. Every Member entitled to vote or execute consents shall have the right to do so either in person or by an agent or agents authorized by a written proxy executed by such Member or his duly authorized agent and filed with the Secretary and/or Treasurer of the Association at which the proxy is to be exercised. Except for the Secretary, no Member present at the meeting can hold and vote for more than three (3) proxies of absent Members. Every proxy shall be revocable by the person granting it announcing its revocation to the Secretary of the meeting at which it would otherwise be exercised prior to the exercise thereof and shall automatically cease upon sale or conveyance of the person granting the proxy of his interest in his Lot.

SECTION 8. Member Address. Each Member is responsible for delivering to the Secretary of the Association the Member's current address, phone number and e-mail address for notice purposes, and for updating the Association as to current contact information. In the event that current Member address or contact information is not on file with the Association so that conventional mail or electronic mail is not deliverable or responded to by the Member in the requested time frame, the Member shall not hold the Board, Association or other Members liable for decisions made in the absence of a response said Member.

ARTICLE X. MEMBER DUES, ASSESSMENTS, FINES, AND PENALTIES

SECTION 1. Member Dues, Fines, Charges and Penalties. Member dues and fines, shall be as required, defined, and enforced in the Declaration and Bylaws. The Board of Directors shall have the responsibility to establish, levy and enforce fines, charges and penalties, which shall be default assessments, and shall file liens with the Gallatin County Recorder for such default assessments or delinquent assessments.

SECTION 2. Infractions.

- A. **Procedure.** Each Owner, Owner's family, Occupant, agents, employees, invitees or licensee(s) shall comply with these Bylaws, the Declaration and rule and regulations adopted by resolution of the Board, as those may be amended from time to time. Each Owner shall be responsible to the Association for such compliance. The Association shall have the right, but not the obligation, to enforce these Bylaws and the Declaration, in accordance therewith and through establish forms, procedures, and standards for enforcement adopted by resolution of the Board, by proceedings either at law or in equity. Legal proceedings may be to restrain violation of the Declaration or to recover damages or both. Such procedure, if adopted by the Board to enforce the Declaration, shall include provisions for due process, including but not limited to notice and an opportunity to be heard at a regular meeting of the Board.
- B. **Discretion.** The decision to pursue enforcement action in any particular case shall be at the Board's discretion, subject to these Bylaws and the Declaration. Without limiting the generality of the foregoing sentence, the Board may determine that, under the circumstances of a particular case:
- i. the Association's position is not strong enough to justify taking action; or
 - ii. the covenant, condition, restriction, or rule being enforced is, or is likely to be construed as, inconsistent with applicable law; or
 - iii. although a technical violation may exist or may have occurred, it is not of such a material nature as to be objectionable to a reasonable person or to justify expenditure of the Association's resources; or,
 - iv. it is not in the Association's best interest, based upon hardship, expense, or other reasonable criteria, to pursue enforcement action.

Such a decision shall not be deemed a waiver of the right of the Board or Association to enforce such provision at a later time under other circumstances or preclude the Association from enforcing any other covenant, condition, restriction or rule, nor shall it preclude any Owner from taking action at law or in equity to enforce the Declaration.

SECTION 3. Non-payment of Dues or Assessments. Notice of assessments will be sent via first class mail as provided in the Declaration, and failure to pay any assessment by its due date will subject the late charges, interest and lien provision as provided in the Declaration. The Association may file that lien with the Gallatin County Clerk and Recorder's Office, bring an action at law to collect the lien or foreclose the lien, and otherwise shall be entitled in any such actions or foreclosure proceedings to recover its costs, including lien release fees, expenses and

reasonable attorneys' fees. No Owner may waive or otherwise escape liability for payment assessments provided for herein and as required by the Declaration.

SECTION 4. Notice of Enforcement, Violations, Fines and Penalties. Upon determination to pursue enforcement action, notice of any violation, fine and/or penalty must be approved by the Board of Directors and mailed with return receipt requested to the Owner at the address on file with the Association within three (3) days of determination to pursue enforcement action and levy of fine, charges, penalties or interest, which shall be Default Assessments. The notice shall contain:

- (a) Description of the violation, and applicable Article(s) and Sections(s) not in compliance.
- (b) Recommended action, the fine, charges and/or penalties assessed, and deadline to bring into compliance.
- (c) Description of any legal action that will take place if violation continues.

SECTION 5. Failure to Pay or Come into Compliance. In the event of failure to pay any fine, penalties or charges assessed as Default Assessments, or continued noncompliance with these Bylaws or the Declaration after the deadline and after notice given as provided herein, the Association may take such action, including legal action, as needed to correct the violation, with the costs thereof recoverable as provided in these Bylaws or the Declaration. Once the violation is corrected and the Owner is in compliance with the Declaration, the Owner may request the lien, if recorded, to be removed.

SECTION 6. Fines for Minor Violations. Amounts of fines for minor violations that are easily corrected and first-time violations shall be appropriate for the offense and determined by the Board by resolution, which shall be provided to Owners in writing. Examples of such minor violations include, but are not limited to, parking of campers outside of fences, failure to properly store trash containers. Such fines shall be a minimum of \$25 per violation but not more than one half of the established current year Owner's dues shall be levied (if no dues were assessed for the current year, then the established dues of the previous year shall be used for the fine assessment).

SECTION 7. Fines for Major Violations. Amounts of fines for violations that are willful, continual and ongoing, repeated, or not easily remedied or abated will be set at the discretion of the Board of Directors by resolution, which shall be provided to Owners in writing. Such fines shall fit the seriousness of the violation or noncompliance. Examples of such major violations include, but are not limited to, repeated or continual minor violations, discharge of a Firearm in an Open Area, nonconforming Lot Improvement or Alteration, commercial or industrial use of a Lot, etc. Such fines shall be a minimum of \$100 per violation or for each day the violation or noncompliance occurs or continues depending on the nature and severity of such violation or noncompliance, at the discretion of the Board.

ARTICLE XI. FINANCES; CONTRACTS; CHECKS; DEPOSITS

SECTION 1. Budget. Prior to the Annual Meeting, the Board of Directors shall cause a budget for the forthcoming year to be prepared and adopted. Based on the adopted budget, the Board shall set the annual dues assessment for the forthcoming year. A copy of the budget and the recommended assessments, with any explanation deemed desirable by the Board, shall be sent to the Membership with the notice of Annual Meeting. The adopted budget and dues assessment shall be discussed at the Annual Meeting.

SECTION 2. Contracts. The Board of Directors, except as in these Bylaws otherwise provided, may authorize any Officer or Officers, agent or agents, to enter into any contract or execute any instrument in the name and on behalf of the Association, in accordance with these Bylaws, and such authority may be general or confined to specific instances; and unless so authorized by the Board of Directors, no Officer, agent, or employee shall have any power or authority to bind the Association by a contract or engagement or to pledge its credit or to render it liable for any purpose or to any amount.

SECTION 3. Checks, Drafts, Etc. All checks, drafts or other orders for payment of money, notes or other evidences of indebtedness, issued in the name of or payable to the Association, shall be signed or endorsed by such person or persons and in such manner as, shall be determined by resolution of the Board of Directors. If any check is return non-sufficient funds, the Board will charge the person or persons a reasonable fee for the returned check costs. The reasonable fee will be determined by the Board.

SECTION 4. Deposits. All funds of the Association not otherwise employed shall be deposited from time to time to the credit of the Association in such banks, trust companies or other depositories as the Board of Directors may select.

ARTICLE XII. NO WAIVER OF RIGHTS

SECTION 1. No Waiver of Rights; Cumulative Rights. The failure of the Association, the Board of Directors, or of an Owner to enforce any right, provision, covenant, condition or restriction which may be granted by the Declaration, these Bylaws or otherwise shall not constitute a waiver of the right of the Association, the Board of Directors, or an Owner to enforce such right, provision, covenant, condition or restriction in the future. All rights, remedies and privileges granted to the Association, Board of Directors or any Owner pursuant to any term, provision, covenant, condition or restriction of the Declaration or these Bylaws shall be deemed cumulative and the exercise of any one or more thereof shall not be deemed to constitute an election of remedies, nor shall it preclude the party exercising the same from exercising such other rights, privileges or remedies as may be granted to such party by the Declaration, these Bylaws, or at law or in equity.

ARTICLE XIII. MISCELLANEOUS

SECTION 1. Notice. All notices, demands, bills, statements, or other communications under these Bylaws shall be in writing and shall be deemed to have been duly given if delivered personally or if sent by registered or certified mail, return receipt requested, postage prepaid and regular mail as provided herein or by the Act (a) to an Owner, at the address which the Owner shall designate in writing and file with the Secretary of the Association, or if no such address is designated, at the address of the Owner's Lot, or b) to the Association, Board of Directors or to the managing agent or at such other address as shall be designed by notice in writing to the Owners pursuant to the this section. If a Lot is owned by more than one (1) person, each such person who is so designated and who has addressed such in writing to the Secretary of the Association shall be entitled to receive notice hereunder.

SECTION 2. Waiver of Notice. Unless otherwise provided by law, whenever any notice is required to be given to any Owner or Director under the provisions of these Bylaws or under the provisions of the Articles, a waiver thereof in writing, signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice.

SECTION 3. Inspection of Bylaws. The Association shall keep the original or a copy of the current Bylaws at the residence of the Association Secretary, or other office of the Association or its managing agent, which shall be open to inspection by the Members at all reasonable times by appointment.

SECTION 4. Fiscal Year and Tax Exemption. The fiscal year of the Association shall be from January 1 through December 31. The Association shall apply for and maintain a tax-exempt status under applicable provisions of the Internal Revenue Code.

SECTION 5. Accounts, Books and Records. The Association shall maintain adequate and correct accounts, books and records of its business. All of such accounts, books and records of the Association shall be kept at the residence of the Association Secretary and/or Treasurer, the Association's principal place of business in the State of Montana, as fixed by the Board of Directors from time to time, or office of the Association's managing agent, which shall be open to inspection by the Members at all reasonable times by appointment.

SECTION 6. Reports to Members. The Board of Directors shall cause an annual operating statement reflecting income and expenditures of the Association for the recent fiscal year to be prepared and shall cause the delivery of a copy thereof to all Members of the Association at the Annual Meeting.

SECTION 7. Evidence of Membership. The Board of Directors shall have the power, but not the obligation, to cause the issuance of evidence of Membership in the Association to Members thereof in such form as the Board may determine.

SECTION 8. Captions. The captions herein are inserted only as a matter of convenience and for reference, and in no way define, limit or prescribe the scope of these Bylaws or the intent of provision thereof.

ARTICLE IX. AMENDMENTS; CONFLICT

SECTION 1. Bylaw Revisions and Amendments. The Bylaws may be altered, amended and updated as needed by a two-thirds (2/3) vote of Owners at any duly called meeting for such

purposes at which a quorum is present or the Annual Meeting at which a quorum of Membership is present in accordance with the operating Bylaws and Declaration. The Notice of meeting shall contain or be accompanied by the text of the proposed amendment.

SECTION 2. Whenever an amendment to these Bylaws or a new bylaw is adopted, such amendment or new bylaw shall be maintained with the copies of the Association's books and records as provided herein, with the original Bylaws. If any bylaw is repealed, the fact of the repeal, with the date of the meeting at which the repeal was approved or enacted and vote thereon shall be maintained with the Association's books and records as provided herein, with the original Bylaws.

SECTION 3. Conflicts. In the event of any conflict or inconsistency between these Bylaws and the Articles, the Articles shall control. In the event of any conflict or inconsistency between these Bylaws or the Articles and the Declaration, the Declaration shall control.

We, the initial Board of Directors, hereby certify that the above and foregoing Bylaws of the Meadowlark Ranch North Homeowners Association Inc. are the Bylaws of this Association adopted effective on the ____ day of _____ 20 ____.

Landy Leep, Director

Jason Leep, Director

Gary Oakland, Director

To: Jason Leep
From: Meadowlark Ranch, LLC
Date: September 30, 2018
Subject: Meadowlark Ranch Subdivision Aquatic Resources Delineation Report

Dear Jason,

Please find enclosed the aquatic resources delineation report summarizing the results of the delineation that was conducted for the Meadowlark Phase II development area on July 12 and 13, 2018. After you have had a chance to review the report, I will follow up with you to see if you have any questions. We can also talk about whether you'd like to move forward with a preliminary Jurisdictional Determination from the Corps on the mapped wetland areas, or if you'd prefer to hold off until your project is closer to submitting a Section 404 permit application.

Thank you for the work!

Jeannette Blank
Cell: (406) 223-5955
Email: jromigblank@gmail.com

Meadowlark Phase II

Aquatic Resources Delineation Report

September 30, 2018

Prepared for:

Meadowlark Development LLC
175 N. 27th Street, Suite 900
Billings, Montana 59101

Prepared by:

Restoration Engineering, LLC
P.O. Box 1021
Livingston, MT 59047



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INTRODUCTION

An aquatic resources investigation was conducted by Restoration Engineering, LLC (RE) and TerraQuatic, LLC at the request of Meadowlark LLC for the Phase II portion of the Meadowlark Ranch Subdivision located near the City of Belgrade in Gallatin County, Montana. A delineation was previously conducted for the Meadowlark property in 2004 using the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation guidance (Corps File No. 2004-90-848), however, this delineation is now considered expired for permitting purposes. The following aquatic resources delineation is required for Phase II subdivision platting and for future Section 404 permitting.

SITE DESCRIPTION

The Meadowlark Ranch is a new residential development located in the SE $\frac{1}{4}$ of Section 31 and the SW $\frac{1}{4}$ of Section 32, Township 1N, Range 5E, near the City of Belgrade in Gallatin County, Montana (**Figure 1**). The property is in a semi-urban setting adjacent to substantial development including the City of Belgrade, MT, and the Bozeman-Yellowstone International Airport. It is also near the main channels of the East Gallatin River, Hyalite Creek, and Thompson Creek. Historically, the land has been farmed and grazed for agricultural purposes.

An old railroad (RR) grade berm runs midway through the property separating the Phase I development area, now under construction, from the proposed Phase II development area. Two borrow areas, which also historically served as irrigation ditches, run along the north and south side of the railroad berm. The two borrow areas are connected via a series of culverts to two drainage swales that bisect the Phase II project area. The head of the 'east' drainage swale is connected to Hyalite creek via an abandoned irrigation ditch/non-wetland swale that enters the southeast corner of the Meadowlark property. From there, the east drainage swale meanders to the northwest off the property where it is eventually ditched before it ties into Thompson Creek. The 'west' drainage swale begins at the railroad grade berm and continues northwest and ends at the edge of the elevated upland cropland on the adjacent property. Both of the swales are broad, shallow, vegetated drainage features that lack any scoured bed or bank characteristics.

Before the Meadowlark property was purchased by Meadowlark, LLC in 2004, the property was flood irrigated with water from Hyalite Creek. Irrigation water would enter the southeast corner of the property via the now abandoned irrigation ditch/non-wetland swale. From here, water would be diverted to the east drainage and to the west drainage swale via the RR berm borrow areas and a series of connecting culverts that run under the RR grade berm. Irrigation water would be backed up in the swales to allow the water to flood into the adjacent fields to irrigate the crops. Flood irrigation practices were discontinued when the current property owners (Meadowlark, LLC) purchased the property 14 years ago, which significantly altered the property's hydrology. Today, the property's hydrology is predominantly supported by a seasonal high groundwater table as well as snowmelt and stormwater runoff. The abandoned irrigation ditch/non-wetland swale off of Hyalite Creek also appears to continue to convey some surface water to the site due to a leaky headgate; however, the flow is minor. Occasional overflow from Hyalite Creek during large runoff events could also contribute to the amount of surface water the site receives. Overall, the property appears to be significantly drier than what was previously observed in 2004. The discontinued use of flood irrigation practices appears to be the primary factor behind this change.

