



**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
ENVIRONMENTAL FIELD OFFICE**

**3711 Middlebrook Pike  
Knoxville, TN 37921**

**(865)594-6035 STATEWIDE 1-888-891-8332 (865)594-6105**

**Receipt:** EAC-K-11191

**Date of Receipt:** 14-May-2021 9:00 am

**Created By:** Petey Roach (BG57034)

**County:** Knox

**EFO/Office:** Knoxville Field Office

**Received From:** Carolyn Karnes

**Company/Affiliation:** Robert G Campbell & Associate:

**Recipient Address:** 7523 Taggart Lane  
KNOXVILLE, TN- 37938

**Amount Received:** \$750.00

**Method of Payment:** CHECK

**Check Number:** 37149

**Comments:** 21053- ARAP & NOI payment

Division	Description	TDEC Code	Quantity	Unit Price	Line Total
WPC	WPC-NOI \$250 Permit Application	43.340.F02	1	\$250.00	\$250.00
WPC	WPC-ARAP-\$500 Permit Application	43.340.F02	1	\$500.00	\$500.00

**Receipt Total:** **\$750.00**

**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 Permit**

<b>OFFICIAL STATE USE ONLY</b>		Site #:		Permit #:	
<b>Section 1. Applicant Information</b> (individual responsible for site, signs certification below)					
Applicant Name: <b>Mark Clinton</b>					
Company: <b>Tellico Area Services System</b>			Signatory's Title or Position: <b>Superintendent</b>		
Mailing Address: <b>505 Clearview Road</b>			City: <b>Maryville</b>	State: <b>TN</b>	Zip: <b>37801</b>
Phone: <b>865-884-6400</b>		Fax: <b>865-856-3533</b>		E-mail:	
<b>Section 2. Alternate Contact/Consultant Information</b> (a consultant is not required)					
Alternate Contact Name:					
Company:			Title or Position:		
Mailing Address:			City:	State:	Zip:
Phone:		Fax:		E-mail:	
<b>Section 3. Fee</b> (check appropriate box and submit requisite fee with application)					
<input type="checkbox"/> No Fee Submitted		<input checked="" type="checkbox"/> Fee Submitted with Application		Amount Submitted: \$ <b>500</b>	
Current fee schedules for Aquatic Resource Alteration Permit processing may be found at the Division of Water Resources webpage at <a href="http://www.tn.gov/environment/permits/arap.shtml">http://www.tn.gov/environment/permits/arap.shtml</a> or by calling (615) 532-0625. Make checks payable to "Treasurer, State of Tennessee".					
<b>Section 4. Project Details</b> (fill in information and check appropriate boxes)					
Site or Project Name: <b>Tellico Area Services System Water Line Extension</b>			Nearest City, Town or Major Landmark: <b>Vonore, TN</b>		
Street Address or Location: <b>Howards Chapel, Gentry Lane, Old Citico Road and Tipton Lane</b>					
County(ies): <b>Monroe</b>		MS4 Jurisdiction: <b>Monroe</b>		Latitude (dd.dddd): <b>35.540429</b>	
				Longitude (dd.dddd): <b>-84.180174</b>	
Resource Proposed for Alteration: <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Wetland <input type="checkbox"/> Reservoir					
Name of Water Resource: <b>Tributaries of Little Tennessee River and Little Tennessee River (Tellico Reservoir)</b>					
Brief Project Description (a more detailed description is required under Section 8): <b>Construction of 14,270 linear feet of water line in Monroe County</b>					
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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
If Yes, provide the permit reference numbers:					
Is the proposed activity associated with a larger common plan of development? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
If Yes, submit site plans and identify the location and overall scope of the common plan of development.				Plans attached? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If applicable, indicate any other federal, state, or local permit authorizations that the overall project site (common plan of development) has obtained in the past (i.e. construction general permit coverage and/or other ARAPs):					
<b>Section 5. Project Schedule</b> (fill in information and check appropriate boxes)					
Start date: <b>June 01, 2021</b>		Estimated end date: <b>June 01, 2022</b>			
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:					

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*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. Project 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 ( <i>can be a photographic copy</i> )	<input type="checkbox"/>	<input type="checkbox"/>
6.3	Photographs of the resource(s) proposed for alteration with location description ( <i>photo locations should be noted on map</i> )	<input type="checkbox"/>	<input type="checkbox"/>
6.4	A narrative description of the <b>existing</b> 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 <b>proposed</b> 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 streams or wetlands.		<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 8.5x 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 ( <i>e.g., stream cross sections where road crossings are proposed</i> )	<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"/>

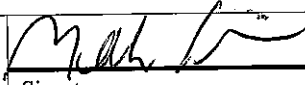
Section 9. Water Resources Degradation (degree of proposed impact) <i>Note that in most cases, activities that exceed the scope of the General Permit limitations are considered greater than de minimis degradation to water quality.</i>	
<p>My activity, as proposed:</p> <ul style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> Will not cause measurable degradation to water quality</li> <li>b. <input type="checkbox"/> Will only cause de minimis degradation to water quality</li> <li>c. <input type="checkbox"/> Will cause more than de minimis degradation to water quality (<i>Complete additional sections 9-11</i>)</li> <li>d. <input type="checkbox"/> Unsure/need more information</li> </ul> <p><i>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: <a href="https://www.tn.gov/sos/rules/0400/0400-40/0400-40-03.20131216.pdf">https://www.tn.gov/sos/rules/0400/0400-40/0400-40-03.20131216.pdf</a>. For more information on specifics on what General Permits can cover, refer to the Natural Resources Unit webpage at <a href="http://www.tn.gov/environment/permits/arap.shtml">http://www.tn.gov/environment/permits/arap.shtml</a></i></p>	

*If you checked "c." above in Section 9, complete the following 2 sections, 10-11.*

Section 10. Detailed Alternative 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"/>

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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>			
Mark Clinton	Superintendent		S-10-26
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 (e.g., maps, wetland delineations and narrative portions) to [water.permits@tn.gov](mailto: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



## OFFICIAL STATE USE ONLY

Received Date:	Permit Number:	Reviewer:	Field Office:
Fee amount paid:	T & E Aquatic Flora and Fauna:	Impaired Receiving Stream:	Application Review:
Date:			<input type="checkbox"/> Deficient Date: _____
Check #:	Exceptional TN Water:		<input type="checkbox"/> Complete Date: _____



**APPLICATION FOR  
AQUATIC RESOURCE ALTERATION PERMIT (ARAP)**

**TELLICO AREA SERVICES SYSTEM**

**Water Line Improvements  
Howards Chapel Road, Gentry Lane, and Tipton Lane**

**Monroe County, Tennessee**

**May 2021**

**RGC&A Project: 21053**

**Engineer: Robert G. Campbell & Associates  
Contact: Mark Mlynarski  
7523 Taggart Lane  
Knoxville, TN 37938  
Phone: (865) 947-5996  
Email: Mark.Mlynarski@rgc-a.com**

**Owner: Tellico Area Services System  
505 Clearview Road  
Maryville, TN 37801  
Contact: Mark Clinton  
Phone: (423) 884-6400**

**Aquatic Resource Alteration Permit Application  
Tellico Area Services System in Monroe County, TN  
Water Line Improvements for Howards Chapel Rd, Gentry Lane, and Tipton Lane**

**Section 6: Project Description**

**6.1 A NARRATIVE DESCRIPTION OF THE SCOPE OF THE PROJECT:**

**Project Location:**

A set of project plans is included with this documentation; the project plans provide a location map. In addition, a general location map on an 11"x17" sheet is included with this documentation.

The location map was generated using the following USGS quadrangle maps:

- Mount Vernon (132-NE)

**Project Description:**

*Proposed Construction Description:*

The proposed project consists of installing 14,270 linear feet of 6-inch and 2-inch PVC water line in Monroe County. The construction activities will include 11,000 linear feet of 6-inch water line and 3,270 linear feet of 2-inch water line. Water Line A and D will be 6-inch and the remainder will be 2-inch. The pipe will be Class 250 SDR 17 PVC. The system proposed will be constructed, operated, and maintained by Tellico Area Services System (TASS).

Water Line A (WL-A) will begin at the intersection of Howards Chapel Road and Miller Road and continue northeast along the south side of Howards Chapel Road for 8,500 linear feet before terminating at its intersection with Old Citico Road. WL-B will begin at the intersection of Gentry Lane and Howards Chapel Road, off WL-A, and travel south along Gentry Lane for 650 linear feet before terminating along the east side of the dead end road. WL-C will begin at the intersection of Tipton Lane with Howards Chapel Road and travel south along the east side of Tipton Lane for 1,300 linear feet before terminating with a fire hydrant. WL-D will begin at the end of WL-A and travel north along the west side of Old Citico Road for approximately 2500 linear feet before terminating at the intersection with a private road. WL-E will begin at the end of WL-A and travel south along the west side of Old Citico Road for approximately 1,320 linear feet.

The post construction runoff coefficient will remain the same as the existing site's runoff coefficient in that the surface conditions will not be significantly altered. No additional impervious area is planned for the proposed project. Considering that this is a linear project with small contributing drainage areas to localized outfalls, runoff management with regards to quantity is not applicable to this project.

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As discussed in a subsequent section, the general timing of the construction process is as follows:

- Establish staging area in consideration of the design project.
- Install silt fence, or other appropriate erosion and sediment control measure where topography allows for effectiveness.
- Begin trenching by clearing the necessary ground material and over burden. The material will be placed temporarily beside the trench. Therefore, there are no stockpile areas and this has been accounted for in the calculation of the total amount of disturbed area. As indicated in the “estimate of disturbed area” the width of the disturbed area will be approximately 10 feet. The construction limits are bound by the area surrounding the project alignment, shown on the attached plans.
- Water line and appurtenances to be installed and tested. Typically, the water line will be installed in no more than 500 linear feet sections during the course of a day, correlating to the amount of disturbed area at one time.
- Over burden will be placed back in the trench with topsoil placed on ground surface.
- Seed and straw will be distributed over the disturbed area after final grading, which will include the vegetative control measures indicated in the Appendix.

Due to the nature of this project, i.e. linear, the disturbed area per “outfall” area is negligible regarding structural practices. In addition, the narrow construction limits prevent the installation of such structures, with the exception of silt fence, and therefore, design calculations are not included with this SWPPP.

Construction material expected to be stored on-site is, at most, 1,000 linear feet of pipe. Other appurtenances will be brought to the job site and either installed or taken back to the Contractor’s storage yard (off-site) at the end of the workday to prevent theft. Diesel fueling of machinery will take place at the Contractor’s yard prior to the workday.

The stormwater prevention and sediment control measures in this report have been designed for the 2-year, 24-hour storm event.

*Estimate of Total Disturbed Area:*

Construction for the installation of the proposed water line will be done using traditional open trenching methods, so the expected area of disturbance is based on a trench 14,270 feet long and 10 feet wide (to allow for surface disturbance by machinery), will account for 142,700 square feet of disturbance, or 3.28 acres. As described in a subsequent section the entire 3.28 acres will not be disturbed at one time, rather, the construction activities will be staged.

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*Existing Site Conditions:*

The proposed project area consists of an existing road that relies on typical parallel ditch and culvert systems for stormwater drainage. Much of the travel of the water lines are within level properties off main roads.

The anticipated receiving waters for stormwater runoff from the project area are:

- Unnamed Tributary to Little Tennessee River
- Tellico Reservoir (Little Tennessee River)

Tellico Reservoir has been assessed according to the TDEC Division of Water Resources Public Data Viewer and is listed as “not supporting”. It is impaired due to the source of contaminated sediments causing high levels of polychlorinated biphenyls or PCBs. Tellico Reservoir will require a 60-foot average/ 30-foot minimum buffer.

As shown on the attached figures with USGS maps as a background, the areas indicated as the project locations show that the topography of the project site is typical of the Tennessee Valley.

According to the USDA’s Web Soil Survey, the soils present on the site have moderate to very slow infiltration rates and the soils in the project areas are primarily classified within hydrologic soil groups “B”, “C”, and “D”. The primary soils group is “B”. Group “B” soils are moderately draining soils leading to average rates of runoff. Approximately 15-percent of the area is soil groups “C” and “D” which are poor draining and lead to higher rates of runoff. The soil map for this project is located in the Appendix.

*Surface Water Conveyance Crossings:*

As shown on the attached USGS quad map, there are two areas where the proposed water line will be placed overtop A 72-inch and 96-inch CMP that actively houses parts of the Tellico Reservoir. WL-A will be laid overtop of an existing 72-inch CMP at Station 50+47.00 that runs underneath Howard’s Chapel Road and it will be laid overtop a 96-inch CMP at Station 71+54.00. At this point silt fence and mulch filter berm will be utilized to protect the creek.

6.2 USGS TOPOGRAPHIC MAP INDICATING THE EXACT LOCATION OF THE PROJECT (CAN BE A PHOTOGRAPHIC COPY):

See attached.

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**6.3 PHOTOGRAPHS OF THE RESOURCES PROPOSED FOR ALTERATION WITH LOCATION**  
**DESCRIPTION**

**AREA#1 (35.545157, -84.167012), STA 50+47 (WL-A), SHEET 7**





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**AREA#2 (35.548527, -84.161590), STA 50+47 (WL-A), SHEET 8**





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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.

