

Black Rock Utilities (BRU)

Wet Utilities Permit Application / Septic-Potable-Irrigation 2022

Applicant Name (please print): _____
Date: _____

Permit #: RES _____
Owner: _____
Address: _____
City, State, Zip: _____
Phone #: _____ **Cell #:** _____

Project Site Info: _____
Block & Lot #: _____
Street Address: _____
Parcel #: _____ **Sec:** _____ **Twn:** _____ **Ran:** _____

General Contractor: _____
Address: _____
City, State, Zip: _____
Bus. Phone #: _____ **Cell #:** _____

Septic Tank Contractor: _____ **License #:** _____
Address: _____
City, State, Zip: _____
Bus. Phone #: _____ **Cell #:** _____

Total Bedrooms: _____
of Dishwashers: _____
of Garbage Disposals: _____
of Washing Machines: _____
of Bathrooms: _____
of Occupants: _____

Total Residences Onsite
(e.g. Single/Multi-residential): _____
Total Square Footage of Home: _____

*Standard septic tank capacity – 1000-gal. tank with
500-gal. pump chamber. **See Septic Parameters.**

Irrigation Contractor: _____
Address: _____
City, State, Zip: _____
Bus. Phone #: _____ **Cell #:** _____
Proposed Irrigated Area (Acres): _____
Largest GPM Zone: _____
Water Feature(s): Yes ☐
No ☐

NOTICE: A Rain Sensing Irrigation Controller, Irrigation Plan, and Landscaping Plan are required and will be inspected.

See Cross Connection Identification Questionnaire – **MUST BE COMPLETED – SEE PAGE 5-8**

* Detail drawings and material specifications are supplied for sewer system and effluent line connection to existing main line.



MINIMUM SEPARATION DISTANCES BETWEEN SEPTIC TANKS AND FEATURES OF CONCERN

Required by Panhandle Health & The Idaho Department of Environmental Quality (IDEQ)

<u>Features of Concern</u>		<u>Minimum Distance to Tank in Feet</u>
Well or Spring or Suction Line	Public Water	100
	Other	50
Water Distribution Line	Public Water	25
	Other	10
Permanent or Intermittent Surface Water		50
Temporary Surface Water		25
Down Slope Cut of Scrap		25
Dwelling Foundation or Building		5
Property Line		5
Seasonal High Water Level Vertically from Top of Tank		2

Applicant Initials: _____

Date: _____



SEPTIC PARAMETERS:

The STEP (Septic Tank Effluent Pumping) system has been designed to work throughout the Black Rock project regardless of the location within the project or the location of any individual lot. Black Rock Utilities (BRU) **requires** the installation of vendor specific – Spokane Wilbert Precast "BRU Specific Monolithic Vaults" – as they meet the STEP system design standards; BRU also **requires** the installation of a specific sewer/septic service vault assembly – see attached drawings and construction guidelines for further details. The pump selection was made to work adequately at any elevation on the platted lots and the septic tank is sized for standard family residences – see attached drawings and construction guidelines for further details. There are limitations, however. Any of the following situations may exceed these parameters:

01. Homes in excess of 8,000 square feet.
02. Double laundry or dishwashers.
03. Hard plumbed (drained) bathing or hot tubs in excess of 100 gallons.
04. Hard plumbed (drained) ponds, fountains or other water features.
05. More than four (4) bathrooms.
06. Continuous use of a residence by more than 10 occupants.

If any of the above criteria are anticipated the STEP system shall be designed & approved by Black Rock Utilities.

**Pricing assumes two 24"x 2' tall risers. All prices listed are
good for 60 days after date on application.**

SEPTIC SYSTEM FEES
SEWER INFRASTRUCTURE IMPACT FEE: \$4,000.00

Inspection Fee: **\$ 600.00**

COST

STEP Pump Sys. Simplex: **\$5,630.00**

Applicant Signature: _____

Date: _____

Applicant Name: (please print) _____

Comments: _____



Potable, & Irrigation Services 2022

Black Rock Utilities

POTABLE INFRASTRUCTURE IMPACT	FEE	\$3,000
IRRIGATION INFRASTRUCTURE IMPACT	FEE	\$3,000

METER INSTALLATION & FEE OVERVIEW

(fill out attached form: BRU FEE 2022)

1" Domestic or Irrigation Water Meter & Fee:	<u>\$1,200.00</u>
1-½" Domestic/Irrigation Water Meter & Fee:	<u>\$2,300.00</u>
2" Irrigation Water Meter & Fee	<u>\$5,600.00</u>
2" Compound Domestic Water Meter & Fee:	<u>\$7,600.00</u>

* Detail drawings and material specifications are supplied for meter sets and water line connection to existing main line.

** Meter Pricing Disclosure: Pricing listed above is good for 60 days after date on application.

*** When using a 2" meter for domestic usage, a compound meter is required.

Locate Fee:	<u>\$150.00</u>
Application Processing Fee for third party management:	<u>\$175.00</u>

SUMMARY OF FEES:

01. The backflow prevention equipment fee includes one physical inspection and product check of installed assembly to verify its compliance with Backflow Prevention Parameters.
02. The water meter installation fee includes one inspection of the service when installed for construction water, the installation of the meter and a second inspection when the service is installed to the home.
03. The domestic/irrigation meter fee includes one inspection prior to backfill of the service and the installation of the meter.
04. The STEP system installation fee includes an inspection at the tank and service line prior to backfill and the installation of the system and an inspection of the entire system when installation is complete.
05. If any additional inspections are needed an inspection fee of \$100.00 per inspection will be billed to the owner.
06. All installation / inspection fees include temporary monitoring of the wet utilities to ensure proper operation.
07. Application Processing Fee includes third party processing and handling of fund distribution for BRU.

Applicant Initials:

Date:

Contact Info:

Black Rock Utility Operations
C/o United Crown Pump & Drilling
ragueros@unitedcrown.com
208-772-7867



BLACK ROCK UTILITIES

2022 RESIDENTIAL WET UTILITY FEE SCHEDULE FOR BLACK ROCK and CDA NATIONAL

***Please choose a STEP package, potable meter and irrigation meter**

☐	STEP Package - Simplex System:	\$5,630.00
☐	STEP Package - Simplex System w/ 2500 gallon tank:	\$5,730.00
☐	STEP Package - Duplex System w/ 2500 gallon tank:	\$7,830.00
☐	STEP Package - The Estates at Black Rock:	\$5,830.00

☒	STEP Package Inspection Fee:	\$600.00
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Note: STEP Package pricing good for 60 days from receipt of this form by owner or owner's agent.

☒	Potable Infrastructure Impact Fee:	\$3,000.00
☒	Irrigation Infrastructure Impact Fee:	\$3,000.00
☒	Sewer Infrastructure Impact Fee:	\$4,000.00

Note: All lots within Black Rock and CDA National have all three (3) services.

☐	1" Domestic Water Meter with Inspection:	\$1,200.00
☐	1" Irrigation Water Meter with Inspection:	\$1,200.00
☐	1.5" Domestic Water Meter with Inspection:	\$2,300.00
☐	1.5" Irrigation Water Meter with Inspection:	\$2,300.00
☐	2" Irrigation Water Meter with Inspection:	\$5,600.00
☐	2" Compound Domestic Water Meter with Inspection:	\$7,600.00

☒	Locate Fee for Utility Service Stubs:	\$150.00
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Note: Additional charges may apply for more than two (2) locates or complicated properties and/or systems.

☒	Application Processing Fee:	\$175.00
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Please email this sheet to: Wendy@unitedcrown.com

Cross Connection Identification Questionnaire With Terms & Definitions

Important Terms and Definitions:

Auxiliary Water Supply: Any water source or system other than the water system of the Association that may be available in buildings or anywhere on the premises – such as a rain-catch cistern.

Backflow: The reverse from normal flow of direction in a plumbing system or water system caused by backpressure or back siphonage.

Backflow Prevention Assembly: An assembly such as a Double Check Valve Assembly (DCVA), a Pressure Vacuum Breaker Assembly (PVBA), a Reduced Pressure Backflow Assembly (RPBA), or a Spill-Resistant Pressure Vacuum Breaker Assembly (SVBA) used for the protection of the public water supply. For new construction or replacement, the specific assembly shall be on the current approval list published by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (USC Foundation).

Backflow Prevention Device: A device such as an Atmospheric Vacuum Breaker (AVB) which does not contain valves or test ports, or method such as an air gap utilized to prevent cross connections to a public water supply.

Contaminant: Any physical, chemical, biological, or radiological substance or matter in water.

