

| SUMMARY OF QUANTITIES | | | |
|-----------------------|--|-----------------------------|----------|
| CODE NO. | ITEM | CONSTRUCTION TYPE CODE 0010 | |
| | | UNIT | QUANTITY |
| 20200100 | EARTH EXCAVATION | CU YD | 144 |
| 20300100 | CHANNEL EXCAVATION | CU YD | 826 |
| 20400800 | FURNISHED EXCAVATION | CU YD | 275 |
| 25100630 | EROSION CONTROL BLANKET | SQ YD | 454 |
| 28000250 | TEMPORARY EROSION CONTROL SEEDING | POUND | 10 |
| 28000305 | TEMPORARY DITCH CHECKS | FOOT | 20 |
| 28000400 | PERIMETER EROSION BARRIER | FOOT | 750 |
| 28100209 | STONE RIPRAP, CLASS A5 | TON | 950 |
| 28200200 | FILTER FABRIC | SQ YD | 811 |
| 35100100 | AGGREGATE BASE COURSE, TYPE A | TON | 119 |
| 35400200 | PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 7" | SQ YD | 122 |
| 40600295 | POLYMERIZED BITUMINOUS MATERIALS (TACK COAT) | POUND | 550 |
| 40600982 | HOT MIX ASPHALT REMOVAL - BUTT JOINT | SQ YD | 106 |
| 40603215 | POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5FG, N50 | TON | 78 |
| 40604100 | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, MIX "C", N50 | TON | 81 |
| 42000070 | PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB | SQ YD | 48 |
| 44000100 | PAVEMENT REMOVAL | SQ YD | 276 |
| 44000153 | HOT-MIX ASPHALT SURFACE REMOVAL, 1" | SQ YD | 623 |
| 48101200 | AGGREGATE SHOULDERS, TYPE B | TON | 157 |
| 50100100 | REMOVAL OF EXISTING STRUCTURES | EACH | 1 |
| 50200100 | STRUCTURE EXCAVATION | CU YD | 186 |
| 50200300 | COFFERDAM EXCAVATION | CU YD | 133 |
| 50201101 | COFFERDAM (TYPE 1) (LOCATION - 1) | EACH | 1 |
| 50201102 | COFFERDAM (TYPE 1) (LOCATION - 2) | EACH | 1 |
| 50300100 | FLOOR DRAINS | EACH | 14 |
| 50300225 | CONCRETE STRUCTURES | CU YD | 88.8 |
| 50300255 | CONCRETE SUPERSTRUCTURE | CU YD | 207.9 |
| 50300260 | BRIDGE DECK GROOVING | SQ YD | 659 |
| 50300290 | CONCRETE ENCASEMENT | CU YD | 20.0 |
| 50300300 | PROTECTIVE COAT | SQ YD | 877 |
| 50301350 | CONCRETE SUPERSTRUCTURE (APPROACH SLAB) | CU YD | 89.2 |
| 50500105 | FURNISHING AND ERECTING STRUCTURAL STEEL | L SUM | 1 |
| 50500505 | STUD SHEAR CONNECTORS | EACH | 3,795 |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 97,220 |
| 51200959 | FURNISHING METAL SHELL PILES 14" X 0.312" | FOOT | 1,280 |
| 51202305 | DRIVING PILES | FOOT | 1,280 |
| 51203200 | TEST PILE METAL SHELLS | EACH | 2 |