**AREA#1 (35.442750, -84.169389), STA 30+05 (WL-C), SHEET 8**

Tellico Reservoir flows from south to north and under Howards Chapel Road via a 72-inch CMP. The reservoir continues north and into the main body of the Little Tennessee River. The reservoir has a defined top of bank and the width of the channel at this location is approximately 174-300' and the channel side slopes are generally 3:1 to vertical in this area. The channel depth varies and is not able to be determined and as well as the water depth. The stream bottom also varies and is not determinable.

**AREA#1 (35.442750, -84.169389), STA 30+05 (WL-C), SHEET 8**

Tellico Reservoir flows from south to north and under Howards Chapel Road via a 96-inch CMP. The reservoir continues north and into the main body of the Little Tennessee River. The reservoir has a defined top of bank and the width of the channel at this location is approximately 200-275' and the channel side slopes are generally 3:1 to vertical in this area. The channel depth, water depth and consistency of the stream bottom are indeterminable in this area.

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.

The proposed water line crossings (Area #1 and #2) will be overlay on top of an existing CMP to minimize disturbance to the area and reservoir. Grading and construction will be conducted in accordance with the SWPPP, which will be submitted to TDEC, and prudent best management practices will be followed until all affected areas are permanently stabilized.

6.6 IN THE CASE OF WETLANDS, INCLUDE WETLAND DELINEATION WITH DELINEATION FORMS AND SITE MAP DENOTING LOCATION OF DATA POINTS.

Not applicable; no wetlands will be affected at the crossing locations.

6.7 THE CASE OF WETLANDS, INCLUDE WETLAND DELINEATION WITH DELINEATION FORMS AND SITE MAP DENOTING LOCATION OF DATA POINTS.

Not applicable.



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**Section 7: Project Rationale**

7.0 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 STREAMS OR WETLANDS.

Monroe County is seeking to increase its ability to provide water to more of its residents. Construction activities include installation of approximately 14,270 linear feet of water line installation and associated appurtenances to provide service to the area. There will be two stream crossings of culverts that house Tellico Reservoir.

Alternatives considered for the stream crossings include open cut the crossings, directionally bore the crossings, or jack and/or bore the crossings. The crossings were evaluated for feasibility and minimization of environmental impact.

**Section 8: Technical Information**

8.1 DETAILED PLANS, SPECIFICATIONS, BLUEPRINTS, OR LEGIBLE SKETCHES OF PRESENT SITE CONDITIONS AND THE PROPOSED ACTIVITY.

Please see attached plan set.

8.2 FOR BOTH THE PROPOSED ACTIVITY AND COMPENSATORY MITIGATION, PROVIDE A DISCUSSION REGARDING THE SEQUENCING OF EVENTS AND CONSTRUCTION METHODS.

- 1) One or more staging areas will be selected.
- 2) It is the intent of this Storm Water Pollution Prevention Plan that no sediment leaves the construction site. Work will be performed in such a manner that, as much as possible, trenches, borings and excavations will be opened in the morning; pipe and appurtenances installed throughout the day, and trenches, borings and excavations shall be filled before work is suspended for the day. All disturbed areas shall be covered with straw before work is suspended for the day, with no disturbed areas left uncovered. Seeding of completed areas shall occur within 7 days of completion of construction activities.
- 3) Silt fence shall be installed in areas along the project as required by topography or proximity to nearby watercourses. Details for installation and maintenance of silt fence are included in the Appendix. Silt fence need not be installed on the entire project at once, but silt fence installation shall proceed in advance of any soil disturbing activity. Silt fence shall not be required at all locations along the project route but shall be placed on the downhill side of construction activity where existing slopes indicate the possibility of sediment begin carried into any adjacent water conveyances during a rainfall event.

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- 4) At areas where construction activity is near streams, silt fence shall be placed between construction activity and the stream such that project run-off is intercepted before it enters the stream channel. In no case shall construction equipment be permitted to operate in the stream channel.
- 5) Smaller conveyances with no flow at the time of construction will be trenched without diverting.
- 6) Topsoil will be removed and temporarily stockpiled for later redistribution. Topsoil piles shall be temporarily stabilized and seeded.
- 7) Construction activity for this water line shall be limited to excavating and backfilling as work progresses. To minimize the area of active disturbance at any given time, any initial clearing, excavating, or backfilling will be conducted in sections 500 feet or less in length. Silt fence shall be installed on downstream side of activity as directed by the construction representative.
- 8) Care shall be exercised to protect all open utility pipe ends or open ends of trenches so that neither the pipe nor the trench becomes a conduit for silt movement. Temporarily open pipe ends shall be capped and any trenches that open onto existing grade and may allow water to drain from the trench to natural ground shall be protected by silt fence.
- 9) Sediment shall be removed from silt fence before the design capacity of the structure has been reduced by 50%. Litter, construction debris, and construction chemicals exposed to storm water shall be picked up prior to anticipated storm events, or otherwise prevented from becoming a pollutant source for storm water discharges. After use, silt fences shall be removed to prevent them from becoming a pollutant source for storm water discharges. Temporary measures may be removed at the beginning of the workday, but shall be replaced at the end of the workday.
- 10) Stabilization shall be accomplished as soon as practicable after trench or excavation backfilling and no later than seven days after attaining final grade. Where trenching and backfilling have ceased (temporarily or permanently), temporary stabilization shall be applied within seven days if the activity will not resume within 15 days.
- 11) The dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated shall be recorded and maintained on the site. Stabilization methods may include seed and mulch, or seed and erosion control blankets.

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- 12) Storm drain inlet protection will be utilized when necessary. Use of storm drain inlet protection shall not interfere with roadway traffic. The contractor is responsible for ensuring the safety of the public when implementing and utilizing storm drain inlet protection.
- 13) Permittees shall maintain a rain gauge and daily rainfall records at the site, or use a reference site for a record of daily amount of precipitation.
- 14) Muddy water to be pumped from excavation and work areas must be held in settling basins or filtered or chemically treated prior to its discharge into surface waters. Water must be discharged through a pipe, well-grassed or lined channel or other equivalent means so that the discharge does not cause erosion and sedimentation. Discharges from dewatering activities including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls. Appropriate controls included, but are not limited to: weir tank, dewatering tank, gravity bag filter, sand media particulate filter, pressurized bag filter, cartridge filter or other control units providing the level of treatment necessary to comply with permit requirements. Discharged water must not cause an objectionable color contrast with the receiving stream.
- 15) Buffer zone requirements: to the extent practical, a minimum 30-foot/average 60-foot, natural riparian buffer zone adjacent to streams at the project sites shall be preserved, per the Tennessee Erosion and Sediment Control Handbook.

All erosion prevention and sediment control best management practices identified in this SWPPP shall be installed as recommended in the Tennessee Erosion and Sediment Control Handbook.

Mark Clinton, or his designate, shall be responsible for implementation of the erosion and sediment control plan, and for inspections and maintenance. Robert G. Campbell & Associates will assist and advise Mr. Clinton.

If sediment escapes the construction site, off-site accumulations of sediment that have not reached a stream must be removed at a frequency sufficient to minimize offsite impacts (e.g., fugitive sediment that has escaped the construction site and has collected in a street must be removed so that it is not subsequently washed into storm sewers and streams by the next rain and/or so that it does not pose a safety hazard to users of public streets). Permittee shall not initiate remediation/restoration of a stream without consulting the division first. This permit does not authorize access to private property. Arrangements concerning removal of sediment on adjoining property must be settled by the permittee with the adjoining landowner.

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Tellico Area Services System in Monroe County, TN  
Water Line Improvements for Howards Chapel Rd, Gentry Lane, and Tipton Lane**

**8.3 DEPICTION AND NARRATIVE ON THE LOCATION AND TYPE OF EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES FOR THE PROPOSED ALTERATIONS.**

The construction-phase erosion prevention controls will be implemented to minimize the dislodging and suspension of soil in water and retain mobilized sediment on site. The construction sequence will be followed to minimize the exposure time of graded or denuded areas. Clearing and grubbing will be held to the minimum necessary. Pre-construction vegetative ground cover shall not be destroyed, removed or disturbed more than 10 days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.

Erosion and sediment control structures will be installed and functional before any earthmoving activity begins. All control measures will be properly installed and maintained in accordance with the manufacturer's specifications and good engineering practices. Measures will be implemented to slow runoff so that rill and gully formation is prevented.

Permanent seeding is outlined in the construction sequence and will be followed as a minimum. Disturbed areas will be seeded for permanent cover as soon as grading is completed and weather conditions are suitable. Final stabilization requires a minimum of 70% coverage. Temporary seeding will also be used when necessary. Stabilization will be accomplished as soon as practicable after attainment of final grade. Where earth-disturbing activity has temporarily ceased, temporary stabilization will be applied if the activity will not resume within 15 days. Steep slopes will require stabilization within 7 days. Stabilization methods may also include erosion control blankets.

Sediment will be removed from silt fence before the design capacity of the structure has been reduced by 50%. Litter, construction debris, and construction chemicals exposed to storm water will be picked up prior to anticipated storm events, or otherwise prevented from becoming a pollutant source for storm water discharges. After use, silt fences will be removed to prevent them from becoming a pollutant source for storm water discharges. Temporary measures may be removed at the beginning of the workday, but will be replaced at the end of the workday.

All erosion prevention and sediment control best management practices identified in this ARAP will be installed as recommended in the Tennessee Erosion and Sediment Control Handbook.

Please see the attached EPSC measures:

Wire Backed Silt Fence

Mulch Berm

Permanent Vegetation

Stabilization

**Aquatic Resource Alteration Permit Application**  
**Tellico Area Services System in Monroe County, TN**  
**Water Line Improvements for Howards Chapel Rd, Gentry Lane, and Tipton Lane**

The contractor will be responsible for day-to-day operational control and will have a qualified person to conduct inspections. Persons conducting inspections will have successfully completed the “Fundamentals of Erosion Prevention and Sediment Control” course offered by TDEC and certification shall be current throughout the life of the project.

If sediment escapes the construction site, off-site accumulations of sediment that have not reached a stream will be removed as soon as possible to minimize offsite impacts. The Division will be consulted prior to remediation or restoration activities of a stream. Arrangements concerning removal of sediment on adjoining property will be settled by the permittee with the adjoining landowner.

Litter, construction debris, and construction chemicals exposed to storm water will be picked up prior to anticipated storm events or before being carried off of the site by wind, or before otherwise becoming a pollutant source. After use, materials used for erosion prevention and sediment control will be removed.



**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)**

Division of Water Resources

William R. Snodgrass Tennessee Tower, 11th Floor  
312 Rosa L. Parks Avenue, Nashville, Tennessee 37243  
1-888-891-TDEC (8332)

**Notice of Termination (NOT) for General Aquatic Resource Alteration Permit (ARAP) Coverage**

Submittal of this form is required when requesting termination of coverage from a General ARAP. The purpose of this form is to notify TDEC that the ARAP activities authorized at the portion of the identified facility have been completed. Submission of this form shall in no way relieve the permittee of permit obligations required prior to submission of this form. Please submit this form along with photographic documentation of the completion of the permitted activity to the local DWR Environmental Field Office (EFO) address (see table below). For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC).

**Type or print clearly, using ink.**

<b>Site or Project Name:</b>	<b>ARAP Tracking Number: NR</b>
Street Address or Location:	County(ies):

<b>Name of Applicant Requesting Termination of Coverage:</b>			
Permittee Contact Name:		Title or Position:	
Mailing Address:	City:	State:	Zip:
Phone:	E-mail:		

**Check the reason(s) for termination of permit coverage:**

<input type="checkbox"/>	All activities authorized by the above referenced tracking number have been completed in accordance with terms and conditions of the general permit. Photographic documentation is attached.
<input type="checkbox"/>	The activity was not conducted.

**Certification and Signature:** (must be signed by president, vice-president or equivalent ranking elected official)

<p>I certify under penalty of law that either: (a) all activities authorized by the above referenced tracking number have been completed in accordance with terms and conditions of the general permit; or (b) the authorized activity was not conducted. I understand that by submitting this notice of termination, I am no longer authorized to conduct aquatic resource alteration activities under this general permit, and that such alterations to waters of the State is unlawful under the Tennessee Water Quality Control Act or waters of the United States is unlawful under the Clean Water Act. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act and the Tennessee Water Quality Control Act.</p> <p>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.</p>		
Permittee name (print or type):	Signature:	Date:

EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	8383 Wolf Lake Drive, Bartlett, TN	38133	Cookeville	1221 South Willow Ave.	38506
Jackson	1625 Hollywood Drive	38305	Chattanooga	1301 Riverfront Parkway, 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

TELLICO AREA SERVICES SYSTEM  
MONROE COUNTY, TENNESSEE  
STORMWATER POLLUTION PREVENTION PLAN (SWPPP)  
2021 GOVERNOR LOCAL GOVERNMENT  
SUPPORT GRANT  
FOR  
HOWARDS CHAPEL RD., GENTRY LN. & TIPTON LN.