Cross Connection: Any actual or potential connection or piping arrangement between a public or a consumers potable water system and any other source or system through which it is possible to introduce into any part of the potable water system used water, water from any source other than an approved public water system, industrial fluid, gas or substance other than the intended potable water with which the system is supplied. Cross connections include bypass arrangements, jumper connections, removable sections, swivel or changeover devices and other temporary or permanent devices which, or because of which backflow can or may occur. Examples: hot water space-heating boiler, common garden hose attached to a hose bib, rain-catch cisterns connected to potable system, service sinks, or supply lines connected to commercial dishwashers and sinks.

Human Consumption: The use of water which includes drinking, bathing, showering, cooking, dishwashing, and maintaining oral hygiene.

- ① For any further clarification on Cross Connections, a copy of: WATTS Cross-Connection Questions, Answers & Illustrations Manual is attached to this document. It can also be viewed electronically at <http://media.wattswater.com/F-50.pdf>

Cross Connection Identification Questionnaire

If any term is not understood, see above terms and definitions. Please fill out to the best of your knowledge.

01. Development Identification – Check yes to one that applies; check no to all that do not apply.

- a. Are you planning on developing in Black Rock?

☐ Yes Please see Prohibited Installation on following page and follow pertinent attached construction guidelines.
☐ No

- b. Are you planning on developing in Rock Creek?

☐ Yes Please see Prohibited Installation on following page and follow pertinent attached construction guidelines.
☐ No

- c. Are you planning on developing in The Estates at Black Rock?

☐ Yes Please see Prohibited Installation, Product Recommendation, and Backflow Prevention Parameters on following page.
☐ No

02. External Cross Connections – Check each as applies.

- a. Is there a plan for connecting any **auxiliary water supply** to the plumbing system – such as a rain-catch cistern?



☐ Yes **Such connection is prohibited.** Please see Prohibited Installation on following page and follow pertinent attached construction guidelines.

☐ No

b. Do you plan on installing Yard Hydrants (frost-free)?

☐ Yes **Such installation is prohibited.** Please see Prohibited Installation on following page and follow pertinent attached construction guidelines.

☐ No

c. Do you plan on installing any other external stand-alone hydrants?

☐ Yes **Such installation is prohibited.** Please see Prohibited Installation on following page and follow pertinent attached construction guidelines.

☐ No

d. Do you plan on installing external hose bib assemblies or keep fill lines, such as: garden/greenhouse hose bibs and water features?

☐ Yes **Insure that a hose bib vacuum breaker is installed. Insure that proper double check valves are installed. Insure these devices are compliant with Uniform Plumbing Code and USC Foundation's "List of Approved Assemblies."** Please see Prohibited Installation on following page and follow pertinent attached construction guidelines.

☐ No

03. Internal Cross Connections – Check each as applies.

a. Is there a plan for connecting any internal potable plumbing to any other water supply?

☐ Yes **Connecting internal potable to any other water supply is prohibited.** Please see Prohibited Installation on following page and follow pertinent attached construction guidelines.

☐ No

b. Is there a plan to install a service sink or commercial dishwasher to the potable system?

☐ Yes **Insure that double check valves are installed. Insure that any hose bibs have vacuum breakers installed. Insure these devices are compliant with Uniform Plumbing Code and USC Foundation's "List of Approved Assemblies."** Please see Prohibited Installation on following page and follow pertinent attached construction guidelines.

☐ No

04. Commercial Cross Connections – Check if applicable.

a. Is there a plan for a commercial kitchen – i.e. commercial sink, commercial dishwasher, etc. – greenhouse/garden, or water feature?

☐ Yes **Insure that double check valves are installed. Insure that any hose bibs have vacuum breakers installed. Insure these devices are compliant with Uniform Plumbing Code and USC Foundation's "List of Approved Assemblies." If any other devices are required, make sure they adhere to the Uniform Plumbing Code and the USC Foundation's "List of Approved Assemblies."** Please see Prohibited Installation on following page and follow pertinent attached construction guidelines.

☐ No



Prohibited Installation:

Per the Black Rock Utilities Board Resolution 12-2016 and IDAPA 58.01.08, several forms of construction installation are prohibited regarding service utilities:

01. All auxiliary water supply connections are **prohibited**. This includes internal and external cross connections.
02. There shall be **no connection** between the potable distribution system and any pipes, pumps, hydrants, water loading stations, or tanks whereby unsafe water or other contaminating materials may be discharged or drawn into a public water system.
03. Connection of yard hydrants to the potable water system is **prohibited**.
04. Installation of any STEP system tanks, other than the required, is **prohibited**.
05. There shall be **no installation of meter vaults and assemblies that deviate from specified construction drawing guidelines**. This includes sewer service, potable service, and irrigation service.

Product Recommendation and Backflow Prevention Parameters

BRU recommends backflow prevention products that meet standards pursuant of IDAPA 58.01.08 Rules for Public Drinking Water Systems and BRU's Board Resolution 12-2016:

- **Potable Double Check Valves (DC) –**
 - * Watts 1" Assembly Model #007M1-QT
 - * Watts 2" Assembly Model #007M1-QT
- **Potable Reduced Pressure Double Check Valves (RP-DC)**
 - * Watts 2" Assembly Model #009M2QT
 - * Wilkins 1" Assembly Model #975XL
 - * Wilkins 1.25" Assembly Model #975XL
 - * Wilkins 2" Assembly Model #975XL

If the above products are not used – Appropriate and adequate backflow prevention types for various facilities, fixtures, equipment, and uses of water shall comply with local ordinances and shall be selected from the following guide adopted for use within the Black Rock Utilities (BRU):

Backflow prevention devices and assemblies shall conform to the following requirements:

01. The selected assembly manufacturer model number must be included on the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (USC Foundation) "List of Approved Assemblies" and must comply with local ordinances.
02. All Replacement parts and components shall meet original manufacturer's specifications or otherwise be approved by the USC foundation as replacement parts or components. The design, material, or operational characteristics of any assembly must not be altered during maintenance or repair.
03. All atmospheric vacuum breakers used shall be marked approved either by the International Association of Plumbing and Mechanical Officials (IAPMO) or by the American Society of Sanitation Engineers (ASSE).
04. Backflow prevention devices or assemblies shall be installed at the meter or at a location designated or approved by the Association and BRU. The device or assembly shall be located so as to be readily accessible for maintenance and testing where no part of the device or assembly will be potentially submerged.
05. All devices and assemblies shall adhere to the Uniform Plumbing Code.

Inspection and Enforcement

BRU and the Association will inspect devices and assemblies on an annual basis. This inspection includes a test of the device/assembly for proper function and adherence to the above guidelines. If a deficiency in backflow prevention devices and assemblies is found, the Board and/or its authorized agent – BRU Operations – require that the contractor correct the deficiency by installing a product per the aforementioned guidelines. Corrective action must be performed within 10 business days of the notification of deficiency. If said action does not take place within the allotted time, BRU and the Association reserve the right to discontinue services until such correction can take place. If the inspection reveals no devices or assemblies installed, BRU and the Association reserve the right to discontinue service immediately, and the significant deficiency is to be corrected promptly.



The Cross Connection Terms and Identification Questionnaire is filled out to the best of my knowledge

Applicant Signature: _____ Date: _____

Name: (please print) _____

Comments: _____

Contact Info:
Black Rock Utility Operations
C/o United Crown Pump & Drilling
ragueros@unitedcrown.com
208-772-7867



BRU RESIDENTIAL SERVICE(S) INSPECTION FORM

**INSPECTION FORM FOR BRU OPERATIONS ONLY*

DATE: _____

INSPECTED BY: _____

Location _____ Lot# _____

Contact _____

Potable service -	<u>Meter setter installed</u>	☐ No	☐ Yes
	<u>Meter vault installed</u>	☐ No	☐ Yes
	<u>Meter installed</u>	☐ No	☐ Yes
	<u>Service pressurized</u>	☐ No	☐ Yes

Irrigation Service -	<u>Meter setter installed</u>	☐ No	☐ Yes
	<u>Meter vault installed</u>	☐ No	☐ Yes
	<u>Meter installed</u>	☐ No	☐ Yes
	<u>Service pressurized</u>	☐ No	☐ Yes

Sewer Service -	<u>1½" PVC serv. installed</u>	☐ No	☐ Yes
	<u>Service vault installed</u>	☐ No	☐ Yes
	<u>Valves opened</u>	☐ No	☐ Yes
	<u>Main stop valve open</u>	☐ No	☐ Yes
	<u>Controls in tested</u>	☐ No	☐ Yes

