

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94-P4031-00-BR	DUPAGE	DUPAGE	64A	1

CONTRACT NO. 83560 54+6 160

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3. TYPICAL SECTIONS AND SUMMARY OF QUANTITIES
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- 50.-53. CROSS-SECTIONS: PEDESTRIAN PATH
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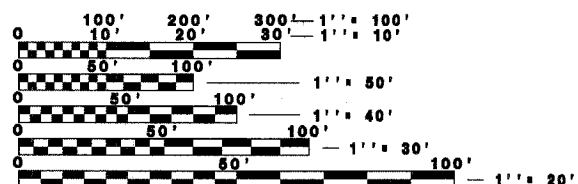
THE IMPROVEMENT IS LOCATED IN THE CITY OF WHEATON

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		MANHOLE
		CATCH BASIN
		INLET
		CLEANOUT
		SLOPE INLET BOX
		HEADWALL
		END SECTION
		STORM SEWER
		SANITARY SEWER
		WATERMAIN
		VALVE & BOX
		WATER VALVE (UNLESS OTHERWISE NOTED)
		WATER VALVE IN VAULT
		FIRE HYDRANT
		CONTOURS
		ELEVATIONS
		STREET LIGHT
		WATERMAIN PROTECTION
		SILT FENCE INLET PROTECTOR
		TEMPORARY STRAW BALE DITCH CHECK
		OVERFLOW ROUTE

HIGHWAY STANDARDS

ITEM	STANDARD NUMBER
TEMPORARY EROSION CONTROL SYSTEMS	280001-02
CURB RAMPS FOR SIDEWALKS	424001-04
PRECAST REINFORCED CONCRETE FLARED END SECTIONS	542301
GRATING FOR CONCRETE FLARED END SECTION (FOR 600mm (24") THRU 1350mm (54") PIPE)	542311
METAL END SECTION FOR PIPE CULVERTS	542401
CATCH BASIN, TYPE A	602001
MANHOLE, TYPE A	602401
PRECAST REINFORCED CONCRETE FLAT SLAB TOP	602601
CAST IRON STEPS	602701
FRAME AND LIDS, TYPE 1	604001-02
GRATE, TYPE 8	604036-01
CONCRETE CURB TYPE B AND COMBINATION	606001-02
CONCRETE CURB AND GUTTER	664001-01
CHAIN LINK FENCE	805001
ELECTRICAL SERVICE INSTALLATION DETAIL	878001-03
CONCRETE FOUNDATION DETAILS	

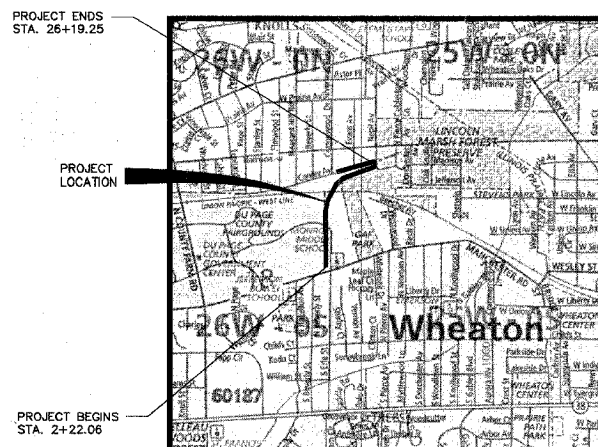


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PROPOSED
HIGHWAY PLANS**

WHEATON PARK DISTRICT PEDESTRIAN/BIKE PATH
OVER UNION PACIFIC RAILROAD
SECTION 94-P4031-00-BR
NEW BRIDGE CONSTRUCTION
PROJECT: TE-00D1(422)
CITY OF WHEATON
DUPAGE COUNTY
C-91-455-94



LOCATION MAP

BENCH MARKS

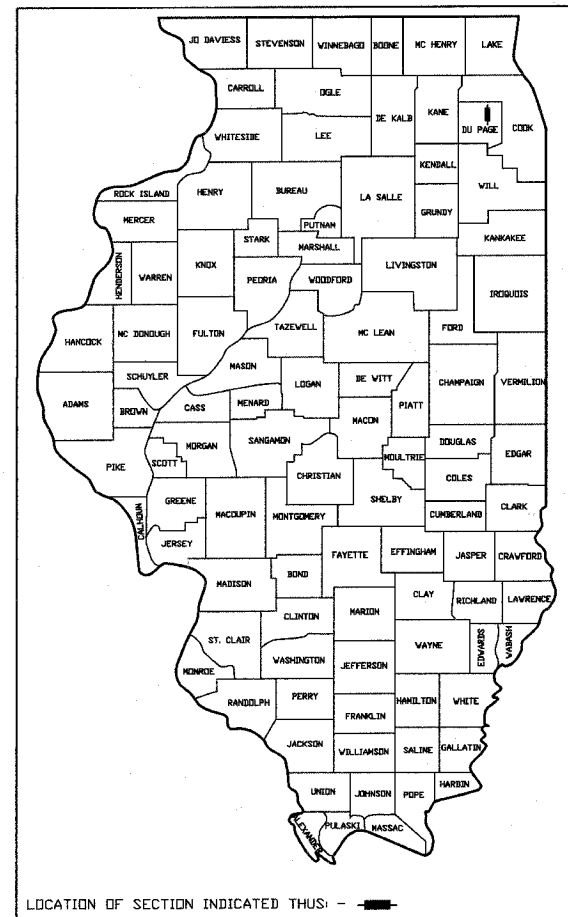
ELEVATION REFERENCE MARKS
DUPAGE COUNTY CONTROL, ALUMINUM DISC # 02943 0.3 MILES EAST OF THE INTERSECTION OF MANCHESTER ROAD AND COUNTY FARM ROAD, ±150' NORTH OF MANCHESTER ROAD. ELEVATION = 735.26
PROJECT ELEVATION REFERENCE MARKS
RM1-BOLT BETWEEN "MUE" & "LLER" ON THE FIRST FIRE HYDRANT EAST OF ERIE AVENUE ON THE SOUTH SIDE OF MANCHESTER ROAD. ELEVATION = 757.00
RM2-BOLT UNDER THE LAST "9" IN "1969" ON THE FIRE HYDRANT LOCATED AT THE NORTHWEST CORNER OF MONROE SCHOOL. ELEVATION = 755.82

UNION PACIFIC RAILROAD CROSSING
MILE POST - MP 26.20
ON GENEVA SUBDIVISION

BIKE PATH PROJECT BEGINS 2+22.06
BIKE PATH PROJECT ENDS 28+19.25

PEDESTRIAN PATH PROJECT BEGINS 121+45.00
PEDESTRIAN PATH PROJECT ENDS 129+84.81

GROSS LENGTH OF PROJECT - BIKE PATH 2397.19 FT. 0.454 MILES
GROSS LENGTH OF PROJECT - PEDESTRIAN PATH 839.81 FT. 0.159 MILES
3237.00 FT. 0.613 MILES



WHEATON PARK DISTRICT
APPROVED *[Signature]*
EXECUTIVE DIRECTOR
NOVEMBER 1, 2005

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED NOVEMBER 09 2005
[Signature]
BUREAU OF LOCAL ROADS
Nov. 9 2005
[Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

DISTRICT 1 DESIGN PLAN PREPARATION ENGINEER: MAZHAR KHAN (847) 705-4179

CONTRACT NO. 83560

COUNTY DUPAGE SECTION 94-P4031-00-BR FAU ROUTE

CONSTRUCTION SPECIFICATIONS – GENERAL NOTES

F.A. -- RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	64-P4021-00-BR	DUPAGE	64	2

CONTRACT NO. 83560

SANITARY SEWER, STORM SEWER, WATERMAIN

- ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION TO VERIFY IN THE FIELD ALL EXISTING AND UNDERGROUND UTILITIES ADJACENT TO THE PROJECT, AND BE RESPONSIBLE FOR PROTECTION OF SAME. THE CONTRACTOR SHALL ALSO NOTIFY THE CONSTRUCTION DIVISION OF THE MUNICIPALITY AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION.
- ALL STORM MANHOLE, VALVE VAULT, OR CATCH BASIN ADJUSTMENT OF FRAMES SHALL BE MADE IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.
- ALL DRAINAGE STRUCTURES TO HAVE POURED INVERTS CONFORMING TO THE SHAPE OF THE PIPE IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL BEWARE OF POTENTIAL CONFLICTS WITH EXISTING UTILITIES AS INDICATED ON THE PLANS. THE CONTRACTOR SHALL EXCAVATE AROUND UTILITIES TO DETERMINE ELEVATIONS BEFORE BEGINNING CONSTRUCTION.
- "BAND-SEAL" OR SIMILAR COUPLINGS SHALL BE USED WHEN JOINING SEWER PIPES OF DISSIMILAR MATERIALS IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.
- ALL EXISTING FIELD DRAINAGE TILE ENCOUNTERED OR DAMAGED DURING CONSTRUCTION ARE TO BE RESTORED TO THEIR ORIGINAL CONDITION, PROPERLY REROUTED AND/OR CONNECTED TO THE STORM SEWER SYSTEM. ALL LOCATIONS OF ENCOUNTERED FIELD DRAINAGE TILE SHALL BE PROPERLY INDICATED ON THE RECORD SET OF RECORD DRAWINGS.
- AT THE COMPLETION OF THIS PROJECT ONE SET OF RECORD DRAWINGS IS TO BE SUBMITTED TO THE ENGINEER SHOWING THE LOCATION OF ALL OF THE SERVICES, PIPES AND STRUCTURES. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE OWNER DEFINING SANITARY SEWER WYE LOCATIONS FROM THE NEAREST DOWNSTREAM MANHOLE AND THE DISTANCE FROM THE SANITARY SEWER TERMINUS AND ALSO HORIZONTAL TIES BETWEEN WATER B-BOXES AND PROPERTY LINES. A STATEMENT SHALL BE ATTACHED TO THE RECORD MYLAR DRAWINGS THAT "ALL CONSTRUCTION WAS IN SUBSTANTIAL CONFORMANCE WITH THE ENGINEERING PLANS AND SPECIFICATIONS".
- CONNECTIONS TO EXISTING STORM SYSTEM SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- GRANULAR TRENCH BACKFILL SHALL BE USED IN ALL LOCATIONS WHERE THE PROPOSED UNDERGROUND UTILITY IS TO BE CONSTRUCTED UNDER PERMANENT TYPE PAVEMENTS; IN ANY UTILITY TRENCH OVER WHICH ANOTHER UTILITY WILL PASS; OR AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.
- THE COST OF PIPE BEDDING WILL NOT BE PAID FOR SEPARATELY BUT INCLUDED IN THE CONTRACT UNIT PRICES OF THE VARIOUS SEWER ITEMS.
- ALL STORM SEWER JOINTS SHALL BE CONSTRUCTED UTILIZING "O" RING GASKETS CONFORMING TO IDOT STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL PIPE LINE CROSSINGS PRIOR TO COMMENCEMENT OF ANY UNDERGROUND IMPROVEMENT CONSTRUCTION. ENGINEER SHALL BE NOTIFIED OF VERTICAL CONFLICTS IMMEDIATELY.

**FOR UNDERGROUND UTILITY
LOCATIONS, CALL
J.U.L.I.E.
TOLL FREE
TEL. 1-800-892-0123**

GENERAL

- WITHIN THE CONSTRUCTION SPECIFICATIONS SHOWN HEREON THE "OWNER" REFERS TO WHEATON PARK DISTRICT AND "CONTRACTOR" REFERS TO THE COMPANY PERFORMING THE WORK.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE JANUARY 1, 2002 EDITION OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", 1996 EDITION, THE NATIONAL ELECTRIC CODE AND THE SUBDIVISION AND DEVELOPMENT CODES AND STANDARDS AS PUBLISHED BY THE CITY OF WHEATON. ALL WORK, INCLUDING SOIL EROSION CONTROL, SHALL ALSO BE PERFORMED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL (I.U.M.). IN THE EVENT OF CONFLICTING SPECIFICATIONS, THE ENGINEER AND OWNER SHALL DECIDE WHICH SPECIFICATION SHALL PREVAIL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND HEALTHFUL WORKING CONDITIONS THROUGHOUT THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING EACH OF THE UTILITY COMPANIES BEFORE ANY WORK IS STARTED. ALL UTILITIES MUST BE STAKED PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL INFORM THE VILLAGE ENGINEER, AND THE MUNICIPALITY BEFORE WORK COMMENCES ON EACH CATEGORY OF CONSTRUCTION, I.E. WATERMAIN, SANITARY, STREET AND DRAINAGE IMPROVEMENT. A FORTY EIGHT (48) HOUR NOTICE SHALL BE GIVEN FOR ANY ITEM THAT REQUIRE FINAL TESTING AND INSPECTION SUCH AS WATERMANS OR SANITARY SEWERS.
- THE CONTRACTOR SHALL CALL THE ATTENTION OF THE OWNER'S REPRESENTATIVE TO ANY ERRORS OR DISCREPANCIES WHICH MAY BE SUSPECTED IN LINES AND GRADES WHICH ARE ESTABLISHED BY THE CONTRACTOR, AND SHALL NOT PROCEED WITH THE WORK UNTIL ANY LINES AND GRADES WHICH ARE BELIEVED TO BE IN ERROR HAVE BEEN VERIFIED OR CORRECTED BY THE OWNER'S REPRESENTATIVE.
- CONTRACTORS SHALL KEEP PUBLIC STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS AND WHEN NECESSARY, CLEAN PAVEMENTS ON A DAILY BASIS. THIS WORK AND THE STABILIZED CONSTRUCTION ENTRANCE WORK IS TO BE PERFORMED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.
- ANY BRACING, SHEETING, OR SPECIAL CONSTRUCTION METHODS DEEMED NECESSARY BY THE CONTRACTOR IN ORDER TO INSTALL THE PROPOSED IMPROVEMENTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PROJECT. ANY ADDITIONAL SOILS DATA NEEDED TO CONFIRM THE CONTRACTOR'S OPINIONS OF THE SUBSOIL CONDITIONS SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL OBTAIN THE OWNER'S WRITTEN AUTHORIZATION TO ACCESS THE SITE TO CONDUCT A SUPPLEMENTAL SOILS INVESTIGATION.
- NO NOTE
- THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND IDOT STANDARD SPECIFICATIONS.
- THE CHAIN LINK FENCE AND CHAIN LINK GATES SHALL BE VINYL-COATED AS PER ARTICLE 1006.27.(a). (1). d. TYPE IV CLASS B (BLACK OR BROWN POLYVINYL CHLORIDE (PVC) - COATED STEEL)

EARTHWORK AND GRADING

- WORK UNDER THIS SECTION SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS:
 - CLEARING AND REMOVAL OF ALL UNDESIRABLE TREES AND OTHER VEGETATIVE GROWTH WITHIN THE CONSTRUCTION AREA. TREE REMOVAL SHALL BE DESIGNATED BY THE OWNER AND SHALL BE KEPT TO A MINIMUM.
 - STRIPPING OF TOPSOIL FROM ALL STREET, DRIVEWAY, PARKING LOT, RIGHT-OF-WAY, BUILDING PAD AND OTHER DESIGNATED STRUCTURAL AREAS.
 - REMOVAL OF UNSUITABLE MATERIALS AS SPECIFIED FROM BIKE PATH, PEDESTRIAN PATH AND OTHER DESIGNATED AREAS.
 - CLAY CUT AND CLAY FILL WITH COMPACTION WITHIN BIKE PATH, PEDESTRIAN PATH AND OTHER DESIGNATED AREAS.
 - EXCAVATION AND GRADING OF THE OPEN SPACE, CONSTRUCTION OF EMBANKMENT, ETC.
 - PLACEMENT AND COMPACTION OF STRUCTURAL MATERIAL TO THE DESIGN SUBGRADE ELEVATIONS AS REQUIRED BY THE STANDARDS AND DETAILS ON THE CONSTRUCTION PLANS. THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE ELEVATIONS AND THAT PAVEMENT AND/OR TOPSOIL REPLACEMENT THICKNESS MUST BE SUBTRACTED TO DETERMINE SUBGRADE ELEVATIONS.
 - IF REQUIRED, BORROW PIT EXCAVATION OF STRUCTURAL MATERIAL AND REFILL OF PIT WITH NON-STRUCTURAL MATERIAL.
 - PLACEMENT AND COMPACTION OF NON-STRUCTURAL FILLS.
 - FINAL SHAPING AND TRIMMING TO THE LINES, GRADES, AND CROSS-SECTIONS SHOWN IN THESE PLANS; AND TOPSOIL PLACEMENT TO DESIGN FINISHED GRADE ELEVATIONS.
 - SOIL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS.
- THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS AND SHALL NOTIFY THE ENGINEER AT ONCE OF ANY DISCREPANCIES. THE CONTRACTOR SHALL EXAMINE THE DRAINAGE PATTERNS SHOWN ON THE PLANS AND MAKE CERTAIN THAT ALL PAVEMENTS ARE PITCHED PROPERLY TO ACHIEVE THIS DRAINAGE PATTERN.
- NO NOTE
- DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHALL INSURE POSITIVE SITE DRAINAGE AT THE CONCLUSION OF EACH DAY. SITE DRAINAGE MAY BE ACHIEVED BY DITCHING, PUMPING OR ANY OTHER ACCEPTABLE METHOD IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIAL CREATED AS A RESULT THEREOF.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE FROM THE SITE ANY AND ALL MATERIALS AND DEBRIS WHICH RESULT FROM HIS CONSTRUCTION OPERATIONS IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.
- THE GRADING OPERATIONS ARE TO BE CLOSELY SUPERVISED AND INSPECTED, PARTICULARLY DURING THE REMOVAL OF UNSUITABLE MATERIAL AND THE CONSTRUCTION OF EMBANKMENTS, BY THE SOILS ENGINEER OR HIS REPRESENTATIVE. ALL TESTING, INSPECTION AND SUPERVISION OF SOIL QUALITY, UNSUITABLE REMOVAL AND ITS REPLACEMENT AND OTHER SOILS RELATED OPERATIONS SHALL BE ENTIRELY THE RESPONSIBILITY OF THE SOILS ENGINEER. NO UNDERCUT SHALL BE PERFORMED WITHOUT AUTHORIZATION FROM OWNER.
- THE GRADING AND CONSTRUCTION OF THE SITE IMPROVEMENTS SHALL NOT CAUSE PONDING OF STORM WATER. ALL AREAS SHALL BE GRADED TO ALLOW POSITIVE DRAINAGE IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.
- THE PROPOSED GRADING ELEVATIONS SHOWN ON THE PLANS ARE FINISH GRADE. TOPSOIL IS TO BE PLACED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.
- THE SELECTED STRUCTURAL FILL MATERIAL SHALL BE PLACED IN LEVEL UNIFORM LAYERS IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.
- EMBANKMENT MATERIAL WITHIN BIKE PATH/PEDESTRIAN PATH AND OTHER STRUCTURAL CLAY FILL AREAS SHALL BE COMPACTED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.
- THE SURFACE VEGETATION, TOPSOIL AND ANY OBVIOUSLY SOFT UNDERLYING SOIL SHOULD BE STRIPPED FROM ALL AREAS TO RECEIVE STRUCTURAL FILL. IF THE UNDERLYING SUBGRADE SOILS RUT DEEPER THAN ONE INCH UNDER THE CONSTRUCTION EQUIPMENT OR IF THE MOISTURE CONTENT EXCEEDS THAT NEEDED FOR PROPER COMPACTION, THE SOIL SHALL BE SCARIFIED, DRIED AND RECOMPACTED TO THE REQUIRED SPECIFICATIONS (SEE SECTION 301.03 OF THE IDOT SPECIFICATIONS).
- COMPLETED GRADING (FINISHED FINE GRADE) FOR PROPOSED PAVEMENT SUBGRADE AREAS, SHALL BE WITHIN A TOLERANCE IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS.

TAB: GENNOTE1

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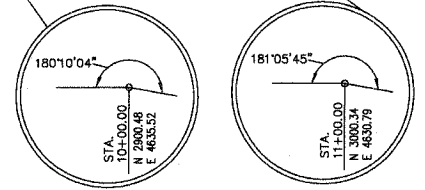
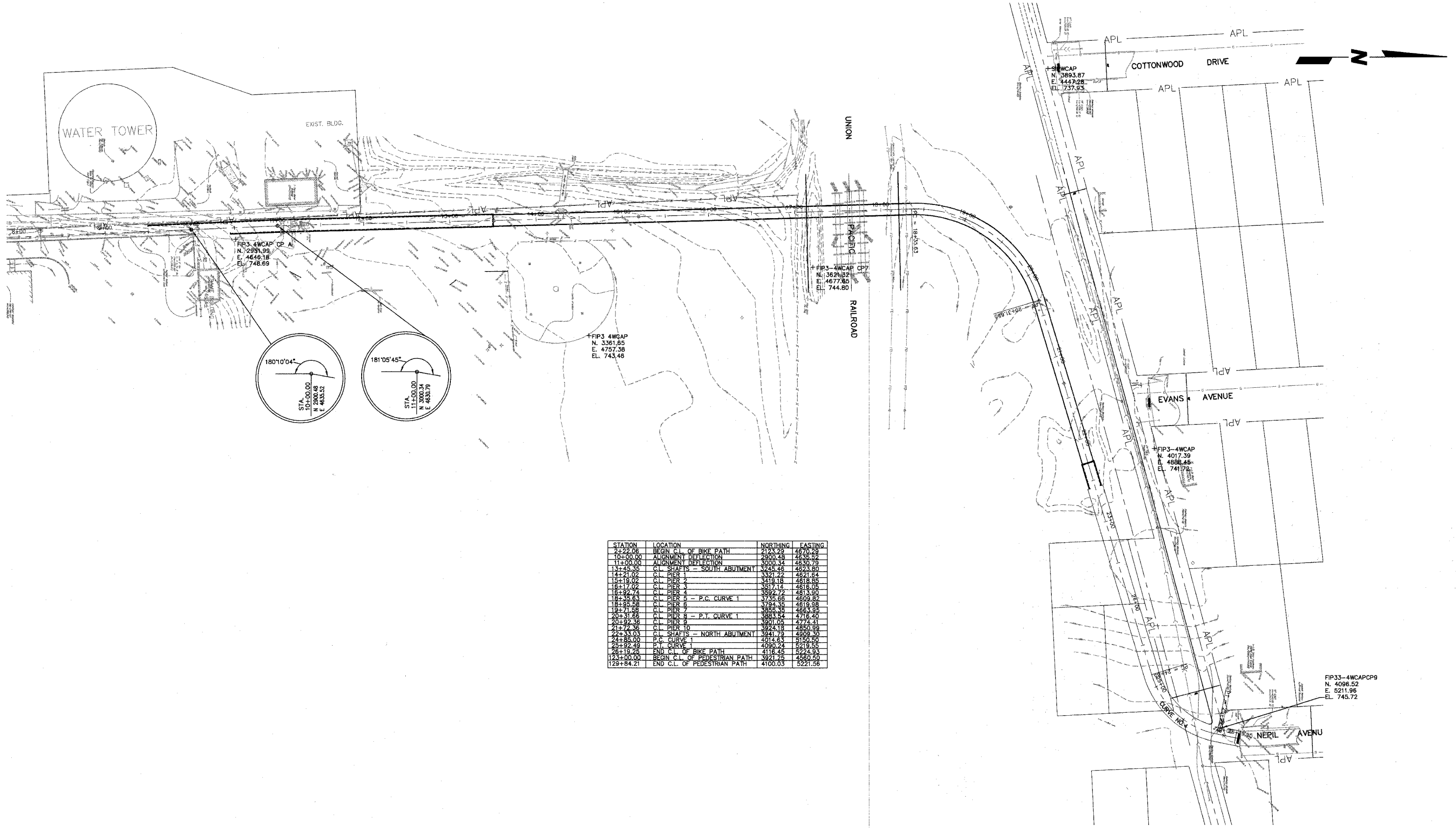
PREPARED FOR:
WHEATON PARK DISTRICT
666 S. MAIN STREET
WHEATON, IL 60187



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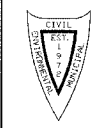
REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

CONSTRUCTION SPECIFICATIONS – GENERAL NOTES				
PEDESTRIAN/BICYCLE BRIDGE OVER UNION PACIFIC RAILROAD				
FILE NAME: GENNOTES	DSGN. BY: RDS	JOB NO.: 551007	FLD. BK./PG.: -----	SHEET NO.
DIR: R\551007	DRN. BY: DRA	DATE: 04-26-04	SCALE: 1" = N.T.S.	2 of 54



STATION	LOCATION	NORTHING	EASTING
2+22.06	BEGIN C.L. OF BIKE PATH	2123.29	4670.29
10+00.00	ALIGNMENT DEFLECTION	2900.48	4635.82
11+00.00	ALIGNMENT DEFLECTION	3000.34	4630.79
11+45.35	C.L. SHAFTS - SOUTH ABUTMENT	3235.46	4623.80
14+21.02	C.L. PIER 1	3321.22	4621.64
15+19.02	C.L. PIER 2	3419.18	4618.85
16+17.02	C.L. PIER 3	3517.14	4616.05
16+92.74	C.L. PIER 4	3592.72	4613.90
18+35.63	C.L. PIER 5 - P.C. CURVE 1	3735.66	4609.82
18+85.38	C.L. PIER 6	3784.35	4619.98
19+71.58	C.L. PIER 7	3852.35	4630.95
20+31.66	C.L. PIER 8 - P.T. CURVE 1	3883.54	4716.40
20+82.36	C.L. PIER 9	3901.05	4774.41
21+74.36	C.L. PIER 10	3924.19	4850.98
22+33.03	C.L. SHAFTS - NORTH ABUTMENT	3941.79	4909.30
24+85.00	P.C. CURVE 1	4014.63	5150.50
25+92.49	P.T. CURVE 1	4090.24	5219.55
26+19.28	END C.L. OF BIKE PATH	4116.45	5274.93
123+00.00	BEGIN C.L. OF PEDESTRIAN PATH	3921.25	4560.50
129+84.21	END C.L. OF PEDESTRIAN PATH	4100.03	5221.56

PREPARED FOR:
WHEATON PARK DISTRICT
 666 S. MAIN STREET
 WHEATON, IL 60187



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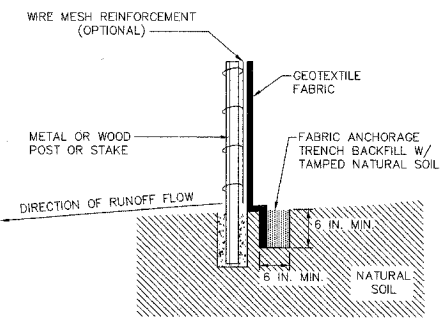
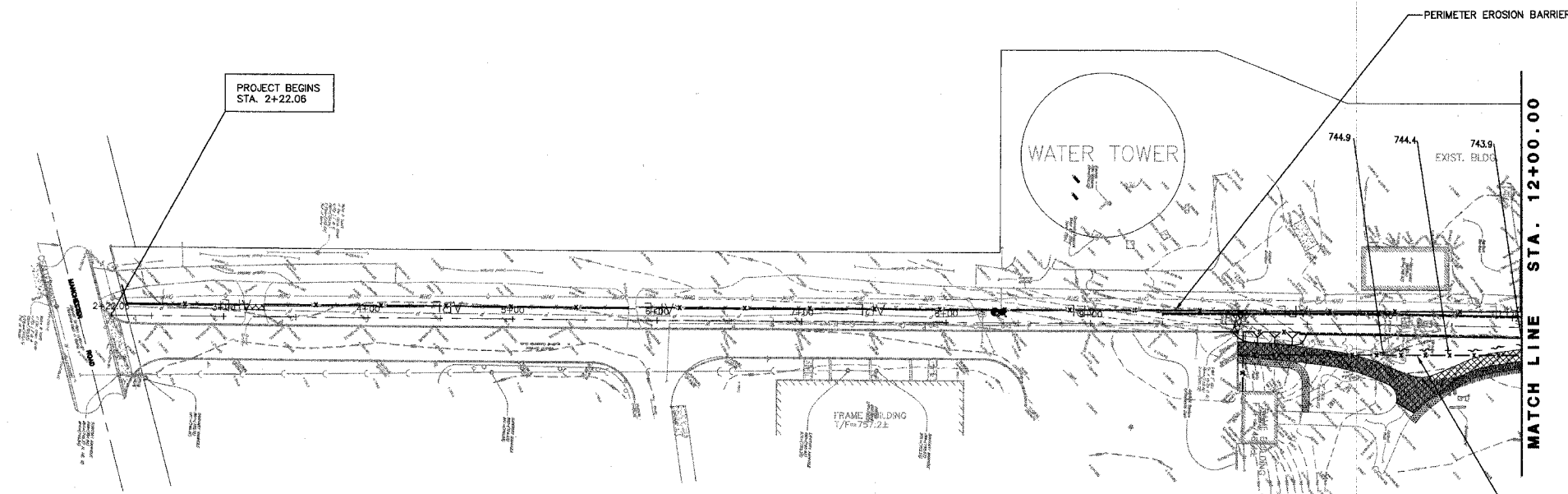
REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

COORDINATES AND TIES

PEDESTRIAN/BICYCLE BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: GENNOTES	DSGN. BY: CA/MMH	JOB NO.: 551007	FLD. BK./PG.: 21-30	SHEET NO. 2A of 54
DIR: R\551007	DRN. BY: DRA	DATE: 12-21-04	SCALE: 1" = 50'	

XREF: TOPO/OVERALL
 TAB: CONTROL POINTS
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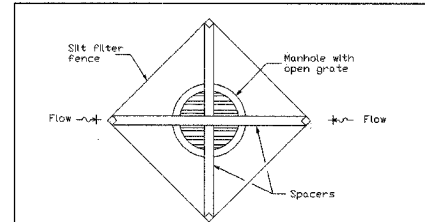


NOTE: DEPENDING UPON CONFIGURATION, ATTACH FABRIC TO WIRE MESH W/HOG RINGS, STEEL POSTS W/TIE WIRES, WOOD POSTS W/NAILS.

TYPICAL DETAIL FOR PERIMETER EROSION BARRIER CONSTRUCTION

GENERAL NOTES - EROSION CONTROL MEASURES

- PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ERECT ALL PERIMETER SILT FENCE IN ACCORDANCE WITH THE STANDARD DETAILS AND SHALL MAINTAIN THE SILT FENCE UNTIL COMPLETION OF ALL GRADING OPERATIONS.
- UPON COMPLETION OF CONSTRUCTION OF EACH INLET, CATCH BASIN, MANHOLE, OR OUTLET CONTAINED IN THE STORM SEWER SYSTEM, EACH STRUCTURE SHALL BE PROTECTED WITH FILTER FABRIC AND, IF NOTED ON EROSION CONTROL PLAN, A STRAW BALE SEDIMENT TRAP. THESE MEASURES ARE TO REMAIN IN PLACE UNTIL FINAL STABILIZATION OF THE SITE OR UNTIL THE NEXT CONSTRUCTION OPERATION.
- THE CONTRACTORS SHALL BE RESPONSIBLE ON A DAILY BASIS TO CLEAN THE MUD OR DEBRIS DEPOSITED ON ADJACENT STREETS AS A RESULT OF THEIR CONSTRUCTION OPERATIONS AND TO PROVIDE DUST CONTROL WHEN REQUESTED BY THE OWNER'S REPRESENTATIVE.



REINFORCED INLET PROTECTORS

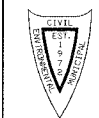
36" POLYPROPYLENE, CONTINUOUS FILAMENT, NEEDLE PUNCHED NONWOVEN GEOTEXTILE WITH BIAXIAL GEGRID REINFORCEMENT

POLYMER WEIGHT	POLYPROPYLENE 4.5 oz/eqs
U.V. RESISTANCE	>85%
PERMITTIVITY	3.0 SEC-1
WATER FLOW RATE	225 GPM/SQ. FT.
TRAPEZOIDAL TEAR	50 LBS.
GRAB TENSILE/ELONGATION STRUCTURE	125 LBS/50 NONWOVEN

LEGEND		
EXISTING	PROPOSED	DESCRIPTION
○	●	MANHOLE
□	■	CATCH BASIN
	●	INLET
	■	CLEANOUT
	▭	SLOPE INLET BOX
	▭	HEADWALL
	▭	END SECTION
	▭	STORM SEWER
	▭	SILT FENCE INLET PROTECTOR
	▭	PERIMETER EROSION BARRIER WITH MAINTENANCE
	▭	TEMPORARY SEEDING
	▭	SEEDING CLASS 2A WITH EROSION CONTROL BLANKET
	NO	NUMBERING SYSTEM USED ON PLANS FOR DRAINAGE STRUCTURE IDENTIFICATION
	-----	SILT FENCE DITCH CHECK
	-x-x-x-	CONSTRUCTION FENCE

TAB: SOILERO 01
XREF: OVER_50.DWG
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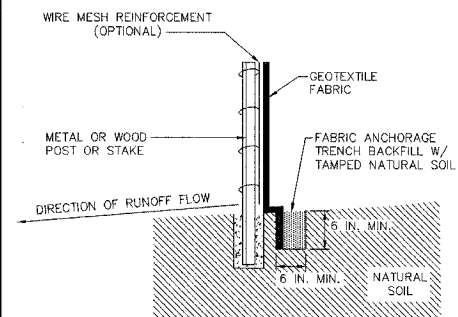
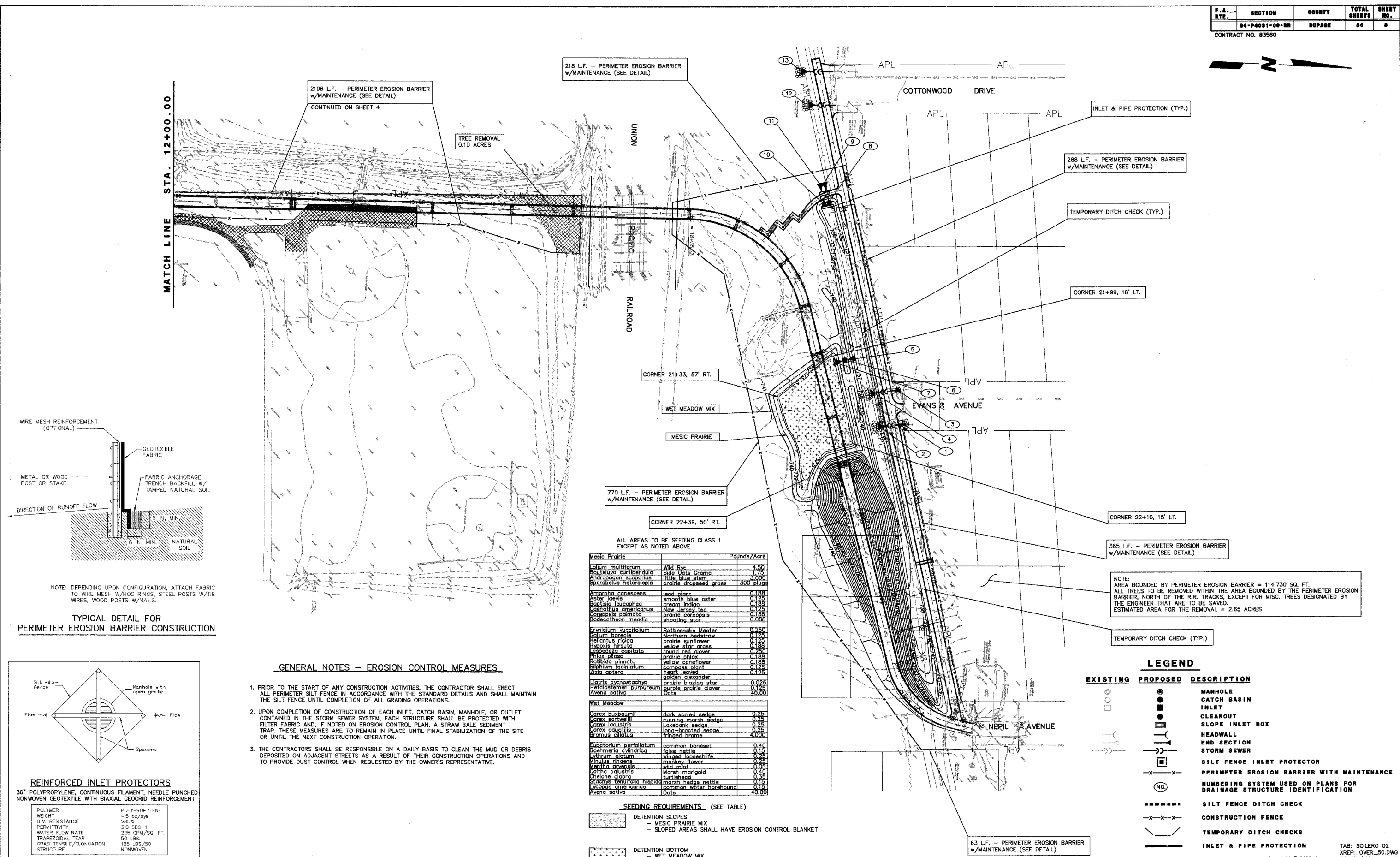
PREPARED FOR:
WHEATON PARK DISTRICT
666 S. MAIN STREET
WHEATON, ILLINOIS 60187



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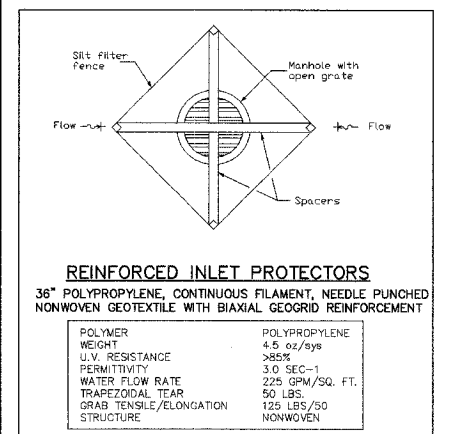
REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

OVERALL SOIL EROSION, SEDIMENTATION CONTROL PLAN AND DETAILS			
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD			
FILE NAME: SOILERO	DSGN. BY: JAC	JOB NO.: 551.007	FLD. BK./PG.: -----
DISC. NUMBER: 551007	DRN. BY: KMS	DATE: 04-26-04	SCALE: 1" = 50'
SHEET NO.			4 of 54



NOTE: DEPENDING UPON CONFIGURATION, ATTACH FABRIC TO WIRE MESH W/HOC RINGS, STEEL POSTS W/TIE WIRES, WOOD POSTS W/NAILS.

TYPICAL DETAIL FOR PERIMETER EROSION BARRIER CONSTRUCTION



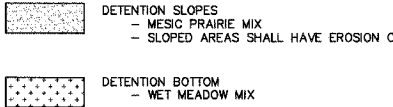
GENERAL NOTES - EROSION CONTROL MEASURES

- PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ERECT ALL PERIMETER SILT FENCE IN ACCORDANCE WITH THE STANDARD DETAILS AND SHALL MAINTAIN THE SILT FENCE UNTIL COMPLETION OF ALL GRADING OPERATIONS.
- UPON COMPLETION OF CONSTRUCTION OF EACH INLET, CATCH BASIN, MANHOLE, OR OUTLET CONTAINED IN THE STORM SEWER SYSTEM, EACH STRUCTURE SHALL BE PROTECTED WITH FILTER FABRIC AND, IF NOTED ON EROSION CONTROL PLAN, A STRAW BALE SEDIMENT TRAP. THESE MEASURES ARE TO REMAIN IN PLACE UNTIL FINAL STABILIZATION OF THE SITE OR UNTIL THE NEXT CONSTRUCTION OPERATION.
- THE CONTRACTORS SHALL BE RESPONSIBLE ON A DAILY BASIS TO CLEAN THE MUD OR DEBRIS DEPOSITED ON ADJACENT STREETS AS A RESULT OF THEIR CONSTRUCTION OPERATIONS AND TO PROVIDE DUST CONTROL WHEN REQUESTED BY THE OWNER'S REPRESENTATIVE.

ALL AREAS TO BE SEEDING CLASS 1 EXCEPT AS NOTED ABOVE

Mesic Prairie		Pounds/Acre
Lolium multiflorum	Wild Rye	4.50
Routelula curtispindula	Side Oats Grama	1.75
Andropogon scoparius	Little blue stem	3.00
Sporobolus heterolepis	prairie dropseed grass	300 plugs
Amaranthus canescens	leaf plant	0.188
Aster laevis	smooth blue aster	0.125
Baptisia leucophnea	cream indigo	0.188
Ceanothus americanus	New Jersey tea	0.125
Corsosia palmata	prairie cosmos	0.188
Decalobium meadia	shooting star	0.088
Eryngium yuccifolium	Rattlesnake Master	0.250
Galium boreale	Northern bedstraw	0.125
Helianthus rigidus	prairie sunflower	0.188
Hypochaeris hirsuta	yellow star grass	0.188
Lespedeza capitata	round red clover	0.250
Rhizis glabra	prairie rhizis	0.188
Ratibida pinnata	yellow coneflower	0.188
Silphium laciniatum	compsa plant	0.125
Zizia aurea	heart leaved	0.125
Urtica dioica	stinging nettle	0.125
Ligustrum pycnostachya	prairie blazing star	0.025
Petalostemon purpureum	purple prairie clover	0.125
Avena sativa	Oats	40.00
Wet Meadow		
Carex buxbaumii	dark scaled sedge	0.25
Carex sartwellii	running marsh sedge	0.25
Carex lasiocarpa	Lakebed sedge	0.25
Carex oedocarpa	long-bracted sedge	0.25
Bromus ciliatus	fringed brome	4.000
Subularia perfoliatum	common bonaset	0.40
Boerhaavia cylindrica	false nettle	0.15
Xyrum dictum	winged loosestrife	0.25
Minulus ringens	monkey flower	0.25
Mentha arvensis	wild mint	0.05
Galium poliflorum	Marsh marigold	0.40
Chelone glabra	turtlehead	0.35
Stachys tenuifolia hispida	marsh hedge nettle	0.15
Lycopus americanus	common water horehound	0.15
Avena sativa	Oats	40.00

SEEDING REQUIREMENTS (SEE TABLE)



NOTE: AREA BOUNDED BY PERIMETER EROSION BARRIER = 114,730 SQ. FT. ALL TREES TO BE REMOVED WITHIN THE AREA BOUNDED BY THE PERIMETER EROSION BARRIER, NORTH OF THE R.R. TRACKS, EXCEPT FOR MISC. TREES DESIGNATED BY THE ENGINEER THAT ARE TO BE SAVED. ESTIMATED AREA FOR THE REMOVAL = 2.65 ACRES

LEGEND

EXISTING	PROPOSED	DESCRIPTION
○	●	MANHOLE
□	■	CATCH BASIN
○	●	INLET
○	●	CLEANOUT
○	●	SLOPE INLET BOX
○	●	HEADWALL
○	●	END SECTION
○	●	STORM SEWER
○	●	SILT FENCE INLET PROTECTOR
○	●	PERIMETER EROSION BARRIER WITH MAINTENANCE
○	●	NUMBERING SYSTEM USED ON PLANS FOR DRAINAGE STRUCTURE IDENTIFICATION
○	●	SILT FENCE DITCH CHECK
○	●	CONSTRUCTION FENCE
○	●	TEMPORARY DITCH CHECKS
○	●	INLET & PIPE PROTECTION

PREPARED FOR:
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666 S. MAIN STREET
WHEATON, ILLINOIS 60187

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NO.		DATE		DESCRIPTION	

OVERALL SOIL EROSION, SEDIMENTATION CONTROL PLAN AND DETAILS
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: SOILERO	DSGN. BY: JAC	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 5 of 54
DISC. NUMBER: 551007	DRN. BY: KMS	DATE: 07-05-05	SCALE: 1" = 50'	

TAB: SOILERO 02
XREF: OVER_50.DWG
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START AT EAST R.O.W. OF COUNTY FARM ROAD
AND NE WINGWALL OF RAILROAD BRIDGE



POINT WHERE THE NORTH R.O.W. LINE OF THE RAILROAD INTERSECTS
THE NORTH LINE OF THE SE QUARTER OF THE NW QUARTER OF SEC. 17 T39 N R10E.
300 L.F. WILL CONTINUE OFF THE RAILROAD R.O.W. AND ALONG THE QUARTER/QUARTER LINE

NOTE:
DIMENSIONS ARE TO RAILROAD R.O.W.

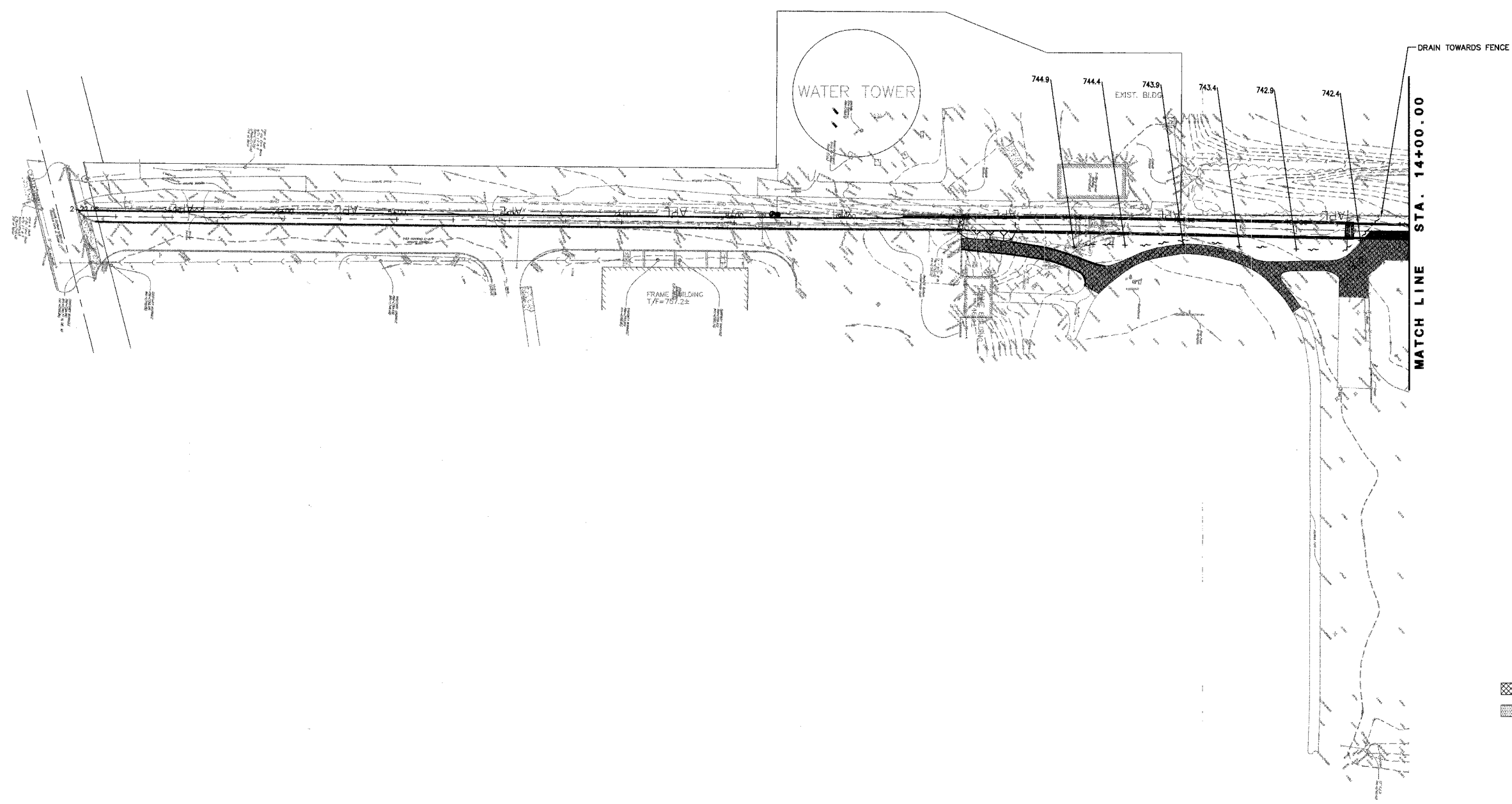
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REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

RAILROAD R.O.W. FENCE				
PEDESTRIAN/BICYCLE BRIDGE OVER UNION PACIFIC RAILROAD				
FILE NAME: AERIAL	DSGN. BY: GF	JOB NO.: 551.007	FLD. BK./PG.:	SHEET NO.
DIR: 551007	DRN. BY: MD	DATE: 04-26-04	SCALE: 1" = 200'	5A of 54



LEGEND

- BITUMINOUS PATH REMOVAL
- BITUMINOUS PATH
- 2' BITUMINOUS SURFACE
- 6' AGGREGATE BASE COURSE
- SEE TYPICAL SECTION

NOTE:
FOR FURTHER DETAIL
SEE CROSS SECTIONS

TAB: GRADE 01
XREF: OVER_50.DWG
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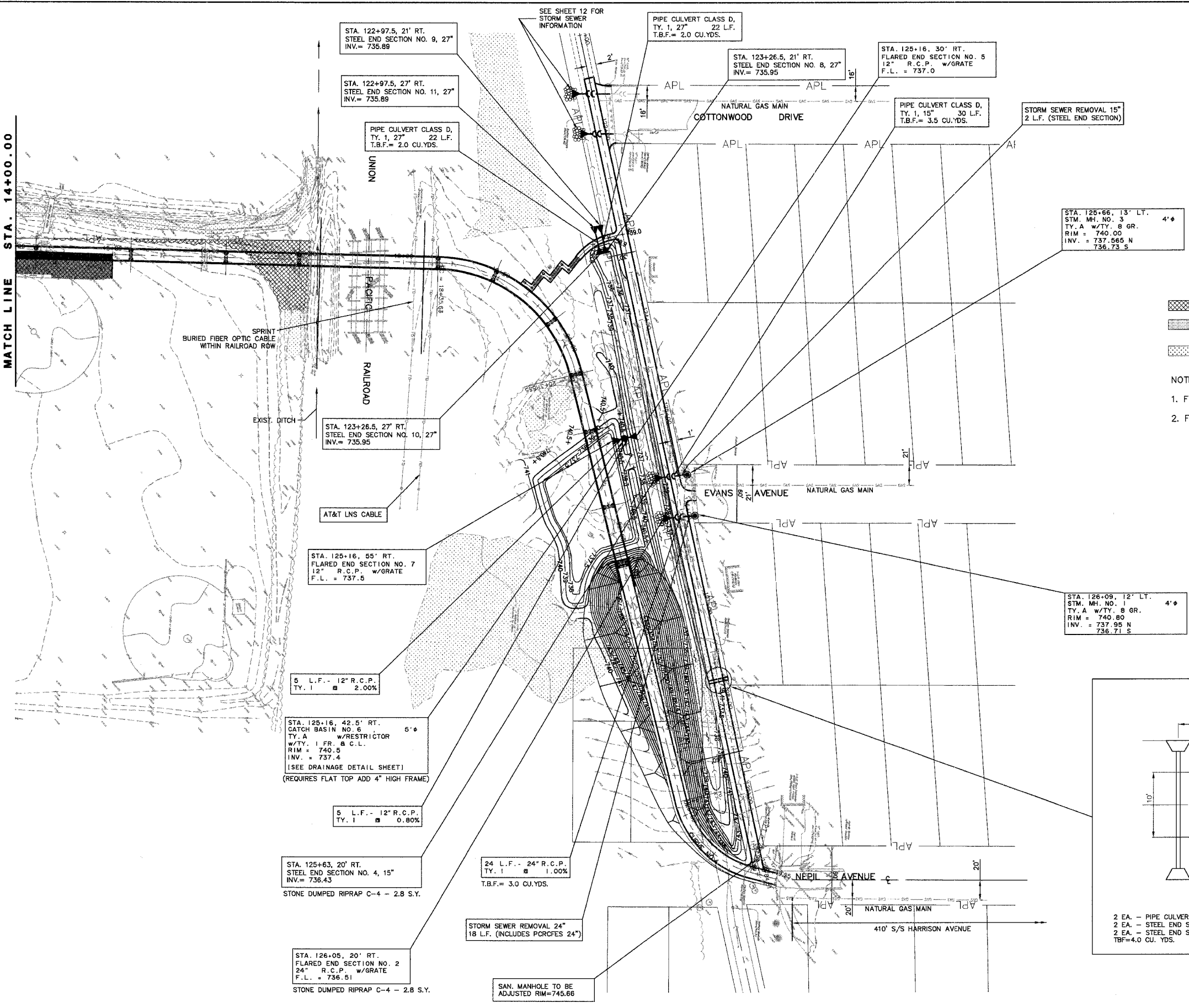
DRAINAGE AND GRADING PLAN				
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD				
FILE NAME: GRADE	DSGN. BY: JAC	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: KMS	DATE: 04-26-04	SCALE: 1" = 50'	6 of 54

