# LOCATION MAP

LONGITUDE: 84°36'53" LATITUDE: 40°53'30"

|          |          | SCA     | ALE IN MIL | .ES  |   |             |
|----------|----------|---------|------------|--|---|-------------|
|          | 0        | 2       | 4          | 6  | 8 | N           |
| PORTION  | TO BE 1  | MPROVED | ·          |  |   |             |
| INTERSTA | ATE HIGH | WAY     |            | فعال فالحر بالكافر للمحا عامل عامل للمحاد المحاد |   |             |
| STATE &  | FEDERAL  | ROUTES  |            |  |   | <del></del> |

COUNTY & TOWNSHIP ROADS.\_\_\_\_\_\_

| DESIGN DESIGNATION                | S.L.M.<br>11.24-12.92 | S.L.M.<br>12.92-15.97 |
|-----------------------------------|-----------------------|-----------------------|
| CURRENT ADT (2011)                | 14700                 | 11750                 |
| DESIGN YEAR ADT (2031)            | 21860                 | 17230                 |
| DESIGN HOURLY VOLUME (2031)       | 1967                  | 1551                  |
| DIRECTIONAL DISTRIBUTION          | 53%                   | 53%                   |
| TRUCKS (24 HOUR B&C)              | 50%                   | 43%                   |
| DESIGN SPEED                      | 70 MPH                | 70 MPH                |
| LEGAL SPEED                       | 65 MPH                | 65 MPH                |
| DESIGN FUNCTIONAL CLASSIFICATION: | •                     |                       |
| RURAL/URBAN PRINCIPAL ARTERIAL    |                       |                       |
| NHS PROJECT                       | YFS                   |                       |

# DESIGN EXCEPTIONS

NONE REQUIRED

| UNDI | ERGRO                         | UND    | UTIL | .ITIES |
|------|-------------------------------|--------|------|--------|
|      | CONTACT<br>CALL TWO           |        |      |        |
|      |                               | E YOU  |      | J      |
|      | <b>&gt;</b>                   | CALL   |      |        |
|      | , , , , , ,                   | -362-2 | _    |        |
|      | UTILITIES<br>NON<br>MUST BE C | -MEMBE | RS   |        |
|      |                               |        | ^    |        |
| 1    | CAS PROI                      |        |      | 1      |

PLAN PREPARED BY: DISTRICT NO. 1 OHIO DEPARTMENT OF TRANSPORTATION PRODUCTION DEPARTMENT

# STATE OF OHIO DEPARTMENT OF TRANSPORTATION

# VAN-30-11.24

# CITY OF VAN WERT PLEASANT AND RIDGE TOWNSHIP VAN WERT COUNTY

# INDEX OF SHEETS:

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| TYPICAL SECTIONS                 | 3-6   |
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| MAINTENANCE OF TRAFFIC           | 8-9   |
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| STRUCTURES (20' AND OVER)        | 17    |

# PROJECT DESCRIPTION

PLANE 1.25" OFF OF 4.73 MILES OF THE EXISTING ROADWAY AND OVERLAY THE PLANED SURFACE WITH 1.75" INTERMEDIATE COURSE AND 1.5" OF SURFACE COURSE. PROVIDE TRANSITIONS TO MAINTAIN CLEARANCE AT THE OVERHEAD STRUCTURES. PERFORM HYDRODEMOLITION ON STRUCTURE NO. 10-VAN-30-1276 L&R AND OVERLAY WITH MICROSILICA CONCRETE.

PROJECT EARTH DISTURBED AREA: N/A MAINT. ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A MAINT. NOTICE OF INTENT EARTH DISTURBED AREA: N/A MAINT.

# LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

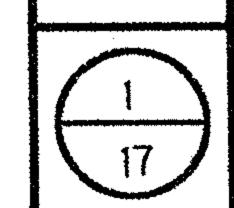
# 2010 SPECIFICATIONS

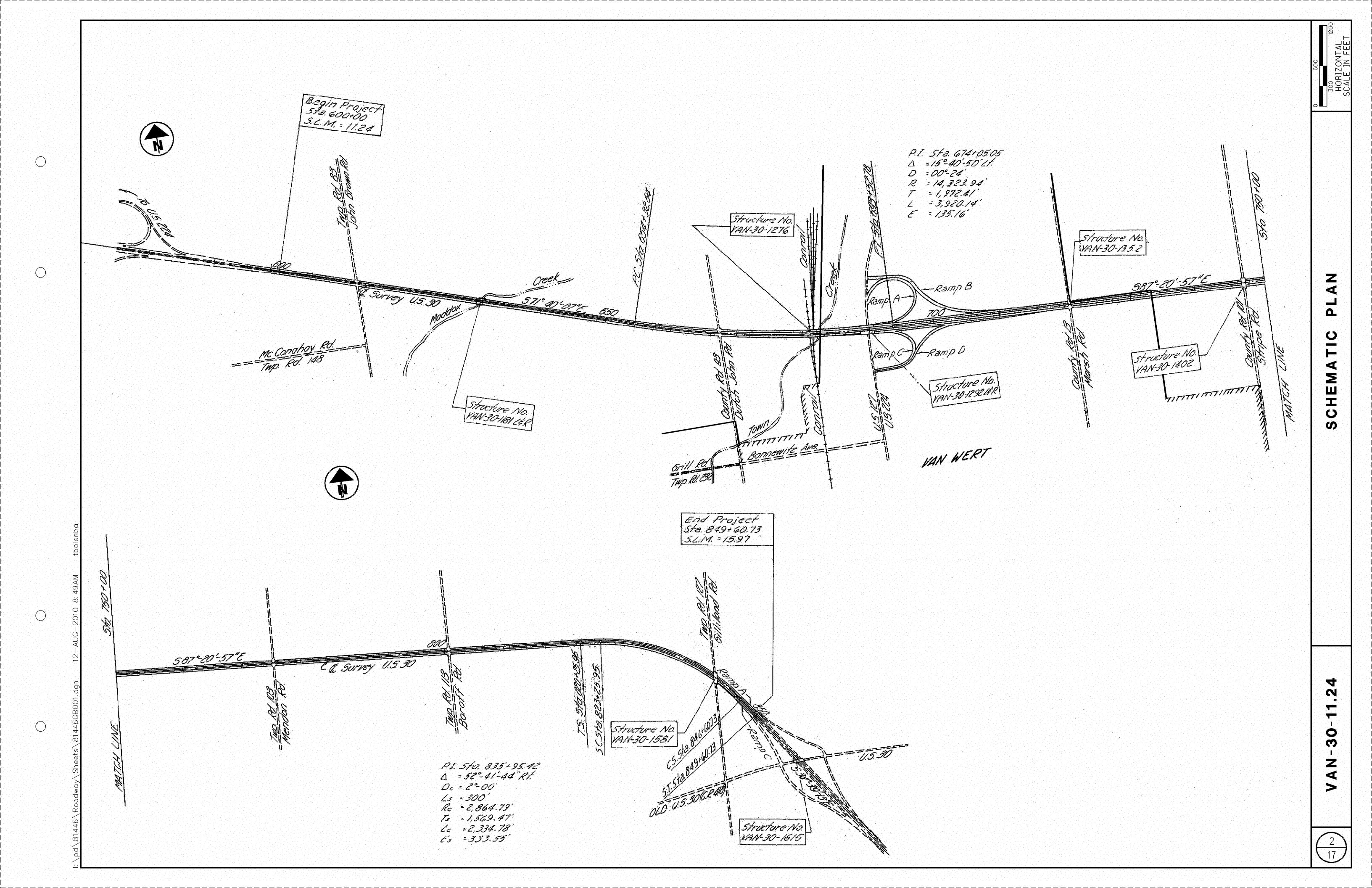
THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

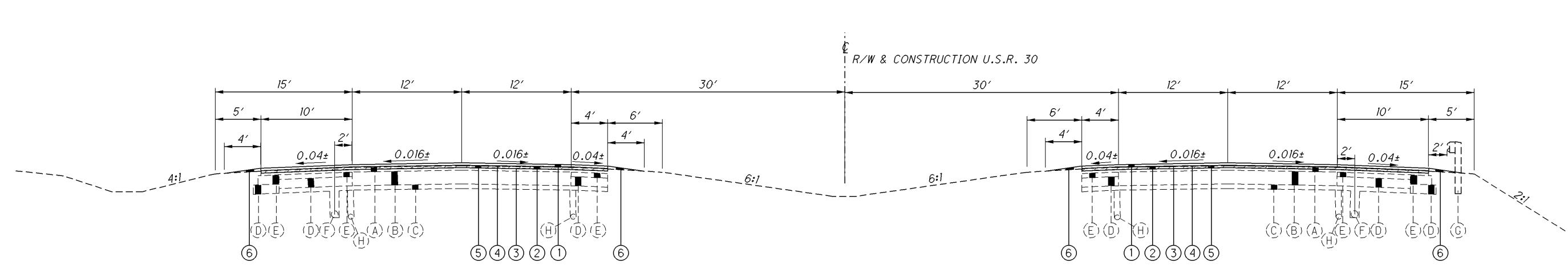
I HEREBY APPROVED THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

|  |            |             | STAN      |          | SUPPLEMENTAL<br>SPECIFICATIONS        |  |  |                         |
|--|------------|-------------|-----------|----------|---------------------------------------|--|--|-------------------------|
|  | BP-3.1     | 10/19/07    | MT-101.70 | 1/16/09  |                                       |  |  | <i>800</i> 10 / 15 / 10 |
|  | BP-9.1     | 4/15/05     | MT-101.90 | 1/16/09  |                                       |  |  | 832 5/5/09              |
|  |            |             | MT-102.10 | 7/17/09  |                                       |  |  | 848 10/16/09            |
| ENGINEERS SEAL:  | DM-4.3     | 4/17/09     | MT-102.20 | 4/17/09  |                                       |  | ·                                      |                         |
| LIVUIIVELING SEAL.   | DM-4.4     | 4/17/09     | MT-105.10 | 1/16/09  |                                       |  |  |                         |
|  |            | <del></del> | <u> </u>  |          |                                       |  | ·                                      |                         |
| WILLIAM OF THE CONTRACT  | GR-1.1     | 7/16/04     | TC-41.20  | 1/19/01  |                                       |  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                         |
| III'S T  | GR-2.1     | 1/16/04     | TC-42.20  | 7/16/04  |                                       |  | ·                                      |                         |
| JENNIFER   | GR-3.3     | 10/16/09    | TC-52.10  | 1/19/07  |                                       |  |  |                         |
| GASSER<br>73984  |            |             | TC-52.20  | 1/19/07  | · · · · · · · · · · · · · · · · · · · |  |  | SPECIAL                 |
| GISTERED.  | MT-35.10   | 4/20/0      | TC-65.10  | 1/21/05  | ·                                     |  |  | PROVISIONS              |
| GASSER 73984  CONAL ENGINEERS  ONAL ENGINEERS  1000888000000000000000000000000000000 | MT-95.30   | 7/17/09     | TC-65.11  | 1/21/05  |                                       |  |  | PROVISIONS              |
| 200888989#   | MT-95.40   | 7/17/09     | TC-71.10  | 1/15/10  |                                       |  |  |                         |
| 1 0 + 01   | MT-95.41   | 4/17/09     | TC-72.20  | 10/16/09 |                                       |  |  | ·                       |
| SIGNED: Jennil-L. Doss   | _ MT-95.50 | 4/17/09     | TC-73.10  | 1/19/01  |                                       |  |  |                         |
| 14 TF: 8-12-10   | MT-00 20   | 1/16/00     | 2         |          |                                       |  |  |                         |

TRANSPORTATION



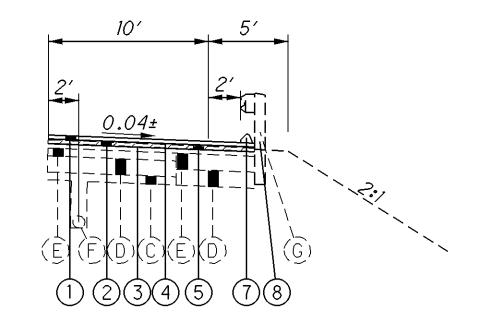




# NORMAL SECTION - U.S.R. 30

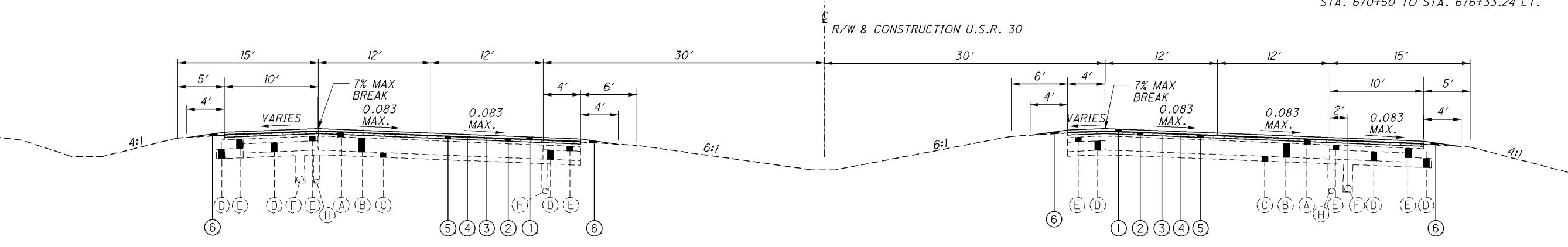
STA. 600+00 TO STA. 625+00 = 2500.00 FEET STA. 635+00 TO STA. 676+33.24 = 4133.24 FEET STA. 695+00 TO STA. 819+50 = 12450.00 FEET \* 19083.24 FEET

### **GUARDRAIL DETAIL**



#### **ASPHALT CURB DETAIL**

STA. 668+25 TO STA. 676+33.24 RT. STA. 670+50 TO STA. 676+33.24 LT.



# SUPERELEVATED SECTION - U.S.R. 30

STA. 819+50.00 TO STA. 849+60.73 = 3010.73 FEET #

# SEE TRANSITION DETAIL FOR OVERHEAD STRUCTURES VAN-30-1581 OLD US 30

# PROPOSED LEGEND

- 1) ITEM 442 1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5 mm, Type A (446)
- (2) ITEM 442 1 3/4 " ASPHALT CONCRETE INTERMEDIATE COURSE, 19 mm, TYPE A (446)
- (3) ITEM 407 TACK COAT APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
- (4) ITEM 407 TACK COAT FOR INTERMEDIATE COURSE APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
- (5) ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE (1 1/4" THICK)
- (6) ITEM 617 COMPACTED AGGREGATE VARIES FROM 0-2"

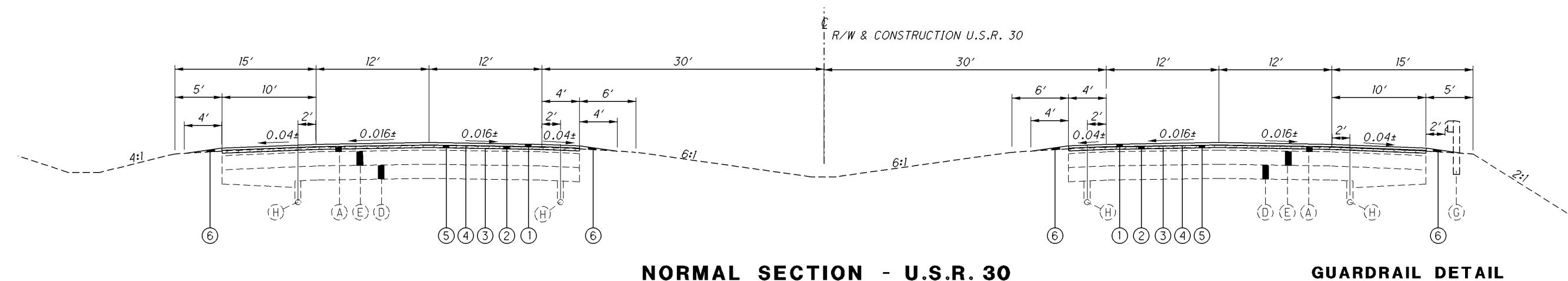
PAVEMENT PLANING, ASPHALT CONCRETE (T=1 1/4")

\* SEE TRANSITION DETAIL FOR OVERHEAD STRUCTURES VAN-30-1352 MARSH ROAD VAN-30-1402 STRIPE ROAD

- (7) ITEM 609 ASPHALT CONCRETE CURB, TYPE I
- 8 ITEM 202 GUARDRAIL REMOVED FOR REUSE ITEM 606 - GUARDRAIL REBUILT, TYPE 5

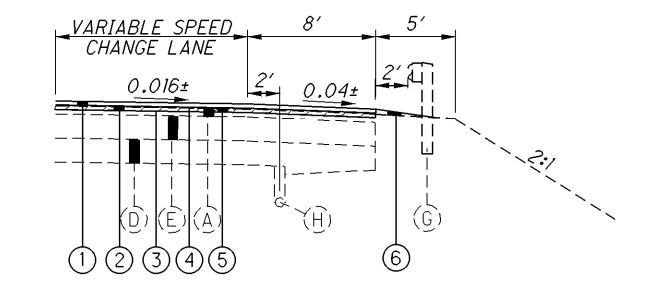
# **EXISTING LEGEND**

- (A) 3"± ASPHALT CONCRETE
- (B) 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- (C) SUBBASE
- (D) AGGREGATE BASE
- (È) ASPHALT CONCRETE BASE
- (F) 6" PIPE UNDERDRAINS
- (G) TYPE 5 GUARDRAIL
- (H) SHALLOW UNDERDRAINS



