NORTH DAKOTA PUBLIC SERVICE COMMISSION

# Application for Route Permit

## Magellan Midstream Partners, L.P.
## Fargo Relocation Project

**Prepared by E3 Environmental, LLC**

**February 2012**

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**INTRODUCTION**

The proposed Fargo Relocation Project (Project) is a relocation of approximately 2,300 feet of two existing co-located pipelines. The Alex to Grand #1-6 inch (AG1) and the Alex to Fargo #2-8-inch (AF2) refined petroleum product pipelines, owned by Magellan Pipeline Company, L.P. (Magellan), must be moved to accommodate a North Dakota Department of Transportation (DOT) roadway expansion project over the existing lines. The Project is located entirely within the city limits of West Fargo, Cass County, North Dakota.

Magellan is submitting to the North Dakota Public Service Commission (Commission) a single consolidated application for a Certificate of Corridor Compatibility and Route Permit for the Project.

The application provides the requisite information as stipulated by:

- North Dakota Century Code, Energy Conversion and Transmission Facility Siting Act, Chapter 49-22-08; and
- North Dakota Administrative Code, Chapter 69-06-05, Transmission Facility Permit.

The information presented in this application is organized according to the format prescribed in the Commission's Application Guidelines for an Application for a Route Permit, which divides the information into the following categories:

- SECTION 1: Type, Size and Design
- SECTION 2: Route Analysis and Findings
- SECTION 3: Evaluation of the Proposed Route in Regard to Applicable Considerations in Section 49-22-09 and Criteria Established in Section 49-22-05.1
- SECTION 4: Mitigative Measures
- SECTION 5: Description of Right-of-Way Preparation and Reclamation Procedures
- SECTION 6: Utility's Easement Acquisition, Landowner Notification, and Easement Compensation Plan
- SECTION 7: List of Preparers

## SECTION 1: TYPE, SIZE AND DESIGN

### 1.1 TYPE

The Project consists of the relocation of two existing pipelines, the AG1 and AF2 transmission pipelines, which are designed to ship refined petroleum products.

The project will result in the abandonment of approximately 1,869 feet of existing AG1 and AF2 piping. Where practicable and with consideration of the construction impacts to individual land and business owners, Magellan shall remove and dispose select portions of the pipeline segment to be abandoned. This will result in the removal of approximately 494 feet of AG1 and 127 feet of AF2 with balance to be abandoned in situ

### 1.2 APPROXIMATE LENGTH OF FACILITY

The proposed relocation is approximately 2,300 feet in total length, all of which will be located in the city of West Fargo, North Dakota.

### 1.3 SIZE AND DESIGN OF PIPELINE FACILITY

The Project involves the relocation of transmission pipelines. The steel pipeline will meet U.S. Department of Transportation (USDOT) regulations, specifically the design, installation, pressure testing, operations and maintenance requirements as outlined in 49 CFR Part 195.

#### 1.3.1 PIPE SIZE

Magellan will construct the re-route of steel pipe which shall, at a minimum, meet the following standards.

AG1:

- 6 ⅝-inch outside diameter;
- 0.280-inch wall thickness;
    - 0.344-inch wall thickness (road crossings);
- API 5L PSL 2 X52.

AF2:

- 8 ⅝ -inch outside diameter;
- 0.322-inch wall thickness;
    - 0.344-inch wall thickness (road crossings);
- API 5L PSL 2 X52.

#### 1.3.2 MAXIMUM DESIGN OF OPERATING PRESSURE, FLOW RATE AND TEMPERATURE

The Project pipeline has been designed with the maximum design parameters listed below:

- Maximum Operating Pressure: 1440 pounds per square inch gauge (psig);
- Maximum Flow Rate, AG1: 11,040 barrels per day (bpd);
- Maximum Flow Rate, AF2: 17,400 barrels per day (bpd);
- Maximum Operating Temperature: 120ºF;
- Normal Operating Conditions, AG1: 60º F at 950 psig;
- Normal Operating Conditions, AF2: 60º F at 1100 psig.

## 1.4 ABOVEGROUND FACILITIES

No above ground facilities are directly related to this project.

## 1.5 WIDTH OF RIGHT-OF-WAY

- Typical Construction Right-of-Way (ROW) Width:
  - 75-feet wide typical
- US Highway 10/Main Street East crossing (horizontal directional drill)
  - South workspace
    - 75-feet wide by 75-feet long
  - North workspace
    - 75-feet wide by 75-feet long
    - 415 feet of temporary storage for pipe for HDD
- Permanent ROW Width:
  - 50-feet wide

## 1.6 LOCATION

The proposed relocation is approximately 2,300 feet in total length, which will be located entirely within the city limits of West Fargo, Cass County, North Dakota.

## 1.7 PROJECT SCHEDULE

### 1.7.1 ROUTE PERMIT

Magellan is seeking a Route Permit in or before March 2012.

### 1.7.2 CERTIFICATE OF CORRIDOR COMPATIBILITY

Magellan is submitting the application for a Certificate of Corridor Compatibility in February 2012 which has been included with this application for Route Permit. The two applications have been combined to form this Consolidated Application. Magellan is seeking a Certificate of Corridor Compatibility in or before March 2012.

### 1.7.3 CONSTRUCTION SCHEDULE

Magellan plans to commence construction in early March 2012, with an in-service date by July 31, 2012. Restoration and commissioning activities will commence immediately after construction. Magellan, in coordination with ND DOT, has developed this schedule to accommodate the larger efforts necessary to accommodate the road reconstruction and improvements. Coordination of utility relocations in advance of the road work is a key element in this process.