F.A. - RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94-P4031-00-BR		DUPAGE	64	7

CONTRACT NO. 83560

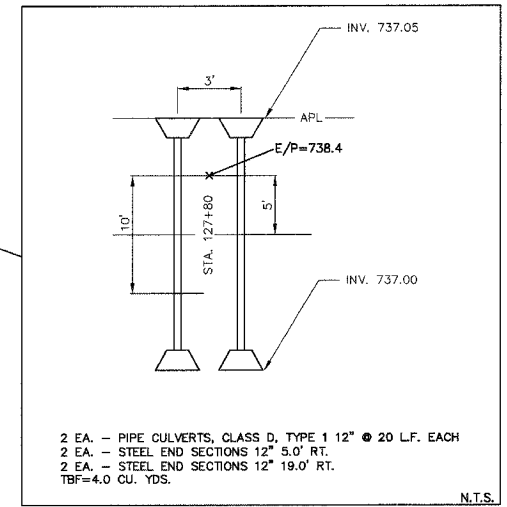


MATCH LINE STA. 14+00.00



- LEGEND**
- BITUMINOUS PATH REMOVAL
 - PROPOSED BITUMINOUS PATH (SIMILAR TO PEDESTRIAN PATH)
 - EXISTING WETLANDS

- NOTES:
- FOR FURTHER DETAIL SEE CROSS SECTIONS
 - FOR TREE REMOVAL SEE SHEET 5



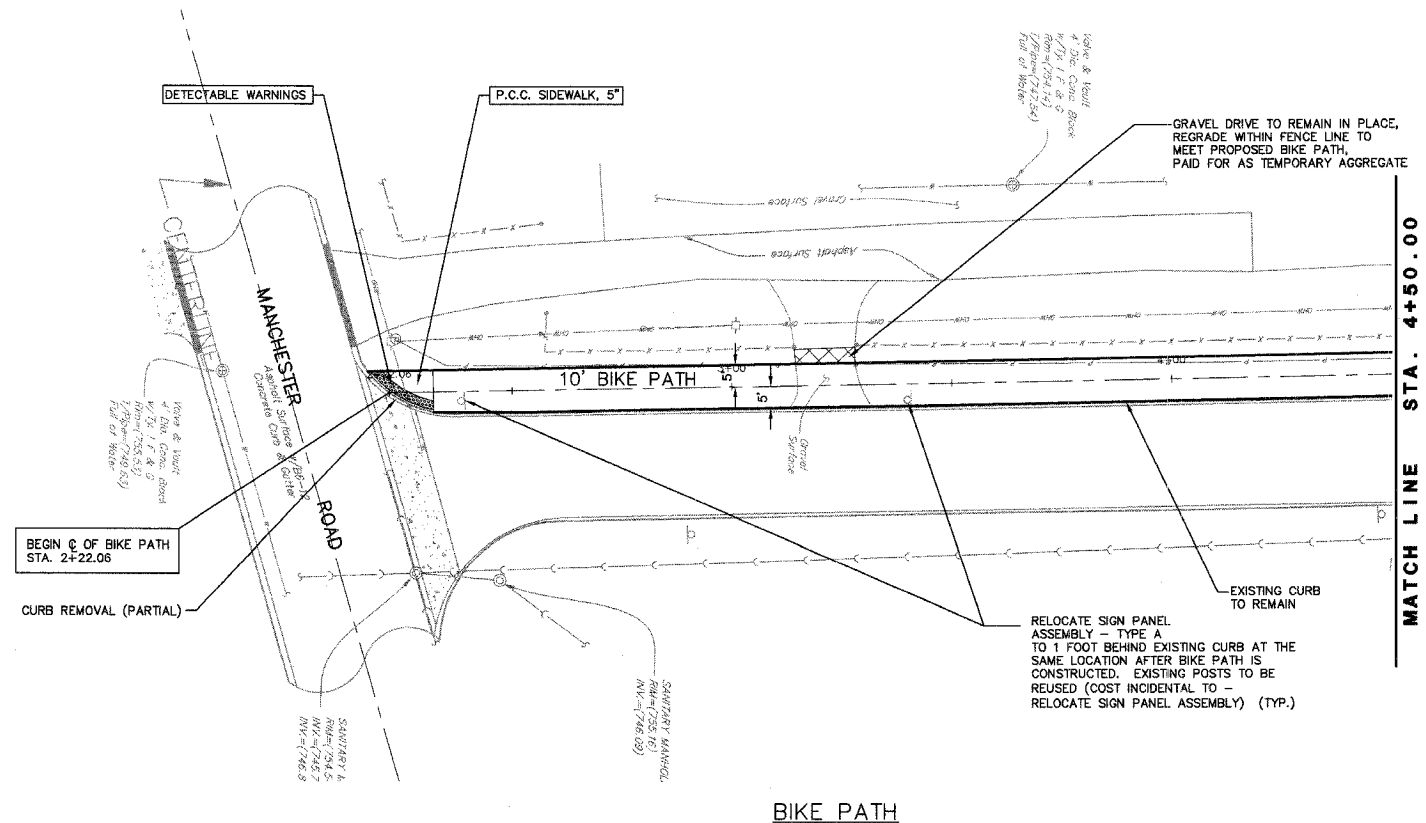
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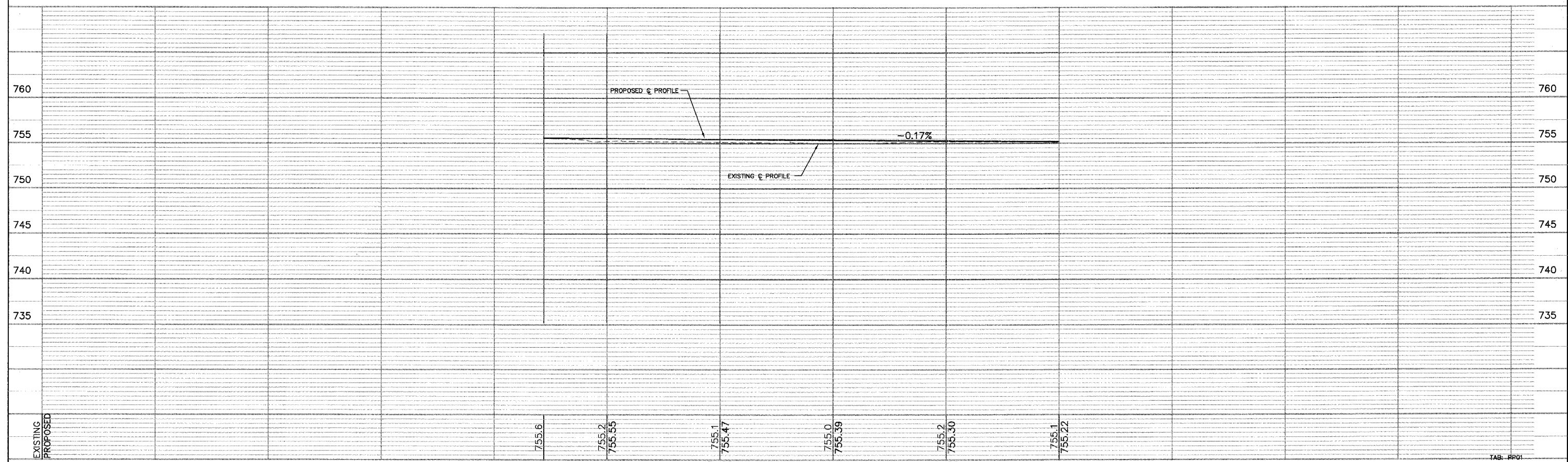
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DRAINAGE AND GRADING PLAN				
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD				
FILE NAME: GRADE	DSGN. BY: JAC	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 7 of 54
DISC. NUMBER: 551007	DRN. BY: KMS	DATE: 07-05-05	SCALE: 1" = 50'	

TAB: GRADE 02
 XREF: OVER_50.DWG
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BIKE PATH



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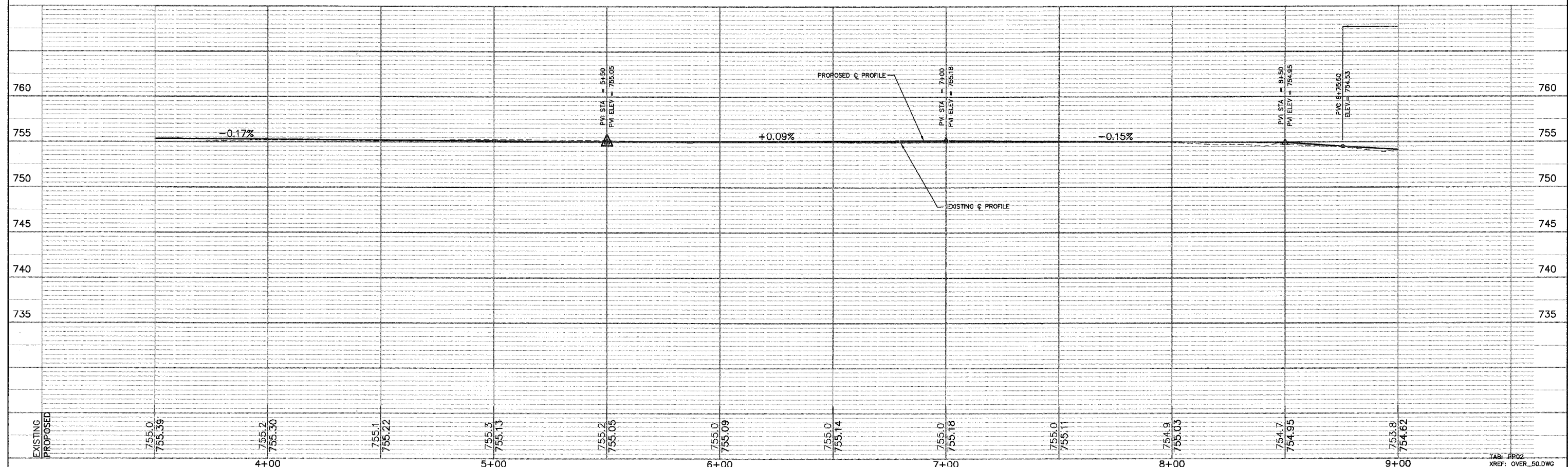
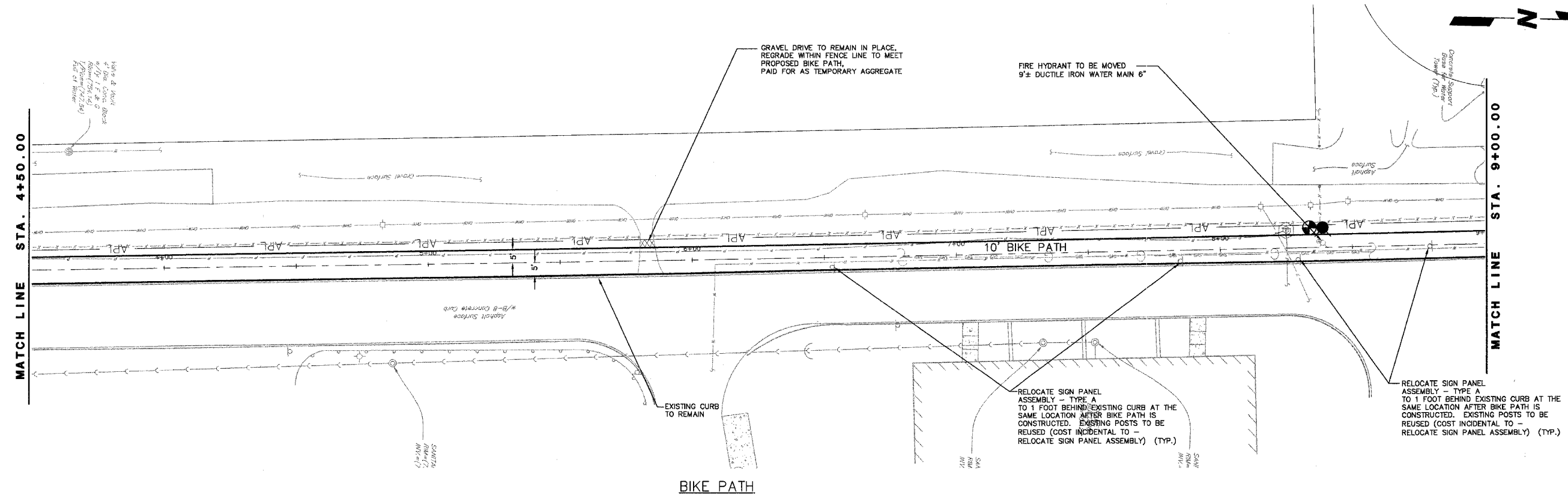
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BICYCLE BRIDGE STA. 2+22.06 TO 4+50.00

PEDESTRIAN/BICYCLE BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: PP_OVR	DSGN. BY: CA	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 8 of 54
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: 1" = 20'H:5'V	

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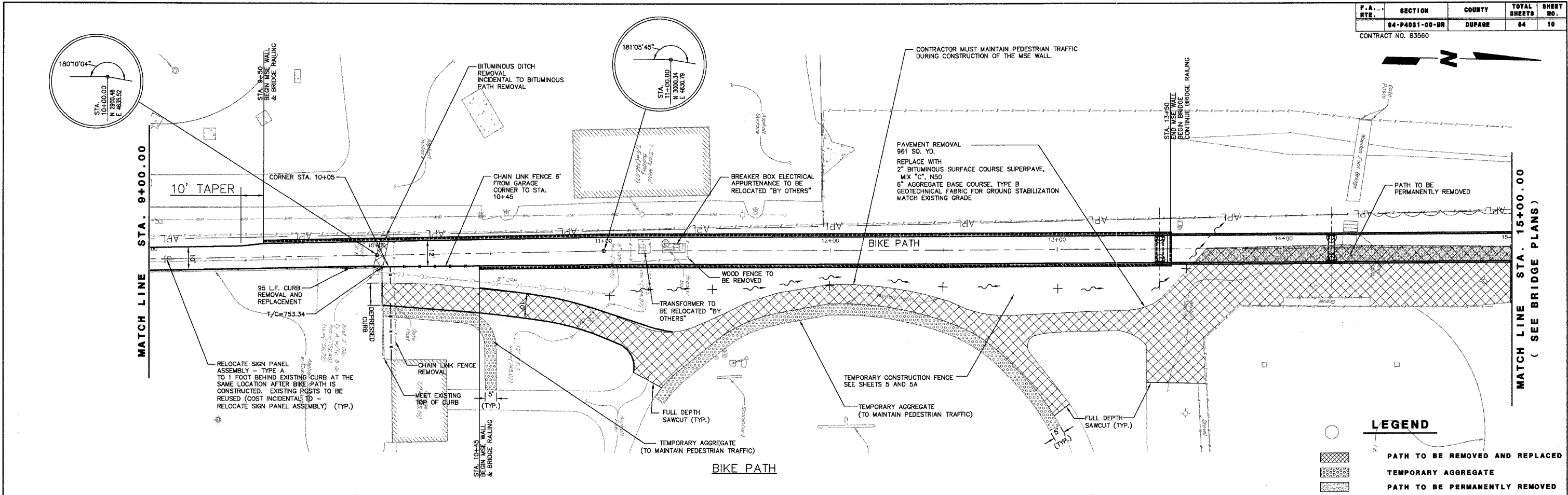
REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

BICYCLE BRIDGE STA. 4+50.00 TO 9+00.00

PEDESTRIAN/BICYCLE BRIDGE OVER UNION PACIFIC RAILROAD

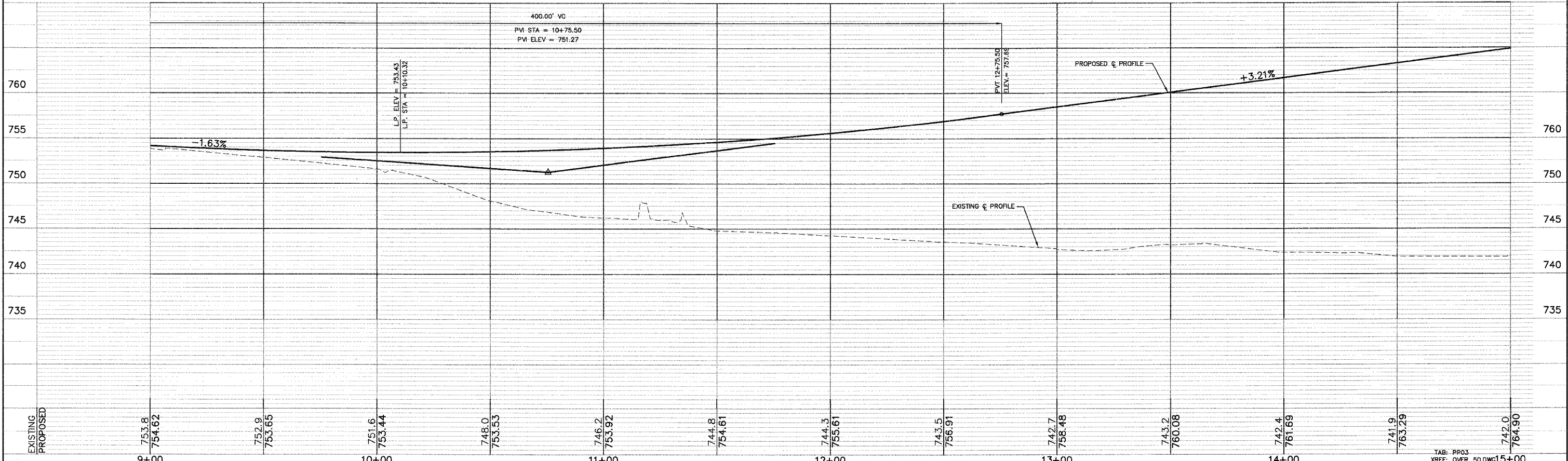
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DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: 1" = 20'H:5"V	

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LEGEND

- PATH TO BE REMOVED AND REPLACED
- TEMPORARY AGGREGATE
- PATH TO BE PERMANENTLY REMOVED



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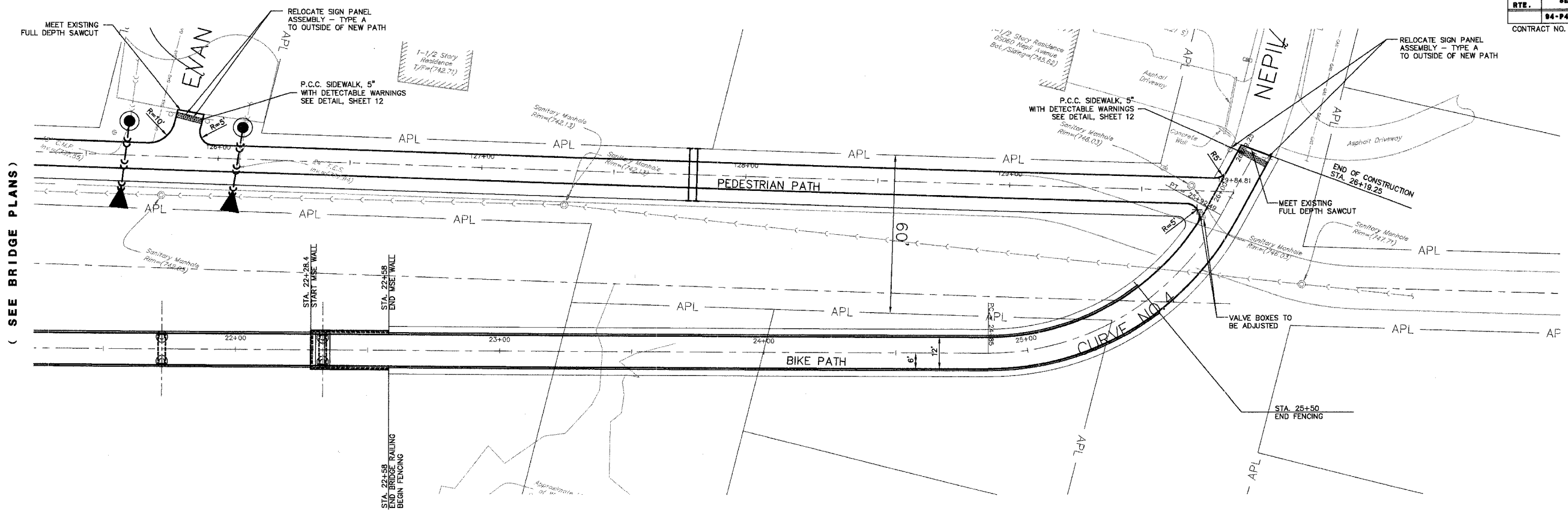
REVISIONS		REVISIONS	
NO.	DATE	NO.	DATE

BICYCLE BRIDGE STA. 9+00.00 TO 14+50.00

PEDESTRIAN/BICYCLE BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: PP_OVR	DSGN. BY: CA	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 12-21-04	SCALE: 1" = 20'H:5'V	10 of 54

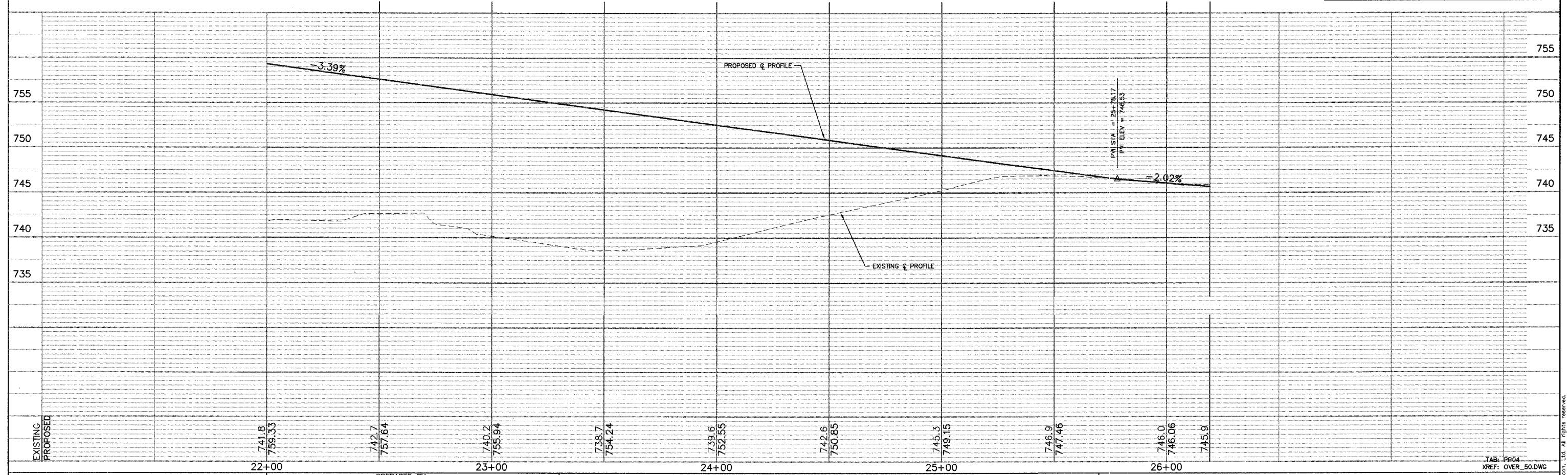
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(SEE BRIDGE PLANS)

CURVE TABLE				
CURVE	LENGTH	RADIUS	CHORD	BEARING
CURVE NO. 4	107.50'	100.00'	102.40'	N 42°24'04" E
				61°35'30"

BIKE PATH



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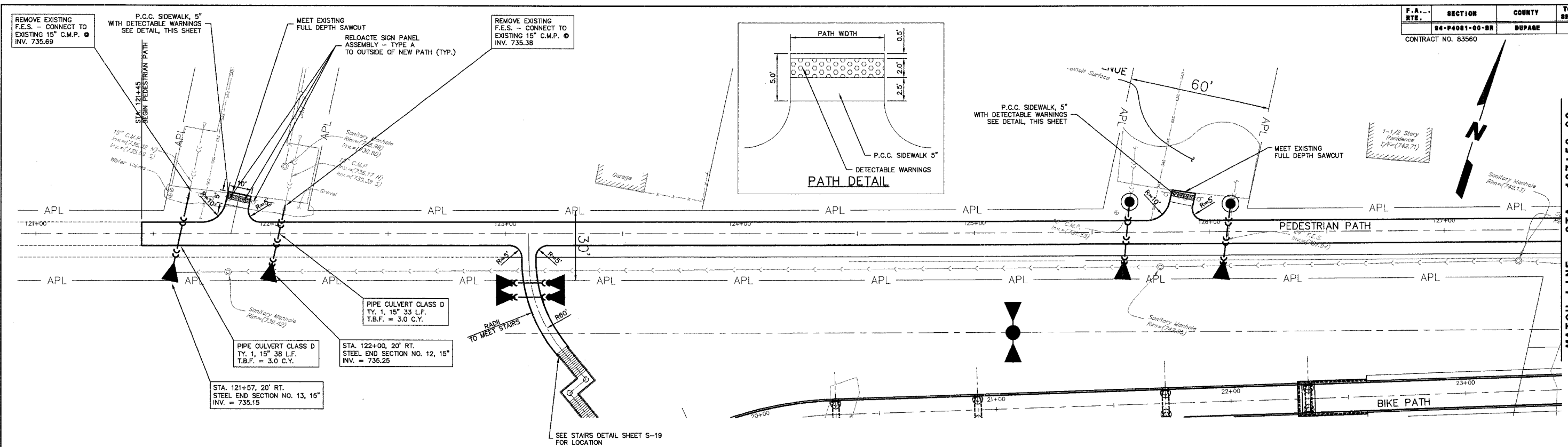
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NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

BICYCLE BRIDGE STA. 22+00.00 TO 26+19.25

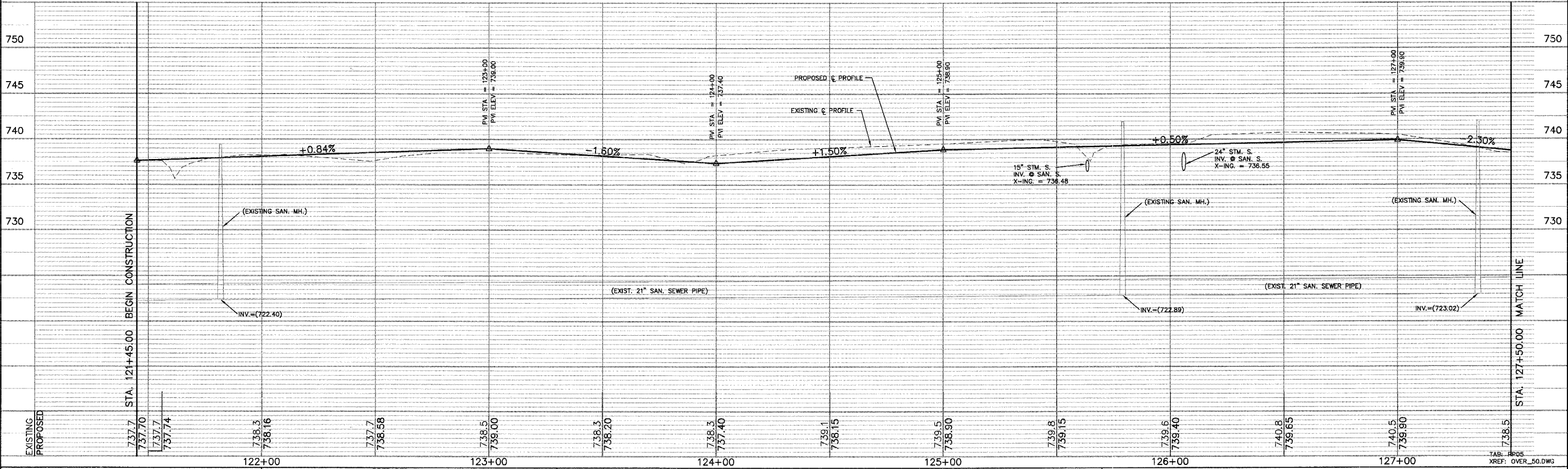
PEDESTRIAN/BICYCLE BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: PP_OVR	DSGN. BY: CA	JOB NO.: 551.007	FLD. BK./PG.: ----	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: KMS	DATE: 12-21-04	SCALE: 1" = 20'H: 5'V	11 of 54

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PEDESTRIAN PATH

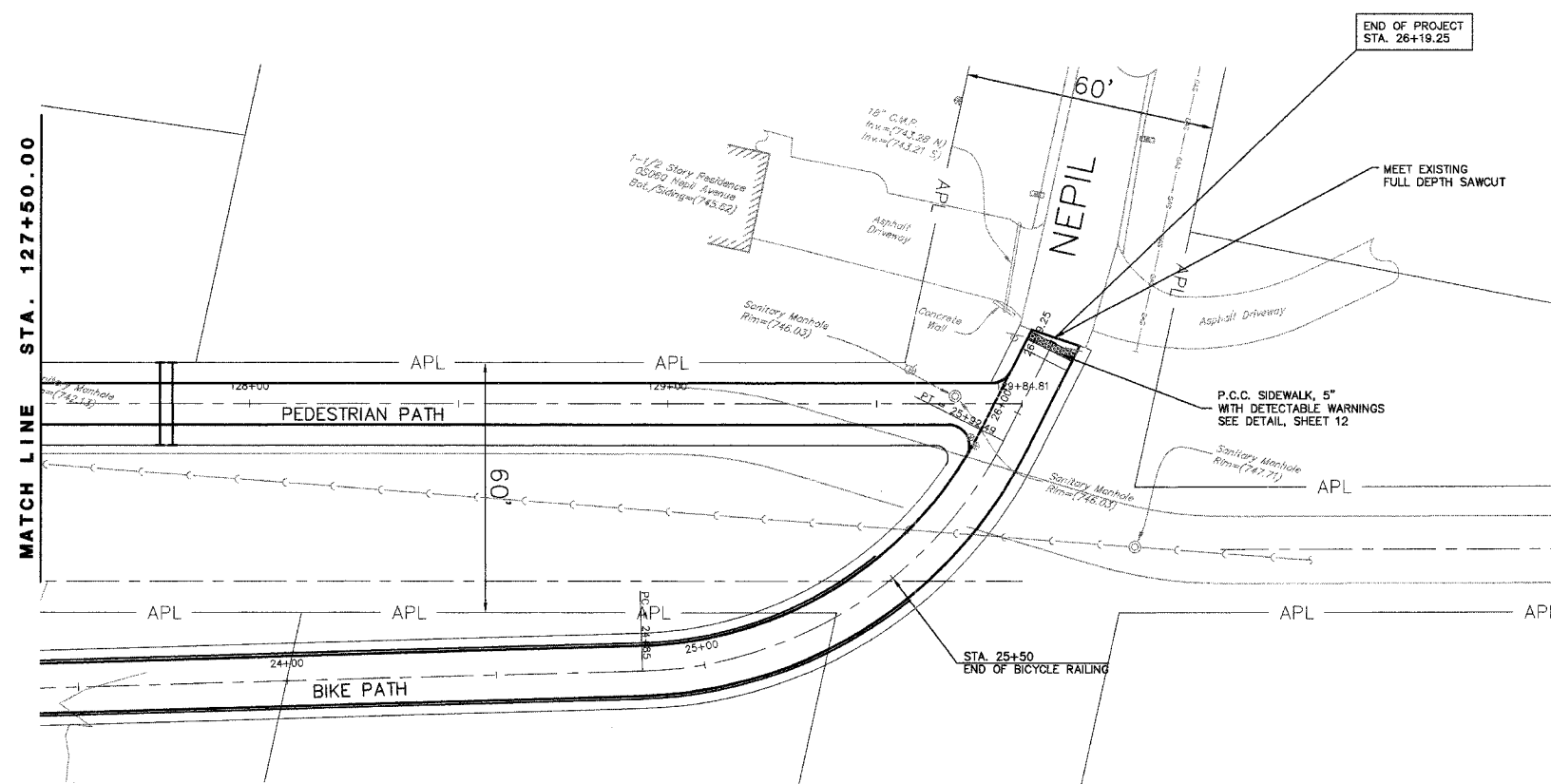


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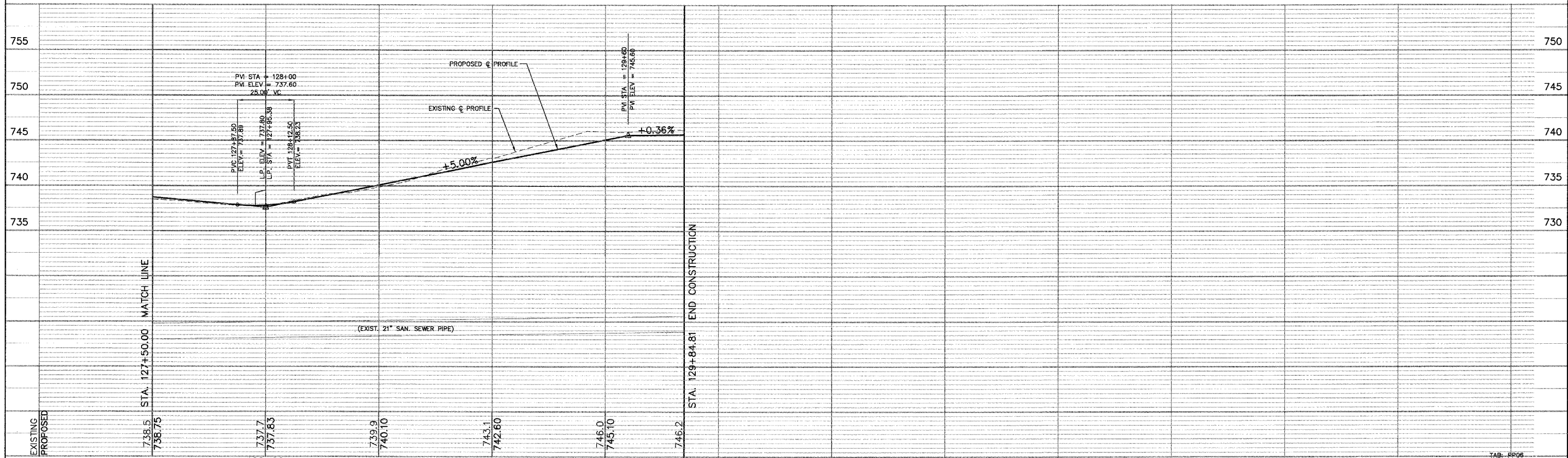
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NO.		DATE	DESCRIPTION	NO.		DATE	DESCRIPTION

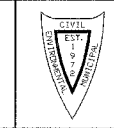
PEDESTRIAN PATH STA. 123+00.00 TO STA. 127+50.00
PEDESTRIAN/BICYCLE BRIDGE OVER UNION PACIFIC RAILROAD
 FILE NAME: PP_OVR DSGN. BY: CA JOB NO.: 551.007 FLD. BK./PG.: --- SHEET NO. 12 of 54
 DISC. NUMBER: 551007 DRN. BY: KMS DATE: 07-05-05 SCALE: 1" = 20'H:5'V



PEDESTRIAN PATH



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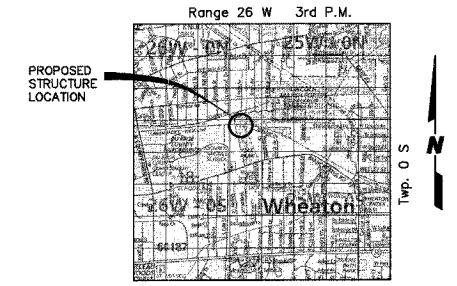
NO.		DATE	DESCRIPTION	REVISIONS		NO.	DATE	DESCRIPTION

PEDESTRIAN PATH STA. 127+50.00 TO STA.129+84.81
PEDESTRIAN/BICYCLE BRIDGE OVER UNION PACIFIC RAILROAD

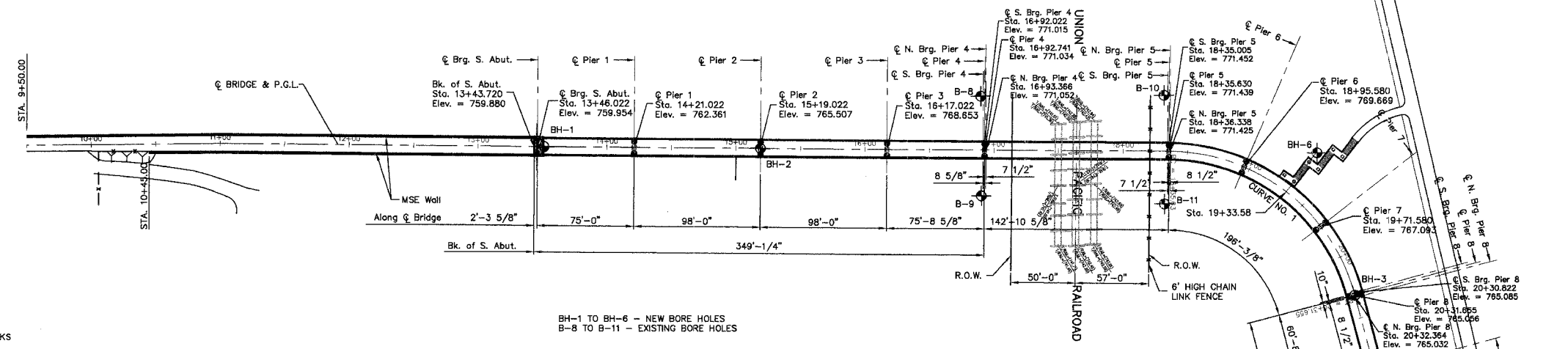
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DISC. NUMBER: 551007	DRN. BY: KMS	DATE: 04-26-04	SCALE: 1" = 20'H:5'V	13 of 54

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CONTRACT NO. 83560



LOCATION SKETCH



PLAN

BENCHMARKS

ELEVATION REFERENCE MARKS

DUPAGE COUNTY CONTROL, ALUMINUM DISC # 02943 0.3 MILES EAST OF THE INTERSECTION OF MANCHESTER ROAD AND COUNTY FARM ROAD, ±150' NORTH OF MANCHESTER ROAD.
ELEVATION = 735.26

PROJECT ELEVATION REFERENCE MARKS

RM1-BOLT BETWEEN "MJE" & "LLER" ON THE FIRST FIRE HYDRANT EAST OF ERIE AVENUE ON THE SOUTH SIDE OF MANCHESTER ROAD.
ELEVATION = 757.00

RM2-BOLT UNDER THE LAST "9" IN "1969" ON THE FIRE HYDRANT LOCATED AT THE NORTHWEST CORNER OF MONROE SCHOOL.
ELEVATION = 755.82

BH-1 TO BH-6 - NEW BORE HOLES
B-8 TO B-11 - EXISTING BORE HOLES

DESIGN SPECIFICATIONS

- AASHTO Standard Specifications for Highway Bridges - 2002
- AASHTO Guide Specifications for Design of Pedestrian Bridges - 1997
- AASHTO Guide Specifications for Horizontally Curved Steel Girder Highway Bridges - 2003

CONSTRUCTION SPECIFICATIONS

- IDOT - Standard Specifications for Road and Bridge Construction Adopted January 1, 2002
- IDOT - Supplemental Specifications and Recurring Special Provisions Adopted January 1, 2004
- IDOT - Guide Bridge Special Provision

LOADING

H10 Truck or Pedestrian Live Load of 85 psf.

DESIGN STRESSES

(FIELD UNITS)

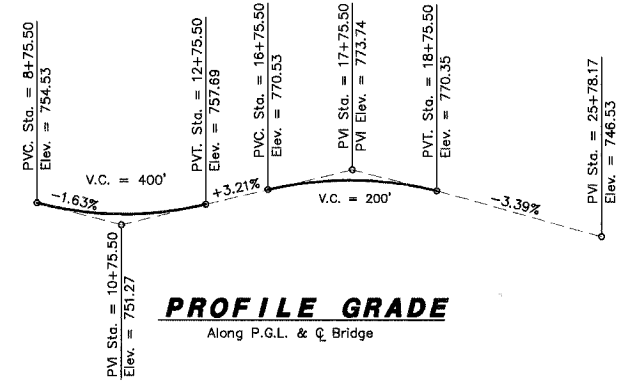
- $f_c = 3,500$ psi
- $f_y = 60,000$ psi (Rein.)
- $f_y = 50,000$ psi (Structural Steel)
- M-270, Grade 50W

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient(s) = 1.0

NOTES:

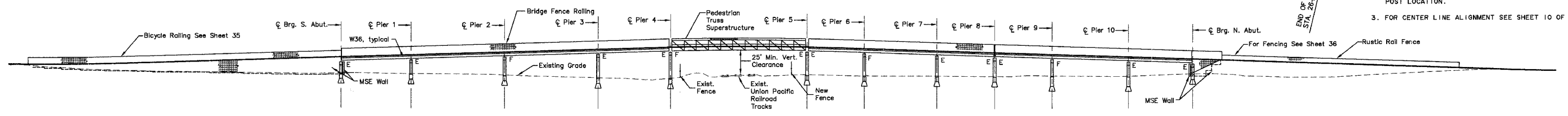
- THE ELEVATION OF THE EXISTING TOP-OF-RAIL PROFILE SHALL BE VERIFIED PRIOR TO BEGINNING CONSTRUCTION.
- SEE SHEET S3 OF S29 FOR UNION PACIFIC RR MILE POST LOCATION.
- FOR CENTER LINE ALIGNMENT SEE SHEET 10 OF 54.



PROFILE GRADE
Along P.G.L. & Bridge

CURVE 1 DATA

$\Delta = 74' 52' 34"$
 $D = 38' 11' 50"$
 $T = 114.84'$
 $L = 196.025'$
 $E = 38.91'$
 $R = 150.00'$
P.C. = 18+35.63
P.T. = 20+31.655
P.L. = 19+50.47



ELEVATION

PREPARED FOR:
WHEATON PARK DISTRICT
666 S. MAIN STREET
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NO.		DATE		DESCRIPTION	

GENERAL PLAN & ELEVATION - BICYCLE PATH BRIDGE
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: PLAN_50	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----
DISC. NUMBER: 551007	DRN. BY: KMS	DATE: 12-21-04	SCALE: 1" = -----

SHEET NO. 14 of 54

INDEX OF BRIDGE SHEETS
SHEET S1 OF S29
XREF: OVER_50.DWG
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GENERAL NOTES

- Fasteners shall be high strength bolts (AASHTO M-164, Type 3). Bolts $\frac{7}{8}$ " dia. open holes $\frac{5}{8}$ " dia., unless otherwise noted.
- Calculated mass of Structural Steel AASHTO M-270
Grade 50W = 293,500 lbs.
Grade 36 = 600 lbs.
- All structural steel including bearing plates shall be AASHTO M-270, Grade 50W except expansion joint plates and attached bars, which shall be AASHTO M-270 Grade 36.
- Expansion joint plates and attached bars shall be shop painted with the Inorganic zinc rich primer. See IDOT Special Provisions "Cleaning and Painting New Metal Structures"
- AASHTO M-270 Grade 50W structural steel shall only be painted, for a distance of three times the depth of the beams or girders each way from the deck joints. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel."
- Field welding of construction accessories will not be permitted to the bottom flange of beams or girders, nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
- Anchor bolts shall be set before bolting diaphragms over supports.
- The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams, tension flanges, webs and all splice plate material except fill plates.
- Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.
- Bridge Seat Sealer shall be applied to the seat area of the abutments and piers under expansion joint.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ ". Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $\frac{1}{8}$ " adjusting shims, of the dimensions of the bottom Bearing plate, shall be provided for each bearing, in addition to all other plates or shims. For Type I Elastomeric Bearings, two $\frac{1}{8}$ " adjusting shims shall be provided for each bearing and placed as detailed.
- The contractor shall submit for Engineer's review his detailed erection plan and procedures including but not limited to sequence of girder erection and bolt tightenings, and provisions for stability of girders and blocking of bearings during erection. The Engineer's review of such plan and procedures does not relieve contractor of any responsibility.
- Drilled shafts for piers and abutments shall be constructed according to IDOT Guide Bridge Special Provision "Drilled Shafts".

INDEX OF BRIDGE SHEETS

BRIDGE SHEET NO.	TITLE
S1	GENERAL PLAN & ELEVATION
S2	BILL OF MATERIAL, GENERAL NOTES & INDEX OF BRIDGE SHEETS
S3	FOUNDATION LAYOUT PLAN
S4	TOP OF SLAB ELEVATIONS - SHEET 1 OF 4
S5	TOP OF SLAB ELEVATIONS - SHEET 2 OF 4
S6	TOP OF SLAB ELEVATIONS - SHEET 3 OF 4
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S10	EXPANSION JOINT DETAILS - SECTIONS
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S19	STAIR DETAILS
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S25	PIER DETAILS - SHEET 1 OF 2
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S28	SOIL BORINGS - SHEET 2 OF 3
S29	SOIL BORINGS - SHEET 3 OF 3

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Structure Excavation	Cu. Yd.	---	992	992
Concrete Structures	Cu. Yd.	---	322	322
Bridge Seat Sealer	Sq. Ft.	---	194	194
Elastomeric Bearing Assembly, Type I	Each	---	12	12
Elastomeric Bearing Assembly, Type II	Each	---	4	4
Elastomeric Bearing Assembly, Type III	Each	---	4	4
Furnishing and Erecting Structural Steel	L. Sum	1	---	1
Stud Shear Connectors	Each	3,632	---	3,632
Reinforcement Bars, Epoxy Coated	Pound	122,850	51,250	174,100
Concrete Superstructure	Cu. Yd.	258.8	---	258.8
Bridge Fence Railing	Foot	1,540	---	1,540
Protective Coat	Sq. Yd.	1,440	---	1,440
Neoprene Expansion Joint, 2"	Foot	13	---	13
Neoprene Expansion Joint, 2 1/2"	Foot	39	---	39
Neoprene Expansion Joint, 4"	Foot	13	---	13
Performed Joint Seal, 2 1/2"	Foot	15	---	15
Pipe Handrail	Foot	---	168	168
Drilled Shaft In Soil, 30"	Foot	---	216	216
Drilled Shaft In Soil, 36"	Foot	---	36	36
Pedestrian Truss Superstructure	Sq. Ft.	1,910	---	1,910
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	---	9,900	9,900
Bicycle Railing	Foot	700	---	700
Rustic Rail Fence	Foot	590	---	590
Drainage Scupper	Each	4	---	4
Drainage System	L. Sum	1	---	1

STRUCTURAL ENGINEER'S CERTIFICATION


I, MOHAMMAD M. HUSAIN, A LICENSED STRUCTURAL ENGINEER OF ILLINOIS, HEREBY CERTIFY THAT THIS TECHNICAL SUBMISSION WAS PREPARED ON BEHALF OF WHEATON PARK DISTRICT BY CEMCON, LTD. UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.

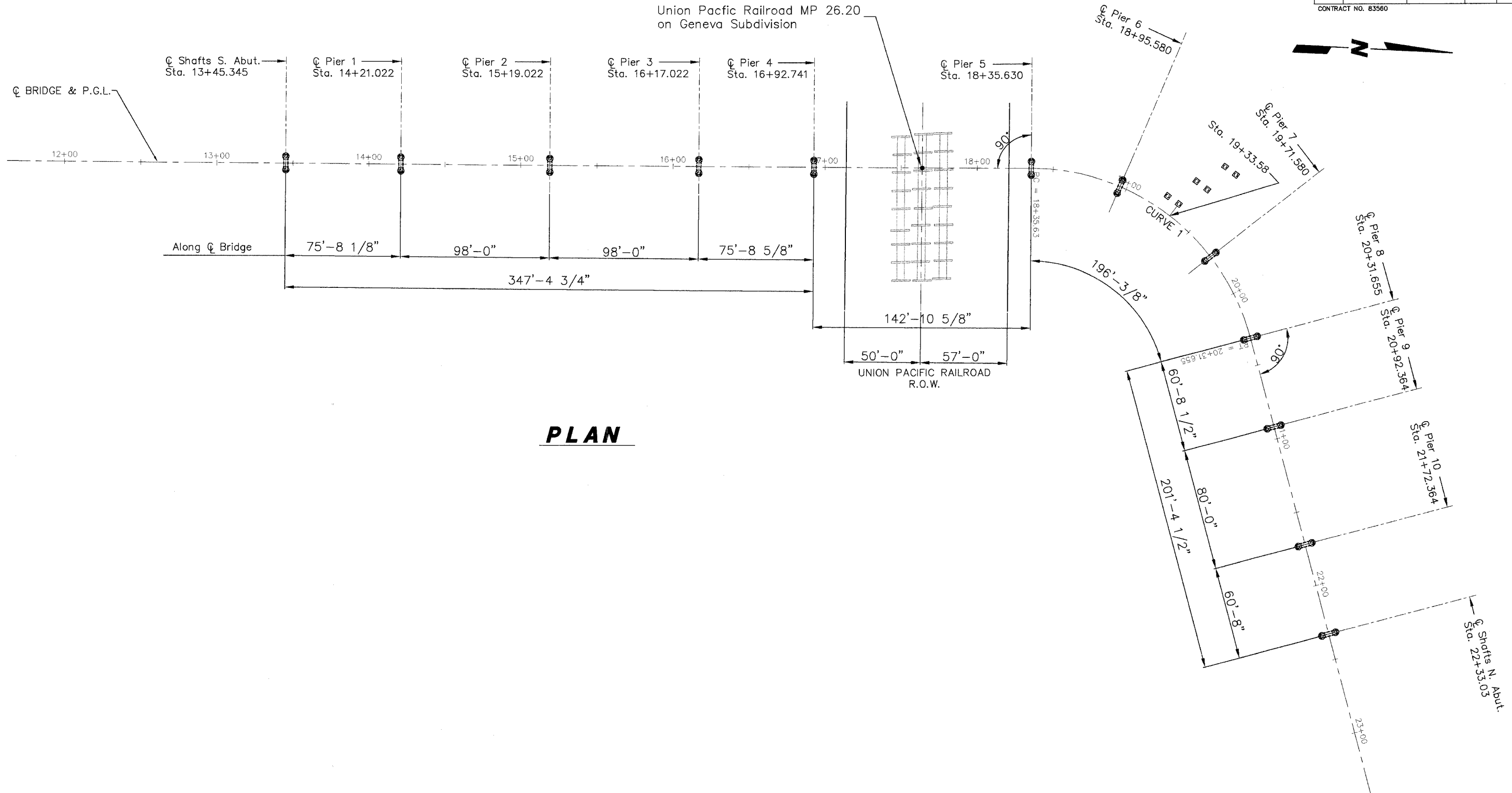
DATED THIS 15th DAY OF November, A.D., 2005.

ILLINOIS LICENSED STRUCTURAL ENGINEER NO. 081-005529
MY LICENSE EXPIRES ON NOVEMBER 30, 2006



NOTE : UNLESS THIS DOCUMENT BEARS THE ORIGINAL SIGNATURE AND IMPRESSED SEAL OF THE DESIGN STRUCTURAL ENGINEER, IT IS NOT A VALID TECHNICAL SUBMISSION.

PREPARED FOR: WHEATON PARK DISTRICT 666 S. MAIN STREET WHEATON, ILLINOIS 60187	 PREPARED BY: CEMCON, Ltd. Consulting Engineers, Land Surveyors & Planners 2280 White Oak Circle, Suite 100 Aurora, Illinois 60504-9675 Ph: 630.862.2100 Fax: 630.862.2199 E-Mail: cadd@cemcon.com Website: www.cemcon.com	REVISIONS		BILL OF MATERIAL, GENERAL NOTES & INDEX OF BRIDGE SHEETS PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD																																					
		<table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION																									<table border="1"> <tr> <td>FILE NAME: INDEX</td> <td>DSGN. BY: MMH</td> <td>JOB NO.: 551.007</td> <td>FLD. BK./PG.: -----</td> <td>SHEET NO. 15 of 54</td> </tr> <tr> <td>DISC. NUMBER: 551007</td> <td>DRN. BY: RDS</td> <td>DATE: 12-21-04</td> <td>SCALE: -----</td> <td></td> </tr> </table>	FILE NAME: INDEX	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 15 of 54	DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 12-21-04
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PLAN

- NOTES:
1. For foundation dimensions and details see sheets S19, S21, S25 & S26.
 2. For stair foundation locations see sheet S19.
 3. For Curve 1 data see sheet S1.

