**** DUPLICATE ****

STATE OF TENNESSEE
Environment and Conservation
Office: Jackson EFO
5/1/2024 8:13 AM

Cashier: JACQK0710001
Batch #: 1598646
Trans #: 2

==========

Jackson EFO Deposit

Receipt #: 37664752
Customer: The North Utility Distric
Address: P.O. Box 54
Parsons TN 38363
Phone:
Permit #: NR2402.017

EN209	Appl/Licensing Fee-W	$500.00
Payment Total:		**$500.00**

==========

Transaction Total: **$500.00**

Check 21 $500.00

Thank you for your payment.
Have a nice day!

**** DUPLICATE ****

HETHCOAT DAVIS

March 5, 2024

File 1169-04

Jackson Environmental Field Office
1625 Hollywood Drive
Jackson, TN 38305-4316
ATTN: **ARAP Processing**

Re: Application for General Aquatic Resource Alteration Permit (ARAP)
2023 ARPA: Contract B: Water Line Extensions
North Utility District of Benton & Decatur Counties
Holladay, TN

To whom it may concern:

On behalf of North Utility District of Benton & Decatur Counties, we are requesting approval for three (3) stream crossings with a 4-inch water line under the Statewide Permit. These crossings are part of a larger project, which includes the installation of approximately 25,785 LF of 4-inch water line along Westport Rd., Shiloh Rd., Oxford Rd. and Fullerton Rd in Holladay, TN.

Crossing 1 Location: Approximately 0.51 miles North of the intersection of Westport Road and Shiloh Road. See attached creek crossing map.

Crossing 2 Location: Approximately 0.88 miles North of the intersection of Westport Road and Shiloh Road. **See attached creek crossing map.**

Crossing 3 Location: Approximately 1.01 miles North of the intersection of Westport Road and Shiloh Road. **See attached creek crossing map.**

The proposed water line for the crossings will be installed inside a road ROW by methods of open cut. The 4-inch water line will cross Birdsong Creek and Unnamed Tributaries. The existing streams vary in width and flow conditions. This was verified during inspection of the proposed route. Crossings 2 and 3 had no flow at time of inspection and Crossing 2 was covered by tree foliage. Pictures have been attached of the proposed creek crossings along with descriptions of creek characteristics. The project requirements include that all disturbed areas be returned to their original condition.

The executed application form and check are attached. The entire ARAP Permit package along with supplemental materials has been submitted by email. If you have any questions concerning this matter, please contact me at your convenience.

Sincerely,

Jacob Baker

Jacob Baker

278 Franklin Road, Suite 200 • Brentwood, TN 37027 • Phone: (615) 577-4300 • Fax: (615) 577-4303

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Water Resources
William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor,
Nashville, Tennessee, 37243
1-888-891-8332 (TDEC)

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Certification

OFFICIAL STATE USE ONLY	Site #:		Permit #:	NR2402.017

Section 1. Applicant Information *(individual responsible for site, signs certification below)*

Applicant Name (company or individual): North Utility District of Benton and Decatur Counties		SOS #:	Status:
Primary Contact/Signatory: Michael Hamm		Signatory's Title or Position: General Manager	
Mailing Address: 6448 Highway 641 N		City: Parsons	State: TN / Zip: 38363
Phone: 731-847-3838	Fax:	E-mail: 1nud@tds.net	

Section 2. Alternate Contact/Consultant Information (*a consultant is not required*)

Alternate Contact Name: Jacob Baker			
Company: Hethcoat & Davis Engineers		Title or Position: Engineering Technician	
Mailing Address: 278 Franklin Road, Suite 200		City: Franklin	State: TN / Zip: 37027
Phone: 615-577-4300	Fax: 615-577-4303	E-mail: jacob.baker@hdengr.com	

Section 3. Fee *(Application will be incomplete until fee is received)*

☐ No Fee ■ Fee Submitted with Application Amount Submitted: $ 500.00

Current application fee schedules can be found at the Division of Water Resources webpage at:
https://www.tn.gov/environment/permit-permits/water-permits1/aquatic-resource-alteration-permit--arap-.html
or by calling (615) 532-0625. Please make checks payable to "Treasurer, State of Tennessee".

