

# DRAWINGS PREPARED UNDER THE AUTHORITY OF THE EMERGENCY WATERSHED PROTECTION ACT

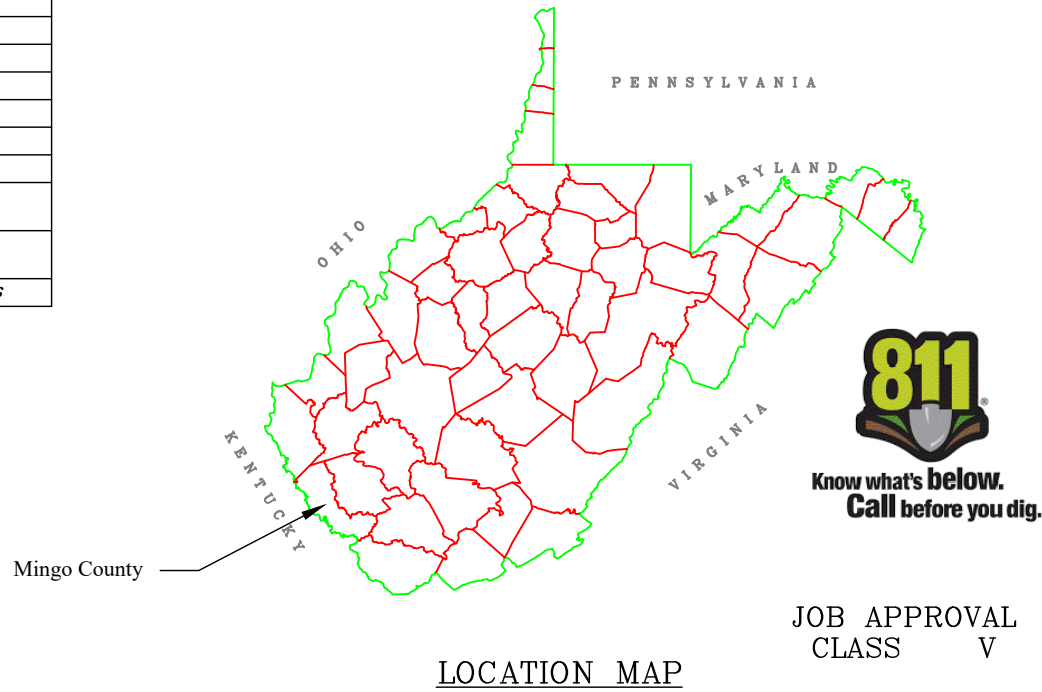
## by the Natural Resources Conservation Service of the United States Department of Agriculture

Gilbert Creek EWP  
Cline, Blankenship, Lester, and Thompson Sites  
Mingo County, West Virginia

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### UTILITY NOTIFICATION

"The Natural Resources Conservation Service makes no representation as to the existence or non-existence of any utilities at the construction site. Shown on these construction drawings are those utilities which have been identified. It is the responsibility of the contractor(s) to assure themselves that no hazard exists or damage will occur to utilities."



File Name <i>Review</i> <i>Combined.dwg</i>	Date 01/22	Drawing Name 3/8/23 11:32 AM	Sheet 1 of 13
Designed LS	Date 01/22	Drawn LS	Checked JW
Approved PM	Date 01/22	2021 EWP STREAMBANK STABILIZATION MINGO County, West Virginia BLANKENSHIP, LESTER, AND THOMPSON SITES COVER SHEET	
United States Department of Agriculture <b>USDA</b>		Natural Resources Conservation Service	

## CONSTRUCTION NOTES

1. Call 811 to locate utilities prior to mobilization and excavation.
2. Access roads shall be restored to pre-construction condition or better.
3. All fences removed and/or damaged as a result of the contractor's operations shall be restored to a condition equal to or better than they existed before the start of work.
4. Soil compacted as a result of construction operations shall be loosened for a depth of 6-inches below the compacted soil layer and re-graded to blend with existing ground.
5. Provide sub-channel as shown on Typical Channel Bottom Configuration drawings.
6. While working in the stream all efforts will be made to reduce downstream impacts including keeping the excavator tracks elevated above flowing water. A diversion berm shall be established at the top of each stream access point to minimize surface water from flowing toward the stream.
7. Required pollution control measures shall be installed as needed in accordance with Pollution Control Specification 5.
8. Site access shall be off the main road and shall be in accordance with all West Virginia Department of Highways rules and guidelines. The contractor shall provide signage and flagmen for traffic control as required.
9. Excess material from the excavation & obstruction removal shall be wasted off-site in accordance with all local, state, & federal regulations and as approved by the NRCS representative in the field. Floodplains will not be allowed as waste areas under any circumstances. Waste areas shall be seeded according to construction specification 6, Seeding, Sprigging and Mulching.
10. The contractor shall provide approved fill as required to complete the work.
11. Trash, tires, & woody debris within the work limits shall be disposed of off-site in an approved landfill. The contractor shall be responsible for the landfill tipping fees.
12. All pipes encountered in the embankment shall be extended through the riprap and/or gabions with the same pipe material or better to the face of the slope or baskets.
13. Pipes 12" diameter and larger shall be encased in a minimum of 6" of concrete when passing through rock riprap. Concrete shall have a minimum compressive strength of 2500 psi.
14. The contractor shall maintain the cleanliness of public and private roads impacted by hauling operations during the duration of the work.
15. Starting location of baskets will be marked in the field.
16. Reshape stream banks at the upstream and downstream ends of gabion walls to transition to baskets.