INDEX OF BRIDGE SHEETS
SHEET S3 OF S29
XREF: OVER_50.DWG
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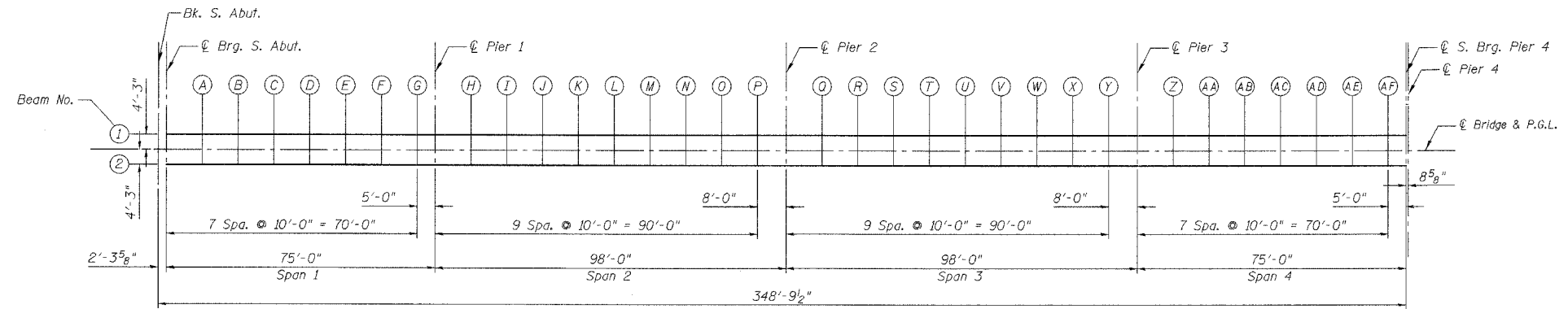
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666 S. MAIN STREET
WHEATON, ILLINOIS 60187



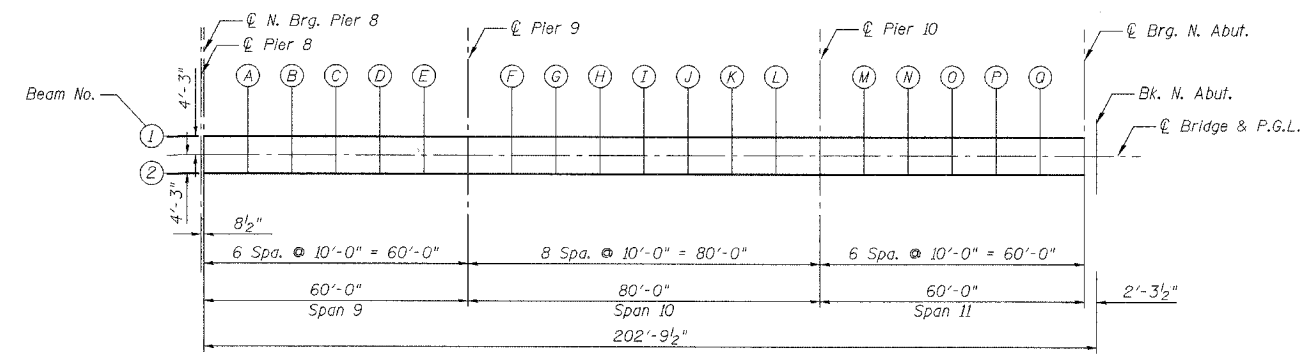
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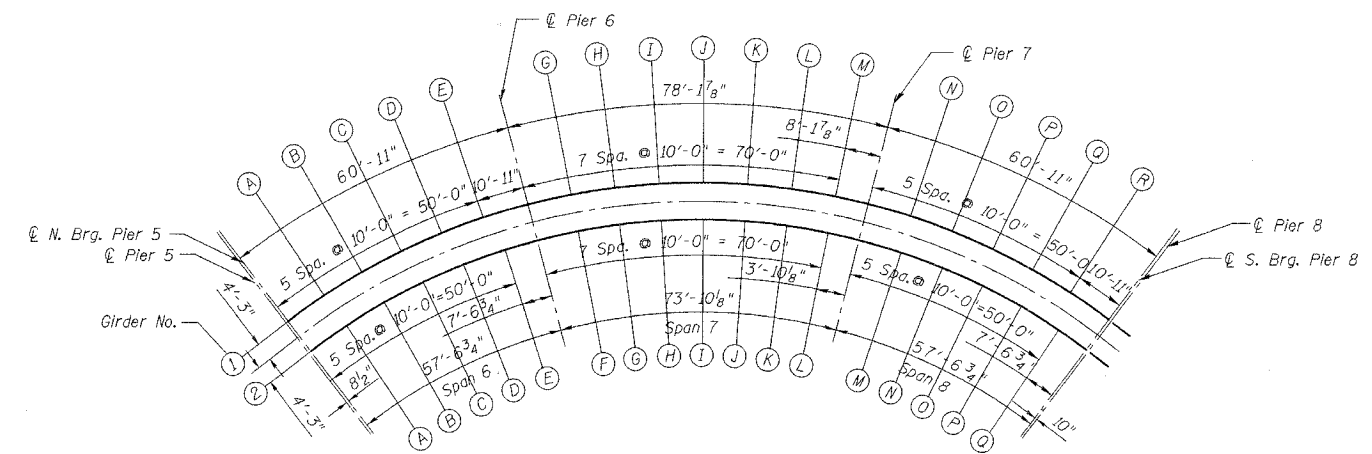
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PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD				
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DISC. NUMBER: 551007	DRN. BY: DMC	DATE: 12-21-04	SCALE: 1" = 30'	16 of 54



PLAN
(SPANS 1 THRU 4)



PLAN
(SPANS 9 THRU 11)



PLAN
(SPANS 6 THRU 8)

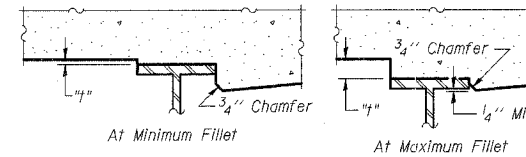
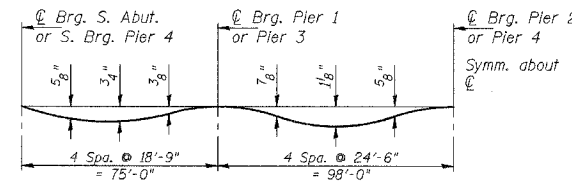
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NO.		DATE	DESCRIPTION	REVISIONS		NO.	DATE	DESCRIPTION

TOP OF SLAB ELVATIONS - SHEET 1 OF 4			
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD			
FILE NAME: TOP OF SLAB	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: 1" = 20'
			SHEET NO. 17 of 54



BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. OF S. ABUT.	1343.720	-4.25	759.791	759.791
CL. BRG. S. ABUT.	1346.022	-4.25	759.865	759.865
A	1356.022	-4.25	760.186	760.217
B	1366.022	-4.25	760.507	760.561
C	1376.022	-4.25	760.828	760.892
D	1386.022	-4.25	761.149	761.209
E	1396.022	-4.25	761.470	761.515
F	1406.022	-4.25	761.791	761.814
G	1416.022	-4.25	762.112	762.116
CL. PIER 1	1421.022	-4.25	762.273	762.273
H	1431.022	-4.25	762.594	762.626
I	1441.022	-4.25	762.915	762.977
J	1451.022	-4.25	763.236	763.319
K	1461.022	-4.25	763.557	763.651
L	1471.022	-4.25	763.878	763.971
M	1481.022	-4.25	764.199	764.280
N	1491.022	-4.25	764.520	764.580
O	1501.022	-4.25	764.841	764.876
P	1511.022	-4.25	765.162	765.174
CL. PIER 2	1519.022	-4.25	765.418	765.418
Q	1529.022	-4.25	765.739	765.756
R	1539.022	-4.25	766.060	766.101
S	1549.022	-4.25	766.381	766.447
T	1559.022	-4.25	766.702	766.787
U	1569.022	-4.25	767.023	767.118
V	1579.022	-4.25	767.344	767.437
W	1589.022	-4.25	767.665	767.745
X	1599.022	-4.25	767.986	768.043
Y	1609.022	-4.25	768.307	768.334
CL. PIER 3	1617.022	-4.25	768.564	768.564
Z	1627.022	-4.25	768.885	768.898
AA	1637.022	-4.25	769.206	769.240
AB	1647.022	-4.25	769.527	769.581
AC	1657.022	-4.25	769.848	769.912
AD	1667.022	-4.25	770.169	770.230
AE	1677.022	-4.25	770.490	770.534
AF	1687.022	-4.25	770.789	770.806
CL. S. BRG. PIER 4	1692.022	-4.25	770.927	770.927
CL. PIER 4	1692.741	-4.25	770.946	770.946

CL. BRIDGE & PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. OF S. ABUT.	1343.720	0	759.880	759.880
CL. BRG. S. ABUT.	1346.022	0	759.954	759.954
A	1356.022	0	760.275	760.306
B	1366.022	0	760.596	760.650
C	1376.022	0	760.917	760.981
D	1386.022	0	761.238	761.298
E	1396.022	0	761.559	761.603
F	1406.022	0	761.880	761.903
G	1416.022	0	762.201	762.205
CL. PIER 1	1421.022	0	762.361	762.361
H	1431.022	0	762.682	762.715
I	1441.022	0	763.003	763.065
J	1451.022	0	763.324	763.408
K	1461.022	0	763.645	763.739
L	1471.022	0	763.966	764.059
M	1481.022	0	764.287	764.368
N	1491.022	0	764.608	764.669
O	1501.022	0	764.929	764.965
P	1511.022	0	765.250	765.263
CL. PIER 2	1519.022	0	765.507	765.507
Q	1529.022	0	765.828	765.845
R	1539.022	0	766.149	766.190
S	1549.022	0	766.470	766.535
T	1559.022	0	766.791	766.875
U	1569.022	0	767.112	767.206
V	1579.022	0	767.433	767.526
W	1589.022	0	767.754	767.834
X	1599.022	0	768.075	768.132
Y	1609.022	0	768.396	768.422
CL. PIER 3	1617.022	0	768.653	768.653
Z	1627.022	0	768.974	768.986
AA	1637.022	0	769.295	769.329
AB	1647.022	0	769.616	769.669
AC	1657.022	0	769.937	770.001
AD	1667.022	0	770.258	770.319
AE	1677.022	0	770.578	770.623
AF	1687.022	0	770.898	770.894
CL. S. BRG. PIER 4	1692.022	0	771.015	771.015
CL. PIER 4	1692.741	0	771.034	771.034

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. OF S. ABUT.	1343.720	4.25	759.791	759.791
CL. BRG. S. ABUT.	1346.022	4.25	759.865	759.865
A	1356.022	4.25	760.186	760.217
B	1366.022	4.25	760.507	760.561
C	1376.022	4.25	760.828	760.892
D	1386.022	4.25	761.149	761.209
E	1396.022	4.25	761.470	761.515
F	1406.022	4.25	761.791	761.814
G	1416.022	4.25	762.112	762.116
CL. PIER 1	1421.022	4.25	762.273	762.273
H	1431.022	4.25	762.594	762.626
I	1441.022	4.25	762.915	762.977
J	1451.022	4.25	763.236	763.319
K	1461.022	4.25	763.557	763.651
L	1471.022	4.25	763.878	763.971
M	1481.022	4.25	764.199	764.280
N	1491.022	4.25	764.520	764.580
O	1501.022	4.25	764.841	764.876
P	1511.022	4.25	765.162	765.174
CL. PIER 2	1519.022	4.25	765.418	765.418
Q	1529.022	4.25	765.739	765.756
R	1539.022	4.25	766.060	766.101
S	1549.022	4.25	766.381	766.447
T	1559.022	4.25	766.702	766.787
U	1569.022	4.25	767.023	767.118
V	1579.022	4.25	767.344	767.437
W	1589.022	4.25	767.665	767.745
X	1599.022	4.25	767.986	768.043
Y	1609.022	4.25	768.307	768.334
CL. PIER 3	1617.022	4.25	768.564	768.564
Z	1627.022	4.25	768.885	768.898
AA	1637.022	4.25	769.206	769.240
AB	1647.022	4.25	769.527	769.581
AC	1657.022	4.25	769.848	769.912
AD	1667.022	4.25	770.169	770.230
AE	1677.022	4.25	770.490	770.534
AF	1687.022	4.25	770.789	770.806
CL. S. BRG. PIER 4	1692.022	4.25	770.927	770.927
CL. PIER 4	1692.741	4.25	770.946	770.946

INDEX OF BRIDGE SHEETS
SHEET 55 OF 529

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666 S. MAIN STREET
WHEATON, ILLINOIS 60187



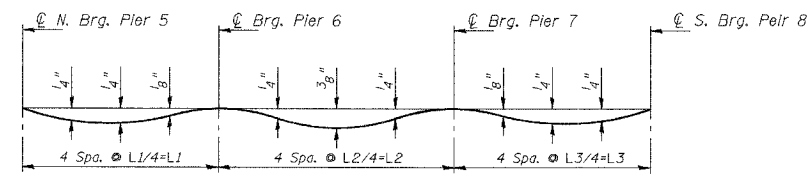
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TOP OF SLAB ELEVATIONS - SHEET 2 OF 4

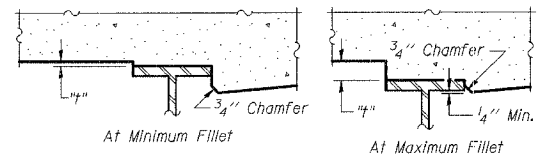
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		DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: -----	18 of 54

CONTRACT NO. 83560



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.



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

FILLET HEIGHTS

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. PIER 5	1835.630	-4.25	771.351	771.351
CL. N. BRG. PIER 5	1836.338	-4.25	771.336	771.336
A	1846.062	-4.25	771.116	771.133
B	1855.787	-4.25	770.865	770.888
C	1865.511	-4.25	770.583	770.604
D	1875.236	-4.25	770.270	770.285
E	1884.960	-4.25	769.941	769.948
F	1894.685	-4.25	769.611	769.611
CL. PIER 6	1895.580	-4.25	769.581	769.581
G	1905.305	-4.25	769.251	769.261
H	1915.029	-4.25	768.921	768.943
I	1924.754	-4.25	768.592	768.620
J	1934.478	-4.25	768.262	768.293
K	1944.203	-4.25	767.932	767.960
L	1953.927	-4.25	767.603	767.622
M	1963.652	-4.25	767.273	767.281
CL. PIER 7	1971.580	-4.25	767.004	767.004
N	1981.304	-4.25	766.675	766.681
O	1991.029	-4.25	766.345	766.359
P	2000.753	-4.25	766.015	766.036
Q	2010.478	-4.25	765.686	765.708
R	2020.202	-4.25	765.356	765.373
CL. S. BRG. PIER 8	2030.822	-4.25	764.996	764.996
CL. PIER 8	2031.655	-4.25	764.968	764.968

CL. BRIDGE & PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. PIER 5	1835.630	0	771.439	771.439
CL. N. BRG. PIER 5	1836.338	0	771.425	771.425
A	1846.338	0	771.198	771.215
B	1856.338	0	770.939	770.962
C	1866.338	0	770.647	770.667
D	1876.338	0	770.322	770.336
E	1886.338	0	769.983	769.989
CL. PIER 6	1895.580	0	769.669	769.669
F	1905.580	0	769.330	769.341
G	1915.580	0	768.991	769.013
H	1925.580	0	768.652	768.682
I	1935.580	0	768.313	768.344
J	1945.580	0	767.974	768.001
K	1955.580	0	767.635	767.653
L	1965.580	0	767.296	767.303
CL. PIER 7	1971.580	0	767.093	767.093
M	1981.580	0	766.754	766.760
N	1991.580	0	766.415	766.429
O	2001.580	0	766.076	766.097
P	2011.580	0	765.737	765.759
Q	2021.580	0	765.398	765.414
CL. S. BRG. PIER 8	2030.822	0	765.085	765.085
CL. PIER 8	2031.655	0	765.056	765.056

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. PIER 5	1835.630	4.25	771.351	771.351
CL. N. BRG. PIER 5	1836.338	4.25	771.336	771.336
A	1846.630	4.25	771.102	771.120
B	1856.921	4.25	770.834	770.857
C	1867.213	4.25	770.531	770.551
D	1877.504	4.25	770.193	770.206
E	1887.796	4.25	769.844	769.849
CL. PIER 6	1895.580	4.25	769.581	769.581
F	1905.872	4.25	769.232	769.243
G	1916.164	4.25	768.883	768.905
H	1926.455	4.25	768.534	768.564
I	1936.747	4.25	768.185	768.216
J	1947.038	4.25	767.836	767.862
K	1957.330	4.25	767.487	767.503
L	1967.622	4.25	767.138	767.142
CL. PIER 7	1971.580	4.25	767.004	767.004
M	1981.871	4.25	766.655	766.662
N	1992.163	4.25	766.306	766.321
O	2002.454	4.25	765.958	765.979
P	2012.746	4.25	765.609	765.631
Q	2023.038	4.25	765.260	765.274
CL. S. BRG. PIER 8	2030.822	4.25	764.996	764.996
CL. PIER 8	2031.655	4.25	764.968	764.968

INDEX OF BRIDGE SHEETS
 SHEET S6 OF S29
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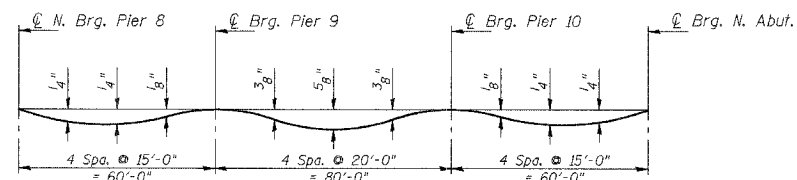
PREPARED FOR:
 WHEATON PARK DISTRICT
 666 S. MAIN STREET
 WHEATON, ILLINOIS 60187



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REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

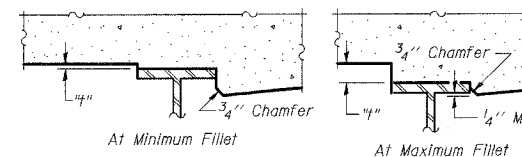
TOP OF SLAB ELEVATIONS - SHEET 3 OF 4			
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD			
FILE NAME: TOP OF SLAB	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: -----
			SHEET NO. 19 of 54



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.



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

FILLET HEIGHTS

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. PIER 8	2031.655	-4.25	764.968	764.968
CL. N. BRG. PIER 8	2032.364	-4.25	764.944	764.944
A	2042.364	-4.25	764.605	764.621
B	2052.364	-4.25	764.266	764.288
C	2062.364	-4.25	763.927	763.947
D	2072.364	-4.25	763.588	763.602
E	2082.364	-4.25	763.249	763.255
CL. PIER 9	2092.364	-4.25	762.910	762.910
G	2102.364	-4.25	762.571	762.583
H	2112.364	-4.25	762.232	762.263
I	2122.364	-4.25	761.893	761.939
J	2132.364	-4.25	761.554	761.606
K	2142.364	-4.25	761.215	761.261
L	2152.364	-4.25	760.876	760.907
M	2162.364	-4.25	760.537	760.549
CL. PIER 10	2172.364	-4.25	760.198	760.198
N	2182.364	-4.25	759.859	759.865
O	2192.364	-4.25	759.520	759.534
P	2202.364	-4.25	759.181	759.201
Q	2212.364	-4.25	758.842	758.864
R	2222.364	-4.25	758.503	758.519
CL. BRG N. ABUT.	2232.364	-4.25	758.164	758.164
BK. OF N. ABUT.	2234.655	-4.25	758.086	758.086

CL. BRIDGE & PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. PIER 8	2031.655	0	765.056	765.056
CL. N. BRG. PIER 8	2032.364	0	765.032	765.032
A	2042.364	0	764.693	764.710
B	2052.364	0	764.354	764.377
C	2062.364	0	764.015	764.036
D	2072.364	0	763.676	763.691
E	2082.364	0	763.337	763.344
CL. PIER 9	2092.364	0	762.998	762.998
G	2102.364	0	762.659	762.672
H	2112.364	0	762.320	762.352
I	2122.364	0	761.981	762.028
J	2132.364	0	761.642	761.694
K	2142.364	0	761.303	761.350
L	2152.364	0	760.964	760.996
M	2162.364	0	760.625	760.638
CL. PIER 10	2172.364	0	760.286	760.286
N	2182.364	0	759.947	759.954
O	2192.364	0	759.608	759.623
P	2202.364	0	759.269	759.290
Q	2212.364	0	758.930	758.953
R	2222.364	0	758.591	758.608
CL. BRG. N. ABUT.	2232.364	0	758.252	758.252
BK. OF N. ABUT.	2234.655	0	758.175	758.175

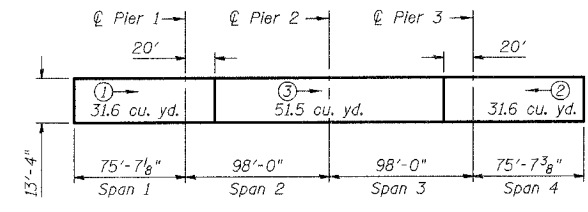
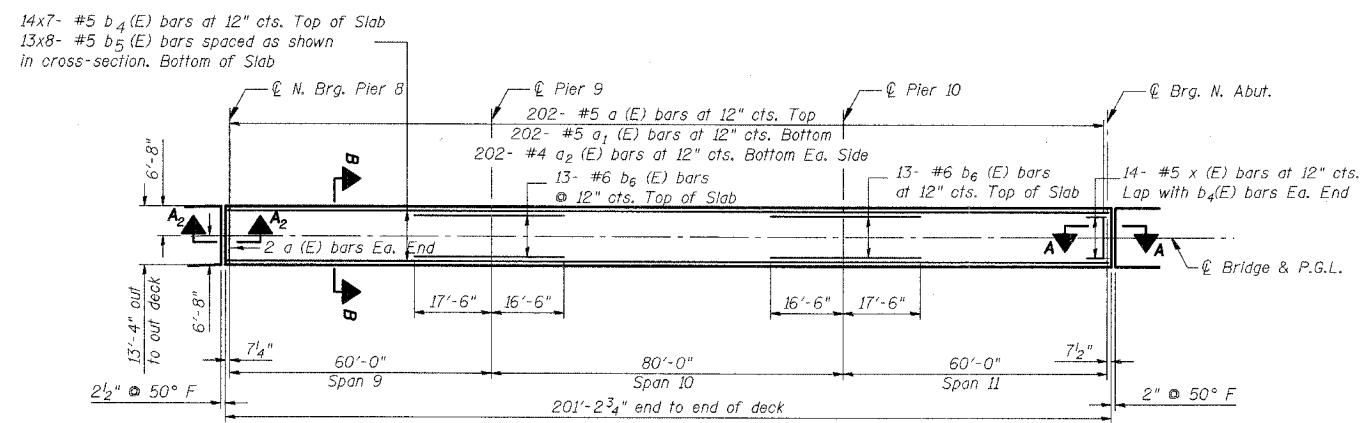
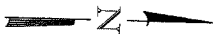
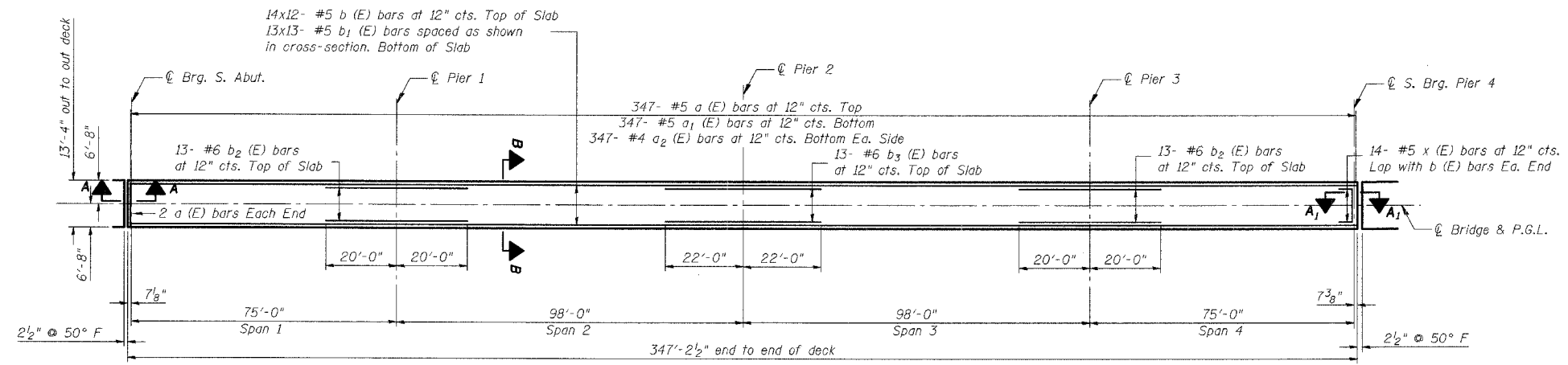
BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. PIER 8	2031.655	4.25	764.968	764.968
CL. N. BRG. PIER 8	2032.364	4.25	764.944	764.944
A	2042.364	4.25	764.605	764.621
B	2052.364	4.25	764.266	764.288
C	2062.364	4.25	763.927	763.947
D	2072.364	4.25	763.588	763.602
E	2082.364	4.25	763.249	763.255
CL. PIER 9	2092.364	4.25	762.910	762.910
G	2102.364	4.25	762.571	762.583
H	2112.364	4.25	762.232	762.263
I	2122.364	4.25	761.893	761.939
J	2132.364	4.25	761.554	761.606
K	2142.364	4.25	761.215	761.261
L	2152.364	4.25	760.876	760.907
M	2162.364	4.25	760.537	760.549
CL. PIER 10	2172.364	4.25	760.198	760.198
N	2182.364	4.25	759.859	759.865
O	2192.364	4.25	759.520	759.534
P	2202.364	4.25	759.181	759.201
Q	2212.364	4.25	758.842	758.864
R	2222.364	4.25	758.503	758.519
CL. BRG. N. ABUT.	2232.364	4.25	758.164	758.164
BK. OF N. ABUT.	2234.655	4.25	758.086	758.086

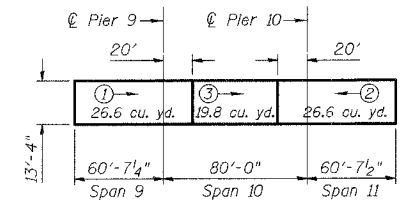


REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

CONTRACT NO. 83560



PLAN
(SPANS 1 THRU 4)



PLAN
(SPANS 9 THRU 11)

DECK POURING SEQUENCE

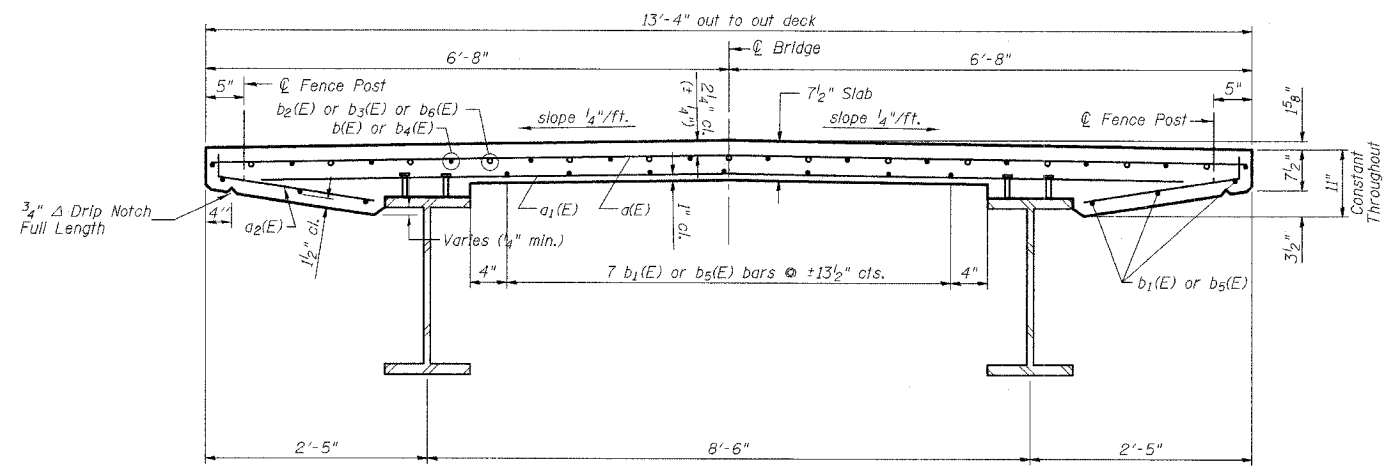
The rate of placing concrete shall equal or exceed 1/2 span length per hour, but not exceed 50 cu. yd. per hour.

The contractor may submit an alternate pouring sequence subject to approval of the Engineer.

① Indicates sequence number and pouring direction

Notes

- For Bill of Material see sheet S9.
- Top of deck surface shall have Type A final finish with hand tining operations as per Sec. 420.11 of the Standard Specifications.
- For sections A-A, A1-A1 & A2-A2 see sheet S10



CROSS SECTION B-B

INDEX OF BRIDGE SHEETS
SHEET S8 OF S29

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PREPARED FOR:
WHEATON PARK DISTRICT
666 S. MAIN STREET
WHEATON, ILLINOIS 60187



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NO.		DATE		DESCRIPTION	

DECK PLAN - SHEET 1 OF 2

PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: DECK PLAN	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 21 of 54
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: 1" = 20'	

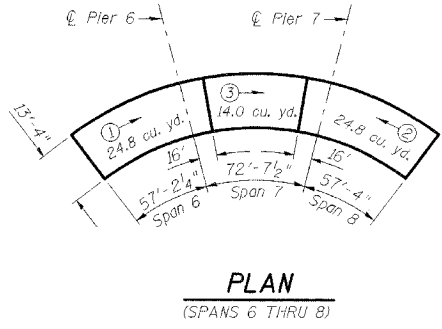
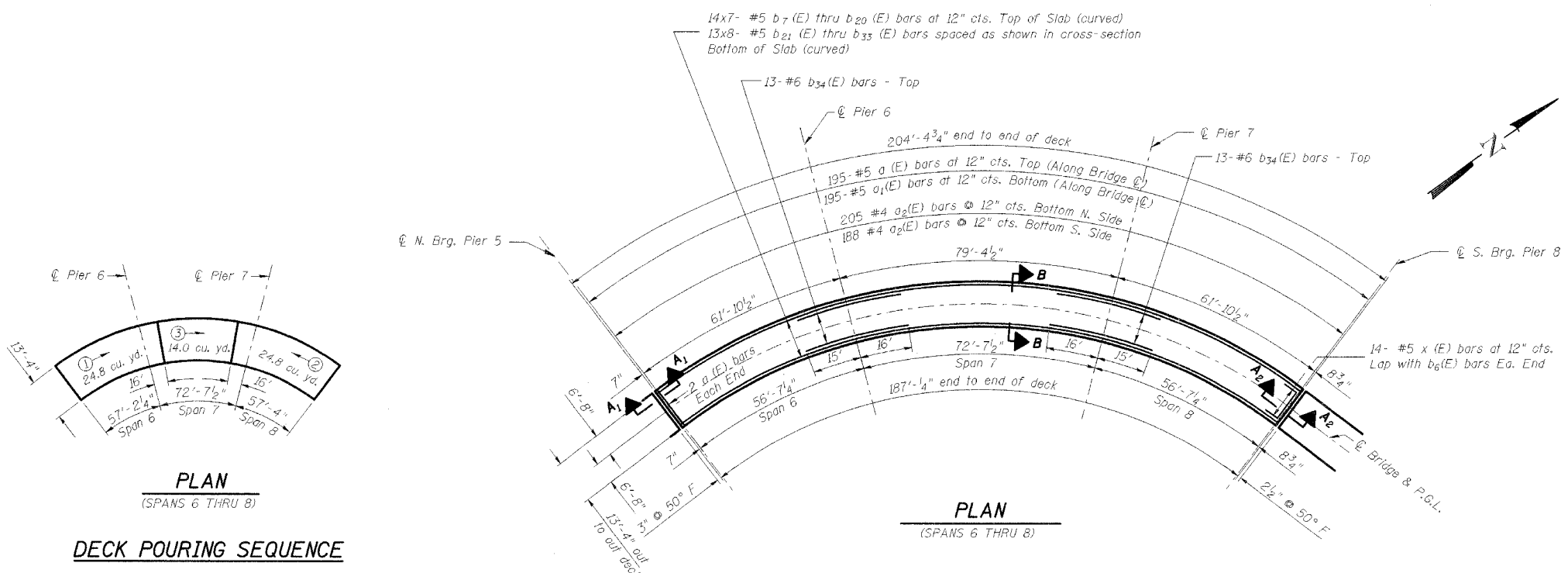
CONTRACT NO. 83560

BILL OF MATERIAL

Bar	No.	Size	Length (ft)	Shape
a ₁ (E)	756	#5	13'-0"	—
a ₂ (E)	744	#5	12'-0"	—
a ₃ (E)	1491	#4	1'-9"	—
b ₁ (E)	168	#5	31'-0"	—
b ₂ (E)	169	#5	28'-8"	—
b ₃ (E)	26	#6	40'-0"	—
b ₄ (E)	13	#6	44'-0"	—
b ₅ (E)	98	#5	30'-7"	—
b ₆ (E)	104	#5	27'-0"	—
b ₇ (E)	26	#6	34'-0"	—
b ₈ (E)	98	#5	31'-0"	—
b ₉ (E)	98	#5	30'-9"	—
b ₁₀ (E)	98	#5	30'-5"	—
b ₁₁ (E)	98	#5	30'-3"	—
b ₁₂ (E)	98	#5	30'-0"	—
b ₁₃ (E)	98	#5	29'-10"	—
b ₁₄ (E)	98	#5	29'-8"	—
b ₁₅ (E)	98	#5	29'-6"	—
b ₁₆ (E)	98	#5	29'-3"	—
b ₁₇ (E)	98	#5	29'-1"	—
b ₁₈ (E)	98	#5	29'-0"	—
b ₁₉ (E)	98	#5	28'-9"	—
b ₂₀ (E)	98	#5	28'-6"	—
b ₂₁ (E)	104	#5	27'-4"	—
b ₂₂ (E)	104	#5	27'-3"	—
b ₂₃ (E)	104	#5	27'-1"	—
b ₂₄ (E)	104	#5	26'-10"	—
b ₂₅ (E)	104	#5	26'-8"	—
b ₂₆ (E)	104	#5	26'-6"	—
b ₂₇ (E)	104	#5	26'-4"	—
b ₂₈ (E)	104	#5	26'-2"	—
b ₂₉ (E)	104	#5	26'-0"	—
b ₃₀ (E)	104	#5	25'-9"	—
b ₃₁ (E)	104	#5	25'-6"	—
b ₃₂ (E)	104	#5	25'-4"	—
b ₃₃ (E)	104	#5	25'-3"	—
b ₃₄ (E)	26	#6	31'-0"	—
x(E)	84	#5	4'-1"	—

Concrete Superstructure	Cu. Yd.	258.8
Reinforcement Bars, Epoxy Coated	Pound	122,850

- Notes
1. Reinforcement bars designated (E) shall be epoxy coated.
 2. Bars indicated thus 14x7 - #5 etc. indicates 14 lines of bars with 7 lengths per line.
 3. For sections A-A, A₁-A₁ & A₂-A₂ see sheet S10

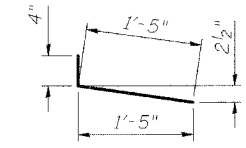


DECK POURING SEQUENCE

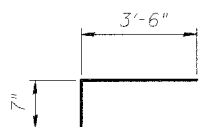
The rate of placing concrete shall equal or exceed 1/2 span length per hour, but not exceed 50 cu. yd. per hour.

The contractor may submit an alternate pouring sequence subject to approval of the Engineer.

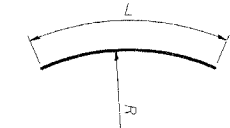
① → Indicates sequence number and pouring direction



BAR a₂(E)



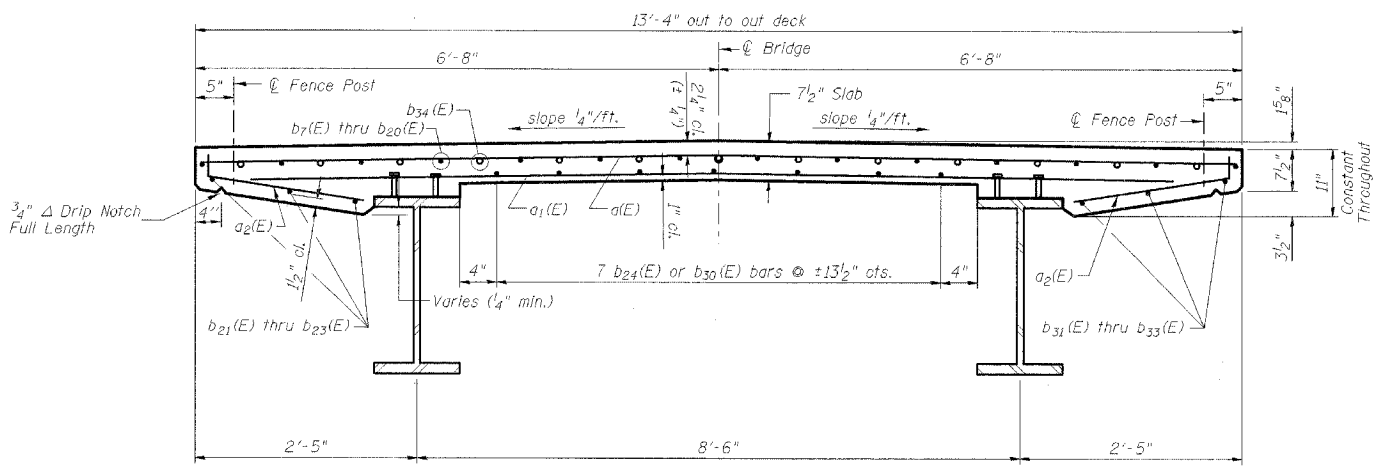
BAR x(E)



BARS b₆(E) THRU b₃₂(E)

CURVED BAR DIMENSIONS

Bar	R (ft)	L (ft)
b ₇ (E)	156.50	31'-0"
b ₈ (E)	155.50	30'-9"
b ₉ (E)	154.50	30'-7"
b ₁₀ (E)	153.50	30'-5"
b ₁₁ (E)	152.50	30'-3"
b ₁₂ (E)	151.50	30'-0"
b ₁₃ (E)	150.50	29'-10"
b ₁₄ (E)	149.50	29'-8"
b ₁₅ (E)	148.50	29'-6"
b ₁₆ (E)	147.50	29'-3"
b ₁₇ (E)	146.50	29'-1"
b ₁₈ (E)	145.50	29'-0"
b ₁₉ (E)	144.50	28'-9"
b ₂₀ (E)	143.50	28'-6"
b ₂₁ (E)	156.50	27'-4"
b ₂₂ (E)	155.75	27'-3"
b ₂₃ (E)	155.00	27'-1"
b ₂₄ (E)	153.42	26'-10"
b ₂₅ (E)	152.28	26'-8"
b ₂₆ (E)	151.14	26'-6"
b ₂₇ (E)	150.00	26'-4"
b ₂₈ (E)	148.86	26'-2"
b ₂₉ (E)	147.73	26'-0"
b ₃₀ (E)	146.58	25'-9"
b ₃₁ (E)	145.00	25'-6"
b ₃₂ (E)	144.25	25'-4"
b ₃₃ (E)	143.50	25'-3"



CROSS SECTION B-B

PREPARED FOR:
WHEATON PARK DISTRICT
 666 S. MAIN STREET
 WHEATON, ILLINOIS 60187

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REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

DECK PLAN - SHEET 2 OF 2

PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: DECK PLAN	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 22 of 54
DISC. NUMBER: 551007	DRN. BY: KMS	DATE: 04-26-04	SCALE: 1" = 20'	

CONTRACT NO. 83560

Joint Size	"C" at 50°F	"D" at 50°F
2"	2"	1 1/2" Min.
2 1/2"	2 1/2"	1 3/4" Min.
4"	3"	2 1/2" Min.

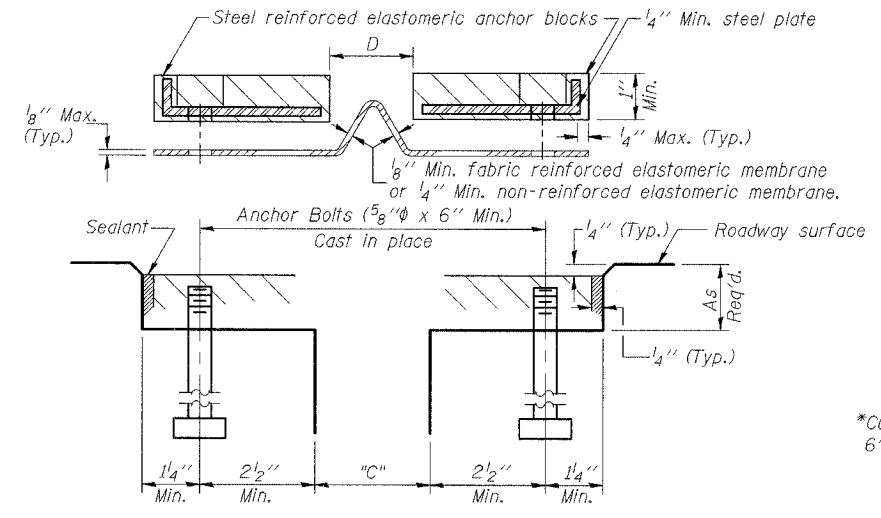
INSTALLATION NOTES

- Install continuous seal in roadway.
- Install anchor blocks as indicated.

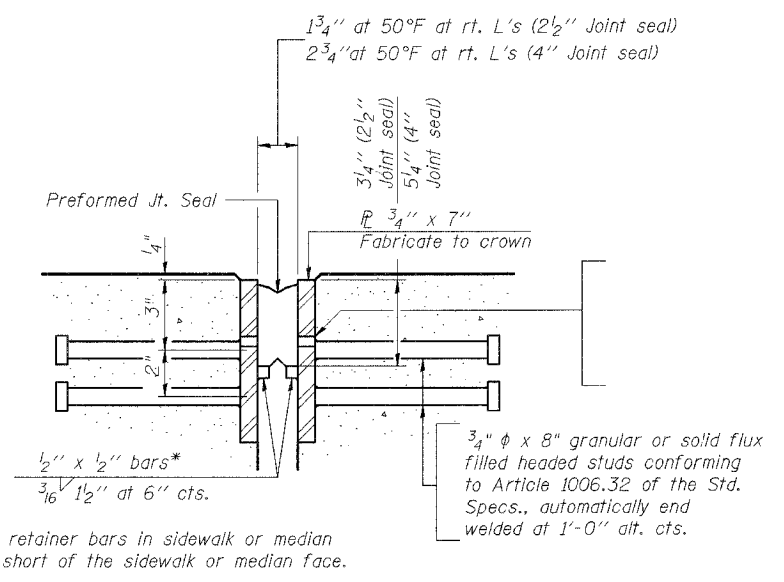
NOTE A: Maximum spacing of anchor bolts shall be 12" centers.

SKREW LIMITATIONS

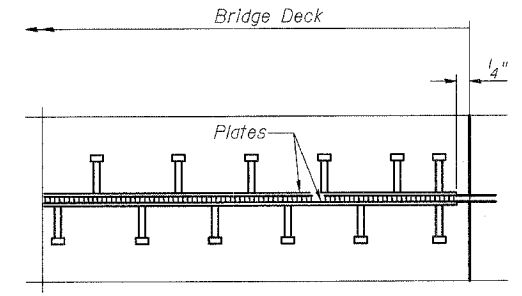
The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed according to dimension "D", might require modifications to insure a minimum clearance of 1 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±12" cts.



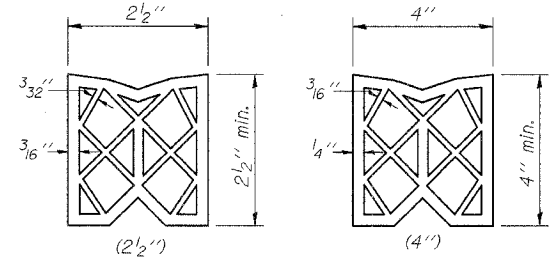
CROSS SECTION



SECTION THRU EXPANSION JOINT
(2 1/2" and 4" joint seals)



PLAN

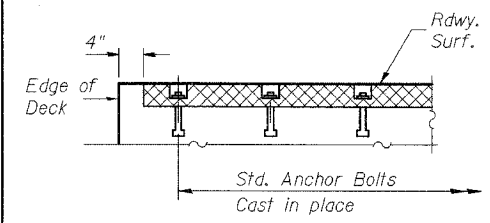


PREFORMED JOINT SEAL

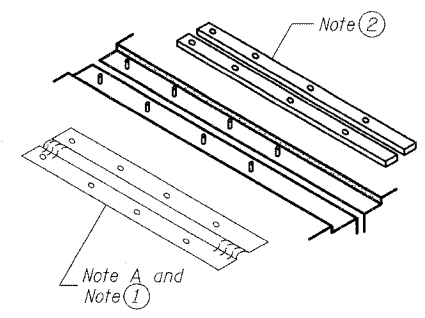
Bridge Joint System (Expansion)		
Design Movement	Required Preformed Joint Seal Size	Required Strip Seal Rated movement
1"	2 1/2"	1"
1 5/8"	4"	2"

GENERAL NOTES

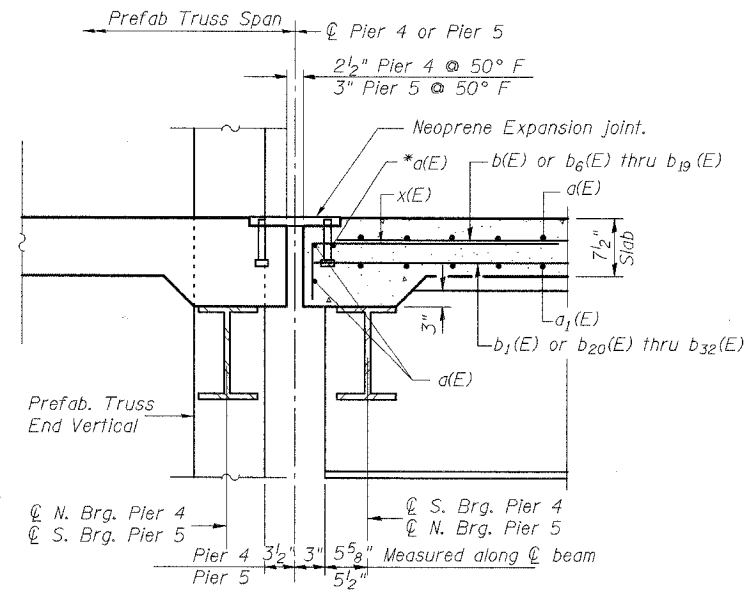
Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. The elastomeric membrane shall be preformed with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure. The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed. Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.



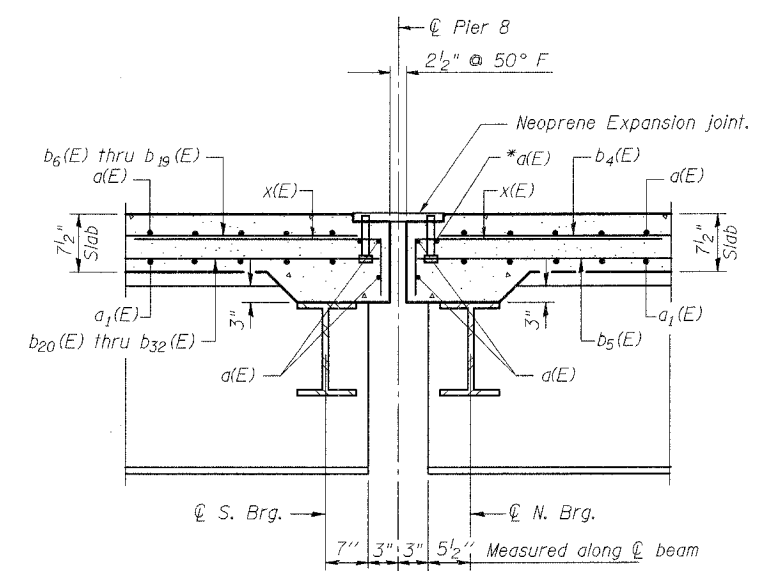
LONG SECTION



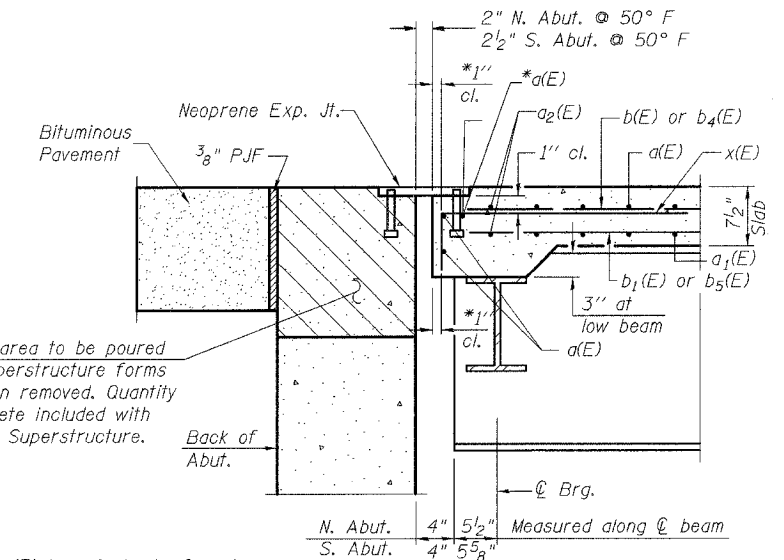
AT ROADWAY



SECTION A1-A1
(Pier 4 & Pier 5)



SECTION A2-A2
(Pier 8)



SECTION A-A
(Abutments)

* Place a(E) bars in back of anchor bolt as shown if required to maintain 1" cl. (+0-3/8"). Anchor bolts should be tied to a(E) bars.