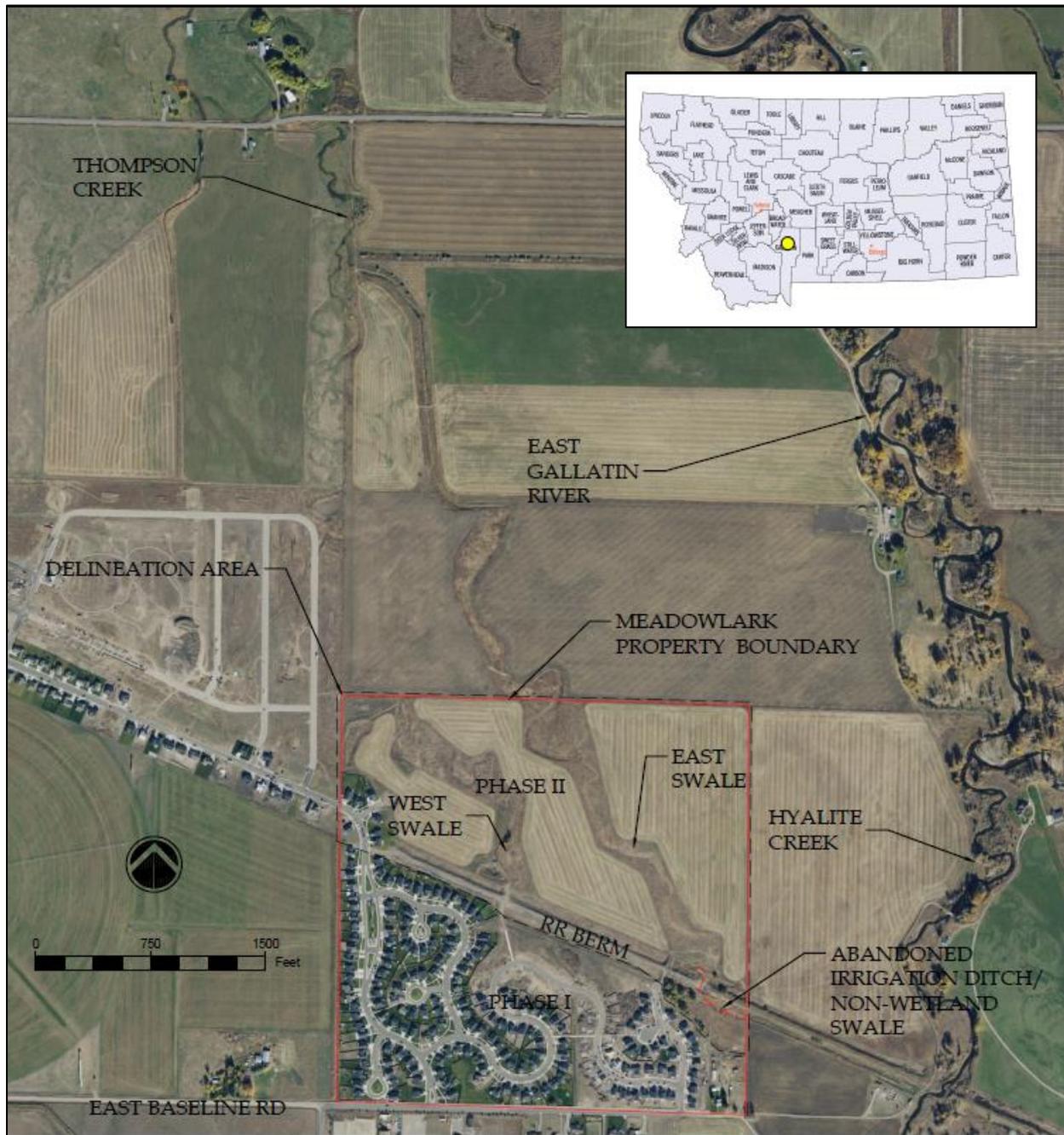


Figure 1. Site Location Map

METHODS The delineation was conducted by Restoration Engineering and TerraQuatic on July 12 and 13, 2018 using standard Army Corps of Engineers delineation methods (USACE 2010). The delineation survey included a wetland and non-wetland waterway determination for the entire Phase II area north of the RR grade berm, the borrow area south of the RR grade, and the southeast corner of the Meadowlark property as defined in **Figure 1**. Hydrologic connectivity to Jurisdictional waterbodies was also evaluated for Jurisdictional Determination purposes. A survey-grade GPS was used to survey the wetland data points and wetland/non-wetland boundaries. A summary of the delineation results is tabulated in **Table 1**. The delineation map (**Figure 2**), USACE data forms, and site photos are attached in **Appendix A, B,**

and C, respectively. USDA soil data (NRCS 2018) and the National Wetland Inventory (USFWS 2018) map are provided in **Appendix D**.

RESULTS & DISCUSSION

A total of 1.74 acres of wetland resources were delineated within the Meadowlark Subdivision. No non-wetland waterways were identified. As noted above, the vegetation communities, hydrology and aerial extent of the wetlands within the Meadowlark property have changed substantially since flood irrigation practices were discontinued in 2004. The combination of flood irrigation water and groundwater historically supported much more extensive and diverse wetland communities in the RR grade borrow areas and drainage swales. These communities are documented in the previous 2004 delineation report (see Corps File No. 2004-90-848). Current conditions within the property are substantially drier. Subsequently, the site is transitioning to an upland community as evidenced by the encroachment of upland species such as *Bromus inermis* in areas that were formerly dominated by cattails. The upland transition is also supported by the observed remnant hydric soil indicators in areas that were previously mapped as wetlands but are now dominated by upland cultivars and infested with noxious weeds and invasive species.

At the time of the July 2018 delineation, most of the wetland sample locations were quite dry, having some saturation within the upper 12 inches of the ground surface or having sufficient hydrologic indicators to suggest that wetland hydrology is present during the early growing season. However, water was observed at or near the surface in the southeast corner of the Meadowlark property, along the east end of the north RR grade borrow area, and in the upper reach of the east drainage swale (see DP-1U, DP-2U, PP4 and PP29). This is the area where the abandoned irrigation ditch/non-wetland swale enters the property and joins the more clearly defined RR grade borrow area and east drainage swale features. For the purpose of this report, the abandoned irrigation ditch that was once an active feature in the RR borrow areas is also described as a 'non-wetland swale' because the ditch is poorly defined once it enters the Meadowlark property; there is no defined bed, bank or scour features.

The non-wetland swale is also infested with upland and facultative County-listed noxious weed species (poison-hemlock, *Conium maculatum*), and lacks hydric soils indicators. The surface water observed in this area is likely the result of excess flow from Hyalite Creek during the high runoff experienced earlier this year. High groundwater table conditions resulting from higher-than-average 2017/2018 water year may have also contributed to the excess surface water observed in this portion of the delineation area. This area was mapped as upland despite having water at or near the ground surface because test pits and data points lacked hydric soil indicators and vegetation communities were dominated by upland species (see DP-1U/PP1 and DP-2U/PP3). Given the upland vegetation and non-hydric soil conditions in this area, it is assumed that the extent of the observed surface/near surface water condition is not a common occurrence at this location.

Overall, vegetation throughout the entire delineation area is now dominated by upland cultivars and infested with a variety of weeds. Dominant upland species included smooth brome (*Bromus inermis*), catchweed bedstraw (*Galium aparine*) poison-hemlock, and field pennycress (*Thlaspi arvense*). Wetland communities dominated by Nebraska, water and Northwest Territory sedge (*Carex nebrascensis*, *C. aquatalis*, *C. utriculata*), cattail (*Typha latifolia*), and reed canarygrass (*Phalaris arundinacea*) in 2004 are now much smaller in aerial extent and less diverse. The existing wetlands are now largely monocultures dominated by reed

canarygrass, with minor components of cheatgrass (*Bromus tectorum*), field pennycress, and smooth brome. Sedge was infrequently encountered and cattail were not observed anywhere in the Phase II project area in July 2018.

The wetlands that persist within the project site today are found in areas of lowest topography within the RR borrow areas and in some isolated areas in the east and west swales. Wetland 1 (0.126 ac), Wetland 2 (0.012), and Wetland 3 (0.089 ac) are located in the borrow area on the south side of the RR grade. WL-1 and WL-2 could receive surface water from Hyalite Creek overflow during high runoff events via a culvert connection; however, given the position and elevation of this culvert relative to primary culvert that directs water from the southeast corner of the property to the east drainage swale, it is more likely that WL-1 and WL-2 are primarily supported by groundwater, snowmelt or stormwater runoff events. WL-3 is isolated by berms on all four sides. There are no culverts that would allow any additional hydrological *inputs* into WL-3 besides groundwater, snowmelt, or precipitation events. There is one *outlet* culvert near WL-3 that runs under the RR berm that connects WL-3 to the west drainage swale which eventually terminates at the boundary of an elevated terrace of upland cropland field to the north.

The wetland areas that have persisted in the drainage swales include Wetland 4 (0.095) at the northern end of the west drainage swale, and Wetland 5 (0.157 ac) and Wetland 6 (1.267) in the east drainage swale. Seasonal groundwater, snowmelt and stormwater runoff events support marginal hydric conditions in these topographically low areas. The upper reaches of the east drainage swale also receive minor surface water inputs from the abandoned irrigation ditch/non-wetland swale off of Hyalite Creek. In addition, the east drainage swale may occasionally receive overflow water from Hyalite creek during high run-off events. The west drainage swale could also conceivably receive overflow from Hyalite Creek via a series of connecting culverts; however, the east drainage swale is positioned topographically to receive the vast majority of any overflow that may enter the site from Hyalite Creek. The east drainage swale meanders to the northwest off the property where it is eventually ditched before it ties into Thompson Creek; whereas the west drainage swale terminates at an upland crop field at the property boundary on the north end of the Meadowlark property.

Given the marginal wetland conditions onsite, groundwater, stormwater/precipitation, and snowmelt most likely support the hydrology within the wetland communities. Gravels encountered within the upper 12 inches of several soil pits suggest that alluvium is close to the surface which likely provides a conduit for the movement of high seasonal groundwater.

Table 1. Meadowlark Ranch Subdivision Aquatic Resources Summary

Data Point / Photo Point	Description, Dominant Vegetation, Hydrology	Hydric Soils	Wetland Hydrology	Wetland Vegetation	Wetland Type	Wetland Size	Hydrologic Connection	JD
DP-1U/PP1	Documents upland conditions on the north side of the RR berm at east end of property. Veg dominated by <i>Galium</i> and <i>Thlaspi</i> . Soil is saturated with groundwater at 2" bgs but lack hydric indicators	No	Yes	No	UPL	-	Could occasionally receive overflow water from Hyalite Creek during high runoff events.	NA
PP2	Taken on east end of RR berm. Documenting <i>Galium</i> and <i>Conium</i> -dominated upland communities.	-	-	-	-	-	-	-
DP-2U/PP3	Documents upland conditions on the south side of the RR berm at east end of property. Veg dominated by <i>Galium</i> and <i>Conium</i> . Soil is saturated at 6" bgs with groundwater at 10" bgs but lacks hydric soil indicators.	No	Yes	No	UPL	-	Could occasionally receive overflow water from Hyalite Creek during high runoff events.	NA
PP4	Taken south of DP-2U/PP3. Documenting <i>Conium</i> -dominated upland communities. Soils were saturated within 12" bgs, but did not have hydric indicators	-	-	-	-	-	-	-
PP5	Taken on RR berm. Documenting <i>Sisymbrium</i> , <i>Conium</i> , <i>Galium</i> -dominated upland communities.	-	-	-	-	-	-	-
PP6	Taken on south side of RR berm, looking east towards DP-2U/PP3. Documenting <i>Conium</i> -dominated upland communities.	-	-	-	-	-	-	-
PP7	Taken on north side of RR berm, looking east towards DP-1U/PP1. Documenting <i>Conium</i> and <i>Galium</i> -dominated upland communities.	-	-	-	-	-	-	-
PP8	Taken on north side of RR berm. Documenting <i>Bromus</i> -dominated upland communities.	-	-	-	-	-	-	-
PP9	Taken on south side of RR berm. DP-3W/PP10 (not yet flagged) is in the center of the photo.	-	-	-	-	-	-	-
DP-3W/PP10 Wetland 1	"Wetland 1" Small <i>Phalaris</i> -dominated wetland on south side of RR berm. Isolated by berms, but could receive surface water from Hyalite Creek overflow via culvert onnection. More likely that wetland is supported by snowmelt, stormwater and/or groundwater.	Yes (F6)	Yes	Yes	PEM	0.126	Could receive overflow water from Hyalite Creek during high runoff events via a culvert connection under one of the three berms that surround wetland.	UNK
DP-3U/PP11	Paired upland datapoint, dominated by <i>Bromus</i> vegetation.	No	No	No	UPL	-	None	NA
DP-4W/PP12 Wetland 2	"Wetland 2" Small <i>Phalaris</i> -dominated wetland on south side of RR berm. Isolated by berms, but could receive surface water from Hyalite Creek overflow via culvert onnection. More likely that wetland likely supported by snowmelt, stormwater and perhaps groundwater.	Yes (F6)	Yes	Yes	PEM	0.012	Could receive overflow water from Hyalite Creek during high runoff events via a culvert connection under one of the three berms that surround wetland.	UNK
DP-4U/PP13	Paired upland datapoint, dominated by <i>Bromus</i> vegetation. Meets secondary hydrology indicators, but sufficient primary indicators in early growing season highly unlikely.	Yes (F6)	Yes (Secondary)	No	UPL	-	None	NA

Table 1. Continued.

Data Point / Photo Point	Description, Dominant Vegetation, Hydrology	Hydric Soils	Wetland Hydrology	Wetland Vegetation	Wetland Type	Wetland Size	Hydrologic Connection	JD
PP14	Taken on north side of RR berm. Documenting <i>Bromus</i> -dominated upland communities.	-	-	-	-	-	-	-
PP15	Taken on south side of RR berm. Documenting <i>Bromus</i> -dominated upland communities.	-	-	-	-	-	-	-
DP-5W/PP16 Wetland 3	"Wetland 3" Small <i>Alopecurus</i> -dominated wetland on south side of RR berm; isolated. Remnant wetland support by groundwater, snowmelt or precipitation. No culverts to provide hydrological connection with Hyalite Creek. Only one accessible culvert nearby that could allow outflow from Wetland 3 to north side of RR berm	Yes (F6)	Yes (Secondary)	Yes	PEM	0.089 ac	Small isolated wetland surrounded by berms. No culverts to provide hydrological connection with Hyalite Creek. Only one accessible culvert nearby that could allow outflow from Wetland 3 to north side of RR berm.	UNK
DP-5U/PP17	Paired upland datapoint, dominated by <i>Bromus</i> vegetation, looking west.	No	No	No	UPL	-	None	NA
PP18	Taken at the south end of the 'west' drainage swale, looking north. Documenting <i>Bromus</i> -dominated upland community.	-	-	-	-	-	-	-
PP19	Taken at the south end of the 'west' drainage swale, looking north. Documenting <i>Bromus</i> -dominated upland community.	-	-	-	-	-	-	-
DP-9U/PP20	Documenting continued <i>Alopecurus</i> -dominated upland community. Point is located in a depression. Gravelly substrate at 12" bgs.	No	Yes (Secondary)	Yes	UPL	-	None	NA
PP21	Documenting continued <i>Bromus</i> -dominated upland community in west drainage swale.	-	-	-	-	-	-	-
DP-6W/PP22 Wetland 4	"Wetland 4" Small <i>Alopecurus</i> -dominated wetland in north end of west drainage swale. Gravel encountered at 10" bgs; isolated. Remnant wetland likely supported by stormwater, snowmelt, and perhaps groundwater.	Yes	Yes	Yes	PEM	0.095 ac	Small isolated wetland. This wetland area was previously documented as Non-Jurisdictional in the 2004 wetland/water determination report. Wetland at terminal end of 'west' drainage that ends in upland	No
DP-6U/PP23	Paired upland datapoint, dominated by <i>Bromus</i> vegetation. Clay hardpan encountered at 10" bgs	Yes (Remnant F6)	No	No	UPL	-	None	NA
DP-7W/PP24 Wetland 5	"Wetland 5" Small <i>Alopecurus</i> -dominated wetland in the north end of the east drainage swale; isolated. Remnant wetland likely supported stormwater, snowmelt, and perhaps groundwater. Could receive overflow from Hyalite Creek during high runoff events.	Yes (F6)	Yes (Secondary)	Yes	PEM	0.157 ac	Small isolated wetland, predominantly supported by groundwater, but may receive overflow from Hyalite Creek during high runoff events. Drainage continues north off property and eventually ties into Thompson Creek.	Yes
DP-7U/PP25	Paired upland datapoint, dominated by <i>Bromus</i> vegetation.	No	No	No	UPL	-	None	NA
PP26	Documenting upland <i>Bromus</i> -dominated community between Wetland 5 and Wetland 6.	-	-	-	-	-	-	-

Table 1. Continued.