Table of Estimated Quantities

Site	Geotextile SY*	Riprap Tons	Gabions CY	Earth Fill CY	Foundation Prep Shallow Bedrock SF	Foundation Prep Rock Riprap Tns	Foundation Prep Geotextile SY
<i>Alice Blankenship</i>	162	-	153	<i>As Needed</i>	630	210	259
<i>James Lester</i>	108	-	101	<i>As Needed</i>	396	132	168
<i>Timothy Thompson</i>	133	-	125	<i>As Needed</i>	504	168	210
<i>Total</i>	403	-	379	<i>As Needed</i>	1530	510	637

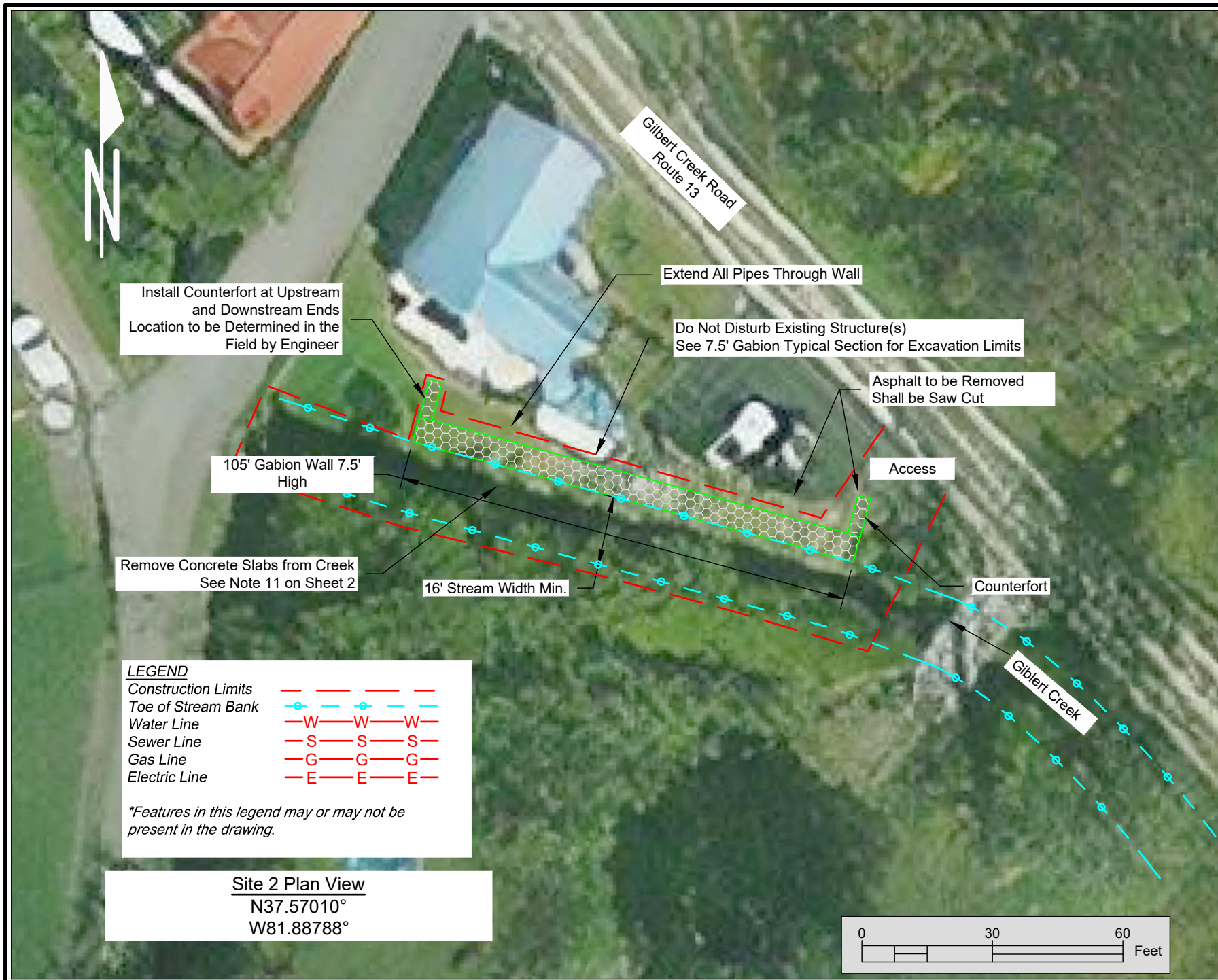
\* The area required for overlaps is not included in the quantity for geotextile.

