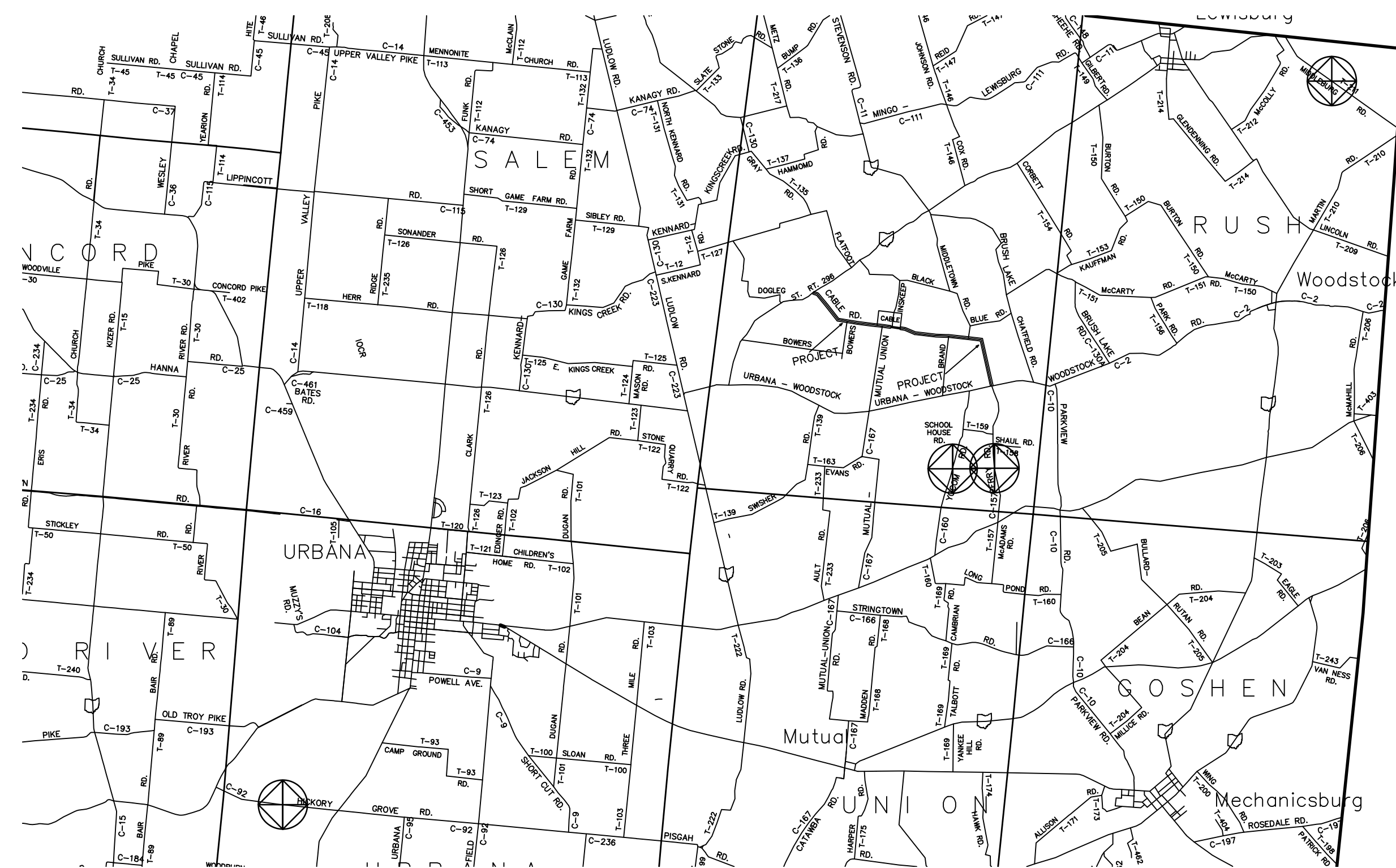


# HICKORY GROVE, PERRY, YOCUM, MIDDLEBURG ROADS COLD CONSTRUCTED ASPHALT CHAMPAIGN COUNTY



LOCATION MAP

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### PROJECT DESCRIPTION

WORK FOR THIS PROJECT SHALL CONSIST OF PAVING CABLE ROAD CO. 2 FROM FLOOD ST. TO URBANA WOODSTOCK PK. IN CHAMPAIGN COUNTY AS SET FORTH IN THESE PLANS.

