Costco Billings 2
Facility No. 00-32511
DRAFT
Environmental Assessment

Montana Department of Environmental Quality
Waste and Underground Tank Management Bureau
Underground Storage Tank Section
DRAFT ENVIRONMENTAL ASSESSMENT

COMPANY NAME: Costco Wholesale			
FACILITY NUMBER: 00-32511			
FACILITY NAME: Costco Billings 2			
PERMIT NUMBER: 23-0154			
APPLICATION DATE: 11/14/2022			
LOCATION: 3880 Zoo Drive, Billings, MT 59102		**COUNTY: Yellowstone**	
PROPERTY OWNERSHIP:	**FEDERAL ____ STATE ____ PRIVATE __X__**		
EA PREPARER: Brett Smith and Jonathon Love		**EA DATE:**	3/1/2023

COMPLIANCE WITH THE MONTANA ENVIRONMENTAL POLICY ACT
Under the Montana Environmental Policy Act (MEPA), Montana agencies are required to prepare an environmental review for state actions that may have an impact on the human or physical environment. The proposed state action is issuance of underground storage tank (UST) installation permit number 23-0154 and an operation permit allowing operation of the underground storage tanks at UST Facility number 00-32511. This environmental assessment (EA) will examine the proposed action, alternatives to the proposed action, and disclose potential impacts that may result from the proposed and alternative actions. The Department of Environmental Quality (DEQ) will determine the need for additional environmental review based on consideration of the criteria set forth in Administrative Rules of Montana (ARM) 17.4.608

SUMMARY OF THE PROPOSED ACTION: Costco Wholesale is proposing to install four (4) new UST systems at the new Costco Billings 2 facility for storing Unleaded and Premium fuel in three 40,000-gallon tanks and gasoline additive in a 1,500-gallon tank for their new fully attended fueling facility at the site of the new Costco Wholesale store. The proposed UST systems include:

Tank(s): This project involves installing the following four (4) double-walled tanks:

Tank #	Capacity in gallons	Substance stored
1	40,000	Unleaded
2	40,000	Unleaded
3	40,000	Premium
4	1,500	Gasoline additive

The gas tanks will be double-walled Xerxes fiberglass reinforced plastic (frp) tanks with a monitored brine filled interstitial space. The additive tank will be a double-walled fiberglass Containment Solutions Tank with a monitored brine filled interstitial space as well. These tanks will be utilized by the facility for retail fueling at their new grocery store.

Piping: All product piping associated with this facility will be double wall fiberglass piping. Approximately 2,230 feet of double wall frp piping will be utilized in these tank systems.

Sumps: Fiberglass tank-top sumps will be installed around the tanks' piping and access manways. Polyethylene containment sumps will be installed under each dispenser and transition sumps for future expansion will also be installed. These tank and piping systems will be continuously monitored. Monitoring will be accomplished via internal tank probes, interstitial tank sensors, pressurized electronic line leak detectors as well as continuous sensor monitoring in all containment sumps. A Veeder Root TLS-450 Plus Automatic Tank Gauge (ATG) will continuously monitor all operational parameters.

Tank & Piping Monitoring System: The leak detection monitoring system consists of a Veeder Root TLS-450 Plus ATG, Mag Plus series probes, VR 794380-323 liquid sump sensors, and VR 794390-303 tank interstitial brine level sensors.

PURPOSE AND BENEFIT FOR PROPOSED ACTION: DEQ's purpose in conducting this environmental review is to act upon Costco Wholesale's application to authorize the installation of the new UST systems at Facility ID 00-32511 in Billings, MT. DEQ's action on the permit application is governed by the Underground Storage Tank Installer and Inspector Licensing and Permitting Act, Section 75-11-212, et seq, Montana Code Annotated (MCA) and the Montana Underground Storage Tank Act, Section 75-11-501, MCA et seq. and administrative rules adopted under those Acts at Administrative Rule of Montana (ARM) Title 17, chapter 56.

The benefits of the proposed action include supplying retail fuel at a new grocery and warehouse store in Billings, MT.

REGULATORY RESPONSIBILITIES: In accordance with ARM 17.4.609(3)(c), DEQ must list any state, local, or federal agencies that have overlapping or additional jurisdiction or environmental review responsibility for the proposed action and the permits, licenses, and other authorizations required.

The Montana DEQ Solid Waste Section and Hazardous Materials Section has reviewed this environmental assessment. Their comments have been addressed in this document. DEQ's Asbestos Control Program, and DEQ's tribal liaison coordinator were also consulted.

One building permit has been issued to the applicant by the City of Billings, Building Codes Program in Billings, Montana for the location 3880 Zoo Drive, Billings, MT, in Yellowstone County. The Building Permit number is BP-22-02701. This building permit is for the underground storage tanks installation. Soil disturbances and storm water runoff during construction are regulated under the Montana Pollution Discharge Elimination System (MPDES) Authorization. Permit MTR109747 was issued for Storm Water Discharges associated with construction activity. Permit MTB013026 was issued for short-term water quality standard for turbidity related to construction activities.

Table 1: Proposed Action Details

Summary of Proposed Action	
General Overview	Costco Wholesale is proposing to install four new UST systems at the new Costco Warehouse facility for storing additive, Premium and Unleaded fuel at the location.
Proposed Action Disturbance & Equipment	
Total Lot Acreage	Disturbed area for the UST system installation would be around 16,000 square feet.
Tank Basin Dimensions (LxWxD)	One tank basin measuring 82' x 42' x 15' and one tank basin measuring 8' x 16' x 10'.
Piping Trench Linear Feet	900 feet trench length for the double wall non-corrodible fiberglass piping
Electrical Supply Trench Linear Feet	Approximately 1300 linear feet
Truck traffic	1 dump truck and 1 concrete truck
Other equipment	1 crane, 1 large excavator, 1 large backhoe, and 1 skid steer
Proposed Action	
Duration	**Construction Period**: The construction would last for about 8 months **Construction Hours:** Work would occur during shifts which would generally occur during daylight hours. **Operational Hours:** Hours of fuel dispensing is only during the hours of operation of the warehouse store. **Tank Operational Life:** Fiberglass double-walled tanks have an operational life that is typically ≈30 years.
Construction Equipment	- 1 large excavator - 1 large backhoe - 1 hydraulic lift dump truck - 1 concrete truck - 1 skid steer - 1 crane - Miscellaneous light vehicles (i.e., 2 ¾ ton pickups)
Location and Analysis Area	**Location**: The site address is 3880 Zoo Drive, Billings, MT (see Figure 2). The proposed project is located on the south side of Zoo Drive. The proposed project is located on Parcel C of Section 22 located in Township 1 South, Range 25 East in Yellowstone County. The legal Description is Shiloh Business Park Subd, S23, T01 S, R25 E, Block 2, Lot 9A, LT 9A BLK 2 Shiloh Business Park Sub Amd (09). (See Figure 1) **Analysis Area**: The area being analyzed as part of this environmental review includes the immediate project area (Figure 2) as well as neighboring lands surrounding the analysis area as reasonably appropriate for the impacts being considered.
Personnel Onsite	During construction, onsite personnel would vary per task, but generally would include 1-3 equipment operators and laborers. During operation, onsite personnel would consist of at least one trained Class A, B, and C operator to make sure everything operates safely and compliantly. Onsite

	personnel would be performing the Montana UST Program required monthly and annual walkthrough inspection. Since the site is a manned refueling site, a full-time onsite operator is always present.
Structures	During the UST installation project, there would be a temporary portable toilet. After UST installation, the site would be a manned retail fueling facility only open during store hours.
Project Water Source	One water wagon would be used for testing containment sumps after the UST installation is completed. After construction and installation of the UST is complete, operation of the underground fuel tanks would not use water or discharge any wastewater.
Supplemental Lighting	During the construction of the UST systems, supplemental lighting would not be anticipated. After installation, there would be area lighting associated with large retail fueling facility.
Air Quality	During the UST installation, there may be some dust suppression. After installation, the UST system includes four vertical vent standpipes and submerged fill pipes. Stage 1 vapor recovery is to be installed on all gasoline tank systems.
Water Quality	The project area lies within the Yellowstone River watershed. The proposed site would be located approximately 8,000 feet northwest (upgradient) from the Yellowstone River. Nearest surface waters include the irrigation ditches and Canyon Creek which is 2,500' south of the site. The Canyon Creek Irrigation ditch runs directly through the site. This ditch will be relocated using a 60" reinforced concrete pipe (RCP) and re-routed to the north end of the parcel (See Figure 4). Water used for containment sump testing must follow all applicable regulations, including proper disposal of spent test water. Stormwater would be managed under the Montana Pollutant Discharge Elimination System (MPDES) General Permit for Storm Water Discharges associated with construction activity. Protection of ambient water quality standards, drinking water maximum contaminant levels, and prevention of degradation of water quality is achieved through secondarily contained non-corrodible underground tanks/piping and continuous system monitoring to reduce the chance of leaks and spills to the environment. Water used for containment sump testing must follow all applicable regulations, including proper disposal of spent test water.
Solid Waste	Garbage cans and dumpsters would be used during installation to collect miscellaneous solid wastes and would be disposed of at a Montana-licensed solid waste management facility.
Hazardous Substances	Equipment fuel and lubricants would be needed on the site during the construction phase of this project. Petroleum products would be stored in vehicles in original, labeled containers and a clearly labeled slip tank for fuel. No more than 5 gallons of oil and 125 gallons of fuel would be on site at any

