

BERRIEN COUNTY ROAD COMMISSION

PROPOSAL AND SPECIFICATIONS

FOR

DEFAY ROAD

LINCOLN TOWNSHIP

PROJECT NO. P15101

**BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF BERRIEN
2860 EAST NAPIER AVENUE
BENTON HARBOR, MI 49022
1-269-925-1196 OR 1-800-442-0734**

BERRIEN COUNTY ROAD COMMISSION

NOTICE TO BIDDERS

Notice is hereby given that sealed bids will be received at the office of the Board of County Road Commissioners of the County of Berrien, 2860 East Napier Avenue, Benton Harbor, Michigan 49022 until 11:00 A.M., Thursday, March 24, 2016 at which time and place they will be publicly opened and read aloud for the following:

- 1. MAINTENANCE BITUMINOUS MIXTURES**
- 2. ASPHALT EMULSIONS**
- 3. ICE CONTROL SAND**
- 4. HOT MELT CRACK FILLER MATERIAL**
- 4. DEFAY ROAD – RECONSTRUCTION – PROJECT NO. 15101**

All bids will be tabulated and presented to the Board of County Road Commissioners at their next regular meeting.

All bids shall be signed in ink and sealed in an envelope with the name of the items bid upon and the name of the bidder plainly marked on the outside. Specifications and proposal blanks may be obtained at the office of the Berrien County Road Commission.

The Road Commission reserves the right to accept or reject any or all bids, to waive defects in a proposal and to award the Bid in any manner deemed to be in the best interest of Berrien County.

Please visit our website for bid proposals: www.bcbroad.org

**BY THE BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF BERRIEN
AUGUST ZIELKE
TIMOTHY LYNCH
JESS MINKS
WILLIAM HODGE
JOSEPH MARGOL**

BERRIEN COUNTY ROAD COMMISSION

BENTON HARBOR, MICHIGAN

GENERAL SPECIFICATIONS

Except as hereinafter provided by Supplemental Specifications or Special Provisions, the method and manner of performing the work and the quantity and quality of materials to be furnished under this contract shall be in strict accordance with the current Standard Specifications for construction of the Michigan Department of Transportation and the current edition of the Michigan Manual of Uniform Traffic Control Devices.

SUPPLEMENTAL SPECIFICATIONS

101.02 Definitions:

Commission – The Board of County Road Commissioners of the County of Berrien, Michigan.

103.02 Changes in Work

Adjustable Items – This Contract contains no adjustable item; therefore, no adjustments in unit prices for increased or decreased quantities will be allowed.

107.10 Owners Protective Liability Policy covering bodily injury and property damage protection shall be furnished to the Commission.

108.02 Prosecution of the Work – The Contractor shall begin the work within ten (10) days after being notified by the Commission to do so, unless this is inconsistent with the progress clause, with full 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 clause, or if it appears any time that such work is not being prosecuted in such a manner as to insure its completion within time specified, the Commission shall have the right to require the force and equipment as the Commission shall deem necessary to bring the work up to the Progress Schedule; and in case of the Contractor's neglect to do so, the Commission may place such working force and equipment on the work and charge the Contractor the cost of labor and such rental and depreciation rates for the plant and equipment as in its judgment is reasonable, and for such time as the plant and equipment are in service.

109.06 Partial Payment – PAYMENT WILL BE MADE IN FULL IN NOT MORE THAN THREE (3) PARTIAL PAYMENTS, SUCH PAYMENTS TO BE MADE on the basis of ninety percent (90%) of the value of the work done, provided the work is progressing satisfactorily and the orders of the engineer have been compiled with an provided that the date for completion, or date granted as extension, has not passed, and provided that the amount is at least \$2,000.00.

BERRIEN COUNTY ROAD COMMISSION

1. CANCELLATION OF CONTRACT PROVISIONS

The Board shall have the right to cancel the Contract for non-performance. Should an inspection by the Board's designated representative reveal that the Contractor's work results in any non-acceptable maintenance condition of one or all specified areas.

The Boards designated representative at the time of the first circumstance shall call for a meeting with the Contractor to insure no misunderstanding on the issues involved.

If the condition should repeat itself a second time, the Board's designated representative shall call for another meeting with the Contractor and issue a written warning of possible Contract termination should the condition continue.

If the condition should repeat itself for a third time, the Board's designated representative shall call for another meeting with the Contractor and issue a written Notice of Contract Termination.

2. Submission of bid will be construed as a conclusive presumption that the Contractor is thoroughly familiar with the bid requirements and specifications and that he/she understands agrees to abide by each and all stipulations and requirements contained therein.
3. The Contractor, his/her employees, agent, and representatives shall conduct themselves in a manner which is conducive to good public relations. They shall display proper respect to the Board, the general public, and surrounding property owners as is applicable.
4. Neither the Contractor nor his/her Subcontractors shall discriminate against any employee or applicant for employment, to be employed in the performance of this Contract, with respect his/her hire, tenure, terms, conditions or privileges of employment, of any matter directly or indirectly related to employment because of his/her race, color, religion, national origin, or ancestry. Breach of this covenant may be regarded as a material breach of this Contract.

BID BOND

A Certified Check or Cashier's Check or Bid Bond in the amount of not less than five (5) percent of the bid made payable to the Berrien County Road Commission shall accompany this proposal as guarantee of good faith.

BERRIEN COUNTY ROAD COMMISSION

TITLE VI

“The Berrien County Road Commission, in accordance with Title VI of Civil Rights Act of 1964, 78 Stat. 252, 42 USC 2000d to 2000d-4 an Title 49, Code of Federal Regulations, Department of Federally-assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of gender, disability, race, color, or national origin in consideration for an award”.

BERRIEN COUNTY ROAD COMMISSION

PROGRESS CLAUSE: Start work within ten (10) days after receiving notice of award of contract or on the date agreed upon with the Engineer. In no case shall any work be commenced prior to receipt of a formal notice of award by the Road Commission.

This Contract shall be completed in 20 working days. Working days will be charged starting on that date that the work is started or the date agreed. The project shall be complete by September 1, 2016.

The low bidder(s) for the work covered by this proposal will be required to meet with Road Commission representatives to work out a detailed Progress Schedule. The schedule for this meeting will be set within one week after the low bidder(s) is determined.

The named subcontractor(s) for Designated and/or Specialty Items, as shown on the proposal, is recommended to be at the scheduled meeting if such items materially affect the work schedule.

