



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)

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

OFFICIAL STATE USE ONLY	Site #:	Permit #:	NR1804-314
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Section 1. Applicant Information <i>(individual responsible for site, signs certification below)</i>			
Applicant Name (company or individual): Regent Development, LLC		SOS #: 000343007	Status: Active
Primary Contact/Signatory: David McGowan	Signatory's Title or Position: President		
Mailing Address: 6901 Lenox Village Drive - Suite 107	City: Nashville	State: TN	Zip: 37211
Phone: (615) 333-9000	Fax:	E-mail: David.McGowan@regenthomes-tn.com	

Section 2. Alternate Contact/Consultant Information <i>(a consultant is not required)</i>			
Alternate Contact Name: Eric Olsen			
Company: Anderson, Delk, Epps & Associates, Inc.		Title or Position: Engineer	
Mailing Address: 618 Grassmere Park Drive - Suite 4	City: Nashville	State: TN	Zip: 37211
Phone: (615) 331-0809	Fax: (615) 331-0110	E-mail: AndersonDelk@bellsouth.net	

Section 3. Fee <i>(Application will be incomplete until fee is received)</i>			
<input type="checkbox"/> No Fee		<input checked="" type="checkbox"/> Fee Submitted with Application	
		Amount Submitted: \$ <u>500.00</u>	
Current application fee schedules can be found at the Division of Water Resources webpage at: https://www.tn.gov/environment/permit-permits/water-permits/1/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 <i>(fill in information and check appropriate boxes)</i>			
Site or Project Name: Carothers Crossing - Phase 7, Section 1		Nearest City, Town or Major Landmark: Cane Ridge Park	
Street Address or Location (include Zip): 7211 Carothers Road, Nolensville, TN 37135			
County(ies): Davidson	MS4 Jurisdiction: Nashville	Latitude (dd.ddd): 35.9836	Longitude (dd.ddd): -86.6155
Resource Proposed for Alteration: <input checked="" type="checkbox"/> Stream / River <input type="checkbox"/> Wetland <input type="checkbox"/> Reservoir			
Name of Water Resource (for more information, access http://tdeconline.tn.gov/dwr): Unnamed Drain to East Branch Hurricane Creek <input checked="" type="checkbox"/>			
Brief Project Description (a more detailed description is required under Section 8): Installation of a gravity sewer crossing of an Unnamed Drain to East Branch Hurricane Creek (35.9832, -86.6108).			

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):

TNR242073

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:	December 2018	Estimated End Date:	January 2021
Is any portion of the activity complete now?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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	<input type="checkbox"/>	<input type="checkbox"/>
6.2	USGS topographic map indicating the exact location of the project (can be a photographic copy)	<input type="checkbox"/>	<input type="checkbox"/>
6.3	Photographs of the resource(s) proposed for alteration with location description (photo locations should be noted on map)	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
6.6	In the case of wetlands, include a wetland delineation with delineation forms and site map denoting location of data points	<input type="checkbox"/>	<input type="checkbox"/>
6.7	A copy of all hydrologic or jurisdictional determination documents issued for water resources on the project site	<input type="checkbox"/>	<input type="checkbox"/>

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		<input type="checkbox"/>	<input type="checkbox"/>

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)	<input type="checkbox"/>	<input type="checkbox"/>
8.2	For both the proposed activity and compensatory mitigation, provide a discussion regarding the sequencing of events and construction methods	<input type="checkbox"/>	<input type="checkbox"/>
8.3	Depiction and narrative on the location and type of erosion prevention and sediment control (EPSC) measures for the proposed alterations	<input type="checkbox"/>	<input type="checkbox"/>

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 minimis 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-permits/1/aquatic-resource-alteration-permit--arap-/permit-water-aquatic-resource-alteration-list-of-general-permits.html>

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

Section 10. Detailed Alternatives Analysis		Attached	
		Yes	No
10.1	Analyze all reasonable alternatives and describe the level of degradation caused by each of the feasible alternatives	<input type="checkbox"/>	<input type="checkbox"/>
10.2	Discuss the social and economic consequences of each alternative	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>

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

Certification and Signature			
<p>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.</p> <p><i>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.</i></p>			
<u>David McGowan</u> Printed Name	<u>President</u> Official Title	 Signature	<u>10/20/10</u> 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



ANDERSON, DELK, EPPS & ASSOCIATES, INC.
618 GRASSMERE PARK, SUITE 4
NASHVILLE, TN 37211-3677

26573

PAY
TO THE
ORDER OF

State of Tennessee

DATE *11/30/2018*

87-5/640

Five hundred and 00/100

\$ *500.00*

usbank.

