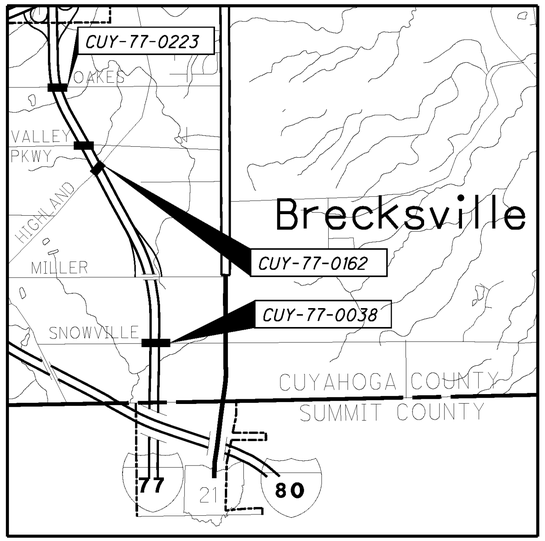

LOCATION MAP

LATITUDE: 41° 21′ 59″ LONGITUDE: 81° 38′ 11″

SCALE IN MILES

0 1 2

N

PORTION TO BE IMPROVED
INTERSTATE & DIVIDED HIGHWAY
UNDIVIDED STATE & FEDERAL ROUTES
OTHER ROADS

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
CUY-77-0.38/VAR.
CITY OF BRECKSVILLE
CUYAHOGA COUNTY

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PROJECT DESCRIPTION

REPLACEMENT OF THE BRIDGE DECK AND APPROACH SLABS FOR STRUCTURES CUY-77-0038, CUY-77-0162 AND CUY-77-0223. ANCILLARY APPROACH WORK INCLUDES PAVEMENT, CURB, SIDEWALK AND GUARDRAIL REPLACEMENT.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: N/A ACRES
ESTIMATED CONTRACTOR EARTH DISTRUBED AREA: N/A ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: N/A ACRES
(MAINTENANCE PROJECT)

LIMITED ACCESS

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

2008 SPECIFICATIONS

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

DESIGN DESIGNATION

	SNOWVILLE	HIGHLAND	OAKES
CURRENT ADT (2009)	3,000	3,363	3,533
DESIGN YEAR ADT (2030)	3,300	3,699	3,709
DESIGN HOURLY VOLUME (2030)	330	370	371
DIRECTIONAL DISTRIBUTION	60%	60%	60%
TRUCKS (24 HOUR B&C)	7%	4%	4%
DESIGN SPEED	40	30	40
LEGAL SPEED	35	25	35
DESIGN FUNCTIONAL CLASSIFICATION:	URBAN LOCAL	URBAN LOCAL	URBAN LOCAL

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE SERVICE CALL: **1-800-925-0988**

PLAN PREPARED BY:

BURGESS & NIPLE
BURGESS & NIPLE, INC.
100 WEST ERIE ST.
PAINESVILLE, OH 44077

ENGINEER'S SEAL

"AS-BUILT PLANS"

DATE: MARCH 18,2013

STANDARD CONSTRUCTION DRAWINGS

BP-1.1	7/28/00	MT-95.30	7/17/09	TC-22.20	10/16/09				
BP-2.1	7/18/08	MT-95.31	7/17/09	TC-41.20	1/19/01				
BP-2.2	7/18/08	MT-95.32	7/17/09	TC-41.30	1/19/07				
BP-2.3	7/16/04	MT-96.11	1/16/09	TC-41.41	1/19/01				
BP-2.5	7/18/08	MT-96.20	1/16/09	TC-61.30	4/16/10				
BP-3.1	10/19/07	MT-96.26	1/16/09	TC-71.10	1/15/10				
BP-5.1	7/28/00	MT-97.10	4/17/09	TC-73.10	1/19/01				
		MT-99.20	1/16/09	TC-85.20	1/15/10				
F-3.1	4/16/10	MT-101.60	4/17/09						
		MT-101.70	1/16/09						
GR-1.1	7/16/04	MT-102.10	7/17/09						
GR-3.1	10/16/09	MT-102.30	4/17/09			AS-1-81	7/19/02		
GR-3.2	10/16/09					BR-2-98	7/19/02		
						PCB-91	7/19/02		
						VPF-1-90	7/19/02		

SUPPLEMENTAL SPECIFICATIONS

800	4/16/10
832	5/5/09
961	10/17/08

SPECIAL PROVISIONS

OHIO EPA
NOTIFICATION OF
DEMOLITION &
RENOVATION

RECORD DRAWING

NOTE: THIS RECORD DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. B&N, INC HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT.

FEDERAL PROJECT NO. E100(136)
PID NO. 87632
CONSTRUCTION PROJECT NO. 103010
RAILROAD INVOLVEMENT NONE
CUY-77-0.38/VAR.

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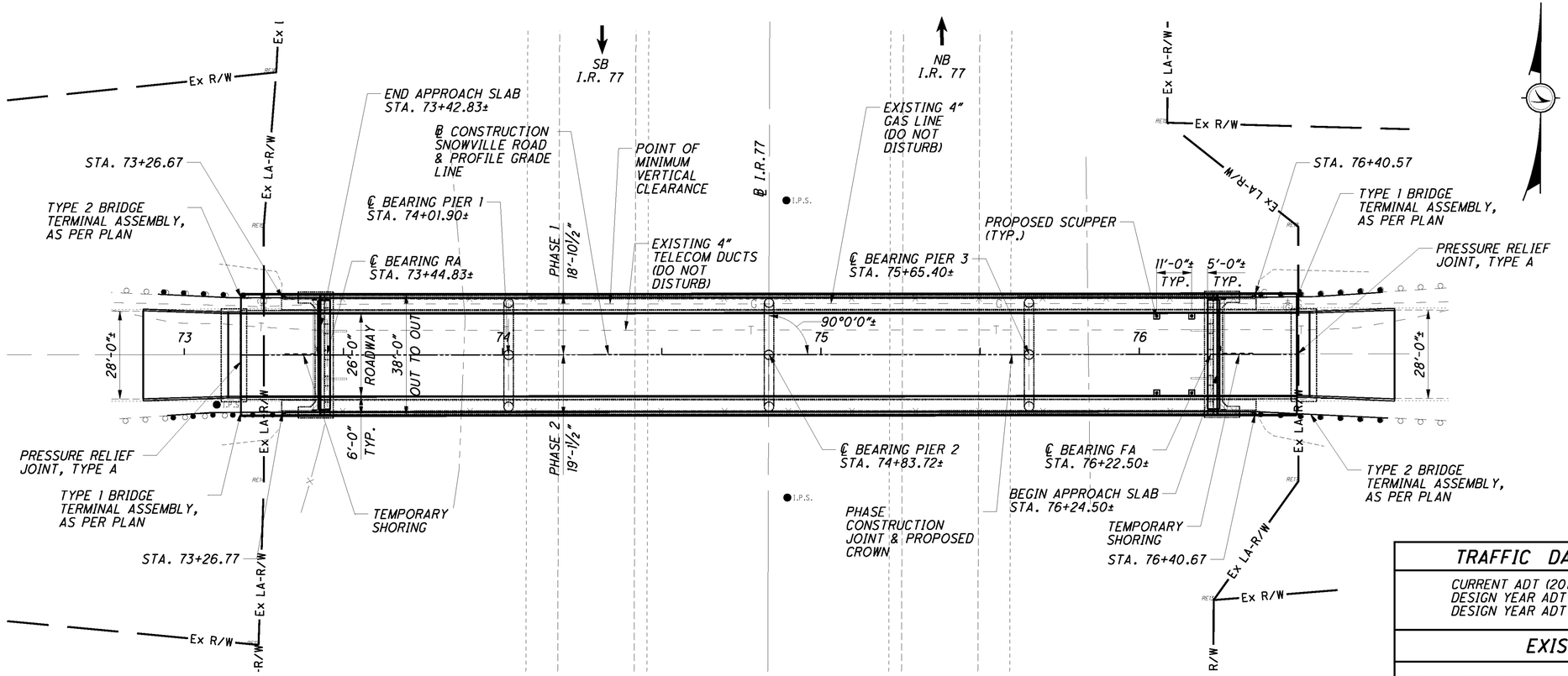


PLAN

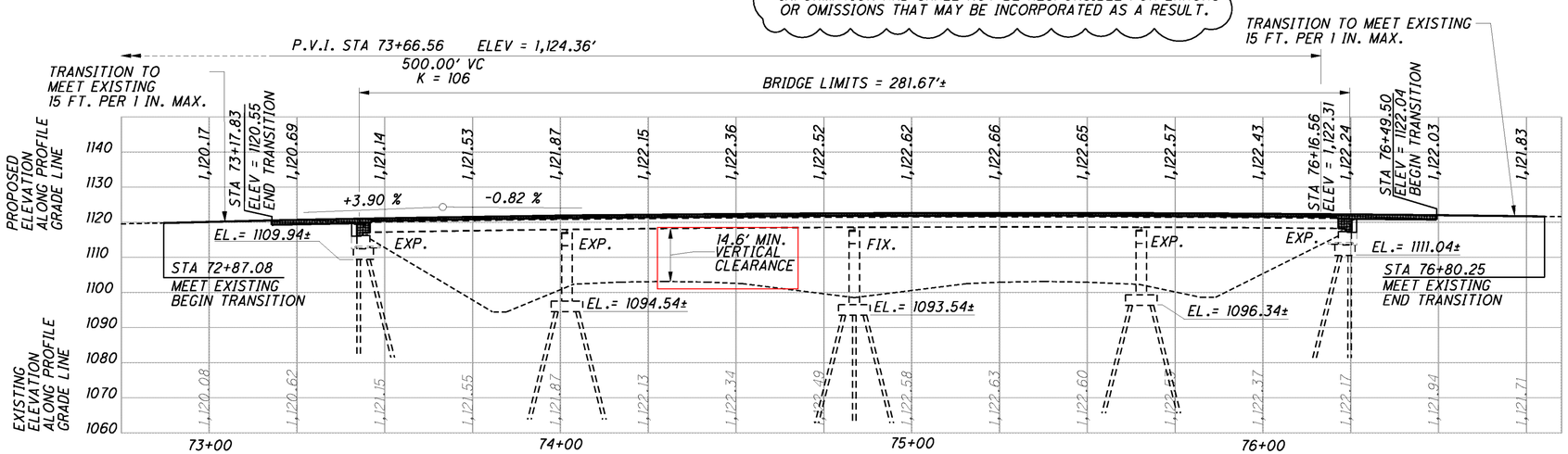
BENCHMARK #1, EL. 1104.92 E. BOLT ON FIRE HYDRANT STA. 68+03.63, 38.99' RT.
BENCHMARK #2, EL. 1121.90 E. FLANGE BOLT ON FIRE HYDRANT STA. 79+98.15, 31.18' RT.

RECORD DRAWING

NOTE: THIS RECORD DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. B&N, INC HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT.

LEGEND:

EL. = ELEVATION
FA = FORWARD ABUTMENT
RA = REAR ABUTMENT
TELECOM. = TELECOMMUNICATIONS
TYP. = TYPICAL



PROFILE

(ALONG ℄ CONSTRUCTION SNOWVILLE ROAD)

PROPOSED WORK:

1. REMOVE EXISTING DECK, EXPANSION JOINTS, PARAPETS, SIDEWALKS, BACKWALLS, ENDFRAMES, APPROACH SLABS, AND PORTIONS OF WINGWALLS.
2. REFURBISH AND RESET ROCKERS.
3. REHABILITATE PORTIONS OF ABUTMENTS, REPLACE DECK AND APPROACH SLABS, AND PROVIDE PARAPETS, FENCE AND SIDEWALKS.
4. SEAL SIDEWALK AND PARAPETS.
5. FIELD PAINT BEARINGS AND BEAM ENDS.

NOTES:

1. NO UTILITIES SHALL BE DISTURBED UNLESS NOTED OTHERWISE.

TRAFFIC DATA SNOWVILLE ROAD

CURRENT ADT (2010).....3,000
DESIGN YEAR ADT (2030).....3,300
DESIGN YEAR ADTT (2030).....231

EXISTING STRUCTURE

TYPE: FOUR SPAN CONTINUOUS STEEL BEAM BRIDGE WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS: 57'-3"±, 81'-9"±, 81'-9"±, 57'-3"± C/C BEARINGS
ROADWAY: 28'-0"± T/T CURB WITH 3'-8"± SIDEWALKS
DESIGN LOADING: CF400 (57)
SKEW: NONE
WEARING SURFACE: 1¾"± SUPERPLASTICIZED DENSE CONCRETE OVERLAY
APPROACH SLABS: AS-1-54 (25'± LONG)
ALIGNMENT: TANGENT
CROWN: 0.0156±
STRUCTURAL FILE NUMBER: 1805649
DATE BUILT: 1968

PROPOSED STRUCTURE

PROPOSED WORK: REPLACE APPROACH SLABS, DECK, EXPANSION JOINTS AND BACKWALLS WITH SEMI-INTEGRAL CONSTRUCTION
TYPE: FOUR SPAN CONTINUOUS STEEL BEAM WITH COMPOSITE REINFORCED CONCRETE DECK AND SUBSTRUCTURE WITH SEMI-INTEGRAL ABUTMENTS
SPANS: 57'-3"±, 81'-9"±, 81'-9"±, 57'-3"± C/C BEARINGS
ROADWAY: 26'-0" T/T CURB WITH 5'-0" SIDEWALKS
DESIGN LOADING: HS20 CASE II AND ALTERNATE MILITARY LOADING WITH A FUTURE WEARING SURFACE = 60 PSF
SKEW: NONE
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG) (MODIFIED)
ALIGNMENT: TANGENT
CROWN: 0.016
COORDINATES: LATITUDE 41°17'0" N
LONGITUDE 81°38'12" W

DESIGN AGENCY
BURGESS & NIPLE
100 WEST ERIE STREET PAINESVILLE, OHIO 44077

DESIGNED	CHECKED	DRAWN	REVISED	REVIEWED	DATE	STRUCTURE FILE NUMBER
WCS	AKS	WCS		DWL	03-11	1805649

CUYAHOGA COUNTY
STA. 73+42.83 ±
STA. 76+24.50 ±

STRUCTURE PLAN & PROFILE
BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38 / VAR
PID No. 87632

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REFERENCE SHALL BE MADE TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-81 REVISED 7-19-02
BR-2-98 REVISED 7-19-02
PCB-91 REVISED 7-19-02
SICD-1-96 REVISED 7-19-02
VPF-1-90 REVISED 7-19-02

AND TO SUPPLEMENTAL SPECIFICATIONS:

800 DATED 4-16-10

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS (AASHTO), 2002, AND THE 2004 ODOT BRIDGE DESIGN MANUAL.

DESIGN DATA:

DESIGN LOADING: HS-20, CASE II, AND ALTERNATE MILITARY LOADING WITH A FUTURE WEARING SURFACE = 60 PSF

CONCRETE CLASS HP - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
CONCRETE CLASS HP - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996 GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI

PROPOSED STRUCTURAL STEEL - ASTM A709 GRADE 50 MINIMUM YIELD STRENGTH 50,000 PSI

DECK PLACEMENT DESIGN ASSUMPTIONS:

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 0.95 KIPS FOR A TOTAL MACHINE LOAD OF 7.6 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG BRACKETS OF 48".

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
2½" MINIMUM TOP CONCRETE COVER
CLASS HP CONCRETE

MONOLITHIC WEARING SURFACE:

THE MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1" THICK.

MAINTENANCE OF TRAFFIC:

SEE THE ROADWAY PLANS FOR MAINTENANCE OF TRAFFIC DETAILS.

UTILITY LINES

THE UTILITY COMPANY(IES) SHALL BEAR ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY COMPANY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

SEQUENCE OF CONSTRUCTION

PHASE 1:

A. INSTALL TEMPORARY CONCRETE BARRIER AND MAINTAIN TRAFFIC ON EXISTING BRIDGE AS SHOWN.

B. SAW CUT FULL DEPTH ALONG PHASE CONSTRUCTION JOINT AND REMOVE NORTH PORTION OF EXISTING CONCRETE DECK SLAB, PARAPET, FENCE, AND CORRESPONDING PORTIONS OF APPROACH SLAB.

C. INSTALL TEMPORARY SHORING AND REMOVE ABUTMENT BACKWALL AND PORTIONS OF WINGWALLS AS SHOWN IN PLANS.

D. REMOVE EXISTING END FRAMES.

E. REMOVE, REFURBISH AND RESET EXISTING ROCKERS AT BEAMS A, B & C.

F. INSTALL SHEAR STUDS ON TOP FLANGE OF BEAMS A-C.

G. CONSTRUCT PHASE 1 PORTION OF DECK SLAB, SIDEWALK, DIAPHRAGM, BACKFILL, APPROACH SLABS, PARAPETS, VANDAL PROTECTION FENCE & BRIDGE TERMINAL ASSEMBLIES.

