

APPLICATION FOR TRANSPORTATION AND
UTILITY SYSTEMS AND FACILITIES
ON FEDERAL LANDS

FORM APPROVED
OMB NO. 1004-0189
Expires: November 30, 2008

NOTE: Before completing and filing the application, the applicant should completely review this package and schedule a preapplication meeting with representatives of the agency responsible for processing the application. Each agency may have specific and unique requirements to be met in preparing and processing the application. Many times, with the help of the agency representative, the application can be completed at the preapplication meeting.

FOR AGENCY USE ONLY

Application Number

34604

Date filed

12/01/2003

1. Name and address of applicant (include zip code)

Judd Whliworth
2604 Pahsimeroi Road
May, Idaho 83253

2. Name, title, and address of authorized agent if different from Item 1 (include zip code)

Same

3. TELEPHONE (area code)

Applicant

208-940-0456

Authorized Agent

4. As applicant are you? (check one)

- a. ☒ Individual
b. ☐ Corporation*
c. ☐ Partnership/Association*
d. ☐ State Government/State Agency
e. ☐ Local Government
f. ☐ Federal Agency

* If checked, complete supplemental page

5. Specify what application is for: (check one)

- a. ☐ New authorization
b. ☐ Renewing existing authorization No.
c. ☒ Amend existing authorization No.
d. ☐ Assign existing authorization No.
e. ☐ Existing use for which no authorization has been received*
f. ☐ Other*

* If checked provide details under Item 7

6. If an individual, or partnership are you a citizen(s) of the United States? ☒ Yes ☐ No

7. Project description (describe in detail): (a) Type of system or facility, (e.g., canal, pipeline, road); (b) related structures and facilities; (c) physical specifications (length, width, grading, etc.); (d) term of years needed; (e) time of year of use or operation; (f) Volume or amount of product to be transported; (g) duration and timing of construction; and (h) temporary work areas needed for construction (Attach additional sheets, if additional space is needed.)

a) Irrigation Pipeline to transport water gravity flow.

b) This project proposes to install approximately 922 feet of 18" mainline PVC pipe and then reduce down to 15" PVC pipe for approximately 3940 feet which will connect to existing 15" pipe on private ground. Once on private ground the pipe is again reduced to 12" and then 10" to provide a gravity flow pressure for one existing pivot. This is the extent of the project that has federal funding provided through the NRCS EQIP program. Another pivot will be installed strictly on private ground and has already been purchased and will be installed after the pipeline project is complete. Idaho Department of Fish and Game has been contacted and will provide input on fish screening for the system at the point of diversion. A bubble screen will be installed at the point of diversion where the pipe comes out of Goldberg Creek and enters the pipeline. A point of diversion application has been completed and submitted to the Department of Fish and Game.

c) See attached design specifications.

d) 30 years.

e) Irrigation season of 4/1 through 10/31

SEE ATTACHED SHEET #1

8. Attach a map covering area and show location of project proposal attachment 344

9. State or local government approval: ☐ Attached ☒ Applied for ☐ Not required

10. Nonreturnable application fee ☐ Attached ☐ Not required

11. Does project cross international boundary or affect international waterways? ☐ Yes ☒ No (If "yes," indicate on map)

12. Give statement of your technical and financial capability to construct, operate, maintain, and terminate system for which authorization is being requested.

Technical Assistance for this project for project design and specifications will be provided by the NRCS. Federal Funding through the Natural Resources Conservation Service Environmental Quality Incentive Program is being provided at 50%. The additional 50% will be privately funded. This system will provide gravity flow for the irrigation pivots at virtually no cost therefore termination of the system is not an alternative that needs to be considered. Maintenance of the pipeline will be minimal as will the maintenance of the diversion and bubbler. Note: Delays in the project implementation may jeopardize funding.