<b>2021 EWP STREAMBANK STABILIZATION</b> MINGO County, West Virginia BLANKENSHIP, LESTER, AND THOMPSON SITES QUANTITIES AND CONSTRUCTION NOTES	File Name Review Combined.dwg	Drawing Name	3/8/23 11:32 AM Sheet 2 of 13
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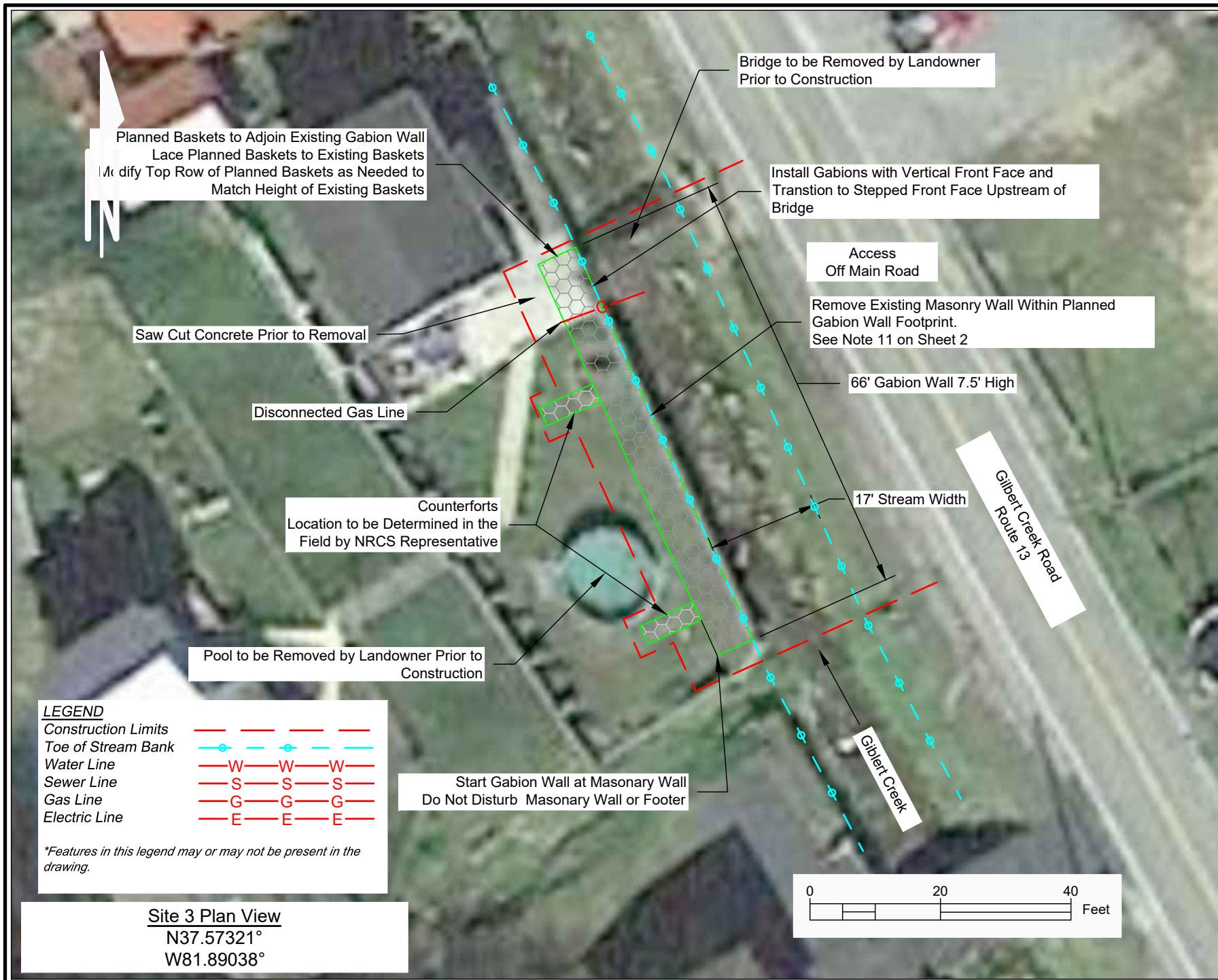