	time during facility construction. The Montana state licensed UST installer would be performing daily inspections on the equipment to ensure that they are in good operating condition. The construction crew would be trained in spill and overfill containment and cleanup. Spill kits and absorbent pads would be onsite at all times on each truck. No hazardous waste generators are registered at the address listed in this EA. No hazardous waste is expected to be generated during installation. Once the underground storage tanks are permitted, installed, and tested, petroleum products would be stored in double-walled continuously monitored UST systems.
UST Installation, Operation, and Monitoring Requirements	The following compliance, testing, and inspection requirements would be followed regarding this proposed UST installation project. 1. Double-walled non-corrodible continuously monitored tanks and piping systems are required for any new UST installation project. 2. An UST installation permit is required to be issued by the DEQ UST program before installation of the regulated UST systems. 3. A DEQ UST program One Time Fill Permit is issued with the UST installation permit. The One Time Fill Permit is issued only to fill the tanks for the purpose of testing the UST systems. A One Time Fill Permit is not a permit to dispense fuel or otherwise operate the UST facility. Testing must be conducted on each tank when no less than 90 percent full. 4. The UST installation permit requires numerous tank and piping test requirements including: • 0.1 gallon per hour (gph) or 0.2 gph EPA-certified tank test conducted on the tank when at least 90 percent full, • a department approved 0.1 gph or 0.2 EPA-certified ullage tank test, • PEI RP 1200 functional testing of all UST system tank and piping interstitial liquid sensors, • primary pipe installation line testing, • secondary pipe installation line testing, • PEI RP 1200 Tank Monitor setup and diagnostic testing, • Tank Monitor programming requirements for tank and piping shutdown on alarms and failed tests, • Tank Monitor programming for tank and piping leak detection, hydrostatic sump test of all containment sumps (tank top and transition sumps), • PEI RP 1200 spill bucket tightness testing of the spill containers, • PEI RP 1200 function testing of the overfill prevention devices (automatic shutoff valve, flapper valve, outside high level overfill alarm, etc.), • certification of compliance signed by the licensed installer, • signed UST installation permit, • signed One Time Fill Permit,

	• and Unique GPS coordinates at the fill pipe of these newly installed tanks. 5. When all installation permit requirements and testing mandates have been satisfied, a Conditional Operating Permit is issued. The Conditional Operating Permit requires an inspection to be completed by a State Licensed UST inspector between 90 and 120 days from the date of issuance. 6. A Full DEQ UST compliance inspection is completed, signed, and submitted by a State Licensed UST inspection to meet the requirements of the Conditional Operating Permit. 7. If the department determines that the UST owner/operator meets the requirements of the Conditional Operating Permit inspection, then the department issues a three-year UST operating permit to the owner/operator. 8. The department 30-day, annual, and three-year compliance requirements are described here: http://mtrules.org/gateway/ChapterHome.asp?Chapter=17%2E56 9. Refuse associated with the UST installation project activities would be collected, removed, and disposed of in proper disposal sites. 10. Disposal of water used for containment sump testing must follow all applicable regulations, including proper disposal of spent test water. 11. Requirements at ARM 17.56 subchapter 5 must be followed for release reporting, investigation, confirmation, abatement measures and corrective action. State statutory authority for corrective actions is found in the Montana Underground Storage Tank Act, 75-11-501, MCA, et seq.

Figure 1: Map of general location of the proposed Costco Billings 2 UST Project, FID 00-32511

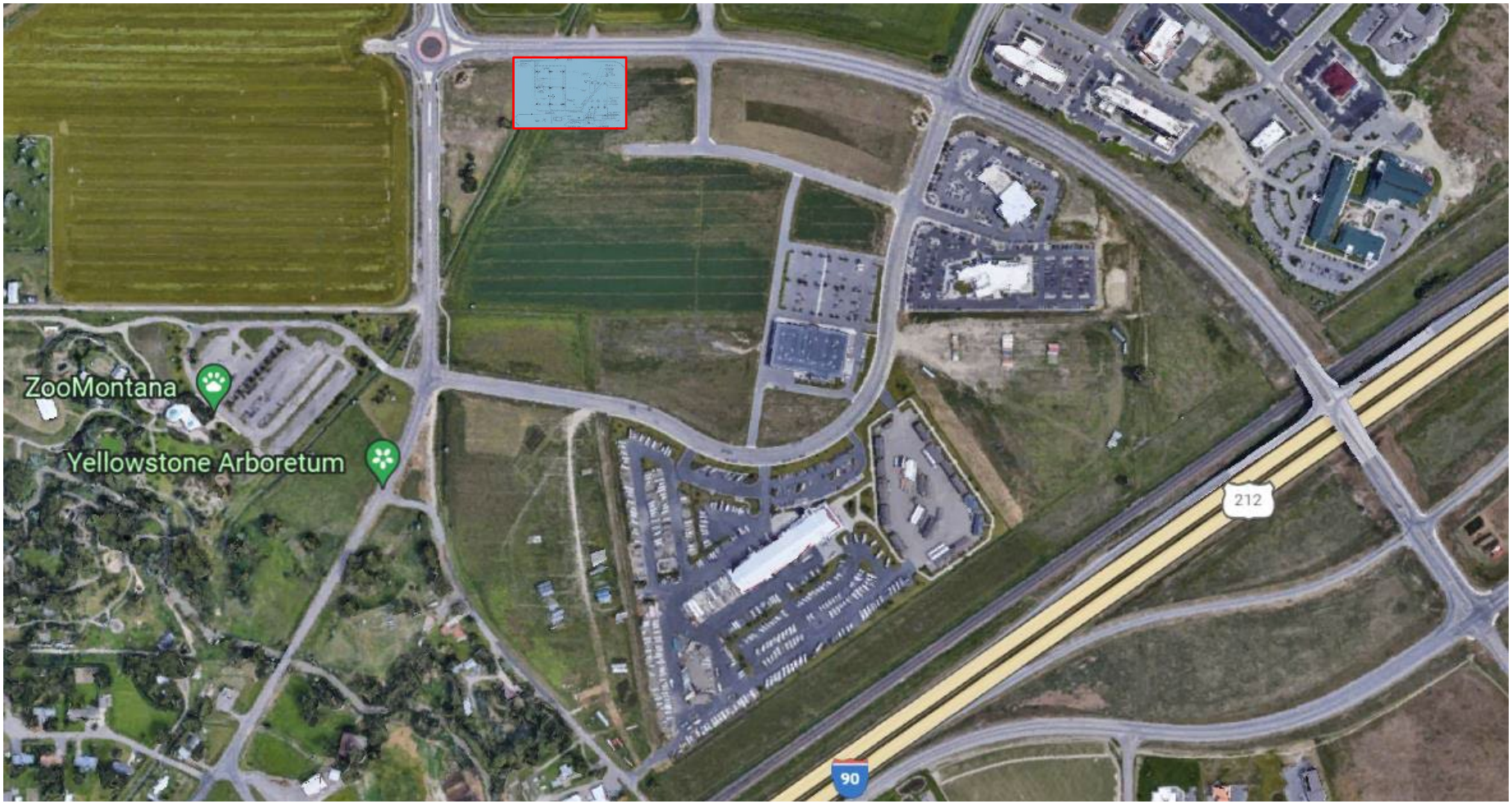


Figure 2: Proposed Project Site - Physical Address: 3880 Zoo Drive, Billings, MT FID **00-32511**

