

# GENERAL PLAN & ELEVATION

## S.N. 074-0055

THE EXISTING OVERHEAD STRUCTURE WAS BUILT IN 1975 AS FAI ROUTE 72, SECTION (58,74-66)HB-2 AT STATION 932+59.22 AT THE MACON-PIATT COUNTY LINE. THE SUPERSTRUCTURE CONSISTS OF TEN 44" STEEL PLATE GIRDERS SUPPORTING A 7 1/2" R.C. DECK AND A 1 1/2" HOT MIX ASPHALT WEARING SURFACE WITH A WATERPROOFING MEMBRANE SYSTEM. THE SUPERSTRUCTURE IS SUPPORTED BY TWO SAND-FILLED, VAULTED ABUTMENTS ON SPREAD FOOTINGS AND CONCRETE PILES AND ONE TRAPEZOIDAL PIER ON A SPREAD FOOTING AND TIMBER PILES. THE EXISTING STRUCTURE MEASURES 250'-10" FROM BACK TO BACK OF APPROACH BENTS AND 68'-0" OUT TO OUT OF DECK. THE HORIZONTAL CLEARANCE IS 64'-6" FROM FACE TO FACE OF CURB INCLUDING 24'-3" OF CLEAR ROADWAY FOR EACH DIRECTION AND A 16'-0" FULLY-BONDED RAISED-CURB MEDIAN.

SEE LIST OF PROPOSED IMPROVEMENTS ON THIS SHEET.

WORK SHALL BE COMPLETED WITH STAGED CONSTRUCTION.

### PROPOSED IMPROVEMENTS

1. REMOVAL OF THE EXISTING HMA WEARING SURFACE AND WATERPROOFING MEMBRANE SYSTEM.
2. 1/2" DECK HYDRO-SCARIFICATION.
3. FULL-DEPTH DECK PATCHING.
4. STRUCTURAL REPAIR OF CONCRETE ON ABUTMENT STEMS AND MEDIAN CURB FACES.
5. PLACEMENT OF PROPOSED MICRO SILICA CONCRETE WEARING SURFACE.
6. REPLACE EXISTING PREFORMED JOINT SEALS WITH SILICONE JOINT SEALER AND POLYMER CONCRETE NOSING.
7. INSTALL FLOOR DRAINS.
8. REPLACE EXISTING STEEL ROCKER BEARINGS WITH ELASTOMERIC BEARINGS AT ABUTMENTS.

### GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

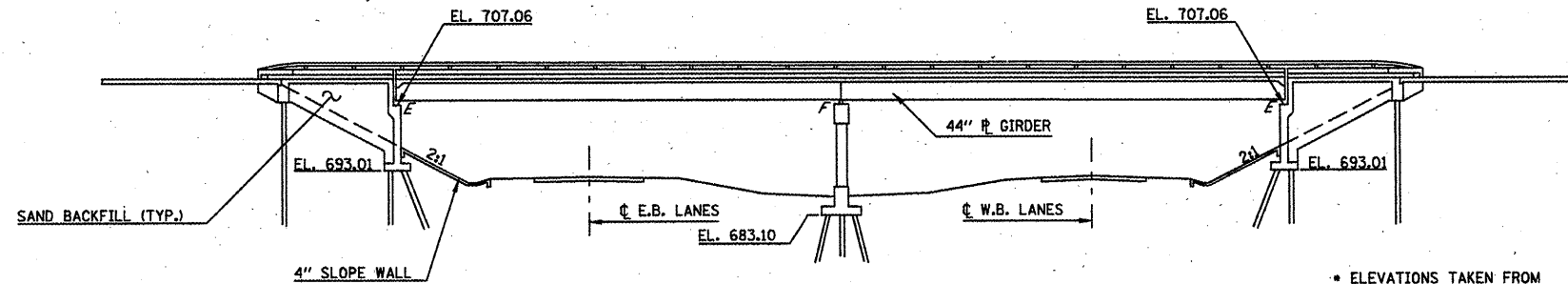
EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY REINFORCEMENT BARS THAT ARE DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED SPLICER OR ANCHORAGE SYSTEM. COST INCLUDED WITH CONCRETE REMOVAL.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 GR 60. SEE SPECIAL PROVISIONS.