STA. 625+00 TO STA. 635+00

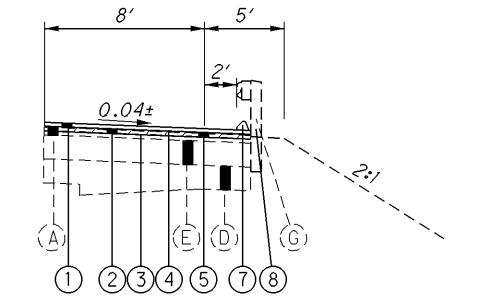
PAVEMENT PLANING. ASPHALT CONCRETE (T=1 1/4")



# SPEED CHANGE LANE - U.S.R. 30

RAMP A @ U.S.R. 127 STA. 678+74.65 TO STA. 690+80.00 = 1205.35 FEET DEDUCT FOR STRUCTURE NO. VAN-30-1276 & APPROACH SLAB STA. 680+33.24 TO STA. 683+23.26 = -290.02 FEET DEDUCT FOR STRUCTURE NO. VAN-30-1292 & APPROACH SLAB STA. 688+25.91 TO STA. 690+79.41 = -253.50 FEET

RAMP C @ U.S.R. 127 STA. 684+82.00 TO STA. 688+79.64 = 397.64 FEET STA. 388+79.64 TO STA. 392+82.21 & RAMP C = 402.57 FEET DEDUCT FOR STRUCTURE NO. VAN-30-1292 & APPROACH SLAB STA. 388+79.64 TO STA. 390+80.50 = -200.86 FEET STA. 688+25.91 TO STA. 688+79.64 = -53.73 FEET 1207.45 FEET



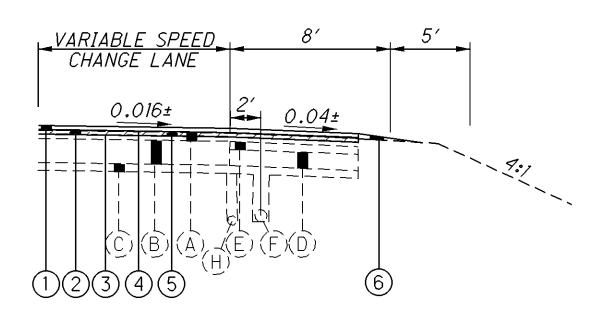
**ASPHALT CURB DETAIL** RAMP A @ U.S.R. 127 STA. 678+74.65 TO STA. 680+33.24

DEDUCT FOR STRUCTURE NO. VAN-30-1181 & APPROACH SLABS STA. 629+89.88 TO STA. 631+26.12 = -136.24 FEET STA. 676+33.24 TO STA. 695+00

DEDUCT FOR STRUCTURE NO. VAN-30-1276 & APPROACH SLABS STA. 680+33.24 TO STA. 683+23.26 = -290.02 FEET DEDUCT FOR STRUCTURE NO. VAN-30-1292 & APPROACH SLABS STA. 688+25.91 TO STA. 690+79.41 = -253.50 FEET

2187.00 FEET

= 1000.00 FEET



# SPEED CHANGE LANE - U.S.R. 30

RAMP B @ U.S.R. 127 STA. 103+92.37 TO STA. 108+45.44 STA. 708+55.64 TO STA. 712+00.00 RAMP D @ U.S.R. 127 STA. 706+52.45 TO STA. 718+52.45

= 453.07 FEET = 344.36 FEET = 1200.00 FEET 1997.43 FEET

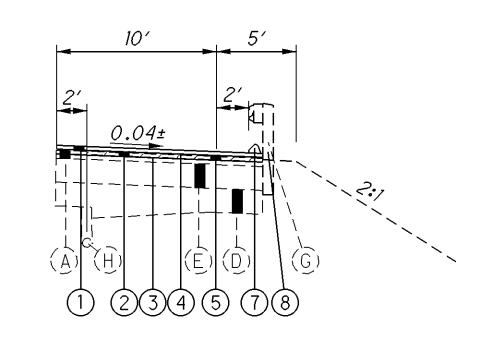
# PROPOSED LEGEND

- (1) ITEM 442 1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5 mm, Type A (446)
- (2) ITEM 442 1 3/4 " ASPHALT CONCRETE INTERMEDIATE COURSE, 19 mm, TYPE A (446)
- (3) ITEM 407 TACK COAT APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
- (4) ITEM 407 TACK COAT FOR INTERMEDIATE COURSE APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
- (5) ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE (1 1/4" THICK)
- ITEM 617 COMPACTED AGGREGATE VARIES FROM 0-2"

ITEM 609 - ASPHALT CONCRETE CURB, TYPE 1

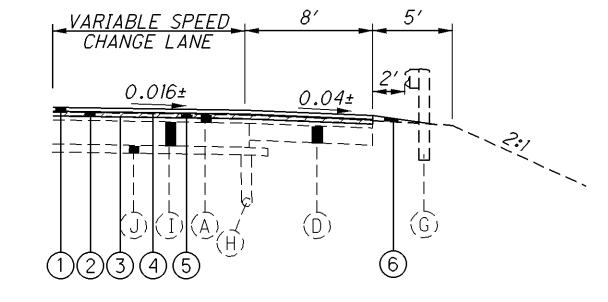
ITEM 202 - GUARDRAIL REMOVED FOR REUSE ITEM 606 - GUARDRAIL REBUILT, TYPE 5

#### **GUARDRAIL DETAIL**



# **ASPHALT CURB DETAIL**

STA. 676+33.24 TO STA. 680+33.24 LT. STA. 676+33.24 TO STA. 678+74.65 RT.



# SPEED CHANGE LANE - U.S.R. 30

RAMP A @ C.R. 418 STA. 836+50.00 TO STA. 849+60.73

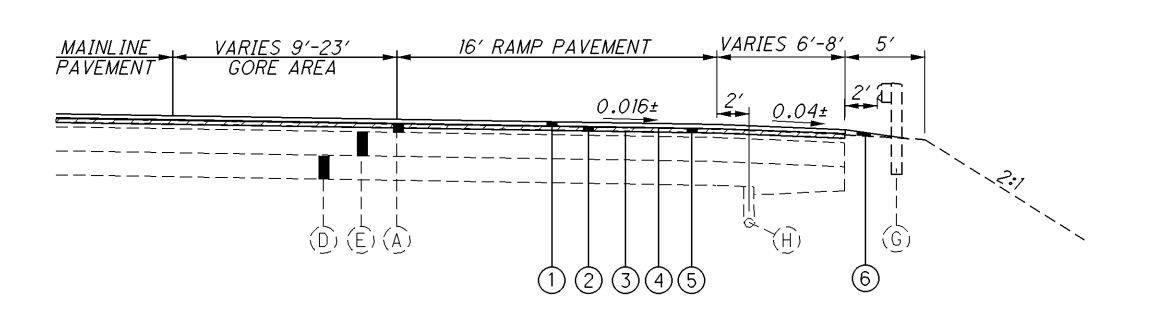
= 1310.73 FEET

RAMP C @ C.R. 418 STA. 840+81.68 TO STA. 848+70.53

= 788.85 FEET 2099.58 FEET

### EXISTING LEGEND

- (A) 3"± ASPHALT CONCRETE
- (B) 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- (C) SUBBASE
- (D) AGGREGATE BASE
- (È) ASPHALT CONCRETE BASE
- (F) 6" PIPE UNDERDRAINS
- (G) TYPE 5 GUARDRAIL
- (H) SHALLOW UNDERDRAINS
- (I) 9" PORTLAND CEMENT CONCRETE BASE
- (J) LIME STABILIZED SUBGRADE



# VARIES 6'-8' 16' RAMP PAVEMENT 0.016± 0.04±

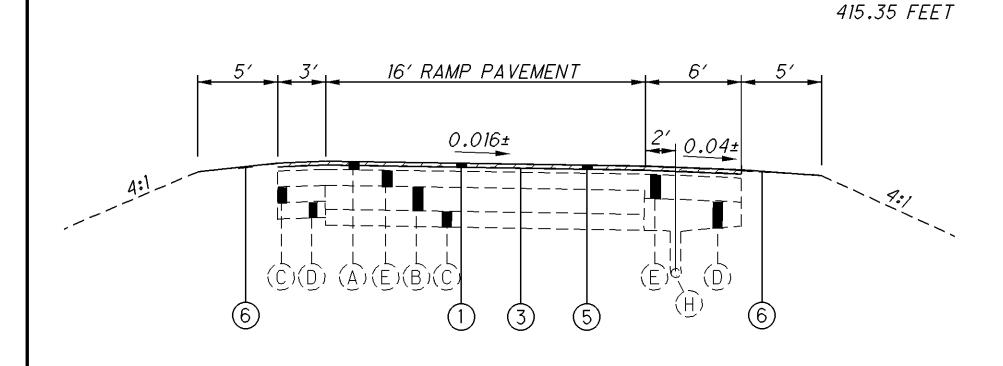
# SPEED CHANGE LANE (GORE AREA)- U.S.R. 30

= 415.35 FEET

SPEED CHANGE LANE (GORE AREA)- U.S.R. 30

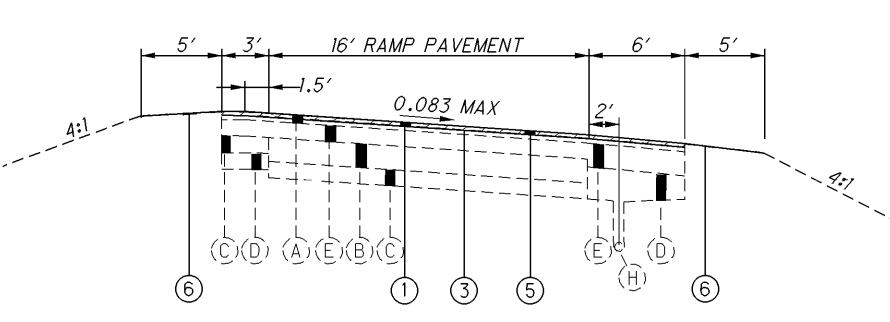
RAMP D @ U.S.R. 127 STA. 702+25 TO STA. 706+52.45

= 427.45 FEET 427.45 FEET

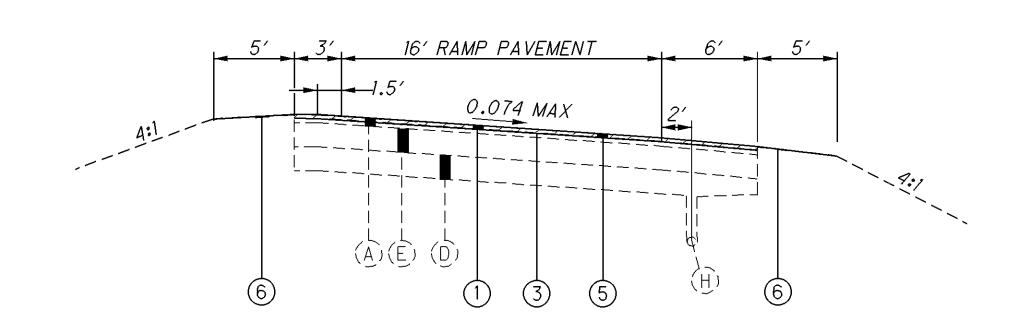


STA. 190+74.65 TO STA. 194+90.00

RAMP A @ U.S.R. 127



PAVEMENT PLANING, ASPHALT CONCRETE (T=1 1/4")



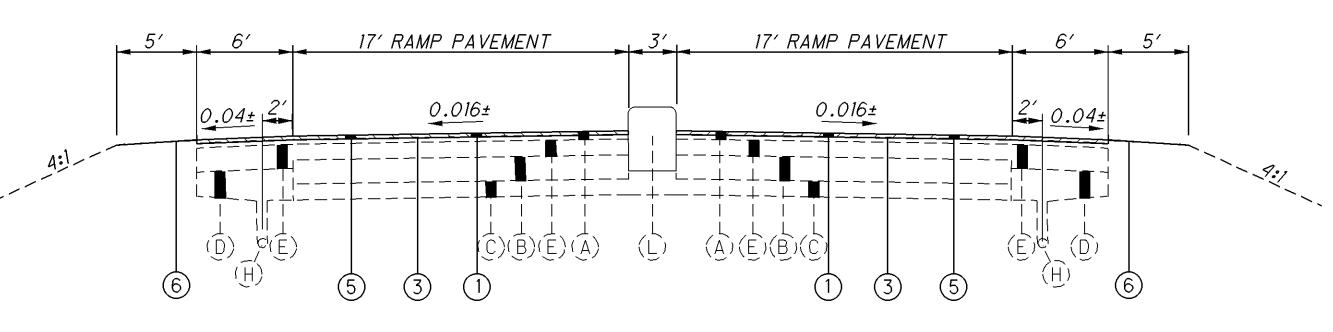
#### ONE WAY SUPERELEVATED RAMP- U.S.R. 30 ONE WAY NORMAL RAMP- U.S.R. 30 ONE WAY SUPERELEVATED RAMP- U.S.R. 30

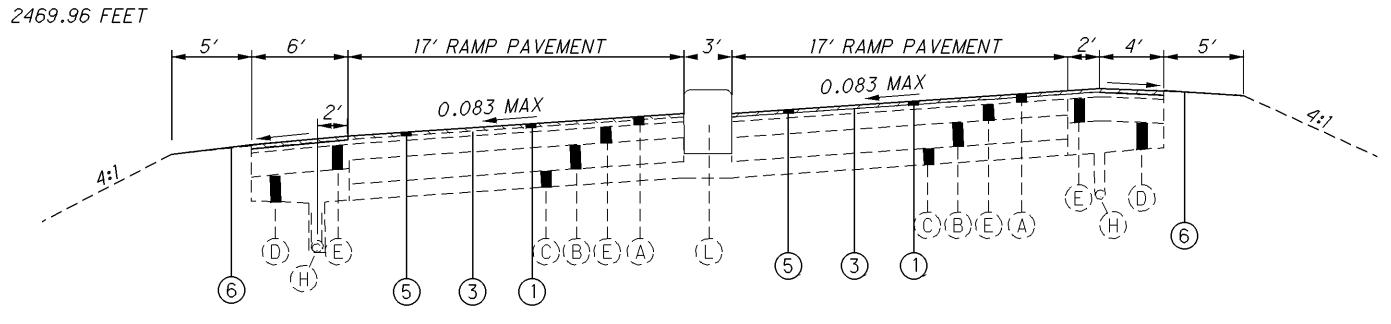
RAMP B @ U.S.R. 127 STA. 95+77 TO STA. 98+02.49 RAMP D @ U.S.R. 127 STA. 594+58 TO STA. 596+36.91

= 225.49 FEET = 178.91 FEET 434.40 FEET

RAMP A @ U.S.R. 127 STA. 194+90 TO STA. 208+49.20 = 1359.20 FEET DEDUCT STA. 200+00 TO STA. 204+25 =-425.00 FEET RAMP B @ U.S.R. 127 STA. 98+02.49 TO STA. 103+92.37 = 589.88 FEET RAMP C @ U.S.R. 127 STA. 394+82.21 TO STA. 398+40 = 357.79 FEET RAMP D @ U.S.R. 127 STA. 596+36.91 TO STA. 602+25 = 588.09 FEET

RAMP C @ U.S.R. 127 STA. 392+82.21 TO STA. 394+82.21 = 200.00 FEET 200.00 FEET





# TWO WAY NORMAL RAMP- U.S.R. 30

RAMP A & B @ U.S.R. 127 (USING RAMP B STATIONING) STA. 89+24.70 TO STA. 91+12.15 = 187.45 FEET RAMP C & D @ U.S.R. 127 (USING RAMP C STATIONING) STA. 401+16.02 TO STA. 403+97.79 = 281.77 FEET 469.22 FEET