SEE SPECIAL PROVISIONS

| SUMMARY OF QUANTITIES | | | |
|-----------------------|--|-----------------------------|----------|
| CODE NO. | ITEM | CONSTRUCTION TYPE CODE 0010 | |
| | | UNIT | QUANTITY |
| 51500100 | NAME PLATES | EACH | 1 |
| 52100520 | ANCHOR BOLTS, 1" | EACH | 40 |
| 58600101 | GRANULAR BACKFILL FOR STRUCTURES | CU YD | 104 |
| 59100100 | GEOCOMPOSITE WALL DRAIN | SQ YD | 60 |
| 60100060 | CONCRETE HEADWALLS FOR PIPE DRAINS | EACH | 4 |
| 60146304 | PIPE UNDERDRAINS FOR STRUCTURES 4" | FOOT | 138 |
| 63000001 | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS | FOOT | 25 |
| 63100085 | TRAFFIC BARRIER TERMINAL, TYPE 6 | EACH | 4 |
| 63100167 | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT | EACH | 4 |
| 63200310 | GUARDRAIL REMOVAL | FOOT | 908 |
| 67100100 | MOBILIZATION | L SUM | 1 |
| 70300100 | SHORT TERM PAVEMENT MARKING | FOOT | 162 |
| 70300150 | SHORT TERM PAVEMENT MARKING REMOVAL | SQ FT | 54 |
| 72501000 | TERMINAL MARKER - DIRECT APPLIED | EACH | 4 |
| 78001110 | PAINT PAVEMENT MARKING - LINE 4" | FOOT | 1,860 |
| 78200005 | GUARDRAIL REFLECTORS, TYPE A | EACH | 6 |
| X2501000 | SEEDING, CLASS 2 (SPECIAL) | ACRE | 0.5 |
| X7011006 | TRAFFIC CONTROL AND PROTECTION, TEMPORARY DETOUR | L SUM | 1 |
| Z0013798 | CONSTRUCTION LAYOUT | L SUM | 1 |
| XX007887 | RELOCATE EXISTING RIPRAP | SQ YD | 230 |

SEE SPECIAL PROVISIONS
* SPECIALTY ITEMS

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2022". (HERE IN AFTER REFERRED TO AS THE STANDARD SPECIFICATIONS, THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; THE DETAILS IN THE PLANS AND THE "SPECIAL PROVISIONS" INCLUDED IN THE DOCUMENTS.
- THE LOCATION ON THE PLANS OF EXISTING DRAINAGE STRUCTURES, TELEPHONE LINES, ELECTRIC LINES, WATER SERVICE LINES, GAS MAINS, AND OTHER UTILITY FACILITIES AS SHOWN ON THE PLANS ARE BASED ON FIELD INVESTIGATIONS AND THE BEST INFORMATION AVAILABLE. BUT THE LOCATIONS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE INDIVIDUAL UTILITY COMPANIES AND BY FIELD INSPECTION.
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES

| | |
|-----------------------|----------------|
| AGGREGATE BASE COURSE | 2.05 TON/CU YD |
| GRANULAR BACKFILL | 1.50 TON/CU YD |
| STONE RIPRAP | 1.75 TON/CU YD |

| BITUMINOUS MATERIALS APPLICATION RATES | |
|--|----------------|
| SURFACE TYPE | RESIDUAL RATE |
| AGGREGATE BASE (PRIME COAT) | 0.250 LB/SQ FT |
| MILLED HMA OR PCC (TACK COAT) | 0.080 LB/SQ FT |
| EXISTING PAVEMENT (TACK COAT) | 0.050 LB/SQ FT |
| TACK COAT (BETWEEN LIFTS) | 0.080 LB/SQ FT |
- THE AREA TO BE SEEDDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER.
SEEDING, CLASS 2 (SPECIAL) = 0.50 ACRES
- ALL WASTE MATERIAL FROM EXCAVATIONS SHALL BE DISPOSED OF BY THE CONTRACTOR. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- COMMITMENTS:
1) NONE

HIGHWAY STANDARDS

| | |
|-----------|---|
| 000001-08 | STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS |
| 001001-02 | AREAS OF REINFORCEMENT BARS |
| 280001-07 | TEMPORARY EROSION CONTROL SYSTEMS |
| 420406 | PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB |
| 515001-04 | NAME PLATE FOR BRIDGES |
| 601101-02 | CONCRETE HEADWALL FOR PIPE UNDERDRAINS |
| 630001-12 | STEEL PLATE BEAM GUARDRAIL |
| 630301-09 | SHOULDER WIDENING FOR TYPE 1, (SPECIAL) GUARDRAIL TERMINALS |
| 631031-18 | TRAFFIC BARRIER TERMINAL, TYPE 6 |
| 701006-05 | OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE |
| 701301-04 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701901-08 | TRAFFIC CONTROL DEVICES |
| 725001-01 | OBJECT AND TERMINAL MARKERS |
| 780001-05 | TYPICAL PAVEMENT MARKINGS |
| 782006-01 | GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS |
| BLR 21-9 | TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS |

| PAVEMENT MARKING SCHEDULE | | | | | |
|---|-----------------------------|-------------------------------------|----------------------------------|----------------|--------------------------|
| LOCATION | SHORT TERM PAVEMENT MARKING | SHORT TERM PAVEMENT MARKING REMOVAL | PAINT PAVEMENT MARKING - LINE 4" | | |
| | | | WHITE EDGE LINES | SKIP DASH LINE | SINGLE YELLOW CENTERLINE |
| | 70300100 | 70300150 | 78001110 | | |
| NORTH VALLEY ROAD / C.H. 13 / F.A.S. 1372 | FOOT | SQ. FT. | FOOT | FOOT | FOOT |
| LT. STA. 7+50 TO CL. STA. 12+90 | 54 | 18 | 540 | | |
| CL-WB STA. 7+50 TO CL. STA. 12+00 | | | | | 450 |
| CL-EB STA. 7+50 TO CL. STA. 12+90 | 54 | 18 | | 30 | |
| CL-EB STA. 8+70 TO CL. STA. 11+30 | | | | | 260 |
| CL-EB STA. 11+30 TO CL. STA. 12+90 | | 18 | | 40 | |
| RT. STA. 7+50 TO CL. STA. 12+90 | 54 | | 540 | | |
| SUBTOTAL | 162 | 54 | 1,080 | 70 | 710 |
| TOTAL | 162 | 54 | 1860 | | |

| TEMPORARY DITCH CHECKS | |
|------------------------|------|
| LOCATION | FOOT |
| LT STA 11+00 | 10 |
| LT STA 12+00 | 10 |
| TOTAL | 20 |

| PERIMETER EROSION BARRIER | |
|------------------------------|------|
| LOCATION | FOOT |
| LT STA 7+50 TO LT STA 9+10 | 175 |
| RT STA 7+50 TO RT STA 9+10 | 175 |
| LT STA 11+00 TO LT STA 12+75 | 200 |
| RT STA 11+00 TO LT STA 12+75 | 200 |
| TOTAL | 750 |

| EARTHWORK SCHEDULE | | | | | | | |
|-----------------------------|------------------|--------------------|------------------|--------------|---|---------------------|-------------------|
| LOCATION | EARTH EXCAVATION | CHANNEL EXCAVATION | SHRINKAGE FACTOR | PERCENT USED | EARTH EXCAVATION ADJUSTED FOR SHRINKAGE | EMBANKMENT REQUIRED | EARTHWORK BALANCE |
| | CU YD | CU YD | | | CU YD | CU YD | CU YD |
| STA 7+50 TO STA 9+24.13 | 49 | | 25% | 100% | 37 | 376 | -339 |
| STA 9+24.13 TO STA 10+76.83 | | 826 | 25% | 70% | 434 | | 434 |
| STA 10+76.83 TO STA 12+75 | 95 | | 25% | 100% | 71 | 441 | -370 |
| TOTAL | 144 | 826 | | | 542 | 817 | -275 |
| USE | 144 | 826 | | | | | 275 |