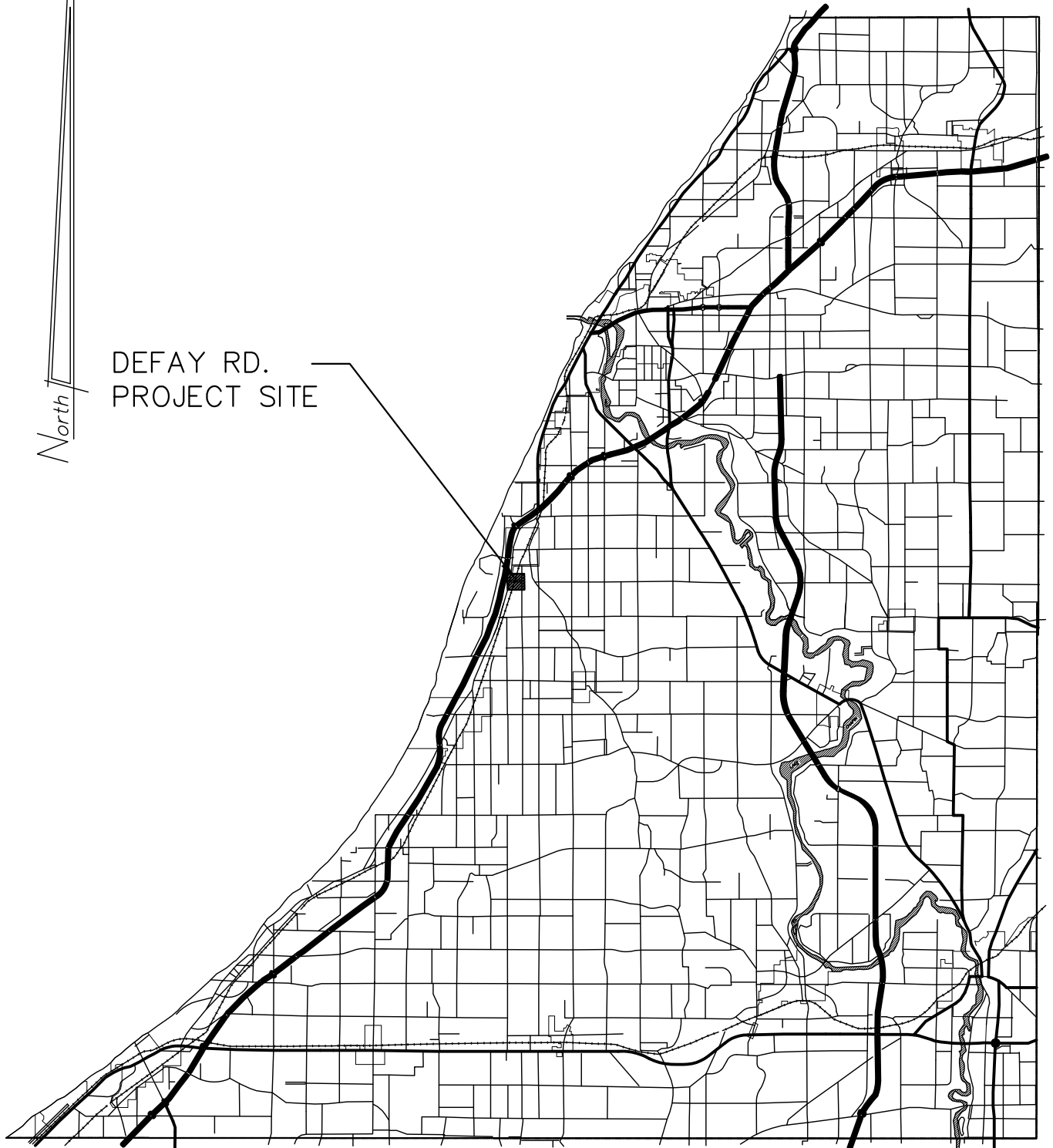
The Project Engineer will arrange the time and place for the meeting.

The Progress Schedule shall include, as a minimum, the controlling work items for the completion of the project and the planned dates (or work day for a work day project) that these work items will be controlling operations. When specified in the bidding proposal, the date the project is to be opened to traffic as well as the final project completion date shall also be included in the Progress Schedule.

If the bidding proposal specifies other controlling dates, these shall also be included in the Progress Schedule.

Failure on the part of the contractor to carry out the provision of the Progress Schedule, as established, may be considered sufficient cause to prevent bidding future projects until a satisfactory rate of progress is again established.

VICINITY MAP



BERRIEN COUNTY ROAD COMMISSION
NOTICE TO BIDDERS
UTILITY COORDINATION
SHEET 1 OF 2

BCRC/BQB

4/30/15

The Contractor shall cooperate and coordinate construction activities with the owners of utilities as stated in Section 104.08 of the 2012 MDOT Standard Specifications for Construction. In addition, for the protection of underground utilities, the Contractor shall follow the requirements in Section 107.12 of the 2012 MDOT Standard Specifications for Construction. Contractor delay claims, resulting from a utility, will be determined based upon Section 109.03 of the 2012 MDOT Standard Specifications for Construction.

The existing utilities listed below and shown on the plans (if shown) represent the best information available. This information does not relieve the Contractor of the responsibility to satisfy himself/herself as to their accuracy.

PUBLIC UTILITIES

The following Public Utilities have facilities within the Right of Way:

ELECTRIC:	American Electric Power 2925 Meadowbrook Road Benton Harbor, MI 49022	269-926-0683
TELEPHONE:	AT&T 1435 Milton Street Benton Harbor, MI 49022	269-926-0233
GAS:	Michigan Gas Utilities 711 Starlite Drive Benton Harbor, MI 49022	269-605-2187
CABLE:	Comcast 3830 M-139 St. Joseph, MI 49085	269-429-3209 Ext 1324
TOWNSHIPS:	Lincoln Township 2055 W John Beers Road Stevensville, MI 49127	269-429-1589

BERRIEN COUNTY ROAD COMMISSION
NOTICE TO BIDDERS
UTILITY COORDINATION
SHEET 2 OF 2

**ON ALL PROJECTS – “3 WORKING DAYS BEFORE YOU DIG – CALL MISS DIG –
TOLL FREE 1-800-482-7171 OR 811**

For protection of underground utilities and in conformance with Public Act 53, the contractor shall dial 1-800-482-7171 or 811 a minimum of three full working days, excluding Saturdays, Sundays and holidays prior to beginning each excavation in areas where public utilities have not been previously located. Members will thus be routinely notified. This does not relieve the contractor of the responsibility of notifying owners who may not be a part of the “Miss Dig” alert system.

The owners of existing service facilities that are within the road structure limits will move them to locations designated by the Engineer. Owners of Public Utilities will not be required by the County to move additional poles or structures in order to facilitate the operation of construction equipment unless it is determined by the Engineer that such poles or structures constitute a hazard to the public or are extraordinarily dangerous to the Contractor’s operations.

The Contractor shall conduct his/her construction operations so as to interfere a little as possible with those of other Contractors, utilities, or any public authority on or near work as shown on the plans or in the proposal.

The Contractor shall protect existing underground and overhead utilities within the project limits. The Contractor shall be responsible for the cost and expenses of repairing utilities damaged by his/her construction operations. The contractor shall hand dig along existing underground utilities and shall protect existing utilities.

BERRIEN COUNTY ROAD COMMISSION

BERRIEN COUNTY ROAD COMMISSION

PROJECT SPECIFICATIONS for SPECIAL PROVISIONS

GENERAL

The “2012 Standard Specifications for Construction” (Standard Specifications) of the Michigan Department of Transportation, are hereby incorporated into these contract documents. Copies of these standards are available for inspection at the office of the Engineer. All construction included in this project shall be done in accordance with the Standard Specifications, as modified by these project specifications and special provisions, or as modified by plan notes. Where notes on the plans are in conflict with the standard specifications or there special provisions, the plan notes shall control.

CONTRACT REQUIREMENTS AND COVENANTS

Where the contract requirements in these Contract Documents conflict with the contract requirements specified in Division 1 of the standard specifications, the contract requirements in these contract documents shall control.

SPECIAL PROVISIONS

The special provisions, which follow, shall modify the standard specifications for the item indicated.

MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR

SLOPE RESTORATION, NON-FREEWAY

C&T:DMG 1 of 3 C&T:APPR:TWK:DBP:12-07-11

a. Description. This work consists of preparing all lawns and slopes on non-freeway projects designated for slope restoration on the plans or as directed by the Engineer and applying topsoil, fertilizer, seed, mulch with mulch anchor, mulch blanket, high velocity mulch blanket and permanent turf reinforcement mat to those areas. Turf establishment must be in accordance with section 816 of the Standard Specifications for Construction and Standard Plan R-100 Series, except as modified herein or otherwise directed by the Engineer.

b. Materials. The materials and application rates specified in sections 816 and 917 of the Standard Specifications for Construction apply unless modified by this special provision or otherwise directed by the Engineer. The following materials must be used on this project:

1. Seeding mixture as called for on the plans
2. Fertilizer, Chemical Nutrient, Class A
3. Topsoil Surface, Furnished or Salvaged, 4 inch. Remove any stones greater than 1/2 inch in diameter or other debris from all topsoil.
4. Mulch and Mulch Anchoring, Mulch Blanket and High Velocity Mulch Blanket
5. Permanent Turf Reinforcement Mat (TRM) must be 100 percent synthetic and consist of 100 percent ultraviolet (UV) stabilized polyolefin fibers sewn between two layers of black UV stabilized polypropylene netting with polyolefin thread. The TRM must meet the following "minimum average roll value" requirements:

Property	Test Method	Requirement
Mass/Unit Area	ASTM D 6566	10 oz/syd
Ultraviolet Stability @ 1000 hrs	ASTM D 4355	80 percent
Tensile Strength (MD)	ASTM D 6818	165 lbs/ft

Acceptance. Supply a Test Data Certification for the permanent TRM from one of the following manufacturers:

Recyclex - American Excelsior Co., Arlington, TX (800) 777-7645
P300 - North American Green, Poseyville, IN (800) 772-2040
Landlok 450 - Propex, Inc., Chattanooga, TN (800) 621-1273
PP5-10 - Western Excelsior, Mancos, CO (800) 833-8573

c. Construction. Construction methods must be in accordance with subsection 816.03 of the Standard Specifications for Construction. Begin this work as soon as possible after final grading of the areas designated for slope restoration but no later than the maximum time frames stated in subsection 208.03 of the Standard Specifications for Construction. It may be necessary, as directed by the Engineer, to place materials by hand.