### 2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING OF TRAFFIC OF THE HIGHWAY AND THAT THE PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH IN THE PLANS AND ESTIMATES.

PLANS PREPARED BY THE

## CHAMPAIGN COUNTY ENGINEER

**Stephen E. McCall P.E. P.S.**  
**County Engineer**





ST. RT. 55

0+51 BEGIN PROJECT

BUTT JOINT MILLING

HICKORY GROVE ROAD

5+00

10+00

15+00

20+00

25+00

30+00

35+00

40+00

45+00

HICKORY GROVE ROAD

BUTT JOINT MILLING

HICKORY GROVE, PERRY, YOCUM CCAP

DRAWN BY: RCH  
CHECKED BY: SEM

DESIGNED BY: SEM  
REDRAWN BY: RCH





HICKORY GROVE, PERRY, YOCUM CCAP

DRAWN BY: RCH  
CHECKED BY: SEM

DESIGNED BY: SEM  
REDRAWN BY: RCH





HICKORY GROVE, PERRY, YOCUM CCAP

DRAWN BY: RCH  
CHECKED BY: SEM

DESIGNED BY: SEM  
REDRAWN BY: RCH





ROAD

50+00 -

55+00 -

60+00 -

65+00 -

70+00 -

75+00 -

80+00 -

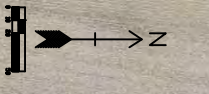
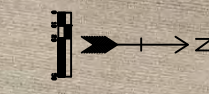
85+00 -

90+00

95+00 -

100+00 -

YOCUM ROAD



HICKORY GROVE, PERRY, YOCUM CCAP

DRAWN BY: RCH  
CHECKED BY: SEM

DESIGNED BY: SEM  
REDRAWN BY: RCH





95+00-

100+00-

YOCUM ROAD

105+00-

110+00-

115+00-

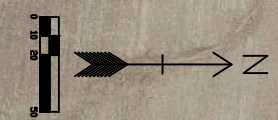
YOCUM ROAD

120+00-

125+00-

125+09

URBANA WOODSTOCK PIKE



HICKORY GROVE, PERRY, YOCUM CCAP

DRAWN BY: RCH  
CHECKED BY: SEM

DESIGNED BY: SEM  
REDRAWN BY: RCH





0+00 -

5+00 -

10+00 -

15+00 -

20+00 -

25+00 -

30+00 -

35+00 -

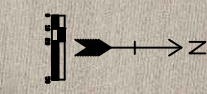
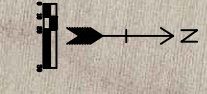
40+00 -