## SECTION 2: ROUTE ANALYSIS AND FINDINGS

### 2.1 PIPELINE ROUTE

The proposed Route was developed based upon a thorough analysis of the proposed Corridor (a 1-mile wide corridor centered upon the proposed Route, *i.e.*, one-half mile on either side of the proposed Route), as discussed in the application for a Certificate of Corridor Compatibility. This broad-based analysis confirmed that the proposed pipeline Corridor was suitable and that it would cause minimal environmental impacts, thus conforming to the Commission's siting criteria.

Once the Corridor was established, Magellan studied routing alternatives and developed the proposed pipeline alignment (Route), which satisfies the Project's objectives while also conforming to the Commission's siting requirements for a transmission route. In support of Magellan's Route selection, the analytical studies from the Corridor were refined and augmented with field studies. Natural resource field studies were conducted along the entire length of the Project by a certified wildlife biologist. The environmental survey corridor was a 250-foot wide corridor centered upon the proposed pipeline Route. The purpose of these field studies was to inventory any potential resource issues (*e.g.*, wetlands, waterbodies, protected species or critical habitats) that may intersect the proposed pipeline alignment and to collect the baseline field data necessary to prescribe alternative routing or mitigation to minimize environmental impacts. The results of these field surveys are discussed in the following sections. A full Natural Resources and Wetland Determination Report (Natural Resource Survey Report) is provided in Appendix D, and the Class I Cultural Resource Inventory Report is provided in Appendix E.

### 2.2 ENVIRONMENTAL SURVEY

All field surveys were conducted based upon a minimum 250-foot wide survey corridor, centered upon the proposed pipeline Route. The surveys conducted for the Project covered the entire construction right-of-way, as well as temporary extra workspace.

#### 2.2.1 TREE/SAPLING/SHRUB SURVEY

The survey of the Route was conducted on January 7, 2012. The natural resource surveys included a tree/shrub inventory. This inventory recorded the pre-construction status of this resource and shall form a baseline for restoration and mitigation reconciliation. The inventory found that no trees, saplings, or shrubs would be impacted by the Project. Please see Appendix D for the complete survey report.

#### 2.2.2 WETLAND AND WATERBODIES SURVEY

The proposed alignment was inventoried for wetland and waterbody features. Protocol dictated that relevant features be identified, characterized as wetland or waterbody, and feature boundaries recorded relative to the proposed centerline.

#### 2.2.2.1 WETLAND SURVEY

The natural resource survey performed on January 7, 2012 concluded that no wetlands were present within the survey corridor. Please see Appendix D for a copy of the Natural Resources Report.

#### 2.2.2.2 WATERBODIES SURVEY

The natural resource survey performed on January 7, 2012 found no streams, ponds or creeks present within the survey corridor. The survey identified a large, man-made storm water retention pond located to the south of the construction corridor east of 17th street.

Please see Appendix B for Project maps and Appendix D for a copy of the Natural Resources Report.

### 2.2.3 WILDLIFE INVENTORY

The proposed alignment was inventoried for sensitive species and their critical habitat. The Project area is comprised primarily of urbanized land including residential, commercial and industrial development. No threatened or endangered species were observed by field biologists. Please see Appendix D for a copy of the Natural Resources Report.

#### 2.2.3.1 FEDERALLY PROTECTED SPECIES SURVEY

Under the authority of the Endangered Species Act (ESA), the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's (NOAA) Fisheries Service have identified and maintain a list of species and critical habitats that have been afforded protection under the ESA. The ESA has also established a program for the conservation of threatened and endangered plants and animals and the habitats in which they live. A field survey was conducted for federally listed species and their habitats. No federally listed species or their critical habitats were identified by the survey in the Project area.

Consultations were initiated with the USFWS on January 12, 2012, and a response from the USFWS is pending. Magellan will coordinate, as necessary, with the USFWS to address the agency's concerns, if any.

**Whooping crane and gray wolf:** E3 has reviewed the available data describing the natural history, habitat requirements and conservation measures associated with these species to evaluate the potential effects of the projects on these resources.

The project area is located in an urban area located within the city limits of West Fargo, North Dakota. This region has developed steadily over the last half century through the construction of industrial, residential and retail areas, along with the roads and highways that connect the greater Fargo metro area. As such, the project area offers little or no natural habitat for either of the species listed above. For this reason, we believe the pipeline relocation will have no effect on either the whooping crane or the gray wolf.

**Bald and Golden Eagles:** A line-of-sight field survey was performed, canvassing a 0.5 mile corridor for raptors and, more specifically, evidence of eagle breeding habitat (i.e., nests). No eagles were seen during the execution of the field survey, and no eagle nests were observed within 0.5 mile of the proposed Route.

### 2.2.4 NORTH DAKOTA STATE HISTORIC PRESERVATION OFFICE

The North Dakota State Historic Preservation Office (SHPO) is responsible for managing the historic and archaeological resources of the state. Magellan commissioned SWCA, Inc. (SWCA), to conduct a Class I Cultural Resource Inventory of the Corridor; background research utilizing relevant holdings at the State Historical Society of North Dakota (SHSND) was conducted on December 21, 2011. This portion of the Class I Cultural Resource Inventory identified 17 previously recorded cultural resources within the proposed Corridor. These results were used to assess Corridor compatibility for routing and later for Route refinement and preparation for field studies.

In addition to the SHSND review, SWCA performed additional, supplemental historical research utilizing other available data sources in an attempt to find information pertaining to previously undocumented cultural resources in the project area. Two sites were discovered within the project area (32CS5122 and 32CS5123), and a third (32CSX336) was found just outside the project area. Site 32CS5122 is recommended as a non-contributing portion of an eligible site, and no further work is recommended. In addition, Magellan intends to bore beneath this site; therefore, it is avoided by the Project. Site 32CS5123 is recommended not eligible and requires no further work, and site 32CSX336 is located outside the project area and will not be impacted.

