

NAME OF CONTRACTOR _____

PROPOSAL AND SPECIFICATIONS

FOR

HIGHWAY CONSTRUCTION

COUNTY LOCAL ROAD SYSTEM

**Do Not Separate
or Remove Sheets
From This Proposal**

PROJECT NO. 400022 – 1.33 miles of roadway rehabilitation and 0.12 miles of roadway reconstruction including clearing, crushing and shaping, trenching, widening, grade establishment, sand subbase, aggregate base coarse, cross culvert replacement, peat excavation, swamp backfill and restoration on Taft Road from M-40 to 124th Avenue in Valley Township, Allegan County.

VALLEY TOWNSHIP

September 29, 2021

BOARD OF COUNTY ROAD COMMISSIONERS
OF ALLEGAN COUNTY, MICHIGAN

1308 Lincoln Road, Allegan, MI 49010

ALLEGAN COUNTY ROAD COMMISSION
ADVERTISEMENT FOR BIDS
COUNTY LOCAL ROAD CONSTRUCTION

Sealed bids will be received by the Allegan County Road Commission at their office at 1308 Lincoln Road (M-89), Allegan, Michigan until 11:00 A.M., Local Time, Wednesday, September 29, 2021, and, at such time, be publicly opened and read aloud for the following:

PROJECT NO. 400022 – 1.33 miles of roadway rehabilitation and 0.12 miles of roadway reconstruction including clearing, crushing and shaping, trenching, widening, grade establishment, sand subbase, aggregate base coarse, cross culvert replacement, peat excavation, swamp backfill and restoration on Taft Road from M-40 to 124th Avenue in Valley Township, Allegan County.

Complete specifications, plans, and bid forms are available at the Road Commission office and the Road Commission website www.alleganroads.org under the Projects link. When accessing plans from the website, please send an email to jlemaire@alleganroads.org to be added to the plan holders list.

All bids must be submitted on forms furnished by the Road Commission and sealed in envelopes with the name and address of the bidder, and the item bid upon clearly marked thereon.

A bid deposit of at least 5% of the bid amount will be required for this item. The bid deposit may be in the form of certified check, cashier's check or bid bond.

The Commission reserves the right to reject any or all bids, to waive minor technicalities, and to accept the bid that is deemed to be in the best interest of the County of Allegan.

BOARD OF COUNTY ROAD COMMISSIONERS
OF ALLEGAN COUNTY, MICHIGAN

John Kleinheksel, Chairman
James Rybicki, Vice-Chairman
Larry Brown, Member

PROJECT NO. 400022 – 1.33 miles of roadway rehabilitation and 0.12 miles of roadway reconstruction including clearing, crushing and shaping, trenching, widening, grade establishment, sand subbase, aggregate base coarse, cross culvert replacement, peat excavation, swamp backfill and restoration on Taft Road from M-40 to 124th Avenue in Valley Township, Allegan County.

BID and AWARD

Date _____

Board of County Road Commissioners
Of Allegan County
1308 Lincoln Road
Allegan, MI 49010

Gentlemen:

The undersigned has examined the plans, specifications, and location of the work described herein and is fully informed as to the nature of the work and the conditions relating to its performance and understands that the quantities shown in the estimate are approximate only and are subject to either increase or decrease; and hereby proposed to furnish all necessary machinery, tools, apparatus and other means of doing the work, do all the work, furnish all the materials except as otherwise specified herein, and, for the unit prices named in the accompanying unit price schedule, to complete work in strict accordance with the plans and specifications therefore.

The undersigned further proposes to such extra work as may be ordered by you, prices for that are not included in the itemized bid, compensation therefore to be made on the basis agreed upon before such extra work is begun.

The undersigned agrees to final completion of all items of work on or before September 30, 2022. The schedule for liquidated damages is located in the general specifications.

The contractor shall submit a progress schedule subject to approval of the Engineer prior to the award of the contract.

The undersigned encloses a certified check, cashier's check, or Bid Bond, representing 5% of the bid, in the amount of \$_____, payable to the Allegan County Road Commission as a guarantee of good faith. If the contract is awarded to the undersigned, and the undersigned fails to furnish satisfactory bonds to the Road Commission within fifteen (15) days after being given notice of award said check will be forfeited to the Allegan County Road Commission as liquidated damage.

THE CONTRACT

The Contract Documents consist of the bid documents, this Agreement, Conditions of the Contract (General Supplementary, Special and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement; these form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiation, representations or agreements, either written or oral. If anything in the other Contract Documents is inconsistent with this Agreement, this Agreement will govern.

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ALLEGAN COUNTY ROAD COMMISSION
ALLEGAN, MICHIGAN
ITEMIZED UNIT PRICE BID SCHEDULE

ITEM OF WORK	QUANTITY	UNIT	UNIT PRICE	TOTAL
Clearing	1	LS		
Station Grading	1	LS		
Subbase, CIP	4,900	Cyd		
Topsoil Surface, Salv, LM	2,500	Cyd		
Trenching	71	Sta		
Subgrade Undercutting, Type II	500	Cyd		
Geotextile, Stabilization	1,000	Syd		
Aggregate, 6A	50	Ton		
Excavation, Peat	1,800	Cyd		
Backfill, Swamp	1,800	Cyd		
HMA Base Crushing and Shaping	15,800	Syd		
Aggregate Surface Cse	5,000	Ton		
Culv End Sect, Conc, 18 inch	8	Ea		
Culv End Sect, Conc, 24 inch	2	Ea		
Culv End Sect, Conc, 30 inch	2	Ea		
Culv End Sect, Conc, 36 inch	2	Ea		
Culv, CI E, Conc, 18 inch	216	Ft		
Culv, CI E, Conc, 24 inch	56	Ft		
Culv, CI E, Conc, 30 inch	83	Ft		
Culv, CI E, Conc, 36 inch	56	Ft		
Culv, CI F, 12 inch	980	Ft		
Culv, CI F, 18 inch	40	Ft		
Dr Structure, 60 inch dia	1	Ea		
Dr Structure Cover, Type E	1	Ea		
Underdrain, Subgrade, 6 inch	2,500	Ft		
Underdrain Outlet, 6 inch	140	Ft		
Underdrain, Outlet Ending, 6 inch	14	Ea		
Approach, CI II	450	Ton		
Approach, HMA Millings	20	Ton		
Riprap, Plain	60	Syd		
Riprap, Heavy	30	Syd		
Slope Restoration, Type A	18,000	Syd		
Slope Restoration, Type C	5,000	Syd		
Extended Restoration	1	LS		
Sign, Type B, Temp, Modified	264	Sft		
Plastic Drum, High Intensity, Lighted, Modified	30	Ea		
Barricade Type III, High Intensity, Dbl Sided, Ltd, Modified	6	Ea		

400022

Erosion Control, Silt Fence	1,500	Ft		
Erosion Control, Check Dam	60	Ft		
Project Cleanup	1	LS		

TOTAL \$ _____

The undersigned bidder agrees that the following is a complete and accurate list of all sub-contractors to be utilized is awarded this contract and any change from this list will be permitted only with the consent of the Board of County Road Commissioners of Allegan County. **LIST NAME OF EACH SUB-CONTRACTOR AND BRIEF DESCRIPTION OF WORK TO BE DONE.**

I hereby state that all of the information I have provided is true, accurate and complete. I hereby state that I have the authority to submit this bid, which will become a binding contract if accepted by the Board of County Road Commissioners of Allegan County. I hereby state that I have not communicated with nor otherwise colluded with any other bidder, nor have I made any agreement with nor offered or accepted anything of value from an official or employee of the Board of County Road Commissioners of Allegan County that would tend to destroy or hinder free competition.

In case the bidder is a co-partnership, each member must sign this proposal.

In case the bidder is a Corporation, this proposal must be executed by its duly authorized officials in accordance with its articles of incorporation and a certified copy of such articles must be attached hereto.

I hereby state that I have read, understand and agree to be bound by all the terms of this bid document.

SIGNATURE: _____ NAME: _____
(Type or Print)

TITLE: _____ DATE: _____

FIRM NAME: _____ PHONE: _____

ADDRESS: _____
(Street Address) (City) (State) (Zip)

FOR COUNTY USE ONLY – DO NOT WRITE BELOW

ACCEPTED BY: BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF ALLEGAN, MICHIGAN

Chairman

Vice-Chairman

Member

Date

STANDARD SPECIFICATIONS

The Standard Specifications for Construction of the Michigan Department of Transportation, 2012 Edition shall apply. Nothing herein will be construed to create any obligation or duty on the part of the Board of County Road Commissioners of Allegan County, including obligations or duties which may be expressed or implied in the Standard Specifications for Construction of the Michigan Department of Transportation, unless specifically set forth in the contract documents.

The quantity for all pay items will not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission. Amounts in excess of the plan quantity will not be considered for payment unless the increase was directed by the Engineer or an error in calculations is proven.

CLEARING: The contractor will remove all trees, stumps and brush that are marked or are entirely or partially within the clear zone or within the slope stake line as shown on the plans and all stumps within five (5) feet of the right-of-way or within the slope stake line unless instructed otherwise by the Engineer. Trees will remain the property of the adjacent landowner, if they want them. If not, the contractor will dispose of them. The contractor will dispose of all stumps. The contractor shall grind all stumps to avoid disturbing underground facilities. The stump and brush removal will be done in accordance with Section 201 & 202 of the 2012 Standard Specifications for Construction.

The Contractor will not receive any additional compensation due to delays caused by utility companies.

METHOD OF PAYMENT FOR CLEARING: The item of "Clearing" will be paid for as a lump sum. No stump count is provided. It is the contractor's responsibility to inspect the site and verify accuracy of trees, stumps, and brush shown on the plans. No change in payment will be made for variances. Clearing stakes have been set. Direct any questions to the Allegan County Road Commission.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Clearing	Lump Sum

STATION GRADING: The item of "Station Grading" will include all culvert removal, fence removal, fence relocation regardless of fence type, obliterating roadway, rock excavation, concrete removal, HMA removal, earth excavation, embankment, and saw cuts required. The contractor will place ditches and slopes as shown on the project cross section sheets. The earth excavation quantity does include the existing topsoil and pavement that must be stripped. The embankment quantity does include material to replace stripped topsoil and pavement in fill sections. The embankment quantity does not reflect shrinkage. Some excavation and embankment will be required to make a smooth transition into driveways; this is included in the earthwork figures. Additional driveway changes in slopes or ditch depths will not result in extra payment on this item. Additional grading in yards at the request of property owners will be included in Station Grading.

Some material excavated from ditches will not be suitable for embankment and will be disposed of at the contractor's expense.

All slopes in yard areas will be finished to Class A tolerance. Slopes not in yards will be trimmed to Class B tolerance (Section 205.03 page 138).

The Controlled Density Method (Section 205.03 page 135) of the Standard Specifications for Construction will apply. The Engineer will run density tests at his discretion.

Any salvaged gravel required to maintain local traffic will be included in the item of Station Grading.

STATION GRADING (CON'T):

The following is an approximate list of earthwork quantities (Note: Quantities below are compacted in place units, Subbase not included).

<u>STATION</u>	<u>EARTH EXCAVATION</u>	<u>EMBANKMENT</u>
Taft Road	18,795 CYD	520 CYD

METHOD OF PAYMENT FOR STATION GRADING: The item of "Station Grading" will be paid for as a lump sum. The quantities listed above are approximate; any changes in quantity will not alter the lump sum pay quantity for Station Grading.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Station Grading	Lump Sum

SUBBASE, CIP: Section 301 of the Standard Specifications will apply. The contractor will furnish, place, compact and shape the material to obtain a minimum depth of 18 inch of Subbase where there is greater than one (1) foot of grade increase in the proposed profile. All Subbase will be Class II material.

The Subbase material will be compacted to not less than 95% of the maximum unit weight. Density tests will be done at the discretion of the Engineer.

METHOD OF PAYMENT FOR SUBBASE, CIP: The item of "Subbase, CIP" will be paid by the cubic yard, compacted-in-place.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Subbase, CIP	Cubic Yard

TOPSOIL SURFACE, SALV, LM: The existing topsoil will be stripped from the areas within the right-of-way or grading limits shown or as directed in the field, adjacent to roadway as detailed in the project description. The salvaged topsoil will be stockpiled for measurement. The item includes picking up, stockpiling, replacing and shaping the topsoil at least 3 inches deep.

Prior to seeding, the Contractor will be required to drag all front and back slopes that are 1 on 3 or flatter. Slopes that are steeper than 1 on 3 must be left in a relatively smooth condition. Slope preparation will be included in the item of Topsoil Surface, Salv, LM.

METHOD OF PAYMENT FOR TOPSOIL SURFACE, SALV, LM: The item of "Topsoil Surface, Salv, LM" will be paid for by the cubic yard as measured in the stockpile. The plan quantity is the maximum Cubic Yards that will be paid.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Topsoil Surface, Salv, LM	Cubic Yard

TRENCHING: Excavate, shape, and compact trenches to the width and depth required. For trenches under Hot Mix Asphalt (HMA) compact the bottom of the trench to at least 98 percent of the maximum unit weight at no greater than optimum moisture content. Compact the bottom of other trenches to 95 percent of the maximum unit weight. The engineer may allow 95 percent if 98 percent of the maximum unit weight cannot be achieved.

TRENCHING (CONT.):

Take ownership of trenched material and dispose in accordance with subsection 205.03.P at no additional cost.

Place and maintain traffic control devices in accordance with section 812, in shoulder areas that cannot be backfilled and compacted the same day. Bring shoulder material flush with existing pavement the next calendar day.

METHOD OF PAYMENT FOR TRENCHING: The item of "Trenching" will be paid for by the station measured along the centerline of the roadway. The unit price for Trenching includes the cost of trenched aggregate reused in shoulders or approaches that does not require loading and hauling.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Trenching	Station

SUBGRADE UNDERCUTTING, TYPE II: The item of "Subgrade Undercutting, Type II" will consist of cutting out undesirable material below the Subgrade and will include backfilling with Class II material (Section 205 Standard Specifications for Construction). Subgrade undercutting will be done only if requested by the engineer. Backfill of Subgrade Undercutting will be compacted to not less than 95% of the Maximum Unit Weight. Tests will be run at the discretion of the engineer. This item will also include all muck, morrow and peat excavation and backfill required up to 6 feet deep.

METHOD OF PAYMENT FOR SUBGRADE UNDERCUTTING, TYPE II: The item of "Subgrade Undercutting, Type II" will be paid for by the cubic yard as measured from the area actually excavated from the roadway. Backfill for the undercutting is included in the price for Subgrade Undercutting, Type II. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Subgrade Undercutting, Type II	Cubic Yard

GEOTEXTILE, STABILIZATION: The item of "Geotextile, Stabilization" will include all labor, material and equipment to place material as instructed by the Engineer. Material will be in accordance with section 308 of the Standard Specifications.