Figure 3: Proposed Costco Billings 2 Facility Site Diagram, Facility ID 00-32511

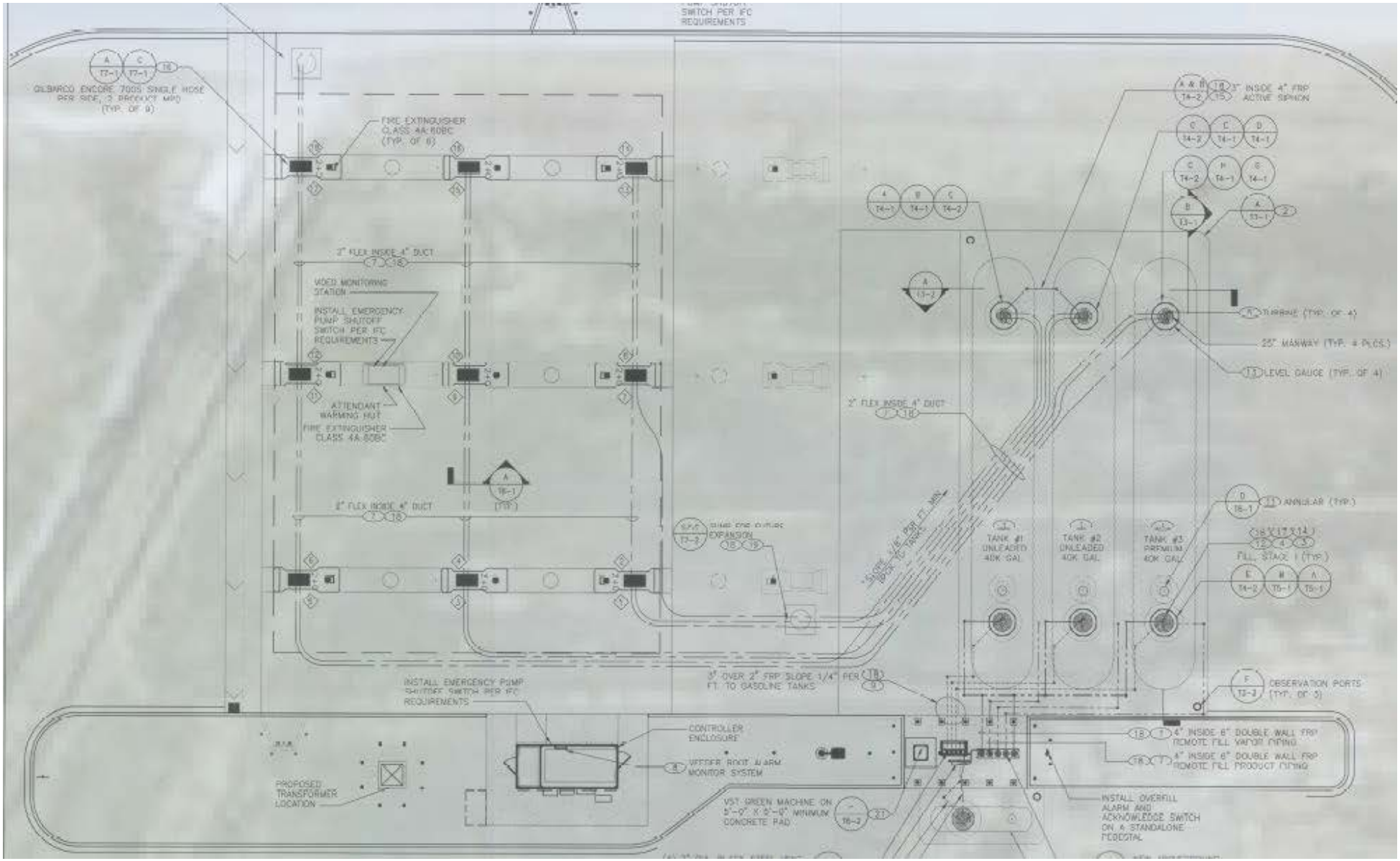
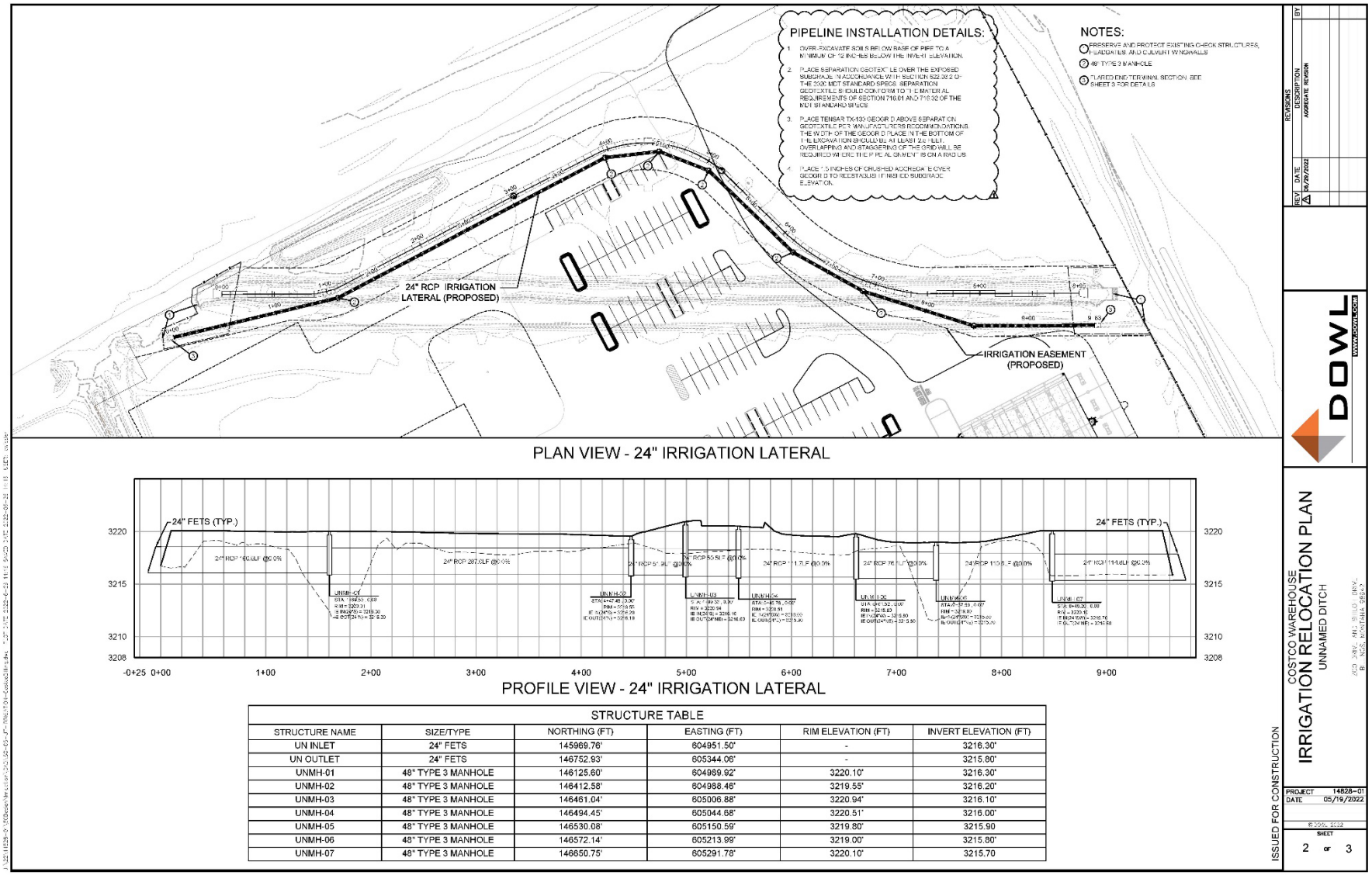


Figure 4: Proposed Costco Billings 2 Irrigation Ditch Relocation Site Diagram, Facility ID 00-32511



STRUCTURE TABLE

STRUCTURE NAME	SIZE/TYPE	NORTHING (FT)	EASTING (FT)	RIM ELEVATION (FT)	INVERT ELEVATION (FT)
UN INLET	24" FETS	145969.76'	604951.50'	-	3216.30'
UN OUTLET	24" FETS	146752.93'	605344.06'	-	3215.80'
UNMH-01	48" TYPE 3 MANHOLE	146125.60'	604989.92'	3220.10'	3216.30'
UNMH-02	48" TYPE 3 MANHOLE	146412.58'	604988.46'	3219.55'	3216.20'
UNMH-03	48" TYPE 3 MANHOLE	146461.04'	605006.88'	3220.94'	3216.10'
UNMH-04	48" TYPE 3 MANHOLE	146494.45'	605044.68'	3220.51'	3216.00'
UNMH-05	48" TYPE 3 MANHOLE	146530.08'	605150.59'	3219.80'	3215.90
UNMH-06	48" TYPE 3 MANHOLE	146572.14'	605213.99'	3219.00'	3215.80'
UNMH-07	48" TYPE 3 MANHOLE	146650.75'	605291.78'	3220.10'	3215.70

SUMMARY OF POTENTIAL IMPACTS TO THE PHYSICAL AND HUMAN ENVIRONMENT:

The impact analysis will identify whether the impacts are direct or secondary impacts. Direct impacts occur at the same time and place as the action that causes the impact. Secondary impacts are a further impact to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action (ARM 17.4.603(18)). Where impacts would occur, the impacts analysis will also estimate the duration and intensity of the impact.