Due to the disturbed, developed nature of the project area, the likelihood of any previously unidentified resources being found in the Corridor is extremely low. It was determined then that a subsequent Class III Cultural Resource Inventory was not necessary.

On February 2, 2012, Magellan received concurrence of *No Historic Properties Affected* and *No Significant Sites Affected* for the Project, provided the proposed project takes place in the location mapped and plotted, and in the manner stated in the Cultural Resource Report.

Please refer to Appendix C for related agency consultations, Appendix E for the Cultural Resource Report and SECTION 4: Mitigative Measures of this document for proposed mitigation measures.

### 2.2.5 NORTH DAKOTA DEPARTMENT OF TRUST LANDS

The North Dakota Department of Trust Lands (NDDTL) is in charge of managing surface acres and mineral interests held in trust for various schools and institutions.

Consultations with NDDTL with respect to mineral interests were initiated on December 21, 2011. On December 21 and 22, 2011, the NDDTL confirmed the absence of both Mineral Trust and School Trust lands within the proposed Corridor. Please see Appendix C for a copy of this correspondence.

# SECTION 3: EVALUATION OF THE PROPOSED ROUTE IN REGARD TO APPLICABLE CONSIDERATIONS IN SECTION 49-22-09 AND CRITERIA ESTABLISHED IN SECTION 49-22-05.1

## 3.1 EXCLUSION AREAS

Exclusion areas are geographical areas that should be excluded in the consideration of a route for a transmission facility. The following table and text identify and discuss exclusion areas identified along the proposed Route.

| Exclusion Area | Crossed by Proposed Route |
|---|---|
| **Federal** | |
| National Parks or Memorial Parks | No |
| Historic Sites or Landmarks | No |
| Natural Landmarks or Monuments | No |
| Wilderness Areas | No |
| **State** | |
| Historic Sites, Monuments, or Historical Markers; | No |
| Archaeological Sites | Yes |
| Parks | No |
| Nature Preserves | No |
| **County** | |
| Parks | No |
| Recreation Areas | No |
| Municipal Parks | No |
| **Other** | |
| Areas Critical to the Life Stages of Threatened and Endangered Animal or Plant Species | No |
| Areas where Animal or Plant Species that are Unique or Rare to this State would be Irreversibly Damaged | No |

### 3.1.1 FEDERAL RESOURCE REVIEW

Magellan has initiated consultations with various Federal agencies and has conducted a comprehensive review of published information. Magellan has concluded that no national parks, memorial parks, historic sites, landmarks, natural landmarks, monuments, or wilderness areas will be affected by the Project.

Please see Appendix C for related agency consultations.

### 3.1.2 STATE RESOURCE REVIEW

Magellan has confirmed, through a combination of agency consultations, review of publicly available information and field studies, that no state parks, historic sites, monuments, historical markers, or nature preserves are crossed by the proposed Route.

Magellan commissioned a Class I Cultural Resource Inventory of the proposed Corridor. On February 2, 2012, Magellan received concurrence of *No Historic Properties Affected* and *No Significant Sites Affected* for the Project, provided the proposed project takes place in the location mapped and plotted and in the manner stated in the Cultural Resource Report. Please see Appendix C for related agency consultations and Appendix E for the Cultural Resource Report.

### 3.1.3 COUNTY RESOURCE REVIEW

Magellan has confirmed through a combination of agency consultations, review of publicly-available information and field studies the absence of county parks, county recreation areas, municipal parks, or parks owned by other subdivisions of government bodies within the proposed Route.

### 3.1.4 AREAS CRITICAL TO THE LIFE STAGES OF THREATENED AND ENDANGERED ANIMAL OR PLANT SPECIES

Magellan has commissioned surveys of the proposed Route. The scope of the surveys included documentation of federally listed species identified during field surveys and/or evidence of their critical habitats. Emphasis was placed on those species indentified through public domain research, as well as the results of Project-specific consultations conducted for the Corridor analysis. The results of these field efforts are detailed in SECTION 2.2.3: Wildlife Inventory of this document.

### 3.1.5 AREAS WHERE ANIMAL OR PLANT SPECIES THAT ARE UNIQUE OR RARE TO THIS STATE WOULD BE IRREVERSIBLY DAMAGED

Based upon agency consultations and subsequent field surveys, the proposed Project would not result in irreversible impacts that are detrimental to species or their habitats.

## 3.2 AVOIDANCE AREA INVENTORY AND ANALYSIS

Avoidance areas are geographical areas that shall not be considered in the routing of a transmission facility unless, under the circumstances, it is shown that there is no reasonable alternative. The following table and text identify and discuss avoidance areas crossed by the proposed Route.

| Avoidance Area | Crossed by Proposed Route |
|---|---|
| **Federal** | |
| Historic Districts | No |
| Wildlife Areas | No |
| Wild, Scenic or Recreational Rivers | No |
| Wildlife Refuges | No |
| Grasslands | No |
| **State** | |
| Wild, Scenic or Recreational Rivers | No |
| Game Refuges or Game Management Areas | No |
| Forests or Forest Management Areas | No |
| Grasslands | No |
| **Other** | |
| Historic Resources not meeting Exclusion Areas criteria | No |
| Areas of Known Geologic Instability | No |
| Areas within 500-Feet of a Residence, School, or Place of Business | Yes |
| Reservoirs and Municipal Water Supplies | No |
| Water Sources for Organized Rural Water Districts | No |
| Irrigated Land (Does not apply to underground facilities) | NA |
| Areas of Recreational Significance which are not designated as Exclusion Areas | No |

### 3.2.1 FEDERAL RESOURCE REVIEW

A review of publicly available information was conducted, and Magellan has concluded that no designated or registered historic districts, wildlife areas, wild, scenic or recreational rivers, wildlife refuges or grasslands are crossed by the Route.