METHOD OF PAYMENT FOR GEOTEXTILE, STABILIZATION: The item of "Geotextile, Stabilization" will be paid for by the square yard as measured in place.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Geotextile Stabilization	Square Yard

AGGREGATE, 6A: The item of "Aggregate, 6A" will include furnishing, hauling, placing, and shaping of the material. Material will meet MDOT 6A Specifications. This item is not shown on the plans, and will be used at the discretion of the Engineer. The item is intended to be used for pipe bedding over Geotextile Stabilization (separate item).

AGGREGATE, 6A (CONT.):

METHOD OF PAYMENT FOR AGGREGATE, 6A: The item of "Aggregate, 6A" will be paid for by the ton. Weight slips will be required.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Aggregate, 6A	Ton

EXCAVATION, PEAT: The item of "Excavation, Peat" will include all labor, material, and equipment necessary to remove peat, marl, soft clay, or other undesirable material as directed by the Engineer. All work will be performed in accordance with Section 205 of the Standard Specifications and in accordance with Standard Plan R-103 (current edition), Treatment of Peat Marshes, Method A-1, or as directed by the Engineer in the field.

METHOD OF PAYMENT FOR EXCAVATION, PEAT: The item of "Excavation, Peat" will be paid by the square yard as measured in place.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Excavation, Peat	Cubic Yard

BACKFILL, SWAMP: The item of "Backfill, Swamp" will include all labor, material, and equipment necessary to backfill areas, which are excavated as part of "Excavation, Peat." All work will be performed in accordance with Section 205 of the Standard Specifications and in accordance with Standard Plan R-103 (current edition), Treatment of Peat Marshes, Method A-1, or as directed by the Engineer in the field.

METHOD OF PAYMENT FOR BACKFILL, SWAMP: The item of "Backfill, Swamp" will be paid by the square yard as measured in place.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Backfill, Swamp	Cubic Yard

HMA BASE CRUSHING AND SHAPING: This item will include all labor, material and equipment required to scarify, crush, grade, shape roll and compact the existing HMA surface to a minimum depth of 8 inches. The pay item does not differentiate between various depths of crushing required. Gravel will be added on top of the existing HMA prior to the crush and shape operation and will be paid for separately as Aggregate Surface Course. This item will include the final shaping compaction required prior to paving on the entire project.

METHOD OF PAYMENT FOR HMA BASE CRUSHING AND SHAPING: The item of "HMA Base Crushing and Shaping" will be paid for by the square yard. The existing HMA surface area will be measured for payment.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
HMA Base Crushing and Shaping	Square Yard

AGGREGATE SURFACE CSE: This item will include all labor, material, and equipment required to add MDOT 22A gravel to the HMA surface prior to pulverizing and mixed thoroughly with the existing material. This item may also be used to add additional aggregate after pulverizing.

METHOD OF PAYMENT FOR AGGREGATE SURFACE CSE: The item of "Aggregate Surface Cse" will be paid for by the ton. Scaled tickets are required.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Aggregate Surface Cse	Ton

SEWER, CULVERT AND END SECTIONS: The items of sewer, culvert, and end section will include all labor and material for placing the new storm sewer, culverts and end sections as specified. Excavating and backfilling will be included in the item of Sewer and Culverts. If any material more than 0.5 feet below the sewer or culvert is ordered to be removed by the Engineer, it will be paid for as "Subgrade Undercutting, Type II".

Granular bedding and backfill will be included in the item of Sewer and Culverts.

All sewer, culverts, and end sections will be laid true to the lines and grades given, bells or grooves upgrade, ends fully and closely jointed, and each section will have a full, firm bearing throughout its length. All pipe sections/joint assemblies for use in culvert will be selected from the Qualified Products List for Watertight Sewer and Culvert Joint Systems. Pipes with diameters greater than 24 inch will have the pipe joints wrapped with a non-woven Geotextile fabric. The fabric will have a minimum width of 36 inch and will be centered on the joint.

It is the contractor's responsibility to protect all new culverts and existing culverts to be left in place from damage by heavy equipment by ramping or other means necessary. All cross culverts and sewer will be placed prior to the machine grading unless approved by the Engineer.

All drainage structures and covers will meet the requirements of Section 403 of the 2012 MDOT Standard Specifications for Construction and the current MDOT Standard Plans R-1 thru R-24. They will be of the size noted on the plans or as directed by the Engineer in the field and will include all labor, material, equipment to furnish and install the drainage structures for a functional installation. Drainage Structure Covers will be the type noted on the plans.

Concrete Cross Culverts will be placed at the following locations:

<u>STATION</u>	<u>TYPE</u>	<u>END SECTIONS</u>	<u>LENGTH</u>
12+12	Culv, CI E, Conc, 18 inch	2	64
32+86	Culv, CI E, Conc, 30 inch	2	82
46+48	Culv, CI E, Conc, 36 inch	2	56
53+15	Culv, CI E, Conc, 18 inch	2	48
66+00	Culv, CI E, Conc, 18 inch	2	40
38 th Street	Culv, CI E, Conc, 18 inch	2	64
78+38	Culv, CI E, Conc, 24 inch	2	48

METHOD OF PAYMENT FOR SEWER, CULVERT, AND END SECTION: The item of "Culvert" will be paid by the linear foot and the item of "End Section" will be paid for by the individual unit.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Culv, CI F, ___ inch	Foot
Culv, CI E, Conc, ___ inch	Foot
Culv End Sect, Conc, ___ inch	Each
Dr Structure, _ inch dia	Each
Dr Structure Cover, Type _	Each

UNDERDRAIN, SUBGRADE, 6 INCH: The item of “Underdrain, Subgrade, 6 inch” will include all labor, material and equipment to place the item as instructed by the Engineer.

Section 404 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR UNDERDRAIN, SUBGRADE 6 INCH: The item of “Underdrain, Subgrade, 6 inch” will be paid for by the linear foot.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Underdrain, Subgrade, 6 inch	Foot

UNDERDRAIN OUTLET, 6 INCH: The item of “Underdrain Outlet, 6 inch” will include all labor, material and equipment required to place a piece of 6 inch PVC Schedule 40 or stronger from the end of the 6 inch Subgrade Underdrain to the Underdrain, Outlet Ending, 6 inch.

METHOD OF PAYMENT FOR UNDERDRAIN OUTLET, 6 INCH: The item of “Underdrain Outlet, 6 inch” will be paid for by the linear foot.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Underdrain Outlet, 6 inch	Foot

UNDERDRAIN, OUTLET ENDING, 6 INCH: The item of “Underdrain, Outlet Ending, 6 inch” will include all labor, material and equipment required to place a precast end section at the end of an Underdrain Outlet, 6 inch.

METHOD OF PAYMENT FOR UNDERDRAIN, OUTLET ENDING, 6 INCH: The item of “Underdrain, Outlet Ending, 6 inch” will be paid for by the individual unit.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Underdrain, Outlet Ending, 6 inch	Each

APPROACH, CL II: The item of “Approach, Cl II” will include all labor, material and equipment to place and compact the material specified on the plans. Section 307 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR APPROACH, CL II: The item of “Approach, Cl II” will be paid for by the ton. Weight slips will be required.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Approach, Cl II	Ton

APPROACH, HMA Millings: The item of “Approach, HMA Millings” will include all labor, material and equipment to place and compact the material specified on the plans. Section 307 of the Standard Specifications for Construction will apply. Material must approximate 22A gradation or be approved by Engineer.

METHOD OF PAYMENT FOR APPROACH, HMA Millings: The item of “Approach, HMA Millings” will be paid for by the ton. Weight slips will be required.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Approach, HMA Millings	Ton

RIPRAP, PLAIN AND RIPRAP, HEAVY: The item of “Riprap, Plain” and “Riprap, Heavy” will include all labor, equipment and material to place the Riprap as instructed by the engineer.

Section 813 of the Standard Specifications for Construction will apply to this item. The Riprap will be placed over Geotextile Fabric, included in this item.

METHOD OF PAYMENT FOR RIPRAP, PLAIN: The item of “Riprap, Plain” and “Riprap, Heavy” will be paid for by the square yard. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission. Amounts in excess of the plan quantity will not be considered for payment unless an error in calculations is proven.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Riprap, Plain	Square Yard
Riprap, Heavy	Square Yard

SLOPE RESTORATION, TYPE A: The item of “Slope Restoration, Type A” will include all labor, material and equipment required to do the restoration. Restoration will consist of placing Seeding, Mixture TUF (220#/acre); Seeding, Mixture CR (70#/acre), Fertilizer, Chemical Nutrient, CI A (176#/acre); Mulch (2 ton/acre); and Mulch Anchoring. Place Mulch and Mulch Anchoring within one calendar day after seeding.

Section 816 of the Standard Specifications for Construction will apply. The following is an approximate list of restoration material quantities:

<u>MATERIAL</u>	<u>QUANTITY</u>
Seeding, Mixture TUF	850 Lb
Seeding, Mixture CR	3000 Lb
Fertilizer, Chemical Nutrient, CI A	700 Lb (Nutrients)
Mulch	37.5 Ton
Mulch Anchoring	Per manufactures recommendation

METHOD OF PAYMENT FOR SLOPE RESTORATION, TYPE A: The item of “Slope Restoration, Type A” will be paid for by the square yard measured in place.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Slope Restoration, Type A	Square Yard

SLOPE RESTORATION, TYPE C: The item of "Slope Restoration, Type C" will include all labor, material and equipment required to do the restoration. Restoration will consist of placing Seeding, Mixture TUF (400#/acre); Seeding, Mixture CR (70#/acre), Fertilizer, Chemical Nutrient, CI A (228#/acre); and High Velocity Mulch Blanket. Place High Velocity Mulch Blanket and Anchoring within one calendar day after seeding.

Section 816 of the Standard Specifications for Construction will apply. The material for Mulch Blanket will meet the specifications set on page 853 (Section 917.15) of the 2012 MDOT Standard Specifications for Construction. The following is an approximate list of restoration material quantities:

<u>MATERIAL</u>	<u>QUANTITY</u>
Seeding, Mixture TUF	450 Lb
Seeding, Mixture CR	100 Lb
Fertilizer, Chemical Nutrient, CI A	250 Lb (Nutrients)
High Velocity Mulch Blanket	5,000 Syd
Mulch Blanket Anchoring	Per manufactures recommendation

METHOD OF PAYMENT FOR SLOPE RESTORATION, TYPE C: The item of "Slope Restoration, Type C" will be paid for by the square yard measured in place.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Slope Restoration, Type C	Square Yard

EXTENDED RESTORATION: The item of "Extended Restoration" will include all labor, material and equipment required to maintain the restoration of the construction site. The contractor shall be responsible for the permanent establishment of turf and maintaining the temporary and permanent soil erosion control measures for a period of one year from the date of final approval or when the site is stabilized and approved by the Engineer. This may include reseeded, maintaining check dams and spillways, and fixing erosion on site.

METHOD OF PAYMENT FOR EXTENDED RESTORATION: The item of "Extended Restoration" will be paid for as a lump sum.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Extended Restoration	Lump Sum

SIGN, TYPE B, TEMP, MODIFIED: The item of "Sign, Type B, Temp, Modified" will include supplying all materials, equipment and labor required to erect and maintain construction signs as designated by the Engineer. Materials and placement will conform to the MDOT Standard Specifications for Construction and the Michigan Manual of Uniform Traffic Control Devices. Signs will be placed as instructed by the Engineer. All "CONSTRUCTION AHEAD" and "ROAD CLOSED AHEAD" signs will be 48" x 48" mounted on two posts with one steady burn light. Place "CONSTRUCTION AHEAD" signs on all public roads approaching the project limits. Also, place "ROAD CLOSED AHEAD" signs at each end of the project limits if applicable. (Steady burn light and posts are included in the Sign, Type B, Temp, Modified item).

METHOD OF PAYMENT FOR SIGN, TYPE B, TEMP, MODIFIED: The item of "Sign, Type B, Temp, Modified" will be paid for by the square foot of sign face.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Sign, Type B, Temp, Modified	Square Foot

PLASTIC DRUM, HIGH INTENSITY, LTD, MODIFIED: The item of "Plastic Drum, High Intensity, Ltd, Modified" will include all labor, equipment and material to furnish, set up, move and maintain the drums as required by the Engineer. Drums will be equipped with one light.

Section 812 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR PLASTIC DRUM, HIGH INTENSITY, LTD, MODIFIED: The item of "Plastic Drum, High Intensity, Ltd, Modified" will be paid for by the individual unit.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Plastic Drum, High Intensity, Ltd, Modified	Each

BARRICADE ,TYPE III, HIGH INTENSITY, DOUBLE SIDED, LTD, MODIFIED: The item of "Barricade, Type III, High Intensity, Double Sided, Ltd, Modified" will include all labor, equipment and material to furnish, set up, move and maintain the barricades.

The Contractor will furnish and maintain Barricades, Type III with three lights and an R-11-4 Sign (ROAD CLOSED TO THRU TRAFFIC) mounted above the barricade. The R-11-4 sign will comply with and be paid as "Sign, Type B, Temp, Modified".

Section 812 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LTD, MODIFIED: The item of "Barricade, Type III, Double Sided, Ltd, Modified" will be paid for as individual units.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Barricade, Type III, High Intensity, Double Sided, Ltd, Modified	Each

EROSION CONTROL, SILT FENCE: The item of "Erosion Control, Silt Fence" will include all labor, material and equipment to place silt fence as instructed by the Engineer. Section 208 of the Standard Specifications for Construction will apply to this item.

METHOD OF PAYMENT FOR EROSION CONTROL, SILT FENCE: The item of "Erosion Control, Silt Fence" will be paid for by the linear foot.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Erosion Control, Silt Fence	Foot

EROSION CONTROL, CHECK DAM: The item of "Erosion Control, Check Dam" will include all labor, material and equipment to place the check dam as instructed by the engineer.

Section 208 of the Standard Specifications for Construction will apply to this item. Stone or a permeable plastic berm, such as *Nillex, Inc. Geo-Ridge* or Equal will be allowed.

METHOD OF PAYMENT FOR EROSION CONTROL, CHECK DAM: The item of "Erosion Control, Check Dam" will be paid for by the linear foot.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Erosion Control, Check Dam	Foot

PROJECT CLEANUP: The item of "Project Cleanup" will include all labor, material and equipment to pick up stone, sticks, branches, roots and other debris from the project.

This item will also include moving all mailboxes to a temporary location to be approved by the mail carrier and to reset the boxes permanently on the project. If new boxes or posts are required, they will be supplied by the Road Commission. Project Cleanup also includes placing a 1" x 3" with the respective property address written on it in the front yard of each residence to assist with identification for emergency vehicles.