Shape, compact and assure all areas to be seeded are weed free prior to placing topsoil. Place topsoil to the minimum depth indicated above, to meet proposed finished grade. If the area being restored

requires more than the minimum depth of topsoil to meet finished grade, this additional depth must be filled using topsoil or, at the Contractor's option, embankment. Furnishing and placing this additional material is included in this item of work.

Topsoil must be weed and weed seed free and friable prior to placing seed. Remove any stones greater than 1/2 inch in diameter or other debris. Apply seed mixture and fertilizer to prepared soil surface. Incorporate seed into top 1/2 inch of topsoil

Apply mulch at a rate of 2 tons per acre. Place Mulch Anchoring over the mulch at a rate specified in subsection 816.03.F of the Standard Specifications for Construction. Mulch Blanket and High Velocity Mulch Blanket must be placed in accordance with subsection 816.03.H of the Standard Specifications for Construction and as shown on Standard Plan R-100 Series.

Areas constructed with the TRM must be installed on prepared (seeded) grades as shown on the plans in strict accordance with the manufacturer's published installation guidelines. The top edge of the TRM must be anchored in a minimum 6 inch deep trench. Operation of equipment on the slope will not be allowed after placement of the TRM. No credit for splices, overlaps, tucks or wasted material will be made.

If an area washes out after this work has been properly completed and approved by the Engineer, make the required corrections to prevent future washouts and replace the topsoil, fertilizer, seed and mulch. This replacement will be paid for as additional work using the applicable contract items.

If an area washes out for reasons attributable to the Contractor's activity or failure to take proper precautions, replacement will be at the Contractor's expense.

The Engineer will inspect the seeded turf to ensure the end product is well established, weed free, in a vigorous growing condition, and contains the species called for in the seeding mixture.

If the seeded turf is not well established at the end of the first growing season, the Contractor is responsible to re-seed until the turf is well established and approved by the Engineer.

If weeds are determined by the Engineer to cover more than 10 percent of the total area of slope restoration, the Contractor must provide weed control in accordance with subsection 816.03.J of the Standard Specifications for Construction. Weed control will be at the Contractor's expense with no additional charges to the project.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following contract item (pay item):

Contract Item

Pay Item

Pay Unit

Slope Restoration, Type _____ Square Yard

1. Place **Slope Restoration, Type A** in all areas not described in the other types of slope restoration and will be measured by area in square yards in place. **Slope Restoration, Type A** includes all labor, equipment and materials required to install Topsoil Surface, Furnished or Salvaged; Fertilizer, Chemical Nutrient, Class A; Seeding Mixture; and Mulch and Mulch Anchoring which will not be paid for separately but is included in the contract unit price for **Slope Restoration, Type A**.

2. Place **Slope Restoration, Type B** parallel (6 feet minimum) to the edge of the roadway, in areas that have a 1 on 3 slope and in any ditch with a grade less than 1.5 percent, or as directed by the Engineer. **Slope Restoration, Type B** will be measured by area in square yards in place. **Slope Restoration, Type B** includes all labor, equipment and materials required to install Topsoil Surface, Furnished or Salvaged; Fertilizer, Chemical Nutrient, Class A; Seeding Mixture; and Mulch Blanket which will not be paid for separately but is included in the contract unit price for **Slope Restoration, Type B**.

3. Place **Slope Restoration, Type C** in areas that have a 1 on 2 slope, any ditch with a grade of 1.5 percent to 3 percent or as directed by the Engineer. **Slope Restoration, Type C** will be measured by area in square yards in place. **Slope Restoration, Type C** includes all labor, equipment and materials required to install Topsoil, Furnished or Salvaged; Fertilizer, Chemical Nutrient, Class A; Seeding Mixture; and High Velocity Mulch Blanket which will not be paid for separately but is included in the contract unit price for **Slope Restoration, Type C**.

4. Place **Slope Restoration, Type D** in areas that have a slope steeper than 1 on 2, any ditch with a grade steeper than 3 percent or as directed by the Engineer. **Slope Restoration, Type D** will be measured by area in square yards in place. **Slope Restoration, Type D** includes all labor, equipment and materials required to install Topsoil, Furnished or Salvaged; Fertilizer, Chemical Nutrient, Class A; Seeding Mixture; and TRM which will not be paid for separately but is included in the contract unit price for **Slope Restoration, Type D**.

BERRIEN COUNTY ROAD COMMISSION

SPECIAL PROVISION HMA APPLICATION ESTIMATE SHEET 1 OF 1 DEFAY ROAD

BCRC/BQB

04/30/15

The yield for the proposed HMA, 13A is 220 pounds per square yard.

The yield for the proposed HMA, 36A is 165 pounds per square yard.

The yield for the proposed HMA, Approach is 220 pounds per square yard. HMA, 36A material to be used for HMA, Approach

The Asphaltic Cement for the mixture shall be performed grade 58-28.

The Bond Coat Material shall be SS-1h. The application rate shall be 0.05 to 0.15 gallons per square yard as directed by the Engineer. The Bond Coat shall not be a pay item.

The Aggregate Weat Index (AWI) number required for the aggregate used in production of the HMA mixture used in the top source of the traveled way shall be 220 minimum.

ROLLING

The Nuclear Gauge Method for testing compaction is hereby waived for this project. Acceptance will be given by performing Rolling operations on each course of HMA according to the following table.

NUMBER OF ROLLERS REQUIRED BASED ON PLACEMENT RATE

Average Laydown Rate, Square Yards Per Hour	Number of Rollers Compaction Rollers	Required Finish Rollers
Less than 675	1	1*
675-1500	1	1
1500-3400	2	1
3400-6000	3	1

*The compaction roller may be used as the finish roller also.

MEASUREMENT AND PAYMENT

Measurement and Payment shall be at the contract unit price per ton.

BERRIEN COUNTY ROAD COMMISSION

SPECIAL PROVISION FOR MAINTAINING TRAFFIC 1 OF 2

BCRC/BQB

04/30/15

GENERAL REQUIREMENTS

Traffic shall be maintained by the Contractor throughout the project in accordance with the requirements of Sections 104.11, 812 and 922 of the 2012 MDOT Standard Specifications for Construction and as herein specified. The Contractor is advised that the 2011 Edition, as amended, of the Michigan Manual of Uniform Traffic Control Devices is hereby established as governing all work in connection with traffic control devices, barricade lighting, etc., required on this project. The Contractor shall coordinate this work with other contractors performing work within the construction influence area or adjoining areas to avoid conflicts in the maintenance of traffic, construction signing and the orderly progress of work.

Berrien County Road Commission shall, at the beginning of construction and immediately after the detour is set up, remove all signs that conflict with new construction, and shall install all necessary permanent signing prior to opening to traffic. The Contractor shall be responsible for all temporary signing during construction, and shall coordinate with the Berrien County Road Commission to assure adequate signage during the transitions. As the project nears completion, the Contractor shall coordinate removal of temporary signs, barricades, and traffic control devices with the Berrien County Road Commission's placement of permanent signs and pavement markings to assure a safe transition. The Road Commission shall place permanent signs and pavement markings before the removal of the detour.

The Contractor shall furnish, erect, maintain and upon completion of the work, remove all traffic control devices and barricade lights within the construction influence area for the safety and protection of thru and local traffic. This includes, but is not limited to, advance, regulatory and warning signs, barricades, and channeling devices at the intersecting street on which traffic is to be maintained and all other traffic control devices required to maintain traffic as called for on the plans. The construction influence area (CIA) shall consist of the width of the project right of way from 2,600 feet before the project P.O.B. to 2,600 feet beyond the project. P.O.E., 500 feet in all directions along the cross roads, within the project limits.

TRAFFIC RESTRICTIONS

Traffic will be maintained using Lane Closures and Traffic Regulators.

All work for this project shall be performed during daylight hours. Night work will not be allowed.

