"Healthy environment, healthy people"

Montana Department of
ENVIRONMENTAL QUALITY

Steve Bullock, Governor
Tracy Stone-Manning, Director

P. O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • Website: www.deq.mt.gov

June 10, 2013

Connie Ternes-Daniels, Interim Chief Executive
Anaconda-Deer Lodge County
County Courthouse
800 South Main
Anaconda, MT 59711

RE: Anaconda-Deer Lodge County West Valley Sewer Extension Phase 1, WPCSRF Project# C302193, STAG Project# XP-98852401

Dear Ms. Ternes Daniels:

Enclosed is a copy of the Finding of No Significant Impact (FONSI) and Environmental Assessment (EA) for the Anaconda-Deer Lodge County West Valley Sewer Extension Phase 1 WPCSRF/STAG project. Please print the FONSI letter in one publication of your local paper under legal advertising and return the proof of advertising. You do not have to print the EA. Please note that the EA is a joint effort between the DEQ and the Environmental Protection Agency (EPA). However, each agency prepared its own FONSI and both FONSIs must be published for the one shared EA. You should already have a copy of EPA's FONSI. We recommend that you advertise both FONSIs as soon as possible to allow for a 30-day public comment period. We have distributed these documents to the enclosed list of agencies.

If you have any questions, please do not hesitate to contact me at (406) 444-5322.

Sincerely,

Michele Marsh

Michele Marsh, P.E.
Environmental Engineer
Technical & Financial Assistance Bureau

Encl.

cc (via e-mail): Ed Janney, PE, DOWL HKM
Brian Friel, EPA Region 8

DAMON MURDO
MT HISTORICAL SOCIETY
HISTORIC PRESERVATION
PO BOX 201201
HELENA MT 59620-1201

DARLENE EDGE
DIRECTOR
RESOURCE ASSESSMENT
FW & P
PO BOX 200701
HELENA MT 59620-0701

JOHN TUBBS
DIRECTOR
DNRC
PO BOX 201601
HELENA MT 59620-1601

ENVIRONMENTAL QUALITY COUNCIL
STATE CAPITOL RM #106
PO BOX 201701
HELENA MT 59620-1701

BRENT ESMOIL
US FISH & WILDLIFE SERVICE
100 NO PARK STE 320
HELENA MT 59601

TODD TILLINGER
US ARMY CORPS OF ENGINEERS
10 W 15
HELENA MT 59626

JEAN RILEY
MT DEPT OF TRANSPORTATION
PLANNING
2960 PROSPECT
HELENA MT 59620

CHARYL FRANCOIS
US ARMY CORPS OF ENGINEERS
PO BOX 3755
SEATTLE WA 98124-3755

Edgar.Robert@epa.gov
Friel.Brian@epa.gov

JASON SEYLER
MT DEQ
REMEDIATION DIVISION
1100 N LAST CHANCE GULCH
HELENA MT 59620-0901

~~LAURA A BENTLEY PE~~
~~PROJECT MANAGER~~
~~ARMY CORPS OF ENGINEERS~~
~~106 SOUTH 15TH STREET~~
~~OMAHA, NEBRASKA 68102-1618~~

▲ CORE LIST

▼ OPTIONAL LIST

ADMINISTRATOR
R & P DIVISION
FW & P
PO BOX 200701
HELENA MT 59620-0701

STATE CONSERVATIONIST
US SOIL CONSERVATION
FEDERAL BLDG RM #443
10 E BABCOCK
BOZEMAN MT 59715

STATE DIRECTOR
RURAL DEVELOPMENT
PO BOX 850
BOZEMAN MT 59715

DIRECTOR
MT FIELD OFFICE - HUD
7 W 6th AVE
HELENA MT 59601

ENVIR PROJECT REV
US DEPT OF INTERIOR
OFFICE OF THE SECT
WASHINGTON DC 20240

MUNICIPAL SYSTEMS UNIT
8P-W-MS
US EPA REGION VIII
1595 WYNKOOP ST
DENVER CO 80202-1129

ENVIR REVIEW OFFICER
US DEPT OF INTERIOR
DENVER FEDERAL CENTER
PO BOX 25007
DENVER CO 80225-0007

MDT
NANCY EDWARDS
UTILITY AGENT
PO BOX 7039
MISSOULA MT 59807

DAVID S STELLING
FAA
FAA BUILDING STE #2
2725 SKYWAY DR
HELENA MT 59601

ECOLOGICAL SERVICES
585 SHEPHARD WAY
HELENA MT 59601-9785

REGIONAL DIRECTOR
US BUREAU RECLAMATION
FEDERAL BLDG
PO BOX 36900
BILLINGS MT 59103-6900

OFFICE OF THE GOVERNOR
STATE CAPITAL RM 204
PO BOX 201701
HELENA MT 59620-1701

BUREAU OF LAND MGMT
BILLINGS FIELD OFFICE
5001 SOUTHGATE DRIVE
BILLINGS MT 59101

ECOLOGICAL SERVICES
US FISH & WILDLIFE SERV
BILLINGS SUBOFFICE
2900 4TH AVE N RM #104
BILLINGS MT 59101-1228

DIRECTOR
MRAN
304 N 18TH AVE
BOZEMAN MT 59715-3114

COMM DEVELOPMENT BUREAU LOCAL
GOVT ASST DIV
DEPT OF COMMERCE
PO BOX 200523
HELENA MT 59620-0523

GALLATIN AIRPORT AUTHORITY
GALLATIN FIELD AIRPORT
BELGRADE MT 59714

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P. O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • Website: www.deq.mt.gov

June 10, 2013

FINDING OF NO SIGNIFICANT IMPACT

TO ALL INTERESTED GOVERNMENTAL AGENCIES AND PUBLIC GROUPS

As required by state and federal rules for determining whether an Environmental Impact Statement is necessary, an environmental review has been performed on the proposed action below. One joint environmental assessment was prepared for the proposed project, but the DEQ and the Environmental Protection Agency (EPA) each prepared its own Finding of No Significant Impact (FONSI). This document is the DEQ's FONSI for the following action:

Project	Anaconda-Deer Lodge County West Valley Sewer Extension, Phase 1
Location	Anaconda, Montana
Project Number	WPCSRF Project# C302193 STAG Project# XP-98852401
Total Cost	$2,572,100.00

Anaconda-Deer Lodge County (ADLC), through a December 2012 Preliminary Engineering Report (PER), assessed the condition of its existing sewer collection system and wastewater treatment plant (WWTP) and evaluated wastewater collection and treatment alternatives for the valley area immediately west of Anaconda's city limits, commonly referred to as the West Valley.

The West Valley is currently served by individual wells and on-site wastewater systems, which are commonly located in coarse-grained soils and shallow groundwater areas. The PER recognizes the potential health threat to domestic wells and Anaconda's downgradient public water supply wells due to these on-site wastewater systems.

The proposed Phase 1 West Valley project consists of connection to the ADLC public WWTP through construction of 2.4 miles of 12-inch sewer trunk main installed within the former railroad right-of-way from Anaconda to the West Valley town site and 1.2 miles of 12-inch diameter sewer main connecting this new West Valley trunk main to existing ADLC sewer collection system. Connection to the existing ADLC collection system will be made at Main Street. Forty-five West Valley homes will be disconnected from their private on-site wastewater treatment

systems and connected to the new sewer extension. Replacement of West Valley on-site wastewater systems with a new sewer collection system and treatment of wastewater at the City of Anaconda's wastewater treatment plant will protect groundwater and surface water quality.