The duration is quantified as follows:

- **Short-term**: Short-term impacts are defined as those impacts that would not last longer than the installation of the USTs and operation of the UST Facility.
- **Long-term**: Long-term impacts are impacts that would remain or occur following tank closure and removal.

The intensity of the impacts is measured using the following:

- **No impact**: There would be no change from current conditions.
- **Negligible**: An adverse or beneficial effect would occur but would be at the lowest levels of detection.
- **Minor**: The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- **Moderate**: The effect would be easily identifiable and would change the function or integrity of the resource.
- **Major**: The effect would alter the resource.

1. **GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:** ***Are soils present, which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?***

   There are no known fragile or unstable soils identified in the project site by the reviewer. The facility area was formerly an irrigated field. There are no unusual or unstable geologic features or special reclamation considerations in the project area according to the 2022 Montana Bureau of Mines and Geology web mapping geologic application.

   Direct Impacts:

   No unusual or unstable geologic features are present, and no fragile or particularly erosive or unstable soils are present. All topsoil would be removed from the site during the construction phase of this project. Erosion control and other limits and conditions would be accomplished using a variety of Best Management Practices (BMP) including straw berms or straw bales placed at all areas of potential runoff from operations to mitigate impacts to surface water quality from stormwater discharges associated with construction of the facility. During installation, impacts to the geology, soil quality, stability and moisture would be short-term and negligible. After

construction has been completed, the entire area is going to be paved with concrete pads over the tank basin and around the dispensers. Under ARM 17.56. subchapter 5, UST owners and operators are required to immediately report and clean up any surface spills.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No secondary impacts to the geology and soil quality, stability and moisture would be expected.

2. WATER QUALITY, QUANTITY, AND DISTRIBUTION: ***Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?***

The project area receives an average of 13 inches of precipitation annually. Important water resources are present within one mile of the proposed project. The project area lies within the Yellowstone River watershed.

The Canyon Creek Irrigation ditch runs directly through the site. This ditch will be relocated using a 60" reinforced concrete pipe (RCP) and re-routed to the north end of the parcel (See Figure 4).

Additional surface waters include an irrigation ditch located approximately 600 feet north from proposed tank basin, Canyon Creek located approximately 2500 feet south of proposed tank basin. Additional irrigation ditches are also located within 2700 feet of the area but are considered isolated by irrigation ditches mentioned above.

The new site is approximately 8000 feet west (upgradient) of the Yellowstone River. There are 16 domestic and irrigation wells downgradient from the proposed site. For the project area, approximate depth to groundwater is between 12-30 feet (GWIC Records 244315 and 274838). The nearest wells are within the project area and is GWIC Record 146647 with a static water level of 7 feet and GWIC Record 323353 with a static water level of 4 feet. If a release of petroleum fuel occurred from the underground tank and piping system, it would enter the tank basin. Depending on the quantity of a release, product could move into native soil and groundwater.

Wetlands have been identified on the banks of the Yellowstone River. Temporarily flooded wetlands are located 150 feet southeast of the project area. This is emergent freshwater wetlands. No land disturbance or work is proposed within wetland or riparian areas.

Direct Impacts:

If a release of petroleum fuel occurred from the underground tank and piping system, the release would enter the tank basin. Depending on the quantity of a release, product could move into native soil and groundwater.

Secondarily contained non-corroding underground tanks/piping and continuous system monitoring would protect ambient water quality, drinking water quality and use, and prevent

degradation of surface and ground water quality. Proper operation of this system would decrease the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, and the degradation of water quality. Secondary containment and leak detection systems serve to mitigate the potential impacts by immediately reducing the amount of fuel available for release to the environment and by making early detection of releases possible. The Facility UST systems must meet State installation standards and Montana DEQ UST program construction permit requirements and conditions. Adherence to State installation standards and permit requirements/conditions ensure that proper technology is implemented for cathodic, spill, and overfill protection.

Tank leak detection equipment would be installed at the facility. The facility would utilize tank interstitial monitoring sensors. Additional piping leak detection equipment would also be utilized, and liquid sensors would be placed in the tank top and transition sumps. If a leak occurs, the fuel pumping system automatically shuts down and cannot be energized again until the source of the leak is identified and addressed. Further, leak detection systems must meet leak rate detection standards of a probability of detection of 0.95 and a probability of false alarm of 0.05. Finally, these systems are designed and programmed to shut down on detecting leaks as small as 0.2 gallons per hour.

The applicant would install an overfill prevention valve for overfill prevention on the tank systems and use secondary containment sumps. Single wall round tank top sump would be installed around the piping accesses to the tanks. Sump boots which provide a seal around each piping and conduit penetration to the sump would be compatible with the piping and installed at each sump penetration. All sumps would be hydrostatically tested (filling it with water and pressurizing it to test for strength and leaks) according to the specific installation conditions.

Mitigation and monitoring plans reduce the likelihood of a petroleum fuel product release to the environment. Should a release occur, mitigation and monitoring plans also reduce the amount of product released to the environment. Immediate reporting, containment of any spills or overfills are required and would reduce surface and groundwater impacts. Direct impacts to surface and/or ground water are not expected. However, should a release occur, and it is not properly contained, the impacts could be long term and moderate (Table 2).

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No secondary impacts to water quality, quantity and distribution would be expected. However, should a catastrophic release of petroleum fuel product occur, and it is not properly contained, it could secondarily impact aquatic species in Canyon Creek or Yellowstone River.

3. **AIR QUALITY:** ***Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I Airshed)?***

The proposed project site is not located in a Class I Airshed. The closest Class I Airshed is located

at least 80 miles away from the project site (North Absaroka Wilderness Area) in Wyoming.

Direct Impacts:

During construction of the UST installation project, dust particulate may become airborne. However, the applicant would be required to comply with industry standard Best Management Practices for dust control. Impacts to air quality during the UST installation project, would be short-term and negligible (Table 2).

During operation of the UST system, natural air currents and tank vents would dissipate hydrocarbon vapors to a safe level. Petroleum vapors would be mitigated by natural air currents, submerged fill pipes, and properly designed vent pipes would control hydrocarbon vapors. Impacts to air quality would be long-term and minor (Table 2).

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No secondary impacts to air quality would be expected.

4. VEGETATION COVER, QUANTITY AND QUALITY: ***Will vegetative communities be significantly impacted? Are any rare plants or cover types present?***

The project site and proposed tank basin is currently an irrigated field. The location is bordered by agricultural fields to the north and west, mixed commercial/residential to the southwest, and commercial properties to the south and east. No rare plants or cover types have been reported to this reviewer. A review of the Montana Natural Heritage Program's Species of Concern did not show any rare plans or cover types in Yellowstone County. Currently the project area is in the process of construction for the new Costco warehouse store.

Direct Impacts:

Minimal vegetation is present and the site is to be paved after completion. Due to the size of the project area and the absence of rare plants and cover, impacts to vegetative cover, quantity or quality resulting from this project would be long-term and negligible (Table 2).

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No secondary impacts to vegetation cover, quantity and quality would be expected.

5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: ***Is there substantial use of the area by important wildlife, birds, or fish?***

Zoo Montana is located 2000 feet southwest of this facility. This is the closest area that contains

wildlife that could possibly be affected by the new fuel installation.

No known use of this project site by important wildlife, birds, or fish has been identified. The project site is not in the core, general, or connective sage grouse habitat areas as designated by the Montana Sage Grouse Habitat Conservation Program. The United States Fish and Wildlife Service indicates that the Rufa Red Knot (bird) is known to occur in several areas in Montana. This species is listed as Threatened. However, there is no critical habitat for this species in Montana.

Direct Impacts:

As Figures 1 and 2 depicts this Proposed action would be in a currently disturbed property in construction in the City of Billings. Any wildlife disturbance has already taken place due to the current anthropogenic impacts of the site. There is no substantial use of this area by important wildlife, bird, or fish. No impacts to important terrestrial, avian and aquatic life and habitats are expected.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts or further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No secondary impacts to terrestrial, avian, and aquatic life and habitats stimulated or induced by the direct impacts analyzed above would be expected. However, in the water quality section of this environmental assessment, it was identified that secondary impacts from a petroleum fuel release could impact downstream aquatic life.