STEP Effl. Sys. -	<u>Septic tank installed</u>	☐ No	☐ Yes
	<u>Tank risers installed</u>	☐ No	☐ Yes
	<u>Pump system installed</u>	☐ No	☐ Yes
	<u>Elect./controls installed</u>	☐ No	☐ Yes
	<u>Hi Water alarm tested</u>	☐ No	☐ Yes
	<u>Lo Water alarm tested</u>	☐ No	☐ Yes
	<u>Serv. PVC valves open</u>	☐ No	☐ Yes
	<u>Serv. main valve open</u>	☐ No	☐ Yes
	<u>Tank hydro tested</u>	☐ No	☐ Yes

Comments/Notes:



GENERAL NOTES:

1. ALL CONSTRUCTION OF NEW SEPTIC TANK EFFLUENT LINES SHALL CONFORM TO BLACK ROCK UTILITY (BRU) STANDARDS
2. ALL INSTALLATIONS SHALL BE TRUE, STRAIGHT, CENTERED AND PLUMB.
3. ALL SEWER LINES SHALL BEDDED WITH 4" OF PEA GRAVEL TOP & BOTTOM AND MAINTAIN A MINIMUM PIPE BURY DEPTH OF 4".
4. MAINTAIN ALL POTABLE-NON POTABLE SEPARATIONS PER IDAHO CODE AND THE LATEST EDITION OF THE DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS.
5. PRIOR TO BACKFILL, ALL SEPTIC TANK EFFLUENT LINES CONNECTED TO THE BRU SYSTEM SHALL BE INSPECTED BY A BRU REPRESENTATIVE.
6. ALL FITTING CONNECTIONS SHALL BE THREADED AND WRAPPED IN TEFLON TAPE PRIOR TO TIGHTENING.
7. ALL FITTINGS AND VALVES SHALL BE PVC SCH. 80 AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

KEY NOTES:

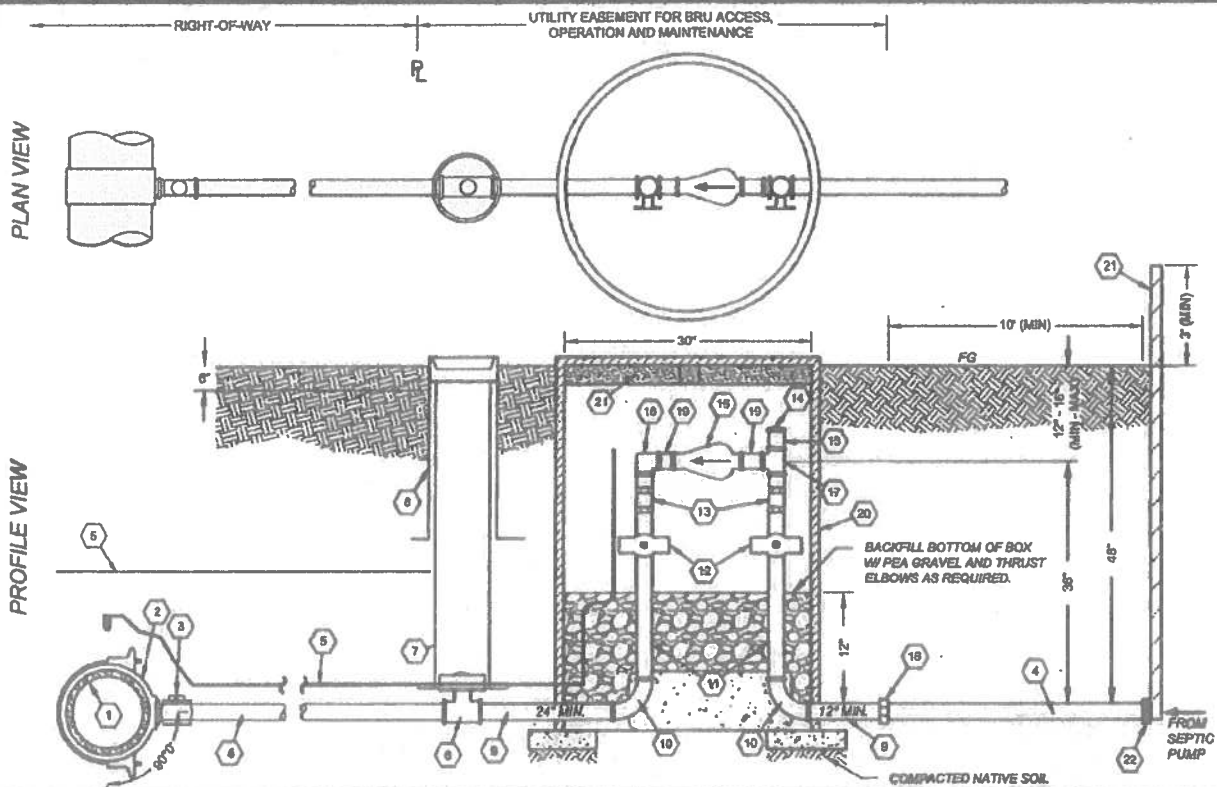
- 1 SEWER MAIN. CONTRACTOR TO VERIFY PIPE SIZE AND PIPE CLASSIFICATION PRIOR TO WORK.
- 2 1.5" ROMAC DOUBLE STAINLESS STEEL SERVICE MODEL 2029 INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- 3 TAP SEWER MAIN (DRY AND LIVE): 1.5" CORP STOP X 1.5" POLYETHYLENE PACK JOINT ADAPTER WITH STIFFENER.
- 4 1.5" 260 PSI POLYETHYLENE PIPE. LENGTH AS REQUIRED.
- 5 A SOLID COPPER TRACER WIRE TAPED TO TOP OF SEWER PIPES. EXTEND WITH 12" EXCESS WIRE INSIDE ALL SEWER VALVES AND EFFLUENT LATERAL BOXES. SPLICE ALL BREAKS IN LOCATING WIRE WITH 3M DBR OR DRYCON DBSR SPLICE KITS. INSTALL SEWER LINE BELOW WARNING TAPE AS REQUIRED.
- 6 1.5" A.Y. McDONALD BALL STYLE CURB STOP MODEL 78101. INSTALL WITH 1.5" POLYETHYLENE PACK JOINT ADAPTER WITH STIFFENER AS REQUIRED.

- 7 4" SCHEDULE 40 PVC PIPE CENTERED OVER CURB STOP. LENGTH AS REQUIRED.
- 8 TYLER FOUNDRY D.I. VALVE BOX WITH LID MARKED "SEWER" CENTERED OVER CURB STOP. SET RIM 2" ABOVE FINISH GRADE ELEVATIONS.
- 9 1.5" THREADED SCH 80 PVC NIPPLE (TYPICAL BETWEEN ALL FITTINGS). LENGTH AS REQUIRED.
- 10 1.5" 90 GLUE SCH 80.
- 11 1.5" X 24" SCH 80 SLIP AND THREAD PVC NIPPLE STANDPIPE.
- 12 1.5" TRUE UNION SPEARS 2339-015 BALL VALVE.
- 13 1.5" X 2" SCH 80 PVC NIPPLE.
- 14 1.5" THREADED PVC CAP.
- 15 1.5" BALL CHECK FLOWMATIC 2087/2133T SCH 80 PVC.
- 16 1.5" POLYETHYLENE PACK JOINT ADAPTER WITH STIFFENER.
- 17 1.5" THREADED SCH 80 PVC TEE.
- 18 1.5" THREADED SCH 80 PVC 90°.
- 19 1.5" x 6" THREADED NIPPLE SCH 80.

RAVEN RMB-R-24-33-48 POLY METER BOX WITH AY McDONALD 74M53A 15" ROUND METER BOX COVER WITH LOCK. SET BOX CENTERED ON CHECK VALVE ON TOP OF 1" MASONRY BLOCK PLACED CONTINUOUSLY AROUND ENTIRE BOTTOM OF BOX ON TOP OF MECHANICALLY COMPACTED NATIVE SOILS. SET RIM 2" ABOVE FINISH GRADE ELEVATIONS. IF BOX IS INSTALLED IN TRAFFIC AREAS, BOX SHALL BE TRAFFIC RATED WITH LID SET FLUSH WITH FINISH SURFACE ELEVATIONS.

2" THICK RIGID FOAM INSULATION CUT TO FIT INSIDE METER BOX. DRILL 1" DIAMETER PICK HOLE IN CENTER OF INSULATION.