Data Point / Photo Point	Description, Dominant Vegetation, Hydrology	Hydric Soils	Wetland Hydrology	Wetland Vegetation	Wetland Type	Wetland Size	Hydrologic Connection	JD
DP-8W/PP27 Wetland 6	"Wetland 6" representative datapoint documenting dominant <i>Alopecurus</i> wetland community within the east drainage swale. Wetland is marginal and appears to be transitioning to upland in various locations. Wetland is surrounded by uplands, likely supported by stormwater runoff, snowmelt and perhaps groundwater, but may receive runoff from Hyalite Creek during high runoff events. At the time of the delineation <5 gal/min from Hyalite Creek was accessing south end of drainage.	Yes (F6)	Yes (Secondary)	Yes	PEM	1.267 ac	Wetland could receive overflow from Hyalite Creek during high runoff events. Southern portion of this drainage swale receives minor surface water inputs from Hyalite Creek via a leaky headgate/abandoned irrigation ditch. Drainage continues north off property and eventually ties into Thompson Creek.	Yes
DP-8U/PP28	Paired upland datapoint, dominated by <i>Bromus</i> vegetation.	No	No	No	UPL	-	None	NA
PP29	Documenting <i>Bromus</i> -dominated upland vegetation communities at the south end of the east drainage swale. Up to 6" of water observed in slight drainage pattern of the north RR berm ditch and east drainage swale as the result of seasonal overflow from Hyalite Creek.	-	-	-	-	-	-	-

SUMMARY

A total of 1.74 acres of wetland resources were delineated within the Meadowlark Subdivision. No non-wetland waterways were identified. No fill has been placed within any of the 2004 wetland boundaries since the 2004 delineation. Irrigation water was the primary source of hydrology at the time of the 2004 delineation. Since the 2004 delineation, irrigation water from Hyalite Creek has not been routinely released into the Meadowlark Subdivision. However, minor amounts of water apparently still enter the property on occasion due to a leaky headgate on Hyalite Creek. Consequently, wetland and drainage swales have changed drastically since 2004. Obligate wetland species, including cattail and sedges have almost completely disappeared and state- and county-listed noxious weeds and invasive species have colonized former obligate communities. Wetlands 1, 2 and 3 have an unknown jurisdictional status as the result of an interrupted connection to any water leaking from the Hyalite headgate. Wetland 4 was considered a non-jurisdictional wetland in the 2004 delineation, and still likely holds that non-jurisdictional status today because the wetland itself is isolated and the west swale has no downstream connection to any Waters of the U.S. Wetland 5 and 6, located in the east drainage swale, are likely jurisdictional because they are hydrologically connected to Hyalite Creek via the leaky headgate and could receive overflow from Hyalite Creek which could continue northwest off the Meadowlark property to downstream Waters of the U.S.

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APPENDIX A

Figure 2: Aquatic Resources Delineation Map

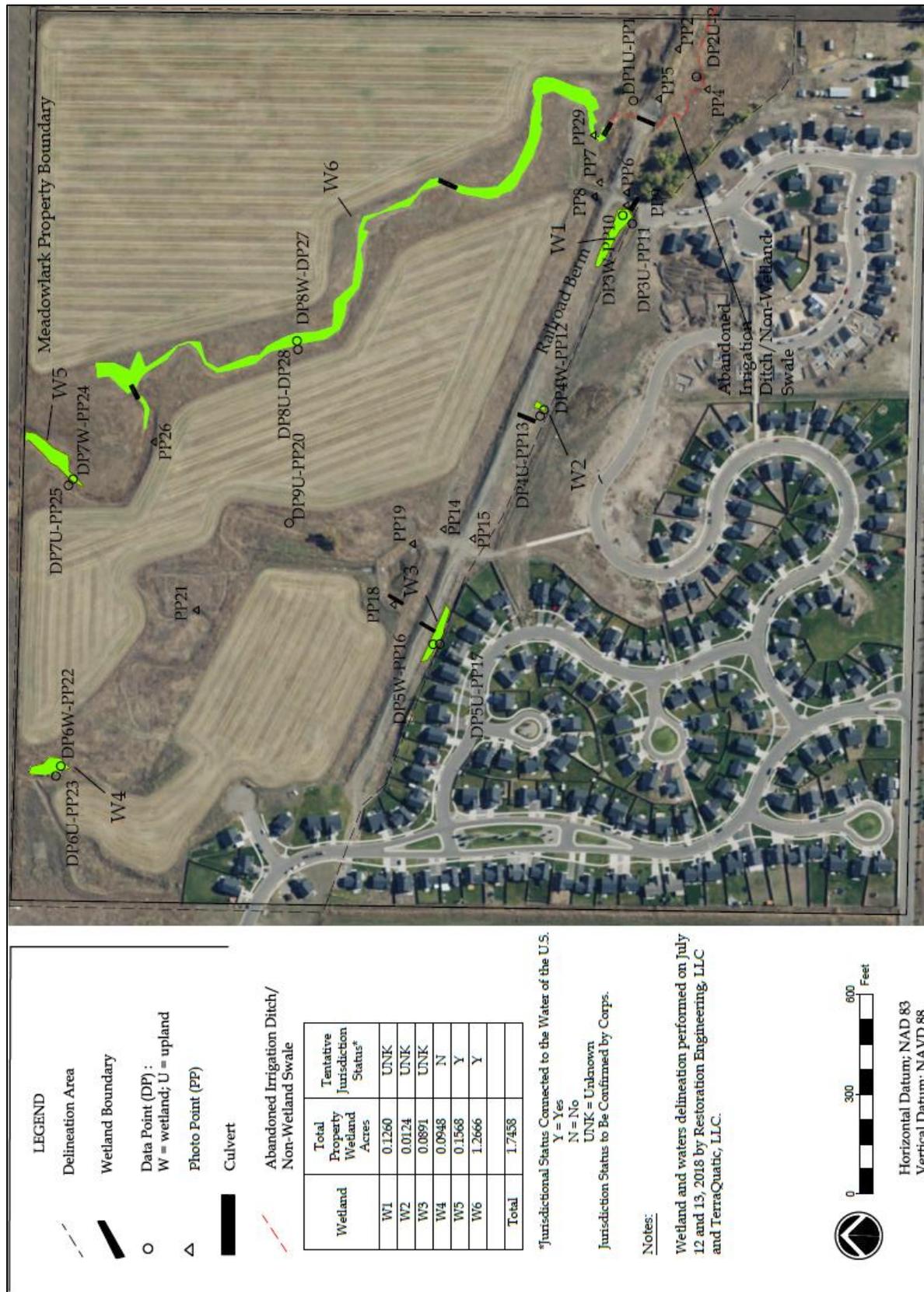


Figure 2. Aquatic Resources Delineation Map

APPENDIX B

USACE Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark Ranch Subdivision City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: Meadowlark Ranch, LLC State: MT Sampling Point: DP-1u
 Investigator(s): JBlank/LBacon Section, Township, Range: SW1/4 Sec. 32, T1N, R5E
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): LRR E Lat: 45 47 23.357662 N Long: 111 08 04.076422 W Datum: NAD83
 Soil Map Unit Name: 556A: Threeeriv-Bonebasin loams, 0-2% slopes (95% hydric) NWI classification: DNA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No N*
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Remarks: DP-1u is located in 2004/WL-2 area; this area no longer qualifies as a wetland. *Irrigation water through these 2004-delineated wetlands was discontinued and vegetation communities have changed. However, runoff from Hyalite Creek entered this area early this season (see hydrology section) No fill has been added to this area since the 2004 delineation	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 0 </u> (A) Total Number of Dominant Species Across All Strata: <u> 2 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u> 0.0% </u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 5 x 3 = 15 FACU species 45 x 4 = 180 UPL species 20 x 5 = 100 Column Totals: 70 (A) 295 (B) Prevalence Index = B/A = 4.21
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				
Herb Stratum (Plot size: 3ft)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <i>Galium aparine</i>	45	Yes	FACU	
2. <i>Thlaspi arvense</i>	20	Yes	UPL	
3. <i>Conium maculatum</i>	5	No	FAC	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
70 =Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum <u> 30 </u>				
Remarks: extremely weedy; ground covered in conium stem skeletons				

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark Ranch Subdivision City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: Meadowlark Ranch, LLC State: MT Sampling Point: DP-2u
 Investigator(s): JBlank/LBacon Section, Township, Range: SW1/4 Sec. 32, T1N, R5E
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): LRR E Lat: 45 47 21.495495 N Long: 111 08 03.038414 W Datum: NAD83
 Soil Map Unit Name: 556A: Threeriv-Bonebasin loams, 0-2% slopes (95% hydric) NWI classification: DNA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No N*
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP-2u is located in 2004/WL-1 area; this area no longer qualifies as a wetland. *Irrigation water through these 2004-delineated wetlands was discontinued and vegetation communities have changed. However, overflow from Hyalite Creek entered into this area (see hydrology section). No fill has been added to this area since the 2004 delineation	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>3ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Galium aparine</u>	<u>90</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Conium maculatum</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>120</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				
% Bare Ground in Herb Stratum <u>30</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: Multiply by:
 OBL species 0 x 1 = 0
 FACW species 0 x 2 = 0
 FAC species 30 x 3 = 90
 FACU species 90 x 4 = 360
 UPL species 0 x 5 = 0
 Column Totals: 120 (A) 450 (B)
 Prevalence Index = B/A = 3.75

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 5 - Wetland Non-Vascular Plants¹
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:
 Extremely weedy, no FACW or OBL species such as sedge, cat-tail, etc. occur in this area any longer.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark Ranch Subdivision City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: Meadowlark Ranch, LLC State: MT Sampling Point: DP-3u
 Investigator(s): JBlank/LBacon Section, Township, Range: SW1/4 Sec. 32, T1N, R5E
 Landform (hillside, terrace, etc.): slope Local relief (concave, convex, none): convex Slope (%): 0
 Subregion (LRR): LRR E Lat: 45 47 23.310902 N Long: 111 08 09.276044 W Datum: NAD83
 Soil Map Unit Name: 556A: Threeriv-Bonebasin loams, 0-2% slopes (95% hydric) NWI classification: DNA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Remarks: DP-3u is located on historic RR berm slope; was not in a 2004 wetland area.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 0 </u> (A) Total Number of Dominant Species Across All Strata: <u> 1 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u> 0.0% </u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u> 0 </u> x 1 = <u> 0 </u> FACW species <u> 0 </u> x 2 = <u> 0 </u> FAC species <u> 1 </u> x 3 = <u> 3 </u> FACU species <u> 0 </u> x 4 = <u> 0 </u> UPL species <u> 100 </u> x 5 = <u> 500 </u> Column Totals: <u> 101 </u> (A) <u> 503 </u> (B) Prevalence Index = B/A = <u> 4.98 </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
<u>Herb Stratum</u> (Plot size: <u>3ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Bromus inermis</u>	<u>100</u>	<u>Yes</u>	<u>UPL</u>	
2. <u>Cirsium arvense</u>	<u>1</u>	<u>No</u>	<u>FAC</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
% Bare Ground in Herb Stratum <u> </u>				
Remarks: Dry RR berm slope.				

SOIL

Sampling Point: DP-3u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/1	100					Loamy/Clayey	SILO
4-8	10YR 4/3	100					Loamy/Clayey	SILO
8-12	10YR 4/2	100					Loamy/Clayey	SILO
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)					Indicators for Problematic Hydric Soils³:			
<input type="checkbox"/> Histosol (A1)				<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)				<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)			
<input type="checkbox"/> Black Histic (A3)				<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (F22)			
<input type="checkbox"/> Hydrogen Sulfide (A4)				<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)				<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)				<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)				<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G)				<input type="checkbox"/> Redox Depressions (F8)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)								
Restrictive Layer (if observed):								
Type: _____								
Depth (inches): _____					Hydric Soil Present? Yes _____ No <u>X</u>			
Remarks: Soils somewhat mixed, old fill in historic RR berm.								

HYDROLOGY

Wetland Hydrology Indicators:								
Primary Indicators (minimum of one is required; check all that apply)					Secondary Indicators (2 or more required)			
<input type="checkbox"/> Surface Water (A1)				<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)			
<input type="checkbox"/> High Water Table (A2)				<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Saturation (A3)				<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Water Marks (B1)				<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Sediment Deposits (B2)				<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Drift Deposits (B3)				<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Algal Mat or Crust (B4)				<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)			
<input type="checkbox"/> Iron Deposits (B5)				<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)			
<input type="checkbox"/> Surface Soil Cracks (B6)				<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)								
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)								
Field Observations:								
Surface Water Present?	Yes _____	No <u>X</u>	Depth (inches): _____					
Water Table Present?	Yes _____	No <u>X</u>	Depth (inches): _____					
Saturation Present? (includes capillary fringe)	Yes _____	No <u>X</u>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <u>X</u>				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
Remarks: No hydrology indicators on this dry slope.								

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark Ranch Subdivision City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: Meadowlark Rnach, LLC State: MT Sampling Point: DP-3w
 Investigator(s): JBlank/LBacon Section, Township, Range: SW1/4 Sec 32, T1N, R5E
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR E Lat: 45 47 23.617622 N Long: 111 08 09.035957 W Datum: _____
 Soil Map Unit Name: 556A: Threeriv-Bonebasin loams, 0-2% slopes (95% hydric) NWI classification: PEM
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No N*
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Remarks: DP-3w (2018 WL-1) is located in 2004/WL-1 area. *Irrigation water through these 2004-delineated wetlands was discontinued (see report) and vegetation communities have changed, though this particular depressin still remains wetland. No fill has been added to this area since the 2004 delineation.	

VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status																	
<u>Tree Stratum</u>	(Plot size: _____)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1.																					
2.																					
3.																					
4.																					
				=Total Cover																	
<u>Sapling/Shrub Stratum</u>	(Plot size: _____)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>5</u> (A)</td> <td><u>10</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>5</u> (A)	<u>10</u> (B)	Prevalence Index = B/A = <u>2.00</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>0</u>	x 1 = <u>0</u>																				
FACW species <u>5</u>	x 2 = <u>10</u>																				
FAC species <u>0</u>	x 3 = <u>0</u>																				
FACU species <u>0</u>	x 4 = <u>0</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>5</u> (A)	<u>10</u> (B)																				
Prevalence Index = B/A = <u>2.00</u>																					
1.																					
2.																					
3.																					
4.																					
5.																					
				=Total Cover																	
<u>Herb Stratum</u>	(Plot size: <u>3ft</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1.		<u>5</u>	<u>Yes</u>	<u>FACW</u>																	
2.																					
3.																					
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					
11.																					
				=Total Cover																	
<u>Woody Vine Stratum</u>	(Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
1.																					
2.																					
				=Total Cover																	
% Bare Ground in Herb Stratum <u>95</u>																					
Remarks: No OBL species observed.																					

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark Ranch Subdivision City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: Meadowlark Ranch, LLC State: MT Sampling Point: DP-4u
 Investigator(s): JBlank/LBacon Section, Township, Range: SW1/4 Sec. 32, T1N, R5E
 Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): LRR E Lat: 45 47 25.933063 N Long: 111 08 17.497962 W Datum: NAD83
 Soil Map Unit Name: 556A: Threeeriv-Bonebasin loams, 0-2% slopes (95% hydric) NWI classification: DNA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	

Remarks: DP-4u is located in same depression as DP-4w (2018 WL-2) but further west to provide contrast to DP-4w data. Since cessation of irrigation water in these depressions along the north and south sides of the historic RR berm, wetland characteristics have nearly 100% disappeared except for two small areas where DP 3w DP 4w and DP 5w occur

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
Herb Stratum (Plot size: <u>3ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <i>Bromus inermis</i>	35	Yes	UPL	
2. <i>Thlaspi arvense</i>	5	No	UPL	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
40 =Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
% Bare Ground in Herb Stratum <u>60</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 1 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: Multiply by:
 OBL species 0 x 1 = 0
 FACW species 0 x 2 = 0
 FAC species 0 x 3 = 0
 FACU species 0 x 4 = 0
 UPL species 40 x 5 = 200
 Column Totals: 40 (A) 200 (B)
 Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 5 - Wetland Non-Vascular Plants¹
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks: Slightly raised area south of DP-4w.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark Ranch Subdivision City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: Meadowlark Ranch, LLC State: MT Sampling Point: DP-4w
 Investigator(s): JBlank/LBacon Section, Township, Range: SW1/4 Sec. 32, T1N, R5E
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR E Lat: 45 47 25.835284 N Long: 111 08 17.266823 W Datum: NAD83
 Soil Map Unit Name: 556A: Threeriv-Bonebasin loams, 0-2% slopes (95% hydric) NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No N*
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Remarks: DP-4w (2018 WL-2) is located in 2004/WL-1 area. *Irrigation water through these 2004-delineated wetlands was discontinued (see report) and vegetation communities have changed, though this particular depression still remains wetland. No fill has been added to this area since the 2004 delineation	

VEGETATION – Use scientific names of plants.