### PROPOSED LEGEND

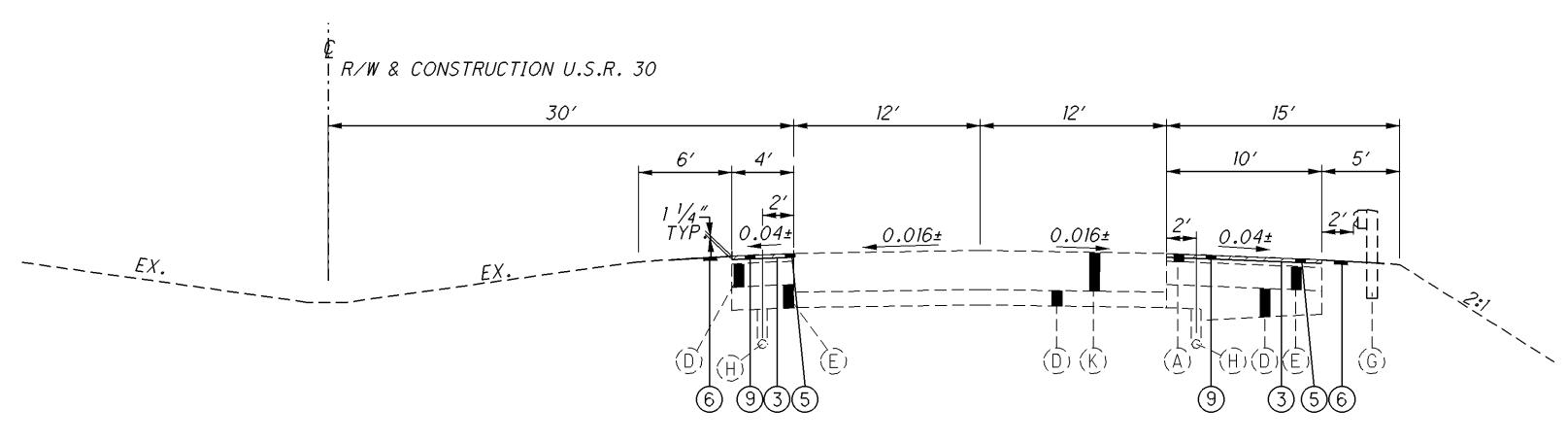
- (1) ITEM 442 1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5 mm, Type A (446)
- (2) ITEM 442 1 3/4 " ASPHALT CONCRETE INTERMEDIATE COURSE, 19 mm, TYPE A (446)
- (3) ITEM 407 TACK COAT APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
- ITEM 407 TACK COAT FOR INTERMEDIATE COURSE APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
- (5) ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE (1 1/4" THICK)
- ITEM 617 COMPACTED AGGREGATE VARIES FROM 0-2"

# **EXISTING LEGEND**

- (A) 3"± ASPHALT CONCRETE
- (B) 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- (C) SUBBASE
- (D) AGGREGATE BASE
- (È) ASPHALT CONCRETE BASE
- (G) TYPE 5 GUARDRAIL
- (H) SHALLOW UNDERDRAINS
- (L) CONCRETE MEDIAN

# TWO WAY SUPERELEVATED RAMP- U.S.R. 30

RAMP A & B @ U.S.R. 127 (USING RAMP B STATIONING) STA. 91+12.15 TO STA. 95+77.00 = 464.85 FEET RAMP C & D @ U.S.R. 127 (USING RAMP C STATIONING) STA. 398+40.00 TO STA. 401+16.02 = 276.02 FEET 740.87 FEET

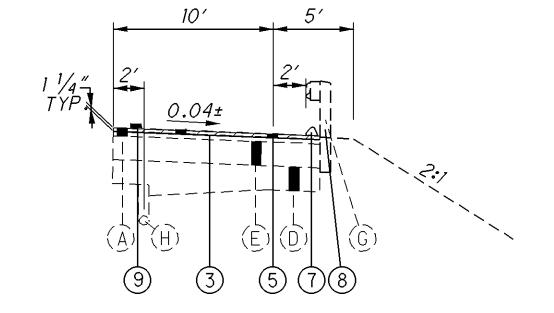


# HALF SECTION AT APPROACH SLABS

**GUARDRAIL DETAIL** 

PAVEMENT PLANING, ASPHALT CONCRETE (T=1 1/4")

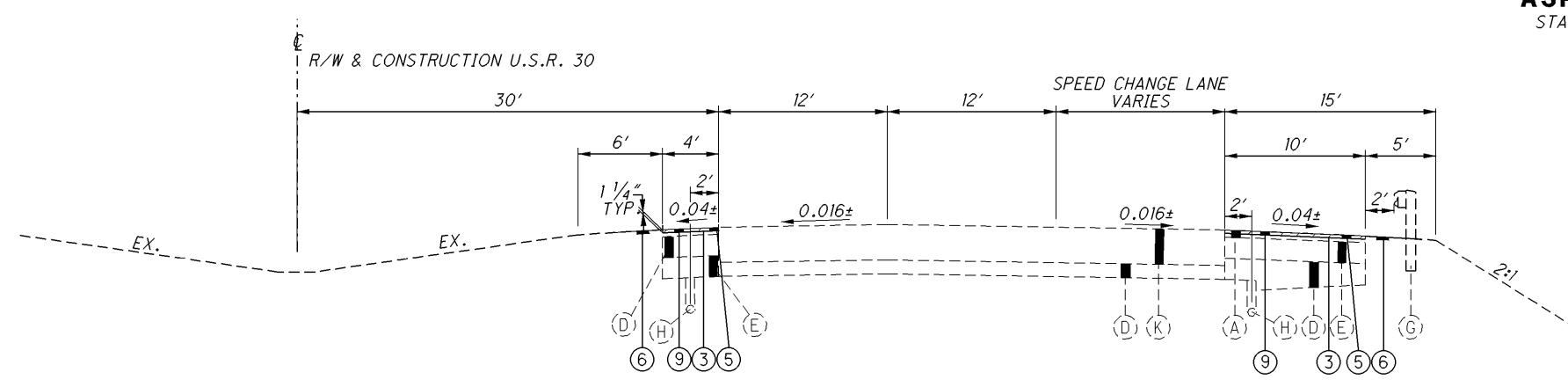
STA. 629+89.88 TO STA. 630+14.88 = 25.00 FEET STA. 631+01.12 TO STA. 631+26.12 = 25.00 FEET STA. 680+33.24 TO STA. 680+58.24 (RT. ONLY) = 25.00 FEET STA. 682+98.26 TO STA. 683+23.26 (RT. ONLY) = 25.00 FEET



ASPHALT CURB DETAIL

STA. 680+33.24 TO STA. 680+58.24

RT. & LT.



# HALF SECTION AT APPROACH SLABS

GUARDRAIL DETAIL

STA. 680+33.24 TO STA. 680+58.25 (LT. ONLY) = 25.00 FEET STA. 682+98.26 TO STA. 683+23.26 (LT. ONLY) = 25.00 FEET STA. 688+25.91 TO STA. 688+50.91 = 25.00 FEET STA. 690+54.41 TO STA. 690+79.41 = 25.00 FEET

# PROPOSED LEGEND

- (3) ITEM 407 TACK COAT APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
- (5) ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE (1 1/4" THICK)
- (6) ITEM 617 COMPACTED AGGREGATE VARIES FROM 0-2"
- (7) ITEM 609 ASPHALT CONCRETE CURB, TYPE 1
- 8 ITEM 202 GUARDRAIL REMOVED FOR REUSE ITEM 606 GUARDRAIL REBUILT, TYPE 5
- 9 ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5 mm, Type A (446) (THICKNESS VARIES AS SHOWN)

# **EXISTING LEGEND**

- (A) 3"± ASPHALT CONCRETE
- (D) AGGREGATE BASE
- (E) ASPHALT CONCRETE BASE
- (G) TYPE 5 GUARDRAIL
- (H) SHALLOW UNDERDRAINS
- (K) APPROACH SLAB

#### PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. (PREVIOUS CON-STRUCTION PLANS, PROJECT NO. VAN-30-11.24 (1965), SHOWING THE ORIGINAL ALIGNMENT AND PROFILE. ARE AVAILABLE FOR INSPECTION AT THE ODOT DISTRICT 1 OFFICE). PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY WITH A UNIFORM THICK-NESS OF 3.25 INCHES (SURFACE COURSE 1.50 INCHES THICK AND INTERMEDIATE COURSE 1.75 INCHES THICK AS SHOWN ON THE TYPICAL SECTIONS AFTER 1.25 INCH PAVEMENT PLANING).

#### PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES. EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

#### CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

#### UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

#### PIPE UNDERDRAINS

ANY PIPE UNDERDRAINS BROKEN OR DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE STATE.

#### MAINTAINING EXISTING PAVEMENT SLOPES

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL SLOPES LABELED ON THE TYPICAL SECTIONS, UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER.

#### ITEM 202 GUARDRAIL REMOVED FOR REUSE & ITEM 606 GUARDRAIL REBUILT. TYPE 5

THE FOLLOWING QUANTITES ARE PROVIDED FOR TEMPORARY REMOVAL AND SUBSEQUENT REPLACEMENT OF THE EXISTING GUARDRAIL AS REQUIRED FOR CONSTRUCTION OPERATIONS ASSOCIATED WITH ITEM 609 ASPHALT CONCRETE CURB, TYPE 1. REMOVE AND STORE THE EXISTING GUARDRAIL IN ACCORDANCE WITH THE REQUIREMENTS OF ITEM 202, GUARDRAIL REMOVED FOR REUSE. AFTER THE CURB INSTALLATION AND PRIOR TO THE OPENING THE ADJACENT ROADWAY TO TRAFFIC, REBUILD THE GUARDRAIL IN THE ORIGINAL LOCATION IN ACCORDANCE WITH ITEM 606, GUARDRAIL REBUILT, TYPE 5.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 202 GUARDRAIL REMOVED FOR REUSE = 2250 FT. ITEM 606 GUARDRAIL REBUILT, TYPE 5 = 2250 FT.

#### ENVIRONMENTAL COMMITMENTS

THE ENVIRONMENTAL DOCUMENT WAS APPROVED 12/07/09 AND CONTAINED THE FOLLOWING CONSTRUCTION RELATED ITEMS THAT THE CONTRACTOR AND PROJECT ENGINEER ARE TO ENSURE ARE CARRIED OUT. IF THEY CANNOT BE FOLLOWED THE DISTRICT PLANNING AND PROGRAM ADMINISTRATOR SHOULD BE NOTIFIED IMMEDIATELY.

NO WORK SHALL BE PERMITTED WITHIN OR BELOW ORDINARY HIGH WATER (O.H.W.) OF TOWN CREEK. DEBRIS FROM THE PARTIAL REMOVAL OF THE CONCRETE DECK SHALL NOT FALL INTO THE WATERWAY. THE EXISTING BANKS SHALL NOT BE DISTRUBED (NO CUTTING OR FILLING ALONG THE BANKS).

#### SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: RAISED CONCRETE MEDIAN

THIS ITEM SHALL BE USED TO REPAIR THE DETERIORATED FACE OF THE CONCRETE MEDIAN ON RAMPS A/B AND C/D AT U.S.R. 127. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH ITEM 519 - PATCHING CONCRETE STRUCTURES AND AS MODIFIED HEREIN.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL. BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT OR VACUUM ABRASIVE BLASTING.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: RAISED CONCRETE MEDIAN AND WILL BE PAID FOR PER FOOT. AN ESTIMATED QUANTITY IS PROVIDED BELOW TO BE USED AT THE DIRECTION OF THE PROJECT ENGINEER.

| RAMP   |          |     | DISTANC   |
|--------|----------|-----|-----------|
| U.S.R. | 127 RAMP | A/B | 130.5 F7  |
| U.S.R. | 127 RAMP | C/D | 111.5 FT. |
| TOTAL  |          | •   | 0.40 5.5  |

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#### ITEM 614 - MAINTAINING TRAFFIC. AS PER PLAN

THE CONTRACTOR SHALL MAINTAIN TRAFFIC AT ALL TIMES ON MAINLINE USR 30 IN ACCORDANCE WITH THE REQUIREMENTS OF SPEC. 614. THESE MAINTENANCE OF TRAFFIC NOTES AND DETAILS AND THE TRAFFIC CONTROL DETAILS DESCRIBED IN THESE PLANS.

THE MINIMUM LANE WIDTH FOR TRAFFIC CONTROL SHALL BE 11 FEET AT ALL TIMES ON USR 30. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ORGANIZE HIS WORK IN SUCH A MANNER TO PROVIDE THE MOST SAFETY WITH THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASON-ABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAIN-TENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING AND MAINTAINING SAFE AND EFFECTIVE TRAFFIC CONTROL 24 HOURS A DAY FOR THE DURATION OF THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED. ERECTED. MAINTAINED. AND REMOVED BY THE CONTRACTOR. THIS CONSISTS OF NOTIFYING THE OHIO STATE PATROL AFTER ENCOUNTERING ANY ACCIDENTS OR DISABLED VEHICLES OR OBJECTS HINDERING THE FLOW OF TRAFFIC.

THE CONTRACTOR SHALL DESIGNATE TO THE ENGINEER, A PERSON RESPONSIBLE FOR MAINTENANCE OF TRAFFIC CONTROL DURING NON-WORK HOURS WHO SHALL BE AVAILABLE WITHIN THIRTY (30) MINUTES AFTER NOTIFICATION.

THE CONTRACTOR SHALL REMOVE THE RUMBLE STRIPS WITHIN 500 FEET OF STRUCTURE NO. VAN-30-1276 L&R PRIOR TO BEGINNING WORK ON THE MICROSILICA OVERLAY BY FILLING WITH AN ASPHALT CONCRETE MATERIAL AS DIRECTED BY THE PROJECT ENGINEER.

UNLESS PHYSICALLY IMPOSSIBLE, ALL CONSTRUCTION EQUIP-MENT SHALL EXIT ALL WORK ZONES FROM THE DOWNSTREAM END OF THE WORK ZONE OR BY INTERCHANGE RAMPS.

UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMIT-TED TO DIRECTLY TRANSPORT OR OPERATE ANY EQUIPMENT ACROSS THE OPEN LANES OF USR 30.

ALL WORK VEHICLES LICENSED TO OPERATE ON THE HIGHWAY, INCLUDING MATERIAL TRUCKS, SHALL BE EQUIPPED WITH A FLASH-ING. ROTATING OR OSCILLATING AMBER LIGHT VISIBLE TO ALL DIRECTIONS OF TRAFFIC A MINIMUM OF ONE QUARTER MILE IN BRIGHT SUNLIGHT AND SHALL BE OPERATED WITH LIGHTED HEAD AND TAIL LAMPS. THE AMBER LIGHT SHALL BE IN OPERATION AT ALL TIMES WITHIN THE WORK ZONE AND WHILE TRAVELLING TO AND FROM THE WORK ZONE WHENEVER THE VEHICLE SPEED IS BELOW 40 MPH. VEHICLE HAZARD LAMPS DO NOT SATISFY THIS REQUIREMENT. ALL OTHER EQUIPMENT SHALL BE EQUIPPED WITH A FLASHING, ROTATING OR OSCILLATING AMBER LIGHT VISIBLE TO ALL DIRECTIONS OF TRAFFIC A MINIMUM OF ONE QUARTER MILE IN BRIGHT SUNLIGHT. THE AMBER LIGHT SHALL BE IN OPERATION WHILE THE EQUIPMENT IS WITHIN THE WORK ZONE.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL ITEMS. LABOR. EQUIPMENT AND MATERIALS REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THESE REQUIREMENTS AND DEEMED NECESSARY BY THE ENGINEER SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614. MAINTAINING TRAFFIC. AS PER PLAN. UNLESS SEPARATELY ITEMIZED IN THE PLAN.

#### ALTERNATE METHODS

IF THE CONTRACTOR SO ELECTS, THEY MAY SUBMIT ALTERNATE METHODS FOR MAINTENANCE OF TRAFFIC PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM, NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE DISTRICT CONSTRUCTION ENGINEER.

#### MAINTAINING TRAFFIC AT PLANED AND PAVED AREAS

THE CONTRACTOR SHALL ARRANGE HIS OPERATIONS SO THAT TRAFFIC IS RETURNED TO AN AREA WHEN PAVING IS COMPLETE. NO TRAFFIC SHALL BE ALLOWED TO OPERATE ON A PLANED SURFACE. ALL REQUIRED WORK ZONE PAVEMENT MARKING SHALL BE PLACED PRIOR TO OPENING THE AREA TO TRAFFIC. ALL LANE CLOSURES SHALL BE IN COMPLIANCE WITH THE HOLIDAY RESTRICTIONS AS STATED IN THESE PLANS.

#### COORDINATION OF CONTRACTORS

SINCE THE MAINTENANCE OF TRAFFIC AND WORK ON THIS PROJECT MAY OVERLAP OTHER PROJECTS. IT IS ESSENTIAL THAT EACH CONTRACTOR CONDUCT THEIR WORK AND COOPERATE WITH EACH OTHER IN SUCH A MANNER AS NOT TO HINDER THE PROGRESS OR COMPLETION OF THE WORK BEING PERFORMED BY THE OTHER CONTRACTOR.

#### PAVEMENT MARKING

PRIOR TO PLACEMENT OF ANY WORK ZONE PAVEMENT MARKINGS. THE CONTRACTOR SHALL COMPLETELY OBLITERATE, AS PER SPEC. 641.10, ALL EXISTING PAVEMENT MARKINGS THAT WOULD CREATE CONFUSION OR CONFLICT WITH THE WORK ZONE PAVEMENT MARKINGS. PAYMENT FOR THIS COMPLETE REMOVALSHALL BE INCLUDED IN ITEM 614 MAINTAINING TRAFFIC. AS PER PLAN.

#### COVERING OF SIGNS

WHERE THE PLANS CALL FOR A PERMANENT SIGN TO BE COVERED. THE CONTRACTOR SHALL DO SO IN SUCH A MANNER AS TO AVOID DAMAGING THE PERMANENT SIGN WHEN THE COVER IS REMOVED. THE COVER SHALL BE TOTALLY OPAQUE. THE USE OF ADHESIVE TAPE APPLIED DIRECTLY TO THE SIGN FACE IS STRICTLY PROHIBITED.