METHOD OF PAYMENT FOR PROJECT CLEANUP: The item of "Project Cleanup" will be paid for as a lump sum.

PAY ITEM
Cleanup

PAY UNIT
Lump Sum

ALLEGAN COUNTY ROAD COMMISSION
ALLEGAN, MICHIGAN

GENERAL SPECIFICATIONS

MICHIGAN DEPARTMENT OF TRANSPORTATION-STANDARD SPECIFICATIONS

The work covered by the plans and specifications will be done in accordance with the 2012 Michigan Department of Transportation Standard Specifications for Construction, except as qualified in supplemental specifications and special conditions of the Allegan County Road Commission or as agreed to in writing at the time of the award of the contract.

DEFINITION OF TERMS

See Section 101 of Michigan Department of Transportation Standard Specifications for Construction.

SPECIAL CONDITIONS

Special requirements, regulations or directions applying to a particular project may be made a part of these specifications.

THE WORK

The work consists of the completed services, construction and/or paving by the Contract Documents and includes all materials and labor incorporated or to be incorporated therein.

RESPONSIBILITIES OF CONTRACTOR

A. Responsibility for and Supervision of Construction. Unless otherwise stated herein, Contractor will be solely responsible for all construction under this Contract, including the methods, techniques, sequences, procedures, and means, and for coordination of all work. Contractor will supervise and direct the work to the best of Contractor's ability, and give it all attention necessary for such proper supervision and direction. Contractor will notify the Road Commission of any anticipated pay item overruns or extras as soon as possible to allow for approval or design changes.

B. Discipline and Employment. Contractor will maintain at all times strict discipline among Contractor's employees, and contractor agrees not to employ for work on the project any person unfit for without sufficient skill to perform the job for which he or she was employed.

C. Furnishing of Labor, Materials, etc. Unless otherwise stated herein, Contractor will provide and pay for all labor, materials, and equipment, including tools, construction equipment, and machinery, utilities, including water, transportation, and all other facilities and services necessary for the proper completion of work on the project in accordance with the Contract Documents.

D. Payment of Taxes; Procurement of Licenses and Permits. Contractor will pay all taxes required by law in connection with work on the project in accordance with this agreement including sales, use, and similar taxes, and will secure all licenses and permits necessary for proper completion of the work, paying the fees for such licenses and permits.

E. Compliance with Laws and Regulations. Contractor will comply with all laws and ordinances, and the rules, regulations or orders of all public authorities relating to the performance of the work under and pursuant to this Agreement including, but not limited to, the Occupational Safety and Health Act of 1970, the Michigan Occupational Safety and Health Act, and the rules and regulations of the Michigan Construction Safety Commission.

RESPONSIBILITIES OF CONTRACTOR (CON'T):

F. Responsibility for Negligence of Employees and Subcontractors. Contractor assumes full responsibility for acts, negligence or omissions of all of Contractor's employees on the project, for those of Contractor's subcontractors and their employees, and for those of all other persons doing work under a contract with Contractor.

G. Responsibility for Safety. Unless otherwise stated herein, at Contractor's expense, Contractor will take all necessary precautions (including, without limitation, the furnishing of traffic control, barricades, traffic control devices, flaggers, warning lights, signs, warning signs, safety channels, channelization devices, guards, fences, walks, flags, cables and lights) for the safety of, and the prevention of injury, loss and damage to, persons and property (including, without limitation, in the term persons, members of the public, employees, Contractor's subcontractors and their respective employees, other contractors, their subcontractors and respective employees) on, about or adjacent to the location where the work is being performed, and will comply with all applicable provisions of safety rules, ordinances, codes, regulations, and orders of duly-constituted public authorities including, but not limited to, the Michigan Manual of Uniform Traffic Control Devices.

H. Responsibility of Subcontractors. The Contractor will require any subcontractor hired by the Contractor for the purpose of performing any of the work described by the Contract documents to be bound by all of the terms and conditions of the Contract documents and to perform the work in accordance with the Contract documents. Each and every condition of the Contract documents, including without limitation, the RESPONSIBILITIES OF THE CONTRACTOR, will be made a condition of each subcontract entered into by the Contractor in conjunction with the performance of the work.

INDEMNIFICATION

To the fullest extent permitted by law, the Contractor will indemnify, defend, and hold harmless The Board of County Road Commissioners of Allegan County, its officers, employees, representatives and agents from and against any and all claims, damages, demands, payments, suits, actions, recoveries, judgements, losses and expenses, including attorney fees, interest, and court costs, which are made, brought or recovered against the Board of County Road Commissioners of Allegan County, arising out of or resulting from performance of the Contractor's work under this Contract, provided that such claims, damages, losses, demands, payments, suits, actions, recoveries, judgements and/or expenses are attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including loss of use resulting therefrom, but only if caused in whole or in part, by the act, omissions, fault, negligence or breach of the conditions of this Contract by negligent acts or omissions of the Contractor, the Contractor's sub-subcontractors, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. The Contractor will not, however, be obligated to indemnify the Board of County Road Commissioners of Allegan County, for any damage or injuries caused by or resulting from the sole negligence of the Board of County Road Commissioners of Allegan County. Such obligation will not be construed to negate, abridge or otherwise reduce other rights or obligations of indemnity which would otherwise exist as a party or person described in this paragraph.

In claims against any person or entity indemnified under this Agreement by an employee of the Contractor, the Contractor's sub-subcontractors, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this paragraph will not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or the Contractor's subcontractors under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

INSURANCE

A. Contractor's Insurance. Prior to start of the Contractor's work, the Contractor will procure for the Contractor's work and maintain in force until the completion of the work, workers' compensation insurance, employer's liability insurance, comprehensive general liability insurance and all insurance required of the contract under the contract documents.

The Board of County Road Commissioners of Allegan County will be named as an additional insured on each of these policies except for worker's compensation.

The insurance will include contractual liability insurance covering the Contractor's obligations under its agreement of indemnification as set forth herein.

B. Minimum Limits of Liability. The Contractor's comprehensive general and automobile liability insurance as required herein, will be written with limits of liability not less than the following:

a. Comprehensive general liability including completed operations

(1) \$ 500,000 each occurrence

b. Property damage

(1) \$ 500,000 each occurrence

C. Number of Policies. Comprehensive general liability insurance and other liability insurance may be arranged under a single policy for the full limit required or by combination of underlying policies with the balance provided by an excess or umbrella liability policy.

D. Cancellation, Renewal or Modification. The Contractor will maintain in effect all insurance coverage required under this Agreement at the Contractor's sole expense and with insurance companies acceptable to the Board of County Road Commissioners of Allegan County.

All insurance policies will contain a provision that the coverage afforded thereunder will not be cancelled or not renewed nor restrictive modifications added at any time after a certificate of insurance required under agreement has been issued and before the work; as defined herein, has been completed, until at least thirty (30) days prior thereto written notice has been given to the Board of County Road Commissioners of Allegan County unless otherwise specifically required in the Contract Documents.

Certificates of insurance or certified copies of policies acceptable to the Board of County Road Commissioners of Allegan County will be filed with the Board of County Road Commissioners of Allegan County prior to the commencement of the Contractor's work.

In the event that the Contractor fails to obtain or maintain any insurance coverage required under this Agreement, the Board of County Road Commissioners of Allegan County may:

1. Purchase such coverage and charge the expense thereof to the Contractor, and
2. Withhold from any payment due or to become due to the Contractor an amount sufficient to protect the Board of County Road Commissioners of Allegan County from such claims, damages, demands, payments, suits, actions, recoveries, judgments, losses and expenses, including attorney fees, interest and court costs, and
3. Terminate this agreement.

Nothing contained in this Agreement, nor the Board of County Road Commissioners of Allegan County's compliance therewith, will relieve the Contractor from its obligations under the Contract to purchase and maintain required insurance or to indemnify the Board of County Road Commissioners of Allegan County.

PROGRESS CLAUSE

The successful bidder will be required to submit a Progress Schedule, giving an outline of his proposed order of work and to indicate the dates for completion of the work. This outline, when approved by the Road Commission, will become a part of the contract.

PROSECUTION OF THE WORK

The Contractor will begin the work within five (5) days after being notified by the Road Commission of the award of the contract, unless this is inconsistent with the Progress Schedule, in which case the Progress Schedule will govern. He will prosecute the work in the order given in the Progress Schedule, with force and equipment adequate to complete the sections within the time limit therein fixed for completion. In case of failure to proceed with the work as rapidly as is provided in the Progress Schedule, or if it appears at any time that such work is not being prosecuted in such a manner as to insure its completion within time specified, the Road Commission will have the right to require the contractor to furnish and place in operation such additional force and equipment as the Road Commission will deem necessary to bring the work up to the Progress Schedule; and in case of the Contractor's neglect to do so, the Road Commission may place such working force and equipment on the work and charge the Contractor the cost of the labor and such rental and depreciation rates for the plan and equipment as in its judgment is reasonable, and for such time as the plant and equipment are in service.

ESTIMATED QUANTITIES

The quantities listed in the proposal are the estimated quantities. Increases or decreases in quantities will not be considered as a basis for adjustment in unit prices and Articles 109.03 of M.D.O.T. Standard Specifications for Construction will not apply in this regard.

FINAL PAYMENT

Final payment will not be made until the contractor will have filed with the Board of County Road Commissioners the consent of the Surety of the payment of the final estimate and satisfactory evidence by affidavit or otherwise that all his indebtedness by reason of the contract has been fully paid or satisfactorily secured. In case such evidence is not furnished, the Road Commission may retain out of any amount due said contractor sums sufficient to cover all lienable claims unpaid.

AFFIRMATIVE ACTION POLICY (EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER)

The Allegan County Road Commission will require the Contractor to submit an Affirmative Action Policy stating that they are an equal employment opportunity employer and will recruit, hire and promote in all job classifications without regard to race, color, religion, sex or national origin, except where sex is a bona fide occupational qualification. The Affirmative Action Policy will be signed by the Contractor or one of the Company's Authorized Officers.

CONTRACT BONDS

The Successful Bidder will furnish satisfactory performance and lien bonds, each in the amount of not less than one hundred (100) percent of the total contract price. Such bonds will be on forms provided and will meet the regulations of the Allegan County Road Commission and the requirements specified in the laws of Michigan.

Bonds will not be required for contracts of less than \$5,000.00.

M.D.O.T. – PREQUALIFICATION

Contractors bidding on this work must be pre-qualified by the Michigan Department of Transportation to do similar work on State or Federal-aid Secondary projects.

LIQUIDATED DAMAGES

Failure to complete the project on or before the completion date specified will be assessed according to the following schedule:

Original Contract Amount	Liquid Damages Per Calendar Day
\$ 0 to 49,999	75
50,000 to 99,999	150
100,000 to 499,999	450
500,000 to 999,999	900
1,000,000 to 1,999,999	1,300
2,000,000 to 4,999,999	1,550
5,000,000 to 9,999,999	2,650
10,000,000 and above	3,000

The liquidated damages may be waived if the contractor meets the requirements set forth in Section 108.07 of the 2012 Standard Specifications for Construction. Approval of the Engineer is required.

A Contractor's Guide to

STORM WATER POLLUTION PREVENTION



Our Watershed, Our Responsibility

- A watershed is an area of land that catches rain and snow melt and drains into a river, lake, stream, or wetland. There are several major watersheds in Allegan County including the Kalamazoo River Watershed and the Macatawa Watershed.
- As citizens and contractors living and working in Allegan County, it is your duty to ensure that the surface waters of the community are kept clean and healthy.

Where Do Storm Drains Go?

- Storm drains, catch basins, and ditches are directly connected to local waterways.
- This direct connection means that whatever enters the storm drain eventually enters a river, lake, stream or wetland.
- When fertilizer, yard waste, sediment, or other contaminants enter a storm drain, it has adverse effects on local waterways.



Eliminating Illicit Discharges

- An illicit discharge is the discharge of pollutants to storm sewer systems via overland flow or direct dumping into catch basins.

- Illicit discharges are illegal! Reporting them can help eliminate the problem and keep our rivers and streams clean.

Report an illicit discharge to the Pollution Emergency Alerting System (PEAS) at (800) 292-5706 or to the Allegan County Road Commission at (269) 673-2184.

Practicing Healthy Land Care

- Use a fertilizer that is organic slow-release with low or no phosphorus. Phosphorus is the main cause of algae growth in streams, which depletes the oxygen aquatic organisms need to survive.
- Get your soil tested through your county Michigan State University Extension office. This will tell you what fertilizer you should use, if any.
- Don't dump leaves or grass clippings down the drain or blow them into the street! Decaying leaves also deplete the oxygen in streams. They can be used as mulch, or they can be disposed of by curbside pick-up.

Maintaining Your Fleet

- Leaky vehicles and construction machinery can easily cause stream contamination by tracking fluids and other pollutants off site, eventually draining into a catch basin
- You can prevent vehicle fluids from entering local bodies of water by ensuring that your vehicles and equipment are properly maintained and in good working condition.
- Proper disposal of chemicals and other waste is critical to the health of streams and rivers. Solid and liquid waste materials are not meant to be dumped in catch basins. Remember that catch basins are made for storm water only!



- Manage riparian land wisely! Leaving a buffer zone of 20 feet between lawns and streams prevents stream bank erosion, stops pollutants from reaching the stream, and creates a habitat for local wildlife.

Managing Streets and Parking Lots

- Storm water runoff from streets and parking lots is a main cause of pollution because the storm water takes sediment and other solids with it into catch basins.
- The runoff from these impervious surfaces entering streams contains total suspended solids (TSS).
- Suspended solids make water in streams cloudy, which inhibits aquatic plant growth. This in turn affects the health of aquatic organisms that require oxygen from the aquatic plants.
- You can prevent this by keeping roads clean near the construction site and have a designated disposal area for cigarette butts and other small debris that can make its way into a catch basin.



Allegan County Road
Commission
1308 Lincoln Road
Allegan, MI 49010
(269) 673-2184 phone
(269) 673-5922 fax



NOTICE OF AUTHORIZATION

Permit Number: WRP030061 v. 1
Site Name: 03 - Taft Road Reconstruction

Date Issued: July 29, 2021
Expiration Date: July 29, 2026

The Michigan Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division, P.O. Box 30458, Lansing, Michigan 48909-7958, under provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, specifically:

- Part 31, Floodplain Regulatory Authority of the Water Resources Protection.
- Part 301, Inland Lakes and Streams.
- Part 303, Wetlands Protection.
- Part 315, Dam Safety.
- Part 323, Shorelands Protection and Management.
- Part 325, Great Lakes Submerged Lands.
- Part 353, Sand Dunes Protection and Management.