PHASE 2:

A. RELOCATE TEMPORARY CONCRETE BARRIER AND REROUTE TRAFFIC TO THE PROPOSED BRIDGE COMPLETED IN PHASE 1.

B. REMOVE REMAINDER OF EXISTING CONCRETE SLAB, PARAPET, FENCE AND CORRESPONDING PORTIONS OF APPROACH SLAB.

C. REMOVE REMAINDER OF ABUTMENT BACKWALL AND PORTIONS OF WINGWALL AS SHOWN IN THE PLANS.

D. REMOVE EXISTING END FRAMES.

E. REMOVE, REFURBISH AND RESET EXISTING ROCKERS AT BEAMS D & E.

F. INSTALL SHEAR STUDS ON TOP FLANGE OF BEAMS C-E.

G. CONSTRUCT PHASE 2 PORTION OF DECK SLAB, SIDEWALKS, DIAPHRAGM, BACKFILL, APPROACH SLABS, PARAPETS, VANDAL PROTECTION FENCE & BRIDGE TERMINAL ASSEMBLIES.

OTHER WORK:
WORK NOT LISTED IN THIS SEQUENCE MAY BE PERFORMED AT THE CONTRACTOR'S TIMING IN ACCORDANCE WITH THE CONTRACT PROVISIONS.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

DESCRIPTION:
THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

THIS WORK CONSISTS OF THE REMOVAL OF THE CONCRETE DECK INCLUDING PARAPETS, RAILINGS, FENCE, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSS FRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE.

PROTECTION OF STEEL SUPPORT SYSTEMS:
BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

DECK REMOVAL METHODS:
THE CONTRACTOR MAY REMOVE CONCRETE BY THE SAWCUT & LIFT METHOD AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (STEEL BEAM), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (E.G., FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVE EXISTING WELDED ATTACHMENTS (E.G. FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES. ALSO GRIND WEBS OF BEAMS SMOOTH WHERE CROSS FRAMES AND OTHER WELDED ATTACHMENTS HAVE BEEN REMOVED.

CUT LINE CONSTRUCTION JOINT PREPARATION:
SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP OR AS SHOWN IN THE PLANS. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT, ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

SUBSTRUCTURE CONCRETE REMOVAL METHODS:
REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

ITEM 503- UNCLASSIFIED EXCAVATION, AS PER PLAN

UNCLASSIFIED EXCAVATION SHALL BE IN ACCORDANCE WITH THE CMS ITEM 503 EXCEPT THAT THE BACKFILL MATERIAL SHALL BE MATERIAL CONFORMING TO CMS 703.17 (CMS 304 MATERIAL) AND MEET THE COMPACTION REQUIREMENTS OF CMS 304.05. IN ADDITION, THE BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED IN 6" LIFTS. EXCAVATION OF THE EXISTING POROUS BACKFILL SHALL BE INCLUDED IN THIS ITEM.

ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/ OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO 709.00.

MECHANICAL CONNECTORS FOR REINFORCING STEEL:

AN APPROVED TYPE OF MECHANICAL CONNECTOR FOR REINFORCING BARS SHALL BE PROVIDED WHERE REQUIRED. INSTALLATION OF CONNECTORS SHALL CONFORM WITH MANUFACTURER'S RECOMMENDED PROCEDURES. IF A DOWEL BAR SPLICE TYPE OF CONNECTOR IS FURNISHED, THE MINIMUM DOWEL BAR LENGTH TO BE FURNISHED WITH THE CONNECTOR SHALL BE AS SHOWN ON THE PLAN.

CONNECTORS AND DOWEL BARS SHALL BE EPOXY COATED. COATING FOR BOTH THE CONNECTORS AND BARS SHALL CONFORM TO THE SAME SPECIFICATIONS. COATINGS WHICH HAVE BEEN DAMAGED OR WHICH OTHERWISE DO NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY, AND UNIFORMITY, MAY BE REPAIRED AS DIRECTED BY THE ENGINEER OR THEY SHALL BE REPLACED WITH MATERIAL WHICH MEETS THE SPECIFICATIONS.

CONNECTOR AND DOWEL BAR EXTENSIONS SHALL CONFORM WITH ITEM 509.

RECORD DRAWING

NOTE: THIS RECORD DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. B&N, INC HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT.

DESIGN AGENCY
BURGESS & NIPLE
100 WEST ERIE STREET PAINESVILLE, OHIO 44077

DESIGNED	DRAWN	REVIEWED	DATE
WCS	WCS	DWL	03-11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AKS		1805649	

STRUCTURE NOTES 1 OF 2
BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38 / VAR
PID No. 87632

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ITEM 510 - DOWEL HOLES WITH NON-SHRINK, NON-METALLIC GROUT, AS PER PLAN

THIS WORK INCLUDES THE DRILLING OF THE HOLES INTO THE CONCRETE AND FURNISHING AND PLACING EPOXY GROUT INTO THE HOLES.

WHEN DRILLING DOWEL HOLES, IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR.

THE CONTRACTOR SHALL DEMONSTRATE HIS ABILITY TO DRILL THE DOWEL HOLES WITHOUT DAMAGING THE SURROUNDING CONCRETE. SHOULD SUCH DAMAGE OCCUR, THE CONTRACTOR IS DIRECTED TO REPAIR THE DAMAGE AT HIS EXPENSE AND TO CORE DRILL THE REMAINING DOWEL HOLES. DEPTH OF HOLES SHALL BE AT LEAST 16 TIMES THE DOWEL DIAMETER UNLESS OTHERWISE SHOWN IN THE PLANS.

ITEM 511 - CLASS HP CONCRETE, BRIDGE DECK, AS PER PLAN
ITEM 511 - CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN
ITEM 511 - CLASS HP CONCRETE, SUBSTRUCTURE, AS PER PLAN
ITEM 511 - CLASS HP CONCRETE, SIDEWALK, AS PER PLAN

GENERAL REQUIREMENTS:
THE PROVISIONS OF ITEM 511 SHALL APPLY EXCEPT AS NOTED BELOW.

MIX OPTIONS:
ALL SUPERSTRUCTURE, BRIDGE DECK, SIDEWALK, PARAPET, AND APPROACH SLAB CONCRETE SHALL BE THIS MIX (HP4, AS PER PLAN) AS MODIFIED AS BY TABLE A. ALL OTHER STRUCTURE CONCRETE SHALL BE THIS MIX (HP2, AS PER PLAN) AS MODIFIED BY TABLE B.

THE FOLLOWING PROPORTIONS SHALL BE USED AS A STARTING MIX DESIGN:

CONCRETE TABLE A
QUANTITIES PER CUBIC YARD
AGGREGATES (SSD)

HP4, AS PER PLAN (GGBF SLAG + MICROSILICA)

AGGREGATE TYPE	FINE AGGRE. (LB)	* #8 COARSE AGGRE. (LB)	* #57 COARSE AGGRE. (LB)	TOTAL (LB)	CEMENT CONTENT (LB)	MICRO-SILICA (LB)	GGBF SLAG (LB)	WATER TO CEMENTITIOUS RATIO ±0.01	AIR CONTENT ±2%
GRAVEL	1245	360	1315	2920	400	30	170	0.43	7
LIMESTONE	1245	360	1335	2940	400	30	170	0.43	7
SLAG	1245	315	1155	2715	400	30	170	0.43	7

CONCRETE TABLE B
QUANTITIES PER CUBIC YARD
AGGREGATES (SSD)

HP2, AS PER PLAN (GGBF SLAG W/OUT MICROSILICA)

AGGREGATE TYPE	FINE AGGRE. (LB)	* #8 COARSE AGGRE. (LB)	* #57 COARSE AGGRE. (LB)	TOTAL (LB)	CEMENT CONTENT (LB)	MICRO-SILICA (LB)	GGBF SLAG (LB)	WATER TO CEMENTITIOUS RATIO ±0.01	AIR CONTENT ±2%
GRAVEL	1245	360	1315	2920	430	0	170	0.43	7
LIMESTONE	1245	360	1335	2940	430	0	170	0.43	7
SLAG	1245	315	1155	2715	430	0	170	0.43	7

* ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED PER ASTM C127. THE WEIGHTS SPECIFIED IN THE CONCRETE TABLE WERE CALCULATED FOR MATERIALS OF THE FOLLOWING BULK SPECIFIC GRAVITIES (SSD): NATURAL SAND AND GRAVEL 2.62, LIMESTONE SAND 2.68, LIMESTONE 2.65, SLAG 2.30, FLY ASH 2.65, GGBF SLAG 2.90, MICROSILICA SOLIDS 2.20, AND PORTLAND CEMENT 3.15. FOR AGGREGATES OF SPECIFIC GRAVITIES DIFFERING MORE THAN ±0.02 FROM THESE, THE WEIGHTS IN THE TABLE WILL BE CORRECTED.

PARAPET CONSTRUCTION (FORMED AND POURED):
FORMS SHALL NOT BE REMOVED UNTIL AT LEAST 2 HOURS AFTER THE FINAL SET.

THE MINIMUM CONCRETE SLUMP DURING PLACEMENT OF FORMED CONCRETE PARAPETS SHALL BE 6 INCHES, WITH A MAXIMUM SLUMP OF 8 INCHES.

ANCHOR BOLTS FOR FENCE POSTS AND NOISE BARRIERS SHALL BE CAST IN PLACE.

PARAPET CONSTRUCTION (SLIP FORMED):
SLIP FORMING SHALL IS PROHIBITED.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

EPOXY-URETHANE SEALER SHALL BE APPLIED TO THE SURFACES OF THE PARAPET AND DECK AS SHOWN IN THESE PLANS. THE COLOR OF THE URETHANE TOP COAT SHALL BE FEDERAL COLOR STANDARD NUMBER 595B-25630 (LIGHT-GREY, SEMI-GLOSS).

ITEM 512 - SEALING OF CONCRETE SURFACES (NON-EPOXY)

THE NON-EPOXY SEALER SHALL BE APPLIED TO THE SURFACES OF THE SIDEWALKS, CURBS AND APPROACH SLABS AS SHOWN IN THESE PLANS.

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL

THE PAINT SYSTEM SHALL BE OZEU CONFORMING TO 708.02. THE COLOR SHALL CLOSELY MATCH THAT IN THE FIELD.

ITEM 516- REFURBISHING BEARING DEVICES, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS AS WELL AS THEIR CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE SNUG FIT, REALIGNMENT SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60° F, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING." AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

ITEM 516 - SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN

INSTALL A 3 FOOT WIDE NEOPRENE SHEET AT LOCATIONS SHOWN IN THE PLANS. SECURE THE NEOPRENE SHEETING TO THE CONCRETE WITH 1¼"x #10 GAGE (LENGTH x SHANK DIAMETER) GALVANIZED BUTTON HEAD SPIKES THROUGH A 1 INCH OUTSIDE DIAMETER, #10 GAGE GALVANIZED WASHER. MAXIMUM FASTENER SPACING IS 9 INCHES. USE OF OTHER SIMILAR GALVANIZED DEVICES, WHICH WILL NOT DAMAGE EITHER THE NEOPRENE OR THE CONCRETE WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

CENTER THE NEOPRENE STRIPS ON ALL JOINTS. FOR HORIZONTAL JOINTS, SECURE THE HORIZONTAL NEOPRENE STRIP BY USING A SINGLE LINE OF FASTENERS, STARTING AT 6"± FROM THE TOP OF THE NEOPRENE STRIP. FOR THE VERTICAL JOINTS, SECURE THE VERTICAL NEOPRENE STRIP BY USING A SINGLE VERTICAL LINE OF FASTENERS, STARTING AT 6"± FROM THE VERTICAL EDGE OF THE NEOPRENE STRIP NEAREST TO THE CENTERLINE OF ROADWAY. FOR VERTICAL JOINTS, INSTALL 2 ADDITIONAL FASTENERS AT 6 INCHES, CENTER TO CENTER, ACROSS THE TOP OF THE NEOPRENE STRIP ON THE SAME SIDE OF THE VERTICAL JOINT AS THE SINGLE VERTICAL ROW OF FASTERNERS IS LOCATED.

THE VERTICAL NEOPRENE STRIPS SHALL COMPLETELY OVERLAP THE HORIZONTAL STRIPS. LAP LENGTHS OF THE HORIZONTAL STRIPS THAT ARE NOT VULCANIZED OR ADHESIVE BONDED, SHALL BE AT LEAST 1 FOOT IN LENGTH, OR 6 INCHES IN LENGTH IF THE LAP IS VULCANIZED OR ADHESIVE BONDED. NO LAPS ARE ACCEPTABLE IN VERTICALLY INSTALLED NEOPRENE STRIPS.

THE NEOPRENE SHEETING SHALL BE 3/32" THICK GENERAL PURPOSE, HEAVY-DUTY NEOPRENE SHEET WITH NYLON FABRIC REINFORCEMENT. THE SHEETING SHALL BE "FAIRPRENE NUMBER NN-0003", BY E.I. DUPONT DE NEMOURS AND COMPANY, INC., "WINGPRENE" BY THE GOODYEAR TIRE AND RUBBER COMPANY, OR AN APPROVED ALTERNATE. THE NEOPRENE SHEETING SHALL CONFORM TO THE FOLLOWING:

DESCRIPTION OF TEST	ASTM METHOD	REQUIREMENT
THICKNESS, INCHES	D751	0.094 ±0.01
BREAKING STRENGTH GRAB, LBS. MINIMUM (LONG. x TRANS.)	D751	700 x 700
ADHESIVE STRIP, 1" WIDE x 2" LONG, LBS MIN.	D751	9
BURST STRENGTH, PSI MINIMUM	D751	1400
HEAT AGING, 70 HR, 212 DEGREES F, 180 DEGREES BEND WITHOUT CRACKING	D2136	NO CRACKING OF COATING
LOW TEMP. BRITTLENESS 1 HR, -40 DEGREES F, BEND AROUND 1/4" MANDREL	D2136	NO CRACKING OF COATING

ITEM 526 - REINFORCED CONCRETE APPROACH SLAB, AS PER PLAN

CONCRETE SHALL BE ITEM 511 - CLASS HP CONCRETE, MIX HP4, AS PER PLAN. PARAPETS ON APPROACH SLABS SHALL BE INCLUDED IN THIS ITEM.

ITEM SPECIAL - STRUCTURE MISC.: PROTECTION OF UTILITIES

THIS ITEM SHALL CONSIST OF FURNISHING ALL NECESSARY LABOR, MATERIALS, AND EQUIPMENT TO PROTECT EXISTING FACILITIES AS APPROVED AND DIRECTED BY THE ENGINEER DURING CONSTRUCTION.

THE CONTRACTOR IS REMINDED THAT ALL EXISTING COMPONENTS AND SYSTEMS ARE TO REMAIN IN USE DURING AND AFTER THIS PROJECT AND REQUIRE PROTECTION. THIS WORK INCLUDES, BUT IS NOT LIMITED TO:

1. CAREFUL MACHINE DIGGING, HAND DIGGING, OR OTHER SUBSURFACE UTILITY INVESTIGATION TO ACCURATELY LOCATE OR TO EXPOSE UNDERGROUND LINES NEAR THE PROPOSED WORK.
2. AVOIDING OVERHEAD LINES.
3. OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT THESE SYSTEMS AND COMPONENTS FOR THE DURATION OF THE CONTRACT. THE CONTRACTOR IS DIRECTED TO SECTION 107 AND PARTICULARLY TO SECTION 107.12 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

ITEM 607- VANDAL PROTECTION FENCE, 6' STRAIGHT COATED FABRIC, AS PER PLAN

THIS ITEM SHALL BE AS PER THE DETAILS IN THE PLAN WITH THE APPLICABLE PORTIONS OF STANDARD DRAWING VPF-1-90 AND THE MANUFACTURER'S RECOMMENDATIONS.

THE ANCHORS SHALL BE CAST IN PLACE WITH 6⅝" MINIMUM EMBEDMENT OR INSTALLED IN THREADED FERRULE CONCRETE INSERTS. THE INSERTS SHALL BE APPROVED BY THE DIRECTOR. CORE WIRE SHALL BE 9 GAGE.

THE COLOR OF THE FENCE FABRIC, RAILS, POSTS, PLATES, TIE WIRES, NUTS, BOLTS, CAULK AND ANY ADDITIONAL VISUAL HARDWARE SHALL BE COATED BLACK ASTM F668 CLASS 2B PVC.

RECORD DRAWING

NOTE: THIS RECORD DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. B&N, INC HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT.