#### **FLOODLIGHTING**

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614. MAINTAINING TRAFFIC. AS PER PLAN.

#### ITEM 614. REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCOR-DANCE WITH THE REQUIREMENTS OF THE PLANS. SPECIFICA-TIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED

#### ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CON-TRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 25 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

#### CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

IN ADDITION TO THE REQUIREMENTS OF SECTION 614.03(a) OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS THE FOLLOWING SHALL APPLY. THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL. EXTREME CAUTION SHALL BE USED WHERE THE CONTRACTOR'S VEHICLES AND EQUIPMENT MERGE WITH THE TRAFFIC STREAM. VEHICLES AND EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT.

EQUIPMENT MAY BE PARKED IN AREA ALONG THE HIGHWAY, THIRTY FEET (30') FROM THE EDGE OF THE TRAVELED HIGHWAY UNLESS BEHIND GUARDRAIL. WHEN VARIOUS OPERATIONS ARE SCHEDULED TO CONTINUE THE NEXT WORKDAY. EQUIPMENT PARKED BEHIND THE GUARDRAIL SHALL BE AT LEAST 6 FEET FROM THE FACE OF THE GUARDRAIL. NO EQUIPMENT SHALL BE PARKED BEHIND A GUARDRAIL ATTENUATOR. ON WEEKENDS OR AT OTHER TIMES OF SUSPENSION OF WORK, EQUIPMENT SHALL BE STORED AT A STORAGE AREA REMOVED FROM THE INTERSTATE RIGHT OF WAY. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY EXCEPT WHEN TRAFFIC IS MAINTAINED ON THE OUTSIDE LANES. ADEQUATE BARRICADES AND LIGHT SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA.

#### ITEM 614. MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS)

NO WORK SHALL BE PERFORMED AND THE SAME NUMBER OF LANES AS WERE AVAILIBLE AT THE START OF THE PROJECT SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS:

> CHRISTMAS FOURTH OF JULY NEW YEARS LABOR DAY THANKSGIVING MEMORIAL DAY

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEP-ENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS, THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

TIME ALL LANES MUST DAY OF THE WEEK BE OPEN TO TRAFFIC

12:00N FRIDAY THROUGH 6:00 AM MONDAY SUNDAY 12:00N FRIDAY THROUGH 6:00 AM TUESDAY MONDAY TUESDAY 12:00N MONDAY THROUGH 6:00 AM WEDNESDAY WEDNESDAY 12:00N TUESDAY THROUGH 6:00 AM THURSDAY 12:00N WEDNESDAY THROUGH 6:00 AM MONDAY THURSDAY FRIDAY 12:00N THURSDAY THROUGH 6:00 AM MONDAY SATURDAY 12:00N FRIDAY THROUGH 6:00 AM MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES. UNLESS SUCH DELAYS ARE INDUSTRY-WIDE. OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE RE-QUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$50 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

#### EXTRA ADVANCE WARNING SIGNS

AN EXTRA ADVANCE WARNING SIGN GROUP CONSISTS OF TWO W20-1 (ROAD WORK AHEAD) SIGNS. TWO W20-5 (RIGHT/LEFT LANE CLOSED AHEAD) SIGNS WITH W16-3A DISTANCE PLATES, AND TWO W3-H7 (WATCH FOR STOPPED TRAFFIC) SIGNS AND REQUIRED WARNING LIGHTS.

THE CONTRACTOR SHALL PROVIDE, ERECT, MAINTAIN AND REMOVE EXTRA ADVANCE WARNING SIGN GROUPS AS SHOWN ON SCD MT-95.50 AT A DISTANCE OF 2 MILES IN ADVANCE OF THE LANE TAPERS WITH THE APPROPRIATE W16-3A DISTANCE PLATES.

PAYMENT FOR PROVIDING, ERECTING, MAINTAINING AND RE-MOVING EXTRA ADVANCE WARNING SIGN GROUPS SHALL BE IN-CLUDED IN THE LUMP SUM BID FOR ITEM 614. MAINTAINING TRAFFIC, AS PER PLAN.

#### ITEM 614, BARRIER REFLECTORS AND/OR OBJECT MARKERS

BARRIER REFLECTORS AND/OR OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE CONCRETE BARRIER USED FOR TRAFFIC CONTROL. BARRIER REFLECTORS, OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO CMS 626, EX-CEPT THAT THE SPACING SHALL BE 50 FEET. PAYMENT FOR THIS ITEM SHALL BE INCLUDED IN ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

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#### ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PER-MITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCE-MENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

IN ADDITION TO THE REQUIREMENT OF CMS 614 AND THE OMUTCD. A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS. SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITION-ED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/ DECELERATION LANE FOR THE VEHICLE. THE LEO WILL NOT BE REQUIRED.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSI-BILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CON-SIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COM-MUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT. THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RE-TURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINT-ENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614. LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 150 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) IN-CURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614,

#### WORK ZONE MARKINGS AND SIGNS

THE CONTRACTOR SHALL BE REQUIRED TO INSTALL VARIOUS TYPES OF WORK ZONE MARKINGS AND SIGNS ACCORDING TO THE FOLLOWING CRITERIA CONTINGENT UPON THE SEQUENCE OF CONSTRUCTION. WORK ZONE PAVEMENT MARKINGS SHALL BE 740.06. TYPE I PREFORMED MATERIAL OR 642 PAINT APPLIED USING THE FOLLOWING CRITERIA: ALL WORK ZONE MARKINGS INSTALLED ON A BRIDGE DECK OR ON FINAL PAVEMENT SURFACE SHALL BE 740.06, TYPE 1 PREFORMED MATERIAL. PAINT MAY BE USED FOR WORK ZONE MARKINGS INSTALLED ON EXISTING PAVEMENT THAT WILL BE PLANED.

ERECT A GROOVED PAVEMENT SIGN 250 FEET IN ADVANCE OF ANY SECTION OF ROADWAY WHERE TRAFFIC MUST TRAVEL ON A PLANED SURFACE. ENSURE THESE SIGHNS ARE IN PLACE BEFORE OPENING THE ROADWAY TO TRAFFIC. ERECT THESE SIGNS AT INTERSECTIONS OF THROUGH ROUTES TO WARN TRAFFIC OF THIS SURFACE CONDITION.THE SIGN CODE IS 8-H15 AND THESE SIGNS SHALL BE PAID FOR AS ITEM 614 WORK ZONE MARKING SIGN.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF CMS 614.04 AND 614.11.

ITEM 614 WORK ZONE MARKING SIGN - 28 EACH ITEM 614 WORK ZONE LANE LINE, CLASS II - 9.46 MILES

WORK ZONE RAISED PAVEMENT MARKERS CANNOT BE USED TO SIMULATE (REPLACE) ANY TYPE OF WORK ZONE PAVEMENT MARKING.

#### ITEM 622, PORTABLE CONCRETE BARRIER, 50", AS PER PLAN

THIS WORK SHALL CONSIST OF FURNISHING, MAINTAINING, AND SUBSEQUENTLY REMOVING A 50-INCH PORTABLE CONCRETE BARRIER (PCB) AT THE LOCATIONS SHOWN ON THE PLANS. FOR DETAILS SEE SCD RM-4.1. PLEASE NOTE THAT SCD RM-4.1 WAS UPDATED 10-20-06 TO PROVIDE A PCB WHICH IS COMPATIBLE WITH NCHRP 350 CRITERIA.

PORTABLE CONCRETE BARRIER, 32 INCHES HIGH WITH AN 18-INCH MINIMUM HEIGHT GLARE SCREEN MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE GLARE SCREEN SHALL BE CON-STRUCTED USING ONE OF THE SCREENS PROVIDED ON THE APPROVED LIST, AVAILABLE ON THE OFFICE OF MATERIAL MANAGEMENT WEB PAGE. THE APPROVED LIST OF GLARE SCREENS CAN BE FOUND ON THE ODOT WEBSITE BY CLICKING ON THE SERVICES MENU. THEN CLICKING ON MATERIALS MANAGE-MENT. AND CHOOSING THE APPROVED LIST LINK.

PADDLE OR INTERMITTENT TYPE GLARE SCREENS SHALL BE DESIGNED USING A 20 DEGREE CUT-OFF ANGLE BASED ON TAN-GENT ALIGNMENT. THAT SPACING SHALL BE USED THROUGHOUT THE BARRIER LENGTH WITHOUT REGARD TO BARRIER CURVATURE.

THE GLARE SCREEN SYSTEM SHALL BE SECURELY FASTENED TO THE 32-INCH PORTABLE CONCRETE BARRIER USING THE HARD-WARE AND PROCEDURES SPECIFIED BY THE MANUFACTURER.

FOR DIRECTIONS ON HOW TO INSTALL THE GLARE SCREEN AND THE BARRIER. SEE THE MANUFACTURER'S INSTRUCTIONS.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIP-MENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR USING ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

#### ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ONE OF THE FOLLOWING IMPACT ATTENUATORS:

1. THE QUADGUARD CZ, (24 INCHES WIDE SIX-BAY) WORK ZONE IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC., 35 EAST WACKER DRIVE, CHICAGO. IL 60601 (TELEPHONE: 312-467-6750).

THE LENGTH OF THE SIX-BAY QUADGUARD CZ IS 20'-9". INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER: QSCZCVR-T4

QUADGUARD CZ SYSTEM FOR DRAWING NAME:

CONSTRUCTION ZONES

REVISION DATE: 5/13/99 REV. J ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35-40-10

DRAWING NAME: QUADGUARD SYSTEM CONCRETE PAD.

CZ, QG 11/19/97 REV. D REVISION DATE: ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35-40-16

DRAWING NAME: QUADGUARD SYSTEM BACKUP ASSEMBLY,

CZ, QG

REVISION DATE: 7/30/99 REV. F ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER:

*354051Z* QUADGUARD CZ SYSTEM NOSE ASSEMBLY, DRAWING NAME:

CZ, QG, 24, 30, 36

REVISION DATE: 5/17/99 ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35-40-18

DRAWING NAME: TRANSITION ASSEMBLY, 4 OFFSET, QG

REVISION DATE: 6/25/99 REV. F

ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: *35400260* DRAWING NAME:

QUADGUARD SYSTEM PCMB ANCHOR **ASSEMBLY** 

REVISION DATE: *11/19/97 REV. C* ODOT APPROVAL DATE: 8/27/99

2. THE TRACC (TRINITY ATTENUATING CRASH CUSHION) MANUFACTURED BY TRINITY INDUSTRY. 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE TRACC IS 21'-0" LONG AND 2'-7" WIDE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER: SS450

DRAWING NAME: CRASH-CUSHION ATTENUATING TERMINAL

PLAN, ELEVATION & SECTIONS

REVISION DATE: *3/12/99 REV. 1* ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: SS455

TRACC TRANSITION TO W-BEAM MEDIAN DRAWING NAME:

BARRIER PLAN. ELEVATION & SECTIONS

REVISION DATE: 2/18/99 ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER:

TRACC TRANSITION TO CONCRETE SAFETY DRAWING NAME: SHAPE BARRIER PLAN, ELEVATION &

SECTIONS

REVISION DATE: 6/30/99 REV. 1 ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER:

TRACC TRANSITION TO CONCRETE BARRIER DRAWING NAME:

SINGLE SLOPE PLAN, ELEVATION &

SECTIONS

REVISION DATE: 6/30/99 ODOT APPROVAL DATE: 8/27/99

3. THE BARRIER SYSTEMS, INC. TAU-II IMPACT ATTENUATOR, DISTRIBUTED BY ROAD SYSTEMS INC., SALES SUPPORT, 2183 ELM TRACE, AUSTINTOWN, OH 44515, (TELEPHONE 330-799-9291)

THE TAU-II FOR THIS NOTE IS A PARALLEL 8-BAY UNIT (24' LONG AND 35" WIDE). INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIEDIN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER: A040416

UNIVERSAL TAU-II PARTS LIST DRAWING NAME:

REVISION DATE: 4/22/04 ODOT APPROVAL DATE: 10/16/04

DRAWING NUMBER: A040420

UNIVERSAL TAU-II FOUNDATION. DRAWING NAME:

FLUSH MOUNT BACKSTOP

REVISION DATE: 4/28/04

ODOT APPROVAL DATE: 10/16/04

DRAWING NUMBER: A040105 UNIVERSAL TAU-II FOUNDATION. DRAWING NAME:

PCB BACKSTOP (REFERENCED ON A04020)

REVISION DATE: 1/07/04 ODOT APPROVAL DATE: 10/16/04

DRAWING NUMBER:

DRAWING NAME:

APPLICATION, FLUSH MOUNT BACKSTOP (TYPICAL FOR PARALLEL 60 MPH UNIT)

REVISION DATE: 4/21/04 ODOT APPROVAL DATE: 10/16/04

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

BO40239

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS. PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

|      | S  | HEET | NUMB | ER             |    |    |       |     |                | TEM        | ITEM           | GRAND          | UNIT         | DESCRIPTION SHEE  |
|------|----|------|------|----------------|----|----|-------|-----|----------------|------------|----------------|----------------|--------------|---|
| 7    | 8  | 9    |      | 12             | 1. | 15 | 16    |     |                | IEW        | EXT.           | TOTAL          | UNII         | DESCRIPTION SHEE  |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              | 004044  |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              | ROADWAY   |
| 2250 |    |      |      |                |    |    |       |     |                | 202        | 38200          | 2250           | FT           | GUARDRAIL REMOVED FOR REUSE   |
| 242  |    |      |      |                |    |    |       |     |                | PECIAL     | 51911720       | 242            | FT           | SPECIAL - PATCHING CONCRETE STRUCTURES, MISC.: RAISED CONCRETE MEDIAN   7               |
| 2250 |    |      |      |                |    |    |       |     |                | 606        | 16000          | 2250           | <br>FT       | GUARDRAIL REBUILT   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              |   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              | PAVEMENT  |
|      |    |      |      |                | 20 | 00 |       |     |                | 252        | 01000          | 200            | SQ YD        | FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT                              |
|      |    |      |      |                | 75 | 50 |       |     |                | 252        | 01500          | 750            | FT           | FULL DEPTH PAVEMENT SAWING  |
|      |    |      |      |                | 40 | 00 |       |     |                | 253        | 01000          | 400            | SQ YD        | PAVEMENT REPAIR   |
|      |    |      |      | 241916         |    |    |       |     |                | 254        | 01000          | 241916         | SQ YD        | PAVEMENT PLANING, ASPHALT CONCRETE  |
|      |    |      |      | 12096          |    |    |       |     |                | 254        | 01600          | 12096          | SQ YD        | PATCHING PLANED SURFACE   |
|      |    |      |      | 10144          |    |    |       |     |                | 407        | 10000          | 10144          | CALLON       | TACK COAT   |
|      |    |      |      | 18144          |    |    |       |     |                | 407        | 10000          | 18144          |              | TACK COAT FOR INTERMEDIATE COURSE   |
|      |    | -    |      | 15802<br>10136 |    |    |       |     |                |            | 14000          | 15802          | GALLON       | TACK COAT FOR INTERMEDIATE COURSE   |
|      |    |      |      | 10136          |    |    |       |     |                | 442        | 10000<br>10100 | 10136<br>10175 | CU YD        | ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)                              |
|      |    |      |      | 2241           |    |    |       |     |                | 609        | 10000          | 2241           | CU YD<br>FT  | ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446)  ASPHALT CONCRETE CURB, TYPE 1 |
|      |    |      |      | 2241           |    |    |       |     |                | 009        | 10000          | 2241           | ΓΙ           | ASPHALI CONCRETE CORD, TIPE I   |
|      |    |      |      | 1480           |    |    |       |     |                | 617        | 10100          | 1480           | CU YD        | COMPACTED AGGREGATE   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              | TRAFFIC CONTROL   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              | TRAFFIC CONTROL   |
|      |    |      |      |                |    |    | 18.51 |     |                | 618        | 40600          | 18.51          | MILE         | RUMBLE STRIPS, (ASPHALT CONCRETE)   |
|      |    |      |      |                |    |    | 735   |     |                | 621        | 00100          | 735            | EACH         | RPM   |
|      |    |      |      |                |    |    | 803   |     |                | 621        | 54000          | 803            | EACH         | RAISED PAVEMENT MARKER REMOVED  |
|      |    |      |      |                |    |    | 25.34 |     |                | 642        | 00100          | 25.34          | MILE         | EDGE LINE, TYPE 1   |
|      |    |      |      |                |    |    | 9.62  |     |                | 642        | 00190          | 9.62           | MILE         | LANE LINE   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              |   |
|      |    |      |      |                |    |    | 0.16  |     |                | 642        | 00290          | 0.16           | MILE         | CENTER LINE   |
|      |    |      |      |                |    |    | 1750  |     |                | 647        | 18010          | 1750           | FT           | CHANNELIZING LINE, TYPE B90   |
|      |    |      |      |                |    |    | 334   |     |                | 647        | 18060          | 334            | FT           | STOP LINE, TYPE B90   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              |   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              | STRUCTURES OVER 20 FEET   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              | FOR STRUCTURES VAN-30-1276 L&R QUANTITIES SEE SHEET 17                                  |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              | MAINTENANCE OF TRAFFIC  |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              |   |
|      |    | 150  |      |                |    |    |       |     |                | 614        | 11110          | 150            | HOUR         | LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE                                  |
|      |    | 28   |      |                |    |    |       |     |                | 614        | 12460          | 28             | EACH         | WORK ZONE MARKING SIGN  |
|      | 5  |      |      |                |    |    |       |     |                | 614        | 12500          | 5              | EACH         | REPLACEMENT SIGN  |
|      | 25 | 9.46 |      |                |    |    |       |     |                | 614<br>614 | 12600<br>20400 | 25<br>9.46     | EACH<br>MILE | REPLACEMENT DRUM  WORK ZONE LANE LINE, CLASS II   |
|      |    | 9.40 |      |                |    |    |       |     |                | 014        | 20400          | 9.40           | WILE         | WORK ZONE LANE LINE, CLASS II   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              |   |
|      |    |      |      |                |    |    |       |     |                | 614        | 11001          | LUMP           |              | MAINTAINING TRAFFIC, AS PER PLAN 8  |
|      |    |      |      |                |    |    |       |     |                | 619        | 16010          | 3              | MONTH        | FIELD OFFICE, TYPE B  |
|      |    |      |      |                |    |    |       |     |                | 624        | 10000          | LUMP           |              | MOBILIZATION  |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              |   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              |   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              |   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              |   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              |   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              |   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              |   |
|      |    |      |      |                |    |    |       |     |                |            |                |                |              |   |
|      |    |      |      |                |    |    |       | † † | <del>-  </del> | +          |                |                |              |   |