DOLLARS 

Security Features
guaranteed
Details on Back.

Application Fee

FOR Carothers Crossing Sewer Crossing ARAP

Ruffice

MP

Application for Aquatic Resource Alteration Permit (ARAP)

Carothers Crossing

Phase 7, Section 1

Property Map 188, p/o Parcel 8.00 Davidson County
7211 Carothers Road, Nolensville, TN 37135

November 1, 2018

GRAVITY SEWER CROSSING OF UNNAMED DRAIN TO EAST BRANCH HURRICANE CREEK

Section 6 : Project Description

- (6.1) Description of Work to be Done :** Installation of a 12" PVC gravity sewer line crossing that is to be encased in concrete for the length of the crossing. Flowable fill to be used to backfill open trench for the sewer line crossing.
- (6.2) See attached map**
- (6.3) See attached photos**
- (6.4) Description of Existing Drain :** Some flow at time of examination. The drain is roughly 8' wide with a rocky bottom and steep eroded earth banks with vegetation.
- (6.5) Description of Proposed Drain :** The existing drain characteristics upstream and downstream of the proposed sewer crossing are to be maintained. Rip rap is to be installed along the banks at the crossing to protect from erosion.
- (6.6) Not Applicable**
- (6.7) No determination documents issued for site.**

Section 7 : Project Rational

The purpose of the proposed project is to provide gravity sewer access to the proposed Phase 7, Section 1 and the future phases/sections of the Carothers Crossing development.

The pipe for the proposed sewer crossing has been sized in excess of what is needed for the proposed Phase 7, Section 1 to allow it to accommodate possible future flows from the development of the remaining areas of the Carothers Crossing development.

Since the Unnamed Drain to East Branch Hurricane Creek runs the length of the overall remaining property, there are no alternatives to provide gravity sewer to the proposed Phase 7, Section 1 and future phases/sections of the Carothers Crossing development.

Section 8 : Technical Information

(8.1) See attached detailed plans

(8.2) Mitigation Details : No Mitigation required.

Proposed Sequence of Events : 1) Any flow at time of construction to be block off and diverted using coffer dams, geotextile tubes, and/or pumps. 2) Area to be grubbed. Disturbance of the area to be done no greater than 20 days prior to planned grading or construction activity. 3) Install Sewer line and manholes. All excavation to be done by hoe ram. 4) Install concrete check dams. 5) Backfill excavated trench. Trench at crossing shall be filled to within 6" of original stream bed bottom. The remainder of fill shall consist of hand placed slab rocks. 6) Silt fence, rip rap, and slope protection to be installed along the disturbed banks to prevent erosion. All disturbed areas are to be seeded and strawed, unless planed grading activities are to resume within 15 days. 7) Final stabilization.

Construction Methods: Excavation of to be done by hoe ram. Any unsuitable material excavated is to be removed from the crossing area and disposed of properly.

(8.3) EPSC Measures: Silt fence will be used to limit the amount of sediments being discharged. Rip rap is to be used to stabilize the slopes at the crossing. All work to be in the dry by the contractor using coffer dams, geotextile tubes, and/or pumps. (see attached plan).

Section 9 : Water Resources Degradation (degree of proposed impact)

Will only cause de minimis degradation to water quality

The proposed work falls within the scope of the respective General Permit limitations.

Section 10 : Detailed Alternative Analysis

(10.1) Not Applicable (Section 9)

(10.2) Not Applicable (Section 9)

(10.3) Not Applicable (Section 9)

Section 11 : Mitigation

(11.1) Not Applicable (Section 9)

(11.2) Not Applicable (Section 9)

(11.3) Not Applicable (Section 9)

(11.4) Not Applicable (Section 9)

(11.5) Not Applicable (Section 9)

NOLENSVILLE, TENN.

N3552.5-WB637.5/7.5

1957

PHOTOREVISED 1979
DMA 3655 I NW-SERIES V841

NOLENSVILLE QUADRANGLE

TENNESSEE

7.5 MINUTE SERIES (TOPOGRAPHIC)

SMYRNA QUADRANGLE

TENNESSEE

7.5 MINUTE SERIES (TOPOGRAPHIC)

SMYRNA, TENN.

