

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|------------|----------|--------------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64* | 1 |
| | | ILLINOIS | CONTRACT NO. 66H54 | |

*64 + 1 = 65 TOTAL SHEETS

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

INDEX OF SHEETS

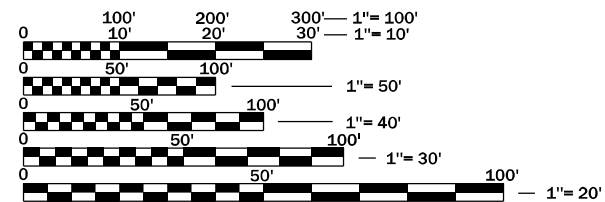
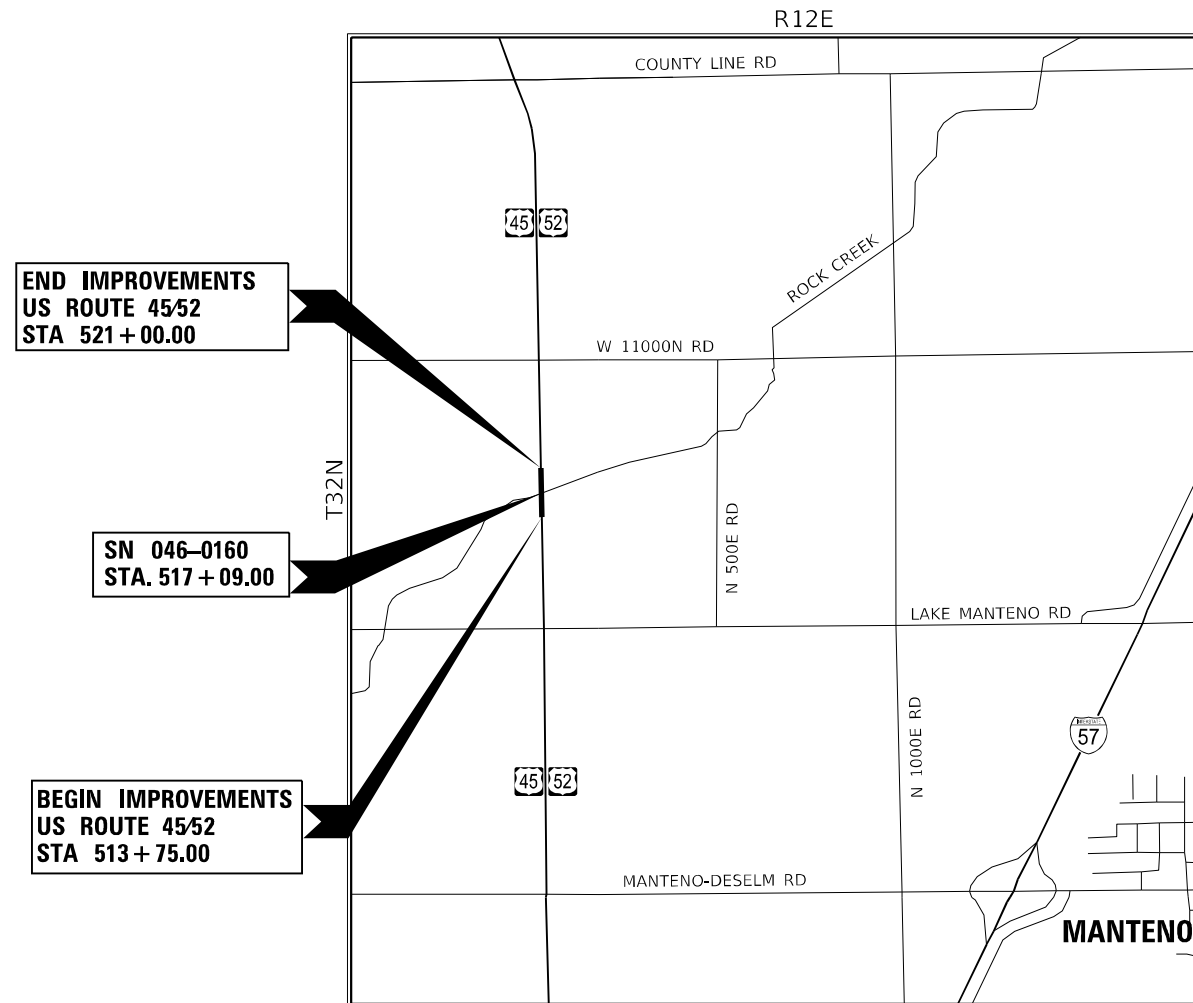
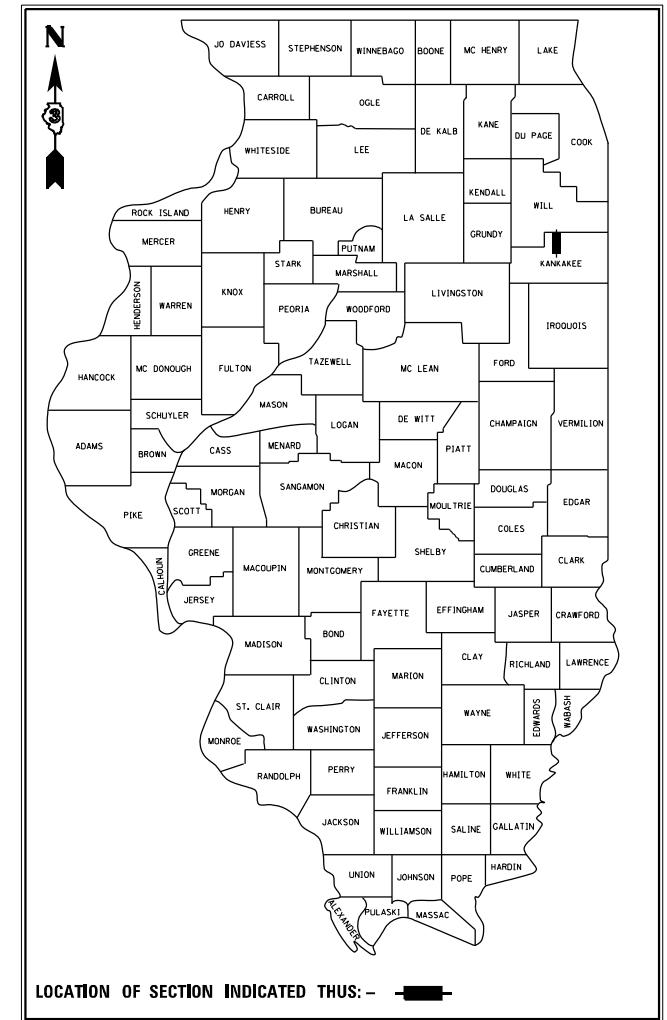
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TRAFFIC DATA

FUNCTIONAL CLASSIFICATION
OTHER PRINCIPAL ARTERIAL
7050 ADT (2019)
P.V. = 87% S.U. = 5% M.U. = 8%

PROPOSED
HIGHWAY PLANS

F.A.P. ROUTE 330 (US 45/52)
SECTION (16BR-1) BR
PROJECT NHPP-V3UB (063)
STRUCTURE REPLACEMENT
KANKAKEE COUNTY
C-93-025-22



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: BRAD DUNCAN, P.E.
UNIT CHIEF: DARCY CARPENTER
DISTRICT 3 NO. (815) 434-6131
CONTRACT NO. 66H54

LOCATION MAP
(NOT TO SCALE)
PROJECT GROSS AND NET LENGTH
US 45/52 = 725 FT. = 0.14 MILE



Jason M. Roitburd
JASON M. ROITBURD, P.E.
NO. 062-065592
EXPIRES: 02/28/2022
HR GREEN, INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED December 15, 2021
David Almond
REGIONAL ENGINEER

February 4, 2022
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

February 4, 2022
Stephen M. Smith
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

D3 GENERAL NOTES

THE HMA SURFACE OF ALL MAILBOX TURNOUTS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES, AND SIDE ROADS SHALL BE MADE NEATLY, IN A WORKMANLIKE MANNER, AND SHALL ACCURATELY CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. IF REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL SAW CUT THE HMA SURFACE TO CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. THIS WORK WILL BE INCLUDED IN THE COST OF THE HMA SURFACE.

EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

BEFORE ORDERING PIPE CULVERTS OR PIPE DRAINS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES (100 MILLIMETERS) IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF TOPSOIL EXCAVATION AND PLACEMENT.

ALL EXCAVATED MATERIAL, WHICH INCLUDES DIGGING OR GRADING OF ANY SOIL OR FILL MATERIAL, WITH THE EXCEPTION OF AGGREGATE FILLS, MUST BE INCORPORATED WITHIN THE IDOT RIGHT OF WAY.

SHORT TERM PAVEMENT MARKING SHALL BE USED TO OUTLINE EXIT AND ENTRANCE RAMPS FOR THE PRIME COAT APPLICATION AND EACH RESURFACING LIFT.

ALL ELEVATIONS ARE ON THE NAVD88 DATUM.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

| | | |
|------------------------------|--------|---------------------------|
| GRANULAR MATERIALS | 2.05 | TONS / CU YD |
| HMA RESURFACING | 112 | LBS / SQ YD / IN |
| SHORT TERM PAVEMENT MARKING | 10 | FT /100 FT OF APPLICATION |
| MIX FOR CRACKS, JTS & FLGWYS | 0.0003 | TONS / SQ YD |
| LEVEL BINDER (HAND METHOD) | 0.0005 | TONS / SQ YD |
| SUPPLEMENTAL WATERING | 3 | GAL / SQ YD / APPLICATION |
| CALCIUM CHLORIDE | 2 | LB / SQ YD / APPLICATION |
| AGGREGATE DITCH CHECKS | 5 | TONS AGGREGATE |

THE WORK REQUIRED TO CONNECT ANY SEWER TO AN EXISTING DRAINAGE STRUCTURE OR PIPE WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THE SEWER ITEMS.

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:
COMED, AT&T

ADDITIONAL NOTES

PAVING

THE THICKNESS OF HMA MIXTURES SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA MIXTURE IS PLACED.

STAKING

THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS, AND REFERENCE MARKERS UNTIL THE OWNER, HIS AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.

UTILITIES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF EARTH EXCAVATION.

THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR. THIS WORK SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MIGHT NOT BE SHOWN ON THE PLANS. ANY UTILITY PROPERTY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.

MISCELLANEOUS

THE CONTRACTOR SHALL MAINTAIN EXISTING SIDE STREET AND DRIVEWAY ACCESS TO EACH ABUTTING PROPERTY AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.

WHERE NEW WORK MEETS EXISTING FEATURES TO REMAIN, THE CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS AND ELEVATIONS PRIOR TO PROCEEDING WITH CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

ANY REFERENCE TO A STANDARD THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS INCLUDED IN THESE PLANS.

SAW CUTTING WILL BE REQUIRED FOR ALL REMOVAL ITEMS LISTED IN SECTION 440 OF THE STANDARD SPECIFICATIONS, SHOWN IN THE PLANS, AND AS DIRECTED BY THE ENGINEER. THE COST OF SAW CUTTING WILL BE INCLUDED IN CONTRACT UNIT BID PRICES FOR THE ITEMS BEING REMOVED.

THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION. THE CONTRACTOR IS PROHIBITED FROM BURNING ANY MATERIAL WITHIN OR ADJACENT TO THE IMPROVEMENT.

THE SUBGRADE SHALL BE KEPT DRAINED DURING CONSTRUCTION OF THE PAVEMENT STRUCTURE. THE CONTRACTOR SHALL FACILITATE SURFACE DRAINAGE BY CUTTING WEEPS IN THE SUBGRADE OR ADJACENT TERRAIN AS NECESSARY. THIS WORK SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

WATER SUPPLY THE INDISCRIMINATE USE OF FIRE HYDRANTS, EXISTING STREAMS, CREEKS, WETLANDS, OR PONDS IS STRICTLY PROHIBITED. THE CONTRACTOR SHALL PROVIDE A WATER TRUCK AND DRIVER AS REQUIRED TO OBTAIN AND TRANSPORT THIS WATER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WATER FROM AN APPROVED SOURCE. IF THIS WATER IS FROM A SOURCE OTHER THAN HIS YARD, WRITTEN APPROVAL FROM THE AGENCY HAVING JURISDICTION FOR THE SOURCE OF THE WATER MUST BE RECEIVED BY THE CONTRACTOR PRIOR TO USE OF THE WATER.

HIGHWAY STANDARDS

| | |
|-----------|--|
| 000001-08 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 001001-02 | AREAS OF REINFORCEMENT BARS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 280001-07 | TEMPORARY EROSION CONTROL SYSTEMS |
| 406201-01 | MAILBOX TURNOUT |
| 420406 | PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB |
| 515001-04 | NAME PLATE FOR BRIDGES |
| 542301-03 | PRECAST REINFORCED CONCRETE FLARED END SECTION |
| 630001-12 | STEEL PLATE BEAM GUARDRAIL |
| 630201-07 | PCC / HMA STABILAZATION AT STEEL PLATE BEAM GUARDRAIL |
| 630301-09 | SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS |
| 631031-17 | TRAFFIC BARRIER TERMINAL, TYPE 6 |
| 701001-02 | OFF-RD OPERATIONS 2L, 2W, MORE THAN 15' AWAY |
| 701006-05 | OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE |
| 701011-04 | OFF-RD MOVING OPERATIONS 2L, 2W, DAY ONLY |
| 701201-05 | LANE CLOSURE 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH |
| 701321-18 | LANE CLOSURE 2L, 2W, BRIDGE REPAIR WITH BARRIER |
| 701901-08 | TRAFFIC CONTROL DEVICES |
| 704001-08 | TEMPORARY CONCRETE BARRIER |
| 780001-05 | TYPICAL PAVEMENT MARKINGS |
| 782006-01 | GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS |

HMA MIXTURE REQUIREMENT TABLE

| LOCATIONS: | ENTIRE PROJECT | EMTIRE PROJECT | ENTIRE PROJECT | EMTIRE PROJCT | ENTIRE PROJECT | ENTIRE PROJECT |
|--|----------------|----------------|-------------------------|----------------------------|--------------------------|--------------------------|
| MIXTURE USE(S): | HMA BINDER | HMA SURFACE | HMA SHLD BOTTOM LIFT(S) | HMA SHLD TOP LIFT (1 1/2") | DRIVEWAY BOTTOM LIFT(S) | DRIVEWAY TOP LIFT |
| BINDER GRADE (PG): | PG 64-22 | PG 64-22 | PG 64-22 | PG 64-22 | PG 64-22 | PG 64-22 |
| DESIGN AIR VOIDS: | 4.0% @ N70 | 4.0% @ N70 | 4.0% @ N70 | 4.0% @ N70 | 4.0% @ N70 | 4.0% @ N70 |
| MIXTURE COMPOSITION: (MIXTURE GRADATION) | IL 9.5FG | IL 9.5FG | IL 19.0 | IL 9.5FG | IL 19.0 | IL 9.5FG |
| FRICITION AGGREGATE: | | MIXTURE D | | | | |
| MIXTURE WEIGHT: | 112.0 LB/SY/IN | 112.0 LB/SY/IN | 112.0 LB/SY/IN | 112.0 LB/SY/IN | 112.0 LB/SY/IN | 112.0 LB/SY/IN |
| QUALITY MANAGEMENT PROGRAM: | OCQA | OCQA | OCQA | OCQA | OCQA | OCQA |
| SUBLOT SIZE: | NA | NA | NA | NA | NA | NA |
| DENSITY TEST METHOD: | CORES | CORES | CORES | CORES | SATISFACTION OF ENGINEER | SATISFACTION OF ENGINEER |

Contract No. 66H54
US 45/52 BRIDGE REPLACEMENT OVER NORTH BRANCH OF ROCK CREEK

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE
AS BUILT INFORMATION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

PREPARED BY: _____
DISTRICT STUDIES & PLANS ENGINEER

DATE: _____

EXAMINED BY: _____
DISTRICT CONSTRUCTION ENGINEER

DISTRICT MATERIALS ENGINEER

DISTRICT OPERATIONS ENGINEER

START & END DATES
OF CONSTRUCTION:

INSPECTORS:

HRG PROJECT NO: 2002M.0
 HRG PROJ CONTACT:
 FILE NAME: 066664.dwg
 PEN TABLE: 10/10/2011



| | | |
|------------------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - JMR | REVISED - |
| | DRAWN - AJM | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND
HIGHWAY STANDARDS

SCALE: SHEET OF SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|----------|--------------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 2 |
| | | | CONTRACT NO. 66H54 | |
| ILLINOIS FED. AID PROJECT | | | | |

| CONSTRUCTION CODE | |
|-------------------|-------------|
| FED - 80% | FED - 80% |
| STATE - 20% | STATE - 20% |
| ROADWAY | BRIDGE |
| 0004 | 0010 |
| RURAL | SN 046-0160 |

S.P.

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | ROADWAY | BRIDGE |
|------------|---|-------|----------------|---------|--------|
| 20200100 | EARTH EXCAVATION | CU YD | 307 | 307 | |
| * 20201200 | REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL | CU YD | 878 | 878 | |
| 20400800 | FURNISHED EXCAVATION | CU YD | 1,359 | 1,359 | |
| 21101505 | TOPSOIL EXCAVATION AND PLACEMENT | CU YD | 1,744 | 1,744 | |
| 25000210 | SEEDING, CLASS 2A | ACRE | 1.1 | 1.1 | |
| 25000400 | NITROGEN FERTILIZER NUTRIENT | POUND | 96 | 96 | |
| 25000500 | PHOSPHORUS FERTILIZER NUTRIENT | POUND | 96 | 96 | |
| 25000600 | POTASSIUM FERTILIZER NUTRIENT | POUND | 96 | 96 | |
| 25100630 | EROSION CONTROL BLANKET | SQ YD | 3,374 | 3,374 | |
| 25100635 | HEAVY DUTY EROSION CONTROL BLANKET | SQ YD | 1,744 | 1,744 | |
| 28000250 | TEMPORARY EROSION CONTROL SEEDING | POUND | 200 | 200 | |
| 28000305 | TEMPORARY DITCH CHECKS | FOOT | 150 | 150 | |
| 28000400 | PERIMETER EROSION BARRIER | FOOT | 1,385 | 1,385 | |
| 28000500 | INLET AND PIPE PROTECTION | EACH | 1 | 1 | |

* INDICATES SPECIAL PROVISION

HRG PROJECT NO: 2002M.0
 HRG PROJ CONTACT:
 FILE NAME: 086664_sht-sum.dgn
 PEN TABLE: 16610664.tbl



| | | |
|------------------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - JMR | REVISED - |
| | DRAWN - AJM | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

| | | | | |
|---------------------------|------------|----------|--------------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 330 | (16BR-1)BR | KANKAKEE | 64 | 3 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 66H54 | |

HRG PROJECT NO.: 2002M.0
 HRG PROJ. CONTACT:
 FILE NAME: 0866d4_sht-sum.dgn
 PEN TABLE: 168tbl.tbl



| | | |
|------------------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - JMR | REVISED - |
| | DRAWN - AJM | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|----------|---------------------------|-----------|
| 330 | (168R-1)BR | KANKAKEE | 64 | 4 |
| CONTRACT NO. 66H54 | | | ILLINOIS FED. AID PROJECT | |

S.P.

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | |
|----------|--|-------|----------------|-------------------|-------------|
| | | | | FED - 80% | FED - 80% |
| | | | | STATE - 20% | STATE - 20% |
| | | | | ROADWAY | BRIDGE |
| | | | | 0004 | 0010 |
| | | | | RURAL | SN 046-0160 |
| 28100105 | STONE RIPRAP, CLASS A3 | SQ YD | 22 | 22 | |
| 28100107 | STONE RIPRAP, CLASS A4 | SQ YD | 636 | | 636 |
| 28200200 | FILTER FABRIC | SQ YD | 658 | 22 | 636 |
| 31101200 | SUBBASE GRANULAR MATERIAL, TYPE B 4" | SQ YD | 1,052 | 1,052 | |
| 35101800 | AGGREGATE BASE COURSE, TYPE B 6" | SQ YD | 82 | 82 | |
| 40201000 | AGGREGATE FOR TEMPORARY ACCESS | TON | 26 | 26 | |
| 40600990 | TEMPORARY RAMP | SQ YD | 20 | 20 | |
| 40602970 | HOT-MIX ASPHALT BINDER COURSE, 1L-9.5FG, N70 | TON | 630 | 630 | |
| 40604012 | HOT-MIX ASPHALT SURFACE COURSE, 1L-9.5FG, MIX "D", N70 | TON | 136 | 136 | |
| 42000080 | PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB | SQ YD | 169 | 169 | |
| 44000100 | PAVEMENT REMOVAL | SQ YD | 113 | 113 | |
| 44000155 | HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2" | SQ YD | 530 | 530 | |
| 44004250 | PAVED SHOULDER REMOVAL | SQ YD | 317 | 317 | |
| 48101500 | AGGREGATE SHOULDERS, TYPE B 6" | SQ YD | 170 | 170 | |

* INDICATES SPECIAL PROVISION

S.P.

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | |
|----------|--|-------|----------------|-------------------|-------------|
| | | | | FED - 80% | FED - 80% |
| | | | | STATE - 20% | STATE - 20% |
| | | | | ROADWAY | BRIDGE |
| | | | | 0004 | 0010 |
| | | | | RURAL | SN 046-0160 |
| 48203029 | HOT-MIX ASPHALT SHOULDERS, 8" | SQ YD | 1,052 | 1,052 | |
| 50100100 | REMOVAL OF EXISTING STRUCTURES | EACH | 1 | | 1 |
| 50105220 | PIPE CULVERT REMOVAL | FOOT | 34 | 34 | |
| 50200100 | STRUCTURE EXCAVATION | CU YD | 184 | | 184 |
| 50300225 | CONCRETE STRUCTURES | CU YD | 140.3 | | 140.3 |
| 50300255 | CONCRETE SUPERSTRUCTURE | CU YD | 179.2 | | 179.2 |
| 50300260 | BRIDGE DECK GROOVING | SQ YD | 709 | | 709 |
| 50300300 | PROTECTIVE COAT | SQ YD | 876 | | 876 |
| 50301350 | CONCRETE SUPERSTRUCTURE (APPROACH SLAB) | CU YD | 116.8 | | 116.8 |
| 50500105 | FURNISHING AND ERECTING STRUCTURAL STEEL | L SUM | 1 | | 1 |
| 50500505 | STUD SHEAR CONNECTORS | EACH | 5,124 | | 5,124 |
| 50800105 | REINFORCEMENT BARS | POUND | 8,420 | | 8,420 |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 106,640 | | 106,640 |
| 50800515 | BAR SPLICERS | EACH | 837 | | 837 |

* INDICATES SPECIAL PROVISION

HRG PROJECT NO.: 2002M.0
 HRG PROJ. CONTACT:
 FILE NAME: 08669d4_sht-sum.dgn
 PEN TABLE: 1661066.dtl



| | | |
|------------------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - JMR | REVISED - |
| | DRAWN - AJM | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|------------|----------|--------------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 5 |
| | | | CONTRACT NO. 66H54 | |
| | | ILLINOIS | FED. AID PROJECT | |

| CONSTRUCTION CODE | |
|-------------------|-------------|
| FED - 80% | FED - 80% |
| STATE - 20% | STATE - 20% |
| ROADWAY | BRIDGE |
| 0004 | 0010 |
| RURAL | SN 046-0160 |

S.P.

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | | |
|------------|--------------------------------------|-------|----------------|----|------|
| 51201600 | FURNISHING STEEL PILES HP12X53 | FOOT | 246 | | 246 |
| 51202305 | DRIVING PILES | FOOT | 246 | | 246 |
| 51203600 | TEST PILE STEEL HP12X53 | EACH | 2 | | 2 |
| 51204650 | PILE SHOES | EACH | 14 | | 14 |
| 51500100 | NAME PLATES | EACH | 1 | | 1 |
| * 51603000 | DRILLED SHAFT IN SOIL | CU YD | 4.2 | | 4.2 |
| * 51604000 | DRILLED SHAFT IN ROCK | CU YD | 32.0 | | 32.0 |
| 52100010 | ELASTOMERIC BEARING ASSEMBLY, TYPE I | EACH | 14 | | 14 |
| 52100510 | ANCHOR BOLTS, 3/4" | EACH | 28 | | 28 |
| 52100520 | ANCHOR BOLTS, 1" | EACH | 28 | | 28 |
| 52200020 | TEMPORARY SOIL RETENTION SYSTEM | SQ FT | 368 | | 368 |
| 54213453 | END SECTIONS 18" | EACH | 2 | 2 | |
| 542D0223 | PIPE CULVERTS, CLASS D, TYPE 1 18" | FOOT | 24 | 24 | |
| 58600101 | GRANULAR BACKFILL FOR STRUCTURES | CU YD | 112 | | 112 |

* INDICATES SPECIAL PROVISION

HRG PROJECT NO.: 2002M.0
 HRG PROJ. CONTACT:
 FILE NAME: 08669d4_sht-sum.dgn
 PEN TABLE: penTable.tbl



| | | |
|------------------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - JMR | REVISED - |
| | DRAWN - AJM | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|------------|----------|--------------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 6 |
| | | | CONTRACT NO. 66H54 | |
| | | ILLINOIS | FED. AID PROJECT | |

HRG PROJECT NO. 2002M.0
 HRG PROJ. CONTACT
 FILE: 086654.sht-sum.dgn
 PLOT DATE: 12/6/2021
 PEN TABLE: p10.tbl



| | | |
|------------------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - JMR | REVISED - |
| | DRAWN - AJM | REVISED - |
| PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| SUMMARY OF QUANTITIES | | | |
|-----------------------|-------|----|--------|
| SCALE: | SHEET | OF | SHEETS |
| | STA. | TO | STA. |

| | | | | |
|---------------------------|------------|----------|--------------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 330 | (16BR-1)BR | KANKAKEE | 64 | 7 |
| | | | CONTRACT NO. 66H54 | |
| ILLINOIS FED. AID PROJECT | | | | |

| S.P. | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | |
|------|----------|--|--------|----------------|-------------------|-------------|
| | | | | | FED - 80% | FED - 80% |
| | | | | | STATE - 20% | STATE - 20% |
| | | | | | ROADWAY | BRIDGE |
| | | | | | 0004 | 0010 |
| | | | | | RURAL | SN 046-0160 |
| | 59100100 | GEOCOMPOSITE WALL DRAIN | SQ YD | 52 | | 52 |
| | 60146304 | PIPE UNDERDRAINS FOR STRUCTURES 4" | FOOT | 146 | | 146 |
| * | 63000001 | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS | FOOT | 188 | 188 | |
| * | 63100085 | TRAFFIC BARRIER TERMINAL, TYPE 6 | EACH | 4 | 4 | |
| * | 63100167 | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT | EACH | 4 | 4 | |
| | 63200310 | GUARDRAIL REMOVAL | FOOT | 827 | 827 | |
| | 64200108 | SHOULDER RUMBLE STRIPS, 8 INCH | FOOT | 1,114 | 1,114 | |
| * | 66700205 | PERMANENT SURVEY MARKERS, TYPE I | EACH | 1 | 1 | |
| | 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 12 | 12 | |
| | 67100100 | MOBILIZATION | L SUM | 1 | 1 | |
| | 70100405 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 | EACH | 1 | 1 | |
| | 70100450 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701201 | L SUM | 1 | 1 | |
| | 70106500 | TEMPORARY BRIDGE TRAFFIC SIGNALS | EACH | 1 | 1 | |
| | 70106700 | TEMPORARY RUMBLE STRIPS | EACH | 12 | 12 | |

* INDICATES SPECIAL PROVISION

HRG PROJECT NO. 2002M.0
 HRG PROJ. CONTACT
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 PLOT DATE: 12/6/2021 10:41:17 AM
 PEN TABLE: p10.tbl



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| USER NAME = jroibu | DESIGNED - JMR | REVISED - |
| | DRAWN - AJM | REVISED - |
| PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| SUMMARY OF QUANTITIES | | | | |
|-----------------------|-------|----|--------|--------------|
| SCALE: | SHEET | OF | SHEETS | STA. TO STA. |

| | | | | |
|---------------------------|------------|----------|--------------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 330 | (16BR-1)BR | KANKAKEE | 64 | 8 |
| | | | CONTRACT NO. 66H54 | |
| ILLINOIS FED. AID PROJECT | | | | |

S.P.

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | |
|------------|--|------|----------------|-------------------|-------------|
| | | | | FED - 80% | FED - 80% |
| | | | | STATE - 20% | STATE - 20% |
| | | | | ROADWAY | BRIDGE |
| | | | | 0004 | 0010 |
| | | | | RURAL | SN 046-0160 |
| 70300221 | TEMPORARY PAVEMENT MARKING - LINE 4" - PAINT | FOOT | 4,848 | 4,848 | |
| 70300281 | TEMPORARY PAVEMENT MARKING - LINE 24" - PAINT | FOOT | 42 | 42 | |
| 70400100 | TEMPORARY CONCRETE BARRIER | FOOT | 950 | 950 | |
| 70400200 | RELOCATE TEMPORARY CONCRETE BARRIER | FOOT | 800 | 800 | |
| 70600250 | IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3 | EACH | 2 | 2 | |
| 70600241 | IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE, NARROW), TEST LEVEL 2 | EACH | 4 | 4 | |
| 70600350 | IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3 | EACH | 2 | 2 | |
| * 72501000 | TERMINAL MARKER - DIRECT APPLIED | EACH | 4 | 4 | |
| * 78009004 | MODIFIED URETHANE PAVEMENT MARKING - LINE 4" | FOOT | 2,900 | 2,900 | |
| * 78009006 | MODIFIED URETHANE PAVEMENT MARKING - LINE 6" | FOOT | 364 | 364 | |
| * 78100100 | RAISED REFLECTIVE PAVEMENT MARKER | EACH | 9 | 9 | |
| * 78200005 | GUARDRAIL REFLECTORS, TYPE A | EACH | 9 | 9 | |
| * 78200011 | BARRIER WALL REFLECTORS, TYPE C | EACH | 11 | 11 | |
| 78300200 | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL | EACH | 9 | 9 | |

* INDICATES SPECIAL PROVISION

S.P.

| CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODE | | |
|----------|---|-------|----------------|-------------------|-------------|-----|
| | | | | FED - 80% | FED - 80% | |
| | | | | STATE - 20% | STATE - 20% | |
| | | | | ROADWAY | BRIDGE | |
| | | | | 0004 | 0010 | |
| | | | | RURAL | SN 046-0160 | |
| 78300202 | PAVEMENT MARKING REMOVAL - WATER BLASTING | SQ FT | 1,352 | 1,352 | | |
| X0326649 | LINEAR DELINEATOR PANELS, 6 INCH | EACH | 4 | 4 | | |
| X0327809 | LINEAR DELINEATOR PANELS, 4 INCH | EACH | 6 | 6 | | |
| X0900020 | THERMAL INTEGRITY PROFILE TESTING | EACH | 10 | | | 10 |
| X0900044 | THERMAL INTEGRITY PROFILE DATA COLLECTION | FOOT | 192 | | | 192 |
| X4401198 | HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH | SQ YD | 437 | 437 | | |
| 70400125 | PINNING TEMPORARY CONCRETE BARRIER | EACH | 256 | 256 | | |
| Z0013798 | CONSTRUCTION LAYOUT | L SUM | 1 | 1 | | |
| Z0030850 | TEMPORARY INFORMATION SIGNING | SQ FT | 42 | 42 | | |
| Z0062456 | TEMPORARY PAVEMENT | SQ YD | 113 | 113 | | |

* INDICATES SPECIAL PROVISION

HRG PROJECT NO. 2002M.0
 HRG PROJ. CONTACT
 FILE: 086656.dgn
 PLOT DATE: 12/6/2021
 PEN TABLE: p10.tbl



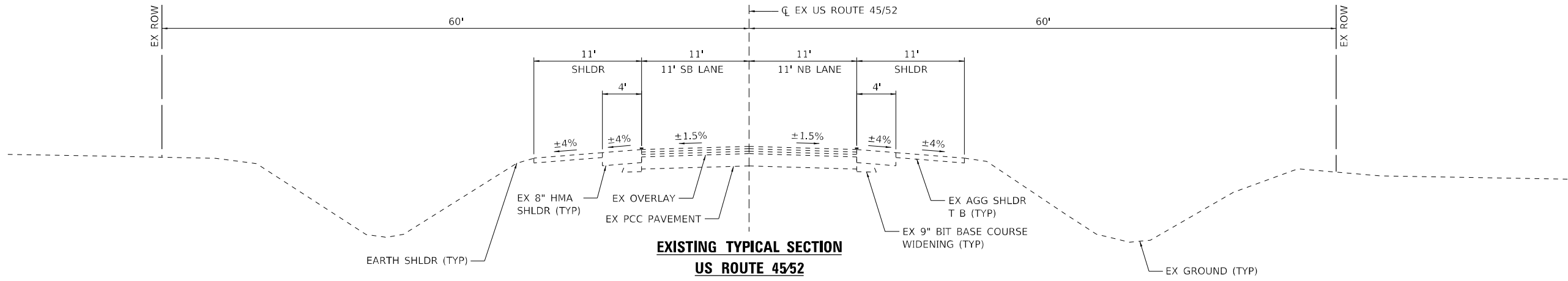
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| | DRAWN - AJM | REVISED - |
| PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

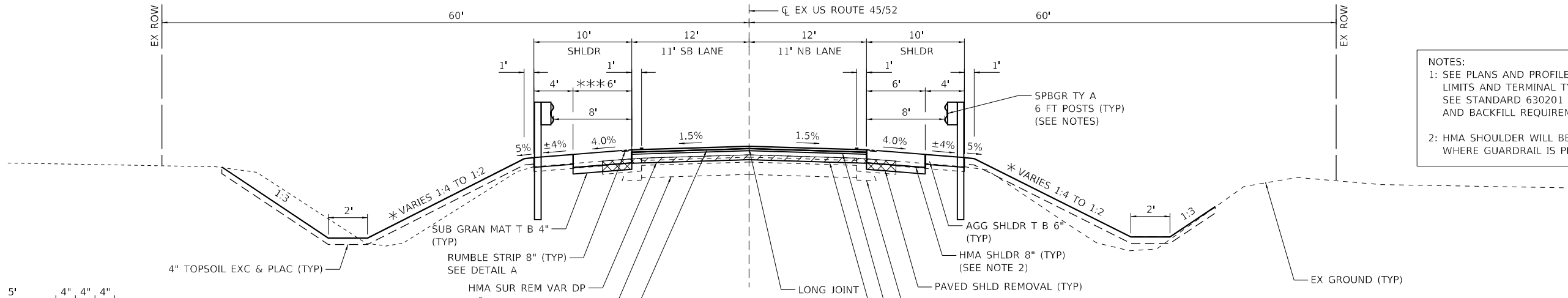
SCALE: SHEET OF SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------------------|------------|----------|--------------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 9 |
| | | | CONTRACT NO. 66H54 | |
| (ILLINOIS) FED. AID PROJECT | | | | |



**EXISTING TYPICAL SECTION
US ROUTE 45/52**

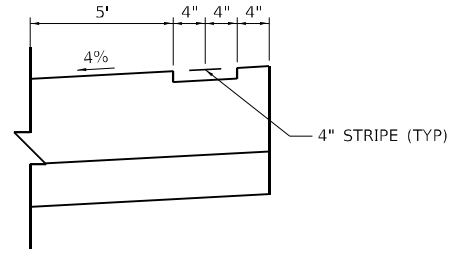
STA 513+75.00 TO STA 516+67.30
STA 517+50.60 TO STA 521+00.00



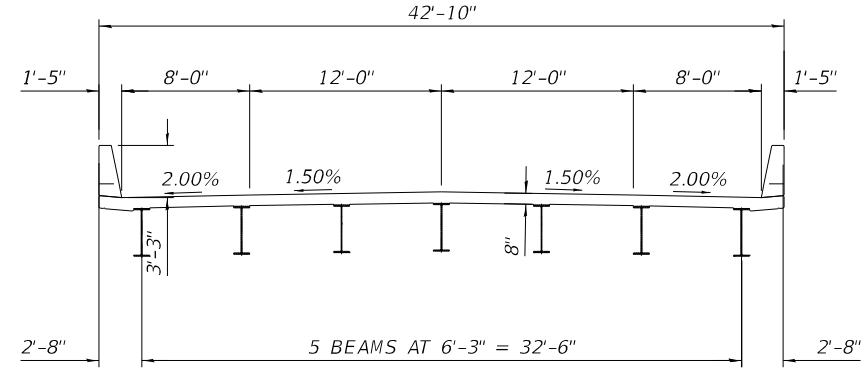
**PROPOSED TYPICAL SECTION
US ROUTE 45/52**

STA 513+75.00 TO STA 516+14.79
STA 518+03.21 TO STA 521+00.00

NOTES:
1: SEE PLANS AND PROFILES FOR GUARDRAIL LIMITS AND TERMINAL TYPE. SEE STANDARD 630201 FOR PCC HOLE AND BACKFILL REQUIREMENTS
2: HMA SHOULDER WILL BE 11' WIDE IN AREAS WHERE GUARDRAIL IS PRESENT.



DETAIL A



**PROPOSED BRIDGE TYPICAL SECTION
US ROUTE 45/52**

PAVEMENT CONNECTOR
STA 516+14.79 TO STA 516+24.79
STA 517+93.21 TO STA 518+03.21
APPROACH PAVEMENT
STA 516+24.79 TO STA 516+54.79
STA 517+63.21 TO STA 517+93.21

* TRANSITION FORESLOPE 1:4 TO 1:2 FROM STA. 514+50 TO STA. 515+50 LT/RT
* TRANSITION FORESLOPE 1:2 TO 1:4 FROM STA. 518+50 TO STA. 519+00 LT/RT
*** 8' HMA SHOULDER WITH 2' AGGREGATE SHOULDER FROM STA. 519+25 TO STA. 521+00 LEFT

*** HMA SURFACE REMOVAL DEPTH SHALL BE THE MINIMUM NECESSARY TO PROVIDE FOR PLACEMENT OF THE 2 3/4\"/>

HRG PROJECT NO.: 2002M.0
HRG PROJ. CONTACT:
FILE NAME: 066664_sht-typr.dgn
PEN TABLE: 1/16/2021.tbl



| | | |
|------------------------------|----------------|-----------|
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| | DRAWN - AJM | REVISED - |
| PLOT SCALE = 12,0000 * / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | |
|-------------------------|----------------------------------|
| TYPICAL SECTIONS | |
| SCALE: | SHEET 1 OF 1 SHEETS STA. TO STA. |

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 10 |
| CONTRACT NO. 66H54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

PAVEMENT SCHEDULE

| LOCATION | SUBBASE GRANULAR MATERIAL TYPE B 4" (SQ YD) | | AGGREGATE BASE COURSE TYPE B 6" (SQ YD) | TEMPORARY RAMP (SQ YD) | PAVED SHOULDER REMOVAL (SQ YD) | | HOT-MIX ASPHALT BINDER COURSE IL-9.5FG, N70 (TON) | HOT-MIX ASPHALT BINDER COURSE IL-19.0, N70 (TON) | HOT-MIX ASPHALT SURF. COURSE IL-9.5FG MIX "D", N70 (TON) | PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB (SQ YD) | PAVEMENT REMOVAL (SQ YD) | | AGGREGATE SHOULDERS, TYPE B 6" (SQ YD) | | HOT-MIX ASPHALT SHOULDERS, 8" (SQ YD) | | SHOULDER RUMBLE STRIPS, 8 INCH (FOOT) | | TEMPORARY PAVEMENT (SQ YD) |
|--------------------------------|---|-------|---|------------------------|--------------------------------|-------|---|--|--|---|--------------------------|-------|--|-------|---------------------------------------|-------|---------------------------------------|-------|----------------------------|
| | LEFT | RIGHT | | | LEFT | RIGHT | | | | | LEFT | RIGHT | LEFT | RIGHT | LEFT | RIGHT | LEFT | RIGHT | |
| US ROUTE 45/52 | | | | | | | | | | | | | | | | | | | |
| STA 513+75.00 TO STA 516+24.79 | 261 | 253 | | 10 | 160 | 131 | 313 | | 52 | 84 | 62 | 12 | 25 | 261 | 253 | 247 | 253 | 62 | |
| STA 517+93.21 TO STA 521+00.00 | 295 | 242 | | 10 | 157 | 154 | 316 | | 65 | 84 | 51 | 42 | 90 | 295 | 242 | 310 | 304 | 51 | |
| DRIVEWAYS | | | | | | | | | | | | | | | | | | | |
| STA 514+46.60 LT (PE) | | | 82 | | | | | 11 | 13 | | | | | | | | | | |
| TOTAL | 1052 | | 82 | 20 | 602 | | 630 | 11 | 131 | 169 | 113 | 170 | | 1052 | | 1114 | | 113 | |

EARTHWORK SCHEDULE

| LOCATION | TOPSOIL EXCAVATION (CU YD) | TOPSOIL EXCAVATION ADJUSTED FOR SHRINKAGE (25%) (CU YD) | TOPSOIL PLACEMENT (CU YD) | EARTH EXCAVATION (CU YD) | EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%) (CU YD) | EMBANKMENT (CU YD) | TOPSOIL BALANCE SURPLUS (+) OR SHORTAGE (-) (CU YD) | EARTH BALANCE SURPLUS (+) OR SHORTAGE (-) (CU YD) | REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (CU YD) |
|--------------------------------|----------------------------|---|---------------------------|--------------------------|---|--------------------|---|---|---|
| US ROUTE 45/52 | | | | | | | | | |
| STA 513+75.00 TO STA 516+14.79 | 786.13 | 590 | 195.21 | 184.41 | 138 | 636.85 | 395 | -499 | 395 |
| STA 518+03.21 TO STA 521+00.00 | 957.40 | 718 | 234.22 | 121.96 | 91 | 952.04 | 484 | -861 | 484 |
| TOTAL | 1744 | 1308 | 430 | 307 | 229 | 1589 | 879 | -1359 | 879 |

NOTES:

- ALL MATERIAL TO BE UTILIZED AS EMBANKMENT ON THIS PROJECT SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS INCLUDED IN THIS CONTRACT AT THE TIME OF CONSTRUCTION.
- EXCESS TOPSOIL SHALL BE UTILIZED IN THE EMBANKMENT TO REDUCE THE VOLUME OF FURNISHED EXCAVATION NEEDED, HOWEVER THE USE OF TOPSOIL IN THE EMBANKMENT SHALL BE IN ACCORDANCE WITH NOTE #1 ABOVE. THE EARTHWORK SCHEDULE HAS NOT BEEN ADJUSTED TO ACCOUNT FOR USE OF EXCESS TOPSOIL IN THE EMBANKMENT. IF THE EXCESS TOPSOIL IS NOT ABLE TO BE UTILIZED IN THE EMBANKMENT A QUANTITY FOR REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL HAS BEEN INCLUDED.