MONROE COUNTY MAYOR:

MITCH INGRAM

TELLICO AREA SERVICES SYSTEM

MARK CLINTON SUPERINTENDENT

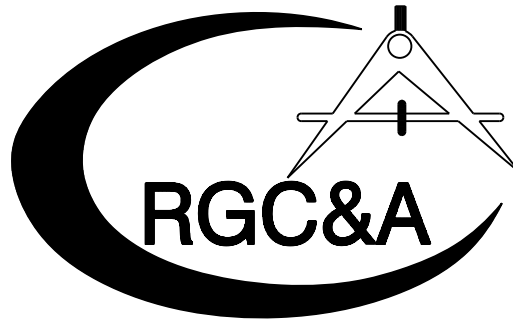
MONROE COUNTY COMMISSIONERS:

1ST DISTRICT: ADAM REYNOLDS  
LUKE BRIGHT  
JOE ANDERSON  
2ND DISTRICT: CHAD LEMING  
BRIAN HARRILL  
RICHARD KIRKLAND  
3RD DISTRICT: CHRIS WISEMAN  
BILL SHADDEN  
ROGER THOMAS  
4TH DISTRICT: PAULETTE SUMMEY

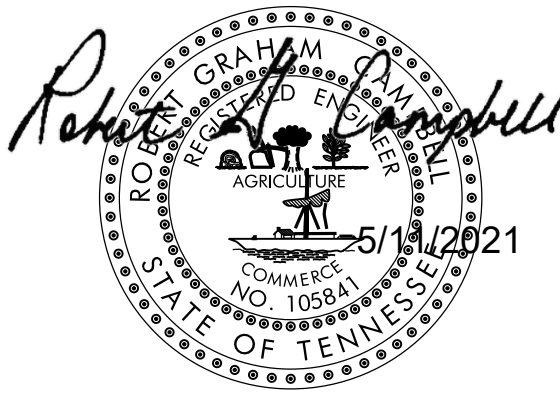
BOARD MEMBERS

JIM BROOKS CHAIRMAN  
JOHN HAMMONTREE VICE-CHAIRMAN  
CHIP MILLER SECRETARY  
ROBERT WOOLDRIDGE  
ROBBY LOVINGOOD  
WILLIAM D. SATTERFIELD

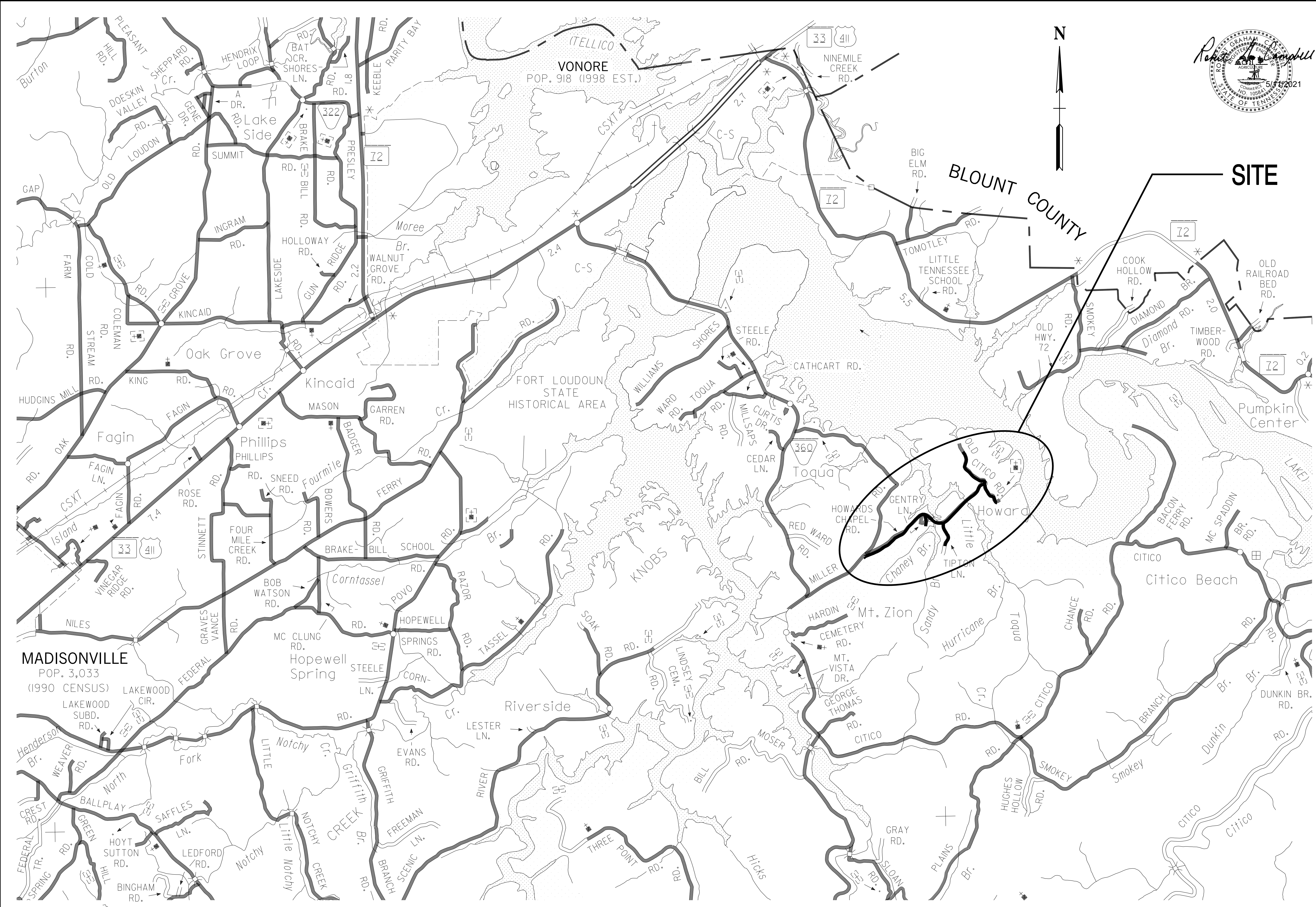
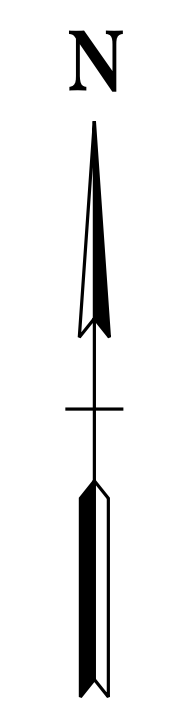
ROBERT G. CAMPBELL & ASSOCIATES , L.P.  
CONSULTING ENGINEERS



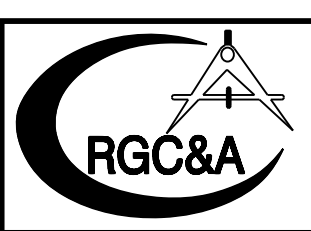
KNOXVILLE , TENNESSEE







NO.	DATE	DESCRIPTION	BY	CKD.
REVISIONS				



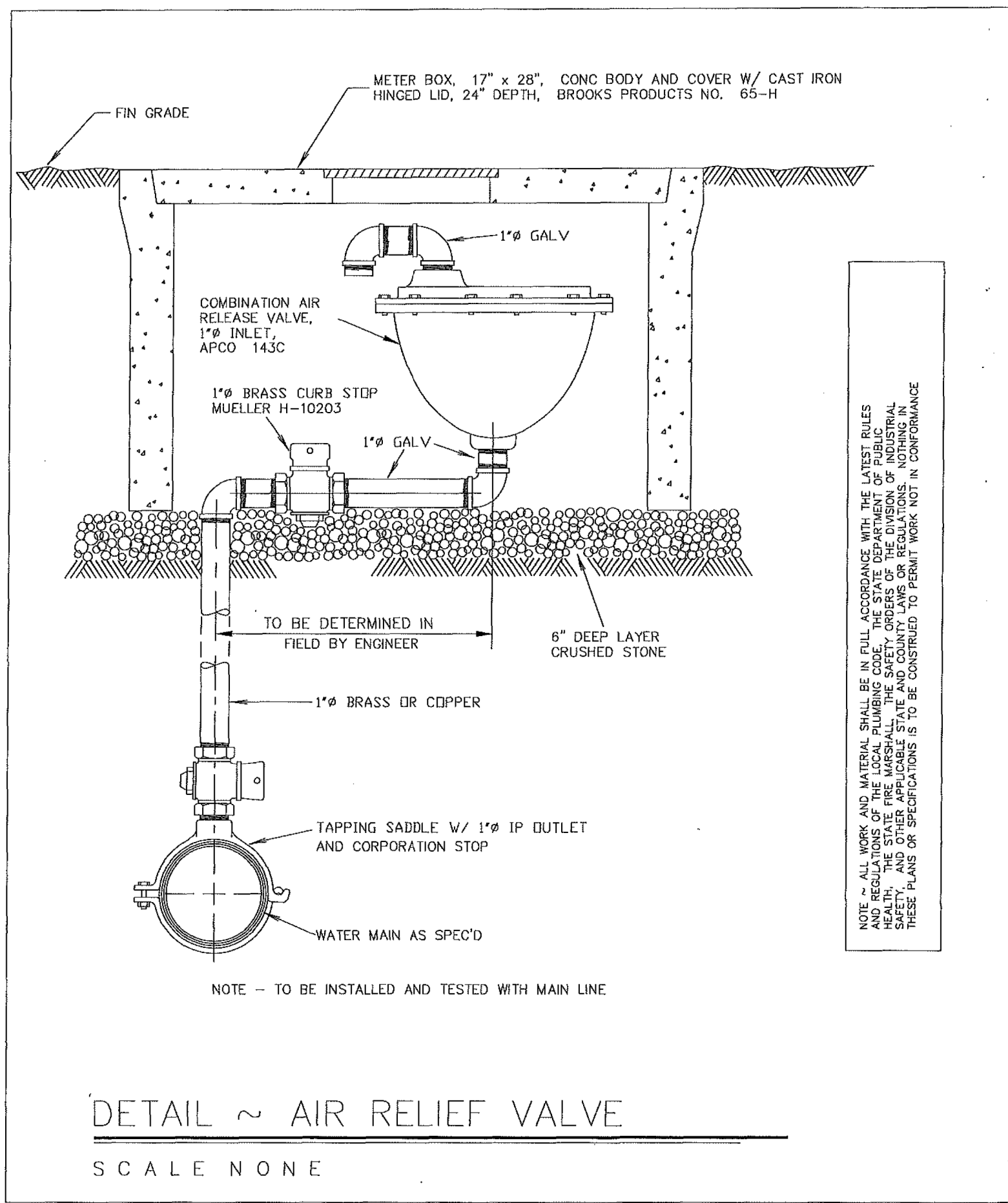
**ROBERT G. CAMPBELL & ASSOC., L.P.**  
CONSULTING ENGINEERS  
KNOXVILLE, TENNESSEE