DESIGN AGENCY
BURGESS & NIPLE
100 WEST ERIE STREET PAINESVILLE, OHIO 44077

DESIGNED	CHECKED	DRAWN	REVISED	REVIEWED	DATE	STRUCTURE FILE NUMBER
WCS	AKS	WCS		DWL	03-11	1805649

STRUCTURE NOTES 2 OF 2
BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38/VAR
PID No. 87632

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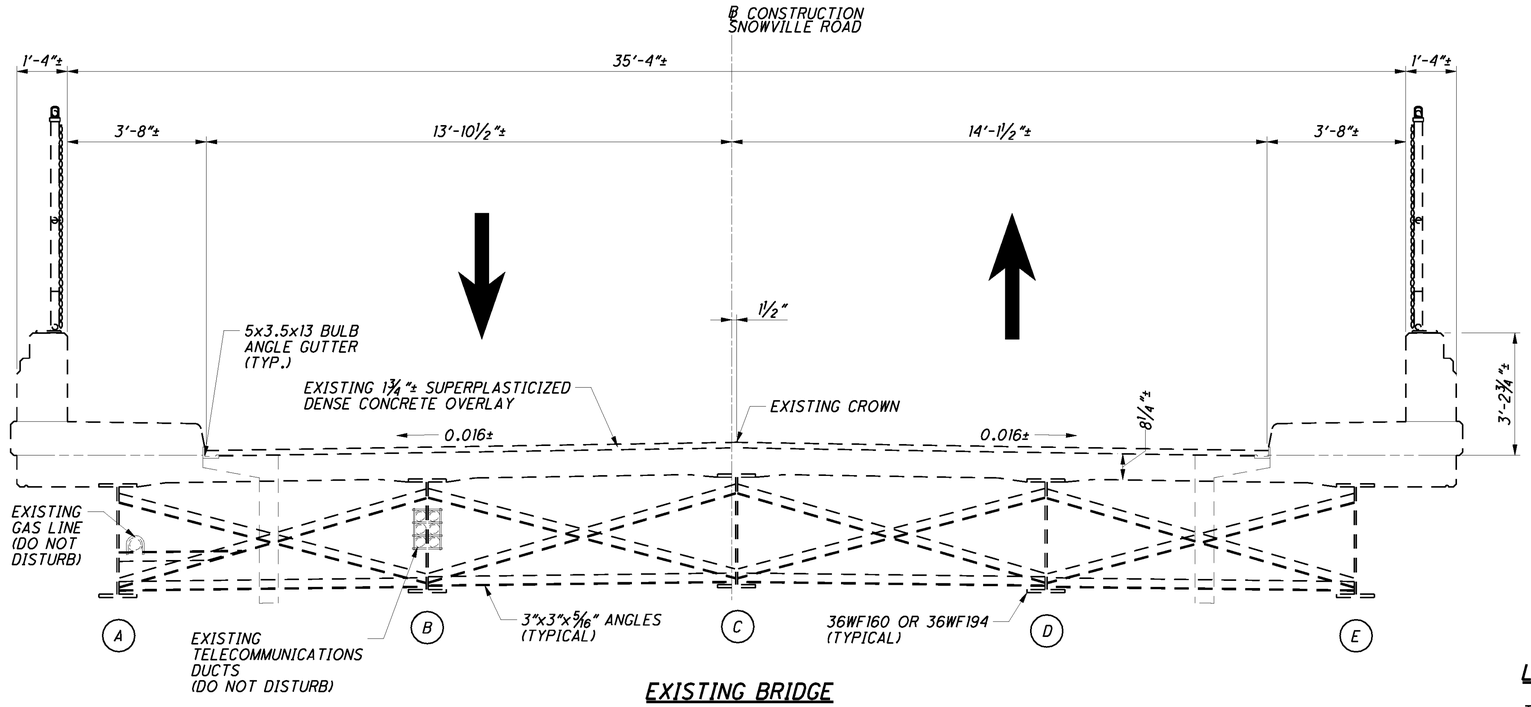


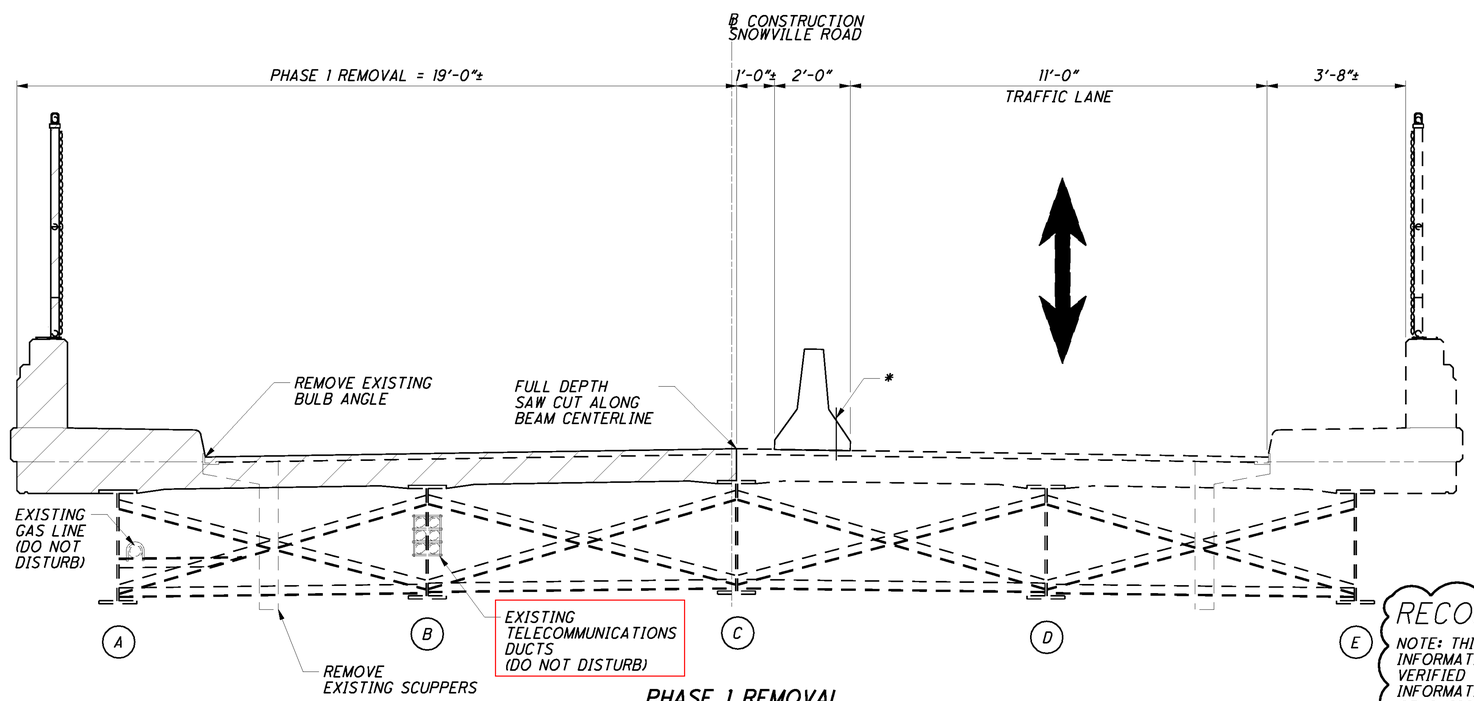
EXISTING BRIDGE

LEGEND:

TYP. = TYPICAL

= ITEM 202 - PORTIONS OF STRUCTURE REMOVED

* = ANCHOR PORTABLE CONCRETE BARRIER WITH 2 ANCHORS PER SEGMENT.



PHASE 1 REMOVAL

RECORD DRAWING

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CHECKED	REVISED	STRUCTURE FILE NUMBER	
AKS		1805649	

PHASED REMOVAL AND CONSTRUCTION DETAILS 1 OF 3
BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38/VAR
PID No. 87632

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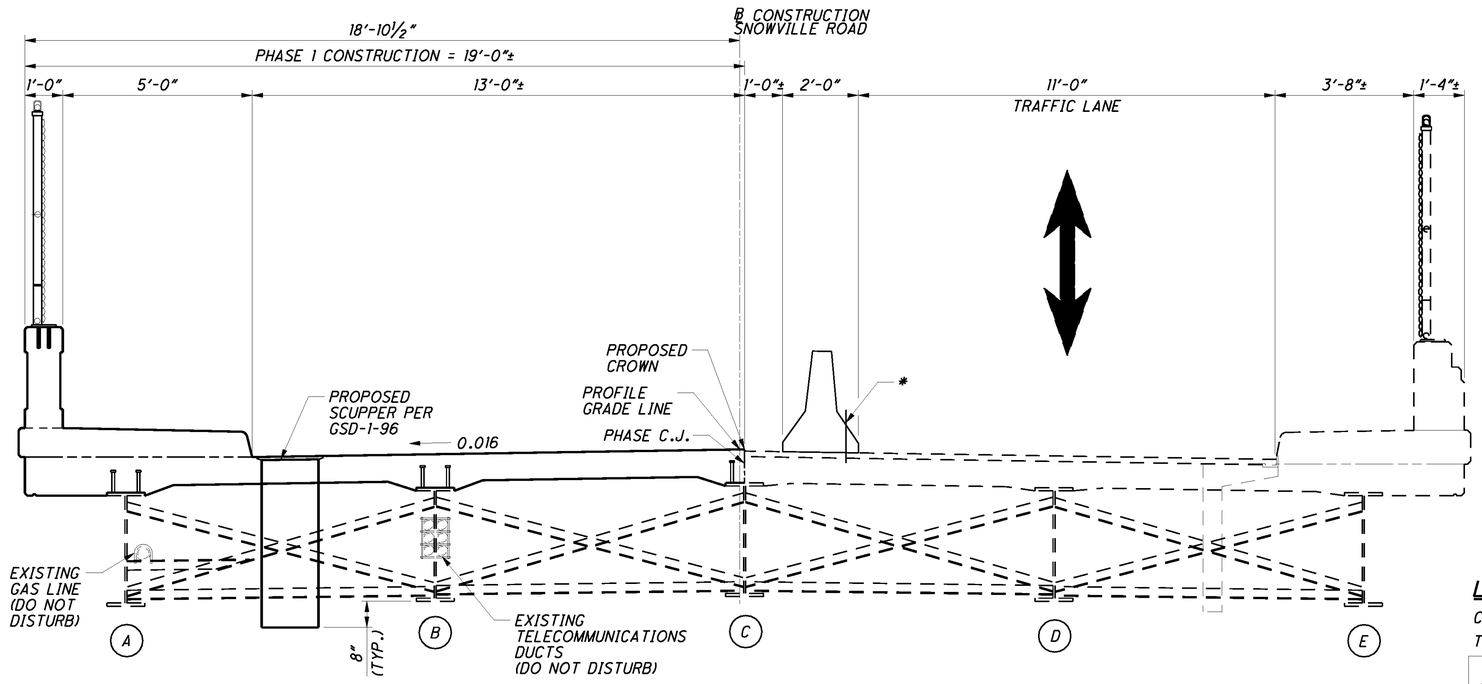
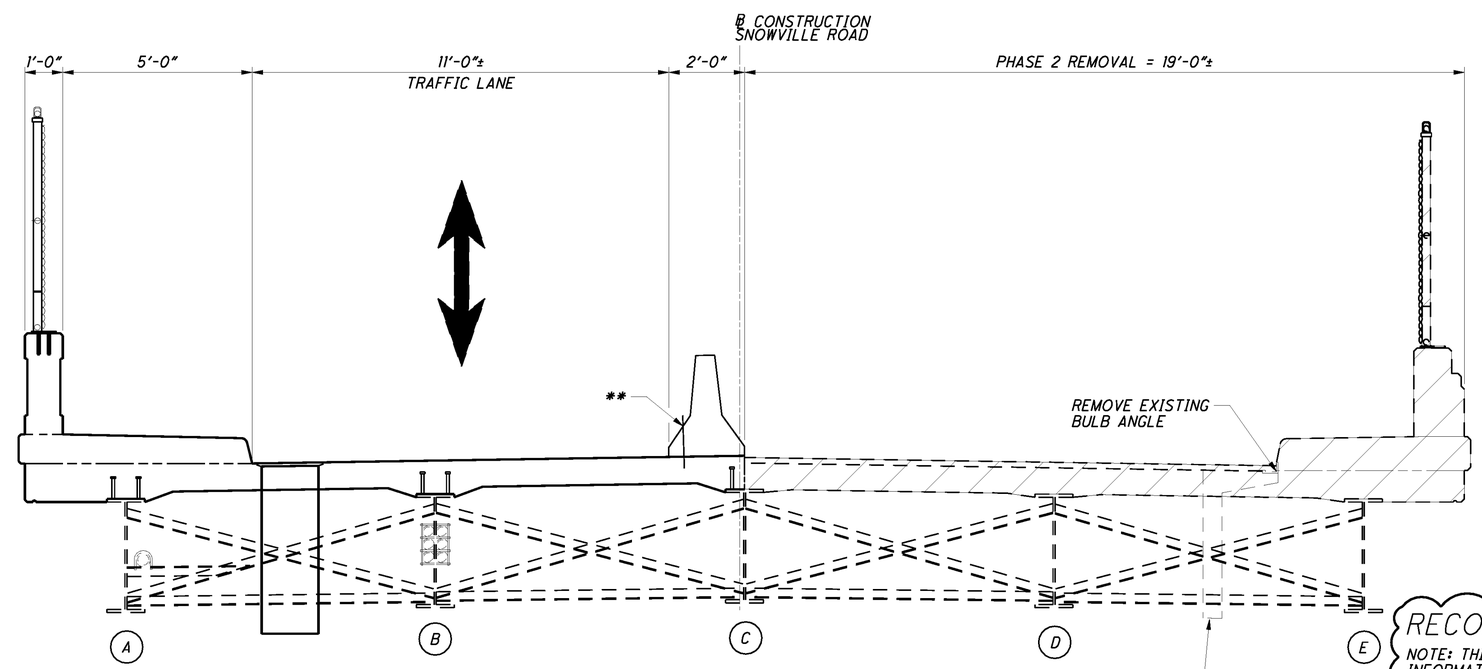


PHASE 1 CONSTRUCTION

LEGEND:

C.J.	= CONSTRUCTION JOINT
TYP.	= TYPICAL
	= ITEM 202 - PORTIONS OF STRUCTURE REMOVED
*	= ANCHOR PORTABLE CONCRETE BARRIER WITH 2 ANCHORS PER SEGMENT.
**	= ANCHOR PORTABLE CONCRETE BARRIER WITH 4 ANCHORS PER SEGMENT. FILL ANCHOR HOLES WITH EPOXY GROUT PER CMS 705.20.



PHASE 2 REMOVAL

RECORD DRAWING

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CHECKED	REVISED	STRUCTURE FILE NUMBER	
AKS		1805649	

PHASED REMOVAL AND CONSTRUCTION DETAILS 2 OF 3

BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38/VAR
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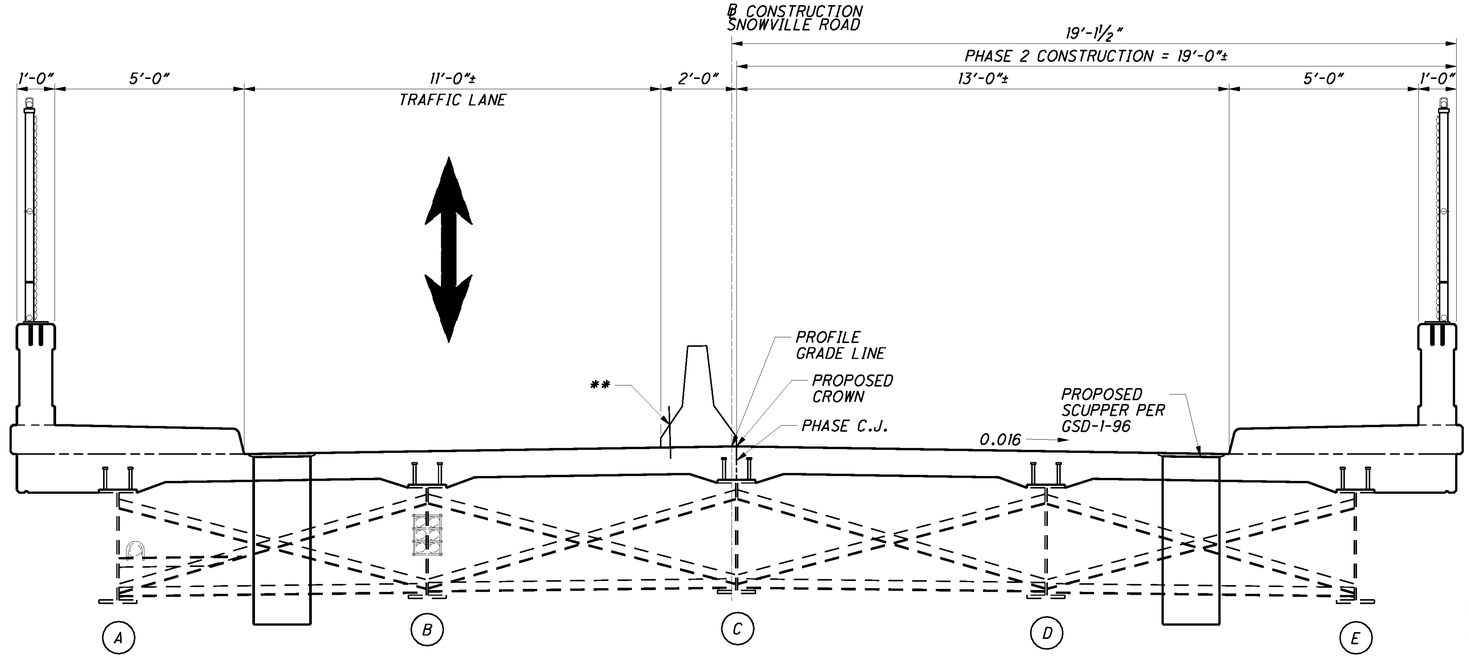
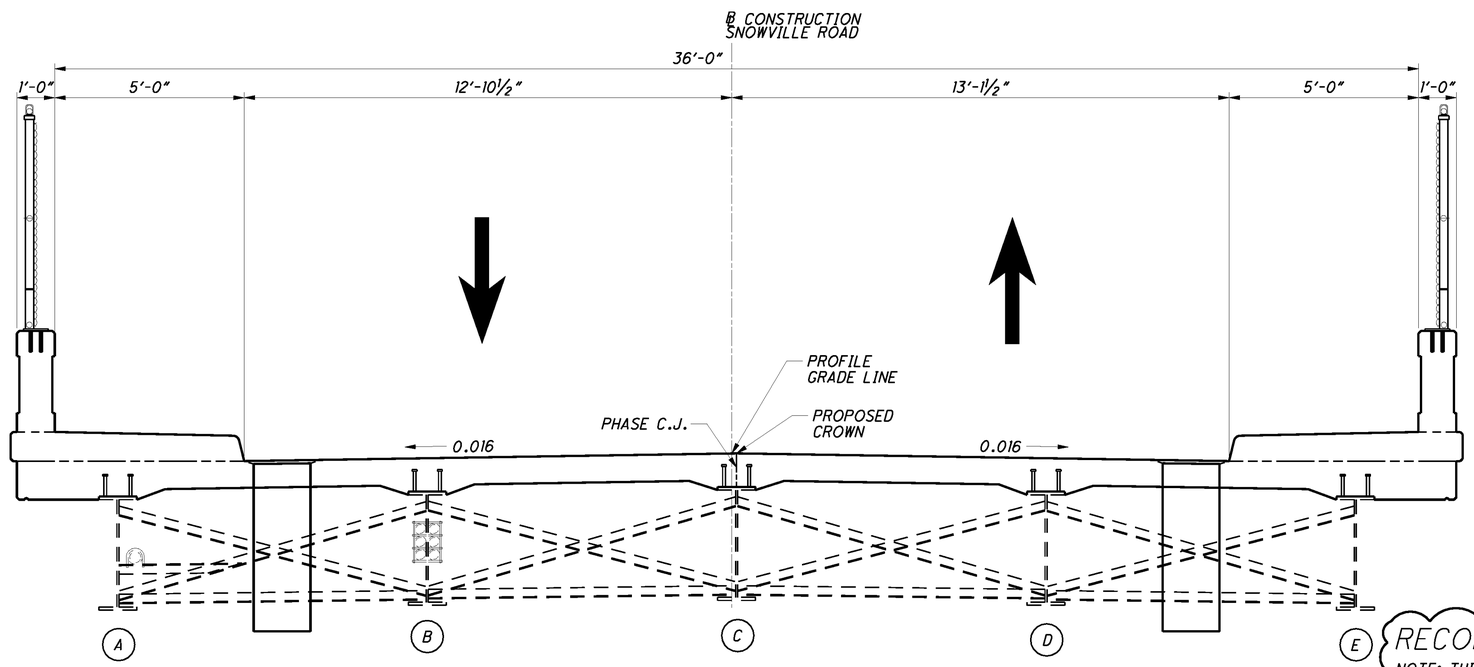