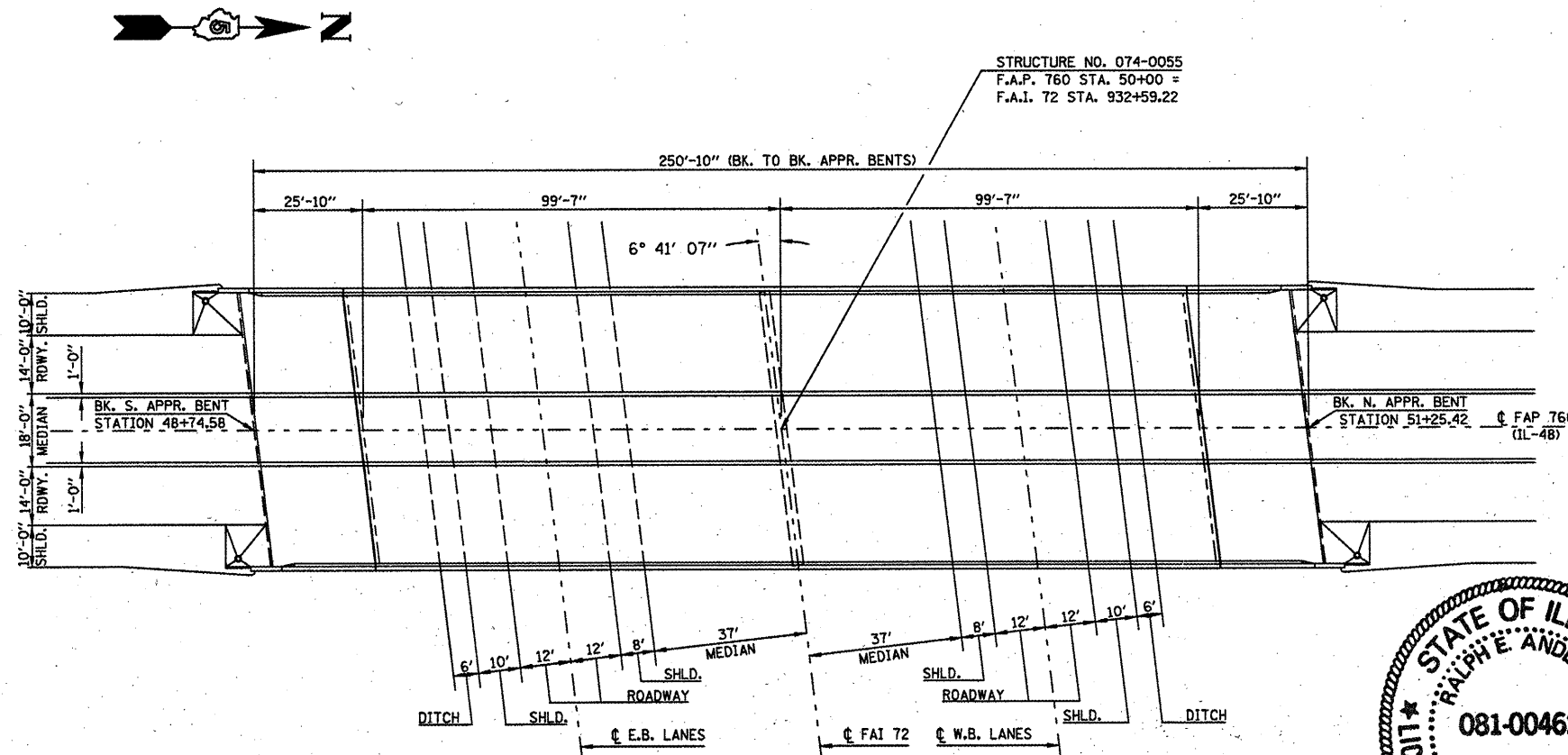
### TOTAL BILL OF MATERIALS

ITEM	UNIT	TOTAL
HMA SURFACE REMOVAL (DECK)	SQ YD	1351.7
BRIDGE DECK HYDRO-SCARIFICATION, 1/2"	SQ YD	1351.7
BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2 1/4"	SQ YD	1351.7
BRIDGE DECK GROOVING	SQ YD	1240.2
PROTECTIVE COAT	SQ YD	1351.7
JACK AND REMOVE EXISTING BEARINGS	EACH	20.0
ELASTOMERIC BEARING ASSEMBLY, TY I	EACH	20.0
FURNISH AND ERECT STRUCTURAL STEEL	POUND	3700.0
ANCHOR BOLTS, 1 1/4"	EACH	40.0
STRUCTURAL REPAIR OF CONCRETE (DEPTH <= 5")	SQ FT	165.8
DECK SLAB REPAIR (FULL-DEPTH, TY I)	SQ YD	4.4
DECK SLAB REPAIR (FULL-DEPTH, TY II)	SQ YD	14.2
CONCRETE REMOVAL	CU YD	7.1
CONCRETE SUPERSTRUCTURE	CU YD	6.6
REINFORCEMENT BARS, EPOXY COATED	POUND	770.0
MECHANICAL SPLICE	EACH	122.0
POLYMER CONCRETE	CU FT	17.3
SILICONE JOINT SEALER, 2"	FOOT	134.0
FLOOR DRAINS	EACH	8.0
PROTECTIVE SHIELD	SQ YD	579.0

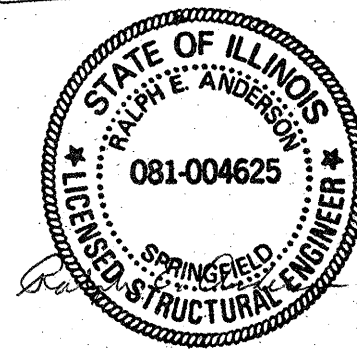


ELEVATIONS TAKEN FROM AS-BUILT PLANS AND ARE SHOWN FOR PERSPECTIVE ONLY.

ELEVATION VIEW



PLAN VIEW



*Expires 11/30/2010*

FILE NAME =	USER NAME = pierabr	DESIGNED - GMS	REVISED -
c:\pwork\pwork\pierabr\10109667\72022-Bridge Repair Plan.dgn		DRAWN - GMS	REVISED -
	PLDT SCALE = 48.0000 / IN.	CHECKED -	REVISED -
	PLDT DATE = 2/8/2010	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN & ELEVATION**  
**S.N. 074-0055**

SCALE: SHEET NO. 1 OF 14 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(58,74-66)&(74-67&68)RS-1	PIATT	251	139
ILLINOIS FED. AID PROJECT				CONTRACT NO. 70022