35086-H5-1F-024

1957

PHOTOREVISED 1983
DMA 3655 I NE-SERIES V841

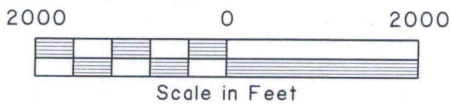
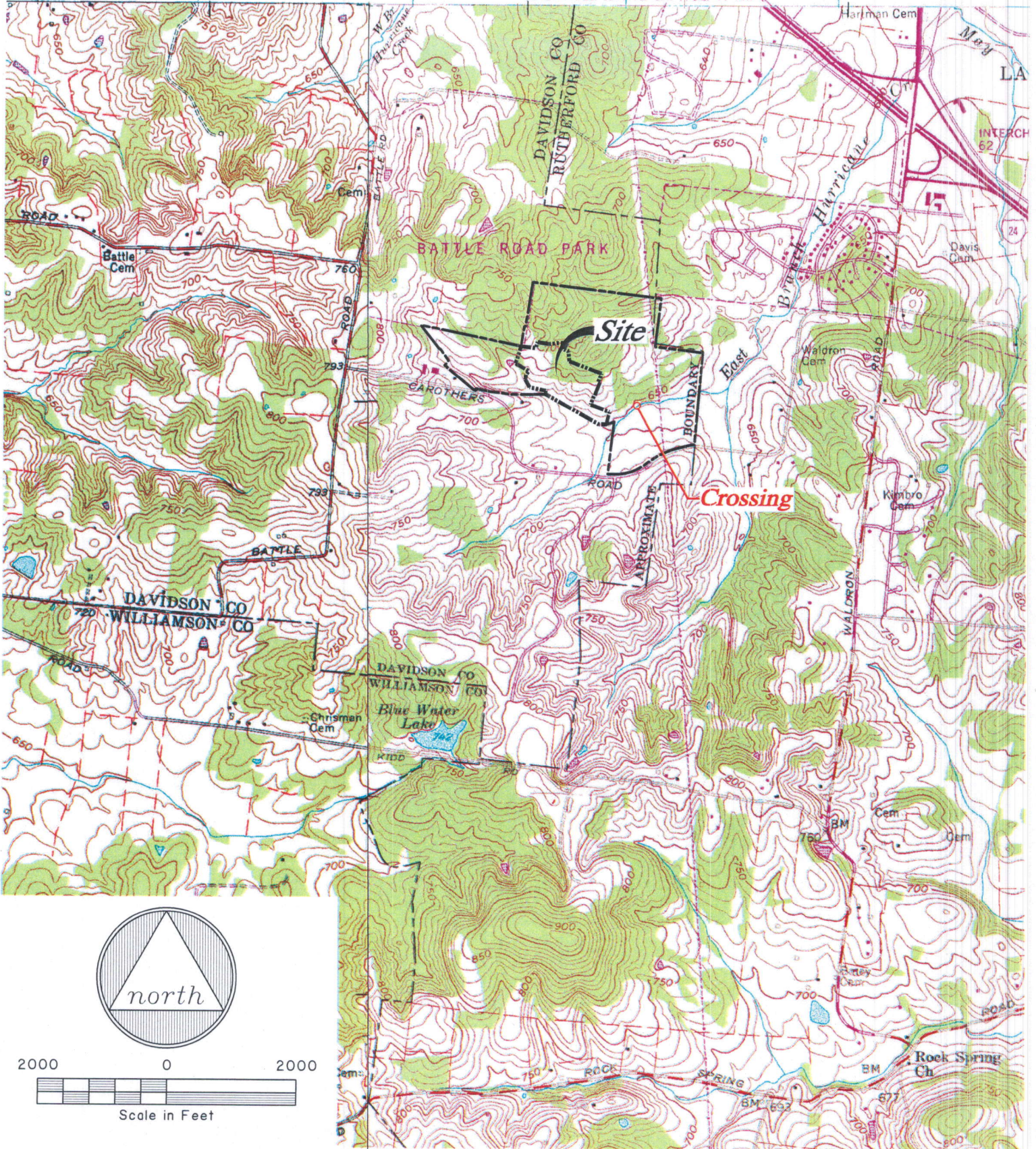
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

1810000 FEET

533

86°37'30" 5340000"E

NASHVILLE (STATE CAPITOL) 17 MI.