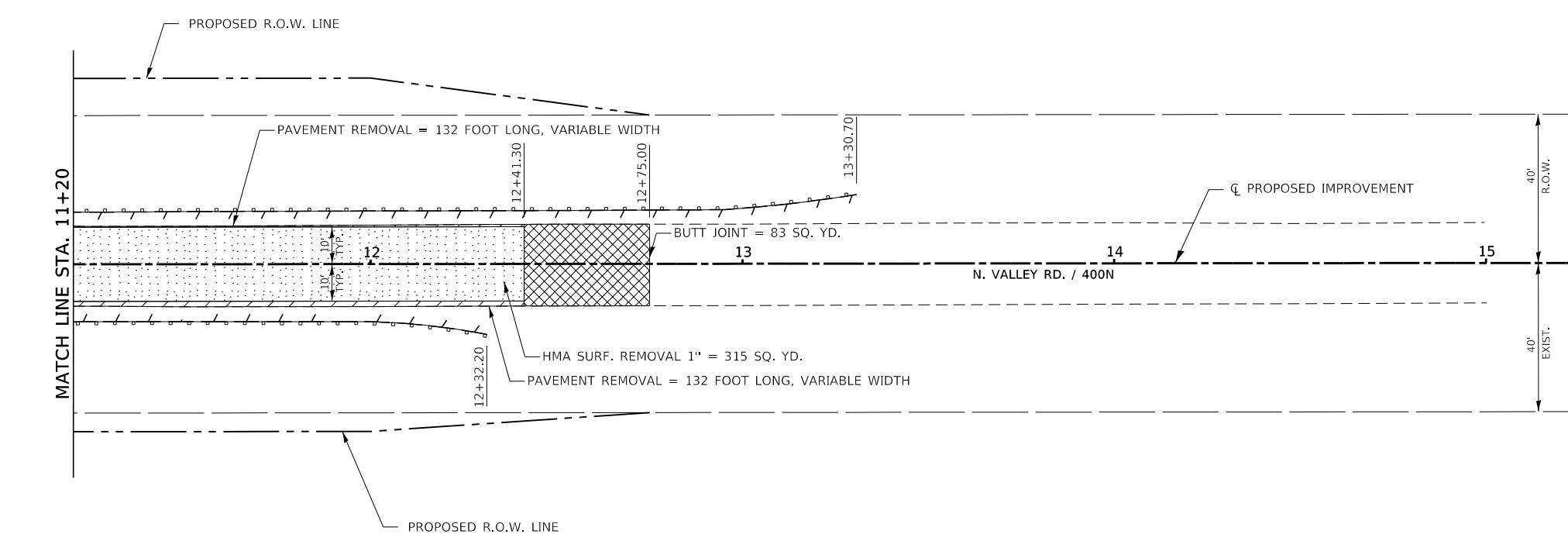
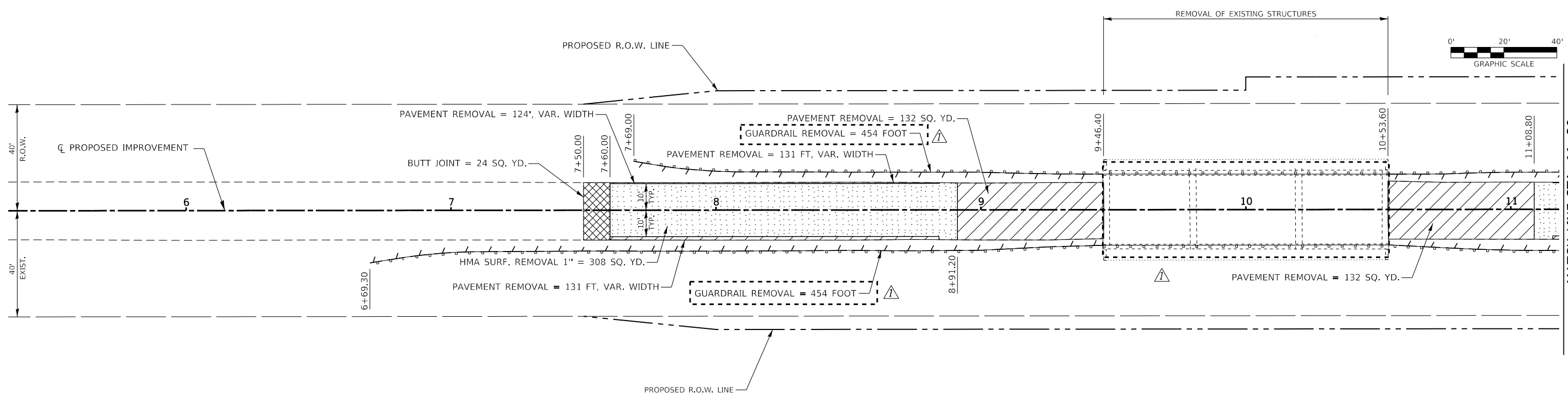
FURNISHED EXCAVATION 275 CU YD

| EROSION CONTROL TABLE | | | |
|----------------------------------|----------------------------|-------------------------|-----------------------------------|
| LOCATION | SEEDING, CLASS 2 (SPECIAL) | EROSION CONTROL BLANKET | TEMPORARY EROSION CONTROL SEEDING |
| | X2501000 | 25100630 | 28000250 |
| C.H. 13 / F.A.S. 1372 | ACRE | SQ YD | POUND |
| STA. 287+00.00 TO STA. 292+30.17 | 0.20 | 221 | 5 |
| STA. 293+73.83 TO STA. 300+00.00 | 0.30 | 233 | 5 |
| TOTAL | 0.50 | 454 | 10 |