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status																	
<u>Tree Stratum</u>	(Plot size: _____)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
1.																					
2.																					
3.																					
4.																					
				=Total Cover																	
<u>Sapling/Shrub Stratum</u>	(Plot size: _____)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>70</u></td> <td>x 2 = <u>140</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>1</u></td> <td>x 5 = <u>5</u></td> </tr> <tr> <td>Column Totals: <u>71</u> (A)</td> <td><u>145</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.04</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>70</u>	x 2 = <u>140</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>1</u>	x 5 = <u>5</u>	Column Totals: <u>71</u> (A)	<u>145</u> (B)	Prevalence Index = B/A = <u>2.04</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>0</u>	x 1 = <u>0</u>																				
FACW species <u>70</u>	x 2 = <u>140</u>																				
FAC species <u>0</u>	x 3 = <u>0</u>																				
FACU species <u>0</u>	x 4 = <u>0</u>																				
UPL species <u>1</u>	x 5 = <u>5</u>																				
Column Totals: <u>71</u> (A)	<u>145</u> (B)																				
Prevalence Index = B/A = <u>2.04</u>																					
1.																					
2.																					
3.																					
4.																					
5.																					
				=Total Cover																	
<u>Herb Stratum</u>	(Plot size: <u>3ft</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1.		<u>70</u>	<u>Yes</u>	<u>FACW</u>																	
2.		<u>1</u>	<u>No</u>	<u>UPL</u>																	
3.																					
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					
11.																					
				=Total Cover																	
<u>Woody Vine Stratum</u>	(Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
1.																					
2.																					
				=Total Cover																	
% Bare Ground in Herb Stratum <u>30</u>																					
Remarks: No OBL species observed.																					

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark Ranch Subdivision City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: Meadowlark Ranch, LLC State: MT Sampling Point: DP-5u
 Investigator(s): JBlank/LBacon Section, Township, Range: SE1/4 Sec. 31, T1N, R5E
 Landform (hillside, terrace, etc.): slight terrace Local relief (concave, convex, none): sl. Convex Slope (%): 0%
 Subregion (LRR): LRR E Lat: 45 47 28.774057 N Long: 111 08 27.283925 W Datum: NAD83
 Soil Map Unit Name: 33B: Attewan clay loam, 0-4% slopes (0% hydric) NWI classification: DNA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP-5u in slightly raised area adjacent to WL-5; unlikely to saturate in early growing season, no hydrophytic vegetation.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 0 </u> (A) Total Number of Dominant Species Across All Strata: <u> 1 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u> 0.0% </u> (A/B)																
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> =Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;"><u> </u> Total % Cover of:</td> <td style="width:50%;"><u> </u> Multiply by:</td> </tr> <tr> <td>OBL species <u> 0 </u></td> <td>x 1 = <u> 0 </u></td> </tr> <tr> <td>FACW species <u> 0 </u></td> <td>x 2 = <u> 0 </u></td> </tr> <tr> <td>FAC species <u> 0 </u></td> <td>x 3 = <u> 0 </u></td> </tr> <tr> <td>FACU species <u> 0 </u></td> <td>x 4 = <u> 0 </u></td> </tr> <tr> <td>UPL species <u> 95 </u></td> <td>x 5 = <u> 475 </u></td> </tr> <tr> <td>Column Totals: <u> 95 </u> (A)</td> <td><u> 475 </u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> 5.00 </u></td> </tr> </table>	<u> </u> Total % Cover of:	<u> </u> Multiply by:	OBL species <u> 0 </u>	x 1 = <u> 0 </u>	FACW species <u> 0 </u>	x 2 = <u> 0 </u>	FAC species <u> 0 </u>	x 3 = <u> 0 </u>	FACU species <u> 0 </u>	x 4 = <u> 0 </u>	UPL species <u> 95 </u>	x 5 = <u> 475 </u>	Column Totals: <u> 95 </u> (A)	<u> 475 </u> (B)	Prevalence Index = B/A = <u> 5.00 </u>	
<u> </u> Total % Cover of:	<u> </u> Multiply by:																			
OBL species <u> 0 </u>	x 1 = <u> 0 </u>																			
FACW species <u> 0 </u>	x 2 = <u> 0 </u>																			
FAC species <u> 0 </u>	x 3 = <u> 0 </u>																			
FACU species <u> 0 </u>	x 4 = <u> 0 </u>																			
UPL species <u> 95 </u>	x 5 = <u> 475 </u>																			
Column Totals: <u> 95 </u> (A)	<u> 475 </u> (B)																			
Prevalence Index = B/A = <u> 5.00 </u>																				
<u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> =Total Cover				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
<u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u>	<u> </u>	<u> </u>	<u> </u>																	
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<u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> 95 </u> =Total Cover																				
<u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> =Total Cover																				
% Bare Ground in Herb Stratum <u> 5 </u>																				
Remarks: Slightly raised strip along edge of WL-3 (DP-5w) wetland.																				

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: _____ State: MT Sampling Point: DP-5w
 Investigator(s): JBlank/LBacon Section, Township, Range: _____
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR E Lat: 45 47 28.919321 N Long: 111 08 27.302873 W Datum: NAD83
 Soil Map Unit Name: 33B: Attewan clay loam, 0-4% slopes (0% hydric) NWI classification: PEM
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No N*
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: DP-5w (2018 WL-3) is located in 2004/WL-1 area. *Irrigation water through these 2004-delineated wetlands was discontinued (see report) and vegetation communities have changed. No fill has been added to this area since the 2004 delineation. OBL and FACW veg has disappeared.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>70</u> x 3 = <u>210</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>80</u> (A) <u>260</u> (B) Prevalence Index = B/A = <u>3.25</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
Herb Stratum (Plot size: <u>3ft</u>)				Hydrophytic Vegetation Indicators: _____ 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ 5 - Wetland Non-Vascular Plants ¹ _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Alopecurus arundinaceus</u>	<u>70</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Bromus tectorum</u>	<u>10</u>	<u>No</u>	<u>UPL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
=Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum	<u>10</u>			
Remarks: No OBL or FACW species observed.				

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: _____ State: MT Sampling Point: DP-6w
 Investigator(s): JBlank/LBacon Section, Township, Range: SE1/4 Sec. 31, T1N, R5E
 Landform (hillside, terrace, etc.): drainage pattern Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR E Lat: 45 47 39.977907 N Long: 111 08 32.864309 W Datum: NAD83
 Soil Map Unit Name: 556A Threeriv-Bonebasin loams, 0-2% slopes (95% hydric) NWI classification: PEM
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks: DP-6w (2018 WL-4) in west drainage pattern and in approximately the same location as isolated non-jurisdictional 2004/WL-7. Wetland likely collects stormwater and snowmelt during early growing season. Immediately north is an upland grain field at higher elevation; drainage pattern stops at WL 4

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>95</u> x 3 = <u>285</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>5</u> x 5 = <u>25</u> Column Totals: <u>100</u> (A) <u>310</u> (B) Prevalence Index = B/A = <u>3.10</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
Herb Stratum (Plot size: <u>3ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Alopecurus arundinaceus</u>	<u>95</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u>5</u> - Wetland Non-Vascular Plants ¹ <u>Problematic Hydrophytic Vegetation</u> ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Thlaspi arvense</u>	<u>5</u>	<u>No</u>	<u>UPL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
=Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum <u>5</u>				

Remarks: FAC-dominant. Small areas Baltic rush in higher areas.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark Ranch Subdivision City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: Meadowlark Ranch, LLC State: MT Sampling Point: DP-7u
 Investigator(s): JBlank/LBacon Section, Township, Range: SE1/4 Sec. 31, T1N, R5E
 Landform (hillside, terrace, etc.): terrace slope Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR E Lat: 45 47 39.860627 N Long: 111 08 20.840709 W Datum: NAD83
 Soil Map Unit Name: 556A Threeriv-Bonebasin loams, 0-2% slopes (95% hydric) NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: DP-7u adjacent to DP-7w (WL-5) on terrace.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>100</u> x 5 = <u>500</u> Column Totals: <u>100</u> (A) <u>500</u> (B) Prevalence Index = B/A = <u>5.00</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
<u>Herb Stratum</u> (Plot size: <u>3ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Bromus inermis</u>	<u>100</u>	<u>Yes</u>	<u>UPL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
=Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: Typical community along slopes above drainage pattern.				

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark Ranch Subdivision City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: Meadowlark Ranch, LLC State: MT Sampling Point: DP-7w
 Investigator(s): JBlank/LBacon Section, Township, Range: SE1/4 Sec. 31, T1N, R5E
 Landform (hillside, terrace, etc.): drainage pattern Local relief (concave, convex, none): concave Slope (%): <1%
 Subregion (LRR): LRR E Lat: 45 47 39.732160 N Long: 111 08 20.650701 W Datum: NAD83
 Soil Map Unit Name: 556A Threeriv-Bonebasin loams, 0-2% slopes (95% hydric) NWI classification: PEM
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP-7w (2018 WL-5) in north end of east drainage and in the same location as 2004/WL-2; Surface or groundwater was not observed as far north as WL-5 at the time of this delineation, however overflow from Hyalite during high runoff events could reach this wetland.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1.	_____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 1 </u> (A) Total Number of Dominant Species Across All Strata: <u> 1 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2.	_____	_____	_____	_____																	
3.	_____	_____	_____	_____																	
4.	_____	_____	_____	_____																	
=Total Cover				_____																	
Sapling/Shrub Stratum	(Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1.	_____	_____	_____	_____	Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u> 0 </u></td> <td>x 1 = <u> 0 </u></td> </tr> <tr> <td>FACW species <u> 0 </u></td> <td>x 2 = <u> 0 </u></td> </tr> <tr> <td>FAC species <u> 101 </u></td> <td>x 3 = <u> 303 </u></td> </tr> <tr> <td>FACU species <u> 0 </u></td> <td>x 4 = <u> 0 </u></td> </tr> <tr> <td>UPL species <u> 1 </u></td> <td>x 5 = <u> 5 </u></td> </tr> <tr> <td>Column Totals: <u> 102 </u> (A)</td> <td><u> 308 </u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> 3.02 </u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u> 0 </u>	x 1 = <u> 0 </u>	FACW species <u> 0 </u>	x 2 = <u> 0 </u>	FAC species <u> 101 </u>	x 3 = <u> 303 </u>	FACU species <u> 0 </u>	x 4 = <u> 0 </u>	UPL species <u> 1 </u>	x 5 = <u> 5 </u>	Column Totals: <u> 102 </u> (A)	<u> 308 </u> (B)	Prevalence Index = B/A = <u> 3.02 </u>	
Total % Cover of:	Multiply by:																				
OBL species <u> 0 </u>	x 1 = <u> 0 </u>																				
FACW species <u> 0 </u>	x 2 = <u> 0 </u>																				
FAC species <u> 101 </u>	x 3 = <u> 303 </u>																				
FACU species <u> 0 </u>	x 4 = <u> 0 </u>																				
UPL species <u> 1 </u>	x 5 = <u> 5 </u>																				
Column Totals: <u> 102 </u> (A)	<u> 308 </u> (B)																				
Prevalence Index = B/A = <u> 3.02 </u>																					
2.	_____	_____	_____	_____																	
3.	_____	_____	_____	_____																	
4.	_____	_____	_____	_____																	
5.	_____	_____	_____	_____																	
=Total Cover				_____																	
Herb Stratum	(Plot size: <u> 3ft </u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1.	<u>Alopecurus arundinaceus</u>	<u>100</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> X </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2.	<u>Thlaspi arvense</u>	<u>1</u>	<u>No</u>	<u>UPL</u>																	
3.	<u>Cirsium arvense</u>	<u>1</u>	<u>No</u>	<u>FAC</u>																	
4.	_____	_____	_____	_____																	
5.	_____	_____	_____	_____																	
6.	_____	_____	_____	_____																	
7.	_____	_____	_____	_____																	
8.	_____	_____	_____	_____																	
9.	_____	_____	_____	_____																	
10.	_____	_____	_____	_____																	
11.	_____	_____	_____	_____																	
=Total Cover				<u>102</u>																	
Woody Vine Stratum	(Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1.	_____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
2.	_____	_____	_____	_____																	
=Total Cover				_____																	
% Bare Ground in Herb Stratum <u> 5 </u>																					
Remarks: FAC-dominant. Hydrophytic vegetation does not occur in east drainage between WL-5 and WL-6.																					

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark Ranch Subdivision City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: Meadowlark Ranch, Inc. State: MT Sampling Point: DP-8u
 Investigator(s): JBlank/LBacon Section, Township, Range: _____
 Landform (hillside, terrace, etc.): terrace slope Local relief (concave, convex, none): convex Slope (%): 0%
 Subregion (LRR): LRR E Lat: 45 47 33.140449 N Long: 111 08 14.870166 W Datum: NAD83
 Soil Map Unit Name: 556A Threeriv-Bonebasin loams, 0-2% slopes (95% hydric) NWI classification: DNA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: DP-8u adjacent to DP-8w (WL-6) on terrace.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;"><u>Total % Cover of:</u></td> <td style="width:50%;"><u>Multiply by:</u></td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>88</u></td> <td>x 5 = <u>440</u></td> </tr> <tr> <td>Column Totals: <u>88</u> (A)</td> <td><u>440</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>5.00</u></td> </tr> </table>	<u>Total % Cover of:</u>	<u>Multiply by:</u>	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>88</u>	x 5 = <u>440</u>	Column Totals: <u>88</u> (A)	<u>440</u> (B)	Prevalence Index = B/A = <u>5.00</u>	
<u>Total % Cover of:</u>	<u>Multiply by:</u>																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>88</u>	x 5 = <u>440</u>																			
Column Totals: <u>88</u> (A)	<u>440</u> (B)																			
Prevalence Index = B/A = <u>5.00</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
=Total Cover																				
<u>Herb Stratum</u> (Plot size: <u>3ft</u>)																				
1. <u>Bromus inermis</u>	<u>80</u>	Yes	UPL																	
2. <u>Bromus tectorum</u>	<u>5</u>	No	UPL																	
3. <u>Thlaspi arvense</u>	<u>1</u>	No	UPL																	
4. <u>Artemisia frigida</u>	<u>2</u>	No	UPL																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
=Total Cover																				
<u>Woody Vine Stratum</u> (Plot size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
=Total Cover																				
% Bare Ground in Herb Stratum <u>15</u>																				
Remarks: Typical community along slopes above drainage pattern.																				
Hydrophytic Vegetation Present? Yes _____ No <u>X</u>																				

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark Ranch Subdivision City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: Meadowlark Ranch, LLC State: MT Sampling Point: DP-8w
 Investigator(s): JBlank/LBacon Section, Township, Range: SW1/4 Sec. 32, T1N, R5E
 Landform (hillside, terrace, etc.): drainage pattern Local relief (concave, convex, none): concave Slope (%): <1%
 Subregion (LRR): LRR E Lat: 45 47 33.163097 N Long: 111 08 14.639262 W Datum: NAD83
 Soil Map Unit Name: 556A Threeriv-Bonebasin loams, 0-2% slopes (95% hydric) NWI classification: PEM
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP-8w (WL-6) in east drainage pattern and in the same location as 2004 wetland-2; Minor surface water flow (< 5 gal/min) from Hyalite Creek (via a leaky headgate/abandoned irrigation ditch) was flowing in the southern portion of the drainage at the time of the delineation. Surface or groundwater not observed as far north as DP 7w (WL 5) however.	

VEGETATION – Use scientific names of plants.