CAROTHERS CROSSING ~ TN

MASTER PLAN

Master Plan

The Master Plan for Carothers Crossing strikes a balance between being a legitimate regional extension of a pre-existing community (Laverne), and a collection of freestanding villages in a rural landscape. The plan configuration of each of the four villages is dictated by the unique topography associated with each village's location on the site, the natural features of the site to be retained or enhanced, and the intended functional role or character of each particular village.

The primary form givers in terms of natural features and local amenities are the large open meadows to the east, the deep ravines and ridges to the south, the large knoll and the existing regional park to the north, and the creeks which traverse the site in a largely west to east direction. A single existing thoroughfare, Carothers Road, also traverses the site in an east and west orientation, which will be replaced by an interconnected street network, serving the larger regional road network.

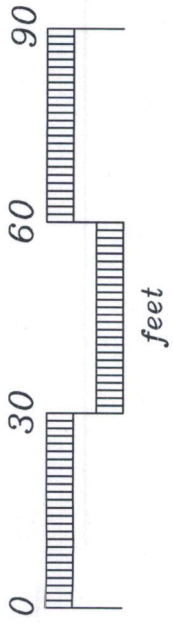
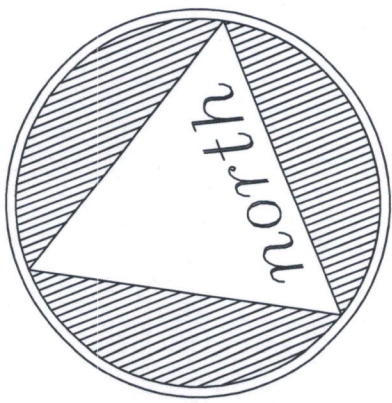
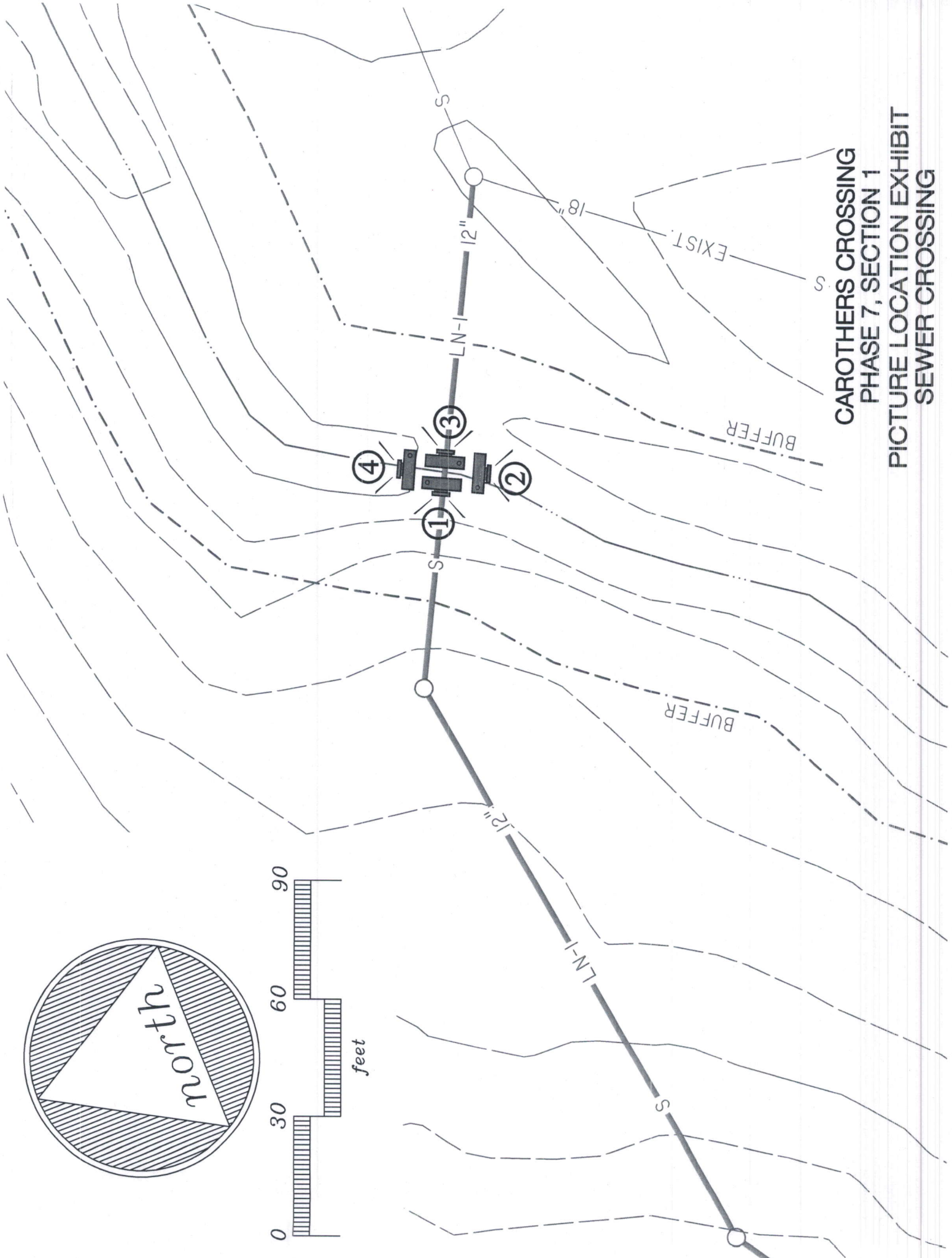
This road, properly designed to allow it to be safely and appropriately integrated into the Master Plan, will also be slightly realigned to allow it to help energize the Town Center Village, provide convenient access to same, and to better deal with issues and concerns of adjoining property owners on Battle Road regarding traffic and headlights. This realignment, along with a more urbanized section, should not impact in any substantive way, either Carothers Road's capacity or its ability to carry out its role within the larger regional transportation network.