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|                            |                          | Τ           |       |          | 254                              | 407    | 407                      | 442                                    | 442   | 442                                      | 442   | 609                      | 617                       |          |                             |                        | I                 |          | I                | 254                              | 407            | 407                      | 442                                    | 442   | 442                                       | 442  | 609                     | 617                           | LED<br>D                                 |
|----------------------------|--------------------------|-------------|-------|----------|----------------------------------|--------|--------------------------|--|---|--|---|--------------------------|---------------------------|----------|-----------------------------|------------------------|-------------------|----------|------------------|----------------------------------|----------------|--------------------------|--|---|---|--|-------------------------|-------------------------------|--|
| STA                        | TION                     | ,<br>L<br>L | WIDTH | REA      | NT PLANING,<br>NCRETE (T=1 1/4") | K COAT | COAT FOR<br>DIATE COURSE | HALT SURFACE<br>2.5mm, TYPE A<br>(446) | JRFACE COURSE,<br>TYPE A (446)<br>ESS VARIES) | " ASPHALT<br>IATE COURSE,<br>YPE A (446) | INTERMEDIATE<br>19mm, TYPE A<br>1CKNESS VARIES) | CONCRETE CURB,<br>TYPE I | D AGGREGATE<br>RIES 0-2") |          | STATIO                      | ON                     | N, FT.            | ІРТН     | REA              | NT PLANING,<br>NCRETE (T=1 1/4") | K COAT         | COAT FOR<br>DIATE COURSE | HALT SURFACE<br>2.5mm, TYPE A<br>(446) | JRFACE COURSE,<br>TYPE A (446)<br>ESS VARIES) | " ASPHALT<br>IATE COURSE,<br>'YPE A (446) | INTERMEDIATE<br>19mm, TYPE A<br>CKNESS VARIES) | ONCRETE CURB,<br>'YPE 1 | TED AGGREGATE<br>VARIES 0-2") | CALCULA<br>JLG<br>CHECKE<br>BDC          |
|                            |                          | 5           | M     | <b>A</b> | PAVEME.<br>4SPHAL T CO           | 740    | TACK<br>INTERMEL         | I 1/2" ASP<br>COURSE, I                | ASPHALT SU<br>12.5mm,<br>(THICKN              | 1 3/4"<br>INTERMEDI<br>I9mm, T)          | ASPHALT<br>COURSE,<br>(446) (THIC               | ASPHALT C                | COMPACTED<br>(T-VARI      |          |                             |                        |                   | <b>*</b> | ◀                | PAVEME.<br>4SPHAL T CO.          | 740            | TACK<br>INTERMEL         | 1 1/2" ASP<br>COURSE, 1                | ASPHALT SU<br>12.5mm,<br>(THICKN              | 1 3/4" A:<br>INTERMEDIA1<br>I9mm, TYP.    | ASPHALT<br>COURSE,<br>(446) (THIU              | ASPHALT C               | COMPACTE<br>(T-VA             |  |
| FROM                       | TO                       |             |       |          | SQ. YD.                          | GAL.   | GAL.                     | CU. YD.                                | CU. YD.                                       | CU. YD.                                  | CU. YD.   | FEET                     | CU. YD.                   |          | FROM                        | TO                     |                   |          |                  | SQ. YD.                          | GAL.           | GAL.                     | CU. YD.                                | CU. YD.                                       | CU. YD.                                   | CU. YD.  | FEET                    | CU. YD.                       |  |
| EAST                       | TBOUND                   |             |       |          |                                  |        |                          |  |   |  |   |                          |                           |          | EASTBOUN<br>OVERHEAD BRIDGE |                        |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               |  |
| BEGINNING<br>600+00.00     | TRANSITION 601+00.00     | 100         | 38    | 3800     | 422                              | 31.7   | 11.9                     |  | 20.3  |  | 6.1   |                          | 2.5                       |          | 745+16.35                   | 749+16.35              | 400.00            | 38       | 15200            | 1689                             | 126.7          | 23.8                     |  | 70.0  |   | 12.1   |                         | 9.9                           |  |
| 000+00.00                  | 001+00.00                | 100         | 30    | 3800     | 422                              | 31.1   | 11.3                     |  | 20.5  |  | 0.1   |                          | 2.0                       |          | 749+16.35                   | 839+64.82              | 9048.47           | 38       | 343841.9         | 38205                            | 2865.3         | 2865.3                   | 1591.9                                 |   | 1857.2                                    |  |                         | 223.4                         |  |
| 601+00.00                  | 628+89.88                | 2789.88     | 38    | 106015.4 | 11779                            | 883.5  | 883.5                    | 490.8                                  |   | 572.6                                    |   |                          | 68.9                      | -        | OVERHEAD BRIDGE             | TRANSITON              |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               |  |
|                            | DGE TRANSITION           |             |       |          |                                  |        |                          |  |   |  |   |                          |                           |          |                             | 843+64.82              | 400.00            | 38       | 15200            | 1689                             | 126.7          | 23.8                     |  | 70.0  |   | 12.1   |                         | 9.9                           | SN                                       |
| 628+89.88                  | 629+89.88<br>VAN-30-1181 | 100.00      | 38    | 3800     | 422                              | 31.7   | 11.9                     |  | 20.3  |  | 6.1   |                          | 2.5                       | -        | 843+64.82                   | 848+60.73              | 495.91            | 38       | 18844.6          | 2094                             | 157.0          | 157.0                    | 87.2                                   |   | 101.8                                     |  |                         | 12.2                          | 0  |
|                            | 4CH SLAB                 |             |       |          |                                  |        |                          |  |   |  |   |                          |                           |          | ENDING TRANS                | SITION                 |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               | <b>⊢</b>                                 |
| 629+89.88<br>BR            | 630+14.88<br>PIDGE       | 25.00       | 14    | 350      | 39                               | 2.9    |                          |  | 1.4   |  |   |                          | 0.6                       |          | 848+60.73                   | 849+60.73              | 100.00            | 38       | 3800             | 422                              | 31.7           | 11.9                     |  | 20.3  |   | 6.1  |                         | 2.5                           |  |
| 630+14.88                  | 631+01.12                | 86.24       |       |          |                                  |        |                          |  |   |  |   |                          |                           |          | U.S.R. 127 RA               | PAMPS                  |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               | no                                       |
| APPRO.<br>631+01.12        | 4CH SLAB<br>631+26.12    | 25.00       | 14    | 350      | 39                               | 2.9    |                          |  | 1.4   |  |   |                          | 0.6                       | _        | RAMP C SPEED CHA            | ANGE LANES             |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               | ب  |
|                            |                          | 20.00       |       | 300      |                                  | 2.0    |                          |  | , , ,   |  |   |                          | 0.0                       |          | 684+82.00                   | 688+25.91              | 343.91            |          | 2444.1           | 272                              | 20.4           | 20.4                     | 11.3                                   |   | 13.2                                      |  |                         |                               | CA                                       |
| MAINLINE BRIL<br>631+26.12 | DGE TRANSITION 632+26.12 | 100.00      | 38    | 3800     | 422                              | 31.7   | 11.9                     |  | 20.3  |  | 6.1   |                          | 2.5                       |          | 390+79.41                   | 392+82.21              | 202.80            |          | 5374.2           | 597                              | 44.8           | 44.8                     | 24.9                                   |   | 29.0                                      |  |                         |                               |  |
| 037.20.12                  | 032720.12                | 100.00      |       | 3000     | 122                              | 51.1   | 11.5                     |  | 20.5  |  | 0.1   |                          | 2.0                       |          | RAMP C TRANS                | SITION                 |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               |  |
| 632+26.12                  | 668+25.00                | 3598.88     | 38    | 136757.4 | 15195                            | 1139.6 | 1139.6                   | 633.1                                  |   | 738.7                                    |   |                          | 88.9                      |          | 392+82.21                   | 393+69.71              | 87.50             | 25       | 2187.5           | 243                              | 18.2           | 7.8                      |  | 12.1  |   | 4.0  |                         | 2.2                           | Z<br>H                                   |
| 668+25.00                  | 679+33.24                | 1108.24     | 40    | 44329.6  | 4926                             | 369.4  | 369.4                    | 205.2                                  |   | 239.4                                    |   | 1108                     | 13.7                      |          | RAMP C ONE<br>393+69.71     | 398+40.00              | 470.29            | 25       | 11757.3          | 1306                             | 98.0           |                          | 54.4                                   |   |   |  |                         | 11.6                          | EN                                       |
|                            | DGE TRANSITION           | 100.00      | 10    | 4000     | 444                              | 77 7   | 11.0                     |  | 20.7  |  | 6.1   | 100                      | 1.2                       |          | DAMP C /D TW/               | (O WAY                 |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               | <b>&gt;</b>                              |
| 679+33.24                  | 680+33.24                | 100.00      | 40    | 4000     | 444                              | 33.3   | 11.9                     |  | 20.3  |  | 6.1   | 100                      | 1.2                       |          | 398+40.00 TWC               | 403+97.79              | 557.79            | 46       | 25658.3          | 2851                             | 213.8          |                          | 118.8                                  |   |   |  |                         | 13.8                          | Ь/                                       |
|                            | VAN-30-1276<br>ACH SLAB  |             |       |          |                                  |        |                          |  |   |  |   |                          |                           |          | 403+97.79                   | 404+66.54              | 68.75             |          | 6314             | 702                              | 52.6           |                          |  | 25.3  |   |  |                         | 3.0                           |  |
| 680+33.24                  | 680+58.24                | 25.00       | 16    | 400      | 44                               | 3.3    |                          |  | 1.5   |  |   | 25                       | 0.3                       |          | RAMP D ONE                  | WAY                    |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               |  |
| BR 680+58.24               | PIDGE 682+98.26          | 240.02      |       |          |                                  |        |                          |  |   |  |   |                          |                           | _        | 594+58.00                   | 601+37.50              | 679.50            | 25       | 16987.5          | 1888                             | 141.6          |                          | 78.6                                   |   |   |  |                         | 16.8                          |  |
| ×                          | ACH SLAB                 | 240.02      |       |          |                                  |        |                          |  |   |  |   |                          |                           |          | RAMP D TRANS                | SITION                 |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               |  |
| ○ 682+98.26                | 683+23.26                | 25.00       | 14    | 350      | 39                               | 2.9    |                          |  | 1.4   |  |   |                          | 0.6                       |          | 601+37.50                   | 602+25.00              | 87.50             | 25       | 2187.5           | 243                              | 18.2           | 7.8                      |  | 12.1  |   | 4.0  |                         | 2,2                           |  |
|                            | DGE TRANSITION           |             |       |          |                                  |        |                          |  |   |  |   |                          |                           |          | RAMP D SPEED CHA            |                        |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               |  |
| ≥ 683+23.26<br>01          | 684+23.26                | 100.00      | 38    | 3800     | 422                              | 31.7   | 11.9                     |  | 20.3  |  | 6.1   |                          | 2.5                       | _        |                             | 706+52.45<br>718+52.45 | 427.45<br>1200.00 |          | 12823.5<br>13800 | 1425<br>1533                     | 106.9<br>115.0 | 106.9<br>115.0           | 59.4<br>63.9                           |   | 69.3<br>74.5                              |  |                         | 10.6<br>29.6                  |  |
| 684+23.26                  | 687+25.91                | 302.65      | 38    | 11500.7  | 1278                             | 95.8   | 95.8                     | 53.2                                   |   | 62.1                                     |   |                          | 7.5                       |          |                             |                        | .20000            |          |                  | .000                             |                |                          |  |   |   |  |                         | 2000                          |  |
| MAINI INF BRI              | <br>DGE TRANSITION       | 100.00      | 38    | 3800     | 422                              | 31.7   | 11.9                     |  | 20.3  |  | 6.1   |                          | 2.5                       | _        | <i>C.R. 418 RAI</i>         | AMPS                   |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               |  |
| 687+25.91                  | 688+25.91                | 700100      |       |          | ,,,,                             |        |                          |  | 2000  |  |   |                          |                           |          | RAMP C SPEED CHA            |                        |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               |  |
| STR NO                     | <br>VAN-30-1292          |             |       |          |                                  |        |                          |  |   |  |   |                          |                           |          | 840+81.68                   | 848+70.53              | 788.85            |          | 14780.8          | 1642                             | 123.2          | 123.2                    | 68.4                                   |   | 79.8                                      |  |                         | 19.5                          |  |
|                            | ACH SLAB                 |             |       |          |                                  |        |                          |  |   |  |   |                          |                           |          | RAMP C TRANS                | ISITON                 |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               |  |
| 688+25.91                  | 688+50.91<br>PIDGE       | 25.00       | 14    | 350      | 39                               | 2.9    |                          |  | 1.4   |  |   |                          | 0.6                       | _        | 848+70.53                   | 849+70.53              | 100.00            | 25       | 2500.0           | 278                              | 20.8           | 7.8                      |  | 13.4  |   | 4.0  |                         | 2.5                           | 24                                       |
| 688+50.91                  | 690+54.41                | 203.50      |       |          |                                  |        |                          |  |   |  |   |                          |                           |          | AT-GRADE                    | ES                     |                   |          |                  |                                  |                |                          |  |   |   |  |                         |                               |  |
| $\bar{\alpha}$             | ACH SLAB                 | 25.00       | 1.4   | 750      | <b>7</b> 0                       | 2 9    |                          |  | 1.4   |  |   |                          | 0.6                       |          | JOHN BROWN                  |                        |                   |          | 9469             | 1052                             | 78.9           | 78.9                     | 43.8                                   | 28.8  | 51.1                                      | 17. 0  |                         | 4.0                           | <u> </u>                                 |
| 690+54.41<br>690+54.41     | 690+79.41                | 25.00       | 14    | 350      | )9                               | 2.9    |                          |  | 1.4   |  |   |                          | 0.6                       | _        | TRANSITIC                   | ON                     |                   |          | 5588             | 621                              | 46.6           | 25.6                     |  | 20.0  |   | 13.0   |                         | 5.4                           | 30                                       |
| 9 MAINLINE BRIL            | OGE TRANSITION 691+79.41 | 100.00      | 38    | 3800     | 422                              | 31.7   | 11.9                     |  | 20.3  |  | 6.1   |                          | 2.5                       |          | DUTCH JOHN I                |                        |                   |          | 9469<br>5588     | 1052<br>621                      | 78.9<br>46.6   | 78.9<br>25.6             | 43.8                                   | 28.8  | 51.1                                      | 13.0   |                         | 4.0<br>5.4                    | -<br>Z                                   |
| 691+79.41                  | 718+63.48                | 2684.07     | 38    | 101994.7 | 11333                            | 850.0  | 850.0                    | 472.2                                  |   | 550.9                                    |   |                          | 66.3                      |          | MENDON RO                   | OAD                    |                   |          | 9469             | 1052                             | 78.9           | 78.9                     | 43.8                                   |   | 51.1                                      |  |                         | 4.0                           | <b>A V</b>                               |
| OVERHEND RP                | <br>IDGE TRANSITON       |             |       |          |                                  |        |                          |  |   |  |   |                          |                           | -        | TRANSITIC                   | ON                     |                   |          | 5588             | 621                              | 46.6           | 25.6                     |  | 28.8  |   | 13.0   |                         | 5.4                           | 1  |
| 718+63.48                  | 722+63.48                | 400.00      | 38    | 15200    | 1689                             | 126.7  | 23.8                     |  | 70.0  |  | 12.1  |                          | 9.9                       |          | BOROFF RO                   | OAD                    |                   |          | 9469             | 1052                             | 78.9           | 78.9                     | 43.8                                   |   | 51.1                                      |  |                         | 4.0                           | 1  |
| 722+63.48                  | 745+16.35                | 2252.87     | 38    | 85609.1  | <i>9512</i>                      | 713.4  | 713.4                    | 396.3                                  |   | 462.4                                    |   |                          | 55.6                      |          | TRANSITIO                   | ON                     |                   |          | 5588             | 621                              | 46.6           | 25.6                     |  | 28.8  |   | 13.0   |                         | 5.4                           |  |
| 722 TUJ.40                 | טויטדו                   | 2202.01     | 70    | 00003.1  | JJ1Z                             | 113.9  | 110.7                    |  |   |  |   |                          | 33.0                      | <u> </u> | SUBTOTAL                    | . <i>B</i>             |                   |          |                  | 63770                            | 4783           | 3933                     | 2334                                   | 338   | 2429                                      | 94   | 0                       | 407                           | $\begin{pmatrix} 11 \\ 17 \end{pmatrix}$ |
| SUBT                       | OTAL A                   |             |       |          | 58929                            | 4420   | 4159                     | 2251                                   | 221   | 2626                                     | 55  | 1233                     | 330                       |          |                             |                        |                   |          |                  |                                  | <u> </u>       |                          |  |   |   |  | <u> </u>                |                               |  |