6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: ***Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?***

The project site is not in the core, general, or connective sage grouse habitat areas as designated by the Montana Sage Grouse Habitat Conservation Program. There are no endangered species listed for Yellowstone County: There are two species listed as threatened identified in Yellowstone County. The Grizzly Bear is a federally listed threatened species identified within the county. However, no grizzly bears have been documented around the project area. The United States Fish and Wildlife Service indicates that the Rufa Red Knot (bird) is known to occur in several areas in Montana. This species is listed as Threatened. However, there is no critical habitat for this species in Montana. No other species of concern or identified habitat area are identified within a mile of the project area.

Direct Impacts:

There are no federally listed endangered species, threatened species, species of concern, or identified habitat areas within the project area. Within the one-mile analysis area, no sightings of grizzly bears or the Rufa Red Knot bird have been documented. No direct impacts to unique, endangered, fragile, or limited environmental resources are expected (see secondary impacts).

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No secondary impacts to unique, endangered, fragile, or limited environmental resources that could be stimulated or induced by the direct impacts analyzed above would be expected. However, secondary impacts from a petroleum fuel release could impact downstream aquatic life.

7. HISTORICAL AND ARCHAEOLOGICAL SITES: ***Are any historical, archaeological, or paleontological resources present?***

The National Register of Historic Places lists 44 National Historic Landmarks in the Billings area.

Ethnoscience Inc,, on the behalf of DOWL Engineering conducted a Class III cultural resource inventory for the project area to meet the Section 106 compliance requirements of the US Core of Engineers. The inventory identified one site within the current project area, the Canyon Creek Ditch, site 24YL0171 (Figure 4). The Canyon Creek Ditch (Wagers and Nichols 2022) has been previously determined ineligible for listing on the National Register of Historic Places (NRHP). This ditch is slated to be rerouted outside the project area but still within the existing parcel.

The USCOE received concurrence (Appendix A) that the project will have No Effect on Historic Properties. Should any important cultural resources be encountered during construction, DEQ and SHPO must be appropriately notified.

Direct Impacts:

With the exception listed above, there are no other known historical, archaeological, or paleontological resources present within the project area. Project area is currently an irrigated field with site preparation begun for the Costco Wholesale store, indicating a low potential for intact buried deposits. No direct impacts to historical and archaeological sites are expected.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No secondary impacts to historical and archaeological sites are expected.

8. AESTHETICS: ***Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?***

There are no prominent topographic features within the project area. The area is currently an agricultural field in Billings, MT.

Direct Impacts:

The Costco fueling facility would be visible from Zoo Drive and Shiloh Road. The Property is on the southwest end of the Billings, MT. The proposed project (installation of underground storage tank systems, and operation of storage tanks and piping) would be four underground tanks with nine dispensers and a canopy. The canopy and dispensers would be visible but is consistent with the existing character of the adjacent commercial properties. Other neighboring existing businesses include 360 Office Solutions, Pierce RV, Denny Menholt Nissan, Underriner Honda, Volvo and Hyundai, Hampton Inn and Suites, Holiday Gas Station and Car Wash, Federal Express Ground Facility, Knife River, Yellowstone Christian College, Department of Veteran Affairs, The Montana Club, Montana Rib and Chop House, The Reef Indoor Water Park, and Homewood Suites. There are several residential properties within 1000 feet of the project area. These are mostly single-family residences. The project would be visible to the surrounding populated area; however, the proposed action would be similar to the commercial nature of the surrounding area.

During the construction of the UST installation project, there would be noise associated with the operation of heavy equipment. After the project is completed, noise would be comparable to a manned fuel facility at a warehouse grocery store. The activities associated with this UST installation are analyzed in the Cumulative Impacts section of this EA (see Cumulative Impacts on Table 2).

The above ground components of the UST systems at the proposed project would be visible to the surrounding population. Due to the limited above ground components of the UST system (vent risers, canopy, and fuel dispensers), the visual impacts would be long-term and negligible (Table 2).

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No secondary impacts to area aesthetics would be expected as a result of the proposed work.

9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: *Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?*

There are no other nearby activities identified near the project area that may be unduly impacted. The neighboring land uses are mixed commercial, agricultural with residential properties located within 2000 feet of the project.

Direct Impacts:

The USTs would be installed on existing vacant land zoned VAC_U – Vacant Land - Urban. This UST installation project would not otherwise use existing environmental resources of land, water, air, or energy. This project would permit the installation of four USTs, a canopy, and a kiosk with a new warehouse store. This UST installation project would not otherwise use existing environmental resources of land, water, air, or energy. No impacts to environmental resources of land, water, air,

or energy are expected.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated or induced by, or otherwise result from a direct impact of the action. No secondary impacts to environmental resources of land, water, air, or energy would be expected.

10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: ***Are there other activities nearby that will affect the project?***

There are no other known environmental studies or projects on this land.

Direct Impacts:

Impacts on other environmental resources are not likely to occur as a result of this project.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated or induced by, or otherwise result from a direct impact of the action. No secondary impacts to other environmental resources would be expected as a result of the proposed action.

11. HUMAN HEALTH AND SAFETY: ***Will this project add to health and safety risks in the area?***

Direct Impacts:

The applicant would be required to adhere to all applicable state, federal, and county safety laws. During the construction phase of this project, there are safety risks to the UST system installation crew. Industrial work such as the work proposed by the applicant is inherently dangerous. The Occupational Safety and Health Administration (OSHA) has developed rules and guidelines to reduce the risks associated with this type of labor.

While the UST facility is in operation, it is anticipated that natural air currents and tank vents would dissipate hydrocarbon vapors to a safe level. Tank and piping leak detection equipment is designed to detect releases before serious environmental, health or safety problems occur.

Ambient water quality standards, drinking water maximum contaminant levels, and degradation of water quality would be protected by secondarily contained non-corroding underground tanks/piping with continuous system monitoring, which reduces the risk of a petroleum release into the environment.

Proper maintenance and operation of the installed leak detection systems and compliance with department UST operating requirements mitigate potential risks to human health and safety by making early detection of releases possible and by immediately reducing the amount of fuel

available to be released into the environment.

Once the UST installation project is completed, the main source of safety risk would be vehicle traffic. The activities associated with this manned fueling facility are analyzed in the Cumulative Impacts section of this EA.

As such, impacts to human health and safety would be short-term and minor.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated or induced by, or otherwise result from a direct impact of the action. No secondary impacts to human health and safety are expected as a result of the proposed project.

12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: *Will the project add to or alter these activities? Will grazing lands, irrigation waters or crop production be affected?*

This project would change the zoning of the project area which is existing vacant land zoned VAC_U – Vacant Land. It would be rezoned as Commercial-Urban. The zoning for this property will be affected. Other nearby grazing lands, irrigation waters, crop production, and industrial activity would not be affected by this project.

Direct Impacts:

A direct impact would be taking 12 acres of dry grassland out of the agricultural pool. The change in the property use is long-term with negligible impact due to the small amount of property (12 acres) changing from agricultural to commercial. It would not change the existing commercial and industrial character of the project area.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated or induced by, or otherwise result from a direct impact of the action. No secondary impacts to industrial, commercial, and agricultural activities and production would be expected as a result of the proposed project.

13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: *Will the project create, move, or eliminate jobs? If so, estimated number.*

Direct Impacts:

During the construction phase of this UST installation project, approximately 3 jobs would be

created intermittently for a period of 8 months. The project result (four underground fuel tanks, a canopy, kiosk, and nine fuel dispensers) is anticipated to create from 3 to 5 jobs and generate community and personal income in the local area. This would be in addition to the jobs created by the Costco Warehouse store being built on this same parcel.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No secondary impacts to quantity and distribution of employment are expected as a result of the proposed project.

14. LOCAL AND STATE TAX BASE AND TAX REVENUES: ***Will the project create or eliminate tax revenue?***

Direct Impacts:

The UST installation project is anticipated to generate additional local and state tax revenue. The activities associated with this UST installation are analyzed in the Cumulative Impacts section of this EA.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No detrimental secondary impacts to local and state tax base and tax revenues would be expected as a result of the proposed project.

15. DEMAND FOR GOVERNMENT SERVICES: ***Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?***

This location is currently under construction to become a Costco warehouse store and fueling facility.

An increase in law enforcement and fire protection activities (increased calls and routine patrols) in the area should not be necessary.

Direct Impacts:

The project result (three gasoline fuel tanks, an additive tank and fuel dispensers) would affect traffic to the property.

The UST installation project would add additional truck traffic to Zoo Drive. The impact would be long-term and minor. This additional truck traffic would be delivery transport trucks delivering fuel to the facility several times a week.

The project result would not increase demand for fire protection or law enforcement.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. After construction is finished, vehicle traffic will increase the risk of vehicle collisions. However, secondary impacts increasing the demand for government services will likely not occur.