Authorized activity:

Widen and reconstruct Taft Road from 124th Avenue to just south of 122nd Avenue for safety improvements. Replace three existing Taft Road crossings of three separate unnamed streams, as follows:
Culvert 1 (Station 32+85): Remove the existing perched structure. Install a single, 82 foot long by 2.5-foot diameter precast concrete culvert, with no recessing.
Culvert 2 (Station 46+52): Remove the existing structure. Install a single 72 foot long by 3-foot diameter precast concrete culvert, with no recessing.
Culvert 3 (Station 78+37): Remove the existing structure. Install a single, 68 foot long by 2-foot diameter precast concrete culvert, recessed 0.5 feet.
Place road fill and riprap slope protection at each crossing. Widening will impact 0.02 acres of adjacent wetland.

To be conducted at property located in: Allegan County, Waterbody: Various unnamed tributary streams, wetlands Section 01, Town 02N, Range 14W, Valley Township

Permittee:
Jason Edwards
Allegan County Road Commission
1308 Lincoln Road
Allegan, Michigan 49010

Issued By:

Holly Vickers
Transportation Review Unit
Water Resources Division
616-295-2787

This notice must be displayed at the site of work.
Laminating this notice or utilizing sheet protectors is recommended.
Please refer to the above permit number with any questions or concerns.

EGLE-WRD
WRP030061 v1.0
Approved
Issued On:07/29/2021
Expires On:07/29/2026



**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
WATER RESOURCES DIVISION PERMIT**

Issued To:

**Allegan County Road Commission
1308 Lincoln Road
Allegan, Michigan 49010**

Permit No: WRP030061 v.1
Submission No.: HP7-SXRM-W275A
Site Name: 03 - Taft Road Reconstruction
Issued: July 29, 2021
Revised:
Expires: July 29, 2026

This permit is being issued by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division (WRD), under the provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA); specifically:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Part 301, Inland Lakes and Streams | <input type="checkbox"/> Part 323, Shorelands Protection and Management |
| <input checked="" type="checkbox"/> Part 303, Wetlands Protection | <input type="checkbox"/> Part 325, Great Lakes Submerged Lands |
| <input type="checkbox"/> Part 315, Dam Safety | <input type="checkbox"/> Part 353, Sand Dunes Protection and Management |
| <input type="checkbox"/> Part 31, Water Resources Protection (Floodplain Regulatory Authority) | |

Permission is hereby granted, based on permittee assurance of adherence to State of Michigan requirements and permit conditions, to:

Authorized Activity:

Widen and reconstruct Taft Road from 124th Avenue to just south of 122nd Avenue for safety improvements. Replace three existing Taft Road crossings of three separate unnamed streams, as follows:

Culvert 1 (Station 32+85): Remove the existing perched structure. Install a single, 82 foot long by 2.5-foot diameter precast concrete culvert, with no recessing.

Culvert 2 (Station 46+52): Remove the existing structure. Install a single 72 foot long by 3-foot diameter precast concrete culvert, with no recessing.

Culvert 3 (Station 78+37): Remove the existing structure. Install a single, 68 foot long by 2-foot diameter precast concrete culvert, recessed 0.5 feet.

Place road fill and riprap slope protection at each crossing. Widening will impact 0.02 acres of adjacent wetland.

Waterbody Affected: Various unnamed tributary streams, wetlands
Property Location: Allegan County, Valley Township, Town/Range/Section 02N14W01

**EGLE-WRD
WRP030061 v1.0
Approved
Issued On:07/29/2021
Expires On:07/29/2026**

Authority granted by this permit is subject to the following limitations:

- A. Initiation of any work on the permitted project confirms the permittee's acceptance and agreement to comply with all terms and conditions of this permit.
- B. The permittee, in exercising the authority granted by this permit, shall not cause unlawful pollution as defined by Part 31 of the NREPA.
- C. This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
- D. All work shall be completed in accordance with the approved plans and specifications submitted with the application and/or plans and specifications attached to this permit.
- E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved.
- F. It is made a requirement of this permit that the permittee give notice to public utilities in accordance with 2013 PA 174 (Act 174) and comply with each of the requirements of Act 174.
- G. This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits, or complying with other state statutes.
- H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his rights.
- I. Permittee shall notify EGLE within one week after the completion of the activity authorized by this permit.
- J. This permit shall not be assigned or transferred without the written approval of EGLE.
- K. Failure to comply with conditions of this permit may subject the permittee to revocation of permit and criminal and/or civil action as cited by the specific state act, federal act, and/or rule under which this permit is granted.
- L. All dredged or excavated materials shall be disposed of in an upland site (outside of floodplains, unless exempt under Part 31 of the NREPA, and wetlands).
- M. In issuing this permit, EGLE has relied on the information and data that the permittee has provided in connection with the submitted application for permit. If, subsequent to the issuance of a permit, such information and data prove to be false, incomplete, or inaccurate, EGLE may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.
- N. The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents, and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representative of the permittee, undertaken in connection with this permit. The permittee's obligation to indemnify the State of Michigan applies only if the state: (1) provides the permittee or its designated representative written notice of the claim or cause of action within 30 days after it is received by the state, and (2) consents to the permittee's participation in the proceeding on the claim or cause of action. It does not apply to contested case proceedings under the Administrative Procedures Act, 1969 PA 306, as amended, challenging the permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.
- O. Noncompliance with these terms and conditions and/or the initiation of other regulated activities not specifically authorized shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, EGLE may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.
- P. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity from EGLE. Such revision request shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by EGLE prior to being implemented.
- Q. This permit may be transferred to another person upon written approval of EGLE. The permittee must submit a written request to EGLE to transfer the permit to the new owner. The new owner must also submit a written request to EGLE to accept transfer. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties that includes all the above information may be provided to EGLE. EGLE will review the request and, if approved, will provide written notification to the new owner.

- R. Prior to initiating permitted construction, the permittee is required to provide a copy of the permit to the contractor(s) for review. The property owner, contractor(s), and any agent involved in exercising the permit are held responsible to ensure that the project is constructed in accordance with all drawings and specifications. The contractor is required to provide a copy of the permit to all subcontractors doing work authorized by the permit.
- S. Construction must be undertaken and completed during the dry period of the wetland. If the area does not dry out, construction shall be done on equipment mats to prevent compaction of the soil.
- T. Authority granted by this permit does not waive permit requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent (CEA).
- U. Authority granted by this permit does not waive permit requirements under the authority of Part 305, Natural Rivers, of the NREPA. A Natural Rivers Zoning Permit may be required for construction, land alteration, streambank stabilization, or vegetation removal along or near a natural river.
- V. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.
- W. Unless specifically stated in this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the water body are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.
- X. For projects with potential impacts to fish spawning or migration, no work shall occur within fish spawning or migration timelines (i.e., windows) unless otherwise approved in writing by the Michigan Department of Natural Resources MDNR), Fisheries Division.
- Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:
1. All work shall be completed in accordance with plans attached and kept on file with EGLE, WRD, Transportation Review Unit.
 2. Authority granted by this permit does not waive compliance requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA. Any discharge of sediment into waters of the state and/or off the road right-of-way is a violation of this permit, Part 91, and Part 31, Water Resources Protection, of the NREPA. A violation of these parts subjects the permittee to potential fines and penalties.
 3. This permit does not authorize or sanction work that has been completed in violation of applicable federal, state, or local statutes.
 4. The permittee is responsible for acquiring all necessary easements or rights-of-way before commencing any work authorized by this permit. All construction operations relating to, or part of this project shall be confined to the existing right-of-way limits or other acquired easements.
 5. Temporary soil erosion and sedimentation control measures shall be installed before or upon commencement of the earth change and shall be maintained daily. Temporary soil erosion and sedimentation control measures shall be maintained until permanent soil erosion and sedimentation control measures are in place and the area is stabilized. Permanent soil erosion and sedimentation control measures for all slopes, channels, ditches, or any disturbed area shall be installed within five (5) calendar days after final grading, or the final earth change has been completed.
 6. All raw areas in uplands resulting from the permitted construction activity shall be effectively stabilized with sod and/or seed and mulch (or other technology specified by this permit or project plans) in a sufficient quantity and manner to prevent erosion and any potential siltation to surface waters or wetlands. Temporary stabilization measures shall be installed before or upon commencement of the permitted activity and shall be maintained until permanent measures are in place. Permanent measures shall be in place within five (5) days of achieving final grade.

7. All raw earth within 100 feet of a lake, stream, or wetland that is not brought to final stabilization by the end of the active growing season shall be temporarily stabilized with mulch blankets in accordance with the following dates: September 20th for the Upper Peninsula, October 1st for the Lower Peninsula north of US-10, and October 10th for the Lower Peninsula south of US-10.
8. This permit placard shall be kept posted at the work site, in a prominent location at all times for the duration of the project, or until permit expiration.
9. This permit is being issued for the maximum time allowed and no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee's acceptance of this condition. The permit, when signed by EGLE, will be for a five-year period beginning at the date of issuance. If the project is not completed by the expiration date, a new permit must be sought.
10. All dredge/excavated spoils including organic and inorganic soils, vegetation, and other material removed shall be placed on upland (non-wetland, non-floodplain or non-bottomland), prepared for stabilization, revegetated and reseeded with native Michigan species appropriate to the site, and mulched in such a manner so as to prevent and ensure against erosion of any material into any waterbody, wetland, or floodplain.
11. All riprap shall be properly sized and graded based on wave action and velocity and shall consist of clean natural field stone or rock (free of paint, soil or other fines, asphalt, soluble chemicals, or organic material).
12. During removal or repair of the existing structure, every precaution shall be taken to prevent debris from entering any watercourse. Any debris reaching the watercourse during the removal and/or reconstruction of the structure shall be immediately retrieved from the water. All material shall be disposed of in an acceptable manner consistent with local, state, and federal regulations.
13. Prior to the removal of the existing structures, cofferdams of steel sheet piling, gravel bags, clean stone, coarse aggregate, concrete or other acceptable barriers shall be installed to isolate all construction activity from the water. The barriers shall be maintained in good working order throughout the duration of the project. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site.
14. All cofferdam and temporary steel sheet pile shall then be removed in its entirety, unless specifically shown to be left in place on the accepted plans. Cofferdam and sheet pile that is left in place shall be cut off at the elevation shown on the plans and shall be a minimum of one foot below the stream bottom.
15. The existing structure shall be kept open to pass the stream flow during removal of the existing road fill.
16. The placement of the new culvert and the initial placement of fill in the stream shall be done immediately after removal of the existing culvert. The placement shall be conducted in such a manner that all flow is immediately passed through the new culverts, allowing the major placement of fill to be done in the dry or in still water where erosion and sedimentation will be minimized. The fill material used in this initial placement shall be washed gravel, coarse aggregate, or rock and shall be placed at both ends of the culvert to a level above normal water level before backfill material is placed.
17. The culvert shall be installed to align with the center line of the existing stream at both the inlet and outlet ends and must be recessed into the stream bed to provide a natural channel substrate throughout the structure, as shown on the approved plans.

18. Road fill side slopes shall not be steeper than 1-on-2 (one vertical to two horizontal) except where headwalls of reinforced concrete, mortar masonry, dry masonry, or other acceptable methods are used.
19. Road fill side slopes terminating in the stream and any raw streambanks resulting from the construction shall be stabilized with temporary measures in accordance with appropriate Best Management Practices based on site conditions, and if necessary, may be riprapped extending above the ordinary high-water mark, before or upon commencement of the permitted activity. Temporary stabilization measures shall be maintained until permanent measures are in place.
20. All other road fill slopes, ditches, and other raw areas draining directly to the stream may be protected with riprap, sod and/or seed and mulch as may be necessary to provide effective erosion protection. The placement of riprap shall be limited to the minimum necessary to ensure proper stabilization of the side slopes and fill in the immediate vicinity of the structure.
21. If the project, or any portion of the project, is stopped and lies incomplete for any length of time other than that encountered in a normal work week, every precaution shall be taken to protect the incomplete work from erosion, including the placement of temporary gravel bag riprap, temporary seed and mulch, or other acceptable temporary protection.
22. No work shall be done in the stream during periods of above-normal flows except as necessary to prevent erosion.
23. To avoid disturbance of Northern long-eared bat, which is federally listed as a threatened species, or Indiana bat, which is federally listed as an endangered species, any tree larger than three inches in diameter shall not be cut between April 1 and September 30 of any year.
24. This project occurs within an area that is considered to be occupied by the federally threatened eastern massasauga rattlesnake (EMR). The following BMPs are necessary to avoid potential take of EMR:
 - Use wildlife-safe materials for erosion control and site restoration. Eliminate the use of erosion control products containing plastic mesh netting or other similar materials that could entangle EMR.
 - To increase human safety and awareness of EMR, those implementing the project should first watch MDNR's "60-Second Snakes: The Eastern Massasauga Rattlesnake" video (available at https://youtu.be/~PFnXe_e02w), or review the EMR factsheet (available at <https://www.fws.gov/midwest/endangered/reptiles/eama/pdf/EMRfactsheetSep2016.pdf>), or call (517) 351-2555.
 - During project implementation, require reporting of any federally listed species, including EMR, to the Service within 24 hours.
 - Exclusionary fencing should be used as a barrier around the project site that occurs within or adjacent to EMR habitat. Once the fence is installed the construction area should be cleared by qualified individual who has demonstrated experience in identification of EMR or otherwise approved by the Service. The exclusionary fencing should be walked weekly to ensure the integrity of the barrier. Once construction activities are complete, the exclusionary fence should be removed from the site.
 - The project site should be revegetated with appropriate native or natural wetland plants to maintain the quality of the existing wetland and prevent the establishment of invasive species.