- 13a. Describe other reasonable alternative routes and modes considered.
An existing irrigation ditch carries irrigation water to the fields for the existing pivot and current flood irrigation. It is very costly to pump the water to run the existing pivot. Additionally the water loss in the ditch and additional water to flood irrigation could be avoided if this system is installed.
- b. Why were these alternatives not selected?
It is not cost effective with the cost of diesel fuel or electrical power and is not as environmentally friendly because less water can be used if between the water savings in the pipeline and reduced flow needed to convert from flood to sprinkler irrigation.
- c. Give explanation as to why it is necessary to cross Federal Lands
The existing ditch is on Federal Lands. There is no other route that can be taken to divert the water from Goldberg Creek point of diversion to deliver the water to the point of use. This is water conservation as well as an energy conservation project.
14. List authorizations and pending applications filed for similar projects which may provide information to the authorizing agency. (Specify number, date, code, or name)
Not that I am aware of at this time.
15. Provide statement of need for project, including the economic feasibility and items such as: (a) cost of proposal (construction, operation, and maintenance); (b) estimated cost of next best alternative; and (c) expected public benefits.
a) Cost: approximately \$86,000. b) No other alternative is feasible. c) This is water conservation as well as an energy conservation project. The system is designed for energy conservation and will allow the elimination of the cost to pump with the current diesel pump or potential costs to convert to electricity. The public benefit for this project is energy savings and water conservation it will reduce the amount of irrigation water diverted from Goldberg Creek. (SEE ATTACHMENT #1)
16. Describe probable effects on the population in the area, including the social and economic aspects, and the rural lifestyles.
The project will have a positive impact on the rural lifestyle and the economy of the area. The local economy of farming and ranching will be enhanced by this project by improving crop production and reducing the amount of water needed and the cost of pumping. Because the pipeline is installed under ground there will be no long-term negative visual effects associated with the project. Short term impacts during construction will be offset by the positive long term positive impacts once the project is installed.
17. Describe likely environmental effects that the proposed project will have on: (a) air quality; (b) visual impact; (c) surface and ground water quality and quantity; (d) the control or structural change on any stream or other body of water; (e) existing noise levels; and (f) the surface of the land, including vegetation, permafrost, soil, and soil stability.
a) Air Quality: Short term impacts will be minimal during the narrow timeframe anticipated to be less than 10 days. The disturbed ground will be leveled and put back to as natural of state as possible and reseeded with a seed variety recommended by BLM. Air quality will be slightly affected by dust for a short duration. b) Visual impacts will be minimal during construction and will not be visual within one year of completion.
18. Describe the probable effects that the proposed project will have on (a) populations of fish, plantlife, wildlife, and marine life, including threatened and endangered species; and (b) marine mammals, including hunting, capturing, collecting, or killing these animals.
a) Potential impacts to Bull Trout and native fish species may occur during installation of the screen. Assistance may be required from IDFG for the one to two day time frame that the pipe is installed at the new point of diversion. Assistance has been requested of IDFG to address screening for this system. IDFG may need to be contacted if there is a potential for spawning areas to be impacted. To the best of my knowledge no negative or long term effects will occur that will impact wildlife or threatened/endangered plants in the area. (SEE ATTACHMENT #1)
19. State whether any hazardous material, as defined in this paragraph, will be used, produced, transported or stored on or within the right-of-way or any of the right-of-way facilities, or used in the construction, operation, maintenance or termination of the right-of-way or any of its facilities. "Hazardous material" means any substance, pollutant or contaminant that is listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. 9601 et seq., and its regulations. The definition of hazardous substances under CERCLA includes any "hazardous waste" as defined in the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. 9601 et seq., and its regulations. The term hazardous materials also includes any nuclear or byproduct material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq. The term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under CERCLA Section 101(14), 42 U.S.C. 9601(14), nor does the term include natural gas.
No hazardous materials will be used at the site. Fueling of equipment will be done on private property and will be managed appropriately. Equipment will have the necessary protection, including diapers to prevent fuel leakage on public ground.
20. Name all the Department(s)/Agency(ies) where this application is being filed
**Bureau of Land Management Challis Field Office
Natural Resources Conservation Service
Idaho Department of Water Resources**