**TELICO AREA SERVICES SYSTEM**  
**MONROE COUNTY, TENNESSEE**

**LOCATION**  
**MAP**

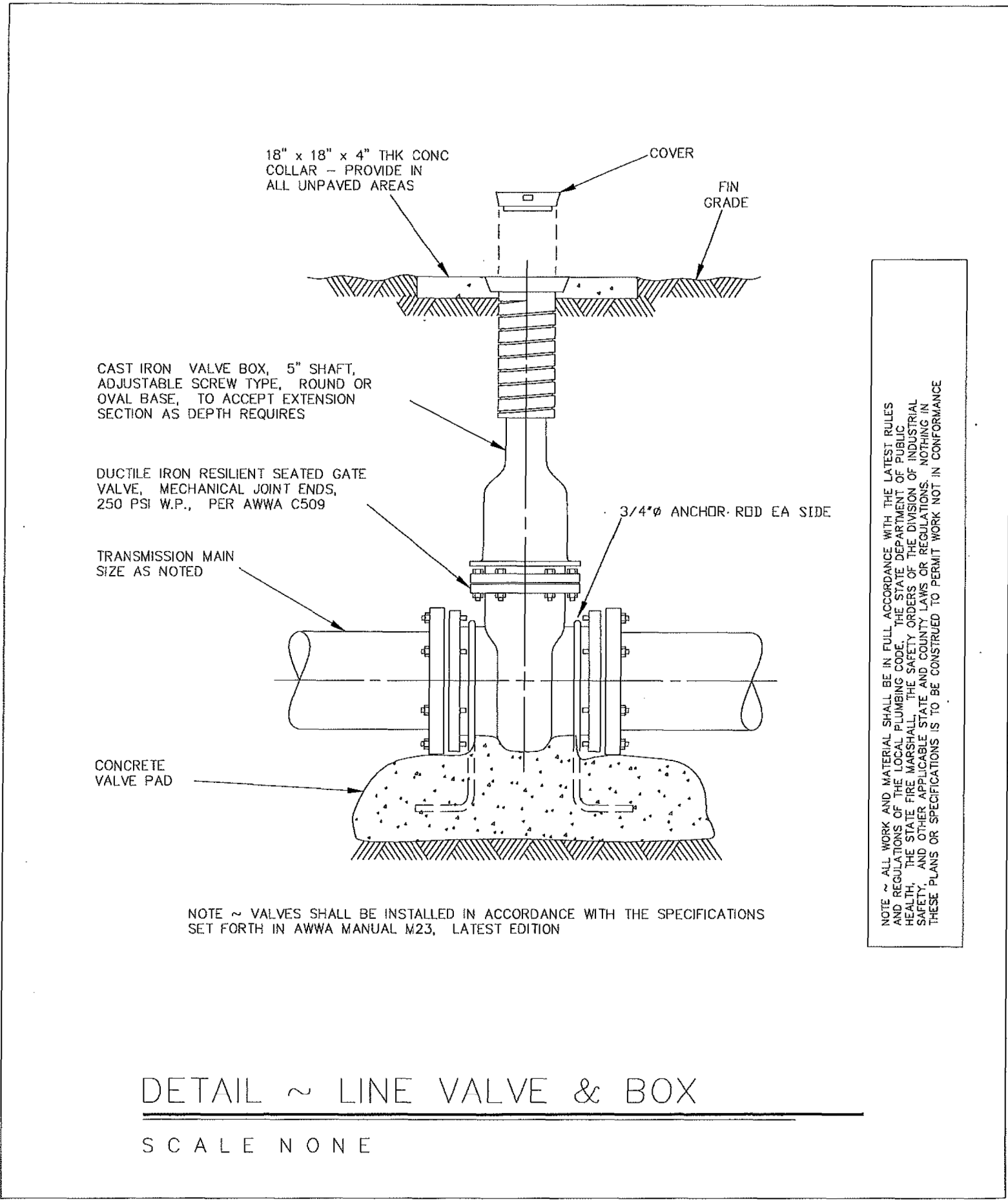
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DRAWN BY <b>JER</b>	DATE <b>05/11/2021</b>	FILE NO. <b>21053</b>	OF <b>13</b> SHEETS





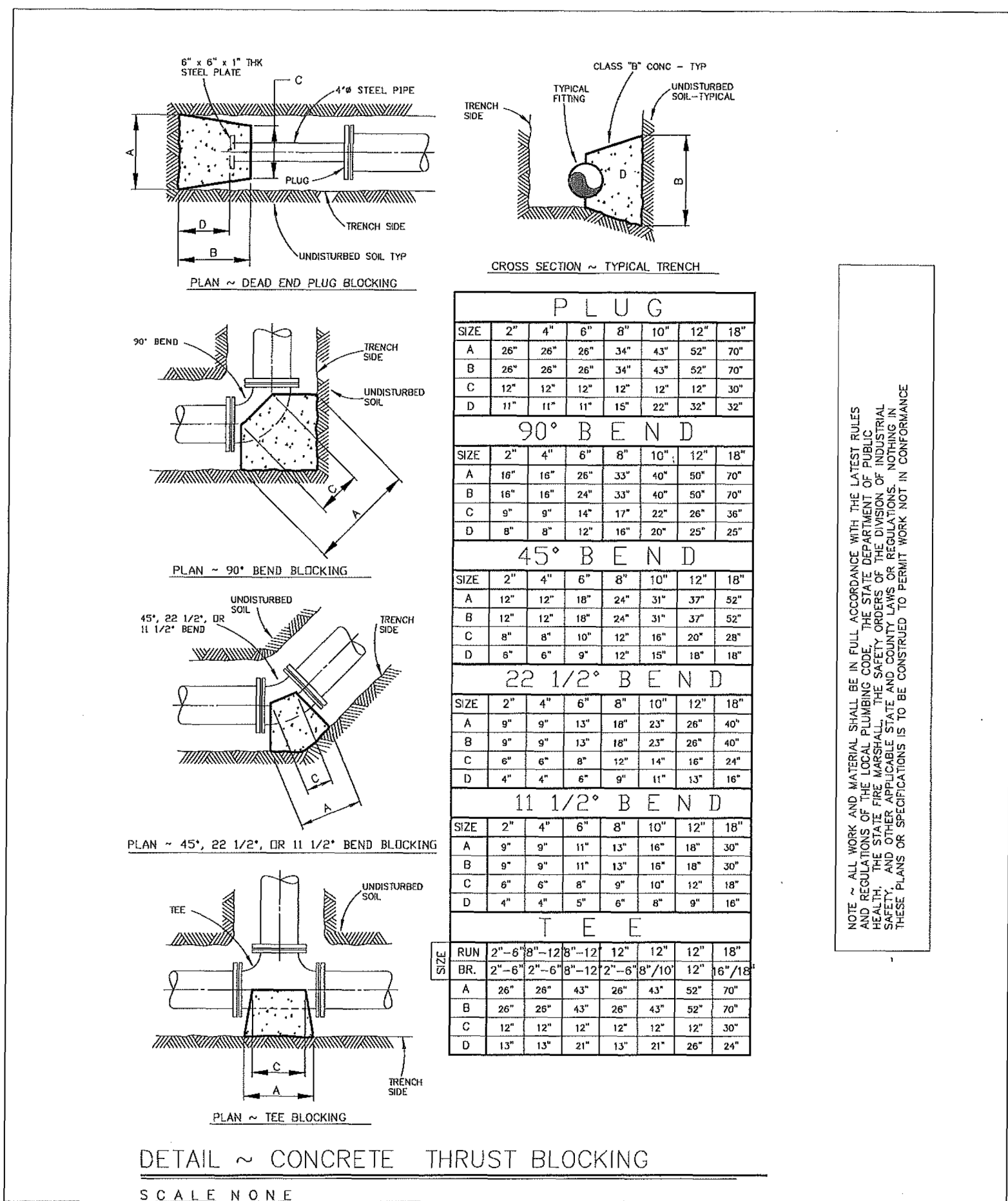
TELlico AREA SERVICES SYSTEM (TASS)  
505 CLEARVIEW ROAD  
MARYVILLE, TN 37801

SD-4



TELlico AREA SERVICES SYSTEM (TASS)  
505 CLEARVIEW ROAD  
MARYVILLE, TN 37801

SD-1



TELlico AREA SERVICES SYSTEM (TASS)  
505 CLEARVIEW ROAD  
MARYVILLE, TN 37801

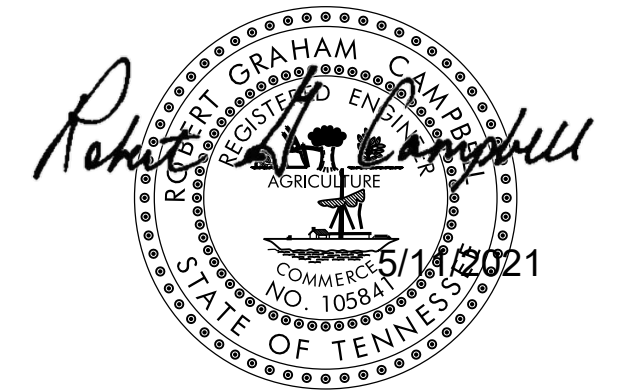
SD-3

WATER NOTES:

1. ALL WATERLINES SHALL BE INSTALLED IN ACCORDANCE WITH APPROVED TELlico AREA SERVICES SYSTEM SPECIFICATIONS.
2. 6" WATERLINES SHALL BE CLASS 250 SDR 17 PVC OR CLASS 350 DIP AS NOTED. 2" WATERLINES SHALL BE CLASS 250 SDR 17 PVC.
3. EXISTING WATERLINE PRESSURE FURNISHED BY OFFICIALS AT TELlico AREA SERVICES SYSTEM.
4. CONTRACTOR MUST HAVE A VALID CONTRACTOR UTILITY LICENSE FOR INSTALLATION OF UNDERGROUND PIPING.
5. ALL WATER VALVES SHALL BE PLACED OUTSIDE THE ROADWAY SURFACE.
6. ALL WATER LINES TO BE CONSTRUCTED WITH A MINIMUM OF 36" OF COVER.
7. CONTRACTOR IS RESPONSIBLE FOR ALL TRENCH SAFETY.
8. CONTRACTOR SHALL SHORE AND BRACE ALL OPEN CUT TRENCHES AS REQUIRED BY STATE AND FEDERAL LAWS AND LOCAL ORDINANCES; TO CONFORM WITH RECOMMENDATIONS SET FORTH IN THE AGC MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION; TO PROTECT LIFE, PROPERTY, OR WORK; TO AVOID EXCESSIVELY WIDE CUTS IN UNSTABLE MATERIAL.
9. EXISTING UTILITIES SHOWN ON PLANS ARE APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL NOTIFY THE OWNERS OF EACH UTILITY PRIOR TO CONSTRUCTION IN THE AREA AND REQUEST EXACT HORIZONTAL AND VERTICAL LOCATIONS.

EROSION / POLLUTION CONTROL:

1. ALL LOCAL, STATE, AND FEDERAL EROSION CONTROL REQUIREMENTS SHALL BE FOLLOWED DURING CONSTRUCTION. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO CONTROL EROSION AND WATER POLLUTION THROUGH THE CONSTRUCTION PERIOD. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE IN PLACE BEFORE EARTH MOVING OPERATIONS BEGIN. CLEARING AND GRUBBING SHALL BE HELD TO A MINIMUM WIDTH NECESSARY TO ACCOMMODATE CONSTRUCTION SLOPES. THE CONTRACTOR SHALL ADHERE TO THE STORM WATER POLLUTION PREVENTION PLAN AS PROVIDED IN THE CONTRACT DOCUMENTS.
2. ANY STOCKPILED SOIL OR FILL MATERIAL SHALL BE LOCATED AND TREATED IN A MANNER TO PREVENT SILT FROM ENTERING STREAMS. NO EXCAVATED MATERIAL SHALL BE DISCHARGED INTO DITCHES. THE CONTRACTOR SHALL DISPOSE OF ALL EXCAVATED MATERIAL IN A LOCATION APPROVED BY THE ENGINEER, ABOVE THE NORMAL HIGH WATER ELEVATION.
3. THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO ALL EROSION CONTROL PROVISIONS AS SET FORTH IN THE EROSION AND SEDIMENT CONTROL HANDBOOK AVAILABLE FROM THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION.
4. THE CONTRACTOR SHALL MAINTAIN THE EROSION CONTROL MEASURES THROUGHOUT THE LENGTH OF THE CONTRACT AS REQUIRED.
5. THE CONTRACTOR SHALL PROVIDE TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES (SUCH AS TEMPORARY VEGETATION, BERMS, SEDIMENT BASINS, SLOPE DRAINS, AND SILT FENCES) AS DIRECTED BY THE ENGINEER.
6. NO EARTH OR OTHER ERODIBLE MATERIAL SHALL BE USED TO DIVERT STREAM FLOW OR TO CONSTRUCT COFFERDAMS. CLEAN CUT ROCK WITH FINES MAY BE USED, OR IN THE CASE OF COFFERDAMS, STEEL SHEETING OR SAND BAGS IS PERMISSIBLE. WATER OR SEDIMENT ISOLATED BY COFFERDAMS SHALL BE PUMPED INTO SEDIMENT BASINS ON THE BANK OF THE STREAM.



\*\*\*\*\*  
\*\*\*\*\*DATE  
\*\*\*\*\*

NO.	DATE	DESCRIPTION	BY	CKD.
REVISIONS				



ROBERT G. CAMPBELL & ASSOC., L.P.  
CONSULTING ENGINEERS  
KNOXVILLE, TENNESSEE

TELlico AREA SERVICES SYSTEM  
MONROE COUNTY, TENNESSEE

NOTES &  
DETAILS

DESIGNED BY JLD	CHECKED BY RGC	SCALE 1" = 50'	SHEET NO. 3
DRAWN BY JER	DATE 05/11/2021	FILE NO. 21053	OF 13 SHEETS

# SWPPP LEGEND

- IP** INLET PROTECTION (SEDIMENT TRAP AND TUBE WATTLES)
- SFB \* SFB \* SFB WIRE BACKED SILT FENCE
- MFB** MULCH BERM
- MU** STRAW MULCH
- PS** PERMANENT VEGETATION
- SO** STABILIZATION WITH SOD
- OP** OUTLET PROTECTION
- 60 FOOT STREAM BUFFER
- LIMIT OF DISTURBANCE

WL-A STA. 0+00.00  
FIELD LOCATE EXISTING 6"  
WATER LINE AND INSTALL  
1" 6"x6" TAPPING SLEEVE  
AND VALVE. BEGIN NEW 6"  
CLASS 250 SDR 17 PVC  
WATER LINE.