22 PLUG END OF 1.5" 250 LB POLY OR CONNECT TO PRESSURE SEWER FROM STEP SYSTEM.



BLACK ROCK UTILITY

Operations
C/o United Crown Pump & Drilling
208-772-7887

STANDARD DRAWING SS -1

SEWER SERVICE
SINGLE FAMILY RESIDENCE

DESIGNED BY:	DCD
DRAFTED BY:	SMA
SCALE:	N. T. S.
DATE:	02/27/2014
JOB NO:	14-007
IACADISEW SRV_SS-1.DWG	

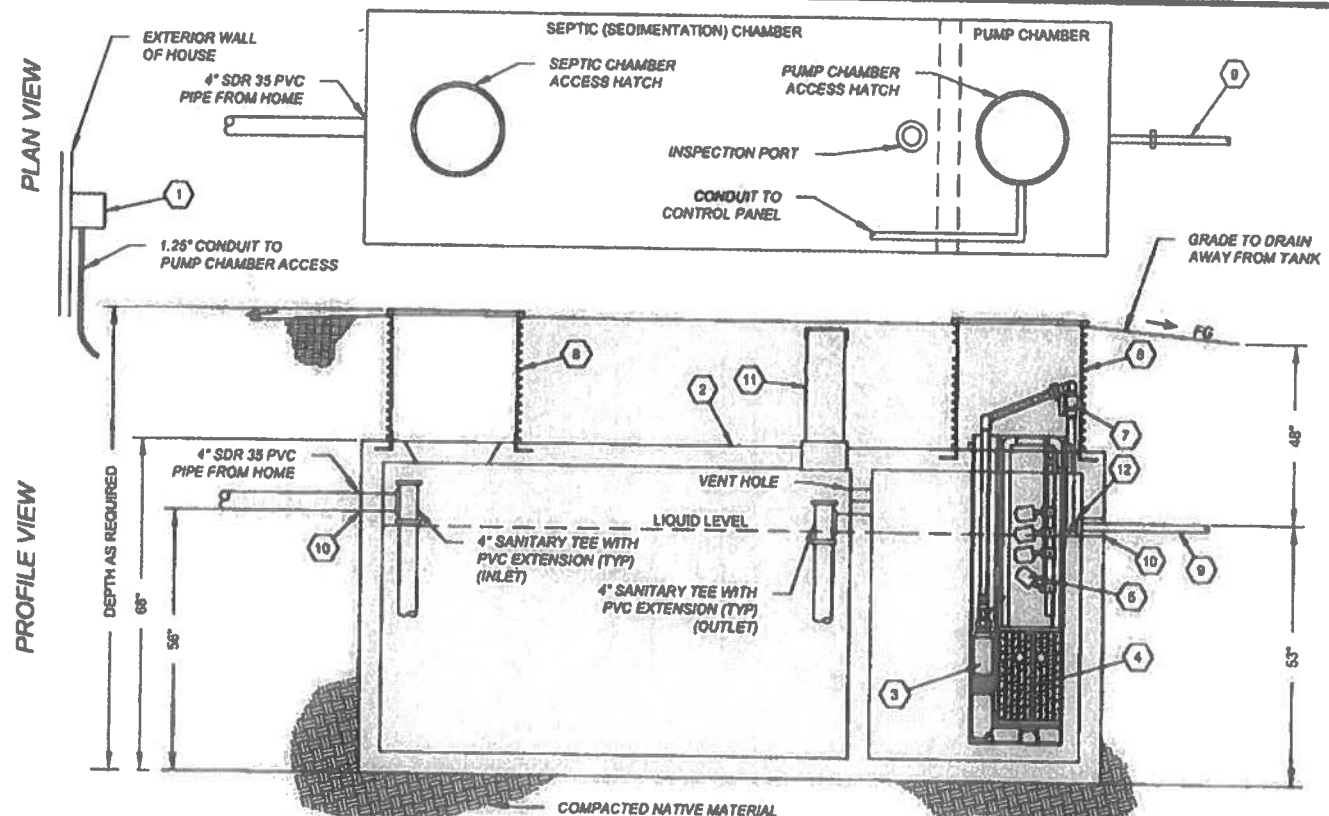
GENERAL NOTES:

1. ALL CONSTRUCTION OF NEW SEPTIC TANK EFFLUENT PUMP (STEP) SYSTEM SHALL CONFORM TO BLACK ROCK UTILITY (BRU) STANDARDS.
2. STEP SYSTEM SHOWN HEREON IS FOR A SINGLE FAMILY HOME ONLY AND FITS OPERATIONAL PARAMETERS AND STANDARDS DETERMINED BY BRU. DEPENDING ON REVISED SITE CONDITIONS BY THE BUILDER, DEVIATIONS FROM THESE PARAMETERS MAY OCCUR. IT IS THE SOLELY THE RESPONSIBILITY OF THE BUILDER TO INSTALL AN OPERATIONAL STEP SYSTEM CONFORMING TO BRU STANDARDS.
3. ALL INSTALLATIONS SHALL BE TRUE, STRAIGHT, CENTERED AND PLUMB. ELEVATIONS ARE DEPENDENT ON SITE CONDITIONS.
4. ALL STEP SYSTEMS SHALL BE ACCESSIBLE FOR BRU INSPECTION AND AT NO TIMES SHALL THE ACCESS HATCHES, INSPECTION PORTS AND CONTROL PANEL OF SAID STEP SYSTEM BE OBSTRUCTED OR ACCESS NOT PERMITTED.
5. PRIOR TO BACKFILL, ALL SEPTIC TANKS SHALL BE INSPECTED BY A BRU REPRESENTATIVE.
6. ALL PLUMBING INSIDE SEPTIC TANK AND BEYOND ORENCO PLUMBING AND VALVES SHALL BE PVC SCH. 80 AND CONNECTED TO 250 PSI POLY PIPE OUTSIDE OF TANK AS SHOWN.
7. ALL FITTING CONNECTIONS SHALL BE THREADED AND WRAPPED IN TEFLON TAPE PRIOR TO TIGHTENING. NO GLUED OR PRESS-ON FITTINGS ARE ACCEPTABLE.
8. ALL FITTINGS SHALL BE PVC SCH. 80 AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
9. INSTALLATION OF ALL ELECTRICAL SHALL CONFORM TO ALL NEC STANDARDS AS REQUIRED.

KEY NOTES:

- 1 ORENCO (OSI) SIMPLEX CONTROL PANEL MODEL S1 RO ETM CT INSTALLED PER MANUFACTURER'S SPECIFICATIONS. EXTENDED 1.25" PVC CONDUIT WITH WIRING TO STEP TANK'S PUMP CHAMBER ACCESS AS REQUIRED.

- 2 WILBERT PRECAST (BLACK ROCK SEPTIC TANK) 1,500 GALLON SEPTIC TANK. CONCRETE SEPTIC TANK PLACED ON MECHANICALLY COMPACTED NATIVE SOIL MATERIAL. 2 - 3 WEEK LEAD TIME, OR INLAND NORTHWEST PRECAST 1500 GALLON DOUBLE COMPARTMENT SEPTIC EFFLUENT PUMP SYSTEM. ALLOWABLE DEPTH OF BURY IS BASED ON SPECIFIC TANK MANUFACTURER'S SPECIFICATIONS ON LOADING.
- 3 10 GPM HIGH HEAD EFFLUENT PUMP INSTALLED PER MANUFACTURER'S SPECIFICATIONS. PUMP SHALL BE ORENCO STEP A10 OR PREAPPROVED EQUAL. PROVIDE 5-YEAR WARRANTY. MODEL # PF100S11.
- 4 ORENCO BIOTUBE PUMP VAULT MODEL PVU 57-1819 INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- 5 ORENCO 4 FLOAT SWITCH ASSEMBLY MODEL MF3 AT-Y,8,W-27V INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- 6 NOT USED
- 7 ORENCO 1" HOSE ASSEMBLY MODEL HV 100BFC8 WITH FLOW CONTROL INSTALLED PER MANUFACTURER'S SPECIFICATIONS WITH 1.25" FLOWMATIC STAINLESS STEEL CHECK VALVE MODEL # 4242SS2.
- 8 ORENCO OR APPROVED EQUAL 24" FIBERGLASS RISER AND STAINLESS STEEL BOLT-DOWN LID. SET RIM 2" ABOVE FINISH GRADE.
- 9 1.5" 250 PSI POLYETHYLENE PIPE TO SEWER SERVICE VAULT.
- 10 K-N-S RUBBER BOOT (1" - 4") IS REQUIRED AT BOTH ENDS OF SEPTIC TANK.
- 11 6" 3034 RISER PIPE WITH 6" GASKET CAP. SET 2' - 6" BELOW GRADE.
- 12 1.5" BRASS INSERT FITTING MALE 1.5" MPT x 1" FPT SCHEDULE 80 PVC THREADED BUSHING INSTALLED INSIDE TANK WITH POLY LINE EXTENDED THROUGH TANK WALL.