Work will not be allowed on holiday weekends, including Labor Day and 4th of July, as directed by the engineer. Saturday work other than holiday weekends will be allowed.

BERRIEN COUNTY ROAD COMMISSION

SPECIAL PROVISION FOR MAINTAINING TRAFFIC 2 OF 2

BCRC/BQB

04/30/15

PROJECT - GENERAL

Any utility trenches across all drives shall be maintained by the use of existing or salvaged materials and costs associated with this work included in Minor Traffic Devices.

Necessary emergency work performed by the County due to the negligence of the Contractor will be billed against the Contractor.

Walks, driveways and entrances to building shall not be unnecessarily blocked. Vehicular access shall be maintained to all properties, or as designated by the Engineer, at all times. Construction shall be completed in such a manner as to maintain the required entrance width for traffic at all times. When partial widths of new pavement are available to traffic, access to drives shall be provided immediately.

TRAFFIC CONTROL DEVICES

All traffic control devices and their usage shall be in accordance with provisions in the 2011 Edition, as amended, of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD), as amended. All construction signs, unless otherwise noted, shall be 4' x 4', mounted at a bottom height of 5 feet and placed as indicated on the plans. When signs are no longer applicable, they shall be removed or have their legend completely covered with plywood or approved equal, if the posts are driven. Signs can no longer be mounted on Type III Barricades. Signs near Type III Barricades shall have separate supports.

Reflectorized strips are required on both sides when barricades are facing traffic in both directions.

Channelizing devices shall be used to separate traffic from the work and if directed by the Engineer or shown on the plan sheets to separate opposing traffic lanes.

Plastic cones may be used as channelizing devices only during day light hours. If plastic cones are used, they shall be a minimum of 28 inches in height and placed as directed by the Engineer. Metal drums or metal barrels shall not be used as traffic control devices.

All traffic control devices shall meet Traffic Special Details WZD-125-E & WZD-100-A.






PLACE THROUGHOUT WORK AREA AS INDICATED AND AFTER ALL MAJOR CROSSROADS IF PERMANENT SIGNS ARE NOT IN PLACE.

PLACE THIS SIGN ALONG WITH THE ADVANCE WORK ZONE SIGNING AS DEPICTED ON THE APPROPRIATE TYPICAL M0030a-M0080a.

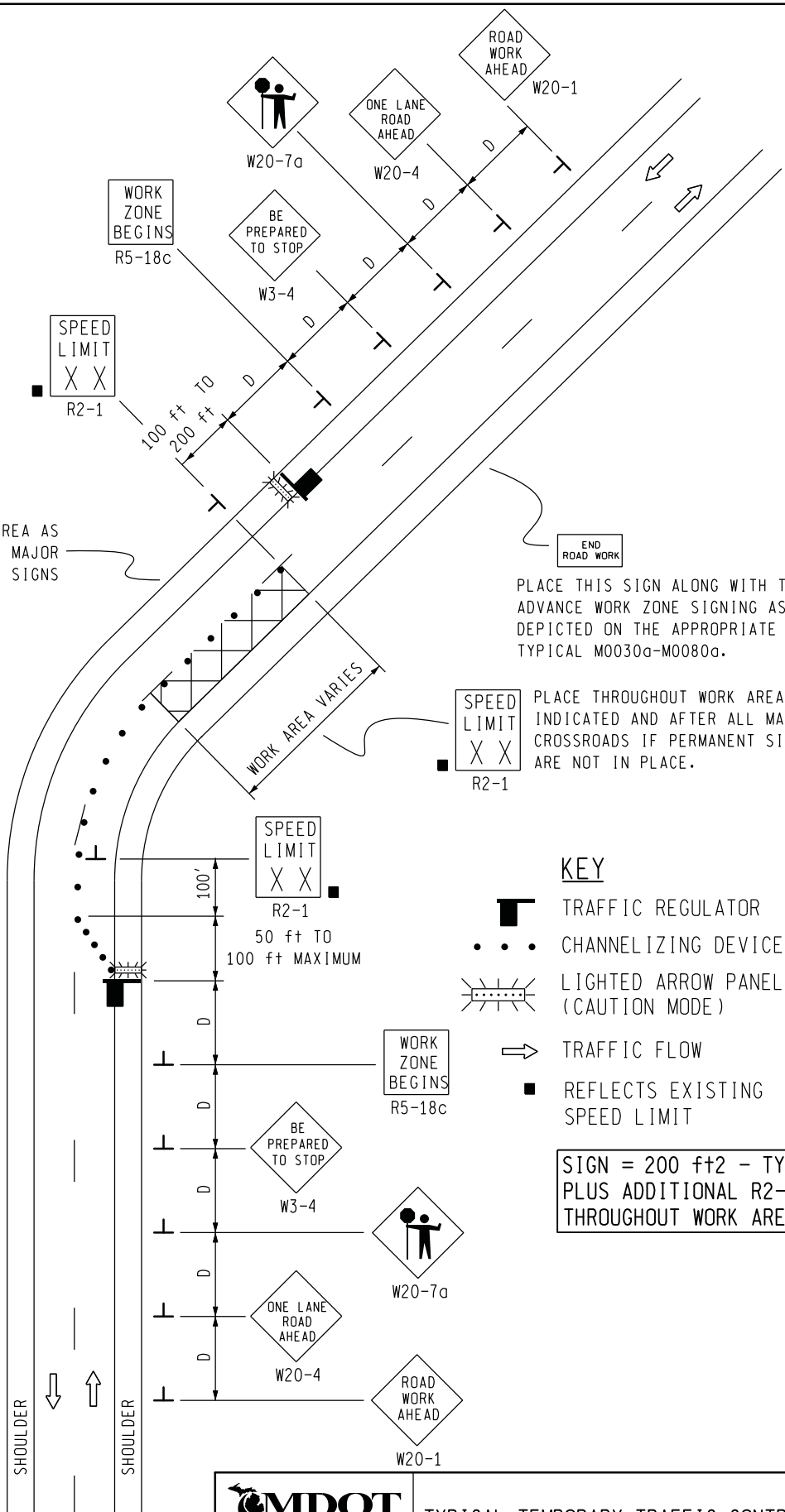
PLACE THROUGHOUT WORK AREA AS INDICATED AND AFTER ALL MAJOR CROSSROADS IF PERMANENT SIGNS ARE NOT IN PLACE.


PLACE THIS SIGN ALONG WITH THE ADVANCE WORK ZONE SIGNING AS DEPICTED ON THE APPROPRIATE TYPICAL M0030a-M0080a.

KEY

-  TRAFFIC REGULATOR
-  CHANNELIZING DEVICES
-  LIGHTED ARROW PANEL (CAUTION MODE)
-  TRAFFIC FLOW
-  REFLECTS EXISTING SPEED LIMIT

SIGN = 200 ft± - TYPE B PLUS ADDITIONAL R2-1's THROUGHOUT WORK AREA



 Michigan Department of Transportation TRAFFIC AND SAFETY MAINTAINING TRAFFIC TYPICAL		TYPICAL TEMPORARY TRAFFIC CONTROL FOR A TWO-LANE TWO-WAY ROADWAY WHERE ONE LANE IS CLOSED UTILIZING TRAFFIC REGULATORS, NO SPEED REDUCTION	
DRAWN BY: CON:AE:djf CHECKED BY: BMM:CRB	OCTOBER 2011 PLAN DATE:	M0140a	SHEET 1 OF 2
FILE: PW RD/TS/Typicals/Signs/MT NON Fwy/M0140a.dgn REV. 10/04/2011			