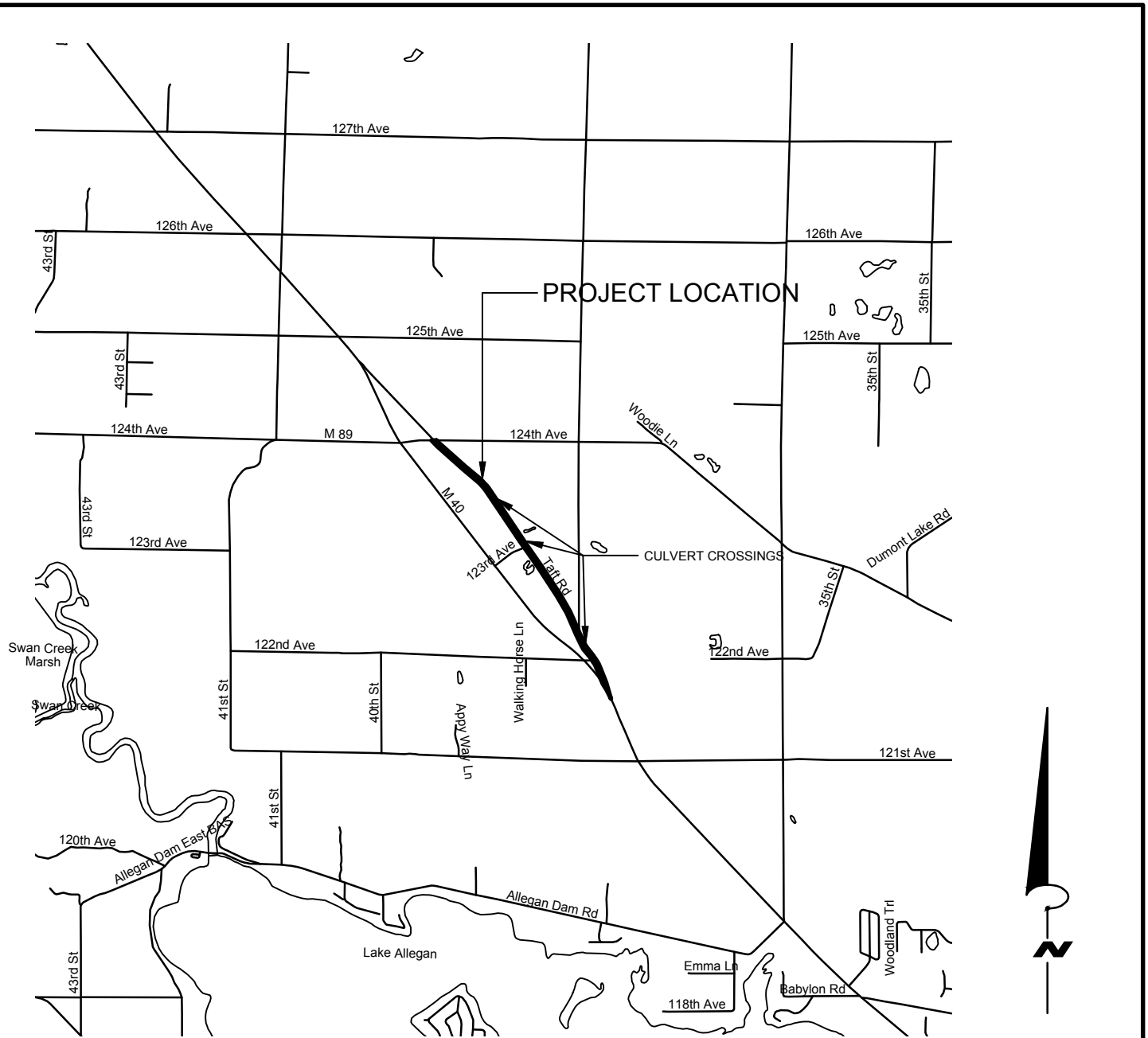
- 25. Prior to the start of construction, all adjacent non-work wetland areas shall be protected by properly trenched sedimentation barrier to prevent sediment from entering the wetland. Orange construction fencing shall be installed as needed to prohibit construction personnel and equipment from entering or performing work in these areas. Fence shall be maintained daily throughout the construction process. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site, the sedimentation barrier shall then be removed in its entirety and the area restored to its original configuration and cover.**
- 26. Stormwater shall not directly outlet to the stream.**



Issued By:

Holly Vickers
Transportation Review Unit
Water Resources Division
616-295-2787

cc: Valley Township Clerk
Allegan County Drain Commissioner
Allegan County CEA
Jason Combs, EGLE
Janelle Hohm, EGLE
Brian Gunderman, MDNR, Fisheries



DRIVING DIRECTIONS:

FROM GRAND RAPIDS:

TAKE US-196 WEST TO M-40 S/LINCOLN RD (EXIT 49), TURN LEFT ON LINCOLN RD AND HEAD SOUTHEAST APPROX. 12.5 MILES. TURN LEFT ON 124TH AVE AND HEAD EAST APPROX. 0.2 MILES. TURN RIGHT ON TAFT ROAD. ALL OF THE CULVERT LOCATIONS ARE IN REGARD TO THE INTERSECTION OF 124TH AVE AND TAFT ROAD. THE FIRST CULVERT IS APPROX. 2185 FT SOUTHEAST, THE SECOND IS APPROX. 3500 FT SOUTHEAST, THE THIRD IS APPROX. 6740 FT SOUTHEAST OF THE INTERSECTION.

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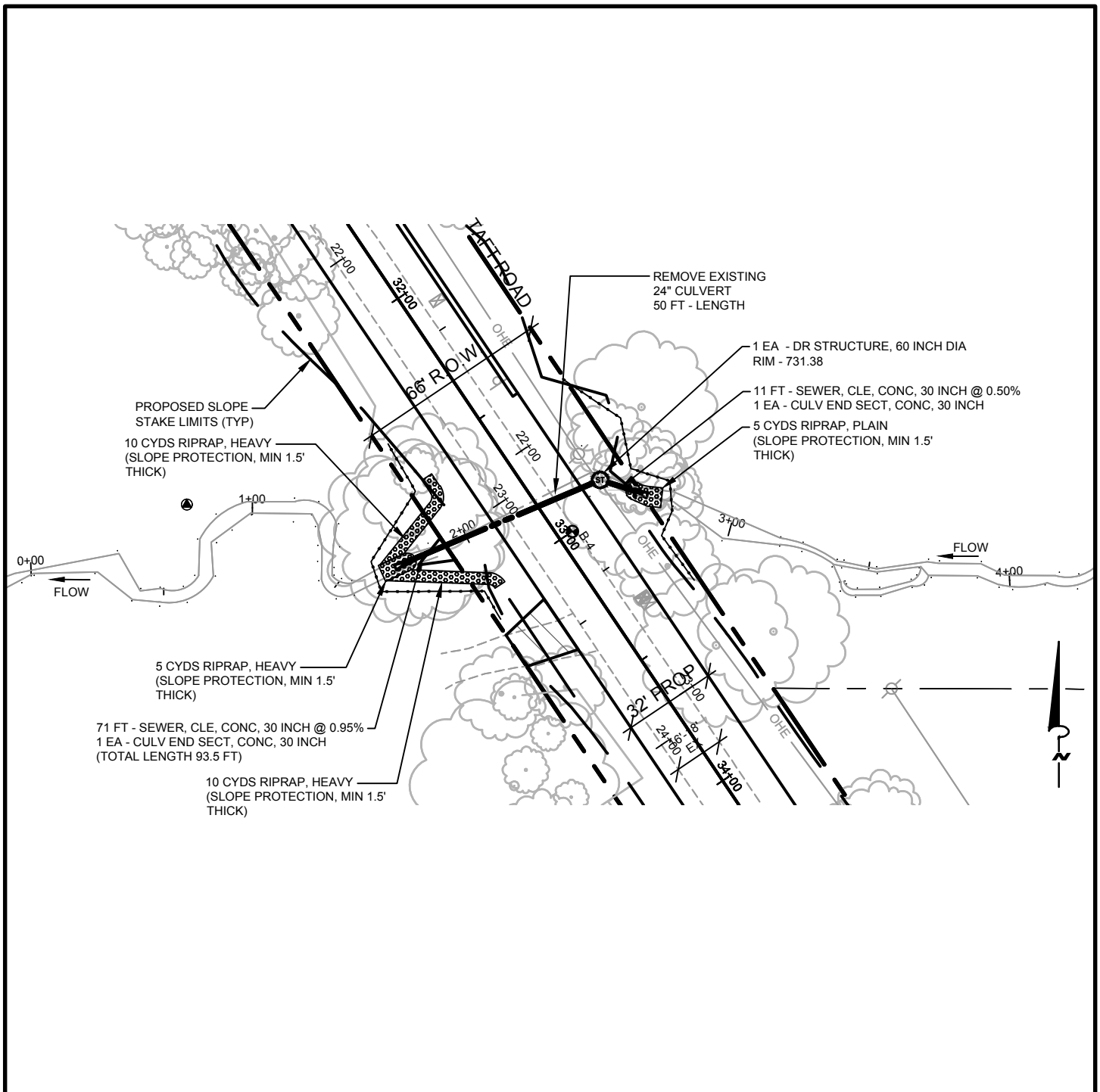
LOCATION MAP

APPLICANT: ALLEGAN COUNTY ROAD COMMISSION
 1308 LINCOLN ROAD
 ALLEGAN, MI 49010-9762
 WATERWAY:
 CITY:
 TOWNSHIP: VALLEY TOWNSHIP
 COUNTY: ALLEGAN
 SHEET: 1 OF 13
 DATE: MAY 2021
 DATUM: NAVD 88

JOB NO: 212003

EGLE RD
 WRP030061 v1.0

Approved
 Issued On: 07/29/2021
 Expires On: 07/29/2026



PROPOSED SLOPE
STAKE LIMITS (TYP)

10 CYDS RIPRAP, HEAVY
(SLOPE PROTECTION, MIN 1.5'
THICK)

5 CYDS RIPRAP, HEAVY
(SLOPE PROTECTION, MIN 1.5'
THICK)

71 FT - SEWER, CLE, CONC, 30 INCH @ 0.95%
1 EA - CULV END SECT, CONC, 30 INCH
(TOTAL LENGTH 93.5 FT)

10 CYDS RIPRAP, HEAVY
(SLOPE PROTECTION, MIN 1.5'
THICK)

REMOVE EXISTING
24" CULVERT
50 FT - LENGTH

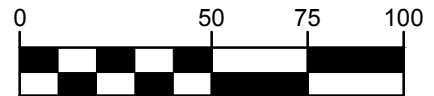
1 EA - DR STRUCTURE, 60 INCH DIA
RIM - 731.38

11 FT - SEWER, CLE, CONC, 30 INCH @ 0.50%
1 EA - CULV END SECT, CONC, 30 INCH

5 CYDS RIPRAP, PLAIN
(SLOPE PROTECTION, MIN 1.5'
THICK)

CONSTRUCTION STAGING

1. INSTALL EROSION CONTROL MEASURES
2. CONSTRUCT BYPASS/DEWATERING SYSTEM
3. REMOVE EXISTING CULVERT
4. INSTALL PROPOSED CULVERT
5. BACKFILL ROADWAY AND ASSOCIATED SLOPES
6. PLACE RESTORATION AND SLOPE PROTECTION
7. REMOVE EROSION CONTROL MEASURES ONCE STABILIZED



1 inch = 50 ft.
HORIZONTAL SCALE 1" = 50'

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CULV 1 (STA. 32+85) PLAN VIEW

APPLICANT: ALLEGAN COUNTY ROAD COMMISSION
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

WATERWAY:
CITY:
TOWNSHIP: VALLEY TOWNSHIP
COUNTY: ALLEGAN

SHEET: 2 OF 13
DATE: MAY 2021
DATUM: NAVD 88

JOB NO: 212003

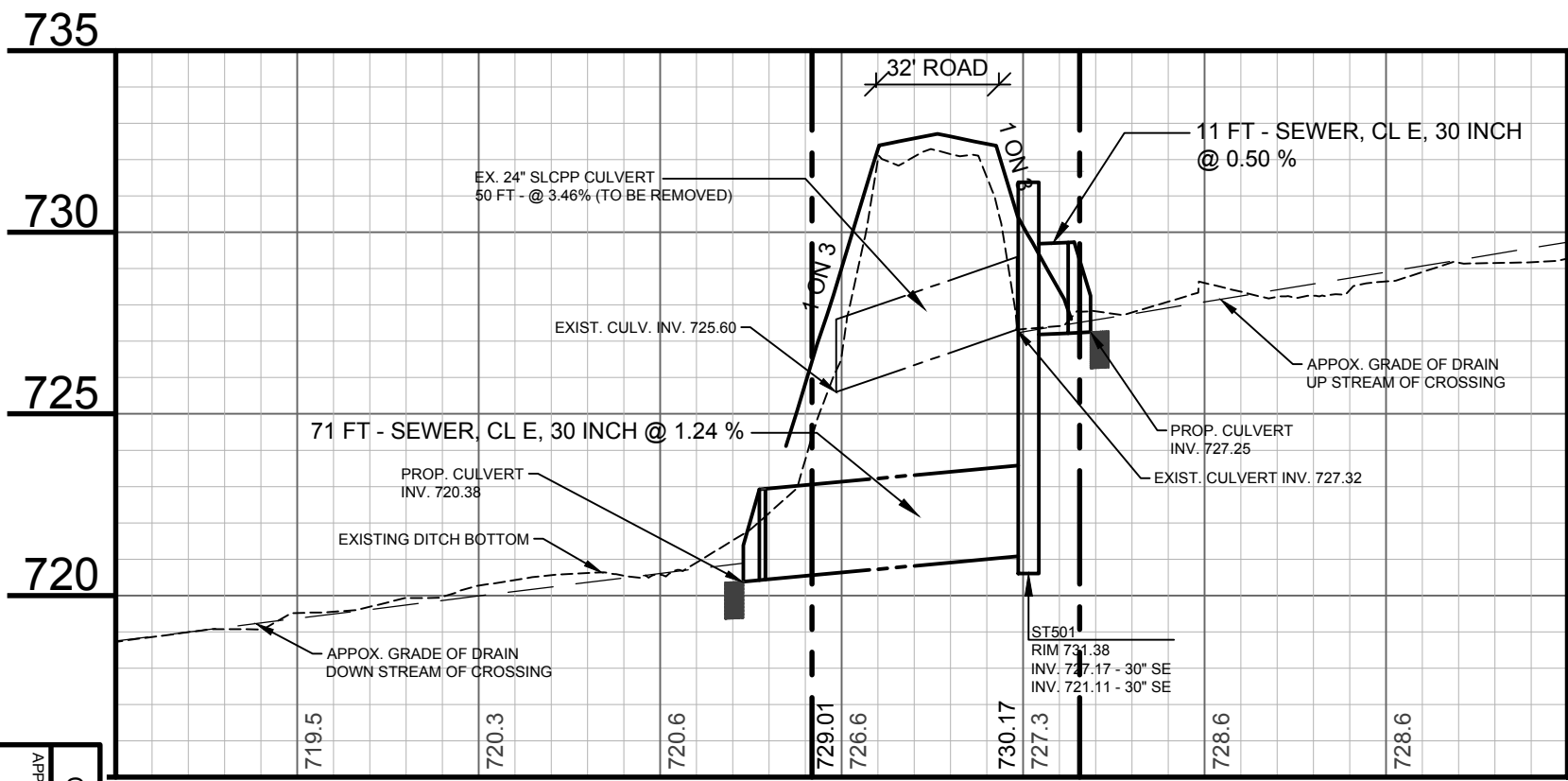
EGLE - D02
WRP030061 v1.0

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735
730
725
720
715



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CULV 1 (STA. 32+85) PROFILE VIEW

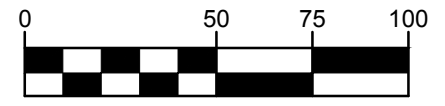
APPLICANT: ALLEGAN COUNTY ROAD COMMISSION
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