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2021 EWP STREAMBANK STABILIZATION MINGO County, West Virginia BLANKENSHIP, LESTER, AND THOMPSON SITES ALICE BLANKENSHIP SITE 2	Date 01/22	Designed LS	Drawing Name 3/8/23 11:32 AM Sheet 4 of 13
United States Department of Agriculture USDA Natural Resources Conservation Service	Date 01/22	Designed LS	Drawing Name 3/8/23 11:32 AM Sheet 4 of 13





<b>2021 EWP STREAMBANK STABILIZATION</b> MINGO County, West Virginia BLANKENSHIP, LESTER, AND THOMPSON SITES JAMES LESTER SITE 3	File Name Review Combined.dwg	Date 01/22
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Install Counterfort at Upstream and Downstream Ends  
Location to be Determined in the Field by Engineer

Install Gabion Wall with a Vertical Front Face

Bridge to be Removed by Landowner Prior to the Start of Construction

84' Gabion Wall 7.5' High

Access Off Main Road

19' Stream Width

Landowner to Remove Porch Prior to the Start of Construction

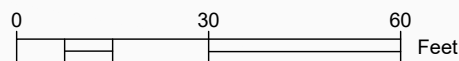
Remove Existing Wall and Properly Dispose of Materials Landowner Does Not Want  
See Note 11 on Sheet 2

Remove Concrete Sidewalk as Needed for Installation  
Saw Cut Concrete Prior to Removal

Start Gabion Wall at Existing Masonary Wall  
Do not Disturb Existing Wall or Footer.  
Modify End of Gabion as Needed.

Gilbert Creek Road  
Route 13

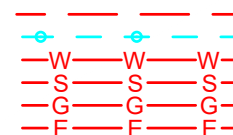
Gilbert Creek



Site 4 Plan View  
N37.57372°  
W81.89071°

#### LEGEND

Construction Limits  
Toe of Stream Bank  
Water Line  
Sewer Line  
Gas Line  
Electric Line




\*Features in this legend may or may not be present in the drawing.

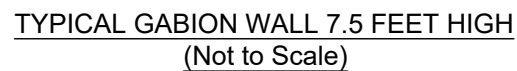
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2021 EWP STREAMBANK STABILIZATION MINGO County, West Virginia BLANKENSHIP, LESTER, AND THOMPSON SITES TIMOTHY THOMPSON SITE 4
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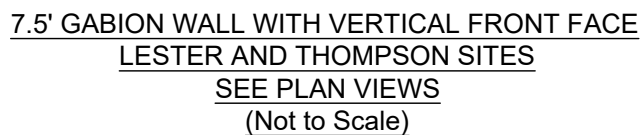


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|  United States<br>Department of<br>Agriculture | Natural Resources<br>Conservation Service | 2021 EWP STREAMBANK STABILIZATION<br>MINGO County, West Virginia<br>BLANKENSHIP, LESTER, AND THOMPSON<br>SITES<br><br>7.5' GABION TYPICAL SECTION |              |                   |                      | Designed <u>LS</u> | Date<br><u>01/22</u> | File Name<br><i>Revised 04-16-22 EWP Sites<br/>Combined.dwg</i> |
|   |   | Drawn <u>LS</u>   | Drawing Name | Checked <u>JW</u> | Date<br><u>01/22</u> | 3/8/23 11:32 AM    |                      |   |
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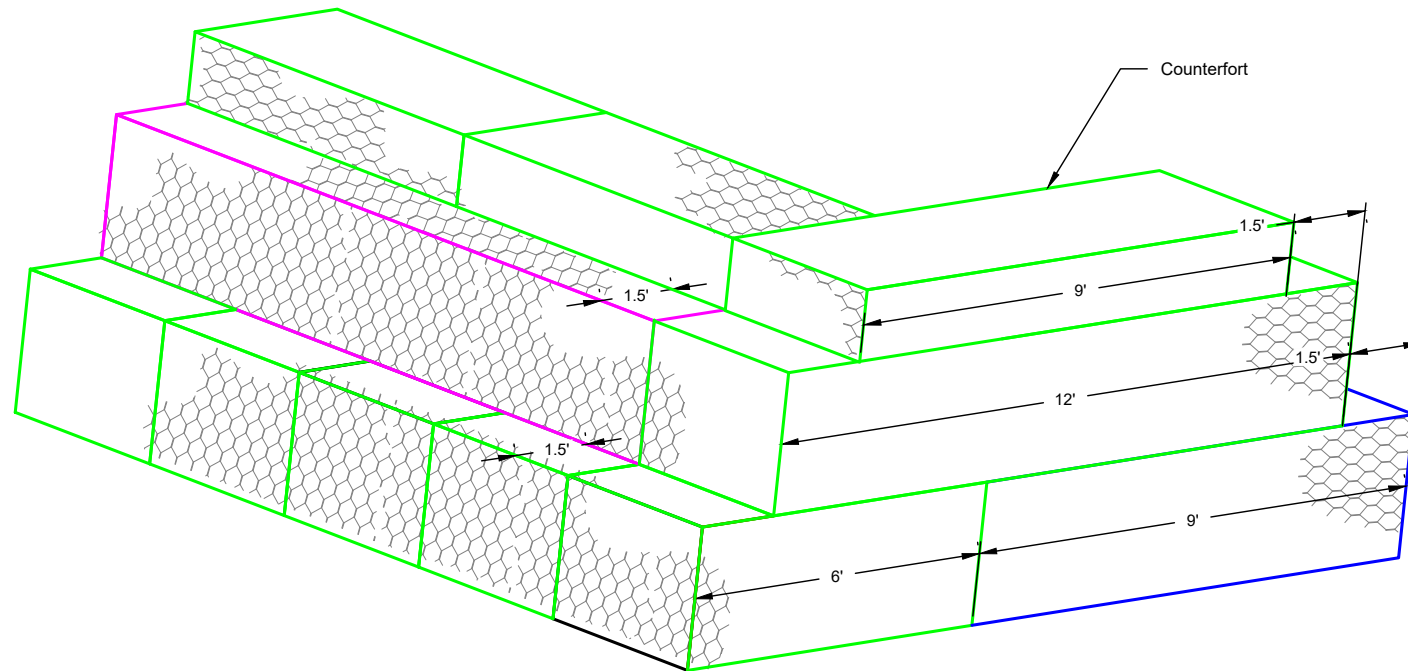