I HEREBY CERTIFY, That I am of legal age and authorized to do business in the State and that I have personally examined the information contained in the application and believe that the information submitted is correct to the best of my knowledge

Signature of Applicant

Date

Title 18, U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 3)

Attachment #1

7. Project Description:

- a) Irrigation Pipeline to transport water gravity flow.
- b) This project proposes to install approximately 922 feet of 18" mainline PVC pipe and then reduce down to 15" PVC pipe for approximately 3940 feet which will connect to existing 15" pipe on private ground. Once on private ground the pipe is again reduced to 12" and then 10" to provide a gravity flow pressure for one existing pivot. This is the extent of the project that has federal funding provided through the NRCS EQIP program. Another pivot will be installed strictly on private ground and has already been purchased and will be installed after the pipeline project is complete. Idaho Department of Fish and Game has been contacted and will provide input on fish screening for the system at the point of diversion. A bubble screen will be installed at the point of diversion where the pipe comes out of Goldberg Creek and enters the pipeline. A point of diversion application has been completed and submitted to the Department of Fish and Game.
- c) See attached design specifications.
- d) 30 years.
- e) Irrigation season of 4/1 through 10/31
- f) Approximately 3.7 CFS of water will be transported in this system from Water Rights for this property covering a total of 374.1 acres of ground under three water rights. 73-146 has 6 cfs from the Pahsimeroi through a ditch that is diverted to Goldberg Creek, 73-145 has 3 cfs from Goldberg Creek and 73-191 has 5.6 cfs from the Pahsimeroi also into a ditch that is diverted into Goldberg Creek. Total water rights for this property are currently 14.6 cfs. Total requirement for the pipeline to irrigate from the two pivots is approximately 3.7 cfs that will be used to irrigate 278 acres under the pivots. All rights have. The point of diversion transfer number is noted as transfer #7279.
- g) Construction for the pipeline will take approximately 10 days (weather permitting). Equipment used will include the use of an excavator and/or backhoe and potentially a dump truck. The staging area will be located for offloading pipe and equipment will be located on private property.
- h) Temporary work area to trench and backfill will be about 44 foot wide trench and approximately 5 feet on the side of the trench during construction.

15. Statement of Need:

- a) Cost: approximately \$86,000. b) No other alternative is feasible. c) This is water conservation as well as an energy conservation project. The system is designed for energy conservation and will allow the elimination of the cost to pump with the current diesel pump or potential costs to convert to electricity. The public benefit for this project is energy savings and water conservation it will reduce the amount of irrigation water diverted from Goldberg Creek. Operation and maintenance will be less than digging the ditch on BLM on an annual basis which will also provide public benefit.

17. Describe Likely Effects:

a) Air Quality: Short term impacts will be minimal during the narrow timeframe anticipated to be less than 10 days. The disturbed ground will be leveled and put back to as natural of state as possible and reseeded with a seed variety recommended by BLM. Air quality will be slightly affected by dust for a short duration. b) Visual impacts will be minimal during construction and will not be visual within one year of completion. c) Surface and groundwater quality: Approximately 300 feet of pipe will be installed near Goldberg Creek and best management practices will be used. d) Point of diversion is being moved downstream and should be less impact than current POD. e) Noise levels will be minimal during construction and not effected after installation. f) Little vegetation is found along the main route of the pipeline and will be re-seeded after construction with BLM specified seed mix. Some disturbance will be noticed near the stream and will also be re-vegetated. The project should not affect soil stability. Equipment will be staged and fueled on private ground.

18. Probable effects:

a) Potential impacts to Bull Trout and native fish species may occur during installation of the screen. Assistance may be required from IDFG for the one to two day time frame that the pipe is installed at the new point of diversion. Assistance has been requested of IDFG to address screening for this system. IDFG may need to be contacted if there is a potential for spawning areas to be impacted. To the best of my knowledge no negative or long term effects will occur that will impact wildlife or threatened/endangered plants in the area. b) no animals or marine life will be hunted, captured, collected or killed as a result of this project.