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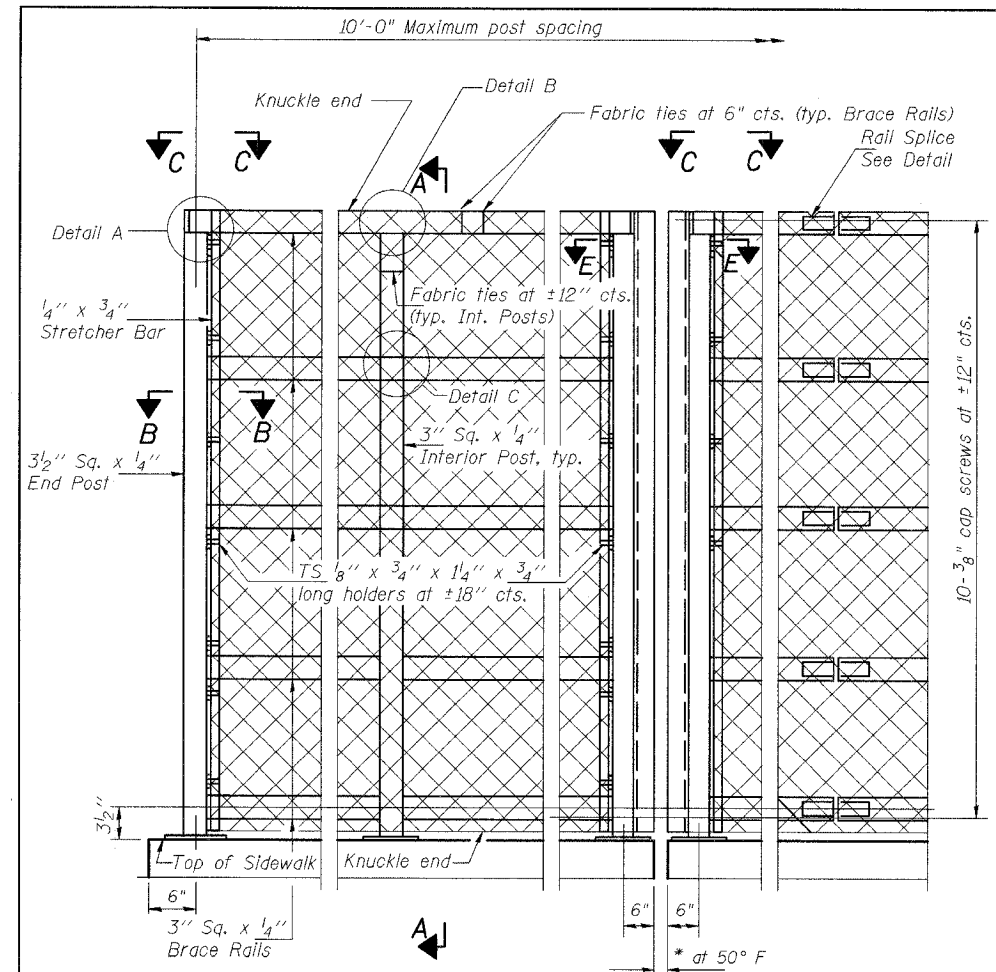
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NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

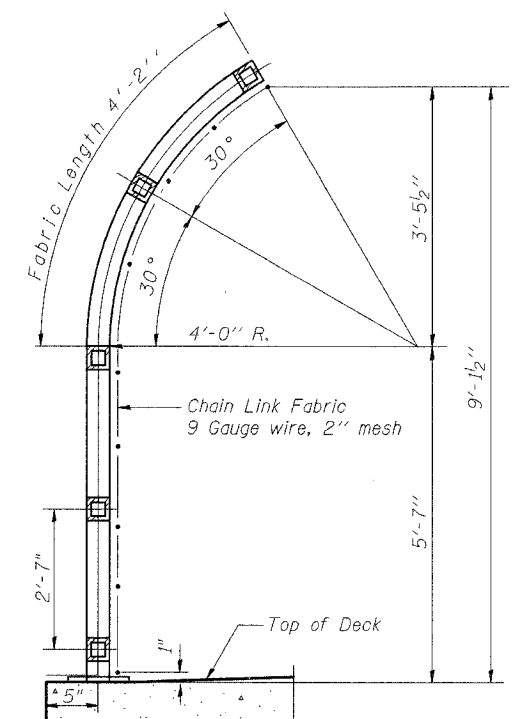
EXPANSION JOINT DETAILS - SECTIONS				
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD				
FILE NAME: EXPANSION	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 23 of 54
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: -----	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94-P4031-00	DUPAGE		54	24

CONTRACT NO. 83560 at 50° F

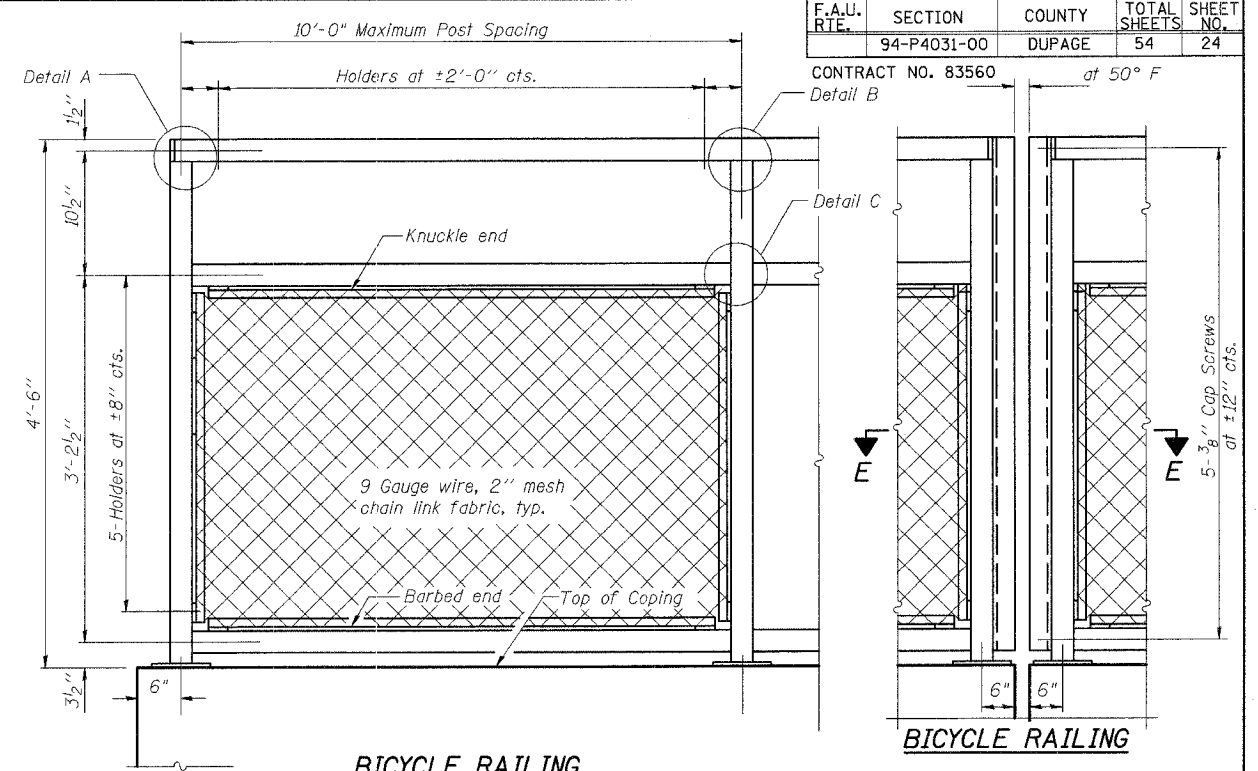


**BRIDGE FENCE RAILING
ELEVATION
(Inside Face)**



SECTION A-A

Note:
Cost of shaft foundations included
in pay item "Bicycle Railing"



BICYCLE RAILING

BICYCLE RAILING

NOTES

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the Contract Unit Price per foot for Bridge Fence Railing and Bicycle Railing.

The 9 gauge fabric ties shall be according to Article 1006.27(d) of the Standard Specifications.

Installation of the chain link fabric shall be according to Section 664 of the Standard Specifications.

Hollow structural sections shall conform to the requirements of ASTM designation A 847, weathering structural steel tubing. All other steel shapes and plates shall conform to the requirements of ASTM A 588, Grade 50.

The chain link fabric shall be placed along pedestrian side as shown on Section A-A.

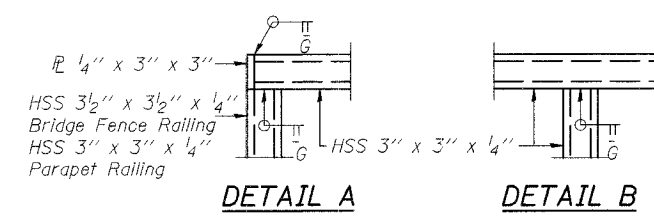
Stretcher bars shall be used at each end of fabric. A minimum of one complete turn is required at ends of all fabric ties.

If the option of drilling and epoxy grouting the anchor rods is chosen, the Contractor shall use the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge shall be sealed with pre-measured amounts of the adhesive chemical.

Space reinforcement to miss anchor rods.

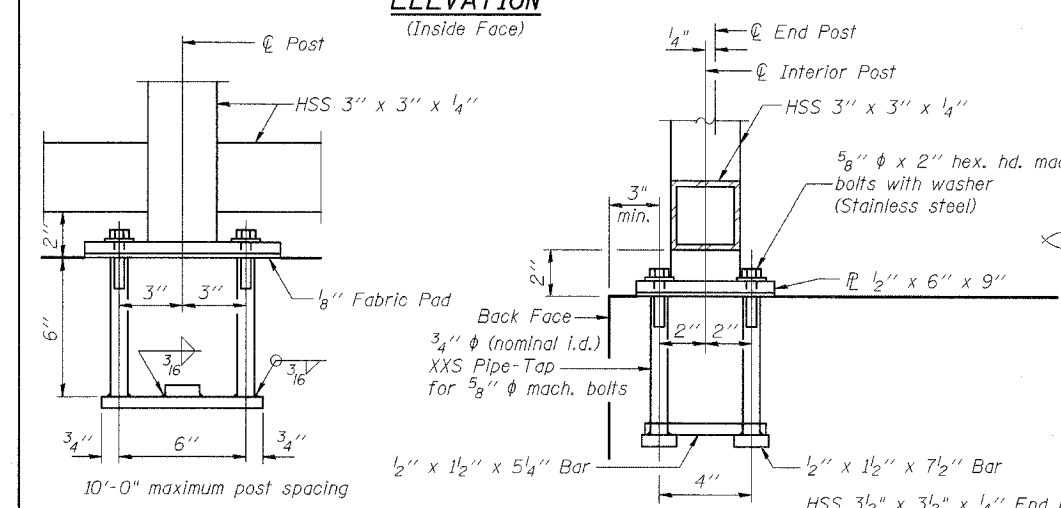
The chain link fabric shall conform to the requirements of Article 1006.27(a)(1)d of the Standard Spec's.

The chain link fabric, ties and other accessories will be vinyl-coated in brown color, as approved by the Engineer.



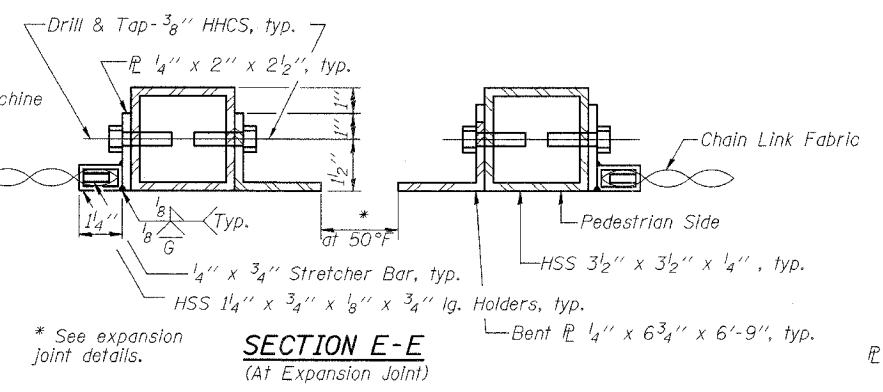
DETAIL A

DETAIL B

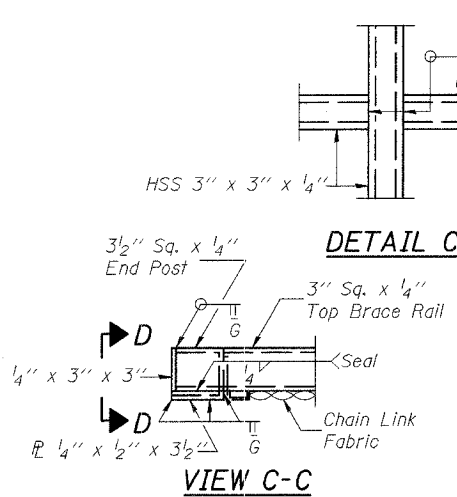


ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and epoxy grouting 5/8\"/>

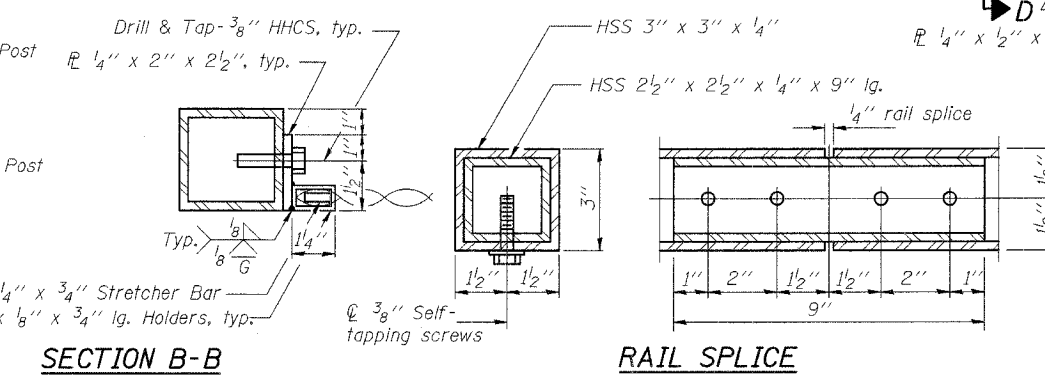


**SECTION E-E
(At Expansion Joint)**



VIEW C-C

VIEW D-D



RAIL SPLICE

BILL OF MATERIAL

Item	Unit	Quantity
Bridge Fence Railing	Foot	1,540
Bicycle Railing	Foot	700
Rustic Rail Fence	Foot	590

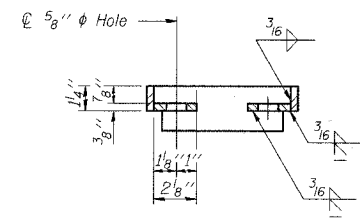
INDEX OF BRIDGE SHEETS
SHEET S110F S29
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666 S. MAIN STREET
WHEATON, ILLINOIS 60187

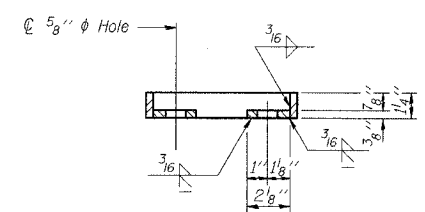
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Ph: 630.862.2100 Fax: 630.862.2199
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NO.		DATE		DESCRIPTION	

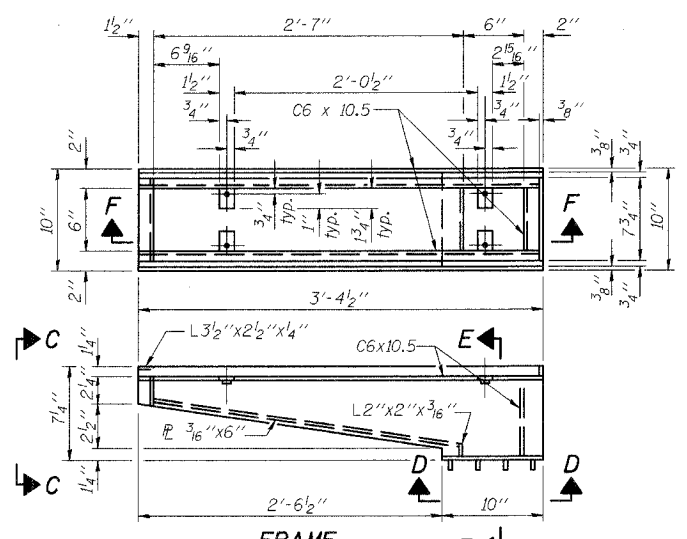
BRIDGE RAILING DETAILS & BICYCLE RAILING DETAILS			
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD			
FILE NAME: RAILING	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: ----
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 12-21-04	SCALE: ----
			SHEET NO. 24 of 54



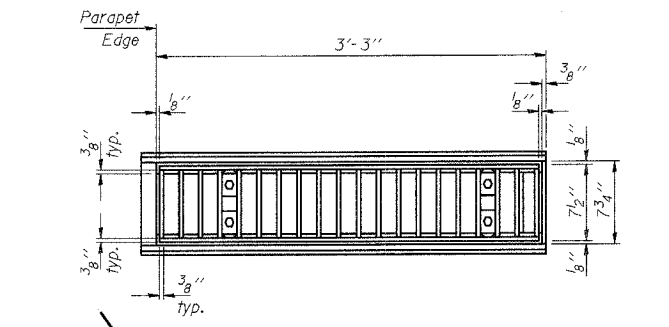
SECTION A-A



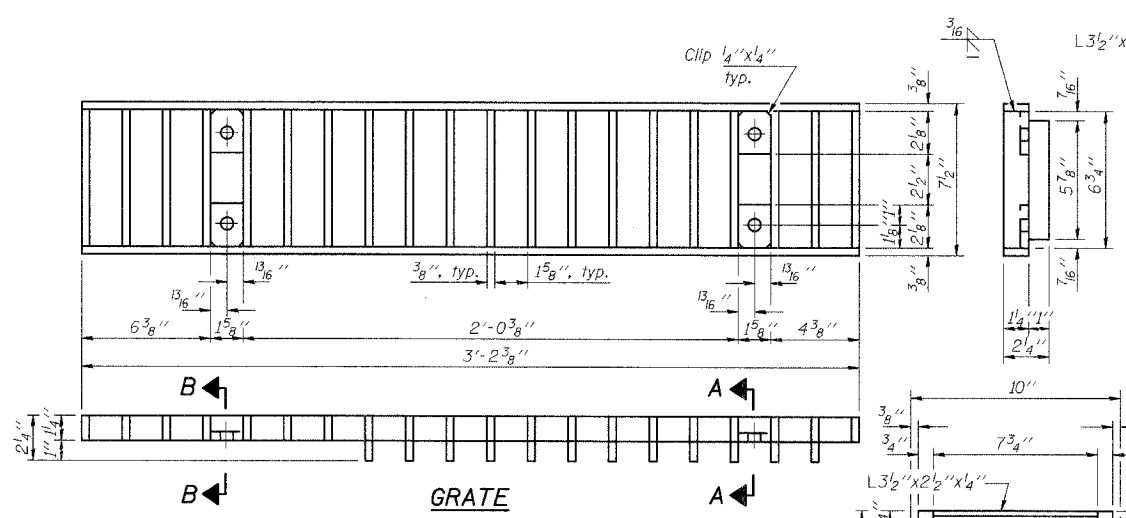
SECTION B-B



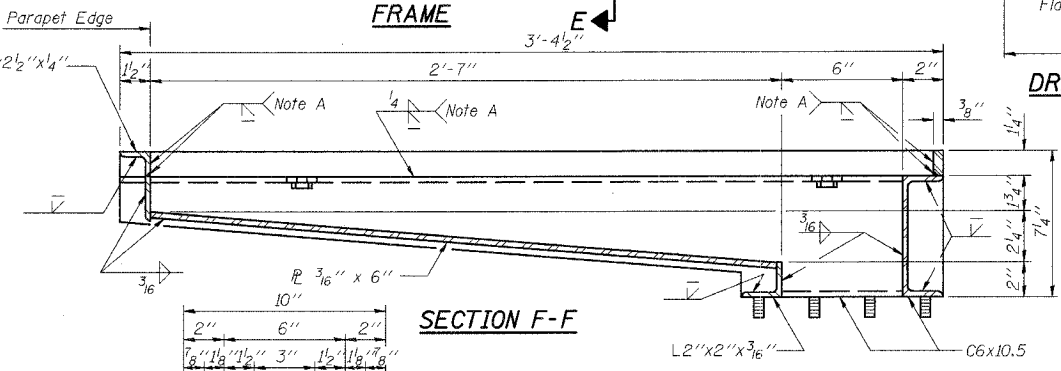
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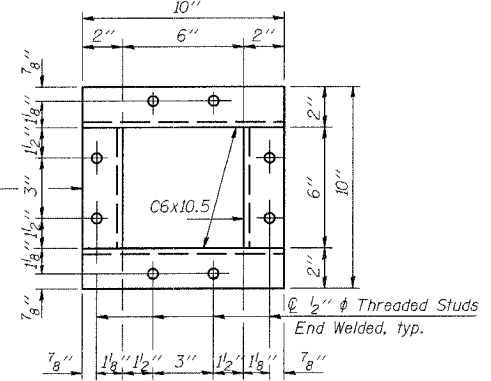
DRAINAGE SCUPPER



GRATE

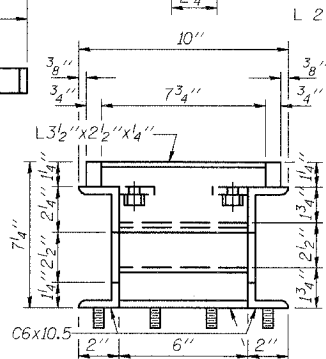


SECTION F-F

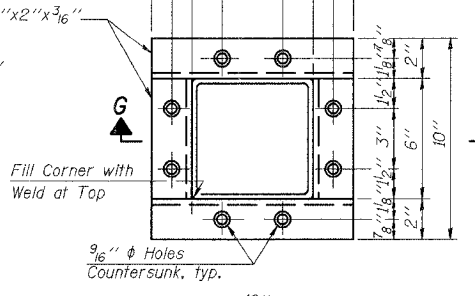


VIEW D-D

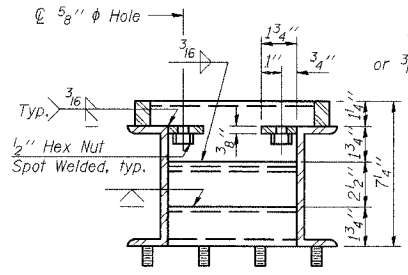
Notes: Hollow structural steel tubing shall conform to the requirements of ASTM designation A 500 Grade B, or A 501 Structural Steel Tubing.
 All other shapes, plates and bars shall conform to the requirements of AASHTO M 270 Grade 36.
 Bolts, studs, washers and nuts shall conform to the requirements of ASTM A 307.
 The Grate, Frame and Downspout shall be galvanized after shop fabrication according to AASHTO M 111 & ASTM A 385.
 All bolts, washers and nuts shall be galvanized according to AASHTO M 232.
 Cost of the Grate, Frame, Downspout, Bolts, Washers and Nuts including complete installation of Scupper will be paid for at the unit bid price each for "DRAINAGE SCUPPERS."



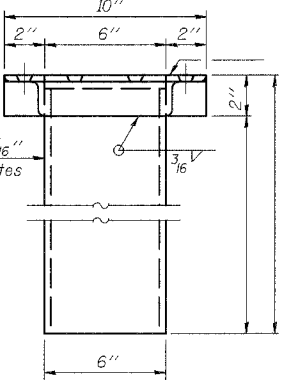
VIEW C-C



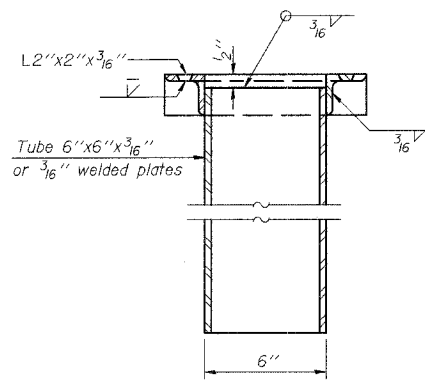
SECTION G-G



SECTION E-E



DOWNSPOUT



SECTION G-G

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper	Each	4

DS-3 4-30-97 (W.T. to inside of exterior stringer flange shall not be 3'-11")

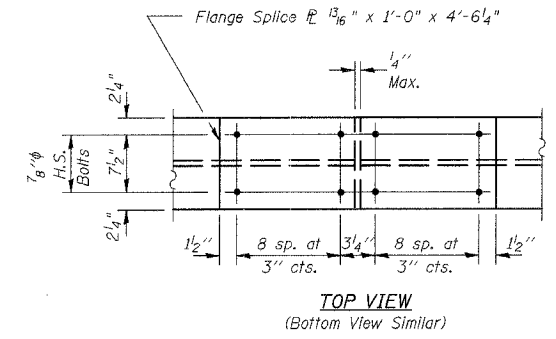
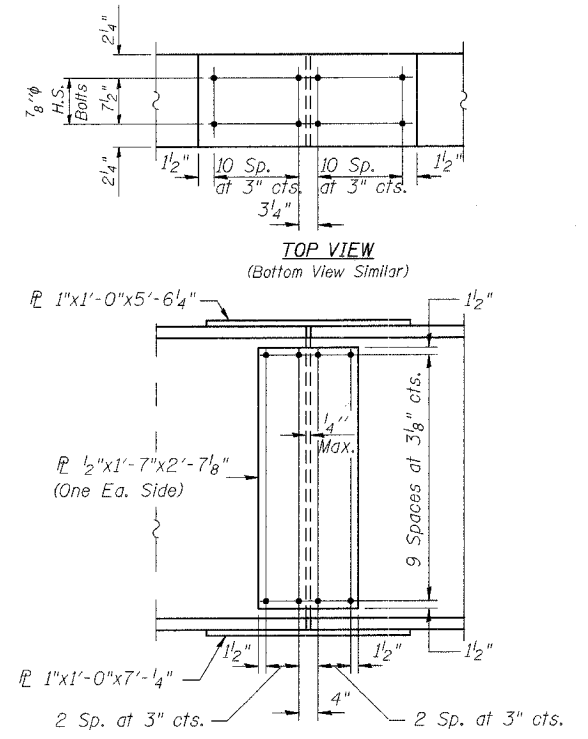
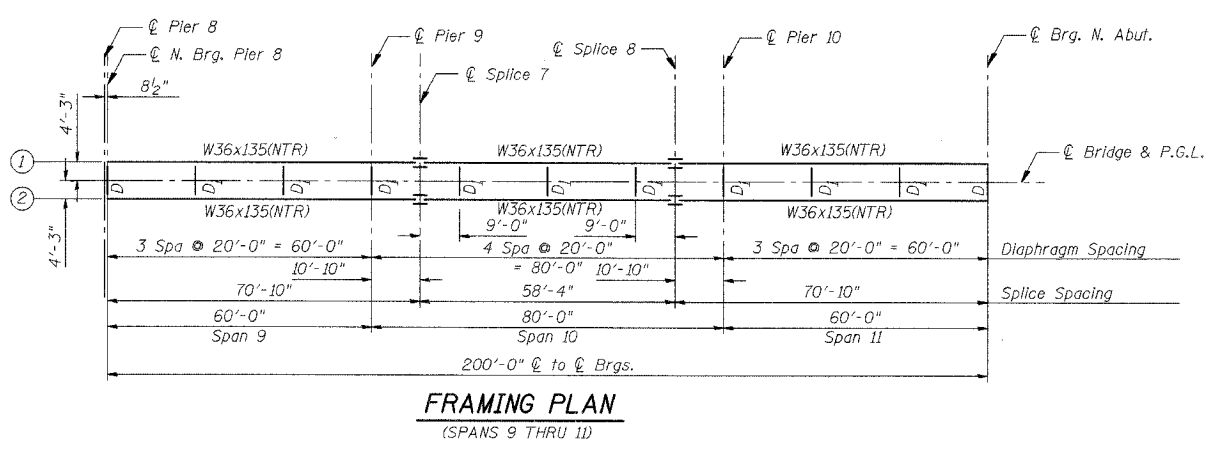
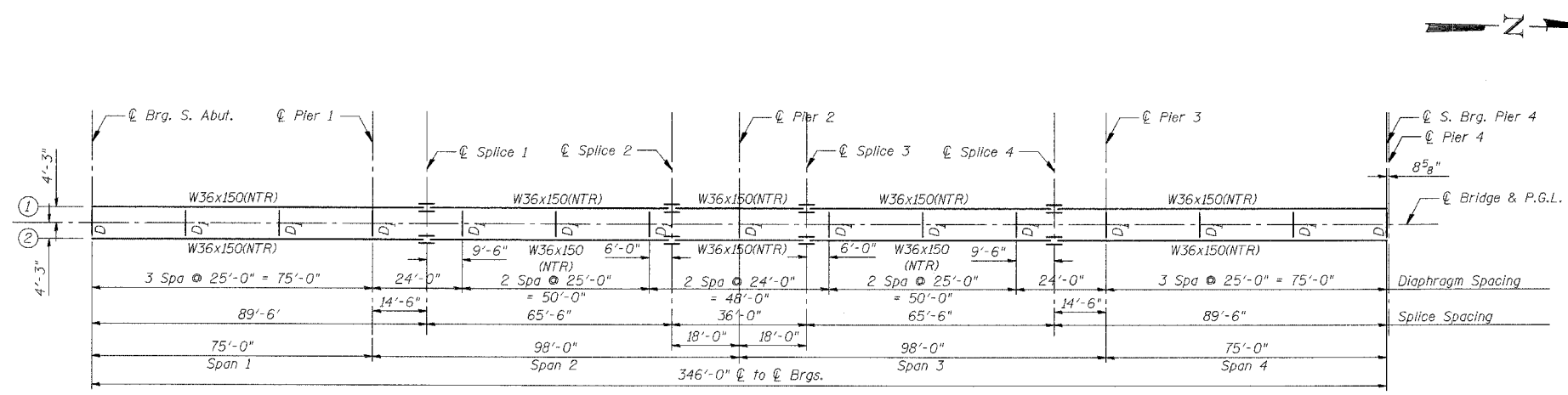
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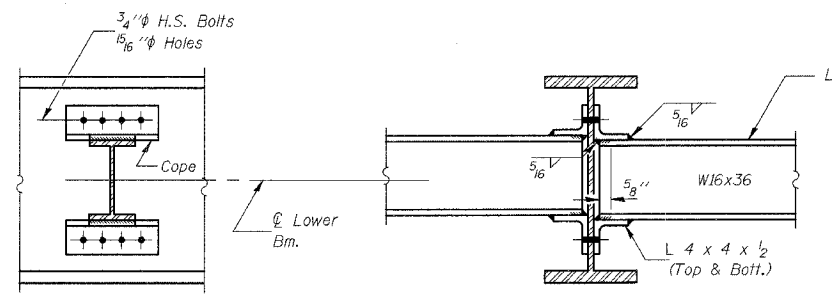
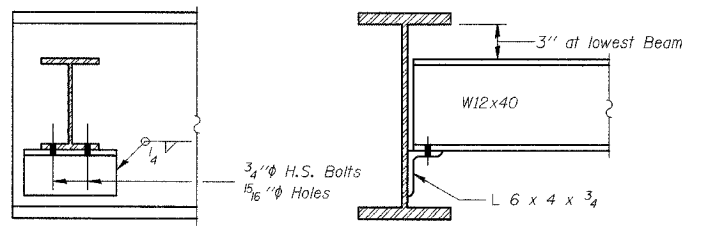
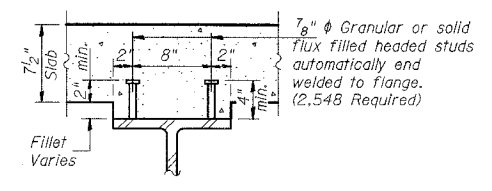
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NO.		DATE	DESCRIPTION	REVISIONS	
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

DRAINAGE SCUPPER			
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD			
FILE NAME: SCUPPER	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 12-21-04	SCALE: ----
SHEET NO.			24A of 54



- Notes:
- For Steel Beam Details See Sheet No. S14
 - All diaphragms, splice plates, connection plates and angles shall comply with N.T.R.



Note: Two hardened washers shall be required over all oversize holes for diaphragms.

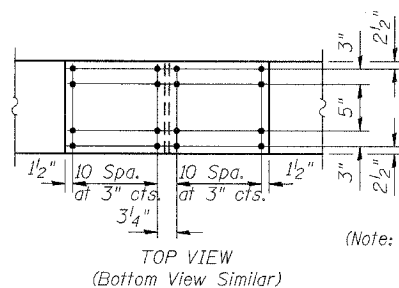
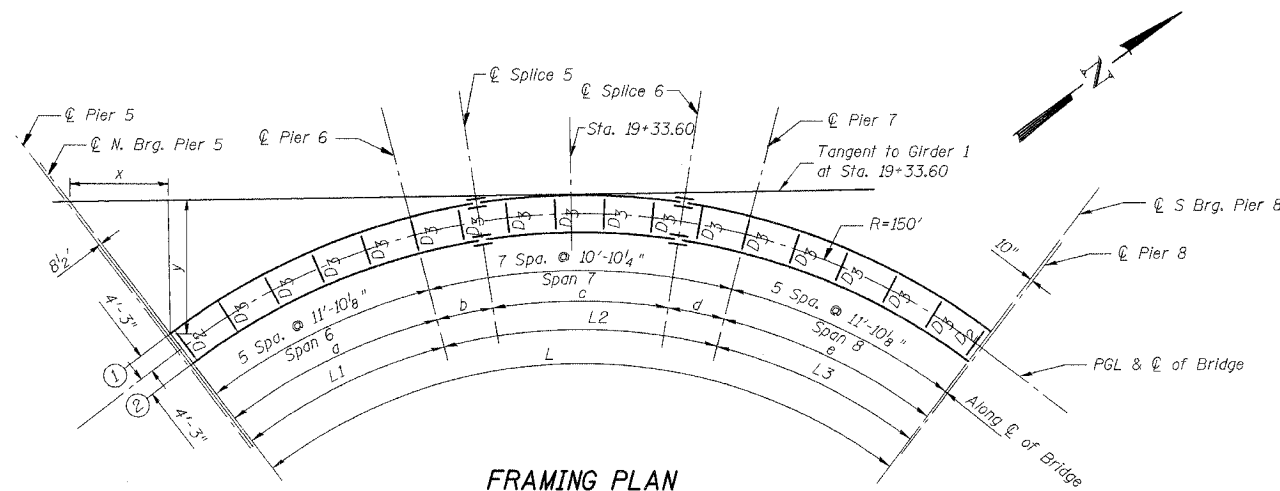
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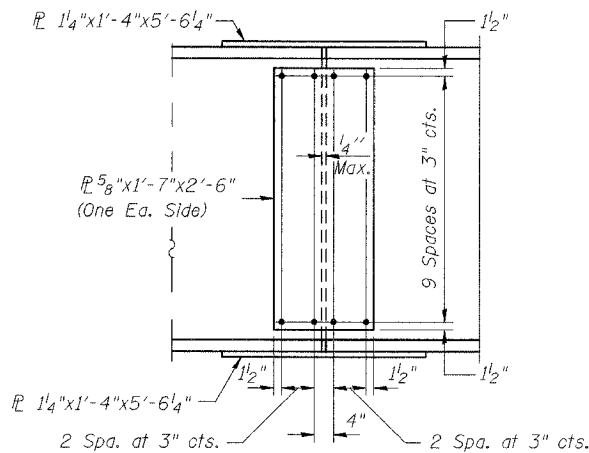
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NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

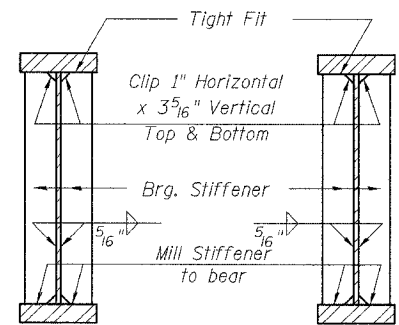
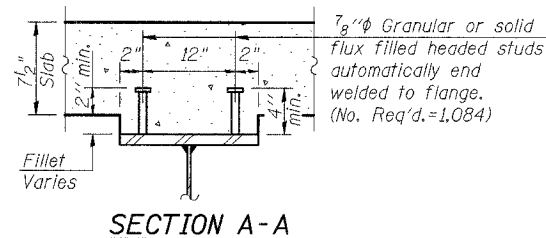
STEEL FRAMING LAYOUT PLAN - SHEET 1 OF 2				
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD				
FILE NAME: FRAMING	DSGN. BY: MMH	JOB NO.: 551007	FLD. BK./PG.: -----	SHEET NO. 25 of 54
DISC. NUMBER: 551007	DRN. BY: ROS	DATE: 04-26-04	SCALE: -----	



(Note: All splice plates are curved to match girder curvature.)



FIELD SPICE DETAIL
(Splices 5 & 6)



SECTION AT PIER **SECTION AT ABUTMENT**

GIRDER DIMENSIONS (Feet)

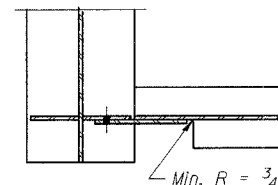
Girder	Radius	a	b	c	d	e	L ₁	L ₂	L ₃	L
1	154.25	60.92	16.34	45.48	16.34	60.92	60.92	78.16	60.92	200.00
2	145.75	57.56	15.44	42.97	15.44	57.56	57.56	73.85	57.56	188.97

LAYOUT DIMENSIONS (Feet)

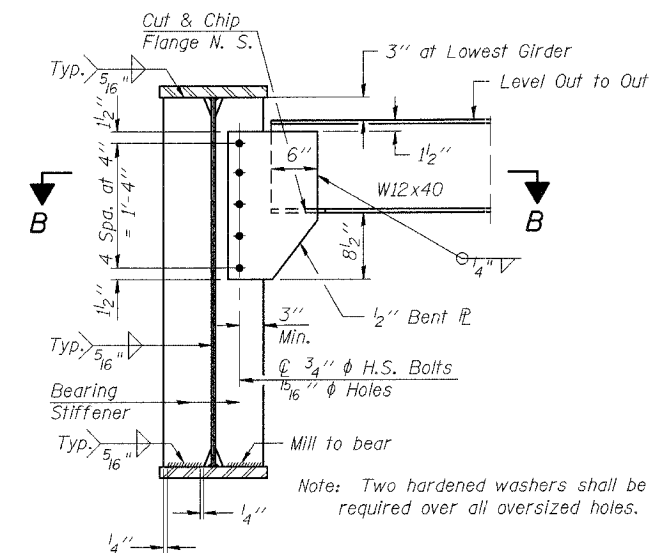
Girder	Pier 5		Pier 6		Splice 5		Splice 6		Pier 7		Pier 8	
	x	y	x	y	x	y	x	y	x	y	x	y
1	23.70	31.29	1.27	4.92	0.25	1.67	0.25	1.67	1.27	4.92	23.71	31.29
2	22.40	29.57	1.20	4.65	0.23	1.58	0.23	1.58	1.20	4.65	22.40	29.57

Notes:

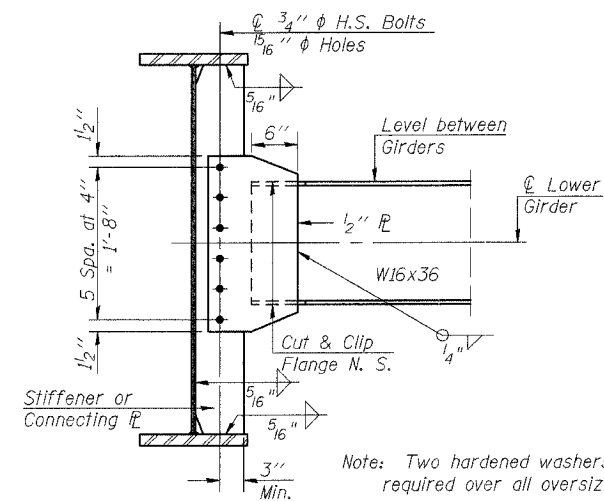
1. For Girder Details See Sheet No. S15
2. All diaphragms, splice plates, connection plates and angles shall comply with N.T.R.



SECTION B-B



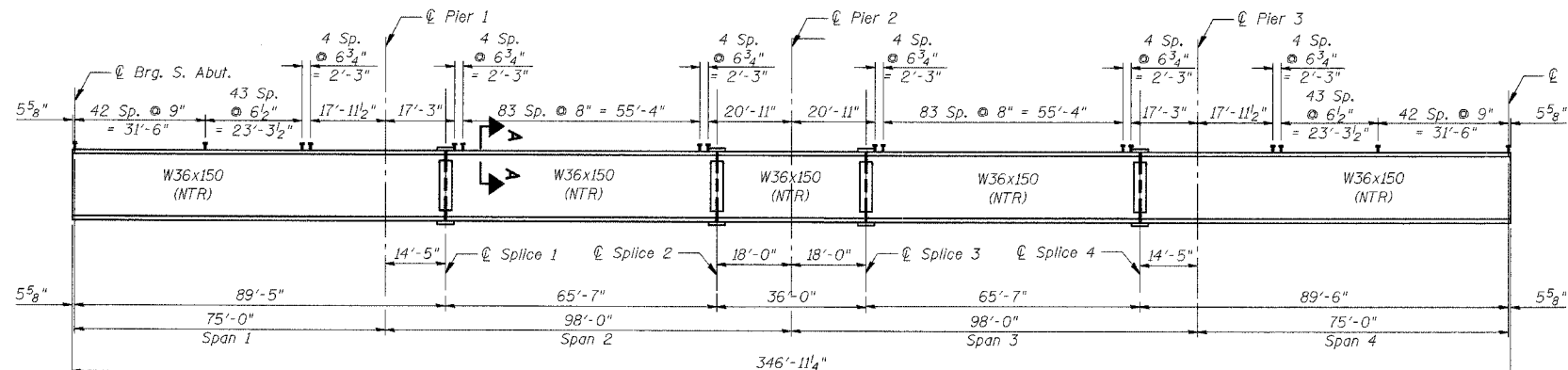
END DIAPHRAGM



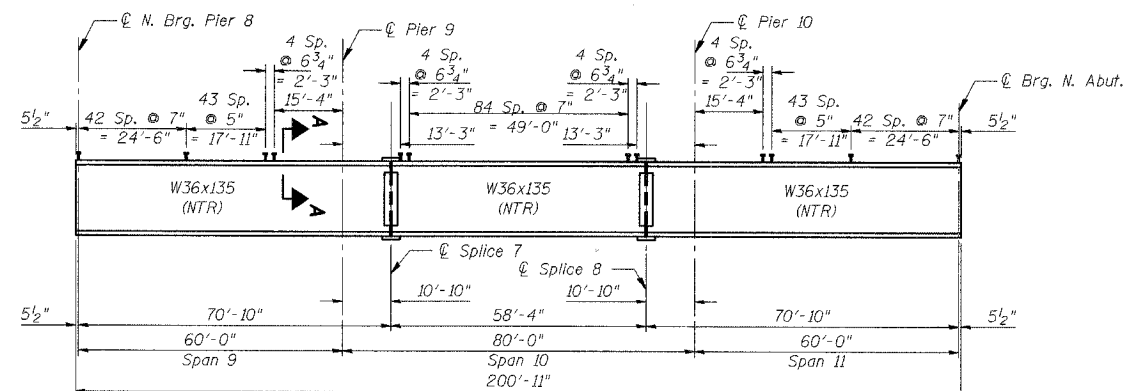
INTERIOR DIAPHRAGM



NO.		DATE		DESCRIPTION	



ELEVATION - BEAMS 1 & 2
(SPANS 1 THRU 4)



ELEVATION - BEAMS 1 & 2
(SPANS 9 THRU 11)

- Notes:
- All Structural Steel for beams and splice plates shall be M270 Grade 50.
 - "NTR" denotes notch toughness requirements.
 - For diaphragm and splice details see sheet no. S12.
 - For Section A-A see sheet no. S12.

BEAM REACTION TABLE - SPANS 1 TO 4

	S. Abutment	Pier 1	Pier 2	Pier 3	Pier 4-S. Brg.
R _ℓ (k)	25.6	88.6	92.0	88.6	25.6
R _ℓ (k)	22.4	64.1	66.2	64.1	22.4
R (Total) (k)	48.0	152.7	158.2	152.7	48.0

Top of Beam Elevations (For Fabrication Only) Spans 1 thru 4

Beam	ℓ Bearing S. Abut.	ℓ Bearing Pier 1	ℓ Field Splice 1	ℓ Field Splice 2	ℓ Bearing Pier 3	ℓ Field Splice 3	ℓ Field Splice 4	ℓ Bearing Pier 4	ℓ S. Bearing Pier 4
1	759.219	761.590	762.048	764.167	764.745	765.323	767.409	767.874	770.281
2	759.219	761.590	762.048	764.167	764.745	765.323	767.409	767.874	770.281

BEAM REACTION TABLE - SPANS 9 TO 11

	Pier 8-N. Brg.	Pier 9	Pier 10	N. Abutment
R _ℓ (k)	20.7	74.6	74.6	20.7
R _ℓ (k)	17.6	50.7	50.7	17.6
R (Total) (k)	38.3	125.3	125.3	38.3

Top of Beam Elevations (For Fabrication Only) Spans 9 thru 11

Beam	ℓ N. Bearing Pier 8	ℓ Bearing Pier 9	ℓ Field Splice 7	ℓ Field Splice 8	ℓ Bearing Pier 10	ℓ Bearing N. Abut.
1	764.298	762.224	761.845	759.879	759.512	757.518
2	764.298	762.224	761.845	759.879	759.512	757.518

BEAM MOMENT TABLE - SPANS 1 THRU 4

	0.4 Sp. 1 or 0.6 Sp. 4	Pier 1 or Pier 3	0.5 Sp. 2 or Sp. 3	Pier 2
I _s (in ⁴)	9040	9040	9040	9040
I _c (n) (in ⁴)	26197	---	26197	---
I _c (3n) (in ⁴)	18516	---	18516	---
S _s (in ³)	504	504	504	504
S _c (n) (in ³)	792	---	792	---
S _c (3n) (in ³)	703	---	703	---
Z (in ³)	---	581	---	581
ℓ (k/ft.)	0.86	0.92	0.86	0.92
M _ℓ (k)	323.86	691.1	357.19	755.39
s _ℓ (k/ft.)	0.06	---	0.06	---
M _s ℓ (k)	24.67	---	30.32	---
M _ℓ (k)	356.76	467.71	476.66	457.29
M (Imp) (k)	---	---	---	---
S ₃ [M _ℓ +M(Imp)] (k)	594.60	779.52	794.43	762.15
M _a (k)	1225.07	1911.80	1536.53	1972.80
M _u (k)	3562	---	3729	---
f _s ℓ non-comp (k.s.i.)	7.71	16.45	8.50	17.99
f _s ℓ (comp) (k.s.i.)	0.41	---	0.52	---
f _s ℓ ₃ (ℓ+Imp) (k.s.i.)	9.01	18.56	12.04	18.15
f _s (Overload) (k.s.i.)	17.13	35.01	21.06	36.13
f _s (Total) (k.s.i.)	---	45.52	---	46.97
VR (k)	32.82	---	38.66	---

BEAM MOMENT TABLE - SPANS 9 THRU 11

	0.4 Sp. 9 or 0.6 Sp. 11	Pier 9 or Pier 10	0.5 Sp. 10
I _s (in ⁴)	7800	7800	7800
I _c (n) (in ⁴)	23695	---	23695
I _c (3n) (in ⁴)	16827	---	16827
S _s (in ³)	439	439	439
S _c (n) (in ³)	708	---	708
S _c (3n) (in ³)	629	---	629
Z (in ³)	---	509	---
ℓ (k/ft.)	0.86	0.92	0.86
M _ℓ (k)	204.66	477.70	262.69
s _ℓ (k/ft.)	0.06	---	0.06
M _s ℓ (k)	15.06	---	20.97
M _ℓ (k)	229.29	295.74	308.39
M (Imp) (k)	---	---	---
S ₃ [M _ℓ +M(Imp)] (k)	382.15	492.90	513.98
M _a (k)	782.43	1261.78	1036.94
M _u (k)	3119	---	3407
f _s ℓ non-comp (k.s.i.)	5.59	13.06	7.18
f _s ℓ (comp) (k.s.i.)	0.29	---	0.40
f _s ℓ ₃ (ℓ+Imp) (k.s.i.)	6.48	13.47	8.71
f _s (Overload) (k.s.i.)	12.36	26.53	16.29
f _s (Total) (k.s.i.)	---	34.49	---
VR (k)	25.84	---	29.84

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing f_s (Total & Overload).
I_{c(n)} and S_{c(n)} are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.
I_{c(3n)} and S_{c(3n)} are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (see AASHTO 10.38)
VR is the maximum Live Load + Impact shear range in span.
Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.
M_a (Applied Moment) = 1.3[M_ℓ + M_sℓ + S₃(M_ℓ + M(Imp))].
The Plastic Moment capacity (M_u) is computed according to AASHTO 10.48.1 and 10.50.1.1.
f_s (Overload) is the sum of the stresses due to M_ℓ + M_sℓ + S₃(M_ℓ + M(Imp)).
f_s (Total) (Non-compact section) is the sum of the stresses due to 1.3[M_ℓ + M_sℓ + S₃(M_ℓ + M(Imp))].

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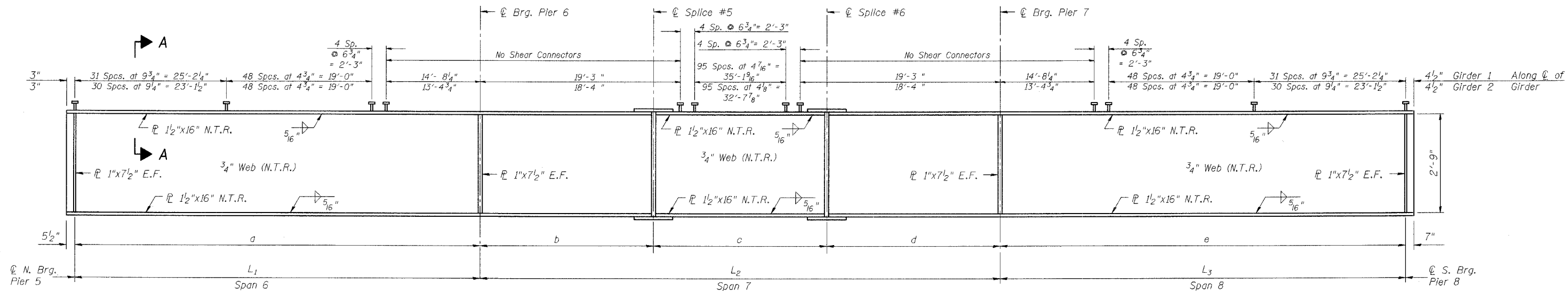
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NO.		DATE	DESCRIPTION	NO.		DATE	DESCRIPTION

STEEL BEAM DETAILS

PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: BEAMELEV	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 27 of 54
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: -----	



GIRDER ELEVATION

"NTR" denotes plates to which notch toughness requirements are applicable.

F_b - Maximum allowable stress F_{bu} or F_{by} computed according to AASHTO [Guide Specifications for Horizontally Curved Highway Bridges Section 2.12(B) and 2.16].

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing F_s (Total and Overload).

$I_{c(n)}$ and $S_{c(n)}$ are the moment of inertia and section modulus of the composite section used in computing stresses due to live load.

$I_{c(3n)}$ and $S_{c(3n)}$ are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead load (see AASHTO 10.38).

VR is the maximum \pm impact shear range in span.

$$M_a \text{ (Applied Moment)} = 1.3[M \ell + M_s \ell + \frac{5}{3}(M \ell + M(\text{Imp}))]$$

$(f_s + f_w)(\text{Overload})$ is the sum of the stress due to $M \ell + M_s \ell + \frac{5}{3}(M \ell + M(\text{Imp})) + \frac{M_{bl}}{1.3}$

f_s (Total) is the sum of stress due to $1.3[M \ell + M_s \ell + \frac{5}{3}(M \ell + M(\text{Imp}))]$

S_{bl} is the section modulus for one flange plate for lateral flange bending.

M_{bl} is the lateral bending moment for flange plate (factored).

f_w is the calculated normal stress at the edge of flange due to lateral bending (factored).

		0.4 Sp. 6 or 0.6 Sp. 8	Pier 6 or Pier 7	0.5 Sp. 7
I_s	(in ⁴)	16538	16538	16538
I_c (n)	(in ⁴)	39030	---	39030
I_c (3n)	(in ⁴)	27495	---	27495
S_s	(in ³)	919	919	919
S_c (n)	(in ³)	1298	---	1298
S_c (3n)	(in ³)	1150	---	1150
S_{bl}	(in ³)	64	64	64
ϕ	(k/ft.)	0.93	0.99	0.93
$M \ell$	(k)	292.59	595.26	294.37
$s \ell$	(k/ft.)	0.06	---	0.06
$M_s \ell$	(k)	17.39	---	17.64
$M \ell$	(k)	376.05	511.77	369.34
M (Imp)	(k)	---	---	---
$5/3[M \ell + M(\text{Imp})]$	(k)	626.75	852.95	615.57
M_a	(k)	1217.75	1882.67	1205.85
M_{bl}	(k)	32.13	53.52	9.88
$f_s \ell$ non-comp	(ksi)	3.82	7.77	3.84
$f_s \ell$ (comp)	(ksi)	0.18	---	0.18
$f_s 5/3[M \ell + M(\text{Imp})]$	(ksi)	5.79	11.14	5.69
f_w	(ksi)	6.02	10.04	1.85
$f_s + f_w$ (Overload)	(ksi)	14.43	26.63	11.14
f_s (Total)	(ksi)	12.74	24.58	12.63
VR	(k)	35.34	---	41.19
F_b	(ksi)	50	45.3	50

		Pier 5-N. Brg.	Pier 6	Pier 7	Pier 8-S. Brg.
$R \ell$	(k)	26.9	75.9	75.9	26.9
$R \ell$	(k)	29.3	62.5	62.5	29.3
R (Total)	(k)	56.2	138.4	138.4	56.2

Girder	℄ N. Bearing Pier 5	℄ Bearing Pier 6	℄ Field Splice 5	℄ Field Splice 6	℄ Bearing Pier 7	℄ S. Bearing Pier 8
1	770.565	768.810	768.303	766.804	766.233	764.225
2	770.565	768.810	768.303	766.804	766.233	764.225

- NOTES:
- For diaphragm and splice details see sheet No. S13
 - For Section A-A see sheet No. S13.
 - For Girder Dimension Table see sheet No. S13.