BLACK ROCK UTILITY
Operations
C/o United Crown Pump & Drilling
208-772-7867

STANDARD DRAWING SS -2

SEPTIC EFFLUENT PUMP SYSTEM
SINGLE FAMILY RESIDENCE

DESIGNED BY:	DCD
DRAFTED BY:	SMA
SCALE:	N. T. S.
DATE:	01/16/2020
JOB NO:	14-007
WCAD:SEP_TNK_SS-2_RVSD.DWG	

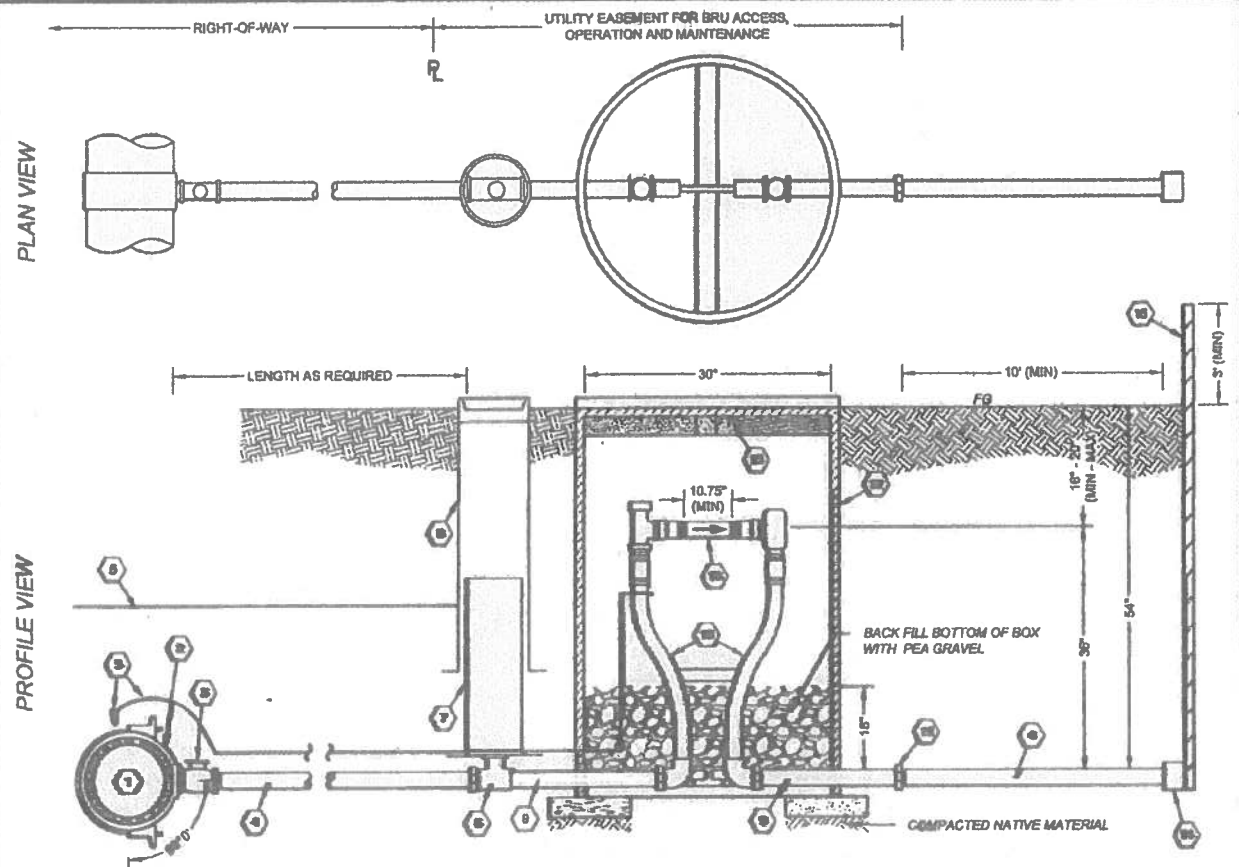
GENERAL NOTES:

1. ALL CONSTRUCTION OF NEW POTABLE WATER LINES SHALL CONFORM TO BLACK ROCK UTILITY (BRU) STANDARDS AND IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPC) STANDARDS (LATEST EDITION). IN THE EVENT OF A CONFLICT, BRU STANDARDS SHALL PREVAIL.
2. ALL INSTALLATIONS SHALL BE TRUE, STRAIGHT, CENTERED AND PLUMB.
3. ALL POTABLE WATER MAINS AND SERVICES SHALL BE BEDDED WITH 4" OF PEA GRAVEL TOP & BOTTOM OF PIPE AND MAINTAIN A MINIMUM PIPE BURY DEPTH OF 4.0'.
4. PRIOR TO BACKFILL, ALL POTABLE WATER LINES CONNECTED TO THE BRU SYSTEM SHALL BE INSPECTED BY A BRU REPRESENTATIVE.
5. ALL MATERIALS THAT MAY COME INTO CONTACT WITH POTABLE WATER, SHALL BE NSF 61 APPROVED AND COMPLIANT WITH ALL REGULATORY REQUIREMENTS.
6. ALL THREADED CONNECTIONS SHALL BE WRAPPED IN TEFLON TAPE PRIOR TO TIGHTENING.

KEY NOTES:

- 1 WATER MAIN. CONTRACTOR TO VERIFY PIPE SIZE AND PIPE CLASSIFICATION PRIOR TO WORK.
- 2 1" ROMAC DOUBLE STRAP SERVICE SADDLE MODEL 202-S INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- 3 TAP WATER MAIN (DRY AND LIVE): 1" CORP STOP X 1" POLYETHYLENE PACK JOINT ADAPTER WITH STIFFENER.
- 4 1" 250 PSI POLYETHYLENE PIPE.
- 5 A SOLID COPPER TRACER WIRE TAPED TO TOP OF WATER PIPES. EXTEND WITH 12" EXCESS WIRE INSIDE ALL WATER VALVES AND METER BOXES. SPLICE ALL BREAKS IN LOCATING WIRE WITH 3M DSR OR DRYCONN OBSR SPLICE KITS. INSTALL WATER LINE BELOW WARNING TAPE AS REQUIRED.

- 6 1" A.Y. McDONALD BALL STYLE CURB STOP MODEL 76101. INSTALL WITH 1" POLYETHYLENE PACK JOINT ADAPTER WITH STIFFENER AS REQUIRED.
- 7 4" SCHEDULE 40 PVC PIPE CENTERED OVER CURB STOP. LENGTH AS REQUIRED.
- 8 TYLER FOUNDRY D.I. VALVE BOX WITH LID MARKED "WATER" CENTERED OVER CURB STOP. SET RIM 2" ABOVE FINISH GRADE ELEVATIONS.
- 9 1" X 18" THREADED BRASS NIPPLE.
- 10 1" X 38" A.Y. McDONALD METER SETTER MODEL 720-438WDD 44 INSTALLED PER MANUFACTURER'S SPECIFICATIONS. BRU SHALL INSTALL METER. INSTALL SETTER'S ANGLE BALL VALVE TOWARDS WATER MAIN. INSTALL (2) 3" X 3/4" GALVANIZED PIPE BRACES THROUGH SETTER BRACING EYES.
- 11 1" POLYETHYLENE FEMALE PACK JOINT ADAPTER WITH STIFFENER.
- 12 RAVEN RMB-R-24-35-48 POLY METER BOX WITH AY McDONALD 74MS3A 18" ROUND METER BOX COVER WITH LOCK. SET BOX CENTERED ON SETTER ON TOP OF 1" MASONRY BLOCKS PLACED CONTINUOUSLY AROUND ENTIRE BOTTOM OF METER BOX ON TOP OF MECHANICALLY COMPACTED NATIVE SOILS. SET RIM 2" ABOVE FINISH GRADE ELEVATIONS. IF METER IS INSTALLED IN TRAFFIC AREAS, BOX SHALL BE TRAFFIC RATED WITH LID SET FLUSH AT AT FINISH SURFACE ELEVATIONS.
- 13 2" THICK RIGID FOAM INSULATION CUT TO FIT INSIDE METER BOX. DRILL 1" DIAMETER PICK HOLE IN CENTER OF INSULATION PANEL.
- 14 1" CAP OR PLUG END OF POLY PIPE UNTIL CONNECTION IS MADE TO USER.
- 15 2"x4" PAINTED BLUE EXTENDED 3' MINIMUM ABOVE FINISHED GRADE.
- 16 CONTRACTOR TO INSTALL 10.75" (MIN) THREADED BLANK.