MILLER ROAD

HOWARD'S CHAPEL ROAD

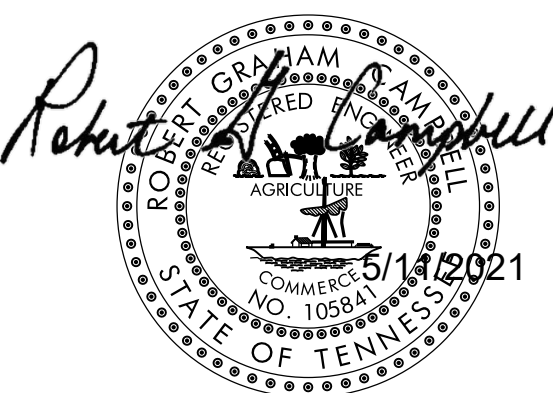
**MU**  
**PS** 5

PLACE SILT FENCE WHERE TOPOGRAPHY  
ALLOWS FOR EFFECTIVENESS

10

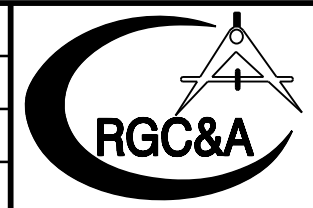
**MU**  
**PS** 1

MATCH LINE WL-A STA. 15+00 SHEET 5



\*\*\*\*\*NO. DATE DESCRIPTION BY CKD.\*\*\*\*\*

NO.	DATE	DESCRIPTION	BY	CKD.
REVISIONS				



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CONSULTING ENGINEERS  
KNOXVILLE, TENNESSEE

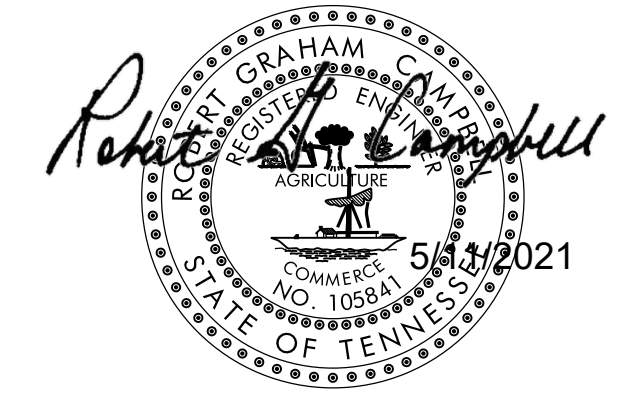
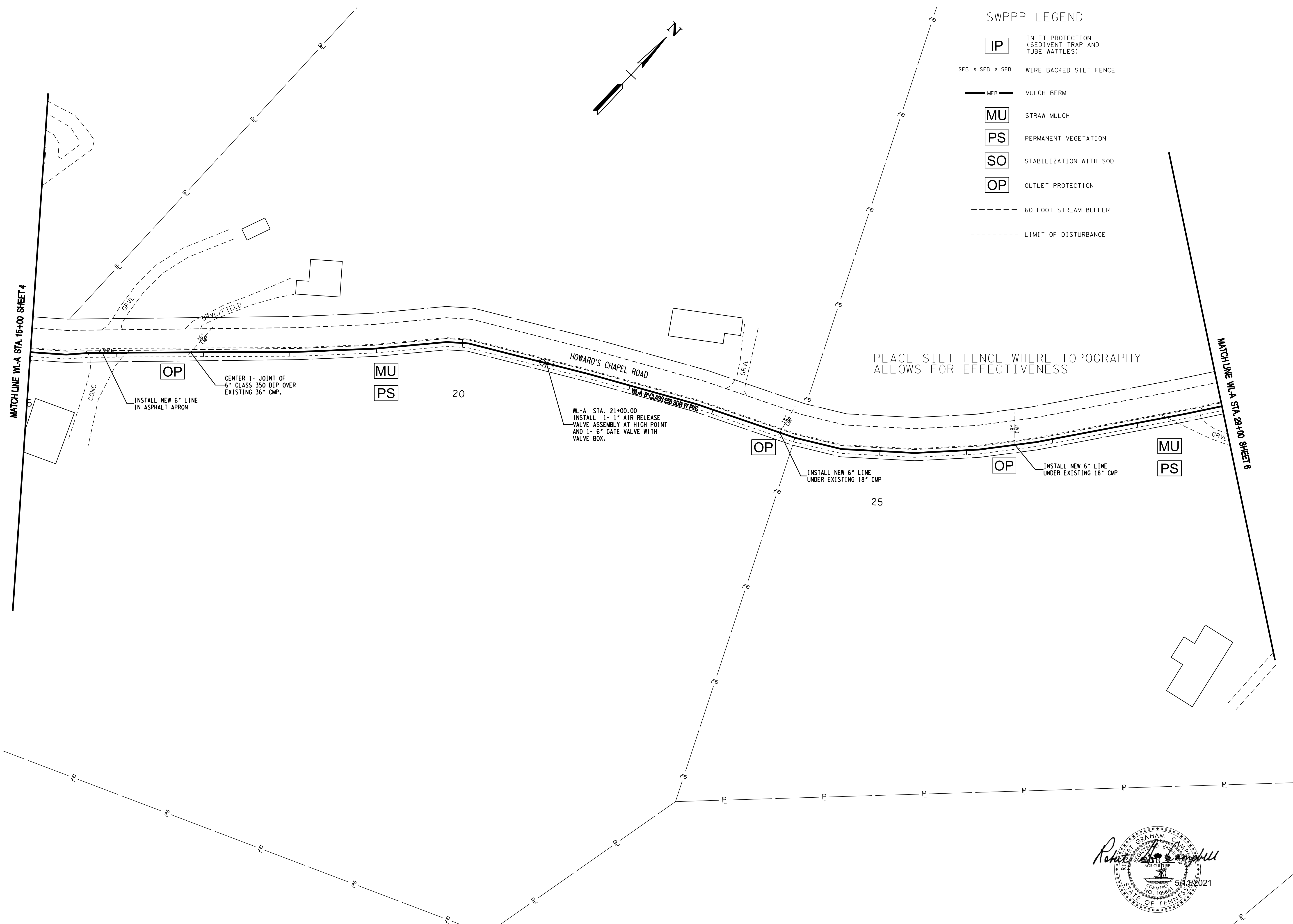
**TELICO AREA SERVICES SYSTEM**  
**MONROE COUNTY, TENNESSEE**

**PLAN VIEW - WL-A**  
**HOWARDS CHAPEL ROAD**

DESIGNED BY <b>JLD</b>	CHECKED BY <b>RGC</b>	SCALE <b>1" = 50'</b>	SHEET NO. <b>4</b>
DRAWN BY <b>JER</b>	DATE <b>05/11/2021</b>	FILE NO. <b>21053</b>	OF 13 SHEETS

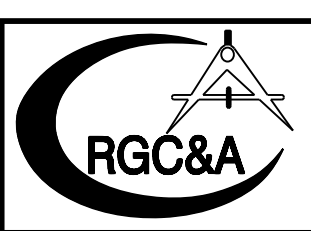
SWPPP LEGEND

- IP** INLET PROTECTION  
(SEDIMENT TRAP AND  
TUBE WATTLES)
- SFB \* SFB \* SFB WIRE BACKED SILT FENCE
- MFB** MULCH BERM
- MU** STRAW MULCH
- PS** PERMANENT VEGETATION
- SO** STABILIZATION WITH SOD
- OP** OUTLET PROTECTION
- 60 FOOT STREAM BUFFER
- LIMIT OF DISTURBANCE



\*\*\*\*\*NO. DATE DESCRIPTION BY CKD.\*\*\*\*\*

NO.	DATE	DESCRIPTION	BY	CKD.

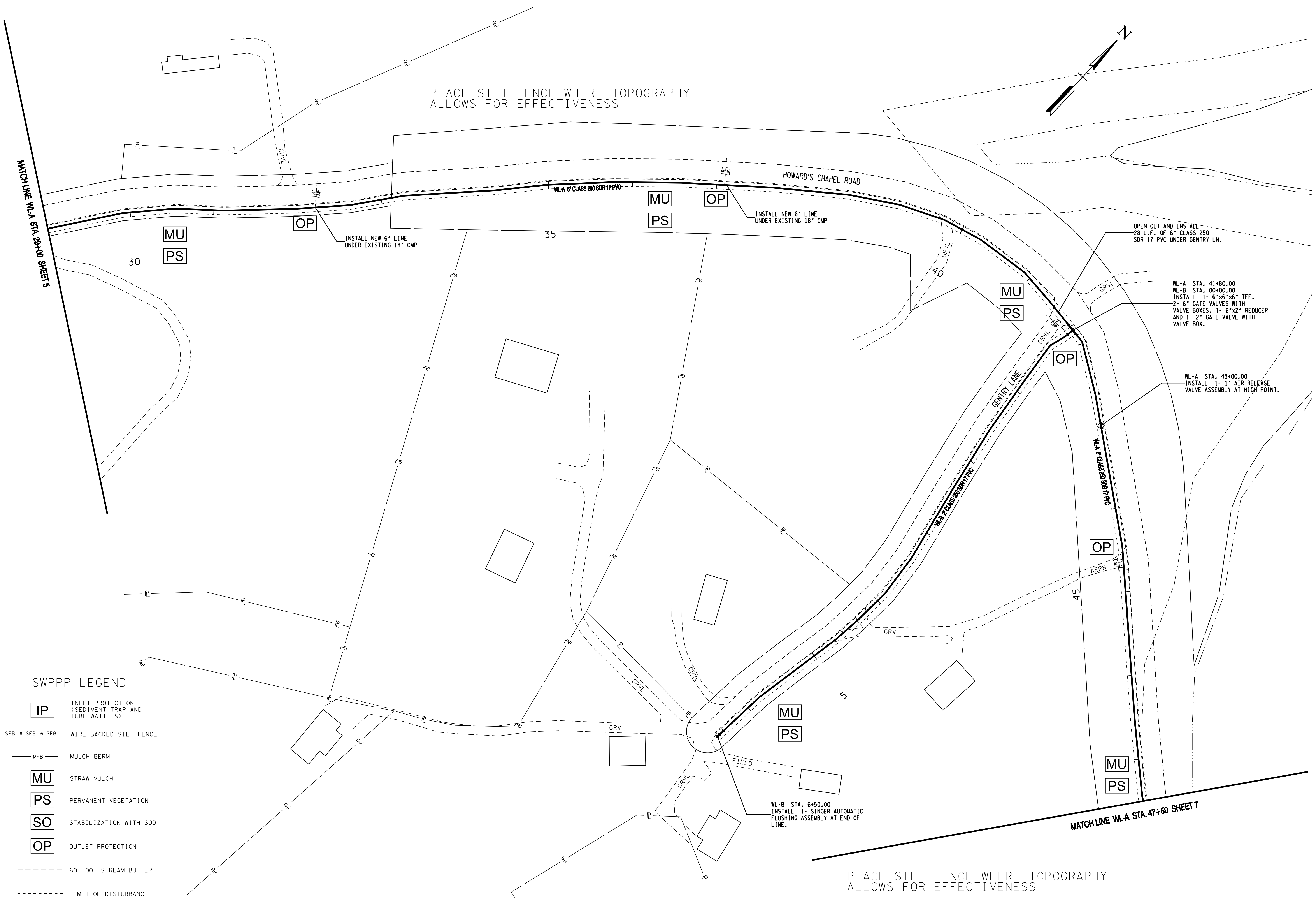


**ROBERT G. CAMPBELL & ASSOC., L.P.**  
CONSULTING ENGINEERS  
KNOXVILLE, TENNESSEE

**TELLICO AREA SERVICES SYSTEM**  
**MONROE COUNTY, TENNESSEE**

**PLAN VIEW - WL-A**  
**HOWARDS CHAPEL ROAD**

DESIGNED BY <b>JLD</b>	CHECKED BY <b>RGC</b>	SCALE <b>1" = 50'</b>	SHEET NO. <b>5</b>
DRAWN BY <b>JER</b>	DATE <b>05/11/2021</b>	FILE NO. <b>21053</b>	OF <b>13</b> SHEETS

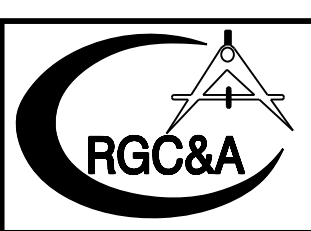


SWPPP LEGEND

- IP** INLET PROTECTION (SEDIMENT TRAP AND TUBE WATTLES)
- SFB \* SFB \* SFB WIRE BACKED SILT FENCE
- MFB** MULCH BERM
- MU** STRAW MULCH
- PS** PERMANENT VEGETATION
- SO** STABILIZATION WITH SOD
- OP** OUTLET PROTECTION
- 60 FOOT STREAM BUFFER
- LIMIT OF DISTURBANCE

\*\*\*\*\*NO. DATE DESCRIPTION BY CKD. REVISIONS\*\*\*\*\*

NO.	DATE	DESCRIPTION	BY	CKD.