Billing Contact Name (if different from Applicant): Name: Email:

Address: Phone:

Section 4. Project Details *(fill in information and check appropriate boxes)*

Site or Project Name: 2023 ARPA: Contract B: Water Line Extensions		Nearest City, Town or Major Landmark: Holladay, TN
Street Address or Location (include Zip): Westport Rd, Fullerton Rd, Shiloh Rd, Oxford Rd - See attached Map		
County(ies): Benton	MS4 Jurisdiction: N/A	Latitude (dd.dddd): See Attached Map Longitude (dd.dddd): See Attached Map

Resource Proposed for Alteration: ■ Stream / River ☐ Wetland ☐ Reservoir

Name of Water Resource (for more information, access *http://tdeconline.tn.gov/dwr*): Birdsong Creek and Unnamed Tributaries

Brief Project Description (a more detailed description is required under Section 8):
Install approx 25,785 LF of new 4" water line along Westport Rd, Shiloh Rd, Oxford Rd, and Fullerton Rd. Includes 3 stream crossings.

Does the proposed activity require approval from the U.S. Army Corps of Engineers, the Tennessee Valley Authority, or any other federal, state, or local government agency? ☐ Yes ■ No

If Yes, provide the permit reference numbers:

Is the proposed activity associated with a larger common plan of development: ☐ Yes ■ No

If Yes, submit site plans and identify the location and overall scope of the common plan of development.

Plans attached? ☐ Yes ■ No

If applicable, indicate any other federal, state, or local permits that are associated with the overall project site (common plan of development) that have been obtained in the past (e.g., construction general permit and/or other ARAP):

PAID

RECEIVED
APR 30 2024

PAYMENT RECEIVED
4.30.24

MAY 01 2024

Initial: CJ Initial: KC

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Permit

Section 5. Project Schedule *(fill in information and check appropriate boxes)*			
Proposed Start Date: June 2024		*Estimated End Date:*	December 2024
Is any portion of the activity complete now?	☐ *Yes*	■ *No*	
If yes, describe the extent of the completed portion:			

The required information in Sections 6-11 must be submitted on a separate sheet(s) and submitted in the same numbered format as presented below. If any question is not applicable, state the reason why it is not applicable.

Section 6. Description		**Attached** Yes	No
6.1	A narrative description of the scope of the project	☐	☐
6.2	USGS topographic map indicating the exact location of the project (*can be a photographic copy*)	☒	☐
6.3	Photographs of the resource(s) proposed for alteration with location description (*photo locations should be noted on map*)	☒	☐
6.4	A narrative description of the **existing** stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation	☒	☐
6.5	A narrative description of the **proposed** stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation	☒	☐
6.6	In the case of wetlands, include a wetland delineation with delineation forms and site map denoting location of data points	☐	☒
6.7	A copy of all hydrologic or jurisdictional determination documents issued for water resources on the project site	☐	☒

Section 7. Project Rationale	**Attached** Yes	No
Describe the need for the proposed activity, including, but not limited to, the purpose, alternatives considered, and what will be done to avoid or minimize impacts to water resources	☒	☐

Section 8. Technical Information		**Attached** Yes	No
8.1	Detailed plans, specifications, blueprints, or legible sketches of present site conditions and the proposed activity. Plans must be 8.5.x 11 inches. Additional larger plans may also be submitted to aid in application review. The detailed plans should be superimposed on existing and new conditions *(e.g., stream cross sections where road crossings are proposed)*	☒	☐
8.2	For both the proposed activity and compensatory mitigation, provide a discussion regarding the sequencing of events and construction methods	☒	☐
8.3	Depiction and narrative on the location and type of erosion prevention and sediment control (EPSC) measures for the proposed alterations	☒	☐

Section 9. Water Resources Degradation (degree of proposed impact) *Note that in most cases, activities that exceed the scope of the General Permit limitations are considered greater than de minimis degradation to water quality.*