BLACK ROCK UTILITY

Operations
C/o United Crown Pump & Drilling
208-772-7867

STANDARD DRAWING W - 1

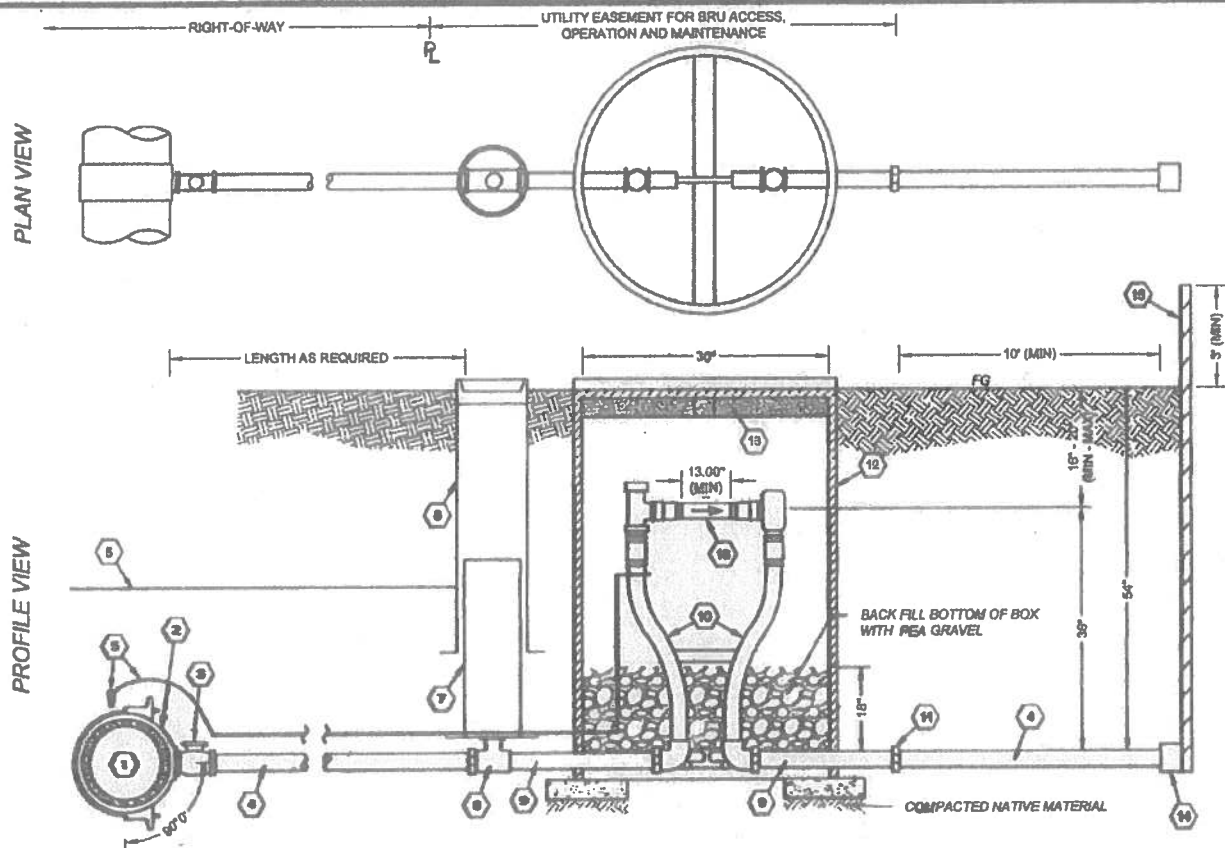
1" DOMESTIC OR IRRIGATION WATER SERVICE
SINGLE FAMILY RESIDENCE

DESIGNED BY:	DCD
DRAFTED BY:	SMA
SCALE:	N. T. S.
DATE:	02/27/2014
JOB NO:	14-007
VACADWAT SRV_W-1.DWG	

1. ALL CONSTRUCTION OF NEW IRRIGATION WATER LINES SHALL CONFORM TO BLACK ROCK UTILITY (BRU) STANDARDS
2. ALL INSTALLATIONS SHALL BE TRUE, STRAIGHT, CENTERED AND PLUMB.
3. ALL IRRIGATION MAINS AND SERVICES SHALL BEDDED WITH 4" PEA GRAVEL TOP & BOTTOM OF PIPE AND MAINTAIN A MINIMUM PIPE BURY DEPTH OF 4.5'.
4. PRIOR TO BACKFILL, ALL IRRIGATION LINES CONNECTED TO THE BRU SYSTEM SHALL BE INSPECTED BY A BRU REPRESENTATIVE.
5. ALL THREADED CONNECTIONS SHALL BE WRAPPED IN TEFLON TAPE PRIOR TO TIGHTENING.

- 1 IRRIGATION (NON-POTABLE) MAIN. CONTRACTOR TO VERIFY PIPE SIZE AND PIPE CLASSIFICATION PRIOR TO WORK.
- 2 1.5" ROMAC DOUBLE STRAP SERVICE SADDLE MODEL 202-S INSTALLED PER MANUFACTURER SPECIFICATIONS.
- 3 TAP WATER MAIN (DRY AND LIVE): 1.5" CORP STOP WITH 1.5" POLYETHYLENE PACK JOINT ADAPTER WITH STIFFENER
- 4 1.5" 250 PSI POLYETHYLENE PIPE.
- 5 A SOLID COPPER TRACER WIRE TAPED TO TOP OF IRRIGATION PIPES. EXTEND WITH 12" EXCESS WIRE INSIDE ALL WATER VALVES AND METER BOXES. SPUCE ALL BREAKS IN LOCATING WIRE WITH 3/8" OR 0.75" O.D. DRYORON DBSR SPUCE KITS. INSTALL IRRIGATION LINE BELOW WARNING TAPE AS REQUIRED.

- (8) 1.5" A.Y. MCDONALD BALL STYLE CURB STOP MODEL 76101. INSTALL WITH 1.5" POLYETHYLENE PACK JOINT ADAPTER WITH STIFFENER AS REQUIRED.
- (7) 4" SCHEDULE 40 PVC PIPE CENTERED OVER CURB STOP. LENGTH AS REQUIRED.
- (6) TYLER FOUNDRY D.I. VALVE BOX WITH LID MARKED "WATER" CENTERED OVER CURB STOP. SET RIM 2" ABOVE FINISH GRADE ELEVATIONS.
- (6) 1.5" X 1" THREADED BRASS NIPPLE.
- (10) 1.5" X 3/8" A.Y. MCDONALD METER SETTER MODEL 729-000000FF805 INSTALLED PER MANUFACTURER'S SPECIFICATIONS. BRU SHALL INSTALL METER. INSTALL SETTERS ANGLE BALL VALVE TOWARDS WATER MAIN. INSTALL (2) 3' X 3/2" GALVANIZED PIPE BRACES THROUGH SETTER BRACING EYES.
- (11) 1.5" POLYETHYLENE FEMALE PACK JOINT ADAPTER WITH STIFFENER.
- (12) RAVEN RMB-R-24-33-48 POLY METER BOX WITH AY MCDONALD 74M3A 15" ROUND METER BOX COVER WITH LOCK. SET BOX CENTERED ON SETTER ON TOP OF 1" MASONRY BLOCKS PLACED CONTINUOUSLY AROUND ENTIRE BOTTOM OF METER BOX ON TOP OF MECHANICALLY COMPACTED NATIVE SOILS. SET RIM 2" ABOVE FINISH GRADE ELEVATIONS. IF BOX IS INSTALLED IN TRAFFIC AREAS, BOX SHALL BE TRAFFIC RATED WITH LID SET FLUSH WITH FINISH SURFACE ELEVATIONS.
- (13) 2" THICK RIGID FOAM INSULATION CUT TO FIT INSIDE METER BOX. DRILL 1" DIAMETER PICK HOLE IN CENTER OF INSULATION PANEL.
- (14) 1.5" CAP OR PLUG END OF POLY PIPE UNTIL CONNECTION IS MADE TO USER.
- (16) 2"x4" PAINTED BLUE EXTENDED 3' MINIMUM ABOVE FINISHED GRADE.
- (16) CONTRACTOR TO INSTALL 13.50" (MIN) THREADED BLANK.