Altogether, the resulting master plan represents an optimal response to the unique features and attributes of the site and the needs of the present and future residents in and around Carothers Crossing.

* Master Plan shown for illustrative purposes and intent. Actual detailed plans and locations of individual villages, streets and lots may vary, subject to constraints and conditions as yet to be determined, however, any changes proposed must be consistent with the intent of the illustrative plan.



CAROTHERS CROSSING
PHASE 7, SECTION 1
PICTURE LOCATION EXHIBIT
SEWER CROSSING



Carothers Crossing Phase 7, Section 1 - Proposed Sewer Crossing



1. Looking at Bank (Westerly)



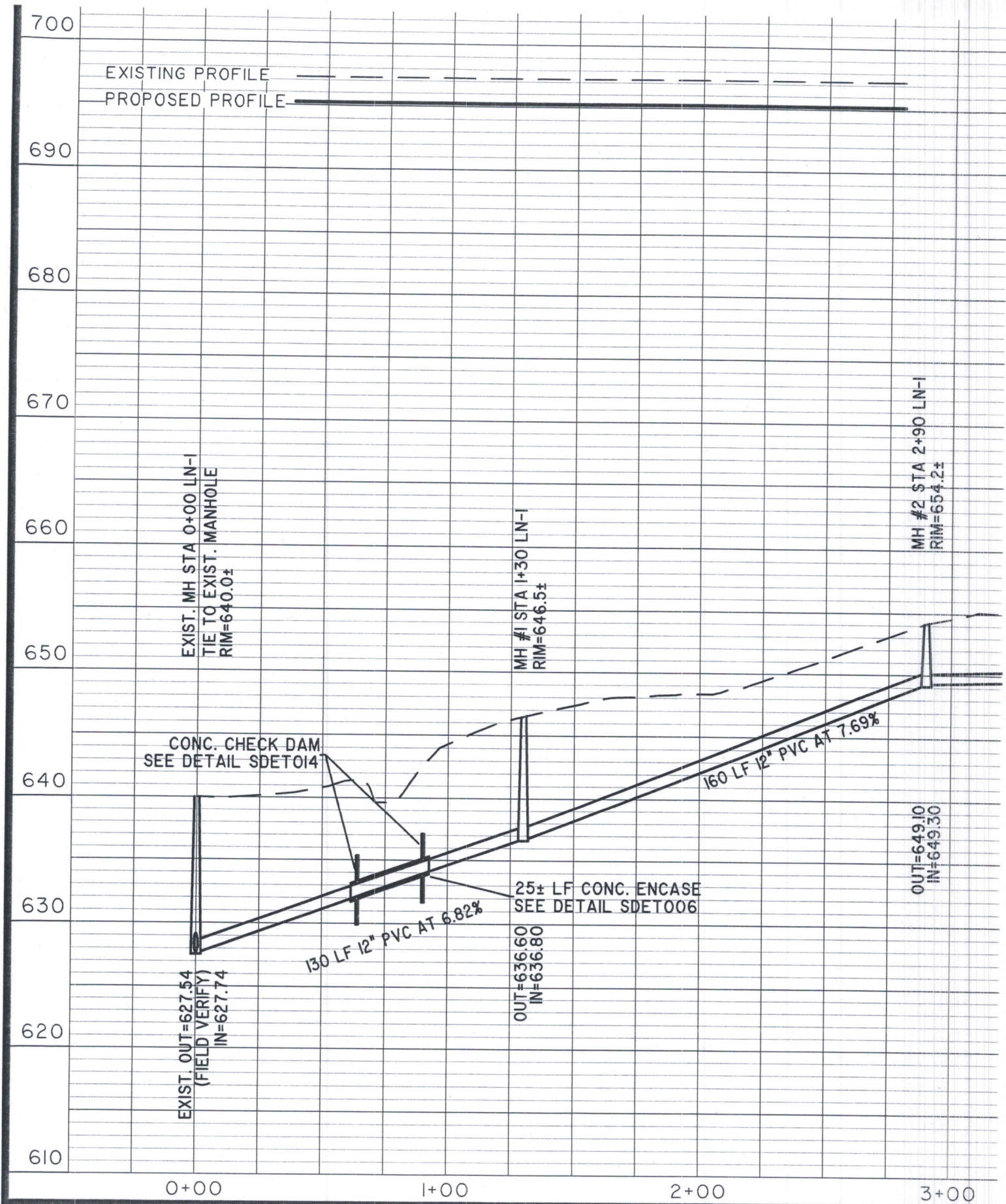
2. Looking Upstream (Southerly)