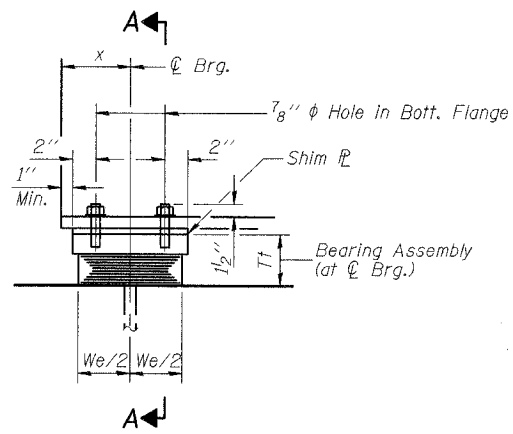
PREPARED FOR:
WHEATON PARK DISTRICT
666 S. MAIN STREET
WHEATON, ILLINOIS 60187



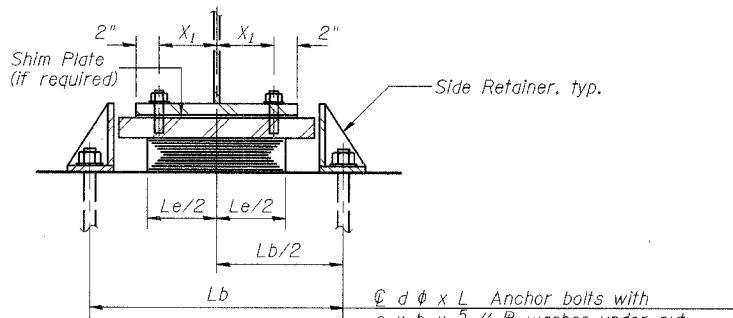
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

NO.		DATE		DESCRIPTION	

STEEL GIRDER DETAILS				
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD				
FILE NAME: GIRDER	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 28 of 54
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: -----	

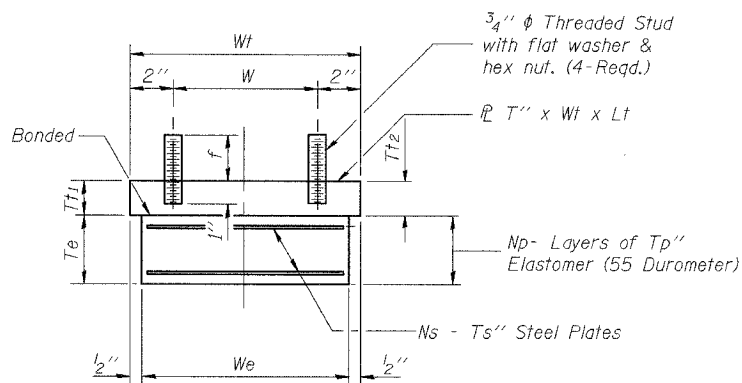


ELEVATION



SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

Note: Shim plates shall not be placed under Bearing Assembly.

NOTES:

- All dimensions in tables are in inch units unless otherwise noted.
- For details of Type III and Fixed Bearings see sheet S17.

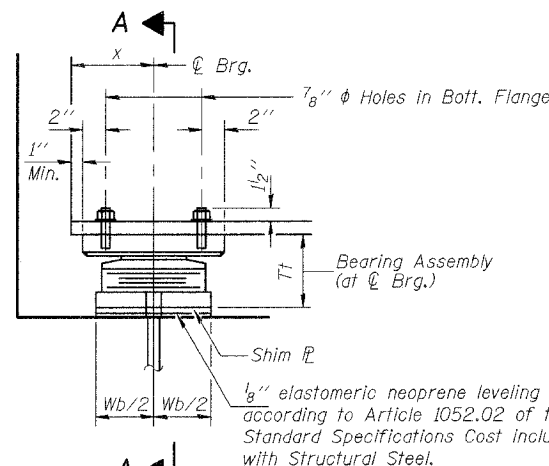
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	12
Elastomeric Bearing Assembly Type II	Each	4
Elastomeric Bearing Assembly Type III	Each	4

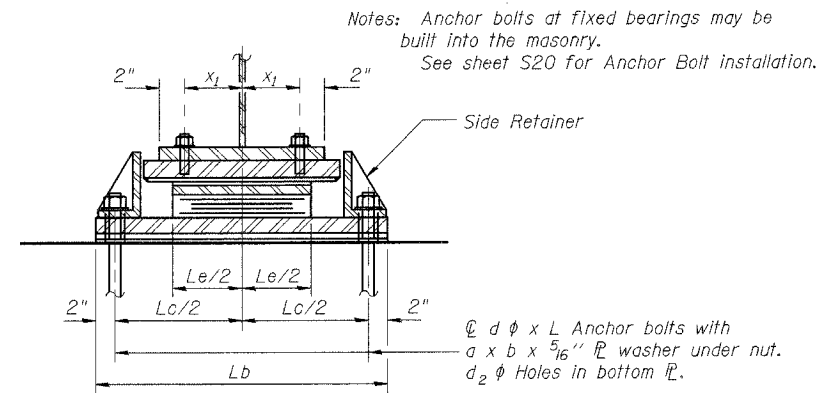
ELASTOMERIC EXPANSION BEARING ASSEMBLIES TYPE I & TYPE II
TABLE OF DIMENSIONS

Location	Type	No.	We	Le	Tp	Np	Ts	Ns	Tb	Wt	W	Lt	T	Tt1	Tt2	Tt	f
Pier 1 & Pier 3	I	4	12	18	9/16	6	3/16	5	4 5/16	13	9	20	3	3	3	7 5/16	2 11/16
Pier 5N	I	2	7	12	3/8	5	3/32	4	2 1/4	8	4	16	Varies	2 1/4	2	4 3/8	3 1/4
Pier 7	I	2	12	18	9/16	7	3/16	6	5 1/16	13	9	20	3	3	3	8 1/16	3 1/4
Pier 8N *	I	2	6	10	5/16	6	14 ga.	5	2 1/4	7	3	12	2	2	2	4 1/4	2 9/16
Pier 10	I	2	11	16	1/2	7	1/8	6	4 1/4	12	8	18	3	3	3	7 1/4	2 9/16
Pier 8S	II	2	7	12	3/8	5	3/32	4	3 1/8	8 5/8	4 5/8	16	Varies	2 5/16	2	5 5/16	3
N. Abut.	II	2	7	10	5/16	6	14 ga.	5	3 1/8	7 3/4	3 3/4	12	Varies	2 1/4	2	5 1/4	2 5/16

Location	a	b	d	L	x	x1	t	y	z	d1	h	A	Tb	Wb	Ld	Lc	d2
Pier 1 & Pier 3	3	3	1 1/2	18	-	4	5/8	2 3/4	5 1/2	1 3/4	7 1/4	-	-	-	25 3/4	-	-
Pier 5N	2 1/4	2 1/4	1	12	5 1/2	4	1/2	2 1/8	4	1 1/4	4 1/2	-	-	-	20 1/2	-	-
Pier 7	3	3	1 1/2	18	-	4	5/8	2 3/4	5 1/2	1 3/4	8	-	-	-	25 3/4	-	-
Pier 8N *	2 1/4	2 1/4	1	12	5 1/2	4	1/2	2 1/8	4	1 1/4	4 1/4	-	-	-	16 1/2	-	-
Pier 10	2 3/4	2 3/4	1 1/4	15	-	4	1/2	2 3/8	4 3/4	1 1/2	7 1/4	-	-	-	23	-	-
Pier 8S	2 1/4	2 1/4	1	12	7	4	1/2	2 1/8	4	1 1/4	5 1/2	1	2	8	24 1/2	20 1/2	1 1/2
N. Abut.	2 1/4	2 1/4	1	12	5 1/2	4	1/2	2 1/8	4	1 1/4	5 1/2	1	1 1/2	7	20 1/2	16 1/2	1 1/2

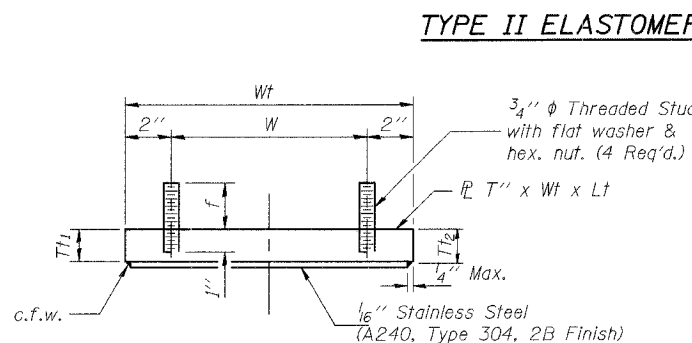


ELEVATION AT N. ABUT. AND PIER 8 S.

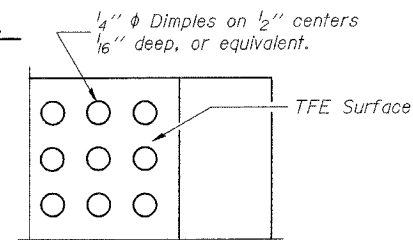


SECTION A-A

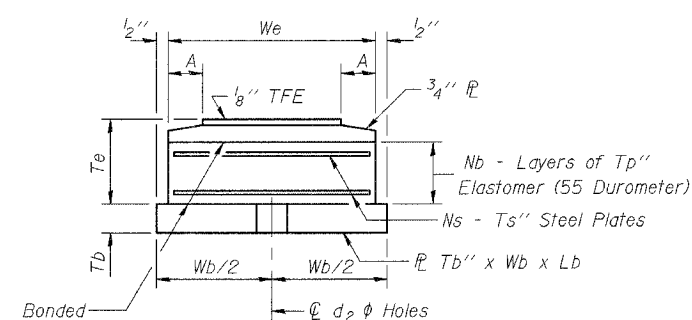
TYPE II ELASTOMERIC EXP. BRG.



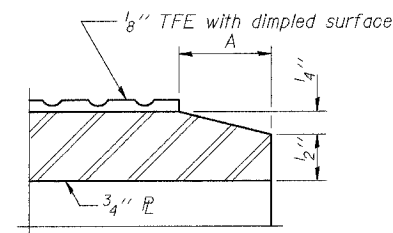
TOP BEARING ASSEMBLY



PLAN-TFE SURFACE



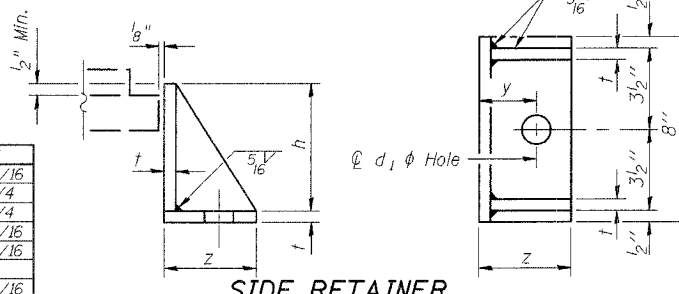
BOTTOM BEARING ASSEMBLY



SECTION THRU TFE

Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

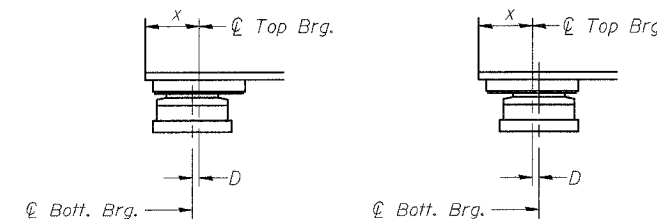
Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. Weight included with Structural Steel.

* 7/8" Thick shim plate required.



BELOW 50°F.

ABOVE 50°F.

(Move bott. brg. away from fixed brg.) (Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

INDEX OF BRIDGE SHEETS
SHEET S16 OF S29
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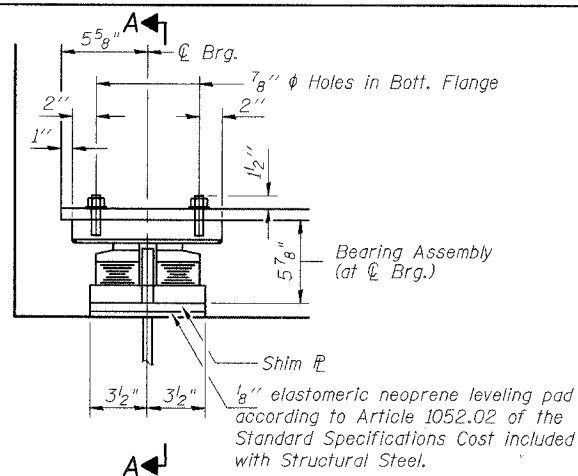
BEARING DETAILS TYPE I & TYPE II

PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: BEARINGS	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: ----	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: ----	29 of 54

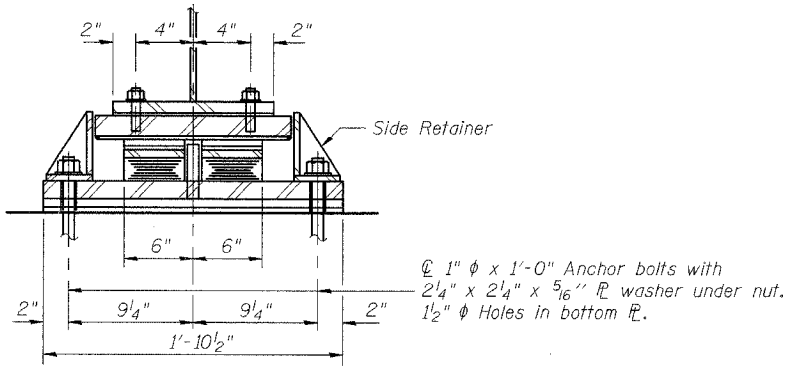


REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

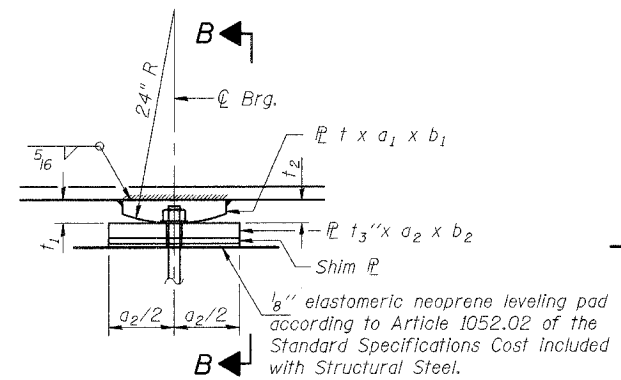


ELEVATION AT S. ABUT. AND PIER 4 S.

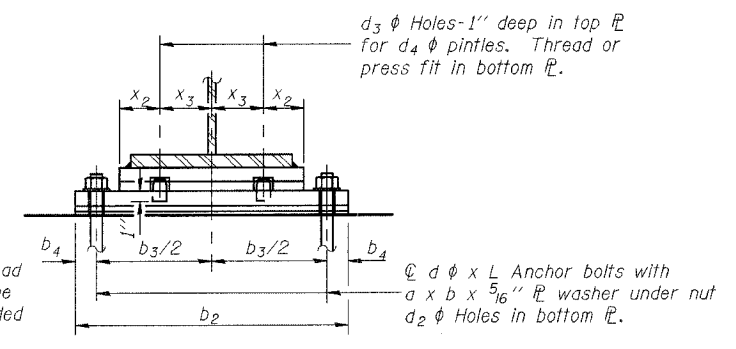
TYPE III ELASTOMERIC EXP. BRG.



SECTION A-A



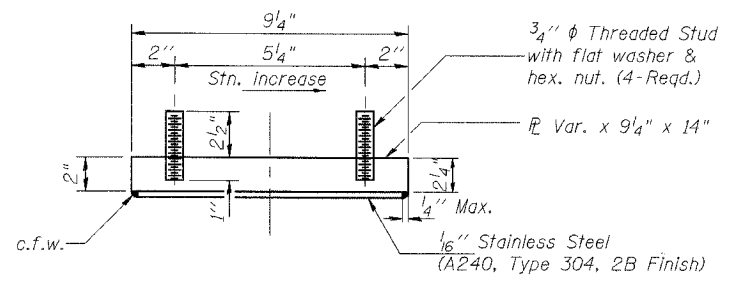
ELEVATION AT PIER



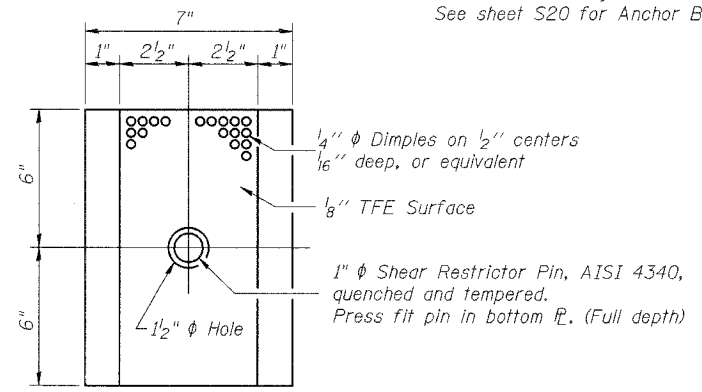
SECTION B-B

FIXED BEARING

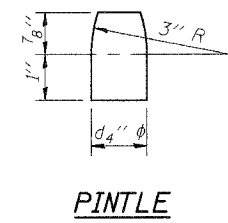
Notes: Anchor bolts at fixed bearings may be built into the masonry. See sheet S20 for Anchor Bolt installation.



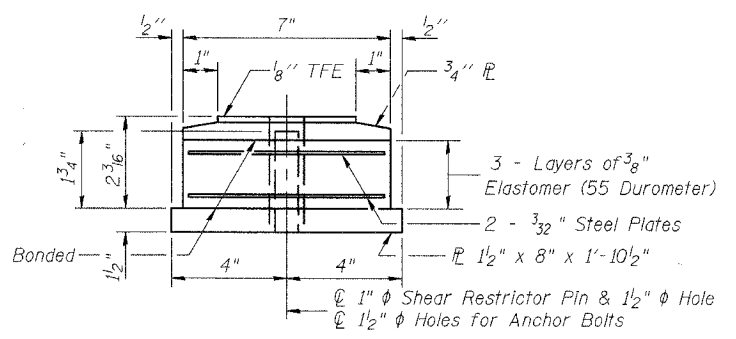
TOP BEARING ASSEMBLY



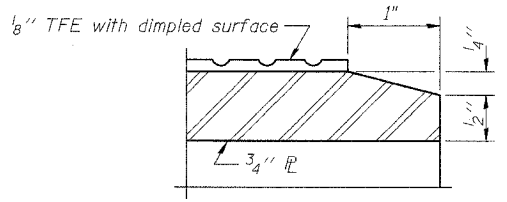
PLAN-TFE ELASTOMERIC BRG.



PINTLE



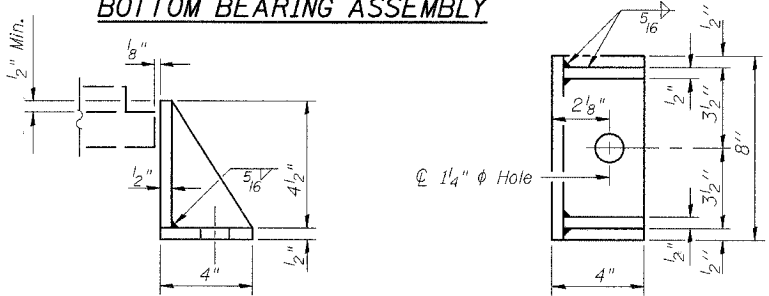
BOTTOM BEARING ASSEMBLY



SECTION THRU TFE

Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. Weight included with Structural Steel.

FIXED BEARINGS TABLE OF DIMENSIONS

Location	No.	a1	b1	t1	t2	t	a2	b2	t3	b3	b4	d	l	a	b	d2	d3	d4	x2	x3
Pier 2	2	9	13	2	2 5/16	Varies	10	24	2	17	3 1/2	2	24	3 1/2	3 1/2	2 1/2	1 1/2	1 3/8	3 1/2	3
Pier 6	2	9	17	2 5/16	2	Varies	9	24 1/2	2	21	1 3/4	1 1/4	15	2 3/4	2 3/4	1 3/4	1 3/8	1 1/4	4 1/2	4
Pier 9	2	9	13	2 5/16	2	Varies	9	20 1/2	2	17	1 3/4	1 1/4	15	2 3/4	2 3/4	1 3/4	1 3/8	1 1/4	3 1/2	3

NOTES:

- All dimensions in tables are in inch units unless otherwise noted.
- For details of Type I and Type II Bearings see sheet S16.
- All bearings shall be blocked during construction.
- For bearings Pier 4N and Pier 5S see Prefabricated Bridge Fabricator's plans.

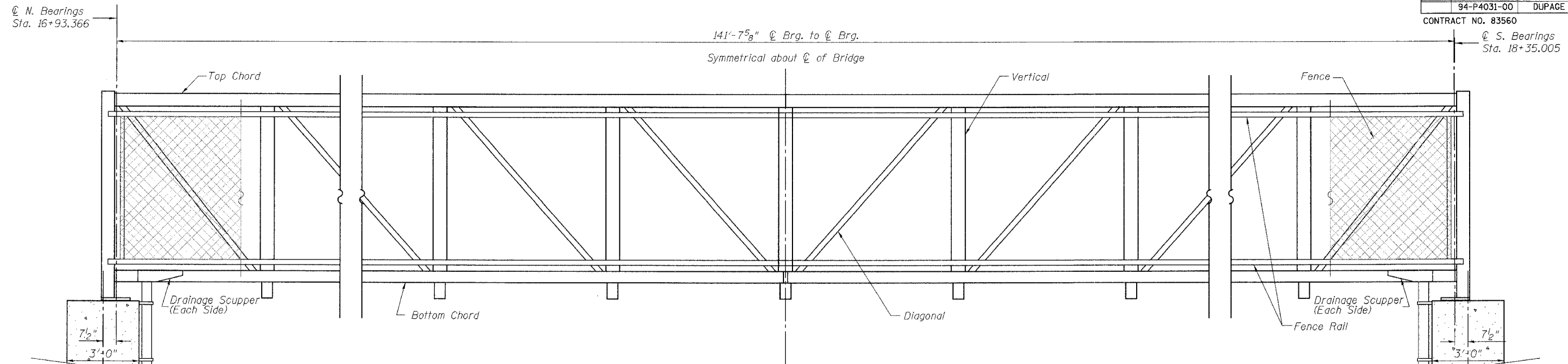
PREPARED FOR:
WHEATON PARK DISTRICT
666 S. MAIN STREET
WHEATON, ILLINOIS 60187

PREPARED BY:
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REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

BEARING DETAILS TYPE III & FIXED BEARINGS
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: BEARINGS	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 30 of 54
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: -----	

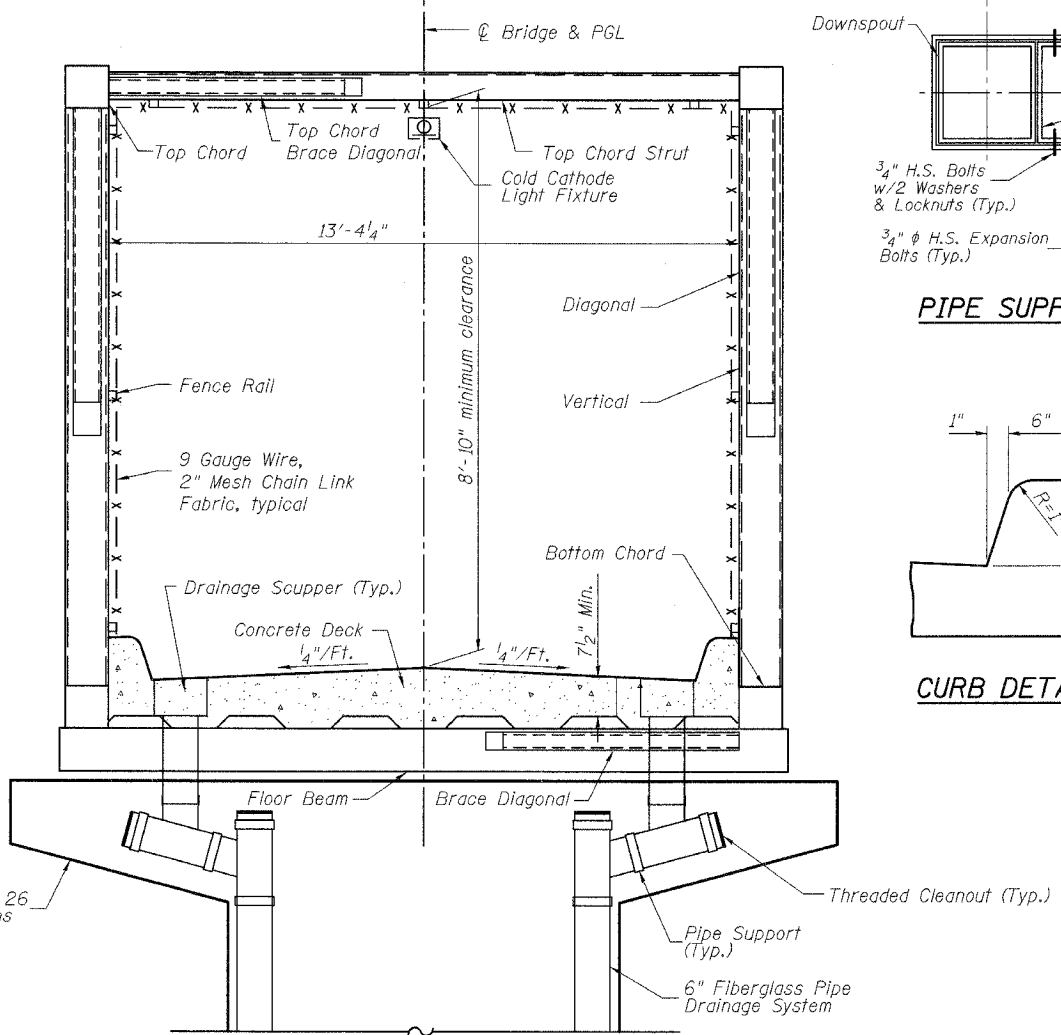


ELEVATION

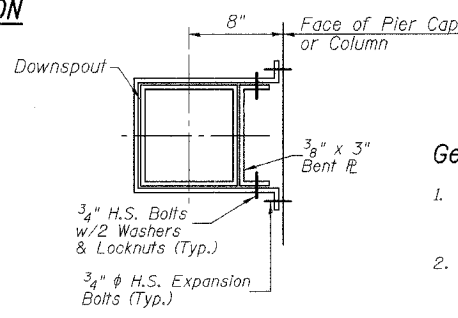
TOP OF DECK ELEVATIONS AT C BRIDGE

Location	Station	Theoretical Grade Elevation
CL. N. BRG. PIER 4	1693.366	771.051
	1703.366	771.296
	1713.366	771.509
	1723.366	771.688
	1733.366	771.835
	1743.366	771.948
	1753.366	772.029
	1763.366	772.077
	1773.366	772.091
	1783.366	772.073
CL. S. BRG. PIER 5	1793.366	772.021
	1803.366	771.937
	1813.366	771.819
	1823.366	771.669
	1833.366	771.486
CL. S. BRG. PIER 5	1835.005	771.452

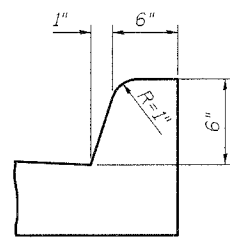
Note: Theoretical Grade Elevations shall be adjusted for deadload deflections for use in the field.



BRIDGE CROSS SECTION



PIPE SUPPORT



CURB DETAIL

General Notes:

- Design Specifications: AASHTO Standard Specifications for Highway Bridges 2002 and AASHTO Guide Specifications for Design of Pedestrian Bridges, August 1997. IDOT Guide Bridge Special Provision "Pedestrian Truss Superstructure" except as noted on plans.
- The work included under Pedestrian Truss Superstructure shall consist of furnishing, fabricating, transporting, erecting, painting as specified, steel decking, concrete, bearings, anchor bolts, wire mesh fence and attachments, and any other item of work to complete the work.
- Before fabrication, the Contractor shall submit structural calculations and shop drawings signed and stamped by an Illinois registered Structural Engineer to the Engineer for review and approval, as per Standard Specifications, Section 505.
- Bridge shall be fabricated from high strength, low alloy, atmospheric corrosion resistant "Weathering Steel". Structural steel shall conform to the requirements of AASHTO M270 Grade 50W.
- Any reference to "Standard" throughout these plans or "Special Provisions" shall be interpreted to be IDOT "Standard Specifications for Road and Bridge Construction", adopted January 1, 2002, and IDOT "Supplemental Specifications and Recurring Special Provisions", adopted January 1, 2003.
- All structural steel shall be cleaned as specified in the Special Provisions for "Surface Preparation and Painting Requirements for Weathering Steel."
- The open area at top corners between bridge cross section and bridge fence railing shall be covered with mesh chain link fabric at each end.
- For other notes, see Sheets S2 and S11

Railroad Construction Notes:

- For bridge construction any temporary at-grade construction crossing will not be permitted.
- Minimum temporary construction clearances of 21 ft. vertical above top of rail and 12 ft. horizontal clearance from centerline of nearest track shall be required.
- The contractor must submit a girder erection plan for the span over the tracks that will not interrupt train traffic.
- Work windows will be available between 9:00 AM. - 3:30 PM.. Construction activities cannot take precedence over train operations and all work within 25 ft. of any track must stop when a train passes. Work windows will also be available on weekends.
- Railroad flagman must be physically present before any work can commence within 25 ft. of the nearest track. For flagging requests call Alice at (312) 496-4738 at least 48 hours before date needed.

BILL OF MATERIAL

Item	Unit	Quantity
Pedestrian Truss Superstructure	Sq. Ft.	1,910
Drainage Scupper	Each	4
Drainage System	L. Sum	1

Notes:

- The Pay Item "Drainage System" shall include providing and installing 6" fiberglass pipe, L's, T's, Reducer Elbows, Cleanouts, Inserts, Anchors, Hangers, Clamps, Concrete Pads and all other items necessary to complete the underdeck drainage system.
- Fiberglass pipe shall conform to ASTM D2995 with short time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

INDEX OF BRIDGE SHEETS
SHEET S18 OF S29
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PREPARED FOR:
WHEATON PARK DISTRICT
666 S. MAIN STREET
WHEATON, ILLINOIS 60187



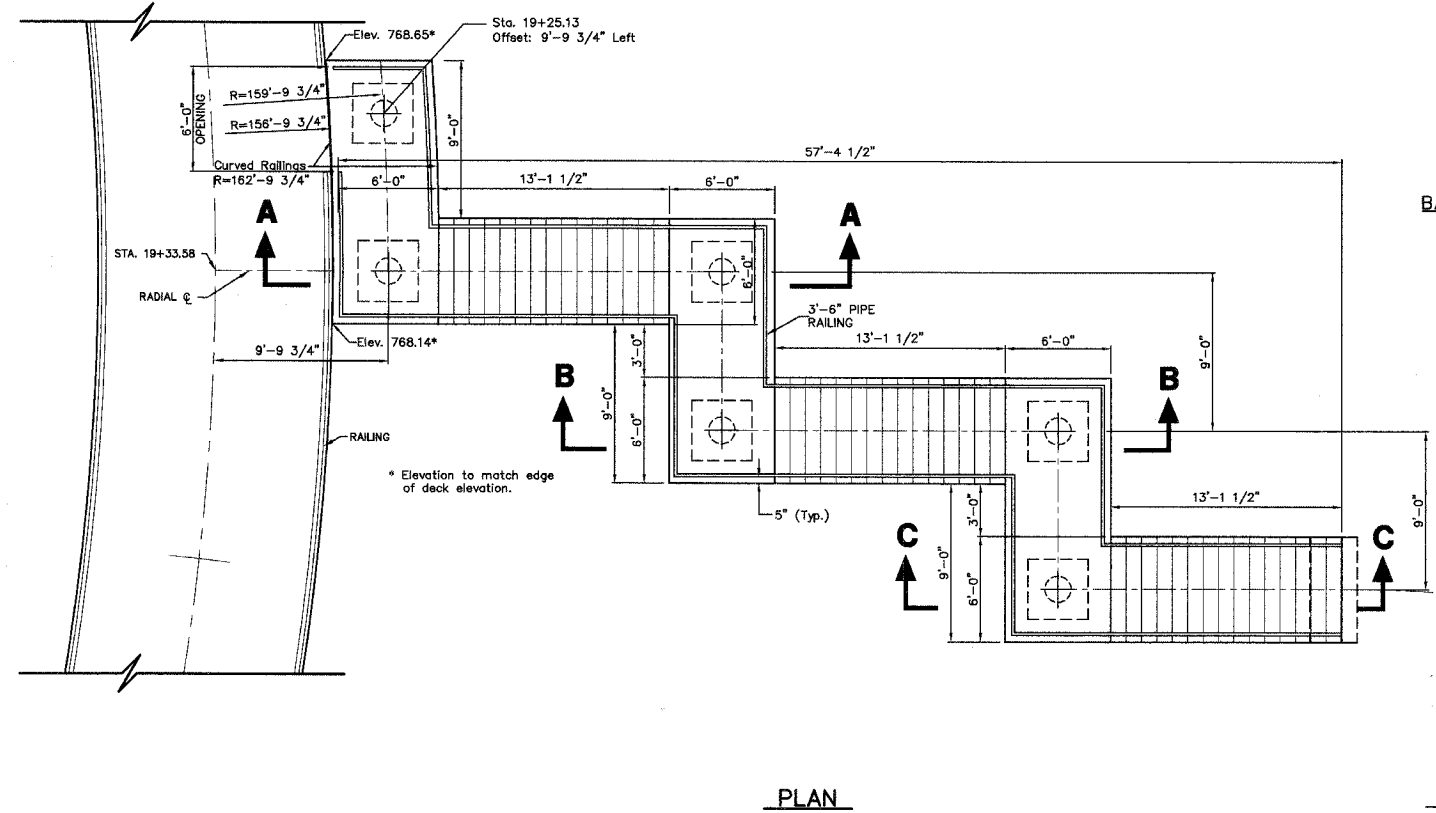
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Ph: 630.862.2100 Fax: 630.862.2199
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NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

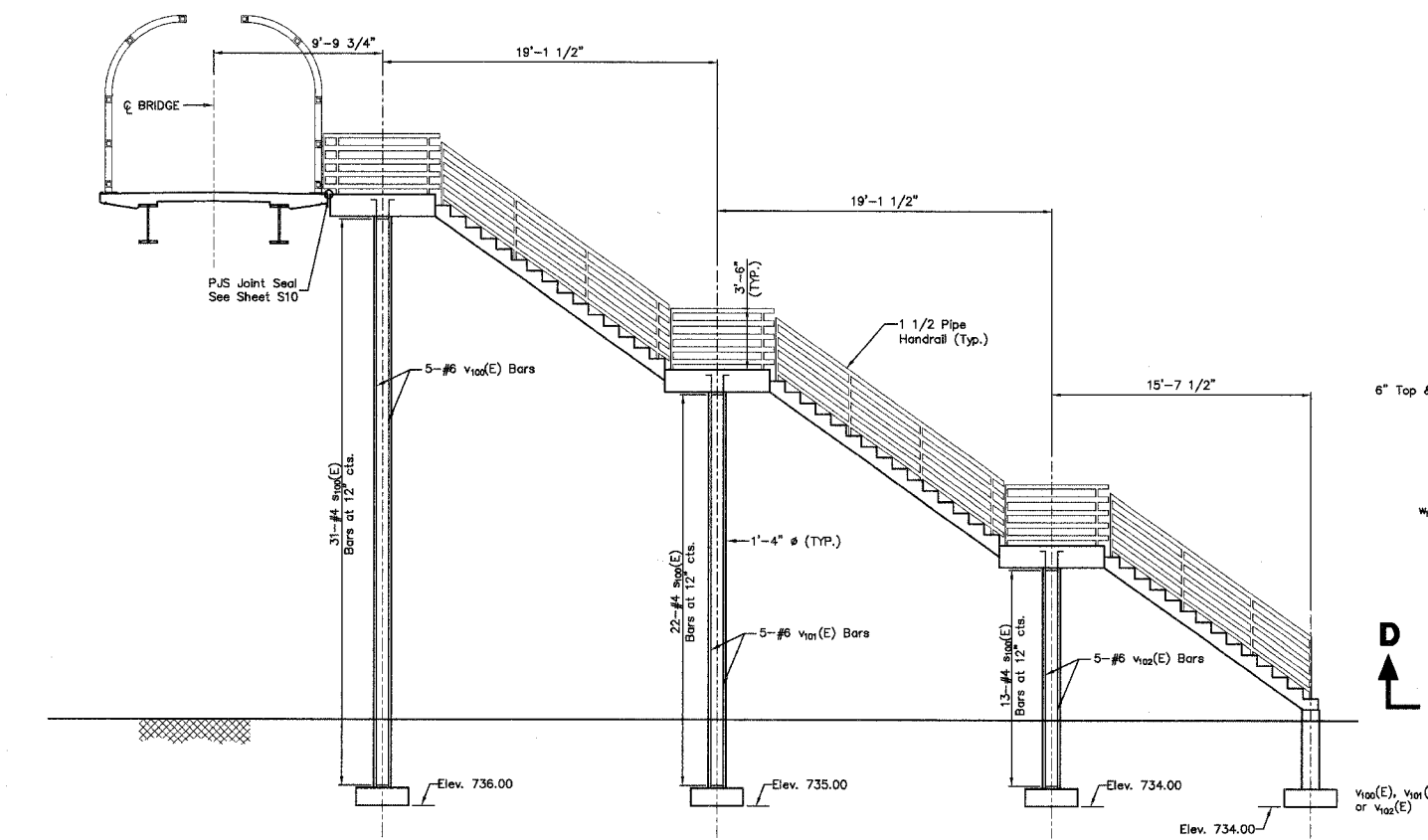
PEDESTRIAN TRUSS SUPERSTRUCTURE

PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: PREFAB	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: ----	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 12-21-04	SCALE: ----	31 of 54

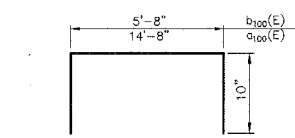
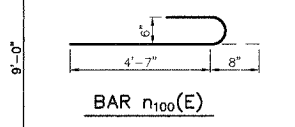
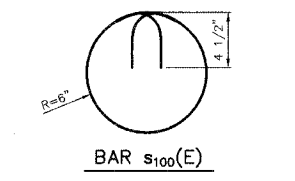


PLAN

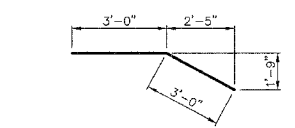


ELEVATION

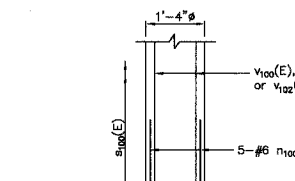
BAR v100(E), BAR v101(E), BAR v102(E), & BAR v103(E)



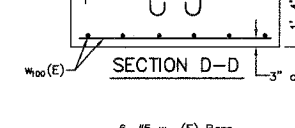
BAR a100(E) & BAR b100(E)



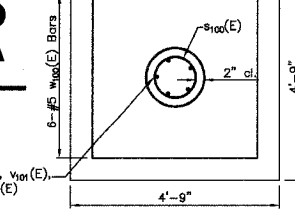
BAR b101(E)



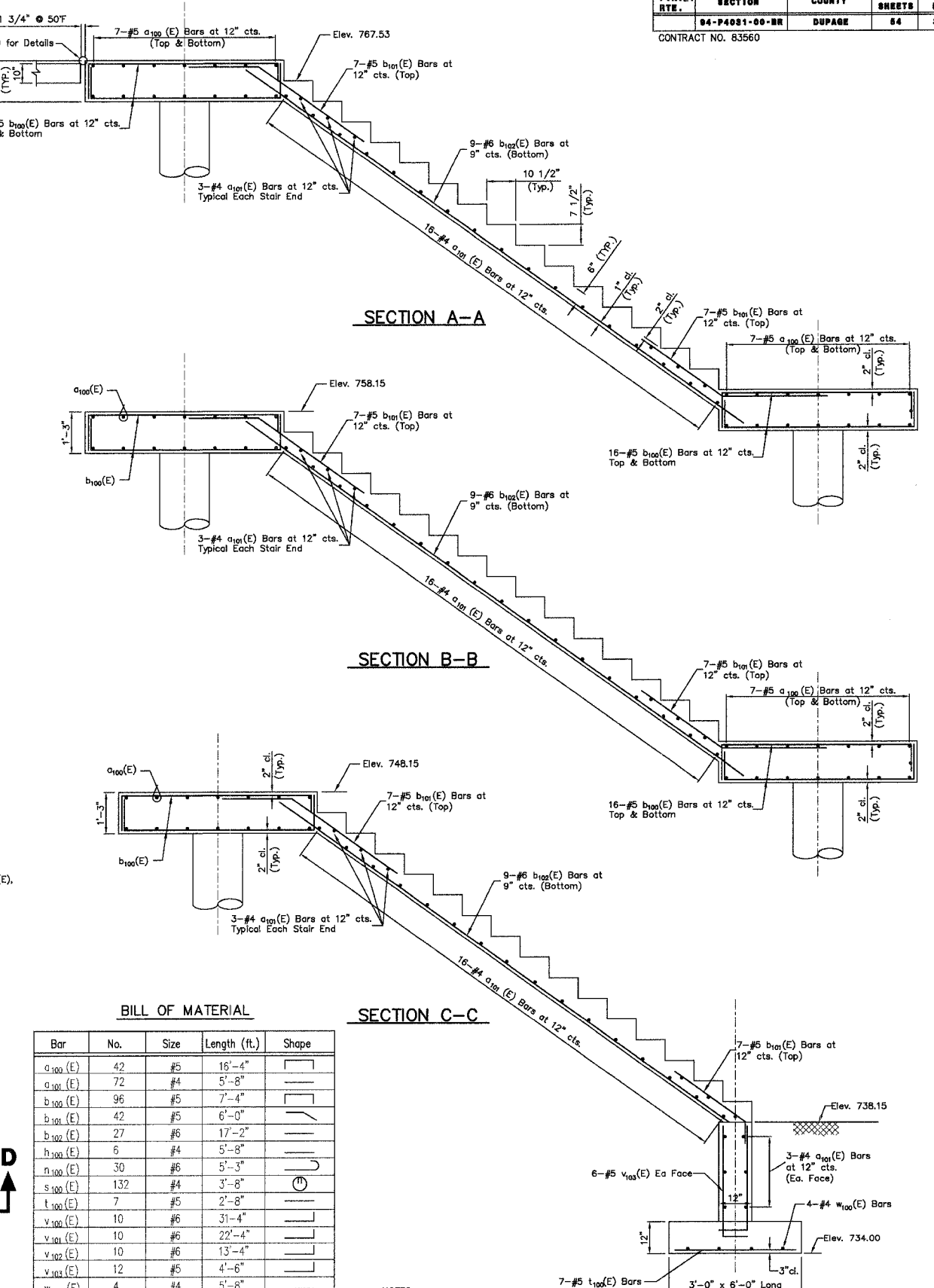
SECTION D-D



COLUMN FOOTING PLAN



SECTION D-D



SECTION A-A

SECTION B-B

SECTION C-C

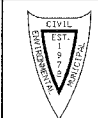
BILL OF MATERIAL

Bar	No.	Size	Length (ft.)	Shape
a100(E)	42	#5	16'-4"	U
a101(E)	72	#4	5'-8"	U
b100(E)	96	#5	7'-4"	U
b101(E)	42	#5	6'-0"	U
b102(E)	27	#6	17'-2"	U
b103(E)	6	#4	5'-8"	U
n100(E)	30	#6	5'-3"	U
s100(E)	132	#4	3'-8"	U
t100(E)	7	#5	2'-8"	U
v100(E)	10	#6	31'-4"	U
v101(E)	10	#6	22'-4"	U
v102(E)	10	#6	13'-4"	U
v103(E)	12	#5	4'-6"	U
w100(E)	4	#4	5'-8"	U

Structure	Excavation	Cu. Yd	79.0
Concrete Structures	Cu. Yd	35.0	
Reinforcement Bars, Epoxy Coated	Pound	4,360	
Pipe Handrail	Foot	168	

NOTES:
 1. Pipe handrail shall be furnished, erected and painted as specified in Section 510 "Pipe Handrail" of the Standard Specifications.
 2. Maximum design soil pressure under footings = 2000 psf
 Suitability of soil under foundations to be verified by soil engineer on site.

PREPARED FOR:
 WHEATON PARK DISTRICT
 666 S. MAIN STREET
 WHEATON, ILLINOIS 60187

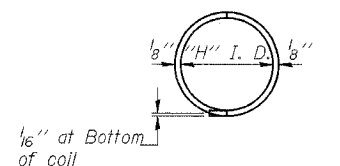
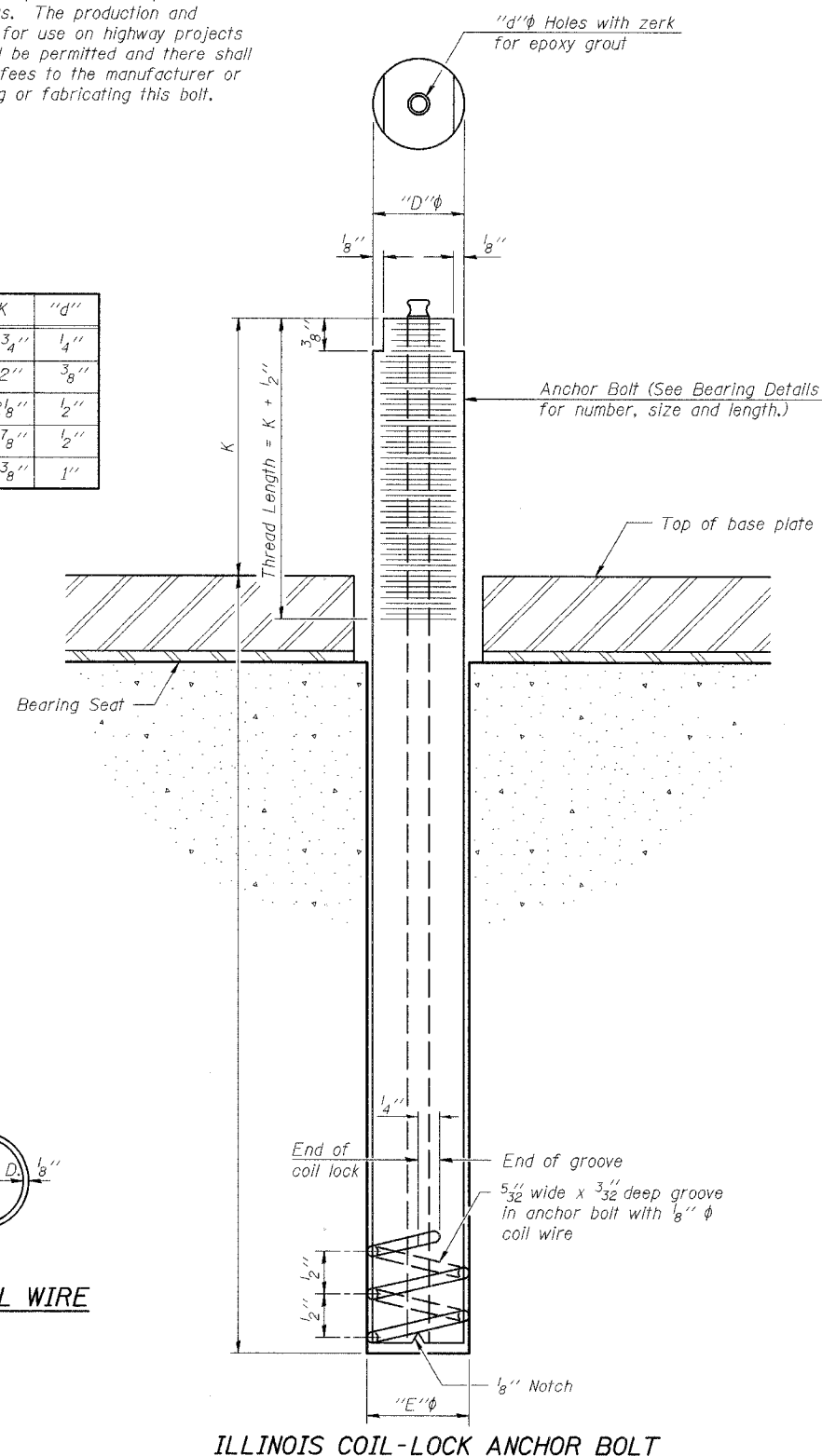


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 E-Mail: cadd@cemcon.com Website: www.cemcon.com

NO.		DATE		DESCRIPTION	

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/16"	2"	3/8"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 13/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



PLAN-COIL WIRE

ILLINOIS COIL-LOCK ANCHOR BOLT

MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.
 The coil wire shall be made of any suitable soft steel wire.
 The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
 The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.
 The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
 1. A threaded rod stud with nut and washer of the type specified.
 2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type
S. Abut.	A 307
Pier 1 to 10	A 307
N. Abut.	A 307

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.
 Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.
 The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Furnishing and Erecting Structural Steel.