NOT TO SCALE


NOTES

- 1H. D = DISTANCE BETWEEN TRAFFIC CONTROL DEVICES AND LENGTH OF LONGITUDINAL BUFFERS SEE M0020a FOR "D" VALUES.
2. ALL NON-APPLICABLE SIGNING WITHIN THE CIA SHALL BE MODIFIED TO FIT CONDITIONS, COVERED OR REMOVED.
3. DISTANCES BETWEEN SIGNS, THE VALUES FOR WHICH ARE SHOWN IN TABLE D, ARE APPROXIMATE AND MAY NEED ADJUSTING AS DIRECTED BY THE ENGINEER.
- 3A. THE "WORK ZONE BEGINS" (R5-18c) SIGN SHALL BE USED ONLY IN THE INITIAL SIGNING SEQUENCE IN THE WORK ZONE. SUBSEQUENT SEQUENCES IN THE SAME WORK ZONE SHALL OMIT THIS SIGN AND THE QUANTITIES SHALL BE ADJUSTED APPROPRIATELY.
- 4A. THE MAXIMUM RECOMMENDED DISTANCE(S) BETWEEN CHANNELIZING DEVICES IN THE TAPER AREA(S) SHOULD BE 15 FEET AND SHOULD BE EQUAL IN FEET TO TWICE THE POSTED SPEED IN MILES PER HOUR IN THE PARALLEL AREA(S).
5. FOR OVERNIGHT CLOSURES, TYPE III BARRICADES SHALL BE LIGHTED.
6. WHEN CALLED FOR IN THE FHWA ACCEPTANCE LETTER FOR THE SIGN SYSTEM SELECTED, THE TYPE A WARNING FLASHER, SHOWN ON THE WARNING SIGNS, SHALL BE POSITIONED ON THE SIDE OF THE SIGN NEAREST THE ROADWAY.
7. ALL TEMPORARY SIGNS, TYPE III BARRICADES, THEIR SUPPORT SYSTEMS AND LIGHTING REQUIREMENTS SHALL MEET NCHRP 350 CRASHWORTHLY REQUIREMENTS STIPULATED IN THE CURRENT EDITION OF THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE STANDARD PLANS AND APPLICABLE SPECIAL PROVISIONS. ONLY DESIGNS AND MATERIALS APPROVED BY MDOT WILL BE ALLOWED.
9. ALL TRAFFIC REGULATORS SHALL BE PROPERLY TRAINED AND SUPERVISED.
- 9A. IN ANY OPERATION INVOLVING MORE THAN ONE TRAFFIC REGULATOR, ONE PERSON SHOULD BE DESIGNATED AS HEAD TRAFFIC REGULATOR.
10. ALL TRAFFIC REGULATORS' CONDUCT, THEIR EQUIPMENT, AND TRAFFIC REGULATING PROCEDURES SHALL CONFORM TO THE CURRENT EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CURRENT EDITION OF THE MDOT HANDBOOK ENTITLED "TRAFFIC REGULATORS INSTRUCTION MANUAL."
11. WHEN TRAFFIC REGULATING IS ALLOWED DURING THE HOURS OF DARKNESS, APPROPRIATE LIGHTING SHALL BE PROVIDED TO SUFFICIENTLY ILLUMINATE THE TRAFFIC REGULATOR'S STATIONS.
- 12E. THE MAXIMUM DISTANCE BETWEEN THE TRAFFIC REGULATORS SHALL BE NO MORE THAN 2 MILES IN LENGTH UNLESS RESTRICTED FURTHER IN THE SPECIAL PROVISIONS FOR MAINTAINING TRAFFIC. ALL SEQUENCES OF MORE THAN 2 MILES IN LENGTH WILL REQUIRE WRITTEN PERMISSION FROM THE ENGINEER BEFORE PROCEEDING.
13. WHEN INTERSECTING ROADS OR SIGNIFICANT TRAFFIC GENERATORS (SHOPPING CENTERS, MOBILE HOME PARKS, ETC.) OCCUR WITHIN THE ONE-LANE TWO-WAY OPERATION, INTERMEDIATE TRAFFIC REGULATORS AND APPROPRIATE SIGNING SHALL BE PLACED AT THESE LOCATIONS.
14. ADDITIONAL SIGNING AND/OR ELONGATED SIGNING SEQUENCES SHOULD BE USED WHEN TRAFFIC VOLUMES ARE SIGNIFICANT ENOUGH TO CREATE BACKUPS BEYOND THE W3-4 SIGNS.
15. THE HAND HELD (PADDLE) SIGNS REQUIRED BY THE MMUTCD TO CONTROL TRAFFIC WILL BE PAID FOR AS PART OF FLAG CONTROL.
- 28E. THE TRAFFIC REGULATORS SHOULD BE POSITIONED AT OR NEAR THE SIDE OF THE ROAD SO THAT THEY ARE SEEN CLEARLY AT A MINIMUM DISTANCE OF 500 FEET. THIS MAY REQUIRE EXTENDING THE BEGINNING OF THE LANE CLOSURE TO OVERCOME VIEWING PROBLEMS CAUSED BY HILLS AND CURVES.

SIGN SIZES

DIAMOND WARNING - 48" x 48"
 R2-1 REGULATORY - 48" x 60"
 R5-18c REGULATORY - 48" x 48"

NOT TO SCALE

 TRAFFIC AND SAFETY MAINTAINING TRAFFIC TYPICAL	TYPICAL TEMPORARY TRAFFIC CONTROL FOR A TWO-LANE TWO-WAY ROADWAY WHERE ONE LANE IS CLOSED UTILIZING TRAFFIC REGULATORS, NO SPEED REDUCTION		
DRAWN BY: CON:AE:djf	OCTOBER 2011	M0140a	SHEET
CHECKED BY: BMM:CRB	PLAN DATE:		2 OF 2
FILE: PW RD/TS/Typicals/Signs/MT NON FWY/M0140a.dgn REV. 10/04/2011			

BERRIEN COUNTY ROAD COMMISSION

NOTICE TO BIDDERS

TESTING OF MATERIALS

All material must be tested and approved in accordance with Section 105 of the 2012 Standard Specifications, or as provided herein, before they enter into the construction of the project. Testing may be performed by the Local Agency or a Commercial Testing Company. Cost of testing shall be the responsibility of the Local Agency and may be eligible for federal participation.

A complete list of all tests must be on file in order to obtain Federal Aid on the construction.

INSURANCE

The Contractor shall provide for and in the behalf of the State, the Commission, the Department, its employees, and all agencies specifically named below and their interests may appear, Owner's Protective Public Liability Insurance. Such insurance shall provide coverage and limits the same as the Contractor's Public Liability Insurance.

The agencies are the Board of County Road Commissioners of the County of Berrien, and the Berrien County Road Commission.

BERRIEN COUNTY ROAD COMMISSION

HOLD HARMLESS

This Agreement made this _____ day of _____, 2016 by and between the Berrien County Road Commission and the Board of County Road Commissioners of the County of Berrien (hereinafter referred to as the BOARD) and _____ (hereinafter referred to as the CONTRACTOR). Said Contractor hereby agrees to undertake the following work in the status of independent contractor performing the following operations:

DEFAY ROAD – Project No. P15101

Said Contractor shall at all times exercise extreme care and shall assume any and all liability for bodily injury, death or property damage arising out of the above stated operation or by anyone else acting in concert or under the control or direction of said Contractor, and will indemnify and hold harmless the Berrien County Road Commission, its Commissioners, employees, attorneys and agents for any and all claims for bodily injury, death or property damage arising out of this agreement.

It is also agreed while engaged in such operation, that the Contractor shall maintain insurance, naming the Board of Berrien County Road Commissioners, the Berrien County Road Commission; their Officers, Agents and Employees as an additional named insured with policy limits of:

Bodily Injury and Property Damage Liability:

Each Occurrence	\$1,000,000
Aggregate	\$2,000,000

Statutory Workmen’s Compensation Insurance

Additionally said Contractor shall furnish to the Board a certificate of insurance providing above requested limits.

It is also agreed if the Board is involved in any litigation arising out of said operation, that the Contractor will indemnify and hold harmless the Board for any and all legal fees or cost incurred by the Board in defense of said Board.

WITNESSED BY:

Contractor

Berrien County Road Commission

**BERRIEN COUNTY ROAD COMMISSION
DEFAY ROAD**

PROPOSAL

Date_____

Board of County Road Commissioners of the County of Berrien,
2860 E. Napier Avenue, Benton Harbor, Michigan 49022-0768

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 performances and understands that the quantities shown in the estimate are approximate only and are subject to either increase or decrease; and hereby proposes 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 the work in strict accordance with the plans and specifications therefore.

The undersigned further proposes to do such extra work as may be ordered by you, prices for which 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 begin work within ten (10) days after being notified to do so, and to complete all items of work **WITHIN 20 WORKING DAYS AND BY SEPTEMBER 1, 2016.**

Signed_____

By_____

Post Office of Bidder_____

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.