SHRINKAGE FACTORS

TOPSOIL & EARTH EXCAVATION 25%

PAY ITEMS

| ITEM NO. | DESCRIPTION | QUANTITY | UNIT |
|----------|---|----------|-------|
| 20200100 | EARTH EXCAVATION | 307 | CU YD |
| 20201200 | REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL | 879 | CU YD |
| 20400800 | FURNISHED EXCAVATION | 1359 | CU YD |
| 21101505 | TOPSOIL EXCAVATION AND PLACEMENT | 1744 | CU YD |

SURVEY MARKER SCHEDULE

| US RTE 45/52 LOCATION: N BRANCH OF ROCK CREEK, 1.5 MI N OF MANTENO RD KANKAKEE COUNTY | | | | | | |
|---|--|----------------------------------|------------------------|------------------------|--------------------------------|----------------|
| MONUMENT NUMBER | DESCRIPTION | APPROXIMATE LOCATION | EXISTING MONUMENT TYPE | PROPOSED MONUMENT TYPE | MONUMENT RECORD TO BE RECORDED | RESPONSIBILITY |
| 4552102 | E QTR CORNER SECTION 7, T32N, R12E, 3RD PM | 24 FEET NORTH OF EXISTING BRIDGE | PK NAIL, BURIED | TYPE 1 | YES | 1 * |

NOTES:

- ONLY THE ORIGINAL SCOPE OF THIS JOB HAS BEEN SEARCHED FOR MONUMENTS. R.E. MUST INFORM PLATS AND PLANS TO SEARCH FOR ADDITIONAL MONUMENTS PRIOR TO MILLING IF ADDENDUMS HAVE BEEN ADDED TO THIS JOB.
- R.E. WILL INFORM PLATS AND PLANS WHEN CONSTRUCTION STARTS, FOR THE PURPOSE OF LOCATING THE BURIED PK NAIL MONUMENT.
- * BURIED NAIL SHOWN ON MONUMENT RECORD 80-01857 WILL BE SEARCHED FOR, AND A TYPE 1 PSM WILL BE SET ONLY IF THE NAIL IS LOCATED.
- UNKNOWN MONUMENTS MAY EXIST. IF AN UNLISTED MONUMENT IS FOUND, R.E. IS REQUIRED TO PROTECT THE MONUMENT FROM DAMAGE UNTIL A PLATS AND PLANS LAND SURVEYOR CAN DOCUMENT THE MONUMENT. PLATS AND PLANS WILL RESET SUCH MONUMENTS IN KIND FOLLOWING CONSTRUCTION.
- UPON PAVING COMPLETION, R.E. WILL DIRECT PLATS AND PLANS TO STAKE THE TYPE 1 PSM CORING LOCATION, IF LOCATED.
- NOTE: FOR BIDDING PURPOSES NO CONTRACTED LAND SURVEYING SERVICES WILL BE REQUIRED. PLATS AND PLANS WILL PREPARE THE REQUIRED MONUMENT RECORD.
- RESPONSIBILITY:
- RESIDENT TO RE-ESTABLISH MONUMENT (PAY ITEM REQUIRED. PERMANENT SURVEY MARKER, TYPE 1)
 - PLATS AND PLANS TO RE-ESTABLISH MONUMENT

GUARDRAIL SCHEDULE

| LOCATION | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS (FOOT) | TRAFFIC BARRIER TERMINAL | | GUARDRAIL REFLECTORS | BARRIER WALL REFLECTORS | TERMINAL MARKER |
|--------------------------|---|--------------------------|--------------------------------|----------------------|-------------------------|-----------------|
| | | TYPE 6 (EACH) | TYPE 1, SPECIAL TANGENT (EACH) | TYPE A (EACH) | TYPE C (EACH) | (EACH) |
| US ROUTE 45/52 | | | | | | |
| ROCK CREEK BRIDGE | | | | | | |
| NORTHBOUND | 100.0 | 2 | 2 | 5 | 6 | 2 |
| SOUTHBOUND | 87.5 | 2 | 2 | 4 | 5 | 2 |
| TOTAL | 188 | 4 | 4 | 9 | 11 | 4 |

STAGE CONSTRUCTION SCHEDULE

| | BEGIN STATION | BEGIN OFFSET | END STATION | END OFFSET | PINNED | LENGTH (FEET) |
|--|---------------|--------------|---------------|------------|--------|---------------|
| TEMPORARY CONCRETE BARRIER | | | | | | |
| STAGE I | | | | | | |
| | STA 512+87.50 | 4.79 L | STA 513+50.00 | 1.05 L | X | 62.50 |
| | STA 513+50.00 | 1.05 L | STA 514+12.50 | 1.05 L | X | 62.50 |
| | STA 514+87.50 | 1.05 L | STA 521+00.00 | 1.05 L | X | 612.50 |
| | STA 521+75.00 | 1.05 L | STA 522+37.50 | 4.65 L | X | 62.50 |
| STAGE II | | | | | | |
| | STA 514+12.50 | 5.17 L | STA 514+87.50 | 5.17 L | X | 75.00 |
| | STA 521+00.00 | 5.17 L | STA 521+75.00 | 5.17 L | X | 75.00 |
| TOTAL | | | | | | 950 |
| RELOCATE TEMPORARY CONCRETE BARRIER | | | | | | |
| STAGE II | | | | | | |
| | STA 512+87.50 | 0.48 L | STA 513+50.00 | 5.17 L | X | 62.50 |
| | STA 513+50.00 | 5.17 L | STA 514+12.50 | 5.17 L | X | 62.50 |
| | STA 514+87.50 | 5.17 L | STA 521+00.00 | 5.17 L | X | 612.50 |
| | STA 521+75.00 | 5.17 L | STA 522+37.50 | 0.50 L | X | 62.50 |
| TOTAL | | | | | | 800 |

PAVEMENT MARKING SCHEDULE

| LOCATION | PAVEMENT MARKING REMOVAL WATER BLASTING (SQ FT) | * PAVEMENT MARKING | | | | RAISED REFLECTIVE PAVEMENT MARKER (EACH) | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL (EACH) |
|--------------------------------|---|--------------------|-------------------------|-------------------|-------------------------|--|--|
| | | EDGE LINE | | LINE - 6" | | | |
| | | SOLID WHITE | SKIP-DASH YELLOW (FOOT) | LANE LINE 30'-10' | SKIP-DASH YELLOW (FOOT) | | |
| US ROUTE 45/52 | | | | | | | |
| STA 513+75.00 TO STA 521+00.00 | 1352 | 1450 | 1450 | 364 | 9 | 9 | |
| TOTAL | 1352 | 2900 | 364 | 9 | 9 | | |

* TWO (2) APPLICATIONS OF MODIFIED URETHANE PAVEMENT MARKING MATERIAL HAS BEEN INCLUDED. SEE SPECIAL PROVISION.

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 HRG PROJ CONTACT:
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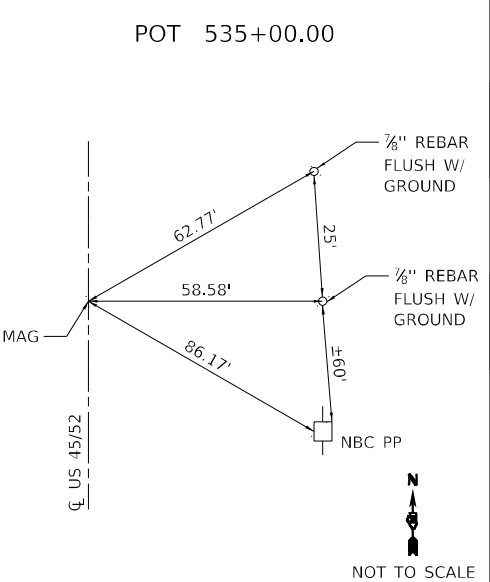
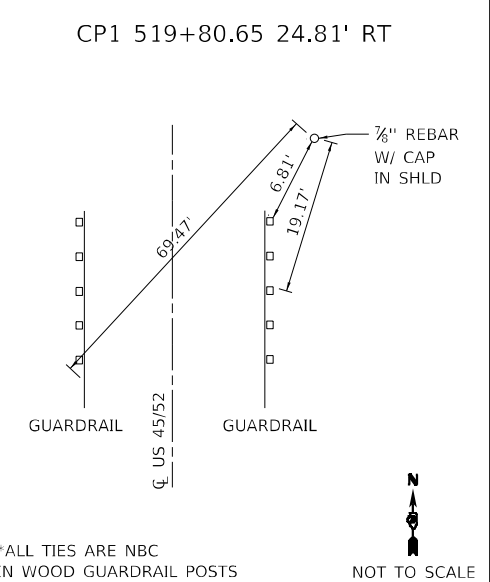
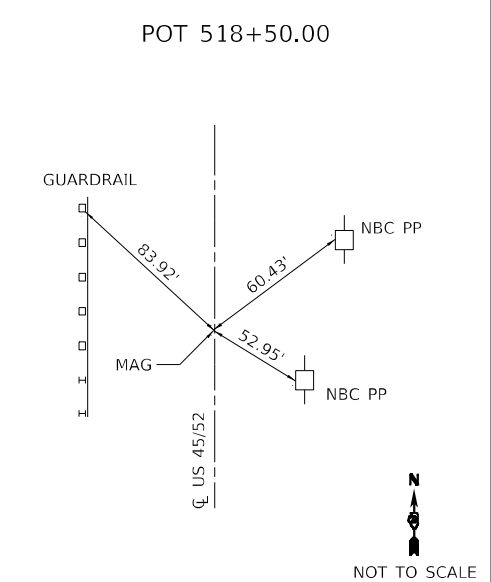
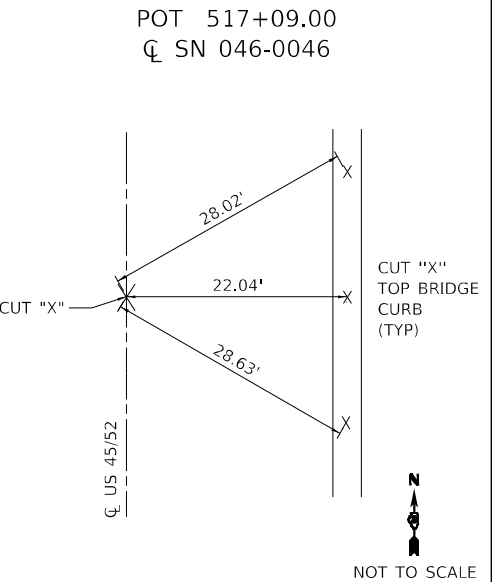
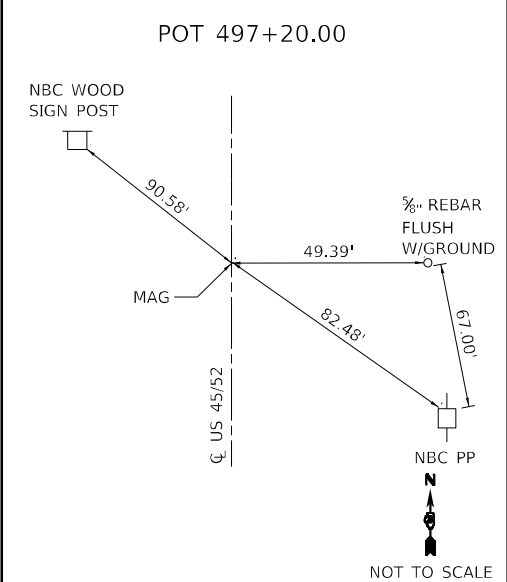
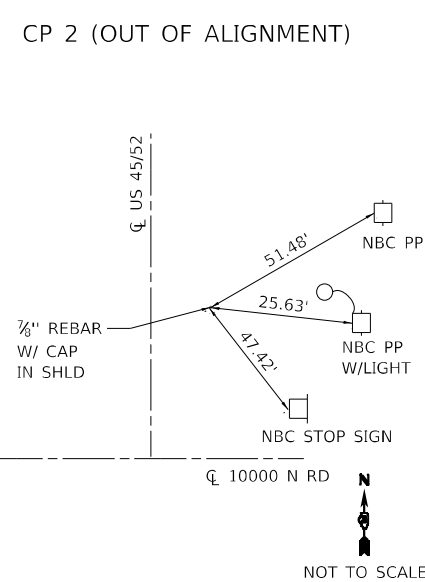
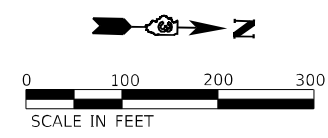
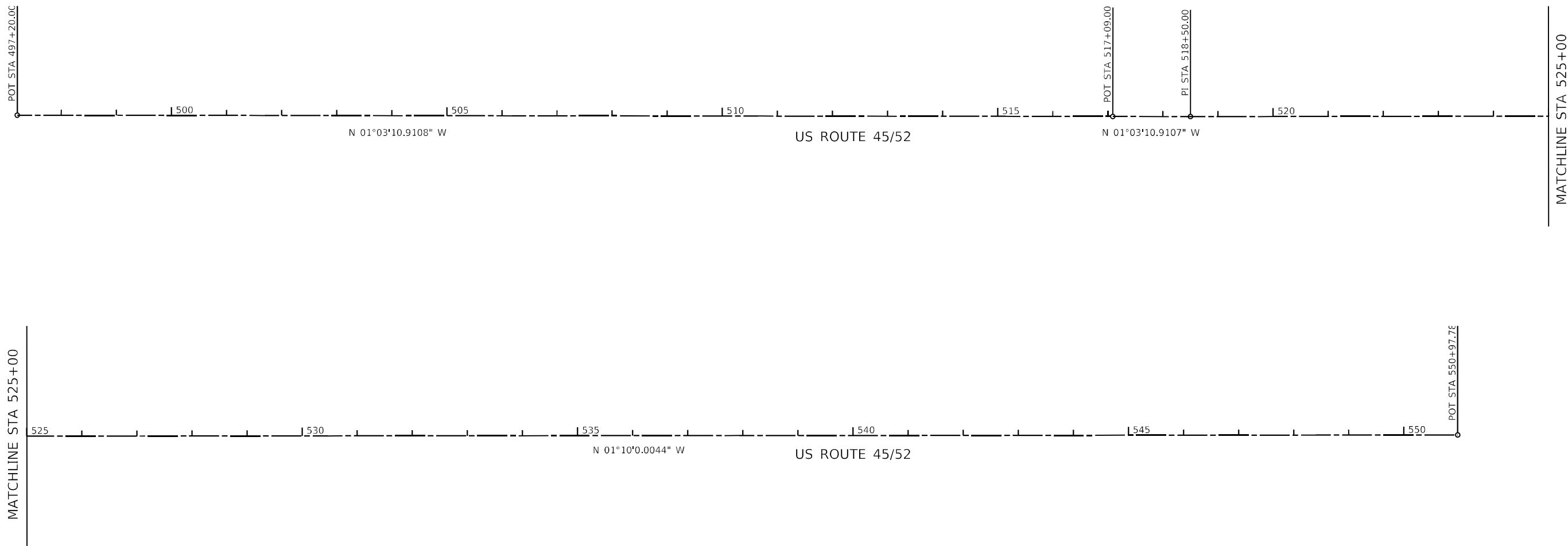


| USER NAME | DESIGNED | REVISIONS |
|------------------------------|-------------|-------------|
| = jroibu | - JMR | - |
| | DRAWN - AJM | REVISIONS - |
| PLOT SCALE = 100,0000' / in. | CHECKED - | REVISIONS - |
| PLOT DATE = 12/6/2021 | DATE - | REVISIONS - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES

| SCALE: | SHEET | OF | SHEETS | STA. | TO | STA. | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------|----|--------|------|----|------|-----------|------------|----------|--------------|-----------|
| | 1 | 1 | | | | | 330 | (16BR-1)BR | KANKAKEE | 64 | 11 |
| CONTRACT NO. 66H54 | | | | | | | | | | | |
| ILLINOIS FED. AID PROJECT | | | | | | | | | | | |



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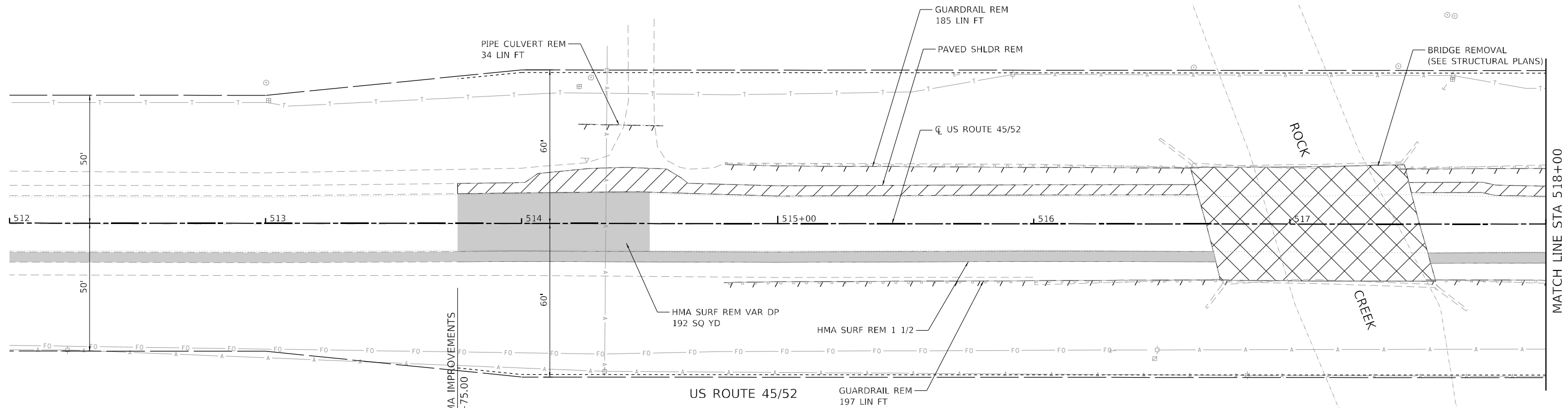
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| | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ALIGNMENT, TIES AND BENCHMARKS

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

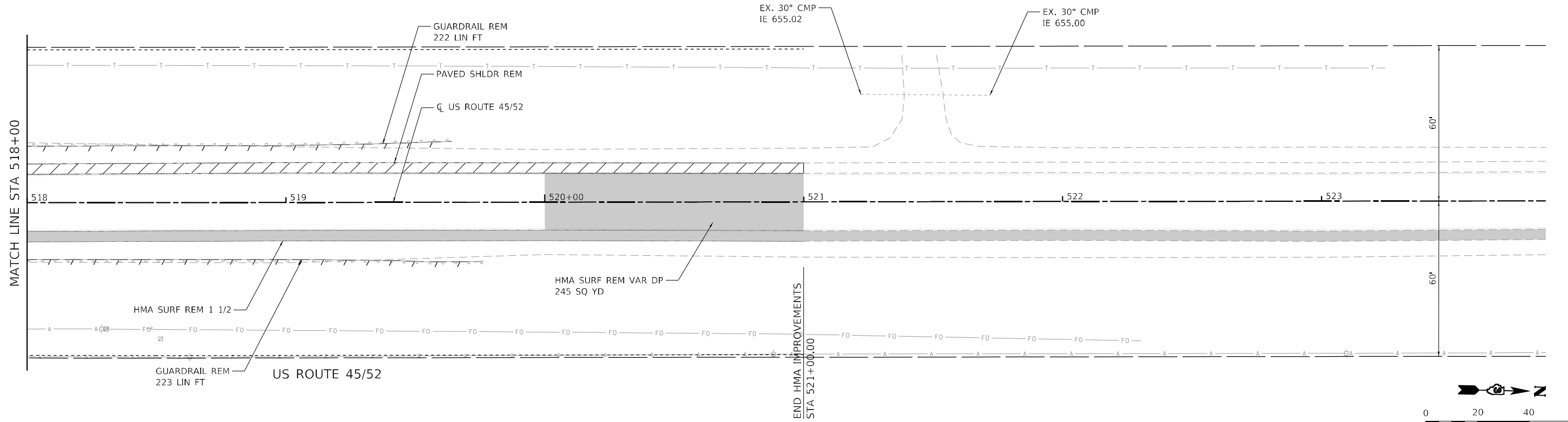
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|--------------------|------------|----------|---------------------------|-----------|
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| CONTRACT NO. 66H54 | | | ILLINOIS FED. AID PROJECT | |



MATCH LINE STA 518+00

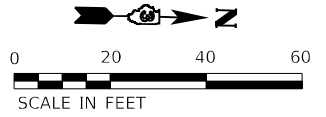
LEGEND

| | | | |
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| | EXISTING RIGHT-OF-WAY | | HMA SURFACE REMOVAL |
| | PROPOSED RIGHT-OF-WAY | | STRUCTURE REMOVAL |
| | PROPOSED TEMPORARY EASEMENT | | PAVED SHOULDER REMOVAL |
| | PROPOSED PERMANENT EASEMENT | | LINEAR REMOVAL |
| | LIMITS OF CONSTRUCTION | | ITEM REMOVAL |



MATCH LINE STA 518+00

END HMA IMPROVEMENTS
STA 521+00.00



HRG PROJECT NO.: 2002M.0
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 PEN TABLE: 166H54.tbl



| | | |
|------------------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - JMR | REVISED - |
| | DRAWN - AJM | REVISED - |
| PLOT SCALE = 40,0000 * / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

REMOVAL PLANS

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 13 |
| CONTRACT NO. 66H54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

PRE-STAGE - U.S. ROUTE 45/52

1. MILL AND RESURFACE TO FILL EXISTING SHOULDER RUMBLE STRIP ALONG THE EAST SIDE OF US 45/52 WHERE REQUIRED, THIS WORK SHALL BE COMPLETED UNDER TRAFFIC IN ACCORDANCE WITH STANDARD 701306.
2. REMOVE THE APPLICABLE PORTIONS OF THE EXISTING SHOULDER ALONG THE WEST SIDE OF US 45/52 AND CONSTRUCT THE TEMPORARY PAVEMENT ACCORDING TO THE MOT STAGE 1 PLANS UNDER TRAFFIC IN ACCORDANCE TO STANDARD 701306-04.

STAGE I - U.S. ROUTE 45/52

1. INSTALL TEMPORARY SIGNAL EQUIPMENT, TEMPORARY CONCRETE BARRIER SHIFT ONE WAY TRAFFIC TO THE EAST SIDE OF US ROUTE 45/52 PER STAGE 1 MOT PLANS IN ACCORDANCE WITH STANDARD 701321.
2. REMOVE THE APPLICABLE PORTIONS OF US 45/52 EXISTING PAVEMENT BY MILLING OPERATIONS AND CONSTRUCT THE WEST SIDE UP TO BUT NOT INCLUDING THE FINAL LIFT OF HMA BINDER COURSE.
3. CONSTRUCT THE WEST HALF OF THE PROPOSED BRIDGE STRUCTURE ACCORDING TO THE STRUCTURE PLANS.

STAGE II - U.S. ROUTE 45/52

1. SHIFT US ROUTE 45/52 TRAFFIC WEST PER THE STAGE II MOT PLANS IN ACCORDANCE WITH STANDARD 701321.
2. REMOVE THE APPLICABLE PORTIONS OF US 45/52 EXISTING PAVEMENT BY MILLING OPERATIONS AND CONSTRUCT THE EAST SIDE UP TO BUT NOT INCLUDING THE FINAL LIFT OF HMA BINDER COURSE.
3. CONSTRUCT THE EAST HALF OF THE PROPOSED BRIDGE STRUCTURE ACCORDING TO THE STRUCTURE PLANS.

STAGE IIA - U.S. ROUTE 45/52

1. SHIFT TRAFFIC TO ITS FINAL CONFIGURATION ALONG US ROUTE 45/52.
2. REMOVE THE TEMPORARY PAVEMENT ALONG THE EAST SIDE OF US ROUTE 45/52.
3. CONSTRUCT THE DRIVEWAY ENTRANCES AND FINAL GRADING ALONG THE EAST SIDE OF US ROUTE 45/52.
4. CONSTRUCT THE FINAL HMA BINDER COURSE LIFT AND SURFACE COURSE ON US ROUTE 45/52 UNDER TRAFFIC IN ACCORDANCE WITH STANDARD 701306-04.
5. INSTALL PERMANENT STRIPING.
6. FINAL LANDSCAPING.

SUGGESTED MAINTENANCE OF TRAFFIC - GENERAL NOTES

1. THE CONTRACTOR SHALL PLACE TEMPORARY INFORMATION SIGNING AT EACH END OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THESE MESSAGE SIGNS WITH THE APPROPRIATE INFORMATION SHALL BE IN PLACE TWO (2) WEEKS PRIOR TO THE START OF CONSTRUCTION ACTIVITY. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE FOR TEMPORARY INFORMATION SIGNING. A MINIMUM OF ONE THROUGH LANE IN EACH DIRECTION SHALL REMAIN OPEN ON U.S. ROUTE 45/52 AT ALL TIMES, EXCEPT FOR PERIODS OF SHORT DURATION DURING MILLING AND RESURFACING OPERATIONS OR AS DIRECTED BY THE ENGINEER. TEMPORARY TRAFFIC LANES SHALL BE A MINIMUM OF 10' WIDE ALONG U.S. ROUTE 45/52.
2. ACCESS TO ALL PROPERTIES SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR PERIODS OF SHORT DURATION AS DETERMINED BY THE ENGINEER. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS A MINIMUM OF 48 HOURS PRIOR TO ANY ACCESS RESTRICTIONS OR CLOSURES. CONSTRUCTION ADJACENT TO AN ENTRANCE, RESULTING IN A TEMPORARY CLOSURE TO THE ENTRANCE, SHALL BE EXPEDITED AND THE ENTRANCE REOPENED TO TRAFFIC AS SOON AS POSSIBLE. DURING THE TEMPORARY CLOSURE, THE CONTRACTOR SHALL PROVIDE TYPE III BARRICADES WITH "ROAD CLOSED" SIGNS AT THE LOCATIONS DESIGNATED BY THE ENGINEER. TEMPORARY CLOSURES AT ENTRANCES WILL NOT BE PERMITTED DURING THE WEEKEND.
3. WORK ZONE PAVEMENT MARKING FOR THE MAINTENANCE OF TRAFFIC SHALL CONSIST OF PAVEMENT MARKING TAPE, TYPE III. EXISTING PAVEMENT MARKINGS IN CONFLICT WITH MAINTENANCE OF TRAFFIC TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED.
4. EXISTING OR PROPOSED TRAFFIC SIGNS CONFLICTING WITH THE TEMPORARY TRAFFIC CONTROL SHALL BE TEMPORARILY REMOVED OR COVERED AS DIRECTED BY THE ENGINEER.
5. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AS REQUIRED OR AS DIRECTED BY THE ENGINEER THROUGHOUT THE CONSTRUCTION ZONE FOR THE DURATION OF CONSTRUCTION. THIS WORK SHALL BE INCLUDED IN THE COST OF THE TEMPORARY DRAINAGE WORK. THE EXISTING DRAINAGE SYSTEM SHALL BE USED THROUGHOUT CONSTRUCTION STAGING.
6. ALL ADVANCE "ROAD CONSTRUCTION" SIGNS, W20-1 SERIES, AS SHOWN ON THE PLANS, REFERENCED IN THE STANDARDS OR DIRECTED BY THE ENGINEER, SHALL BE EQUIPPED WITH A TYPE B MONODIRECTIONAL FLASHING LIGHT, THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION PAY ITEMS.
7. VARIOUS TEMPORARY INFORMATION SIGNS SHALL BE REQUIRED AS DIRECTED BY THE ENGINEER. THIS SHALL BE PAID FOR AS THE FOLLOWING:
TEMPORARY INFORMATION SIGNING.
8. TEMPORARY PAVEMENT MARKING ON THE FINAL WEARING SURFACE OF THE STRUCTURE AND APPROACHES SHALL BE TYPE I OR TYPE III MARKING TAPE PER ARTICLE 703.05 OF THE STANDARD SPECIFICATIONS UNLESS AUTHORIZED BY THE ENGINEER.

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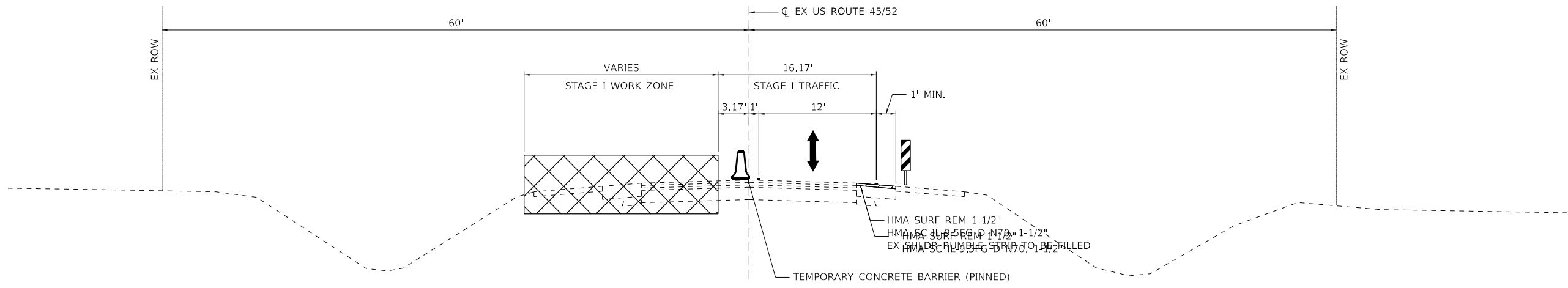
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| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC
GENERAL NOTES

SCALE: SHEET 1 OF 4 SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|----------|---------------------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 15 |
| CONTRACT NO. 66H54 | | | ILLINOIS FED. AID PROJECT | |



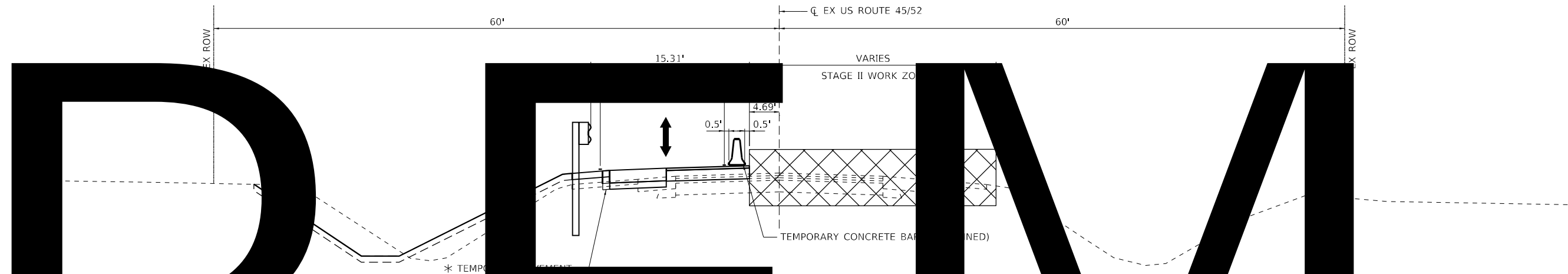
**PROPOSED MAINTENANCE OF TRAFFIC
TYPICAL SECTION (STAGE I)
US ROUTE 45/52**

STA 513+75.00 TO STA 516+14.79
STA 518+03.21 TO STA 521+00.00

↑ EX SHLDR RUMBLE STRIP TO BE MILLED AND RESURFACED PRIOR TO SHIFTING STAGE 1 TRAFFIC.

NOTE:

SEE STRUCTURAL STAGE CONSTRUCTION PLANS FOR STAGE CONSTRUCTION DETAILS WITHIN PROPOSED BRIDGE LIMITS (STA 516+14.78 TO STA 518+03.21)



**PROPOSED MAINTENANCE OF TRAFFIC
TYPICAL SECTION (STAGE II)
US ROUTE 45/52**

STA 513+75.00 TO STA 516+14.79
STA 518+03.21 TO STA 521+00.00

*** TEMPORARY PAVEMENT REQUIRED**

STA 513+75 TO STA 513+75
VARIABLE WIDTH 5'

STA 516+14.78 TO STA 522+10
VARIABLE WIDTH 2'

TEMPORARY PAVEMENT STRUCTURE

8" FULL DEPTH WITH HMA PAVEMENT
BINDER COURSE, IL-19.0, N50
BASE GRANULAR MATERIAL, TYPE B

HRG PROJECT NO.: 2020M-0
HRG PROJ. CONTACT:
FILE NAME: 066664_sht-mot+typ-1.dgn
PLOT DATE: 12/6/2021 10:41:17 AM
PEN TABLE: 16610664.tbl



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|--------------------|------------|----------|
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| DRAWN - AJM | REVISION | |
| CHECKED - | REVISION | |
| DATE - | REVISION | |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

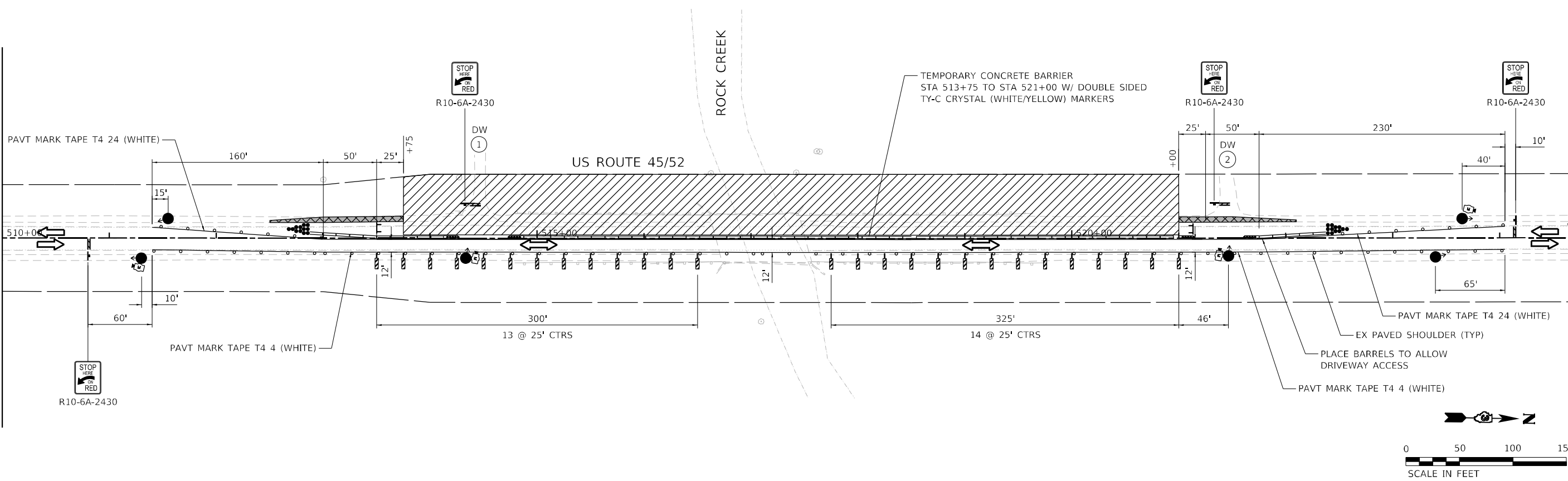
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TYPICAL SECTIONS**

SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.

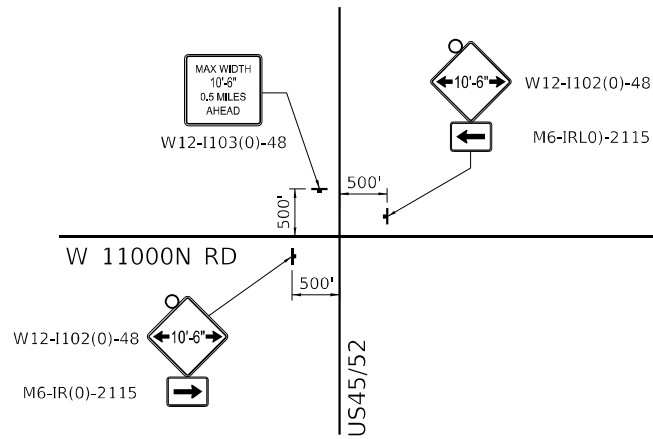
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|---------------------------|------------|----------|--------------------|-----------|
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| | | | CONTRACT NO. 66H54 | |
| ILLINOIS FED. AID PROJECT | | | | |

SEE STANDARD 701321 FOR ADVANCED SIGNING (TYP.)

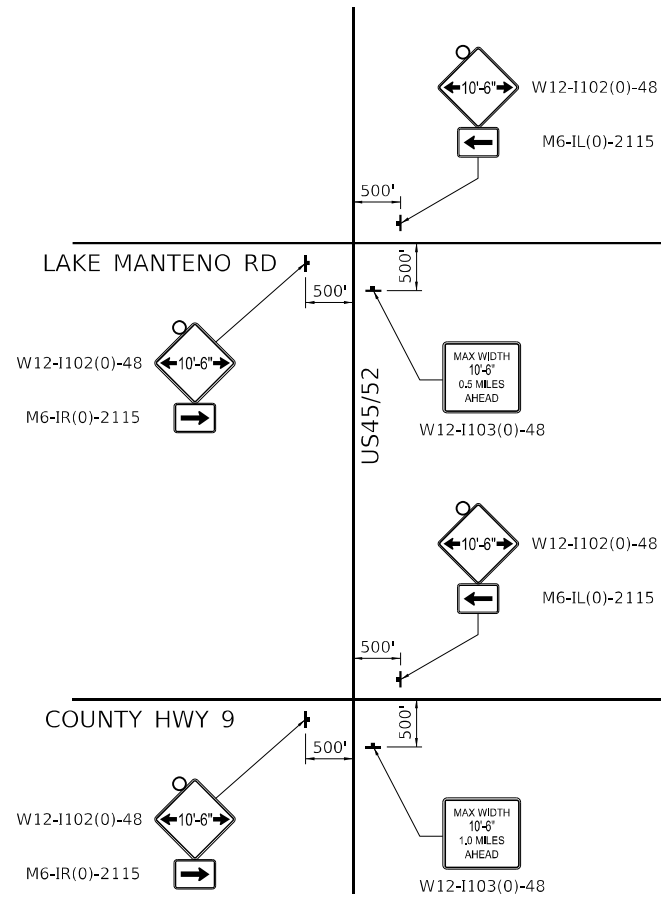
SEE STANDARD 701321 FOR ADVANCED SIGNING (TYP.)



WIDTH RESTRICTION SIGNING US 45/52 SOUTHBOUND TRAFFIC



WIDTH RESTRICTION SIGNING US 45/52 NORTHBOUND TRAFFIC



NOTES

- SIGNING AND BARRICADES OUTSIDE THE LIMITS OF THE STOP BARS SHALL BE PLACED ACCORDING TO STANDARD 701321.
- THE USE OF ADDITIONAL VERTICLE PANELS, ETC. AT THE LOCATIONS SHOWN IN THE PLANS SHALL BE INCLUDED IN THE COST OF VARIOUS TRAFFIC CONTROL PAY ITEMS.

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT CONSTRUCTED IN THIS STAGE
- TEMPORARY PAVEMENT CONSTRUCTED IN PREVIOUS STAGE
- DRUMS OR TYPE II BARRICADES
- DIRECTION OF TRAFFIC FLOW
- SIGN
- REVERSIBLE TRAFFIC
- TYPE III BARRICADE W/ 2 FLASHING BEACONS (NO. OF BARRICADE AS DIRECTED BY ENGINEER)
- DOUBLE VERTICAL PANELS EVERY 25' C-C (INSTALLED BACK TO BACK)
- IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3
- IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE NARROW) TEST LEVEL 2
- TEMPORARY CONCRETE BARRIER (PINNED)
- TRAFFIC SIGNAL
- MICROWAVE DETECTOR

TRAFFIC SIGNAL SEQUENCE

| PHASE | A | | | B | | | C | | | D | | |
|------------|---|---|---|---|---|---|---|---|---|---|---|---|
| INTERVAL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 7 | 8 | 9 |
| NORTHBOUND | G | Y | R | R | R | R | R | R | R | R | R | R |
| SOUTHBOUND | R | R | R | G | Y | R | R | R | R | R | R | R |
| DRIVEWAY 1 | R | R | R | R | R | R | G | Y | R | R | R | R |
| DRIVEWAY 2 | R | R | R | R | R | R | R | R | R | G | Y | R |

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 DESIGNED - JMR
 DRAWN - AJM
 PLOT SCALE = 100,0000' / in.
 PLOT DATE = 12/6/2021

CHECKED -
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SUGGESTED MAINTENANCE OF TRAFFIC PLANS
 STAGE 1**

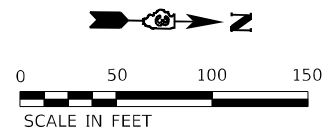
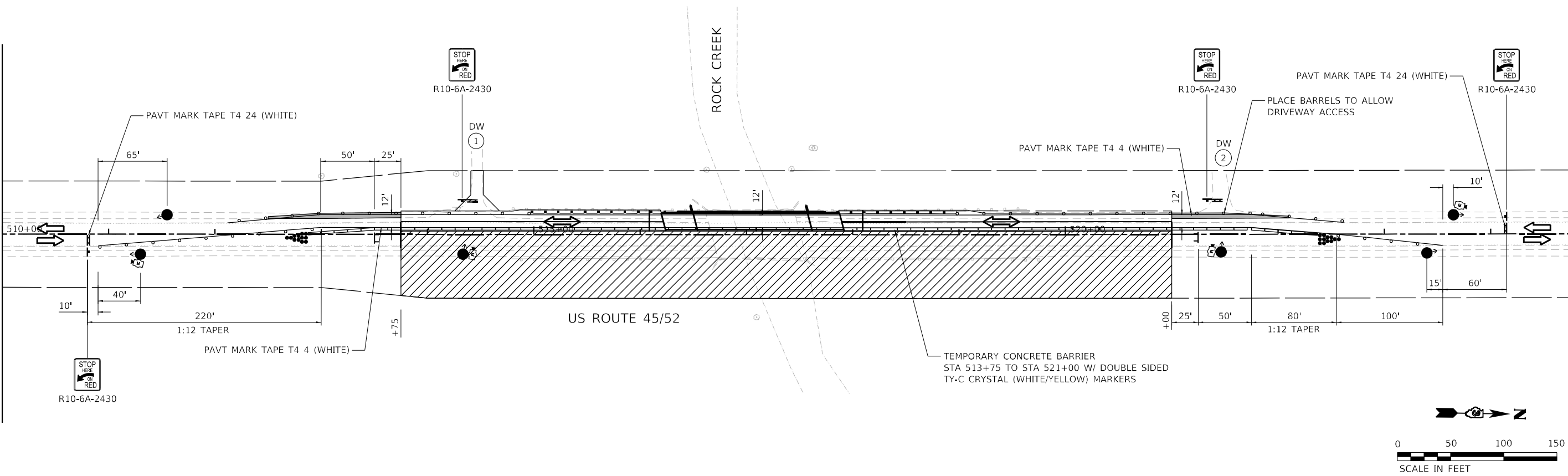
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| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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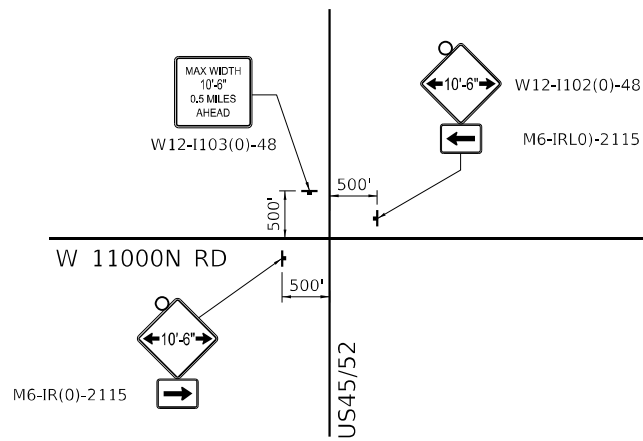
CONTRACT NO. 66H54
 ILLINOIS FED. AID PROJECT

SEE STANDARD 701321 FOR ADVANCED SIGNING (TYP.)