Stratum	Plot size: _____	Absolute % Cover	Dominant Species?	Indicator Status																	
<u>Tree Stratum</u>					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 1 </u> (A) Total Number of Dominant Species Across All Strata: <u> 1 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">Total % Cover of:</td> <td style="text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u> 0 </u></td> <td>x 1 = <u> 0 </u></td> </tr> <tr> <td>FACW species <u> 0 </u></td> <td>x 2 = <u> 0 </u></td> </tr> <tr> <td>FAC species <u> 94 </u></td> <td>x 3 = <u> 282 </u></td> </tr> <tr> <td>FACU species <u> 0 </u></td> <td>x 4 = <u> 0 </u></td> </tr> <tr> <td>UPL species <u> 1 </u></td> <td>x 5 = <u> 5 </u></td> </tr> <tr> <td>Column Totals: <u> 95 </u> (A)</td> <td><u> 287 </u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> 3.02 </u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u> 0 </u>	x 1 = <u> 0 </u>	FACW species <u> 0 </u>	x 2 = <u> 0 </u>	FAC species <u> 94 </u>	x 3 = <u> 282 </u>	FACU species <u> 0 </u>	x 4 = <u> 0 </u>	UPL species <u> 1 </u>	x 5 = <u> 5 </u>	Column Totals: <u> 95 </u> (A)	<u> 287 </u> (B)	Prevalence Index = B/A = <u> 3.02 </u>	
Total % Cover of:	Multiply by:																				
OBL species <u> 0 </u>	x 1 = <u> 0 </u>																				
FACW species <u> 0 </u>	x 2 = <u> 0 </u>																				
FAC species <u> 94 </u>	x 3 = <u> 282 </u>																				
FACU species <u> 0 </u>	x 4 = <u> 0 </u>																				
UPL species <u> 1 </u>	x 5 = <u> 5 </u>																				
Column Totals: <u> 95 </u> (A)	<u> 287 </u> (B)																				
Prevalence Index = B/A = <u> 3.02 </u>																					
1. _____																					
2. _____																					
3. _____																					
4. _____																					
				=Total Cover																	
<u>Sapling/Shrub Stratum</u>																					
1. _____																					
2. _____																					
3. _____																					
4. _____																					
5. _____																					
				=Total Cover																	
<u>Herb Stratum</u>	(Plot size: <u> 3ft </u>)																				
1. <u>Alopecurus arundinaceus</u>		<u>94</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Bromus inermis</u>		<u>1</u>	<u>No</u>	<u>UPL</u>																	
3. _____																					
4. _____																					
5. _____																					
6. _____																					
7. _____																					
8. _____																					
9. _____																					
10. _____																					
11. _____																					
				<u>95</u> =Total Cover																	
<u>Woody Vine Stratum</u>	(Plot size: _____)																				
1. _____																					
2. _____																					
				=Total Cover																	
% Bare Ground in Herb Stratum <u> 5 </u>																					
Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> X </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																					
Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																					
Remarks: FAC-dominant. Hydrophytic vegetation does not occur between WL-5 and WL-6.																					

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Meadowlark Ranch Subdivision City/County: Gallatin Sampling Date: 7/12/18
 Applicant/Owner: Meadowlark Ranch, LLC State: MT Sampling Point: DP-9u
 Investigator(s): JBlank/LBacon Section, Township, Range: SE1/4 Sec. 31, T1N, R5E
 Landform (hillside, terrace, etc.): drainage pattern Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR E Lat: 45 47 33.286457 N Long: 111 08 22.269729 W Datum: NAD83
 Soil Map Unit Name: 556A Threeriv-Bonebasin loams, 0-2% slopes (95% hydric) NWI classification: DNA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No N*
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Remarks: DP-9u in west drainage that classified as wetland-3 in 2004 (new hydric soil parameters were instituted in 2010); *irrigation water has not flowed through this feature for 10+ years. No fill has occurred in this or any other feature.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 1 </u> (A) Total Number of Dominant Species Across All Strata: <u> 1 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	=Total Cover
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u> 0 </u> x 1 = <u> 0 </u> FACW species <u> 0 </u> x 2 = <u> 0 </u> FAC species <u> 80 </u> x 3 = <u> 240 </u> FACU species <u> 5 </u> x 4 = <u> 20 </u> UPL species <u> 15 </u> x 5 = <u> 75 </u> Column Totals: <u> 100 </u> (A) <u> 335 </u> (B) Prevalence Index = B/A = <u> 3.35 </u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	=Total Cover
Herb Stratum (Plot size: <u>3ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Alopecurus arundinaceus</u>	<u>80</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Thlaspi arvense</u>	<u>15</u>	<u>No</u>	<u>UPL</u>	
3. <u>Sisymbrium altissimum</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	=Total Cover
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: FAC species remain in this slight depression.				
Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>				

APPENDIX C

Photographs



Photo 1. DP-1U/PP1. Upland, looking east.



Photo 2. DP-1U/PP1. Soil pit.



Photo 3. PP2. Uplands, looking south.



Photo 4. DP-2U/PP3. Upland.



Photo 5. DP-2U/PP3. Soil pit.



Photo 6. PP4. Upland, looking south.



Photo 7. PP5. Upland, looking west.



Photo 8. PP6. Upland, looking east.



Photo 9. PP7. Upland, looking east.



Photo 10. PP8. Upland, looking west.



Photo 11. PP9. Upland, looking west.



Photo 12. DP-3W/PP10. Wetland 1, looking west



Photo 13. DP-3U/PP11. Upland, looking west



Photo 14. DP-4W/PP12. Wetland 2, looking east



Photo 15. DP-4U/PP13. Upland, looking west



Photo 16. PP14. Upland, looking east.



Photo 17. PP14. Upland, looking west.



Photo 18. PP15. Upland, looking east.



Photo 19. PP15. Upland, looking west.



Photo 20. DP-5W/PP16. Wetland 3, looking east



Photo 21. DP-5U/PP17. Upland, looking east

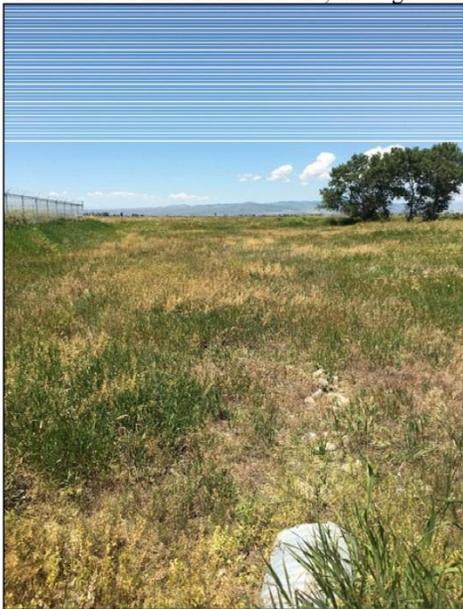


Photo 22. PP18. Upland, looking north



Photo 23. PP19. Upland, looking north.



Photo 24. DP-9U/PP20. Upland, looking north.

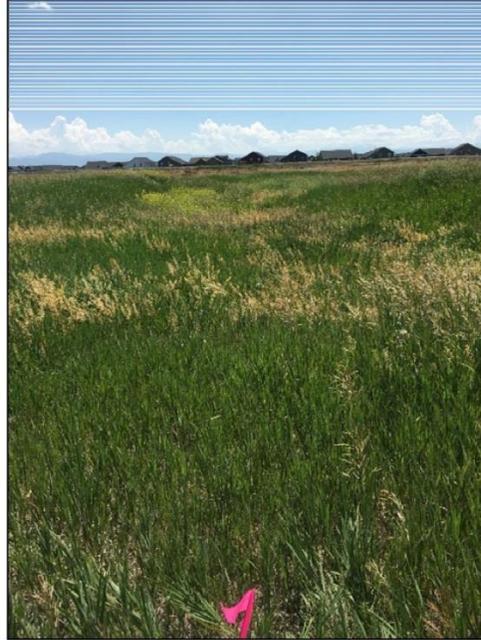


Photo 25. PP21. Upland, looking south.



Photo 26. DP-6W/PP22. Wetland 4, looking south.



Photo 27. DP-6U/PP23. Upland, looking NE.



Photo 28. DP-7W/PP24. Wetland 5, looking NE.



Photo 29. DP-7U/PP25. Upland, looking east.



Photo 30. PP26. Upland, looking northeast.



Photo 31. DP-8W/PP27. Wetland 6, looking south



Photo 32. DP-8U/PP28. Upland, looking south.



Photo 33. PP29. Looking southwest.



Photo 34. PP29. Looking southeast.



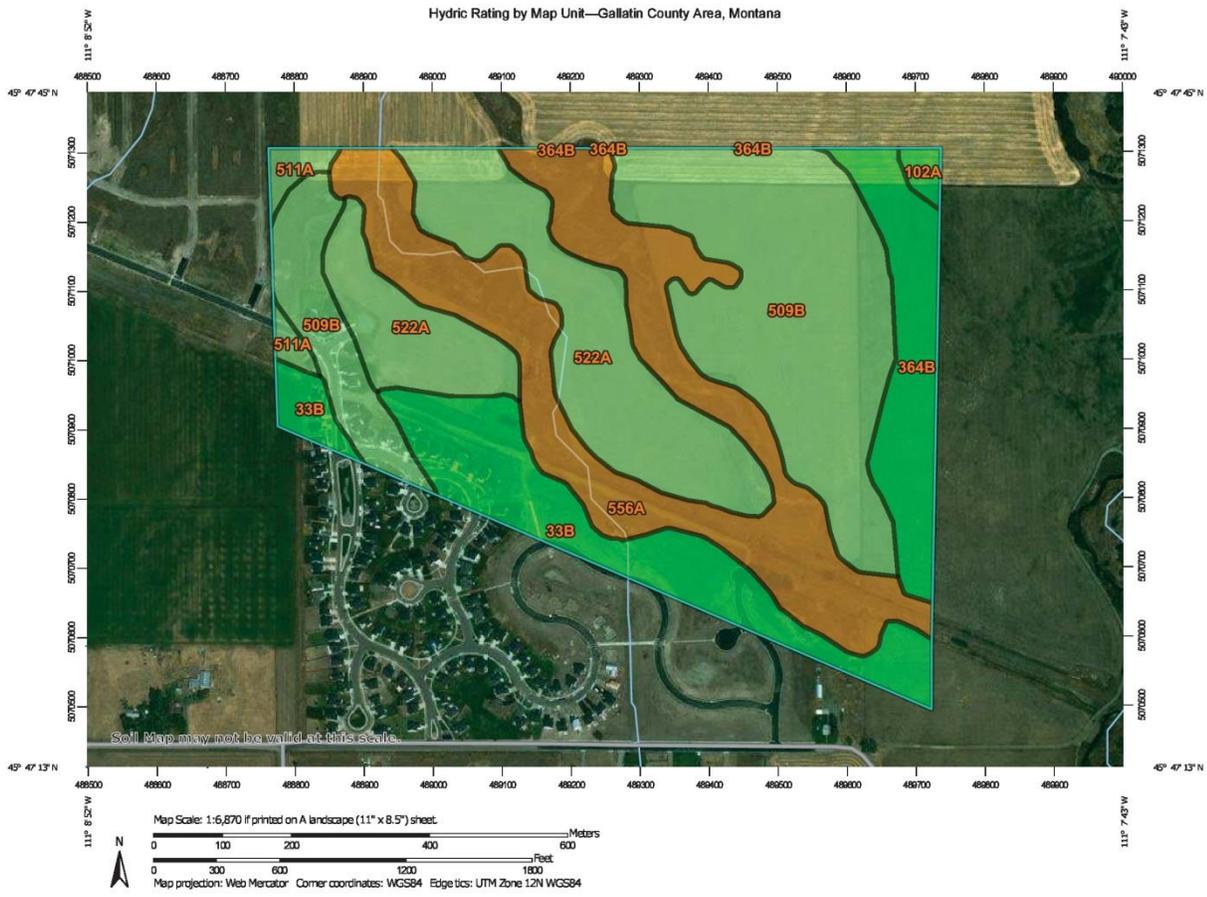
Photo 35. PP29. Looking northeast.

APPENDIX D

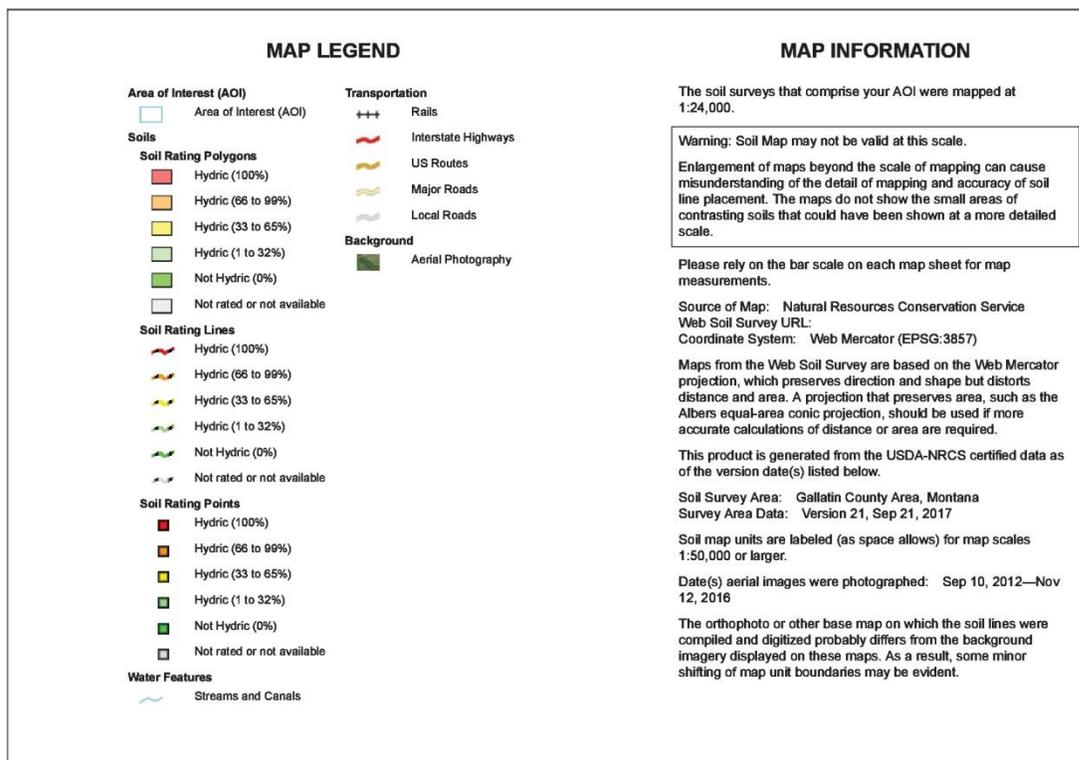
NWI Map & Soils Data

National Wetland Inventory Map for Meadowlark, LLC Property





Hydric Rating by Map Unit—Gallatin County Area, Montana



Hydric Rating by Map Unit—Gallatin County Area, Montana

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
33B	Attewan clay loam, 0 to 4 percent slopes	0	20.2	14.0%
102A	Havre loam, 0 to 2 percent slopes, rare flooding	0	1.0	0.7%
364B	Straw silty clay loam, 0 to 4 percent slopes	0	12.1	8.3%
509B	Enbar loam, 0 to 4 percent slopes	10	42.7	29.5%
511A	Fairway silt loam, 0 to 2 percent slopes	10	2.1	1.5%
522A	Enbar clay loam, 0 to 2 percent slopes	5	30.0	20.7%
556A	Threeriv-Bonebasin loams, 0 to 2 percent slopes	95	36.5	25.3%
Totals for Area of Interest			144.5	100.0%

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hydric Rating by Map Unit—Gallatin County Area, Montana

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

**SUBDIVISION PUBLIC IMPROVEMENTS AGREEMENT FOR
MEADOWLARK SUBDIVISION PHASE V**

THIS AGREEMENT is made and entered into this ____ day of _____, 20____, by and between Meadowlark Ranch, Inc. (“Subdivider”) and City of Belgrade, Montana (“City”).

WHEREAS, it is the intent and purpose of the Subdivider to meet the conditions of approval for the preliminary plat allowing the creation of Meadowlark Ranch Subdivision Phase V (the “Subdivision”), as approved by the City Council on _____; and

WHEREAS, it is the intent and purpose of the Subdivider to obtain final plat approval for the Subdivision;

WHEREAS, pursuant to §76-3-509, MCA and Section 8 of the City of Belgrade Subdivision Regulations it is the intent and purpose of the Subdivider and the City to enter into this Agreement, which will guarantee the full and satisfactory completion of improvements on the property described in this Agreement; and

WHEREAS, the City Council deems 150% of the engineers estimated value of public improvements satisfactory to provide for and secure public improvements.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, it is hereby agreed as follows:

1. Subdivision Description. This Agreement pertains to and includes the property designated and identified as _____, with the legal description of _____, in City of Belgrade, Montana.

2. Improvements. Subdivider shall, at its sole cost and expense, complete the improvements described on Exhibit “A” attached hereto and incorporated herein (the “Improvements”). The Improvements fulfill portions of Conditions of Approval Nos. _____ of the Preliminary Plat. The engineered estimated cost of the Improvements is _____ as shown on Exhibit “A”.

3. Completion of the Improvements. The Improvements must be completed by the Subdivider on or before _____. The Subdivider shall be allowed extensions of time beyond the completion date only for unavoidable delay caused by strikes, lockouts, acts of God, or other factors beyond the control and ability to remedy of the Subdivider or any agent or contractor hired by, or on behalf of, the Subdivider; provided, however, that no extension of time shall be allowed for any delay caused by weather conditions. The Subdivider shall, within two days after any unavoidable delay commences, give notice to the City for its review and approval of the delay, the cause for the delay, the period or anticipated period of the delay, and the steps taken by the Subdivider to mitigate the effects of the delay. Any failure of the Subdivider to properly give notice shall be deemed a waiver of any right to an extension of time for the delay.