Please provide your basis for concluding the proposed activity will cause one of the following levels of water quality degradation:

a. ☒ *De minimis degradation*

b. ☐ Greater than *de minimis degradation* (if greater than *de minimis complete Sections 10-11)*

For information and guidance on the definition of de minimus and degradation, refer to the Antidegradation Statement in Chapter 0400-40-03-.06 of the Tennessee Water Quality Criteria Rule at: http://publications.tnsosfiles.com/rules/0400/0400-40/0400-40.htm

For information on specifics on what General Permits can cover, refer to the Natural Resources Unit webpage at: http://www.tn.gov/environment/permit-permits/water-permits1/aquatic-resource-alteration-permit--arap-/permit-water-aquatic-resource-alteration-list-of-general-permits.html

Section 10. Detailed Alternatives Analysis		Attached Yes	Attached No
10.1	Analyze all reasonable alternatives and describe the level of degradation caused by each of the feasible alternatives	☐	☒
10.2	Discuss the social and economic consequences of each alternative	☐	☒
10.3	Demonstrate that the degradation associated with the preferred alternative will not violate water quality criteria for uses designated in the receiving waters, and is necessary to accommodate important economic and social development in the area	☐	☒

Section 11. Compensatory Mitigation		Attached Yes	Attached No
11.1	A detailed discussion of the proposed compensatory mitigation	☐	☒
11.2	Describe how the compensatory mitigation would result in no net loss of resource value	☐	☒
11.3	Provide a detailed monitoring plan for the compensatory mitigation site	☐	☒
11.4	Describe the long-term protection measures for the compensatory mitigation site *(e.g., deed restrictions, conservation easement)*	☐	☒

Certification and Signature

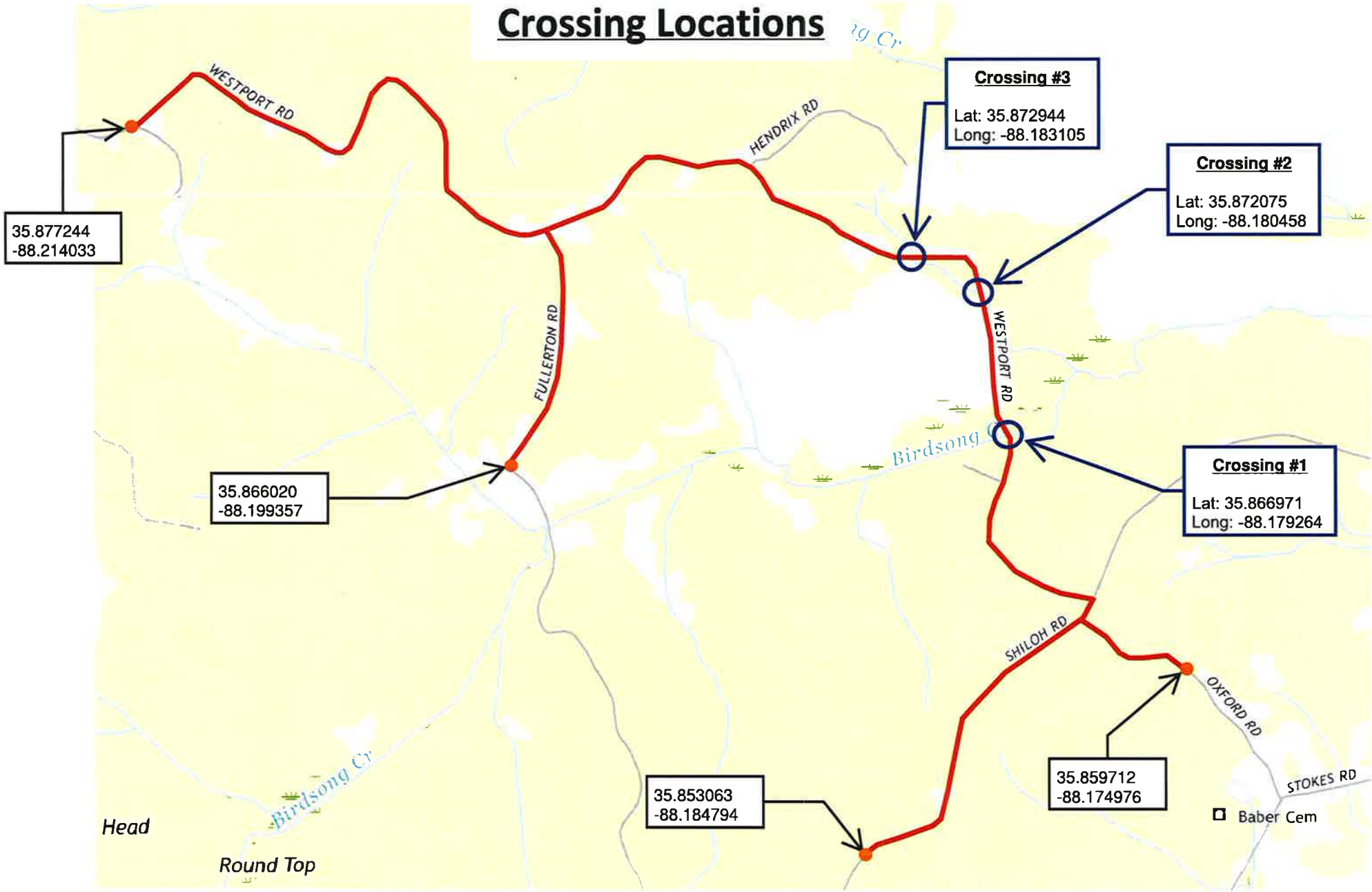
An application submitted by a corporation must be signed by a principal executive officer; from a partnership or proprietorship, by the partner or proprietor respectively; from a municipal, state, federal or other public agency or facility, the application must be signed by either a principal executive officer, ranking elected official, or other duly authorized employee.