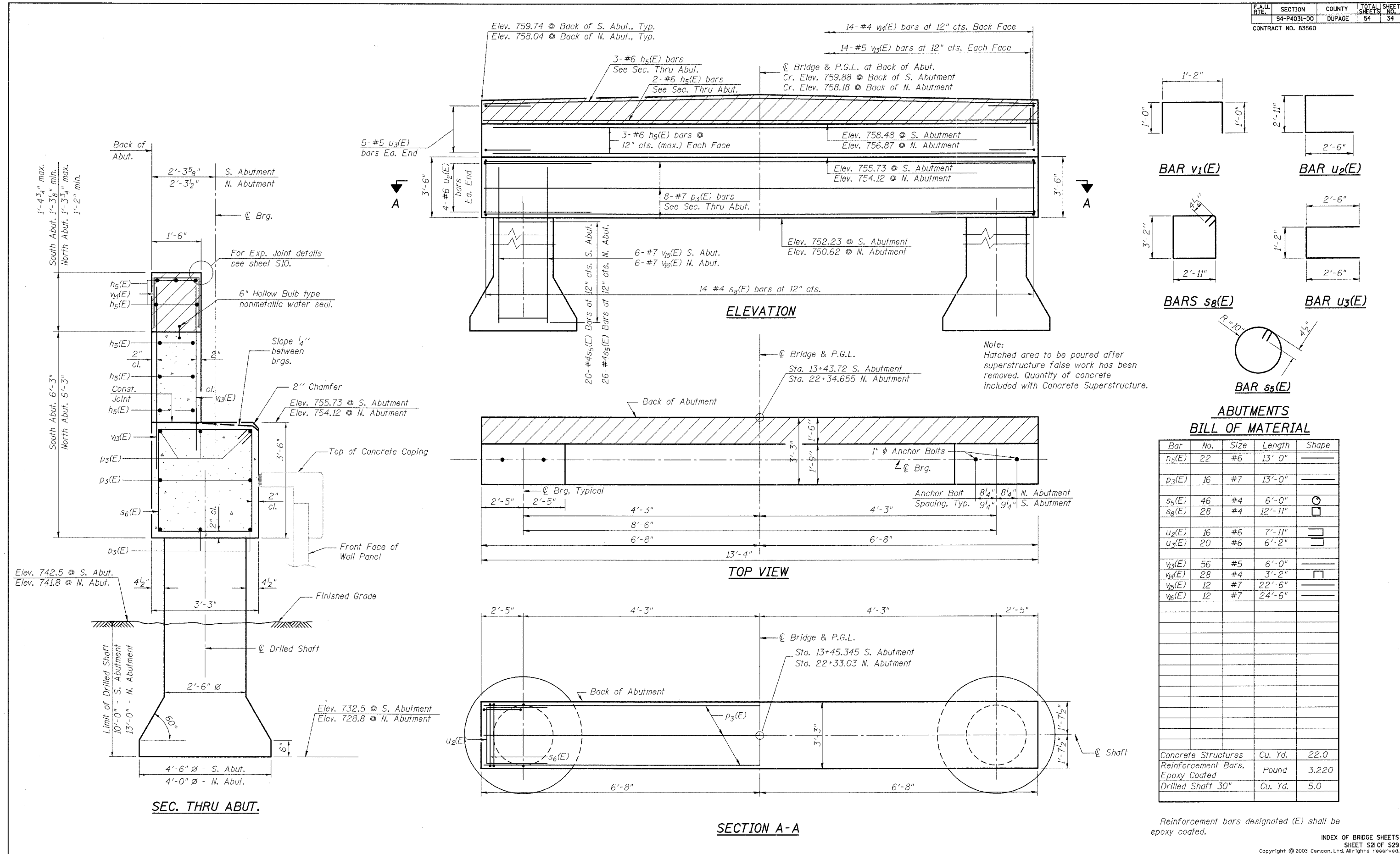
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REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

ANCHOR BOLT DETAILS FOR BEARINGS				
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD				
FILE NAME: ANCHOR	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: ----	SHEET NO.
DISC. NUMBER: 551.007	DRN. BY: RDS	DATE: 04-26-04	SCALE: ----	33 of 54



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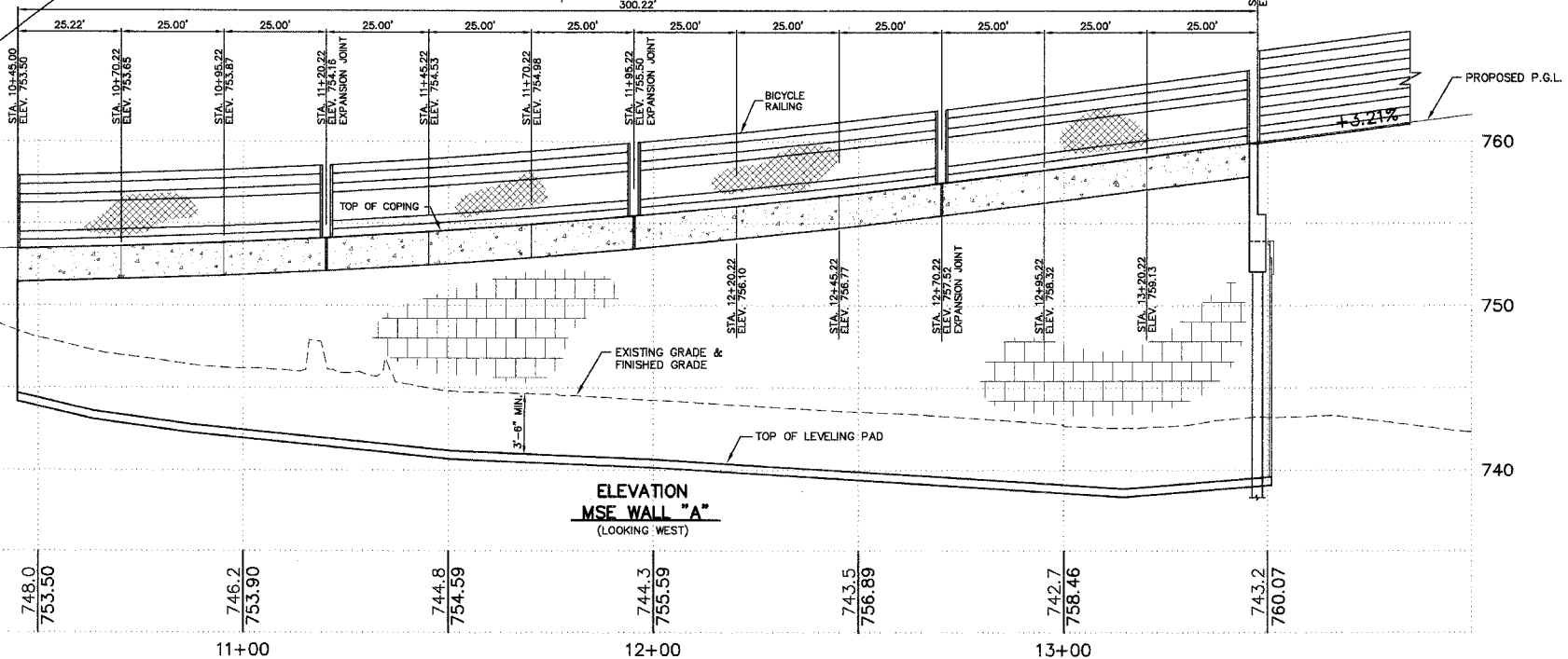
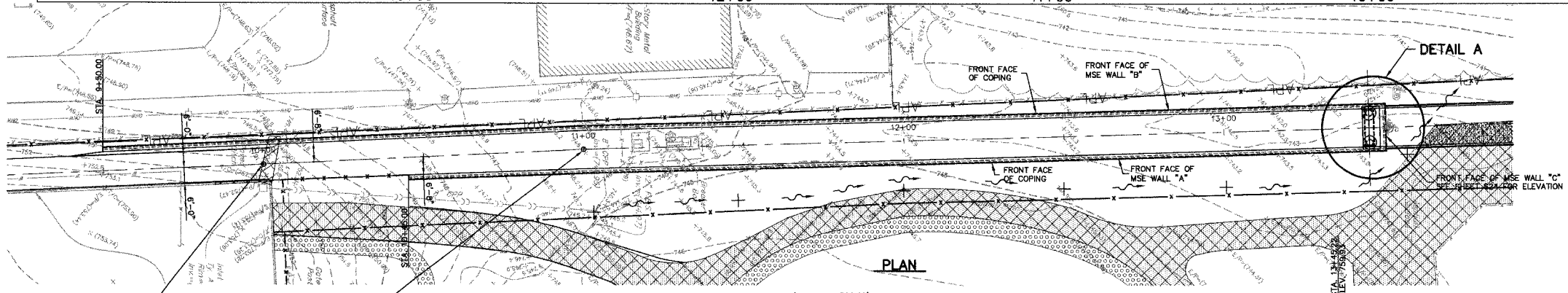
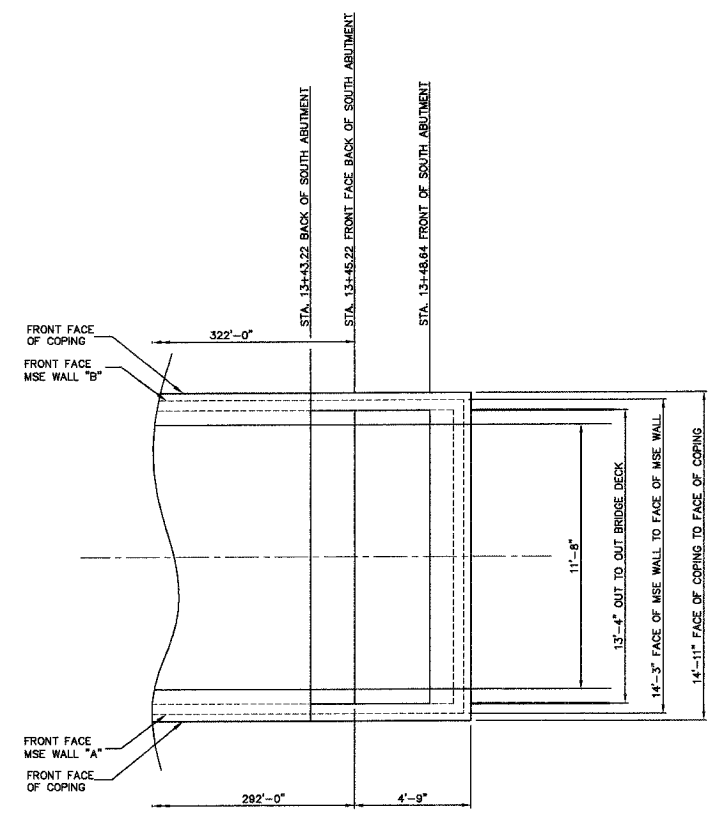
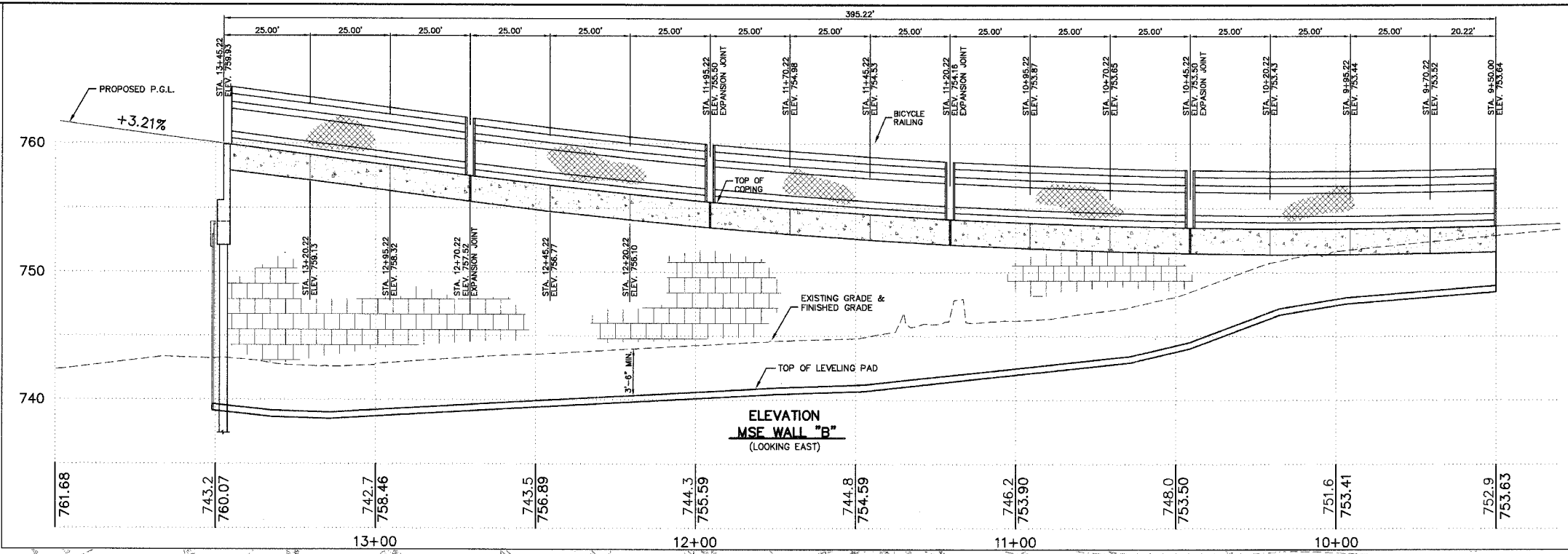
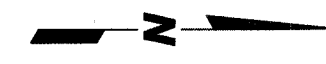
NO.		DATE		DESCRIPTION	

NORTH AND SOUTH ABUTMENTS

PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: ABUTMENT	DSGN. BY: JAC	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 34 of 54
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: -----	

CONTRACT NO. 83560



BILL OF MATERIAL

ITEM	UNIT	TOTAL
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	9,900
Structure Excavation	Cu. Yd.	636

- NOTES:
- ALL ELEVATIONS SHOWN ARE ALONG P.G.L.
 - THE CONTRACTOR WILL BE RESPONSIBLE TO DESIGN AND CONSTRUCT MSE WALLS ACCORDING TO IDOT GUIDE BRIDGE SPECIAL PROVISION "MECHANICALLY STABILIZED EARTH RETAINING WALLS".
 - THE SHAPE, TEXTURE AND COLOR OF THE WALL PANELS WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

INDEX OF BRIDGE SHEETS
SHEET S22 OF S29
DWG: WALL PROF ABC
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666 S. MAIN STREET
WHEATON, ILLINOIS 60187

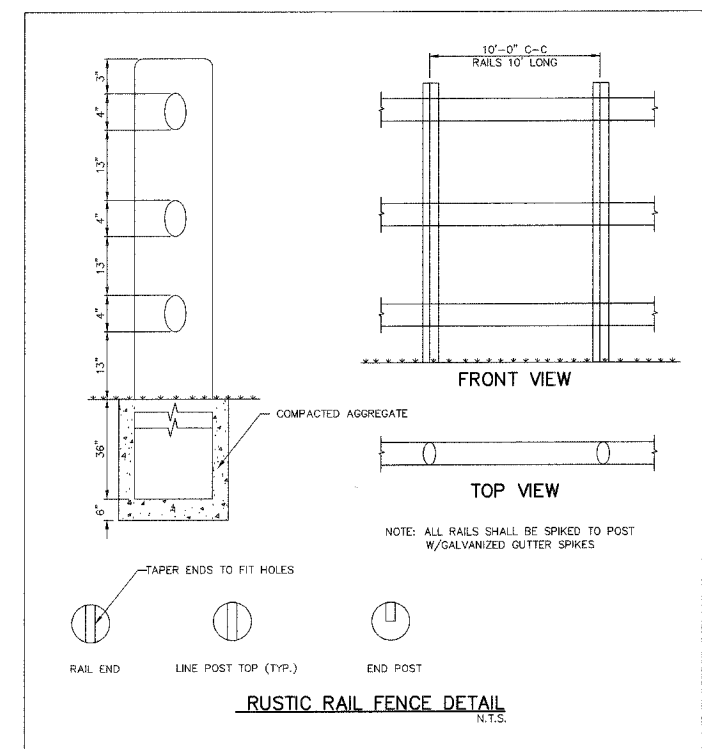
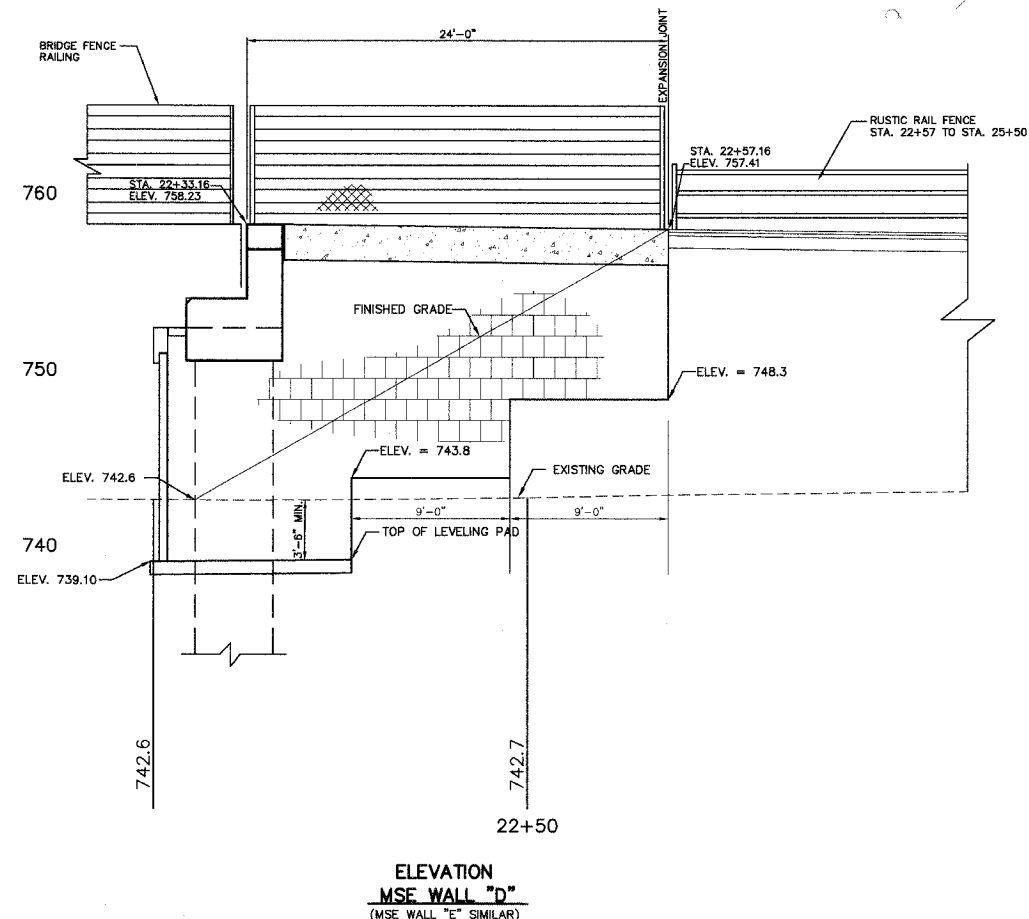
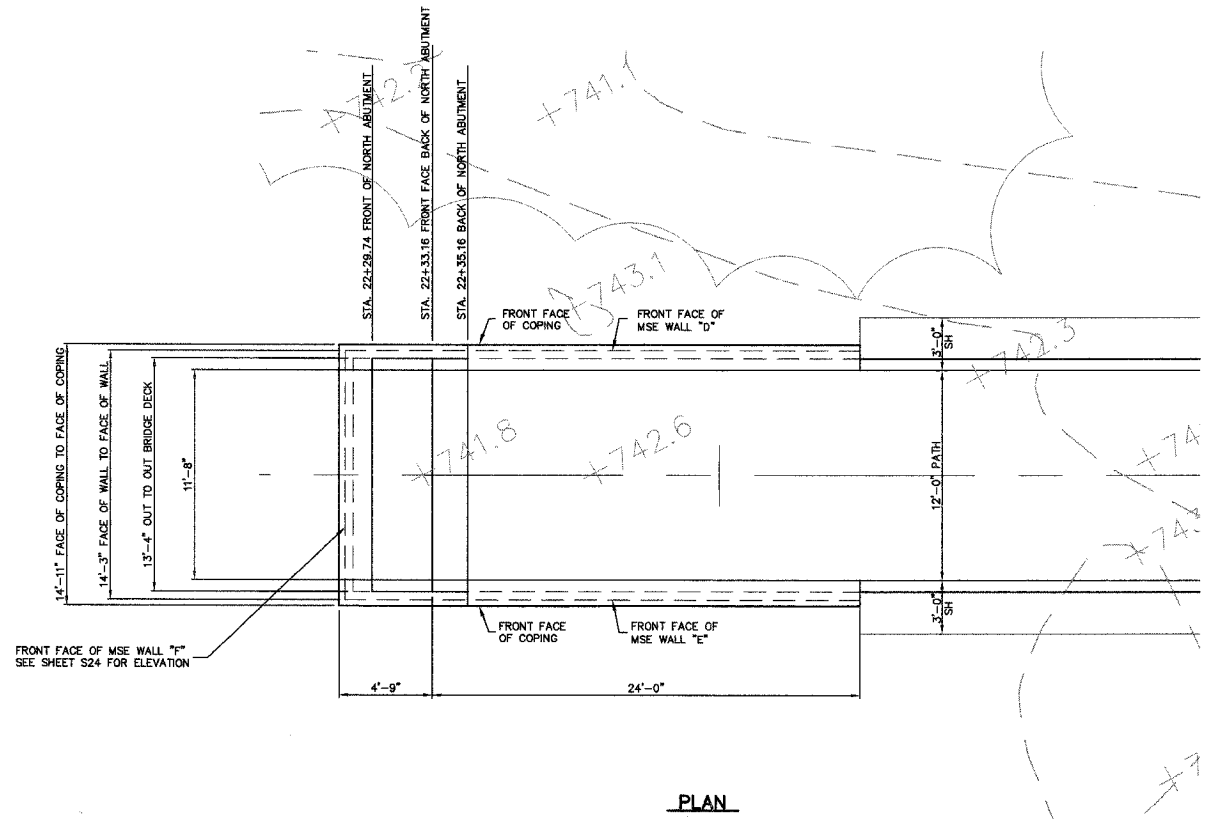
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REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

MSE WALLS A, B & C

PEDESTRIAN/BICYCLE BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: WALL PROF	DSGN. BY: JAC/KK	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: MD	DATE: 12-21-04	SCALE: 1" = 20'H,5'V	35 of 54



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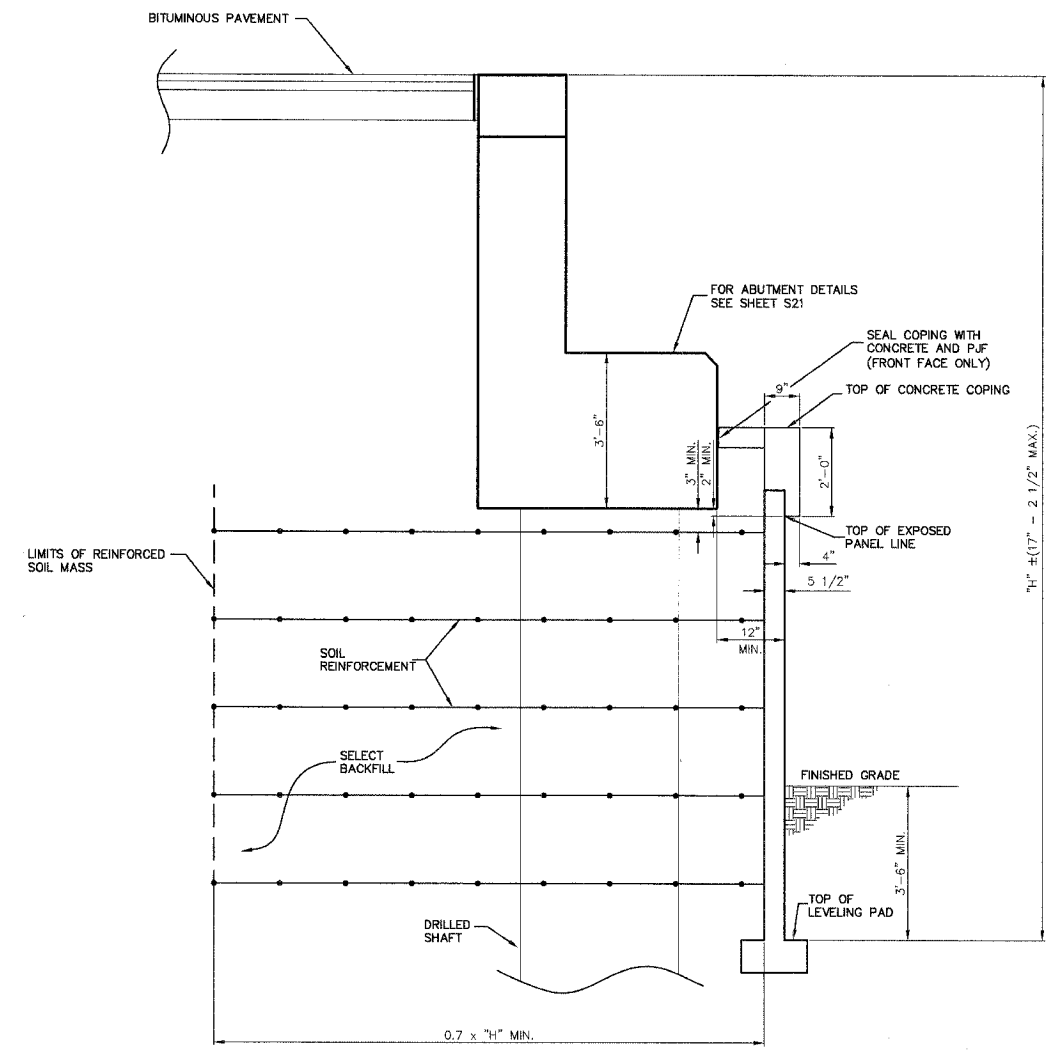
NO.		DATE	DESCRIPTION	REVISIONS		NO.	DATE	DESCRIPTION

MSE WALLS D, E & F

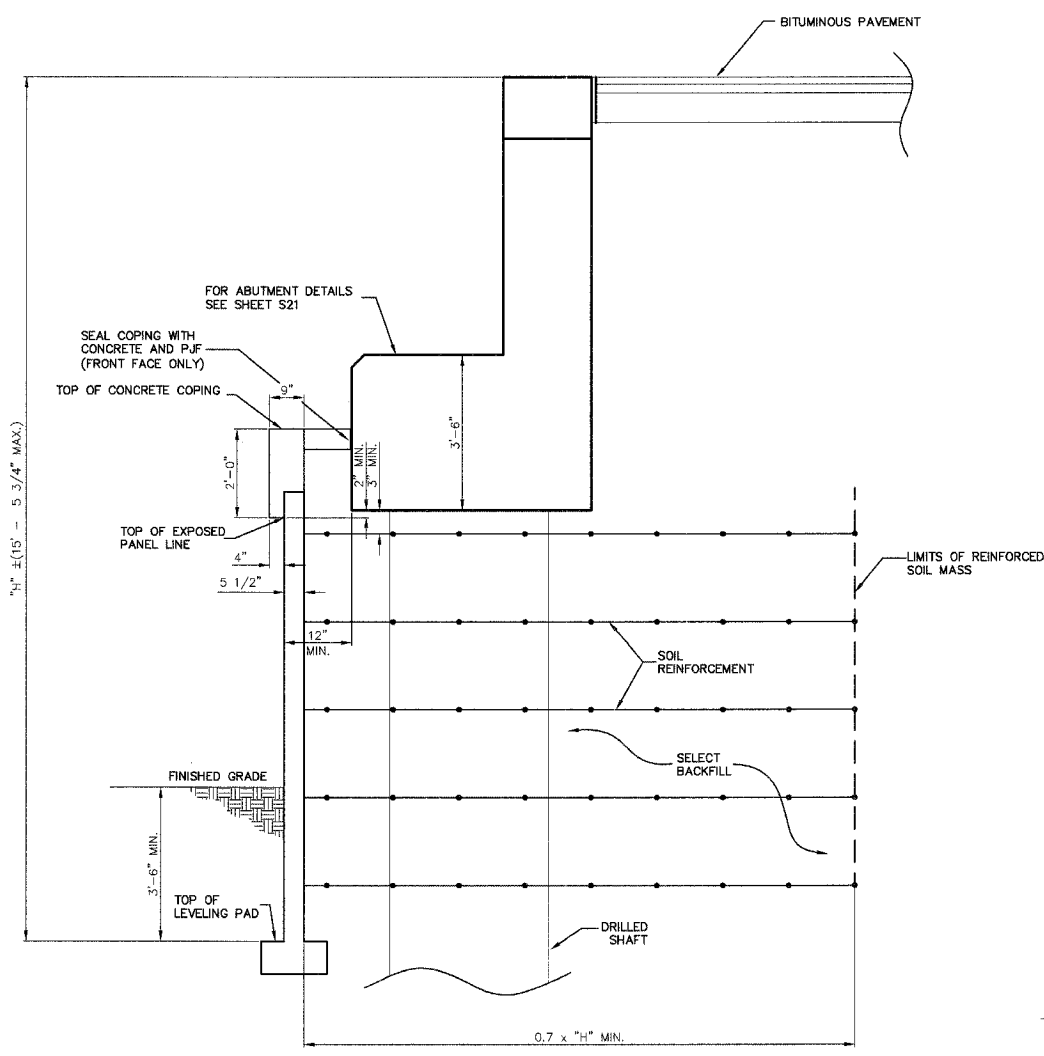
PEDESTRIAN/BICYCLE BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: WALLPROF	DSGN. BY: JAC/KK	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 36 of 54
DISC. NUMBER: 551007	DRN. BY: MD	DATE: 12-21-04	SCALE: 1" = 5'H,5'V	

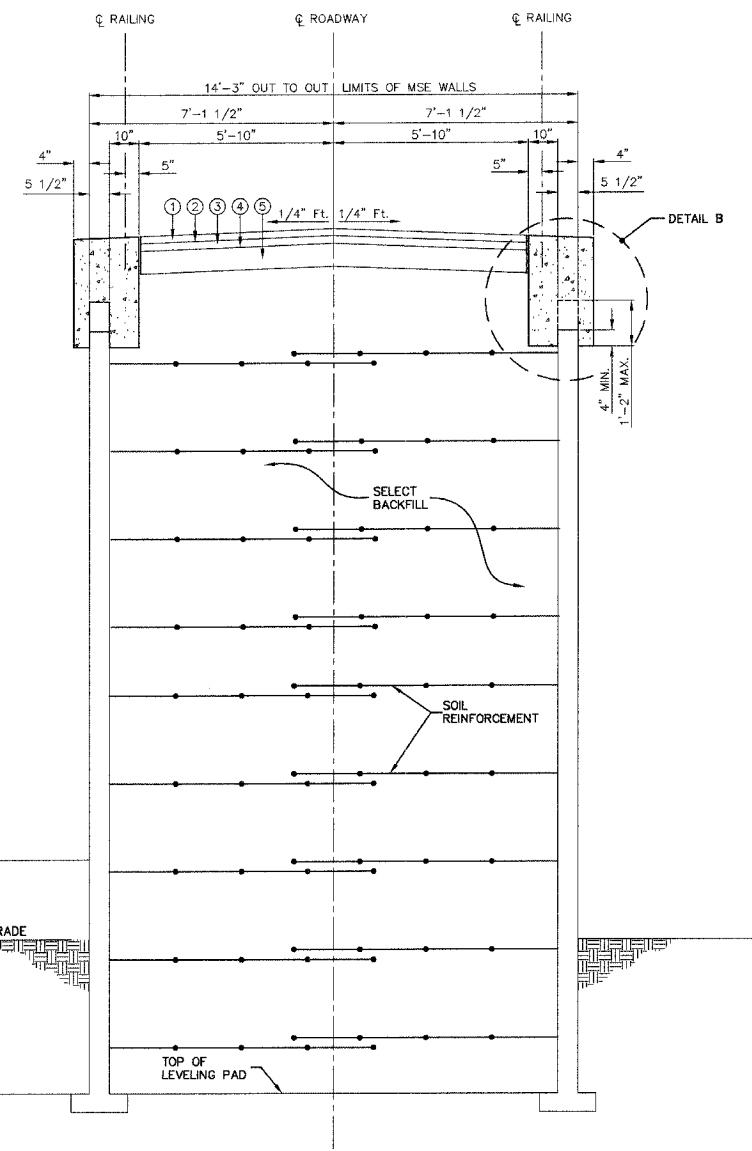
INDEX OF BRIDGE SHEETS
 SHEET S23 OF S29
 DWG: WALL PROF DEF
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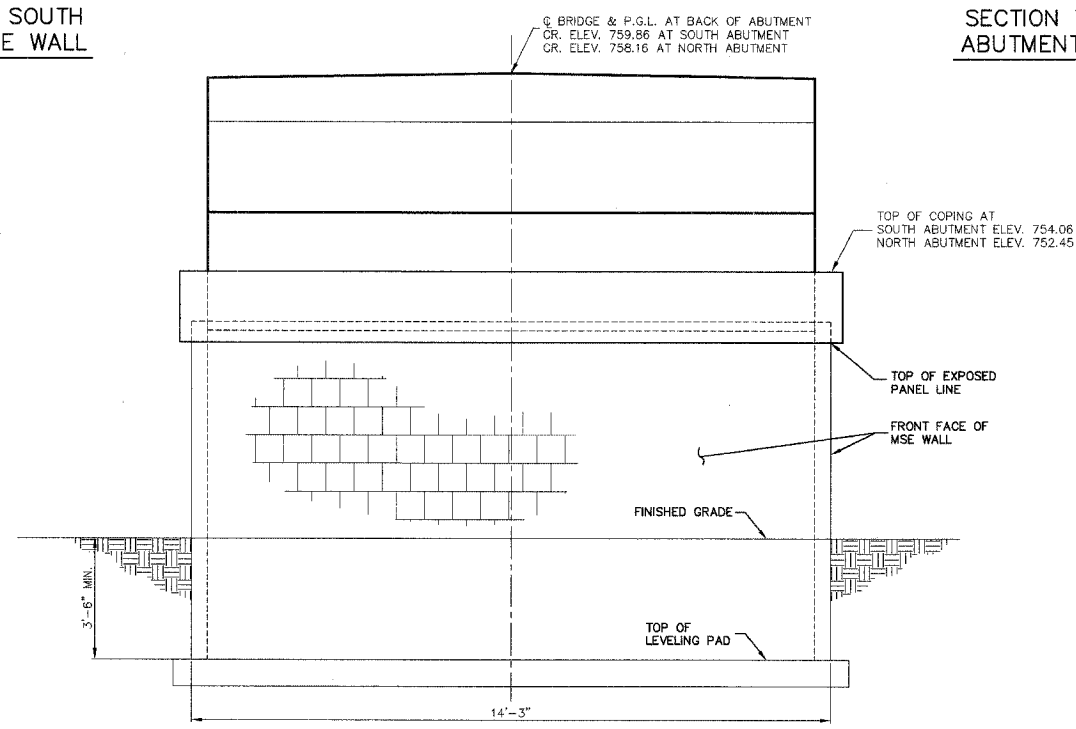
SECTION THROUGH SOUTH ABUTMENT AND MSE WALL



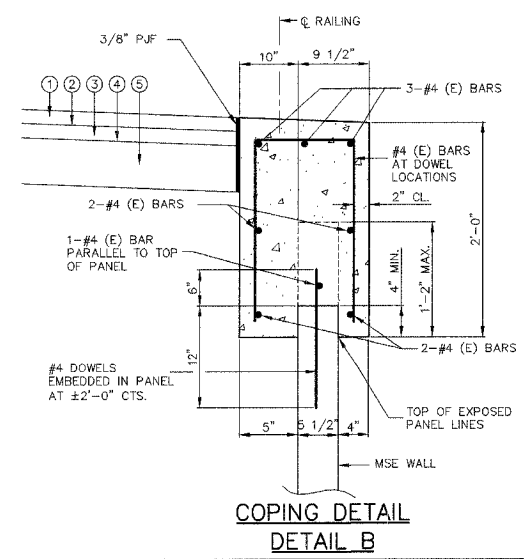
SECTION THROUGH NORTH ABUTMENT AND MSE WALL



SECTION THROUGH MSE WALLS



ELEVATION - MSE WALLS C & F



COPING DETAIL DETAIL B

1. BITUMINOUS CONCRETE SURFACE COURSE, MIX C CL. 1, TYPE 2, 2" (AC-10)
2. BITUMINOUS MATERIAL (PRIME COAT)
3. BITUMINOUS CONCRETE BINDER COURSE, MIX B, TYPE 2, 2 1/2"
4. BITUMINOUS MATERIAL (PRIME COAT) (MC-30)
5. AGGREGATE BASE COURSE, TYPE B, 8"

INDEX OF BRIDGE SHEETS
SHEET S24 OF S29
DWG: WALLDETAILS
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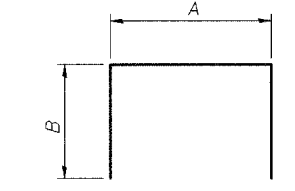
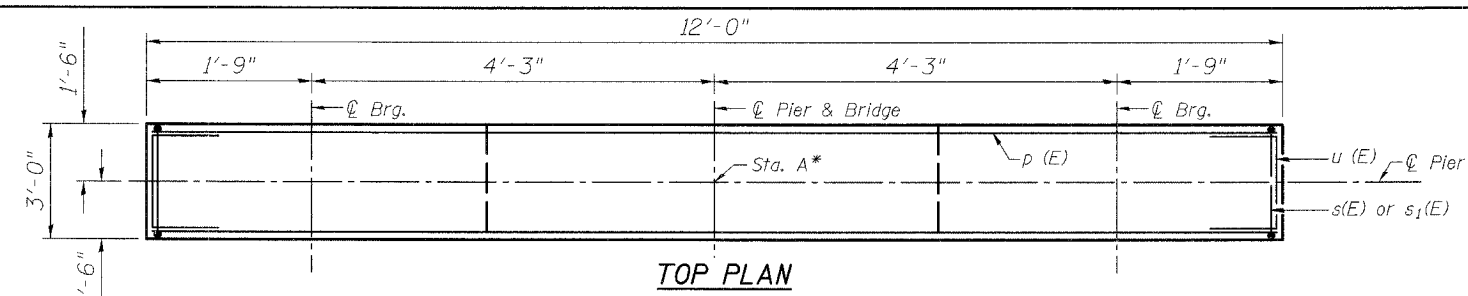
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NO.		DATE	DESCRIPTION	REVISIONS		NO.	DATE	DESCRIPTION

TYPICAL MSE WALL SECTIONS & DETAILS				
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD				
FILE NAME: DETAILS	DSGN. BY: JAC/KK	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 37 of 54
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: 1" = -----	

CONTRACT NO. 83560

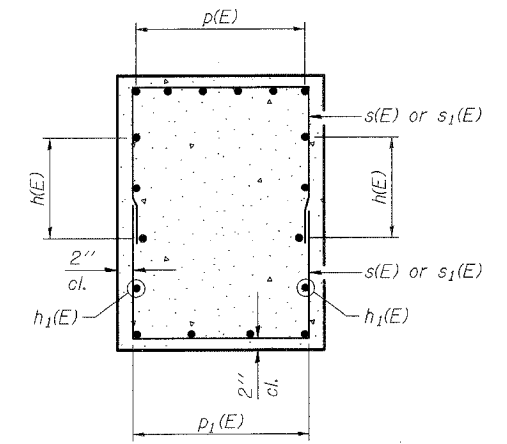
Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For bearing anchor bolt locations see sheet S10, S16 & S17.
 All edges shall have 3/4" Chamfer.



BARS s(E), s1(E), s2(E)

A & B DIMENSIONS

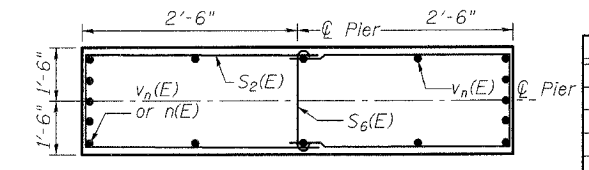
Bar	A	B
s(E)	2'-8"	2'-6"
s1(E)	2'-8"	2'-2"
s2(E)	2'-8"	3'-6"
s3(E)	2'-8"	6'-3"



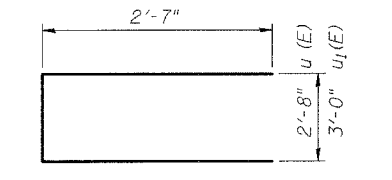
SECTION A-A

BILL OF MATERIAL

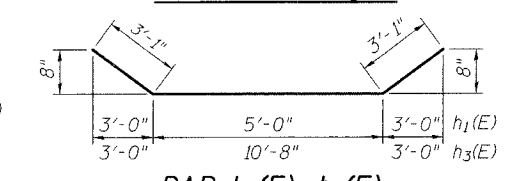
Bar	No.	Size	Length	Shape
h(E)	48	#6	11'-8"	
h1(E)	16	#6	11'-2"	
h2(E)	12	#6	17'-4"	
h3(E)	4	#6	16'-10"	
h4(E)	60	#6	12'-8"	
n(E)	128	#9	11'-8"	
n1(E)	48	#10	13'-4"	
p(E)	48	#7	11'-8"	
p1(E)	80	#6	5'-0"	
p2(E)	12	#7	17'-4"	
s(E)	186	#5	7'-8"	
s1(E)	80	#5	7'-0"	
s2(E)	306	#5	9'-8"	
s3(E)	104	#5	15'-2"	
s4(E)	90	#5	16'-3"	
s5(E)	206	#4	6'-0"	
s6(E)	309	#5	3'-7"	
s7(E)	36	#4	7'-7"	
u(E)	60	#6	7'-10"	
u1(E)	60	#6	8'-2"	
v1(E)	16	#9	16'-2"	
v2(E)	16	#9	20'-7"	
v3(E)	16	#9	26'-2"	
v4(E)	24	#10	29'-5"	
v5(E)	24	#10	25'-9"	
v6(E)	16	#9	25'-2"	
v7(E)	16	#9	22'-10"	
v8(E)	16	#9	22'-4"	
v9(E)	16	#9	19'-0"	
v10(E)	16	#9	15'-4"	
v11(E)	104	#7	13'-0"	
v12(E)	24	#7	19'-0"	
v17(E)	12	#7	20'-0"	



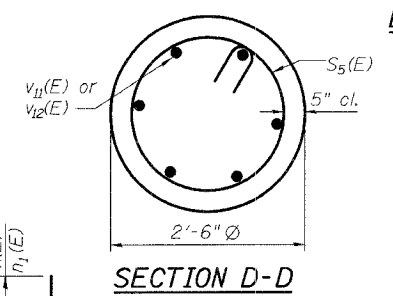
SECTION B-B



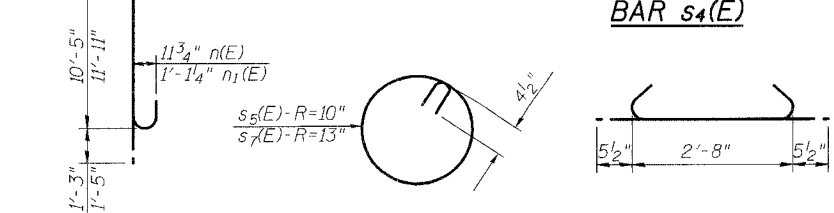
BAR u(E) & u1(E)



BAR h1(E), h3(E)

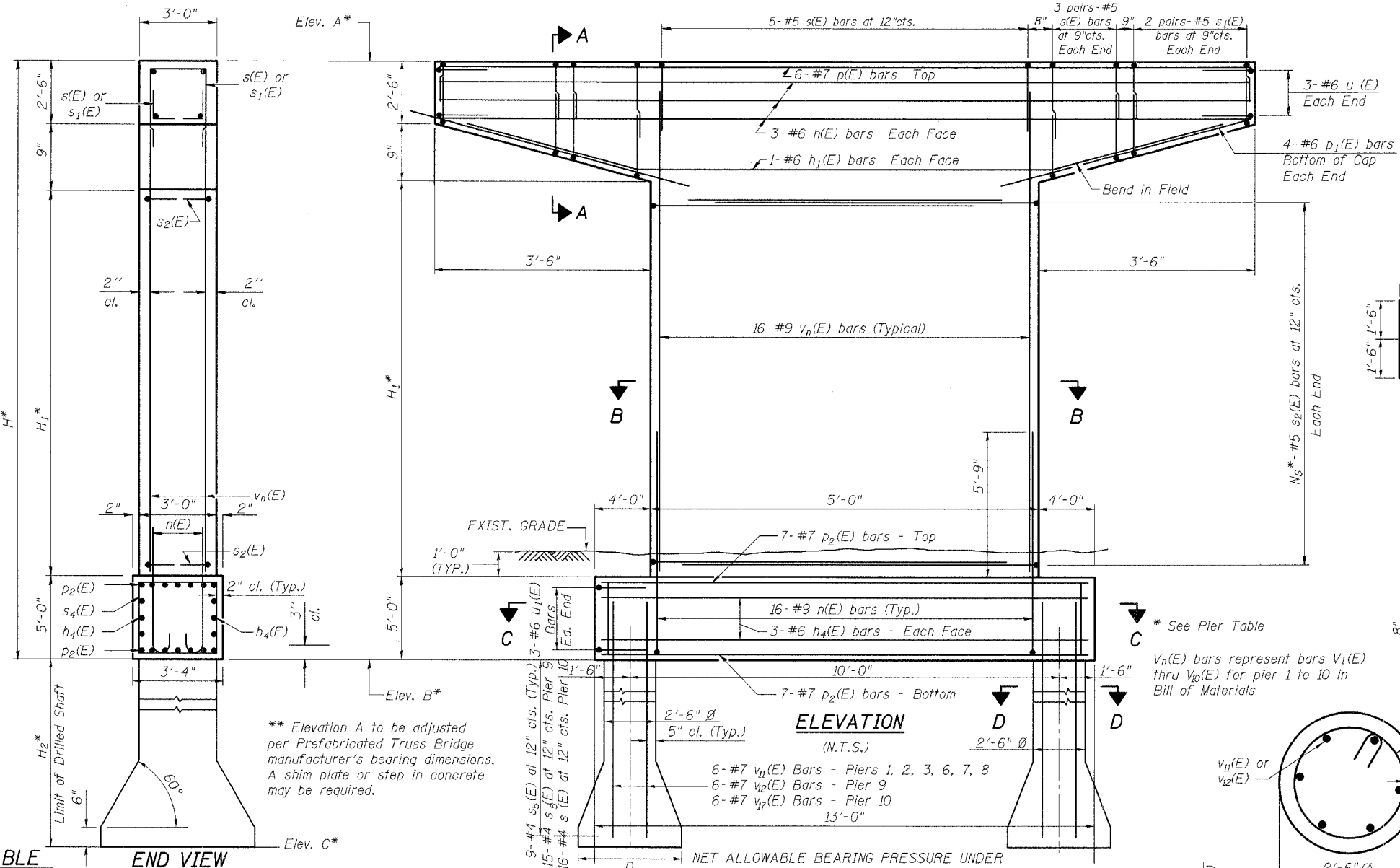


SECTION D-D



BAR s4(E)

BAR n(E) & n1(E) BAR s5(E) & s7(E) BAR s6(E)



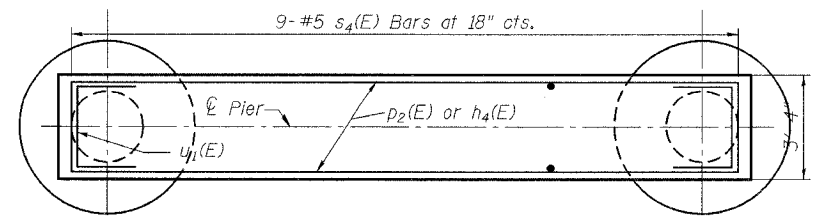
ELEVATION (N.T.S.)

NET ALLOWABLE BEARING PRESSURE UNDER THE DRILLED SHAFTS = 7,500 psf (TO BE INSPECTED AND VERIFIED BY SOILS ENGINEER)

PIER TABLE

PIER NO.	STATION	ELEV. A	ELEV. B	H (FT)	H1(FT)	Ns	D (FT)	H2(FT)	Elev. C
1	14+21.022	757.98	736.30	21.68	13.43	14	7	9	727.30
2	15+19.022	761.39	735.34	26.05	17.80	19	7	9	726.34
3	16+17.022	764.27	732.62	31.65	23.40	24	7	9	723.62
4**	16+92.741	766.79	731.89	34.90	26.65	28	8	9	722.89
5**	18+35.630	767.33	736.06	31.27	23.02	24	8	9	727.06
6	18+95.580	765.58	734.97	30.61	22.36	23	7	9	725.97
7	19+71.580	762.69	734.37	28.32	20.07	21	6.5	9	725.37
8	20+31.655	760.91	733.04	27.87	19.62	21	6	9	724.04
9	20+92.364	758.90	734.35	24.55	16.30	17	6.5	15	719.35
10	21+72.364	755.94	735.10	20.84	12.59	14	6.5	16	719.10

END VIEW



SECTION C-C

PREPARED FOR:
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 666 S. MAIN STREET
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REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

PIERS 1, 2, 3 & 6 THRU 10 - DETAILS - SHEET 1 OF 2
 PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD

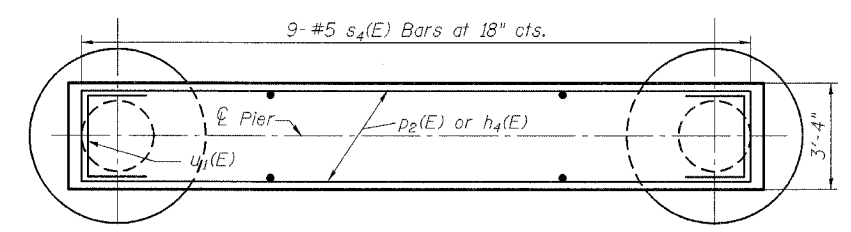
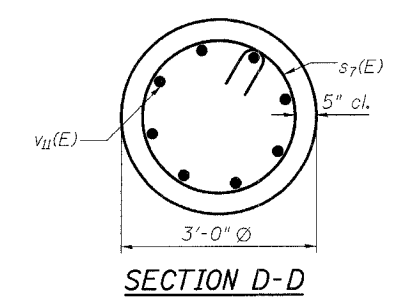
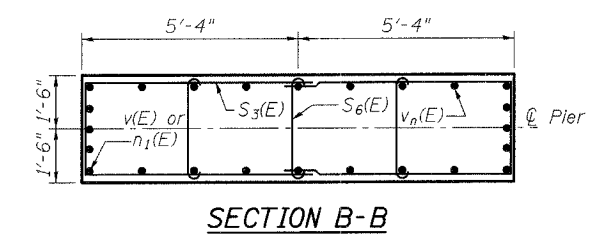
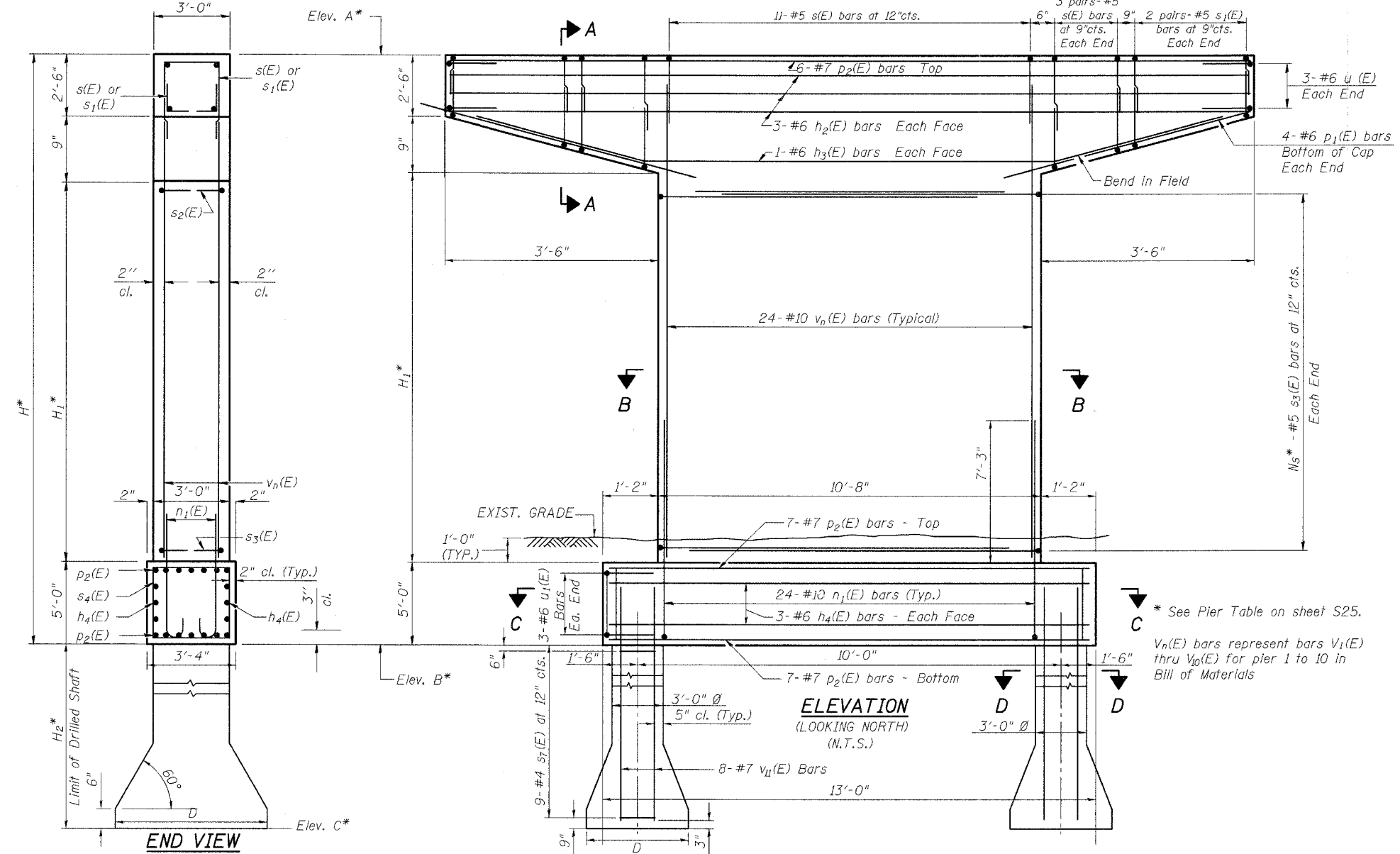
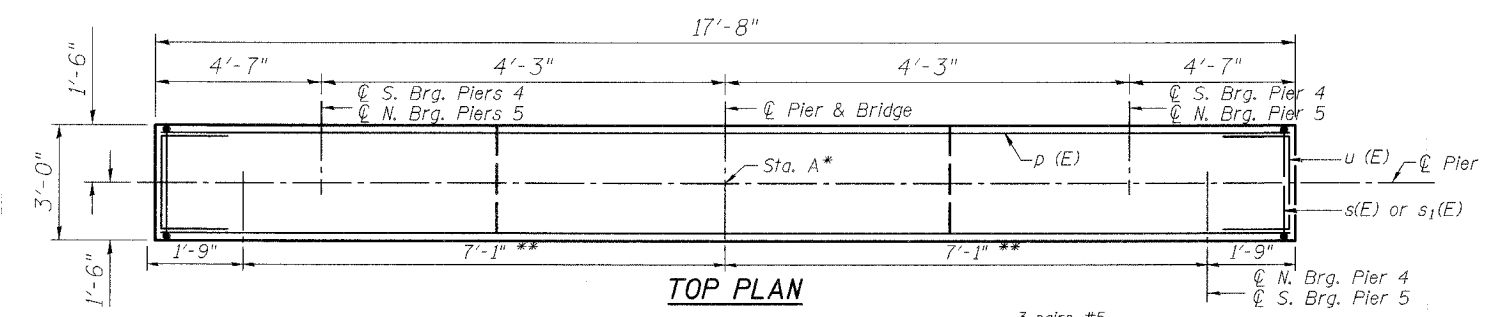
FILE NAME: PIER	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: KMS	DATE: 12-21-04	SCALE: ----	38 of 54

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 SHEET S25 OF S29
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CONTRACT NO. 83560

Notes:

Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For bearing anchor bolt locations see sheet S10, S16 & S17.
 All edges shall have $\frac{3}{4}$ " Chamfer.
 ** Dimensions to be adjusted as per Prefabricated Truss Bridge manufacturer's plans. Notify Engineer for any discrepancies.