NATURAL RESOURCES CONSERVATION SERVICE
Idaho
CONSTRUCTION SPECIFICATIONS
FOR
IRRIGATION WATER CONVEYANCE
HIGH PRESSURE UNDERGROUND PLASTIC

Judd Whitworth
(Owner/Operator)

FBIP

(Project/Title)

GENERAL

This specification covers the installation and materials for high-pressure plastic pipe 18 inch diameter and smaller. Pipelines shall be installed in accordance with a design and plan approved by the responsible technician. Details of construction shown in the design and plan but not included here shall be considered as a part of this specification. Construction activities shall be in accordance with applicable OSHA regulations.

TRENCH CONSTRUCTION

Trench width at any point below the top of the pipe should be only wide enough to permit the pipe to be easily placed and joined and to allow the initial backfill material to be uniformly placed under the haunches and sides of the pipe. The maximum trench width shall be 30 inches greater than the diameter of the pipe. The minimum trench width shall be not less than two pipe diameters, unless the trench is precision excavated with a semicircular bottom that closely fits the pipe and the width does not exceed the outside diameter of the pipe by more than 10 percent. Trench banks that are more than 5 feet high shall be shored or sloped. Refer to Figure 1 for typical trench details.

Where rock, hardpan, cobbles or other hard material which might prevent the pipe from being uniformly supported is encountered in the bottom of the trench, the trench shall be undercut a minimum of four inches below final grade. The over cut area of the trench will then be filled with sand or fine-grained soil.

BEDDING

The pipe shall be firmly and uniformly bedded throughout its entire length. Bedding material shall be placed and spread in uniform layers and in such a manner as to fill the trench so there are no unfilled spaces below the pipe. For pipe with bell joints, holes shall be dug in the bedding at the bells to permit the body of the pipe to be in contact with the bedding along its entire length. Blocking or mounding shall not be used to bring the pipe up to final grade.

PIPE INSTALLATION

Pipe shall be the diameter, length, material and pressure class as specified on the drawings.

The pipe shall not be dropped into the trench or handled in a manner to cause damage. Individual joints of pipe shall be inspected and any damaged pipe shall be removed and replaced. The pipe will be allowed to come within a few degrees of the temperature it will have after it is completely backfilled before placing fill other than that needed for shading or before connecting the pipe to other facilities.

Hand, mechanical or water packing are optional methods for placing and compacting pipe backfill.

Initial Backfill. The initial backfill material shall be soil or sand that is free from rocks, gravels, frozen materials larger than 1 inch or earth clods greater than 2 inch in diameter. This may be the on site trench excavated materials as long as any unsuitable materials are removed. The initial backfill materials shall be placed in a

semi-gloss Alkyd Enamel to provide a minimum thickness of 6 mils or (4) coated with epoxy paint in accordance with the Steel Structures Council (SSPC) Paint Specification # 16.

Pipelines with solvent welded joints shall have expansion-contraction couplers as indicated on the drawings. Couplers shall have a minimum length of 14 inches.

Solvent for solvent cement joints shall conform to ASTM D 2564 for PVC pipe and fittings, to ASTM D 2235 for Acrylonitrile-Butadiene-Styrene pipe and fittings.

Rubber gaskets shall conform to ASTM D 3139.

MATERIALS

Quality of Plastic Pipe. The compound used in manufacturing the pipe shall meet the requirements of one of the following materials:

1. Polyvinyl chloride (PVC) as specified in ASTM D 1784 for Type I, Grade 1 or Type I, Grade 2 or Type II, Grade 1.
2. Acrylonitrile-butadiene-styrene (ABS) as specified in ASTM D 1788 for Type I, Grade 2 or Type I, Grade 3 or Type II, Grade 1.
3. Polyethylene (PE) as specified in ASTM D 1248 for Grade P14, Class C or Grade P23, Class C or Grade P33, Class C or Grade P34, Class C.