Federal and State grant/loan programs will fund the project. Environmentally sensitive characteristics such as floodplains, threatened or endangered species, and historical sites are not expected to be adversely impacted as a result of the proposed project. Minor impacts to wetlands are expected to be covered by a US Army Corps of Engineers 404 permit under the Clean Water Act. Public participation during the planning process demonstrated support for the selected alternative. No significant long-term environmental impacts were identified. An environmental assessment, which describes the project and analyzes the impacts in more detail, is attached to this Finding of No Significant Impact.

These documents are available for public scrutiny at the following locations:

Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901

Anaconda-Deer Lodge County Courthouse
800 South Main
Anaconda, MT 59711

Comments supporting or disagreeing with this decision may be submitted for consideration by the Department of Environmental Quality. After evaluating the comments received, the agency will make a final decision. However, no administrative action will be taken on the project for at least 30 calendar days after release of the Finding of No Significant Impact.

Sincerely,

Todd Teegarden

Todd Teegarden, Bureau Chief
Technical and Financial Assistance Bureau
Planning, Prevention & Assistance Division

Anaconda-Deer Lodge County West Valley Sewer Extension Phase 1
ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Name of Project:	Anaconda – Deer Lodge County West Valley Sewer Extension Phase 1
Applicant:	Anaconda-Deer Lodge County
Address:	County Courthouse 800 South Main Anaconda, MT 59711
Project Number:	C302193-01

B. CONTACT PERSON

Name:	Connie Ternes Daniels, Interim Chief Executive
Address:	County Courthouse 800 South Main Anaconda, MT 59711
Telephone:	(406) 563-4000

C. ABSTRACT

Anaconda-Deer Lodge County (ADLC), through a December 2012 Preliminary Engineering Report (PER), assessed the condition of its existing sewer collection system and wastewater treatment plant (WWTP) and evaluated wastewater collection and treatment alternatives for the valley area immediately west of Anaconda's city limits, commonly referred to as the West Valley.

The ADLC WWTP consists of a headworks facility and two aerated lagoon cells for treatment. Disposal of wastewater is though spray irrigation and the use of rapid infiltration cells. The wastewater treatment plant was sized to treat future flows from the community of Opportunity and the West Valley. The PER identified major capital improvements needed to the aging ADLC sewer collection system and wastewater treatment facilities. ADLC is currently in the process of applying for a Montana Groundwater Pollution Control System (MGWPCS) permit for its wastewater system and further investigating the necessary capital improvements.

The West Valley is currently served by individual wells and on-site wastewater systems, which are commonly located in coarse-grained soils and shallow groundwater areas. The PER recognizes the potential health threat to domestic wells and Anaconda's downgradient public water supply wells due to these on-site wastewater systems. The West Valley consists of two main areas: (1) the roughly 45 service connections along the north side of Highway 1 between Anaconda and the West Valley town site and (2) the 249 service connections within the West Valley town site. There are an additional 70 homes in the North Cable Road area and another 60 homes along Highway 1 that may also be serviced by a West Valley sewer extension in the future.

In order to utilize long-standing State and Tribal Assistance Grant (STAG) funds that will expire at the end of the year 2013 and are designated strictly for the West Valley sewer extension, a first phase of the West Valley project is proposed for construction this year. The proposed Phase 1 West Valley project consists of connection to the ADLC public WWTP through construction of 2.4 miles of 12-inch sewer trunk main installed within the former railroad right-of-way from Anaconda to the West Valley town site and 1.2 miles of 12-inch diameter sewer main connecting this new West Valley trunk main to existing ADLC sewer collection system. Connection to the existing ADLC collection system will be made at Main Street. Forty-five West Valley homes will be disconnected from their private on-site wastewater treatment systems and connected to the new sewer extension. Phased implementation of the West Valley sewer extension allows time for completion of the MGWPCS permit process and time to study and confirm whether the existing ADLC WWTP can handle the wastewater load from the entire West Valley study area. This environmental assessment addresses only this first phase of the West Valley project.

The Anaconda-Deer Lodge County (ADLC) West Valley Sewer Extension Phase 1 project has an estimated project cost of $2,572,100. It is anticipated that the project will be funded through a low-interest (3%) loan obtained from the State Revolving Fund (SRF) loan program, a State and Tribal Assistance Grant (STAG), and local funds.

Environmentally sensitive characteristics such as floodplains, threatened or endangered species, and historical sites are not expected to be adversely impacted as a result of the proposed project. Minor impacts to wetlands are expected to be covered by a US Army Corps of Engineers 404 permit under the Clean Water Act. Additional environmental impacts related to land use, water quality, air quality, public health, energy, noise, and growth were also assessed. While short-term impacts such as dust and noise may occur during construction activities, no significant long-term environmental impacts are expected. Replacement of West Valley on-site wastewater systems with a new sewer collection system and treatment of wastewater at the City of Anaconda's wastewater treatment plant will protect groundwater and surface water quality.

Under Montana law, (75-6-112, MCA), no person may construct, extend, or use a public sewage system until the DEQ has reviewed and approved the plans and specifications for the project. Under the Montana Water Pollution Control State Revolving Fund Act, the DEQ may loan money to municipalities for construction of public sewage systems.

The DEQ Technical and Financial Assistance (TFA) Bureau, has prepared this Environmental Assessment (EA) to satisfy the requirements of the National Environmental Policy Act (NEPA) and the Montana Environmental Policy Act (MEPA).

D. COMMENT PERIOD

Thirty (30) calendar days.

II. PURPOSE OF AND NEED FOR ACTION

The City of Anaconda is served by a public wastewater treatment plant (WWTP) located east of the City of Anaconda. The WWTP was constructed in 1984 and consists of a headworks facility and two aerated lagoon cells. The wastewater treatment plant was sized to include future flows from the community of Opportunity and the valley area west of Anaconda, referred to as the West Valley. In 1991 a spray irrigation system and rapid infiltration cells were approved by the Department for disposal of lagoon effluent. There is no surface water discharge; as a result, there is not a Montana Pollutant Discharge Elimination System (MPDES) permit for the WWTP. The wastewater treatment system has also been exempt from Montana Groundwater Pollution Control System (MGWPCS) permit requirements, based on (1) the application of wastewater effluent at a rate that saturates only one-half of the root zone of the crop, (2) the total agronomic uptake of nitrate by the crop, and (3) the harvesting of that crop.

The ADLC has been exempt from groundwater permit requirements, but is currently in the process of applying for a MGWPCS permit due to impending significant changes to its existing wastewater treatment plant (WWTP). West Valley Phase 1 improvements do not rely on this permit, however, since the current WWTP was designed for a population in excess of 11,000 with a 2.5 mgd design flow. With the current population handled by the wastewater system at 5,500; the existing WWTP can accommodate the 45 homes in the West Valley. Future phases of the West Valley sewer extension are dependent on implementation of needed WWTP improvements and completion of the MGWPCS application process.

The homes and businesses in the valley west of Anaconda are currently served by individual wells and onsite wastewater treatment systems. This West Valley area is located upgradient of Anaconda's public water supply wells and there is concern that contaminants from drainfields in the West Valley could negatively impact the city's drinking water supply. Anaconda's wellfield is located in one of the few areas available near the community where an adequate volume of high-quality groundwater can be developed and the city recognizes the need to protect this valuable resource. Another concern is that the individual wells serving homes and businesses in the West Valley area could be contaminated by surrounding onsite wastewater systems. The coarse-grained soils and high groundwater conditions that are prevalent in the West Valley area are not conducive to providing the most effective on-site wastewater treatment.

The West Valley consists of two main areas: (1) the roughly 45 service connections along the north side of Highway 1 between Anaconda and the West Valley town site and (2) the 250 service connections within the West Valley town site. This first phase of new sewer installation would extend westward from City limits to Theatre Lane on the eastern edge of the West Valley town site (a.k.a. Valley View Subdivision) and provide service to 45 homes located along the north side of Highway 1. These forty-five West Valley homes will be disconnected from their private on-site wastewater treatment systems and connected to the new sewer extension. In accordance with Anaconda-Deer Lodge County Ordinance No. 33, the homeowners are required to connect to the new sewer extension at their own expense. In addition, decommissioning of existing septic tanks will also be a homeowner's expense. This environmental assessment addresses only the first phase of 45 service connections.