| GUARDRAIL SCHEDULE | | | | | | | |
|---------------------------------------|--|----------------------------------|--|-------------------|----------------------------------|------------------------------|----------|
| LOCATION | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS | TRAFFIC BARRIER TERMINAL, TYPE 6 | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT | GUARDRAIL REMOVAL | TERMINAL MARKER - DIRECT APPLIED | GUARDRAIL REFLECTORS, TYPE A | |
| | C.H. 13 / F.A.S. 1372 | 63000001 | 63100085 | 63100167 | 63200310 | 7250100 | 78200005 |
| SEE SHEET 9 FOR LAYOUT | FOOT | EACH | EACH | FOOT | EACH | EACH | |
| LT. STA. 8+34.17 TO LT. STA. 11+90.83 | 12.5 | 2 | 2 | 454 | 2 | 3 | |
| RT. STA. 8+09.17 TO RT. STA. 11+65.83 | 12.5 | 2 | 2 | 454 | 2 | 3 | |
| TOTAL | 25 | 4 | 4 | 908 | 4 | 6 | |



| ROADWAY SCHEDULE | | | | | | | | | | |
|---------------------------|------------------------------|--|--|--|--|--|---|------------------|---|----------------------------|
| LOCATION | AGGREGATE BASE COURSE TYPE A | PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 7" | POLYMERIZED BITUMINOUS MATERIALS (TACK COAT) | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5FG, N50 | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, MIX "C", N50 | PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB | PAVEMENT REMOVAL | HOT-MIX ASPHALT SURFACE REMOVAL, 1 INCH | AGGREGATE SHOULDERS TYPE B |
| | TON | SQ YD | POUND | SQ YD | TON | TON | SQ YD | SQ YD | SQ YD | TON |
| STA 7+50 TO STA 9+24.13 | 59 | 63 | 253 | 24 | 77 | 37 | 24 | 138 | 308 | 75 |
| STA 10+76.83 TO STA 12+75 | 60 | 59 | 297 | 82 | 1 | 44 | 24 | 138 | 315 | 82 |
| TOTAL | 119 | 122 | 550 | 106 | 78 | 81 | 48 | 276 | 623 | 157 |



LEGEND

| | |
|--|------------------------------------|
| | GUARDRAIL REMOVAL |
| | PAVEMENT REMOVAL |
| | H.M.A. SURFACE REMOVAL, BUTT JOINT |
| | H.M.A. SURFACE REMOVAL, 1" |

| | | | |
|---|---------------------|-------------------|-----------------------------|
| FILE NAME = 200084-shr-removal.dgn | USER NAME = rhosick | DESIGNED - M.A.L. | REVISED - 02/28/2023 S.W.M. |
| HAMPTON, LENZINI AND RENWICK, INC. 3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959 | | DRAWN - D.M.F. | REVISED - |
| PLOT SCALE = \$SCALE\$ | | CHECKED - S.W.M. | REVISED - |
| PLOT DATE = 2/28/2023 | | DATE - 06/30/2022 | REVISED - |