Pipe shall have a maximum standard dimension ratio (SDR) of 51. Iron pipe size (IPS) plastic pipe and I.D. controlled PE pipe meeting one of the following ASTM specifications are acceptable under this Practice Standard.

ASTM	SPECIFICATION
D 1785	Polyvinyl Chloride Plastic Pipe, Schedule 40, 80 and 120
D 2241	Polyvinyl Chloride Pressure Rated Pipe
D 2672	Joints for IPS PVC Pipe Using Solvent Cement
D 2740	Polyvinyl Chloride Plastic Tubing
D 1527	Acrylonitrile-Butadiene-Styrene Plastic Pipe, Schedules 40 and 80
D 2282	Acrylonitrile-Butadiene-Styrene Plastic Pipe
D2104	Polyethylene Plastic Pipe, Schedule 40
D 2239	Polyethylene Plastic Pipe Based on

- | | |
|--------|---|
| | Controlled Inside Diameter |
| D 2447 | Polyethylene Plastic Pipe, Schedules 40 and 80, Based on Outside Diameter |
| D 2737 | Polyethylene Plastic Tubing |
| D 3035 | Polyethylene Plastic Pipe Based on Controlled Outside Diameter |
| F 771 | Polyethylene Thermoplastic High-Pressure Irrigation Pipeline Systems |

Plastic irrigation pipe (PIP) shall meet the requirements of ASTM D 2241 or of ASTM D 2282 except that:

1. The outside diameters, wall thicknesses and tolerances in ASAE S376.1 "Design Installation and Performance of Underground, Thermoplastic Irrigation Pipe" shall apply.
2. The minimum burst pressure requirements for water at 23 degrees C for PVC 1120 and 1220 plastic pipe, SDR 51 is 260 lb/in² and for ABS plastic pipe SDR 32.5 and SDR 41 is 380 and 300 lb/in².

Plastic pipe shall be marked with nominal pipe size (for example 10 in), applicable material designation code (for example PVC 1120), pressure rating for water at 23 degrees C, specification designation with which the pipe complies and manufacturer's name or trademark.

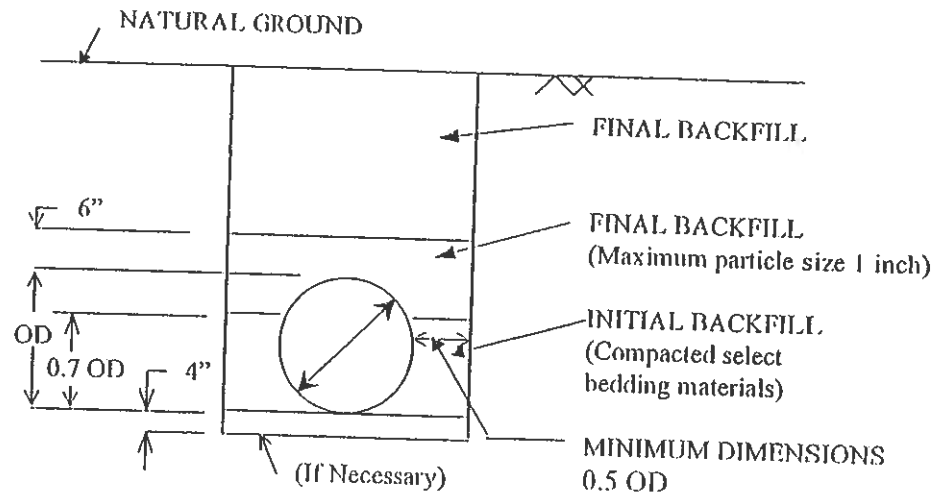
Valves and Appurtenances. The pipeline valves and appurtenances shall be of the size, type, material and pressure rating as shown on the drawings. Unless otherwise shown on the drawings all Butterfly valves shall be equipped with geared operators. Air and vacuum relief valves and/or combination air and vacuum relief valves shall be installed at locations shown on the drawings.