The proposed Phase 1 West Valley project consists of connection to the ADLC public WWTP through construction of:

- 2.4 miles of 12-inch sewer trunk main installed within the former railroad right-of-way from Anaconda to the West Valley town site, and
- 1.2 miles of 12-inch diameter sewer main connecting this new West Valley trunk main to the existing ADLC sewer collection system at Main Street.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION

Three main alternatives for addressing the expansion of Anaconda's sewer collection system into the West Valley area were considered: West Valley centralized wastewater treatment plant (WWTP), conveyance to the Anaconda WWTP, and the no-action alternative. Four different routing options were analyzed under the option to connect to Anaconda's WWTP: connection to Fourth Street trunk line, flow equalization and connection to Fourth Street trunk line, connection to Main Street, and connection to the Pennsylvania Avenue sewer. These alternatives are summarized below:

A. Alternative 1: West Valley Centralized Wastewater Treatment Plant (WWTP)
This alternative consists of construction of an activated sludge or oxidation ditch mechanical WWTP to serve strictly the West Valley area. This option was evaluated for the City in a 2000 engineering study. That study found that construction of a mechanical treatment plant was two to three times the cost of connecting the West Valley to the existing Anaconda wastewater collection and treatment systems. Based on this significant cost disparity, the option of a centralized WWTP was not evaluated further in the 2011 West Valley Sewer Extension Preliminary Engineering Report (PER), was not determined to be a viable alternative, and will not be given further consideration.

B. Alternative 2A: Conveyance to Anaconda's Wastewater Treatment Facility – Connection to Fourth Street Trunk Line
This alternative consists of 1,400 lineal feet of 12-inch sewer main; 1,500 lineal feet of 15-inch sewer main; and 1,200 lineal feet of 18-inch sewer main. Construction would also include upsizing 2,000 lineal feet of 8-inch and 12-inch sewer main on the Fourth Street trunk line with new 18-inch sewer main. This option would require a trench depth of approximately 27 feet at the deepest end, raising concerns about excavation safety and manhole access. Another construction challenge would be crossing under the existing 14-inch water main on Fourth Street. Due to these construction constraints and long-term maintenance concerns, Alternative 2A was not considered further.

C. Alternative 2B: Conveyance to Anaconda's Wastewater Treatment Facility – Flow Equalization and Connection to Fourth Street Trunk Line
This alternative consists of a West Valley sewer collection system similar to the one in Alternative 2A. However, in lieu of upsizing the downstream pipe in Fourth Street, a 240,000-gallon equalization basin would be installed to collect West Valley wastewater prior to release into the Fourth Street trunk sewer. Wastewater would be stored and released at a controlled rate within the flow limits of the downstream Fourth Street, Park Avenue, and Cottonwood Street sewers. This release would occur during low-flow, nighttime hours. Alternative 2B was not considered further due to the drawbacks

of a dependence of power at the equalization basin; loss of flexibility to allow future, adjacent growth; and the equalized West Valley wastewater flows challenging the capacity limits of the Fourth Street trunk sewer.

D. Alternative 2C: Conveyance to Anaconda's Wastewater Treatment Facility – Connection to Main Street Sewer

This alternative consists of connection of the West Valley trunk line to the existing Main Street sewer at Front Street and requires construction of 5,185 lineal feet of 12-inch sewer main and two crossings of the BA&P/Rarus railroad. The existing Park Avenue\Goosetown sewer main has adequate capacity to handle the projected sewer flows up to the West Valley town site. This alternative includes upsizing of the Main Street sewer segment. This alternative was determined to be a viable option and will be given further consideration.

E. Alternative 2D: Conveyance To Anaconda's Wastewater Treatment Facility – Connection to Pennsylvania Avenue Sewer

This alternative consists of connecting the West Valley trunk line to the existing Pennsylvania Avenue sewer and requires 3,310 lineal feet of 12-inch sewer main and a single crossing of the BA&P/Rarus railroad. Since the capacity of the Pennsylvania sewer is insufficient to handle all of the projected West Valley wastewater flow, it would be upsized under this alternative. This alternative was determined to be a viable option and will be given further consideration.

F. Alternative 3: No Action

Under the no-action alternative, all existing and future development in this area would rely on onsite systems for wastewater treatment and disposal. Homeowners needing drainfield replacement on smaller lots would likely have trouble finding an adequate new site that meets Anaconda City-County Health Department separation distance requirements. In addition, the expense of installing a new drainfield meeting current onsite wastewater treatment standards may be financially burdensome to the homeowner. Growth in the West Valley is also stymied by the unavailability of a public wastewater treatment system. More importantly, under the no-action alternative underlying groundwater resources and nearby surface water remain at risk of contamination by pathogens and nutrients from onsite wastewater disposal. Based on these concerns, the no-action alternative was not considered to be a viable option.

IV. COST COMPARISON FOR ALTERNATIVES USING PRESENT WORTH ANALYSIS

Comparison of the cost effectiveness of engineering alternatives is generally based on a present worth analysis, which considers the capital cost, salvage value, and the long-term operation and maintenance costs of each alternative. Although only the first phase of the West Valley sewer extension project is addressed by this environmental assessment, the cost comparison for alternatives in the Preliminary Engineering Report (PER) was based on the total of the West Valley trunk line sewer, the West Valley town site sewer, and the connection to Anaconda's wastewater collection system. Costs were estimated from other similar projects and supplier quotes, and adjusted to anticipated site conditions.

Salvage values were based on straight - line depreciation, an assumed useful life of 50 years, and a $0.00 salvage value at the end of the respective useful life. Annual

operation and maintenance costs were based on jet-cleaning 1/5 of the total length of the sewer main each year at a cost of $1.50 per foot to cover labor and equipment. An interest rate of 6% and an inflation rate of 2% over the 20-year planning period (design year 2030 was used in the analysis. Table 1 provides a summary of the present worth analysis of the feasible alternatives considered.

TABLE 1 – WEST VALLEY SEWER EXTENSION COST ESTIMATES

Alternative	Capital Cost	Annual O&M Present Worth	Present Worth of Salvage Value	Present Worth (rounded to the nearest $1,000)
2C – Main Street Connection	$5,382,044	$150,565	$1,006,888	$4,526,000
2D – Pennsylvania Avenue Connection	$6,250,163	$142,205	$1,169,298	$5,223,000

V. BASIS OF SELECTION OF PREFERRED ALTERNATIVE

As explained in Section III of this environmental assessment, only Alternative 2C (connection to the Main Street sewer) and Alternative 2D (connection to the Pennsylvania Avenue sewer) were considered viable alternatives to be considered further. These alternatives are compared in Table 2 on the basis of how well they address the problem, cost-effectiveness, operation and maintenance, regulatory issues, land requirements, environmental impacts, construction issues, and public acceptance. The ratings of plus (+), minus (-), or neutral (o) are assigned as a relative comparison to the other alternative. Except for cost-effectiveness, the two alternatives were considered equal based on these factors of comparison. Therefore, Alternative 2C, with the lower present worth cost of $4,526,000 is the chosen alternative.