|   |                |          |          | 254  | 407       | 407                                  | 442   | 442  | 442  | 442  | 609                             | 617                                    |   |            |                        |                   | 254  | 407             | 407                                  | 442   | 442  | 442  | $\bar{\sqsubseteq}$ |
|---|----------------|----------|----------|--|-----------|--------------------------------------|---|--|--|--|---------------------------------|--|---|------------|------------------------|-------------------|--|-----------------|--------------------------------------|---|--|--|---------------------|
| STATION   | LIN. FT.       | WIDTH    | AREA     | PAVEMENT PLANING,<br>PHALT CONCRETE (T=1 1/4", | TACK COAT | TACK COAT FOR<br>INTERMEDIATE COURSE | 1 1/2" ASPHALT SURFACE<br>COURSE, 12.5mm, TYPE A<br>(446) | SPHALT SURFACE COURSE,<br>12.5mm, TYPE A (446)<br>(THICKNESS VARIES) | 1 3/4" ASPHALT<br>INTERMEDIATE COURSE,<br>I9mm, TYPE A (446) | ASPHALT INTERMEDIATE<br>COURSE, 19mm, TYPE A<br>'446) (THICKNESS VARIES) | SPHALT CONCRETE CURB,<br>TYPE I | COMPACTED AGGREGATE<br>(T-VARIES 0-2") | STATION                                       | LIN. FT.   | WIDTH                  | AREA              | PAVEMENT PLANING,<br>PHALT CONCRETE (T=1 1/4", | TACK COAT       | TACK COAT FOR<br>INTERMEDIATE COURSE | 1 1/2" ASPHALT SURFACE<br>COURSE, 12.5mm, TYPE A<br>(446) | SPHALT SURFACE COURSE,<br>12.5mm, TYPE A (446)<br>(THICKNESS VARIES) | 1 3/4" ASPHALT<br>INTERMEDIATE COURSE,<br>19mm, TYPE A (446) |                     |
| FROM TO  WESTBOUND                                |                |          |          | SQ. YD.  | GAL.      | GAL.                                 | CU. YD.   | ĕ<br>CU. YD.   | CU. YD.  | CU. YD.  | FEET                            | CU. YD.                                | FROM TO  WESTBOUND                            |            |                        |                   | SQ. YD.  | GAL.            | GAL.                                 | CU. YD.   | € CU. YD.  | CU. YD.  |                     |
|   |                |          |          |  |           |                                      |   |  |  |  |                                 |  | OVERHEAD BRIDGE TRANSITON                     |            |                        |                   |  |                 |                                      |   |  |  |                     |
| BEGINNING TRANSITION 600+00.00 601+00.00          | 100            | 38       | 3800     | 422  | 31.7      | 11.9                                 |   | 20.3   |  | 6.1  |                                 | 2.5                                    | 745+16.35 749+16.35<br>749+16.35 839+64.82    | 9048.47    | <i>38</i><br><i>38</i> | 15200<br>343841.9 | 1689<br>38205                                  | 126.7<br>2865.3 | 23.8<br>2865.3                       | 1591.9  | 70.0   | 1857.2   |                     |
| 601+00.00 628+89.88                               | 2789.88        | 38       | 106015.4 | 11779  | 883.5     | 883.5                                | 490.8   |  | 572.6  |  |                                 | 68.9                                   | 7 73 710.33                                   | 00 10.11   |                        | 3 130 11.0        | 30200  | 2000.5          | 2000.5                               | 1001.0  |  | 1007.2   |                     |
| MANUAL BOIDE TO MOTTO                             |                |          |          |  |           |                                      |   |  |  |  |                                 |  | OVERHEAD BRIDGE TRANSITON                     | 40000      | 7.                     | 15000             | 1000   | 100 -           | ^7 ^                                 |   | 7.0.0  |  | $\vdash$            |
| MAINLINE BRIDGE TRANSITION 628+89.88 629+89.88    | 100.00         | 38       | 3800     | 422  | 31.7      | 11.9                                 |   | 20.3   |  | 6.1  |                                 | 2.5                                    | 839+64.82 843+64.82<br>843+64.82 848+60.73    | 495.91     | 38<br>38               | 15200<br>18844.6  | 1689<br>2094                                   | 126.7<br>157.0  | 23.8<br>157.0                        | 87.2  | 70.0   | 101.8  |                     |
| STR. NO. VAN-30-1181                              |                |          |          |  |           |                                      |   |  |  |  |                                 |  |   |            |                        |                   |  | 10770           |                                      |   |  | .0100  |                     |
| APPROACH SLAB                                     | 25.00          | 1 1      | 750      | 70   | 2.0       |                                      |   | 1 A  |  |  |                                 | 0.0                                    | ENDING TRANSITION                             | 100.00     | 70                     | 7000              | 400  | 71 7            | 11 ^                                 |   | 20.7   |  | <u> </u>            |
| 629+89.88 630+14.88<br>BRIDGE                     | 25.00          | 14       | 350      | 39   | 2.9       |                                      |   | 1.4  |  |  |                                 | 0.6                                    | 848+60.73 849+60.73                           | 100.00     | 38                     | 3800              | 422  | 31.7            | 11.9                                 |   | 20.3   |  |                     |
| 630+14.88 631+01.12                               | 86.24          |          |          |  |           |                                      |   |  |  |  |                                 |  | U.S.R. 127 RAMPS                              |            |                        |                   |  |                 |                                      |   |  |  |                     |
| APPROACH SLAB                                     | 25.00          |          | 75.0     | 7.0  |           |                                      |   |  |  |  |                                 |  | D   |            |                        |                   |  |                 |                                      |   |  |  |                     |
| 631+01.12 631+26.12                               | 25.00          | 14       | 350      | 39   | 2.9       |                                      |   | 1.4  |  |  |                                 | 0.6                                    | RAMP A SPEED CHANGE LANES 678+74.65 680+33.24 | 158.59     |                        | 103.1             | 11   | 0.9             | 0.9                                  | 0.5   |  | 0.6  | $\vdash$            |
| MAINLINE BRIDGE TRANSITION                        |                |          |          |  |           |                                      |   |  |  |  |                                 |  | 683+23.36 688+25.91                           | 502.55     |                        | 6297              | 700  | 52.5            | 52.5                                 | 29.2  |  | 34.0   |                     |
| 631+26.12 632+26.12                               | 100.00         | 38       | 3800     | 422  | 31.7      | 11.9                                 |   | 20.3   |  | 6.1  |                                 | 2.5                                    | 190+74.65 194+90.00                           | 415.35     |                        | 12460.5           | 1385   | 103.8           | 103.8                                | 57.7  |  | 67.3   |                     |
| 632+26.12 670+50.00                               | <i>3823.88</i> | 38       | 145307.4 | 16145  | 1210.9    | 1210.9                               | 672.7   |  | 784.8  |  |                                 | 94.4                                   | RAMP A TRANSITION                             |            |                        |                   |  |                 |                                      |   |  |  |                     |
| 670+50.00 679+33.24                               | 883.24         |          | 35329.6  |  | 294.4     |                                      | 163.6   |  | 190.8  |  | 883                             | 10.9                                   | 194+90.00 195+77.50                           | 87.50      | 25                     | 2187.5            | 243  | 18.2            | 7.8                                  |   | 12.1   |  |                     |
| 010130.00 013133.24                               | 003.24         | 70       | 33323.0  | 3320   | 237.7     | 207.7                                | 105.0   |  | 150.0  |  | 005                             | 10.5                                   | RAMP A ONE WAY                                |            |                        |                   |  |                 |                                      |   |  |  |                     |
| MAINLINE BRIDGE TRANSITION                        |                |          |          |  |           |                                      |   |  |  |  |                                 |  | 195+90.00 200+00.00                           | 410.00     | 25                     | 10250             | 1139   | 85.4            |                                      | <i>47.5</i>   |  |  |                     |
| 679+33.24 680+33.24                               | 100.00         | 40       | 4000     | 444  | 33.3      | 11.9                                 |   | 20.3   |  | 6.1  | 100                             | 1.2                                    | 200+00.00 208+49.20                           | 849.20     | 25                     | 21230             | 2359   | 176.9           |                                      | 98.3  |  |  |                     |
| STR. NO. VAN-30-1276                              |                |          |          |  |           |                                      |   |  |  |  |                                 |  | RAMP B TWO WAY                                |            |                        |                   |  |                 |                                      |   |  |  |                     |
| APPROACH SLAB                                     |                |          |          |  |           |                                      |   |  |  |  |                                 |  | 088+55.45 089+24.70                           | 69.25      |                        | 5493              | 610  | 45.8            |                                      |   | 22.8   |  |                     |
| 680+33.24 680+58.24                               | 25.00          | 16       | 400      | 44   | 3.3       |                                      |   | 1.5  |  |  | 25                              | 0.3                                    | 089+24.70 095+77.00                           | 652.30     | 46                     | 30005.8           | 3334   | 250.0           |                                      | 138.9   |  |  |                     |
| BRIDGE 680+58.24 682+98.26                        | 240.02         |          |          |  |           |                                      |   |  |  |  |                                 |  | RAMP B ONE WAY                                |            |                        |                   |  |                 |                                      |   |  |  |                     |
| APPROACH SLAB                                     | 240.02         |          |          |  |           |                                      |   |  |  |  |                                 |  | 095+77.00 102+92.37                           | 715.37     | 25                     | 17884.3           | 1987   | 149.0           |                                      | 82.8  |  |  |                     |
| 682+98.26 683+23.26                               | 25.00          | 14       | 350      | 39   | 2.9       |                                      |   | 1.4  |  |  |                                 | 0.6                                    |   |            |                        |                   |  |                 |                                      |   |  |  |                     |
|   |                |          |          |  |           |                                      |   |  |  |  |                                 |  | RAMP B TRANSITION                             | 07.50      | 25                     | 0107.5            | 0.47   | 10.0            | 7.0                                  |   | 10.1   |  |                     |
| MAINLINE BRIDGE TRANSITION  ≥ 683+23.26 684+23.26 | 100.00         | 38       | 3800     | 422  | 31.7      | 11.9                                 |   | 20.3   | 1  | 6.1  |                                 | 2.5                                    | 102+92.37 103+79.87                           | 87.50      | 25                     | 2187.5            | 243  | 18.2            | 7.8                                  |   | 12.1   |  |                     |
| 09  | ,,,,,,,,       |          |          | ,,,,,  | VI.1      |                                      |   | 20,0   |  | <b>V</b> .,  |                                 |  | RAMP B SPEED CHANGE LANE                      |            |                        |                   |  |                 |                                      |   |  |  |                     |
| 684+23.26 687+25.91                               | 302.65         | 38       | 11500.7  | 1278   | 95.8      | 95.8                                 | 53.2  |  | 62.1   |  |                                 | 7.5                                    | 103+79.87 108+45.44                           | 465.57     |                        | 10708.1           | 1190   | 89.2            | 89.2                                 | 49.6  |  | 57.8   |                     |
| MAINLINE BRIDGE TRANSITION                        | 100.00         | 70       | 3800     | 422  | 31.7      | 11.9                                 |   | 20.3   | 1  | 6.1  |                                 | 2.5                                    | 708+55.64 712+00.00                           | 344.36     |                        | 4943.6            | 549  | 41.2            | 41.2                                 | 22.9  |  | 26.7   | $\vdash$            |
| 687+25.91 688+25.91                               | 100.00         | 1 30     | 3000     | 722  | J1.1      | 11.3                                 |   | 20.3   | 1  | 0.1  |                                 | 2.3                                    | C.R. 418 RAMPS                                | +          |                        |                   |  |                 |                                      |   |  |  |                     |
|   |                |          |          |  |           |                                      |   |  |  |  |                                 |  |   |            |                        |                   |  |                 |                                      |   |  |  |                     |
| STR. NO. VAN-30-1292                              |                |          |          |  |           |                                      |   |  |  |  |                                 |  | RAMP A SPEED CHANGE LANE                      | 1000 77    |                        | 10070 7           | 0170   | 100 7           | 100 7                                | 00 :  |  | 107.0  | <br>                |
| <i>APPROACH SLAB</i> ⊆ 688+25.91 688+50.91        | 25.00          | 14       | 350      | 39   | 2.9       | 1                                    | -   | 1.4  | 1  | -  |                                 | 0.6                                    | 836+00.00 848+60.73                           | 1260.73    |                        | 19238.7           | 2138   | 160.3           | 160.3                                | 89.1  |  | 103.9  |                     |
| BRIDGE  |                | <u> </u> |          |  | 2.0       |                                      |   |  |  |  |                                 |  | RAMP C TRANSITON                              | 1          |                        |                   |  |                 |                                      |   |  |  |                     |
| 688+50.91 690+54.41                               | 203.50         |          |          |  |           |                                      |   |  |  |  |                                 |  | 848+60.73 849+60.73                           | 100.00     |                        | 3173.00           | 353  | 26              | 9.7                                  |   | 20.2   |  |                     |
| APPROACH SLAB                                     | 25.00          | 11       | 750      | 39   | 2.0       |                                      |   | 1 1  | -  |  |                                 | 0.6                                    |   | 1          |                        |                   |  |                 |                                      |   |  |  | $\vdash$            |
| 690+54.41 690+79.41                               | 25.00          | 14       | 350      | ) 39   | 2.9       | <u> </u>                             |   | 1.4  | 1  | 1  |                                 | 0.6                                    |   | 1          |                        |                   |  | <u> </u>        |                                      |   |  |  |                     |
| ω MAINLINE BRIDGE TRANSITION                      |                |          |          |  |           |                                      |   |  |  |  |                                 |  | SUBTOTAL D                                    |            |                        |                   | 60339  | 4525            | 3555                                 | 2295  | 228  | 2249   |                     |
| 690+79.41 691+79.41                               | 100.00         | 38       | 3800     | 422  | 31.7      | 11.9                                 |   | 20.3   |  | 6.1  |                                 | 2.5                                    | SUBTOTAL C                                    |            |                        |                   | 58879  | 4416            | 4155                                 | 2249  | 221  | 2624   |                     |
| 691+79.41 718+63.48                               | <i>2684.07</i> | 70       | 101994.7 | 11333  | QEO O     | 850.0                                | 472.2   |  | 550.9  |  |                                 | 66.3                                   | SUBTOTAL B                                    | 1          |                        |                   | 63770  |                 | 3933<br>4150                         | 2334  | 338  | 2429<br>2626   |                     |
| Sp     691+79.41     718+63.48                    | 2004.07        | 1 30     | 101334./ | 11333  | 050.0     | 050.0                                | 412.2   |  | 550.9  |  |                                 | 00.3                                   | SUBTOTAL A                                    | <u> </u>   | <u> </u>               |                   | 58929  | 4420            | 4159                                 | 2251  | 221  | 2626   |                     |
| OVERHEAD BRIDGE TRANSITON                         |                |          |          |  |           |                                      |   |  |  |  |                                 |  | TOTALS CARRIED TO GE                          | ENERAL SUM | MARY<br>               |                   | 241916   | 18144           | 15802                                |   | 136  | 10   | 175<br>-            |
| 718+63.48 722+63.48                               | 400.00         | 38       | 15200    | 1689   | 126.7     | 23.8                                 |   | 70.0   |  | 12.1   |                                 | 9.9                                    |   |            | П                      | TEM 254 F         | PATCHING                                       | PLANED          | SURFACE                              | <u> </u>  |  |  |                     |
| 722+63.48 745+16.35                               | <i>2252.87</i> | 38       | 85609.1  | 9512   | 713.4     | 713.4                                | <i>396.3</i>  |  | 462.4  |  |                                 | 55.6                                   | $\dashv$                                      |            |                        |                   |  |                 |                                      |   |  |  |                     |
| P 122103.70 143710.33                             | 2232.01        | 1 50     | 00003.1  | 3312   | 113.4     | 113.4                                | 330.3   |  | 702.4  | 1  |                                 | 33.0                                   | -   |            |                        | (241916 SQ        |  |                 |                                      |   |  |  |                     |
| SUBTOTAL  | 1              | 1        | 1        | 58879  | 4416      | 4155                                 | 2249  | 221  | 2624   | 55   | 1008                            | 333                                    | 7   |            | <u></u>                | OTAL CARI         | TIEU TO (                                      | <u> </u>        | SUMMAR                               | ' Y   |  |  |                     |

333

1008

SUBTOTAL C

58879 4416 4155 2249

221

2624

55

30

ASPHALT INTERMEDIATE COURSE, 19mm, TYPE A (446) (THICKNESS VARIES)

CU. YD.