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Betty Vitt	Administrator	Betty Vitt	4-5-2024
Printed Name	Official Title	Signature	Date

Submitting the form and obtaining more information. Note that this form must be signed by the principal executive officer, partner or proprietor, or a ranking elected official in the case of a municipality; for details see **Certification and Signature** statement above. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed ARAP Application form (keep a copy for your records) to the appropriate EFO for the county(ies) where the ARAP activity is located, addressed to **Attention: ARAP Processing**. You may also electronically submit the complete application and all associated attachments to water.permits@tn.gov.

EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	8383 Wolf Lake Drive, Bartlett	38133-4119	Cookeville	1221 South Willow Ave.	38506
Jackson	1625 Hollywood Drive	38305-4316	Chattanooga	1301 Riverfront Pkwy., Ste. 206	37402
Nashville	711 R S Gass Boulevard	37243	Knoxville	3711 Middlebrook Pike	37921
Columbia	1421 Hampshire Pike	38401	Johnson City	2305 Silverdale Road	37601


Crossing Locations
WESTPORT RD
HENDRIX RD
FULLERTON RD
WESTPORT RD
SHILOH RD
OXFORD RD
STOKES RD
Birdsong
Birdsong Cr
Head
Round Top
Baber Cem
Crossing #3
Lat: 35.872944
Long: -88.183105
Crossing #2
Lat: 35.872075
Long: -88.180458
Crossing #1
Lat: 35.866971
Long: -88.179264
35.877244
-88.214033
35.866020
-88.199357
35.853063
-88.184794
35.859712
-88.174976

Section 6: Project Description

6.1 – A narrative description of the scope of the project.

The North Utility District of Benton-Decatur Counties (NUD) is proposing to install approximately 25,785 LF of 4-inch water line along Westport Rd., Oxford Rd., Fullerton Rd. and Shiloh Rd. in Holladay, TN. This installation will require crossing Birdsong Creek and Unnamed Tributaries in three locations. The crossings will utilize the method of open-cut installation. The contractor will be required to install a concrete cap on top of the proposed water line at the stream crossing, and rip-rap the creek banks. Construction methods used will consist of typical trenching by a track-hoe. If rock is encountered, line drilling along the edges of the trench followed by breaking with a hoe-ram will be utilized to construct the crossing.