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|  United States<br>Department of<br>Agriculture | Natural Resources<br>Conservation Service | 2021 EWP STREAMBANK STABILIZATION<br>MINGO County, West Virginia<br>BLANKENSHIP, LESTER, AND THOMPSON<br>SITES<br>7.5' GABION WITH VERTICAL FRONT<br>FACE |              |                                  |  | Designed <u>LS</u> | Date<br><u>01/22</u> | File Name<br><i>Revised 04-16-22 EWP Sites<br/>Combined.dwg</i> |
|   |   | Drawn <u>LS</u>   | Drawing Name |                                  |  |                    |                      |   |
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|   |   | Approved <u>PM</u>  | 01/22        | 3/8/23 11:32 AM<br>Sheet 8 of 13 |  |                    |                      |   |



1. Refer to Quantities & Notes Sheet for estimated quantities
2. 8 counterfort(s) required at approximate locations shown on the plan view(s). The final locations of counterforts will be determined in the field by Engineer.
3. See gabion typical section for additional details

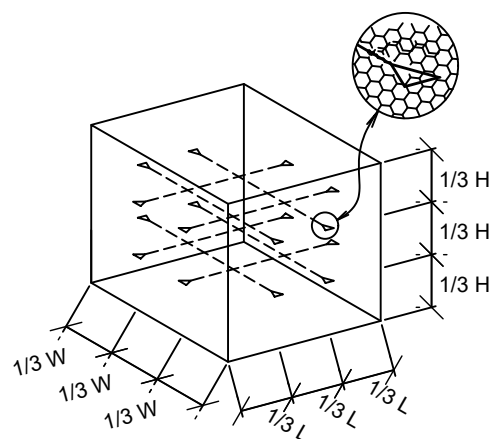


TYPICAL COUNTERFORT DETAILS  
7.5 FT. GABION WALL  
 (Not to Scale)