* See Pier Table on sheet S25.
 v_n(E) bars represent bars v₁(E) thru v₁₀(E) for pier 1 to 10 in Bill of Materials

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 WHEATON, ILLINOIS 60187



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REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

PIERS 4 & 5 - DETAILS - SHEET 2 OF 2				
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD				
FILE NAME: PIER	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: ----	SHEET NO. 39 of 54
DISC. NUMBER: 551007	DRN. BY: KMS	DATE: 04-26-04	SCALE: ----	

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 1 of 2
Date 2/27/04

ROUTE DESCRIPTION Wheaton Park District Pedestrian Path/Bridge over UPRR
SECT. 94-P4031-00-BR STRUCT. NO. DRILLED BY TSC/L-59.861
COUNTY DuPage LOCATION S. TWP. RING.

Boring No.	Station	Offset	Surface Elev.	D	B	L	O	W	Qu	W	Surface Water Elev.	D	B	L	O	W	Qu	W
BH-1	13+50	0.00ft	743.20	H	S	T	S	T	ft	%		H	S	T	S	ft	%	
Black SILTY CLAY (topsoil), moist																		
146.20																		
Very tough gray CLAY, moist A-6/A-7-6																		
15.4																		
22.8																		
78.20																		
Very tough to hard brown to brownish-gray CLAY, moist A-6																		
15.9																		
16.9																		
Sample 5: LL=35/PL=5/PH=20																		
17.6																		
18.4																		
72.70																		
Very tough gray CLAY, moist A-6/A-7-6																		
14.7																		
14.9																		
16.8																		
17.4																		

SPT, (N) = Sum of last two blow values in sample. (Q) B-Bulge S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 2 of 2
Date 2/27/04

STRUCTURE NO. 94-P4031-00-BR
ROUTE SECTION COUNTY DuPage

Boring No.	Station	Offset	Elevation	D	B	L	O	W	Qu	W
BH-1	13+50	0.00ft	683.20	H	S	T	S	T	ft	%
Firm gray silty SAND and GRAVEL, wet A-2-4										
696.20										
Firm to dense gray SAND and GRAVEL, saturated A-1-a										
683.20										
End of Boring at 60.0'										
CME 750 ATV Dr-Rig (#53) CME Automatic Hammer 3.25" (83 mm) ID HSA										

SPT, (N) = Sum of last two blow values in sample. (Q) B-Bulge S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

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Date 2/26/04

ROUTE DESCRIPTION Wheaton Park District Pedestrian Path/Bridge over UPRR
SECT. 94-P4031-00-BR STRUCT. NO. DRILLED BY TSC/L-59.861
COUNTY DuPage LOCATION S. TWP. RING.

Boring No.	Station	Offset	Surface Elev.	D	B	L	O	W	Qu	W	Surface Water Elev.	D	B	L	O	W	Qu	W
BH-2	13+50	0.00ft	741.20	H	S	T	S	T	ft	%		H	S	T	S	ft	%	
FILL - Black SILTY CLAY (topsoil)																		
180.40																		
Very tough gray CLAY, moist A-6																		
78.20																		
Tough gray CLAY, moist A-6																		
70.20																		
FILL - Brown, black and gray CLAY, little topsoil, moist A-7-6																		
28.4																		
28.4																		
78.70																		
Black CLAY (topsoil), very moist A-7-6																		
40.9																		
73.20																		
Sample 4: LL=52/PL=19/PH=33																		
26.2																		
Very tough brown and gray CLAY, trace organic, moist A-7-6																		
24.8																		
72.80																		
Very tough gray CLAY, moist A-6																		
13.7																		
14.7																		
15.5																		
16.4																		
17.6																		
76.10																		
Very tough to tough gray CLAY, moist A-6																		
18.0																		
12.4																		
69.20																		
Tough gray CLAY, moist A-6																		
68.70																		
17.0																		

SPT, (N) = Sum of last two blow values in sample. (Q) B-Bulge S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 2 of 2
Date 2/26/04

STRUCTURE NO. 94-P4031-00-BR
ROUTE SECTION COUNTY DuPage

Boring No.	Station	Offset	Elevation	D	B	L	O	W	Qu	W
BH-2	13+50	0.00ft	692.20	H	S	T	S	T	ft	%
Firm gray SANDY LOAM, very moist A-2-4										
683.20										
Firm to dense gray SAND and GRAVEL, saturated A-1-a										
678.20										
Dense gray SANDY LOAM, wet A-2-4										
676.20										
End of Boring at 65.0'										
CME 750 ATV Dr-Rig (#53) CME Automatic Hammer 3.25" (83 mm) ID HSA										

SPT, (N) = Sum of last two blow values in sample. (Q) B-Bulge S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 1 of 2
Date 2/23/04

ROUTE DESCRIPTION Wheaton Park District Pedestrian Path/Bridge over UPRR
SECT. 94-P4031-00-BR STRUCT. NO. DRILLED BY TSC/L-59.861
COUNTY DuPage LOCATION S. TWP. RING.

Boring No.	Station	Offset	Surface Elev.	D	B	L	O	W	Qu	W	Surface Water Elev.	D	B	L	O	W	Qu	W
BH-3	13+53	0.00ft	738.90	H	S	T	S	T	ft	%		H	S	T	S	ft	%	
Black SILTY CLAY (topsoil)																		
738.90																		
Tough to stiff brown to brown and gray CLAY, moist to very moist A-7-6																		
25.3																		
25.5																		
25.9																		
25.9																		
730.90																		
Stiff brown CLAY, occasional sand seams, very moist A-6/A-7-6																		
22.2																		
728.90																		
Hard gray CLAY, moist A-6																		
13.6																		
14.4																		
720.90																		
Hard gray CLAY LOAM, moist A-4/A-6																		
9.9																		
78.90																		
Very tough to hard gray CLAY, moist A-6																		
20.4																		
16.2																		

SPT, (N) = Sum of last two blow values in sample. (Q) B-Bulge S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 2 of 2
Date 2/23/04

STRUCTURE NO. 94-P4031-00-BR
ROUTE SECTION COUNTY DuPage

Boring No.	Station	Offset	Elevation	D	B	L	O	W	Qu	W
BH-3	13+53	0.00ft	688.90	H	S	T	S	T	ft	%
Firm gray SAND, saturated A-1-b										
686.90										
Loose gray SILTY LOAM, moist A-4										
13.0										
68.90										
Very dense silty SAND and GRAVEL, occasional Cobbles, A-2-4										
50/2"										
578.90										
End of Boring at 60.0'										
CME 750 ATV Dr-Rig (#53) CME Automatic Hammer 3.25" (83 mm) ID HSA										

SPT, (N) = Sum of last two blow values in sample. (Q) B-Bulge S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 1 of 2
Date 2/23/04

ROUTE DESCRIPTION Wheaton Park District Pedestrian Path/Bridge over UPRR
SECT. 94-P4031-00-BR STRUCT. NO. DRILLED BY TSC/L-59.861
COUNTY DuPage LOCATION S. TWP. RING.

Boring No.	Station	Offset	Surface Elev.	D	B	L	O	W	Qu	W	Surface Water Elev.	D	B	L	O	W	Qu	W
BH-4	13+53	0.00ft	739.90	H	S	T	S	T	ft	%		H	S	T	S	ft	%	
FILL - Black and brown CLAY, trace topsoil and roots, moist A-7-6																		
2.9																		
2.9																		
736.90																		
FILL - Black, brown and gray CLAY, trace to little wood and topsoil, very moist A-7-6																		
47.5																		
734.90																		
Tough brown CLAY, trace organic seams, moist to very moist A-6																		
14.3																		
20.3																		
729.90																		
Very tough to tough gray CLAY, moist A-6																		
15.2																		
13.0																		
724.90																		
(Qp = 2.0 - 2.5 tsf)																		
Tough gray SILTY CLAY LOAM, moist A-6																		
9.8																		
719.90																		
Tough gray silty CLAY LOAM, occasional Cobbles, very moist A-6																		
13.3																		
Firm gray SAND and GRAVEL, occasional Cobbles, saturated A-1-a																		
715.90																		
Very Tough gray silty CLAY B LOAM, moist A-6																		
1.9																		
712.90																		
Sample 9: LL=29/PL=2/PH=6																		
Hard to very tough gray CLAY, moist A-6																		
18.3																		
707.90																		
Firm gray silty SAND and GRAVEL, wet A-2-4																		
18.3																		

SPT, (N) = Sum of last two blow values in sample. (Q) B-Bulge S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 2 of 2
Date 2/23/04

STRUCTURE NO. 94-P4031-00-BR
ROUTE SECTION COUNTY DuPage

Boring No.	Station	Offset	Elevation	D	B	L	O	W	Qu	W
BH-4	13+53	0.00ft	689.90	H	S	T	S	T	ft	%
Firm gray silty SAND and GRAVEL, wet A-2-4										
687.90										
Loose gray SILTY LOAM, some sand, wet A-4										
11.3										
682.90										
Firm gray SANDY LOAM, wet A-4										
9.9										
677.90										
Firm gray SANDY LOAM, wet A-2-4										
11.4										
672.90										
Firm gray clayey SAND and GRAVEL, wet A-2-4										
10.1										
669.90										
End of Boring at 70.0'										
CME 750 ATV Dr-Rig (#53) CME Automatic Hammer 3.25" (83 mm) ID HSA										

SPT, (N) = Sum of last two blow values in sample. (Q) B-Bulge S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

PREPARED FOR:
WHEATON PARK DISTRICT
666 S. MAIN STREET
WHEATON, ILLINOIS 60187



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NO.		DATE		DESCRIPTION	

BORINGS - SHEET 1 OF 3					
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD					
FILE NAME: BORING	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.:	SHEET NO. 40 of 54	
DISC. NUMBER: 551007	DRN. BY: MD	DATE: 04-26-04	SCALE: ---		

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 1 of 2
Date 8/25/99

ROUTE _____ DESCRIPTION Wheaton Park District Pedestrian Path/Bridge over UPRR

SECT. 94-P4031-00-BR STRUCT. NO. _____ DRILLED BY JSC/L-48240

COUNTY DuPage LOCATION _____ S. _____, TWP. _____, RNC. _____

Boring No.	Station	Offset	Surface Elev.	D	B	L	O	W	H	S	Qu	W	tsf	%	Surface Water Elev.	Groundwater Elev.	H	S	Qu	W	tsf	%	
B-10	18+30	43.00 FT LT	748.30	2	3	4										590.3							
Black CLAY (topsoil), moist A-7-6																							
738.80																							
Hard brown CLAY, trace gravel, moist A-7-6																							
735.80																							
(Sample 3; Op = 4.5+ tsf)																							
Hard to very tough brown and gray CLAY, trace gravel, moist A-6																							
730.80																							
Firm gray SAND, trace silt, moist A-2-4																							
726.80																							
Firm gray SILT, little sand, moist A-4																							
724.30																							
Very tough brownish-gray CLAY, trace gravel, moist A-6																							
720.80																							
Firm gray silty SAND, moist A-1/A-3																							
717.30																							
Firm gray SILT and layered CLAY, moist A-4/A-6																							
713.30																							
Firm to dense gray SILTY LOAM, moist to damp A-4																							
709.30																							
Very tough gray CLAY, trace gravel, moist A-6																							
705.30																							

SPT (N) = Sum of last two blow values in sample. (Qu) B-Buige S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

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Date 8/25/99

STRUCTURE NO. _____

ROUTE _____

SECTION 94-P4031-00-BR

COUNTY DuPage

Boring No.	Station	Offset	Elevation	D	B	L	O	W	H	S	Qu	W	tsf	%
B-10	18+30	43.00 FT LT	696.30											
Firm to dense gray SILTY LOAM, moist to damp A-4														
688.30														
Firm gray SAND and GRAVEL, saturated A-1-a														
678.30														
Loose gray SAND, saturated A-3														
674.30														
Firm gray SILT and layered CLAY, moist A-4/A-6														
670.30														
End of Boring at 70.0'														
CME 750 ATV Drill Rig (#53)														
CME Automatic Hammer														
3.25" (83 mm) ID HSA														

SPT (N) = Sum of last two blow values in sample. (Qu) B-Buige S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 1 of 2
Date 8/24/99

ROUTE _____ DESCRIPTION Wheaton Park District Pedestrian Path/Bridge over UPRR

SECT. 94-P4031-00-BR STRUCT. NO. _____ DRILLED BY JSC/L-48240

COUNTY DuPage LOCATION _____ S. _____, TWP. _____, RNC. _____

Boring No.	Station	Offset	Surface Elev.	D	B	L	O	W	H	S	Qu	W	tsf	%	Surface Water Elev.	Groundwater Elev.	H	S	Qu	W	tsf	%	
B-11	18+30	40.00 FT RT	743.40													707.1							
Black CLAY (topsoil), moist A-7-6																							
740.40																							
Tough to very tough gray CLAY, trace gravel, moist A-6																							
736.40																							
Hard to very tough brown CLAY, trace gravel, moist A-6																							
732.40																							
(Sample 14; Op = 3.0 tsf)																							
Firm brown and gray SILTY LOAM, trace gravel, moist A-4																							
728.40																							
Hard to very tough gray CLAY, trace gravel, moist A-6																							
724.40																							
Firm gray SILT, trace gravel, moist A-4																							
720.40																							
(Samples 8 & 9; Op = 3.0-3.5 tsf)																							
Firm gray SILTY LOAM, trace gravel, moist A-4																							
716.40																							
Firm gray SAND and GRAVEL, saturated A-1-a																							
712.40																							

SPT (N) = Sum of last two blow values in sample. (Qu) B-Buige S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

Page 2 of 2
Date 8/24/99

STRUCTURE NO. _____


ROUTE _____

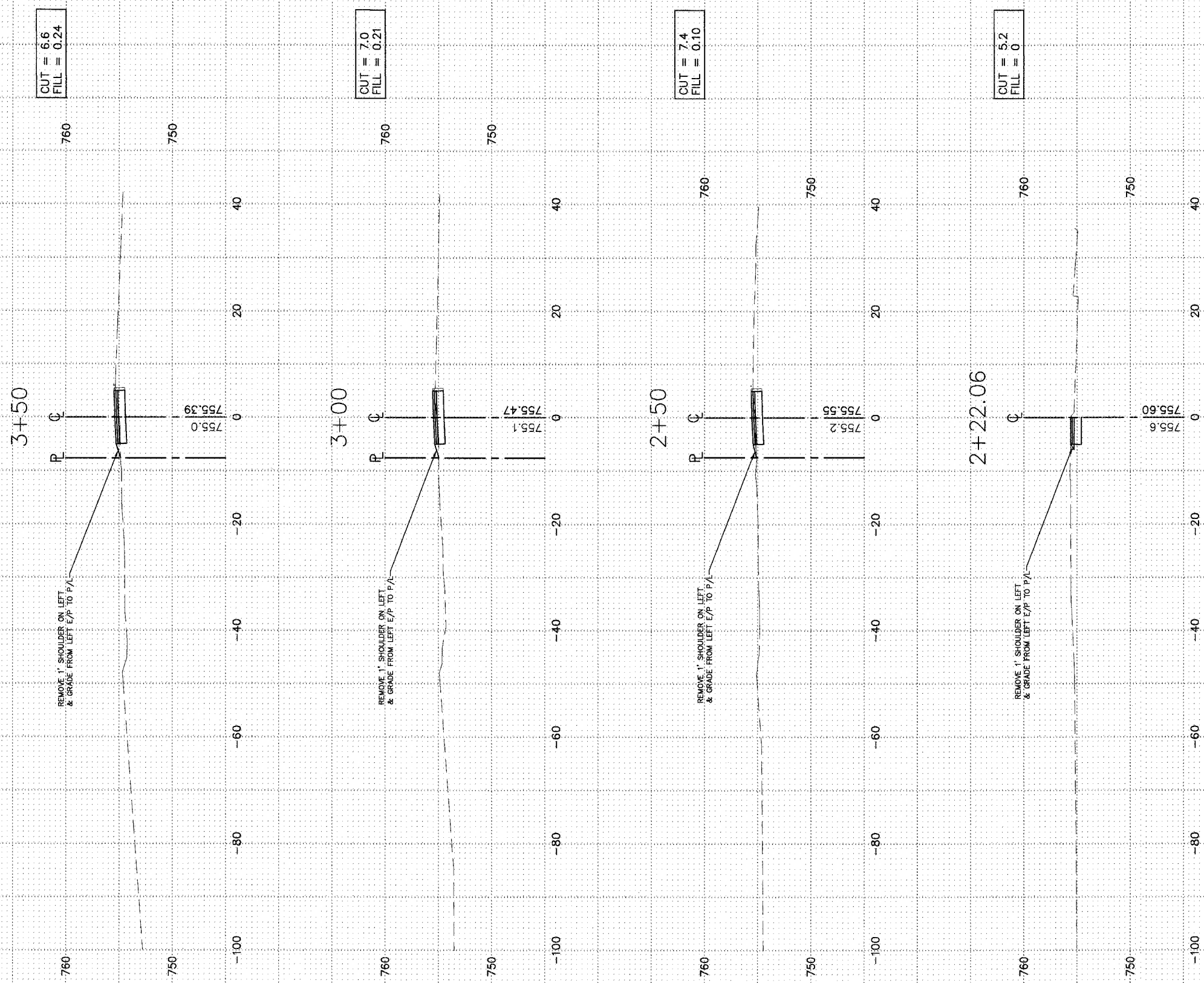
SECTION 94-P4031-00-BR

COUNTY DuPage

Boring No.	Station	Offset	Elevation	D	B	L	O	W	H	S	Qu	W	tsf	%
B-11	18+30	40.00 FT RT	693.40											
Firm gray SAND and GRAVEL, saturated A-1-a														
688.40														
Firm gray SILT, trace gravel, moist A-4														
678.40														
Firm gray SAND, trace gravel, saturated A-1-b														
674.40														
Firm gray silty SAND, saturated A-2-4														
670.40														
End of Boring at 70.0'														
CME 750 ATV Drill Rig (#53)														
CME Automatic Hammer														
3.25" (83 mm) ID HSA														

SPT (N) = Sum of last two blow values in sample. (Qu) B-Buige S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

PREPARED FOR: WHEATON PARK DISTRICT 666 S. MAIN STREET WHEATON, ILLINOIS 60187	 CEMCON, Ltd. Consulting Engineers, Land Surveyors & Planners 2280 White Oak Circle, Suite 100 Aurora, Illinois 60504-9675 Ph: 630.862.2100 Fax: 630.862.2199 E-Mail: cadd@cemcon.com Website: www.cemcon.com	PREPARED BY: JSC/L-48240	REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DATE	DESCRIPTION							BORINGS - SHEET 3 OF 3 PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD
NO.	DATE	DESCRIPTION											
FILE NAME: BORING DISC. NUMBER: 551007		DSGN. BY: MMH DRN. BY: MD		JOB NO.: 551.007 DATE: 04-26-04		FLD. BK./PG. # SCALE: ----		SHEET NO. 42 of 54					



REMOVE 1' SHOULDER ON LEFT
& GRADE FROM LEFT E/P TO P/L

REMOVE 1' SHOULDER ON LEFT
& GRADE FROM LEFT E/P TO P/L

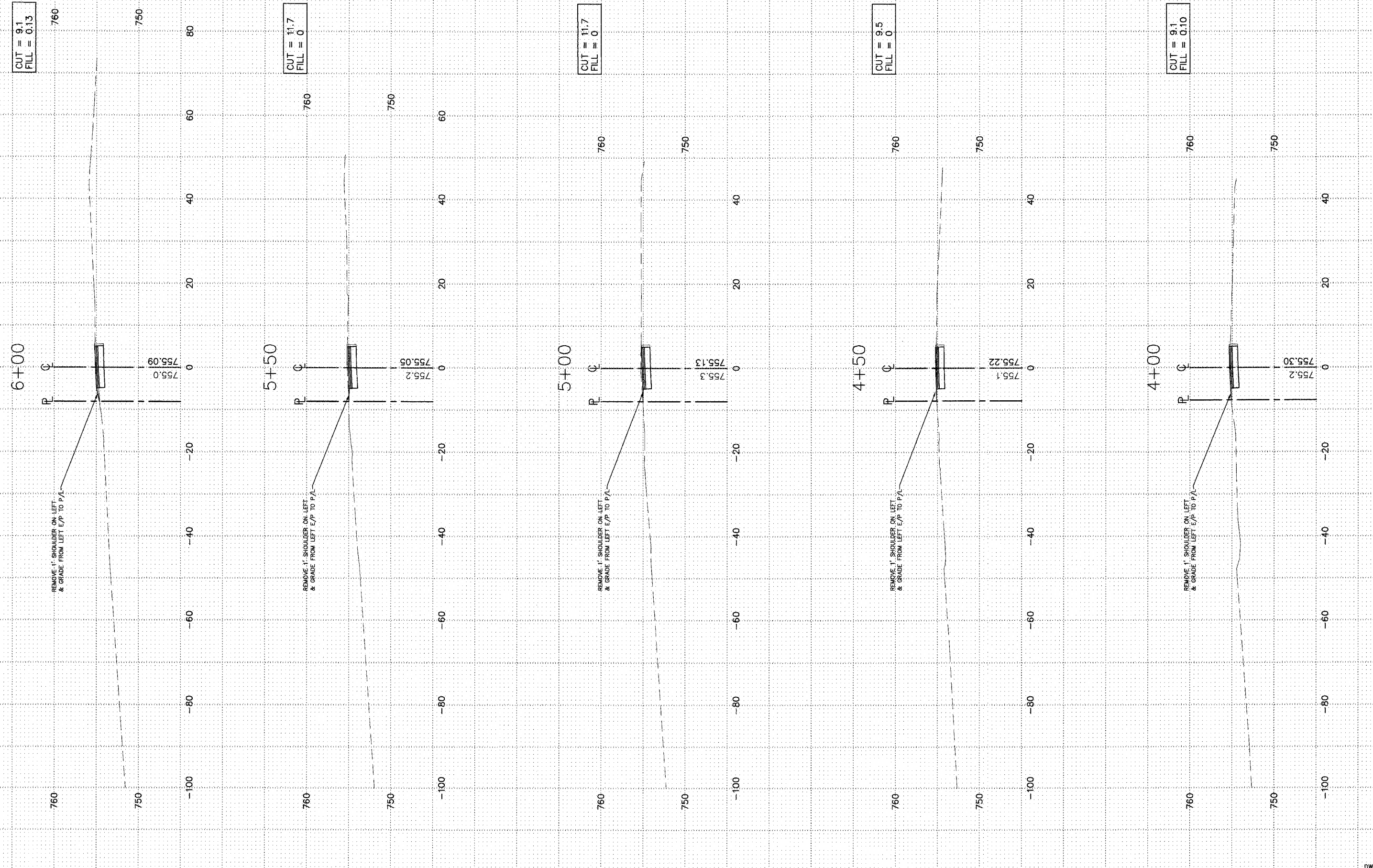
REMOVE 1' SHOULDER ON LEFT
& GRADE FROM LEFT E/P TO P/L

REMOVE 1' SHOULDER ON LEFT
& GRADE FROM LEFT E/P TO P/L

PEDESTRIAN PATH STA. 2+22.06 TO STA. 3+50.00

FILE NAME: XSECTION	DSGN. BY: CA	JOB NO.: 551.007	FLD. BK./PG.: ---	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: 1" = 10' H, 1" = 5' V	43 of 54

DWG: BRIDGE_01



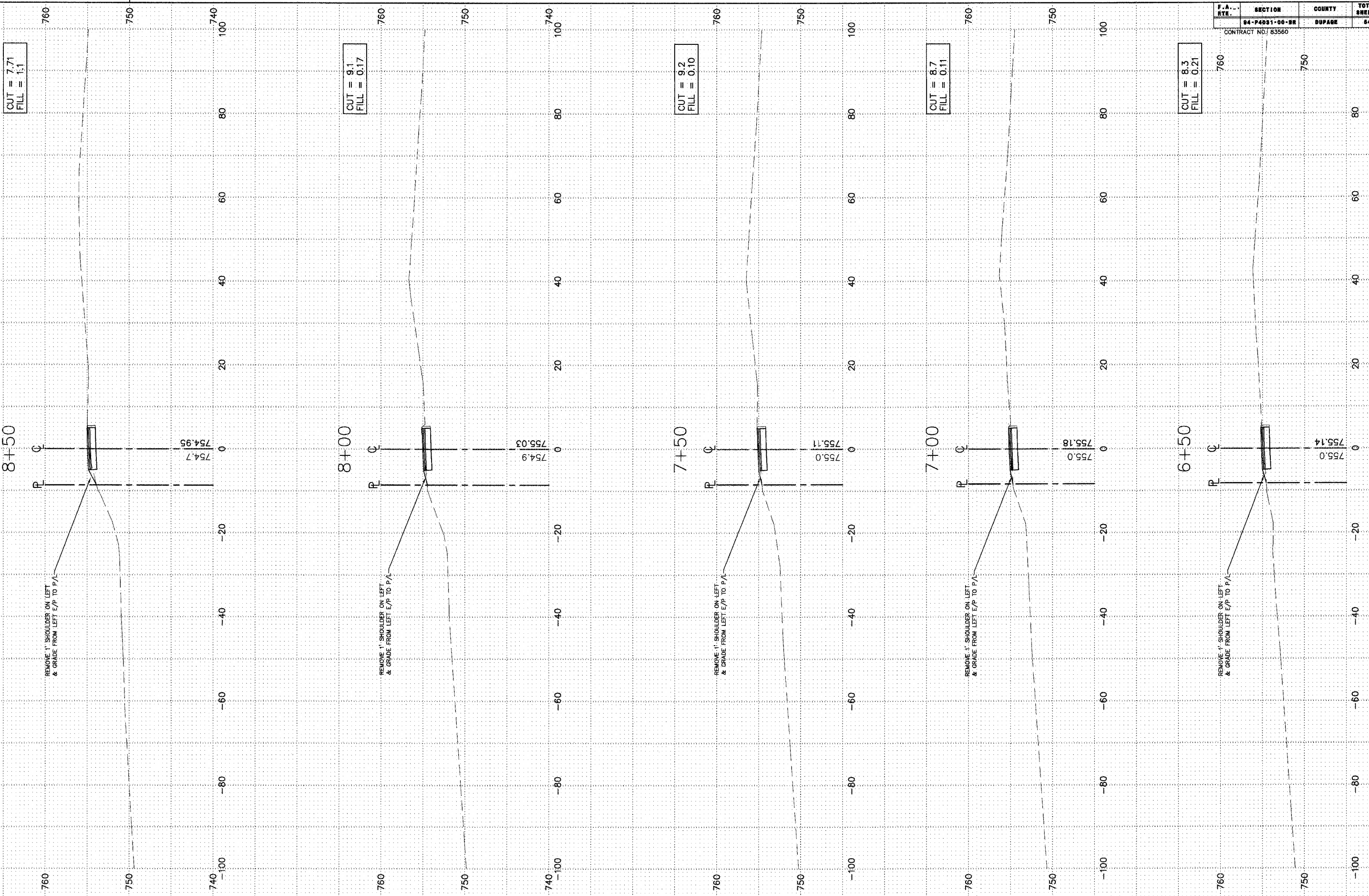
PEDESTRIAN PATH STA. 4+00.00 TO STA. 6+00.00				
FILE NAME: XSECTION	DSGN. BY: CA	JOB NO.: 551.007	FLD. BK./PG.: ---	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: 1"=10' H, 1"=5' V	44 of 54

DWG: BRIDGE_02

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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94-P4031-00-BR <td></td> <td>DUPAGE</td> <td>54</td> <td>45</td>		DUPAGE	54	45

CONTRACT NO. 83560



REMOVE 1' SHOULDER ON LEFT
& GRADE FROM LEFT E/P TO P/A

REMOVE 1' SHOULDER ON LEFT
& GRADE FROM LEFT E/P TO P/A

REMOVE 1' SHOULDER ON LEFT
& GRADE FROM LEFT E/P TO P/A

REMOVE 1' SHOULDER ON LEFT
& GRADE FROM LEFT E/P TO P/A

REMOVE 1' SHOULDER ON LEFT
& GRADE FROM LEFT E/P TO P/A

PEDESTRIAN PATH STA. 6+50.00 TO STA. 8+50.00

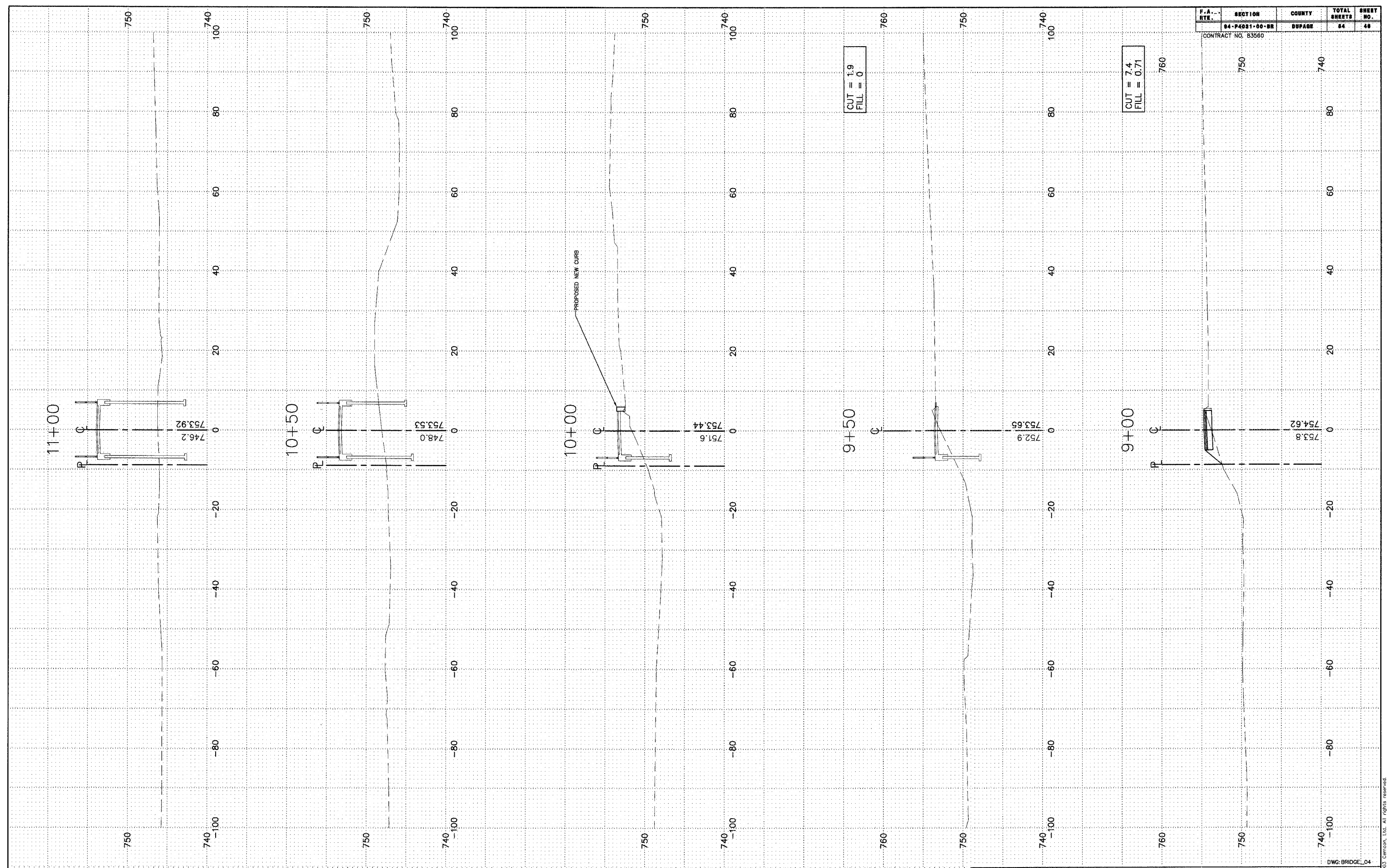
FILE NAME: XSECTION	DSGN. BY: CA	JOB NO.: 551.007	FLD. BK./PG.: ---	SHEET NO. 45 of 54
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: 1" = 10' H, 1" = 5' V	

DWG: BRIDGE_03

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F.A. RYE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	04-P4031-00-BR	DUPAGE	54	46

CONTRACT NO. 83580



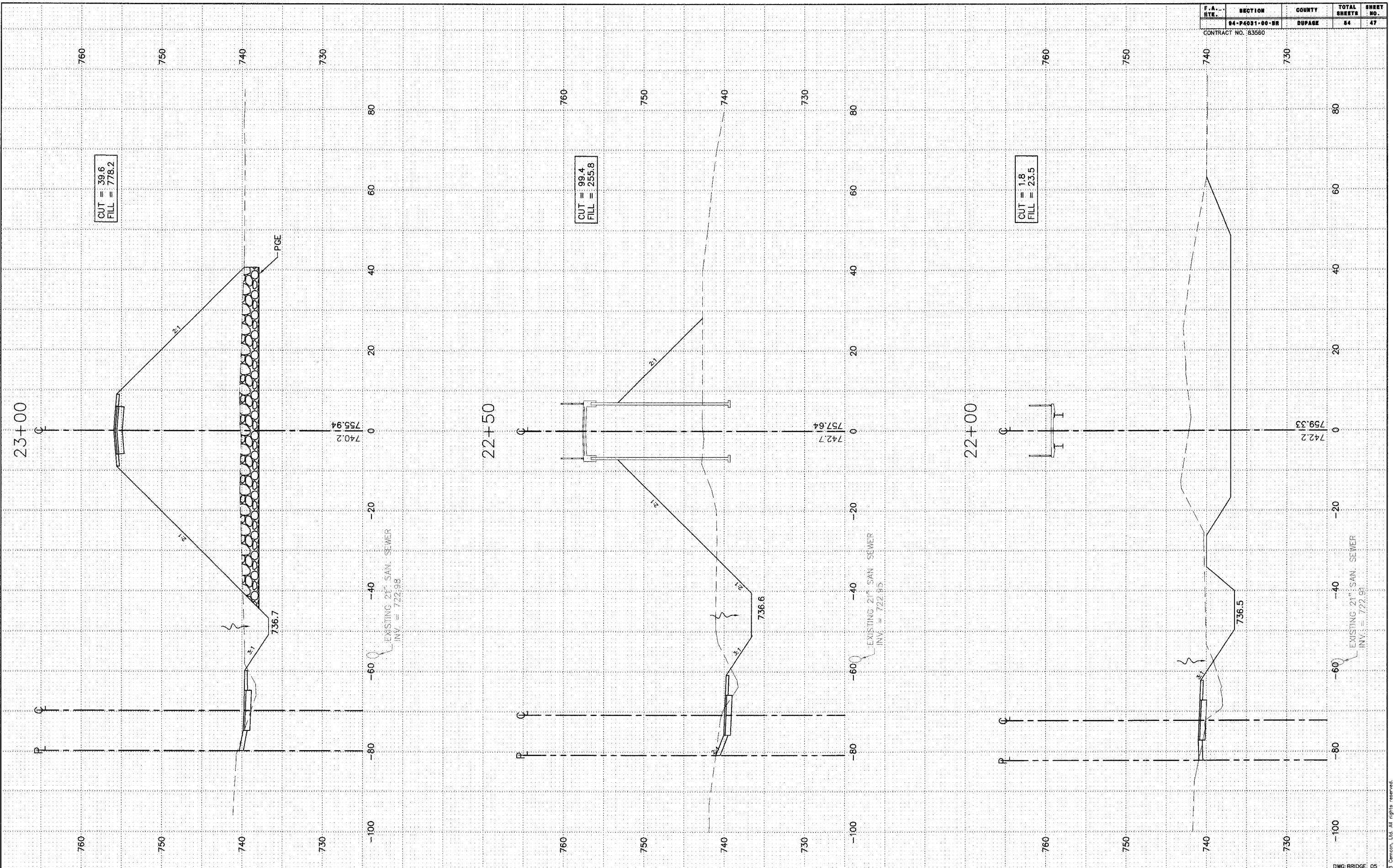
PEDESTRIAN PATH STA. 9+00.00 TO STA. 11+00.00				
FILE NAME: XSECTION	DSGN. BY: CA	JOB NO.: 551.007	FLD. BK./PG.: ---	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: 1" = 10' H, 1" = 5' V	46 of 54

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DWG: BRIDGE_04

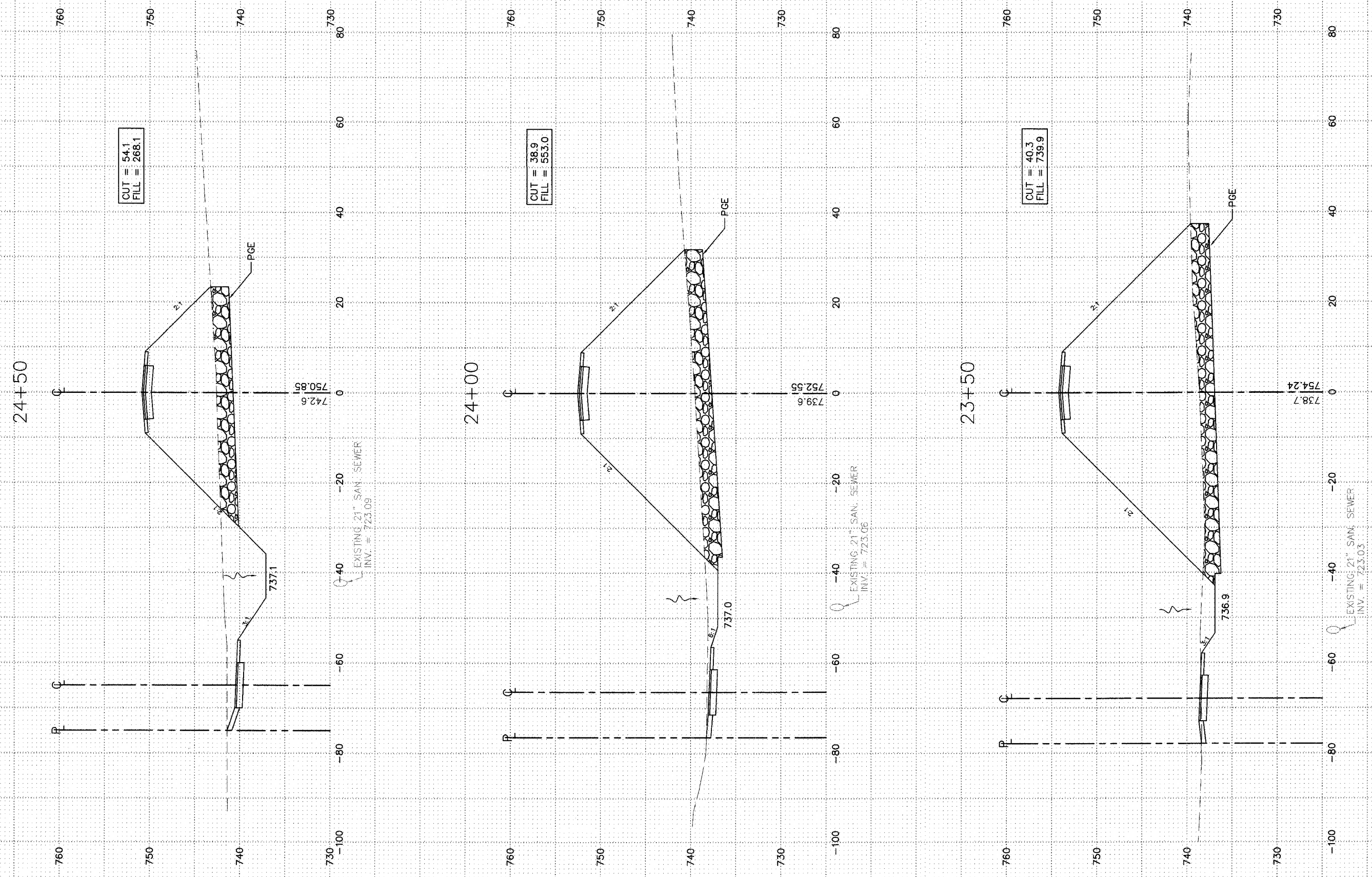
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
84-PA031-00-BR	DUPAGE		54	47

CONTRACT NO. 83560



BIKE PATH STA. 22+00.00 TO STA. 23+00.00				
FILE NAME: XSECTION	DSGN. BY: CA	JOB NO.: 551.007	FLD. BK./PG.: ----	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: 1" = 10' H, 1" = 5' V	47 of 54

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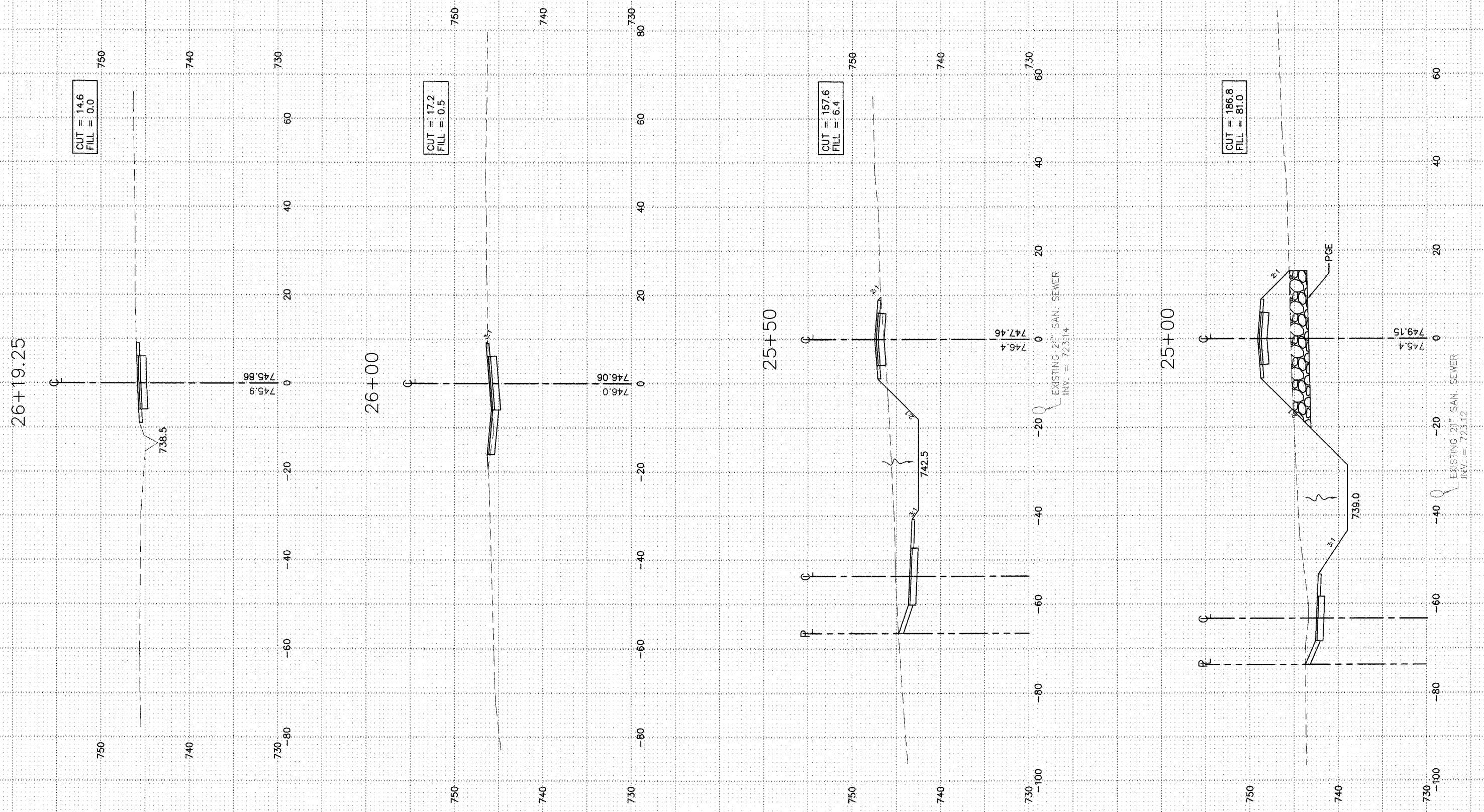
BIKE PATH STA. 23+50.00 TO STA. 24+50.00

FILE NAME: XSECTION	DSGN. BY: CA	JOB NO.: 551.007	FLD. BK./PG.: ----	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: 1" = 10' H, 1" = 5' V	48 of 54

DWG: BRIDGE_06

F.A. RY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
84-P4031-00-NR	DUPAGE	DUPAGE	84	49

CONTRACT NO. 83560

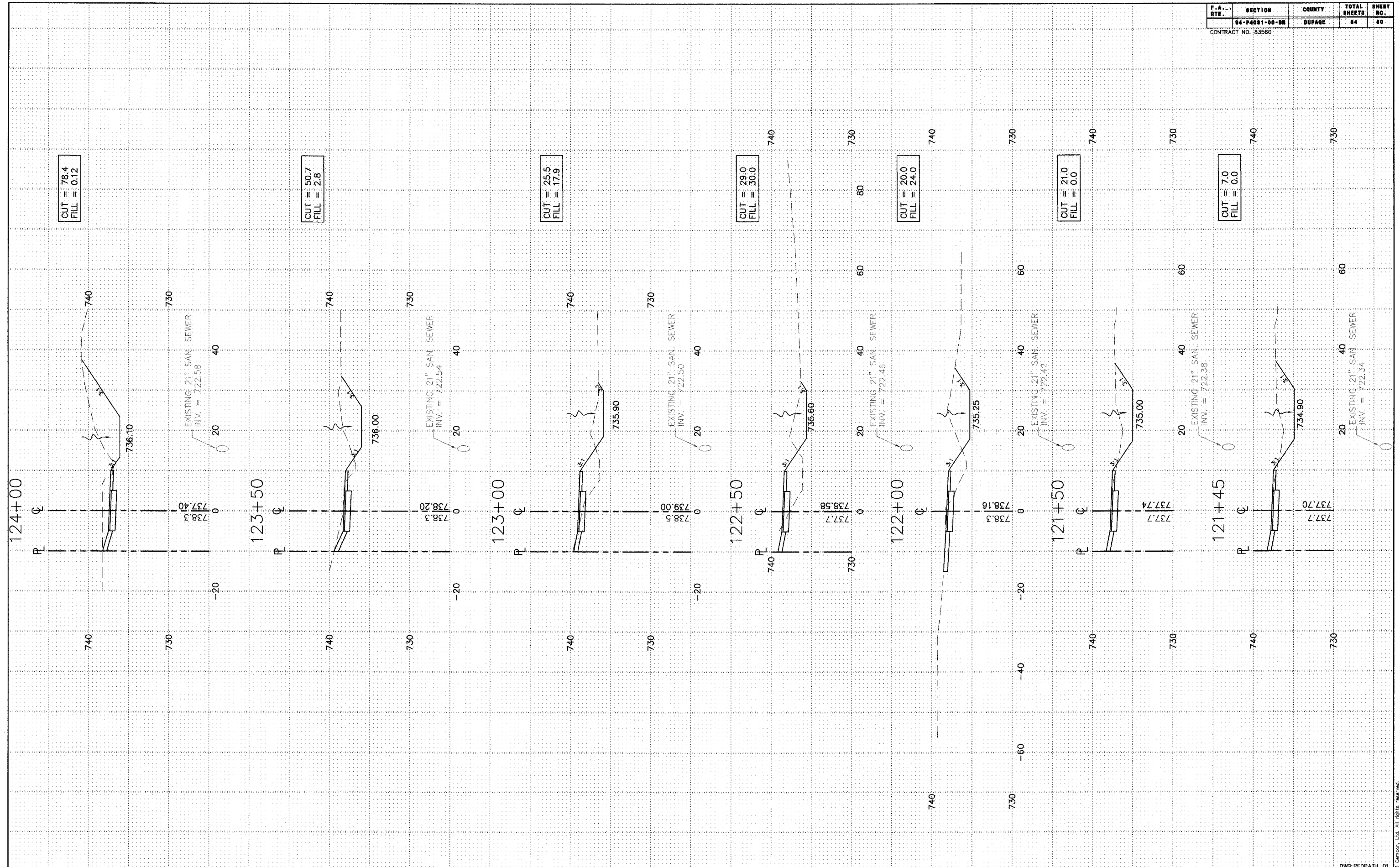


BIKE PATH STA. 25+00.00 TO STA. 26+19.25				
FILE NAME: XSECTION	DSGN. BY: CA	JOB NO.: 551.007	FLD. BK./PG.: ----	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: 1" = 10' H, 1" = 5' V	49 of 54

DWG: BRIDGE_07

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CONTRACT NO. 83560



CUT = 78.4
FILL = 0.12

CUT = 50.7
FILL = 2.8

CUT = 25.5
FILL = 17.9

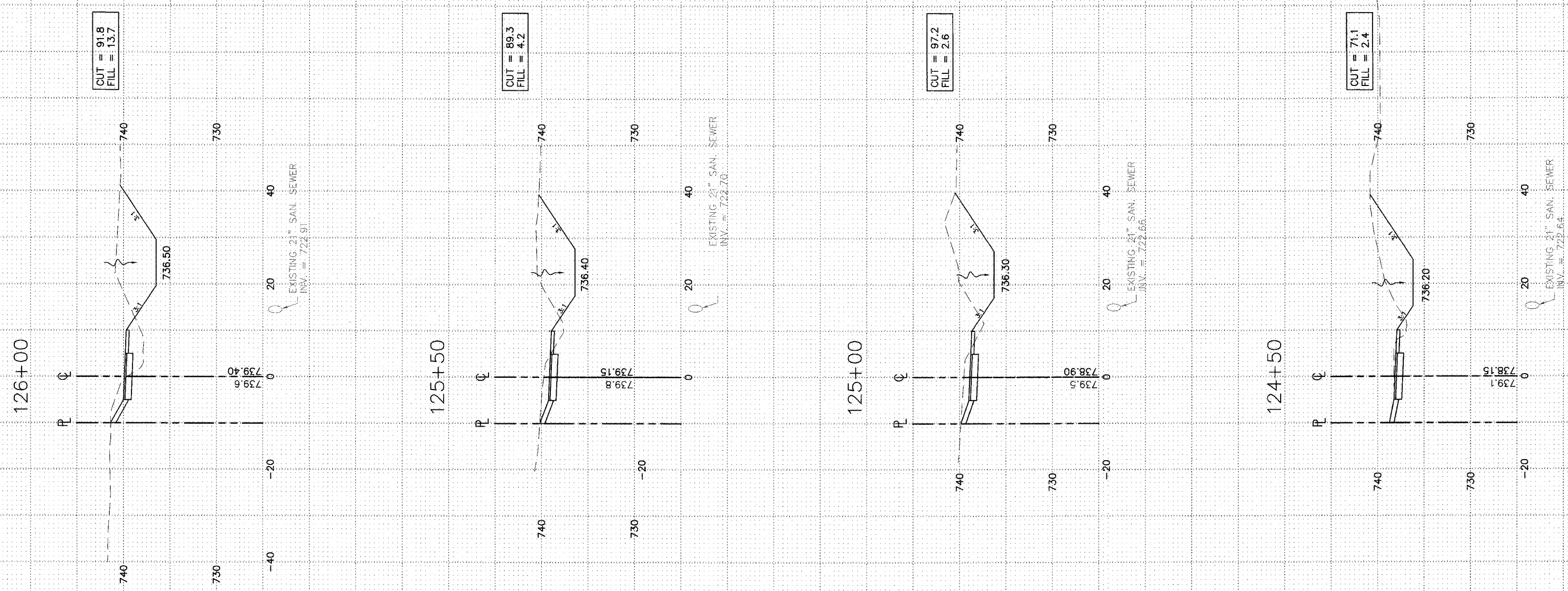
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FILL = 30.0