### 3.2.2 STATE RESOURCE REVIEW

Magellan conducted a review of publicly available resources and has concluded that no designated or registered state wild, scenic, or recreational rivers, game refuges, game management areas, management areas, forests, forest management lands or grasslands are crossed by the proposed Route.

### 3.2.3 HISTORICAL RESOURCES NOT MEETING EXCLUSION AREA CRITERIA

Magellan conducted a review of publicly available resources and has concluded that no historical resources that do not meet the exclusion area criteria are crossed by the Route.

On February 2, 2011, Magellan received SHPO concurrence of *No Historic Properties Affected* and *No Significant Sites Affected* for the Project. Please see SECTION 2.2.4: North Dakota State Historic Preservation Office of this document for a discussion of related studies and results. Please see Appendix C for related agency consultations,

Appendix E for the Cultural Resource Report, and SECTION 4: Mitigative Measures for a detailed discussion of proposed mitigation.

### 3.2.4 AREAS OF KNOWN GEOLOGIC INSTABILITY

There are no known areas of geological instability along the proposed Route. North Dakota has not experienced an earthquake of sufficient magnitude to damage welded steel piping or structural steel in recorded history. Sink holes are known to occur in North Dakota but are more closely related to mining activities and no evidence of mining or sink holes was identified. Finally, the potential for landslides was evaluated; earth movement of this nature is closely associated with areas of great topographic relief, high gradient slopes, recent deposits that have yet to reach a stable angle of repose, or where underground water movement may create a slurry of rock and mud resulting in a subsidence. There are no locations along the proposed Route that can be characterized as instable.

### 3.2.5 AREAS WITHIN 500-FEET OF A RESIDENCE, SCHOOL OR PLACE OF BUSINESS

Magellan utilized aerial photography to identify structures located within 500 feet of the proposed pipeline alignment. Magellan obtained tax parcel identifications for properties that fall within 500 feet of the proposed project centerline to identify potentially affected parties. Aerial imagery was used to characterize structures as: commercial (11 total), residential (75 estimated) or other (7 total). Magellan has identified 93 potential occupied structures located within 500 feet of the proposed alignment. See Appendix B for maps depicting these locations.

### 3.2.6 RESERVOIRS AND MUNICIPAL WATER SUPPLIES

Magellan has confirmed that the Route does not contain reservoirs or municipal water supply sources.

### 3.2.7 WATER SOURCES FOR ORGANIZED RURAL WATER DISTRICTS

Magellan has confirmed that the Route does not contain water sources that are utilized by organized rural water districts.

### 3.2.8 IRRIGATED LAND

This criterion does not apply to underground transmission facilities; as such, it is not applicable to this Project.

### 3.2.9 AREAS OF RECREATIONAL SIGNIFICANCE WHICH ARE NOT DESIGNATED AS EXCLUSION AREAS

Magellan has confirmed that the Route does not cross areas of Recreational Significance.

## 3.3 FACTORS TO BE CONSIDERED IN EVALUATING APPLICATIONS AND DESIGNATIONS OF SITES, CORRIDORS AND ROUTES (49-22-09)

**Available Research and Investigation Relating to the Effects of the Location, Construction, and Operation of the Proposed Facility on Public Health and Welfare, Natural Resources and the Environment:**

Route selection for the relocation of the two existing, co-located pipelines identified and evaluated one alternative routing for this Project. These studies were designed to define a preferred route that achieves Project objectives, is technologically and economically feasible for construction, and minimizes impacts to the environment.

Desktop surveys and field studies were conducted to identify environmental, biological, and cultural resources along the Route; the results of this effort are discussed in SECTION 2: Route Analysis and Findings of this document, and full reports are provided in Appendices D and E. SECTION 3.4: Selection Criteria and SECTION 3.5: Policy Criteria, included below, discuss any potential effects of the Project on the public health and welfare.

**The Effects of New Energy Conversion and Transmission Technologies and Systems Designed to Minimize Adverse Environmental Effects:**

The Project does not include energy conversion or transmission technologies or systems that are specifically designed to minimize adverse environmental impacts. The Project will be constructed in compliance with environmental permits. The conditions of these permits are designed to minimize adverse environmental impacts. Additionally, Magellan will utilize low impact construction techniques (e.g.; horizontal directional drill) to reduce environmental impacts. Refer to SECTION 4: Mitigative Measures in this document for a full description of the mitigation measures Magellan will implement to minimize impacts resulting from the Project's location, construction, and operation.

**Adverse Direct and Indirect Environmental Effects which cannot be Avoided Should the Proposed Site or Route be Designated:**

Unavoidable adverse direct and indirect environmental effects will be temporary and shall be minimized through compliance with environmental permits. The potential impacts from construction storm water and noise levels associated with construction are discussed in SECTION 3.5: Policy Criteria. Magellan will mitigate these temporary impacts to the maximum extent possible.

The Project will be constructed in compliance with environmental permits. The conditions of these permits are designed to minimize adverse environmental impacts. Refer to SECTION 4: Mitigative Measures for a full description of the mitigative measures planned to minimize impacts resulting from the Project's location, construction, and operation.

**Alternatives to the proposed corridor or route which are developed during the hearing process and which minimize adverse effects:**

Magellan will fully participate in the hearing process and will address any alternatives developed during the hearing process, as applicable.

**Irreversible and irretrievable commitments of natural resources should the proposed corridor and route be designated:**

Magellan is not aware of any irreversible or irretrievable commitments of natural resources that would result from the requested approvals.

**Direct and Indirect Economic Impacts of the Proposed Facility:**

Construction of this Project will maintain existing service for approximately 65,000 bpd of refined petroleum products and a critical transportation link between Magellan's existing assets and markets in the upper Midwest. This volume represents approximately 40% of the refined petroleum products delivered to the State of North Dakota.