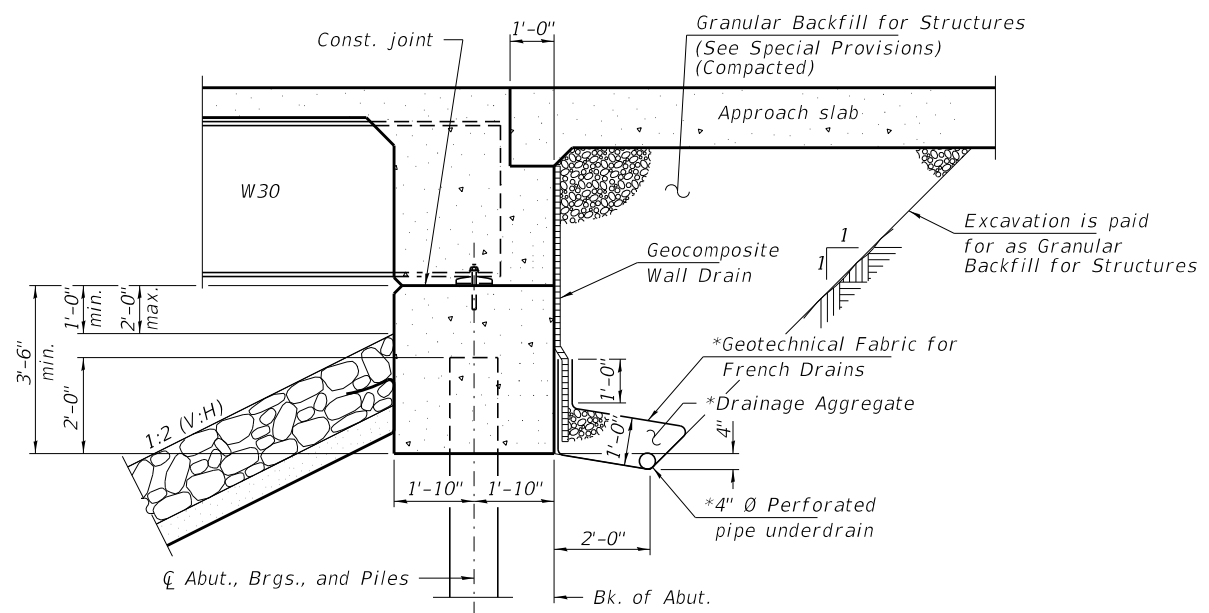
**STATE OF ILLINOIS
STARK COUNTY HIGHWAY DEPARTMENT**

| | | | |
|---------------------|-------------------------|--------------|------------------|
| REMOVAL PLAN | | | |
| SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. 5+20.00 | TO STA. 15+20.00 |

| | | | | |
|-------------------------------------|----------------|--------------------|--------------|-----------|
| F.A.S. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1372 | 17-00183-00-BR | STARK | 50 | 5 |
| C.H. 13 / NORTH VALLEY ROAD | | CONTRACT NO. 89752 | | |
| ILLINOIS FED. AID PROJECT NMKM(136) | | | | |

GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas and ASTM A325 Type 3 in unpainted areas. Bolts 7/8"Ø, holes 1 1/16"Ø, unless otherwise noted.
 Calculated weight of Structural Steel = 117,160 lbs.
 All structural steel shall be AASHTO M 270 Grade 50W.
 No field welding is permitted except as specified in the contract documents.
 Reinforcement bars designated (E) shall be epoxy coated.
 Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 Structural steel shall only be painted from distance equal to the depth of embedment into the concrete cap plus 3 inches. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.
~~The top surface of the deck shall be screeded with a straight edge. Further finishing shall be delayed until the water sheen appears, but not to the point of rendering further manipulation ineffective. The surface then shall be roughened with a suitable stiff bristled broom or wire brush drawn in transverse direction removing any laitance present and breaking up the water sheen. The corrugations formed shall be uniform in appearance and in no case more than 1/4" in depth.~~



SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. at Rt. L's)

*Included in the cost of Pipe Underdrains for Structures, 4"
 All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101). Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures 4".
 Concrete Headwalls for Pipe Drains shall be installed at each pipe underdrain outlet. (4 each).

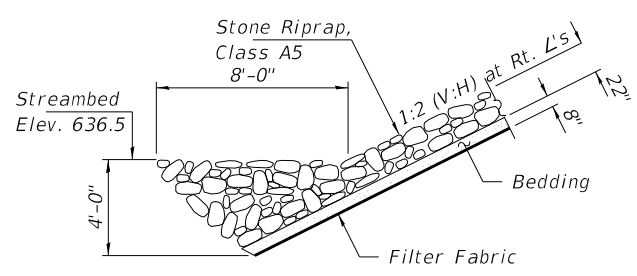
CAMP RUN CREEK
 BUILT 202 BY
 STARK COUNTY
 SEC. 17-00183-00-BR
 C.H. 13 / F.A.S. 1372
 STR. NO. 088-3413
 LOADING HL-93