**ROBERT G. CAMPBELL & ASSOC., L.P.**  
CONSULTING ENGINEERS  
KNOXVILLE, TENNESSEE

**TELICO AREA SERVICES SYSTEM**  
**MONROE COUNTY, TENNESSEE**

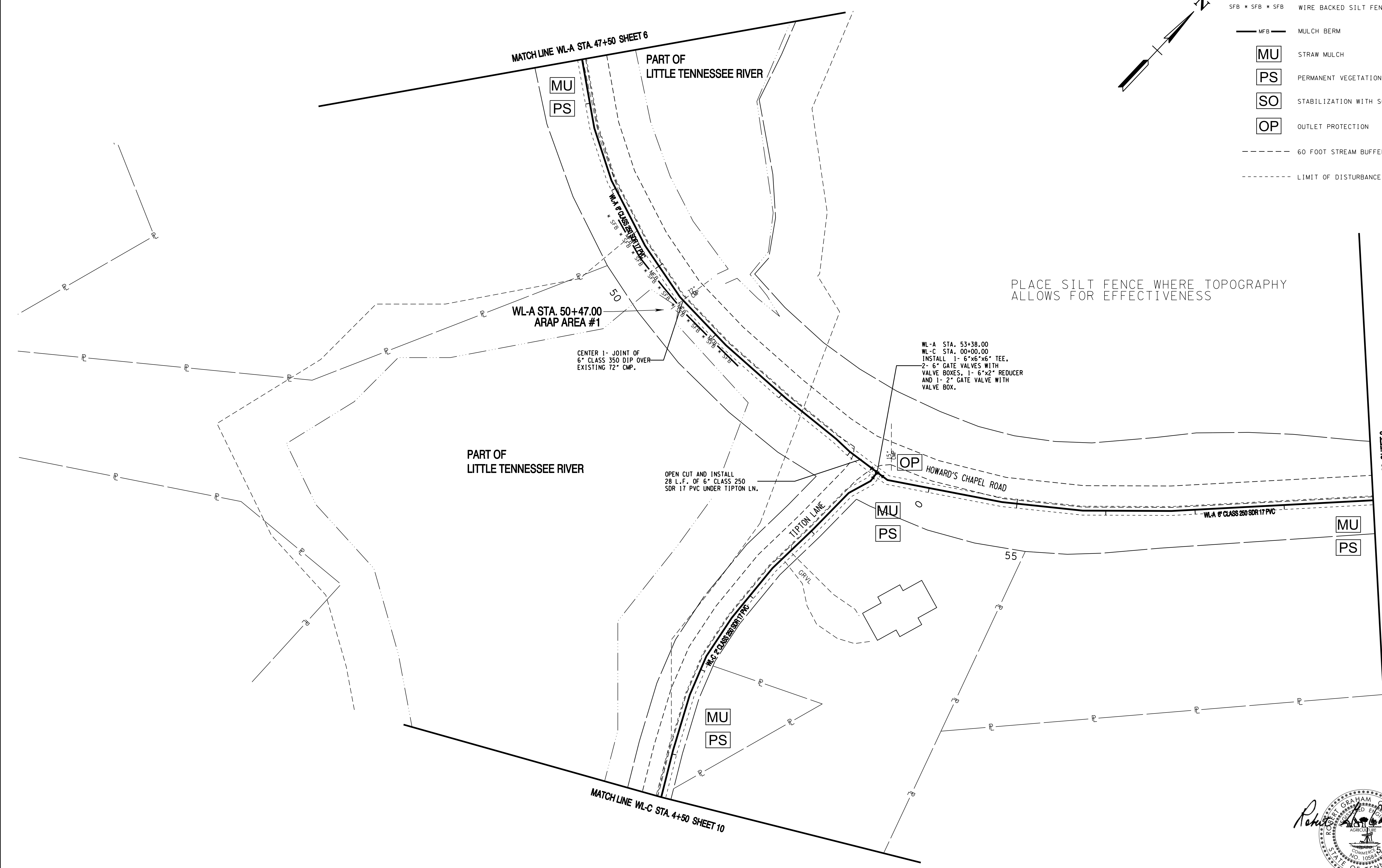
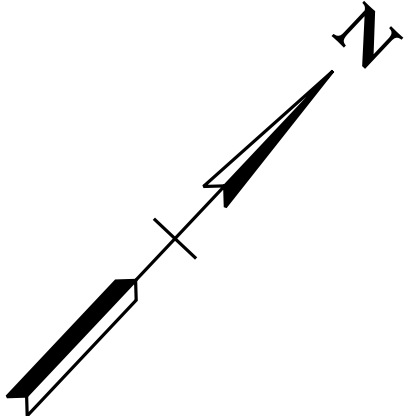
**PLAN VIEW - WL-A & WL-B**  
**HOWARDS CHAPEL RD & GENTRY LN**

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DRAWN BY <b>JER</b>	DATE <b>05/11/2021</b>	FILE NO. <b>21053</b>	OF 13 SHEETS



SWPPP LEGEND

- IP** INLET PROTECTION  
(SEDIMENT TRAP AND  
TUBE WATTLES)
- SFB \* SFB \* SFB WIRE BACKED SILT FENCE
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- OP** OUTLET PROTECTION
- 60 FOOT STREAM BUFFER
- LIMIT OF DISTURBANCE



PLACE SILT FENCE WHERE TOPOGRAPHY  
ALLOWS FOR EFFECTIVENESS

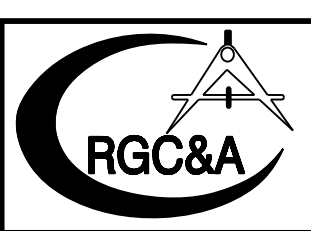
MATCH LINE WL-A STA. 50+00 SHEET 8

MATCH LINE WL-C STA. 4+50 SHEET 10



\*\*\*\*\*NO. DATE DESCRIPTION BY CKD.\*\*\*\*\*

NO.	DATE	DESCRIPTION	BY	CKD.



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CONSULTING ENGINEERS  
KNOXVILLE, TENNESSEE

**TELLICO AREA SERVICES SYSTEM**  
**MONROE COUNTY, TENNESSEE**

**PLAN VIEW - WL-A & WL-C**  
**HOWARDS CHAPEL RD & TIPTON LN**

DESIGNED BY <b>JLD</b>	CHECKED BY <b>RGC</b>	SCALE <b>1" = 50'</b>	SHEET NO. <b>7</b>
DRAWN BY <b>JER</b>	DATE <b>05/11/2021</b>	FILE NO. <b>21053</b>	OF <b>13</b> SHEETS

SWPPP LEGEND

- IP

INLET PROTECTION  
(SEDIMENT TRAP AND  
TUBE WATTLES)
- SFB \* SFB \* SFB

WIRE BACKED SILT FENCE
- MFB

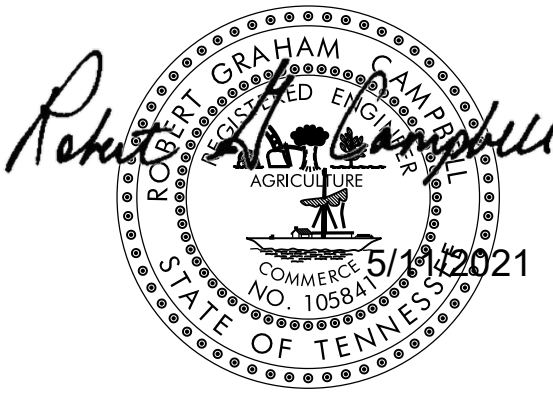
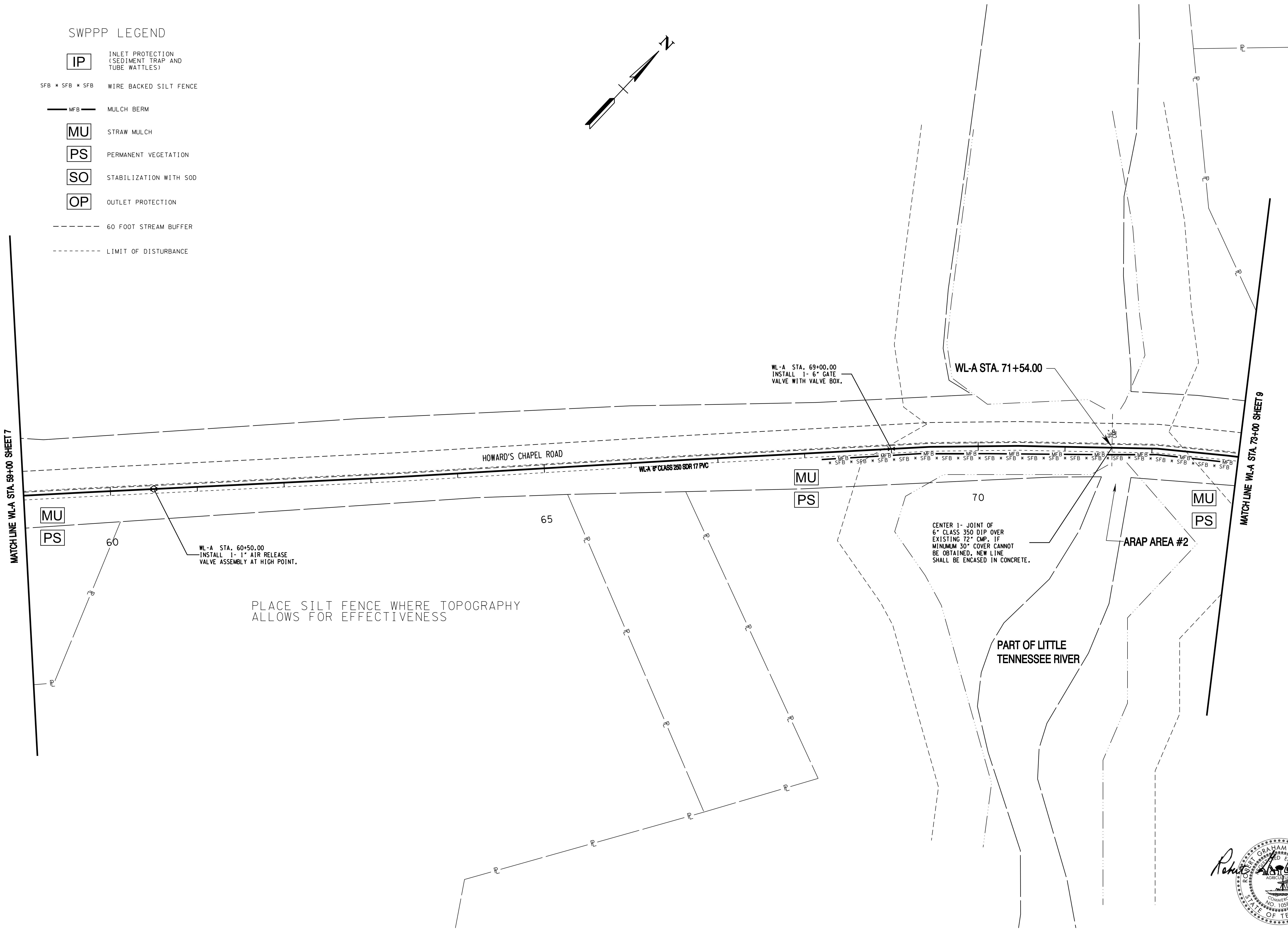
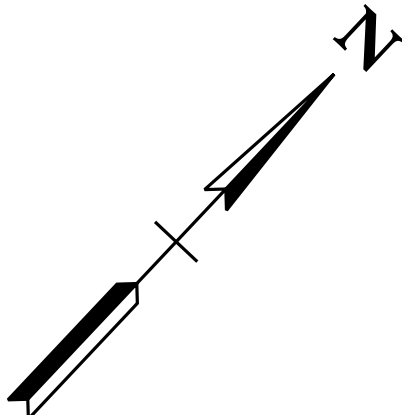
MULCH BERM
- MU