**Existing Plans of the State, Local Government, and Private Entities for Other Developments at or in the Vicinity of the Proposed Route:**

Magellan is not aware of any other future development plans within or in close proximity to the Route.

**The Effect of the Proposed Route on Existing Scenic Areas, Historic Sites and Structures and Paleontological or Archaeological Sites:**

Magellan has commissioned a Class I Cultural Resource Survey of the Route. Magellan has developed mitigation plans for registered or eligible sites that encroach into the proposed construction corridor. The proposed mitigation is detailed in SECTION 4: Mitigative Measures in this document. All related correspondence can be found in Appendix C, and the Cultural Resource Report can be found in Appendix E.

Project-specific consultations with various Federal, State and Local agencies did not identify any scenic areas within the Route. All related correspondence can be found in Appendix C.

**The Effect of the Proposed Route on Areas Which are Unique Because of Biological Wealth or Because they are Habitats for Rare and Endangered Species:**

The proposed Route is not anticipated to result in permanent adverse impacts to the environment. No Federal or State listed species or their critical habitats were identified during field surveys. Please see SECTION 2: Route Analysis and Findings in this document for a comprehensive discussion of Magellan's efforts to identify sensitive environmental resources along the proposed Route. Provided that Magellan adheres to environmental permit conditions, the Project will not result in impacts to

listed or sensitive species or their habitats. See Appendix C for complete Federal and State agency consultations. Detailed biological survey results can be found in Appendix D.

**Problems Raised by Federal Agencies, Other State Agencies and Local Entities:**

Magellan has consulted with several Federal and State agencies to identify possible environmental resources within the Corridor and any related agency concerns. Magellan has not received any agency correspondence that identified a resource issue of concern.

## 3.4 SELECTION CRITERIA

The selection criteria require a study of environmental impacts and changes in land use that may result from the siting of the proposed Project. Magellan has successfully avoided or minimized negative effects with respect to the selection criteria to the maximum extent practicable.

### 3.4.1 AGRICULTURAL IMPACT ASSESSMENT

**Agricultural Production:** The Project will not impact any agriculturally productive land.

**Family Farms and Ranches:** The Project will not impact farm or ranch land.

**Lands Suitable for Irrigation:** This section is not applicable to buried pipelines (69-06-08-02.2h).

**Surface Drainage:** All areas disturbed by construction will be returned to pre-construction contours to the extent practicable, which should result in no change in surface drainage. Impacts to surface drainage will be temporary and limited to construction activities. During construction, Magellan will implement a project-specific Storm Water Pollution Prevention Plan (SWPPP) approved by the NDDoH to manage stormwater run-off and will employ proper erosion and sediment control measures throughout construction and restoration.

**Ground Water:** The aquifers that underlay North Dakota are typically associated with two types of geologic formations, specifically bedrock and shale and sandstone formations. Ground water throughout Cass County is obtained from the sand and gravel deposits associated with the glacial drift. The depth of these deposits varies from 200 to over 400 feet. Ground excavation associated with the Project will generally be limited to depths no greater than 10 feet; as such, it is unlikely that the Project would have significant or permanent impact on groundwater resources.

### 3.4.2 THE IMPACTS UPON

**Noise-Sensitive Land Uses:** A review of the Corridor found 93 potential noise-sensitive resources (inhabited structures) located within 500-feet of the proposed pipeline Route. The Project is located in an urban setting, thereby increasing the

chances of construction activities impacting sensitive receptors. However, once constructed and in-service, normal pipeline operations are not audible.

**Visual Effect on Adjacent Areas:** Upon installation, Magellan will install pipeline markers as required to identify the location of the proposed pipeline. No other permanent above-ground features are to be installed as a part of the Project.

**Extractive and Storage Resources:** This Project will not impact any extractive or storage resources.

**Wetlands, Woodlands, and Wooded Areas:** A comprehensive desktop review of published data, including aerial photography and National Wetland Inventory data was conducted to assess the presence or absence of wetlands, woodlands, and wooded areas. The review of the proposed Corridor confirmed the presence of mapped wetlands, but the absence of waterbodies, wooded areas or woodlands. Magellan commissioned field surveys to identify and record the locations of these resources with respect to the proposed Route. Please refer to SECTION 2: Studies in the Application for Certificate of Corridor Compatibility for a comprehensive discussion of Magellan's consultations. Please see Appendix C for copies of agency consultations and Appendix D for a copy of the Natural Resource report.

**Radio and Television Reception, and other Communication or Electronic Control Facilities:** Magellan does not anticipate that the Project will impact radio, television, or other electronic control facilities.

**Human Health and Safety:** Magellan's corporate policy meets or exceeds Federal and State laws, rules and regulations and is enforced and adhered to by all Magellan's employees and contract employees. Magellan utilizes procedures designed to protect property and personnel, and to maintain regulatory compliance, in its operations and construction activities. By implementing these policies and practices, Magellan promotes a safe and healthy workplace during construction and operation of all its assets.

**Animal Health and Safety:** The Project is located entirely within the city limits of West Fargo, North Dakota. The area is fully developed, urban environment and as such, the likelihood of encountering wildlife along the Route is limited. Urban wildlife, if present, would be accustomed to human activities and would tolerate such activities, typically avoiding areas of active construction. No species of special concern are anticipated to experience direct impacts due to construction or operation of the Project.

**Plant Life:** The Project will not impact any agriculturally productive or pastureland. Construction impacts upon maintained urban plantings (i.e., mowed grass) will be temporary and the restoration will return the area to its pre-construction condition to the extent practicable. No species of special concern will be impacted by the Project.