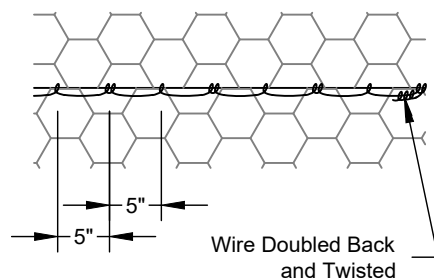
<b>USDA</b> United States Department of Agriculture  Natural Resources Conservation Service	2021 EWP STREAMBANK STABILIZATION MINGO County, West Virginia BLANKENSHIP, LESTER, AND THOMPSON SITES COUNTERFORT		File Name Review Combined.dwg	Drawing Name 3/8/23 11:32 AM Sheet 9 of 13
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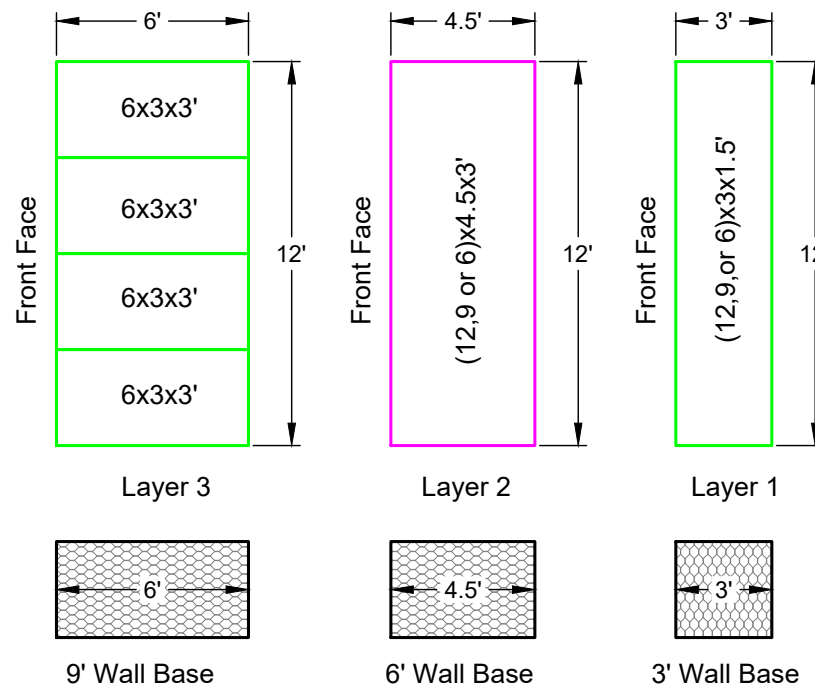
1. Each vertical seam shall be laced prior to setting basket in place and prior to lacing to adjoining baskets.
2. Each basket shall be laced to the adjoining basket at all vertical edges and horizontal edges.
3. Each diaphragm shall be laced to the lid of the basket after closing. Diaphragm shall be laced along all sides.
4. All lacing shall be done with 13.5 gauge wire using the two, one, two, looping procedure as shown in the lacing detail.
5. All wire shall be tightly laced and the ends of the lacing wire shall be doubled back and twisted not less than three turns around itself in a length not greater than one inch.
6. Welded wire baskets shall be laced with spiral binders according to manufacturers recommendations.
7. Install according to manufacturers recommendations.



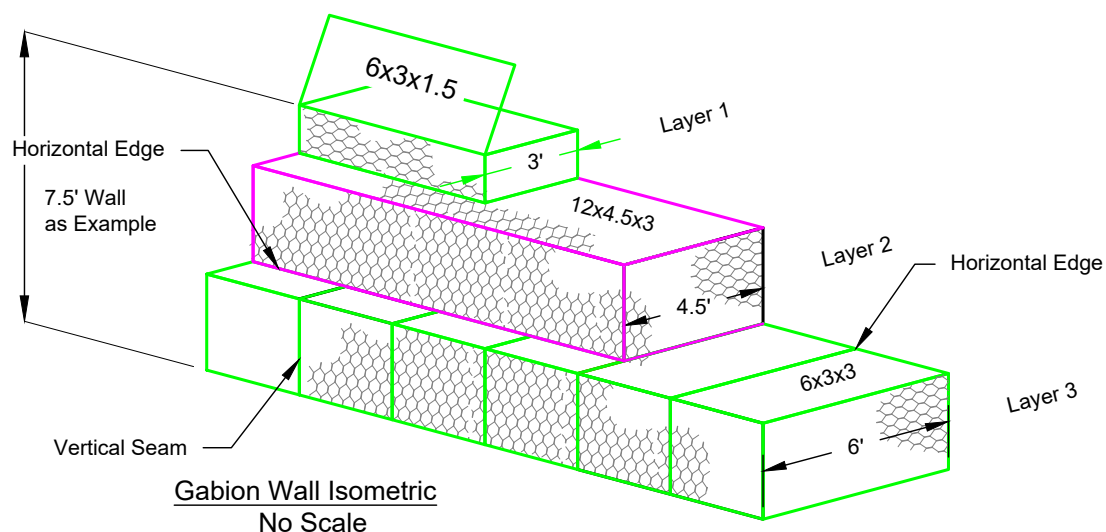
INTERIOR SUPPORT DETAIL



LACING DETAIL



Gabion Wall Base Layout  
No Scale



Gabion Wall Isometric  
No Scale

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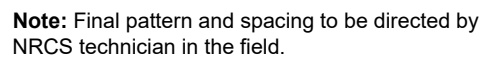
2021 EWP STREAMBANK STABILIZATION  
MINGO County, West Virginia  
BLANKENSHIP, LESTER, AND THOMPSON  
SITES  
GABION DETAILS