PHASE 2 CONSTRUCTION



FINAL BRIDGE

LEGEND:

C.J. = CONSTRUCTION JOINT

TYP. = TYPICAL

** = ANCHOR PORTABLE CONCRETE BARRIER WITH 4 ANCHORS PER SEGMENT. FILL ANCHOR HOLES WITH EPOXY GROUT PER CMS 705.20.

RECORD DRAWING

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100 WEST ERIE STREET PAINESVILLE, OHIO 44077

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PHASED REMOVAL AND CONSTRUCTION DETAILS 3 OF 3
BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38/VAR
PID No. 87632

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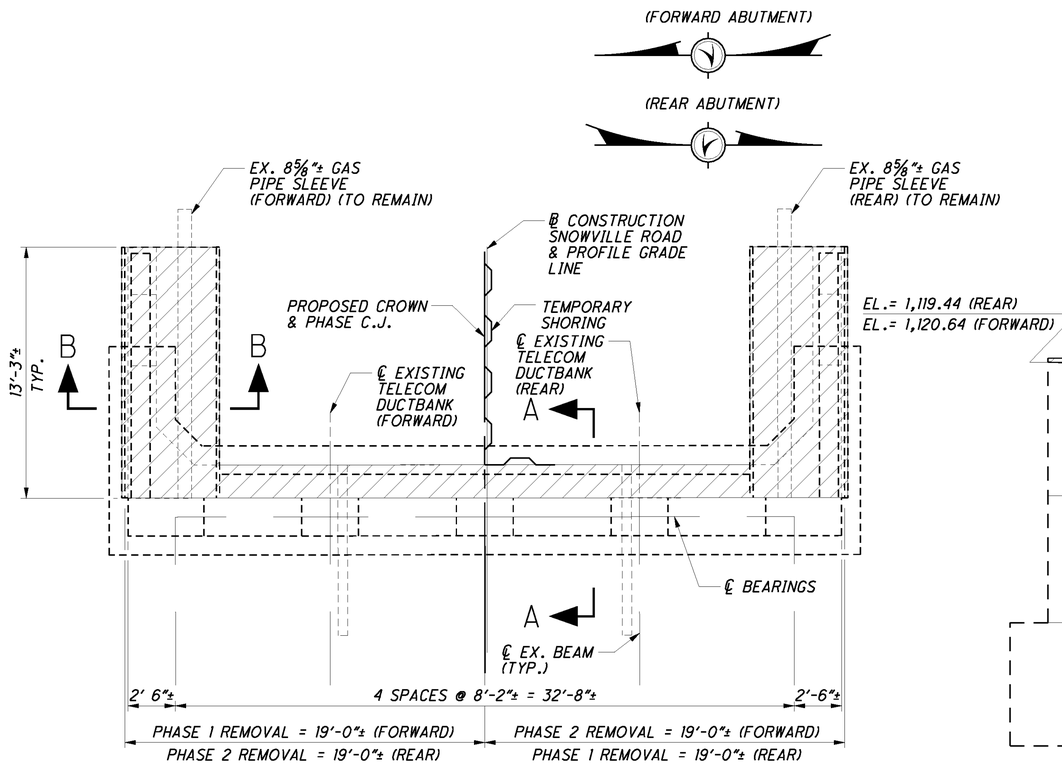
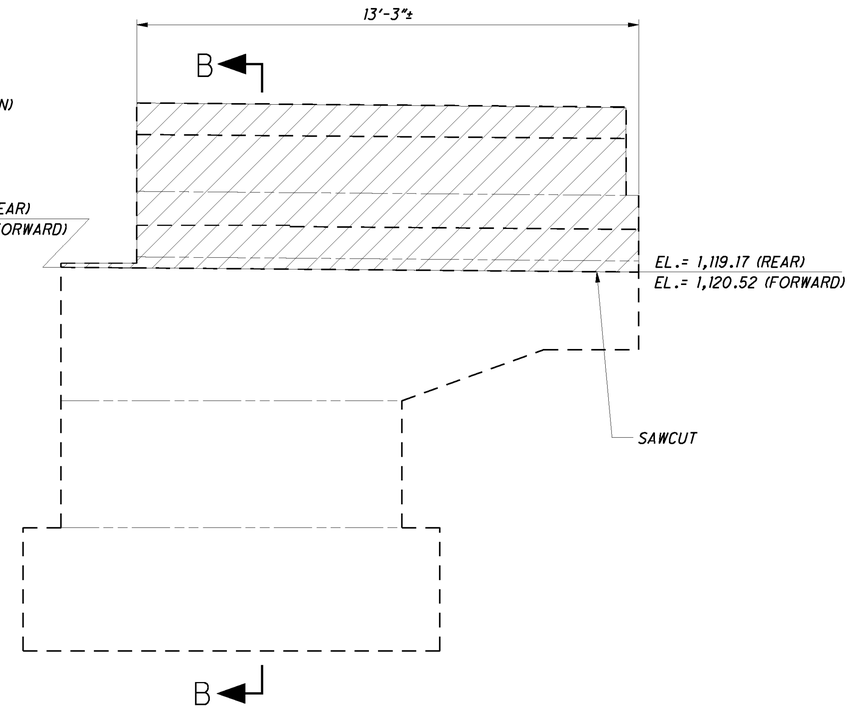
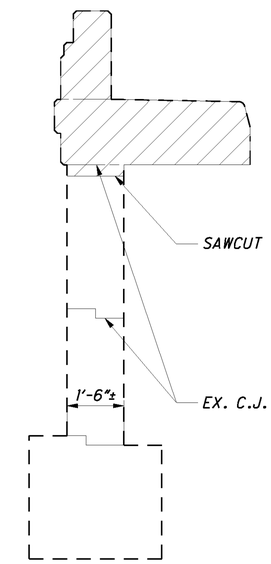


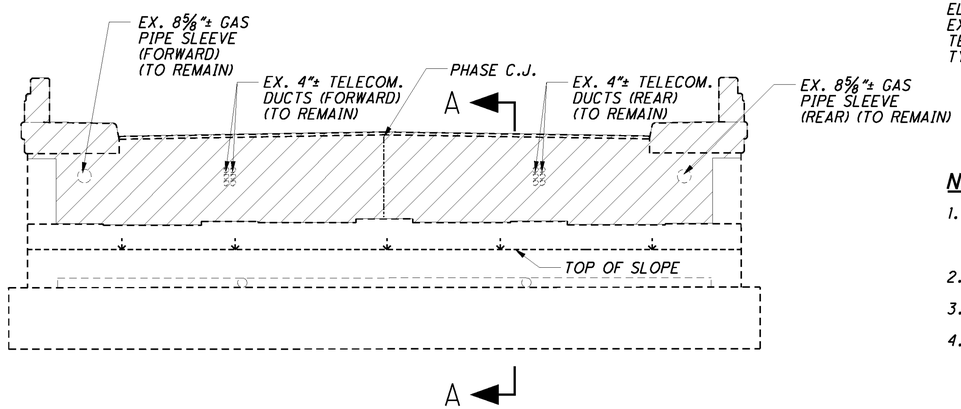
ABUTMENT REMOVAL PLAN
(REAR ABUTMENT SHOWN, FORWARD SIMILAR)



WINGWALL REMOVAL ELEVATION



SECTION B-B



ABUTMENT REMOVAL ELEVATION

LEGEND:

	= ITEM 202 - PORTIONS OF STRUCTURE REMOVED
C.J.	= CONSTRUCTION JOINT
EL.	= ELEVATION
EX.	= EXISTING
TELECOM.	= TELECOMMUNICATION
TYP.	= TYPICAL

NOTES:

1. REMOVE EXISTING BACKWALLS, PORTIONS OF FILLET TO SEAT AND PORTIONS OF CHEEKWALLS AND WINGWALLS AS SHOWN.
2. REFURBISH AND RESET ROCKERS.
3. REMOVE ENDFRAMES.
4. PILES NOT SHOWN ON THIS SHEET.

RECORD DRAWING

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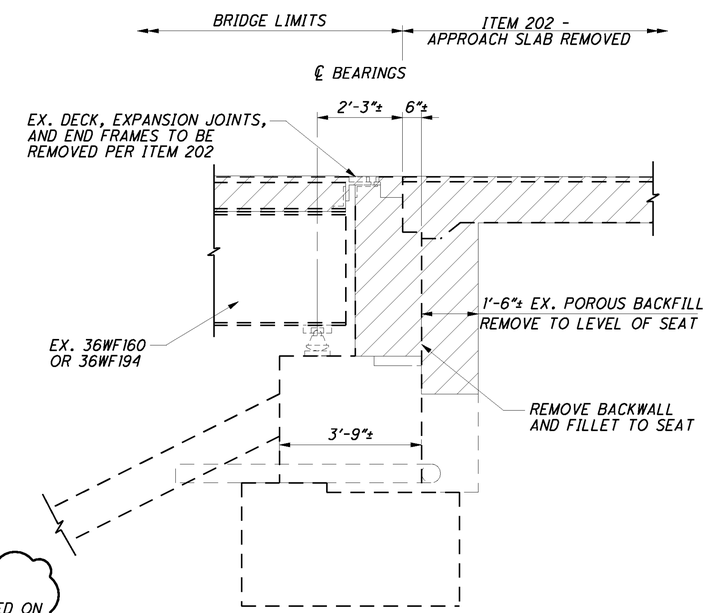

SECTION A-A

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100 WEST ERIE STREET PAINESVILLE, OHIO 44077

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ABUTMENT AND WINGWALL REMOVAL DETAILS
BRIDGE NO. CUY-77-0038
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PID No. 87632

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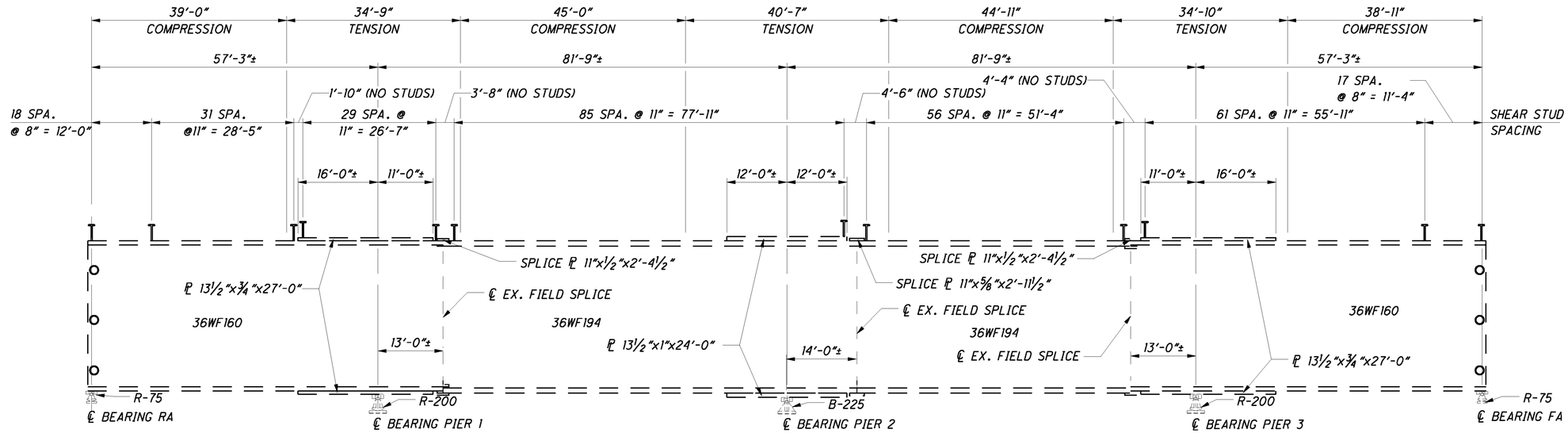
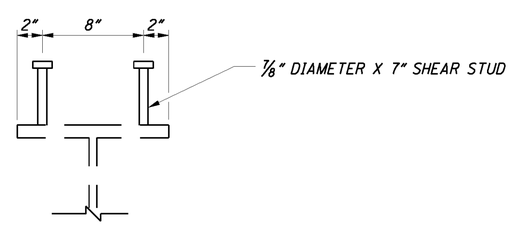


BEAM ELEVATION



SHEAR STUD DETAIL

NOTES:

1. WELDING OF ATTACHMENTS FOR SUPPORTS OF THE CONCRETE DECK FINISHING MACHINE TO THE TOP FLANGE IS NOT PERMITTED EVEN IN COMPRESSION AREAS. THE CONTRACTOR MAY SHOOT SHEAR CONNECTORS AT LOCATIONS OF NECESSARY SUPPORT AT ANY LOCATION AT LEAST FOUR INCHES FROM ADJACENT SHEAR STUDS, IF PRESENT, ALONG THE CENTERLINE OF A FLANGE PLATE, INCLUDING TENSION AREAS. THE CONTRACTOR MAY THEN WELD ATTACHMENTS FOR SUPPORT OF THE CONCRETE FINISHING MACHINE TO THE SHEAR CONNECTORS.