TABLE 2 – WEST VALLEY SEWER EXTENSION ALTERNATIVE RANKING

Ranking Criteria	Alternative 2C Connect to Main Street Sewer	Alternative 2D Connect to Pennsylvania Avenue Sewer
Addresses Problem	(o)	(o)
Cost-Effectiveness	(+)	(-)
Operation and Maintenance	(o)	(o)
Regulatory Issues	(o)	(o)
Land Requirements	(o)	(o)
Environmental Impacts	(o)	(o)
Construction Issues	(o)	(o)
Public Acceptance	(o)	(o)
Total	(+1)	(-1)

The Anaconda-Deer Lodge County (ADLC) West Valley Sewer Extension Phase 1 project has an estimated project cost of $2,572,100. The project will be financed by a State and Tribal Assistance Grant (STAG) of $967,800; a $15,000 Treasure State Endowment Program (TSEP) Planning Grant; $50,000 from the ADLC wastewater/sewer fund; and a Montana Water Pollution Control State Revolving Fund (WPCSRF) Program 20-year loan in the amount of $1,539,300.00 and an interest rate of 3.00%.

The current $5.25 ADLC monthly residential sewer rate has been in place since 1984. Sewer fees are collected on property tax notices. The PER recommended a three-tiered residential sewer rate increase for use or availability of the ADLC wastewater treatment facilities in $7.00 increments for the years 2013, 2014, and 2015, with a resulting overall increase of $21.00 per month. This represents a 400% increase over the existing residential sewer rate. Commercial sewer rates will be increased by the same percentage. The first rate increase of $7.00 was approved by the Commission at its meeting on April 16, 2013. Of this first $7.00 increase, $3.27 supports the Phase 1 West Valley improvements. The sewer rate increase is necessary to build a reserve fund to finance not only Phase 1 of the West Valley project, but other needed wastewater system improvements.

The current average monthly residential sewer rate in Anaconda is $5.25. ADLC's sewer fees are billed to customers on semiannual property tax notices. After the first $7.00 rate increase needed to fund the Phase 1 West Valley improvements, the new sewer rate will be $12.25, which is approximately 0.56% of the monthly median household income of $2,192.00. Based on Environmental Protection Agency guidance for project affordability, the proposed monthly sewer fee per household is not expected to impose an economic hardship for Anaconda sewer users.

VI. AFFECTED ENVIRONMENT

A. PLANNING AREA/MAPS

The City of Anaconda is located along Montana Highway 1, approximately seven miles west of its easternmost intersection with I -90. The West Valley planning area is generally described as the valley area immediately west of the City of Anaconda along Highway 1. All land within the planning area is outside city limits, and as such does not have zoning. The West Valley planning area is shown in Figure 2. It is bounded by the City of Anaconda to the east, with this eastern boundary running along Linden Street from Lincoln Avenue north to North Cable Road. The northern boundary of the study area is bounded by residential areas on the north side of North Cable Road and within Geary, Stucky, Levengood, and English gulches. The western boundary of the study area is bounded by Phillips Lane, from North Cable Road to the south side of Highway 1, and includes the developed areas on the west side of the lane. The southern boundary of the planning area runs from Phillips Lane down Stump Town Road to the main channel of Warm Springs Creek and along the creek to the residential area on Bridge Lane, where it veers south to include the residences on Bridge and Lescantz lanes and then connects to Linden Street at the eastern boundary.

Phase 1 of the West Valley sewer extension project extends the existing sanitary

sewer from Anaconda City limits westward to Theatre Lane on the eastern edge of the West Valley town site (Valley View Subdivision) and will provide service to 45 homes along Highway 1.

Figure 1 shows the general location of the County of Anaconda-Deer Lodge within the State of Montana. Figure 2 shows the West Valley project boundary map. Figure 3 shows a schematic layout of the City of Anaconda's existing municipal wastewater system. Figure 4 shows West Valley sewer extension connection alternatives.

B. POPULATION

The community of Anaconda was built around the mining operations that dominated the area prior to the 1980s. Since cessation of mining operations, the population in the area has steadily declined, with the projected rate of decline for the County at 16.5% for the years between 2000 and 2030. Census data from the year 2000 indicated a Deer Lodge County population of 9,417. With the predicted rate of decline, the estimated 2030 county population is 7,860.

There are 249 homes in the West Valley town site area, 70 homes in the North Cable Road area, and 105 residences in the Highway 1 frontage area, for a total of 424 residences in the planning area. Forty-five homes in the Highway 1 frontage area are included in the Phase 1 West Valley sewer improvements project. Twenty-year growth rates of 1.0%, 5.0%, and 2.0% are forecasted in the PER for the West Valley town site, North Cable Road, and Highway 1 frontage areas, respectively. Using these growth rates and assuming three persons per home, the estimated 2031 West Valley planning area population is 1,953.

C. FLOW PROJECTIONS

The existing Anaconda WWTP was designed for an average daily flow of 3.0 MGD from May through September and an average daily flow of 2.5 MGD from October through April. These flows included capacity for wastewater from anticipated future sewer extensions to the West Valley and Opportunity. The current average wintertime daily flow to Anaconda's wastewater treatment plant (WWTP) is 0.89 MGD and the current average summertime daily flow is 1.13 MGD.

Based on a conservative occupancy rate of three persons per household and 45 homes to be connected to public sewer in Phase 1, there will be an additional 135 people served by Anaconda's wastewater treatment plant as a result of this project. Based on 100 gallons per capita per day of wastewater generation per person, as required in Montana's standards, the proposed expansion will result in an additional 13,500 gpd of wastewater to be treated at the existing WWTP. This flow is well within the design capacity of the existing WWTP.

D. NATURAL FEATURES

The City of Anaconda is located along Warm Springs Creek in southwestern Montana near the Continental Divide. Warm Springs Creek originates in the Flint Creek Range from snowmelt, flows northeasterly through the city and, joins with the Clark Fork River

approximately 10.5 miles away. Warm Springs Creek is classified as A-1 by the State of Montana from its headwaters to Meyers Diversion, located within the study area. Waters classified A-1 are to be maintained suitable for drinking, culinary and food processing purposes after conventional treatment for removal of naturally present impurities. Water quality must be maintained suitable for bathing, swimming, and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply. All of the surface water found within the study area is part of the Upper Clark Fork Drainage Area.

The West Valley project area is located immediately west of Anaconda within the gradually sloped, narrow valley of Warm Springs Creek. Elevations within the area are between 5,360 to 5,800 feet above sea level. Development is generally confined to the creek bottom and the lower slopes of the surrounding hills. Mountains tower around the valley, with some as high as 10,000 feet. The Anaconda-Pintlar Range lies to the south of Anaconda and the Flint Creek Range lies to the northwest.

Underlying bedrock consists of a variety of granitic, volcanic, sedimentary, and metamorphic rocks, as a result of several major mountain-building episodes followed by subsurface magma intrusions. In later times, the West Valley was shaped by glaciers originating in the Flint Creek Range. Consequently, the predominant surface geology is comprised of glacial and alluvial deposits. The predominant soil type is loam containing significant amounts of gravel, cobbles, and sand.

Groundwater in the West Valley is comprised of an upper unconfined Quaternary alluvium aquifer and a Tertiary aquifer of alternating sands, clayey sands, and clay layers. Groundwater flow in the upper aquifer is to the southeast, which is the same direction as surface water drainage. Groundwater depth varies throughout the study area, but is approximately 10 to 20 feet at the eastern end of the study area near Anaconda's public well field and generally less than 10 feet along the West Valley Phase 1 sewer main route. According to soils information from the Natural Resources Conservation Service, groundwater depth may be as shallow as 24 inches in the construction area.

Anaconda's climate is classified as a semi-arid inland mountain climate. A major influence on local weather is the interception of moisture by the surrounding mountains. Annual precipitation is 15 inches per year.