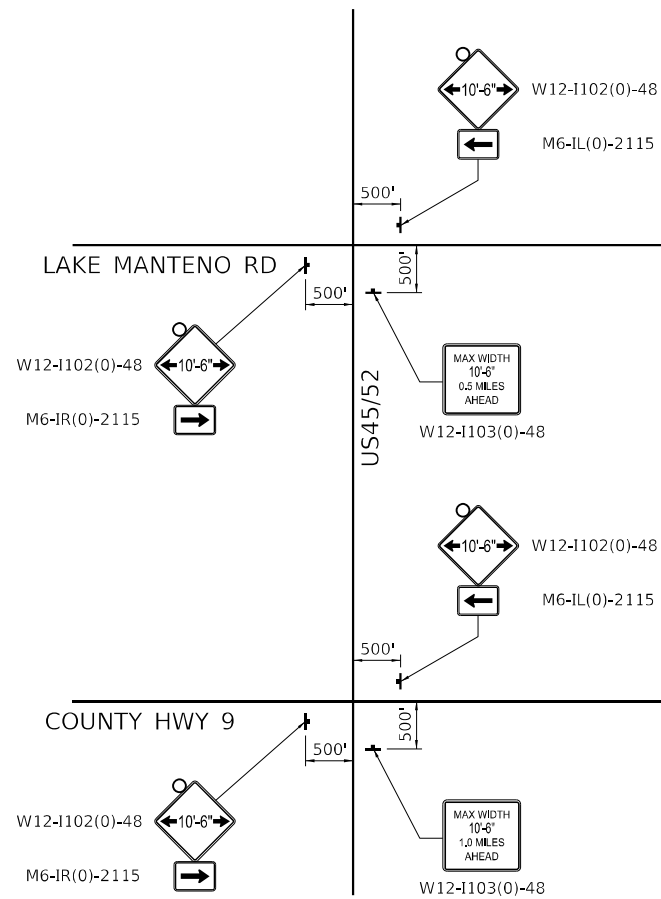
SEE STANDARD 701321 FOR ADVANCED SIGNING (TYP.)



**WIDTH RESTRICTION SIGNING US 45/52
SOUTHBOUND TRAFFIC**



**WIDTH RESTRICTION SIGNING US 45/52
NORTHBOUND TRAFFIC**



NOTES

- SIGNING AND BARRICADES OUTSIDE THE LIMITS OF THE STOP BARS SHALL BE PLACED ACCORDING TO STANDARD 701321.
- THE USE OF ADDITIONAL VERTICLE PANELS, ETC. AT THE LOCATIONS SHOWN IN THE PLANS SHALL BE INCLUDED IN THE COST OF VARIOUS TRAFFIC CONTROL PAY ITEMS.

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT CONSTRUCTED IN THIS STAGE
- TEMPORARY PAVEMENT CONSTRUCTED IN PREVIOUS STAGE
- DRUMS OR TYPE II BARRICADES
- DIRECTION OF TRAFFIC FLOW
- SIGN
- REVERSIBLE TRAFFIC
- TYPE III BARRICADE W/ 2 FLASHING BEACONS (NO. OF BARRICADE AS DIRECTED BY ENGINEER)
- DOUBLE VERTICAL PANELS EVERY 25' C-C (INSTALLED BACK TO BACK)
- IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3
- IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE NARROW) TEST LEVEL 2
- TEMPORARY CONCRETE BARRIER (PINNED)
- TRAFFIC SIGNAL
- MICROWAVE DETECTOR

TRAFFIC SIGNAL SEQUENCE

| PHASE | A | | | B | | | C | | | D | | |
|------------|---|---|---|---|---|---|---|---|---|---|---|---|
| INTERVAL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 7 | 8 | 9 |
| NORTHBOUND | G | Y | R | R | R | R | R | R | R | R | R | R |
| SOUTHBOUND | R | R | R | G | Y | R | R | R | R | R | R | R |
| DRIVEWAY 1 | R | R | R | R | R | R | G | Y | R | R | R | R |
| DRIVEWAY 2 | R | R | R | R | R | R | R | R | R | G | Y | R |

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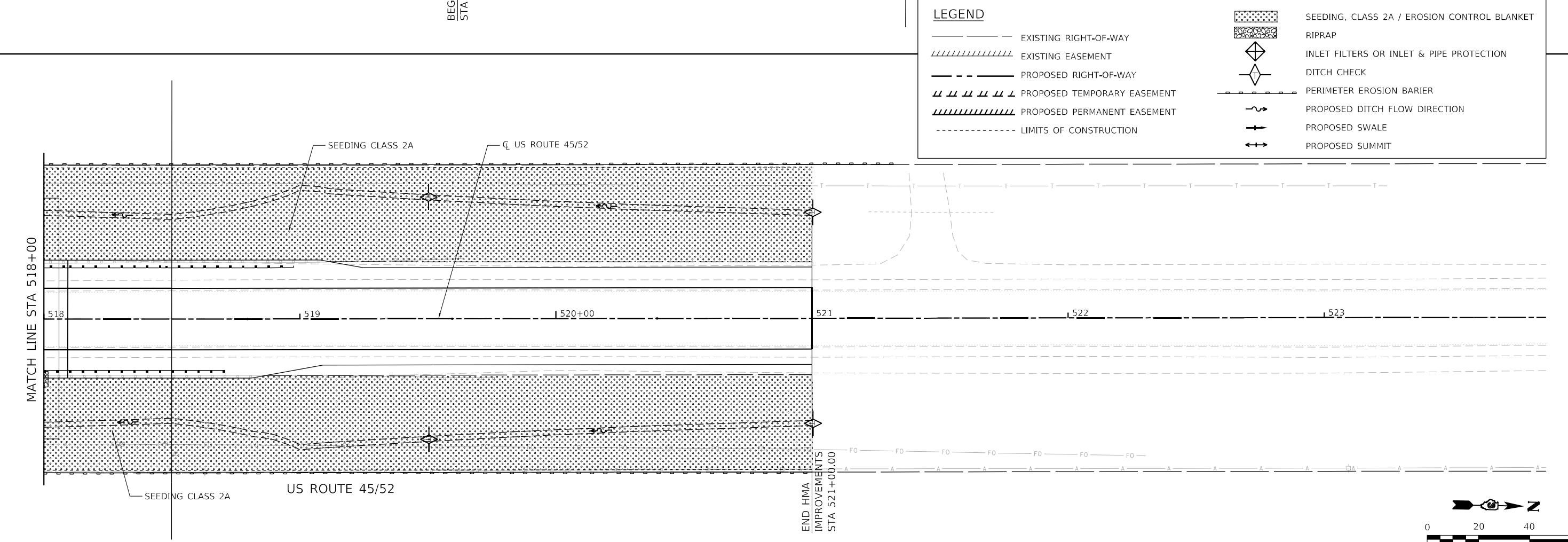
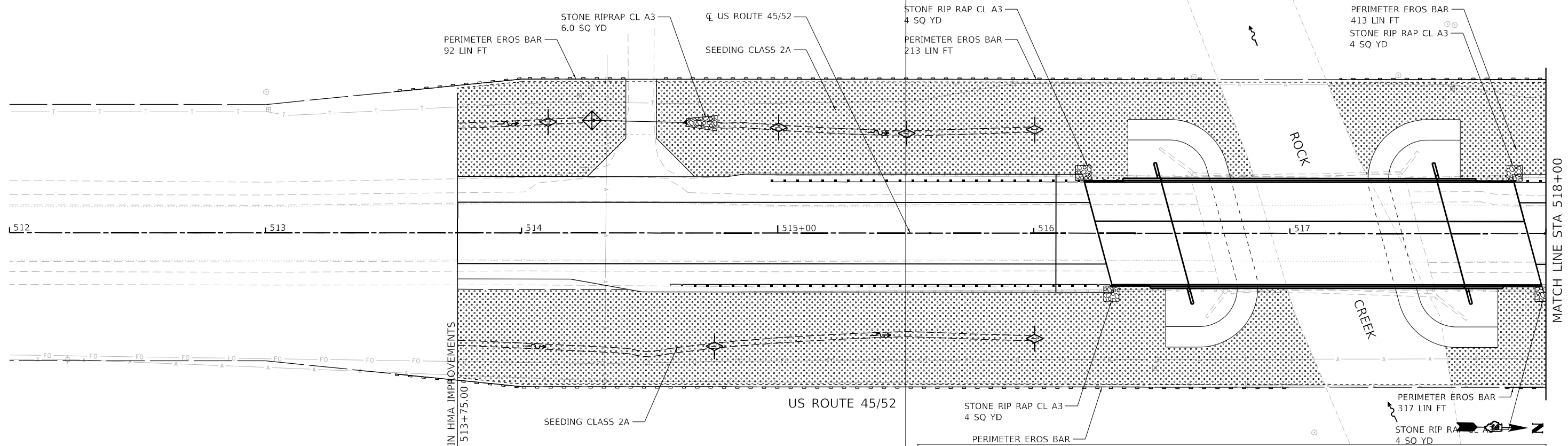
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| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED MAINTENANCE OF TRAFFIC PLANS
STAGE 2**

SCALE: SHEET 4 OF 4 SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|----------|---------------------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 18 |
| CONTRACT NO. 66H54 | | | ILLINOIS FED. AID PROJECT | |



LEGEND

| | | | |
|--|-----------------------------|--|---|
| | EXISTING RIGHT-OF-WAY | | SEEDING, CLASS 2A / EROSION CONTROL BLANKET |
| | EXISTING EASEMENT | | RIPRAP |
| | PROPOSED RIGHT-OF-WAY | | INLET FILTERS OR INLET & PIPE PROTECTION |
| | PROPOSED TEMPORARY EASEMENT | | DITCH CHECK |
| | PROPOSED PERMANENT EASEMENT | | PERIMETER EROSION BARRIER |
| | LIMITS OF CONSTRUCTION | | PROPOSED DITCH FLOW DIRECTION |
| | | | PROPOSED SWALE |
| | | | PROPOSED SUMMIT |

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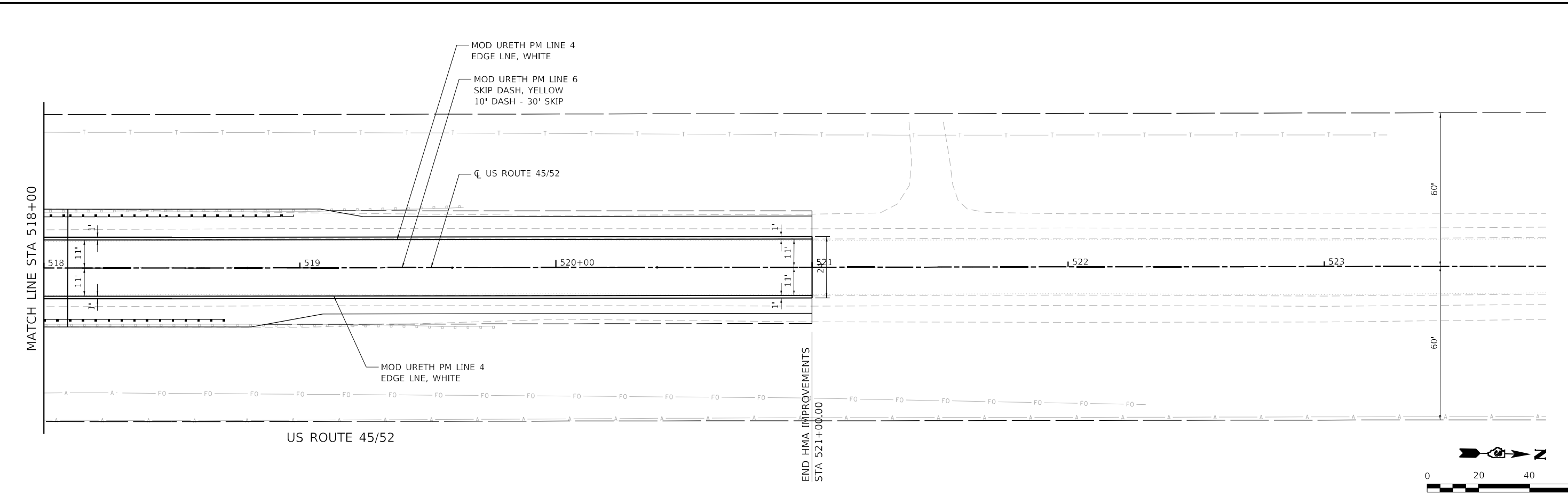
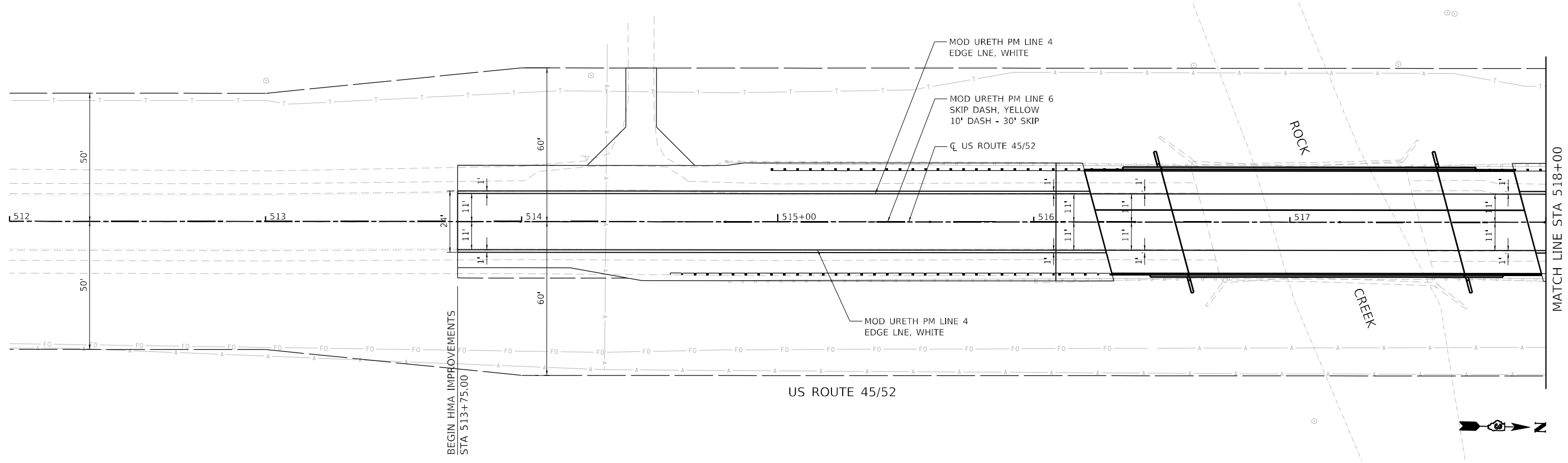


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| | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | |
|--------|---------------------|--------------|
| SCALE: | SHEET 1 OF 1 SHEETS | STA. TO STA. |
|--------|---------------------|--------------|

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|----------|---------------------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 19 |
| CONTRACT NO. 66H54 | | | ILLINOIS FED. AID PROJECT | |



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| | DATE - | REVISED - |

| | |
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| DESIGNED - JMR | REVISED - |
| DRAWN - AJM | REVISED - |
| CHECKED - | REVISED - |
| DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | |
|---|----------------------------------|
| PAVEMENT MARKING AND SIGNING PLANS | |
| SCALE: | SHEET 1 OF 1 SHEETS STA. TO STA. |

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 20 |
| CONTRACT NO. 66H54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

Benchmark: BM 14: Rivet on top of the NE wingwall of SN 046-0046; Elev. 661.91

Existing Structure: SN 046-0046 was originally constructed in 1967 as F.A. 45, Section 16 BR-1 at Station 517+09. The existing 3-span reinforced concrete slab superstructure is supported by closed abutments on spread footings and solid wall piers on spread footings. The outer spans are 24'-7" and the middle span is 30'-10" with a 15 degree skew. The back-to-back of abutments measure 84'-10" and the out-to-out width is 46'-6". The existing structure will be removed and replaced utilizing staged construction.

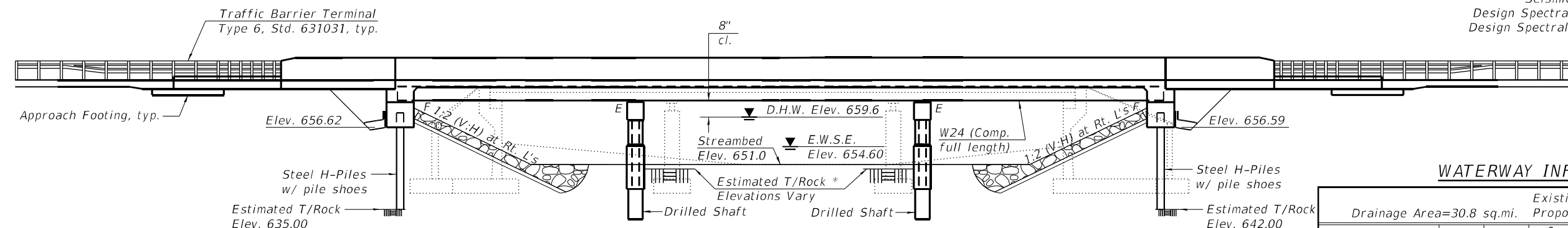
No salvage.

DESIGN SCOUR ELEVATION TABLE

| Event / Limit | Design Scour Elevations (ft.) | | | | Item 113 |
|---------------|-------------------------------|--------|--------|----------|----------|
| | S. Abut. | Pier 1 | Pier 2 | N. Abut. | |
| Q100 | 656.62 | 645.10 | 648.00 | 656.59 | 5 |
| Q200 | 656.62 | 645.30 | 648.10 | 656.59 | |
| Design | 656.62 | 645.10 | 648.00 | 656.59 | |
| Check | 656.62 | 645.30 | 648.10 | 656.59 | |

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.07
 Design Spectral Acceleration at 0.2 sec. (SDS) = 0.124
 Soil Site Class = C



ELEVATION

* Estimated T/Rock at Piers is for quantity purposes at Piers only. Rip rap toes, as part of channel improvements, are anticipated to involve excavation in soil and not rock.

WATERWAY INFORMATION TABLE

Existing Overtopping Elev.=660.14 @ Sta. 510+00
 Drainage Area=30.8 sq.mi. Proposed Overtopping Elev.=660.14 @ Sta. 510+00

| Flood | Freq. Yr. | Q C.F.S. | Opening Ft ² | | Nat. H.W.E. | Head - Ft. | | Headwater El. | |
|------------------|-----------|----------|-------------------------|-------|-------------|------------|-------|---------------|-------|
| | | | Exist. | Prop. | | Exist. | Prop. | Exist. | Prop. |
| Design | 10 | 1400 | 588 | 643 | 658.9 | 0.1 | 0.1 | 659.1 | 659.1 |
| Overtop Existing | 63 | 2240 | 637 | 707 | 659.6 | 0.5 | 0.4 | 660.1 | 659.9 |
| Overtop Proposed | 90 | 2410 | 644 | 716 | 659.7 | 0.5 | 0.4 | 660.1 | 660.0 |
| Base | 100 | 2440 | 651 | 725 | 659.8 | 0.7 | 0.4 | 660.5 | 660.2 |
| Scour Check | 200 | 2770 | 662 | 744 | 660.0 | 0.8 | 0.7 | 660.8 | 660.6 |
| Max. Calc. | 500 | 3240 | 662 | 744 | 660.2 | 0.9 | 0.7 | 661.0 | 660.9 |

10 Year velocity through existing structure = 2.4 ft./sec.
 10 Year velocity through proposed structure = 2.2 ft./sec.

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

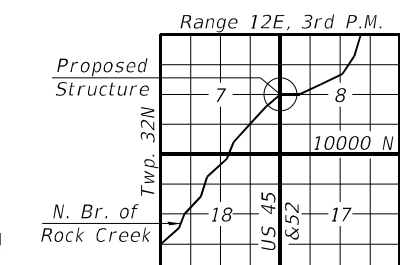
LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
 f'c = 4,000 psi (Superstructure Concrete)
 fy = 60,000 psi (Reinforcement)
 fy = 50,000 psi (M270 Grade 50)



LOCATION SKETCH

GENERAL PLAN AND ELEVATION

US 45 & 52 OVER

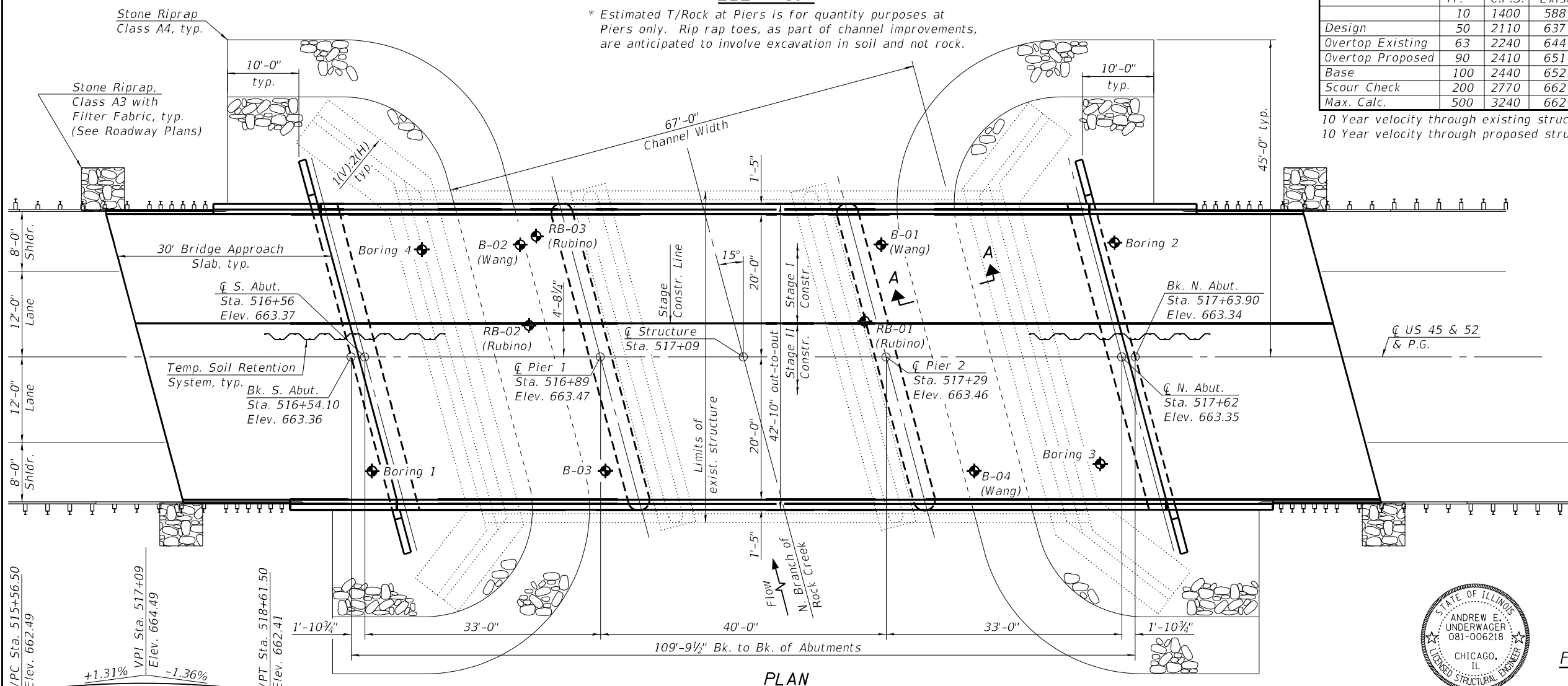
NORTH BRANCH OF ROCK CREEK

F.A.P. RTE. 330 - SEC. (16BR-1)BR

KANKAKEE COUNTY

STATION 517+09.00

STRUCTURE NO. 046-0160



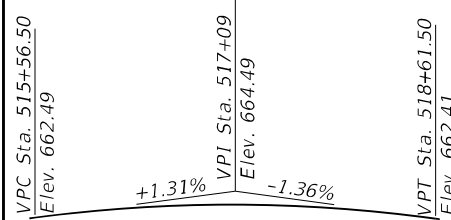
PLAN

Note: See Sheet 2 of 32 for Section A-A



Andy Underwager 12/06/2021
 Structural Engineer Expires: 11/30/2022
 HR Green, Inc.

PROFILE GRADE
 (Along \bar{C} US 45 & 52)



HRG PROJECT NO.: 2020210
 HRG PROJ. CONTACT:
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 PEN TABLE: plotlabel.tbl



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|-----------|----------|----------|
| jrolbu | SLS | - |
| | AEU | - |
| | WJH | - |
| | AEU | - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 21 |

CONTRACT NO. 66H54
 ILLINOIS FED. AID PROJECT

TOTAL BILL OF MATERIAL

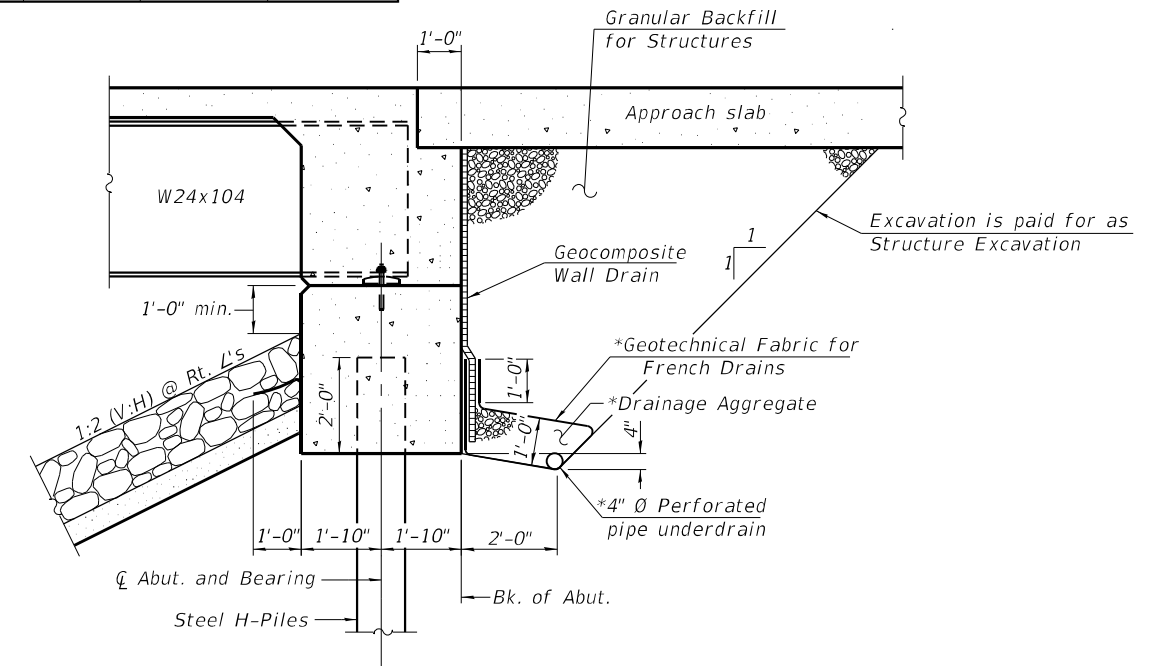
| ITEM | UNIT | SUPER | SUB | TOTAL QUANTITY |
|---|---------|--------|--------|----------------|
| Stone Riprap, Class A4 | Sq. Yd. | | 636 | 636 |
| Filter Fabric | Sq. Yd. | | 636 | 636 |
| Removal of Existing Structures | Each | 1 | | 1 |
| Structure Excavation | Cu. Yd. | | 184 | 184 |
| Concrete Structures | Cu. Yd. | | 140.3 | 140.3 |
| Concrete Superstructure | Cu. Yd. | 179.2 | | 179.2 |
| Bridge Deck Grooving | Sq. Yd. | 709 | | 709 |
| Protective Coat | Sq. Yd. | 876 | | 876 |
| Concrete Superstructure (Approach Slab) | Cu. Yd. | 116.8 | | 116.8 |
| Furnishing and Erecting Structural Steel | L. Sum | 1 | | 1 |
| Stud Shear Connectors | Each | 5,124 | | 5,124 |
| Reinforcement Bars | Pound | | 8,420 | 8,420 |
| Reinforcement Bars, Epoxy Coated | Pound | 85,360 | 21,280 | 106,640 |
| Bar Splicers | Each | 288 | 549 | 837 |
| Furnishing Steel Piles HP12X53 | Foot | | 246 | 246 |
| Driving Piles | Foot | | 246 | 246 |
| Test Pile Steel HP 12X53 | Each | | 2 | 2 |
| Pile Shoes | Each | | 14 | 14 |
| Name Plates | Each | 1 | | 1 |
| Drilled Shaft in Soil | Cu. Yd. | | 4.2 | 4.2 |
| Drilled Shaft in Rock | Cu. Yd. | | 32.0 | 32.0 |
| Elastomeric Bearing Assembly, Type I | Each | 14 | | 14 |
| Anchor Bolts, 3/4" | Each | 28 | | 28 |
| Anchor Bolts, 1" | Each | 28 | | 28 |
| Temporary Soil Retention System | Sq. Ft. | | 368 | 368 |
| Granular Backfill for Structures | Cu. Yd. | | 112 | 112 |
| Geocomposite Wall Drain | Sq. Yd. | | 52 | 52 |
| Pipe Underdrains for Structures, 4" | Foot | | 146 | 146 |
| Thermal Integrity Profile Testing | Each | | 10 | 10 |
| Thermal Integrity Profile Data Collection | Foot | | 192 | 192 |

INDEX OF SHEETS

| | |
|-------|---|
| 1 | General Plan and Elevation |
| 2 | General Data |
| 3 | Temporary Soil Retention System |
| 4 | Stage Construction Details |
| 5 | Temporary Concrete Barrier for Stage Construction |
| 6-8 | Top of Slab Elevations |
| 9-10 | Top of Approach Slab Elevations |
| 11 | Superstructure |
| 12 | Superstructure Details |
| 13 | Concrete Parapet Slipforming Option |
| 14 | Diaphragm Details |
| 15-16 | Bridge Approach Slab Details |
| 17 | Framing Plan |
| 18 | Structural Steel Details |
| 19 | Bearing Details |
| 20-21 | Abutments |
| 22-23 | Piers |
| 24 | Pier 1 and Pier 2 Details |
| 25 | HP Pile Details |
| 26 | Bar Splicer Assembly and Mechanical Splicer Details |
| 27-32 | Soil Boring Logs / Rock Cores |

GENERAL NOTES

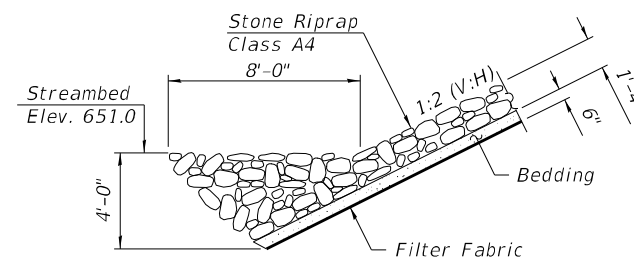
- Fasteners shall be ASTM F3125 Grade A325 Type 1, mechanically galvanized bolts. Bolts 7/8 in. Ø, holes 1 1/16 in. Ø, unless otherwise noted.
- Calculated weight of Structural Steel = 84,670 lbs. (M270 Grade 50)
Calculated weight of Structural Steel = 8,180 lbs. (M270 Grade 36)
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Interstate Green, Munsell No. 7.5G 4/8.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
- The finishing machine rails shall be placed on the top flange of the exterior beams.



SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures.

Note:
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).



SECTION A-A

STATION 517+09.00
BUILT BY
STATE OF ILLINOIS
LOADING HL-93
STRUCTURE NO. 046-0160

NAME PLATE
See Std. 515001

HRG PROJECT NO.: 2022110
HRG PROJ. CONTACT:
FILE NAME: 0460160-002-GenData.dgn
PLOT DRIVER: IL_Pdf.plt
PEN TABLE: plotlabel.tbl



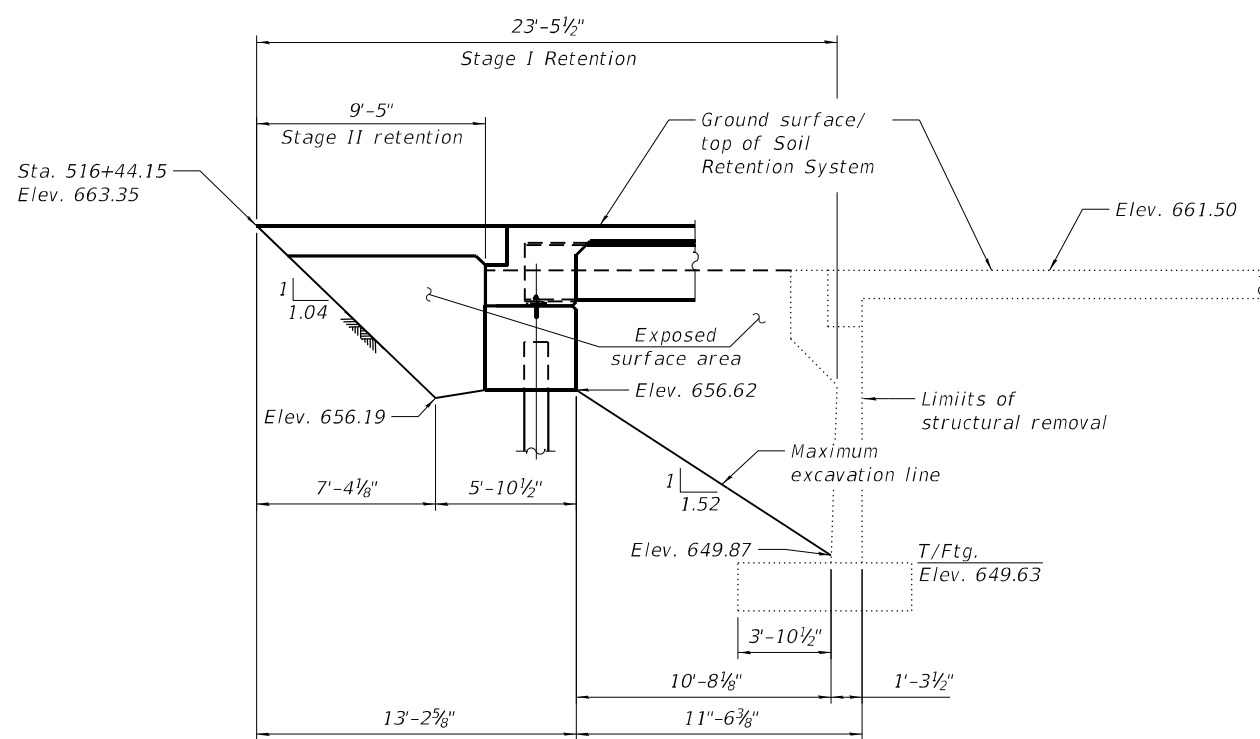
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|-----------------------|----------------|-----------|
| USER NAME = aunderw | DESIGNED - SLS | REVISED - |
| PLOT SCALE = | CHECKED - AEU | REVISED - |
| PLOT DATE = 1/26/2022 | DRAWN - WJH | REVISED - |
| | CHECKED - AEU | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

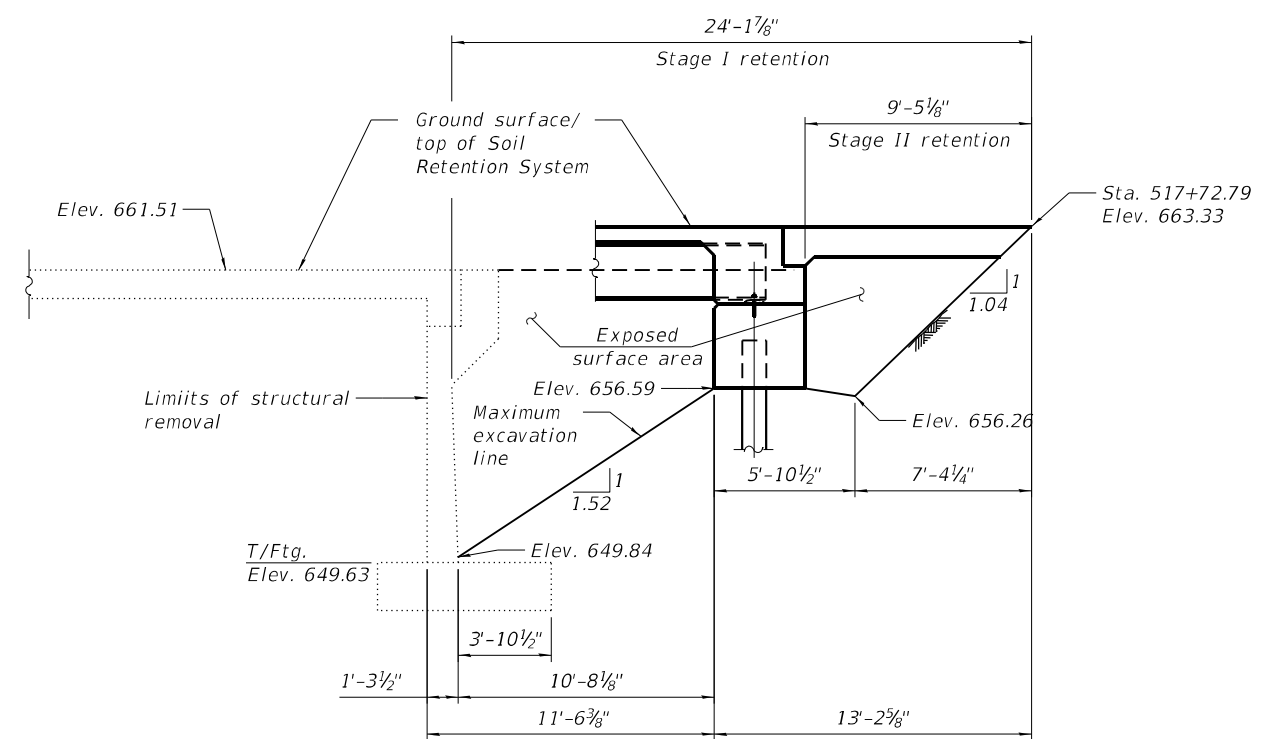
**GENERAL DATA
STRUCTURE NO. 046-0160**

SHEET NO. 2 OF 32 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|----------|---------------------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 22 |
| CONTRACT NO. 66H54 | | | ILLINOIS FED. AID PROJECT | |



SOUTH ABUTMENT
Looking West



NORTH ABUTMENT
Looking West

Notes:
A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

BILL OF MATERIAL

| Item | Unit | Total |
|---------------------------------|---------|-------|
| Temporary Soil Retention System | Sq. Ft. | 368 |

HRC PROJECT NO.: 2022110
 HRC PROJ. CONTACT:
 FILE NAME: 0460160-66H54-003-TempSoilRet.dgn
 PLOT DRIVER: IL_Pdf.plt
 PEN TABLE: plotlabel.tbl



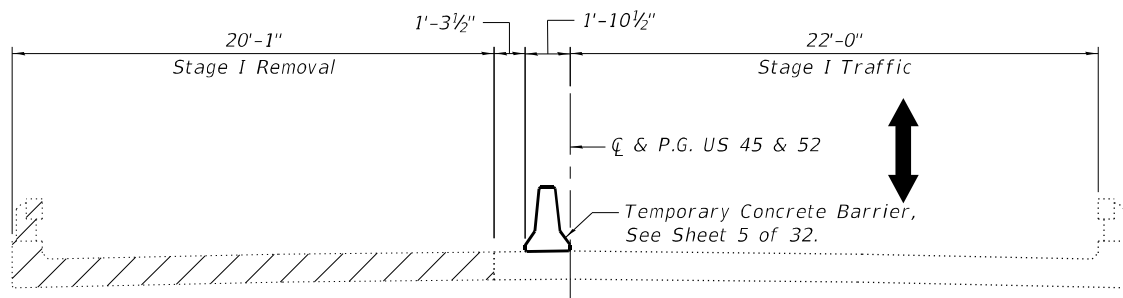
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|-----------------------|----------------|-----------|
| USER NAME = aunderw | DESIGNED - SLS | REVISED - |
| | CHECKED - AEU | REVISED - |
| PLOT SCALE = | DRAWN - WJH | REVISED - |
| PLOT DATE = 1/26/2022 | CHECKED - AEU | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

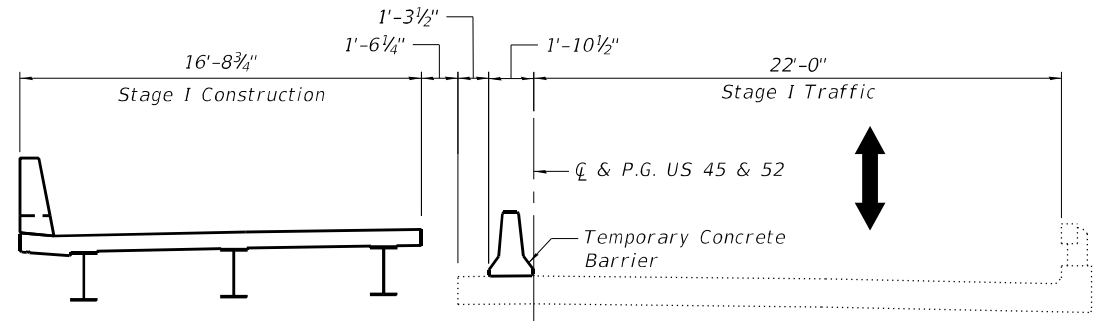
TEMPORARY SOIL RETENTION SYSTEM
STRUCTURE NO. 046-0160

SHEET NO. 3 OF 32 SHEETS

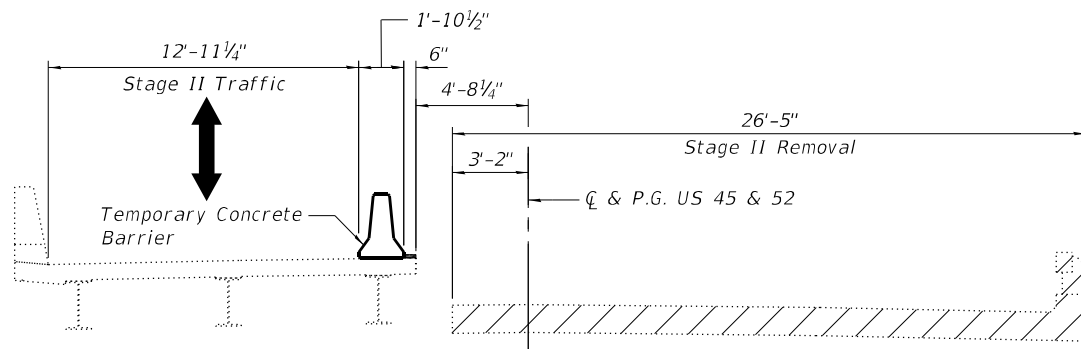
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| F.A.P. RTE. 330 | SECTION (16BR-1)BR | COUNTY KANKAKEE | TOTAL SHEETS 64 | SHEET NO. 23 |
| CONTRACT NO. 66H54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



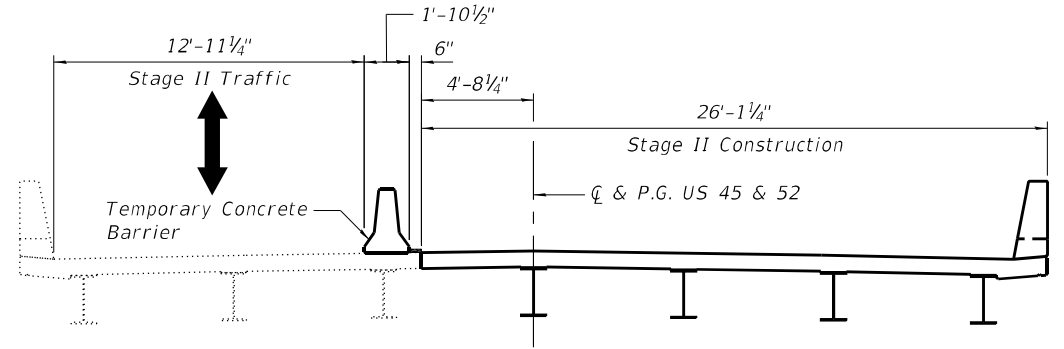
STAGE I REMOVAL
(Looking North)



STAGE I CONSTRUCTION
(Looking North)



STAGE II REMOVAL
(Looking North)



STAGE II CONSTRUCTION
(Looking North)

LEGEND

Removal of Existing Structures

Notes:
For quantity of Temporary Concrete Barrier, see Roadway Plans.