United States  
Department of  
Agriculture

USDA

Natural Resources  
Conservation Service

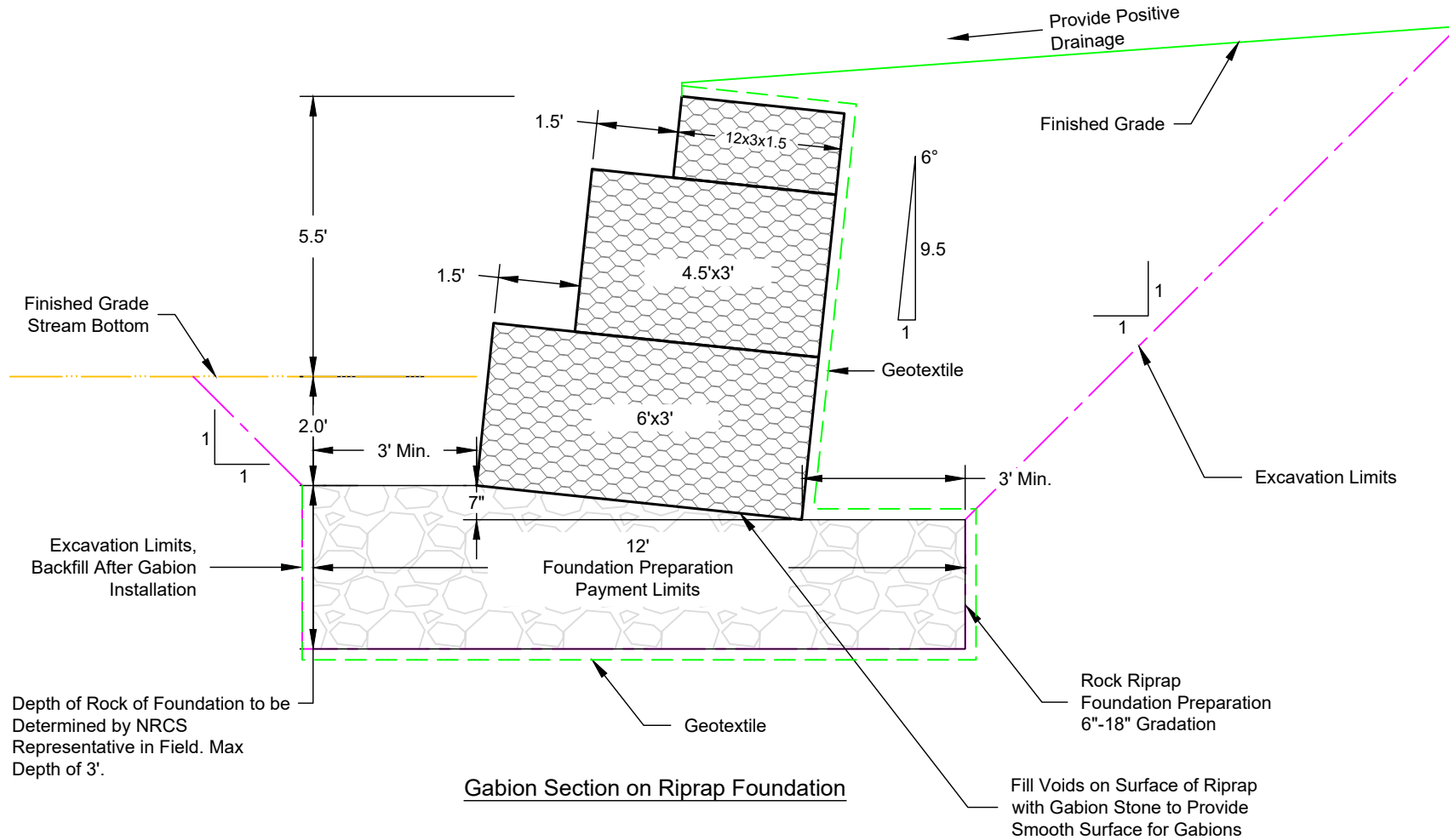
1. Drill holes for Rebar shall be 1 3/8" diameter. The use of epoxy or non-shrink grout **is not** required. The rebar shall be driven by hammer to the required depth without bending.
2. Care shall be taken by the contractor to prevent damage to the rebar during gabion filling operations.
3. Different gabion bottom basket configurations will require additional rebar by repeating the pattern shown.

