

ROUTES	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
AMOS AVE.	05-00445-00-BR	SANGAMON	17	1

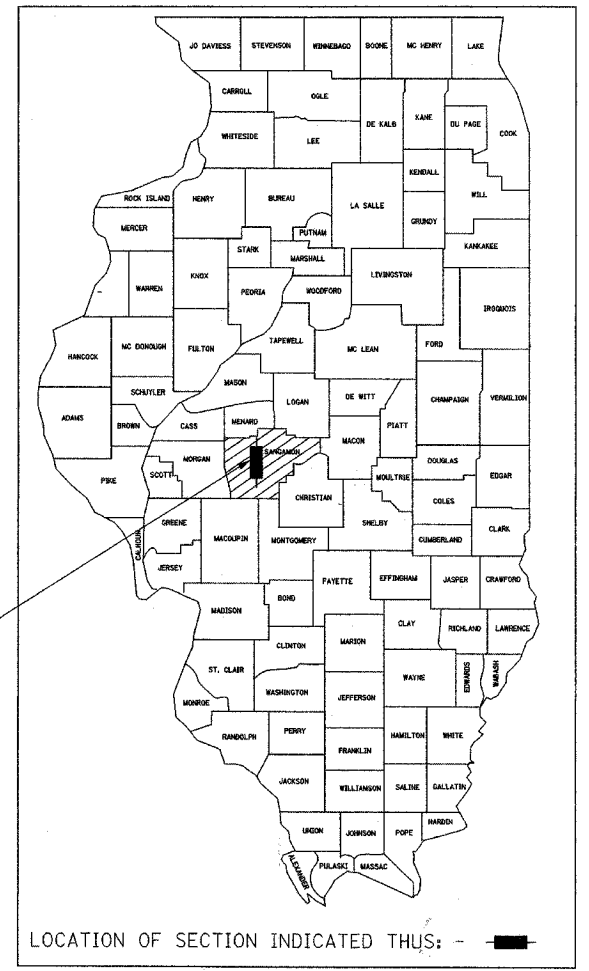
INDEX OF SHEETS

- 1 COVER SHEET
- 2 SUMMARY OF QUANTITIES & GENERAL NOTES
- 3 TYPICAL SECTIONS
- 4 PLAN AND PROFILE
- 5 CHANNEL PAVING DETAILS
- 6 MAINTENANCE OF TRAFFIC - ROAD CLOSURE PLAN
- 7-15 STRUCTURAL DRAWINGS - BOX CULVERT DETAILS
- 16-17 CROSS SECTIONS

IDOT STANDARDS

000001-04	606001-02
280001-02	606401
424001-04	701801-03
482001	702001-06
515001-02	B.L.R. 21-6
542301	B.L.R. 22-4
542401	

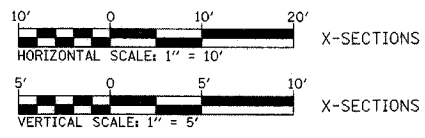
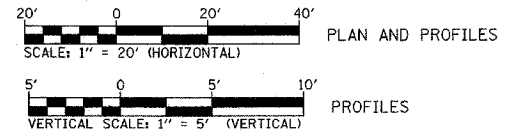
STATE OF ILLINOIS CITY OF SPRINGFIELD PLANS FOR PROPOSED IMPROVEMENT FOR BRIDGE REPLACEMENT AND REHABILITATION PROGRAM SECTION: 05-00445-00-BR PROJECT NO.: BRM-5146(61) JOB NO.: C-96-242-06 AMOS AVENUE BRIDGE REPLACEMENT SANGAMON COUNTY