HRC PROJECT NO.: 202021/0
 HRC PROJ. CONTACT:
 FILE NAME: 0460160-66H54-004-StrConst.dgn
 PLOT DRIVER: il_def_bw.plt
 PEN TABLE: plotlabel.tbl



| | | |
|-----------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - SLS | REVISED - |
| | CHECKED - AEU | REVISED - |
| PLOT SCALE = | DRAWN - WJH | REVISED - |
| PLOT DATE = 12/6/2021 | CHECKED - AEU | REVISED - |

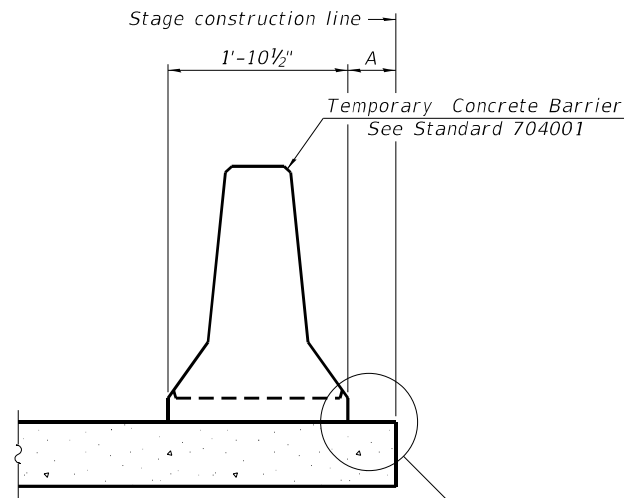
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 046-0160

SHEET NO. 4 OF 32 SHEETS

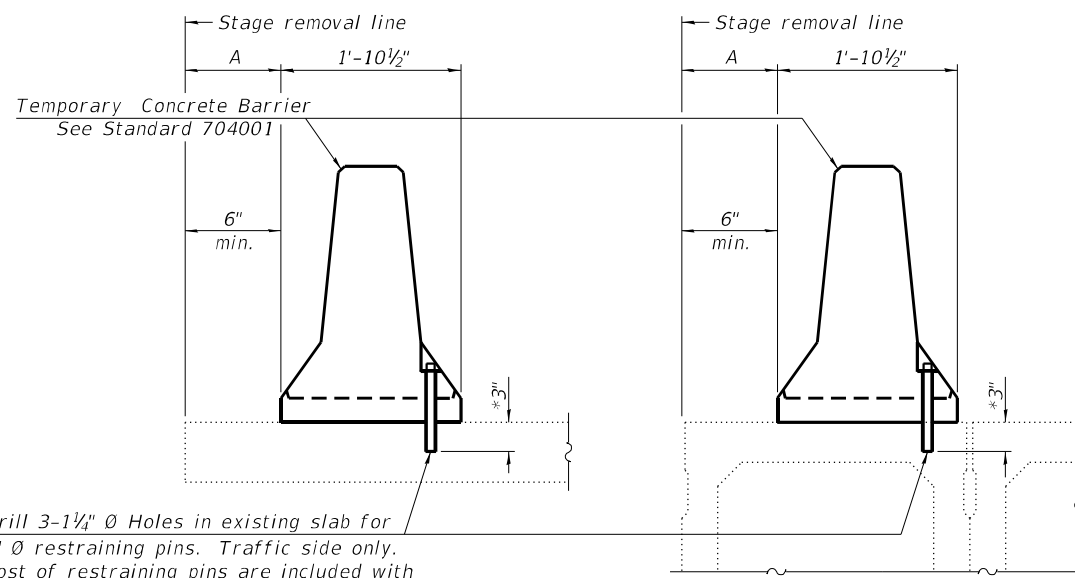
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 24 |
| CONTRACT NO. 66H54 | | | | |

ILLINOIS FED. AID PROJECT



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



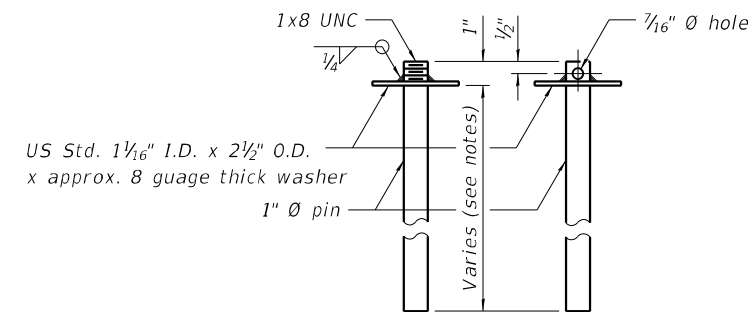
Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

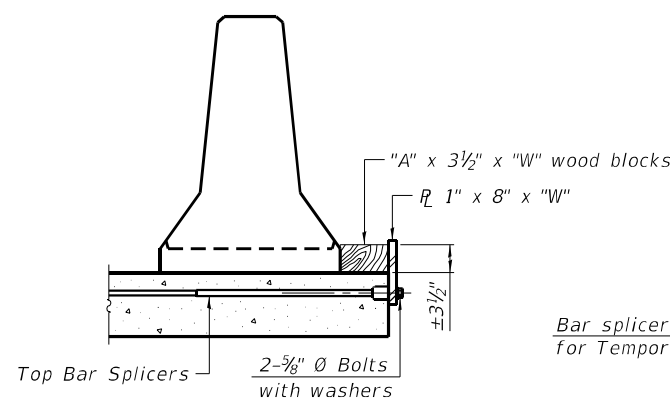
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

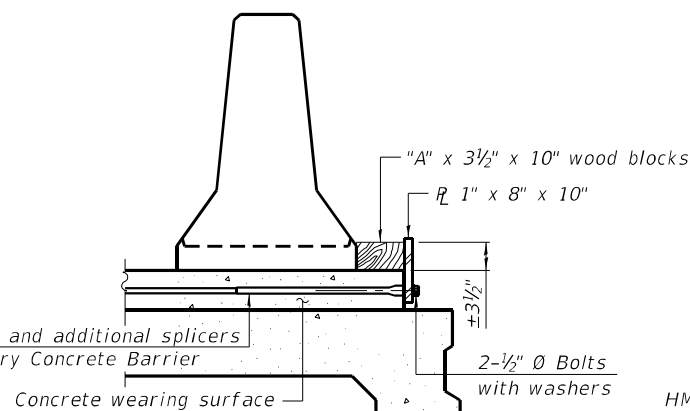


RESTRAINING PIN

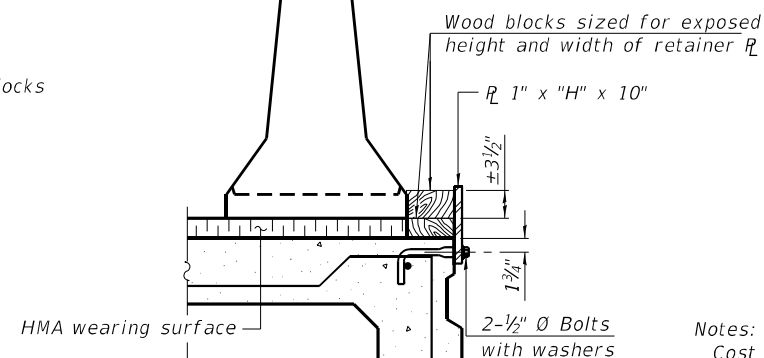


DETAIL I

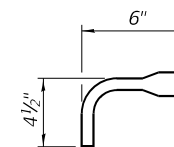
Bar splicers and additional splicers for Temporary Concrete Barrier



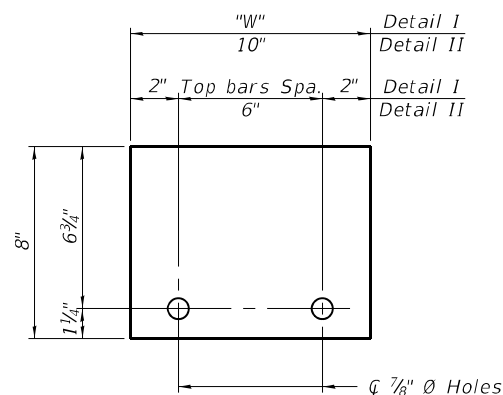
DETAIL II



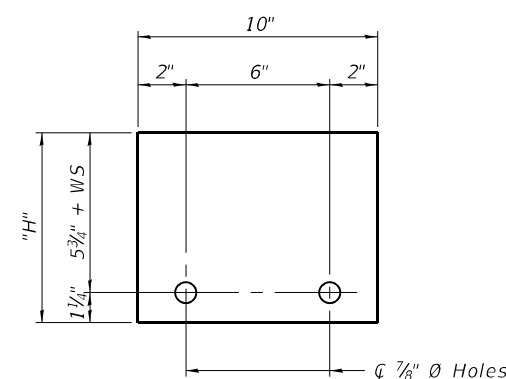
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER 1" x "H" x 10"
(Detail III)

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate center of each temporary concrete barrier.

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6' to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

HRG PROJECT NO.: 2020210
HRG PROJ. CONTACT:
FILE NAME: 0460160-66164-005-TempConcreteBarr.dgn
PLOT DRIVER: IL_Pdf.plt
PEN TABLE: plotlabel.tbl

R-27

2-17-2017



| | | |
|-----------------------|----------------|-----------|
| USER NAME = jrotbu | DESIGNED - SLS | REVISED - |
| PLOT SCALE = | CHECKED - AEU | REVISED - |
| PLOT DATE = 12/6/2021 | DRAWN - WJH | REVISED - |
| | CHECKED - AEU | REVISED - |

| | |
|----------------|-----------|
| DESIGNED - SLS | REVISED - |
| CHECKED - AEU | REVISED - |
| DRAWN - WJH | REVISED - |
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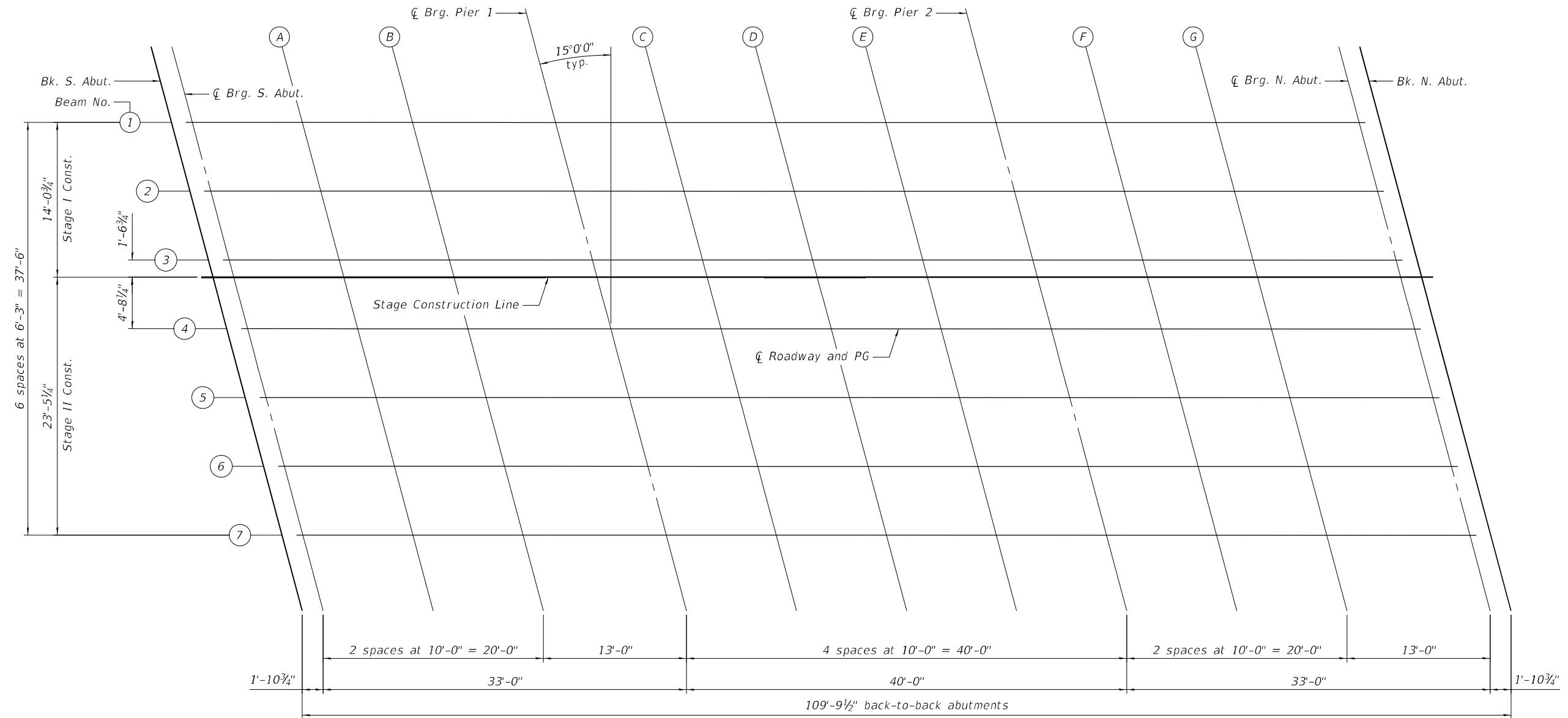
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 046-0160**

SHEET NO. 5 OF 32 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|------------|----------|--------------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 25 |
| | | | CONTRACT NO. 66H54 | |

ILLINOIS FED. AID PROJECT



PLAN

HRC PROJECT NO.: 202210
 HRC PROJ. CONTACT:
 FILE NAME: 0460160-66H54-006-105.dgn
 PLOT DRIVER: il_plotter.dwg
 PEN TABLE: plotlabel.tbl



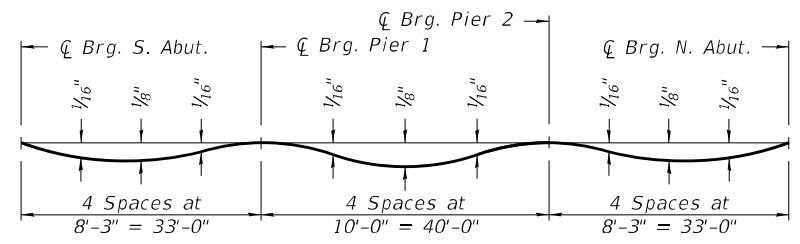
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| USER NAME = aunderw | DESIGNED - SLS | REVISED - |
| | CHECKED - AEU | REVISED - |
| PLOT SCALE = | DRAWN - WJH | REVISED - |
| PLOT DATE = 1/26/2022 | CHECKED - AEU | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 046-0160**

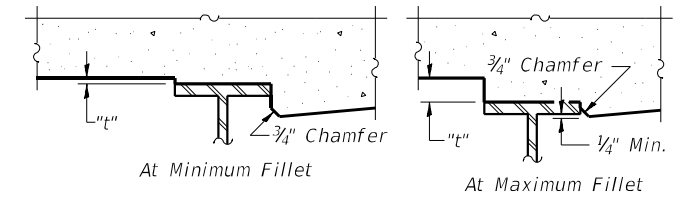
SHEET NO. 6 OF 32 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 26 |
| CONTRACT NO. 66H54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below and on Sheet 8 of 32.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below and on Sheet 8 of 32. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

| BEAM 1 | | | | | BEAM 2 | | | | | BEAM 3 | | | | |
|------------------|-----------|--------|------------------------------|--|------------------|-----------|--------|------------------------------|--|------------------|-----------|--------|------------------------------|--|
| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection | Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection | Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
| Bk. S. Abut. | 516+49.08 | -18.75 | 663.01 | 663.01 | Bk. S. Abut. | 516+50.75 | -12.50 | 663.15 | 663.15 | Bk. S. Abut. | 516+52.43 | -6.25 | 663.25 | 663.25 |
| CL Brg. S. Abut. | 516+50.98 | -18.75 | 663.02 | 663.02 | CL Brg. S. Abut. | 516+52.65 | -12.50 | 663.16 | 663.16 | CL Brg. S. Abut. | 516+54.33 | -6.25 | 663.26 | 663.26 |
| A | 516+60.98 | -18.75 | 663.07 | 663.08 | A | 516+62.65 | -12.50 | 663.20 | 663.21 | A | 516+64.33 | -6.25 | 663.30 | 663.31 |
| B | 516+70.98 | -18.75 | 663.10 | 663.11 | B | 516+72.65 | -12.50 | 663.23 | 663.24 | B | 516+74.33 | -6.25 | 663.33 | 663.34 |
| CL Brg. Pier 1 | 516+83.98 | -18.75 | 663.13 | 663.13 | CL Brg. Pier 1 | 516+85.65 | -12.50 | 663.26 | 663.26 | CL Brg. Pier 1 | 516+87.33 | -6.25 | 663.36 | 663.36 |
| C | 516+93.98 | -18.75 | 663.15 | 663.16 | C | 516+95.65 | -12.50 | 663.28 | 663.29 | C | 516+97.33 | -6.25 | 663.37 | 663.38 |
| D | 517+03.98 | -18.75 | 663.16 | 663.17 | D | 517+05.65 | -12.50 | 663.28 | 663.29 | D | 517+07.33 | -6.25 | 663.38 | 663.39 |
| E | 517+13.98 | -18.75 | 663.15 | 663.16 | E | 517+15.65 | -12.50 | 663.28 | 663.29 | E | 517+17.33 | -6.25 | 663.37 | 663.38 |
| CL Brg. Pier 2 | 517+23.98 | -18.75 | 663.14 | 663.14 | CL Brg. Pier 2 | 517+25.65 | -12.50 | 663.26 | 663.26 | CL Brg. Pier 2 | 517+27.33 | -6.25 | 663.36 | 663.36 |
| F | 517+33.98 | -18.75 | 663.12 | 663.13 | F | 517+35.65 | -12.50 | 663.24 | 663.25 | F | 517+37.33 | -6.25 | 663.33 | 663.34 |
| G | 517+43.98 | -18.75 | 663.09 | 663.10 | G | 517+45.65 | -12.50 | 663.21 | 663.22 | G | 517+47.33 | -6.25 | 663.30 | 663.31 |
| CL Brg. N. Abut. | 517+56.98 | -18.75 | 663.04 | 663.04 | CL Brg. N. Abut. | 517+58.65 | -12.50 | 663.16 | 663.16 | CL Brg. N. Abut. | 517+60.33 | -6.25 | 663.25 | 663.25 |
| Bk. N. Abut. | 517+58.87 | -18.75 | 663.03 | 663.03 | Bk. N. Abut. | 517+60.55 | -12.50 | 663.15 | 663.15 | Bk. N. Abut. | 517+62.22 | -6.25 | 663.24 | 663.24 |

| STAGE CONSTRUCTION LINE | | | | | BEAM 4 & P.G. | | | | | BEAM 5 | | | | |
|-------------------------|-----------|--------|------------------------------|--|------------------|-----------|--------|------------------------------|--|------------------|-----------|--------|------------------------------|--|
| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection | Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection | Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
| Bk. S. Abut. | 516+52.85 | -4.69 | 663.42 | 663.42 | Bk. S. Abut. | 516+54.10 | 0.00 | 663.35 | 663.35 | Bk. S. Abut. | 516+55.78 | 6.25 | 663.29 | 663.29 |
| CL Brg. S. Abut. | 516+54.74 | -4.69 | 663.43 | 663.43 | CL Brg. S. Abut. | 516+56.00 | 0.00 | 663.36 | 663.36 | CL Brg. S. Abut. | 516+57.67 | 6.25 | 663.30 | 663.30 |
| A | 516+64.74 | -4.69 | 663.36 | 663.37 | A | 516+66.00 | 0.00 | 663.40 | 663.41 | A | 516+67.67 | 6.25 | 663.34 | 663.35 |
| B | 516+74.74 | -4.69 | 663.39 | 663.40 | B | 516+76.00 | 0.00 | 663.43 | 663.44 | B | 516+77.67 | 6.25 | 663.37 | 663.38 |
| CL Brg. Pier 1 | 516+87.74 | -4.69 | 663.42 | 663.42 | CL Brg. Pier 1 | 516+89.00 | 0.00 | 663.46 | 663.46 | CL Brg. Pier 1 | 516+90.67 | 6.25 | 663.40 | 663.40 |
| C | 516+97.74 | -4.69 | 663.43 | 663.44 | C | 516+99.00 | 0.00 | 663.47 | 663.48 | C | 517+00.67 | 6.25 | 663.40 | 663.41 |
| D | 517+07.74 | -4.69 | 663.44 | 663.45 | D | 517+09.00 | 0.00 | 663.47 | 663.48 | D | 517+10.67 | 6.25 | 663.40 | 663.41 |
| E | 517+17.74 | -4.69 | 663.43 | 663.44 | E | 517+19.00 | 0.00 | 663.46 | 663.47 | E | 517+20.67 | 6.25 | 663.40 | 663.41 |
| CL Brg. Pier 2 | 517+27.74 | -4.69 | 663.42 | 663.42 | CL Brg. Pier 2 | 517+29.00 | 0.00 | 663.45 | 663.45 | CL Brg. Pier 2 | 517+30.67 | 6.25 | 663.38 | 663.38 |
| F | 517+37.74 | -4.69 | 663.39 | 663.40 | F | 517+39.00 | 0.00 | 663.42 | 663.43 | F | 517+40.67 | 6.25 | 663.35 | 663.36 |
| G | 517+47.74 | -4.69 | 663.36 | 663.37 | G | 517+49.00 | 0.00 | 663.39 | 663.40 | G | 517+50.67 | 6.25 | 663.32 | 663.33 |
| CL Brg. N. Abut. | 517+60.74 | -4.69 | 663.31 | 663.31 | CL Brg. N. Abut. | 517+62.00 | 0.00 | 663.33 | 663.33 | CL Brg. N. Abut. | 517+63.67 | 6.25 | 663.26 | 663.26 |
| Bk. N. Abut. | 517+62.64 | -4.69 | 663.30 | 663.30 | Bk. N. Abut. | 517+63.90 | 0.00 | 663.32 | 663.32 | Bk. N. Abut. | 517+65.57 | 6.25 | 663.25 | 663.25 |

HRG PROJECT NO.: 2022/10
 HRG PROJ. CONTACT:
 FILE NAME: 046/016-66H54-007-105.dgn
 PLOT DRIVER: il_def_bw.ctb
 PEN TABLE: plotlabel.tbl

E-S 2-17-2017

| | | | | | | |
|---|--|--|---|--|---|---------------------------|
| HRGreen.com Illinois Professional Design Firm #184-001322 | USER NAME = jroibu DESIGNED - SLS CHECKED - AEU PLOT SCALE = PLOT DATE = 12/6/2021 | REVISED - REVISED - REVISED - REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | TOP OF SLAB ELEVATIONS STRUCTURE NO. 046-0160 SHEET NO. 7 OF 32 SHEETS | F.A.P. RTE. = 330 SECTION = (16BR-1)BR COUNTY = KANKAKEE TOTAL SHEETS = 64 SHEET NO. = 27 CONTRACT NO. = 66H54 | ILLINOIS FED. AID PROJECT |
|---|--|--|---|--|---|---------------------------|

BEAM 6

BEAM 7

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection | Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|------------------|-----------|--------|------------------------------|--|------------------|-----------|--------|------------------------------|--|
| Bk. S. Abut. | 516+57.45 | 12.50 | 663.18 | 663.18 | Bk. S. Abut. | 516+59.13 | 18.75 | 663.06 | 663.06 |
| CL Brg. S. Abut. | 516+59.35 | 12.50 | 663.18 | 663.18 | CL Brg. S. Abut. | 516+61.02 | 18.75 | 663.07 | 663.07 |
| A | 516+69.35 | 12.50 | 663.22 | 663.23 | A | 516+71.02 | 18.75 | 663.10 | 663.11 |
| B | 516+79.35 | 12.50 | 663.25 | 663.26 | B | 516+81.02 | 18.75 | 663.13 | 663.14 |
| CL Brg. Pier 1 | 516+92.35 | 12.50 | 663.27 | 663.27 | CL Brg. Pier 1 | 516+94.02 | 18.75 | 663.15 | 663.15 |
| C | 517+02.35 | 12.50 | 663.28 | 663.29 | C | 517+04.02 | 18.75 | 663.16 | 663.17 |
| D | 517+12.35 | 12.50 | 663.28 | 663.29 | D | 517+14.02 | 18.75 | 663.15 | 663.16 |
| E | 517+22.35 | 12.50 | 663.27 | 663.28 | E | 517+24.02 | 18.75 | 663.14 | 663.15 |
| CL Brg. Pier 2 | 517+32.35 | 12.50 | 663.25 | 663.25 | CL Brg. Pier 2 | 517+34.02 | 18.75 | 663.12 | 663.12 |
| F | 517+42.35 | 12.50 | 663.22 | 663.23 | F | 517+44.02 | 18.75 | 663.09 | 663.10 |
| G | 517+52.35 | 12.50 | 663.19 | 663.20 | G | 517+54.02 | 18.75 | 663.05 | 663.06 |
| CL Brg. N. Abut. | 517+65.35 | 12.50 | 663.13 | 663.13 | CL Brg. N. Abut. | 517+67.02 | 18.75 | 662.99 | 662.99 |
| Bk. N. Abut. | 517+67.25 | 12.50 | 663.12 | 663.12 | Bk. N. Abut. | 51768.92 | 18.75 | 662.98 | 662.98 |

HRC PROJECT NO.: 20202140
 HRC PROJ. CONTACT:
 FILE NAME: 0460160-66H54-008-TDS.dgn
 PLOT DRIVER: il_pdf_bw.plt
 PEN TABLE: plotlabel.tbl

E-S

2-17-2017



| | | |
|-----------------------|----------------|-----------|
| USER NAME = jraitbu | DESIGNED - SLS | REVISED - |
| | CHECKED - AEU | REVISED - |
| PLOT SCALE = | DRAWN - WJH | REVISED - |
| PLOT DATE = 12/6/2021 | CHECKED - AEU | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 046-0160

SHEET NO. 8 OF 32 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 28 |
| CONTRACT NO. 66H54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

WEST EDGE OF SHOULDER

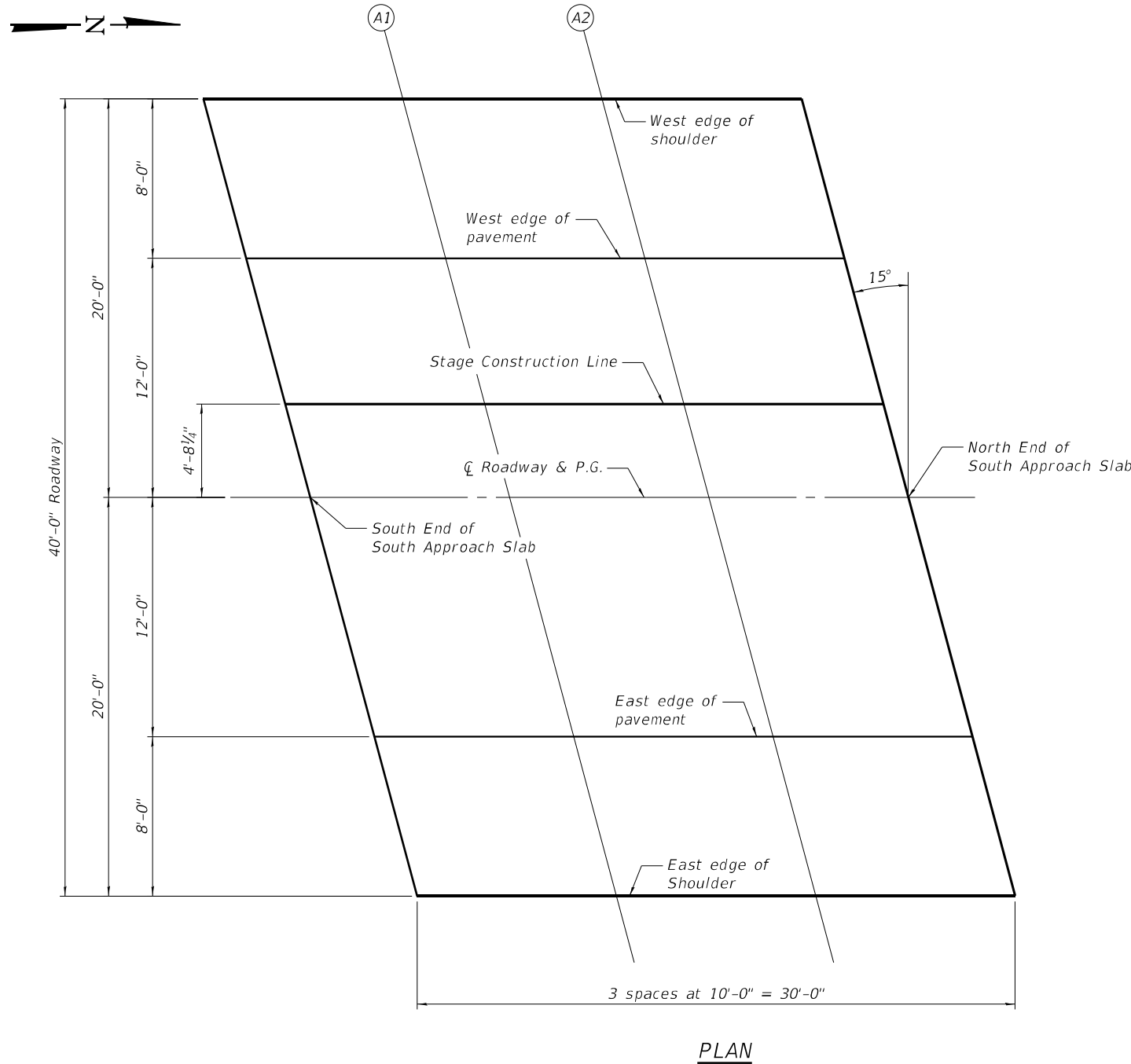
| Location | Station | Offset | Theoretical Grade Elevations |
|-----------------------|-----------|--------|------------------------------|
| S. End of South Appr. | 516+19.78 | -20.00 | 662.80 |
| A1 | 516+29.78 | -20.00 | 662.88 |
| A2 | 516+39.78 | -20.00 | 662.94 |
| N. End of South Appr. | 516+49.78 | -20.00 | 662.99 |

WEST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|-----------------------|-----------|--------|------------------------------|
| S. End of South Appr. | 516+21.92 | -12.00 | 662.98 |
| A1 | 516+31.92 | -12.00 | 663.05 |
| A2 | 516+41.92 | -12.00 | 663.11 |
| N. End of South Appr. | 516+51.92 | -12.00 | 663.16 |

STAGE CONSTRUCTION LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|-----------------------|-----------|--------|------------------------------|
| S. End of South Appr. | 516+23.88 | -4.69 | 663.10 |
| A1 | 516+33.88 | -4.69 | 663.17 |
| A2 | 516+43.88 | -4.69 | 663.23 |
| N. End of South Appr. | 516+53.88 | -4.69 | 663.28 |



☉ ROADWAY & P.G.

| Location | Station | Offset | Theoretical Grade Elevations |
|-----------------------|-----------|--------|------------------------------|
| S. End of South Appr. | 516+25.14 | 0.00 | 663.18 |
| A1 | 516+35.14 | 0.00 | 663.25 |
| A2 | 516+45.14 | 0.00 | 663.31 |
| N. End of South Appr. | 516+55.14 | 0.00 | 663.36 |

EAST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|-----------------------|-----------|--------|------------------------------|
| S. End of South Appr. | 516+28.35 | 12.00 | 663.03 |
| A1 | 516+38.35 | 12.00 | 663.09 |
| A2 | 516+48.35 | 12.00 | 663.14 |
| N. End of South Appr. | 516+58.35 | 12.00 | 663.19 |

EAST EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-----------------------|-----------|--------|------------------------------|
| S. End of South Appr. | 516+30.50 | 20.00 | 662.88 |
| A1 | 516+40.50 | 20.00 | 662.94 |
| A2 | 516+50.50 | 20.00 | 663.00 |
| N. End of South Appr. | 516+60.50 | 20.00 | 663.04 |

PLAN

HRC PROJECT NO.: 2022110
 HRC PROJ. CONTACT:
 FILE NAME: 046016-66H54-009-1045.dgn
 PLOT DRIVER: il_def_bw.ctb
 PEN TABLE: plotlabel.tbl



| | | |
|-----------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - SLS | REVISED - |
| | CHECKED - AEU | REVISED - |
| PLOT SCALE = | DRAWN - WJH | REVISED - |
| PLOT DATE = 12/6/2021 | CHECKED - AEU | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SOUTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 046-0160**

SHEET NO. 9 OF 32 SHEETS

| | | | | |
|---------------------------|----------------------|-------------------|-------------------|----------------|
| F.A.P. RTE. = 330 | SECTION = (16BR-1)BR | COUNTY = KANKAKEE | TOTAL SHEETS = 64 | SHEET NO. = 29 |
| CONTRACT NO. 66H54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

WEST EDGE OF SHOULDER

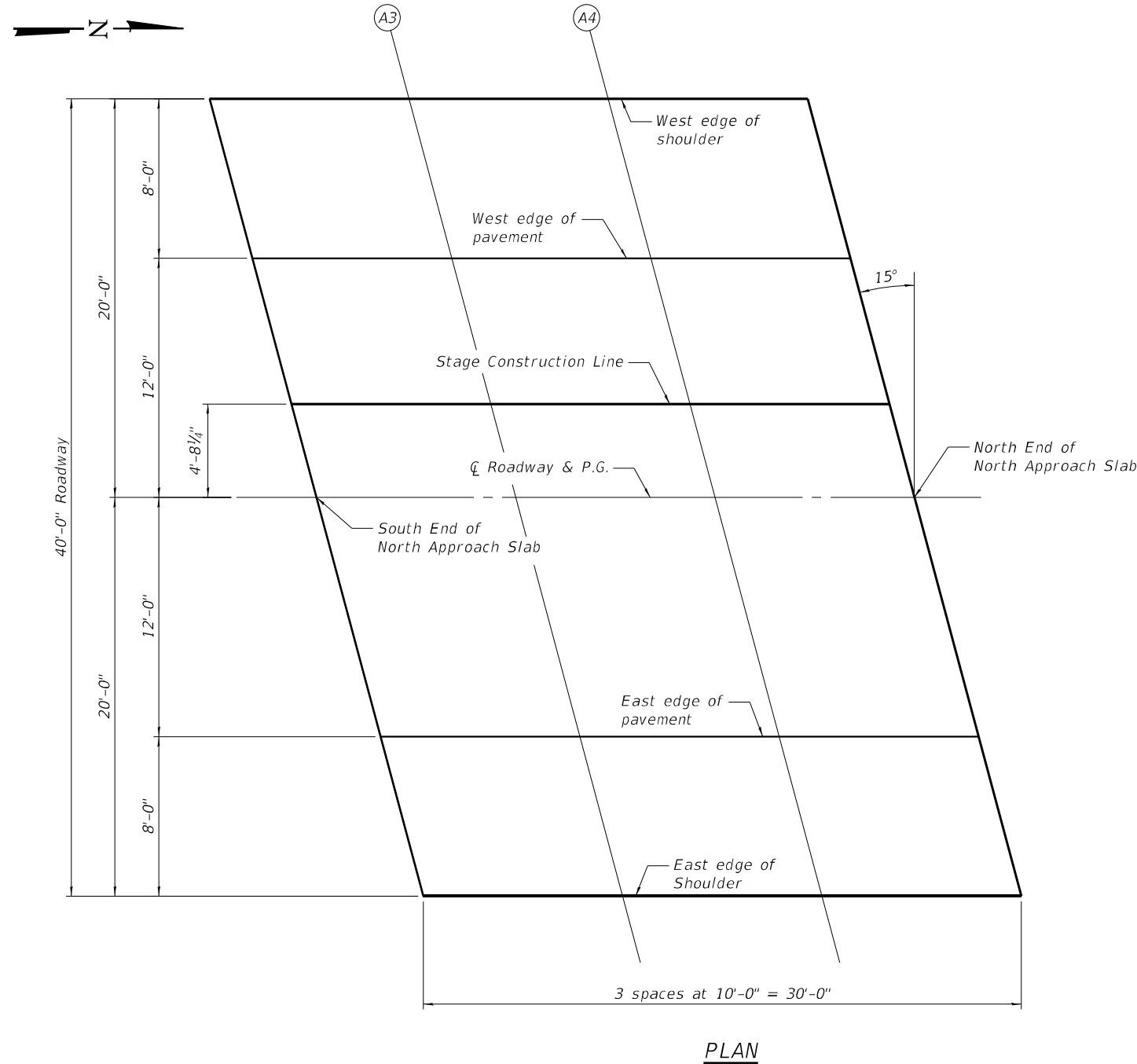
| Location | Station | Offset | Theoretical Grade Elevations |
|-----------------------|-----------|--------|------------------------------|
| S. End of North Appr. | 517+57.50 | -20.00 | 663.01 |
| A3 | 517+67.50 | -20.00 | 662.96 |
| A4 | 517+77.50 | -20.00 | 662.91 |
| N. End of North Appr. | 517+87.50 | -20.00 | 662.84 |

WEST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|-----------------------|-----------|--------|------------------------------|
| S. End of North Appr. | 517+59.65 | -12.00 | 663.16 |
| A3 | 517+69.65 | -12.00 | 663.11 |
| A4 | 517+79.65 | -12.00 | 663.05 |
| N. End of North Appr. | 517+89.65 | -12.00 | 662.98 |

STAGE CONSTRUCTION LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|-----------------------|-----------|--------|------------------------------|
| S. End of North Appr. | 517+61.61 | -4.69 | 663.26 |
| A3 | 517+71.61 | -4.69 | 663.21 |
| A4 | 517+81.61 | -4.69 | 663.15 |
| N. End of North Appr. | 517+91.61 | -4.69 | 663.08 |



CL ROADWAY & P.G.

| Location | Station | Offset | Theoretical Grade Elevations |
|-----------------------|-----------|--------|------------------------------|
| S. End of North Appr. | 517+62.86 | 0.00 | 663.33 |
| A3 | 517+72.86 | 0.00 | 663.27 |
| A4 | 517+82.86 | 0.00 | 663.21 |
| N. End of North Appr. | 517+92.86 | 0.00 | 663.14 |

EAST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|-----------------------|-----------|--------|------------------------------|
| S. End of North Appr. | 517+66.08 | 12.00 | 663.13 |
| A3 | 517+76.08 | 12.00 | 663.08 |
| A4 | 517+86.08 | 12.00 | 663.01 |
| N. End of North Appr. | 517+96.08 | 12.00 | 662.93 |

EAST EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-----------------------|-----------|--------|------------------------------|
| S. End of North Appr. | 517+68.22 | 16.42 | 662.96 |
| A3 | 517+78.22 | 16.42 | 662.90 |
| A4 | 517+88.22 | 16.42 | 662.83 |
| N. End of North Appr. | 517+98.22 | 16.42 | 662.76 |

HRC PROJECT NO.: 2022110
 HRC PROJ. CONTACT:
 FILE NAME: 0460160-66654-000-T045.dgn
 PLOT DRIVER: il_plt_drv_bwp.ctb
 PEN TABLE: plotlabel.tbl



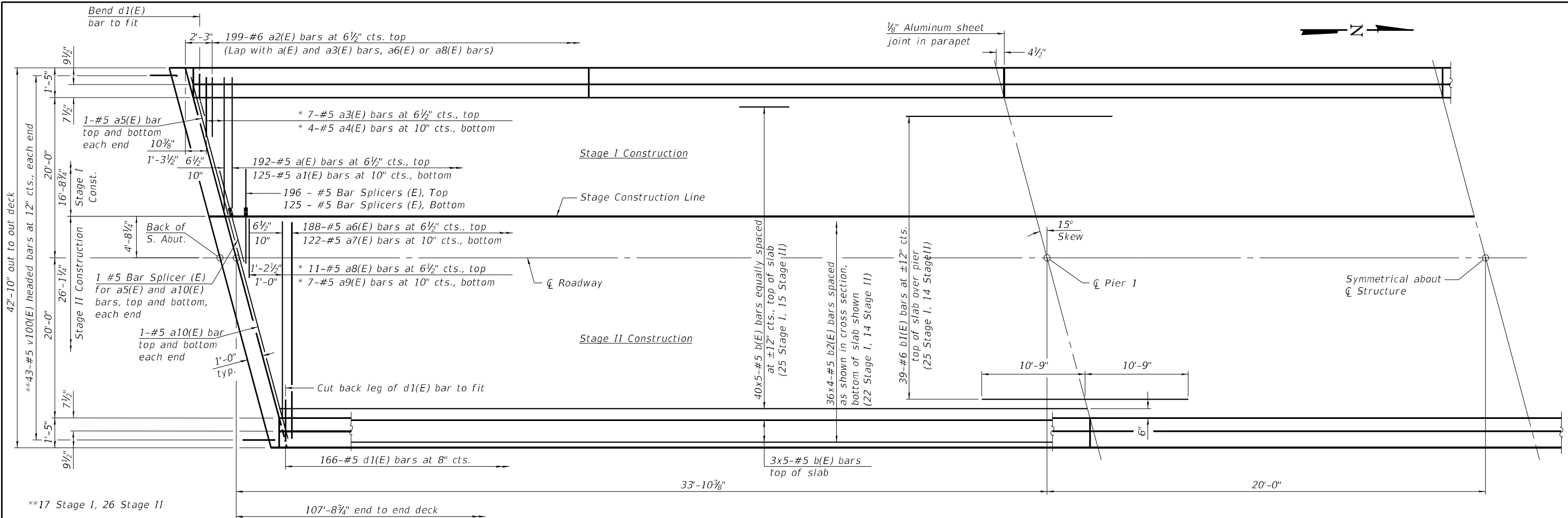
| | | |
|-----------------------|----------------|-----------|
| USER NAME = jraitbu | DESIGNED - SLS | REVISED - |
| | CHECKED - AEU | REVISED - |
| PLOT SCALE = | DRAWN - WJH | REVISED - |
| PLOT DATE = 12/6/2021 | CHECKED - AEU | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF NORTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 046-0160**

SHEET NO. 10 OF 32 SHEETS

| | | | | |
|---------------------------|----------------------|-------------------|-------------------|----------------|
| F.A.P. RTE. = 330 | SECTION = (16BR-1)BR | COUNTY = KANKAKEE | TOTAL SHEETS = 64 | SHEET NO. = 30 |
| CONTRACT NO. 66H54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



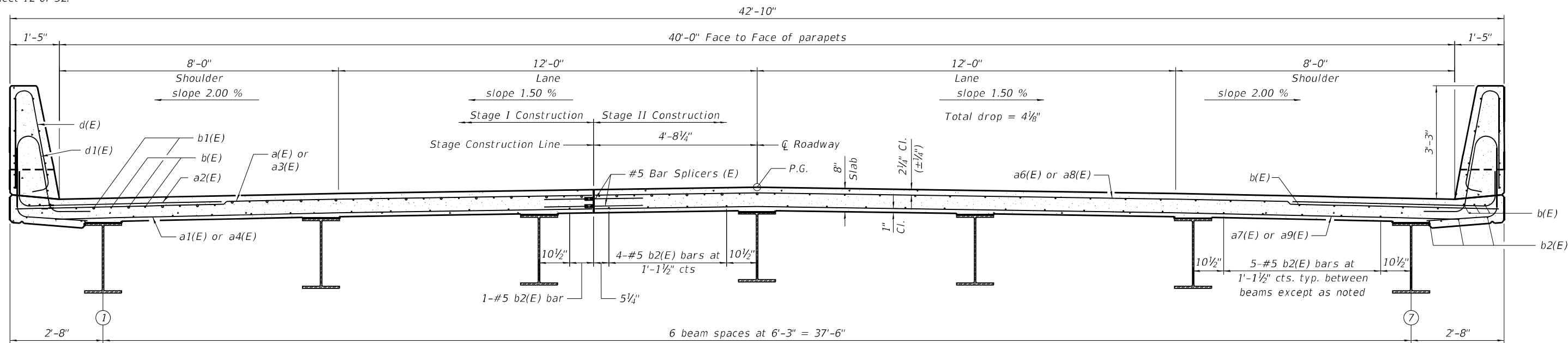
PARTIAL PLAN

MINIMUM BAR LAP

#5 bar = 3'-6"

* See Field Cutting Diagram on sheet 12 of 32.