WATERWAY: VALLEY TOWNSHIP
CITY: ALLEGAN
COUNTY: ALLEGAN
DATE: MAY 2021
DATUM: NAVD 88

JOB NO.: 212003
D03

CONSTRUCTION STAGING

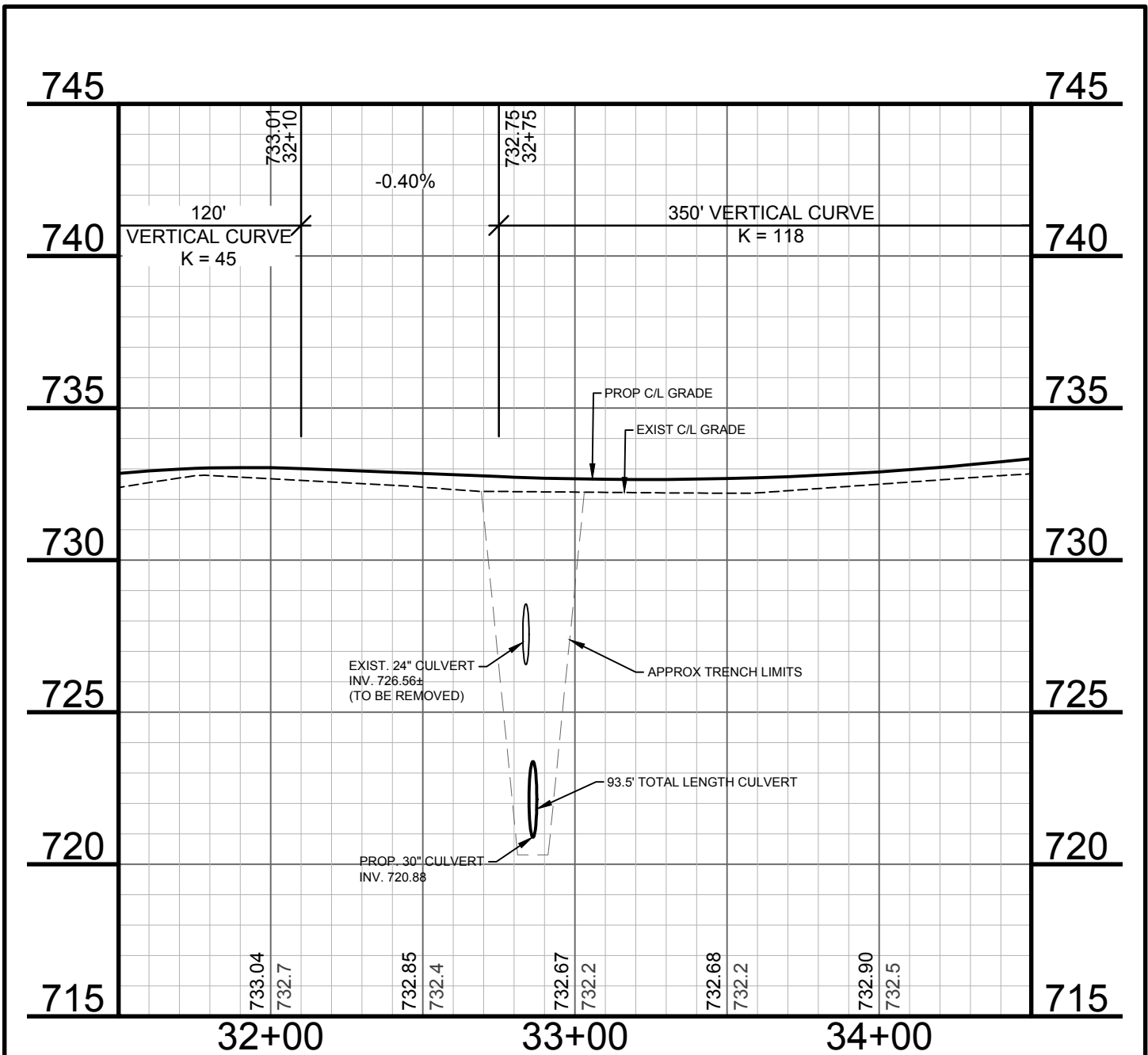
1. INSTALL EROSION CONTROL MEASURES
2. CONSTRUCT BYPASS/DEWATERING SYSTEM
3. REMOVE EXISTING CULVERT
4. INSTALL PROPOSED CULVERT
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6. PLACE RESTORATION AND SLOPE PROTECTION
7. REMOVE EROSION CONTROL MEASURES ONCE STABILIZED



1 inch = 50 ft.
HORIZONTAL SCALE 1" = 50'
VERTICAL SCALE 1" = 5'

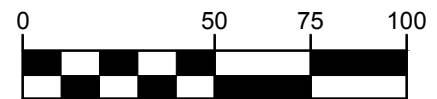
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WRP030061 v1.0

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Expires On: 07/29/2026



PROFILE - TAFT ROAD CENTERLINE

SCALE: 1" = 50'H; 5'V



1 inch = 50 ft.

HORIZONTAL SCALE 1" = 50'

VERTICAL SCALE 1" = 5'

CULV 1 (STA. 32+85) ELEVATION VIEW

APPLICANT: ALLEGAN COUNTY ROAD COMMISSION
 1308 LINCOLN ROAD
 ALLEGAN, MI 49010-9762

WATERWAY:
 CITY:
 TOWNSHIP: VALLEY TOWNSHIP
 COUNTY: ALLEGAN

SHEET: 4 OF 13
 DATE: MAY 2021
 DATUM: NAVD 88

JOB NO: 212003

EGLE RD
 WRP030061 v1.0

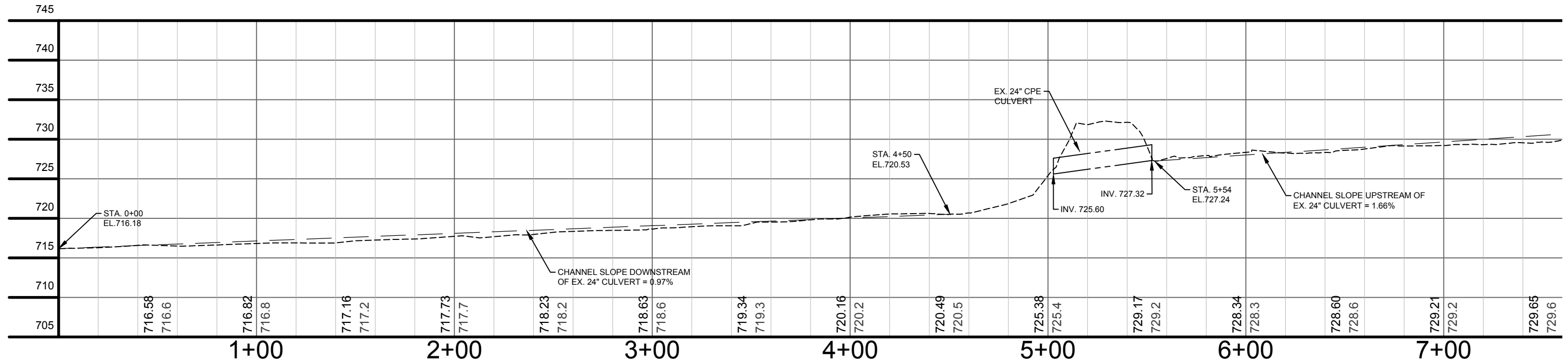
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PREPARED BY:

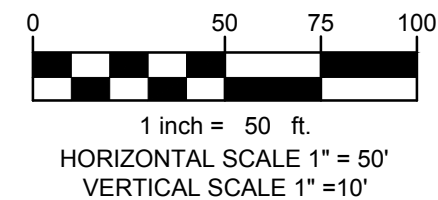
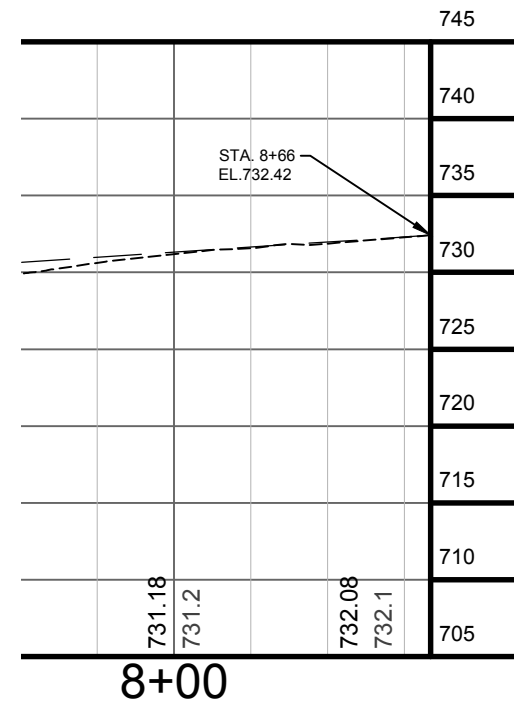


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Culvert Drain Slope - Sta 32+85



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CULV 1 (STA. 32+85) - STREAM PROFILE

APPLICANT: ALLEGAN COUNTY ROAD COMMISSION
 1308 LINCOLN ROAD
 ALLEGAN, MI 49010-9762
 WATERWAY:
 CITY:
 TOWNSHIP: VALLEY TOWNSHIP
 COUNTY: ALLEGAN
 SHEET: 13 OF 13
 DATE: MAY 2021
 DATUM: NAVD 88

EGLE-WRD
 WRP030061
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 Issued On: 07/29/2021
 Expires On: 07/29/2026

745

740

735

730

745

740

735

730

2+00

3+00

4+00

5+00

56 FT - CULV, CL E, 36 INCH @ 0.50%

EX. 36" CONC CULVERT 50 FT (W/ 2 END SECTIONS) @ 0.23% (TO BE REMOVED)

EX. 36" CONC CULVERT @ 123RD AVENUE

EXIST. CULV. INV. 736.23
PROP. CULVERT INV. 735.36

EXISTING DITCH BOTTOM

32' ROAD

1 ON 3

1 ON 3

EXIST. CULVERT INV. 736.12

EXISTING DITCH BOTTOM

PROP. CULVERT INV. 735.72

72'

741.07
740.1

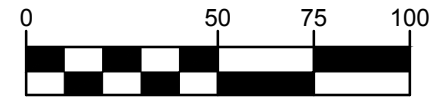
738.01
736.8

738.9

740.0

CONSTRUCTION STAGING

1. INSTALL EROSION CONTROL MEASURES
2. CONSTRUCT BYPASS/DEWATERING SYSTEM
3. REMOVE EXISTING CULVERT
4. INSTALL PROPOSED CULVERT
5. BACKFILL ROADWAY AND ASSOCIATED SLOPES
6. PLACE RESTORATION AND SLOPE PROTECTION
7. REMOVE EROSION CONTROL MEASURES ONCE STABILIZED



1 inch = 50 ft.
 HORIZONTAL SCALE 1" = 50'
 VERTICAL SCALE 1" = 5'

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CULV 2 (STA. 46+52) PROFILE VIEW

APPLICANT: ALLEGAN COUNTY ROAD COMMISSION
 1308 LINCOLN ROAD
 ALLEGAN, MI 49010-9762

WATERWAY:

CITY:

TOWNSHIP: VALLEY TOWNSHIP

COUNTY: ALLEGAN

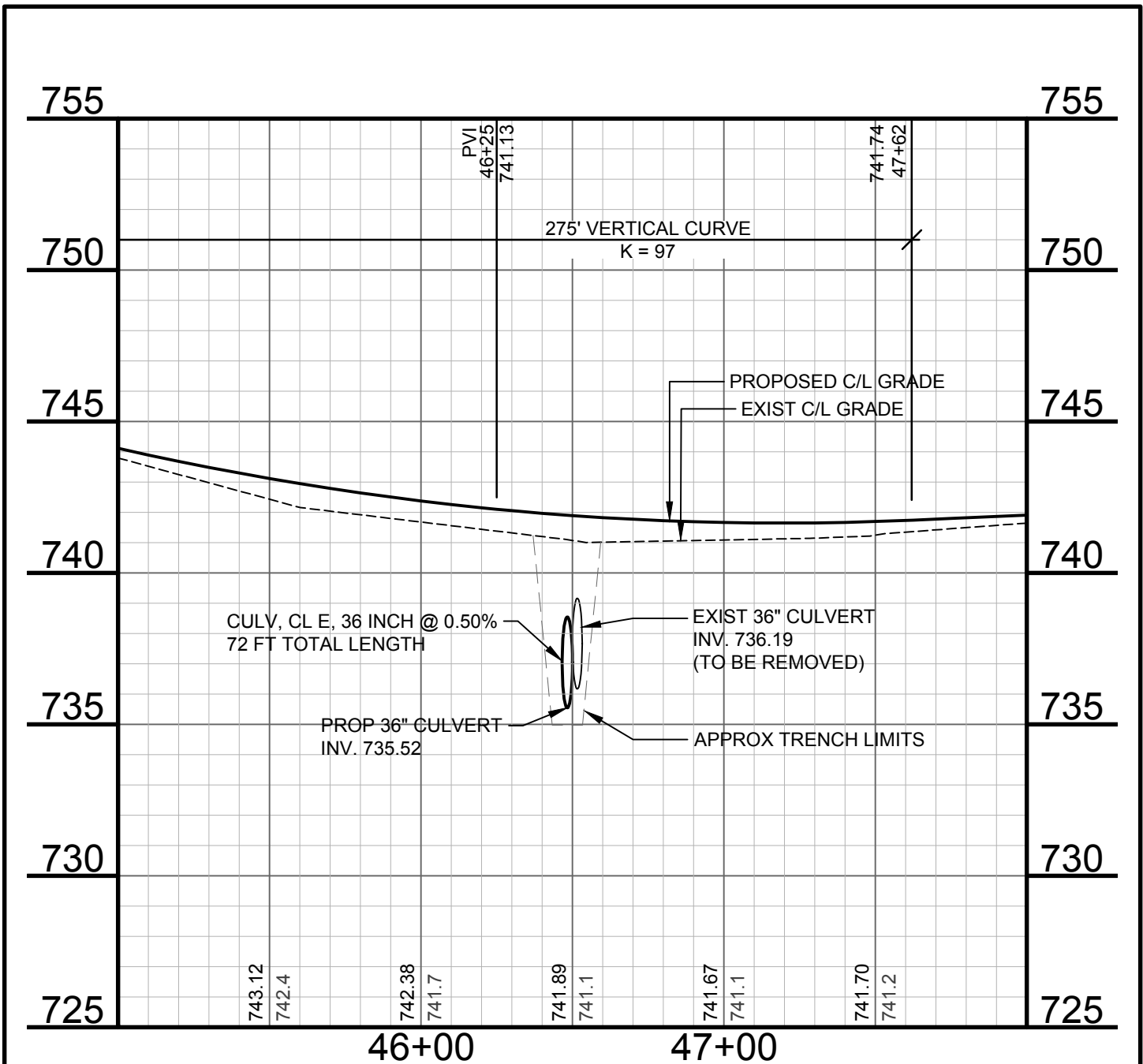
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DATE: MAY 2021

DATUM: NAVD 88

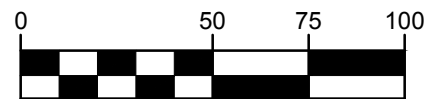
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PROFILE - TAFT ROAD CENTERLINE

SCALE: 1" = 50'H; 5'V



1 inch = 50 ft.