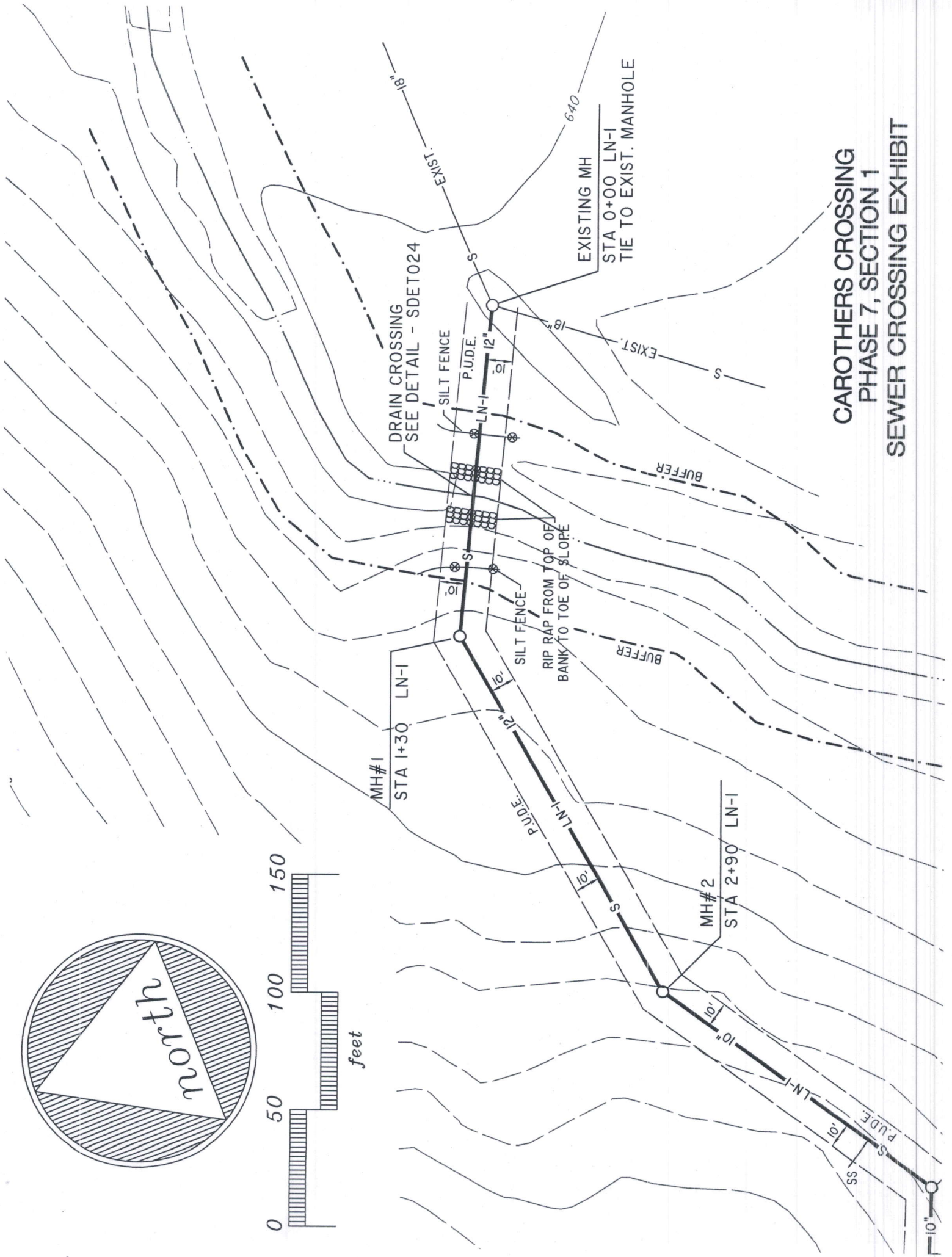
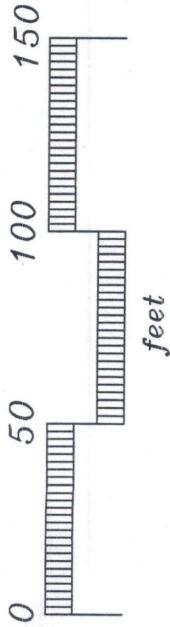
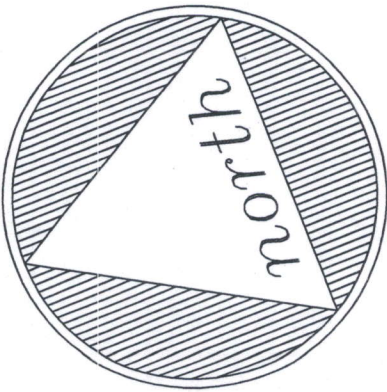
3. Looking at Bank (Easterly)