## 3.5 POLICY CRITERIA

### 3.5.1 POLICIES AND COMMITMENTS TO LIMIT ENVIRONMENTAL IMPACT

Magellan selects pipeline corridors and routes to minimize impact as required by the statutes, rules and regulations of the Commission. As appropriate, Magellan may employ local environmental consultants and archaeologists to assist with planning. Magellan is proud of its safety record in the operation of facilities in North Dakota and is prepared to meet any emergency that should arise in order to minimize the impact of any pipeline failure.

The operation of this pipeline would be monitored by Magellan's Pipeline Control Center located in Tulsa, Oklahoma. This facility monitors most of Magellan's Pipeline operations in North Dakota. With this system in place, abnormal operating parameters will be quickly identified and the proper response shall be implemented quickly and efficiently. Magellan's pipelines that are the subject of this application are federally-regulated pipelines and the operation of the pipelines conform to USDOT standards. As such, Magellan maintains a rigid pipeline integrity program and periodically runs internal line inspection tools to find anomalies, and perform repairs as required.

### 3.5.2 LOCATION AND DESIGN

The Project will be located entirely within the city limits of West Fargo, Cass County, North Dakota. The routing of the relocated pipe will be oriented generally east and west, and will be approximately 2,300 feet in length. Please refer to maps provided in Appendix B.

The AG1 will be a 6 ⅝-inch outside diameter pipe. The pipe installed will meet the following minimum specifications: API 5L PSL 2 X52 line pipe with a nominal wall thickness of 0.280 inches; the nominal wall thickness will increase to 0.344 inches for specific locations such as road crossings. The maximum operating pressure (MOP) of the pipeline will be 1,440 psig.

The AF2 will be a 8 ⅝-inch outside diameter pipe. The pipe installed will meet the following minimum specifications: API 5L PSL 2 X52 line pipe with a nominal wall thickness of 0.322 inches; the nominal wall thickness will increase to 0.344 inches for specific locations such as road crossings. The MOP of the pipeline will be 1,440 psig.

Magellan will ensure that the design of the relocated pipes is in full compliance with applicable USDOT standards.

### 3.5.3 TRAINING AND UTILIZATION OF AVAILABLE LABOR IN THIS STATE FOR THE GENERAL AND SPECIALIZED SKILLS REQUIRED

The construction labor pool utilized by the Project will be primarily comprised of a non-local workforce because pipeline construction is a specialized niche construction market that relies extensively on skilled trades with specific knowledge of pipeline construction techniques. The primary contractor will be a non-local contractor,

supplying specialized skilled labor. Magellan will draw upon the local labor force to supply general laborers. The workforce is anticipated to reach a peak of approximately 20 personnel, of which up to 10 percent could be local hires.

### 3.5.4 ECONOMIES OF CONSTRUCTION AND OPERATION

The Project represents a total investment of approximately $1.34 million. Once constructed and in-service, the continued costs of maintenance and operation of the proposed pipeline are expected to be minimal.

### 3.5.5 USE OF CITIZEN COORDINATING COMMITTEES

Magellan has established and maintains a good relationship with the local residents through its long-term regional presence operating various assets in the area. Through these relationships, Magellan has maintained several grassroots communication channels to inform local residents regarding the developments associated with the Project.

### 3.5.6 COMMITMENT OF A PORTION OF THE TRANSMITTED PRODUCT FOR USE IN THIS STATE

There will be no change in intrastate commitment of product. The Project will maintain current shipping capacity of refined petroleum products from the Fargo Tank Terminal to market points in North Dakota and the Midwest via AG1 and AF2.

### 3.5.7 LABOR RELATIONS

Magellan does not anticipate encountering any adverse labor relations on this Project. The labor market in the Project area is supportive of the oil and gas industry.

### 3.5.8 THE COORDINATION OF FACILITIES

Magellan owns and operates all of the affected facilities; thus, coordination will be seamless and executed from within Magellan's internal management systems.

### 3.5.9 MONITORING OF IMPACTS

During construction and for the duration of the Project, Magellan's primary contractor shall be responsible for providing oversight of construction activities. Magellan will manage environmental obligations throughout construction and restoration. Magellan will identify responsible parties to provide onsite environmental oversight of construction activities.

### 3.5.10 UTILIZATION OF EXISTING AND PROPOSED ROW AND CORRIDORS

Approximately 1000 feet (43%) of the proposed Route would be collocated within an existing utility corridor.

### 3.5.11 OTHER EXISTING OR PROPOSED TRANSMISSION FACILITIES

Magellan does not have current plans to construct or expand transmission facilities in North Dakota in the foreseeable future, as reported in their current 10-Year Plan (see Appendix F).

## SECTION 4: MITIGATIVE MEASURES

### 4.1 LOCATION

The location of the proposed Route is a function of the location of other existing Magellan assets in the area. Magellan commissioned field surveys of the proposed Route to inventory the resources present along the Route, define the location and boundaries of resources that intersect the proposed Route, identify potential impacts to natural resources and identify avoidance or other mitigation opportunities to further minimize the impacts of the Project.

**Trees and shrubs:** Magellan shall comply with the Commission's tree and shrub mitigation specifications. Field surveys included a pre-construction tree and shrub inventory. No trees, shrubs or woody vegetation will be impacted by the Project.

**Wetlands and waterbodies:** No natural wetlands or waterbodies were identified during field surveys and as such, no wetlands or waterbodies will be impacted by the proposed Route. The retention pond located south of the construction corridor is a man-made feature, and will not be impacted by the Project. Magellan will implement best management practices (BMPs) to prevent secondary impacts to the pond, installing sediment barriers along the edge of the construction work area where the retention pond is adjacent to the construction right-of-way and the ground surface slopes toward the depression.

**Migratory Bird Treaty Act:** A response from the USFWS with respect to the Migratory Bird Treaty Act is pending. Magellan will continue to engage the USFWS to complete consultations in this regard.

