TOTAL BHEET SHEETS NO. BENCHMARK: Chiseled "Square" on top of Northwest Wingwall, SN 053-0153 FAP 68 101BR LIVINGSTON 47 15 STATE OF ILLINOIS Elev. 622.08 DEPARTMENT OF TRANSPORTATION EXISTING STRUCTURE: SN 053-0153 was originally built in 1982. The superstructure consists of 3 simple spans of 21" PPC deck beams on pile bent abutments and piers. The back-to-back abutments dimension measures 145'-4'4" while the out-to-out width measures 46'-0". The existing superstructure DWG. NO. 1 OF 17 CONTRACT NO. 66606 shall be removed and replaced utilizing stage construction. STRUCTURE INDEX OF SHEETS No salvage Traffic Barrier Terminal, Type 6A General Plan Dwg. No. 1 of 17 Std. 631032 (Typ. all four corners) Dwg. No. 2 of 17 General Data Stage Construction Details Dwg. No. 3 of 17 Temporary Concrete Barrier Dwg. No. 4 of 17 Superstructure Dwg. No. 5 of 17 Superstructure Details Dwg. No. 6-7 of 17 -21"x48" Deck Beams (Typ.) Type SM Steel Bridge Rail Dwg. No. 8 of 17 1'-9" Continuous Seal Type (Typ.) STATION 280+55 Dwg. No. 9 of 17 Streambed Elev. 599.2± Neoprene Expansion Joints BUILT 200\_ BY Anchor Bolt Details Dwg. No. 10 of 17 STATE OF ILLINOIS North Abutment Dwg. No. 11 of 17 F.A.P. RT. 68 SEC. 101BR Dwg. No. 12 of 17 South Abutment LOADING HS20 Dwg. No. 13 of 17 Abutment Details STR. NO. 053-0153 Pier 1 Dwg. No. 14 of 17 Dwg. No. 15 of 17 Pier 2 Dwg. No. 16 of 17 Pier Details **ELEVATION** NAME PLATE Bar Splicer Assembly Details Dwg. No. 17 of 17 See Std. 515001 Existing Name Plate shall be cleaned and relocated adjacent to the new plate. Cost Ton Con 30' Bridge Approach Pavement Z - (9) - (4) Std. 420401 (Typ.) 3'-0" Agg. Shidr. Bk. S. Abutment /Sta. 281+27.68 Bk. N. Abutment Sta. 279+82.32 © Pier 1 ∕Sta. 280+31.50 @ Pier 2 Sta. 280+78.50 Elev. 620.14 Elev. 619.84 Elev. 619.94 Elev. 620.03 € IL 23 & Profile Gra © Brg. N. Abutment Sta. 279+85.50 © Bridge Sta. 280+55.00 *€ Brg. S. Abutment* Sta. 281+24.50 lev. 619.85 Elev. 619.99 Elev. 620.12 Name Plate Location -Stage Construction Line SCOPE OF WORK 3'-218" 46'-0" 47'-0" 46'-0" 3'-218" Span 1 Span 2 Span 3 1. Remove existing surfacing, concrete parapets, and deck beams. Seal existing cracks and repair delaminated/spalled concrete areas on substructure units. Replace existing abutment backwalls. 145'-4'4" Back to Back Abutments PLAN 3. Repair beam bearing seats at abutments and piers as required. 4. Reconstruct a three-span PPCD beam superstructure with concrete wearing surface and Steel Bridge Rail Type SM, and new bridge 279+53.03 619.79 281+56.97 . 620.19 approach pavements. <u>DESIGN SPECIFICATION</u> 2002 AASHTO LOADING HS20-44
Allow 50 psf future wearing surface Range 3E 3rd P.M. DESIGN STRESSES +0.20% No. 4647 FIELD UNITS f'c = 5,000 psi (Concrete Wearing Surface) f'c = 3,500 psi (Ail concrete except CWS) fy = 60,000 psi (reinf.) GENERAL PLAN <u>PROFILE GRADE</u> STAUCTURAL (Along € Roadway) IL 23 OVER PRAIRIE CREEK EXPIRES 11-30-06 PRECAST PRESTRESSED UNITS FAP ROUTE 68 - SECTION 101BR f'c = 5,000 psi f'ci = 4,000 psi f's = 270,000 psi ('2"\$ low lax strands) fsi = 201,960 psi ('2"\$ low lax strands) SIGNATURE LIVINGSTON COUNTY STRUCTURE LOCATION — CONSULTANTS, INC. 12/21/05 STATION 280+55.00 SEISMIC DATA DESIGNED BY: ELH 8/05 Seismic Performance Category (SPC) = A Bedrock Acceleration Coefficient (A) = 0.045g Site Coefficient (S) = 1.2 STRUCTURE NO. 053-0153 CHECKED BY: ELH 12/05 APPROVED BY: RDP 12/05 LOCATION SKETCH