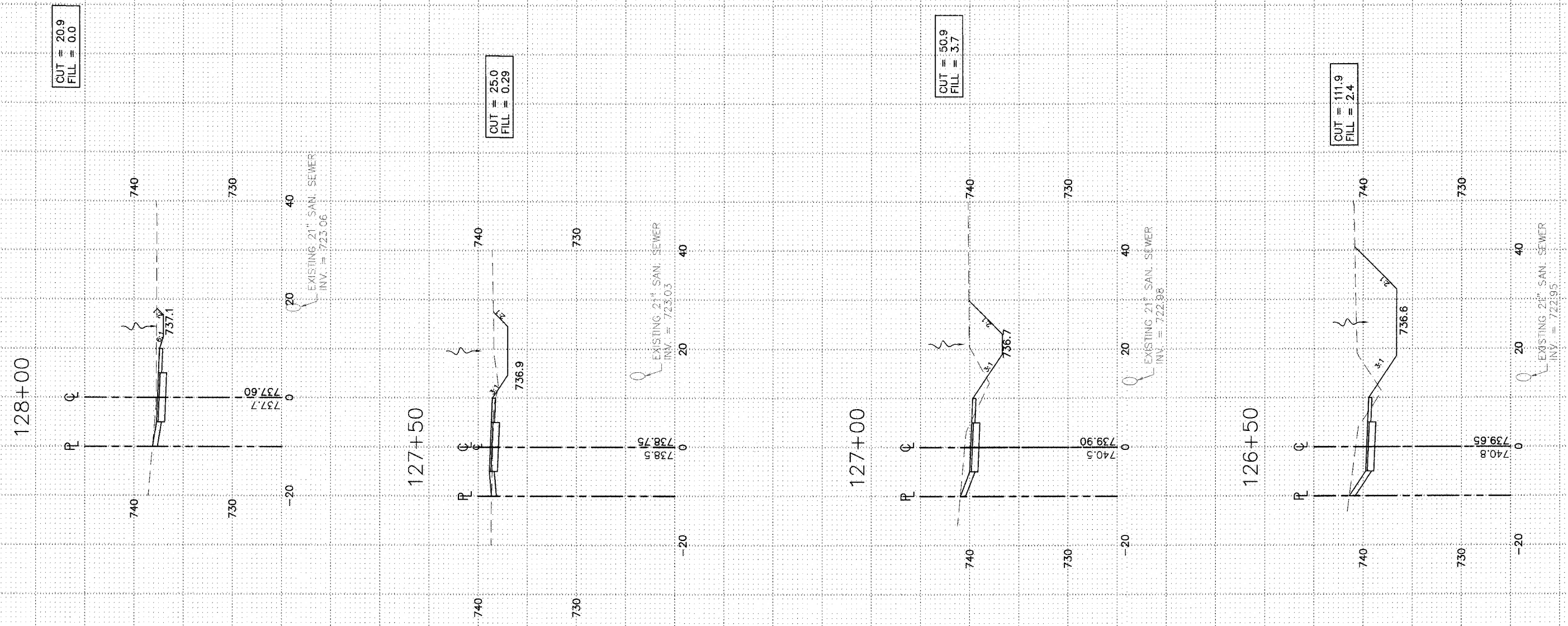
CUT = 20.0
FILL = 24.0

CUT = 21.0
FILL = 0.0

CUT = 7.0
FILL = 0.0

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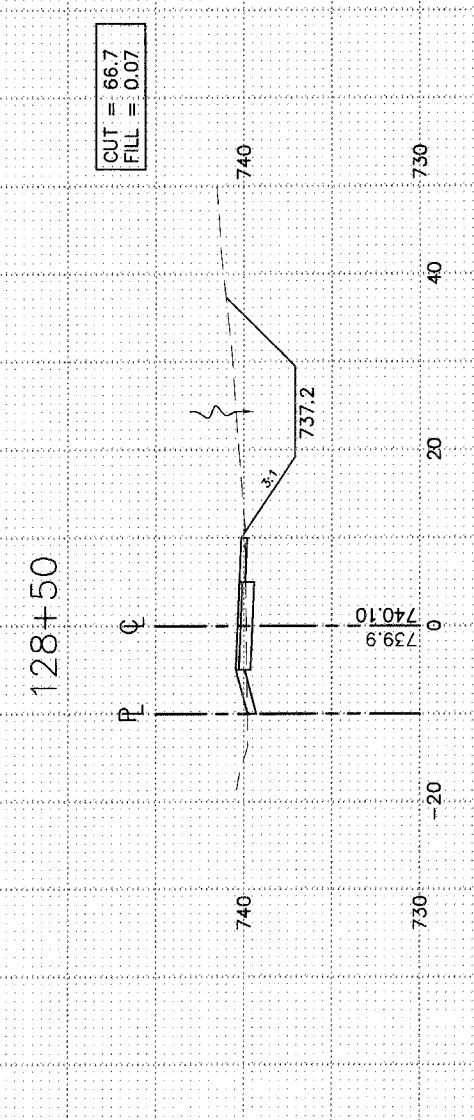
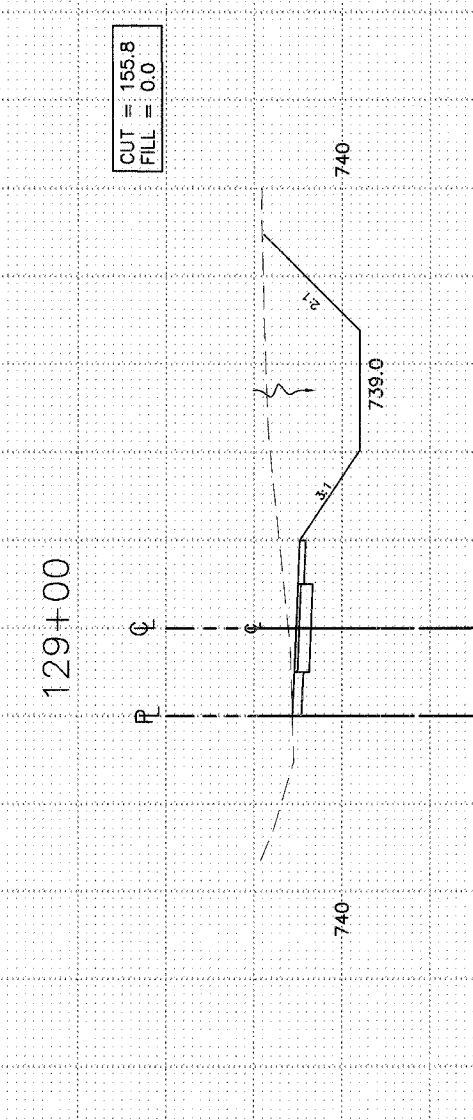
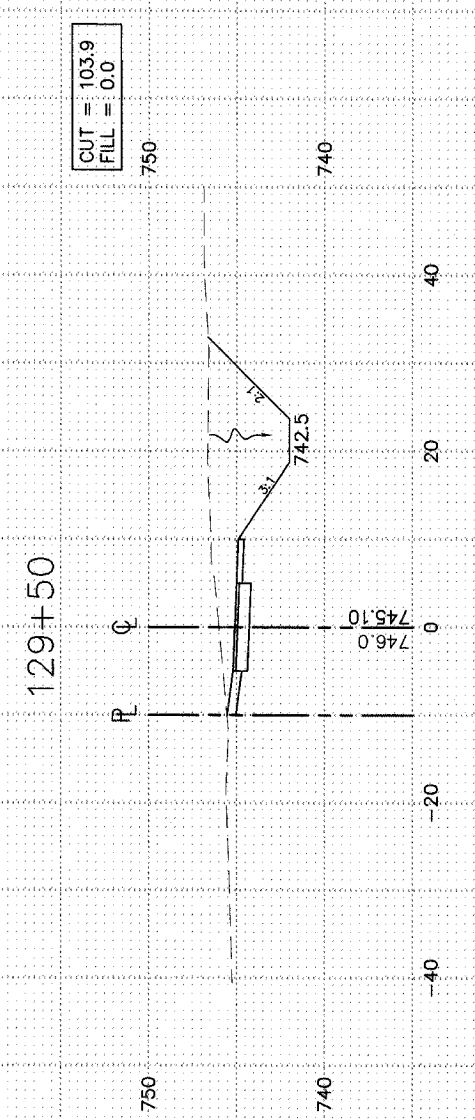
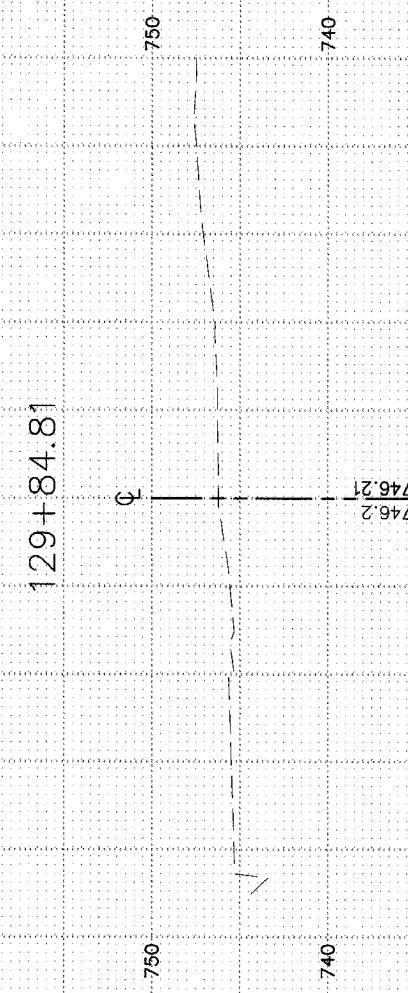


DWG: PEDPATH_03

PEDESTRIAN PATH STA. 126+50.00 TO STA. 128+00.00				
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DISC. NUMBER: 551007	DRN. BY: RDS	DATE: 04-26-04	SCALE: 1" = 10' H, 1" = 5' V	52 of 54

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
84-P4031-00-BR <td>DUPAGE <td></td> <td>54</td> <td>53</td> </td>	DUPAGE <td></td> <td>54</td> <td>53</td>		54	53

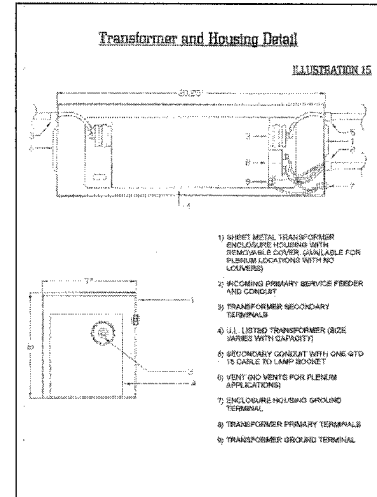
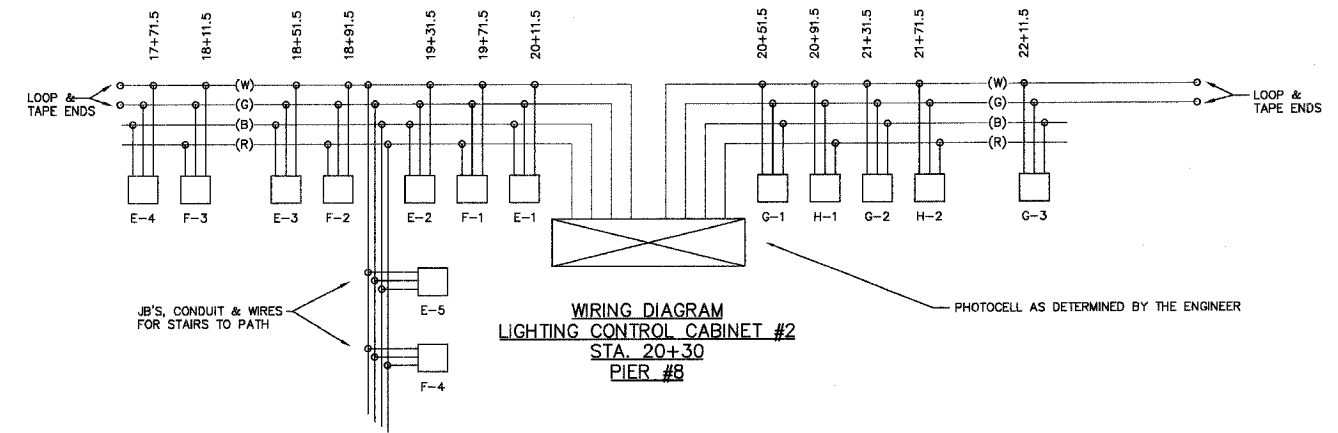
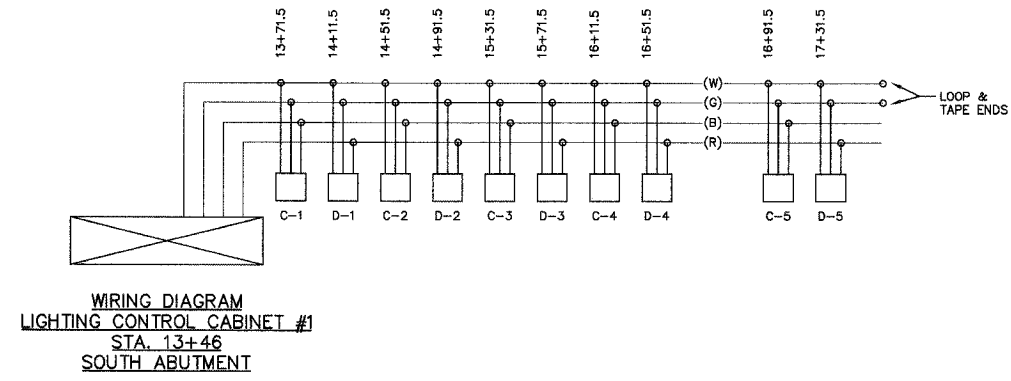
CONTRACT NO. 83560



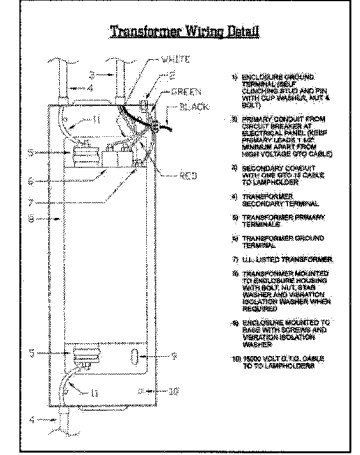
DWG: PEDPATH_04

PEDESTRIAN PATH STA. 128+50.00 TO STA. 129+84.81				
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DISC. NUMBER: 551007	DRN. BY:	DATE: 04-26-04	SCALE: 1" = 10' H, 1" = 5' V	53 of 54

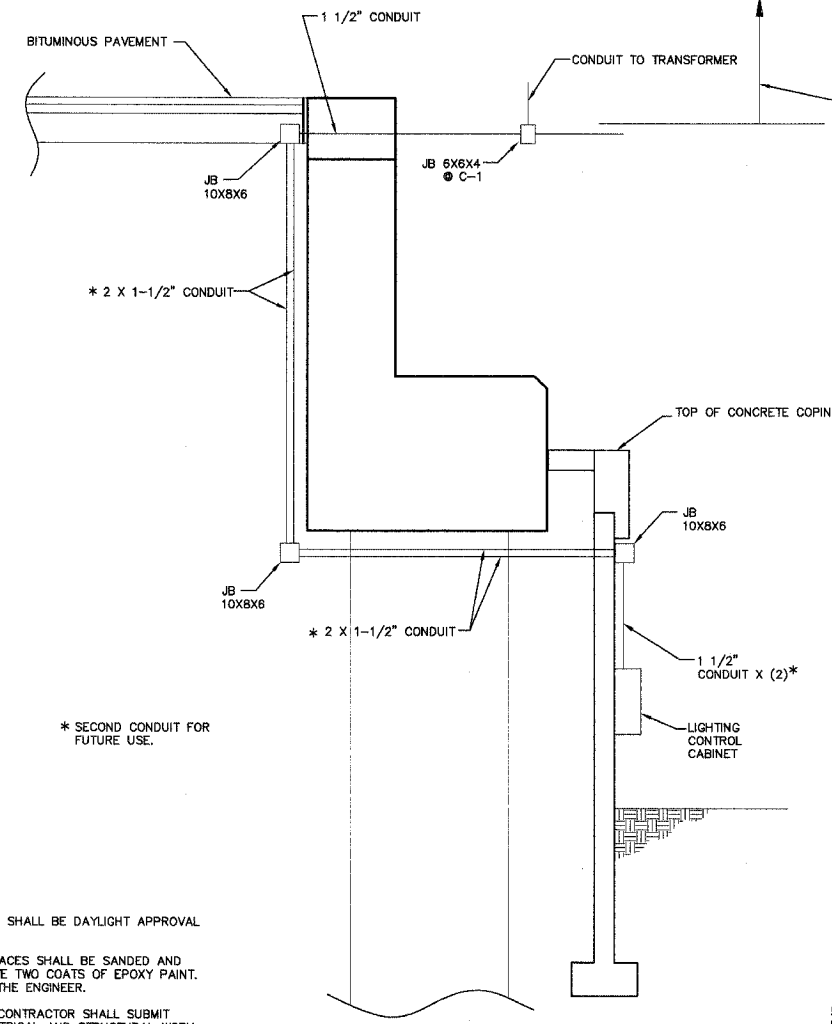
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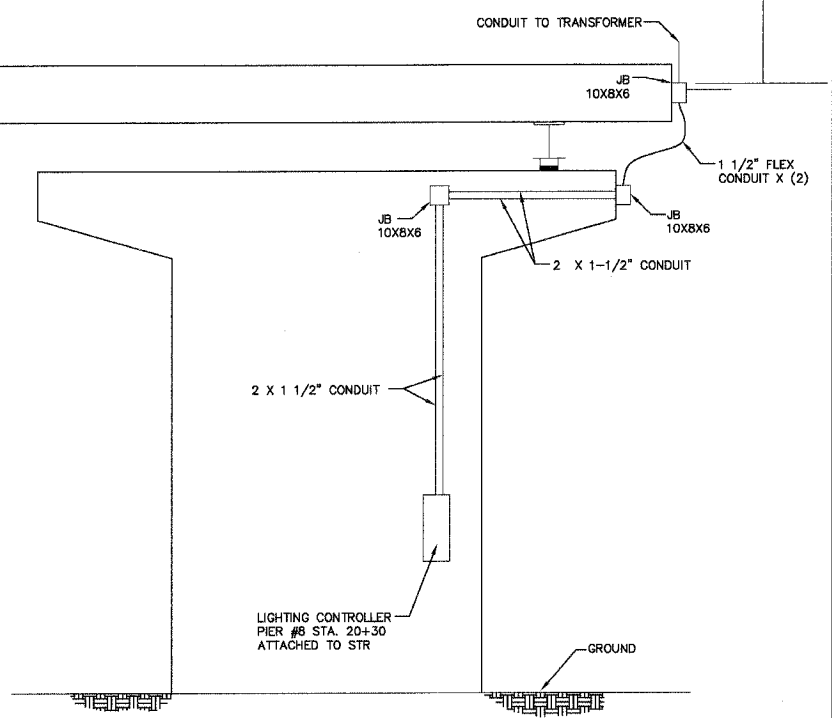
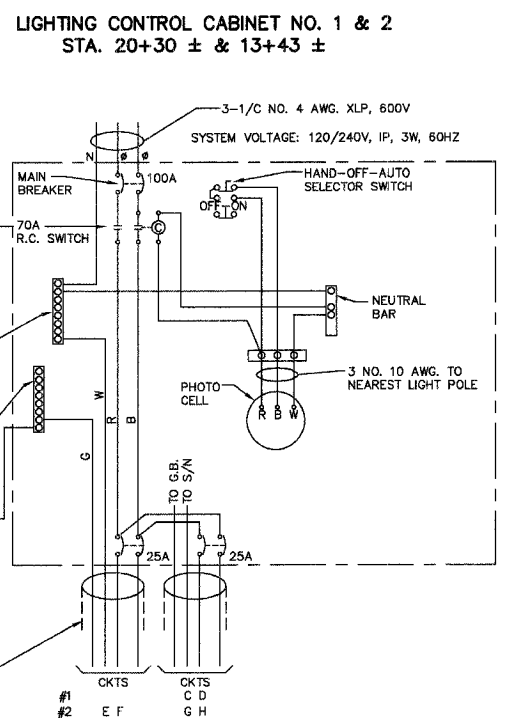
- 1) SHEET METAL TRANSFORMER ENCLOSURE MOUNTED WITH REMOVABLE COVER, GAUGEABLE FOR DOUBLE LOCKING WITH KEY COVERS
- 2) SECONDARY PRIMARY SERVICE FEEDER AND CONDUIT
- 3) TRANSFORMER SECONDARY TERMINALS
- 4) U.L. LISTED TRANSFORMER (SEE TABLE WITH CAPACITY)
- 5) SECONDARY CONDUIT WITH ONE END TO CABLE TO LAMP HOLDER
- 6) VENT AND VENTS FOR FLENUM APPLICATIONS
- 7) ENCLOSURE INCLUDING GROUND TERMINAL
- 8) TRANSFORMER PRIMARY TERMINALS
- 9) TRANSFORMER GROUND TERMINAL



- 1) ENCLOSED GROUND TERMINAL (RED) AND PINS WITH DUP WIRE, NOT 4 1/2"
- 2) PRIMARY CONDUIT FROM CIRCUIT BREAKER AT ELECTRICAL PANEL, KEEP PRIMARY WIRE IN THE SAME CONDUIT FROM HIGH VOLTAGE SUPPLY
- 3) SECONDARY CONDUIT WITH ONE END TO CABLE TO LAMP HOLDER
- 4) TRANSFORMER SECONDARY TERMINAL
- 5) TRANSFORMER PRIMARY TERMINAL
- 6) TRANSFORMER GROUND TERMINAL
- 7) U.L. LISTED TRANSFORMER
- 8) TRANSFORMER MOUNTED TO ENCLOSURE WITH BOLT AND NUT, BUSH AND WASHER, INSULATOR BRACKET WHEN REQUIRED
- 9) ENCLOSURE MOUNTED TO STR WITH BOLTS AND VERTICAL ISOLATION BRACKET
- 10) 180V VOLT 1/2" CABLE TO LAMP HOLDER



ALL ELECTRIC CONDUIT WIRING, TRANSFORMERS, JUNCTION BOXES, COLD CATHODE LIGHTING SYSTEM, ETC. ABOVE THE INDICATED JB, SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR "SUPPLY AND INSTALL COLD CATHODE LIGHTING SYSTEM." CONTRACTOR SHALL SUPPLY SHOP DRAWINGS FOR APPROVAL.



- NOTES:**
1. LIGHT COLOR TEMPERATURE SHALL BE DAYLIGHT APPROVAL BY THE ENGINEER.
 2. ALL EXTERIOR METAL SURFACES SHALL BE SANDED AND ETCH PRIMED AND SHALL HAVE TWO COATS OF EPOXY PAINT. COLOR TO BE APPROVED BY THE ENGINEER.
 3. BEFORE FABRICATION THE CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR ALL ELECTRICAL AND STRUCTURAL WORK SEALED BY ILLINOIS REGISTERED ENGINEERS FOR APPROVAL BY THE ENGINEER.
 4. SHOP DRAWINGS REQUIRED FOR ALL LIGHTING COMPONENTS COLD CATHODE MANUFACTURER MUST BE U.L. CERTIFIED AS A MANUFACTURER FOR ELECTRIC DISCHARGE LIGHTING. ALL ELECTRICAL COMPONENTS USED IN THE LIGHTING SYSTEM MUST BE LISTED BY A RECOGNIZED TESTING LABORATORY SUCH AS U.L. AND APPROVED BY THE ENGINEER.
 5. FINAL LOCATIONS OF JUNCTION BOXES TO BE COORDINATED WITH LIGHTING MANUFACTURER.

**SECTION THROUGH SOUTH ABUTMENT
STA. 13+46 FOR CONDUIT LAYOUT AND
LIGHTING CONTROL CABINET #1**

LIGHTING CONTROL CABINET
SOUTH ABUTMENT STA. 13+43 ± #1
PIER #8 STA. 20+30 ± #2

**LIGHTING CONTROLLER
AND CONDUIT LAYOUT @ STA. 20+30**

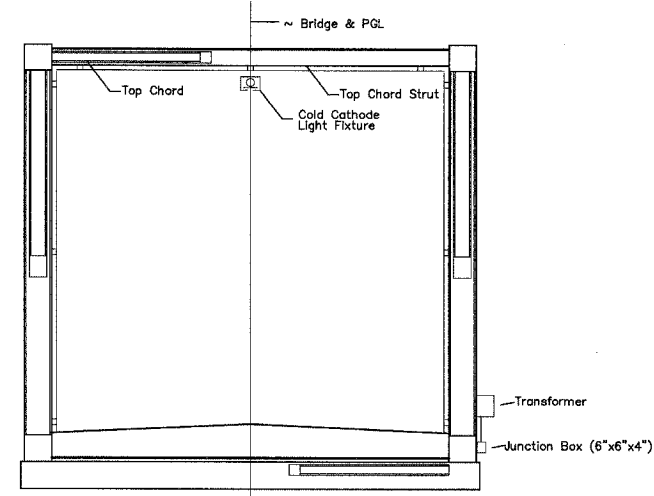
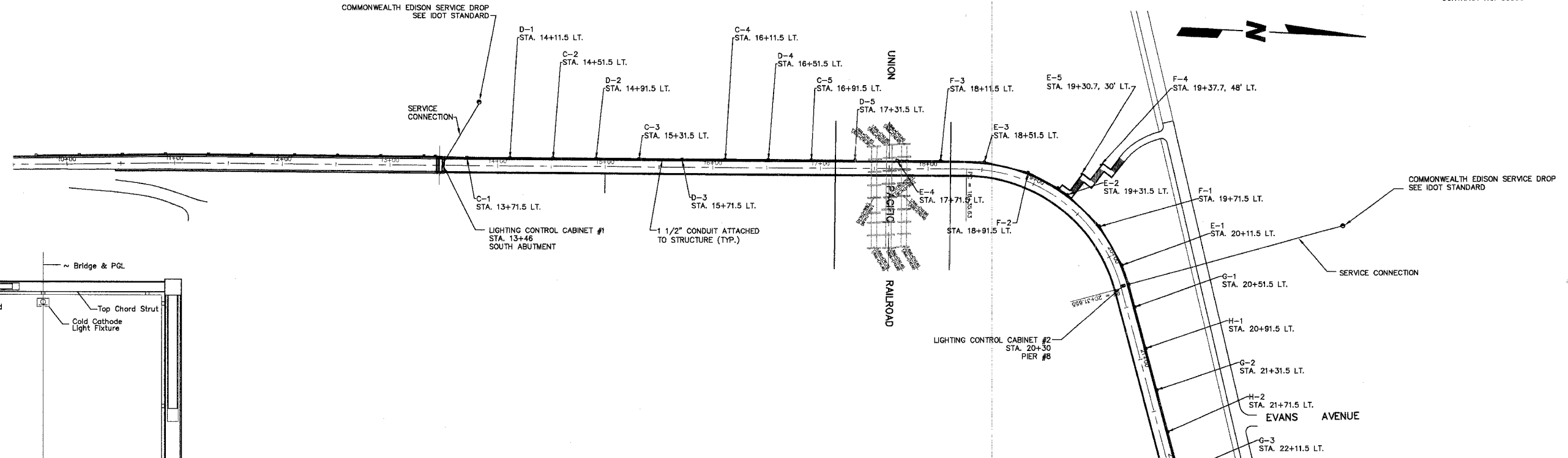
PREPARED FOR:
WHEATON PARK DISTRICT
666 S. MAIN STREET
WHEATON, ILLINOIS 60187



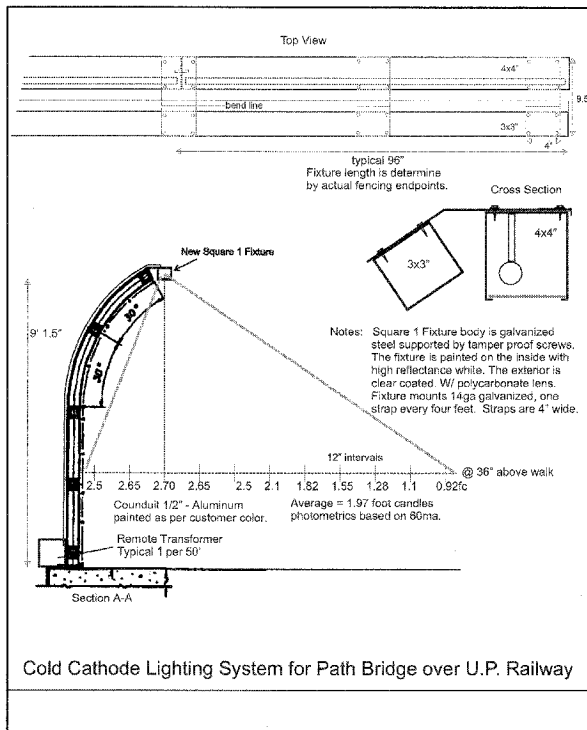
PREPARED BY:
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E-Mail: codd@cemcon.com Website: www.cemcon.com

REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

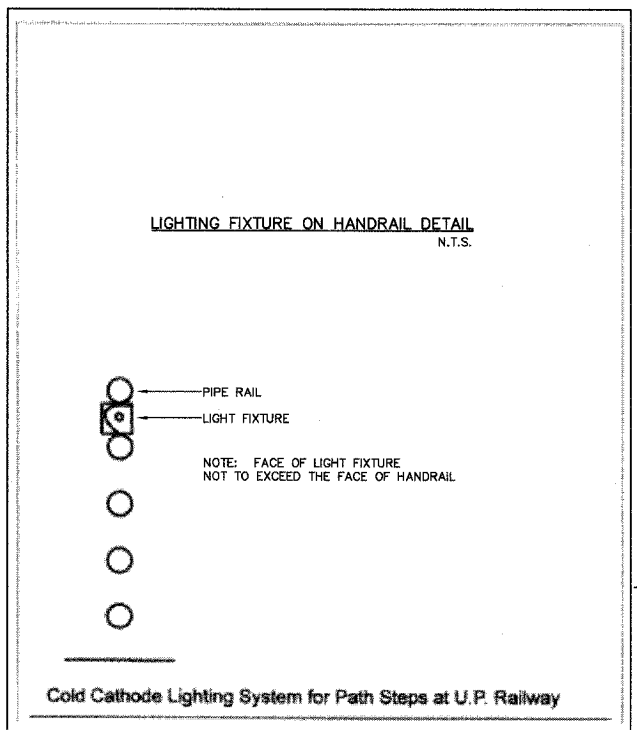
ELECTRICAL DETAILS				
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD				
FILE NAME: DETAILS	DSGN. BY: JAC/KK	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO.
DISC. NUMBER: 551007	DRN. BY: MD	DATE: 12-21-04	SCALE: 1" = -----	53A of 54



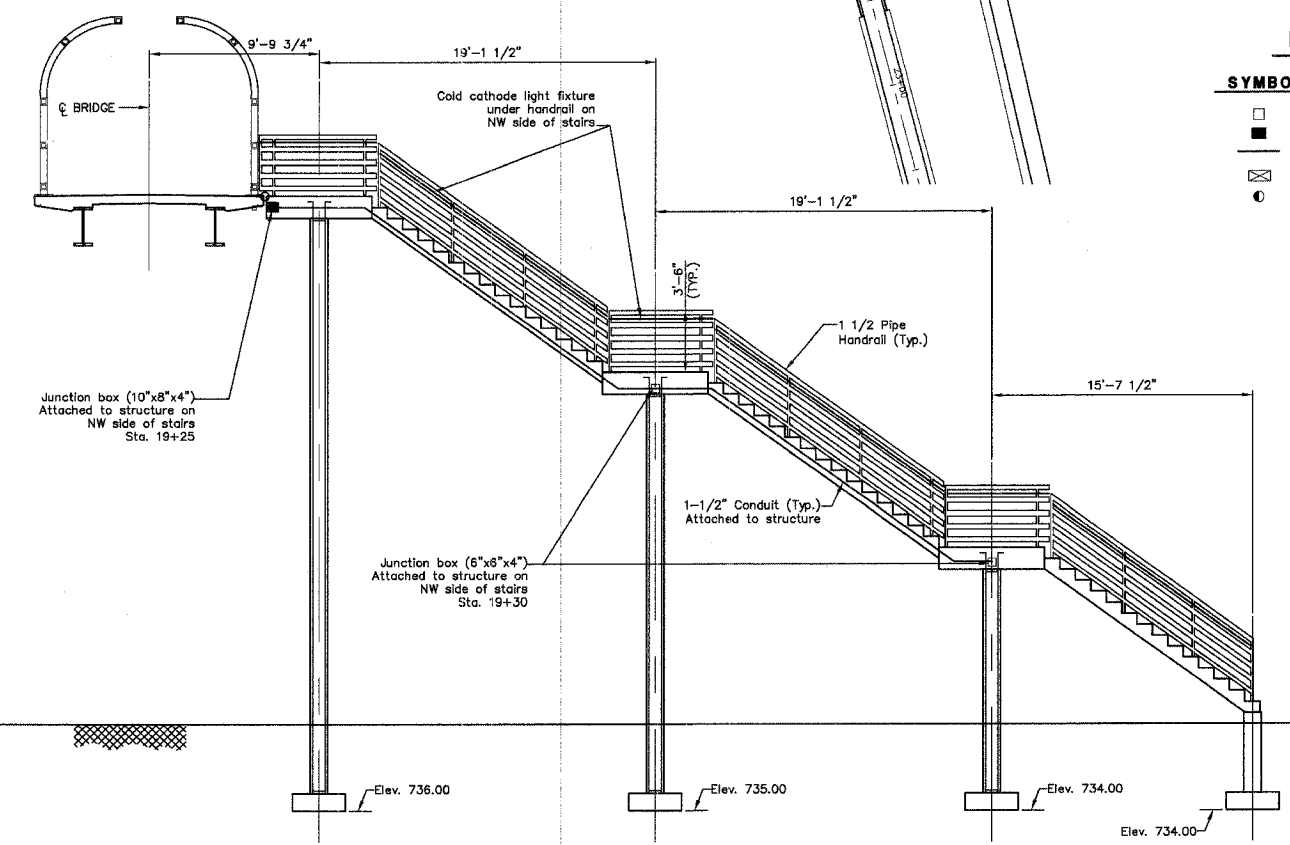
BRIDGE CROSS SECTION



Cold Cathode Lighting System for Path Bridge over U.P. Railway



Cold Cathode Lighting System for Path Steps at U.P. Railway



ELEVATION

LEGEND

SYMBOL	DESCRIPTION
□	JUNCTION BOX 6"X6"X4"
■	JUNCTION BOX 10"X8"X4"
—	1-1/2" CONDUIT
⊞	LIGHTING CONTROL CABINET
○	COMMONWEALTH EDISON SERVICE DROP

PREPARED FOR:
WHEATON PARK DISTRICT
 666 S. MAIN STREET
 WHEATON, ILLINOIS 60187



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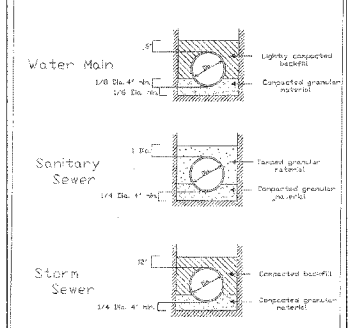
REVISIONS					
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION

LIGHTING LAYOUT PLAN - BICYCLE PATH BRIDGE			
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD			
FILE NAME: OVR LIGHT	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----
DISC. NUMBER: 551007	DRN. BY: DRA	DATE: 04-26-04	SCALE: 1" = 50'
SHEET NO.			53B of 54

TAB: OVR LIGHT
 XREF: OVER_50.DWG
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CONTRACT NO. 83560

Bedding & Backfill Detail



CITY OF WHEATON
Figure 8
08-26-08

SECTION A-A
END VIEW

GENERAL NOTES

PRECAST REINFORCED CONCRETE FLARED END SECTION
STANDARD 54201

DATE	REVISION
11-27-07	Issue Standard 54201
08-26-08	Issue Standard 54201

SECTION A-A

GENERAL NOTES

PRECAST REINFORCED CONCRETE FLARED END SECTION
STANDARD 54201

DATE	REVISION
11-27-07	Issue Standard 54201
08-26-08	Issue Standard 54201

END SECTION

CONNECTIONS OF END SECTIONS

GENERAL NOTES

METAL END SECTION FOR PIPE CULVERTS
STANDARD 54201

DATE	REVISION
11-27-07	Issue Standard 54201
08-26-08	Issue Standard 54201

ELEVATION
ALTERNATE BOTTOM SLAB

GENERAL NOTES

CATCH BASIN TYPE A
STANDARD 60201

DATE	REVISION
11-27-07	Issue Standard 60201
08-26-08	Issue Standard 60201

ELEVATION - ECCENTRIC
ELEVATION - CONCENTRIC

GENERAL NOTES

MANHOLE TYPE A
STANDARD 60201

DATE	REVISION
11-27-07	Issue Standard 60201
08-26-08	Issue Standard 60201

CAST GRATE

SECTION A-A

GENERAL NOTES

GRATE TYPE 8
STANDARD 60408

DATE	REVISION
11-27-07	Issue Standard 60408
08-26-08	Issue Standard 60408

SCREENED CAP
CATCH BASIN TY. A, 5' WITH STEPS
6\" x 1 1/2\" LONG SCH. 80 PVC INTAKE RISER w/ 1\" HOLES CENTERED 3\" APART ALL AROUND
COLLAR w/ GALVANIZED STEEL ROD FOR SUPPORT
12\" RCP
12\" RCP
6\" PVC CROSS
2 LF. - 6\" SCH. 80 PVC GROUTED IN PLACE w/ NON-SHRINK GROUT

NOTE:
1. CATCH BASIN MUST BE CLEANED PERIODICALLY
2. RISER TO BE SECURED TO CATCH BASIN FOR STABILITY

DRAINAGE RESTRICTOR DETAIL FOR CATCH BASIN NO. 6
(N.T.S.)

TYPE A RAMP
TYPE B RAMP
RAMP AT ALLEYS OR ENTRANCES

GENERAL NOTES

CURB RAMP FOR SIDEWALKS
STANDARD 62401-04

DATE	REVISION
11-27-07	Issue Standard 62401-04
08-26-08	Issue Standard 62401-04

SQUARE PATTERN
TRIANGULAR PATTERN
TRUNCATED DOME DETAIL

GENERAL NOTES

CURB RAMP FOR SIDEWALKS
STANDARD 62401-04

DATE	REVISION
11-27-07	Issue Standard 62401-04
08-26-08	Issue Standard 62401-04

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666 S. MAIN STREET
WHEATON, ILLINOIS 60187

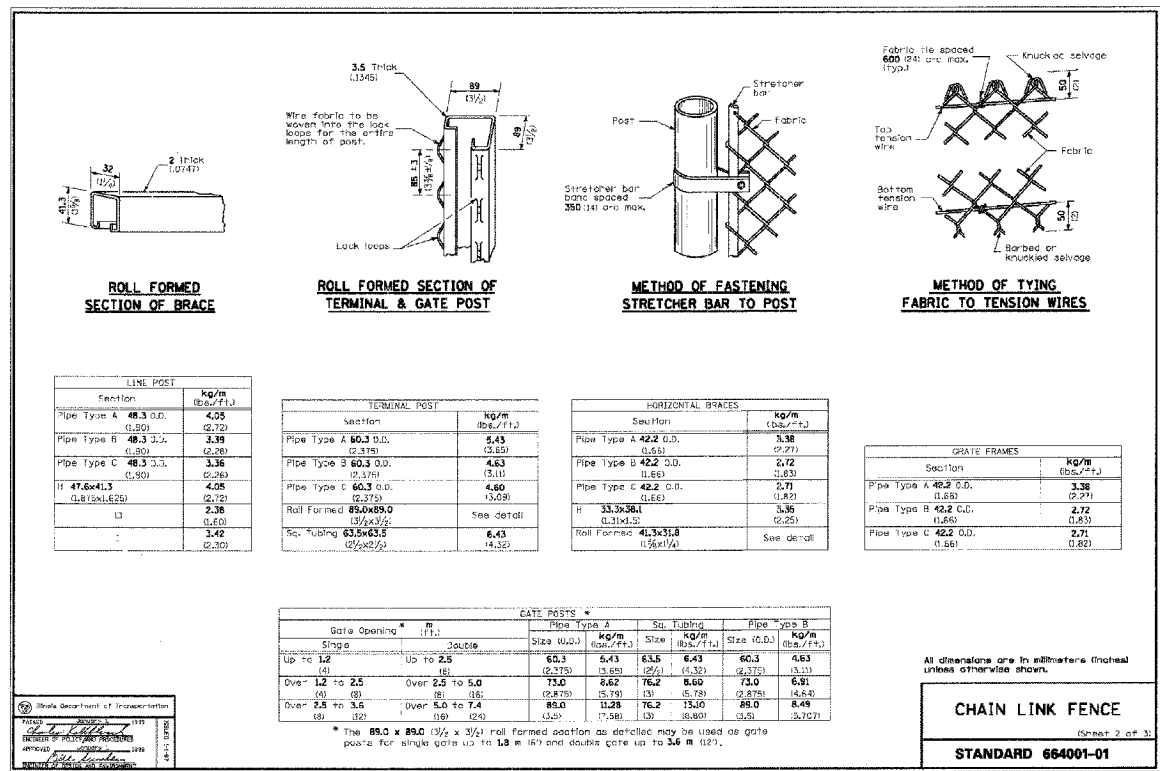
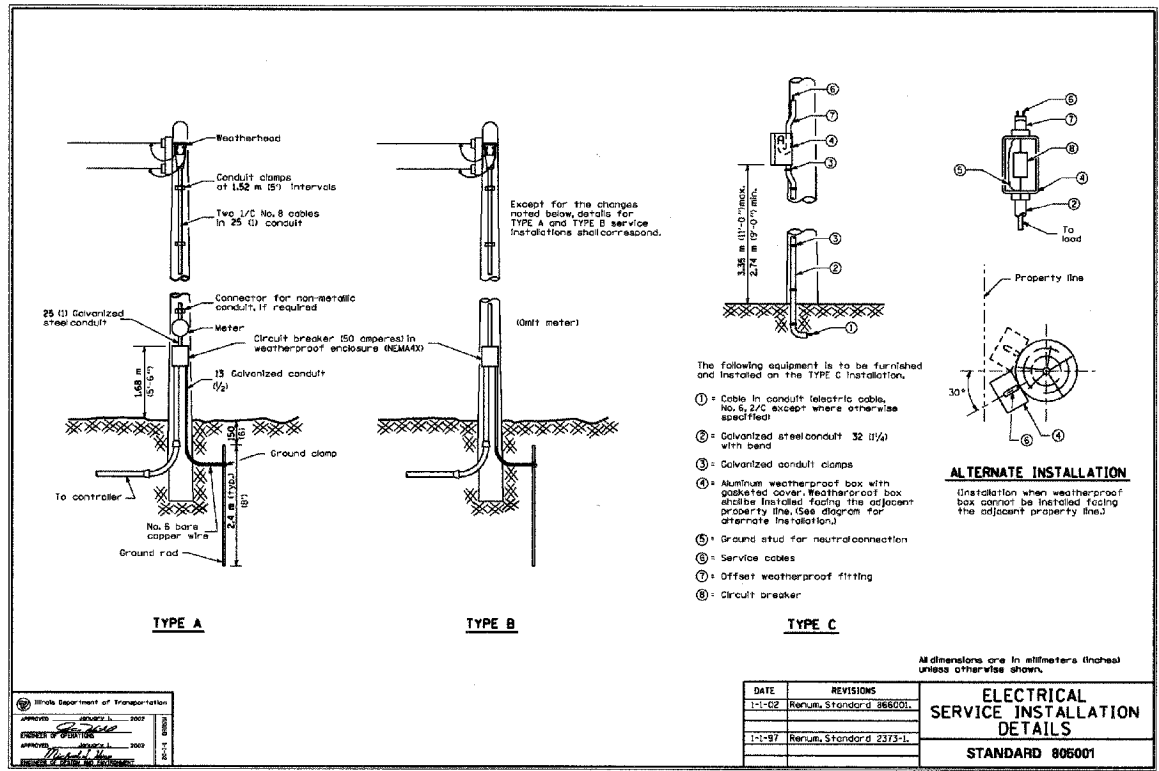
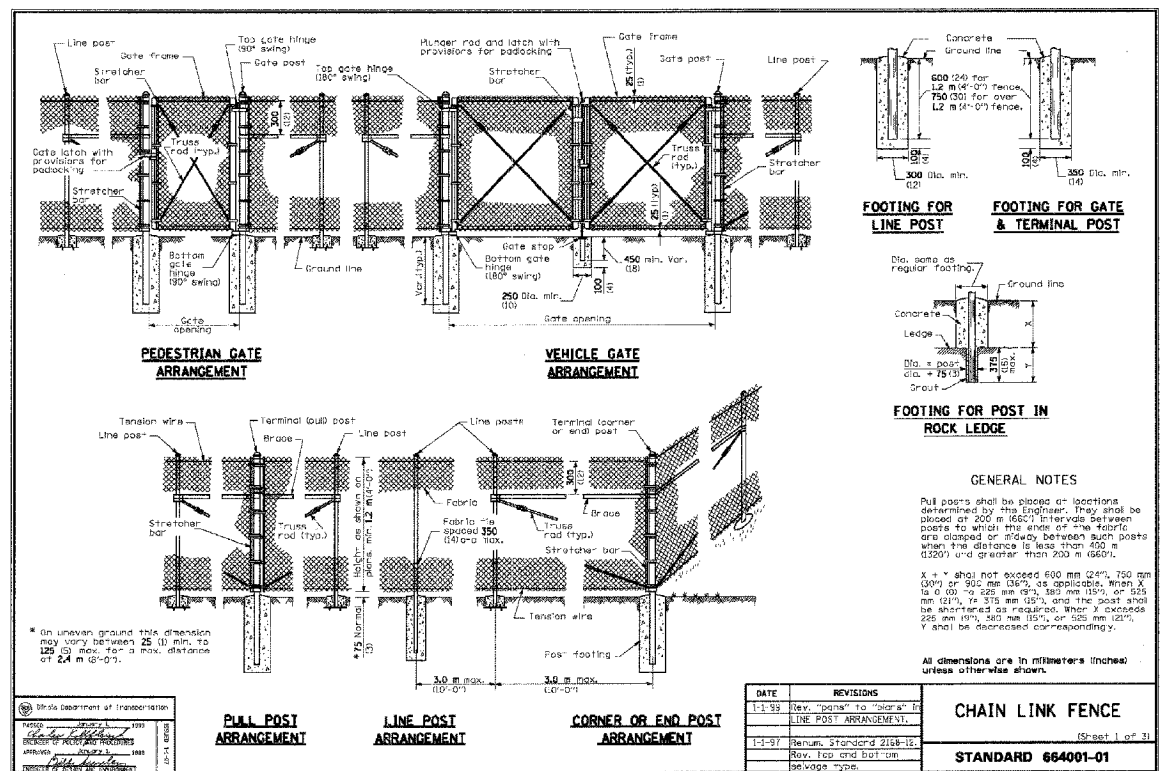
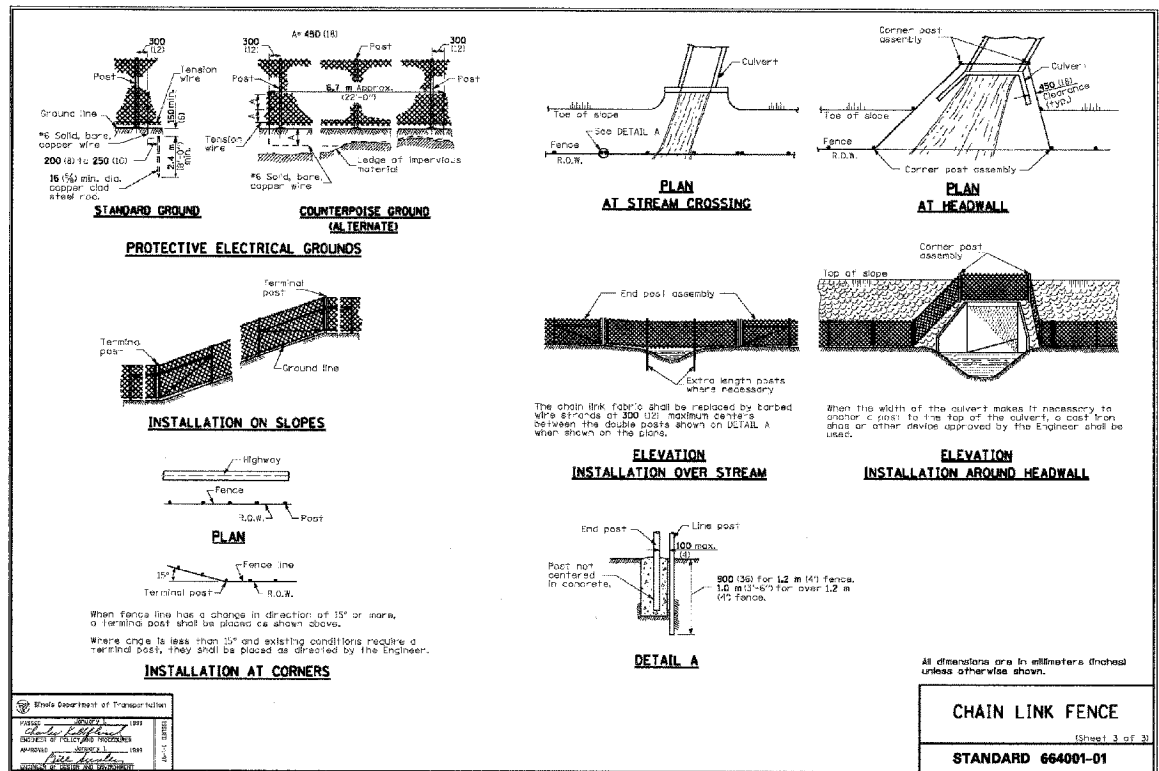
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E-Mail: cadd@cemcon.com Website: www.cemcon.com

NO.		DATE		DESCRIPTION	

CONSTRUCTION DETAILS

PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: DETAILS	DSGN. BY: MMH	JOB NO.: 551.007	FLD. BK./PG.: -----	SHEET NO. 54 of 54
DISC. NUMBER: 551007	DRN. BY: DMC	DATE: 04-26-04	SCALE: 1" = -----	



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666 S. MAIN STREET
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NO.		DATE		DESCRIPTION

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CONSTRUCTION DETAILS
PEDESTRIAN/BICYCLE PATH BRIDGE OVER UNION PACIFIC RAILROAD

FILE NAME: DETAILS OSGN. BY: MMH JOB NO.: 551.007 FLD. BK./PG.: -----
DISC. NUMBER: 551007 DRN. BY: DMC DATE: 04-26-04 SCALE: 1" = ----- SHEET NO. 54 of 54