LEGEND:

EX. = EXISTING
FA = FORWARD ABUTMENT
RA = REAR ABUTMENT
SPA. = SPACES

RECORD DRAWING

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BEAM ELEVATION AND DETAILS
BRIDGE NO. CUY-77-0038
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PID No. 87632

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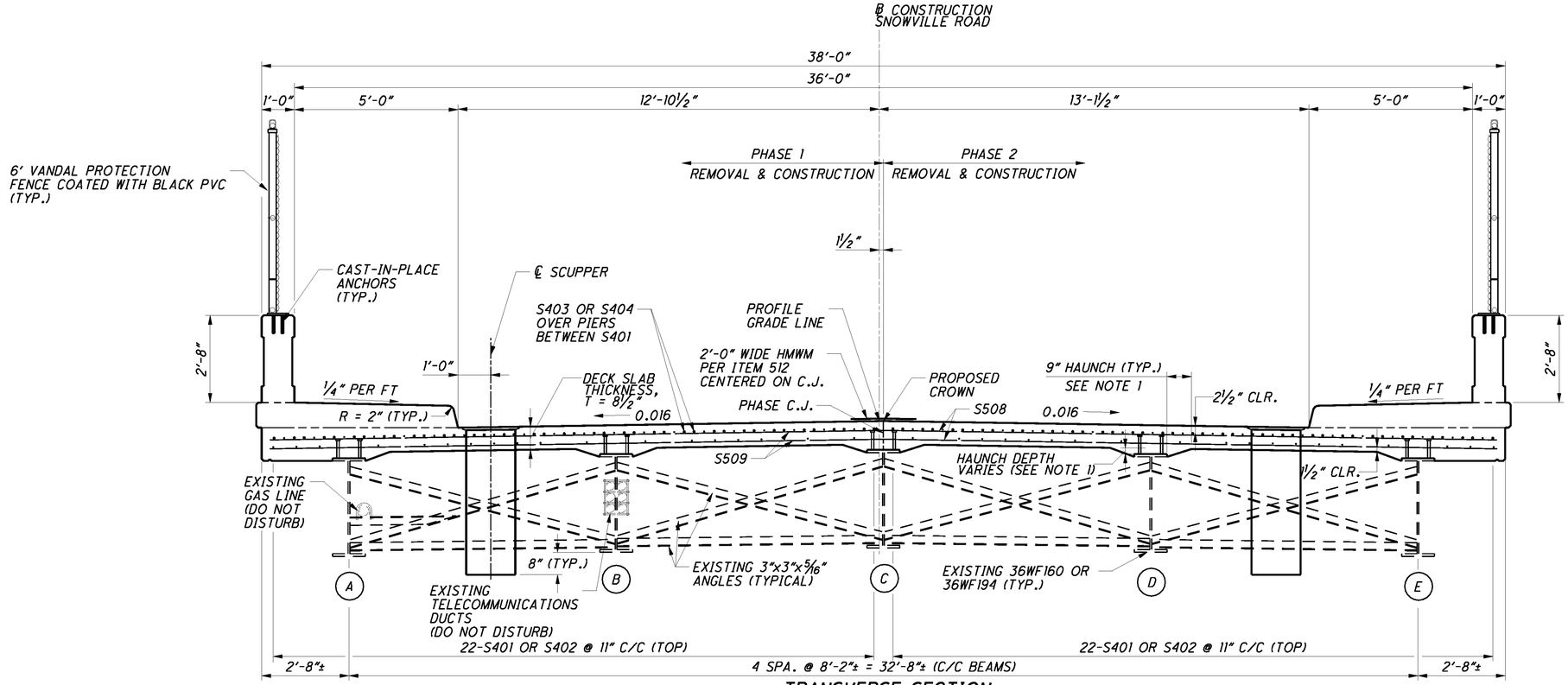
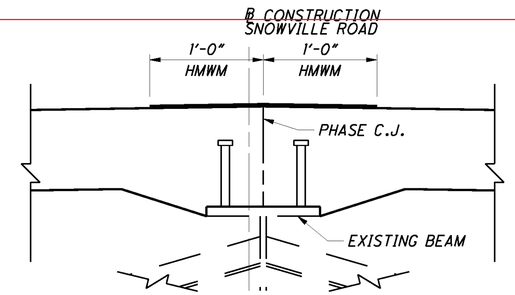
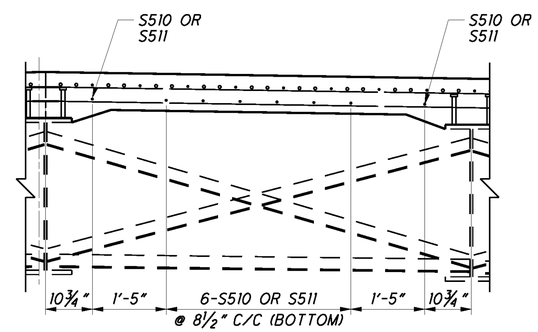


TRANSVERSE SECTION



PHASE CONSTRUCTION JOINT SEALING DETAIL



BOTTOM LONGITUDINAL REINFORCEMENT DETAIL

NOTES:

1. THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 4" AND A CONSTANT HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM FLANGE OF 9". DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT FINISHED GRADE. THE ALLOWABLE TOLERANCE FOR THE HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM FLANGE IS 3"±.

   THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS.

2. FOR PARAPET DETAILS, SEE SHEET 14/18.
   FOR FENCE DETAILS, SEE SHEET 13/18.

3. WELD SCUPPER SUPPORT BAR TO EXISTING SCUPPER SUPPORT CROSS MEMBER.

LEGEND:

C/C = CENTER TO CENTER
C.J. = CONSTRUCTION JOINT
CLR. = CLEAR
DIA. = DIAMETER
HMWM = HIGH MOLECULAR WEIGHT METHACRYLATE
MIN. = MINIMUM
PROP. = PROPOSED
TYP. = TYPICAL
SPA. = SPACES

RECORD DRAWING

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DESIGN AGENCY
BURGESS & NIPLE
100 WEST ERIE STREET PAINESVILLE, OHIO 44077

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AKS		1805649	

TRANSVERSE SECTION
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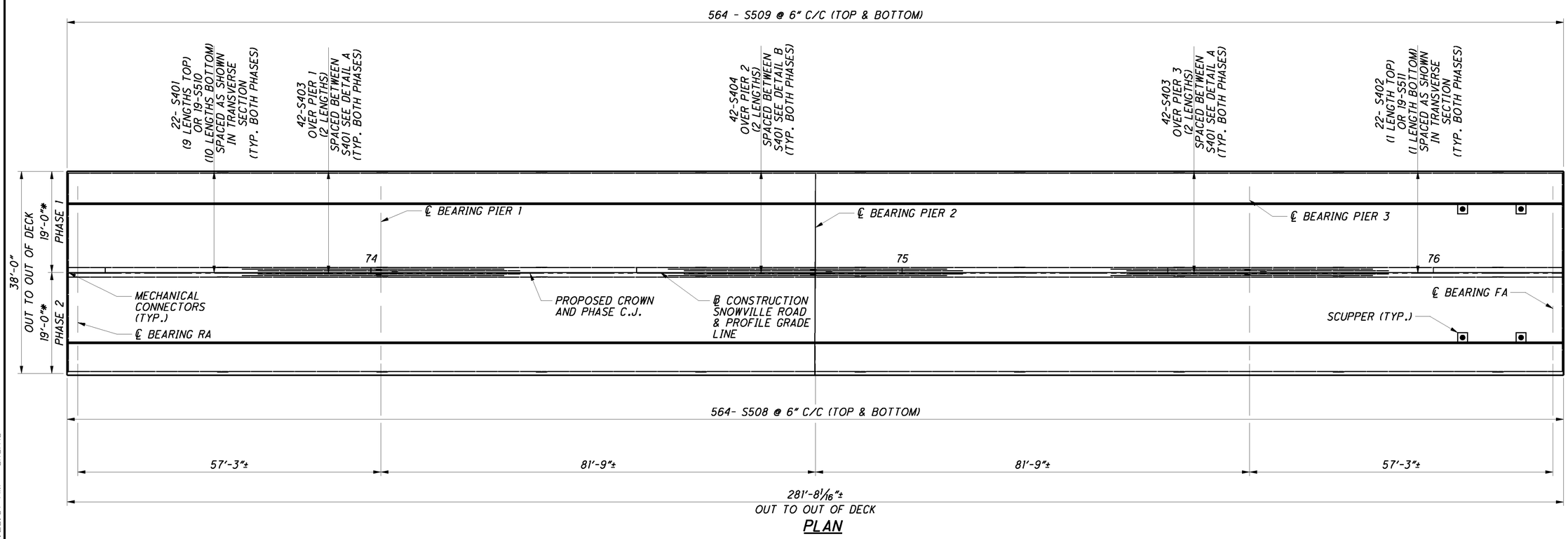
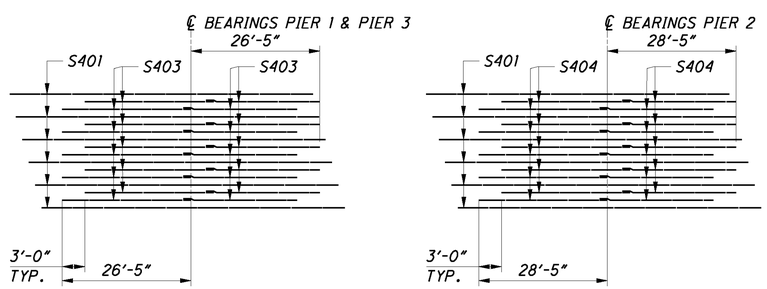


PLAN



DETAIL A

DETAIL B

NOTES:

1. FOR TRANSVERSE SECTION, SEE SHEET 9/18.
2. FOR PARAPET & SIDEWALK DETAILS, SEE SHEET 14/18.
3. MINIMUM REINFORCING LAP LENGTHS:
   #4 = 2'-0"
   #5 = 3'-4"

LEGEND:

C/C = CENTER TO CENTER
C.J. = CONSTRUCTION JOINT
FA = FORWARD ABUTMENT
RA = REAR ABUTMENT
TYP. = TYPICAL
* = MEASURED FROM PHASE CONSTRUCTION JOINT

RECORD DRAWING

NOTE: THIS RECORD DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. B&N, INC HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT.

DESIGN AGENCY
BURGESS & NIPLE
100 WEST ERIE STREET PAINESVILLE, OHIO 44077

DESIGNED	DRAWN	REVIEWED	DATE
WCS	WCS	DWL	03-11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AKS		1805649	

DECK PLAN
BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38/VAR
PID No. 87632

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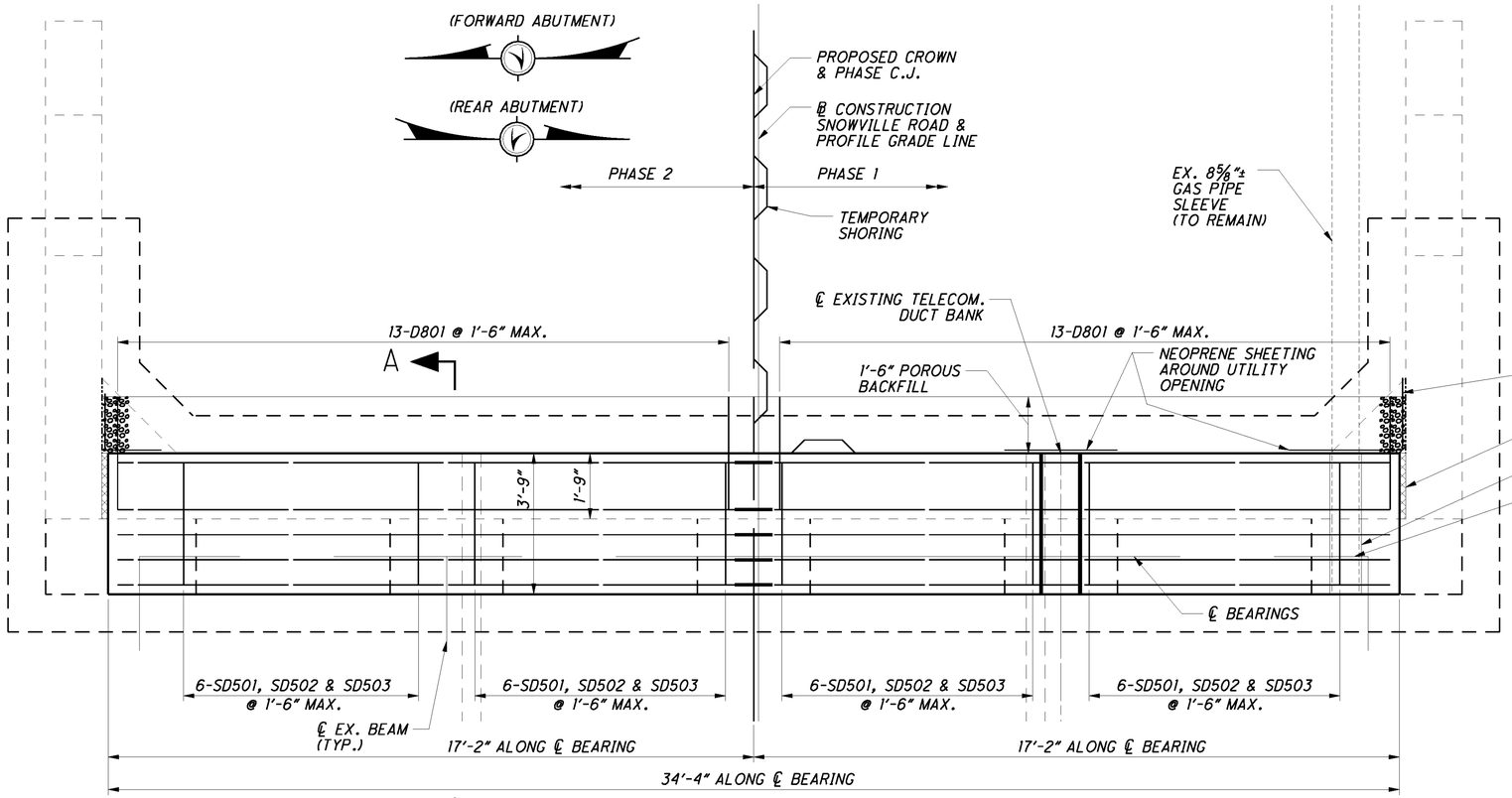


PLAN

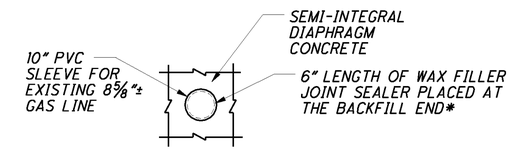
(REAR ABUTMENT SHOWN, FORWARD SIMILAR)

NOTES:

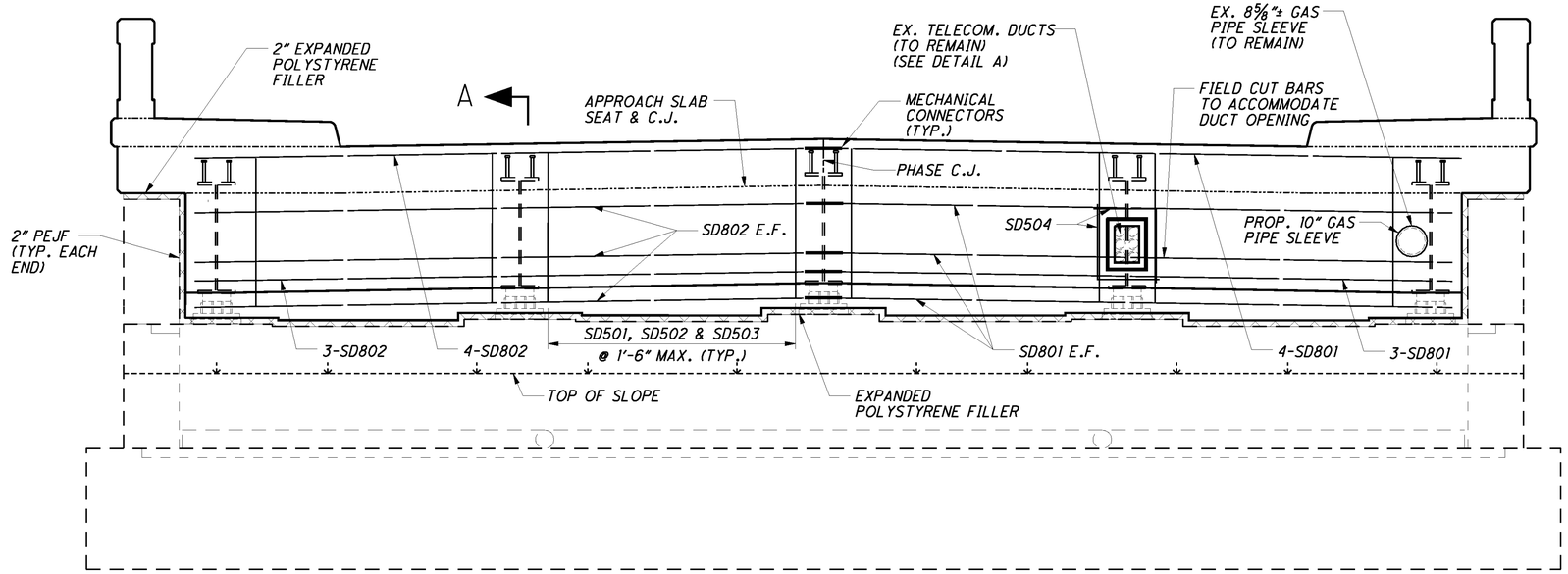
1. SEE SHEET 12/18 FOR SECTION A-A.
2. REFERENCE STD. BRIDGE DWG. SICD-1-96 FOR ADDITIONAL DETAILS.
3. MINIMUM REINFORCING LAP LENGTHS: #8 = 7'-1"
4. LOCATE REINFORCING TO MISS UTILITIES WHERE POSSIBLE.
5. PILES, PROPOSED SIDEWALK AND APPROACH SLAB NOT SHOWN FOR CLARITY.

LEGEND:

C.J.	= CONSTRUCTION JOINT
E.F.	= EACH FACE
EX.	= EXISTING
MAX.	= MAXIMUM
PEJF	= PREFORMED EXPANSION JOINT FILLER
PROP.	= PROPOSED
TELECOM.	= TELECOMMUNICATIONS
TYP.	= TYPICAL

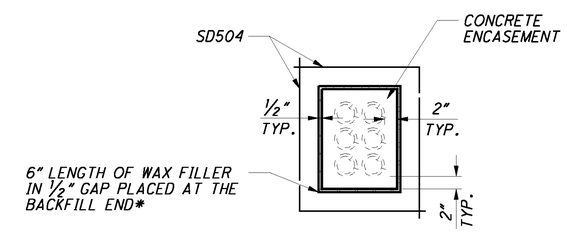


GAS LINE SLEEVE EXTENSION DETAIL



ELEVATION

(REAR ABUTMENT SHOWN, FORWARD SIMILAR)



DETAIL A

*WAX FILLER SHALL BE FILL COAT #7 AVAILABLE FROM THE TRENTON CORPORATION, 7700 JACKSON ROAD, ANN ARBOR, MI 48103. PHONE NUMBER (734) 426-3955 OR APPROVED EQUAL. THE MATERIAL AND INSTALLATION SHALL CONFORM TO THE MANUFACTURER SPECIFICATIONS.

RECORD DRAWING

NOTE: THIS RECORD DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. B&N, INC HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT.