Operations
C/o United Crown Pump & Drilling
208-772-7867

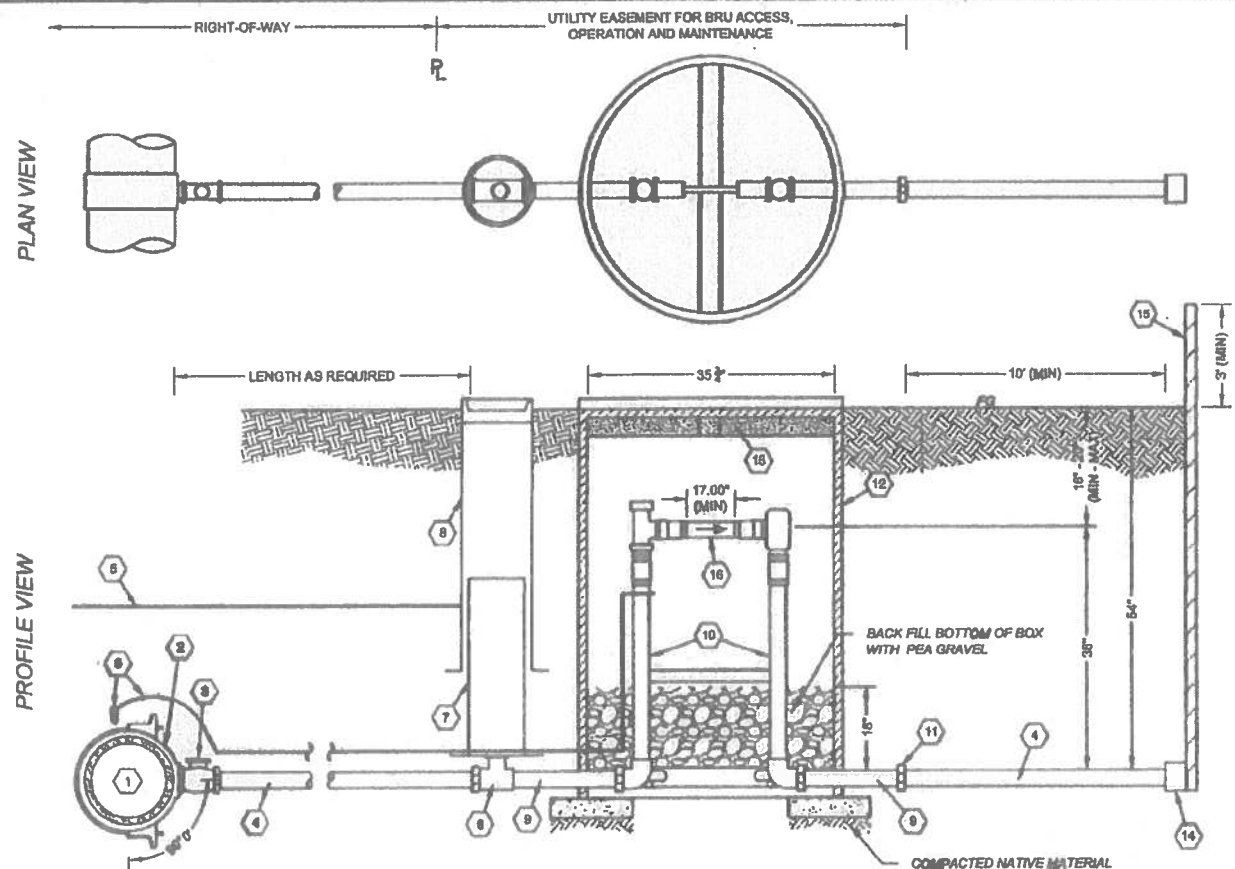
1.5" DOMESTIC OR IRRIGATION WATER SERVICE

DESIGNED BY:	DCD
DRAFTED BY:	SMA
SCALE:	N. T. S.
DATE:	02/27/2014
JOB NO:	14-007
ACAD/RR SRV W-2.DWG	

1. ALL CONSTRUCTION OF NEW POTABLE WATER LINES SHALL CONFORM TO BLACK ROCK UTILITY (BRU) STANDARDS AND IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPPWC) STANDARDS (LATEST EDITION). IN THE EVENT OF A CONFLICT, BRU STANDARDS SHALL PREVAIL.
2. ALL INSTALLATIONS SHALL BE TRUE, STRAIGHT, CENTERED AND PLUMB.
3. ALL POTABLE WATER MAINS AND SERVICES SHALL BE BEDDED WITH 4" OF PEA GRAVEL. TOP & BOTTOM OF PIPE AND MAINTAIN A MINIMUM PIPE BURY DEPTH OF 4.5'.
4. PRIOR TO BACKFILL, ALL POTABLE WATER LINES CONNECTED TO THE BRU SYSTEM SHALL BE INSPECTED BY A BRU REPRESENTATIVE.
5. ALL MATERIALS THAT MAY COME INTO CONTACT WITH POTABLE WATER, SHALL BE NSF 61 APPROVED AND COMPLIANT WITH ALL REGULATORY REQUIREMENTS.
6. ALL THREADED CONNECTIONS SHALL BE WRAPPED IN TEFLON TAPE PRIOR TO TIGHTENING.

- 1 WATER MAIN CONTRACTOR TO VERIFY PIPE SIZE AND PIPE CLASSIFICATION PRIOR TO WORK.
- 2 2" ROMAC DOUBLE STRAP SERVICE SADDLE MODEL 202-S INSTALLED PER MANUFACTURER SPECIFICATIONS.
- 3 TAP WATER MAIN (DRY AND LIVE): 2" CORP STOP X 2" POLYETHYLENE PACK JOINT ADAPTER WITH STIFFENER.
- 4 2" 260 PSI POLYETHYLENE PIPE.
- 5 A SOLID COPPER TRACER WIRE TAPED TO TOP OF WATER PIPES. EXTEND WITH 12" EXCESS WIRE INSIDE ALL WATER VALVES AND METER BOXES. SPLICE ALL BREAKS IN LOCATING WIRE WITH 3M DBR OR DRYCON DBSR SPLICE KITS. INSTALL WATER LINE BELOW WARNING TAPE AS REQUIRED.

- 6 2" A.Y. MCDONALD BALL STYLE CURB STOP MODEL 76101, INSTALL WITH 2" POLYETHYLENE PACK JOINT ADAPTER WITH STIFFENER AS REQUIRED.
- 7 4" SCHEDULE 40 PVC PIPE CENTERED OVER CURB STOP. LENGTH AS REQUIRED.
- 8 TYLER FOUNDRY D.I. VALVE BOX WITH LID MARKED "WATER" CENTERED OVER CURB STOP. SET RIM 2" ABOVE FINISH GRADE ELEVATIONS.
- 9 2" X 18" THREADED BRASS NIPPLE.
- 10 2" X 36" A.Y. MCDONALD METER SETTER MODEL 720-5736WDF775 INSTALLED PER MANUFACTURER'S SPECIFICATIONS. BRU SHALL INSTALL METER. INSTALL SETTER'S ANGLE BALL VALVE TOWARDS WATER MAIN. INSTALL (2) 3" X 1/4" GALVANIZED PIPE BRACES THROUGH SETTER BRACING EYES.
- 11 2" POLYETHYLENE FEMALE PACK JOINT ADAPTER WITH STIFFENER.
- 12 RAVEN RMB-R-24-33-48 POLY METER BOX WITH A.Y. MCDONALD 74153A 15" ROUND METER BOX COVER WITH LOCK. SET BOX CENTERED ON SETTER ON TOP OF 1" MASONRY BLOCKS PLACED CONTINUOUSLY AROUND ENTIRE BOTTOM OF METER BOX ON TOP OF MECHANICALLY COMPACTED NATIVE SOILS. SET RIM 2" ABOVE FINISH GRADE ELEVATIONS. IF METER IS INSTALLED IN TRAFFIC AREAS, BOX SHALL BE TRAFFIC RATED WITH LID SET FLUSH AT FINISH SURFACE ELEVATIONS.
- 13 2" THICK RIGID FOAM INSULATION CUT TO FIT INSIDE METER BOX. DRILL 1" DIAMETER PICK HOLE IN CENTER OF INSULATION PANEL.
- 14 2" CAP OR PLUG END OF POLY PIPE UNTIL CONNECTION IS MADE TO USER.
- 15 2"x4" PAINTED BLUE EXTENDED 3" MINIMUM ABOVE FINISHED GRADE.
- 16 CONTRACTOR TO INSTALL 1750F (MIN) THREADED BLANK.