STRAW MULCH
- PS

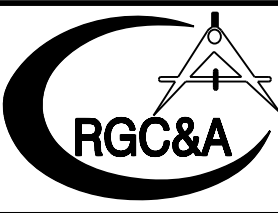
PERMANENT VEGETATION
- SO

STABILIZATION WITH SOD
- OP

OUTLET PROTECTION
- 60 FOOT STREAM BUFFER
- LIMIT OF DISTURBANCE



NO.	DATE	DESCRIPTION	BY	CKD.
REVISIONS				

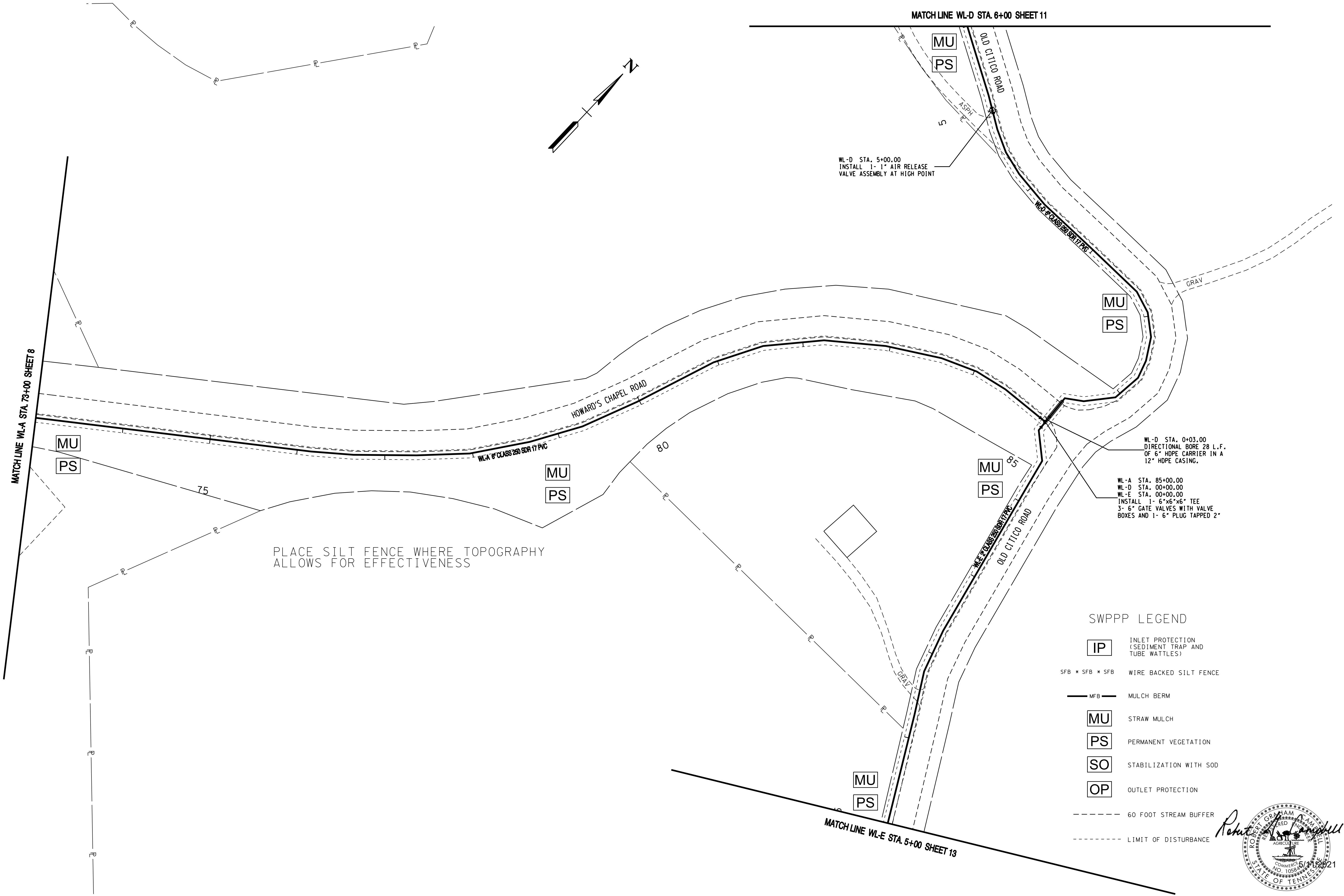


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CONSULTING ENGINEERS  
KNOXVILLE, TENNESSEE

TELICO AREA SERVICES SYSTEM  
MONROE COUNTY, TENNESSEE

PLAN VIEW - WL-A  
HOWARDS CHAPEL ROAD

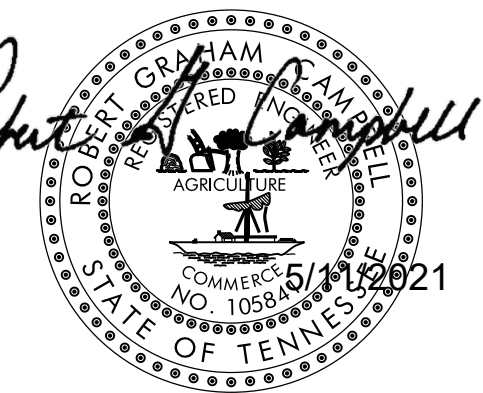
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DRAWN BY JER	DATE 05/11/2021	FILE NO. 21053	OF 13 SHEETS



PLACE SILT FENCE WHERE TOPOGRAPHY  
ALLOWS FOR EFFECTIVENESS

SWPPP LEGEND

- IP** INLET PROTECTION  
(SEDIMENT TRAP AND  
TUBE WATTLES)
- SFB \* SFB \* SFB WIRE BACKED SILT FENCE
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- MU** STRAW MULCH
- PS** PERMANENT VEGETATION
- SO** STABILIZATION WITH SOD
- OP** OUTLET PROTECTION
- 60 FOOT STREAM BUFFER
- LIMIT OF DISTURBANCE



\*\*\*\*\*SPECS\*\*\*\*\*  
\*\*\*\*\*DATE\*\*\*\*\*

NO.	DATE	DESCRIPTION	BY	CHKD.
REVISIONS				

**ROBERT G. CAMPBELL & ASSOC., L.P.**  
CONSULTING ENGINEERS  
KNOXVILLE, TENNESSEE

**TELICO AREA SERVICES SYSTEM**  
**MONROE COUNTY, TENNESSEE**

**PLAN VIEW - WL-A, WL-D & WL-E**  
**HOWARDS CHAPEL RD & OLD CITICO RD**

DESIGNED BY <b>JLD</b>	CHECKED BY <b>RGC</b>	SCALE <b>1" = 50'</b>	SHEET NO. <b>9</b>
DRAWN BY <b>JER</b>	DATE <b>05/11/2021</b>	FILE NO. <b>21053</b>	OF <b>13</b> SHEETS

SWPPP LEGEND

- IP

INLET PROTECTION  
(SEDIMENT TRAP AND  
TUBE WATTLES)
- SFB \* SFB \* SFB

WIRE BACKED SILT FENCE
- MFB

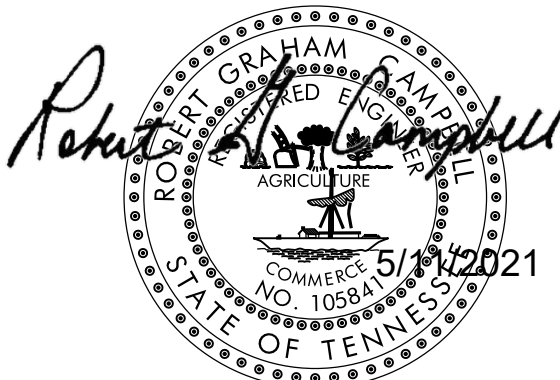
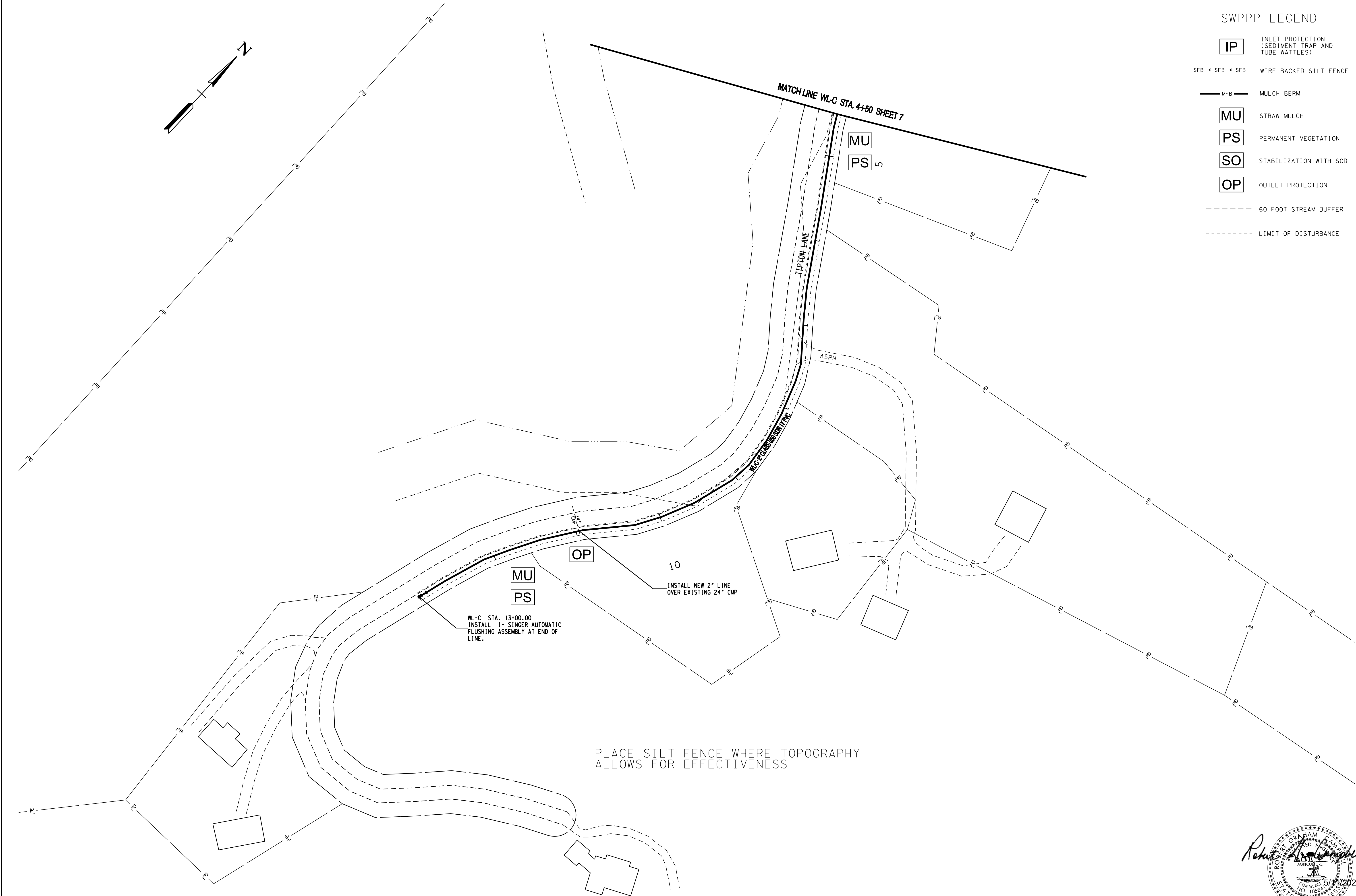
MULCH BERM
- MU