VII. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

A. DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS

1. Land Use – Approximately 2.5 miles of the sewer extension (from the Anaconda city limits to the West Valley town site) will be located within Montana Department of Transportation (DOT) Highway 1 right-of-way. This new segment of main will connect to the existing Anaconda wastewater collection system through 1.2 miles of new sewer constructed generally on the north side of the railroad through developed city lots, some residential and some commercial. Residential lots to be provided with public sewer in the Phase I West Valley area are generally located directly along the immediate corridor of Highway 1. There is also some light commercial development

within this corridor.

Outside of the proposed sewer district boundary, but within the planning area boundary, there is some peripheral residential development and also some undeveloped land. The predominant agricultural land use classification within this open area is hay production, with some land allocated to grazing. Only a small percentage of the land is irrigated. This project does not encroach on agricultural land and consequently will have no negative impacts on agricultural lands.

2. Floodplain – There are designated floodplains along Warm Springs Creek and also along gulches within the West Valley area that are within the proposed sewer main route. Crossing into these floodplain areas is unavoidable and will require a permit from the Anaconda-Deer Lodge County Floodplain Administrator before construction begins. Manhole covers for the sewer will be outside the 100-year floodplain, and therefore, special manhole covers will not be needed.

3. Wetlands – The sewer main route extends 4,000 feet through an abandoned railroad bed with borrow ditches where wetlands may be impacted. It is estimated that a maximum of 1,000 feet of wetlands would be affected. Several wetlands are delineated in the US Fish and Wildlife Service National Wetlands Inventory. The preliminary estimate on wetland disturbance is for less than 0.5 acres in area and therefore the sewer extension project should qualify for a Nationwide General Permit. A field survey will be conducted by a qualified wetland delineator in order to determine the presence of any jurisdictional wetlands along an 800-foot stretch of the project area. There are three stream crossings in the Phase 1 West Valley project – one at Warm Springs Creek, one at Fifer Gulch Creek, and one at an unnamed drainage in the general vicinity of Washoe Park. The sewer crossings at Warm Springs and Fifer Gulch creeks will be completed through boring which will minimize environmental impacts. The sewer crossing at the unnamed drainage will require a permit from the US Corps of Engineers (COE) for backfilling in this slough area. This activity would be considered a temporary impact and will follow the permit conditions including mitigation in the 404 permit.

4. Superfund Issues – The West Valley trunk line sewer route follows the alignment of the former BA&P/Rarus railroad. The railroad tracks and underlying mine waste embankment materials were recently removed by Atlantic Richfield under the direction of the U.S. EPA. The subject railroad right-of-way was then deeded to the Montana Department of Transportation. It is expected that all mine waste materials have been removed from the property. Final design of the sewer line will require coordination with ADLC's institutional controls program. This program states that if soil contamination is discovered, the contractor may need to keep the contaminated material separate from clean material, and take the contaminated soil to the Superfund repository. ADLC's institutional controls program has established a fund to compensate contractors for incremental costs in dealing with contaminated soil. The final design documents will state the required procedures should any mine waste materials be encountered during trench excavation.

5. Vegetation –This project does not encroach on agricultural land. Any vegetation disturbed during construction will be reseeded.

6. Cultural Resources – According to the Montana State Historic Preservation Office (SHPO) there have been several previously recorded historic cultural sites within the

designated project area. Most, if not all, of the proposed sewer main route will be located within previously disturbed right-of-way and will not impact structures over fifty years of age. Should cultural materials be inadvertently discovered during the project, SHPO will be contacted.

7. Fish and Wildlife – The elimination of on-site wastewater systems will reduce the amount of pathogens, nutrients, and other contaminants reaching waters within the Clark Fork watershed, thereby improving environmental quality for fish and wildlife. Warm Springs Creek has been identified as critical bull trout habitat. Westslope cutthroat trout are also a species of concern in the project area. State and federal agency permitting requirements will require that construction practices protect fish habitat. Boring under stream segments, as currently proposed for two crossings, will help to protect the fishery.

   Although some larger mammal species with a federal status of sensitive or threatened can be found in the general West Valley region, these mammals do not frequent immediately along the highway, where the proposed project is located. No adverse impacts to wildlife are foreseen.

8. Water Quality – Water quality in the area will improve due to the proposed project. There are currently not central wastewater collection or water distribution systems in the West Valley. Individual on-site wastewater systems and wells serve the homes and commercial businesses. Coarse-grained soils and shallow groundwater depth found within the West Valley area are not conducive to providing effective wastewater treatment. Most local wells utilize the vulnerable upper alluvial aquifer as their water source. In addition to being within close proximity of many individual domestic wells, the West Valley on-site wastewater systems are upgradient of the Anaconda-Deer Lodge County's public water supply wells. Replacement of septic tank and drainfield systems with public sewer service will help protect local water quality from contamination by pathogens, pharmaceuticals, and nutrients. The implementation of best management practices will protect any nearby surface streams from stormwater runoff during construction.

9. Air Quality – Short-term negative impacts on air quality will occur during construction in the form of dust and fumes from heavy equipment. Proper construction practices, such as watering of the soils, will minimize the problem. The contractor will be responsible for dust control throughout the project. No long-term air quality effects would result from any of this work.

10. Public Health – Public health will not be negatively affected by the project. The project will replace on-site wastewater systems with sewer service to Anaconda-Deer Lodge County's wastewater treatment facility. This will greatly reduce the potential to pollute ground and surface waters in the West Valley area.

11. Energy – A direct short-term impact of energy resources will be consumed during the construction phase. The project will have no long-term effect on energy consumption.

12. Noise – Short-term impacts from excessive noise levels may occur during the construction activities. The construction period will be limited to normal daytime hours to avoid early morning or late evening construction disturbances. No significant long-term impacts from noise will occur.

13. Sludge Disposal – As part of this project, individual septic tanks will be abandoned in areas where service lines are extended. The existing septic tanks will be pumped and abandoned by filling them with sand. A licensed septic tank pumper will be contracted to pump each tank and dispose of the contents in accordance with Montana's septage disposal regulations.

14. Growth – The Anaconda area has seen a population decline since mining operations ceased around the 1980s. A population decline of 16.5% is projected over the 20-year planning period. Growth west of Anaconda has been specifically limited due to the lack of a central wastewater system and environmental site limitations inhibiting construction of new on-site wastewater systems. Once public sewer is extended to the West Valley area, some growth adjacent to the West Valley townsite and along Highway 1 and North Cable Road is expected, despite the overall trend in migration away from Anaconda. Construction of a central collection system may promote more dense development than currently exists. Future density, however, can be controlled with proper zoning.

15. Environmental Justice – Environmental Justice Executive Order 12898: The proposed project will not result in disproportionately high or adverse human health or environmental effects on minority or low income populations. The financial impact of this project is supported by a proposed sewer rate increase, which will be first realized on the semiannual property taxed notice in November 2013. No disproportionate effects among any portion of the community would be expected.

16. Cumulative Effects – Extension of Anaconda's public wastewater service into the West Valley may result in secondary and/or cumulative impacts due to growth of the community and expansion of the service area. Secondary impacts associated with housing, commercial development, solid waste, transportation, utilities, air quality, water utilization, and possible loss of agricultural and rural lands may occur. These secondary impacts are uncertain at this time and therefore cannot be directly addressed in the EA. However, these impacts will need to be managed and minimized as much as possible through proper community planning. There are several existing city, county and state regulations already in place (i.e., zoning regulations, comprehensive planning, subdivision laws, etc.) that control the density and development of property with regards to water supply, sewage disposal, solid waste disposal, transportation, and storm drainage.

B. UNAVOIDABLE ADVERSE IMPACTS

Short-term construction-related impacts (i.e., noise, dust, etc.) will occur, but will be minimized through proper construction management. Energy consumption during construction cannot be avoided.