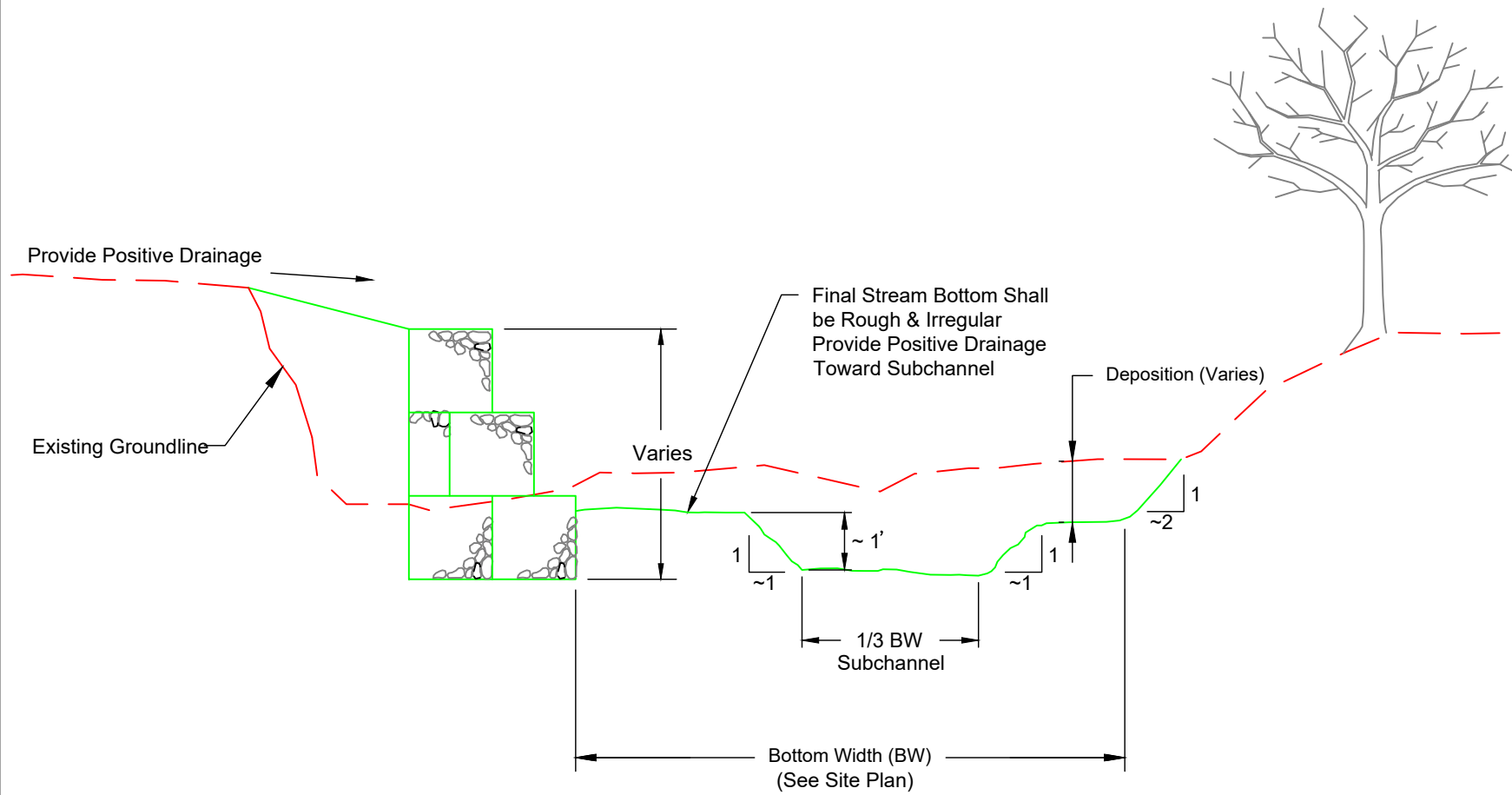


 <p>United States Department of Agriculture</p> <p>Natural Resources Conservation Service</p>	<p>2021 EWP STREAMBANK STABILIZATION MINGO County, West Virginia BLANKENSHIP, LESTER, AND THOMPSON SITES FOUNDATION PREPARATION ON SHALLOW BEDROCK</p>	<p>Designed <u>LS</u></p>	<p>Date <u>01/22</u></p>	<p>File Name <i>Revised 04-18-22 EWP Sites Combined.dwg</i></p>
		<p>Drawn <u>LS</u></p>	<p><u>01/22</u></p>	<p>Drawing Name</p>
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		<p>Approved <u>PM</u></p>	<p><u>01/22</u></p>	<p>Sheet 11 of 13</p>



1. See typical channel bottom configuration sheet.
2. Refer to Sheet 2 for estimated quantities.
3. Actual gabion configuration may vary.





**Notes:**

1. Final location of subchannel to be located in the field by the NRCS representative. The subchannel shall be transitioned as necessary to meet existing grades at the upstream and downstream site extents.
2. Subchannels are not required for bedrock streambeds.
3. Use material from the required excavations and/or approved fill from offsite to reconstruct streambanks as necessary. Seed and mulch per construction specification 6, Seeding, Sprigging and Mulching.
4. Actual gabion configuration and height may vary.

 United States Department of Agriculture  Natural Resources Conservation Service	2021 EWP STREAMBANK STABILIZATION MINGO COUNTY, WEST VIRGINIA ALL SITES TYPICAL CHANNEL BOTTOM CONFIGURATION				File Name <i>Revision (date) Drawing Size Combined.dwg</i>
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