STRAW MULCH
- PS

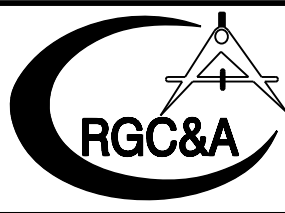
PERMANENT VEGETATION
- SO

STABILIZATION WITH SOD
- OP

OUTLET PROTECTION
- 60 FOOT STREAM BUFFER
- LIMIT OF DISTURBANCE



NO.	DATE	DESCRIPTION	BY	CKD.
REVISIONS				



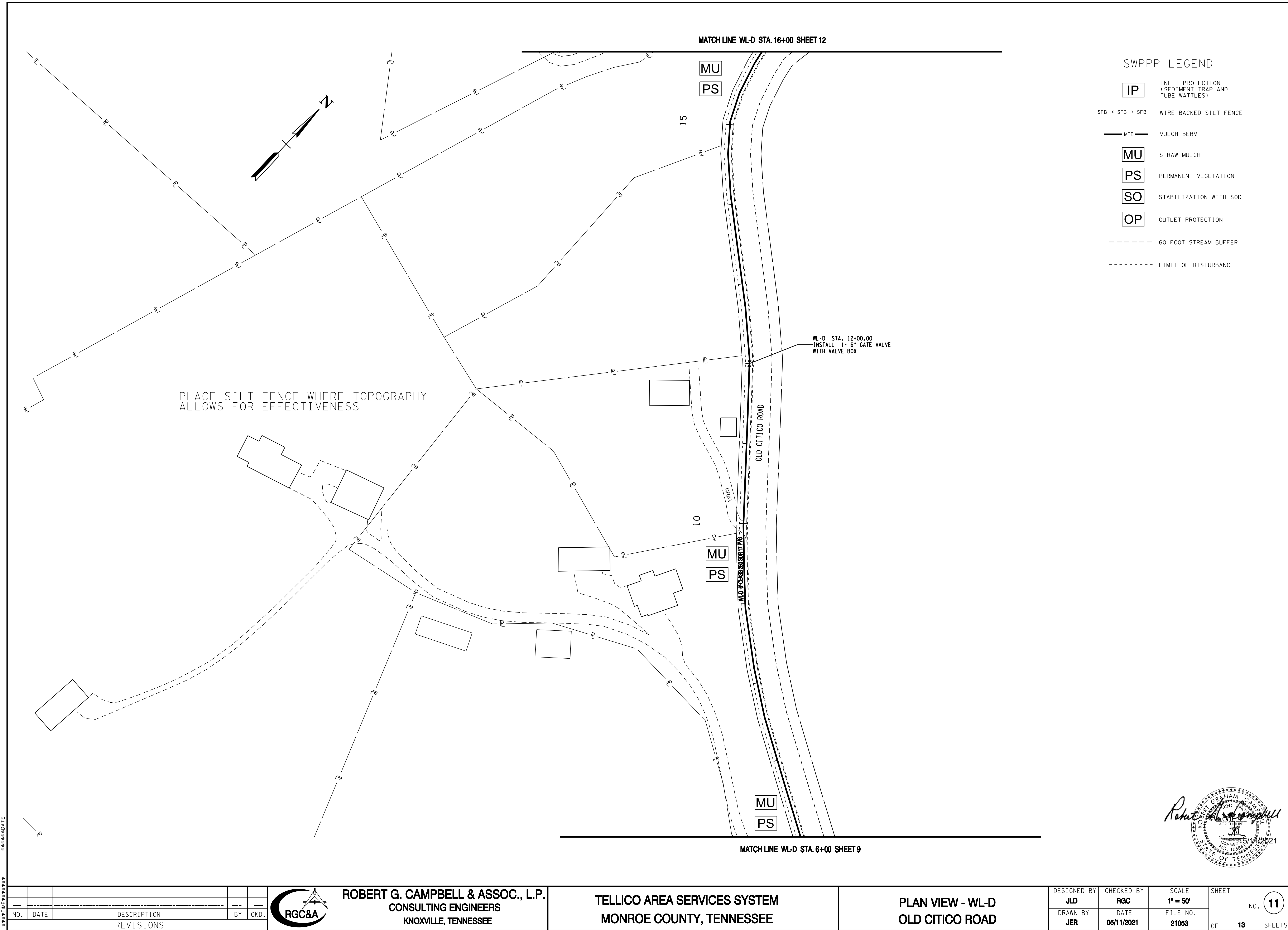
ROBERT G. CAMPBELL & ASSOC., L.P.  
CONSULTING ENGINEERS  
KNOXVILLE, TENNESSEE

TELICO AREA SERVICES SYSTEM  
MONROE COUNTY, TENNESSEE

PLAN VIEW - WL-C  
TIPTON LANE

DESIGNED BY JLD	CHECKED BY RGC	SCALE 1" = 50'	SHEET NO. 10
DRAWN BY JER	DATE 05/11/2021	FILE NO. 21053	OF 13 SHEETS





*****SPECS***** *****TIMES***** *****DATE*****					
NO.	DATE	DESCRIPTION	BY	CKD.	
REVISIONS					



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KNOXVILLE, TENNESSEE

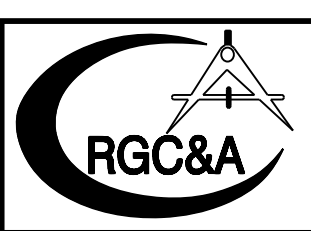
**TELICO AREA SERVICES SYSTEM**  
**MONROE COUNTY, TENNESSEE**

**PLAN VIEW - WL-D**  
**OLD CITICO ROAD**

DESIGNED BY <b>JLD</b>	CHECKED BY <b>RGC</b>	SCALE <b>1" = 50'</b>	SHEET NO. <b>11</b>
DRAWN BY <b>JER</b>	DATE <b>05/11/2021</b>	FILE NO. <b>21053</b>	OF 13 SHEETS

\*\*\*\*\*SHEET NO. 12\*\*\*\*\*  
\*\*\*\*\*DATE\*\*\*\*\*

NO.	DATE	DESCRIPTION	BY	CKD.
REVISIONS				

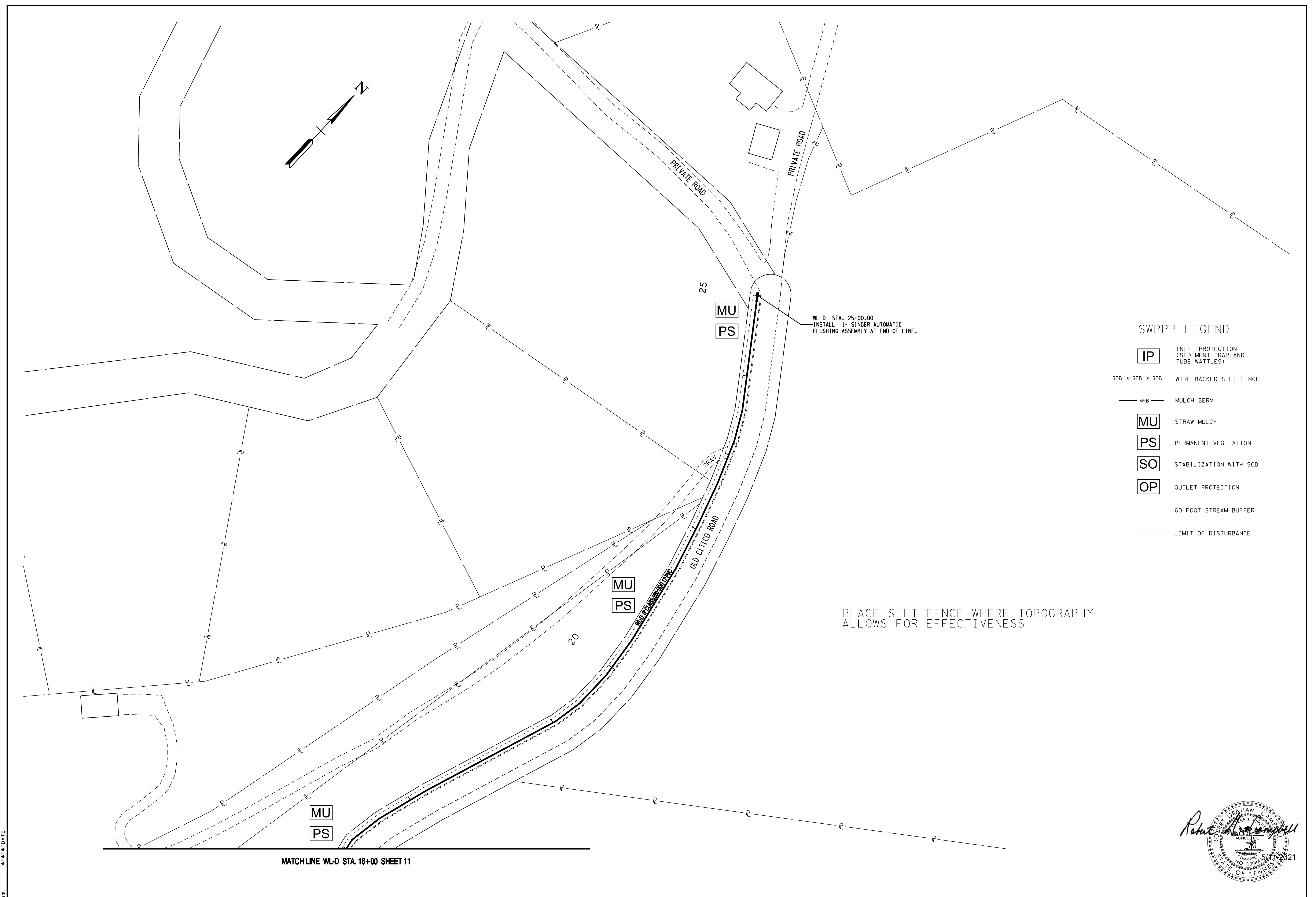


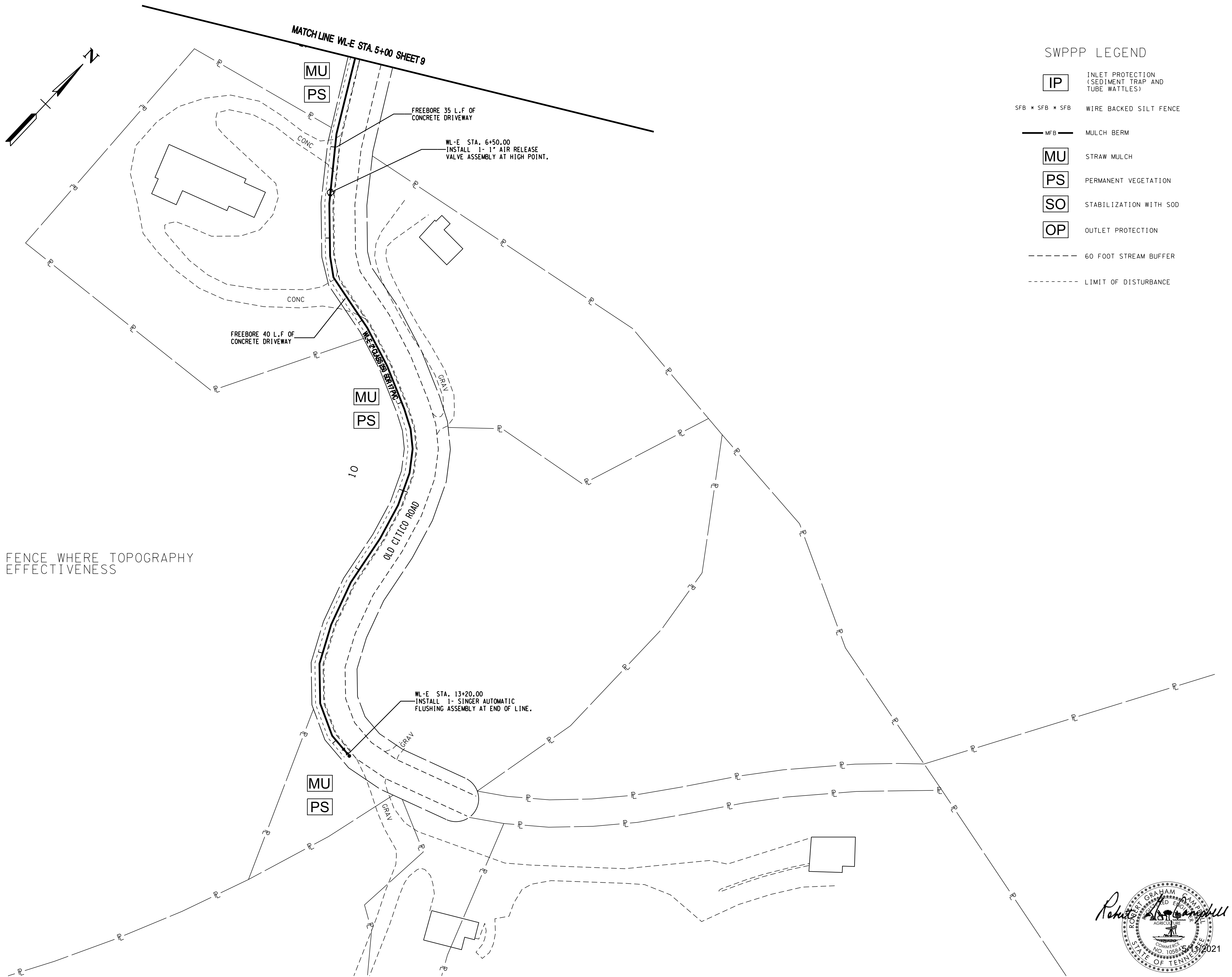
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KNOXVILLE, TENNESSEE

**TELICO AREA SERVICES SYSTEM**  
**MONROE COUNTY, TENNESSEE**

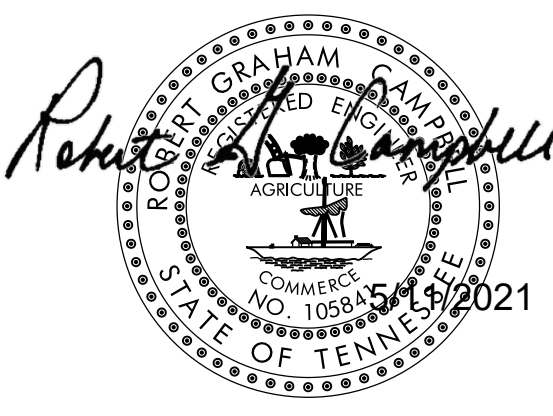
**PLAN VIEW - WL-D**  
**OLD CITICO ROAD**

DESIGNED BY <b>JLD</b>	CHECKED BY <b>RGC</b>	SCALE <b>1" = 50'</b>	SHEET NO. <b>12</b>
DRAWN BY <b>JER</b>	DATE <b>05/11/2021</b>	FILE NO. <b>21053</b>	OF 13 SHEETS



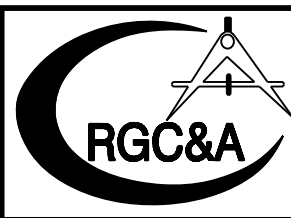


- SWPPP LEGEND
- IP INLET PROTECTION (SEDIMENT TRAP AND TUBE WATTLES)
  - SFB \* SFB \* SFB WIRE BACKED SILT FENCE
  - MFB MULCH BERM
  - MU STRAW MULCH
  - PS PERMANENT VEGETATION
  - SO STABILIZATION WITH SOD
  - OP OUTLET PROTECTION
  - 60 FOOT STREAM BUFFER
  - LIMIT OF DISTURBANCE



\*\*\*\*\*NO. DATE DESCRIPTION BY CKD.\*\*\*\*\*

NO.	DATE	DESCRIPTION	BY	CKD.
REVISIONS				



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CONSULTING ENGINEERS  
KNOXVILLE, TENNESSEE

TELICO AREA SERVICES SYSTEM  
MONROE COUNTY, TENNESSEE

PLAN VIEW - WL-E  
OLD CITICO ROAD

DESIGNED BY JLD	CHECKED BY RGC	SCALE 1" = 50'	SHEET NO. 13
DRAWN BY JER	DATE 05/11/2021	FILE NO. 21053	OF 13 SHEETS