VIII. PUBLIC PARTICIPATION

Interest in a West Valley sewer extension project first began to develop in 2003. During that period 123 people signed a petition expressing interest in the project and asking Anaconda-Deer Lodge County to create a Rural Special Improvement District. A ten-member, volunteer

West Valley Task Force was formed and held a community update meeting at Smitty's Barn on October 10, 2003 to present the plan to extend sewer service from Anaconda to West Valley residents. In September 2004 the West Valley Task Force distributed a survey/questionnaire to the 310 property owners within the proposed sewer district boundary, which included the West Valley town site, the Highway 1 corridor from Anaconda to the West Valley town site, and a portion of North Cable Road just west of Anaconda. The survey's purpose was to determine the general condition of the existing on-site wastewater systems, request permission for domestic well sampling, and to assess local willingness to connect to Anaconda's public wastewater system. The response rate to the survey/questionnaire was 50%.

More recently, the public has been kept informed of the proposed wastewater improvements project though newspaper articles in *The Anaconda Leader and The Montana Standard* published between March and September of 2012. Identical informational public meetings on the proposed West Valley Sewer Extension Project were held on Tuesday, September 27, 2012, in the County Courthouse and Wednesday, October 3, 2012, at the Anaconda Riding Club Center. Twenty people attended each meeting, including a DEQ, WPCSRF Program representative at the second meeting. The presentations provided background information on the history of the wastewater system, the upcoming discharge permit, and the condition of the existing Anaconda-Deer Lodge County wastewater system. The discussion then focused on the West Valley Sewer Extension Project and its associated costs and how this project was prioritized with respect to the other needed wastewater improvements. Comments from the public consisted of questions centered on the amount of the monthly sewer fee and hookup costs, the route of the new sewer extension, and which lots would receive sewer stubouts.

A public hearing regarding the intent of the ADLC to increase existing sewer rates was held on April 9, 2013 in the Anaconda courthouse courtroom. A financial analysis of the wastewater/sewer fund and an overview of the proposed wastewater improvements, including the West Valley sewer main extension, were presented. The courtroom was full and 23 people gave public comment. The main concern was that the 400 percent sewer rate increase was occurring over too short a period and might be a hardship for those on a fixed or low income. The first rate increase of $7.00 was approved by the Commission at their next meeting on April 16, 2013.

IX. AGENCY ACTION, APPLICABLE REGULATIONS AND PERMITTING AUTHORITIES

All proposed improvements will be designed to meet state standards in accordance with Circular DEQ-2 and will be constructed using standard construction methods. Best management practices will be implemented to minimize or eliminate pollutants during construction. No additional permits will be required from the State Revolving Fund (SRF) section of the DEQ for this project after the review and approval of the submitted plans and specifications. However, coverage under the storm water general discharge permit and groundwater dewatering discharge permit, are required from the DEQ Water Protection Bureau prior to the beginning of construction. A 124 Permit from the Department of Fish, Wildlife and Parks, a 404 Permit from the U.S. Corps of Engineers, and a 318 Authorization from the Department of Environment Quality will be required for any work that occurs in a streambed or wetland, and will be obtained if necessary.

X. REFERENCE DOCUMENTS

The following document was utilized in the environmental review of this project and is considered to be part of the project file:

1. Anaconda-Deer Lodge County West Valley Sewer Extension Final Preliminary Engineering Report, DOWL HKM, December 2012.

XI. AGENCIES CONSULTED

The following agencies have been contacted in regard to the proposed construction of this project:

1. The Montana Department of Fish Wildlife and Parks (FWP). FWP did not foresee any adverse effects on fish or wildlife resources or their habitat relating to the proposal.

2. The United States Fish and Wildlife Service (FWS). FWS noted that any wastewater improvements that would enhance the quality of water discharged into tributaries of the Clark Fork River are likely to prove beneficial to fish, wildlife, and habitat resources.

3. Montana State Historic Preservation Office (SHPO). SHPO has indicated that as long as the project occurs within previously disturbed right-of-way and there will be no disturbance to structures over fifty years old, there is a low likelihood that cultural resources will be impacted. SHPO determined that a cultural resource inventory is unwarranted at this time. If any cultural materials are discovered during the project, the SHPO office should be contacted and the site investigated.

4. The United States Army Corps of Engineers (COE). COE would require a permit for backfilling the trench for the new sewer main within an identified slough area. This activity would be considered a temporary impact and would not require mitigation. A Preconstruction Notification (404 application) will be submitted to the COE for the utility work within wetlands and waters of the US. A turnaround time of 30 to 60 days is expected.

5. Department of Natural Resources and Conservation (DNRC). DNRC noted that there are designated floodplains along Warm Springs Creek, Priebe Gulch, Geary Gulch, Stucky Gulch, and English Gulch, and that a floodplain permit from the Anaconda-Deer Lodge County Floodplain Administrator would be required before construction begins.

Recommendation for Further Environmental Analysis:

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

Rationale for Recommendation: Through the Anaconda-Deer Lodge County West Valley Sewer Extension Final Preliminary Engineering Report (DOWL HKM, December 2012), and the public process involved, the County of Anaconda-Deer Lodge determined that extension of its public wastewater collection system into the West Valley with a phased approach was the preferred alternative. Through this EA, the MDEQ has verified that none of the adverse

impacts of the proposed wastewater treatment facility upgrades are significant; therefore an environmental impact statement is not required. The environmental review was conducted in accordance with the Administrative Rules of Montana (ARM) 17.4.607, 17.4.608, 17.4.609 and 17.4.610. This EA is the appropriate level of analysis because none of the adverse effects of the impacts are significant. A Finding of No Significant Impact (FONSI) will be issued and legally advertised in the local newspaper and distributed to a list of interested agencies. Comments regarding the project will be received for 30 days before final approval is granted.

EA Prepared by:

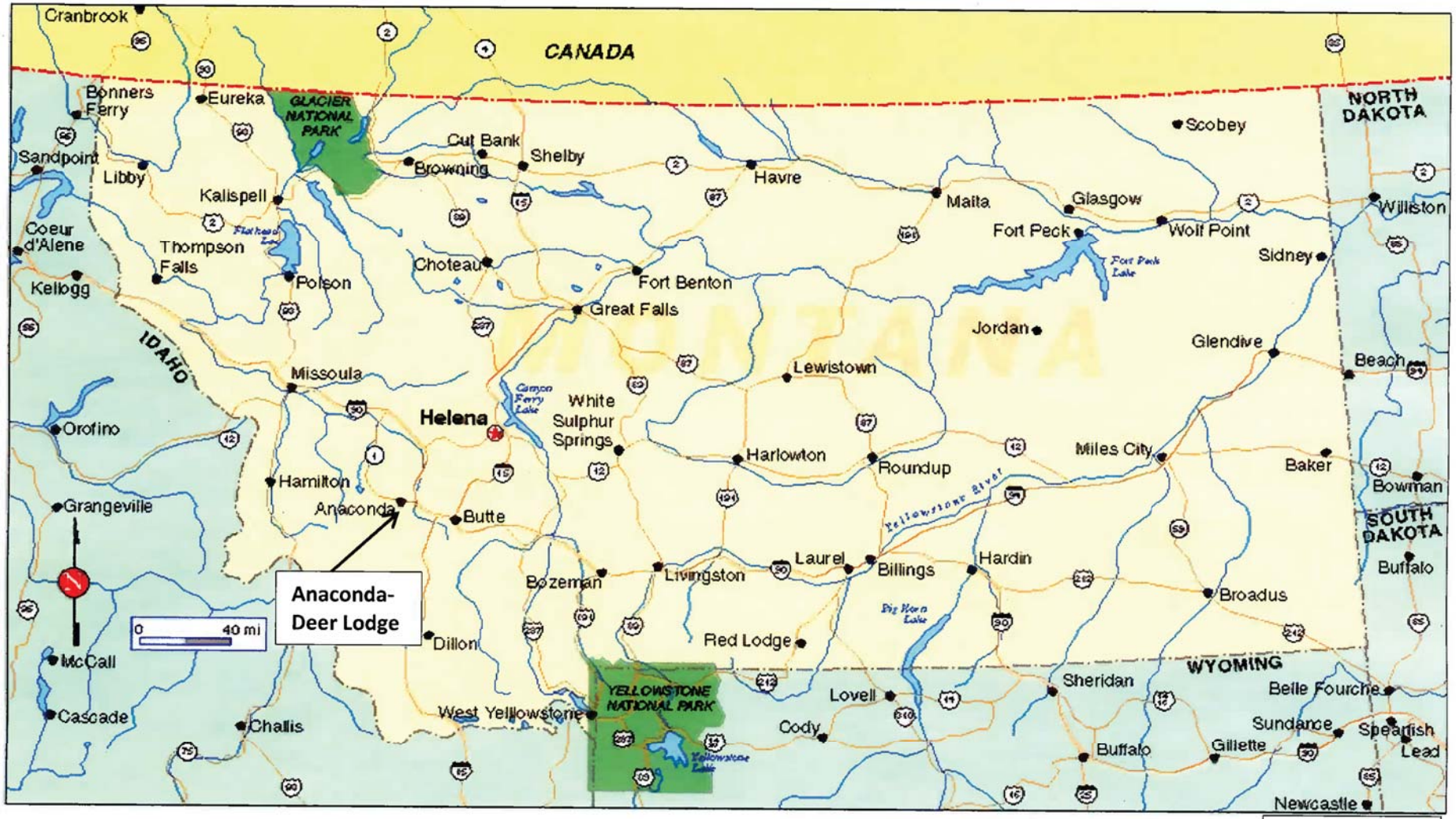
Michele Marsh — 6-10-13

Michele Marsh, P.E. — Date

EA Approved by:

Mike Abrahamson — 6/10/13

Mike Abrahamson, P.E. — Date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Sandpoint
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Scobey
NORTH DAKOTA
Malta
Glasgow
Williston
Coeur d'Alene
Thompson Falls
Polson
Choteau
Fort Peck
Wolf Point
Sidney
Kellogg
Fort Benton
Great Falls
Jordan
Glendive
IDAHO
Missoula
Lewistown
Beach
Helena
White Sulphur Springs
Orofino
Harlowton
Roundup
Miles City
Baker
Bowman
Hamilton
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Laurel
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Buffalo
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McCall
WYOMING
Sheridan
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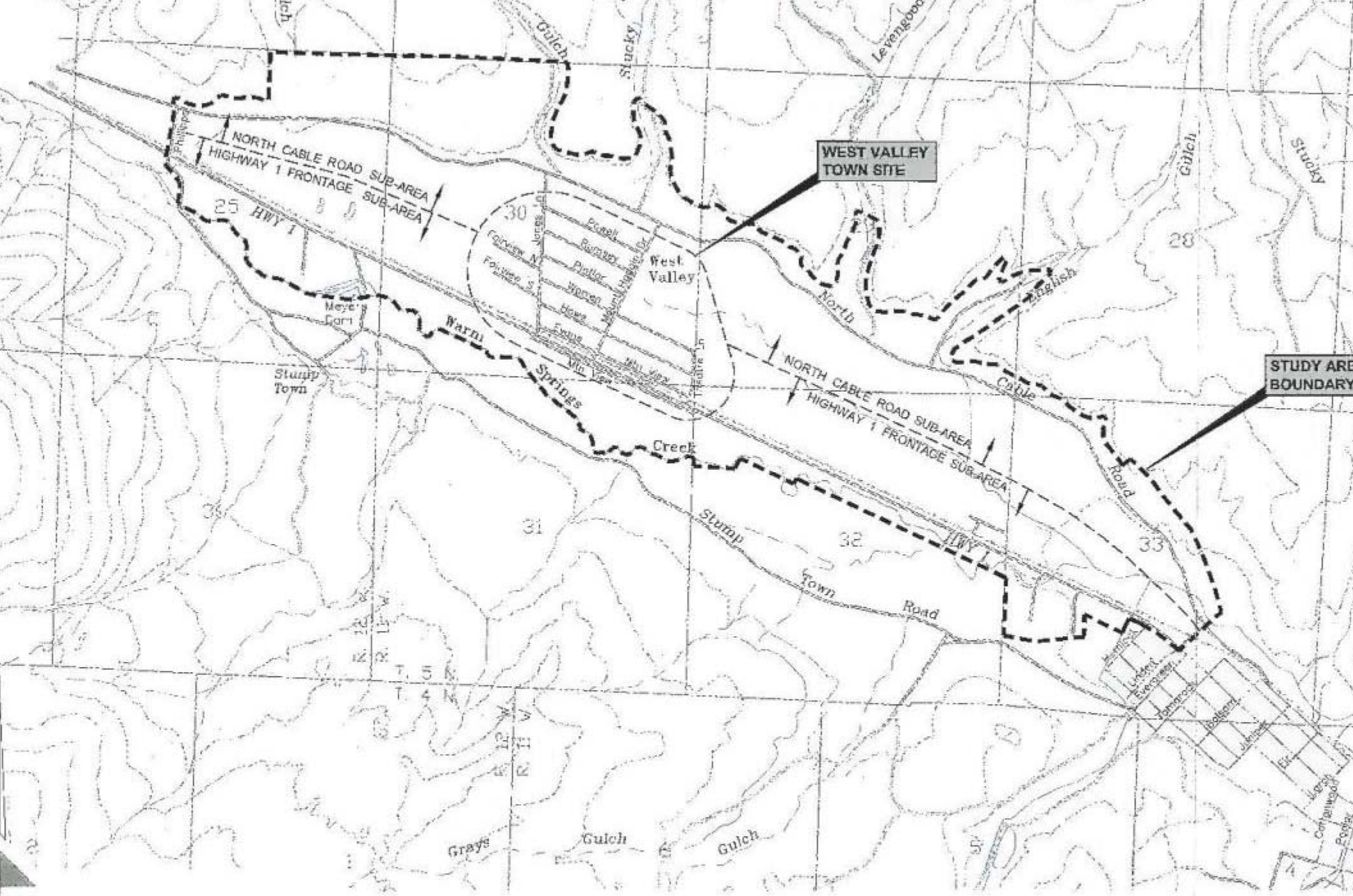
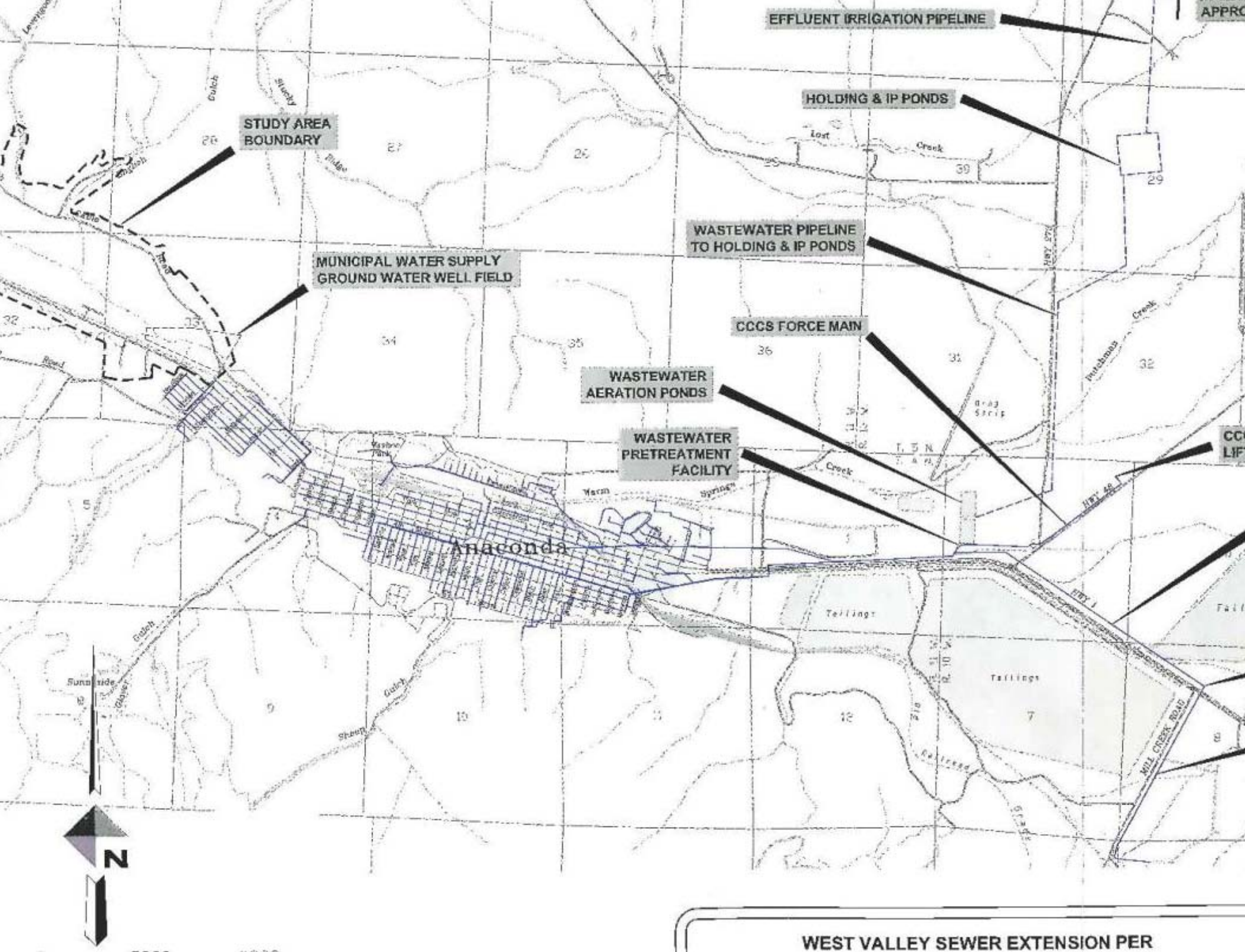
Spearfish
Lead
Buffalo
Gillette
Newcastle