The project requirements include that all disturbed areas be returned to their original condition and be reseeded and mulched to re-establish ground cover. Construction in and around streams will only take place under dry conditions. Channel modifications will not be made to any stream during the projects construction. Also, blasting will not be permitted during the project.

6.2 – USGS topographic map indicating the exact locations of the project.

See attached Exhibit 1.

6.3 – Photographs of the resources proposed for alteration with location description.

See attached photos.

6.4 – A narrative description of the existing streams and/or wetland characteristics.

Crossing #1- Birdsong Creek: The stream crossing is approximately 65' in width at the proposed point of crossing. The stream has a depth of approximately 50'. The stream has grass/soil banks and a rocky/soil stream bottom. The creek runs through 2-96" CMP Culverts under the road. The water line will cross over the culverts along the roadway. At the time of our site visit there was approximately 1.5" of water flow depth.

Crossing #2- Unnamed Tributary: The stream crossing is approximately 4' in width at the proposed point of crossing. The stream has a depth of approximately 3'. The stream has grass banks and a rocky/grass stream bottom. The crossing is heavily covered in tree foliage and was difficult to locate/view. At the time of our site visit there was no flow.

Crossing #3- Unnamed Tributary: The stream crossing is approximately 5' in width at the proposed point of crossing. The stream has a depth of approximately 1'. The stream has grass/soil banks and a rocky/grass stream bottom. At the time of our site visit there was no flow.

6.5 – A narrative description of the proposed stream characteristics.

The dimensions of the streams will not be affected by construction. All stream bottom and banks will be restored to original grade after installation of the waterline. Original creek bottom material will be used on top of stone backfill. Stream banks will be seeded and strawed after construction to re-establish vegetation. Guardrail will be protected during construction. The soil and back over culvert crossing will be restored to original grade and will be seeded and strawed.

6.6 – Wetland Delineation

Not applicable.

6.7 – Hydrological Determination

Not applicable.

Section 7: Project Rationale

7.1 – Describe the purpose for the proposed activity and overall project.

NUD is proposing to install of approximately 25,785 LF of 4-inch water line along Westport Rd., Oxford Rd., Fullerton Rd. and Shiloh Rd. in Holladay, TN. The purpose of this project is to provide an adequate water supply to the surrounding residents.

7.2 – Describe all practical alternatives considered.

The alternatives that were considered for crossing 1 were different types of installation such as horizontal directional drill or bore and jack. However, due to the location, limited area for drill set-up, and depth of the crossing of Birdsong Creek the method chosen of open-cut is the most effective option. For the remaining crossings, open-cut with a concrete cap is the most effective method. The crossings are short and shallow with very little water flow.

Section 8: Technical Information

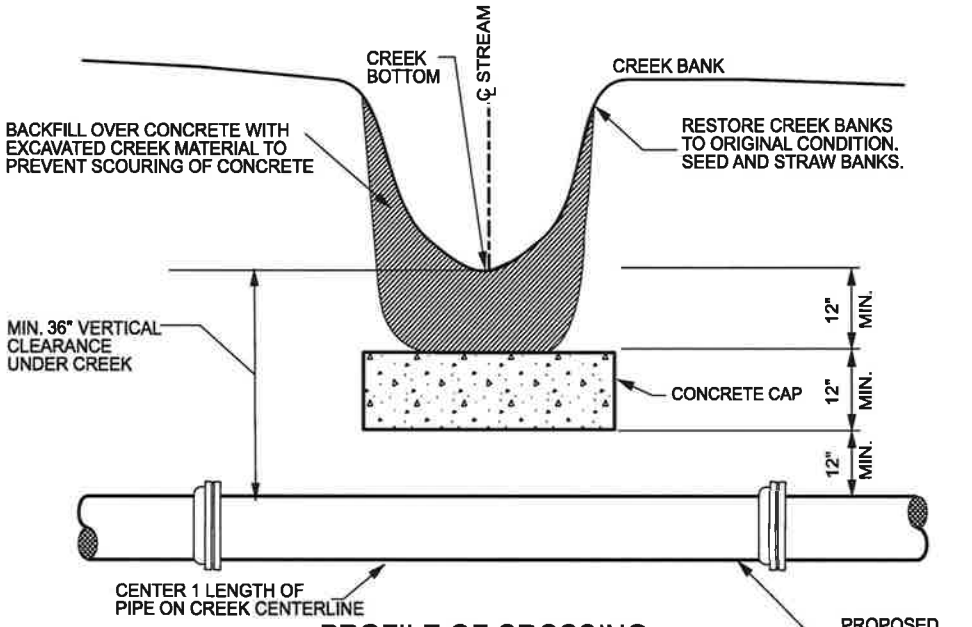
See attached drawings for details of the proposed construction. Erosion control will include the installation of rip-rap check dams and silt fence. Construction will occur during dry periods in order to reduce the risk of erosion and sedimentation. No blasting will be allowed.