Pressure relief valves shall be stamped with the pressure at which the valve starts to open. Adjustable valves shall be sealed or otherwise altered to insure that the setting marked on the valve is not changed.

Check valves shall be rated as quick-closing, non-slamming.

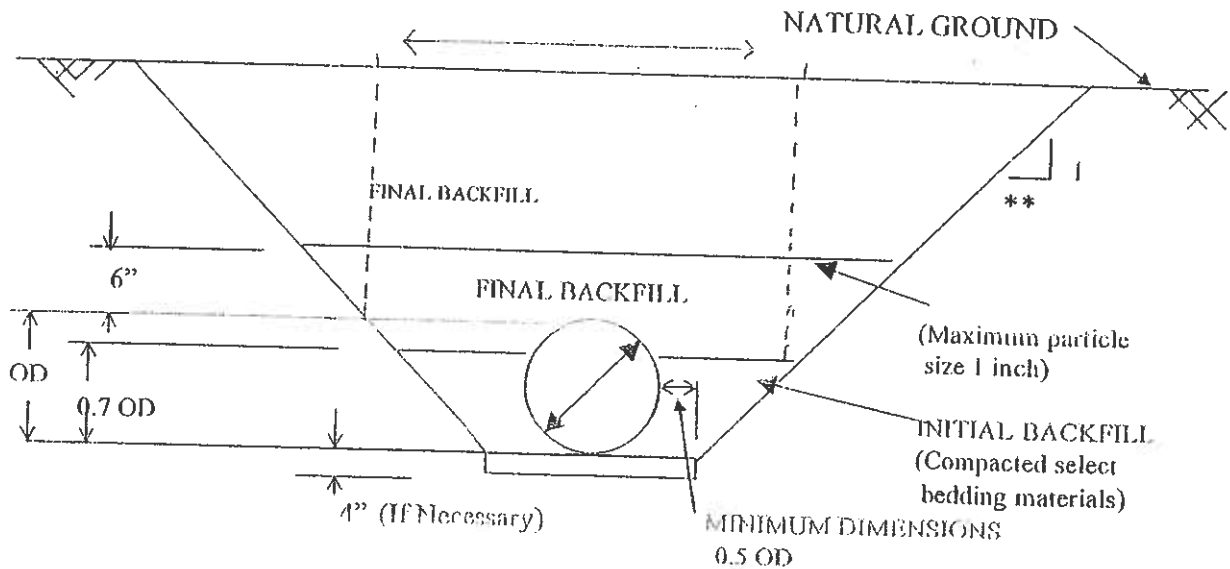
Note: Bedding material to be secured from private property if off site bedding is needed.