**Cultural Resources**: On February 2, 2012, SHPO concurred with Magellan's findings that cultural resource sites in the project area will not be affected by the Project.

32CS5122: This is a newly recorded site identified during the supplemental portion of the Class I Cultural Resource Inventory of the project area. This portion of U.S. Highway 10 is part of a historic alignment known as the Red Trail or the National Parks Highway. Due to road maintenance, upgrades, erosion, and a high volume of vehicle traffic, the segment of the road that falls within the project area does not show any evidence of the construction, design or materials of the original alignment. For this reason, SWCA recommends that this road segment is a non-contributing portion of site 32CS5122, and as such, no further work is recommended. In addition, Magellan plans to bore under the site, avoiding it altogether. The Project will not impact this site.

32CS5123: This is a newly recorded site identified during the supplemental portion of the Class I Cultural Resource Inventory of the project area. The site is a buried pipeline first constructed in 1946. This site is recommended not eligible for nomination to the NRHP; therefore, no further work is necessary.

32CSX336: This is a newly recorded site identified during the supplemental portion of the Class I Cultural Resource Inventory of the project area. The site itself is located just outside of the project area and as such, will not be impacted by the Project.

## 4.2 CONSTRUCTION

The proposed construction of the pipeline will be conducted in an orderly sequence designed to complete the Project in the minimum amount of time required to safely prepare the site, install the pipeline and restore the areas disturbed by construction.

Construction is estimated to require approximately 90 days with restoration to immediately follow. Construction techniques will be employed that minimize the area of ground disturbance, off-site deposition of sediments and long-term impacts to areas disturbed by project activities.

Restoration will immediately follow pipeline construction and commissioning. Final grading will restore the original contours of the land to the extent practicable. Disturbed areas will be prepared for re-seeding and restoration will be coordinated to meet landowner specifications.

## 4.3 OPERATION

The proposed Project is a small segment of two existing pipeline systems which have been in-service since 1946 (AG1) and 1954 (AG2). Once constructed and put into service, the AG1 and AF2 pipelines will resume operations delivering refined petroleum products from the West Fargo Tank Terminal to markets in the upper Midwest. Normal pipeline operations are imperceptible to the general public, as they are silent, buried and therefore not visible, and require only minimal above-ground activity. Standard operating procedures will conform to USDOT standards and requirements. As such, periodic inspection and maintenance of the right-of-way will be required.

## SECTION 5: DESCRIPTION OF RIGHT-OF-WAY PREPARATION AND RECLAMATION PROCEDURES

Construction will be an assembly-line process and will include the following general tasks: surveying and staking, clearing and grading, trenching, pipe stringing, pipe bending, welding, coating, hydrostatic testing, lowering in, tie-ins, backfilling, rough grading, and final restoration (e.g., topsoil replacement, final grading, seeding and mulching, where required). The pipeline may be placed into service before final restoration has been completed in all areas.

At any location along the Project, construction activities will require approximately eight to ten weeks to complete from start to finish, except when weather-related delays affect the schedule. Construction activity at any location is not continual, but occurs in distinct phases, occasionally with several days passing between each phase.

### Surveying and Staking

Prior to construction activities, Magellan will stake the centerline and establish the boundaries of the approved work areas (e.g., the construction right-of-way boundaries and temporary extra workspace areas), and flag the location of approved access roads and foreign utility lines.

### Clearing and Grading

A clearing crew will clear the work area of vegetation and obstacles that may be encountered (e.g., brush, and rocks) in the work area.

The right-of-way will be graded, where necessary, to provide a reasonably level work surface and to segregate topsoil. Topsoil will be carefully removed and stored along the edge(s) of the right-of-way in a manner that allows for a haul road and trench line. The topsoil depth in the area is variable, but generally the topsoil is between 2-9 inches deep. The topsoil depth and the layer removed will be determined in the field. Upon completion of pipeline construction, the trench will be backfilled and topsoil will to be returned to the upper soil horizon. All disturbed areas shall be graded to restore the original contours, as reasonably practicable.

Where slopes are encountered, the construction contractor may grade the slope to reduce the grade, or in areas of side slopes, two-tone the area to create a level working surface. At these locations, excess spoil will be pushed to the side of the construction right-of-way, distributed over the working area and travel lane, or stored in alternative temporary work space. This material will be returned to the original location and preconstruction contours will be reestablished to the extent practicable during restoration.

Concurrent with grading, erosion and sediment control devices will be installed as required by state stormwater permit conditions. These devices may include silt fences, straw wattles, straw bales, and road access pads, and will be installed where

necessary to prevent soil and sediment from leaving the construction work area.

Following installation of the pipe and backfilling of subsoil in the trench, the right-of-way will be returned to the original grade and the topsoil will be redistributed over the work area.

**Directional Drilling / Boring**

At feature crossings (e.g.; roads) installation of pipeline segments may be completed utilizing either a horizontal bore or a directional drill to facilitate the installation with minimal or no disturbance to the feature. Specialized equipment will be setup at each terminus of the feature crossing and additional temporary workspace may be required to accommodate the equipment. Generally, a drill head or auger device is used to excavate and establish the pipeline path. Once this path has been established the full the length of the crossing and it has been reamed out to size (if necessary) the pipe will be pulled into place and each terminus of the segment will be tied into the rest of the pipeline.

**Trenching**

The trench will be excavated by using track-mounted backhoes to a depth that provides sufficient cover over the pipeline after backfilling. The bottom width of the trench will be sufficient to accommodate the pipelines. Typically, the trench will be excavated to a sufficient depth to allow for a minimum of four feet of cover after construction. Additional cover requirements may be applicable at public road crossings.