45+00 -

St. Rt. 36

PERRY ROAD

PERRY ROAD



HICKORY GROVE, PERRY, YOCUM CCAP

DRAWN BY: RCH  
CHECKED BY: SEM

DESIGNED BY: SEM  
REDRAWN BY: RCH





ROAD

50+00 -

55+00 -

60+00 -

65+00 -

70+00 -

PERRY ROAD

75+00 -

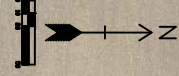
80+00 -

85+00 -

90+00 -

PERRY ROAD

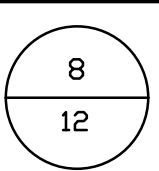
95+00 -



HICKORY GROVE, PERRY, YOCUM CCAP

DRAWN BY: RCH  
CHECKED BY: SEM

DESIGNED BY: SEM  
REDRAWN BY: RCH







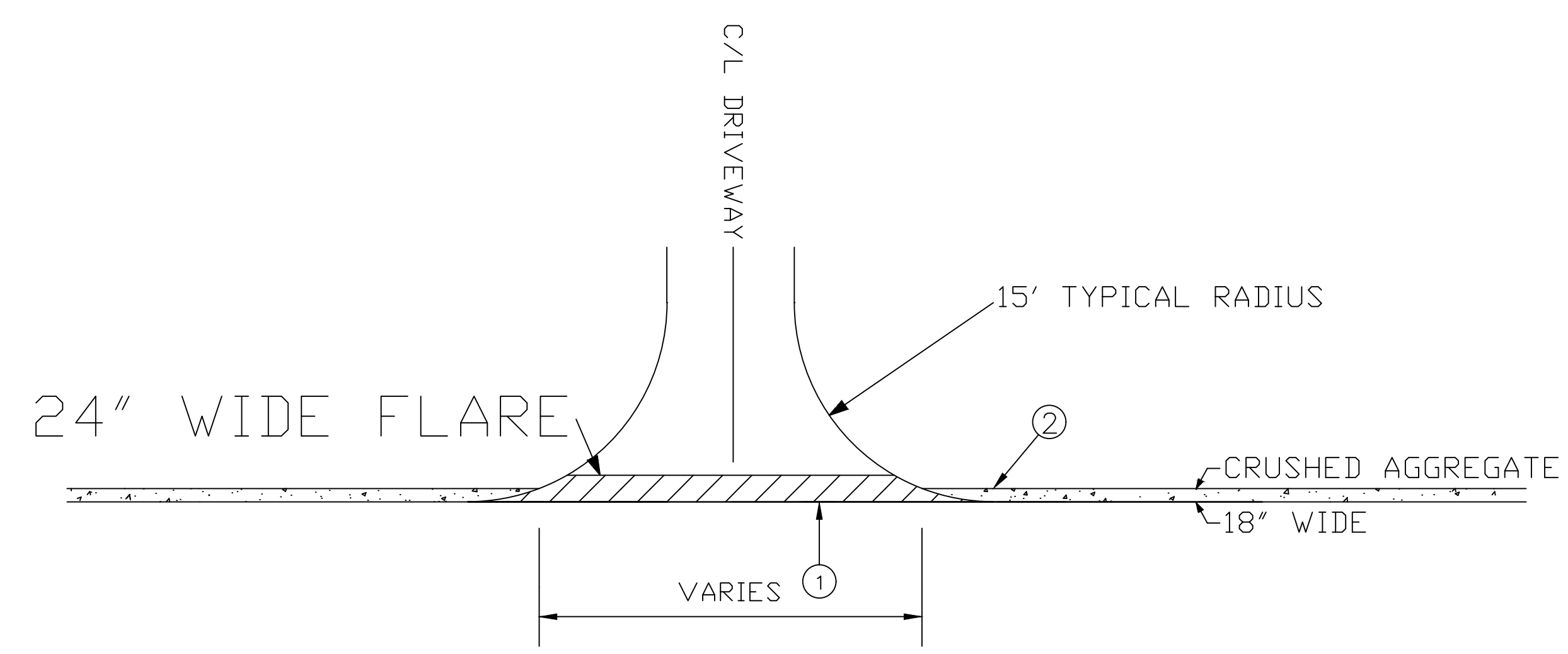
HICKORY GROVE, PERRY, YOCUM CCAP

DRAWN BY: RCH  
CHECKED BY: SEM

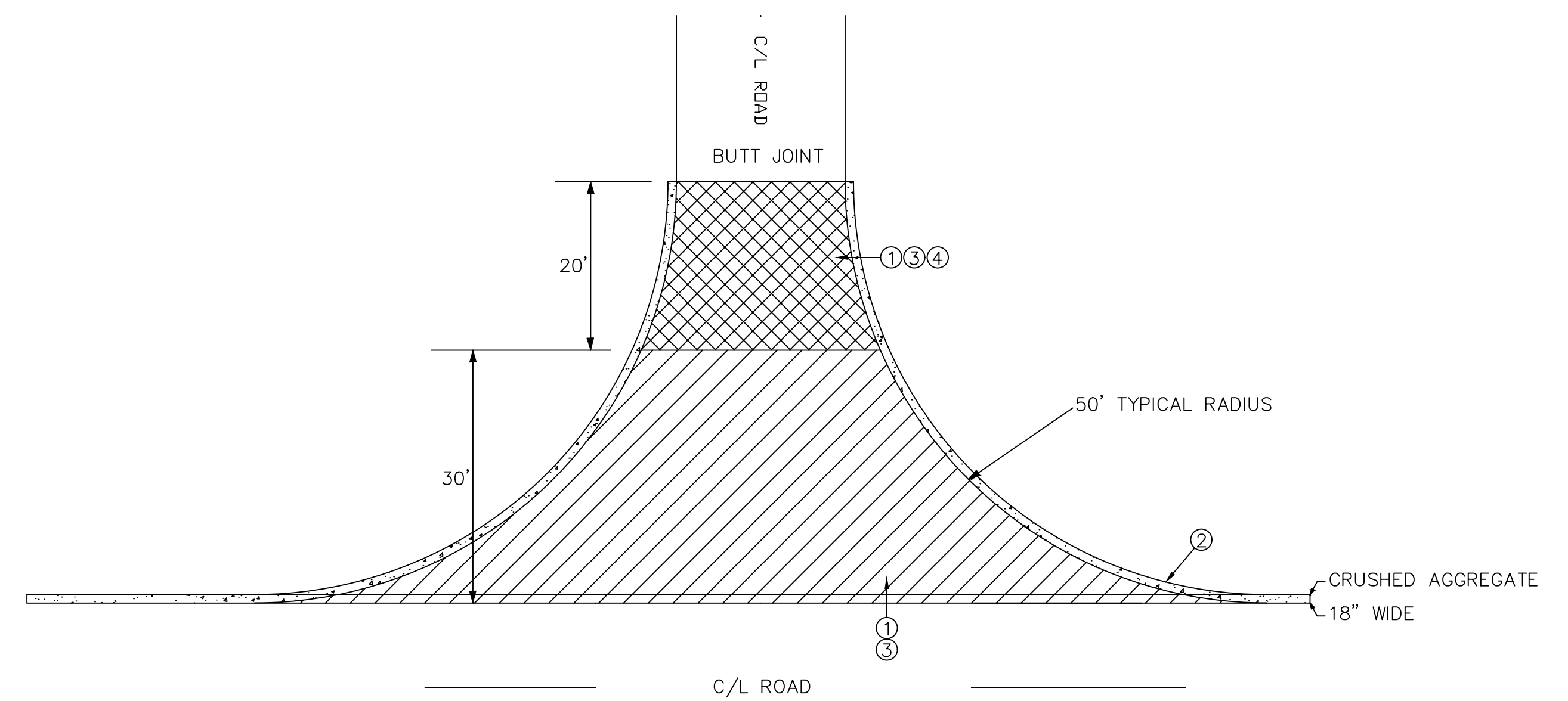
DESIGNED BY: SEM  
REDRAWN BY: RCH



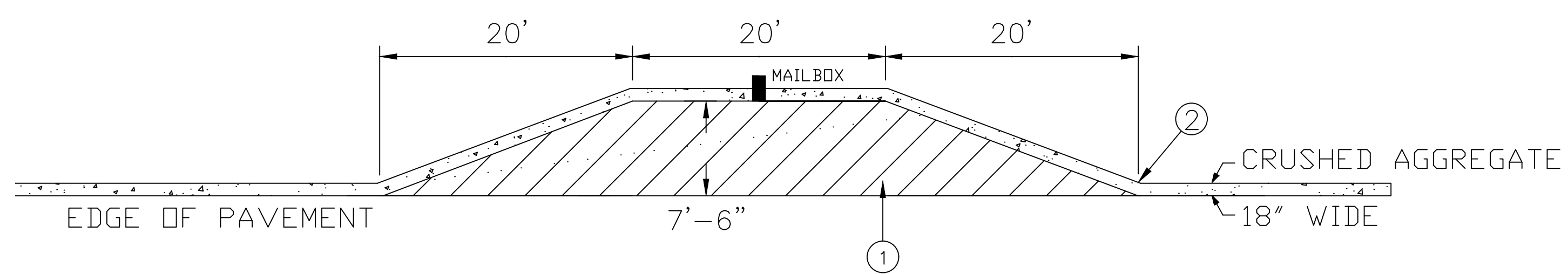
TYPICAL SECTIONS



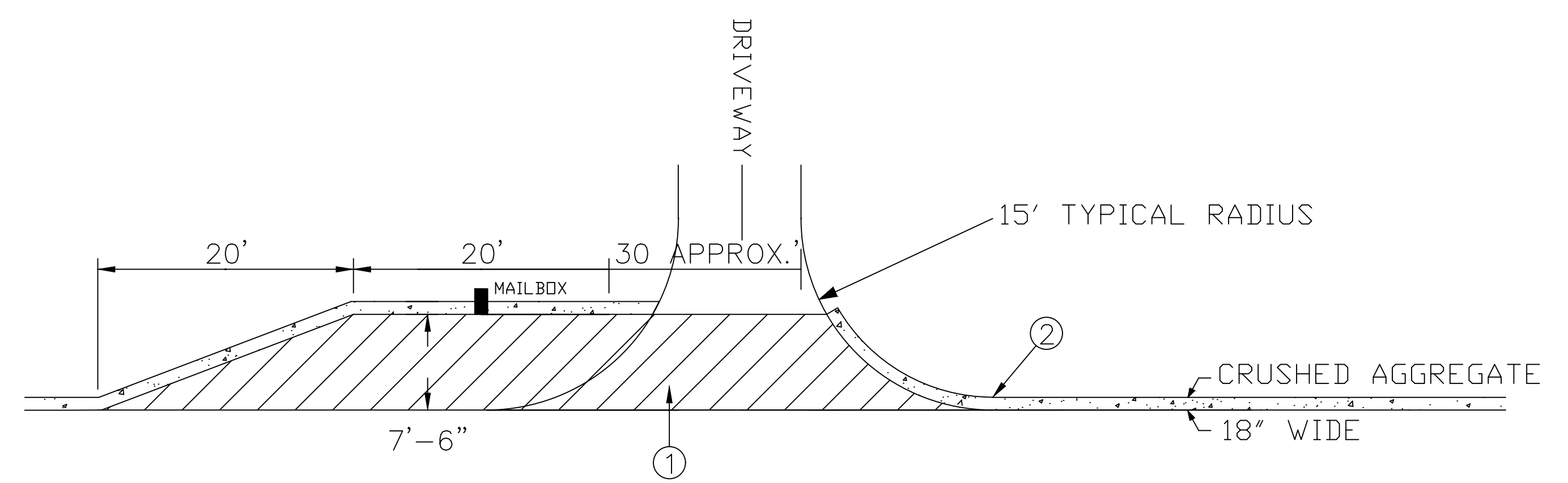
TYPICAL DRIVEWAY APPROACH  
NOT TO SCALE



TYPICAL INTERSECTION APPROACH  
NOT TO SCALE



TYPICAL MAILBOX APPROACH - TYPE A  
NOT TO SCALE

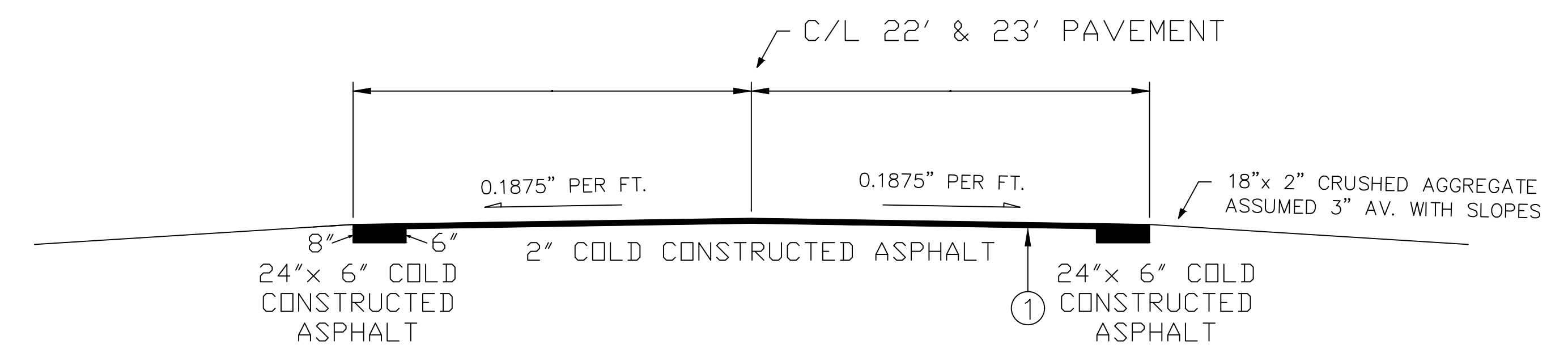


TYPICAL MAILBOX APPROACH - TYPE B  
NOT TO SCALE

PROPOSED LEGEND

- ① ITEM 000 - 2" COLD CONSTRUCTED ASPHALT
- ② ITEM 411 - STABILIZED CRUSHED AGGREGATE, AS PER PLAN
- ③ ITEM 202 - WEARING COURSE REMOVED
- ④ ITEM 407 - TACK COAT

MAILBOXES & APPROACHES	
①	HICKORY GROVE -DRIVE APPROACHES -6 -TYPE A MAILBOX -5 -TYPE B MAILBOX -4
②	PERRY -DRIVE APPROACHES -15 -TYPE A MAILBOX -5 -TYPE B MAILBOX -8
③	YOCUM -DRIVE APPROACHES -26 -TYPE A MAILBOX -15 -TYPE B MAILBOX -17