FIGURE 1
TRENCH WIDTH AND BACKFILL REQUIREMENTS



TYPICAL TRENCH DETAIL,
5 FT DEPTH, MAXIMUM

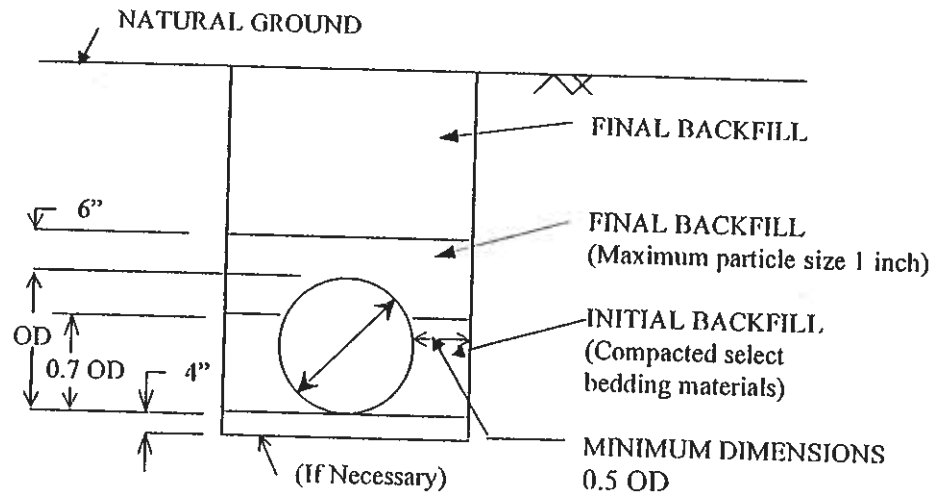
18" Pipe
30" Depth
44" Width



ALTERNATIVE TRENCH DETAIL,
DEPTH GREATER THAN 5 FEET

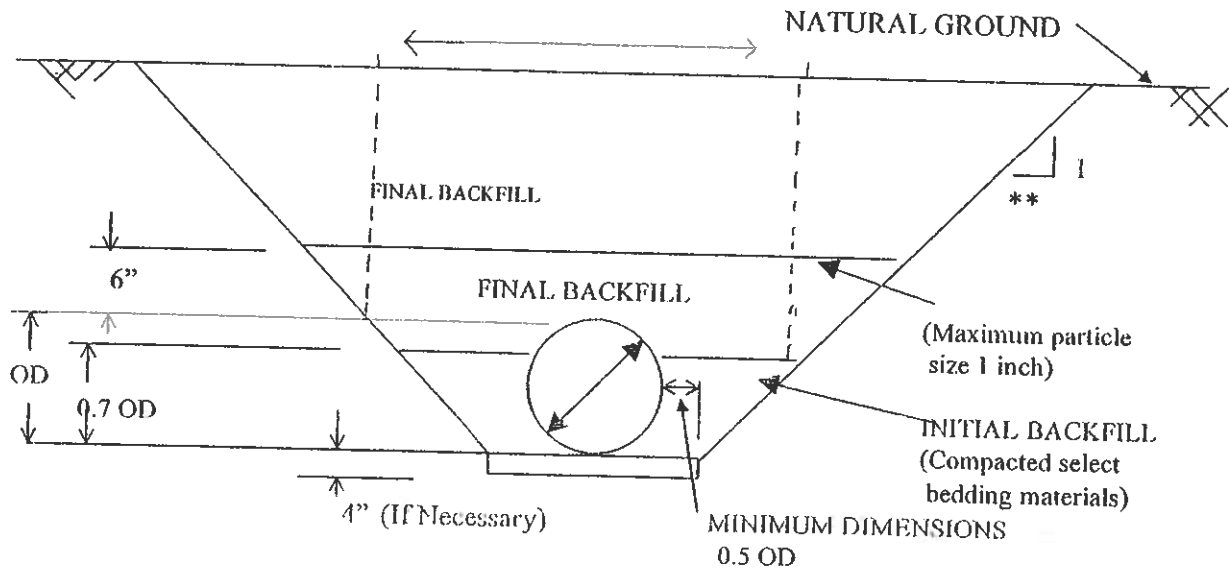
** Slope typically varies from 3/4 to 1 1/2:1 or greater based upon material classification and other factors such as wetness, vibration, surcharge, etc. Refer to OSHA Subpart P for details.