HORIZONTAL SCALE 1" = 50'

VERTICAL SCALE 1" = 5'

CULV 2 (STA. 46+52) ELEVATION VIEW

APPLICANT: ALLEGAN COUNTY ROAD COMMISSION
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

WATERWAY:

CITY:

TOWNSHIP: VALLEY TOWNSHIP

COUNTY: ALLEGAN

SHEET: 7 OF 13

DATE: MAY 2021

DATUM: NAVD 88

JOB NO: 212003

EGLE RD
WRP030061 v1.0

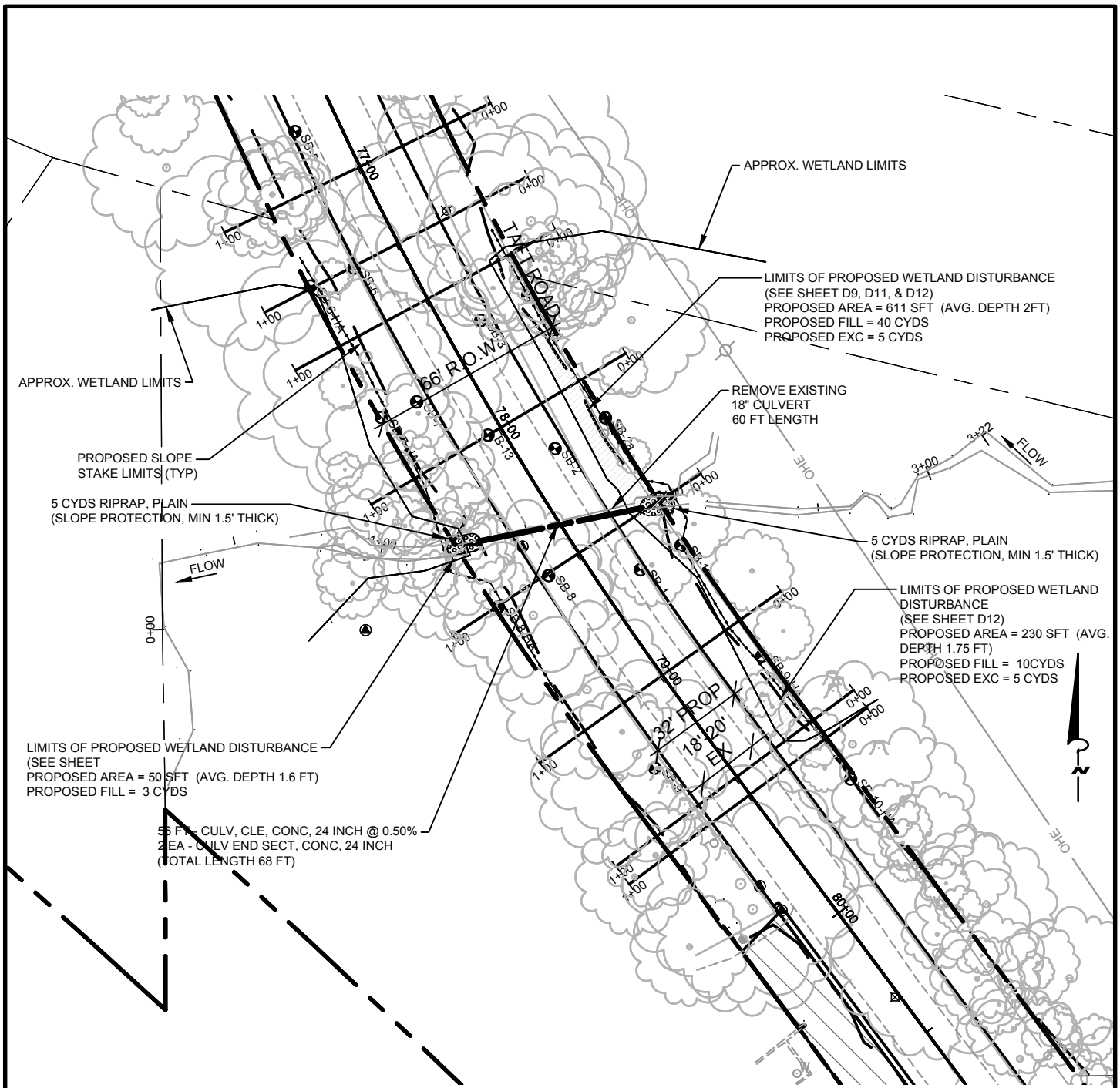
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APPROX. WETLAND LIMITS

PROPOSED SLOPE STAKE LIMITS (TYP)
5 CYDS RIPRAP, PLAIN (SLOPE PROTECTION, MIN 1.5' THICK)

LIMITS OF PROPOSED WETLAND DISTURBANCE (SEE SHEET PROPOSED AREA = 50 SFT (AVG. DEPTH 1.6 FT) PROPOSED FILL = 3 CYDS

53' F - CULV. CLE. CONC, 24 INCH @ 0.50%
2EA - CULV END SECT, CONC, 24 INCH (TOTAL LENGTH 68 FT)

APPROX. WETLAND LIMITS

LIMITS OF PROPOSED WETLAND DISTURBANCE (SEE SHEET D9, D11, & D12) PROPOSED AREA = 611 SFT (AVG. DEPTH 2FT) PROPOSED FILL = 40 CYDS PROPOSED EXC = 5 CYDS

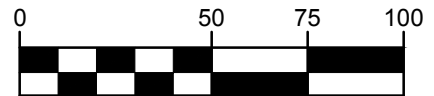
REMOVE EXISTING 18" CULVERT 60 FT LENGTH

5 CYDS RIPRAP, PLAIN (SLOPE PROTECTION, MIN 1.5' THICK)

LIMITS OF PROPOSED WETLAND DISTURBANCE (SEE SHEET D12) PROPOSED AREA = 230 SFT (AVG. DEPTH 1.75 FT) PROPOSED FILL = 10CYDS PROPOSED EXC = 5 CYDS

CONSTRUCTION STAGING

1. INSTALL EROSION CONTROL MEASURES
2. CONSTRUCT BYPASS/DEWATERING SYSTEM
3. REMOVE EXISTING CULVERT
4. INSTALL PROPOSED CULVERT
5. BACKFILL ROADWAY AND ASSOCIATED SLOPES
6. PLACE RESTORATION AND SLOPE PROTECTION
7. REMOVE EROSION CONTROL MEASURES ONCE STABILIZED



1 inch = 50 ft.
HORIZONTAL SCALE 1" = 50'
VERTICAL SCALE 1" = 5'

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CULV 3 (STA. 78+37) PLAN VIEW

APPLICANT: ALLEGAN COUNTY ROAD COMMISSION
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

WATERWAY:
CITY:
TOWNSHIP: VALLEY TOWNSHIP
COUNTY: ALLEGAN

SHEET: 8 OF 13
DATE: MAY 2021
DATUM: NAVD 88

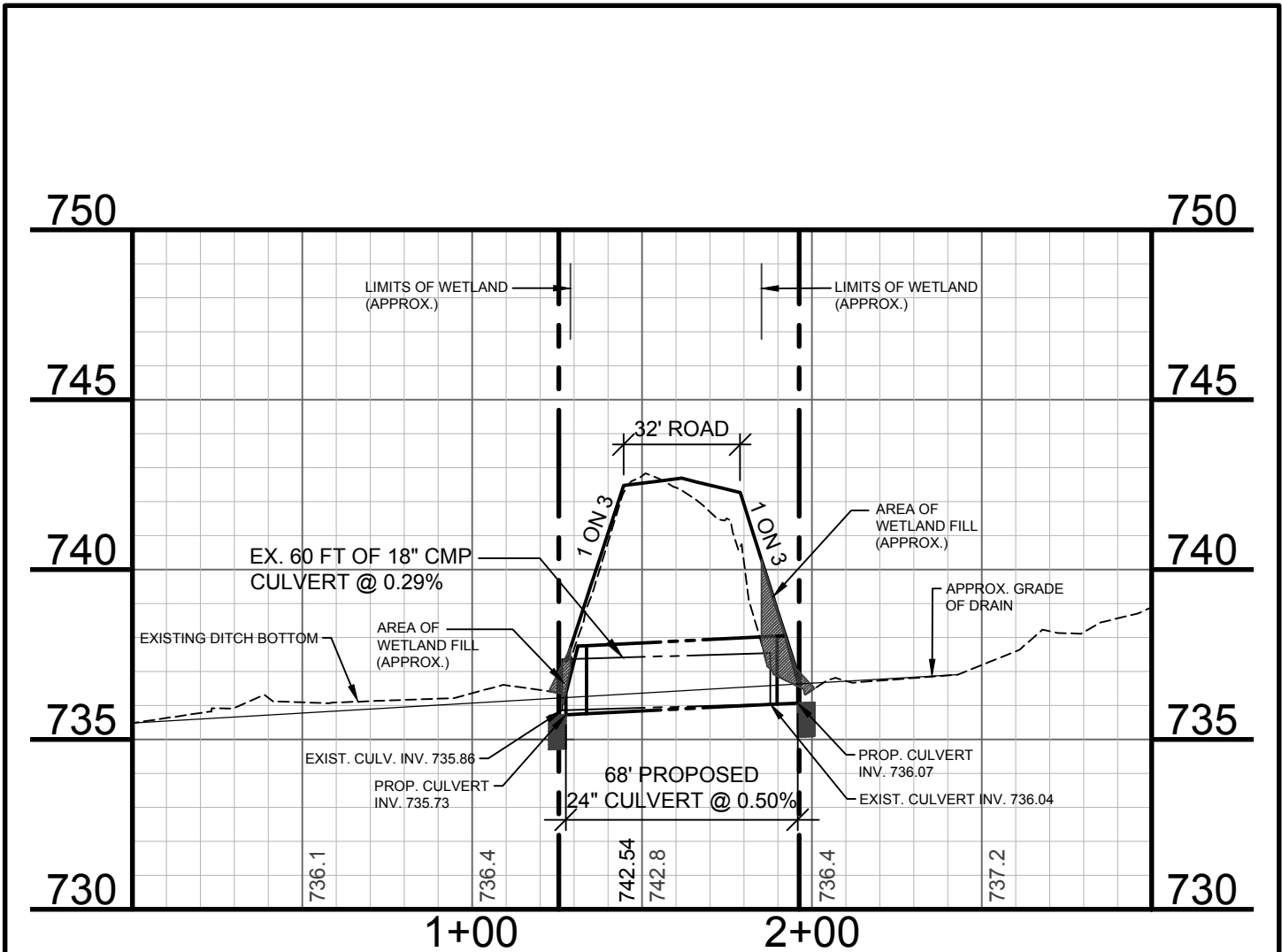
JOB NO: 212003
EGLE-D08

WRP030061 v1.0

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Expires On: 07/29/2026

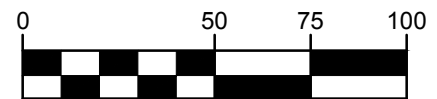
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CONSTRUCTION STAGING

1. INSTALL EROSION CONTROL MEASURES
2. CONSTRUCT BYPASS/DEWATERING SYSTEM
3. REMOVE EXISTING CULVERT
4. INSTALL PROPOSED CULVERT
5. BACKFILL ROADWAY AND ASSOCIATED SLOPES
6. PLACE RESTORATION AND SLOPE PROTECTION
7. REMOVE EROSION CONTROL MEASURES ONCE STABILIZED



1 inch = 50 ft.

HORIZONTAL SCALE 1" = 50'

VERTICAL SCALE 1" = 5'

CULV 3 (STA. 78+37) PROFILE VIEW

APPLICANT: ALLEGAN COUNTY ROAD COMMISSION
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

WATERWAY:
CITY:
TOWNSHIP: VALLEY TOWNSHIP
COUNTY: ALLEGAN
SHEET: 9 OF 13
DATE: MAY 2021
DATUM: NAVD 88

JOB NO: 212003

EGLE RD
WRP030061 v1.0

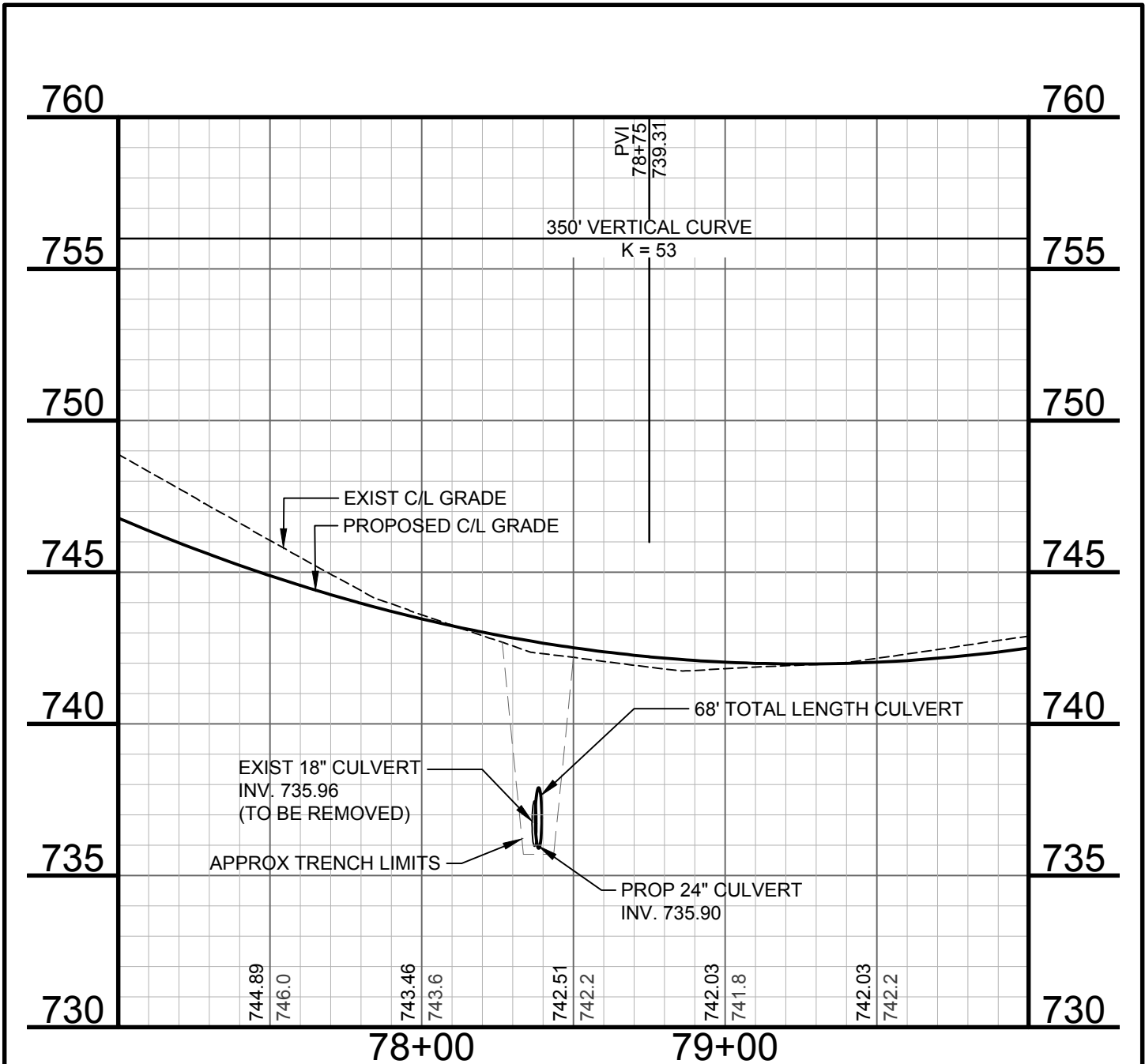
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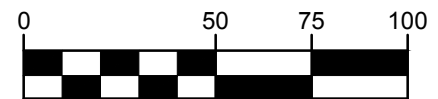
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PROFILE - TAFT ROAD CENTERLINE

SCALE: 1" = 50'H; 5'V



1 inch = 50 ft.