**BERRIEN COUNTY ROAD COMMISSION
DEFAY ROAD PROJECT NUMBER P15101**

2860 E. NAPIER AVENUE
BENTON HARBOR, MICHIGAN 49022
TELEPHONE 925-1196
TOLL FREE FROM 269 AREA 1-800-442-0734

ITEMIZED UNIT PRICE SCHEDULE

QUANTITY	ITEM OF WORK	UNIT PRICE BID	AMOUNT
1 LSUM	MOBILIZATION, MAX		
5 EA	TREE, REM, 19 INCH TO 36 INCH		
10 EA	TREE, REM, 6 INCH TO 18 INCH		
1 EA	CULV, REM, LESS THAN 24 INCH		
1 EA	CULV, REM, 24 INCH TO 48 INCH		
625 SYD	PAVT, REM		
700 CYD	EMBANKMENT, CIP		
400 CYD	EXCAVATION, EARTH		
45 FT	EROSION CONTROL, CHECK DAM, STONE		
850 TON	AGGREGATE BASE, MOD		
15 TON	APPROACH, CL II		
150 TON	SHOULDER, CL II		
300 LB	CULV END SECT, GRATE		
10 FT	CULV, CL A, 12 INCH		
96 FT	CULV, CL B, CONC, 12 INCH		
176 FT	CULV, CL B, CONC, 15 INCH		
48 FT	CULV, CL B, CONC, 24 INCH		
5 EA	DR STRUCTURE COVER, ADJ, CASE 1		
3 EA	DR STRUCTURE COVER, TYPE E		
2 EA	DR STRUCTURE COVER, TYPE G		
1 EA	DR STRUCTURE COVER, TYPE J		
1 EA	DR STRUCTURE, 24 INCH DIA		
4 EA	DR STRUCTURE, 48 INCH DIA		
1 EA	DR STRUCTURE, RECONSTRUCT		
3 EA	HMA SPILLWAY		
1700 FT	UNDERDRAIN, SUBGRADE, OPEN-GRADED, 6 INCH		
10 TON	HAND PATCHING		
325 TON	HMA, 13A		
500 TON	HMA, 36A		

50 TON	HMA APPROACH		
125 SYD	PAVT, FOR BUTT JOINTS, REM		
150 FT	CURB AND GUTTER, CONC, DET C4		
1600 FT	WEDGE CURB, HMA		
75 FT	GUARDRAIL, TYPE B		
4 EA	TERMINAL END SHOE, TYPE 1B		
6 EA	BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, FURN		
6 EA	BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, OPER		
1 LS	MINOR TRAF DEVICES		
160 SFT	SIGN, TYPE B, TEMP, PRISMATIC, FURN		
160 SFT	SIGN, TYPE B, TEMP, PRISMATIC, OPER		
1 LSUM	TRAF REGULATOR CONTROL		
25 SYD	RIPRAP, PLAIN		
1500 SYD	SLOPE RESTORATION, TYPE A		
300 SYD	SLOPE RESTORATION, TYPE C		