PROJECT LOCATION

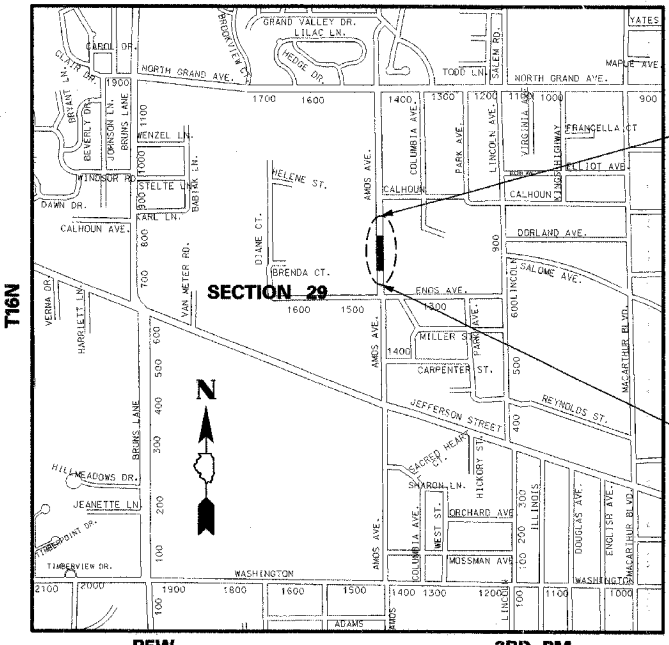
STANDARD SYMBOLS

- | | |
|--|---|
| <ul style="list-style-type: none"> ⊙ EXISTING MANHOLE □ EXISTING INLET ⊕ FIRE HYDRANT ⊞ UTILITY POLE ⊗ STREET LIGHT ⊘ TREE ⊗ TREE TO BE REMOVED ⊙ PROPOSED MANHOLE ⊙ PROPOSED INLET ⊙ VALVE BOX TO BE ADJUSTED | <ul style="list-style-type: none"> →→→→→ EXISTING SANITARY SEWER →→→→→ EXISTING STORM SEWER →→→→→ PROPOSED STORM SEWER →→→→→ EXISTING GAS MAIN →→→→→ EXISTING WATER MAIN →→→→→ EXISTING TELEPHONE CABLE □ SQUARE YARDS OF DRIVEWAY PAVEMENT REMOVAL □ SQUARE YARDS OF P.C.C. DRIVEWAY PAVEMENT, 6" □ SQUARE FEET OF SIDEWALK REMOVAL □ SQUARE FEET OF P.C.C. SIDEWALK |
|--|---|

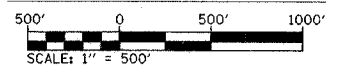


UTILITIES

- | | |
|--|--|
| <p>CITY WATER, LIGHT AND POWER - WATER DEPT.
401 N. 11 TH STREET
SPRINGFIELD, IL. 62702
ATTENTION: STEVE STEWART 789-2022</p> <p>CITY WATER, LIGHT AND POWER - ELECTRIC DEPT.
1008 EAST MILLER
SPRINGFIELD, IL. 62702
ATTENTION: LARRY MINCH 757-8520 x 2159</p> <p>SBC
529 S. SEVENTH STREET
FLOOR 3B
SPRINGFIELD, IL. 62721
ATTENTION: SARA LAC 789-8227</p> | <p>INSIGHT COMMUNICATIONS
711 SOUTH DIRKSEN PARKWAY
SPRINGFIELD, IL. 62703
ATTENTION: ROB DAVIS 788-5898 x 636</p> <p>SPRINGFIELD SANITARY DISTRICT
3017 N. 8TH STREET
SPRINGFIELD, IL. 62707
ATTENTION: ANDY ALVEY 528-0491</p> <p>CILCO
825 NORTH MACARTHUR
SPRINGFIELD, IL. 62702
ATTENTION: ED LYNCH 753-5187 (GAS)</p> <p>CITY OF SPRINGFIELD- PUBLIC WORKS
7TH & MONROE STREETS
ROOM 201 MUNICIPAL CENTER WEST
SPRINGFIELD, IL 62701
ATTENTION: TIM SHEEHAN 789-2260</p> |
|--|--|



LOCATION MAP



AMOS AVENUE
DESIGN DESIGNATION: URBAN COLLECTOR; TWS-2 (CURRENT ADT <5000) DHV 620
DESIGN SPEED = 30 MPH
LENGTH OF IMPROVEMENT = 199.85 FEET = 0.038 MILES