16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: ***Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?***

The City of Billings/Yellowstone County Growth Policy (2016) is in effect for this area. This growth policy was reviewed, and no conflicts were noted. There are no other known local, county, state, or federal environmental management plans that would impact this project development. The proposed project and associated development are expected to be in conformance with current City of Billings, Yellowstone County, and State of Montana zoning requirements.

Direct Impacts:

DEQ is not aware of any other locally adopted environmental plans or goals that would impact this proposed project or the project area. Impacts from or to locally adopted environmental plans and goals would not be expected as a result of this project.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No secondary impacts to the locally adopted environmental plans and goals are expected as a result of the proposed project.

17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: ***Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?***

No designated recreational properties are located within or accessed through the project area.

Direct Impacts:

No impacts to the access to or quality of recreational and wilderness activities would be expected to result from the project.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No secondary impacts to access and quality of recreational and wilderness activities

would be expected as a result of the proposed project.

18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: ***Will the project add to the population and require additional housing?***

The project is located on commercial property on Zoo Drive in a commercial area in Billings, MT.

Direct Impacts:

It is not anticipated that the project (three underground fuel tanks, an additive tank, a canopy, a kiosk and nine fuel dispensers) would add to the population or require additional housing. Population in this area would not be affected. No impact to population density and housing would be expected from this UST installation project.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No secondary impacts to density and distribution of population and housing would be expected as a result of the proposed project.

19. SOCIAL STRUCTURES AND MORES: ***Is some disruption of native or traditional lifestyles or communities possible?***

The project is located on soon-to-be rezoned commercial property on the west end of Billings, MT. The project would not replace any preexisting structures and is consistent with the industrial and commercial character of development at and around the project location.

Direct Impacts:

The proposed project would occur entirely on private land owned by Costco Wholesale. No direct impacts of native or traditional lifestyles would be expected.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated or induced by, or otherwise result from a direct impact of the action. Secondary impacts to social structures and mores would not be expected as a result of the proposed project.

20. CULTURAL UNIQUENESS AND DIVERSITY: ***Will the action cause a shift in some unique quality of the area?***

The project is located on commercial property on the southwest end of Billings, MT.

Direct Impacts:

The proposed project is consistent with the existing character of the adjacent commercial and industrial properties. Other neighboring existing businesses include 360 Office Solutions, Pierce RV, Denny Menholt Nissan, Underriner Honda, Volvo and Hyundai, Hampton Inn and Suites, Holiday Gas Station and Car Wash, Federal Express Ground Facility, Knife River, Yellowstone Christian College, Department of Veteran Affairs, The Montana Club, Montana Rib and Chop House, The Reef Indoor Water Park, and Homewood Suites. There are several single-family residential properties within one mile of the project area. It is not anticipated that the action would cause a shift in the unique quality of the area.

No impacts to cultural uniqueness and diversity would be expected from this project.

Secondary Impacts:

As defined in ARM 17.4.603(18), secondary impacts are further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action. No secondary impacts to cultural uniqueness and diversity would be expected as a result of the proposed project.

21. PRIVATE PROPERTY IMPACTS:

Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required. Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required. Does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize, or eliminate the restriction on the use of private property, and analyze such alternatives.

The proposed project would take place on private land owned by the applicant. DEQ's approval of the UST installation project may affect the use of real property by the applicant and by nearby private landowners. DEQ has determined, however, that the license conditions are reasonably necessary to ensure compliance with applicable requirements under the Montana Underground Storage Tank Act, which will minimize risk of petroleum impacts on neighboring properties, and compliance with UST requirements has been agreed to by the applicant. Therefore, DEQ's approval of the proposed action would not have private property-taking or damaging implications.

22. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Due to the nature of the proposed activities, no further direct or secondary impacts would be anticipated from this project.

ALTERNATIVES CONSIDERED:

In addition to the proposed action, DEQ also considered the "no action" alternative. The "no action" alternative would deny the approval of the proposed action. The applicant would lack the authority to install the UST system on their private land. The no action alternative forms the baseline from which the impacts of the proposed action can be measured.

If the applicant demonstrates compliance with all applicable rules and regulations as required for approval, the "no action" alternative would not be appropriate. Pursuant to § 75-1-201(4), MCA, DEQ "may not withhold, deny, or impose conditions on any permit or other authority to act based on" an environmental assessment.

CUMULATIVE IMPACTS:

Cumulative impacts are the collective impacts on the human environment within the borders of Montana of the Proposed Action when considered in conjunction with other past and present actions related to the Proposed Action by location and generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through preimpact statement studies, separate impact statement evaluation, or permit processing procedures.

This environmental review analyzes the proposed project submitted by the applicant. In addition to the proposed action, the applicant has obtained an electrical permit for the construction of the new underground storage tank facility. The activities associated with these tank systems are described below.

The proposed project is located on the south side of Zoo Drive located on Lot 9A of Section 23 located in Township 01 South, Range 25 East in Yellowstone County. The proposed project is located at the address of 3800 Zoo Drive, Billings, Montana. The project area is currently under construction to become a Costco store and fueling facility.

No other FWP, DNRC, BLM, or USFS regulated projects were identified within one mile of the proposed project.

DEQ considered all impacts related to this project and secondary impacts that may result. Cumulative impacts related to this project are identified in the Table 2. Cumulative impacts related to this project would not be significant.

PUBLIC INVOLVEMENT:

DEQ published a Draft EA on Montana DEQ's website and provide a 10-day public comment period. A copy of this Environmental Assessment has been posted on our website at Public Participation & Engagement at DEQ, MEPA at Montana DEQ (mt.gov), and Open Public Comment Periods at Montana DEQ (mt.gov). The public was invited to provide public comment on the Draft EA.

Internal scoping consisted of internal review of the environmental assessment document by DEQ staff. Scoping efforts also included queries to the following websites/ databases/ personnel:

- Montana State Historic Preservation Office
- City of Billings, MT
- Yellowstone County
- Montana Sage Grouse Habitat Conservation Program
- Montana Fish, Wildlife, and Parks
- Montana Department of Environmental Quality
- US Geological Society - Stream Stats
- Montana Natural Heritage Program
- Montana Cadastral Mapping Program
- Montana Groundwater Information Center
- Montana Bureau of Mines and Geology
- United States Environmental Protection Agency
- EPA's Environmental Justice Screening and Mapping Tool
- United States Department of Fish and Wildlife Service
- United States Army Corps of Engineers
- Google Maps and Google Earth
- DOWL Engineering Cultural Resource Inventory

OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION:

The proposed project would be fully located on private land owned by Costco Wholesale. All applicable state and federal rules must be adhered to, which may also include other local, state, federal, or tribal agency jurisdiction.

NEED FOR FURTHER ANALYSIS AND SIGNIFICANCE OF POTENTIAL IMPACTS

When determining whether the preparation of an environmental impact statement is needed, DEQ is required to consider the seven significance criteria set forth in the Administrative Rules of Montana (ARM) 17.4.608, which are as follows:

1. The severity, duration, geographic extent, and frequency of the occurrence of the impact;
   "Severity" is analyzed as the density of the potential impact while "extent" is described as the area where the impact is likely to occur. An example could be that a project may propagate ten noxious weeds on a surface area of 1 square foot. In this case, the impact may be a high severity over a low extent. If those ten noxious weeds were located over ten acres there may be a low severity over a larger extent.
   "Duration" is analyzed as the time period in which the impact may occur while "frequency" is how often the impact may occur. For example, an operation that occurs throughout the night may have impacts associated with lighting that occur every night (frequency) over the course of the one season project (duration).
2. The probability that the impact will occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;
3. Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;
4. The quantity and quality of each environmental resource or value that would be affected,

including the uniqueness and fragility of those resources and values;

5. The importance to the state and to society of each environmental resource or value that would be affected;
6. Any precedent that would be set as a result of an impact of the proposed action that would commit the department to future actions with significant impacts or a decision in principle about such future actions; and
7. Potential conflict with local, state, or federal laws, requirements, or formal plans.

Table 2: Summary of Potential Impacts.