TOTAL BID AMOUNT _____ \$ _____

SIGNED

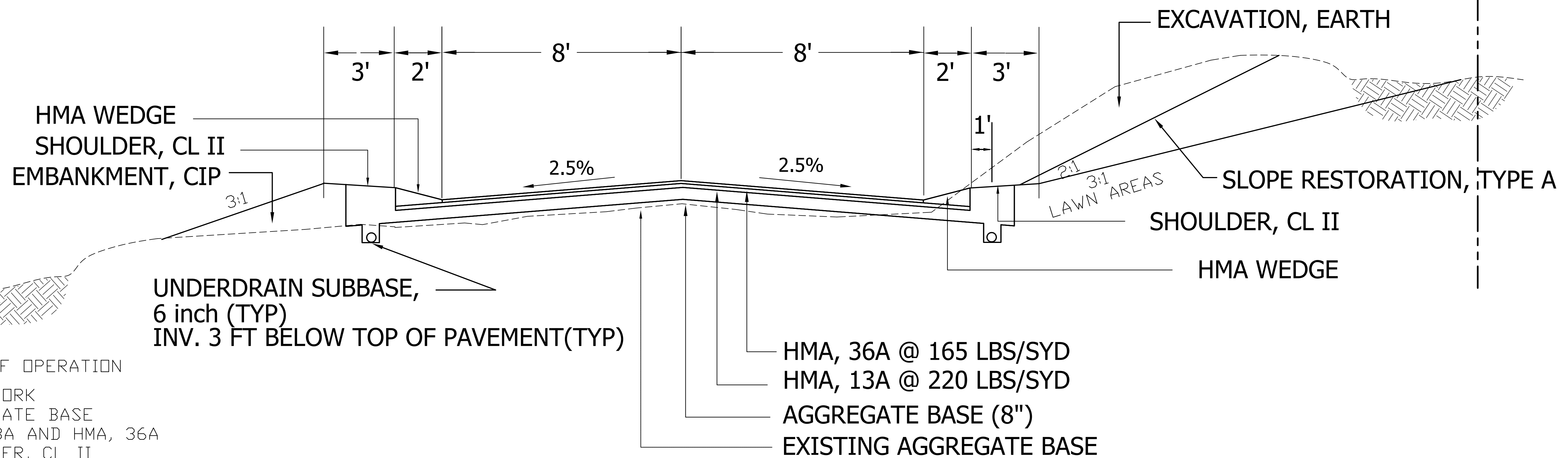
BIDDER

DATE

TYPICAL SECTION

R/W

R/W

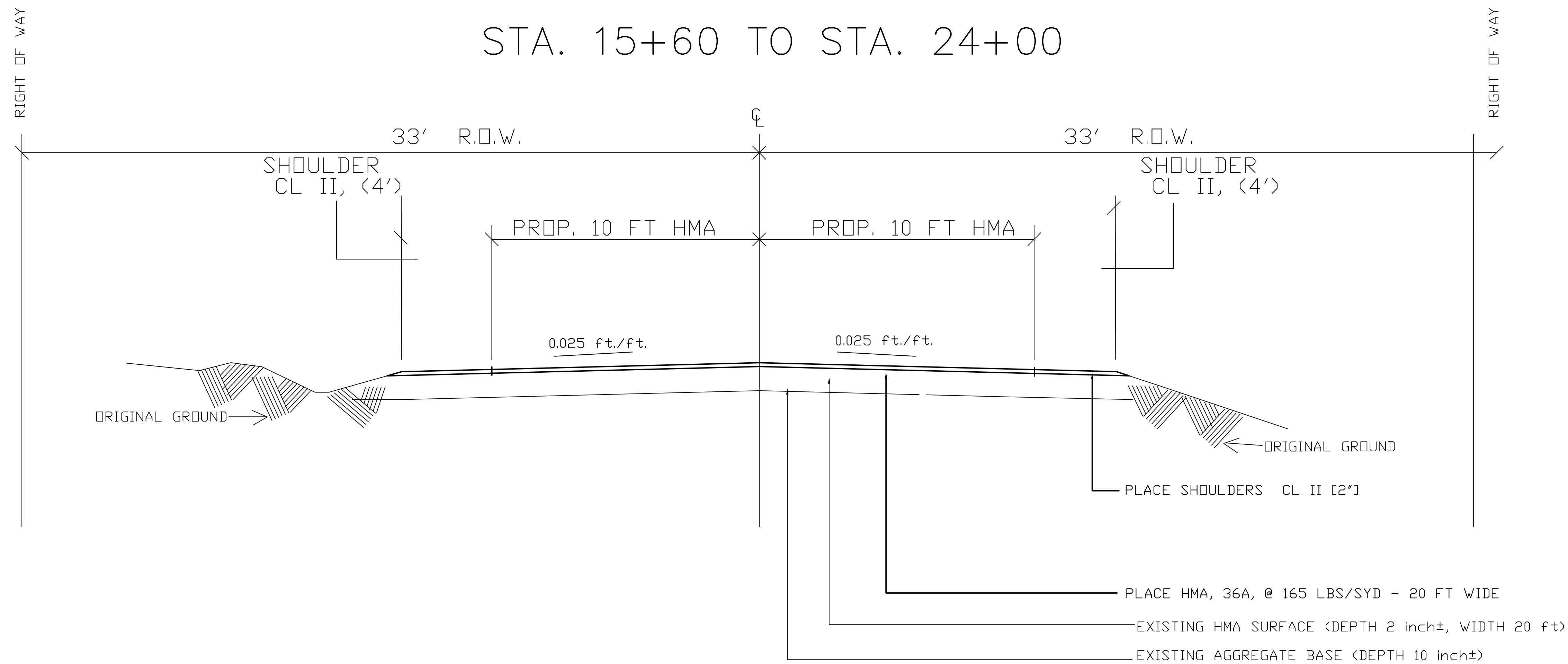


NOTE: ORDER OF OPERATION

1. EARTHWORK
2. AGGREGATE BASE
3. HMA, 13A AND HMA, 36A
4. SHOULDER, CL II

DEFAY RD. TYPICAL SECTION

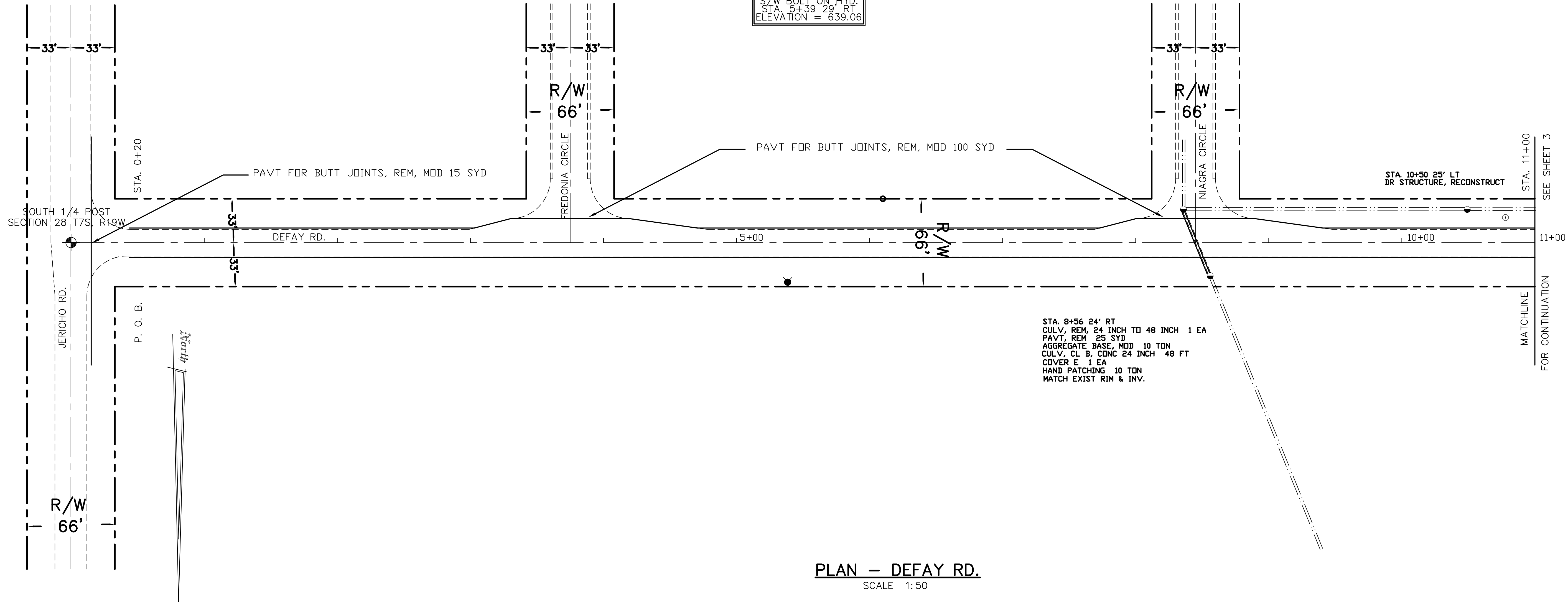
STA. 15+60 TO STA. 24+00



DEFAY RD. TYPICAL SECTION

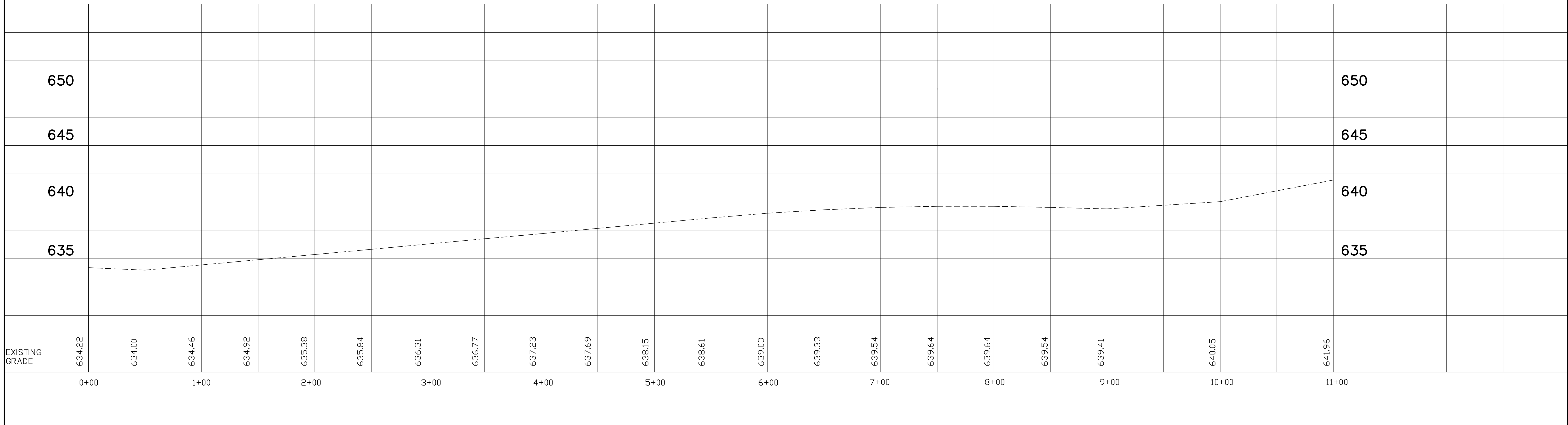
STA. 0+20 TO STA. 12+00

BENCHMARK #2
 S/W BOLT ON HYD.
 STA. 5+39.29 RT
 ELEVATION = 639.06



STA. 8+56.24' RT
 CULV. REM, 24 INCH TO 48 INCH 1 EA
 PAVT. REM 25 SYD
 AGGREGATE BASE, MOD 10 TON
 CULV. CL B, CDNC 24 INCH 48 FT
 COVER E 1 EA
 HAND PATCHING 10 TON
 MATCH EXIST RIM & INV.