Notes:
See sheet 12 of 32 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



CROSS SECTION
(Looking North)

NEAR PIER

NEAR MIDSPAN

HRG PROJECT NO.: 2022110
HRG PROJ. CONTACT:
FILE NAME: 0460160-66H54-01-Super-01.dgn
PLOT DRIVER: IL_Pdf.plt
PEN TABLE: plotlabel.tbl



| | | |
|-----------------------|----------------|-----------|
| USER NAME = jrolibu | DESIGNED - SLS | REVISED - |
| PLOT SCALE = | CHECKED - AEU | REVISED - |
| PLOT DATE = 12/6/2021 | DRAWN - WJH | REVISED - |
| | CHECKED - AEU | REVISED - |

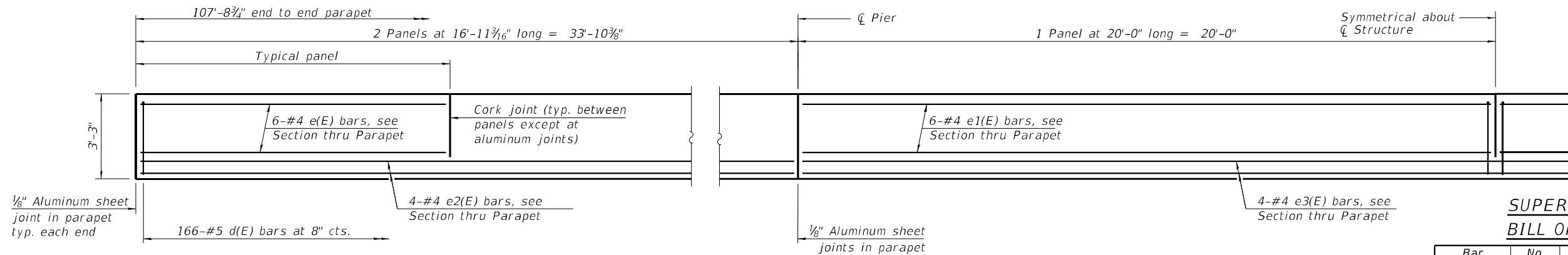
| | |
|----------------|-----------|
| DESIGNED - SLS | REVISED - |
| CHECKED - AEU | REVISED - |
| DRAWN - WJH | REVISED - |
| CHECKED - AEU | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

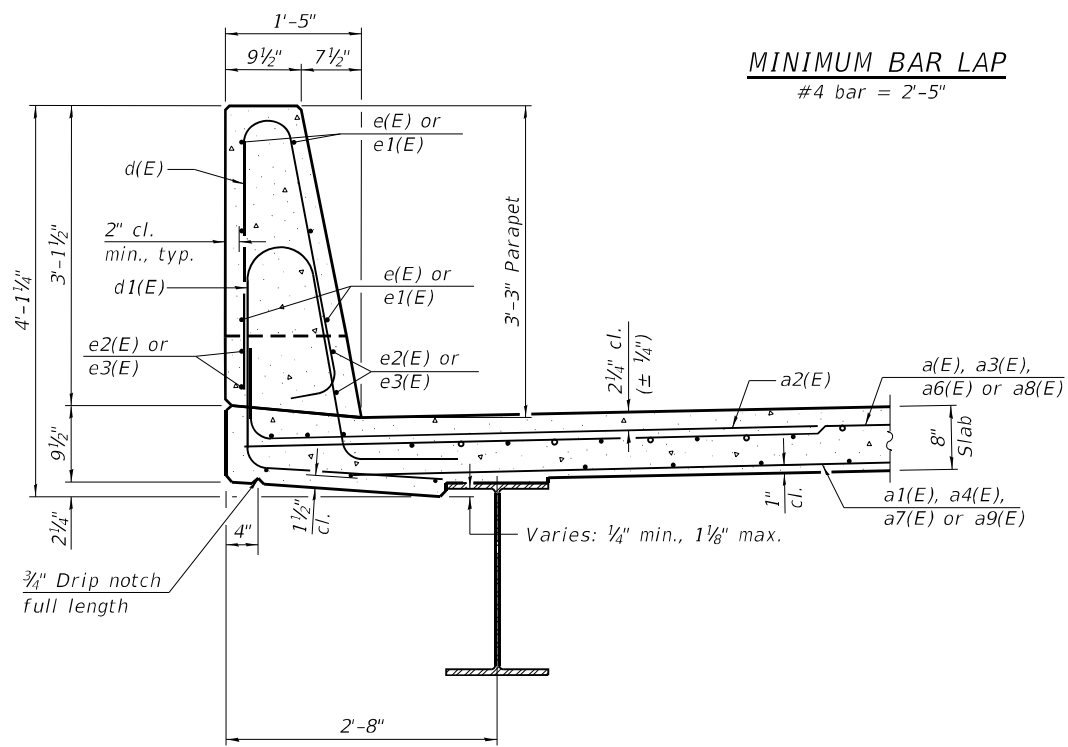
SUPERSTRUCTURE
STRUCTURE NO. 046-0160

SHEET NO. 11 OF 32 SHEETS

| | | | | |
|--------------------|----------------------|-------------------|---------------------------|----------------|
| F.A.P. RTE. = 330 | SECTION = (16BR-1)BR | COUNTY = KANKAKEE | TOTAL SHEETS = 64 | SHEET NO. = 31 |
| CONTRACT NO. 66H54 | | | ILLINOIS FED. AID PROJECT | |

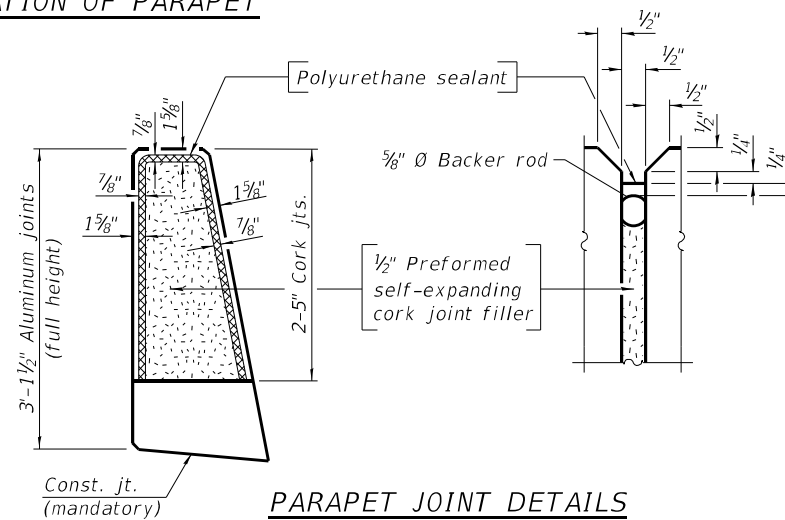


INSIDE ELEVATION OF PARAPET



SECTION THRU PARAPET

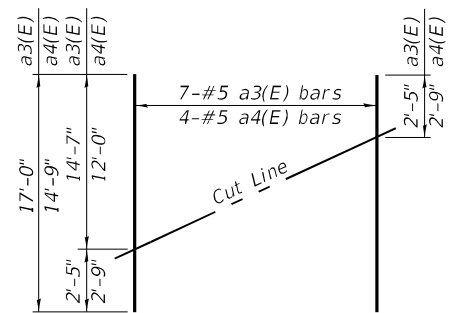
MINIMUM BAR LAP
#4 bar = 2'-5"



PARAPET JOINT DETAILS

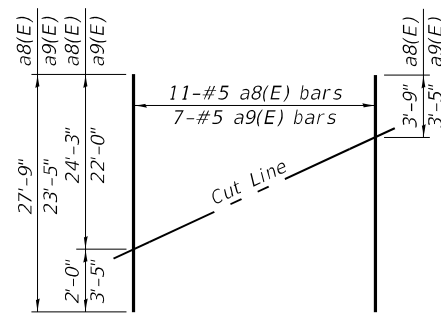
Notes:

The 1/8" aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.



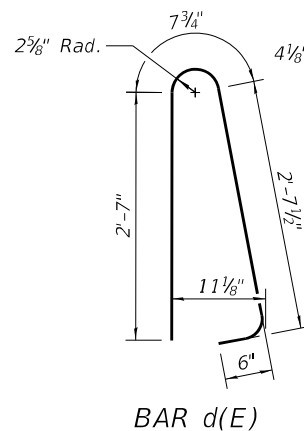
FIELD CUTTING DIAGRAM

Order a3(E) and a4(E) bars full length.
Cut as shown and use remainder of bars in opposite end of deck.

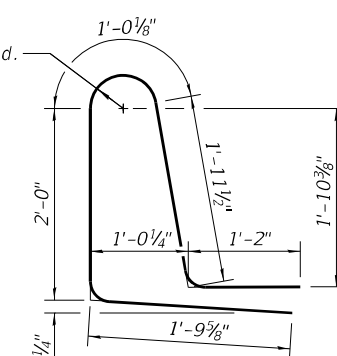


FIELD CUTTING DIAGRAM

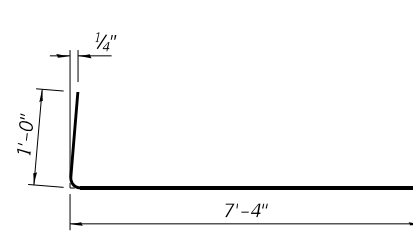
Order a8(E) and a9(E) bars full length.
Cut as shown and use remainder of bars in opposite end of deck.



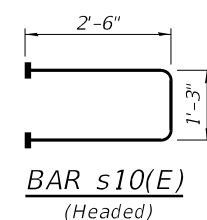
BAR d(E)



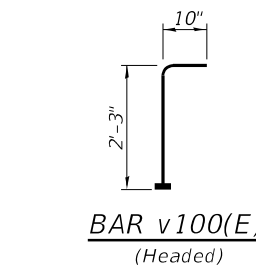
BAR d1(E)



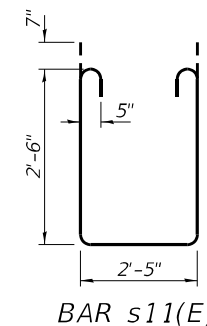
BAR a2(E)



BAR s10(E)
(Headed)



BAR v100(E)
(Headed)



BAR s11(E)

SUPERSTRUCTURE BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|----------|--------|
| a(E) | 192 | #5 | 16'- 5" | — |
| a1(E) | 125 | #5 | 15'- 2" | — |
| a2(E) | 398 | #6 | 8'- 4" | ┌ |
| a3(E) | 7 | #5 | 17'- 0" | — |
| a4(E) | 4 | #5 | 14'- 9" | — |
| a5(E) | 4 | #5 | 17'- 0" | — |
| a6(E) | 188 | #5 | 25'- 10" | — |
| a7(E) | 122 | #5 | 24'- 7" | — |
| a8(E) | 11 | #5 | 27'- 9" | — |
| a9(E) | 7 | #5 | 23'- 5" | — |
| a10(E) | 4 | #5 | 26'- 9" | — |
| b(E) | 230 | #5 | 24'- 4" | — |
| b1(E) | 78 | #6 | 21'- 6" | — |
| b2(E) | 144 | #5 | 29'- 5" | — |
| d(E) | 332 | #5 | 6'- 5" | ┌ |
| d1(E) | 332 | #5 | 8'- 0" | ┌ |
| e(E) | 48 | #4 | 16'- 7" | — |
| e1(E) | 24 | #4 | 19'- 8" | — |
| e2(E) | 16 | #4 | 33'- 6" | — |
| e3(E) | 8 | #4 | 39'- 8" | — |
| m10(E) | 8 | #6 | 17'- 0" | — |
| m11(E) | 30 | #6 | 6'- 1" | — |
| m12(E) | 12 | #6 | 2'- 5" | — |
| m13(E) | 6 | #6 | 1'- 4" | — |
| m14(E) | 6 | #6 | 4'- 6" | — |
| m15(E) | 8 | #6 | 26'- 9" | — |
| s10(E) | 84 | #5 | 6'- 3" | ┌ |
| s11(E) | 84 | #5 | 8'- 7" | ┌ |
| v100(E) | 86 | #5 | 3'- 1" | ┌ |
| Concrete Superstructure | | | Cu. Yd. | 171.4 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 40,950 |

HRG PROJECT NO.: 202210
HRG PROJ. CONTACT:
FILE NAME: 0460166-66164-016-SuperDet1.dgn
PLOT DRIVER: IL_Pdf_bw.ctb
PEN TABLE: plotlabel.tbl



USER NAME = jrotibu
DESIGNED - SLS
CHECKED - AEU
DRAWN - WJH
CHECKED - AEU
PLOT SCALE =
PLOT DATE = 12/6/2021

REVISOR -
REVISION -
REVISION -
REVISION -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

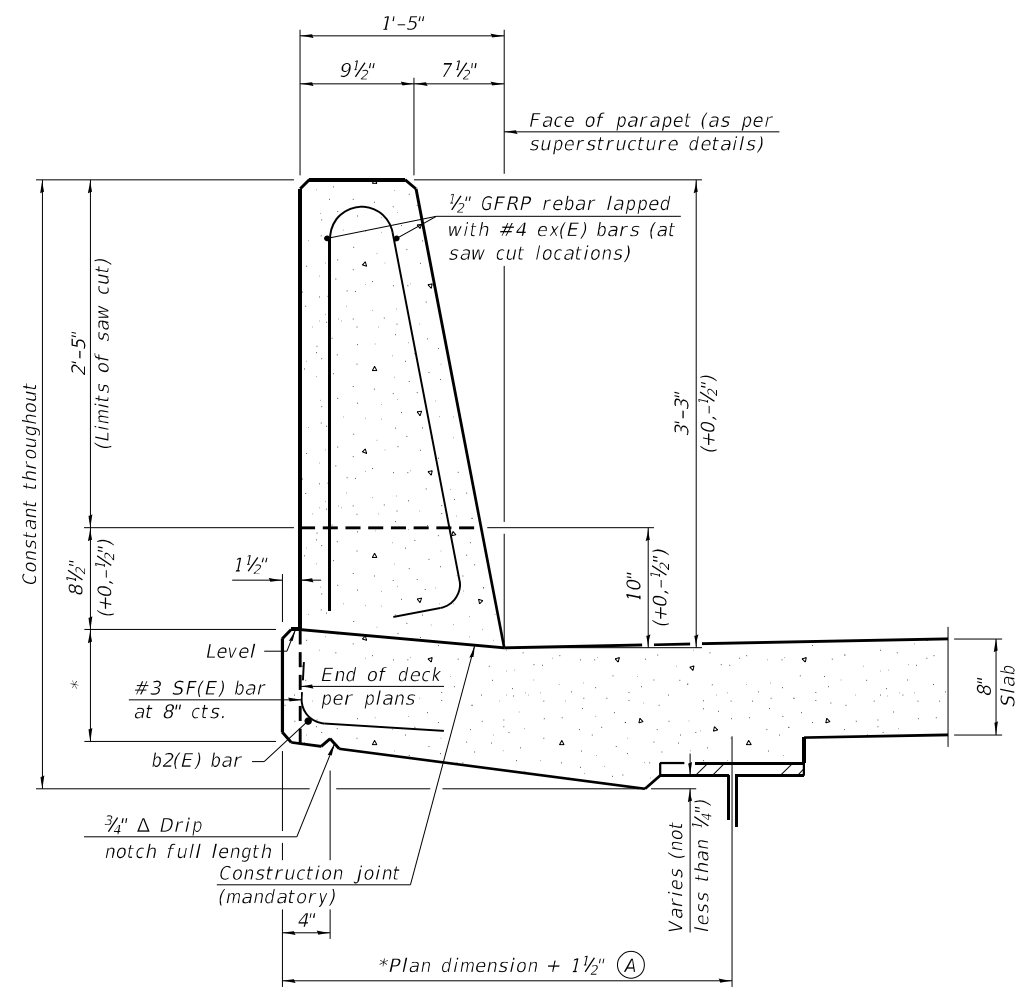
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 046-0160

SHEET NO. 12 OF 32 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 32 |

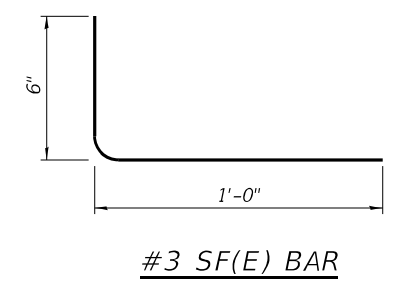
CONTRACT NO. 66H54
ILLINOIS FED. AID PROJECT

Notes:
 All dimensions shall remain the same as shown on superstructure details, except dimension A which is to be revised as shown. Additional concrete needed to revise dimension A = 0.00348 cu. yds./ft. for 39" parapets.
 Place full depth aluminum sheets as shown on superstructure details.
 Replace all cork joint filler locations with a full thickness saw cut.

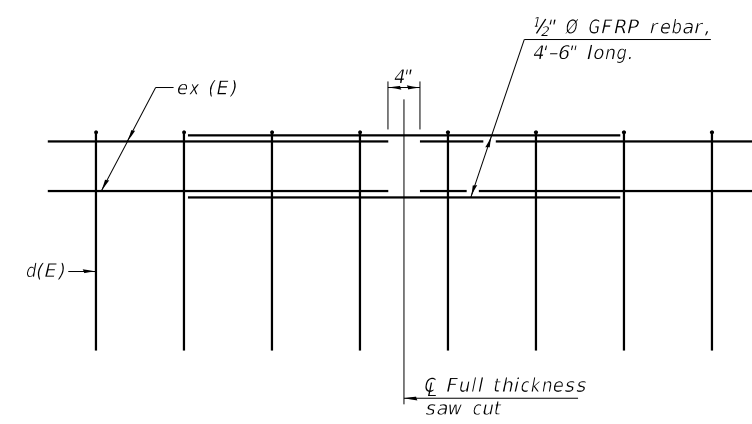


**39" CONSTANT-SLOPE
 PARAPET SECTION**
 (Showing dimensions, d(E), and 1/2" Ø GFRP rebar)

*See Superstructure Details.



#3 SF(E) BAR



GFRP REBAR STIFFENING DETAIL
 (Place as shown in parapet section at each parapet joint location.)

HRC PROJECT NO.: 2022110
 HRC PROJ. CONTACT:
 FILE NAME: 0460160-66H54-03-ConstParapetSlip.dgn
 PLOT DRIVER: IL_Pdf_wplot.ctb
 PEN TABLE: plotlabel.tbl

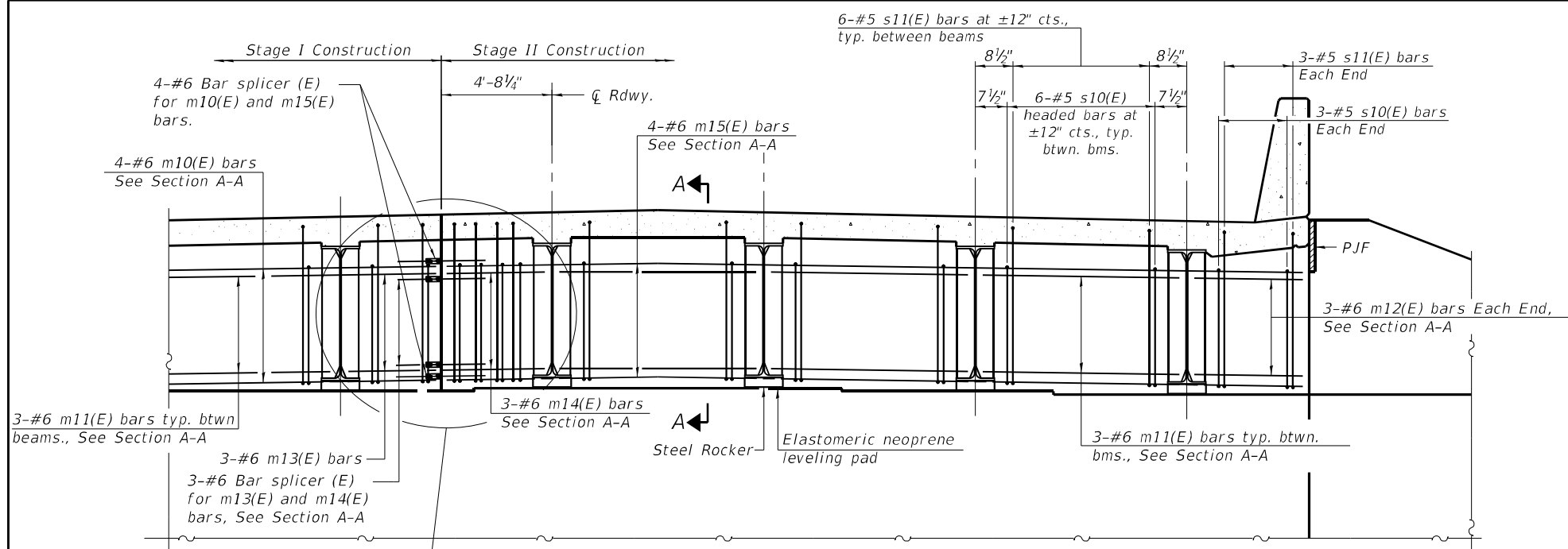


| | | |
|-----------------------|----------------|-----------|
| USER NAME = jralibu | DESIGNED - SLS | REVISED - |
| | CHECKED - AEU | REVISED - |
| PLOT SCALE = | DRAWN - WJH | REVISED - |
| PLOT DATE = 12/6/2021 | CHECKED - AEU | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

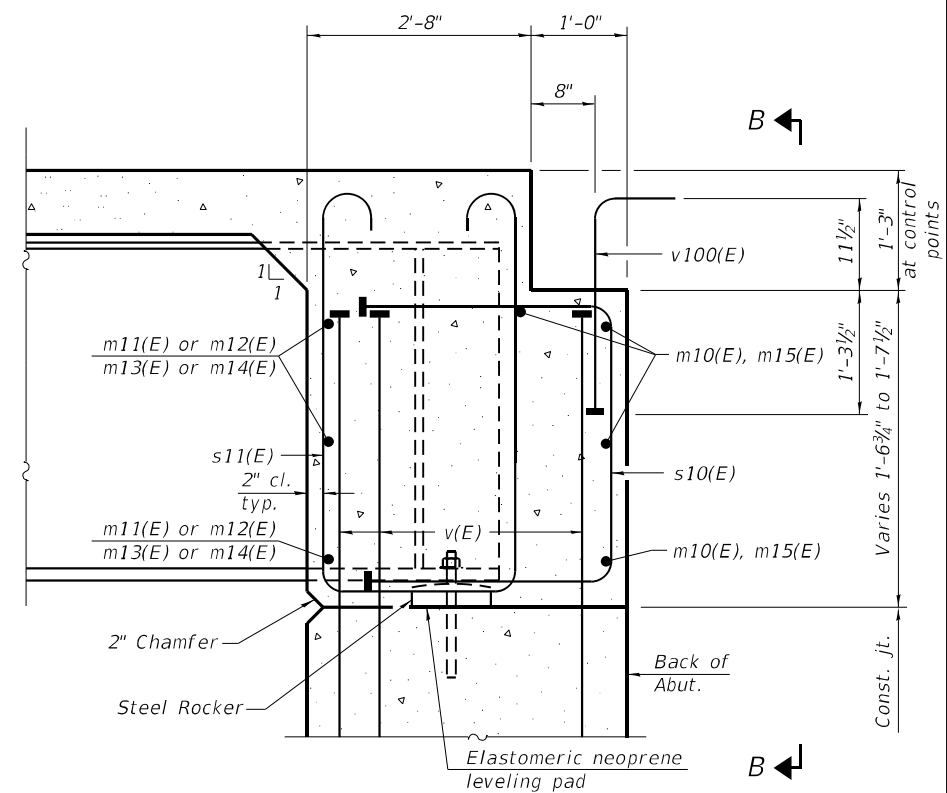
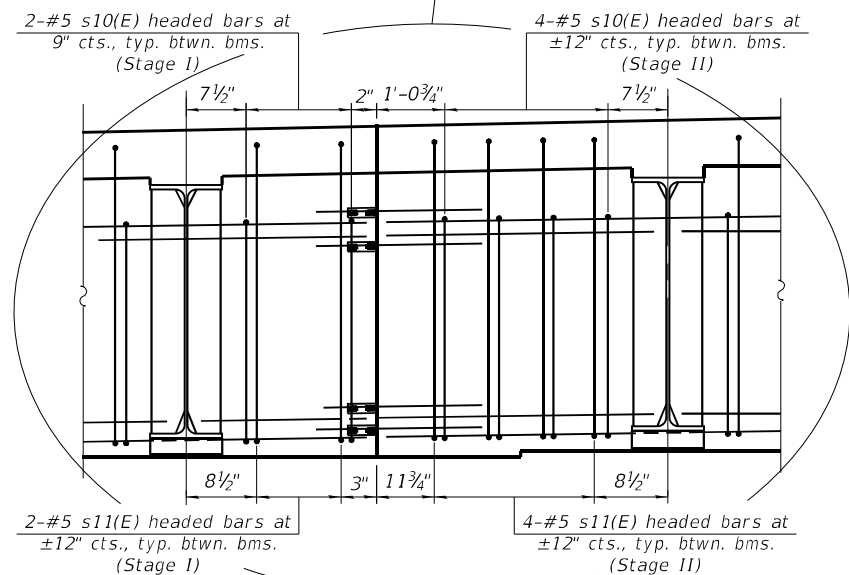
**CONCRETE PARAPET SLIPFORMING OPTION
 STRUCTURE NO. 046-0160**

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 33 |
| CONTRACT NO. 66H54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



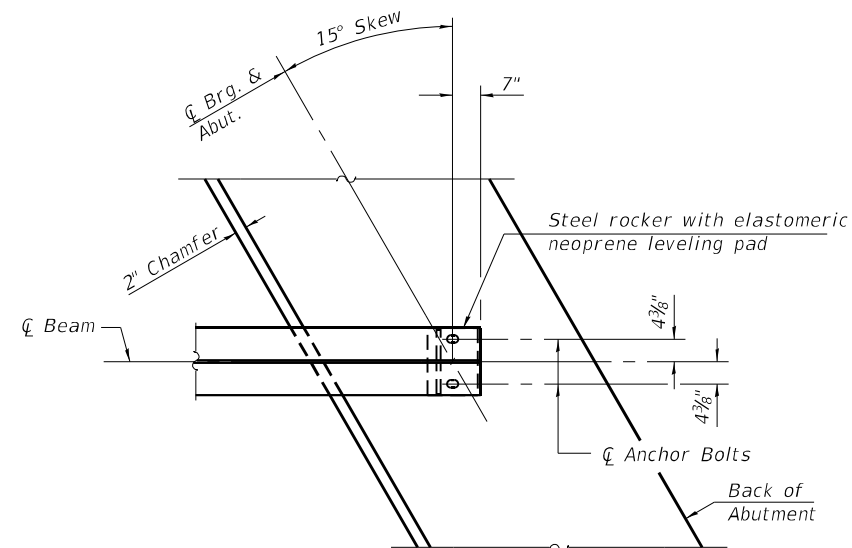
DIAPHRAGM AT ABUTMENT

(Looking North)
(North Abutment shown, South Abutment similar)



SECTION A-A

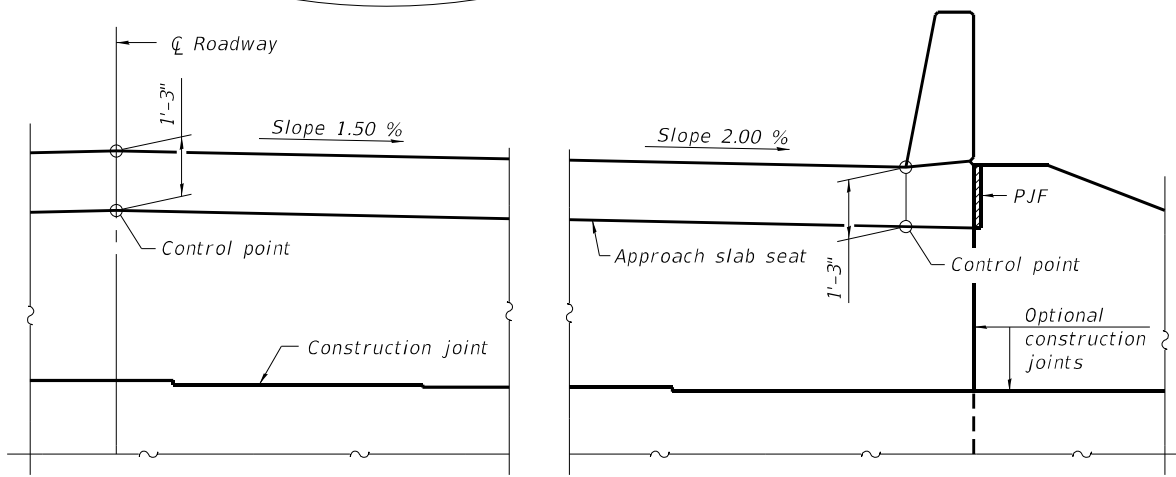
(at Rt. L's)



PLAN AT ABUTMENT

(Showing bottom flange of beam)

Notes:
See sheet 12 of 32 for superstructure details and Bill of Material.
Reinforcement bars in diaphragm are billed with superstructure on sheet 12 of 32.
Concrete in diaphragm is included with Concrete Superstructure on sheet 12 of 32.
See sheet 15 of 32 for PJF details.
The s10(E) and s11(E) bars shall be placed parallel to the beams.
Spacing for these bars shall be at right angles to the beams.
The approach slab seat shall have a constant slope determined from the control points shown.



VIEW B-B

HRG PROJECT NO.: 2022110
HRG PROJ. CONTACT:
FILE NAME: 0460160-66H54-04-Diaphragm.dgn
PLOT DRIVER: IL_Pdf.plt
PEN TABLE: plotlabel.tbl



| | | |
|-----------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - SLS | REVISED - |
| PLOT SCALE = | CHECKED - AEU | REVISED - |
| PLOT DATE = 12/6/2021 | DRAWN - WJH | REVISED - |
| | CHECKED - AEU | REVISED - |

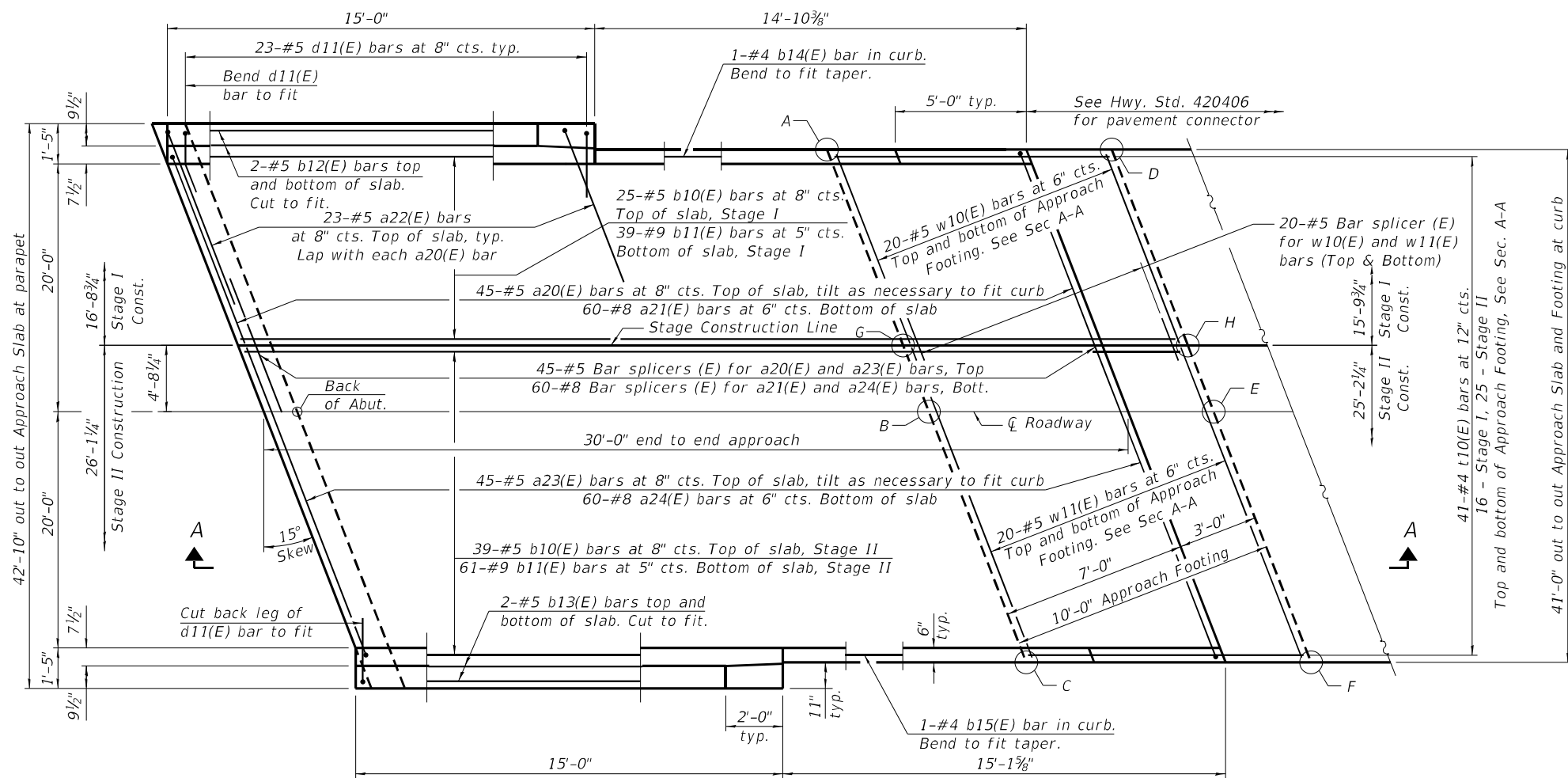
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DIAPHRAGM DETAILS
STRUCTURE NO. 046-0160**

SHEET NO. 14 OF 32 SHEETS

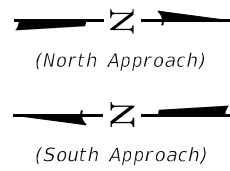
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 34 |
| CONTRACT NO. 66H54 | | | | |

ILLINOIS FED. AID PROJECT



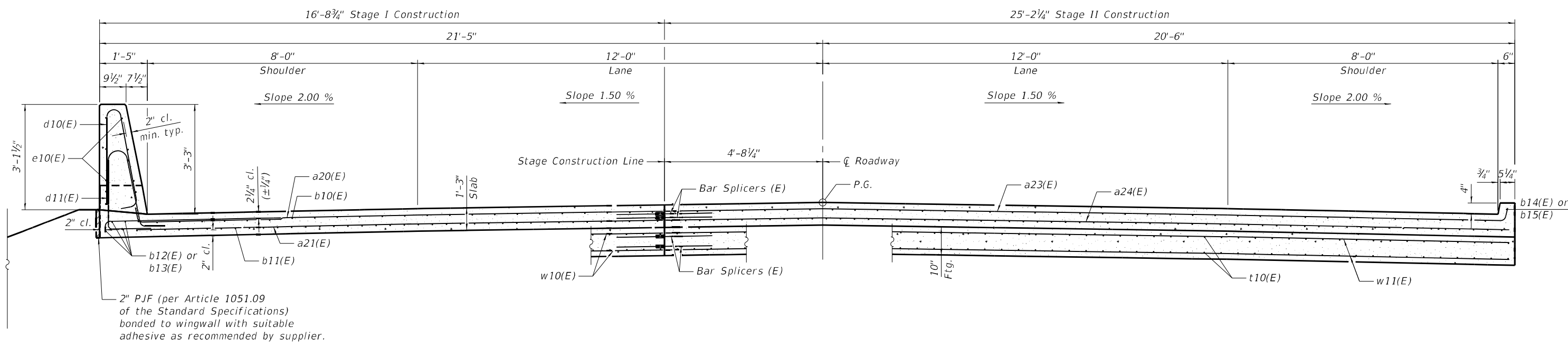
PLAN

North Approach shown, South Approach similar



TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

| Point | South Approach | | North Approach | |
|-------|----------------|--------|----------------|--------|
| | Top | Bottom | Top | Bottom |
| A | 661.60 | 660.76 | 661.63 | 660.80 |
| B | 661.98 | 661.15 | 661.94 | 661.11 |
| C | 661.67 | 660.83 | 661.55 | 660.72 |
| D | 661.52 | 660.69 | 661.56 | 660.72 |
| E | 661.91 | 661.08 | 661.87 | 661.03 |
| F | 661.60 | 660.77 | 661.47 | 660.64 |
| G | 661.62 | 660.79 | 661.60 | 660.77 |
| H | 661.55 | 660.72 | 661.53 | 660.69 |



NEAR ABUTMENT

CROSS SECTION
(Looking North)

AT APPROACH FOOTING

HRC PROJECT NO.: 2022110
 HRC PROJ. CONTACT:
 FILE NAME: 0460160-66164-015-Br-Appr-Slab.dgn
 PLOT DRIVER: IL_Pdf.dwg.plt
 PEN TABLE: plotlabel.tbl



| | | |
|-----------------------|----------------|-----------|
| USER NAME = jrotbu | DESIGNED - SLS | REVISED - |
| | CHECKED - AEU | REVISED - |
| PLOT SCALE = | DRAWN - WJH | REVISED - |
| PLOT DATE = 12/6/2021 | CHECKED - AEU | REVISED - |

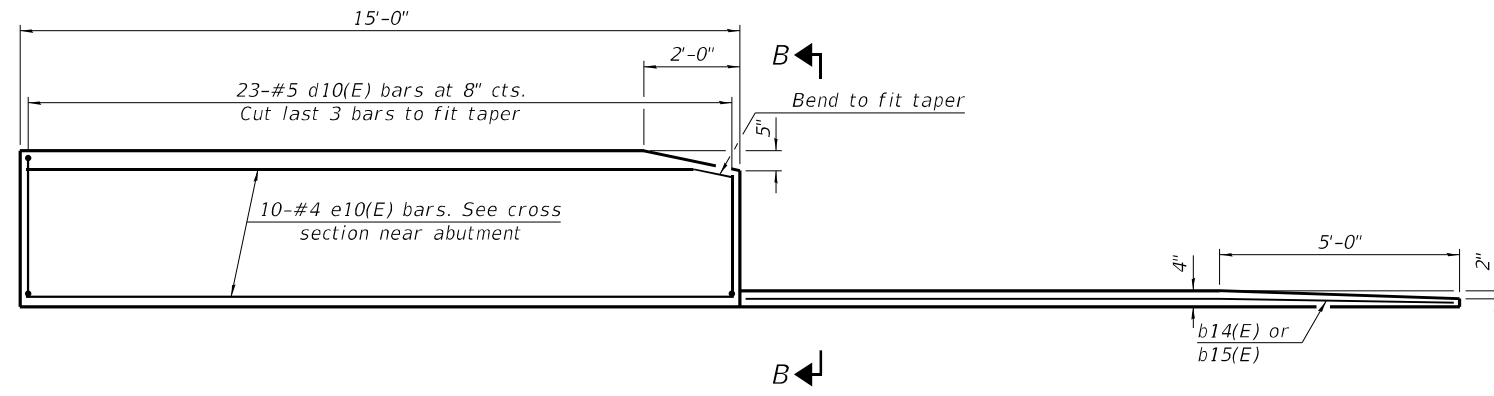
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 046-0160

SHEET NO. 15 OF 32 SHEETS

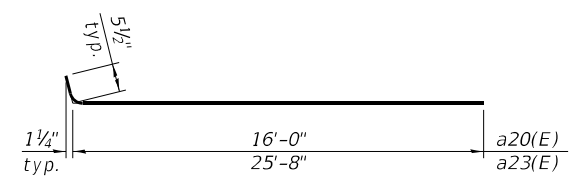
| | | | | |
|--------------------|--------------------|-----------------|---------------------------|--------------|
| F.A.P. RTE. 330 | SECTION (16BR-1)BR | COUNTY KANKAKEE | TOTAL SHEETS 64 | SHEET NO. 35 |
| CONTRACT NO. 66H54 | | | ILLINOIS FED. AID PROJECT | |

(Sheet 1 of 2)

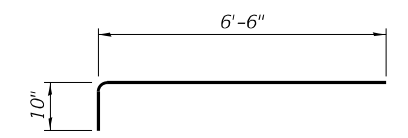


INSIDE ELEVATION OF PARAPET AND CURB

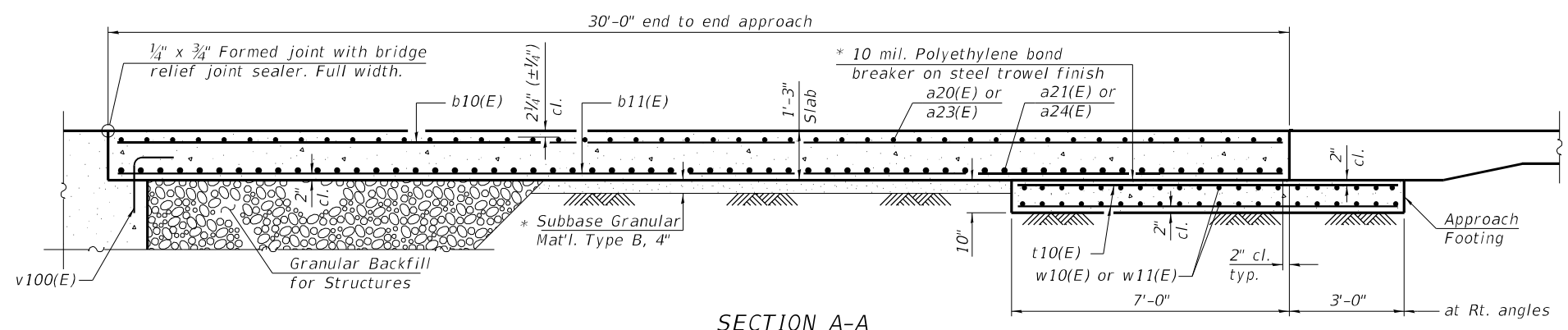
Notes:
 Parapet concrete shall be paid for as Concrete Superstructure.
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
 Approach footing concrete shall be paid for as Concrete Structures.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 32.