12.1

12.1

6.1

4.0

4.0

4.9

55

55

ASPHALT CONCRETE CURB, TYPE I

FEET

CU. YD.

9.9

223.4

9.9

12.2

2.5

3.9 12.4

10.3

2.2

10.1 21.0

2.5 16.1

17.7

2.2

11.5

31.1

2.5

333

407

330

1480

1233

2241

S

TIO

CUL

CAL

AVEMENT

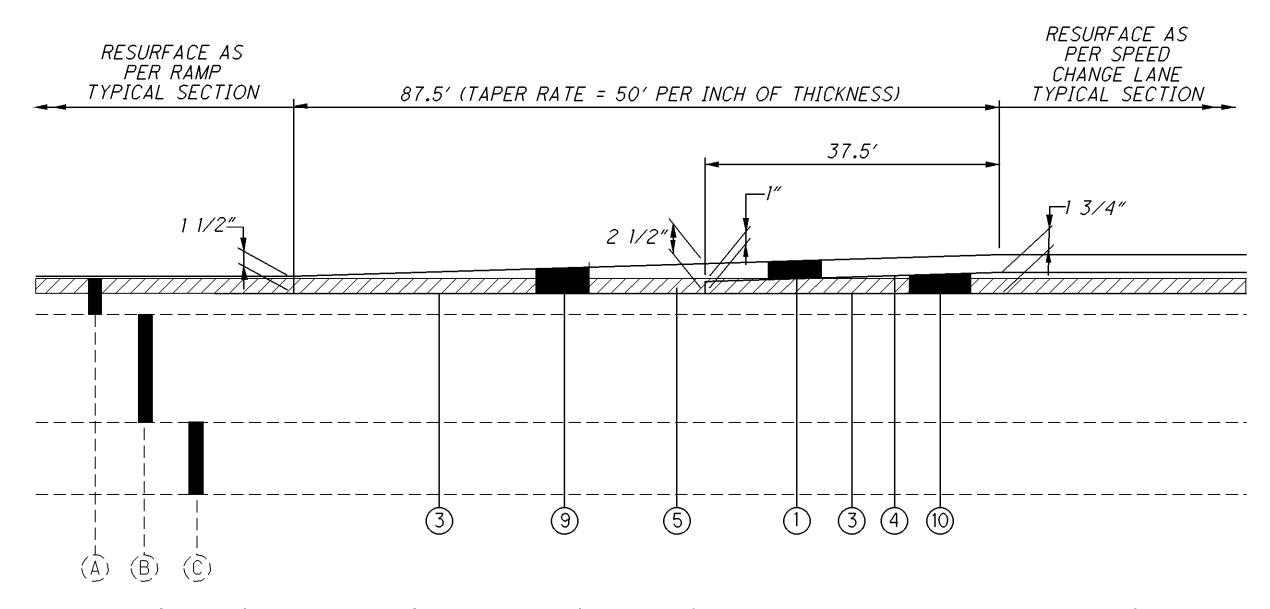


# PROPOSED LEGEND

- 1) ITEM 442 1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5 mm, Type A (446)
- (3) ITEM 407 TACK COAT APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
- (4) ITEM 407 TACK COAT FOR INTERMEDIATE COURSE APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
- (5) ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE (1 1/4" THICK)
- (THICKNESS VARIES AS SHOWN)
- 10 ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19 mm, TYPE A (446)
  (THICKNESS VARIES AS SHOWN)

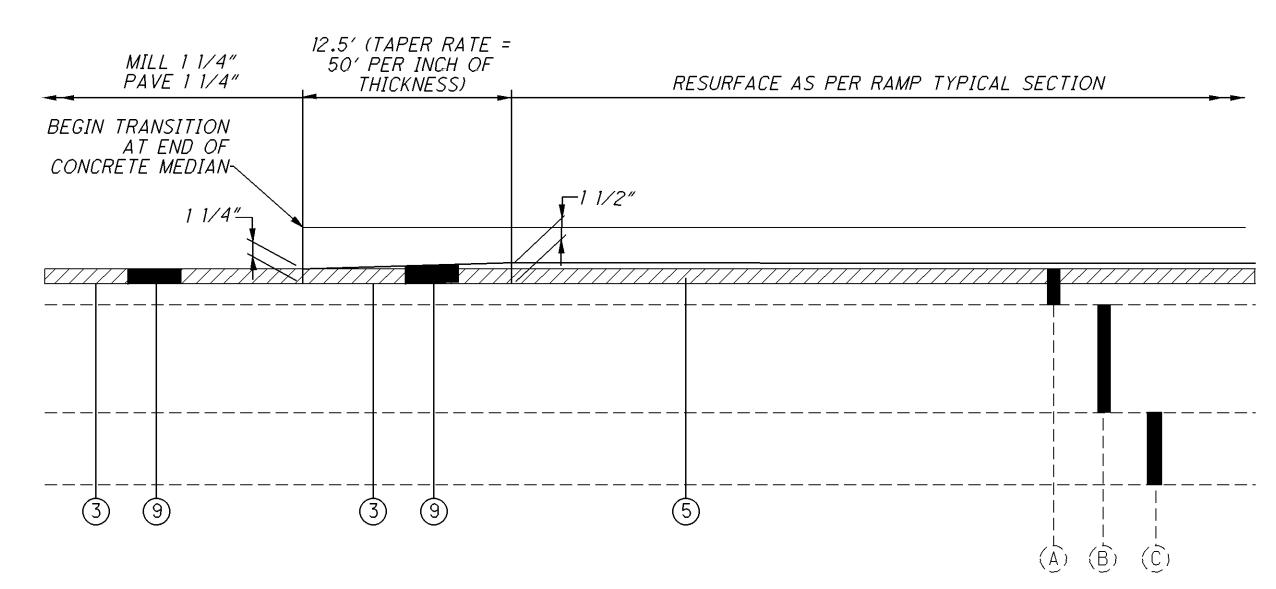
# **EXISTING LEGEND**

- (A) 3"± ASPHALT CONCRETE
- (B) 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- (C) SUBBASE
- (D) AGGREGATE BASE
- (E) ASPHALT CONCRETE BASE

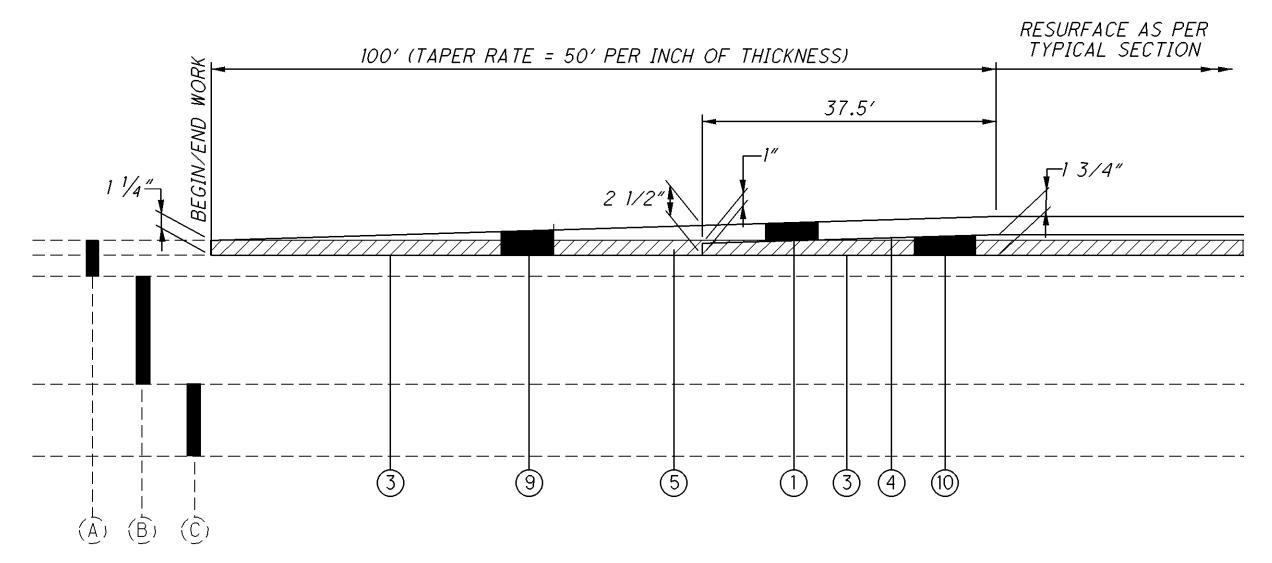


- PAVEMENT PLANING

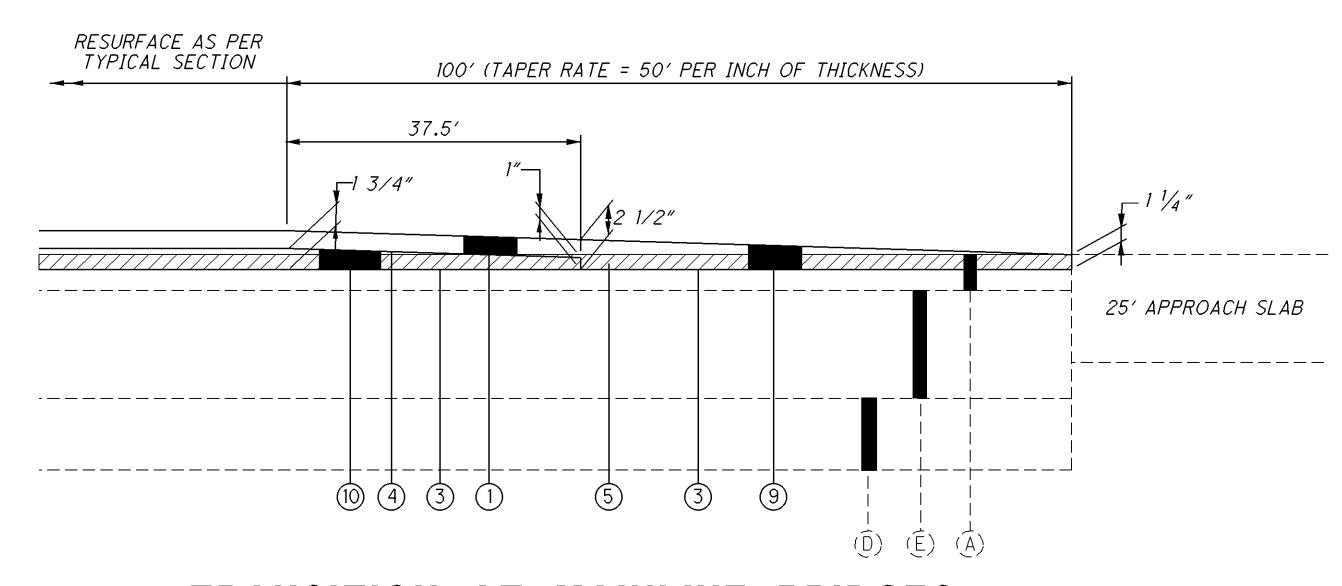
# TRANSITION AT SPEED CHANGE LANE/RAMP - U.S.R. 127



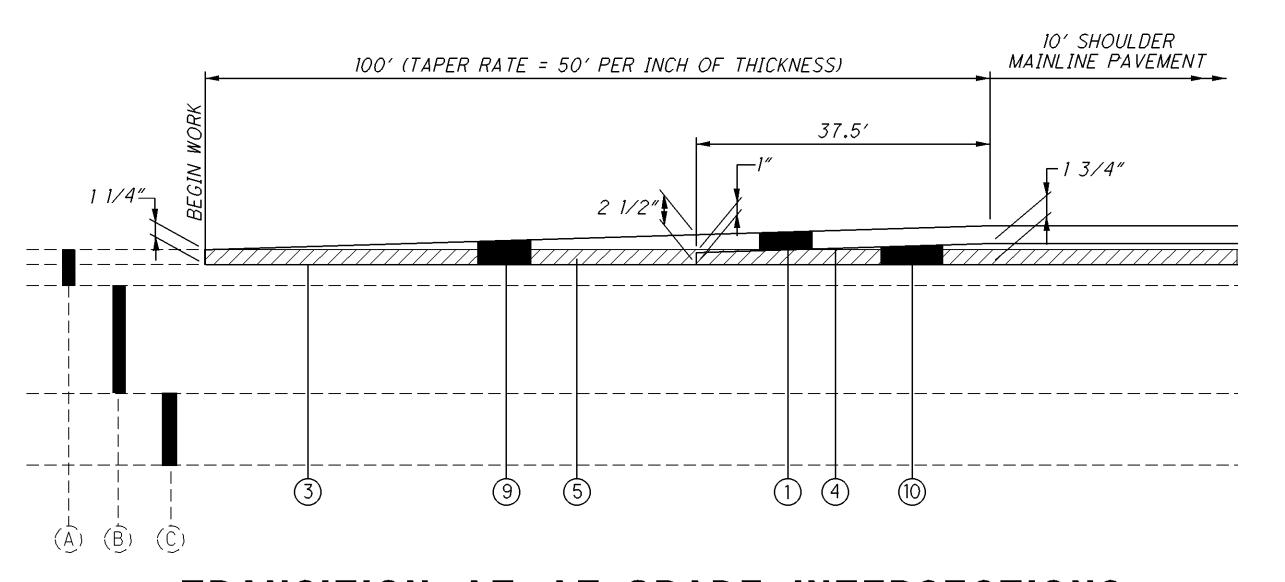
TRANSITION AT TWO WAY RAMP END - U.S.R. 127



TRANSITION AT BEGIN AND END PROJECT & SPEED CHANGE LANES C.R. 418



TRANSITION AT MAINLINE BRIDGES



TRANSITION AT AT-GRADE INTERSECTIONS



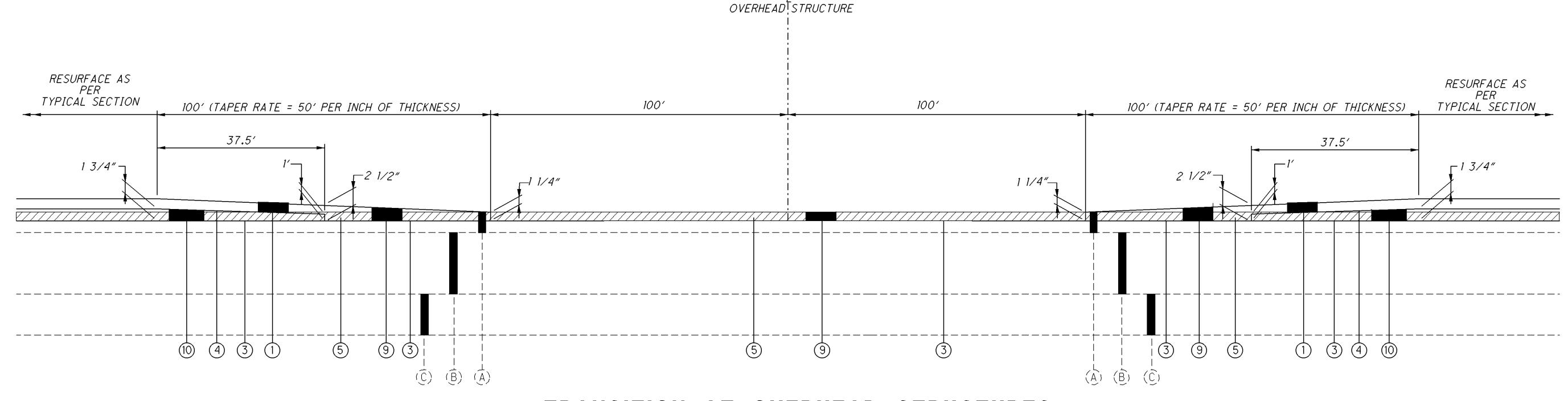
# PROPOSED LEGEND

- (1) ITEM 442 1 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 mm, TYPE A (446)
- (3) ITEM 407 TACK COAT APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
- (4) ITEM 407 TACK COAT FOR INTERMEDIATE COURSE APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
- (5) ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE (1 1/4" THICK)
- 9 ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5 mm, Type A (446) (THICKNESS VARIES AS SHOWN)
- ① ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19 mm, TYPE A (446) (THICKNESS VARIES AS SHOWN)

# - PAVEMENT PLANING

# **EXISTING LEGEND**

- (A) 3"± ASPHALT CONCRETE
- (B) 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- (C) SUBBASE