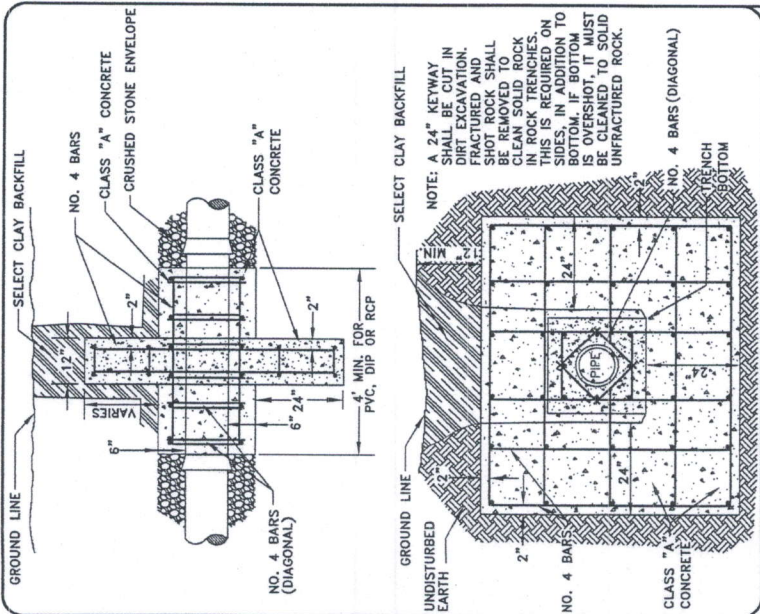
4. Looking Downstream (Northerly)