NAME PLATE

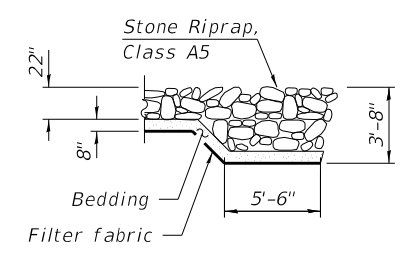
See Std. 515001

TOTAL BILL OF MATERIAL

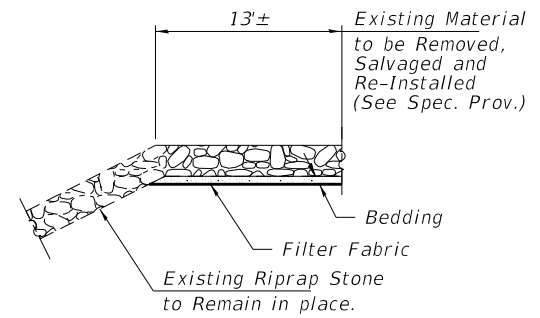
| ITEM | UNIT | SUPER | SUB | TOTAL |
|--|---------|--------|--------|--------|
| Channel Excavation | Cu. Yd. | | 826 | 826 |
| Stone Riprap, Class A5 | Ton | | 950 | 950 |
| Filter Fabric | Sq. Yd. | | 811 | 811 |
| Removal of Existing Structures | Each | | 1 | 1 |
| Structure Excavation | Cu. Yd. | | 186 | 186 |
| Cofferdam Excavation | Cu. Yd. | | 133 | 133 |
| Cofferdam (Type 1) (Location - 1) | Each | | 1 | 1 |
| Cofferdam (Type 1) (Location - 2) | Each | | 1 | 1 |
| Floor Drains | Each | 14 | | 14 |
| Concrete Structures | Cu. Yd. | | 88.8 | 88.8 |
| Concrete Superstructure | Cu. Yd. | 207.9 | | 207.9 |
| Bridge Deck Grooving | Sq. Yd. | 659 | | 659 |
| Concrete Encasement | Cu. Yd. | | 20.0 | 20.0 |
| Protective Coat | Sq. Yd. | 877 | | 877 |
| Concrete Superstructure (Approach Slab) | Cu. Yd. | 89.2 | | 89.2 |
| Furnishing and Erecting Structural Steel | L. Sum | 1 | | 1 |
| Stud Shear Connectors | Each | 3,795 | | 3,795 |
| Reinforcement Bars, Epoxy Coated | Pound | 83,490 | 13,730 | 97,220 |
| Furnishing Metal Shell Piles 14"x0.312" | Foot | | 1,280 | 1,280 |
| Driving Piles | Foot | | 1,280 | 1,280 |
| Test Pile Metal Shells | Each | | 2 | 2 |
| Name Plates | Each | | 1 | 1 |
| Anchor Bolts, 1" | Each | | 40 | 40 |
| Granular Backfill for Structures | Cu. Yd. | | 104 | 104 |
| Geocomposite Wall Drain | Sq. Yd. | | 60 | 60 |
| Concrete Headwalls for Pipe Drains | Each | | 4 | 4 |
| Pipe Underdrains for Structures 4" | Foot | | 138 | 138 |
| Relocate Existing Riprap | Sq. Yd. | | 230 | 230 |



SECTION A-A



SECTION B-B



SECTION C-C

| | | | |
|--|---------------------|-------------------|-----------------------------|
| FILE NAME = 200084-shi-bridge.dgn | USER NAME = rthosck | DESIGNED - P.R.R. | REVISED - 02/28/2023 S.W.M. |
| HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.009959 | CHECKED - S.W.M. | DRAWN - R.D.H. | REVISED - |
| PLOT SCALE = \$SCALE\$ | CHECKED - S.W.M. | REVISED - | |
| PLOT DATE = 2/28/2023 | | | |

STATE OF ILLINOIS
 STARK COUNTY HIGHWAY DEPARTMENT

GENERAL DETAILS
 STRUCTURE NO. 088-3413

SHEET NO. 2 OF 22 SHEETS

| | | | | |
|-----------------------------|----------------|----------------------------|--------------|-----------|
| F.A.S. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1372 | 17-00183-00-BR | STARK | 50 | 12 |
| C.H. 13 / NORTH VALLEY ROAD | | CONTRACT NO. 89752 | | |
| ILLINOIS | | FED. AID PROJECT NMKM(136) | | |