FIGURE 1
TRENCH WIDTH AND BACKFILL REQUIREMENTS



TYPICAL TRENCH DETAIL
5 FT DEPTH, MAXIMUM

15" Pipe
30" Deep
40" Wide

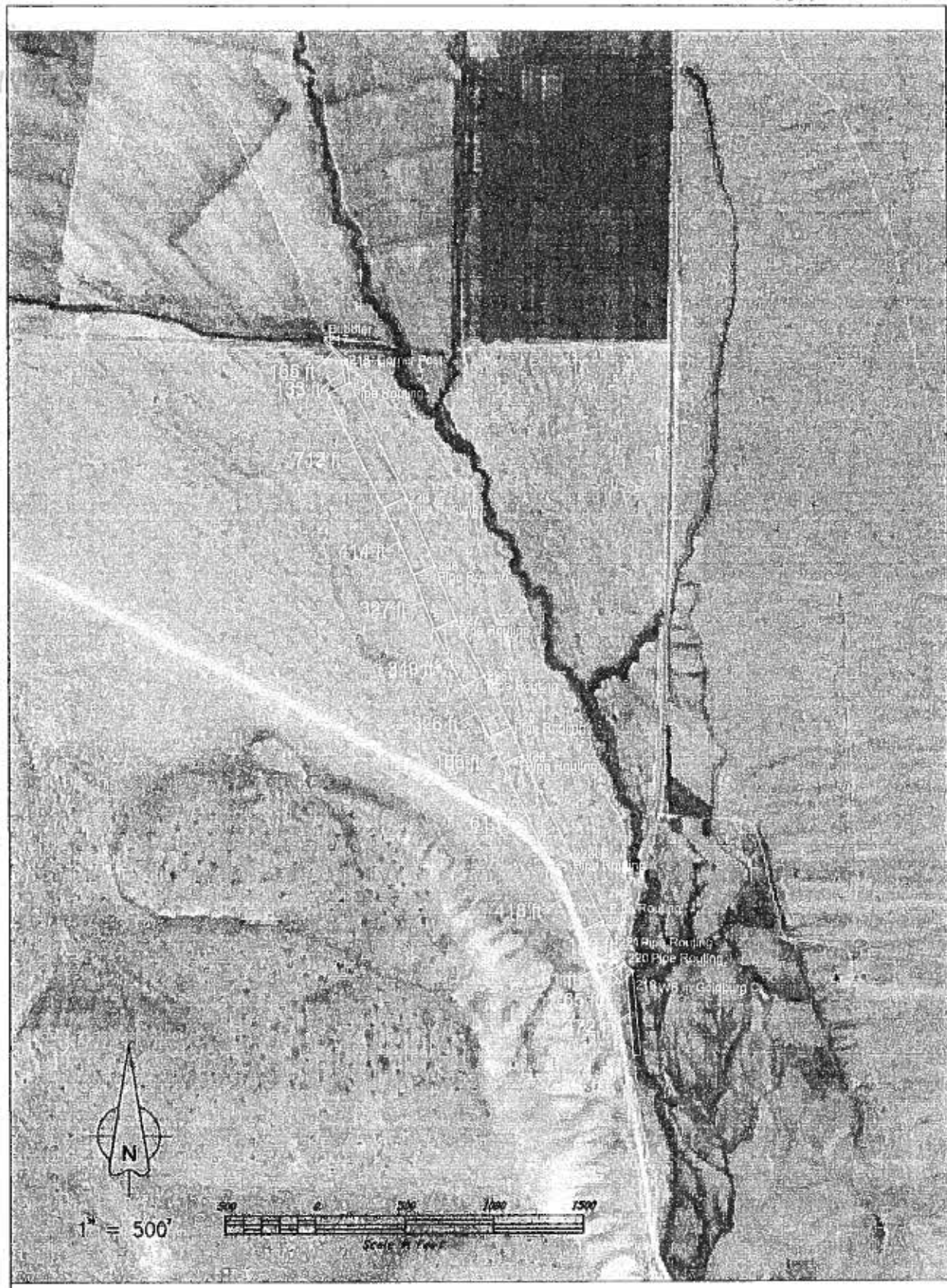


ALTERNATIVE TRENCH DETAIL
DEPTH GREATER THAN 5 FEET

** Slope typically varies from 3/4 to 1 1/2:1 or greater based upon material classification and other factors such as wetness, vibration, surcharge, etc. Refer to OSHA Subpart P for details.

8008

NED



Jud Whitworth
Pipeline Final
March 19, 2007

Designed _____	Date _____	File Name _____
Drawn T.E.D. _____	03/19/2007	Drawing Name _____
Checked _____		
Approved _____		Sheet 1 OF 1

NOV 19 2006

SCANNED

Judd Whitworth New Pivot Location

Field Office: SALMON SERVICE CENTER

Agency: USDA-NRCS

Assisted By: Nathan K Matlack

Date: 7/9/2007