ROAD PROPOSED SECTION  
NOT TO SCALE

HICKORY GROVE - 22' WIDTH  
PERRY & YOCUM - 23' WIDTH



DESCRIPTION	SIDE	STATION		LENGTH OR ADJUSTED LENGTH FT	BEGIN WIDTH FT	END WIDTH FT	AVERAGE WIDTH FT	TOTAL AREA SQ FT	202	SPECIAL	407	SPECIAL	SPECIAL	
		FROM	TO						WEARING COURSE REMOVED SQ YD	COLD CONSTRUCTED 24"x6" WIDENING CU YD	TACK COAT @ 0.05 GAL/SY GALLONS	2" COLD CONSTRUCTED ASPHALT SURFACE COURSE SQ YD	SPECIAL CHOKE AGGREGATE #9'S @ 12 LBS/SQ YD TONS	
HICKORY GROVE COLD CONSTRUCTED ASHPALT		0+51	50+34	4,983.00		22		109,626.00					12,180.67	73.08
HICKORY GROVE COLD CONSTRUCTED ASHPALT		52+43	91+08	3,865.00		22		85,030.00					9,447.78	56.69
PERRY COLD CONSTRUCTED ASPHALT		0+14	102+14	10,200.00		23		234,600.00					26,066.67	156.40
YOCUM COLD CONSTRUCTED ASPHALT		0+14	125+00	12,486.00		23		287,178.00					31,908.67	191.45
HICKORY GROVE 6"x2' WIDENING BOTH SIDES				8,848.00						655.41				
PERRY 6"x2' WIDENING BOTH SIDES				10,200.00						755.56				
YOCUM 6"x2' WIDENING BOTH SIDES				12,486.00						924.89				
HICKORY GROVE APPROACHES, MAILBOXAPPROACHES, DRIVEWAYS, AND INTERSECTIONS							CADD MEASURED	4,597.00					510.78	3.06
PERRY APPROACHES, MAILBOXAPPROACHES, DRIVEWAYS, AND INTERSECTIONS							CADD MEASURED	12,998.00					1,444.22	8.67
YOCUM APPROACHES, MAILBOXAPPROACHES, DRIVEWAYS, AND INTERSECTIONS							CADD MEASURED	16,708.00					1,856.44	11.14
HICKORY GROVE BUTT JOINT MILLING	22'x20'	x4 AREAS					CADD MEASURED	1,760.00	196					
PERRY BUTT JOINT MILLING	20'x	VARIES					CADD MEASURED	2,980.00	331					
YOCUM JOINT MILLING	20'x	VARIES					CADD MEASURED	2,718.00	302					
<b>TOTALS BELOW ARE TO BE BILLED TO RUSH TOWNSHIP</b>														
MIDDLEBURG COLD CONSTRUCTED ASPHALT		0+00 TO	108+35	10,835				238,370.00					26,485.56	158.91
MIDDLEBURG 6"x2' WIDENING BOTH SIDES		0+00 TO	108+35	10,835						802.59				
MIDDLEBURG BUTT JOINT MILLING	22'x20'							880.00	98					
MIDDLEBURG APPROACHES, MAILBOXAPPROACHES, AND DRIVEWAYS							CADD MEASURED	3,205.00					356.11	2.14
<b>TOTALS ABOVE ARE TO BE BILLED TO RUSH TOWNSHIP</b>														
<b>PROJECT TOTALS</b>									<b>926</b>	<b>3,138</b>			<b>110,257</b>	<b>662</b>

CALCULATIONS

DESIGNED BY: SEM  
REDRAWN BY: RCH

DRAWN BY: RCH  
CHECKED BY: SEM

HICKORY GROVE, PERRY, YOCUM PAVING



Specifications

Item numbers refer to ODOT Construction and Material Specifications dated January 1, 2019. These specifications will cover the work unless otherwise noted.

I. Cold Constructed Asphalt Material –

Description. This work shall consist of providing all labor, equipment, transportation and incidentals required to place a Cold Constructed Asphalt (CCAP) according to the requirements set forth within these specifications and plans.

Composition. Nos. 8 or 9 size aggregate for the mixture as specified. Use No. 9 aggregate or screenings for the choke aggregate as specified. The Cold Constructed Asphalt material will be provided by the Owner in a stockpile at locations described in the plans. The choke aggregate shall be provided by the Contractor.