DESIGN AGENCY: BURGESS & NIPLE, 100 WEST ERIE STREET PAINESVILLE, OHIO 44077

DESIGNED	CHECKED	DRAWN	REVIEWED	DATE
WCS	AKS	WCS	DWL	03-11
			REVISED	STRUCTURE FILE NUMBER
				1805649

SEMI-INTEGRAL DIAPHRAGM PLAN AND ELEVATION

BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38 / VAR
PID No. 87632

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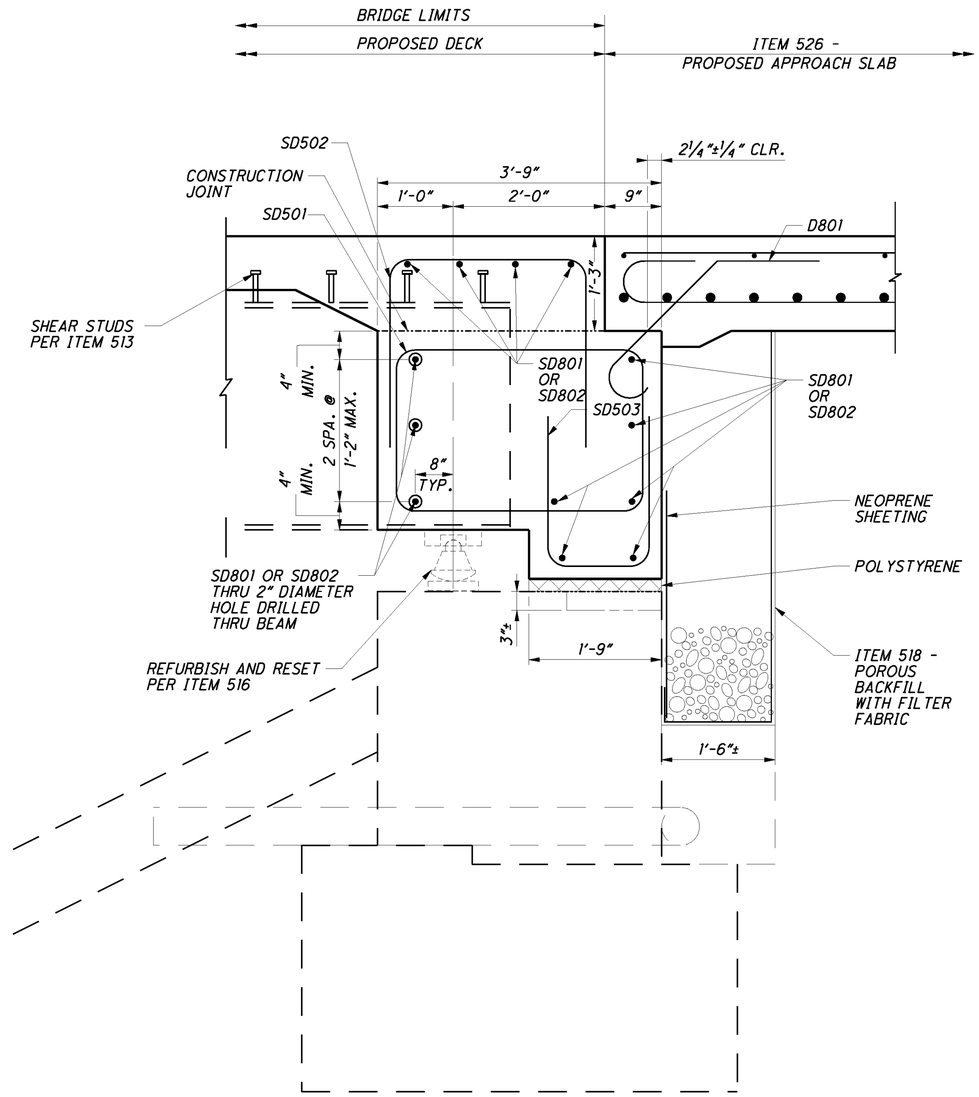
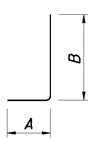
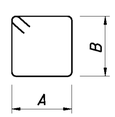


SECTION A-A

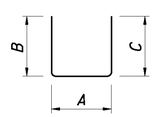
MARK	TYPE	DIMENSIONS				
		A	B	C	D	E
		DIAPHRAGM				
SD501	16	3'-3"	2'-1½"			
SD502	18	2'-6"	2'-5"	2'-5"		
SD503	18	1'-3"	1'-11"	1'-11"		
SD504	1	2'-0"	2'-8"			



TYPE 1



TYPE 16



TYPE 18

NOTES:

1. PILES NOT SHOWN ON THIS SHEET.
2. FOR DIAPHRAGM REINFORCING SEE SHEET 11/18.
3. CLEAN AND PAINT BEARINGS AND 10 FEET OF THE BEAM ENDS PER ITEM 514- OZEU SYSTEM.
4. PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS OF AN INDIVIDUAL PHASE WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE THE HORIZONTAL CONSTRUCTION JOINT BETWEEN THE DIAPHRAGM AND DECK CONCRETE AT THE APPROACH SLAB SEAT.
5. POROUS BACKFILL WITH FILTER FABRIC 1'-6" THICK SHALL EXTEND UP TO THE BOTTOM OF THE APPROACH SLABS, TO 1' BELOW THE EMBANKMENT SURFACE AND LATERALLY TO THE ENDS OF THE WINGWALLS. PLACE AND COMPACT POROUS BACKFILL IN 6" LIFTS.

LEGEND:

CLR. = CLEAR
MAX. = MAXIMUM
MIN. = MINIMUM
SPA. = SPACES
TYP. = TYPICAL

RECORD DRAWING

NOTE: THIS RECORD DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. B&N, INC HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT.

DESIGN AGENCY
BURGESS & NIPLE
100 WEST ERIE STREET PAINESVILLE, OHIO 44077

DESIGNED	CHECKED	DRAWN	REVIEWED	DATE
WCS	AKS	WCS	DWL	03-11
		REVISED	STRUCTURE FILE NUMBER	
			1805649	

SEMI-INTEGRAL DIAPHRAGM DETAILS

BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38/VAR
PID No. 87632

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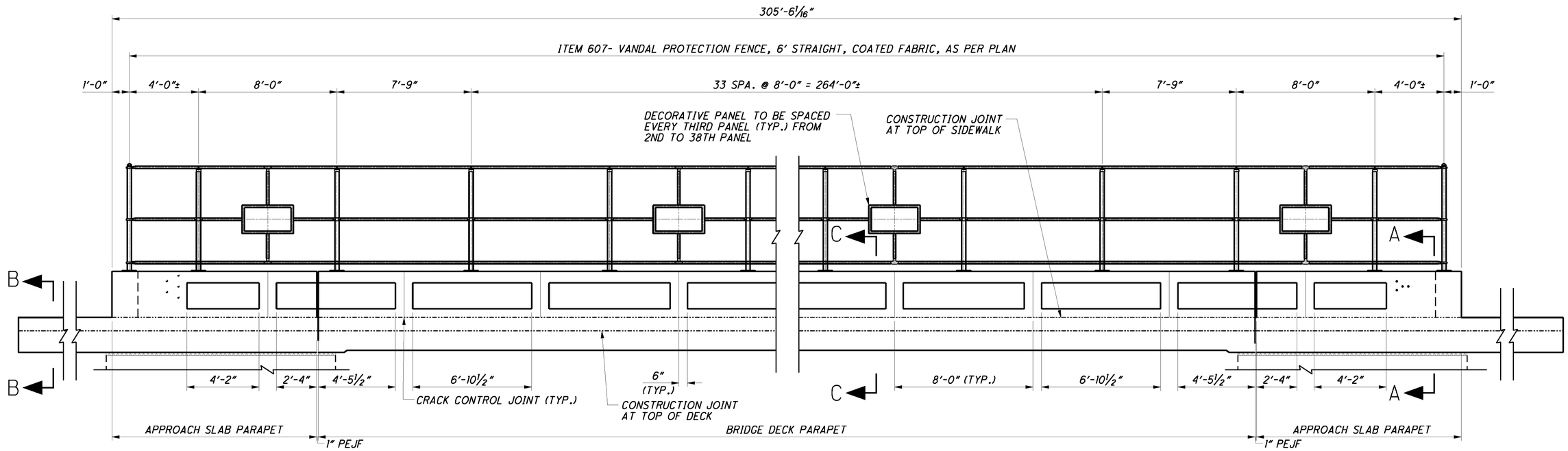

SOUTH PARAPET ELEVATION

(OUTSIDE FACE SOUTH PARAPET SHOWN, NORTH PARAPET SIMILAR)

NOTES:

1. FOR DETAILS NOT SHOWN, REFER TO STANDARD BRIDGE DRAWINGS VPF-1-90 AND BR-2-98.
2. FOR PARAPET DETAILS, SEE SHEET 14/18.
3. FOR SECTIONS A-A & B-B SEE SHEET 18/18.
4. FOR SECTION C-C SEE SHEET 14/18.

LEGEND:

PEJF = PREFORMED EXPANSION JOINT FILLER
SPA. = SPACES
TYP. = TYPICAL

RECORD DRAWING

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DESIGN AGENCY
BURGESS & NIPLE
100 WEST ERIE STREET PAINESVILLE, OHIO 44077

DESIGNED	DRAWN	REVIEWED	DATE
WCS	WCS	DWL	03-11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AKS		1805649	

VANDAL PROTECTION FENCE AND PARAPET DETAILS 1 OF 2
BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38/VAR
PID No. 87632

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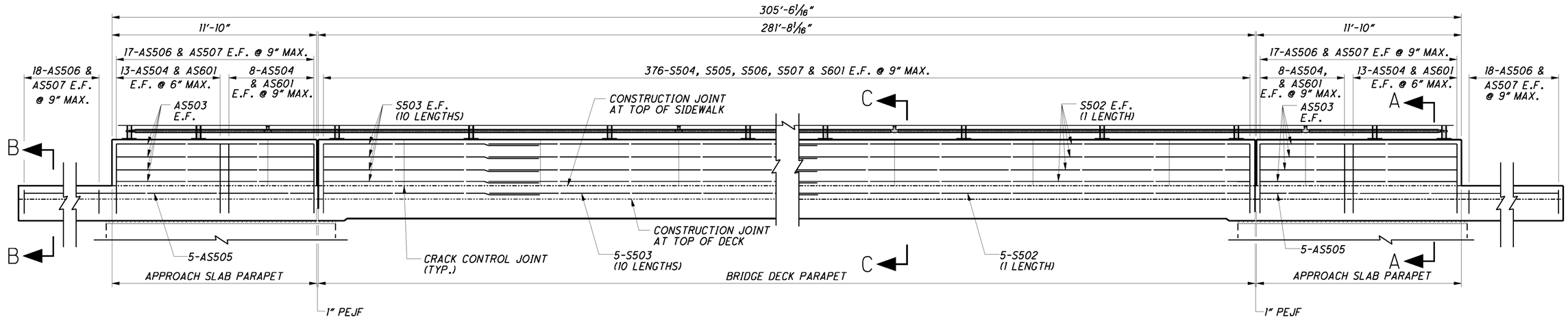
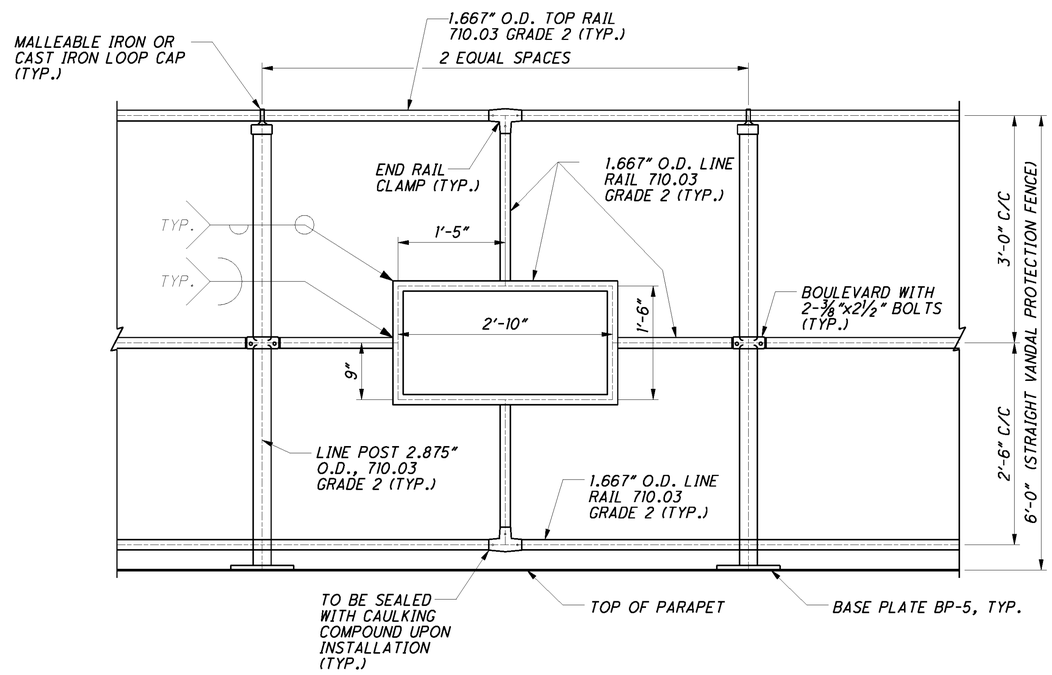


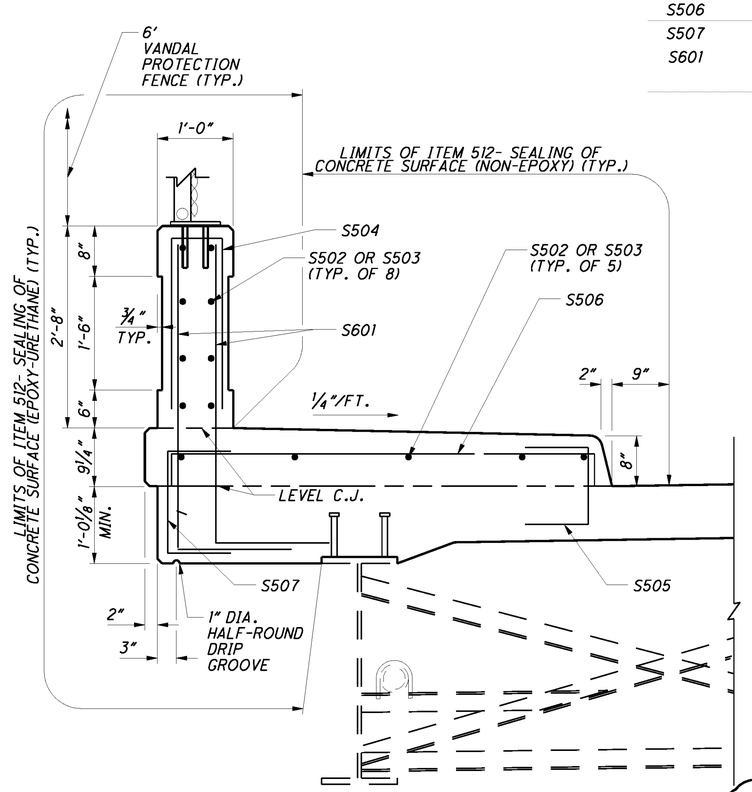
SOUTH PARAPET ELEVATION

(OUTSIDE FACE SHOWN, NORTH PARAPET SIMILAR)

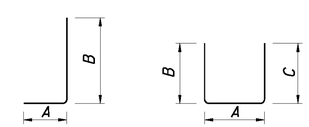
MARK	TYPE	DIMENSIONS				
		A	B	C	D	E
PARAPETS AND SIDEWALK						
S504	18	6 1/2"	2'-4"	2'-4"		
S505	18	1'-0 1/2"	10"	10"		
S506	18	5'-7"	6"	6"		
S507	18	1'-4"	10"	10"		
S601	1	1'-10"	4'-3"			



DECORATIVE PANEL DETAIL



SECTION C-C



TYPE 1 TYPE 18

NOTES:

1. FOR INFORMATION NOT SHOWN REFER TO STANDARD BRIDGE DRAWINGS BR-2-98 AND VPF-1-90.
2. FOR SECTIONS A-A & B-B, SEE SHEET 18/18.
3. FOR ADDITIONAL AESTHETIC CONCRETE PANEL DETAILS SEE SHEET 13/18.