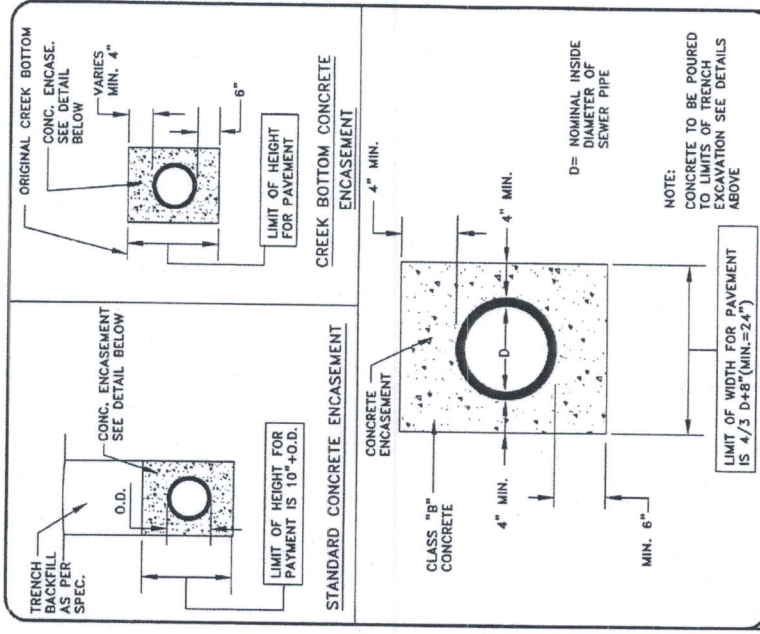
CAROTHERS CROSSING
PHASE 7, SECTION 1
SEWER CROSSING EXHIBIT



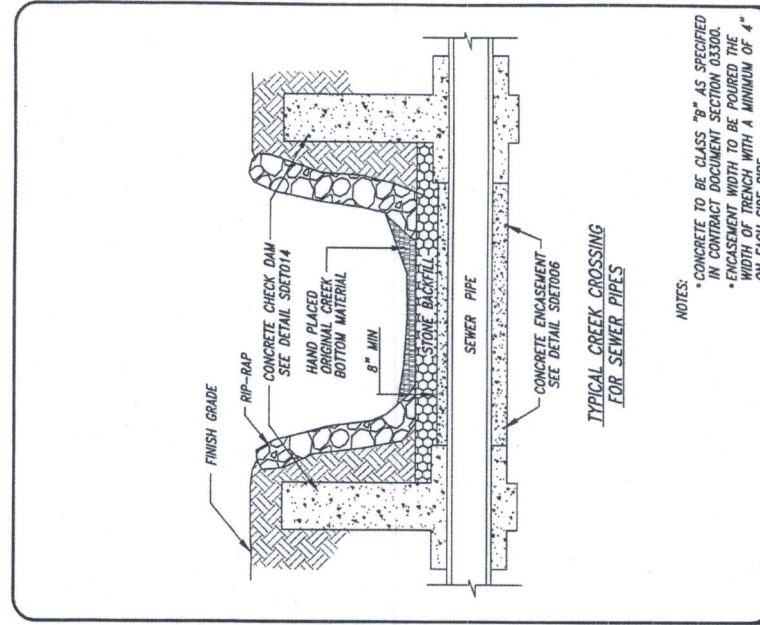
**CAROTHERS CROSSING
PHASE 7, SECTION 1
SEWER CROSSING EXHIBIT**



METRO WATER SERVICES
CONCRETE CHECK DAM
 NOT TO SCALE | DATE: 02/22/08 | **METRO**
 DWG. NO. SDET014 | WATER SERVICES
Hal Battlog
 LICENSED COLLECTION OPERATOR
 DIRECTOR OF WATER AND SEWERAGE SERVICES



METRO WATER SERVICES
CONCRETE ENCASEMENT
 NOT TO SCALE | DATE: 05/05/08 | **METRO**
 DWG. NO. SDET006 | WATER SERVICES
Hal Battlog
 LICENSED COLLECTION OPERATOR
 DIRECTOR OF WATER AND SEWERAGE SERVICES



METRO WATER SERVICES
CREEK CROSSING FOR SEWER PIPES
 NOT TO SCALE | DATE: 02/22/08 | **METRO**
 DWG. NO. SDET024 | WATER SERVICES
Hal Battlog
 LICENSED COLLECTION OPERATOR
 DIRECTOR OF WATER AND SEWERAGE SERVICES

NOTES:
 * CONCRETE TO BE CLASS "B" AS SPECIFIED IN CONTRACT DOCUMENT SECTION 03300.
 * ENCASEMENT WIDTH TO BE POURED THE WIDTH OF TRENCH WITH A MINIMUM OF 4" ON EACH SIDE PIPE.

CAROTHERS CROSSING
 PHASE 7, SECTION 1
 SEWER CROSSING EXHIBIT