BAR a20(E), a23(E)



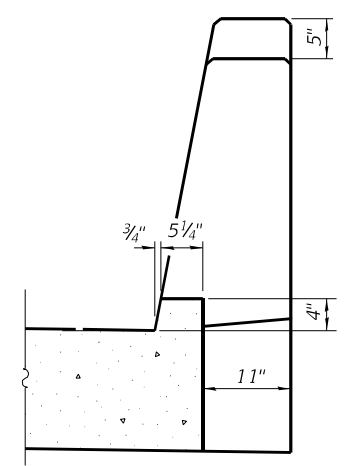
BAR a22(E)



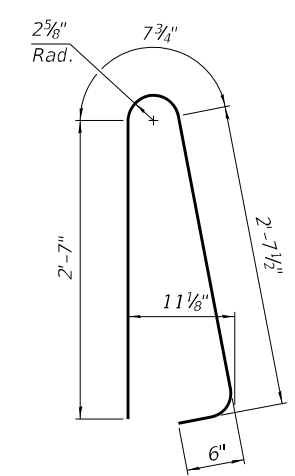
SECTION A-A

TWO APPROACHES
 BILL OF MATERIAL

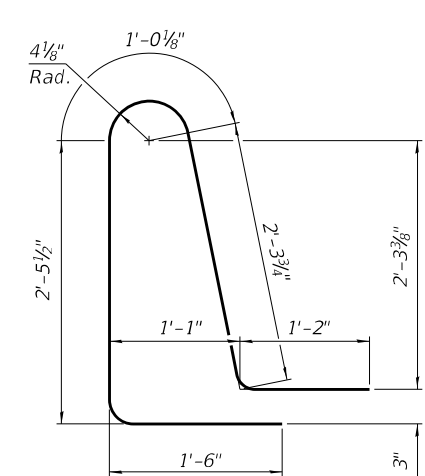
| Bar | No. | Size | Length | Shape |
|---|-----|------|----------|--------|
| a20(E) | 90 | #5 | 16'- 6" | ┌───┐ |
| a21(E) | 120 | #8 | 16'- 2" | ─── |
| a22(E) | 92 | #5 | 7'- 4" | ┌───┐ |
| a23(E) | 90 | #5 | 26'- 2" | ┌───┐ |
| a24(E) | 120 | #8 | 25'- 10" | ─── |
| b10(E) | 128 | #5 | 29'- 8" | ─── |
| b11(E) | 200 | #9 | 29'- 8" | ─── |
| b12(E) | 8 | #5 | 15'- 2" | ─── |
| b13(E) | 8 | #5 | 14'- 8" | ─── |
| b14(E) | 2 | #4 | 14'- 6" | ─── |
| b15(E) | 2 | #4 | 14'- 9" | ─── |
| d10(E) | 92 | #5 | 6'- 5" | ┌┐ |
| d11(E) | 92 | #5 | 8'- 6" | ┌┐ |
| e10(E) | 40 | #4 | 14'- 8" | ─── |
| t10(E) | 82 | #4 | 10'- 0" | ─── |
| w10(E) | 80 | #5 | 16'- 1" | ─── |
| w11(E) | 80 | #5 | 25'- 9" | ─── |
| Concrete Structures | | | Cu. Yd. | 26.2 |
| Concrete Superstructure | | | Cu. Yd. | 7.8 |
| Concrete Superstructure (Approach Slab) | | | Cu. Yd. | 116.8 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 48,450 |



VIEW B-B



BAR d10(E)



BAR d11(E)

* Cost included with Concrete Superstructure (Approach Slab).

(Sheet 2 of 2)

HRG PROJECT NO.: 20202140
 HRG PROJ. CONTACT:
 FILE NAME: 0460160-66164-016-Br-Appr-Slab2.dgn
 PLOT DRIVER: il_def_bw.ctb
 PEN TABLE: plotlabel.tbl



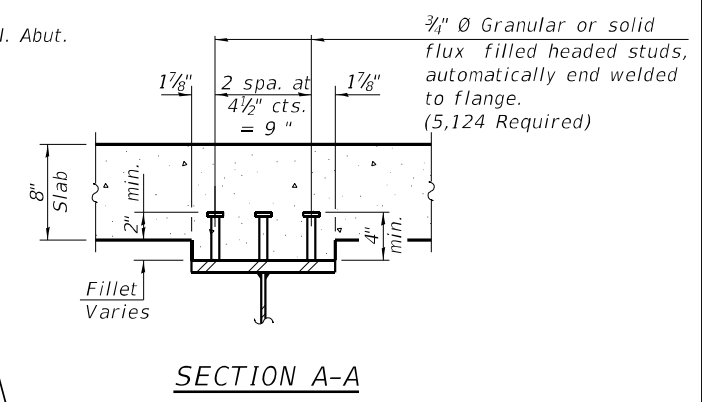
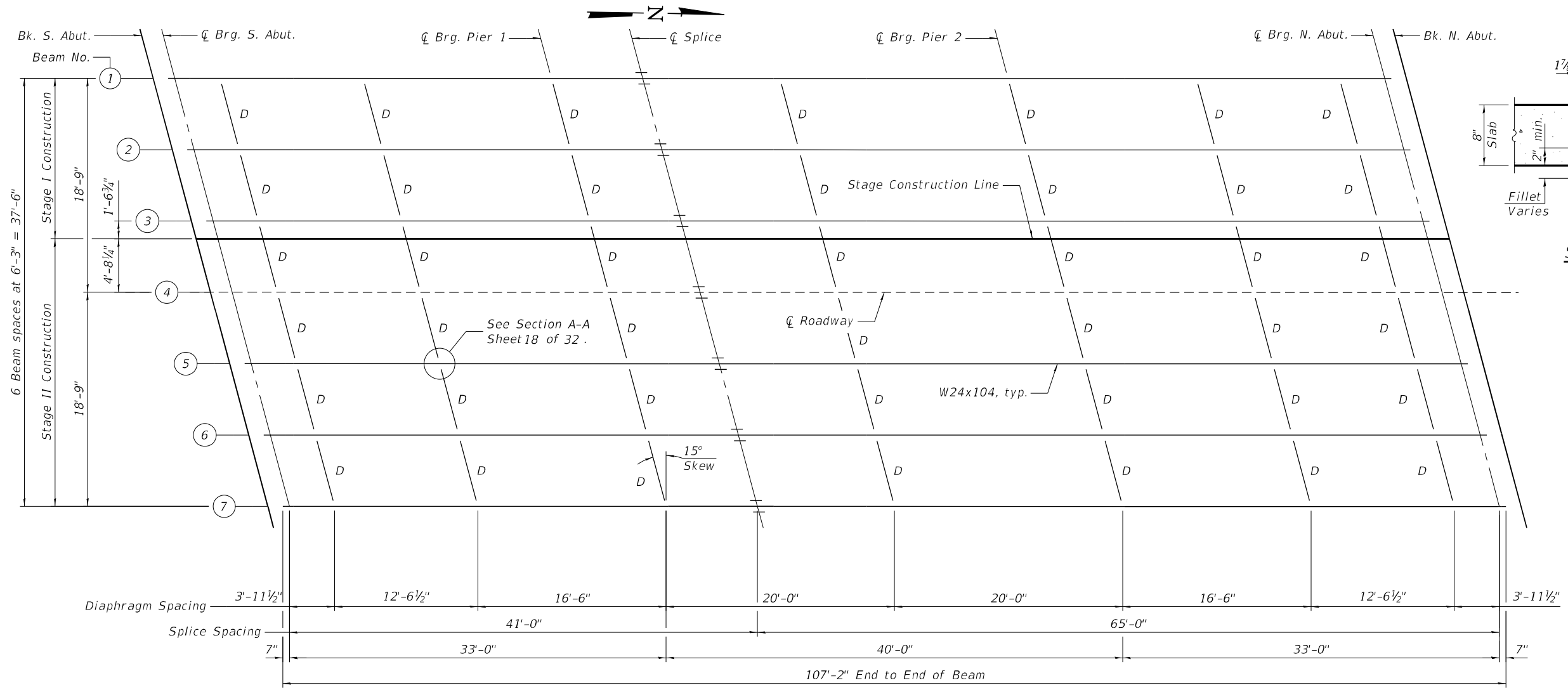
| | | |
|-----------------------|----------------|-----------|
| USER NAME = jrotbu | DESIGNED - SLS | REVISED - |
| PLOT SCALE = | CHECKED - AEU | REVISED - |
| PLOT DATE = 12/6/2021 | DRAWN - WJH | REVISED - |
| | CHECKED - AEU | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 046-0160

SHEET NO. 16 OF 32 SHEETS

| | | | | |
|--------------------|--------------------|-----------------|---------------------------|--------------|
| F.A.P. RTE. 330 | SECTION (16BR-1)BR | COUNTY KANKAKEE | TOTAL SHEETS 64 | SHEET NO. 36 |
| CONTRACT NO. 66H54 | | | ILLINOIS FED. AID PROJECT | |

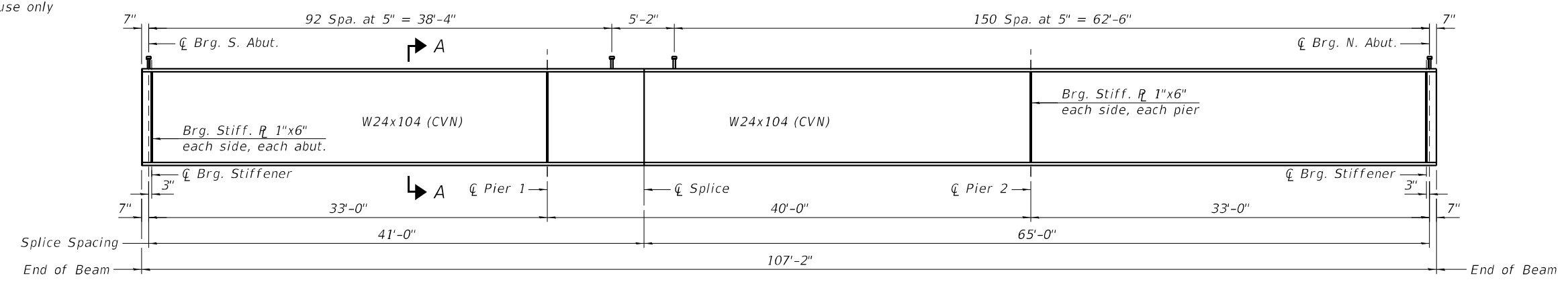


***TOP OF BEAM ELEVATIONS (FOR INFORMATION ONLY)**

| Location | Ctr. Brg. S.Abut. | Ctr. Brg. Pier 1 | Ctr. Splice | Ctr. Brg. Pier 2 | Ctr. Brg. N.Abut. |
|----------|-------------------|------------------|-------------|------------------|-------------------|
| Beam 1 | 662.30 | 662.36 | 662.35 | 662.39 | 662.32 |
| Beam 2 | 662.44 | 662.48 | 662.48 | 662.51 | 662.44 |
| Beam 3 | 662.54 | 662.59 | 662.58 | 662.60 | 662.53 |
| Beam 4 | 662.64 | 662.68 | 662.68 | 662.69 | 662.62 |
| Beam 5 | 662.56 | 662.59 | 662.59 | 662.60 | 662.51 |
| Beam 6 | 662.47 | 662.49 | 662.49 | 662.49 | 662.41 |
| Beam 7 | 662.35 | 662.48 | 662.36 | 662.37 | 662.27 |

- Notes:
- All new beams and bearing stiffeners shall be AASHTO M270 Grade 50.
 - All diaphragms shall be installed as steel is erected and secure with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
 - Load carrying components designated "CVN" shall conform to the Charpy-V-Notch Impact Energy Requirements, Zone 2.

* For fabrication use only



BEAM ELEVATION

HRC PROJECT NO.: 2022/10
 HRC PROJ. CONTACT:
 FILE NAME: 046/016-66H54-01-Framing.dgn
 PLOT DRIVER: IL_Pdf.dwg, p1.ctb
 PEN TABLE: plotlabel.tbl

HRGreen.com
 Illinois Professional Design Firm
 #184-001322

| | | |
|-----------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - SLS | REVISED - |
| PLOT SCALE = | CHECKED - AEU | REVISED - |
| PLOT DATE = 12/6/2021 | DRAWN - WJH | REVISED - |
| | CHECKED - AEU | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 046-0160
 SHEET NO. 17 OF 32 SHEETS

| | | | | |
|--------------------|--------------------|-----------------|---------------------------|--------------|
| F.A.P. RTE. 330 | SECTION (16BR-1)BR | COUNTY KANKAKEE | TOTAL SHEETS 64 | SHEET NO. 37 |
| CONTRACT NO. 66H54 | | | ILLINOIS FED. AID PROJECT | |

| INTERIOR GIRDER MOMENT TABLE | | | | |
|--|--------------------|---------------------------|-------|-----------|
| | | 0.4 Sp. 1 or 0.6 Sp. 3 | Piers | 0.5 Sp. 2 |
| <i>I_s</i> | (in ⁴) | 3100 | 3100 | 3100 |
| <i>I_c(n)</i> | (in ⁴) | 9291 | ----- | 9291 |
| <i>I_c(3n)</i> | (in ⁴) | 6978 | ----- | 6978 |
| <i>I_c(cr)</i> | (in ⁴) | ----- | 4420 | ----- |
| <i>S_s</i> | (in ³) | 258 | 258 | 258 |
| <i>S_c(n)</i> | (in ³) | 391 | ----- | 391 |
| <i>S_c(3n)</i> | (in ³) | 355 | ----- | 355 |
| <i>S_c(cr)</i> | (in ³) | ----- | 300 | ----- |
| <i>DC1</i> | (k/') | 0.755 | 0.755 | 0.755 |
| <i>MDC1</i> | (k) | 58 | 100 | 51 |
| <i>DC2</i> | (k/') | 0.150 | 0.150 | 0.150 |
| <i>MDC2</i> | (k) | 12 | 20 | 10 |
| <i>DW</i> | (k/') | 0.313 | 0.313 | 0.313 |
| <i>MDW</i> | (k) | 24 | 42 | 21 |
| <i>LLDF</i> | | 0.644 | 0.632 | 0.623 |
| <i>M_l + iM</i> | (k) | 302 | 339 | 297 |
| <i>M_u (Strength I)</i> | (k) | 652 | 806 | 628 |
| <i>ØfMn</i> | (k) | 1942 | 1541 | 1942 |
| <i>f_s DC1</i> | (ksi) | 2.7 | 4.7 | 2.4 |
| <i>f_s DC2</i> | (ksi) | 0.4 | 0.8 | 0.3 |
| <i>f_s DW</i> | (ksi) | 0.8 | 1.7 | 0.7 |
| <i>f_s (l+IM)</i> | (ksi) | 9.3 | 13.6 | 9.1 |
| <i>f_s (Service II)</i> | (ksi) | 16.0 | 24.8 | 15.3 |
| <i>0.95RhFyf</i> | (ksi) | 47.50 | 47.50 | 47.50 |
| <i>f_s (Total)(Strength I)</i> | (ksi) | ----- | ----- | ----- |
| <i>Øf F_n</i> | (ksi) | ----- | ----- | ----- |
| <i>Vf</i> | (k) | 43 | 47 | 43 |

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing *f_s*(Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).

I_c(n), S_c(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing *f_s*(Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in.⁴ and in.³).

I_c(3n), S_c(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing *f_s*(Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

I_c(cr), S_c(cr): Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing *f_s* (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.⁴ and in.³).

DC1: Un-factored non-composite dead load (kips/ft.).

MDC1: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_l + iM: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).

$1.25 (MDC1 + MDC2) + 1.5 MDW + 1.75 M_{l} + iM$

Øf Mn: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).

$MDC1 / S_{nc}$

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).

$MDC2 / S_{c(3n)}$ or $MDC2 / S_{c(cr)}$ as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).

$MDW / S_{c(3n)}$ or $MDW / S_{c(cr)}$ as applicable.

f_s (l+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).

$M_{l} + iM / S_{c(n)}$ or $M_{l} + iM / S_{c(cr)}$ as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).

$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_{s(l+IM)}$

0.95RhFyf: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

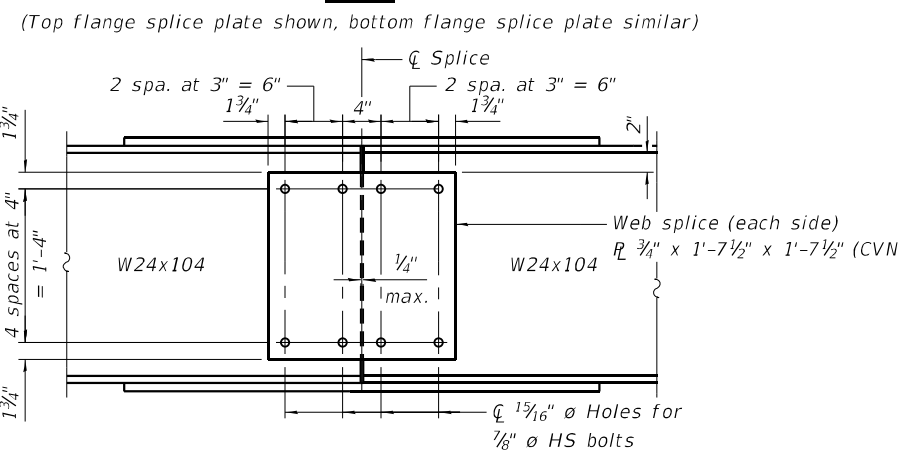
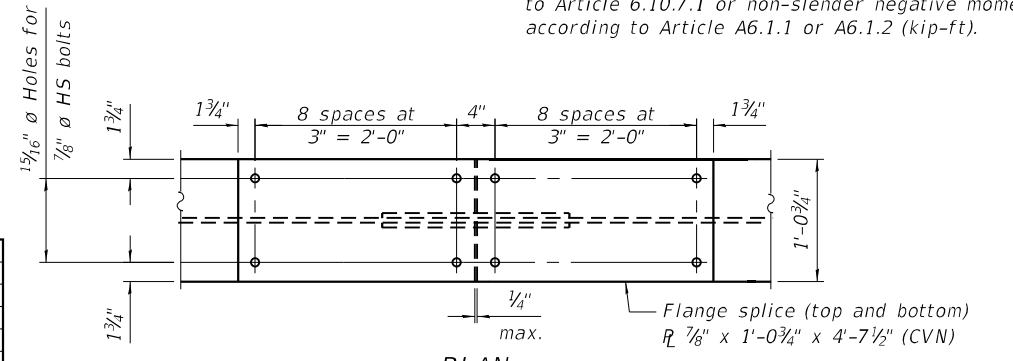
f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).

$1.25 (f_{sDC1} + f_{sDC2}) + 1.5 f_{sDW} + 1.75 f_{s(l+IM)}$

Øf F_n: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

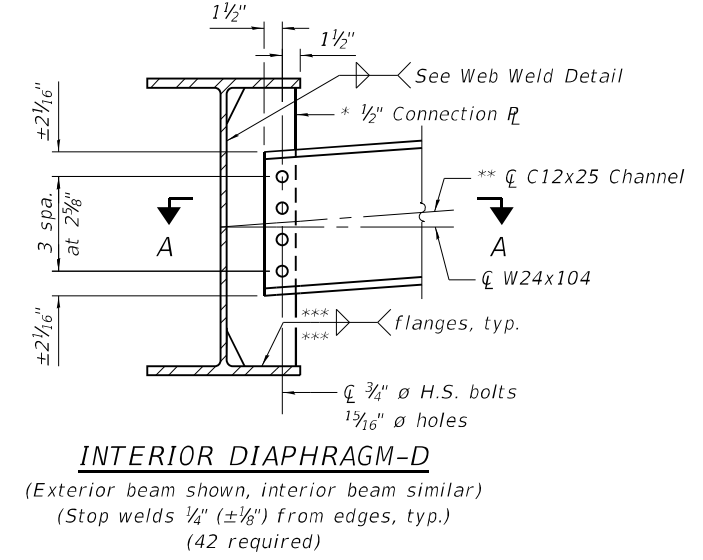
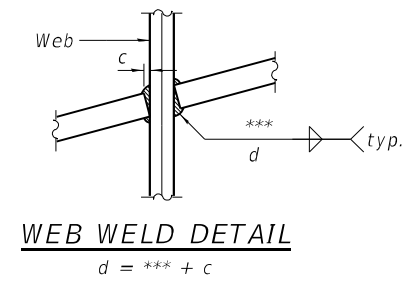
Vf: Maximum factored shear range in span computed according to Article 6.10.10.

| GIRDER REACTION TABLE | | | | | |
|--------------------------|-----|----------|----------|----------|----------|
| | | Abut. | | Pier | |
| | | Interior | Exterior | Interior | Exterior |
| <i>LLDF</i> | | 0.689 | ----- | 0.689 | ----- |
| <i>OCF</i> | | ----- | 1.05 | ----- | ----- |
| <i>R_{DC1}</i> | (k) | 10.2 | ----- | 30.6 | ----- |
| <i>R_{DC2}</i> | (k) | 1.9 | ----- | 6.1 | ----- |
| <i>R_{DW}</i> | (k) | 3.9 | ----- | 12.7 | ----- |
| <i>R_{LL}</i> | (k) | 42.2 | ----- | 63.6 | ----- |
| <i>R_{im}</i> | (k) | 11.6 | ----- | 14.7 | ----- |
| <i>R_{total}</i> | (k) | 69.8 | ----- | 127.7 | ----- |



Splice Notes:

- All splices are symmetrical about \bar{C} splice.
- H.S. bolts shall be ASTM F3125, Grade A325, Type 1.
- Load carrying components designated "CVN" shall conform to the Charpy-V-Notch Impact Energy Requirements, Zone 2.
- All plates composing the splices shall be AASHTO M270, Grade 50.



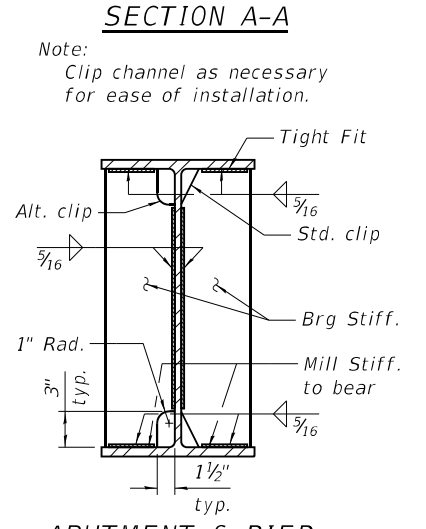
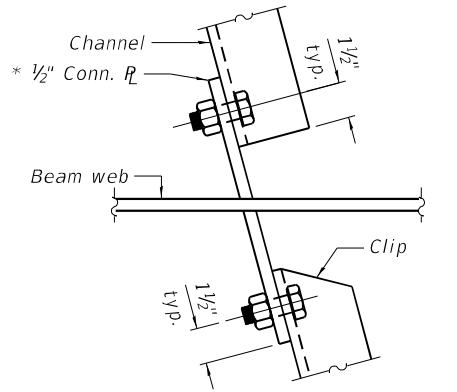
Diaphragm Notes:

- H.S. bolts shall be ASTM F3125, Grade A325, Type 1.
- Two hardened washers required for each set of oversized holes.

*** 1" Bearing stiffener plate each side of web at piers in lieu of connection plate shown.**

**** Alternate channels of equal depth and larger weight are permitted to facilitate material acquisition. Alternate channels, if utilized, shall be provided at no additional cost to the Department.**

***** 1/4 for connection plate and 5/16 for bearing stiffener.**



ABUTMENT & PIER BEARING STIFFENER

Only Bearing Stiffeners at piers shall be placed along the skew

(Stop welds 1/4" (± 1/8") from edges as shown, typical)

HRG PROJECT NO.: 2022/10
 HRG PROJ. CONTACT:
 FILE NAME: 046016-66H54-018-StrSteel.dgn
 PLOT DRIVER: IL_Pdf.dwg, bw, p1c, fg
 PEN TABLE: plotlabel.tbl



| | | |
|-----------------------|----------------|-----------|
| USER NAME = aunderw | DESIGNED - SLS | REVISED - |
| PLOT SCALE = | CHECKED - AEU | REVISED - |
| PLOT DATE = 1/26/2022 | DRAWN - WJH | REVISED - |
| | CHECKED - AEU | REVISED - |

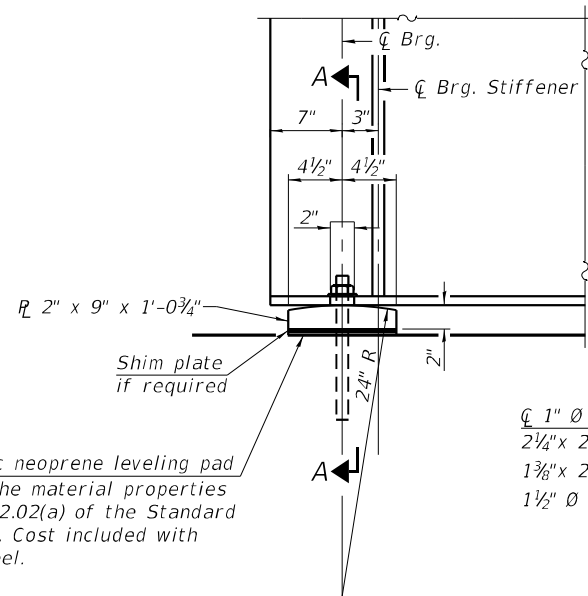
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL STEEL DETAILS
STRUCTURE NO. 046-0160**

SHEET NO. 18 OF 32 SHEETS

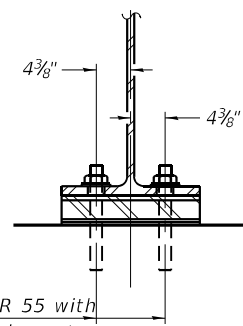
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 38 |
| CONTRACT NO. 66H54 | | | | |

ILLINOIS FED. AID PROJECT



ELEVATION AT ABUTMENT

1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Structural Steel.

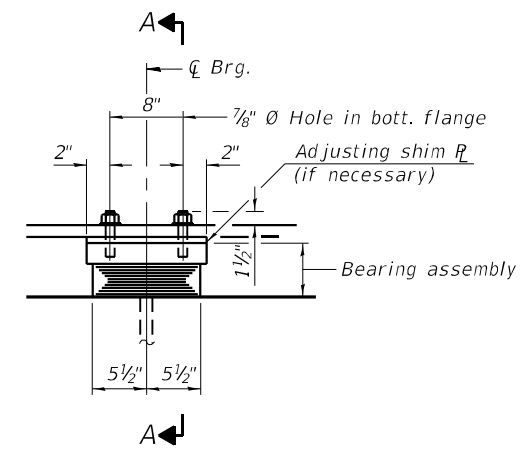


SECTION A-A

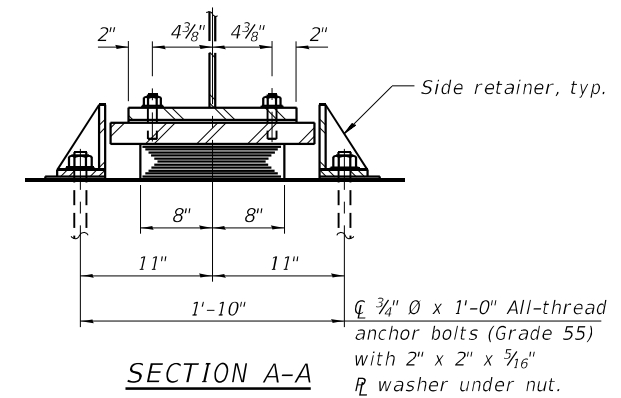
1" \varnothing x 12" anchor bolts GR 55 with 2 1/4" x 2 1/4" x 3/16" R washer under nut. 1 3/8" x 2" slotted hole in flange. 1 1/2" \varnothing holes in bearing plate.

FIXED BEARING

(14 Required)



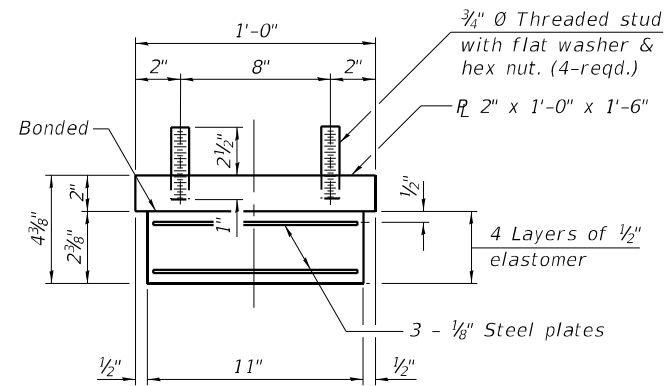
ELEVATION AT PIER



SECTION A-A

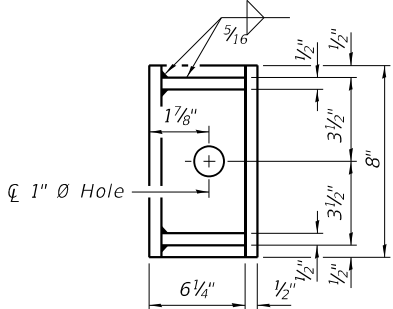
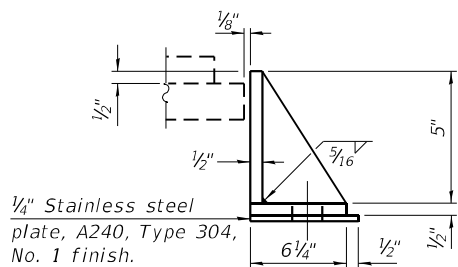
TYPE I ELASTOMERIC EXP. BRG.

(14 Required)



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under bearing assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:
Anchor bolts shall be according to Article 521.06 of the Standard Specifications.
Side retainers and stainless steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.
Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on Bearing Details.
The structural steel plates of the bearing assembly shall conform to the requirements of AASHTO M270 Grade 50.

BILL OF MATERIAL

| Item | Unit | Total |
|-------------------------------------|------|-------|
| Elastomeric Bearing Assembly Type I | Each | 14 |
| Anchor Bolts, 3/4" | Each | 28 |
| Anchor Bolts, 1" | Each | 28 |

HRG PROJECT NO.: 2022110
HRG PROJ. CONTACT:
FILE NAME: 0460160-66H54-019-BR-0101.dgn
PLOT DRIVER: IL_Pdf.dwg, p1.ctb
PEN TABLE: plotlabel.tbl



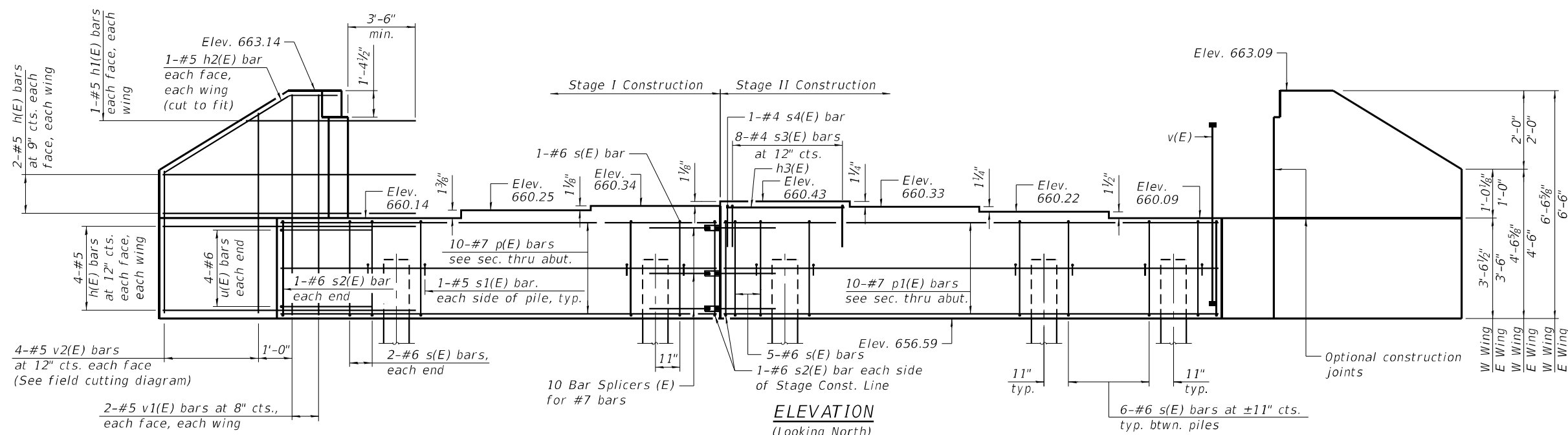
| | | |
|-----------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - SLS | REVISED - |
| PLOT SCALE = | CHECKED - AEU | REVISED - |
| PLOT DATE = 12/6/2021 | DRAWN - WJH | REVISED - |
| | CHECKED - AEU | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

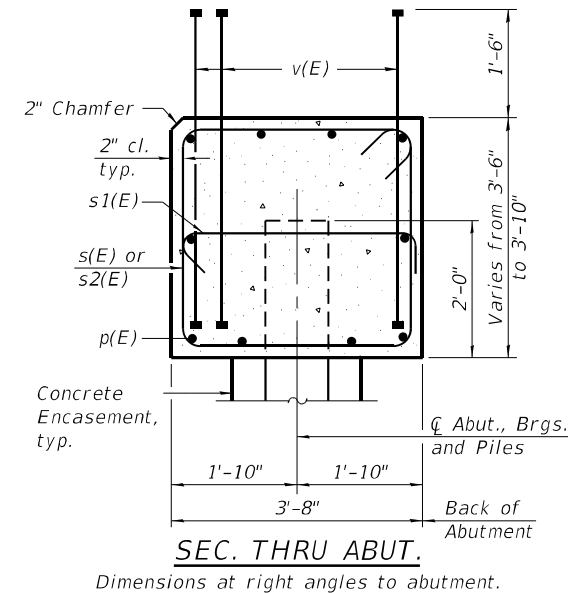
**BEARING DETAILS
STRUCTURE NO. 046-0160**

SHEET NO. 19 OF 32 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 39 |
| CONTRACT NO. 66H54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



ELEVATION
(Looking North)



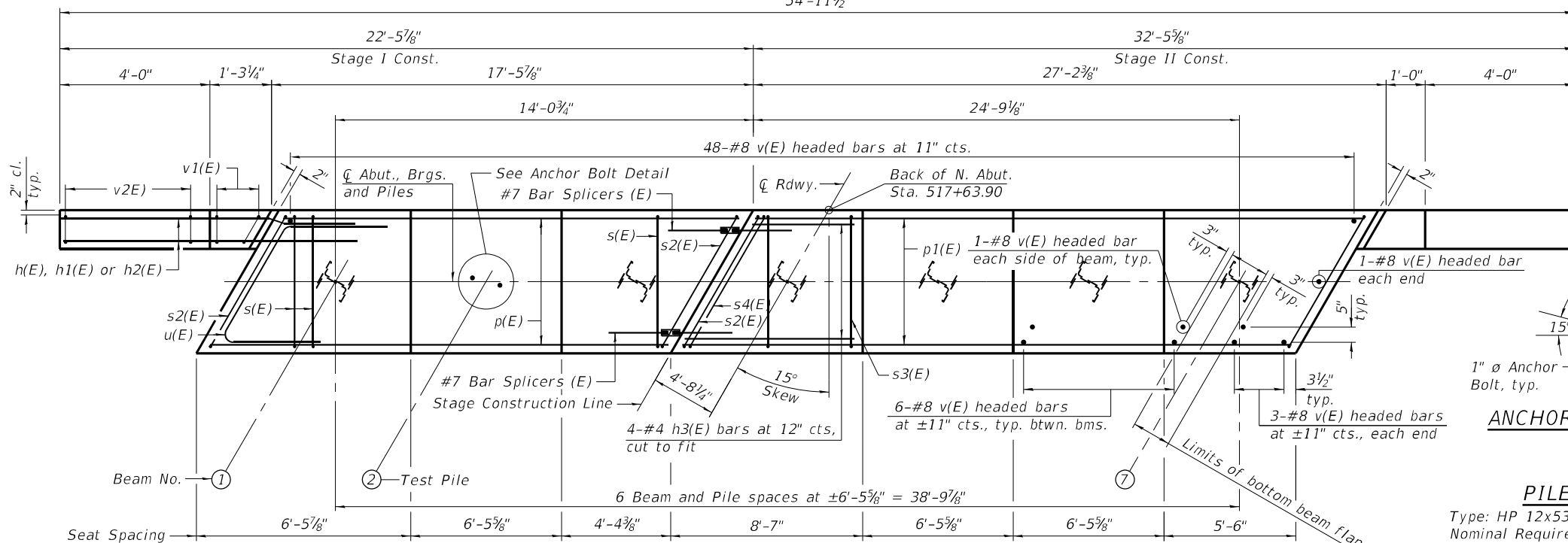
SEC. THRU ABUT.

Dimensions at right angles to abutment.

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|---------|----------|-------|
| h(E) | 24 | #5 | 8'- 10" | — |
| h1(E) | 4 | #5 | 7'- 8" | — |
| h2(E) | 4 | #5 | 5'- 5" | — |
| h3(E) | 4 | #4 | 8'- 3" | — |
| p(E) | 10 | #7 | 17'- 0" | — |
| p1(E) | 10 | #7 | 26'- 9" | — |
| s(E) | 40 | #6 | 14'- 4" | □ |
| s1(E) | 14 | #5 | 4'- 4" | ┌ |
| s2(E) | 4 | #6 | 14'- 6" | □ |
| s3(E) | 8 | #4 | 5'- 4" | ┌ |
| s4(E) | 1 | #4 | 5'- 5" | ┌ |
| u(E) | 8 | #6 | 11'- 11" | ┌ |
| v(E) | 106 | #8 | 4'- 8" | — |
| v1(E) | 8 | #5 | 6'- 2" | — |
| v2(E) | 8 | #5 | 9'- 10" | — |
| Structure Excavation | | Cu. Yd. | 85 | |
| Concrete Structures | | Cu. Yd. | 24.4 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 3,830 | |
| Furnishing Steel Piles HP 12X53 | | Foot | 102 | |
| Driving Piles | | Foot | 102 | |
| Test Pile Steel HP 12X53 | | Each | 1 | |
| Pile Shoes | | Each | 7 | |

Notes:
 Pour steps monolithically with cap.
 Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
 For details of piles see sheet 25 of 32.



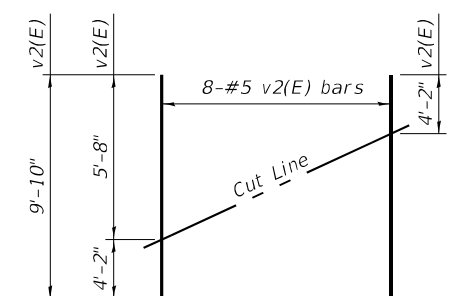
PLAN

ANCHOR BOLT DETAIL

1" ø Anchor Bolt, typ.

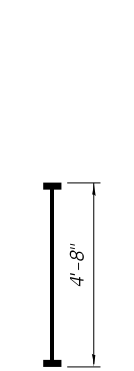
PILE DATA

Type: HP 12x53 with pile shoes
 Nominal Required Bearing: 392k
 Factored Resistance Available: 215k
 Est. Length: 17'
 No. Production Piles: 6
 No. Test Piles: 1

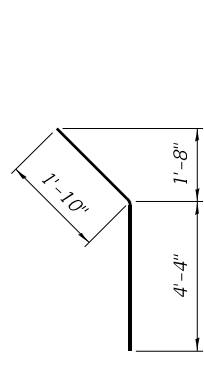


FIELD CUTTING DIAGRAM

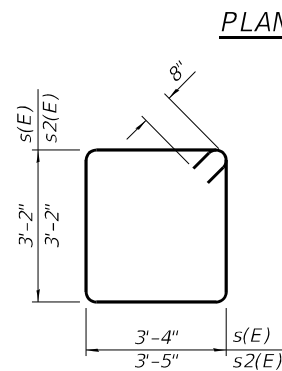
Order v2(E) full length. Cut as shown and use remainder of v2(E) bars in opposite wing.