LEGEND:

C/C = CENTER TO CENTER
C.J. = CONSTRUCTION JOINT
DIA. = DIAMETER
E.F. = EACH FACE
MAX. = MAXIMUM
MIN. = MINIMUM
O.D. = OUTSIDE DIAMETER
PEJF = PREFORMED EXPANSION JOINT FILLER
TYP. = TYPICAL

RECORD DRAWING

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DESIGN AGENCY
BURGESS & NIPLE
100 WEST ERIE STREET PAINESVILLE, OHIO 44077

DESIGNED	DRAWN	REVIEWED	DATE
WCS	WCS	DWL	03-11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AKS		1805649	

VANDAL PROTECTION FENCE AND PARAPET DETAILS 2 OF 2

BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38/VAR
PID No. 87632

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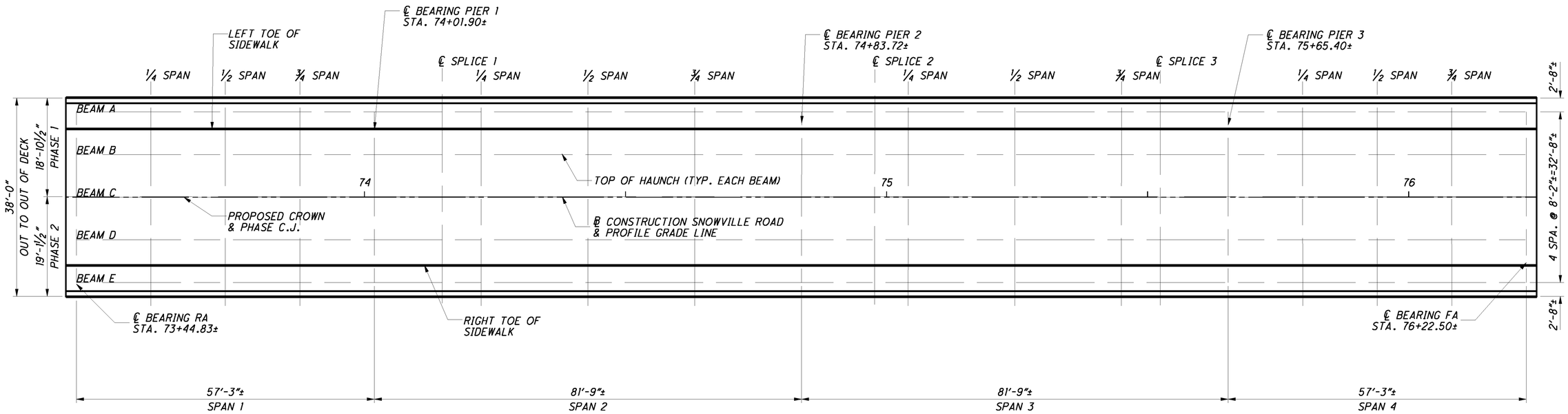

PLAN

LEGEND:

C.J. = CONSTRUCTION JOINT
FA = FORWARD ABUTMENT
RA = REAR ABUTMENT
TYP. = TYPICAL

RECORD DRAWING

NOTE: THIS RECORD DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. B&N, INC HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT.

DESIGN AGENCY
BURGESS & NIPLE
100 WEST ERIE STREET PAINESVILLE, OHIO 44077

DESIGNED	DRAWN	REVIEWED	DATE
WCS	WCS	DWL	03-11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AKS		1805649	

SCREED PLAN
BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38/VAR
PID No. 87632

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DECK SCREED ELEVATION TABLE

ELEVATION LINE	℄ BEARINGS R.A.		¼ SPAN		½ SPAN		¾ SPAN		℄ BEARINGS PIER 1		℄ SPLICE 1		¼ SPAN		½ SPAN		¾ SPAN		℄ BEARINGS PIER 2	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
BEAM A	73+44.83	1120.85	73+59.10	1121.10	73+73.37	1121.32	73+87.63	1121.51	74+01.91	1121.69	74+14.91	1121.85	74+22.36	1121.93	74+42.82	1122.13	74+63.27	1122.26	74+83.74	1122.36
LEFT TOE OF SIDEWALK	73+44.83	1120.85	73+59.10	1121.10	73+73.37	1121.32	73+87.63	1121.51	74+01.91	1121.69	74+14.91	1121.85	74+22.36	1121.93	74+42.82	1122.13	74+63.27	1122.26	74+83.73	1122.36
BEAM B	73+44.83	1120.92	73+59.10	1121.17	73+73.37	1121.39	73+87.63	1121.59	74+01.90	1121.77	74+14.90	1121.92	74+22.36	1122.01	74+42.81	1122.21	74+63.27	1122.34	74+83.73	1122.44
P.G.	73+44.83	1121.05	73+59.10	1121.30	73+73.37	1121.52	73+87.63	1121.72	74+01.90	1121.89	74+14.90	1122.05	74+22.36	1122.14	74+42.81	1122.33	74+63.27	1122.47	74+83.72	1122.57
BEAM C, CROWN, & PHASE C.J.	73+44.83	1121.05	73+59.10	1121.30	73+73.37	1121.53	73+87.63	1121.72	74+01.90	1121.90	74+14.90	1122.05	74+22.35	1122.14	74+42.81	1122.34	74+63.26	1122.47	74+83.72	1122.57
BEAM D	73+44.83	1120.92	73+59.10	1121.17	73+73.37	1121.39	73+87.63	1121.59	74+01.90	1121.77	74+14.90	1121.92	74+22.35	1122.01	74+42.81	1122.21	74+63.26	1122.34	74+83.71	1122.44
RIGHT TOE OF SIDEWALK	73+44.83	1120.85	73+59.10	1121.10	73+73.37	1121.32	73+87.63	1121.51	74+01.89	1121.69	74+14.89	1121.85	74+22.35	1121.93	74+42.80	1122.13	74+63.26	1122.26	74+83.71	1122.36
BEAM E	73+44.83	1120.85	73+59.10	1121.10	73+73.37	1121.32	73+87.63	1121.51	74+01.89	1121.69	74+14.89	1121.85	74+22.35	1121.93	74+42.80	1122.13	74+63.26	1122.26	74+83.70	1122.36

DECK SCREED ELEVATION TABLE

ELEVATION LINE	℄ SPLICE 2		¼ SPAN		½ SPAN		¾ SPAN		℄ SPLICE 3		℄ BEARINGS PIER 3		¼ SPAN		½ SPAN		¾ SPAN		℄ BEARINGS F.A.	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
BEAM A	74+97.74	1122.42	75+04.16	1122.44	75+24.58	1122.48	75+45.00	1122.46	75+52.39	1122.44	75+65.39	1122.40	75+79.67	1122.35	75+93.94	1122.28	76+08.22	1122.18	76+22.50	1122.06
LEFT TOE OF SIDEWALK	74+97.73	1122.42	75+04.15	1122.44	75+24.57	1122.48	75+44.99	1122.46	75+52.39	1122.44	75+65.39	1122.40	75+79.67	1122.35	75+93.94	1122.28	76+08.22	1122.18	76+22.50	1122.06
BEAM B	74+97.73	1122.50	75+04.15	1122.52	75+24.57	1122.56	75+44.99	1122.54	75+52.40	1122.52	75+65.40	1122.48	75+79.67	1122.42	75+93.95	1122.35	76+08.22	1122.26	76+22.50	1122.13
P.G.	74+97.72	1122.62	75+04.14	1122.65	75+24.56	1122.69	75+44.98	1122.67	75+52.40	1122.65	75+65.40	1122.61	75+79.68	1122.55	75+93.95	1122.48	76+08.23	1122.39	76+22.50	1122.26
BEAM C, CROWN, & PHASE C.J.	74+97.72	1122.63	75+04.14	1122.65	75+24.56	1122.69	75+44.98	1122.67	75+52.40	1122.65	75+65.40	1122.61	75+79.68	1122.55	75+93.95	1122.48	76+08.23	1122.39	76+22.50	1122.26
BEAM D	74+97.71	1122.50	75+04.13	1122.52	75+24.55	1122.56	75+44.97	1122.54	75+52.40	1122.52	75+65.40	1122.48	75+79.68	1122.42	75+93.95	1122.35	76+08.23	1122.26	76+22.50	1122.13
RIGHT TOE OF SIDEWALK	74+97.71	1122.42	75+04.13	1122.44	75+24.55	1122.48	75+44.97	1122.46	75+52.41	1122.44	75+65.41	1122.40	75+79.68	1122.35	75+93.96	1122.28	76+08.23	1122.18	76+22.50	1122.06
BEAM E	74+97.70	1122.42	75+04.12	1122.44	75+24.54	1122.48	75+44.96	1122.46	75+52.41	1122.44	75+65.41	1122.40	75+79.68	1122.35	75+93.96	1122.28	76+08.23	1122.18	76+22.50	1122.06

TOP OF HAUNCH ELEVATION TABLE

ELEVATION LINE	℄ BEARINGS R.A.		¼ SPAN		½ SPAN		¾ SPAN		℄ BEARINGS PIER 1		℄ SPLICE 1		¼ SPAN		½ SPAN		¾ SPAN		℄ BEARINGS PIER 2	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
BEAM A	73+44.83	1120.14	73+59.10	1120.39	73+73.37	1120.61	73+87.63	1120.80	74+01.91	1120.98	74+14.91	1121.14	74+22.36	1121.22	74+42.82	1121.42	74+63.27	1121.56	74+83.74	1121.65
BEAM B	73+44.83	1120.22	73+59.10	1120.47	73+73.37	1120.69	73+87.63	1120.88	74+01.90	1121.06	74+14.90	1121.22	74+22.36	1121.30	74+42.81	1121.50	74+63.27	1121.63	74+83.73	1121.73
BEAM C	73+44.83	1120.35	73+59.10	1120.60	73+73.37	1120.82	73+87.63	1121.01	74+01.90	1121.19	74+14.90	1121.35	74+22.35	1121.43	74+42.81	1121.63	74+63.26	1121.76	74+83.72	1121.86
BEAM D	73+44.83	1120.22	73+59.10	1120.47	73+73.37	1120.69	73+87.63	1120.88	74+01.90	1121.06	74+14.90	1121.22	74+22.35	1121.30	74+42.81	1121.50	74+63.26	1121.63	74+83.71	1121.73
BEAM E	73+44.83	1120.14	73+59.10	1120.39	73+73.37	1120.61	73+87.63	1120.80	74+01.89	1120.98	74+14.89	1121.14	74+22.35	1121.22	74+42.80	1121.42	74+63.26	1121.56	74+83.70	1121.65

TOP OF HAUNCH ELEVATION TABLE

ELEVATION LINE	℄ SPLICE 2		¼ SPAN		½ SPAN		¾ SPAN		℄ SPLICE 3		℄ BEARINGS PIER 3		¼ SPAN		½ SPAN		¾ SPAN		℄ BEARINGS F.A.	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
BEAM A	74+97.74	1121.71	75+04.16	1121.73	75+24.58	1121.78	75+45.00	1121.76	75+52.39	1121.74	75+65.39	1121.69	75+79.67	1121.64	75+93.94	1121.57	76+08.22	1121.47	76+22.50	1121.35
BEAM B	74+97.73	1121.79	75+04.15	1121.81	75+24.57	1121.85	75+44.99	1121.83	75+52.40	1121.81	75+65.40	1121.77	75+79.67	1121.72	75+93.95	1121.65	76+08.22	1121.55	76+22.50	1121.42
BEAM C	74+97.72	1121.92	75+04.14	1121.94	75+24.56	1121.98	75+44.98	1121.96	75+52.40	1121.94	75+65.40	1121.90	75+79.68	1121.85	75+93.95	1121.78	76+08.23	1121.68	76+22.50	1121.55
BEAM D	74+97.71	1121.79	75+04.13	1121.81	75+24.55	1121.85	75+44.97	1121.83	75+52.40	1121.81	75+65.40	1121.77	75+79.68	1121.72	75+93.95	1121.65	76+08.23	1121.55	76+22.50	1121.42
BEAM E	74+97.70	1121.71	75+04.12	1121.73	75+24.54	1121.78	75+44.96	1121.76	75+52.41	1121.74	75+65.41	1121.69	75+79.68	1121.64	75+93.96	1121.57	76+08.23	1121.47	76+22.50	1121.35

FINAL TOP OF DECK ELEVATION TABLE

ELEVATION LINE	℄ BEARINGS R.A.		¼ SPAN		½ SPAN		¾ SPAN		℄ BEARINGS PIER 1		℄ SPLICE 1		¼ SPAN		½ SPAN		¾ SPAN		℄ BEARINGS PIER 2	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
BEAM A	73+44.83	1120.85	73+59.10	1121.09	73+73.37	1121.31	73+87.63	1121.51	74+01.91	1121.69	74+14.91	1121.84	74+22.36	1121.92	74+42.82	1122.10	74+63.27	1122.25	74+83.74	1122.36
LEFT TOE OF SIDEWALK	73+44.83	1120.85	73+59.10	1121.09	73+73.37	1121.31	73+87.63	1121.51	74+01.91	1121.69	74+14.91	1121.84	74+22.36	1121.92	74+42.82	1122.10	74+63.27	1122.25	74+83.73	1122.36
BEAM B	73+44.83	1120.92	73+59.10	1121.16	73+73.37	1121.38	73+87.63	1121.58	74+01.90	1121.77	74+14.90	1121.92	74+22.36	1121.99	74+42.81	1122.18	74+63.27	1122.33	74+83.73	1122.44
P.G.	73+44.83	1121.05	73+59.10	1121.29	73+73.37	1121.51	73+87.63	1121.71	74+01.90	1121.89	74+14.90	1122.04	74+22.36	1122.12	74+42.81	1122.31	74+63.27	1122.46	74+83.72	1122.57
BEAM C, CROWN, & PHASE C.J.	73+44.83	1121.05	73+59.10	1121.29	73+73.37	1121.51	73+87.63	1121.72	74+01.90	1121.90	74+14.90	1122.05	74+22.35	1122.12	74+42.81	1122.31	74+63.26	1122.46	74+83.72	1122.57
BEAM D	73+44.83	1120.92	73+59.10	1121.16	73+73.37	1121.38	73+87.63	1121.58	74+01.90	1121.77	74+14.90	1121.92	74+22.35	1121.99	74+42.81	1122.18	74+63.26	1122.33	74+83.71	1122.44
RIGHT TOE OF SIDEWALK	73+44.83	1120.85	73+59.10	1121.09	73+73.37	1121.31	73+87.63	1121.51	74+01.89	1121.69	74+14.89	1121.84	74+22.35	1121.92	74+42.80	1122.10	74+63.26	1122.25	74+83.71	1122.36
BEAM E	73+44.83	1120.85	73+59.10	1121.09	73+73.37	1121.31	73+87.63	1121.51	74+01.89	1121.69	74+14.89	1121.84	74+22.35	1121.92	74+42.80	1122.10	74+63.26	1122.25	74+83.70	1122.36

FINAL TOP OF DECK ELEVATION TABLE

ELEVATION LINE	℄ SPLICE 2		¼ SPAN		½ SPAN		¾ SPAN		℄ SPLICE 3		℄ BEARINGS PIER 3		¼ SPAN		½ SPAN		¾ SPAN		℄ BEARINGS F.A.	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
BEAM A	74+97.74	1122.41	75+04.16	1122.43	75+24.58	1122.46	75+45.00	1122.45	75+52.39	1122.44	75+65.39	1122.40	75+79.67	1122.34	75+93.94	1122.27	76+08.22	1122.17	76+22.50	1122.06
LEFT TOE OF SIDEWALK	74+97.73	1122.41	75+04.15	1122.43	75+24.57	1122.46	75+44.99	1122.45	75+52.39	1122.44	75+65.39	1122.40	75+79.67	1122.34	75+93.94	1122.27	76+08.22	1122.17	76+22.50	1122.06
BEAM B	74+97.73	1122.49	75+04.15	1122.51	75+24.57	1122.54	75+44.99	1122.53	75+52.40	1122.51	75+65.40	1122.48	75+79.67	1122.42	75+93.95	1122.34	76+08.22	1122.25	76+22.50	1122.13
P.G.	74+97.72	1122.62	75+04.14	1122.64	75+24.56	1122.66	75+44.98	1122.66	75+52.40	1122.64	75+65.40	1122.61	75+79.68	1122.55	75+93.95	1122.47	76+08.23	1122.38	76+22.50	1122.26
BEAM C, CROWN, & PHASE C.J.	74+97.72	1122.62	75+04.14	1122.64	75+24.56	1122.67	75+44.98	1122.66	75+52.40	1122.64	75+65.40	1122.61	75+79.68	1122.55	75+93.95	1122.47	76+08.23	1122.38	76+22.50	1122.26
BEAM D	74+97.71	1122.49	75+04.13	1122.51	75+24.55	1122.54	75+44.97	1122.53	75+52.40	1122.51	75+65.40	1122.48	75+79.68	1122.42	75+93.95	1122.34	76+08.23	1122.25	76+22.50	1122.13
RIGHT TOE OF SIDEWALK	74+97.71	1122.41	75+04.13	1122.43	75+24.55	1122.46	75+44.97	1122.45	75+52.41	1122.44	75+65.41	1122.40	75+79.68	1122.34	75+93.96	1122.27	76+08.23	1122.17	76+22.50	1122.06
BEAM E	74+97.70	1122.41	75+04.12	1122.43	75+24.54	1122.46	75+44.96	1122.45	75+52.41	1122.44	75+65.41	1122.40	75+79.68	1122.34	75+93.96	1122.27	76+08.23	1122.17	76+22.50	1122.06

LEGEND:

C.J. = CONSTRUCTION JOINT
F.A. = FORWARD ABUTMENT
P.G. = PROFILE GRADE LINE
R.A. = REAR ABUTMENT

NOTES:

1. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE BEAM/GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
3. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.

RECORD DRAWING

NOTE: THIS RECORD DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. B&N, INC HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT.