4. Applicability of City of Belgrade Subdivision Regulations. This Agreement shall be subject to all requirements and provisions of the City of Belgrade Subdivision Regulations, including

any provisions regarding improvements or subdivision improvements agreements; provided, however, that the provisions of this Agreement shall take precedence over any conflicting provisions in the City of Belgrade Subdivision Regulations.

5. Inspection. Representatives of the City shall have the right to enter upon the property at any reasonable time to inspect and to determine if the Subdivider is in compliance with this Agreement. The Subdivider hereby agrees to permit the City and its representatives to enter upon and inspect the property at any reasonable time.

6. Financial Security Guaranty. As security to the City for performance by the Subdivider of the Subdivider's obligations to complete the Improvements pursuant to and in accordance with this Agreement, the Subdivider shall, prior to the recordation of the final plat, deposit with the City security in the amount of _____, which is 150% of the cost of the Improvements based on an engineers estimated costs as stated in Exhibit "A," in the following form: _____. The City of Belgrade Treasurer shall hold the security in an interest bearing holding account.

7. Reduction and Release of Security. Upon notice by the Subdivider of Improvements completed pursuant to this Agreement and upon approval of the City Council, the Gallatin City Treasurer shall reduce the security and release amounts, with interest, that are commensurate with the percentage of the Improvements completed. Upon completion of all Improvements and release from this Agreement by the Belgrade City Council, the City of Belgrade Treasurer shall release any remaining security with interest as determined by the Treasurer. Upon release of security, City may require that any warranties provided to Subdivider for the construction of any public improvements made pursuant to this agreement be assigned to City.

8. Default. If the Subdivider defaults in or fails to fully perform any of its obligations in accordance with this Agreement, or fails or refuses to correct any defect or deficiency in the Improvements required by this Agreement and such default or failure continues without being completely remedied, satisfied, and discharged for a period of thirty (30) days after written notice specifying the default has been deposited in the United States mail addressed to the Subdivider, the City shall have, and the Subdivider hereby grants to the City, in addition to all other rights afforded to the City in this Agreement and by law, the right, at the City's option, to complete the construction of the Improvements or to correct such defect or deficiency, using either its own forces or contractors hired for that purpose. The City shall have the right to draw from the financial security guarantee made pursuant to this Agreement, as well as the right to demand payment directly from the Subdivider, based either on costs actually incurred or on the City's reasonable estimates of costs to be incurred, an amount of money sufficient to defray the entire cost of the work, including legal fees and administrative expenses. The City may enforce any other remedy provided by law. These remedies are cumulative in nature.

9. Liability and Indemnity of City.

9.1 *No Liability for City Approval.* The Subdivider acknowledges and agrees (1) that the City is not, and shall not be, in any way liable for any damages or injuries that may be sustained as the result of the City's issuance of any approvals or acceptances of the Improvements or use of any portion of the Improvements, and (2) that the City's issuance of any approvals or acceptances does not, and shall not, in any way be deemed to insure the Subdivider, or any of its heirs, successors, assigns, tenants, or licenses, or any third party, against damage or injury of any kind at any time.

9.2 *Indemnification.* The Subdivider agrees to, and does hereby, hold harmless and indemnify the City, and all of its elected and appointed officials, officers, employees, agents, representatives, engineers, and attorneys, from any and all claims, costs and liability of every kind and nature ("Claims") that may be asserted at any time against any such parties for injury or damage received or sustained by any person or entity in connection with (1) the City's review and approval of any plans for the Improvements, (2) the issuance of any approval or acceptance for the Improvements, (3) the development, construction, maintenance or use of any portion of the Improvements, and (4) the performance by the Subdivider of its obligations under this Agreement and all related agreements; provided, however, that the Subdivider shall have no obligation to indemnify the City for Claims arising out of the City's negligence. The Subdivider further agrees to aid and defend the City in the event that the City is named as a defendant in an action concerning the Improvements provided by this Agreement except where such suit is brought by the Subdivider. The Subdivider is not an agent or employee of the City.

10. No Waiver of City Rights. No waiver of any provision of this Agreement will be deemed to constitute a waiver of any other provision nor will it be deemed to constitute a continuing waiver unless expressly provided for; nor will the waiver of any default under this Agreement be deemed a waiver of any subsequent default or defaults of the same type. The City's failure to exercise any obligation under this Agreement will not constitute the approval of any wrongful act by the Subdivider or the acceptance of any improvement.

11. Governing Law. This Agreement shall be construed according to the laws of the State of Montana.

12. Changes of Law. Any reference to laws, ordinances, rules, or regulations shall include such laws, ordinances, rules, or regulations as they have been, or they may hereafter, be amended.

13. Time of Essence. Time is of the essence in the performance of all terms and provisions of this Agreement.

14. Assignment. It is expressly agreed that the Subdivider shall not assign this Agreement in whole or in part, without prior written consent of the City.

15. Successors. This Agreement shall be binding upon, inure to the benefit of, and be enforceable by the parties hereto and their respective heirs, successors, and assigns.

16. Notices. All notices in connection with this Agreement shall be in writing and shall be deemed delivered to the addressee thereof (1) when delivered in person on a business day at the address set forth below or (2) on the third day after being deposited in the United States mail, for delivery by being properly addressed, postage prepaid, certified or registered mail, return receipt requested, at the address set forth below.

Notices to the City shall be addressed to, and delivered at, the following address:

City Council
City of Belgrade
91 East Central Ave
Belgrade, MT 59714

Notices to the Subdivider shall be addressed to, and delivered at, the following address:

By providing notice that complies with the requirements of this Section, each party shall have the right to change its address for all future notices and communications, but no notice of a change of address shall be effective until actually received.

17. Enforcement. The parties hereto may, in law or in equity, by suit, action, mandamus, or any other proceeding, including by specific performance, enforce or compel the performance of this Agreement; provided, however, that the Subdivider agrees that it will not seek, and does not have the right to seek, to recover a judgment for monetary damages against the City or any elected or appointed officials, officers, employees, agents, representatives, engineers, or attorneys thereof, on account of the negotiation, execution, or breach of any of the terms and conditions of this Agreement.

18. Amendments. All amendments to this Agreement shall be in writing and shall be approved by the Subdivider and the City.

19. Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the other provisions hereof and this Agreement shall be construed in all respects as if such invalid or unenforceable provisions were omitted.

20. Authority to Execute. The City and the Subdivider hereby acknowledge and agree that all required notices, meetings and hearings have been properly given and held by the City with respect to the approval of this Agreement and agree not to challenge this Agreement or any of the obligations created by it on the grounds of any procedural infirmity or any denial of any procedural right. The City hereby warrants and represents to the Subdivider that the persons executing this Agreement on its behalf have been properly authorized to do so by the City Council. The Subdivider hereby warrants and represents to the City (1) that it is the record owner of fee simple title to the Subdivision, (2) that it has the right, power, and authority to enter into this Agreement and to agree to the terms, provisions, and conditions set forth herein and to bind the Subdivision as set forth herein, (3) that all legal action needed to authorize the execution, delivery and performance of this Agreement have been taken, and (4) that neither the execution of this Agreement nor the performance of the obligations assumed by the Subdivider hereunder will (i) result in a breach or default under any agreement to which the Subdivider is a party or to which it or the Subdivision is bound or (ii) violate any statute, law, restriction, court order, or agreement to which the Subdivider or the Subdivision is subject.

21. Filing. The Subdivider shall file this Agreement in the office of the City of Belgrade Clerk and Recorder at the same time the final plat is recorded.

IN WITNESS WHEREOF, the parties have hereunto set their hands on the date first above written.

SUBDIVIDER

Title:

State of Montana
City of _____

This instrument was (signed and sworn to) (acknowledge) before me on_
_____ (date) by_____ (name of person coming before Notary) as_____
_____ (type of authority: officer, trustee, attorney-in-fact, etc.) of_
_____ (name of party or entity on behalf of whom document was executed).

(NOTARY SEAL) _____
(Signature of Notary)

(IF FOLLOWING DOES NOT APPEAR ON
SEAL-STAMP)

(Printed name of Notary)

Notary Public for the State of Montana (Title)

Residing at _____ (City/town
Where Notary lives)

My Commission Expires _____ (Month/
Day/4-digit year)

CITY

Board of Gallatin City Councilers

Chair

ATTEST:

City of Belgrade Clerk and Recorder

EXHIBIT A

**PRELIMINARY STORMWATER REPORT
FOR PRELIMINARY PLAT OF
MEADOWLARK RANCH SUBDIVISION, PHASE V
BELGRADE, MONTANA**

OVERVIEW NARRATIVE

The purpose of this preliminary drainage report is to present a summary of calculations performed to quantify storm drainage improvements required for the development of Meadowlark Ranch Subdivision, Phase V in Belgrade, Montana. All design criteria and calculations are in accordance with the City of Belgrade Design Standards and Specifications Policy, adopted July 2017.

Specific site information and criteria are described below:

1. Project Overview

Meadowlark Ranch Subdivision is located near Belgrade, MT, in the SE $\frac{1}{4}$ of Section 31 and the SW $\frac{1}{4}$ of Section 32, Township 1 North, Range 5 East. Phases I through IV have been previously constructed. Phase V consists of 88 lots and is bordered by undeveloped land to the north and previously developed phases of Meadowlark Ranch Subdivision to the south.

One stormwater facility is being proposed within the boundary of Meadowlark Ranch Subdivision, Phase V. The facility, to be located near the northwest edge of the subdivision, will be constructed to serve the area associated with Phase V and a portion of area from Phase IV.

2. Drainage Areas

- a. **Total Contributing Area:** The approximate drainage area considered for the stormwater improvements in Meadowlark Ranch Subdivision, Phase V is 73.15 acres. The site gently slopes from south to north at an average slope of less than 1%. An existing berm along the southern edge of the Phase V area limits additional run-on from entering the development. The existing drainageway is in Flood Zone A and is without Base Flood Elevations. Restoration Engineering analyzed the drainage to establish the base flood elevations for the property. FEMA has reviewed the study

and has approved the Conditional Letter of Map Revision (CLOMR) on March 23, 2020. The calculations for the stormwater conveyance facilities are broken into two basins. The basins will ultimately route to one proposed stormwater facility to be constructed with Phase V and the existing drainageway, which will detain stormwater runoff from Phase V and additional flows from Phase IV routed to the facility. The existing facilities serving previous Phases will remain in place with the northwest stormwater facility draining to the north. The existing stormwater facility, located between Lots 91 and 92, Block 3 of Meadowlark Ranch Subdivision, Phase IV, will be routed through the proposed Phase V detention facility and outfall to the north as it has historically.

- b. Existing Site Conditions:** Phase V of Meadowlark Ranch Subdivision is currently open/undeveloped land with native vegetation and periodic grain crops and a drainageway dividing Phase V from a future phase that will develop lot 32. The breakdown of the site area is as follows:

Table 1 - Pre-Developed C Coefficients

	Basin A		Basin B (Lot 32)	
	Land Use	C Coefficients	Land Use	C Coefficients
Small Lots	2.27	0.45	0.00	0.45
Large Lots	0.00	0.38	0.00	0.38
ROW	0.63	0.95	0.00	0.95
Undeveloped Land	31.35	0.20	27.66	0.20
Total Area	34.24		27.66	
Composite C		0.23		0.20

- c. Post-Development Site Conditions:** The proposed hardscape improvements for Phase V of Meadowlark Ranch Subdivision include roads, sidewalks, driveways, houses, and open space that will house the stormwater facilities. The development has been broken into two basins: Basin A, which will drain to a detention facility near the northwest corner of the site; and Basin B, which will drain to the drainageway that splits Phase V and a future phase that will develop lot 32. Basin A and Basin B characteristics are included below:

Table 2 - Post-Developed C Coefficients

	Basin A		Basin B (Lot 32)	
	Land Use	C Coefficients	Land Use	C Coefficients
Small Lots	20.44	0.45	0.00	0.45
Large Lots	5.88	0.38	0.00	0.38
ROW	5.89	0.95	0.00	0.95
Undeveloped Land	2.03	0.20	27.66	0.20
Total Area	34.24		27.66	
Composite C		0.51		0.20

3. Peak Flow and Volume Summary

Basis of Design:

- A. Peak Flows – Rational Method – 10-year frequency, in combination with the time of concentration for the individual basins, was used to determine peak runoff.
- B. Volumes - Modified Rational Method – The City of Belgrade requires the 10-year, 2-hour Modified Rational storm be analyzed to determine minimum detention facility volumes.

Pre-developed Site Peak Flows:

The pre-developed site drained to the north, through smaller tributaries ultimately to the East Gallatin River, roughly 3 miles away. The existing peak flows for the pre-developed site are based on the Belgrade I.D.F. formulas for the Rational Method, and are as follows:

Table 3 - Pre-Developed Runoff Rates

	Basin A	Basin B	Channel Drainageway
Area (acres)	34.24	27.66	11.49
Time of Concentration (min)	26.7	29.9	--
C Coefficient	0.23	0.20	--
10-Year Storm Peak Runoff (cfs)	8.43	5.56	--

Post-Developed Site Peak Flows:

The runoff produced from the area associated with Phase V of Meadowlark Ranch Subdivision is planned to drain to the proposed stormwater facility and the existing drainageway within Phase V. The existing drainageway divides Phase V, separating the site into two basins with corresponding detention facilities. The facilities will be built to account for the runoff volume estimated by the Modified Rational Method for Basins A and B. Estimated post-developed peak flows for Basins A and B are included below:

Table 4 - Post-Developed Runoff Rates

	Basin A	Basin B	Channel Drainageway
Area (acres)	34.24	27.66	11.49
Time of Concentration (min)	21.6	29.9	--
C Coefficient	0.51	0.20	--
10-Year Storm Peak Runoff (cfs)	21.66	5.56	--

Detention Facility Volume Calculations:

As mentioned above, the runoff produced from Phase V will be routed to one proposed detention facility and the existing drainageway which will outfall offsite as it has historically. The proposed detention facility east of the main drainage way will have a pass-through flow

of 4.94 cfs from the existing detention facility located between lots 91 and 92. The detention facility is sized with the 10-year, 2-hour storm and the required storage volume was determined by subtracting the pre-developed volume from the post-developed volume, as shown below. Stormwater will be discharged at the pre-development rate.

Table 5 - Post-Developed Runoff Volumes

	Basin A	Basin B	Channel Drainageway
Runoff Volume (CF)	51,470	16,329	--
Volume Out (Pre-Developed) (CF)	22,962	16,329	--
Required Storage Volume (CF)	28,508	0.00	--

All calculations have been included in the appendices of this report.

4. Conveyance Systems

Gutter Flows:

Drainage within the gutters will be considered in the final design of all basin run-off calculations. The City of Belgrade requires that the design flows for the 10-year Rational Method design storm remain 0.15 feet below the top of the curb. Sub-basins within the Phase V area will be determined during final design. Inlets will be placed to ensure gutter flow does not exceed the maximum depths.

Inlet Spacing:

Storm inlets will be designed in accordance with the design criteria listed within the City of Belgrade Design Standards and Specifications dated July 2017. As mentioned above, inlets will be spaced to ensure the gutter flow does not exceed 0.15 feet below the top of curb within the streets. Inlets will be placed at sag locations and as required at locations on-grade within the streets to collect and convey runoff to the stormwater facilities. Low points and on-grade inlet locations within the development will be determined during final design.

Storm Drain Pipe:

Storm drain will be designed in accordance with the design criteria listed within the City of Belgrade Design Standards and Specifications dated July 2017. Storm drain will be installed to convey runoff intercepted by stormwater inlets located within the roadways. The existing detention facility to the south will be connected to the storm drain system and will be piped through the Phase V development. Pipe sizing will need to be determined in order convey the discharge adequately. All pipe sizing will occur during final design.

5. Operation and Maintenance:

Proper maintenance of storm drainage facilities is crucial for the functionality of the system. General objectives of maintenance are to prevent clogging, standing water, and the growth of

weeds and wetland plants. This requires frequent cleaning of the outlet structure and mowing. Cleaning out of sediment with earth-moving equipment will be necessary in 1- to 20 years.

Storm drain inlets should be inspected at least once a year. Any necessary repair or maintenance should be prioritized and scheduled through the spring, summer, and fall. These items may include removing blockages, cleaning and flushing the length of pipes, mowing grass and weeds, cutting and removing trees and limbs that threaten to fall and block upstream swales, and establishing vegetation on bare slopes.

6. Conclusion:

The preliminary analyses and calculations show that the proposed storm water management system for the Meadowlark Ranch Subdivision, Phase V development will adequately convey the 10-year storm events in accordance with current design standards. Further analysis and calculations will occur during final design of the development.