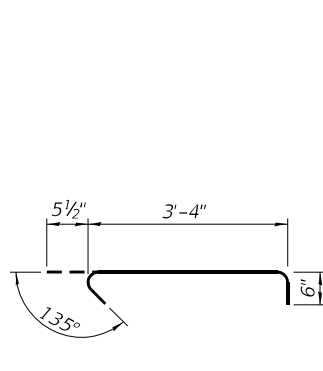
BAR v(E)
(Headed)



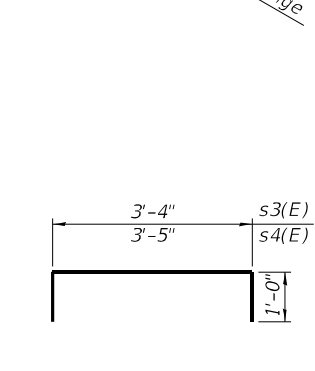
BAR h2(E)



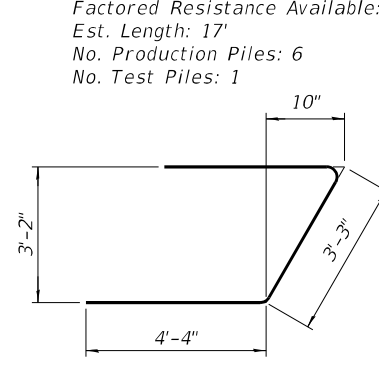
BAR s(E) & s2(E)



BAR s1(E)



BAR s3(E) & s4(E)



BAR u(E)

HRG PROJECT NO.: 2020210
 HRG PROJ. CONTACT:
 FILE NAME: 046016-66H54-021-Nabut.dgn
 PLOT DRIVER: IL_Pdf.dwg
 PEN TABLE: plotlabel.tbl



USER NAME = jroibu
 DESIGNED - SLS
 CHECKED - AEU
 PLOT SCALE =
 DRAWN - WJH
 CHECKED - AEU
 PLOT DATE = 12/6/2021

DESIGNED - SLS
 CHECKED - AEU
 DRAWN - WJH
 CHECKED - AEU

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT
STRUCTURE NO. 046-0160

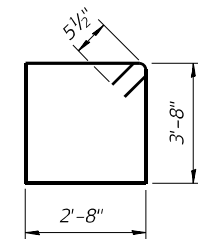
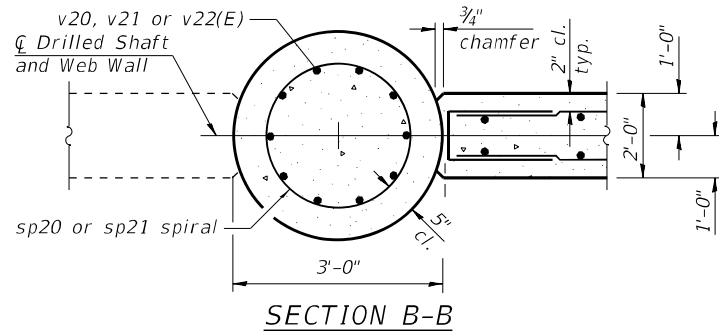
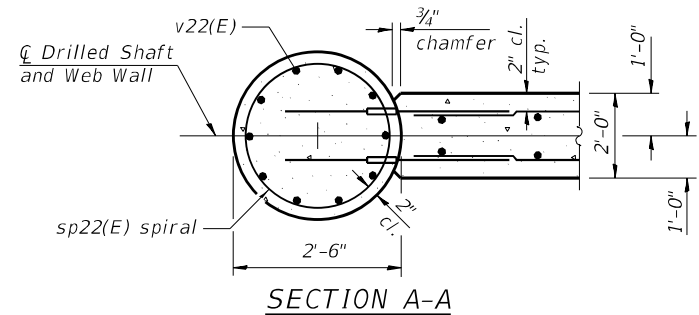
SHEET NO. 21 OF 32 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 41 |

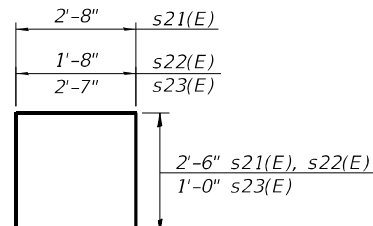
CONTRACT NO. 66H54
 ILLINOIS FED. AID PROJECT

**PIER 1
BILL OF MATERIAL**

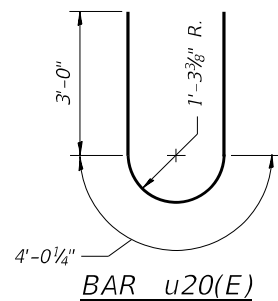
| Bar | No. | Size | Length | Shape |
|---|---------|------|------------|-------|
| h20(E) | 4 | #7 | 15'- 9" | — |
| h21(E) | 4 | #7 | 25'- 6" | — |
| h22(E) | 40 | #5 | 6'- 0" | — |
| h23(E) | 16 | #5 | 5'- 5" | — |
| h24(E) | 4 | #4 | 7'- 9" | — |
| p20(E) | 5 | #7 | 15'- 9" | — |
| p21(E) | 5 | #7 | 25'- 6" | — |
| p22(E) | 5 | #7 | 13'- 2" | — |
| p23(E) | 5 | #7 | 22'- 11" | — |
| p24(E) | 10 | #6 | 3'- 11" | — |
| s20(E) | 50 | #5 | 13'- 7" | □ |
| s21(E) | 16 | #5 | 7'- 8" | ┌ |
| s22(E) | 16 | #5 | 6'- 8" | ┌ |
| s23(E) | 8 | #4 | 4'- 7" | ┌ |
| sp20 | 2 | #4 | 18'- 5" | ⋈ |
| sp21 | 3 | #4 | 16'- 5" | ⋈ |
| sp22(E) | 5 | #4 | 3'- 9" | ⋈ |
| u20(E) | 8 | #6 | 10'-0 1/4" | U |
| v20 | 20 | #9 | 18'- 5" | — |
| v21 | 30 | #9 | 16'- 5" | — |
| v22(E) | 50 | #8 | 11'- 6" | — |
| v23(E) | 48 | #5 | 5'- 10" | — |
| Concrete Structures | Cu. Yd. | | 32.7 | |
| Reinforcement Bars | Pound | | 3,780 | |
| Reinforcement Bars, Epoxy Coated | Pound | | 4,800 | |
| Structure Excavation | Cu. Yd. | | 7.0 | |
| Drilled Shaft in Soil | Cu. Yd. | | 2.1 | |
| Drilled Shaft in Rock | Cu. Yd. | | 14.2 | |
| Thermal Integrity Profile Testing | Each | | 5 | |
| Thermal Integrity Profile Data Collection | Foot | | 86 | |



BAR s20(E)



**BARS s21(E),
s22(E) & s23(E)**



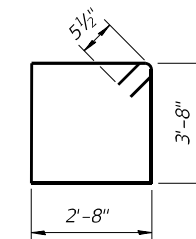
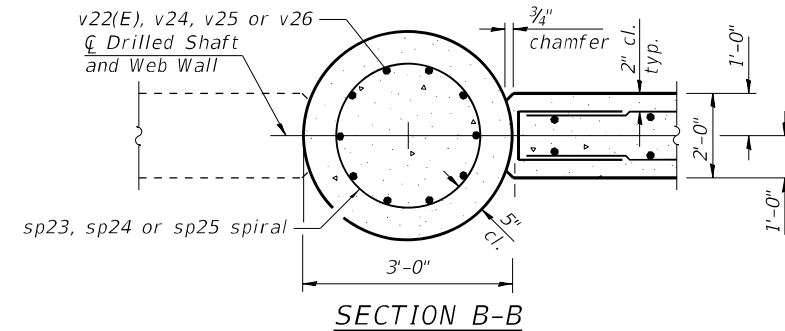
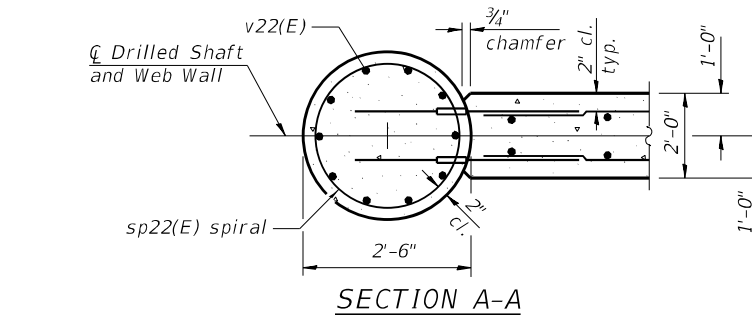
BAR u20(E)

Construction Sequence for Web Wall:

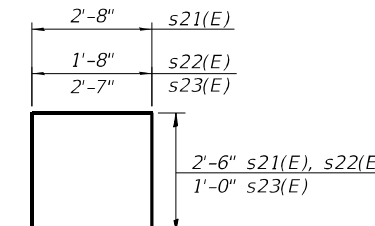
- Excavate between shafts to elevation of web wall base and set lower web wall forms through water to bear on the circular edge of drilled shafts. Secure in place with fill, struts or tie forms together as required.
- Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
- If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
- Construct Columns.
- Construct upper web walls.

**PIER 2
BILL OF MATERIAL**

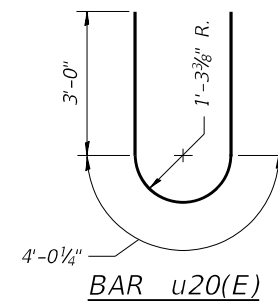
| Bar | No. | Size | Length | Shape |
|---|---------|------|------------|-------|
| h20(E) | 4 | #7 | 15'- 9" | — |
| h21(E) | 4 | #7 | 25'- 6" | — |
| h22(E) | 40 | #5 | 6'- 0" | — |
| h23(E) | 16 | #5 | 5'- 5" | — |
| h24(E) | 4 | #4 | 7'- 9" | — |
| p20(E) | 5 | #7 | 15'- 9" | — |
| p21(E) | 5 | #7 | 25'- 6" | — |
| p22(E) | 5 | #7 | 13'- 2" | — |
| p23(E) | 5 | #7 | 22'- 11" | — |
| p24(E) | 10 | #6 | 3'- 11" | — |
| s20(E) | 50 | #5 | 13'- 7" | □ |
| s21(E) | 16 | #5 | 7'- 8" | ┌ |
| s22(E) | 16 | #5 | 6'- 8" | ┌ |
| s23(E) | 8 | #4 | 4'- 7" | ┌ |
| sp22(E) | 5 | #4 | 3'- 9" | ⋈ |
| sp23 | 2 | #4 | 29'- 5" | ⋈ |
| sp24 | 1 | #4 | 22'- 5" | ⋈ |
| sp25 | 2 | #4 | 12'- 5" | ⋈ |
| u20(E) | 8 | #6 | 10'-0 1/4" | U |
| v22(E) | 50 | #8 | 11'- 6" | — |
| v23(E) | 48 | #5 | 5'- 10" | — |
| v24 | 20 | #9 | 29'- 5" | — |
| v25 | 10 | #9 | 22'- 5" | — |
| v26 | 20 | #9 | 12'- 5" | — |
| Concrete Structures | Cu. Yd. | | 32.7 | |
| Reinforcement Bars | Pound | | 4,640 | |
| Reinforcement Bars, Epoxy Coated | Pound | | 4,780 | |
| Structure Excavation | Cu. Yd. | | 7.0 | |
| Drilled Shaft in Soil | Cu. Yd. | | 2.1 | |
| Drilled Shaft in Rock | Cu. Yd. | | 17.8 | |
| Thermal Integrity Profile Testing | Each | | 5 | |
| Thermal Integrity Profile Data Collection | Foot | | 106 | |



BAR s20(E)



**BARS s21(E),
s22(E) & s23(E)**



BAR u20(E)

Cast steps monolithically with cap.
Space cap reinforcement to miss anchor bolts.
Minimum lap for spirals = 1 1/2 turns
** Length is height of spiral.

HRG PROJECT NO.: 2022110
HRG PROJ. CONTACT:
FILE NAME: 0460160-66H54-024-Pier-Details.dgn
PLOT DRIVER: IL_Pdf.dwg, p1cfg
PEN TABLE: plotlabel.tbl



| | |
|--------------|-----------|
| USER NAME = | jroibu |
| DESIGNED - | SLS |
| CHECKED - | AEU |
| PLOT SCALE = | |
| DRAWN - | WJH |
| CHECKED - | AEU |
| PLOT DATE = | 12/6/2021 |
| REVISIED - | |
| REVISIED - | |
| REVISIED - | |
| REVISIED - | |

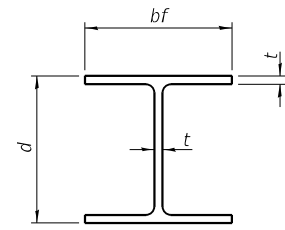
| | |
|------------|-----|
| DESIGNED - | SLS |
| CHECKED - | AEU |
| DRAWN - | WJH |
| CHECKED - | AEU |
| REVISIED - | |
| REVISIED - | |
| REVISIED - | |
| REVISIED - | |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER 1 AND PIER 2 DETAILS
STRUCTURE NO. 046-0160**

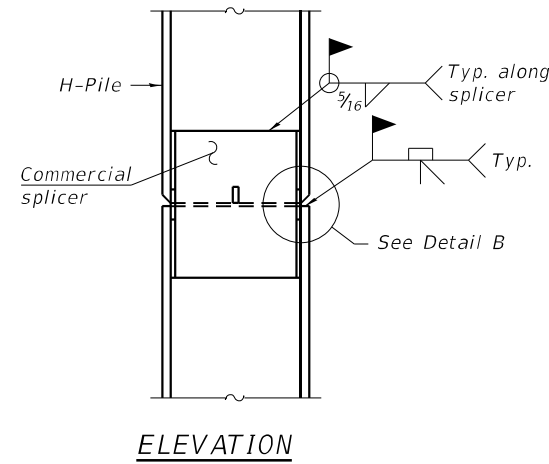
SHEET NO. 24 OF 32 SHEETS

| | | | | |
|---------------------------|------------|----------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 330 | (16BR-1)BR | KANKAKEE | 64 | 44 |
| | | | CONTRACT NO. 66H54 | |
| ILLINOIS FED. AID PROJECT | | | | |

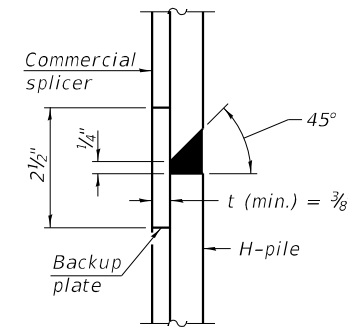


STEEL PILE TABLE

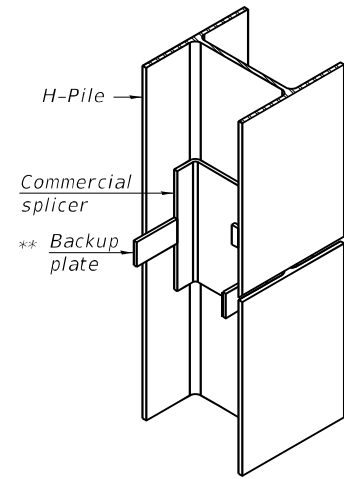
| Designation | Depth d | Flange width bf | Web and Flange thickness t | Encasement diameter A |
|-------------|---------|-----------------|----------------------------|-----------------------|
| HP 14x117 | 14 1/4" | 14 7/8" | 1 3/16" | 30" |
| x102 | 14" | 14 3/4" | 1 1/16" | 30" |
| x89 | 13 3/8" | 14 3/4" | 5/8" | 30" |
| x73 | 13 3/8" | 14 3/8" | 1/2" | 30" |
| HP 12x84 | 12 1/2" | 12 1/4" | 1 1/16" | 24" |
| x74 | 12 1/8" | 12 1/4" | 5/8" | 24" |
| x63 | 12" | 12 1/8" | 1/2" | 24" |
| x53 | 11 3/4" | 12" | 7/16" | 24" |
| HP 10x57 | 10" | 10 1/4" | 9/16" | 24" |
| x42 | 9 3/4" | 10 1/8" | 7/16" | 24" |
| HP 8x36 | 8" | 8 1/8" | 7/16" | 18" |



ELEVATION

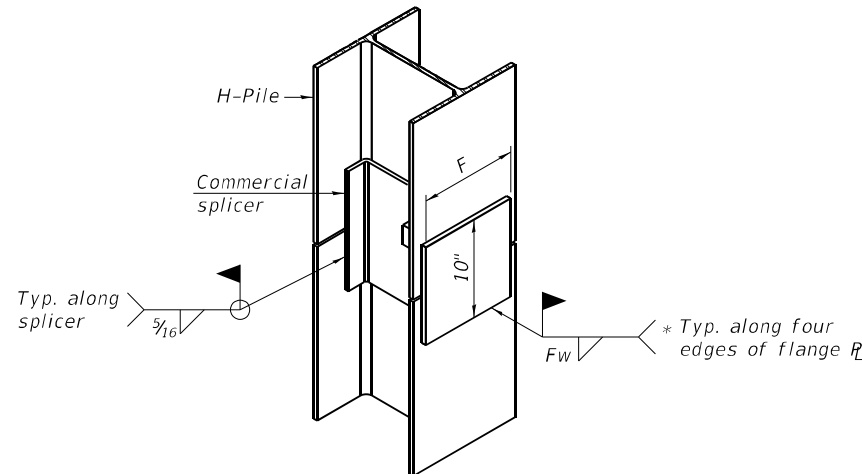


DETAIL "B"



ISOMETRIC VIEW

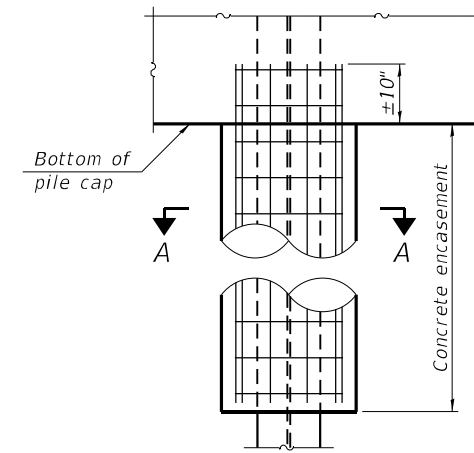
WELDED COMMERCIAL SPLICE



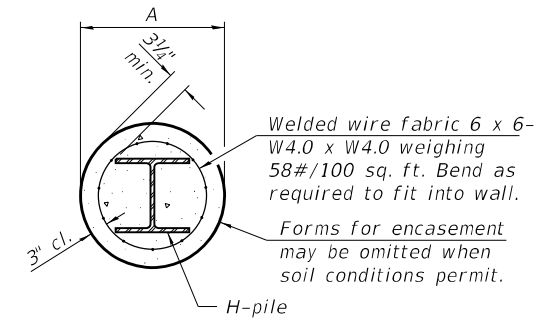
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).

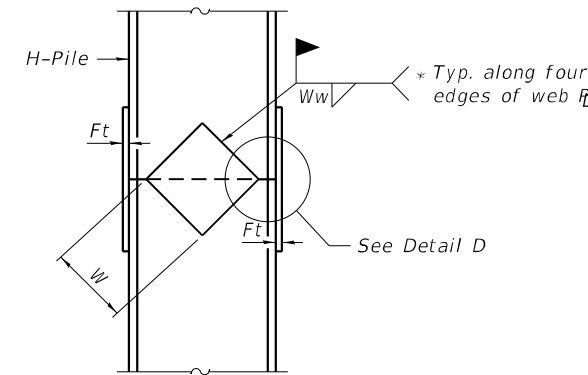


ELEVATION

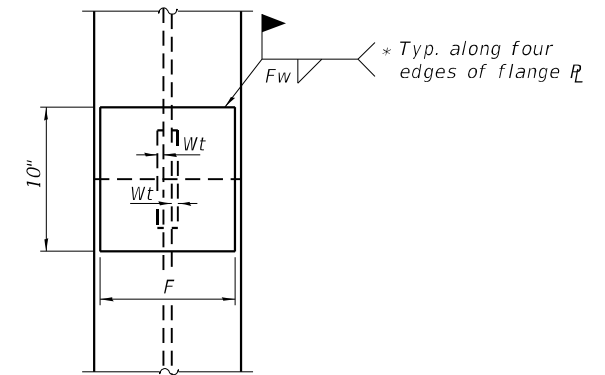


SECTION A-A

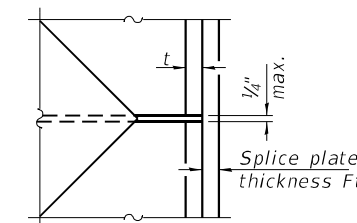
INDIVIDUAL PILE CONCRETE ENCASUREMENT (when specified)



ELEVATION



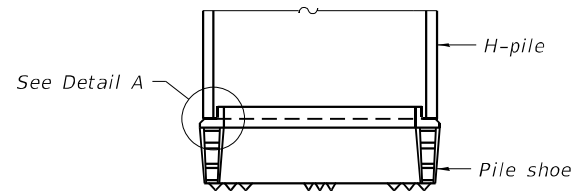
END VIEW



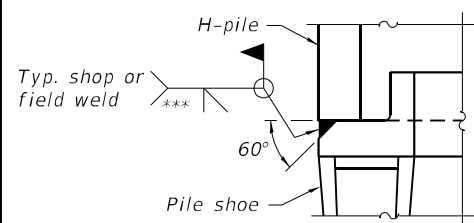
DETAIL D

WELDED PLATE FIELD SPLICE

| Designation | F | Ft | Fw | W | Wt | Ww |
|-------------|---------|------|---------|--------|------|------|
| HP 14x117 | 12 1/2" | 1" | 7/8" | 7 3/4" | 5/8" | 1/2" |
| x102 | 12 1/2" | 7/8" | 3/4" | 7 3/4" | 5/8" | 1/2" |
| x89 | 12 1/2" | 3/4" | 1 1/16" | 7 3/4" | 5/8" | 1/2" |
| x73 | 12 1/2" | 5/8" | 9/16" | 7 3/4" | 5/8" | 1/2" |
| HP 12x84 | 10" | 7/8" | 1 1/16" | 6 1/2" | 5/8" | 1/2" |
| x74 | 10" | 7/8" | 1 1/16" | 6 1/2" | 5/8" | 1/2" |
| x63 | 10" | 5/8" | 1/2" | 6 1/2" | 1/2" | 3/8" |
| x53 | 10" | 5/8" | 1/2" | 6 1/2" | 1/2" | 3/8" |
| HP 10x57 | 8" | 3/4" | 9/16" | 5 1/4" | 1/2" | 3/8" |
| x42 | 8" | 5/8" | 9/16" | 5 1/4" | 1/2" | 3/8" |
| HP 8x36 | 7" | 5/8" | 7/16" | 4 1/4" | 1/2" | 3/8" |



ELEVATION



DETAIL A

SHOE ATTACHMENT

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

HRC PROJECT NO.: 2020210
 HRC PROJ. CONTACT:
 FILE NAME: 0460160-66164-025-HPile.dgn
 PLOT DRIVER: IL_Pdf.plt
 PEN TABLE: plotlabel.tbl

F-HP 1-1-2020



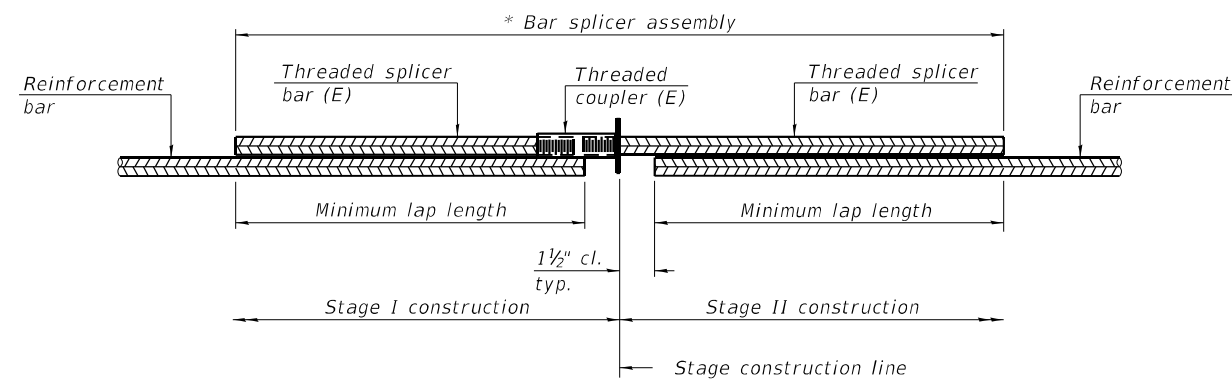
| | | |
|-----------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - SLS | REVISED - |
| PLOT SCALE = | CHECKED - AEU | REVISED - |
| PLOT DATE = 12/6/2021 | DRAWN - WJH | REVISED - |
| | CHECKED - AEU | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**HP PILE DETAILS
STRUCTURE NO. 046-0160**

SHEET NO. 25 OF 32 SHEETS

| | | | | |
|---------------------------|--------------------|-----------------|--------------------|--------------|
| F.A.P. RTE. 330 | SECTION (16BR-1)BR | COUNTY KANKAKEE | TOTAL SHEETS 64 | SHEET NO. 45 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 66H54 | |

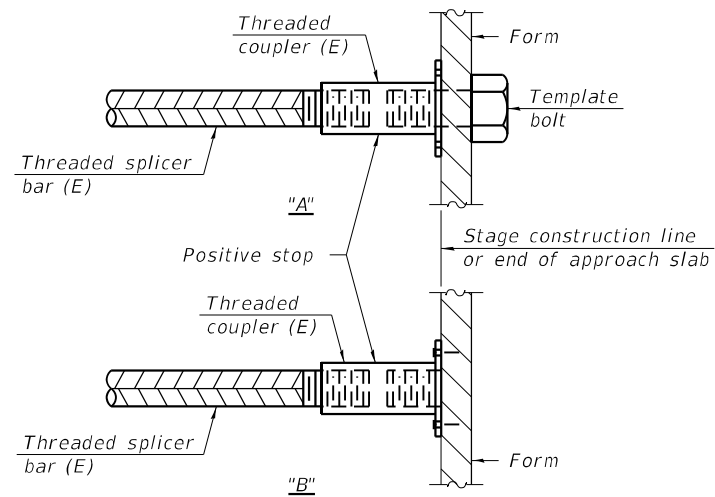


STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

| Location | Bar size | No. assemblies required | Minimum lap length |
|-------------------------|----------|-------------------------|--------------------|
| Deck | #5 | 325 | 3'-6" |
| Approach Slab (Top) | #5 | 90 | 3'-6" |
| Approach Slab (Bottom) | #8 | 120 | 4'-9" |
| Approach Slab (Footing) | #5 | 80 | 3'-6" |
| Abutment Diaphragms | #6 | 14 | 3'-7" |
| Abutments | #7 | 20 | 4'-8" |
| Pier Cap | #7 | 28 | 4'-8" |
| Pier Web Wall | #5 | 160 | 3'-6" |

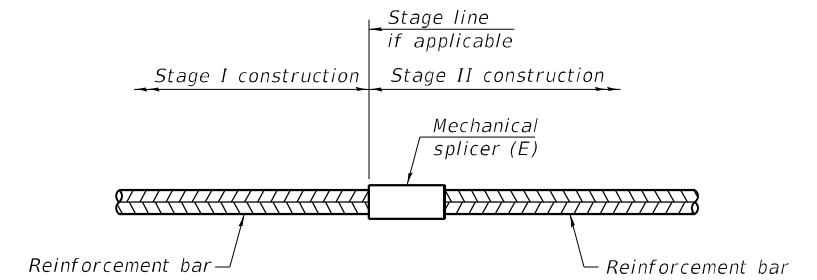


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

| Location | Bar size | No. assemblies required |
|----------|----------|-------------------------|
| | | |
| | | |
| | | |
| | | |

Notes:

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

HRC PROJECT NO.: 2022110
 HRC PROJ. CONTACT:
 FILE NAME: 0460160-66H54-026-Bar-Splicer.dgn
 PLOT DRIVER: il_def_bw.ctb
 PEN TABLE: plotlabel.tbl



| | | |
|-----------------------|----------------|----------|
| USER NAME = jralibu | DESIGNED - SLS | REVISD - |
| | CHECKED - AEU | REVISD - |
| PLOT SCALE = | DRAWN - WJH | REVISD - |
| PLOT DATE = 12/6/2021 | CHECKED - AEU | REVISD - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 046-0160

SHEET NO. 26 OF 32 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|----------|---------------------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 46 |
| CONTRACT NO. 66H54 | | | ILLINOIS FED. AID PROJECT | |

ROCK CORE LOG

Date 4/5/21

ROUTE FAP 330 (US 45/52) DESCRIPTION US 45/52 over North Branch of Rock Creek, 1.5 miles North of Manteno Road LOGGED BY J.I.

SECTION (16BR-1)ES LOCATION NE 1/4 SEC. 7 TWP. 32N. RNG. 12E. 3rd PM
 LAT: 41.2718787 LONG: -87.8781165

COUNTY Kankakee CORING METHOD 10 foot double tube NX

STRUCT. NO. 046-0046 CORING BARREL TYPE & SIZE NX
 Station 517+09
 Core Diameter 2 in
 Top of Rock Elev. 639.35 ft
 BORING NO. RB-01 Begin Core Elev. 639.35 ft
 Station 517+26
 Offset 5LT
 Ground Surface Elev. 661.35 ft

| DESCRIPTION | DEPTH (ft) | CORE (#) | RECOVERY (%) | R.Q.D. (%) | CORE TIME (min/ft) | STRENGTH (tsf) |
|---|------------|----------|--------------|------------|--------------------|----------------|
| Gray LIMESTONE, poor, low field strength, aphanitic, thinly bedded, semi-smooth surfaces, vertical and horizontal fractures Depth 22½ feet: Moisture Content: 2%, Unit Weight: 164 pcf | 639.35 | 1 | 48 | 37 | | 1247.0 |
| Gray LIMESTONE, very poor, low field strength, highly factured, horizontal and oblique fractures, aphanitic, thinly bedded | 636.35 | 2 | 58 | 19 | | |
| Light gray LIMESTONE, fair, strong field strength, aphanitic, thinly bedded Depth 29 feet: Moisture Content: 2%, Unit Weight: 164 pcf | 633.35 | 3 | 68 | 68 | | 771.0 |
| Light gray LIMESTONE, excellent, strong field strength, aphanitic, thinly bedded | 631.35 | 4 | 100 | 97 | | |
| End of Boring | 623.35 | | | | | |

Color pictures of the cores Yes
 Cores will be stored for examination until N/A
 The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
 BBS, form 138 (Rev. 8-99)

ROCK CORE LOG

Date 4/6/21

ROUTE FAP 330 (US 45/52) DESCRIPTION US 45/52 over North Branch of Rock Creek, 1.5 miles North of Manteno Road LOGGED BY J.I.

SECTION (16BR-1)ES LOCATION NE 1/4 SEC. 7 TWP. 32N. RNG. 12E. 3rd PM
 LAT: 41.2717492 LONG: -87.8781122

COUNTY Kankakee CORING METHOD 10 foot double tube NX

STRUCT. NO. 046-0046 CORING BARREL TYPE & SIZE NX
 Station 517+09
 Core Diameter 2 in
 Top of Rock Elev. 646.83 ft
 BORING NO. RB-02 Begin Core Elev. 646.83 ft
 Station 516+79
 Offset 4.4LT
 Ground Surface Elev. 661.33 ft

| DESCRIPTION | DEPTH (ft) | CORE (#) | RECOVERY (%) | R.Q.D. (%) | CORE TIME (min/ft) | STRENGTH (tsf) |
|--|------------|----------|--------------|------------|--------------------|----------------|
| Gray SILTSTONE, highly weathered <i>Note: only 7 inches of recovery in RUN 1, approximately 4 inches of siltstone and 3 inches of limestone. Low recovery is most likely a result of siltstone washing away during rock core operations.</i> | 646.83 | 1 | 11 | 0 | | |
| Gray LIMESTONE, very poor, low field strength, highly weathred, aphanitic, thinly bedded <i>Drillers Note: Increased difficulty of core operations began at approximately 19 feet below existing grade. Assumed top of limestone bedrock at approximately 19 feet below existing grade.</i> | 642.33 | 2 | 66 | 23 | | |
| Gray LIMESTONE, very poor, vertical and horizontal fractures, weathered surfaces on fractured faces (brown in color) | 641.83 | 3 | 95 | 79 | | 1242.0 |
| Gray LIMESTONE, good, strong field strength, horizontal and oblique fractures, aphanitic, thinly bedded Depth 22¼ feet: Moisture Content: 2%, Unit Weight: 164 pcf | 639.33 | 4 | 98 | 73 | | 1209.0 |
| Gray LIMESTONE, fair, strong field strength, horizontal and oblique fractures, aphanitic, thinly bedded Depth 26¼ feet: Moisture Content: 3%, Unit Weight: 162 pcf | 635.33 | 5 | 85 | 28 | | |
| Gray LIMESTONE, poor, low field strength, highly fractured, some clay infills | 631.33 | | | | | |
| End of Boring | 627.33 | | | | | |

Color pictures of the cores Yes
 Cores will be stored for examination until N/A
 The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
 BBS, form 138 (Rev. 8-99)

HRC PROJECT NO.: 2020210
 HRC PROJ. CONTACT:
 FILE NAME: 0460160-66H54-03-RLog5.dgn
 PLOT DRIVER: il_def_bw.plt
 PEN TABLE: plotlabel.tbl



| | | |
|-----------------------|----------------|-----------|
| USER NAME = jralibu | DESIGNED - SLS | REVISED - |
| | CHECKED - AEU | REVISED - |
| PLOT SCALE = | DRAWN - WJH | REVISED - |
| PLOT DATE = 12/6/2021 | CHECKED - AEU | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ROCK CORE LOG
 STRUCTURE NO. 046-0160

SHEET NO. 31 OF 32 SHEETS

| | | | | |
|---------------------------|--------------------|-----------------|--------------------|--------------|
| F.A.P. RTE. 330 | SECTION (16BR-1)BR | COUNTY KANKAKEE | TOTAL SHEETS 64 | SHEET NO. 51 |
| | | | CONTRACT NO. 66H54 | |
| ILLINOIS FED. AID PROJECT | | | | |

ROCK CORE LOG

Date 4/7/21

ROUTE FAP 330 (US 45/52) DESCRIPTION US 45/52 over North Branch of Rock Creek, 1.5 miles North of Manteno Road LOGGED BY J.I.

SECTION (16BR-1)ES LOCATION NE 1/4 SEC. 7, TWP. 32N, RNG. 12E, 3rd PM
 COUNTY Kankakee CORING METHOD 10 foot double tube NX

STRUCT. NO. 046-0046 CORING BARREL TYPE & SIZE NX
 Station 517+09
 BORING NO. RB-03 Core Diameter 2 in
 Station 516+80 Top of Rock Elev. 643.33 ft
 Offset 16.9LT Begin Core Elev. 643.33 ft
 Ground Surface Elev. 661.33 ft

| Description | D E P T H (ft) | C O R E # | R E C O V E R Y (%) | R Q D · (%) | C O R E T I M E (min/ft) | S T R E N G T H (tsf) |
|--|-------------------------------|-----------------------|---|-------------------------|--|---|
| Gray SILT to SILTSTONE, soft, weathered, some gravel | 643.33 | 1 | 20 | 0 | | |
| | -20 | | | | | |
| | 638.33 | | | | | |
| Gray to blueish gray SILTSTONE, highly weathered, highly fractured, wavy bedding, large gravel sized clasts, some clay infills | | 2 | 93 | 13 | | |
| | -25 | | | | | |
| | 632.33 | | | | | |
| Gray to blueish gray SILTSTONE, highly weathered, highly fractured, wavy bedding, large gravel sized clasts, low recovery | | 3 | 58 | 14 | | |
| | -30 | | | | | |
| | 629.33 | | | | | |
| Gray LIMESTONE, very poor, low field strength, semi-smooth surfaces, horizontal and oblique fractures | | | | | | |
| | 627.33 | | | | | |
| End of Boring | | | | | | |
| | -35 | | | | | |

Color pictures of the cores Yes
 Cores will be stored for examination until N/A
 The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
 BBS, form 138 (Rev. 8-99)

HRC PROJECT NO.: 20202140
 HRC PROJ CONTACT:
 FILE NAME: 0460160-66H54-032-Rlog6.dgn
 PLOT DRIVER: il_def_bw.plt
 PEN TABLE: plotlabel.tbl



| | | | |
|-----------------------|----------------|-----------|--|
| USER NAME = jralbu | DESIGNED - SLS | REVISED - | |
| | CHECKED - AEU | REVISED - | |
| PLOT SCALE = | DRAWN - WJH | REVISED - | |
| PLOT DATE = 12/6/2021 | CHECKED - AEU | REVISED - | |

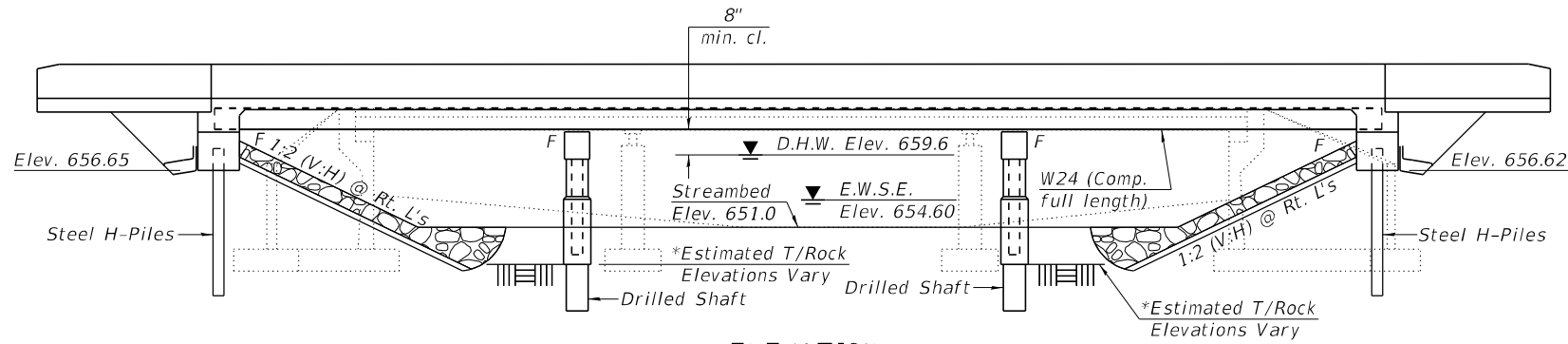
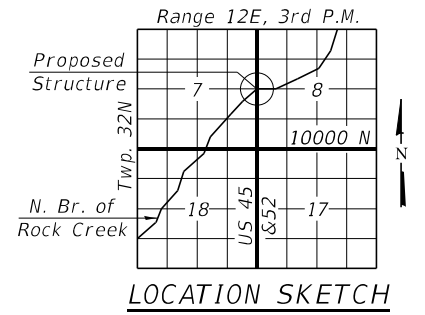
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ROCK CORE LOG
 STRUCTURE NO. 046-0160**

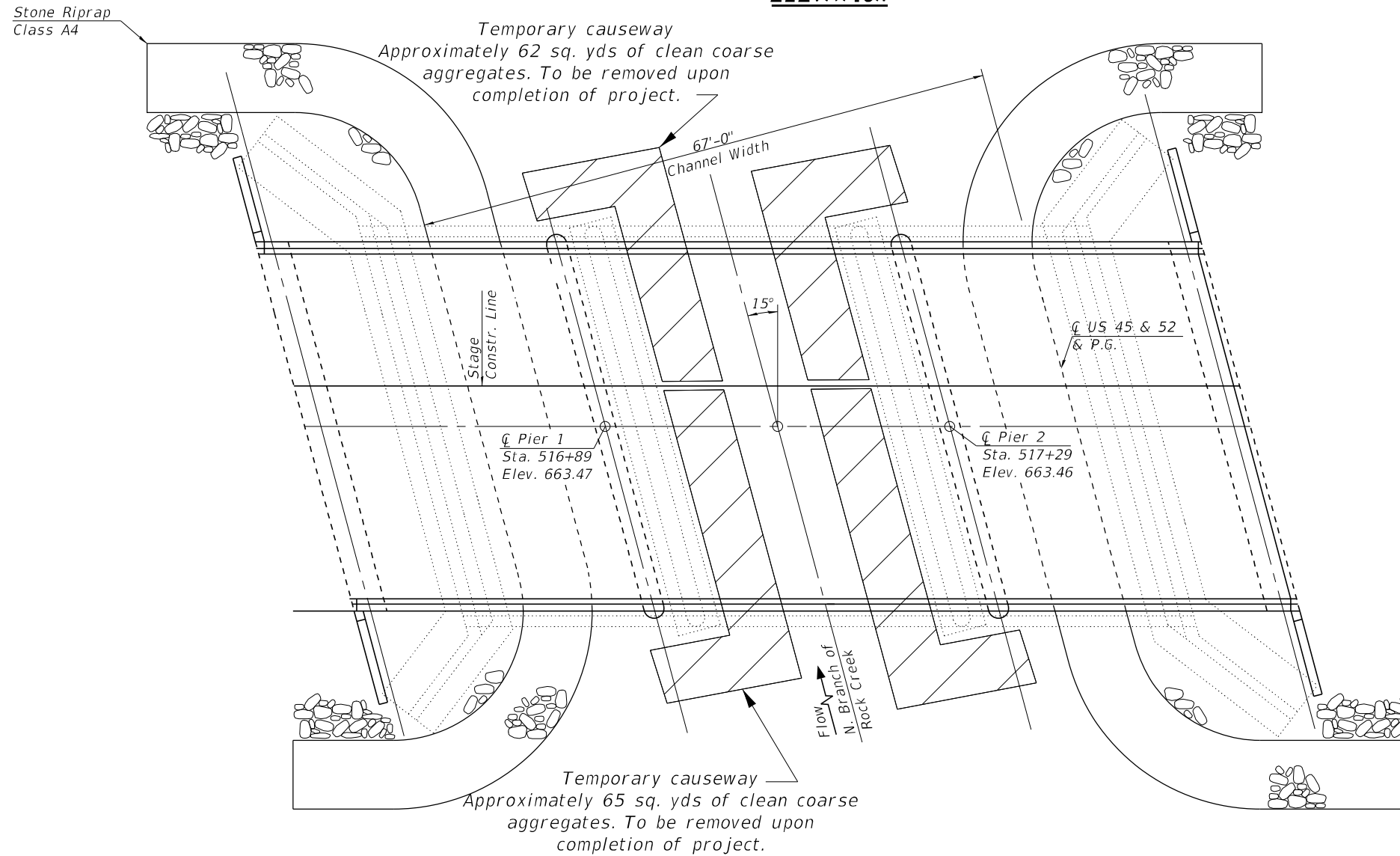
SHEET NO. 32 OF 32 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|----------|--------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 52 |
| CONTRACT NO. 66H54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

EXHIBIT



ELEVATION



PLAN

Not to Scale

GENERAL PLAN AND ELEVATION
US 45 & 52 OVER
NORTH BRANCH OF ROCK CREEK
F.A.P. RTE. 330 - SEC. 16 BR-1
KANKAKEE COUNTY
STATION 517+09.00
EXISTING STRUCTURE NO. 046-0046
PROPOSED STRUCTURE NO. 046-0160

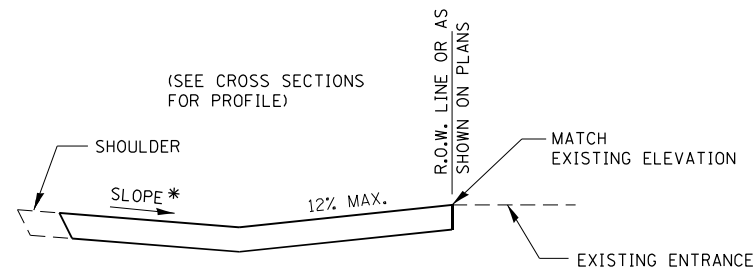
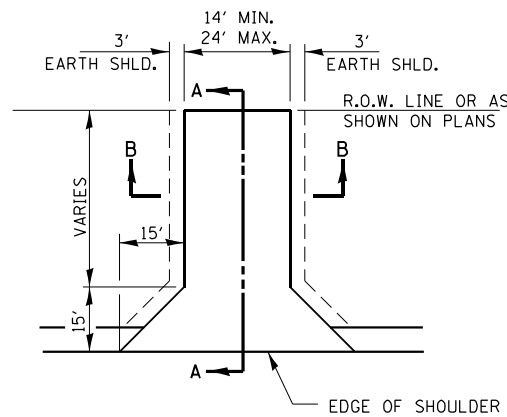
MODEL:
FILE NAME:

| | | |
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| USER NAME = | DESIGNED - | REVISED - |
| CHECKED - | CHECKED - | REVISED - |
| PLOT SCALE = | DRAWN - | REVISED - |
| PLOT DATE = | CHECKED - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CAUSEWAY PLAN
FOR INFORMATION ONLY

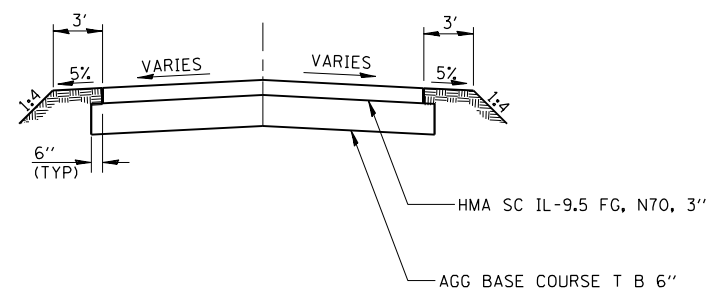
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|----------|--------------|-----------|
| 330 | 16 BR-1 | Kankakee | | 52A |
| CONTRACT NO. 66H54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



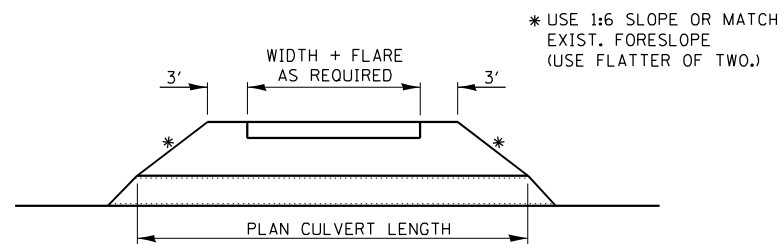
SECTION A-A

* SLOPE AWAY FROM HIGHWAY SURFACE AT 1.5% MINIMUM TO 10% MAXIMUM FOR A RURAL COMMERCIAL ACCESS A DISTANCE OF 10' OR TO CENTERLINE OF DITCH.