DESIGN AGENCY
BURGESS & NIPLE
100 WEST ERIE STREET PAINESVILLE, OHIO 44077

DESIGNED	DRAWN	REVIEWED	DATE
WCS	WCS	DWL	03-11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AKS		1805649	

SCREED TABLE
BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38/VAR
PID No. 87632

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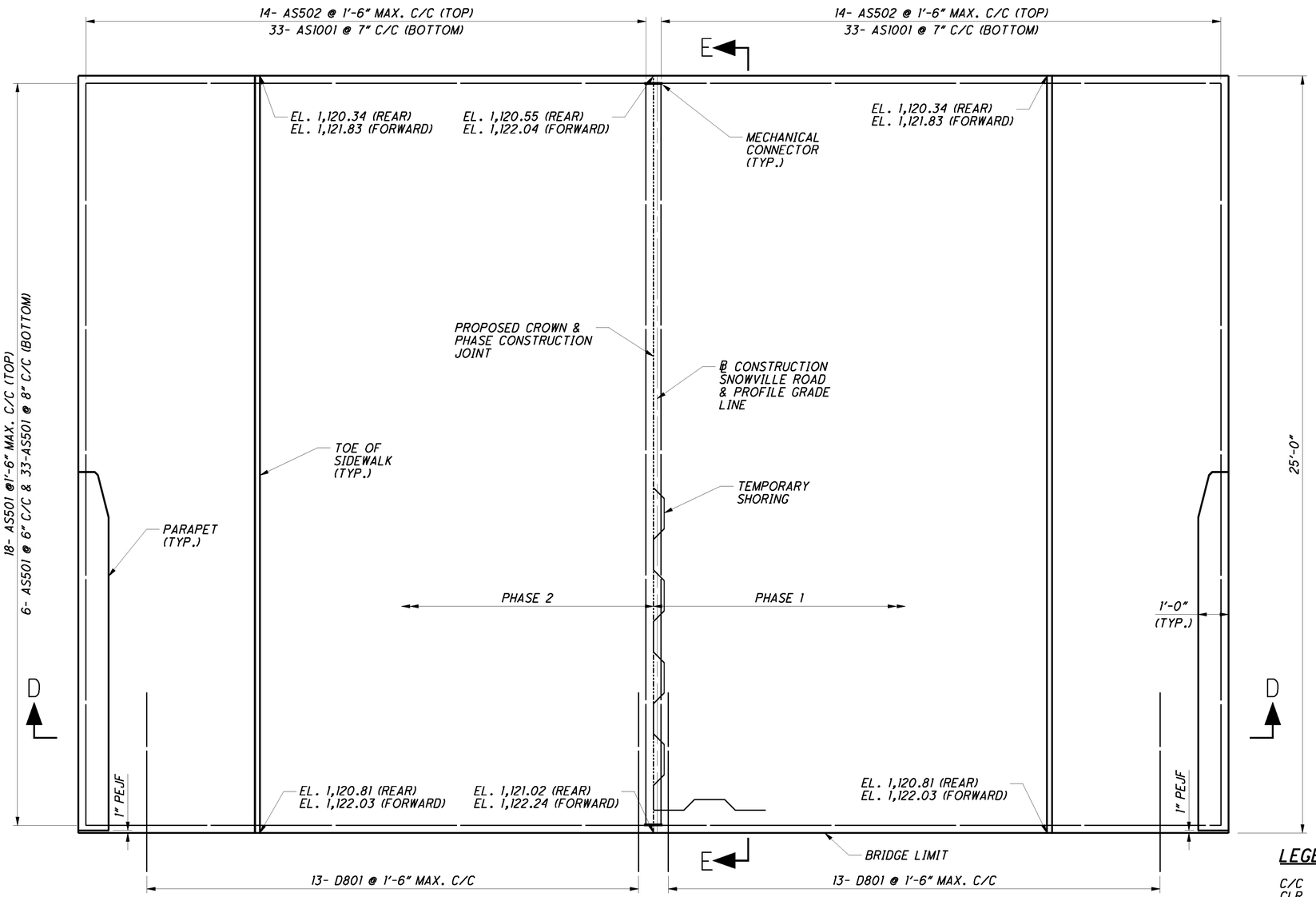
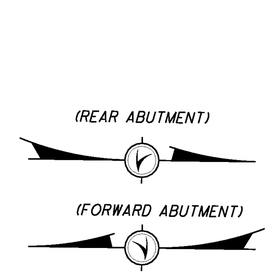
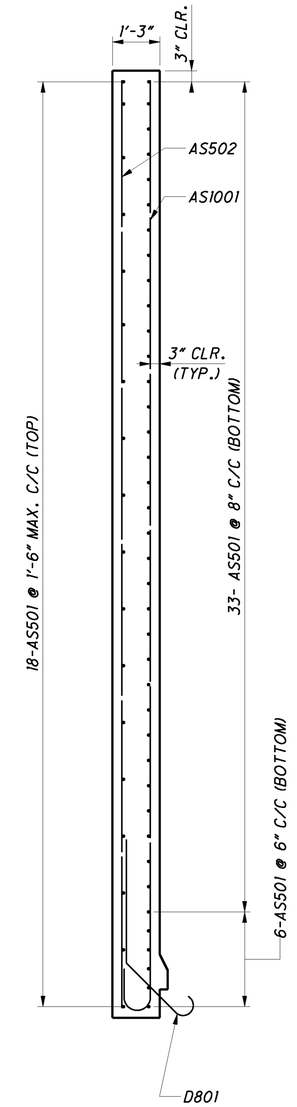


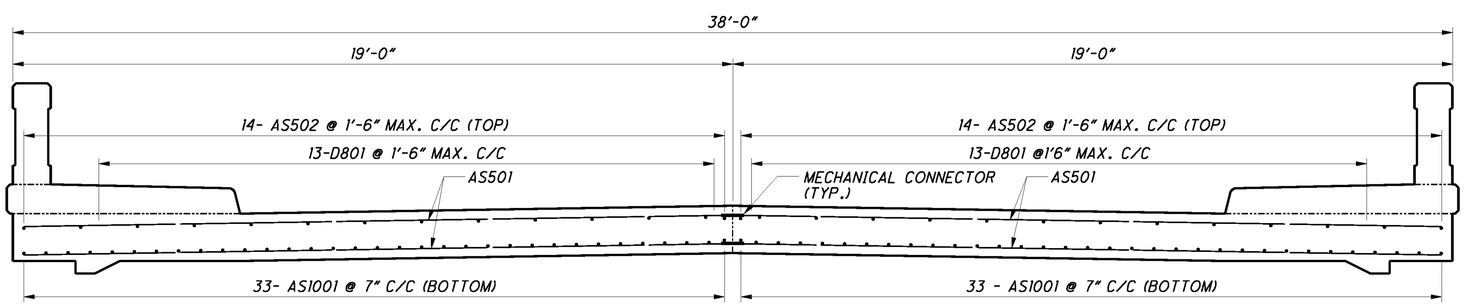
PLAN

(REAR APPROACH SLAB SHOWN, FORWARD SIMILAR)





SECTION E-E



SECTION D-D

LEGEND:

C/C = CENTER TO CENTER
CLR. = CLEAR
EL. = ELEVATION
MAX. = MAXIMUM
PEJF = PREFORMED EXPANSION JOINT FILLER
TYP. = TYPICAL

NOTES:

1. FOR INFORMATION NOT SHOWN, REFER TO STANDARD DRAWING AS-1-81.
2. FOR ADDITIONAL PARAPET DETAILS, SEE SHEET 18/18.
3. APPROACH SLAB BARS SHALL BE PLACED EITHER PARALLEL TO THE CENTERLINE OF ROADWAY OR PARALLEL TO THE ABUTMENTS.
4. MINIMUM REINFORCING LAP LENGTHS:
   #5 = 2'-11"

RECORD DRAWING

NOTE: THIS RECORD DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. B&N, INC HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT.

DESIGN AGENCY
BURGESS & NIPLE
100 WEST ERIE STREET PAINESVILLE, OHIO 44077

DESIGNED	DRAWN	REVIEWED	DATE
WCS	WCS	DWL	03-11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AKS		1805649	

APPROACH SLAB PLAN AND DETAILS
BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38/VAR
PID No. 87632

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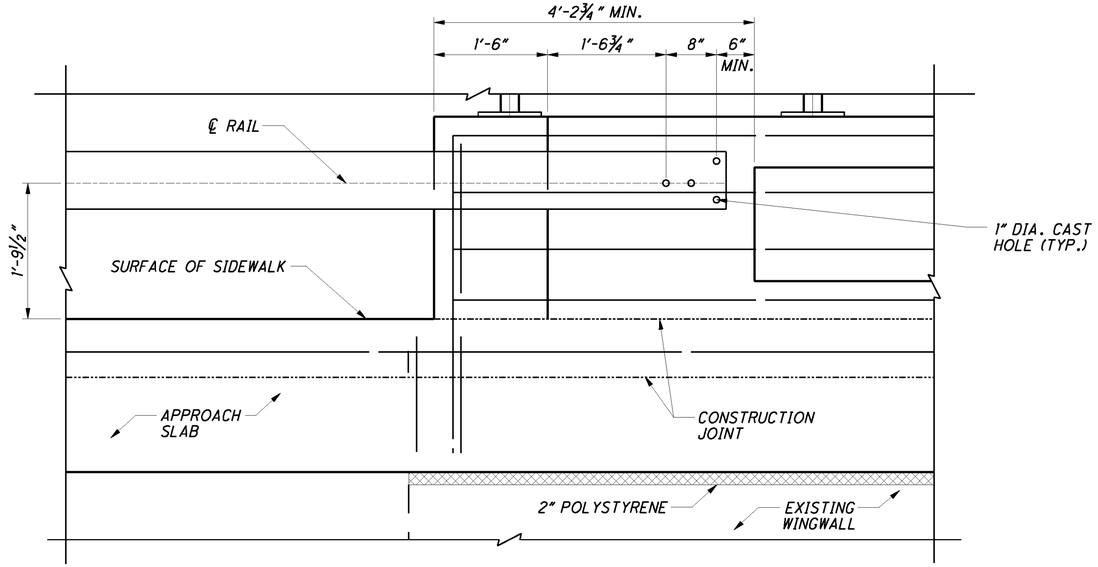
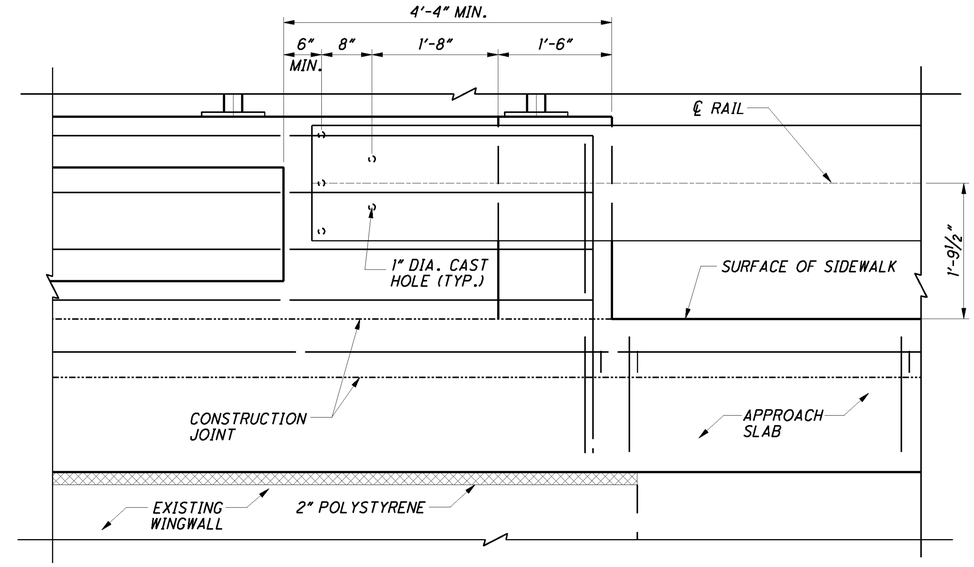


BRIDGE TERMINAL ASSEMBLY, TYPE 2, ELEVATION

(INSIDE FACE OF PARAPET SHOWN)



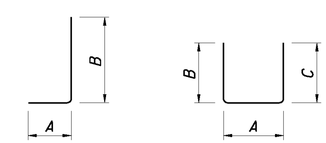
BRIDGE TERMINAL ASSEMBLY, TYPE 1, ELEVATION

(INSIDE FACE OF PARAPET SHOWN)

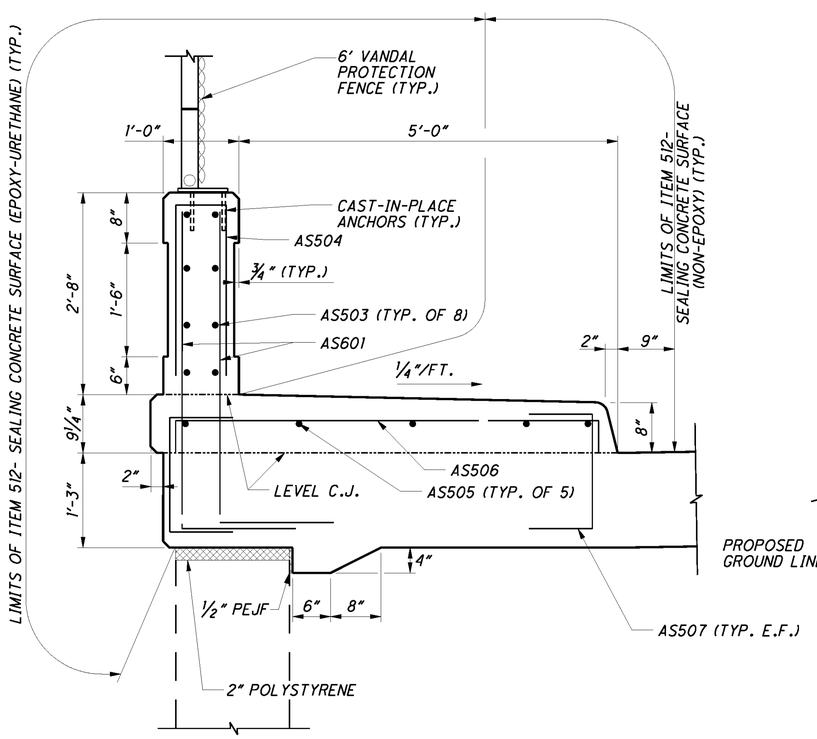
LEGEND:

C.J. = CONSTRUCTION JOINT
DIA. = DIAMETER
E.F. = EACH FACE
MIN. = MINIMUM
PEJF = PREFORMED EXPANSION JOINT FILLER
TYP. = TYPICAL

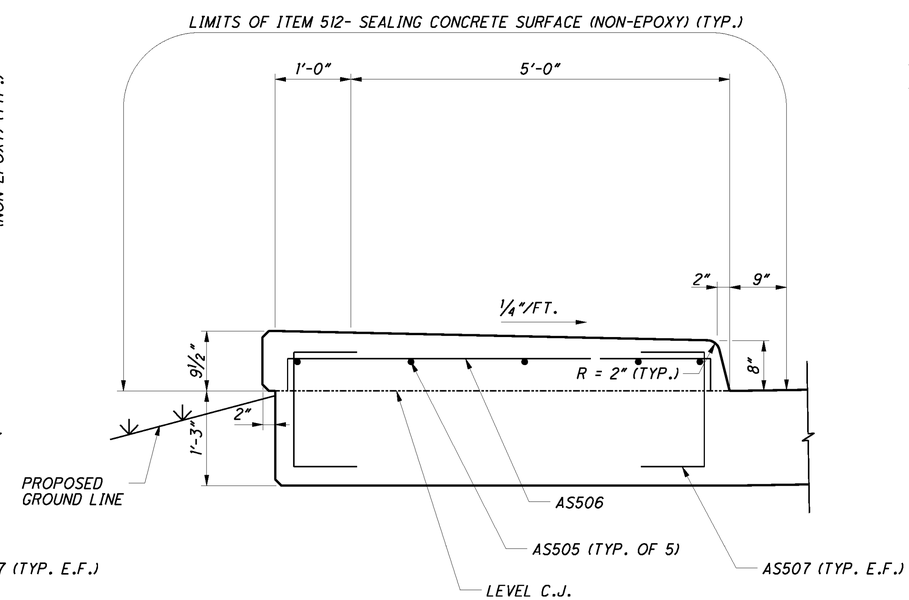
MARK	TYPE	DIMENSIONS A	B	C	D	E
		PARAPETS AND SIDEWALK				
AS504	18	6 ½"	2'-4"	2'-4"		
AS506	18	5'-7"	10"	10"		
AS507	18	1'-6"	10"	10"		
AS601	1	1'-10"	4'-3"			



TYPE 1 TYPE 18



SECTION A-A



SECTION B-B

NOTES:

1. FOR INFORMATION NOT SHOWN REFER TO STANDARD DRAWING BR-2-98, GR-3.1 AND GR-3.2.
2. FOR APPROACH SLAB DETAILS, SEE SHEET 17/18.
3. FOR ADDITIONAL AESTHETIC CONCRETE PANEL DETAILS AND THE LOCATIONS OF SECTIONS A-A AND B-B SEE SHEETS 13/18 & 14/18.

RECORD DRAWING

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DESIGN AGENCY
BURGESS & NIPLE
100 WEST ERIE STREET PAINESVILLE, OHIO 44077

DESIGNED	DRAWN	REVIEWED	DATE
WCS	WCS	DWL	03-11
CHECKED	REVISED	STRUCTURE FILE NUMBER	
AKS		1805649	

APPROACH SLAB PARAPET DETAILS
BRIDGE NO. CUY-77-0038
SNOWVILLE ROAD OVER I.R. 77

CUY-77-0.38 / VAR
PID No. 87632

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