APPENDICES

1. Floodplain Maps

The applicable floodplain maps have been attached in Appendix A.

2. Drainage Exhibit

Drainage Exhibit A has been included in Appendix B.

3. Preliminary Calculations

All preliminary calculations have been attached in Appendix C.

APPENDIX A
FLOODPLAIN MAP

APPENDIX B
DRAINAGE EXHIBIT

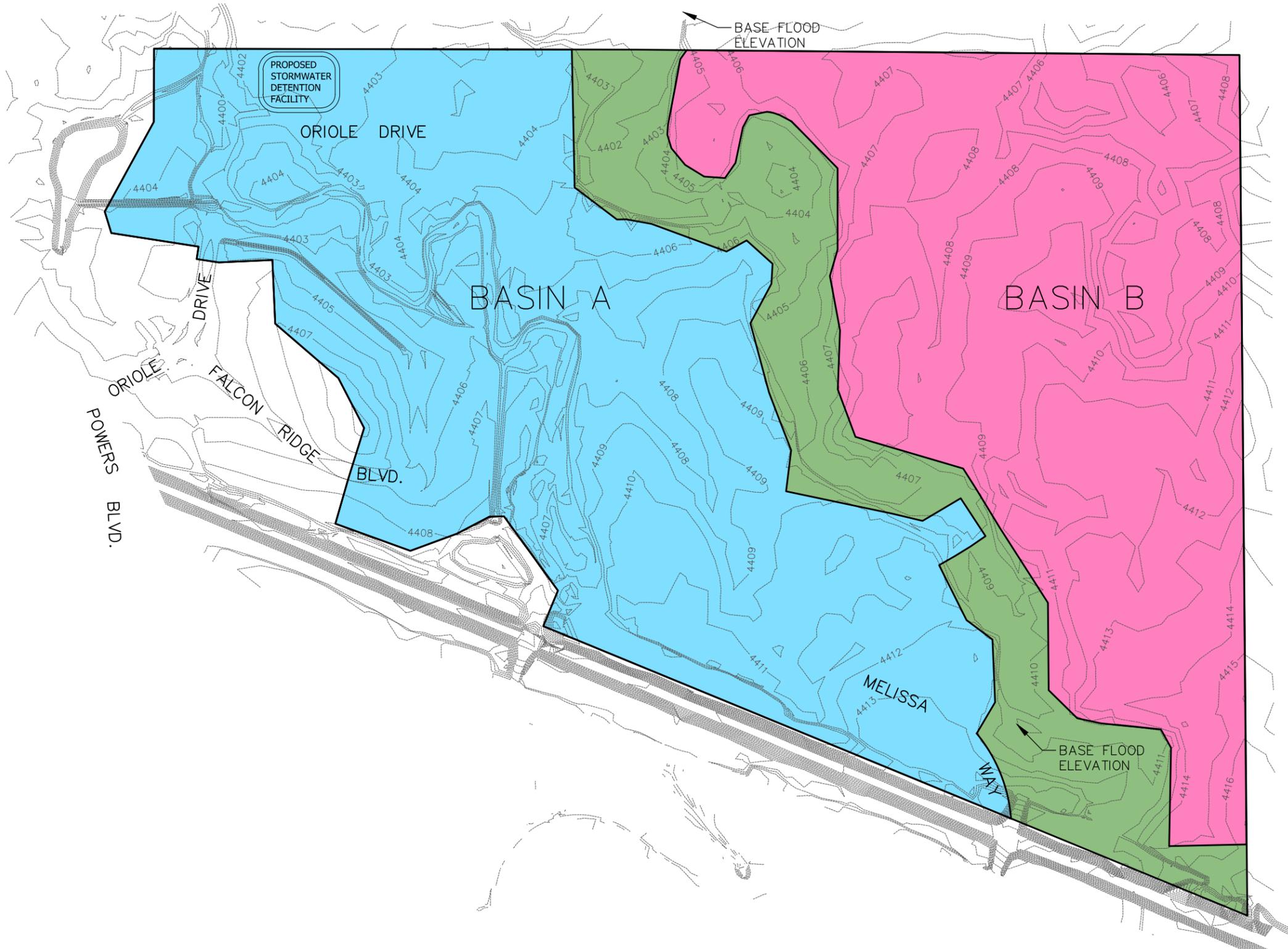
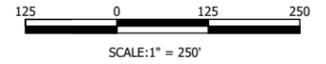
EXHIBIT A
POST-DEVELOPMENT
WITHIN
MEADOWLARK RANCH SUBDIVISION, PHASE V

PREPARED FOR : MEADOWLARK RANCH INC.

PREPARED BY : **SANDERSON STEWART**

AUGUST, 2020

BELGRADE, MONTANA



APPENDIX C
DRAINAGE CALCULATIONS

Meadowlark Ranch

Phase V

PRE-DEVELOPED TIME OF CONCENTRATION WORKSHEET

TABLE 1 - Basin A

Flow Type	Flow Length (FT)	Flow Slope (FT/FT)	C	Velocity (FT/S)	Time of Conc. (MIN)
Sheet Flow*	150	0.0150	0.230	--	17.00
Shallow	938	0.0100	--	1.61	9.69
				Pre-Developed Area	26.7

TABLE 2 - Basin B

Flow Type	Flow Length (FT)	Flow Slope (FT/FT)	C	Velocity (FT/S)	Time of Conc. (MIN)
Sheet Flow*	150	0.0100	0.200	--	18.00
Shallow	1154	0.0100	--	1.61	11.92
				Pre-Developed Area	29.9

POST-DEVELOPED TIME OF CONCENTRATION WORKSHEET

TABLE 3 - Basin A

Flow Type	Flow Length (FT)	Flow Slope (FT/FT)	C	Velocity (FT/S)	Time of Conc. (MIN)
Sheet Flow*	115	0.0300	0.509	--	8.00
Shallow	334	0.0150	--	2.49	2.24
Shallow	2064	0.0350	--	3.02	11.40
				Post-Developed Area	21.6

TABLE 4 - Basin B

Flow Type	Flow Length (FT)	Flow Slope (FT/FT)	C	Velocity (FT/S)	Time of Conc. (MIN)
Sheet Flow*	150	0.0100	0.200	--	18.00
Shallow	1154	0.0100	--	1.61	11.92
				Post-Developed Area	29.9

* Sheet flow determined from Figure 1: Time of Concentration (Rational Formula) 2017 Belgrad Design Standards

DETENTION FACILITY SIZING - MEADOWLARK RANCH PHASE V

(Rational Method)

Existing Site

Basin A		
Land Use	Area (AC)	C
Small Lots	2.267	0.45
Large Lots	0.000	0.38
ROW	0.626	0.95
Undevel.	31.349	0.2
Total =	34.242	
Composite C =		0.230

Basin B		
Land Use	Area (AC)	C
Small Lots	0.000	0.45
Large Lots	0.000	0.38
ROW	0.000	0.95
Undevel.	27.658	0.2
Total =	27.658	
Composite C =		0.200

Design Storm Frequency: 10 year (Figure 2)

Land Use	Area (AC)	C	Time of Conc. (min)	I (in/hr)	Pre-Developed Peak Runoff Rate (cfs)	Intensity for Detention Design	Volume (V=7200Q) (CF)
Basin A	33.78	0.23	26.69	1.08	8.43	0.41	22,962
Basin B	27.66	0.20	29.92	1.01	5.56	0.41	16,329
Channel	11.49	0.20	--	--	--	--	--

Developed Phase V

Basin A		
Land Use	Area (AC)	C
Small Lots	20.436	0.45
Large Lots	5.884	0.38
ROW	5.892	0.95
Undevel.	2.030	0.2
Total =	34.242	
Composite C =		0.509

Basin B		
Land Use	Area (AC)	C
Small Lots	0.000	0.45
Large Lots	0.000	0.38
ROW	0.000	0.95
Undevel.	27.658	0.2
Total =	27.658	
Composite C =		0.200

Design Storm Frequency: 10 year (Figure 2)

Land Use	Area (AC)	C	Time of Conc. (min)	I (in/hr)	Post-Developed Peak Runoff Rate (cfs)	Intensity for Detention Design	Volume (V=7200Q) (CF)	Volume Out (Pre-Developed)(CF)	Required Storage Volume (CF)
Basin A	34.24	0.51	21.63	1.24	21.66	0.41	51,470	22,962	28,508
Basin B	27.66	0.20	29.92	1.01	5.56	0.41	16,329	16,329	0
Channel	11.49	0.20	--	--	--	--	--	--	--

PRELIMINARY PLAT OF
MEADOWLARK RANCH SUBDIVISION, PHASE 5
BEING LOT 14, BLOCK 7 OF MEADOWLARK RANCH SUBDIVISION, PHASE 4,
SITUATED IN THE E1/2 SE1/4 OF SECTION 31 AND THE W1/2 SW1/4 OF SECTION 32,
T. 1 N., R. 5 E., P.M.M., IN THE CITY OF BELGRADE, GALLATIN COUNTY, MONTANA

PREPARED FOR : MEADOWLARK RANCH INC.
175 N. 27th St., Ste. 900
BILLINGS, MT 59101

MARCH 2020

PREPARED BY : SANDERSON STEWART 

BOZEMAN, MONTANA

CERTIFICATE OF EXCLUSION FROM MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY REVIEW

Meadowlark Ranch Subdivision, Phase 5, located in Gallatin County, Montana, is within the City of Belgrade, Montana, a third-class municipality, and is within the area covered by a growth policy adopted pursuant to Section 76-1-601 et seq., M.C.A., and can be provided with adequate storm water drainage and adequate municipal facilities. Therefore, under the provisions of Section 76-4-125(2)(d) M.C.A., this subdivision is excluded from the requirement for Montana Department of Environmental Quality review.

Dated this ___ day of _____, 20____.

Director of Public Works
City of Belgrade, Montana

CERTIFICATE OF GOVERNING BODY

The Mayor of the City of Belgrade, Gallatin County, Montana, does hereby certify that the accompanying Plat has been duly reviewed, and has been found to conform to the requirements of the Subdivision and Platting Act, Section 76-3-101 et. seq. MCA, and the Belgrade City Subdivision Regulations, approves it, and hereby accepts the dedication to public use.

DATED this ___ day of _____, A.D. 20____.

Mayor
City of Belgrade, Montana

CONSENT OF MORTGAGEE

We the undersigned mortgagees, do hereby join in and consent to the described plat, releasing our respective liens, claims or encumbrances as to any portion of said lands now being platted into streets, avenues, parks, common areas or other public areas which are dedicated to the use of the public forever.

DATED this ___ day of _____, A.D. 20____.

FIRST INTERSTATE BANK

By: _____ Title: _____

STATE OF MONTANA)
) :ss
County of _____)

On this _____ day of _____, A.D., 20____, before me, the undersigned Notary Public for the State of Montana, personally appeared _____, known to me to be the person who signed the foregoing instrument as _____ of First Interstate Bank and acknowledged to me that they executed the same.

Notary Public in and for the State of Montana

NOTES

- Meadowlark Ranch is located in the projected flood inundation area in the event of a dam break at Hyalite Reservoir.
- No trees shall be planted in the city infrastructure utility easements.
- Due to the potential of high ground water tables in the area of the subdivision, structures with full or partial basements should not be constructed without first consulting a professional engineer licensed in the State of Montana and qualified in the certification of residential construction.
- A sixteen foot (16') wide utility easement exists on the property side of the public right-of-way, to provide for installation of gas, electric, phone, TV cable, and other utilities, as required. No trees are allowed within the utility easement.

CERTIFICATE OF SURVEYOR

The undersigned, a professional land surveyor licensed in the State of Montana, does hereby certify that between December 2019 and _____ 2020, a survey was performed under their direct supervision for MEADOWLARK RANCH SUBDIVISION, PHASE 5, and described the same as shown on the accompanying plat and platted in accordance with the provisions of the Montana Subdivision and Platting Act, Section 76-3-101 through 76-3-625, MCA, and the Belgrade City Subdivision Regulations.

DATED this ___ day of _____, 20____.

SANDERSON STEWART

By: _____
Montana Registration No. _____

CERTIFICATE OF COUNTY TREASURER

The Treasurer of Gallatin County, Montana, does hereby certify that the accompanying Plat has been duly examined and that all real property taxes and special assessments assessed and levied on the land to be subdivided are paid.

DATED this ___ day of _____, A.D., 20____.

By: _____
Deputy Treasurer of Gallatin County

CERTIFICATE OF CLERK AND RECORDER

I, _____, Clerk and Recorder of Gallatin County, Montana, do hereby certify that the foregoing instrument was filed in my office at ___ o'clock __m., this ___ day of _____, A.D., 20____, and recorded in Book _____ of Plats on Page _____, as Document No. _____, Records of the Clerk and Recorder, Gallatin County, Montana.

Gallatin County Clerk and Recorder

CERTIFICATE OF DEDICATION

We, the undersigned property owners, do hereby certify that they have caused to be surveyed, subdivided and platted into lots, blocks, roads and parks, as shown on the accompanying plat hereunto annexed, the following described tract of land, to wit:

LEGAL DESCRIPTION:

Lot 14, Block 7 of Meadowlark Ranch Subdivision, Phase 4, as recorded in the office of the Clerk and Recorder of Gallatin County, Montana, under Document No. 2635746, situated in the E1/2SE1/4 of Section 31 and the W1/2SW1/4 of Section 32, T. 1 N., R. 5 E., P.M.M., in the City of Belgrade, Gallatin County, Montana, being more particularly described as follows:

Beginning at a point which is the one-quarter common to Sections 31 and 32, T. 1 N., R. 5 E., in the City of Belgrade, Gallatin County, Montana;
thence, from said Point of Beginning, along the south line of Tract 1A, Certificate of Survey No 2495, S 89°29'41" E a distance of 1338.53 feet to the northwest corner of Tract 1A, Certificate of Survey No. 2582C;
thence, along the west line of said Tract 1A, S 00°31'46" E a distance of 2035.95 feet to the northeast corner of the Park in Block 1 of Meadowlark Ranch Subdivision, Second Filing;
thence, along the northerly and easterly lines of Meadowlark Ranch Subdivision, First Filing and Second Filing the following courses and distances:

N 78°59'45" W a distance of 579.44 feet,
along a non-tangent curve to the right with a radius of 225.00 feet a distance of 24.13 feet (chord bearing N 05°36'54" E, chord length 24.12 feet),
N 78°04'02" W a distance of 166.44 feet,
N 12°01'26" E a distance of 246.19 feet,
N 67°41'39" W a distance of 872.74 feet and
N 67°42'18" W a distance of 82.88 feet to the southeast corner of Open Space Lot #2 in Block 3 of Meadowlark Ranch Subdivision, Phase 4;
thence, along the easterly and northerly lines of Blocks 3, 7 and 6 in said Meadowlark Ranch Subdivision, Phase 4 and crossing the rights-of-way of Falcon Ridge Boulevard and Oriole Drive the following Courses and distances:
N 22°17'42" E a distance of 85.15 feet,
N 36°04'46" W a distance of 203.03 feet,
S 88°47'40" W a distance of 32.49 feet,
N 01°12'20" W a distance of 247.30 feet,
N 07°10'30" W a distance of 67.47 feet,
N 89°51'53" W a distance of 121.02 feet,
N 62°22'48" W a distance of 57.07 feet,
along a non-tangent curve to the left with a radius of 155.00 feet a distance of 17.76 feet (chord bearing N 04°29'15" W, chord length 17.75 feet),
S 70°36'59" W a distance of 156.94 feet,
N 49°12'20" W a distance of 184.49 feet,
N 02°40'21" W a distance of 160.17 feet,
N 81°12'20" W a distance of 112.31 feet,
N 29°30'25" W a distance of 80.67 feet,
N 89°53'17" W a distance of 219.98 feet,
N 28°47'12" E a distance of 226.41 feet and
N 00°06'31" E a distance of 161.68 feet to the northeast corner of Open Space Lot #1 in Block 6 of said Meadowlark Ranch Subdivision, Phase 4, said point being on the south line of Tract 1A Certificate of Survey No 2495;
thence, along the south line of said Tract 1A, S 89°53'29" E a distance of 1067.70 feet to the Point of Beginning; said tract containing an area of 73.133 acres, more or less, subject to any existing easements and/or rights-of-way, whether of record or apparent on the ground.

The above described tract of Land is to be known and designated as MEADOWLARK RANCH SUBDIVISION, PHASE 5, City of Belgrade, Gallatin County, Montana; and the lands included in all roads, avenues, rights-of-way, parks and common areas shown on said plat are hereby granted and donated to the use of the public forever.