FIGURE 1



WEST VALLEY SEWER EXTENSION PER



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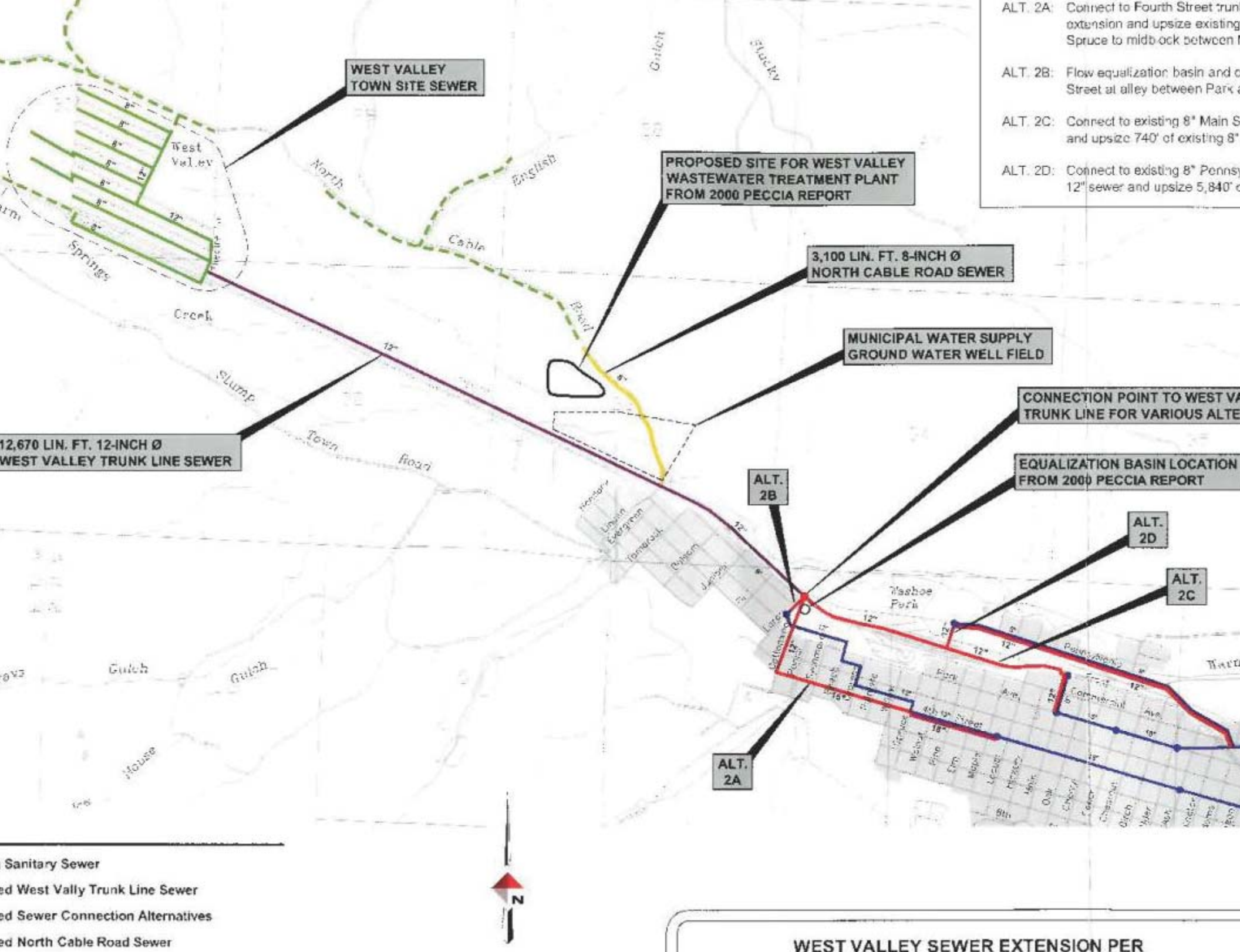

ALT. 2A: Connect to Fourth Street trun
extension and upsize existing
Spruce to midblock between
ALT. 2B: Flow equalization basin and c
Street at alley between Park a
ALT. 2C: Connect to existing 8" Main S
and upsize 740' of existing 8"
ALT. 2D: Connect to existing 8" Penns
12" sewer and upsize 5,840' c
WEST VALLEY TOWN SITE SEWER
PROPOSED SITE FOR WEST VALLEY WASTEWATER TREATMENT PLANT FROM 2000 PECCIA REPORT
3,100 LIN. FT. 8-INCH Ø NORTH CABLE ROAD SEWER
MUNICIPAL WATER SUPPLY GROUND WATER WELL FIELD
CONNECTION POINT TO WEST VA
TRUNK LINE FOR VARIOUS ALTE
EQUALIZATION BASIN LOCATION FROM 2000 PECCIA REPORT
12,670 LIN. FT. 12-INCH Ø WEST VALLEY TRUNK LINE SEWER
ALT. 2B
ALT. 2D
ALT. 2C
ALT. 2A
West Valley
North Cable Road
English Road
Springs Creek
Slump Town Road
Gulch
Washoe Park
Sanitary Sewer
ed West Vally Trunk Line Sewer
ed Sewer Connection Alternatives
ed North Cable Road Sewer
N
WEST VALLEY SEWER EXTENSION PER