Potential Impact	Affected Resource	Severity[1], Extent[2], Duration[3], Frequency[4], Uniqueness and Fragility (U/F)	Probability[5] impact will occur	Cumulative Impacts	Measures to reduce impact as proposed by applicant	Significance (yes/no)
Topsoil Removal and Erosion	1.) Geology	**S**-low: Of the 12.3 acres on this property, approximately 16,000 square feet would be disturbed by the UST system, which could be susceptible to erosion during construction. However, the rest of the property has already begun construction for the store, utilities, and parking lots. **E**-low: Total surface disturbance for the UST system would be under 20,000 square feet. **D**-Construction/Installation is expected to last approximately 8 months where soil disturbance may cause a potential impact. **F**-During occasional storm events.	Probable	Soil disturbance and possible erosion would add to cumulative impacts associated with construction of the underground storage tank system in the proposed project area.	Erosion control would be accomplished using a variety of Best Management Practices (BMP), implemented under an MPDES Permit for Storm Water discharges associated with construction activity, including straw berms or straw bales placed at all areas of potential runoff from operations.	No
Fuel Release	2.) Water Quality	**S**-low: Tank and piping design, continuous monitoring systems, and DEQ mandated shutdown requirements limit the severity of a potential major fuel spill occurrence. **E**-low: Depth to groundwater at the site is between 12-30 feet and distance to the Yellowstone River is 8,000 feet southeasterly. Distance to Canyon Creek is 2,500 feet south of the site. Tank and piping design, continuous monitoring systems, and DEQ mandated shutdown requirements limit the geographic extent of a potential major fuel spill occurrence. **D**-Construction/Installation is expected to last approximately 8 months. The expected operational life of the underground tank is approximately 30 years. **F**-The probability of a large fuel release that would impact water quality is low.	Possible	The underground fuel tanks in the proposed project area may have a cumulative impact on water quality and stormwater drainage from smaller spills which can occur during filling, maintenance, and testing. Due to operator error, fuel transport truck overfills may also occur.	Proper operation of this system would significantly decrease the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, and the degradation of water quality. Secondary containment and leak detection systems serve to mitigate the potential impacts by immediately reducing the amount of fuel available for release to the environment and by making early detection of releases possible. The applicant would install overfill prevention valves for overfill prevention on the tank systems and use secondary containment sumps. Single wall round tank containment sump would be installed around at the tank top to allow connection of the double-walled piping. Sump boots would also be installed at each sump penetration that are compatible with the piping and conduit. All sumps would be hydrostatically tested for tightness according to the specific installation requirements and permit conditions. After installation, they will be tested every three years to determine tightness.	No
Dust, equipment exhaust, and petroleum vapor	3.) Air Quality	**S**-moderate: Dust and other particulate would be generated during construction. Engines would produce some exhaust fumes. During operation, petroleum vapors will be released through vertical vents above the canopy at a low and safe level. **E**-low: During construction, dust and exhaust fumes would be generated in proximity of moving/working equipment. During operation, petroleum vapors will dissipate with the natural air currents through vertical vent standpipes. Stage 1 vapor recovery equipment is to be installed on the gasoline systems to decrease the amount of petroleum vapor released to the environment. **D**- Construction/Installation is expected to last approximately 8 months where dust and equipment exhaust may cause a potential impact. The expected operational life of the underground tank is approximately 30 years. **F**-Daily	Certain	Dust and exhaust would add to the cumulative impacts from other vehicles/engines operating in the area.	During operation, petroleum vapors will dissipate with the natural air currents through a vertical vent standpipe. The site would need to comply with any local dust control plans. This would include complying with industry standard Best Management Practices.	No
Removal of Vegetation	4.) Vegetation	**S**-low: The project area is currently a grassy field where construction has begun for the store and parking lots. **E**-low: Approximately 16,000 square feet of ground would be impacted by removal of surface cover for the project. This is currently grass and weeds. **D**- Construction/Installation is expected to last approximately 8 months where dust and equipment exhaust may cause a potential impact on the vegetation. The expected operational life of the underground tank is approximately 30 years. **F**-Daily	Certain	Little vegetation is currently onsite. Removal of the vegetation would have no cumulative impact with the surrounding commercial and residential area.	None proposed	No
Visual, Noise, Odor	8.) Aesthetics	**S**-low: There are no prominent topographic features within the project area. The project will be visible to the surrounding populated area; however, the project area is not considered scenic. **E**-low: Total surface disturbance for the fueling systems is approximately 16,000 square feet. After construction, the only visible features would be the canopy, kiosk, and dispensers. Construction noise would be present during installation. After construction, the proposed project itself produces no noise. During operation, fuel vapors will be emitted at a minimum of 12' aboveground will dissipate with air currents. Noise will be commensurate with a busy refueling facility. **D**- Construction/Installation is expected to last approximately 8 months where dust and equipment exhaust may cause a potential impact. The expected operational life of the underground tank is approximately 30 years. **F**-Daily	Certain	Impacts to area aesthetics as a result of this project would add to the cumulative impacts associated with the surrounding commercial and residential area.	During operation, petroleum vapors will dissipate with the natural air currents through vertical vent standpipes above the canopy. The tanks and all the associated product piping will be buried underground, while appurtenant equipment is above ground. The general topography will not change. Surface features will be consistent with buried underground fuel tanks with a canopy , kiosk, and nine dispensers.	No

Traffic and Vapor	11.) Human Health and Safety	**S** -low: During construction of the UST system, a temporary increase in traffic would be added to existing roads creating a potential for traffic accidents. Once installed, natural air currents and tank vents will dissipate hydrocarbon vapors to a safe level. Tank and piping leak detection equipment is designed to detect releases before serious health or safety problems occur. **E** - moderate: Construction equipment would be hauled in and off site and not enter the roadway. Minimal traffic increases would be due to highway vehicles carrying construction crews, supplies and equipment. After completion, ingress and egress from the property would increase the traffic on Shiloh Road and Zoo Drive. **D** - Construction/Installation is expected to last approximately 8 months. **F**- Daylight hours during construction and minimal once operational.	Certain	Once the UST installation project is completed, the main source of safety risk would be during the fueling of the tanks by fuel transports and vehicular ingress and egress from the property.	Proper operation of this leak detection systems and department UST operating requirements mitigate potential risks to human health and safety by making early detection of releases possible and by immediately reducing the amount of fuel and vapors available to be released into the environment.	No
Land Use Change	12.) Industrial, Commercial and Agricultural Activities and Production:	**S** -low: This project will change the zoning of part of the project area. It is currently zoned Vacant Land – Urban due to it being a non-producing farm field within the city limits of Billings. It will be changed to commercial in an already developed commercial/residential area. **E** - low: There will be a land use change for this parcel. **D** - Land use changes are controlled by local zoning laws. **F**- Continuous after the change of zoning occurs.	Certain	Zoning will be changed from Vacant Land - Urban to commercial. There would be no cumulative impacts to industrial or agricultural activities or production.	None Proposed	No
Law Enforcement and Fire Protection	15.) Demand for Government Services	**S** -low: During construction of the UST systems, a temporary increase in traffic would be added to existing roads creating a potential for traffic accidents. **E** - low: Construction equipment would be hauled in and off site. Traffic increases would be due to highway vehicles carrying construction crews and equipment. After the project is completed, refueling traffic will be high during business hours due to the popularity of Costco fuels. **D** - Construction/Installation is expected to last approximately 8 months. **F**- Continuous during and after construction.	Certain	The project result (four underground fuel tanks, a canopy and nine fuel dispensers) would affect traffic entering and exiting the facility off of Shiloh Road and Zoo Drive. An increase in law enforcement and fire protection activities (increased calls and routine patrols) in the area may be necessary.	None Proposed	No

1. Severity describes the density at which the impact may occur. Levels used are low, medium, high.
2. Extent describes the land area over which the impact may occur. Levels used are small, medium, and large.
3. Duration describes the time period over which the impact may occur. Descriptors used are discrete time increments (day, month, year, and season).
4. Frequency describes how often the impact may occur.
5. Probability describes how likely it is that the impact may occur without mitigation. Levels used are: Impossible, Unlikely, Possible, Probable, Certain

SIGNIFICANCE DETERMINATION

The severity, duration, geographic extent, and frequency of the occurrence of the impacts associated with the proposed state action would be limited. Costco Wholesale is proposing to install four new UST systems at the Costco Billings 2 facility for storing gas and gasoline additive for their new manned fueling facility.

DEQ has not identified any significant impacts associated with the proposed installation and operation for any environmental resource. Approving the Costco Billings 2 installation and operation does not set precedent that commits DEQ to future actions with significant impacts or a decision in principle about such future actions. If the applicant submits another license application, DEQ is not committed to issue those authorizations. DEQ would conduct another environmental review for any subsequent authorizations sought by the applicant. DEQ would then make a decision based on the criteria set forth in the Underground Storage Tank Installer and Inspector Licensing and Permitting Act, Section 75-11-212, et seq, Montana Code Annotated (MCA) and the Montana Underground Storage Tank Act, Section 75-11-501, MCA et seq. and administrative rules adopted under those Acts at Administrative Rule of Montana (ARM) Title 17, chapter 56.