The choke aggregate shall be of a gradation that will fill surface voids without excess, the Engineer may adjust the estimated quantity of the choke aggregate. Contractor shall submit to the Engineer at the preconstruction meeting or a minimum of 2 weeks prior to the start of the paving operation a list showing the material and supplier proposed for the choke aggregate for approval by the Engineer.

The use of any recycled materials, recycled aggregates, crushed concrete, slag aggregates or reclaimed asphalt pavement will not be allowed for use for the choke aggregate.

Material. Material to be used for trench widening and pavement overlay will be provided by the Owner. This material will be stockpiled at various locations within the county. The volume of material stockpiled shall be sufficient to complete the project as outlined in the specifications and plans. It is the Contractors responsibility to control the stockpiled material during the loading, hauling and laydown operations in such a manner to minimize waste of the stockpiled material. Should the Contractor feel that there is insufficient material to complete the project as outlined in the specifications and plans it is his responsibility to notify the Owner as soon as the shortage is realized.

Weather Limitation. Do not place Cold Constructed Asphalt Pavement under the following conditions: when the existing surface has standing water or is saturated, when the air temperature is below 60°F or when weather conditions otherwise prevents proper handling, finishing of the CCAP mixture.

Test Strip and Start Up Procedures. During the first day of laydown operations, the Contractor shall construct a test strip a single lane wide, 500 feet in length, on the project. The Contractor shall use this to demonstrate that the material, workmanship, equipment and processes proposed will produce a stable CCAP layer that conforms to the requirements of the project specifications without rutting or deformation under traffic.

Should the test strip be accepted by the Engineer, the Contractor may continue with the paving that day. Should the test strip fail, the Contractor and the Engineer shall determine the best plan to correct the deficiencies in the test strip and correct the paving operation moving forward. The Contractor will be required to perform another test strip with the recommended corrections and have that approved by the Engineer before continuing with paving operation.

Any and all cost incurred by the Contractor for a failed test strip, this includes any corrective actions up to and including complete removal and replacement shall be the sole responsibility of the Contractor and no additional compensation will be given by the Owner Agency.

Hauling. Hauling of the CCAP mixture shall be done using trucks that conform to ODOT Construction and Materials specification 401.11.

Bituminous Paver. The CCAP material shall be spread using a self-propelled paver having electronic grade and cross slope controls for the screed. The equipment shall be of sufficient size and power (170 hp) to spread the CCAP material in one continuous pass, without segregation, to the lines and grades established in the Plans.

Handwork of CCAP Material shall be minimized and care shall be taken to prevent segregation. The wings of the paver shall be emptied regularly to prevent buildup and to minimize segregation.

Rollers. The CCAP material shall be compacted using a minimum 10-ton static dual drum steel roller. The material shall be initially rolled in 2 passes, up and back, to seat the mat. The choke material shall be rolled into the CCAP mat using a minimum 10-ton static dual drum steel roller. The mat will then be rolled with an additional pass after the surface choke stone has been applied.

Conditioning of the Existing Surface. Clean the surface on which the CCAP material is to be placed, and keep it free of accumulations of materials that would, in the judgment of the Engineer, contaminate the mixture, prevent bonding, or interfere with spreading operations. Where approved subgrade or pavement courses previously constructed under the Contract become loosened, rutted, or otherwise defective, correct the deficiency according to the contract item or items involved before the spreading of a subsequent pavement course.

Spreading, Finishing and Surface Tolerances. Spread and finish the CCAP material to the lines and grades shown on the plans.

Immediately following the initial rolling, apply the choke aggregate uniformly with an adjustable, hopper equipped, revolving drum type spreader at the specified rate or by equipment and methods approved by the Engineer.

Should the placed mat show signs of rutting or deformation, the Contractor shall be required to re-roll and/or rework the surface and repair any surface issues caused by traffic as well as the Contractors operations. This includes shoulder placement and driveway approach construction. The Contractor shall be responsible for maintaining the condition of the pavement until final acceptance has been given by the Owner Agency.

The placed CCAP material shall meet the surface tolerances specified in 401.19. The variation of the surface from the testing edge of the 10 foot straightedge shall not exceed 3/8 inch.

Joints. Where the CCAP material is to match into an existing HMA or Concrete driveway, cross road or other surface, a butt joint shall be milled to provide a smooth transition from the new CCAP pavement to the existing pavement. Feathering of the CCAP material will not be permitted.

Method of Measurement. The CCAP material will be measured by the total square yard pavement area placed according to the specifications and plans. This square yardage will include all labor, equipment, materials, mobilization, testing and any other incidental cost to the placement of the CCAP mixture.