HORIZONTAL SCALE 1" = 50'

VERTICAL SCALE 1" = 5'

CULV 3 (STA. 78+37) ELEVATION VIEW

APPLICANT: ALLEGAN COUNTY ROAD COMMISSION
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762

WATERWAY:
CITY:
TOWNSHIP: VALLEY TOWNSHIP
COUNTY: ALLEGAN
SHEET: 10 OF 13
DATE: MAY 2021
DATUM: NAVD 88

JOB NO: 212003

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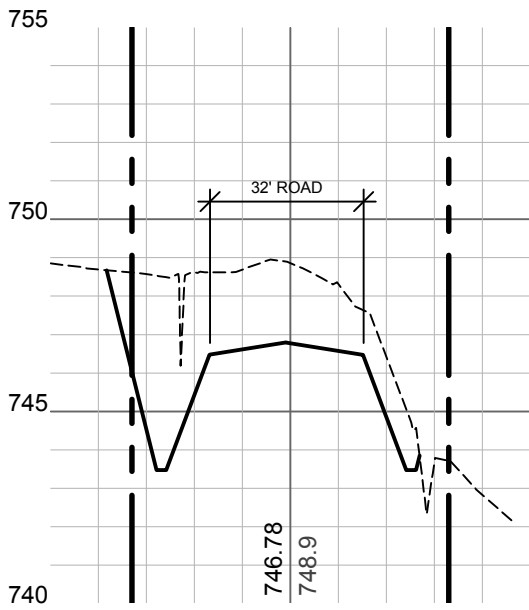
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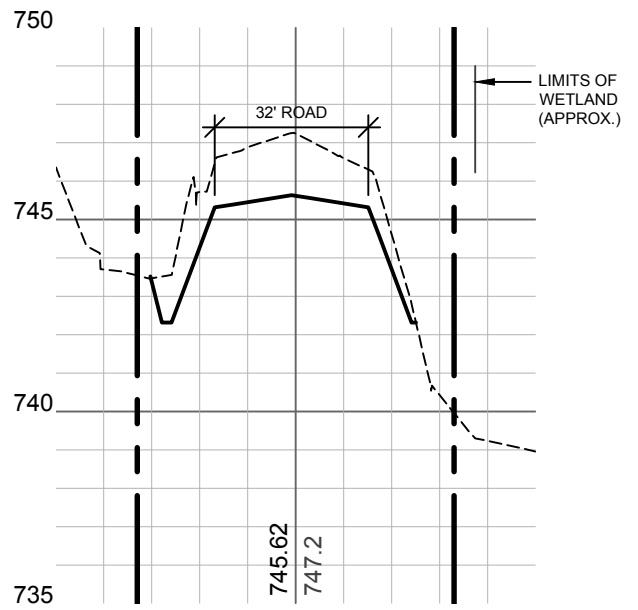
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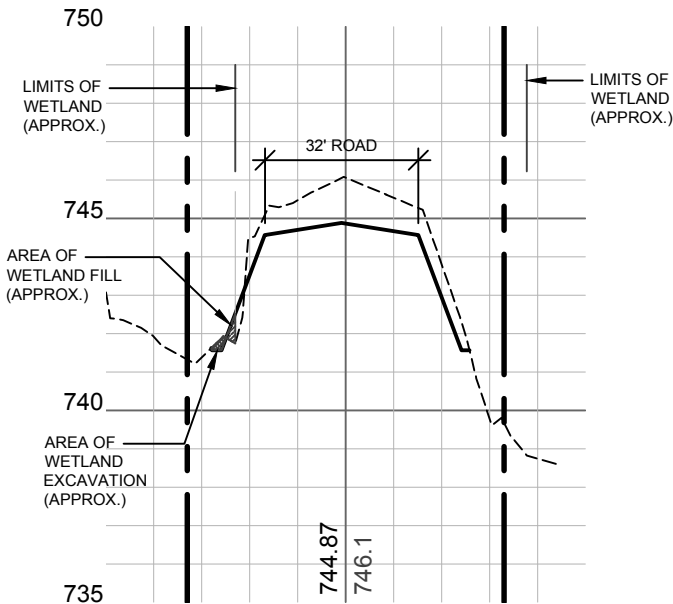
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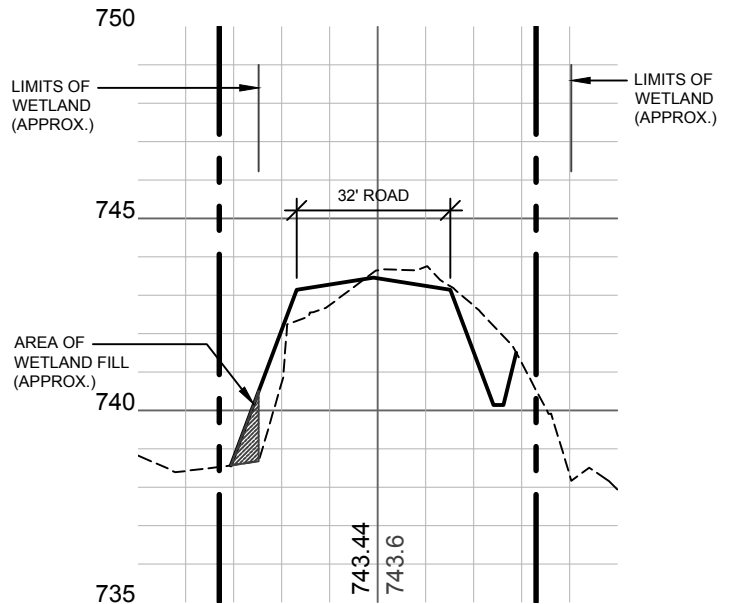
CROSS SECTION
(STA 77+00 - CULVERT 3)



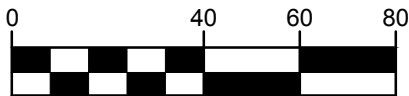
CROSS SECTION
(STA 77+28 - CULVERT 3)



CROSS SECTION
(STA 77+50 - CULVERT 3)



CROSS SECTION
(STA 78+00 - CULVERT 3)



1 inch = 40 ft.
HORIZONTAL SCALE 1" = 40'
VERTICAL SCALE 1" = 5'

PREPARED BY:



BENTON HARBOR KALAMAZOO ALLEGAN ROYAL OAK
269.927.0100 269.327.3532 269.673.8465 248.791.1371

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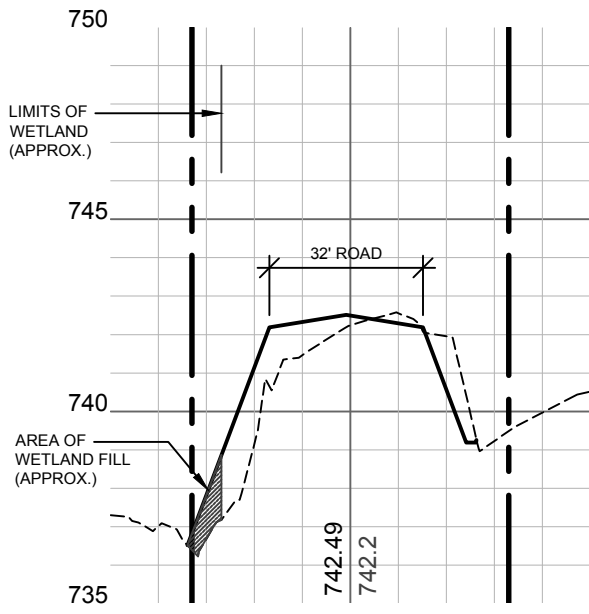
WETLAND AREAS - CULVERT 3

APPLICANT: ALLEGAN COUNTY ROAD COMMISSION
1308 LINCOLN ROAD
ALLEGAN, MI 49010-9762
WATERWAY:
CITY:
TOWNSHIP: VALLEY TOWNSHIP
COUNTY: ALLEGAN
SHEET: 11 OF 13
DATE: MAY 2021
DATUM: NAVD 88

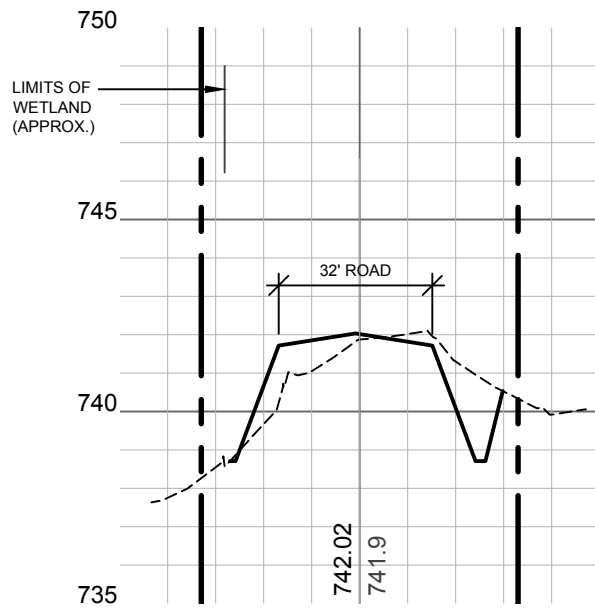
JOB NO: 212003

EGLE RD
WRP030061 v1.0

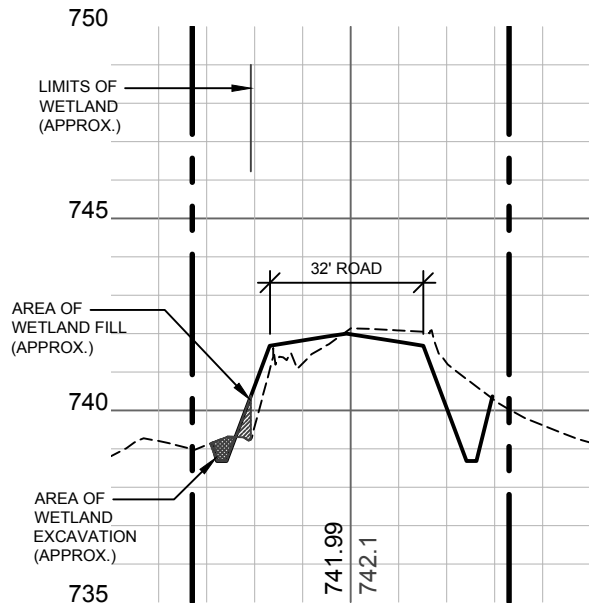
Approved
Issued On: 07/29/2021
Expires On: 07/29/2026



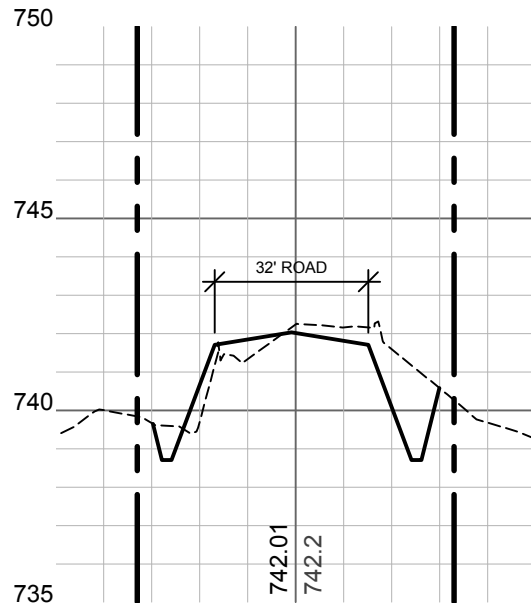
CROSS SECTION
(STA 78+50 - CULVERT 3)



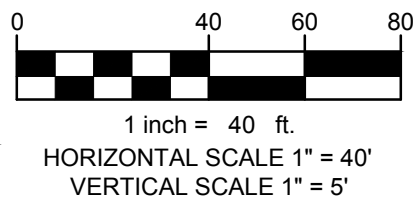
CROSS SECTION
(STA 79+00 - CULVERT 3)



CROSS SECTION
(STA 79+42 - CULVERT 3)



CROSS SECTION
(STA 79+50 - CULVERT 3)



PREPARED BY:



BENTON HARBOR **KALAMAZOO** **ALLEGAN** **ROYAL OAK**
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WETLAND AREAS - CULVERT 3	
APPLICANT:	ALLEGAN COUNTY ROAD COMMISSION 1308 LINCOLN ROAD ALLEGAN, MI 49010-9762
WATERWAY:	
CITY:	
TOWNSHIP:	VALLEY TOWNSHIP
COUNTY:	ALLEGAN
SHEET:	12 OF 13
DATE:	MAY 2021
DATUM:	NAVD 88

JOB NO: 212003
EGLE-D12
WRP030061 v1.0

Approved
Issued On: 07/29/2021
Expires On: 07/29/2026

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