**Pipe Stringing, Bending, and Welding**

Sections of externally coated pipe up to 65 feet long (*e.g.,* joints) will be transported over public roads to the right-of-way by truck and placed or "strung" along the right-of-way parallel to the trench in a continuous line. After the pipe sections are strung along the trench and before they are welded together, individual sections of the pipe may be bent, where necessary, so that the finished pipeline sections conform to the natural contours of the land. Typically, a track-mounted, hydraulic pipe-bending machine will be used. Where multiple or complex bends greater than what can be properly bent in the field are required, a factory made "fitting" will be used.

After the pipe sections are bent, the joints will be welded together into sections and placed on temporary supports. Welding will comply with requirements listed in Title 49 CFR Part 195 and API Standard 1104 *Welding of Pipelines and Related Facilities*. Each weld will be tested by using radiographic non-destructive examination (NDE) to ensure that no defective welds are present and that Magellan's engineering standards are met. Welds that do not meet standards and specifications will be removed and/or repaired.

A third-party contractor certified in non-destructive inspection will be used and inspections will be performed as outlined in Title 49 CFR Part 195. After the welds are approved, a protective coating will be applied to the welded joints. The pipeline will subsequently be electronically and visually inspected for defects in the external coating. Damage to or defects in the coating will be repaired prior to lowering-in the pipeline. Cathodic protection systems will also be directly bonded to the pipe at this time.

**Hydrostatic Testing**

Magellan will hydrostatically test the pipeline once it has been aligned and welded. Hydrostatic testing shall conform to USDOT standards and shall establish the MOP for the pipeline when it is operational. Testing involves installation of test headers that control the pressure applied and are later removed upon the completion of a successful pressure test. The test procedures are a function of pressure and time. Once the desired test pressure has been achieved, the test section must hold the pressure for an 8 hour period, without a significant change in pressure. Once testing is completed, the test water is evacuated from the pipeline, and the line is prepared for commissioning. Magellan will obtain a discharge permit from the NDDoH to authorize the pipeline dewatering activities; the ensuing discharge(s) will conform to the conditions stipulated in the permit.

**Lowering-in and Backfilling**

The trench will be inspected for the presence of rocks and other debris that could damage the pipe or protective coating. If rocks or other obstructions are observed, these will be removed and/or if necessary the pipeline trench bottom will be padded with rock shield subsoil or sand prior to the pipeline being lowered into the trench.

If the trench bottom is obscured by water, the trench will be dewatered. Where dewatering is required, Magellan will remove the water with a pump and discharge it in accordance with the applicable permit conditions.

The trench will be backfilled using the native material removed and compacted; however, the trench may be slightly crowned to accommodate settling.

**Final Tie-in and Commissioning**

Following successful pressure testing, test manifolds will be removed and the final pipeline tie-ins will be made. After final tie-ins are complete and the tie-in welds have been radiographically inspected, the pipeline will be commissioned. Commissioning involves activities to verify that equipment is properly installed and working, the controls and communications systems are functional. After commissioning activities are complete, the pipeline will be filled with petroleum product and purged of air and then the pipeline is ready for service.

**Cleanup and Restoration**

Final cleanup will begin after backfilling as soon as weather and site conditions permit. During cleanup, construction debris remaining on the right-of-way will be collected and disposed of properly. Work areas will be graded and restored to preconstruction contours as closely as practical.

During restoration, segregated topsoil will be spread over the surface after final grading and permanent erosion controls will be installed. After permanent erosion control devices are installed, disturbed areas will be seeded and slopes mulched where required. Seed mixes will be approved in advance of seeding.

Markers will be installed as required. The pipeline markers will be labeled to clearly identify pipeline ownership and emergency contact information in accordance with relevant USDOT regulations. Aerial pipeline markers providing information and guidance to aerial patrol pilots will also be installed.

**Waterbody Restoration**

No waterbodies were identified during field surveys. No waterbodies will be impacted by the proposed Route.

**Wetland Restoration**

No wetlands were identified during field surveys. No wetlands will be impacted by the proposed Route.

**Agricultural Land Restoration**

The Project will not impact any agriculturally productive land.

## SECTION 6: UTILITY'S EASEMENT ACQUISITION, LANDOWNER NOTIFICATION AND EASEMENT COMPENSATION PLAN

### 6.1 LANDOWNER INFORMATION REGARDING EASEMENT ACQUISITION, AND NECESSARY EASEMENT CONDITIONS AND RESTRICTIONS

Once a preliminary route has been established, a title review is conducted of courthouse records for the purpose of identifying the current landowners. Magellan will initiate contact with affected landowners via telephone to be followed with personal visits and e-mail correspondence. Contact by U.S. mail may be used as a last resort if no other means of landowner contact is successful.

During easement negations, landowners will be informed of the easement conditions and restrictions. Magellan, at all times, negotiates in good faith with landowners.

### 6.2 COMPENSATION POLICY

Magellan's practice for determining landowner compensation for easements is based on research of comparable fair market pricing and prior experience negotiating easements locally.

## SECTION 7: LIST OF PREPARERS

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M.S. Wildlife Biology, University of Minnesota – Twin Cities; and B.S. Wildlife Biology, Michigan State University. Mr. McCarthy is an environmental compliance analyst with 15 years of environmental consulting experience working with various energy assets and regulatory agencies. As a compliance analyst he has managed the environmental requirements for facility siting, pipeline routing, federal licensing, and various federal, state and local permits. Mr. McCarthy is a certified wildlife biologist and in this role conducts and coordinates field studies, agency consolations, mitigation and avoidance plans.

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B.A. Environmental Studies, University of St. Thomas, St. Paul, MN. Ms. Sampson is a compliance specialist and throughout her career she has emphasized energy related projects. Her experience includes providing permitting and siting support associated with energy transmission projects located across the Upper Midwest. Ms. Sampson has experience in all levels of federal, state and local permitting. She has recently worked on several ND PSC filings and has managed agency consultations and construction permitting related to these projects.