Approving permit number 23-0154 and issuing an operating permit allowing installation and operation of the underground storage tanks at UST Facility number 00-32511 does not set a precedent for DEQ's review of other applications, including the level of environmental review. The level of environmental review decision is made based on a case-specific consideration of the criteria set forth in ARM 17.4.608.

DEQ does not believe that the proposed state action has any growth-inducing or growth-inhibiting aspects or is in conflict with any local, state, or federal laws, requirements, or formal plans. Based on a consideration of the criteria set forth in ARM 17.4.608, the proposed state action is not predicted to significantly impact the quality of the human environment. Therefore, at this time, preparation of an environmental assessment is determined to be the appropriate level of environmental review under the Montana Environmental Protection Act.

Environmental Assessment and Significance Determination Prepared By:

Brett Smith,
Environmental Science Specialist - Underground Storage Tank Section
Tanks, Brownfields, and Federal Facilities Bureau

Big Sky. Big Land. Big History.
Montana
Historical Society

Historic Preservation
Museum
Outreach & Interpretation
Publications
Research Center

September 15, 2022

Sage Joyce
Corps of Engineers, Helena Office
100 Neill Avenue
Helena, MT 59601-3329

Re: Costco Wholesale, Billings, NWO-2021-01741-MT

Dear Ms. Joyce,

Thank you for your letter (received September 13, 2022) regarding the Costco project in Billings. We concur with your determination of No Effect on Historic Properties.

Please note that our concurrence does not substitute for a good faith effort to consult with interested parties, local government authorities, and American Indian tribes. If you receive a comment that substantially relates to a historic property located within or adjacent to the Area of Potential Effect, please submit it to our office for review. Include documentation of how the comment was addressed. If you have any questions or concerns, do not hesitate to contact me at (406) 444-7719 or Laura.Evilsizer@MT.gov. Thank you for consulting with us.

Sincerely,

Laura Evilsizer

Laura Evilsizer, M.A.
Compliance Officer, Deputy SHPO
Montana State Historic Preservation Office

225 North Roberts Street
P.O. Box 201201
Helena, MT 59620-1201
(406) 444-2694
(406) 444-2696 FAX
montanahistoricalsociety.org

FILE: COE – 2022 - 2022091305

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
HELENA REGULATORY OFFICE
100 NEILL AVENUE
HELENA, MONTANA 59601-3329

September 12, 2022

SUBJECT: Costco Wholesale Corporation; USACE File No.NWO-2021-01741-MT

Laura Evilsizer
Montana State Historic Preservation Office
PO Box 201202
Helena, Montana 59620-1201

Dear Ms. Evilsizer:

In accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, the U.S. Army Corps of Engineers (USACE), as the lead Federal Agency, requests your review and comments on the determination of eligibility and effect that issuing a permit (Undertaking) would have on cultural resources within the Area of Potential Effects (APE) for the Costco Wholesale Corporation project. The approximately 23.12-acre project area is located on Canyon Creek Ditch, at Latitude 45.73466°, Longitude -108.615418°, in Section 23, Township 1 S, Range 25 E, Billings, Yellowstone County, Montana.

Project Description / Proposed Action

The proposed project consists of developing the 23.12-acre parcel to include a new Costco Wholesale warehouse, parking lot, and fuel station. To accommodate the new commercial development, Canyon Creek Ditch will be placed in a new 60-inch reinforced concrete pipe (RCP) on a new alignment that follows the western margins of the project site. The alignment will require a new 50-foot-wide canal easement. In addition, the Canyon Creek Ditch Service Lateral will be placed in a new 24-inch RCP parallel to the 60-inch RCP. A new connection will be constructed for the piped lateral to service the property north of Zoo Drive. Once the ditch and lateral are piped, fill will be placed within the existing aquatic features.

The project would affect waters of the United States (U.S.), therefore, John Ellingsen, on behalf of Costco Wholesale Corporation (Applicant), is seeking authorization from USACE under Section 404 of the Clean Water Act (CWA). USACE is reviewing a Nationwide Permit pre-construction notification (PCN) for the proposed project.

Permit Area / Area of Potential Effects (APE)

Pursuant to USACE regulations at 33 CFR 325 (Appendix C 1(f)), the term "Undertaking" means the work, structure or discharge that requires a Department of the Army permit. The "permit area" is defined as those areas comprising the waters of the U.S. that will be directly affected by the proposed work or structures and uplands directly affected as a result of authorizing the work or structures (33 CFR 325, Appendix C 1(g)). Activities undertaken outside the waters of the United States must meet all three requirements set out in subparagraph 1.g.(1)(i)-(iii). Under the aforementioned regulations, we have identified our permit area/area of potential effects as an approximately 2.5-acre area as described in the project location description and as outlined in the enclosed map.

Results of Cultural Resource Review

A Cultural Resource Inventory and Assessment was completed by Scott Wagers and Sarah Nichols with Ethnoscience, a private cultural resource consultant, on January 14, 2022. The cultural resources survey included a records search and a pedestrian survey throughout the APE. A total of one cultural resource was found within the APE, the previously documented Canyon Creek Ditch, site 24VL0171. The ditch crosses the northwest corner of the study area. Approximately 920 feet of the ditch lies within the project area. The ditch measures approximately 12 feet across and approximately 10 feet deep.

We have reviewed the survey and found that the background research, field methods, and reporting are sufficient to support the findings and recommendations. The documentation is attached for your review.

We have concluded that the following cultural resource does not meet the Criteria for inclusion in the National Register of Historic Places (NRHP).

Canyon Creek Ditch (24YL0171):
Construction of the ditch began in 1883 and was in service by 1886. Portions of the ditch system were modified during the 1920s. Research did not indicate this particular ditch was associated with events, people, or patterns of development important in local, regional, or national history (Criteria A and B). Although irrigation ditches have been used for centuries as an agriculture method, the Canyon Creek ditch lacks distinctive characteristics of a type, period, or method of construction from other irrigation ditches constructed throughout history (Criteria C). By 1942 the Canyon Creek Ditch provided irrigation water to 7,013.35 acres, and of this amount, 3,060 acres were within T1S R25E. A review of the water right claims for T1S R25E found that by 2021 all the water right claims to the Canyon Creek Ditch active in 1942 have been severed. The only active water right claims found were for ground wells or diverting water from the nearby Hogan's Slough. It is unlikely to yield information important to the understanding of

history or prehistory (Criterion D). Therefore, 24YL0171 is recommended not individually eligible for listing in the NRHP.

Project Alternatives

Two alternatives were considered for the proposed project. These alternatives included maintaining Canyon Creek Ditch as an open ditch on a new alignment and piping the existing ditch on a new alignment. Following initial discussions with Canyon Creek Ditch Company Board Members, it was determined that an open ditch system on a new alignment was not ideal. Irrigation maintenance of the open ditch includes burning overgrown vegetation, which may bring smoke across the new Costco Site. An open channel along the western boundary of the site also presents safety concerns. For these reasons, piping the existing Canyon Creek Ditch segment, along with the adjacent lateral, was determined to be the preferred alternative. To avoid flowing under the warehouse loading area and new parking lot, the piped waterways will need to be re-routed. The preferred pipeline alignment is designed to minimize hydraulic losses.

Determination of Effect

We have determined that issuing a permit would have **no effect on historic** properties. Site 24YL0171 was previously determined not eligible for NRHP listing under Criteria A, B, C and D. The current investigation supports this determination.

In an effort to protect historical and/or archaeological resources within our federal control, we request your review and comment on our determinations of both eligibility and effect for resources within the USACE Permit Area. Digital copies of the APE Map, cultural report, CRIS form, CRAB form, Permit Application, and GIS Shapefiles have been transferred to you through the state file transfer system. Please provide us with your response by October 12, 2022.

Please refer to identification number NWO-2021-01741-MT in any correspondence concerning this project. If you have any questions, please contact Colten Shimer, Project Manager, by email at *colten.d.shimer@usace.army.mil*, or telephone at 208-476-1274 or Jennifer Winter, USACE Regulatory Archaeologist, by email at Jennifer.R.Winter@usace.army.mil or by phone at (605) 945-3389.

Sincerely,

Sage L. Joyce

Sage L. Joyce
Chief, Montana Regulatory Program

5 Enclosures
1. APE Map
2. Cultural Resources Report
3. CRIS Form(s) / Historic Property Record(s)
4. CRABS Form
5. Permit Application
6. GIS Shapefiles (sent via State File Transfer on Sept 12, 2022

cc: (w/o encls)

John Ellingsen, Costco Wholesale Corporation, 999 Lake Drive, Issaquah, Washington 98027, *jellingsen@costco.com*

Emily Peterson, DOWL Engineering, 5000 Meadows Road, Lake Oswego, Oregon 97035, *epeterson@dowl.com*