# TRANSITION AT OVERHEAD STRUCTURES

STRUCTURE NO. VAN-30-1352 MARSH ROAD STRUCTURE NO. VAN-30-1402 STRIPE ROAD STRUCTURE NO. VAN-30-1581 GILLILAND ROAD

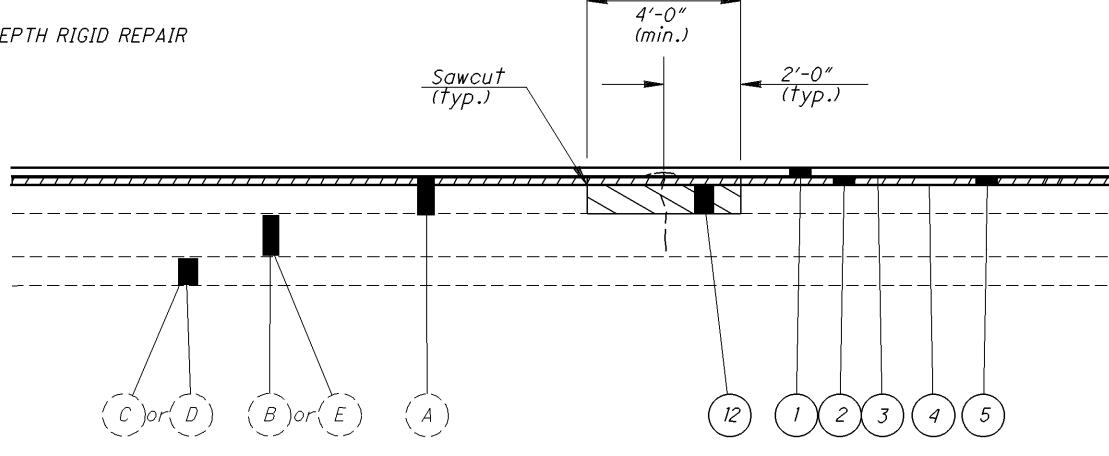
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O

//// - PAVEMENT PLANING

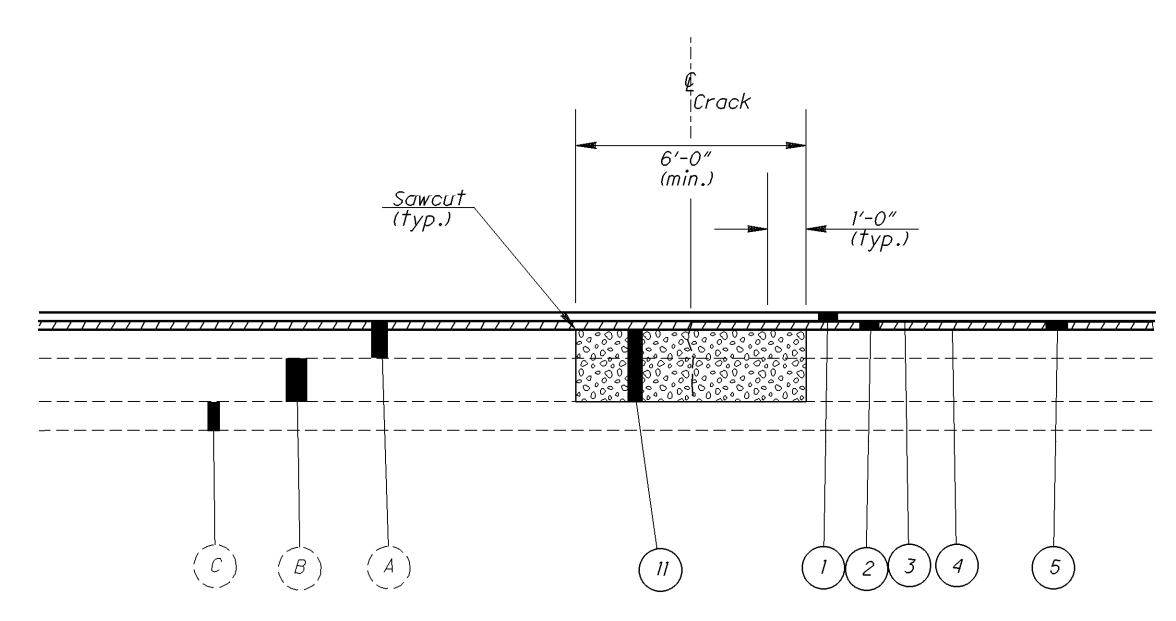
- PAVEMENT REPAIR

- FULL DEPTH RIGID REPAIR



Item 253 Pavement Repair

Crack



Item 252 Full Depth Rigid Pavement Removal and Flexible Replacement

#### EXISTING LEGEND

- 3 ½ ″± Asphalt Concrete
- 9″± Reinforced Portland Cement Concrete Pavement
- Aggregate Base
- Asphalt Concrete

#### PROPOSED LEGEND

- ITEM 442 1-1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5 mm, TYPE A (446)
- ITEM 442 1-3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 mm, TYPE A (446)
- ITEM 407 TACK COAT applied at a rate of 0.075 Gallons per Sq Yd
- ITEM 407 TACK COAT FOR INTERMEDIATE COURSE applied at a rate of 0.075 Gallons per Sq Yd
- ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE  $(1 \frac{1}{4}$ " THICK)
- Item 252 Full Depth Rigid Pavement Removal and Flexible Replacement
- Item 253 Pavement Repair

# Pavement Repair Operations

Prior to the Pavement Planing operation, the following pro-cedure shall be utilized to determine the type of pavement repair at locations designated by the Engineer:

From Sta. 600+00 to 625+00, Sta. 635+00 to 676+33.24, and Sta. 695+00 to 849+60.73:

- 1) Remove the existing Asphalt Concrete material to the top of the existing concrete pavement as specified in Item 253 Pavement Repair.
- 2) If the existing crack or joint in the concrete pavement is acceptable to the Engineer, complete the repair as specified under Item 253 Pavement Repair and details in these plans.
  Use Item 301 Asphalt Concrete Base as the replacement material.
- 3) If the existing crack or joint in the concrete is failed or otherwise unacceptable to the Engineer, perform Item 252 Full Depth Saw Cut and complete the repair as per Item 252 Full Depth Rigid Pavement Removal and Flexible Replacement and the details in these plans.

From Sta. 625+00 to 635+00 and from Sta.676+33.24 to 695+00:

Perform Item 253 Pavement Repair to a depth of 3" at locations designated by the engineer. Use Item 301 A.C. Base as the replacement material.

# Estimated Pavement Repair Dimensions

Estimated length of Crack or Joint to be repaired = 12 feet

Estimated length of Item 253 Pavement Repair = 12 feet

Estimated length of Item 252 Full Depth Rigid Pavement Removal and Flexible Replacement = 12 feet

# Estimated Number of Pavement Repairs

Estimated Total Number of Cracks or Joints to be repaired

Estimated Number of Cracks or Joints to be *= 75* repaired with Item 253 Pavement Repair

Estimated Number of Cracks or Joints to be = 25 repaired with Item 252 Full Depth Rigid Pavement Removal and Flexible Replacement

# Estimated Pavement Repair Quantities

Item 253 Pavement Repair = (75)(12)(4)(1/9) = 400 Sq. Yd. Full Depth Rigid Pavement Removal and Flexible Replacement = (25)(12)(6)(1/9) = 200 Sq. Yd. Full Depth Pavement Sawing = (25)(12+12+6) = 750 Ft.

Quantities carried to General Summary sheet 10.

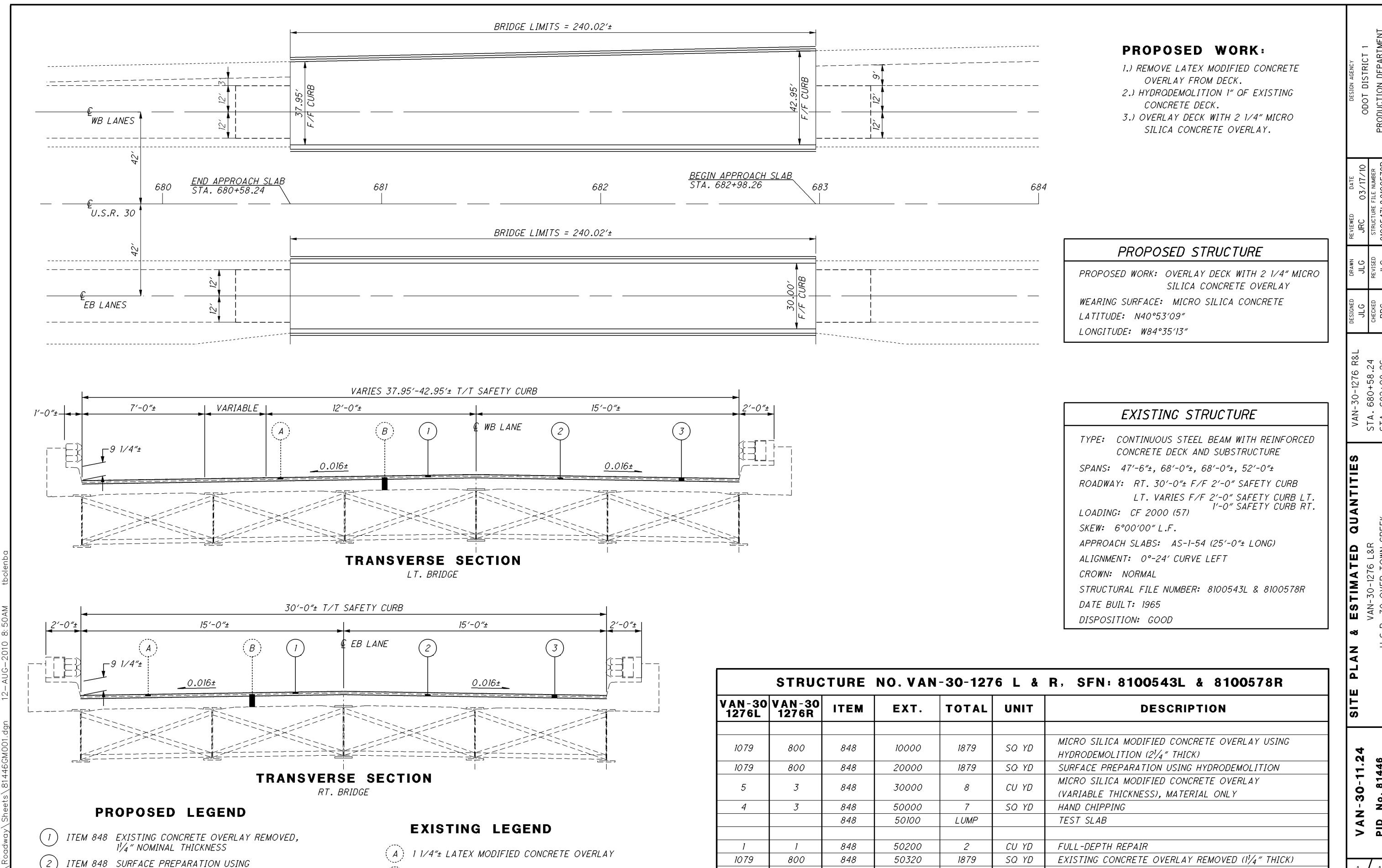


| PAVEMENT MARKINGS SUBSUMMARY  642 647 |           |       |                        |   |          |                                  |  |  |  |  |  |  |  |
|---------------------------------------|-----------|-------|------------------------|---|----------|----------------------------------|--|--|--|--|--|--|--|
| Location                              | Lane Line |       | Line<br>De 1<br>Yellow | Center Line<br>Double Solid<br>(Yellow) |          | Channelizing<br>Line<br>Type B90 |  |  |  |  |  |  |  |
|                                       | Mi/e      | Mile  | Mile                   | Mile                                    | <br>Feet | Feet                             |  |  |  |  |  |  |  |
| J.S. 30 Mainline, E.B.& W.B.          |           |       |                        |   |          |                                  |  |  |  |  |  |  |  |
| ta. 600+00 to Sta. 630+15             | 1.14      | 1.10  | 1.10                   |   |          |                                  |  |  |  |  |  |  |  |
| Sta. 631+01 to Sta. 688+51            | 2.18      | 2.14  | 2.14                   |   |          |                                  |  |  |  |  |  |  |  |
| sta. 690+59 to Sta. 849+61            | 6.30      | 5.95  | 5.95                   |   |          | 1,750                            |  |  |  |  |  |  |  |
| Ramp "A" at U.S. 127                  |           |       |                        |   |          |                                  |  |  |  |  |  |  |  |
| Sta. 194+90 to Sta. 208+49            |           | 0.28  | 0.26                   |   |          |                                  |  |  |  |  |  |  |  |
| Ramp "A" & "B" a† U.S. 127            |           |       |                        |   |          |                                  |  |  |  |  |  |  |  |
| Sta. 88+55 to Sta. 95+77              |           | 0.29  | 0.27                   |   | 62       |                                  |  |  |  |  |  |  |  |
| Ramp "B" at U.S. 127                  |           |       |                        |   |          |                                  |  |  |  |  |  |  |  |
| Sta. 95+77 to Sta. 108+45             |           | 0.24  | 0.24                   |   |          |                                  |  |  |  |  |  |  |  |
| Ramp "C" at U.S. 127                  |           |       |                        |   |          |                                  |  |  |  |  |  |  |  |
| ta. 392+82 to Sta. 398+40             |           | 0.11  | 0.11                   |   |          |                                  |  |  |  |  |  |  |  |
| Ramp "C" & "D" a† U.S. 127            |           |       |                        |   |          |                                  |  |  |  |  |  |  |  |
| ta. 398+40 to Sta. 404+66             |           | 0.28  | 0.24                   |   | 38       |                                  |  |  |  |  |  |  |  |
| Ramp "D" a† U.S. 127                  |           |       |                        |   |          |                                  |  |  |  |  |  |  |  |
| ta. 594+58 to Sta. 706+52             |           | 2.12  | 2.12                   |   |          |                                  |  |  |  |  |  |  |  |
| AT GRADE INTERSECTIONS:               |           |       |                        |   |          |                                  |  |  |  |  |  |  |  |
| John Brown Rd.                        |           | 0.10  |                        | 0.04                                    | 52       |                                  |  |  |  |  |  |  |  |
| Dutch John Rd.                        |           | 0.10  |                        | 0.04                                    | 76       |                                  |  |  |  |  |  |  |  |
| Mendon Rd.                            |           | 0.10  |                        | 0.04                                    | 50       |                                  |  |  |  |  |  |  |  |
| Boroff Rd.                            |           | 0.10  |                        | 0.04                                    | 56       |                                  |  |  |  |  |  |  |  |
| TOTALS                                | 9.62      | 12.91 | 12.43                  | 0.16                                    | 334      | 1,750                            |  |  |  |  |  |  |  |

NOTE: TOTALS CARRIED TO GENERAL SUMMARY SHEET 10.

| RAISED PAVE                  | MENT MA                                  | RKER & F | RUMBLE S                                | STRIPS SU                         | BSUMMAF                         | RY                              |
|------------------------------|--|----------|---|-----------------------------------|---------------------------------|---------------------------------|
|                              | 618                                      |          |   | 6                                 | 21                              |                                 |
|                              |  |          |   |                                   | RPM                             |                                 |
| Location                     | Rumble<br>Strip<br>(Asphalt<br>Concrete) |          | Raised<br>Pavement<br>Marker<br>Removed | 2 Way<br>Yellow/Red<br>Spa. @ 80′ | 2 Way<br>White/Red<br>Spa.@ 80′ | 2 Way<br>White/Red<br>Spa.@ 40′ |
|                              | Mile                                     |          | Each                                    | Each                              | Each                            | Each                            |
| U.S. 30 Mainline, E.B.& W.B. |  |          |   |                                   |                                 |                                 |
| Sta. 600+00 to Sta. 630+15   | 2.28                                     |          |   |                                   | 76                              |                                 |
| Sta. 631+01 to Sta. 680+58   | 3.76                                     |          |   |                                   | 124                             |                                 |
| Sta. 682+98 to Sta. 688+51   | 0.42                                     |          |   |                                   | 6                               |                                 |
| Sta. 690+59 to Sta. 849+61   | 12.05                                    |          |   |                                   | 398                             | 22                              |
| Sta. 600+00 to Sta. 849+61   |  |          | 675                                     |                                   |                                 |                                 |
| Ramp "A" at U.S. 127         |  |          | 32                                      | 26                                |                                 | 10                              |
| Ramp "B" at U.S. 127         |  |          | 33                                      | 25                                |                                 |                                 |
| Ramp "C" at U.S. 127         |  |          | 29                                      | 15                                |                                 |                                 |
| Ramp "D" at U.S. 127         |  |          | 34                                      | 23                                |                                 | 10                              |
|                              |  |          |   | 89                                | 604                             | 42                              |
| TOTALS                       | 18.51                                    |          | 803                                     |                                   | 735                             | -                               |

NOTE: TOTALS CARRIED TO GENERAL SUMMARY SHEET 10.



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8 3/4"± REINFORCED CONCRETE DECK

HYDRODEMOLITION ( 1" THICK)

ITEM 848 MICRO SILICA CONCRETE OVERLAY USING HYDRODEMOLITION (21/4" THICK)

1 / 1

REMOVAL DEBONDED OR DETERIORATED EXISTING VARIABLE

THICKNESS CONCRETE OVERLAY

50340

SQ YD

*36*