CERTIFICATE OF GRANT OF UTILITY EASEMENTS

The undersigned hereby grants unto each and every person or firm, whether public or private, providing or offering to provide telephone, electric, power, gas, cable television, water or sewer service to the public, the right to joint use of an easement for the construction, maintenance, repair and removal of their lines and other facilities, in, over, and under and across each area designated on this plat as "Utility Easement" to have and hold forever.

CERTIFICATE OF WAIVER

We, the undersigned property owners of Meadowlark Subdivision, do hereby waive the right to protest the creation of Special Improvement Districts. In doing so, we do not waive any right to comment on, protest, and/or appeal any assessment formula which may be imposed, if we believe it to be inequitable. This waiver shall be binding upon the heirs, assigns and purchasers of all lots within this Subdivision.

Dated this ___ day of _____, 20____.

MEADOWLARK RANCH INC., a Montana corporation

By: _____

Title: _____

STATE OF MONTANA)
) :ss
County of _____)

On this _____ day of _____, 20____, before me, a Notary Public of the State of Montana, personally appeared _____, know to me to be the person who signed the foregoing instrument as _____ of Meadowlark Ranch Inc., a Montana corporation, and acknowledged to me that said Corporation executed the same. In witness thereof, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Notary Public for the State of Montana



NORTH



SCALE: 1" = 120'

BASIS OF BEARING: CERTIFICATE OF SURVEY No. 2604

- FOUND SURVEY MONUMENT, REBAR WITH YELLOW CAP MARKED "ENGINEERING INC 15273LS", OR AS NOTED
- SET 5/8" X 18" REBAR WITH CAP MARKED WITH THE LICENSE NUMBER OF THE UNDERSIGNED LAND SURVEYOR AND "SANDERSON STEWART"
- SET WITNESS CORNER AT 6.0' OFFSET FROM ACTUAL PROPERTY CORNER. CAP MARKED "WITNESS CORNER 6.0 FT.", "SANDERSON STEWART" AND THE LICENSE NUMBER OF THE UNDERSIGNED LAND SURVEYOR

NOTE: ALL CURVES ARE TANGENT AND ALL PROPERTY LINES INTERSECTING CURVES ARE RADIAL UNLESS OTHERWISE NOTED.

W-1 MEADOWLARK RANCH SUBDIVISION, PHASE II AQUATIC RESOURCES DELINEATION REPORT SEPT. 30, 2018

W-2

W-3

W-4

W-5

W-6

* PROPOSED STREET NAMES SUBJECT TO REVIEW & APPROVAL BY GALLATIN COUNTY G.I.S.

PROPOSED ZONING: R1 & R1T

SURROUNDING ZONING:

NORTH: GALLATIN COUNTY

SOUTH: R1 & R1T

EAST: GALLATIN COUNTY

WEST: R1 & R1T

RESIDENTIAL LOTS (87):	23.37 ACRES
OPEN SPACE LOTS (3):	2.25 ACRES
AREA OF DEDICATED R.O.W.:	5.62 ACRES
FUTURE DEVELOPMENT LOT (LOT 32, BLOCK 6)	41.89 ACRES
TOTAL AREA:	73.13 ACRES

Line #	Bearing	Distance
L1	S 22°17'42" W	85.15'
L2	S 36°04'46" E	203.03'
L3	N 88°47'40" E	32.49'
L4	N 01°12'20" W	247.30'
L5	N 07°10'30" W	67.47'
L6	S 89°51'53" E	121.02'
L7	N 62°22'48" W	57.07'
L8	S 70°36'59" W	156.94'
L9	S 49°12'20" E	184.49'
L10	N 02°40'21" W	160.17'
L11	N 81°12'20" W	112.31'
L12	N 29°30'25" W	80.67'
L13	S 89°53'17" E	219.98'
L14	N 28°47'12" E	226.41'
L15	N 00°06'31" E	161.68'
L16	N 78°04'02" W	166.44'
L17	N 12°01'26" E	246.19'

PRELIMINARY PLAT OF
MEADOWLARK RANCH SUBDIVISION, PHASE 5
 BEING LOT 14, BLOCK 7 OF MEADOWLARK RANCH SUBDIVISION, PHASE 4,
 SITUATED IN THE E1/2 SE1/4 OF SECTION 31 AND THE W1/2 SW1/4 OF SECTION 32,
 T. 1 N., R. 5 E., P.M.M., IN THE CITY OF BELGRADE, GALLATIN COUNTY, MONTANA

PREPARED FOR : MEADOWLARK RANCH INC.
 175 N. 27th St., Ste. 900
 BILLINGS, MT 59101

MARCH 2020

PREPARED BY : SANDERSON STEWART

BOZEMAN, MONTANA

PRELIMINARY PLAT OF MEADOWLARK RANCH SUBDIVISION, PHASE 5

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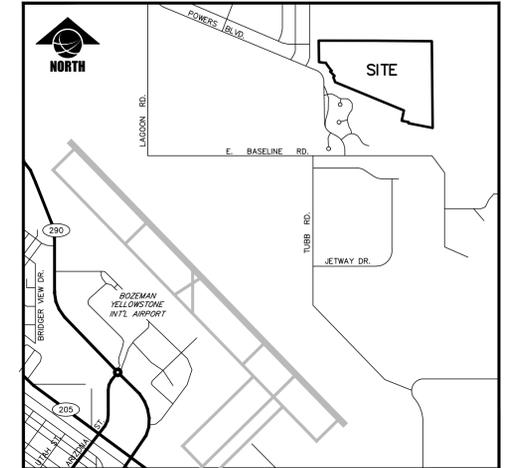
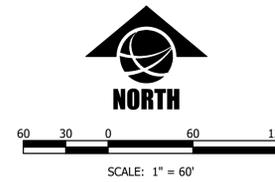
PREPARED BY : SANDERSON STEWART

BOZEMAN, MONTANA

C. OF S. NO. 2495

TRACT 1A

S 89°53'29" E 1067.70'



VICINITY MAP
NOT TO SCALE

- BASIS OF BEARING:** CERTIFICATE OF SURVEY 2604
- FOUND SURVEY MONUMENT WITH YELLOW CAP MARKED "ENGINEERING INC 15273LS". THIS IS NOTED
 - SET 5/8" X 18" REBAR WITH CAP MARKED WITH THE LICENSE NUMBER OF THE UNDERSIGNED LAND SURVEYOR AND "SANDERSON STEWART"
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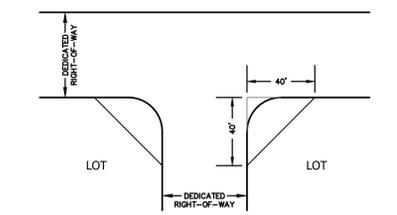
LEGEND

	EXISTING	PROPOSED
8" SANITARY SEWER	SS	SS
STORM DRAIN	SD	SD
8" WATER MAIN	W	W
CURB AND GUTTER	CG	CG
CONTOUR	3157	3157

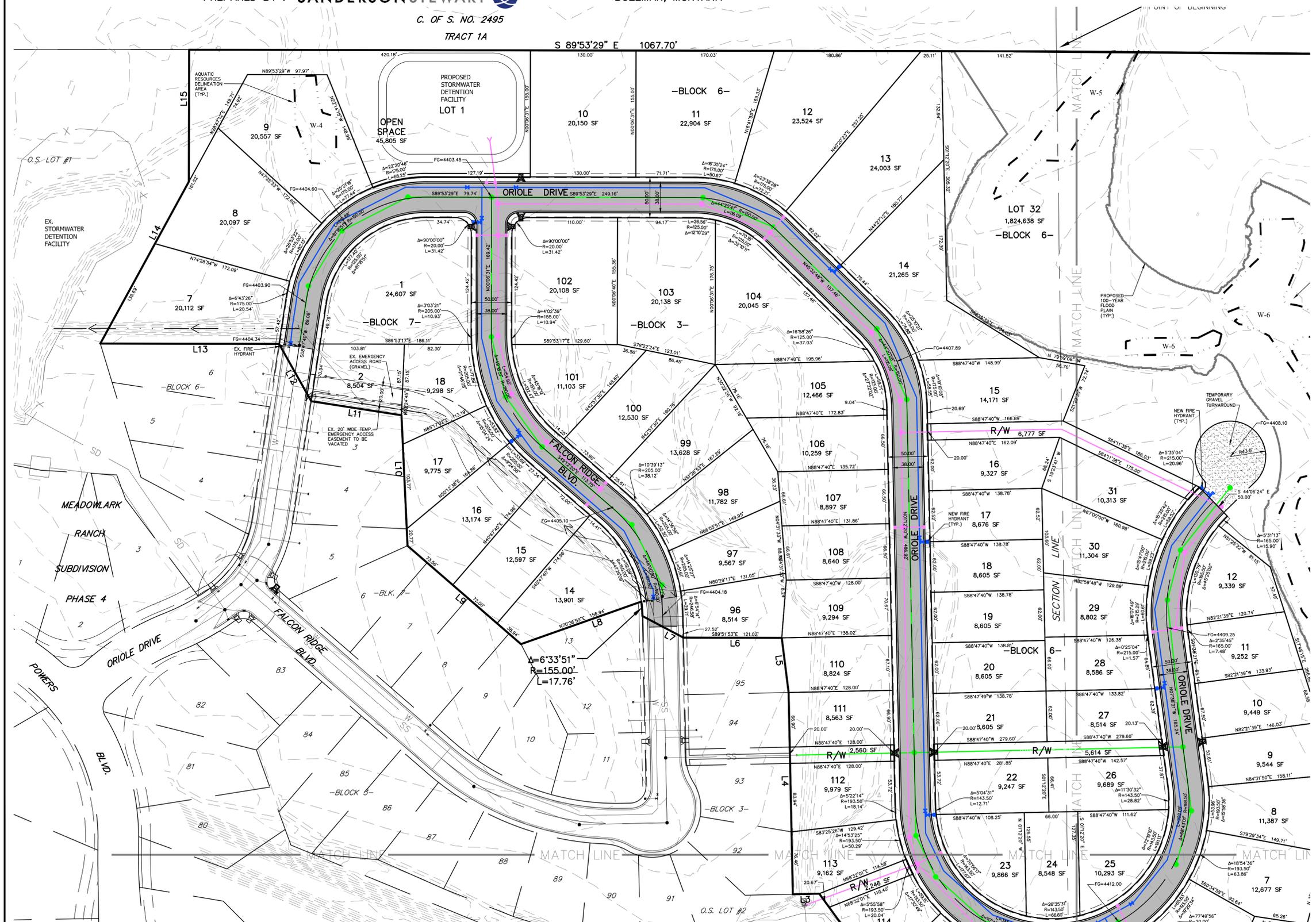
NOTE:
ALL NEW STREET FRONTAGES HAVE A 5' WIDE SIDEWALK EASEMENT & 16' WIDE PRIVATE UTILITY EASEMENT.

PROPOSED ZONING: R1 & R1T
SURROUNDING ZONING:
NORTH: GALLATIN COUNTY
SOUTH: R1 & R1T
EAST: GALLATIN COUNTY
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FUTURE DEVELOPMENT LOT (LOT 32, BLOCK 6): 41.89 ACRES
TOTAL AREA: 73.13 ACRES



DETAIL OF CLEAR VISION ZONE SIGHT TRIANGLE
SCALE: 1" = 50'

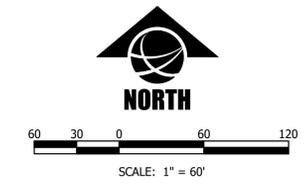


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MARCH 2020

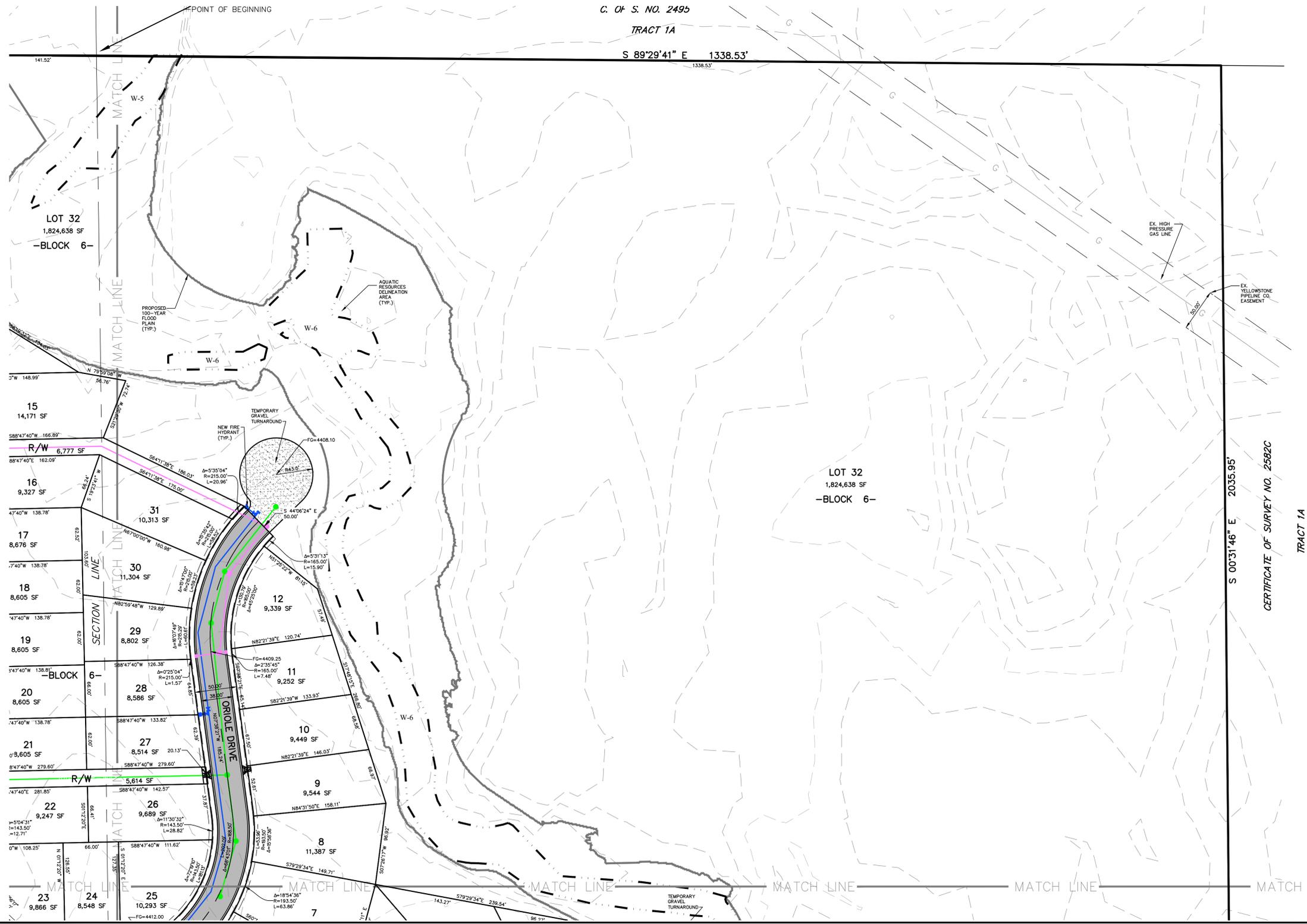
PREPARED BY : SANDERSON STEWART BOZEMAN, MONTANA



LEGEND

	EXISTING	PROPOSED
8" SANITARY SEWER	— SS —	— (Green) —
STORM DRAIN	— SD —	— (Pink) —
8" WATER MAIN	— W —	— (Blue) —
CURB AND GUTTER	= (Double Line) =	= (Double Line) =
CONTOUR	— 3157 —	

NOTE:
 ALL NEW STREET FRONTAGES HAVE A 5' WIDE SIDEWALK
 EASEMENT & A 16' WIDE PRIVATE UTILITY EASEMENT.



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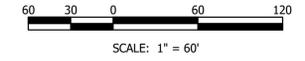
MARCH 2020

PREPARED BY : SANDERSON STEWART

BOZEMAN, MONTANA

LEGEND

	EXISTING	PROPOSED
8" SANITARY SEWER	— SS —	—
STORM DRAIN	— SD —	—
8" WATER MAIN	— W —	—
CURB AND GUTTER	====	====
CONTOUR	3157	



NOTE:
 ALL NEW STREET FRONTS HAVE A 5' WIDE SIDEWALK
 EASEMENT & A 16' WIDE PRIVATE UTILITY EASEMENT.



DRAFT

ENDURING
COMMUNITY
DESIGN

SANDERSONSTEWART.COM