CROSSING #1
Proposed Crossing Location

CROSSING #1
(Cont.)

CROSSING #2
(General Location)

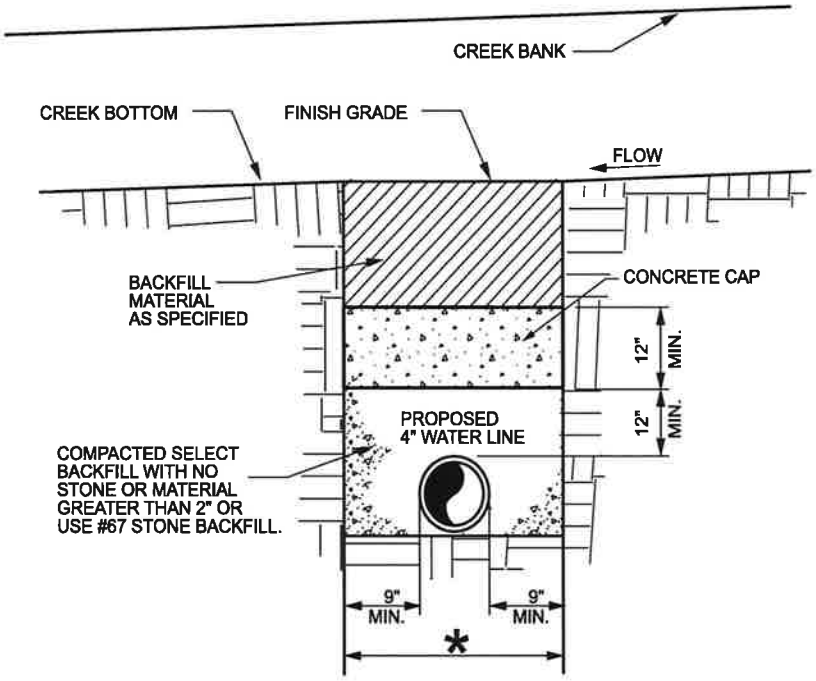

CROSSING #3



PROFILE OF CROSSING

NOTES:

1. RIP RAP STREAM BANKS TO STABILIZE
2. CONTRACTOR SHALL CREATE A DRY WORK ENVIRONMENT TO MINIMIZE SEDIMENT RUNOFF BY DIVERTING STREAM THROUGH A TEMPORARY CULVERT AND BLOCKING ENDS OF CULVERT WITH SAND BAGS.
3. USE CRUSHED STONE BEDDING AND BACKFILL IN ROCK BED.
4. 30" MIN. COVER AND 60" MAX. COVER FOR ALL WATER LINES UNLESS OTHERWISE SHOWN.
5. ALL PIPE INSIDE ROADWAY OR PAVED AREAS SHALL BE TOTALLY BACKFILLED WITH STONE.



CROSS SECTION OF CROSSING

* MIN. TRENCH WIDTH = 8" + BELL OUTSIDE DIAMETER

MAX. TRENCH WIDTH = 4/3 OUTSIDE PIPE BARREL DIAMETER + 15"

3 STREAM CROSSING DETAIL

NOT TO SCALE