BLACK ROCK UTILITY
Operations
C/o United Crown Pump & Drilling
208-772-7867

2" DOMESTIC OR IRRIGATION WATER SERVICE
SINGLE FAMILY RESIDENCE

DESIGNED BY:	DCD
DRAFTED BY:	SMA
SCALE:	N. T. S.
DATE:	02/27/2014
JOB NO:	14-007
VACADWAT SRV W-3.DWG	

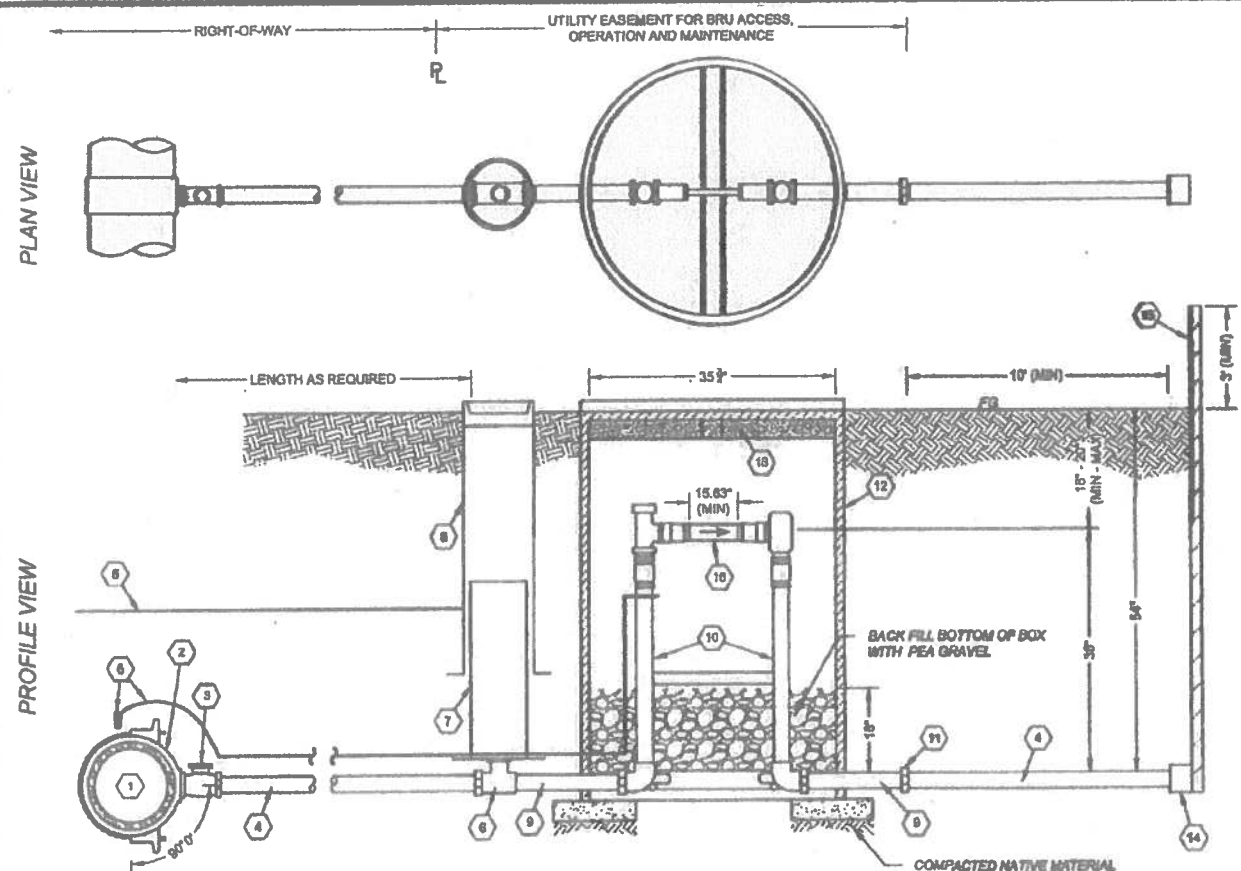
GENERAL NOTES:

1. ALL CONSTRUCTION OF NEW POTABLE WATER LINES SHALL CONFORM TO BLACK ROCK UTILITY (BRU) STANDARDS AND IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPCWC) STANDARDS (LATEST EDITION). IN THE EVENT OF A CONFLICT, BRU STANDARDS SHALL PREVAIL.
2. ALL INSTALLATIONS SHALL BE TRUE, STRAIGHT, CENTERED AND PLUMB.
3. ALL POTABLE WATER MAINS AND SERVICES SHALL BE BEDDED WITH 4" OF PEA GRAVEL TOP & BOTTOM OF PIPE AND MAINTAIN A MINIMUM PIPE BURY DEPTH OF 4.5'.
4. PRIOR TO BACKFILL, ALL POTABLE WATER LINES CONNECTED TO THE BRU SYSTEM SHALL BE INSPECTED BY A BRU REPRESENTATIVE.
5. ALL MATERIALS THAT MAY COME INTO CONTACT WITH POTABLE WATER, SHALL BE NSF 61 APPROVED AND COMPLIANT WITH ALL REGULATORY REQUIREMENTS.
6. ALL THREADED CONNECTIONS SHALL BE WRAPPED IN TEFLON TAPE PRIOR TO TIGHTENING.

KEY NOTES:

- 1 WATER MAIN. CONTRACTOR TO VERIFY PIPE SIZE AND PIPE CLASSIFICATION PRIOR TO WORK.
- 2 2" ROMAC DOUBLE STRAP SERVICE SADDLE MODEL 202-S INSTALLED PER MANUFACTURER SPECIFICATIONS.
- 3 TAP WATER MAIN (DRY AND LIVE): 2" CORP STOP X 2" POLYETHYLENE PACK JOINT ADAPTER WITH STIFFENER.
- 4 2" 250 PSI POLYETHYLENE PIPE.
- 5 A SOLID COPPER TRACER WIRE TAPED TO TOP OF WATER PIPES. EXTEND WITH 12" EXCESS WIRE INSIDE ALL WATER VALVES AND METER BOXES. SPLICE ALL BREAKS IN LOCATING WIRE WITH 3M DBR OR DRYCON DBSR SPLICE KITS. INSTALL WATER LINE BELOW WARNING TAPE AS REQUIRED.

- 6 2" A.Y. McDONALD BALL STYLE CURB STOP MODEL 78101. INSTALL WITH 2" POLYETHYLENE PACK JOINT ADAPTER WITH STIFFENER AS REQUIRED.
- 7 4" SCHEDULE 40 PVC PIPE CENTERED OVER CURB STOP. LENGTH AS REQUIRED.
- 8 TYLER FOUNDRY D.I. VALVE BOX WITH LID MARKED "WATER" CENTERED OVER CURB STOP. SET RIM 2" ABOVE FINISH GRADE ELEVATIONS.
- 9 2" X 18" THREADED BRASS NIPPLE.
- 10 2" X 36" A.Y. McDONALD METER SETTER MODEL 720-6736WDF775 INSTALLED PER MANUFACTURER'S SPECIFICATIONS. BRU SHALL INSTALL METER. INSTALL SETTER'S ANGLE BALL VALVE TOWARDS WATER MAIN. INSTALL (2) 3" X 1/2" GALVANIZED PIPE BRACES THROUGH SETTER BRACING EYES.
- 11 2" POLYETHYLENE FEMALE PACK JOINT ADAPTER WITH STIFFENER.
- 12 RAVEN RMB-R-24-33-48 POLY METER BOX WITH AY McDONALD 74M53A 15" ROUND METER BOX COVER WITH LOCK. SET BOX CENTERED ON SETTER ON TOP OF 1" MASONRY BLOCKS PLACED CONTINUOUSLY AROUND ENTIRE BOTTOM OF METER BOX ON TOP OF MECHANICALLY COMPACTED NATIVE SOILS. SET RIM 2" ABOVE FINISH GRADE ELEVATIONS. IF METER IS INSTALLED IN TRAFFIC AREAS, BOX SHALL BE TRAFFIC RATED WITH UD SET FLUSH AT AT FINISH SURFACE ELEVATIONS.
- 13 2" THICK RIGID FOAM INSULATION CUT TO FIT INSIDE METER BOX. DRILL 1" DIAMETER PICK HOLE IN CENTER OF INSULATION PANEL.
- 14 2" CAP OR PLUG END OF POLY PIPE UNTIL CONNECTION IS MADE TO USER.
- 15 2"x4" PAINTED BLUE EXTENDED 3" MINIMUM ABOVE FINISHED GRADE.
- 16 CONTRACTOR TO INSTALL 15.63" (MIN) THREADED BLANK.



BLACK ROCK UTILITY
Operations
C/o United Crown Pump & Drilling
208-772-7867

STANDARD DRAWING W - 4

2" DOMESTIC OR IRRIGATION WATER SERVICE
DUAL BODY COMPOUND METER

DESIGNED BY: DCD
DRAFTED BY: SMA
SCALE: N. T. S.
DATE: 02/27/2014
JOB NO: 14-007
ACADWAT SRV_W-4DWG