Basis of Payment. The Owner Agency will pay for accepted quantities of Cold Constructed Asphalt Pavement complete and in place at the contract prices as follows:

2. ITEM 202 – WEARING COURSE REMOVED, ASPHALT CONCRETE: Consists of planing existing asphalt to a depth of approximately 2” to match existing pavement for butt joints per the schematic details included with the plans. All planed cuttings shall become the property of the contractor and shall be removed from the limits of the project. Payment will be for square yard of pavement planed. Limits for pavement planning are included per the plan details and quantities.

4. ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN: Consists of furnishing and placing necessary signs at all intersecting roads and furnishing necessary flag men, signs or other traffic control devices to handle traffic in the work zone. DO NOT PASS signs and pavement markings shall be in place in accordance with 614.04 Temporary markings shall be installed as per 614.11 the same day of paving. Local traffic will be maintained throughout the entire project at all times. Payment will be for lump sum bid.





**MAILBOXES & APPROACHES**  
① MIDDLEBURG -DRIVE APPROACHES -7  
-TYPE A MAILBOX -1  
-TYPE B MAILBOX -7





MIDDLEBURG ROAD

MIDDLEBURG ROAD

45+00

50+00

55+00

60+00

65+00

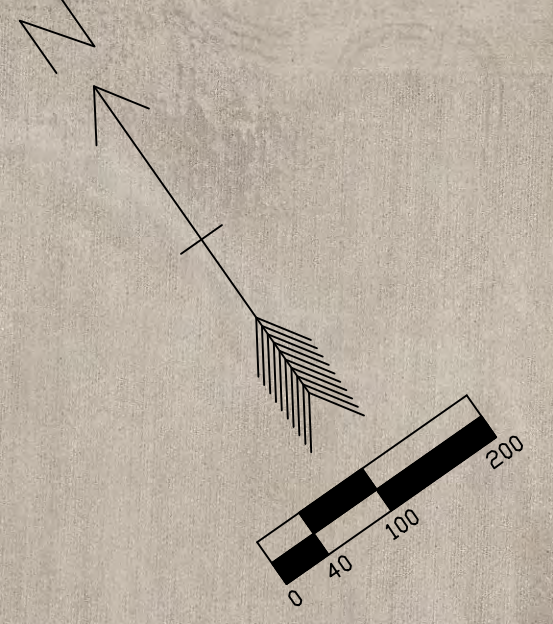
70+00

75+00

80+00

85+00

90+00



MIDDLEBURG ROAD CCAP

DRAWN BY: RCH  
CHECKED BY: SEM

DESIGNED BY: SEM  
REDRAWN BY: RCH





70+00

75+00

80+00

85+00

90+00

95+00

100+00

105+00

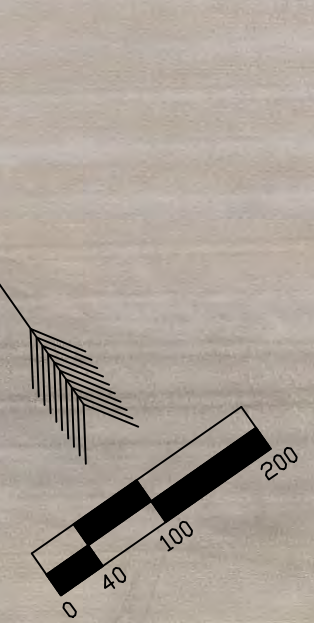
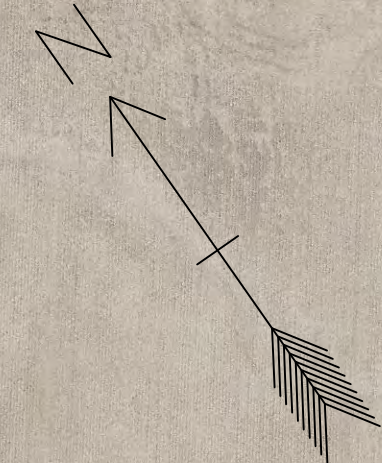
108+35

MIDDLEBURG ROAD

MIDDLEBURG ROAD

BUTT JOINT  
MILLING

MARTIN



MIDDLEBURG ROAD CCAP

DRAWN BY: RCH  
CHECKED BY: SEM

DESIGNED BY: SEM  
REDRAWN BY: RCH