SLOPE AWAY FROM HIGHWAY SURFACE AT 1.5% MINIMUM TO 8% MAXIMUM FOR A RURAL NONCOMMERCIAL ACCESS A DISTANCE OF 10' OR TO CENTERLINE OF DITCH. (PRIVATE ENTRANCE AT STA 630+97 DIFFERS FROM DETAIL, SEE CROSS SECTIONS).

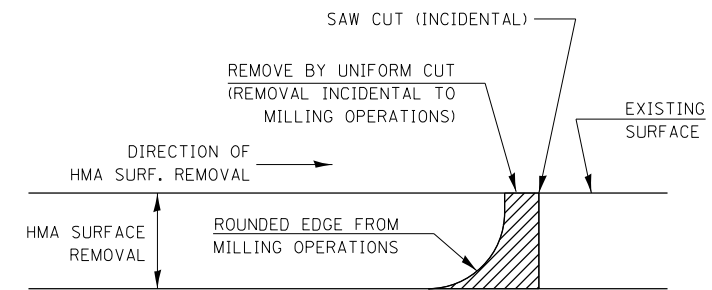


SECTION B-B



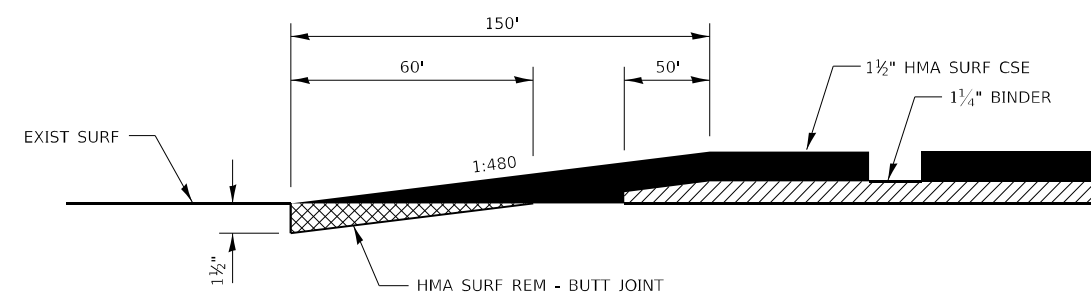
NOTE:
ALL DRIVEWAYS SHALL BE SURFACED FROM THE EDGE OF PAVEMENT TO THE RIGHT OF WAY LINE.

ENTRANCE DETAIL



NOTE:
WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL

HMA DETAIL AT BUTT JOINTS



HMA SURFACE REMOVAL DETAIL AT BUTT JOINTS

HRG PROJECT NO.: 2002M.0
HRG PROJ. CONTACT:
FILE NAME: 066664_sht-def.dgn
DATE PLOTTED: 12/16/2021 10:41:17 AM
PEN TABLE: plotTable.tbl



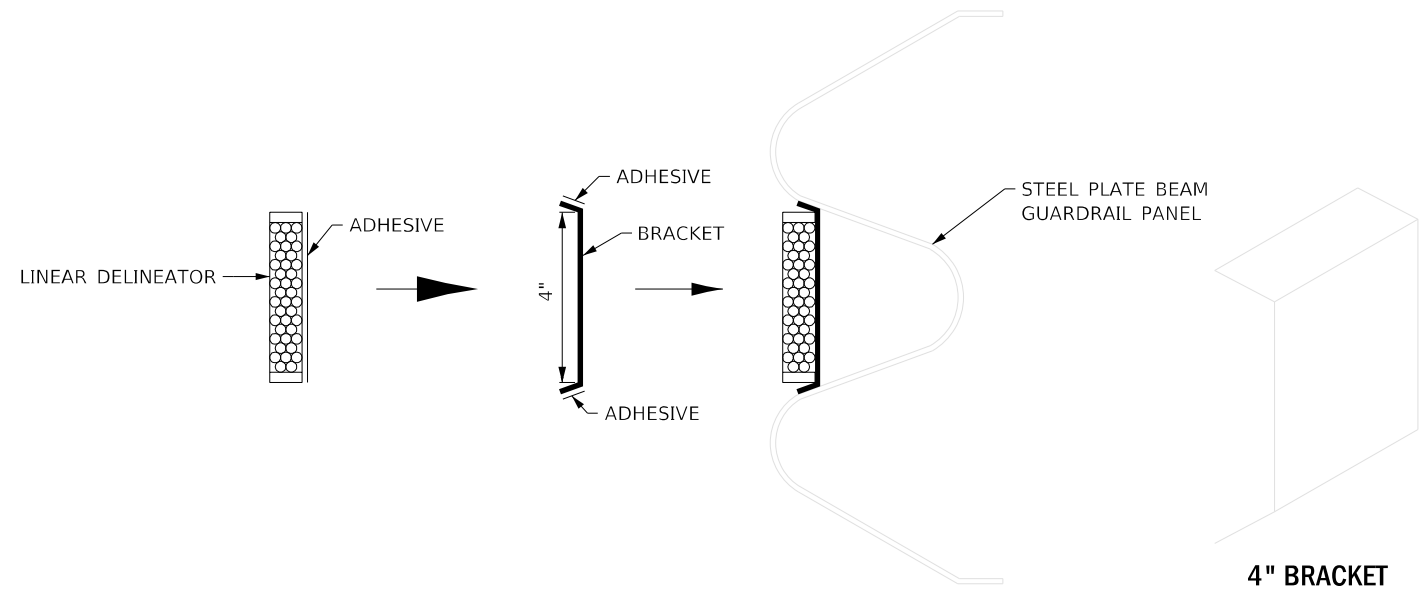
| | | |
|------------------------------|----------------|-----------|
| USER NAME = jrbtbu | DESIGNED - JMR | REVISED - |
| PLOT SCALE = 100,0000' / in. | DRAWN - AJM | REVISED - |
| PLOT DATE = 12/16/2021 | CHECKED - | REVISED - |
| | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS
SHEET 1 OF 3

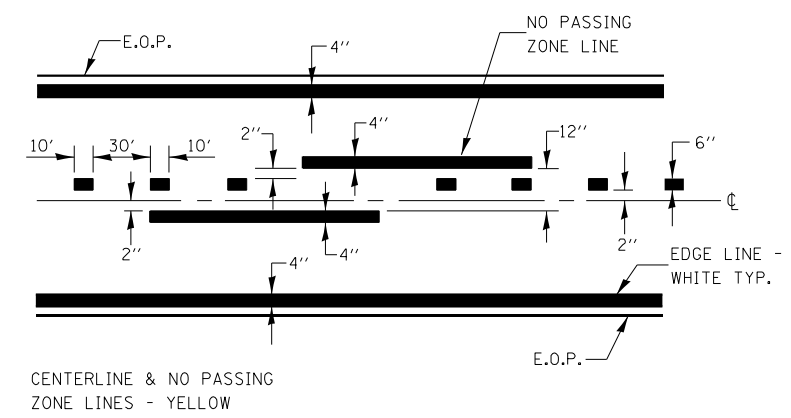
SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|------------|----------|---------------------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 53 |
| | | | CONTRACT NO. 66H54 | |
| | | | ILLINOIS FED. AID PROJECT | |



LINEAR DELINEATOR APPLICATION TO STANDARD GALVANIZED GUARDRAIL

LINEATOR DELINEATOR SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS



PAVEMENT MARKING

HRG PROJECT NO.: 2002M.0
 HRG PROJ. CONTACT:
 FILE NAME: 0866d4_sht-def.dgn
 PLOT DATE: 12/6/2021 10:47:19 AM
 PEN TABLE: plot.tbl

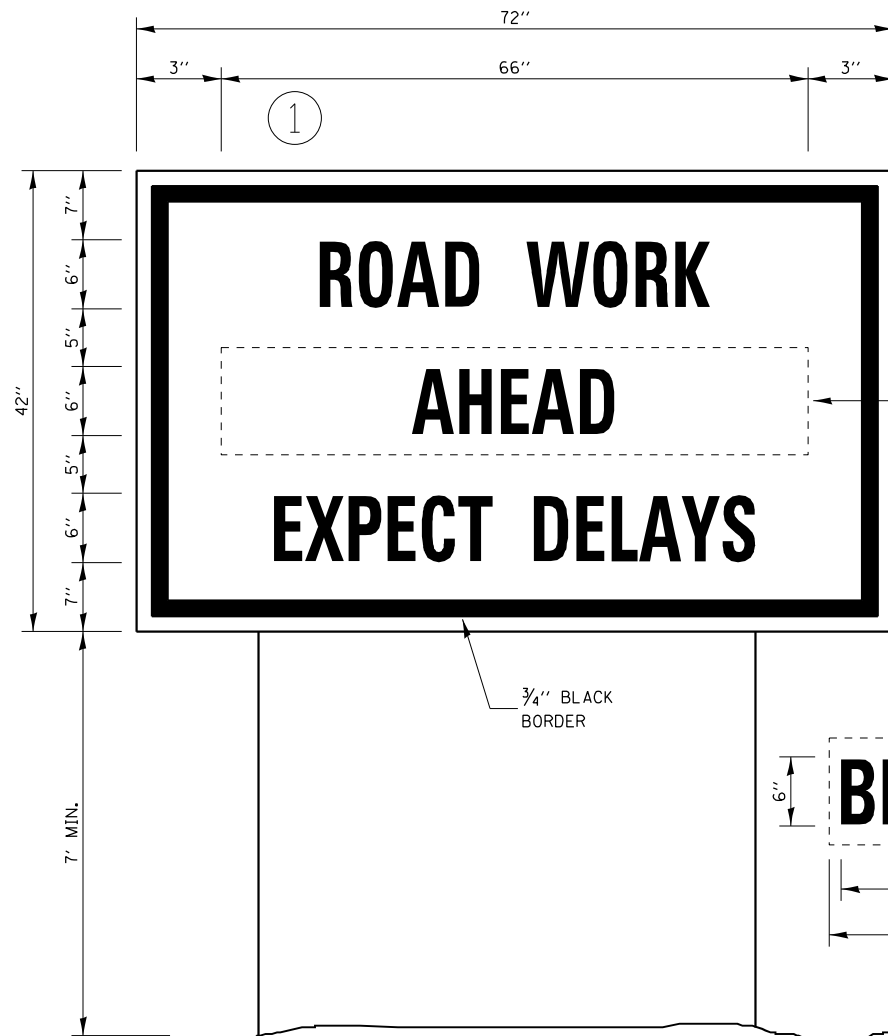

HRGreen.com
 Illinois Professional Design Firm
 #184-001322

| | | |
|------------------------------|----------------|-----------|
| USER NAME = jroibu | DESIGNED - JMR | REVISED - |
| | DRAWN - AJM | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

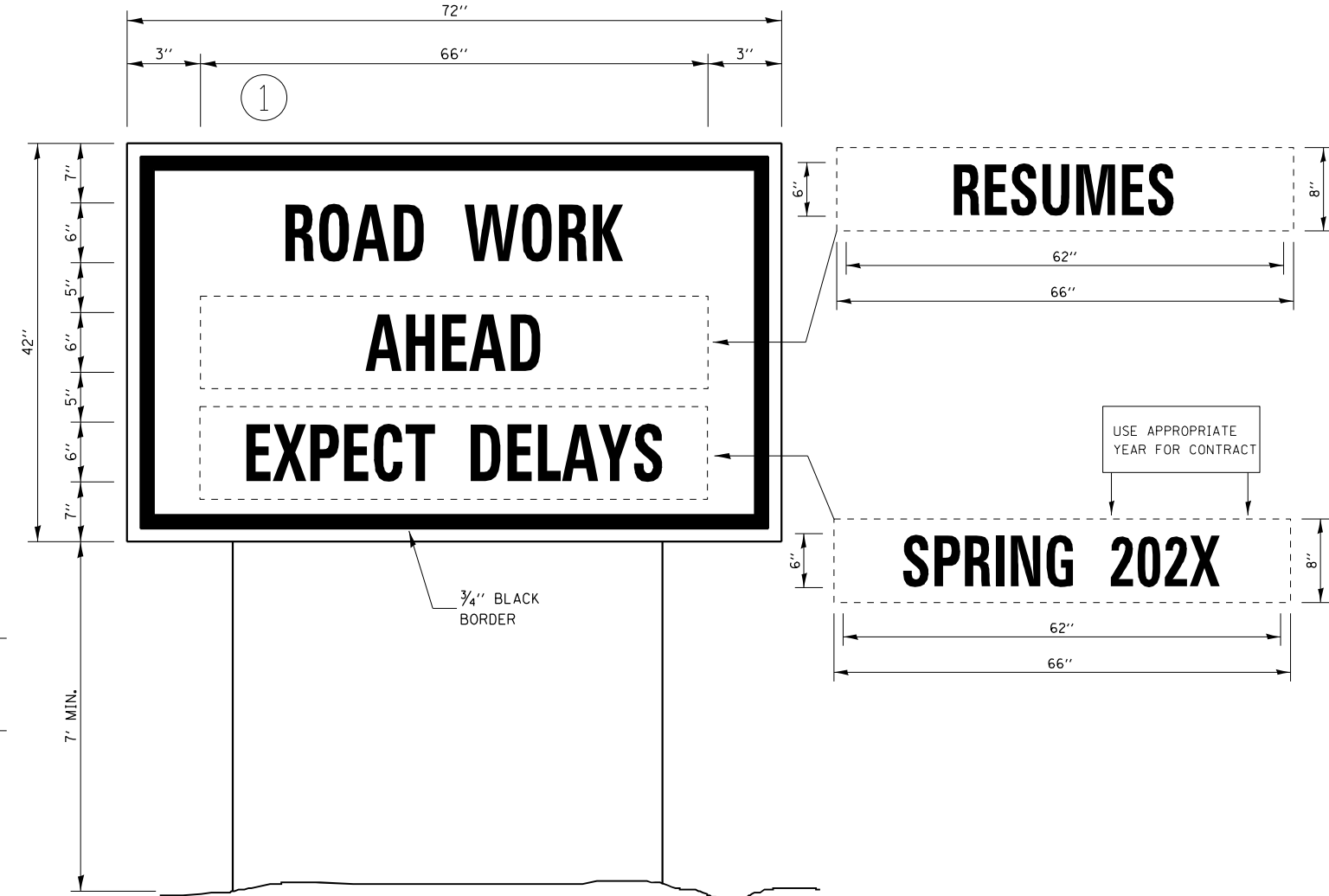
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | |
|---|---------------------|--------------|
| MISCELLANEOUS DETAILS SHEET 2 OF 3 | | |
| SCALE: | SHEET 2 OF 3 SHEETS | STA. TO STA. |

| | | | | |
|--------------------|------------|----------|---------------------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 330 | (16BR-1)BR | KANKAKEE | 64 | 54 |
| CONTRACT NO. 66H54 | | | ILLINOIS FED. AID PROJECT | |



TEMPORARY INFORMATION SIGNING



WINTER SHUT DOWN SIGNING

NOTES:

1. USE 6" D BLACK LETTERING ON FLOURESENT ORANGE BACKGROUND.
2. ERECT SIGNS AT LOCATIONS IN ADVANCE OF THE "ROAD CONSTRUCTION AHEAD" SIGNS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② A MINIMUM OF ONE WEEK PRIOR TO THE START OF THE LANE CLOSURE.
4. REMOVE PANEL ② ON THAT DATE.
5. SEE SPECIAL PROVISION "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. WILL BE PAID FOR PER SQ FT AS "TEMPORARY INFORMATION SIGNING". EACH SIGN = 21 SQ FT AND THE DATE PANEL ② WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.

HRG PROJECT NO: 2002M.0
 HRG PROJ CONTACT:
 FILE NAME: 066664_sht-def.dgn
 PEN TABLE: 1/16/2021.tbl



| | | |
|------------------------------|----------------|-----------|
| USER NAME = jtorbu | DESIGNED - JMR | REVISED - |
| | DRAWN - AJM | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 12/6/2021 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

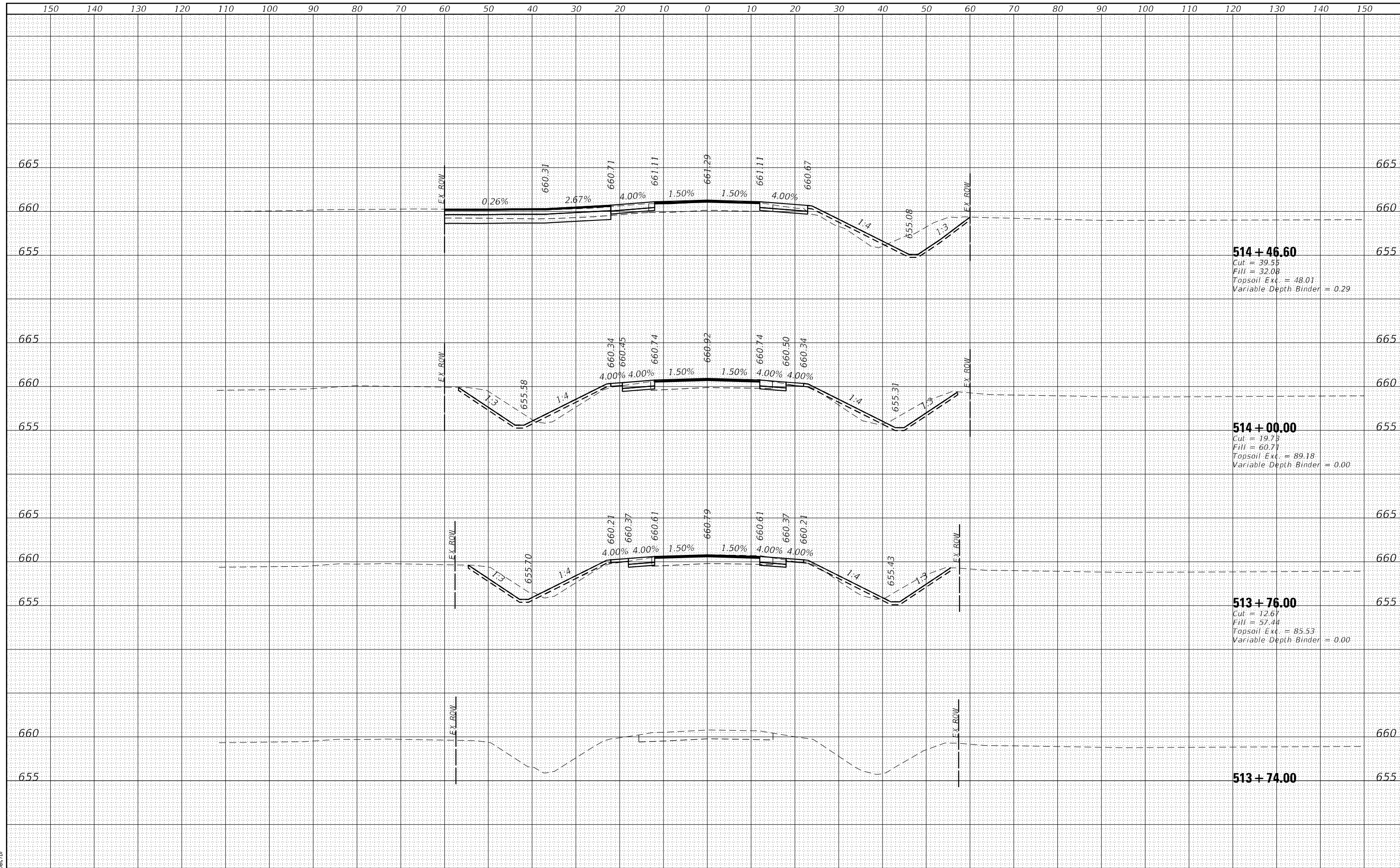
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|------------------------------|---------------------|------|---------|
| MISCELLAENOUS DETAILS | | | |
| SHEET 3 OF 3 | | | |
| SCALE: | SHEET 3 OF 3 SHEETS | STA. | TO STA. |

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|----------|--------------------|-----------|
| 330 | (16BR-1)BR | KANKAKEE | 64 | 55 |
| | | | CONTRACT NO. 66H54 | |
| ILLINOIS FED. AID PROJECT | | | | |

| | |
|---------------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| AREAS CHECKED | |
| FINAL SURVEY | |
| NOTE BOOK | |
| NO. | |

| | |
|-----------------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| AREAS CHECKED | |
| ORIGINAL SURVEY | |
| NOTE BOOK | |
| NO. | |

HRC PROJECT NO: 2022/1/0
 FILE NAME: 066H54 - 217 - 16.dgn
 PLOT DRIVER: lldrf_ba1616c16
 PEN TABLE: plottable.tbl



514 + 46.60
 Cut = 39.55
 Fill = 32.08
 Topsoil Exc. = 48.01
 Variable Depth Binder = 0.29

514 + 00.00
 Cut = 19.73
 Fill = 60.71
 Topsoil Exc. = 89.18
 Variable Depth Binder = 0.00

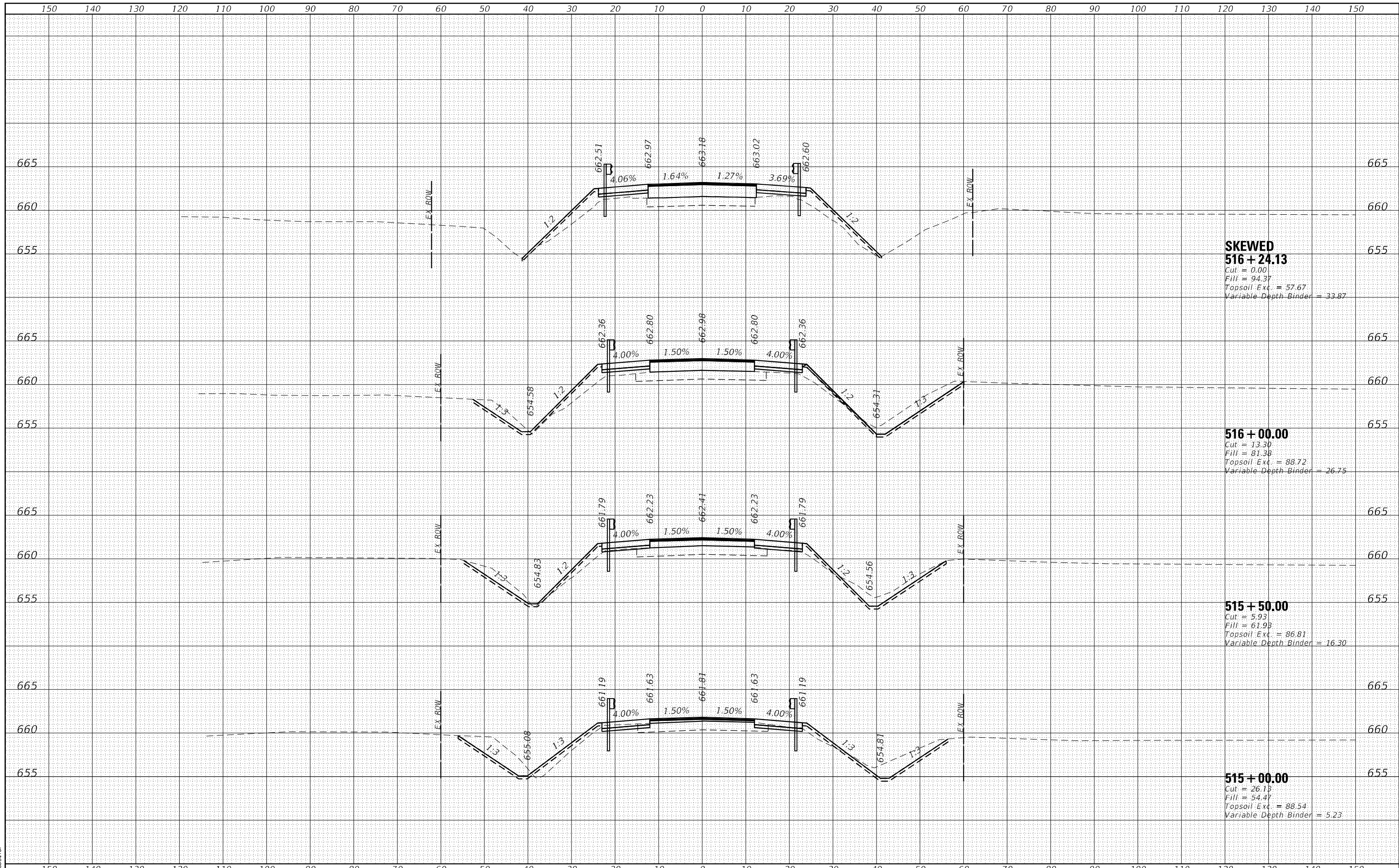
513 + 76.00
 Cut = 12.67
 Fill = 57.44
 Topsoil Exc. = 85.53
 Variable Depth Binder = 0.00

513 + 74.00

| | |
|---------------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| AREAS CHECKED | |
| FINISH SURVEY | |
| NOTE BOOK | |
| NO. | |

| | |
|-----------------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| AREAS CHECKED | |
| ORIGINAL SURVEY | |
| NOTE BOOK | |
| NO. | |

HRG PROJECT NO: 2022M/D
 FILE NAME: 066H54
 PLOT DRIVER: l:\soft\dwgplot\csg
 PEN TABLE: plotpen.tbl

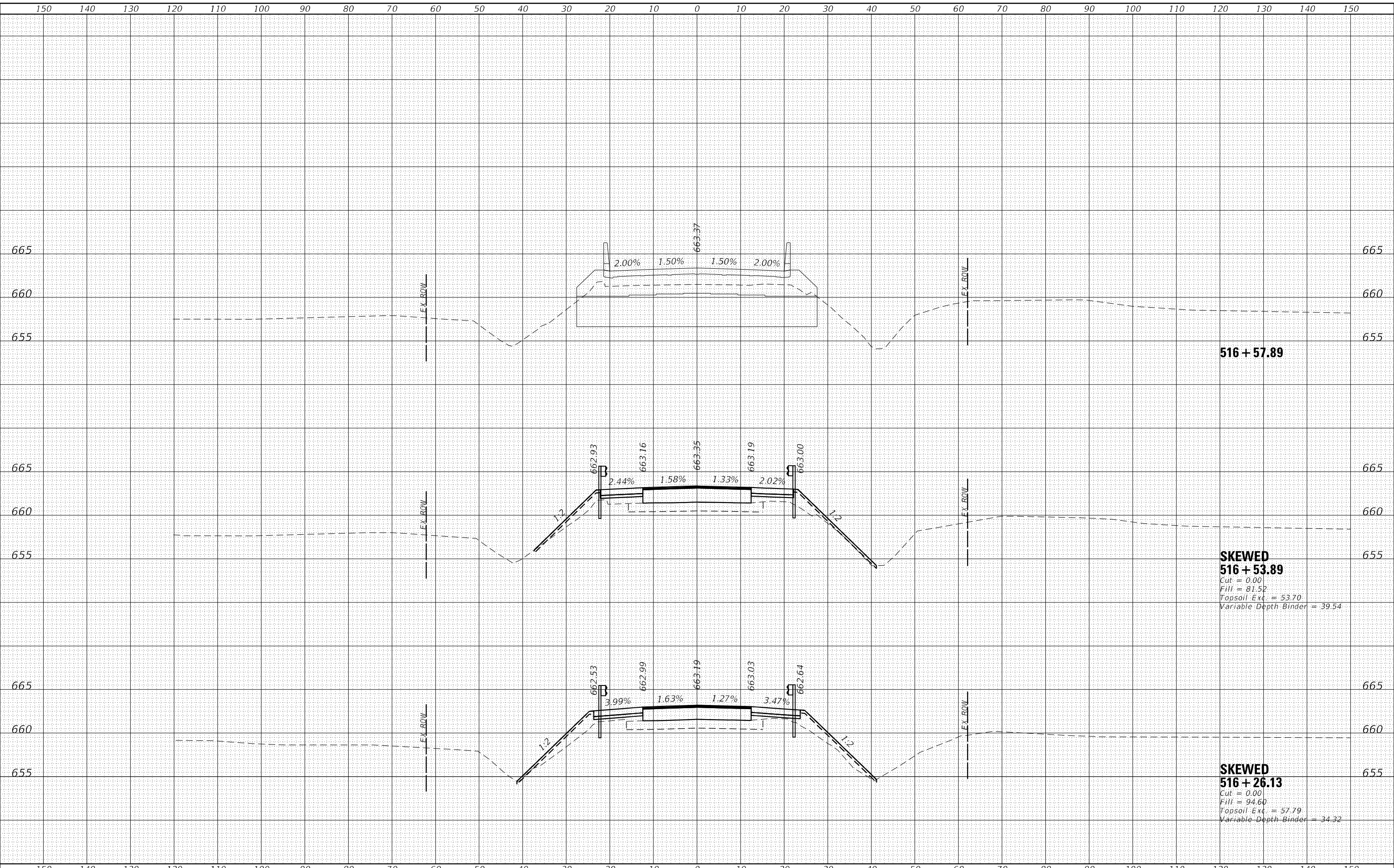


| | | | | | | |
|---|--|--|---|--|---|---------------------------|
| HRGreen.com Illinois Professional Design Firm #184-001322 | USER NAME = jrorbu DESIGNED - JMR DRAWN - AJM CHECKED - DATE - | REVISED - REVISED - REVISED - REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | CROSS SECTIONS SCALE: SHEET 3 OF 8 SHEETS STA. 515+00.00 TO STA. 516+24.13 | F.A. RTE. 330 SECTION (16BR-1)BR COUNTY KANKAKEE TOTAL SHEETS 64 SHEET NO. 58 CONTRACT NO. 66H54 | ILLINOIS FED. AID PROJECT |
| | PLOT SCALE = 20,0000' / in. PLOT DATE = 12/6/2021 | REVISED - REVISED - | | | | |

| | |
|---------------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| AREAS CHECKED | |
| FINAL SURVEY | |
| NOTE BOOK | |
| NO. | |

| | |
|-----------------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| AREAS CHECKED | |
| ORIGINAL SURVEY | |
| NOTE BOOK | |
| NO. | |

HRG PROJECT NO: 2022010
 FILE NAME: 066454.ctb
 PLOT DRIVER: lprf_ba1c1c1g
 PEN TABLE: plotpen.tbl



516 + 57.89

SKewed
516 + 53.89
 Cut = 0.00
 Fill = 81.52
 Topsoil Exc. = 53.70
 Variable Depth Binder = 39.54

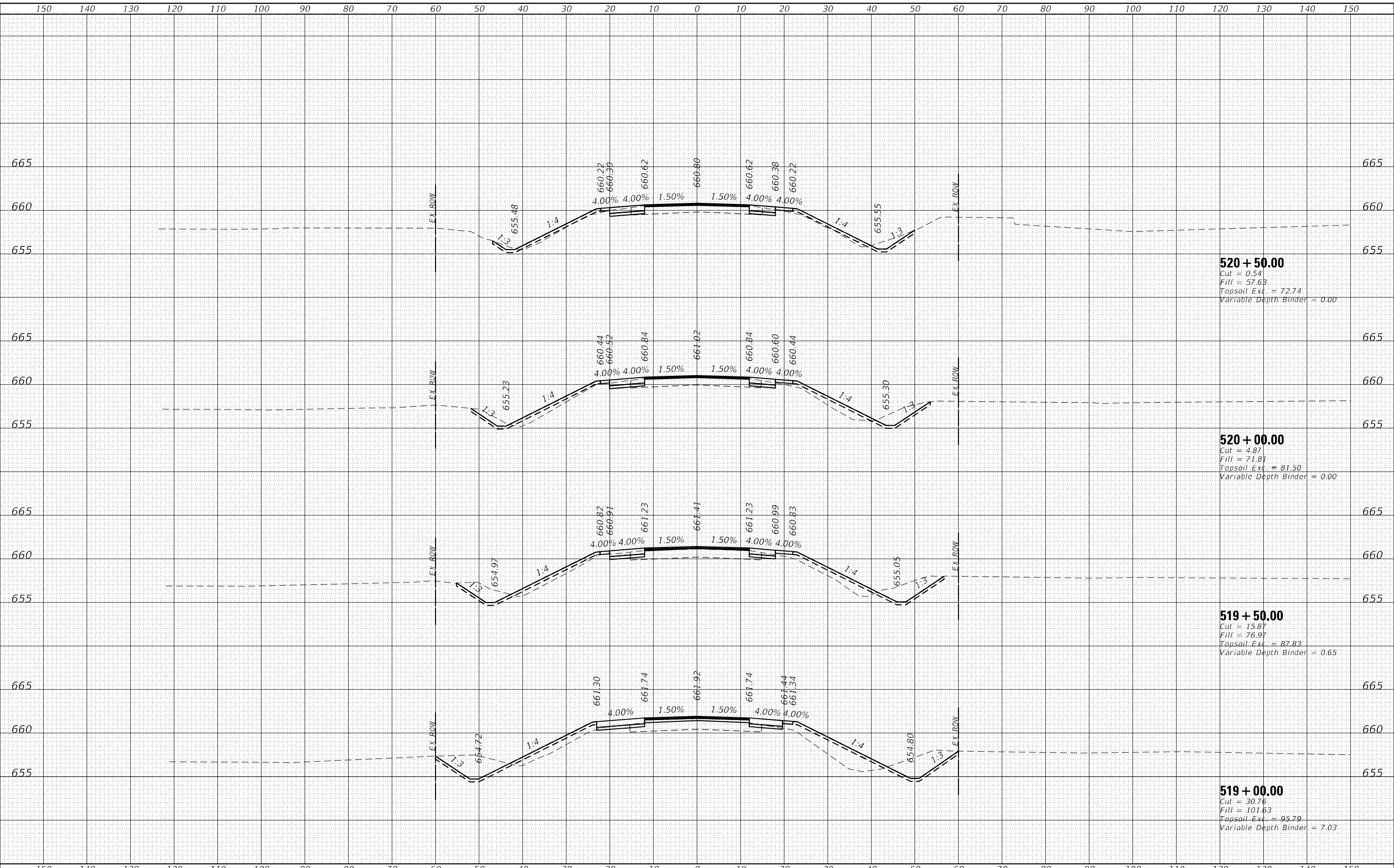
SKewed
516 + 26.13
 Cut = 0.00
 Fill = 94.60
 Topsoil Exc. = 57.79
 Variable Depth Binder = 34.32

| | | | | | | | | | | | | | |
|-----------------------------|---|----------------|--------------------|---|-----------------------|---------------------------|---------------------|----------------------------------|---------------|--------------------|-----------------|-----------------|--------------|
| HRG PROJECT NO: 2022010 | HRGreen.com Illinois Professional Design Firm #184-001322 | DESIGNED - JMR | REvised - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | CROSS SECTIONS | SCALE: | SHEET 4 OF 8 SHEETS | STA. 516+26.13 TO STA. 516+57.89 | F.A. RTE. 330 | SECTION (16BR-1)BR | COUNTY KANKAKEE | TOTAL SHEETS 64 | SHEET NO. 59 |
| USER NAME = jmorbu | DRAWN - AJM | REvised - | CONTRACT NO. 66H54 | | | ILLINOIS FED. AID PROJECT | | | | | | | |
| PLOT SCALE = 20,0000' / in. | CHECKED - | REvised - | | | | | | | | | | | |
| PLOT DATE = 12/6/2021 | DATE - | REvised - | | | | | | | | | | | |

| | |
|------------------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| AREAS CHECKED | |
| FINAL SURVEY NO. | |

| | |
|---------------------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| AREAS CHECKED | |
| ORIGINAL SURVEY NO. | |

HRG PROJECT NO: 2022M/D
 FILE NAME: 02664541.dwg
 PLOT DRIVER: lldrf_ba1r1c1g
 PEN TABLE: plottable.tbl



520 + 50.00
 Cut = 0.54
 Fill = 57.63
 Topsoil Exc. = 72.74
 Variable Depth Binder = 0.00

520 + 00.00
 Cut = 4.87
 Fill = 71.81
 Topsoil Exc. = 81.50
 Variable Depth Binder = 0.00

519 + 50.00
 Cut = 15.87
 Fill = 76.97
 Topsoil Exc. = 87.83
 Variable Depth Binder = 0.65

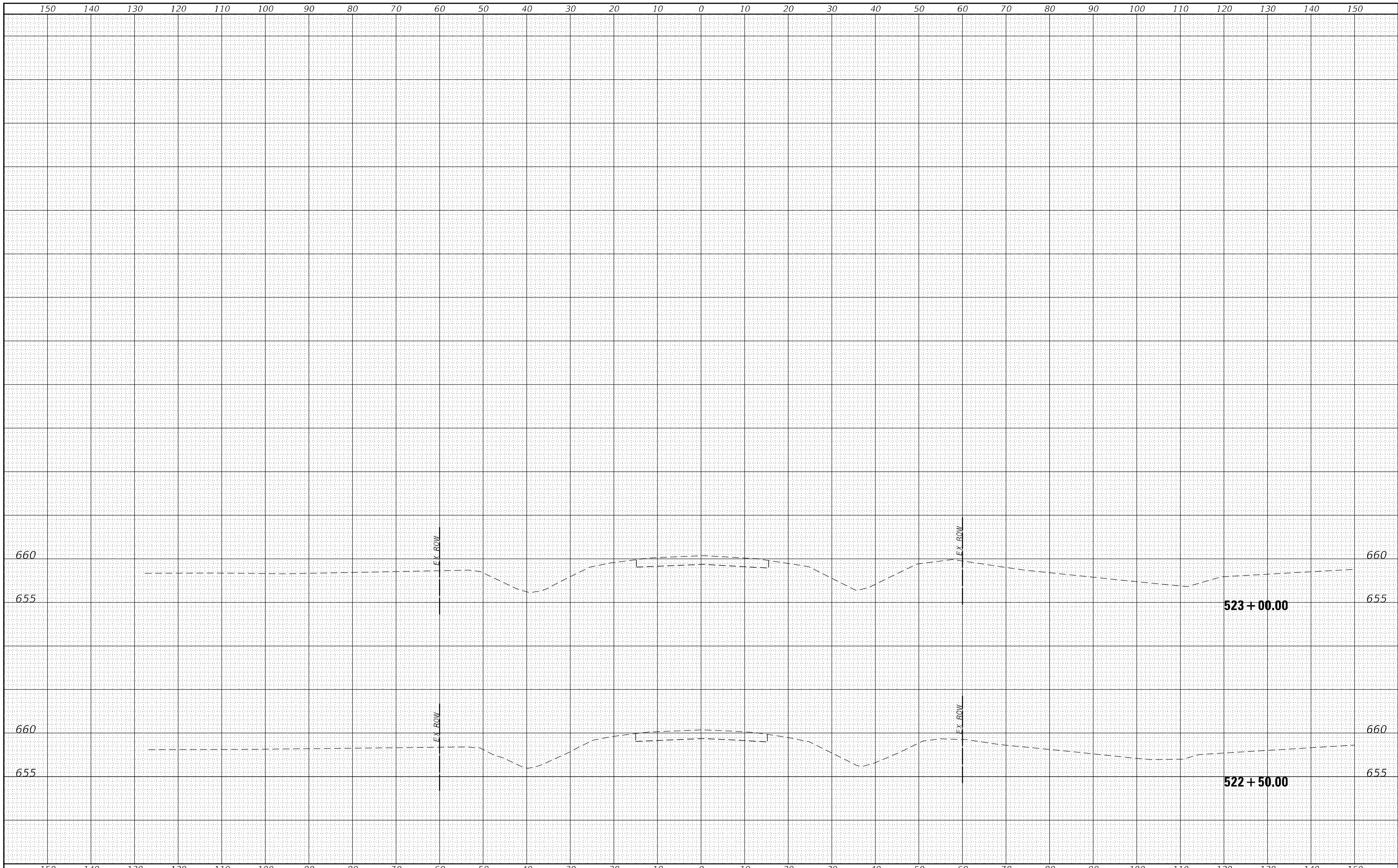
519 + 00.00
 Cut = 30.76
 Fill = 101.63
 Topsoil Exc. = 95.79
 Variable Depth Binder = 7.03

| | | | | | | | | | | |
|-----------------------------|---|----------------|---------------------------|---|-----------------------|---------------------|----------|----------------------------------|--------------|-----------|
| HRG PROJECT NO: 2022M/D | HRGreen.com Illinois Professional Design Firm #184-001322 | DESIGNED - JMR | REVISIED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | CROSS SECTIONS | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| USER NAME = jrorbu | DRAWN - AJM | REVISIED - | 330 | | | (16BR-1)BR | KANKAKEE | 64 | 62 | |
| PLOT SCALE = 20,0000' / in. | CHECKED - | REVISIED - | CONTRACT NO. 66H54 | | | | | | | |
| PLOT DATE = 12/6/2021 | DATE - | REVISIED - | ILLINOIS FED. AID PROJECT | | | | | | | |
| | | | | | SCALE: | SHEET 7 OF 8 SHEETS | | STA. 519+00.00 TO STA. 520+50.00 | | |

| | |
|--------------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| CHECKED | |
| FINAL SURVEY | |
| NOTE BOOK | |
| NO. | |

| | |
|-----------------|--|
| DATE | |
| BY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS | |
| CHECKED | |
| ORIGINAL SURVEY | |
| NOTE BOOK | |
| NO. | |

HRC PROJECT NO: 2022/10
 FILE NAME: 026645.ctb
 PLOT DRIVER: ilcpldwtc9g
 PEN TABLE: plottable.tbl



| | | | | | | | |
|--|--|--|---|-----------------------|----------------------------------|--|-------------------------------------|
| | USER NAME = jrbtbu DESIGNED - JMR DRAWN - AJM CHECKED - DATE - | REVISED - REVISED - REVISED - REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | CROSS SECTIONS | | F.A. RTE. = 330 SECTION = (16BR-1)BR COUNTY = KANKAKEE CONTRACT NO. = 66H54 | TOTAL SHEETS = 64 SHEET NO. = 64 |
| | PLOT SCALE = 20,0000' / in. PLOT DATE = 12/6/2021 | SCALE: | | SHEET OF SHEETS | STA. 522+50.00 TO STA. 523+00.00 | ILLINOIS FED. AID PROJECT | |