- F.D. IRON
- ▨ PAVED DR.
- ▧ UNPAVED DR.
- ▩ PAVT. REM



11-12-0033-0011-15-5
LISA K. & GREGORY A. LA LONDE
3086 DEFAY RD

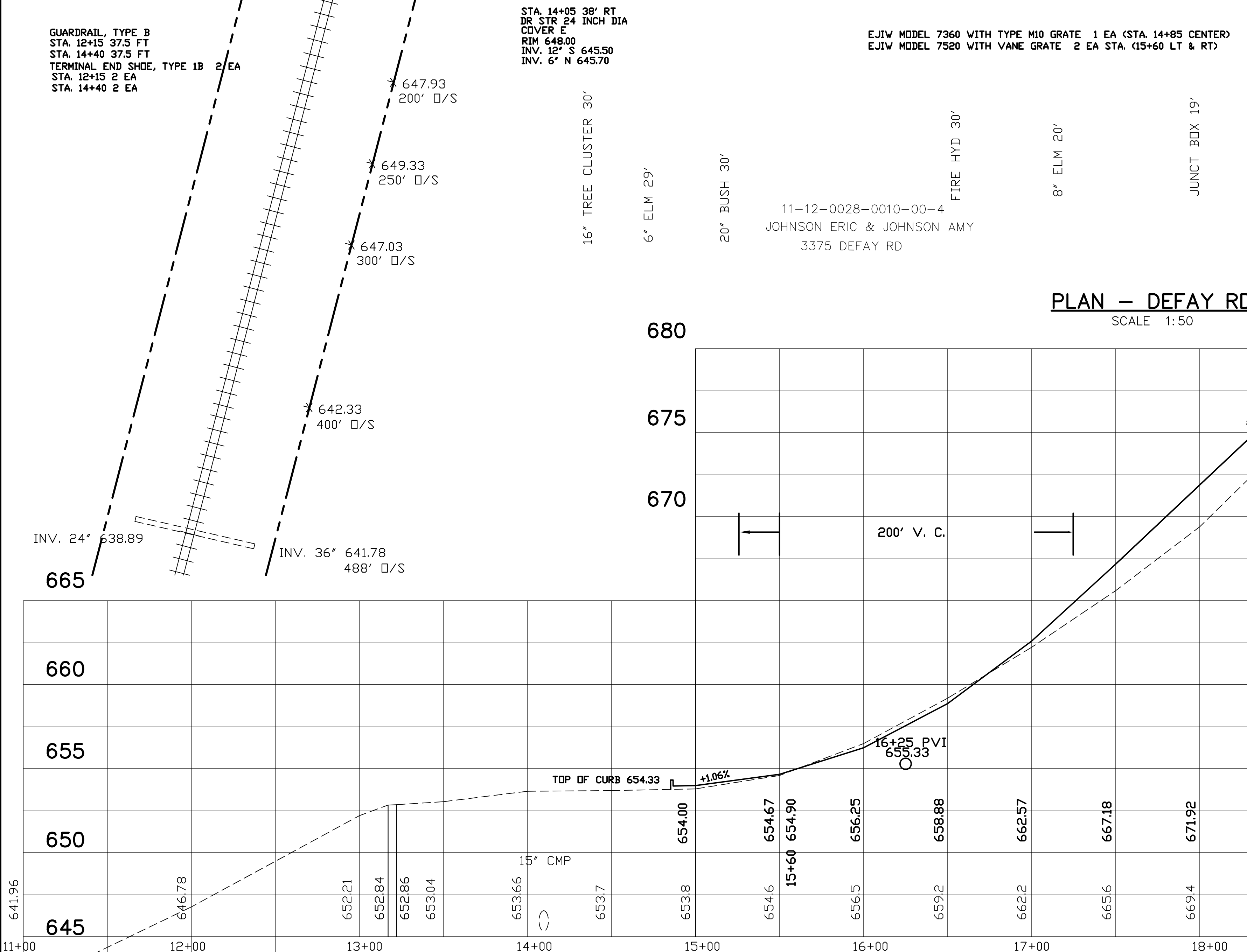
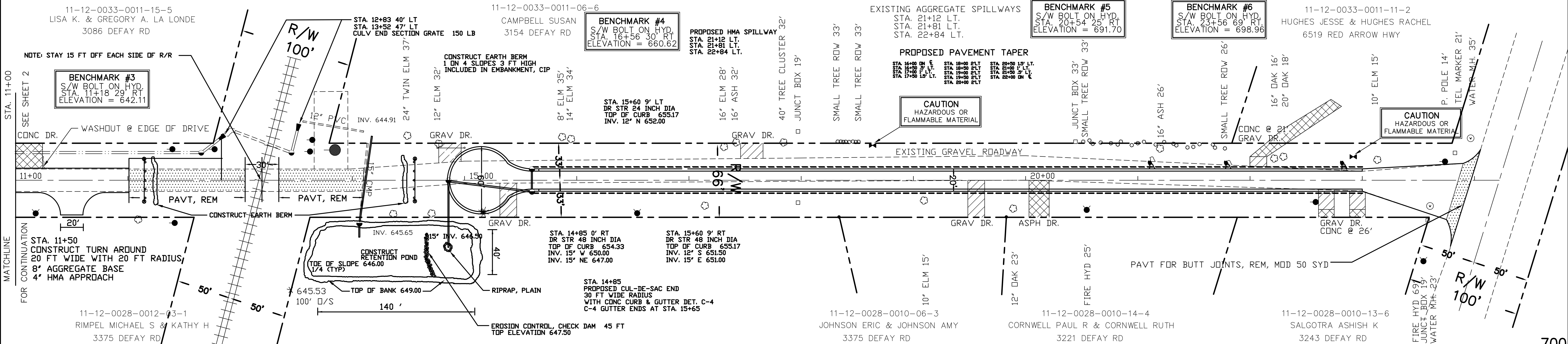
11-12-0033-0011-06-6
CAMPBELL SUSAN
3154 DEFAY RD

EXISTING AGGREGATE SPILLWAYS
STA. 21+12 LT.
STA. 21+81 LT.
STA. 22+84 LT.

BENCHMARK #5
S/W BOLT ON HYD.
STA. 20+54 25' RT
ELEVATION = 691.70

BENCHMARK #6
S/W BOLT ON HYD.
STA. 23+56 69' RT
ELEVATION = 698.96

11-12-0033-0011-11-2
HUGHES JESSE & HUGHES RACHEL
6519 RED ARROW HWY



PLAN - DEFAY RD.
SCALE 1:50

PROFILE - DEFAY RD.
SCALE 1:4 V 1:40 H

Station	Elevation	Notes
11+00	641.96	
12+00	646.78	
13+00	652.21	
13+00	652.84	
13+00	652.86	
13+00	653.04	
14+00	653.66	
14+00	653.7	
15+00	653.8	
15+00	654.00	
15+00	654.67	
15+00	654.90	
16+00	656.5	
16+00	656.25	
16+00	658.88	
17+00	662.2	
17+00	662.57	
18+00	665.6	
18+00	667.18	
18+00	671.92	
18+00	676.66	
19+00	679.1	
19+00	681.28	
19+00	684.4	
19+00	685.15	
20+00	688.2	
20+00	688.16	
20+00	690.29	
20+00	691.2	
20+00	692.4	
20+00	693.8	
20+00	694.24	
20+00	695.8	
20+00	695.78	
20+00	696.9	
20+00	697.36	
20+00	697.5	
20+00	699.13	
20+00	699.79	
20+00	700.43	
20+00	700.43	
20+00	700.17	
20+00	700.17	

PROJECT QUANTITIES

MOBILIZATION, MAX	1 LS
REM, 19 inch to 36 inch	5 EA
TREE, REM, 6 inch to 18 inch	10 EA
CULV, REM, Less than 24 inch	1 EA
CULV, REM, 24 inch to 48 inch	1 EA
PAV'T, REM	625 SYD
EMBANKMENT, CIP	700 CYD
EXCAVATION, EARTH	400 CYD
EROSION CONTROL, CHECK DAM	45 FT
AGGREGATE BASE, MOD	850 TON
APPROACH, CL II	15 TON
SHOULDER, CL II	150 TON
CULV END SECT, GRATE	300 LB
CULV, CL A, 12 inch	10 FT
CULV, CL B, CONC, 12 inch	96 FT
CULV, CL B, CONC, 15 inch	128 FT
CULV, CL B, CONC, 24 inch	48 FT
DR STRUCTURE COVER, ADJ., CASE 1	5 EA
DR STRUCTURE COVER, TYPE E	2 EA
DR STRUCTURE COVER, TYPE G	2 EA
DR STRUCTURE COVER, TYPE J	1 EA
DR STRUCTURE, 24 INCH DIA	2 EA
DR STRUCTURE, 48 INCH DIA	2 EA
DR STRUCTURE, RECONSTRUCT	1 EA
HMA, SPILLWAY	3 EA
UNDERDRAIN, SUBGRADE, OPEN-GRADED; 6 INCH	1500 FT
HAND PATCHING	10 TON
HMA, 13A	280 TON
HMA, 36A	450 TON
HMA APPROACH	50 TON
PAVT FOR BUTT JOINTS, REM, MOD	125 SYD
CONC CURB & GUTTER, DET C-4	150 FT
WEDGE CURB, HMA	1500 FT
GUARDRAIL, TYPE B	75 FT
TERMINAL END SHOE, TYPE 1B	4 EA
BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, FURN	6 EA
BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, OPER	6 EA
TRAF CONTROL REGULATOR	1 LS
MINOR TRAF DEVICES	1 LS
SIGN, TYPE B, TEMP, FURN	160 SFT
SIGN, TYPE B, TEMP, OPER	160 SFT
RIPRAP, PLAIN	25 SYD
SLOPE RESTORATION, TYPE A	1500 SYD
SLOPE RESTORATION, TYPE C	300 SYD