BEGIN ROADWAY IMPROVEMENTS
STA. 3+65.33-AMOS AVENUE

END ROADWAY IMPROVEMENTS
STA. 5+65.18-AMOS AVENUE

REMOVAL OF SIMPLE SPAN BRIDGE; S.N. 084-3218
AND REPLACEMENT WITH TRIPLE BARREL BOX CULVERT
(12'x8'-11"; 15'x10"; 12'x8'-11") ALONG WITH NECESSARY
APPROACH ROADWAY WORK. PROPOSED S.N. 084-8009

**CALL J.U.L.I.E. PRIOR TO ANY CONSTRUCTION OR EXCAVATION
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123**

CONTRACT NO. 93422

SECTION 05-00445-00-BR

COUNTY : SANGAMON

AMOS AVENUE BRIDGE REPLACEMENT



SIGNATURE: *Stan Hansen*
DATE SIGNED: MAY 26, 2006
LICENSE EXPIRATION DATE: 11/30/2007



APPROVED June 01, 2006
Anthony D. ...
SPRINGFIELD CITY ENGINEER

PASSED JUNE 8 20 06
July ...
DISTRICT SIX ENGINEER OF LOCAL ROADS & STREETS

PASSED JUNE 8 20 06
...
DISTRICT CONSTRUCTION ENGINEER

Releasing For Bid Based on Limited Review JUNE 8 20 06
Christine M Reed
DEPUTY DIRECTOR OF HIGHWAYS, REGION FOUR ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

L:\Springfield\050250\Draw\Sheets\cover.dgn 6/2/2006

SUMMARY OF QUANTITIES

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	05-00445-00-BR	SANGAMON	17	2
STA.	N/A	TO STA.	N/A	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LOCATION OF WORK

SUMMARY OF QUANTITIES

SP	CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
*	20200100	EARTH EXCAVATION	CU YD	260
*	20300100	CHANNEL EXCAVATION	CU YD	200
*	25000200	SEEDING, CLASS 2	ACRE	0.5
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	45
	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	45
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	45
	25000700	AGRICULTURAL GROUND LIMESTONE	TON	1.0
*	25100115	MULCH, METHOD 2	ACRE	0.5
	25100630	EROSION CONTROL BLANKET	SQ YD	182
	28000300	TEMPORARY DITCH CHECKS	EACH	4
	28000500	INLET AND PIPE PROTECTION	EACH	1
	28100105	STONE RIPRAP, CLASS A3	SQ YD	60
	28200200	FILTER FABRIC	SQ YD	60
	31101000	SUBBASE GRANULAR MATERIAL, TYPE B	TON	420
	40200100	AGGREGATE SURFACE COURSE, TYPE A	TON	24.3
*	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	275
①	42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4"	SQ FT	2,015
*	48202600	BITUMINOUS SHOULDERS SUPERPAVE 8"	SQ YD	18
*	50100200	REMOVAL OF EXISTING STRUCTURES	L SUM	1
*	50105220	PIPE CULVERT REMOVAL	FOOT	59
*	50300300	PROTECTIVE COAT	SQ YD	36
*	50800105	REINFORCEMENT BARS	POUND	56,220
*	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2,450
	51500100	NAME PLATES	EACH	1
	54003000	CONCRETE BOX CULVERTS	CU YD	274.4
	54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS, 18"	EACH	1
	54215553	METAL END SECTIONS, 18"	EACH	1
	550A0090	STORM SEWERS, CLASS A, TYPE 1, 18"	FOOT	30
*	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	287
*	60614600	PAVED DITCH (SPECIAL)	FOOT	62

① PCC SIDEWALK 4" NOT INCLUDED IN THE BRIDGE REPLACEMENT AND REHABILITATION PROGRAM FROM STA. 5+65.18 TO STA. 6+94.32. (NON-PARTIC. QTY = 646 SQ. FT.)

LOCATION OF WORK

SUMMARY OF QUANTITIES

SP	CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
	63200310	GUARDRAIL REMOVAL	FOOT	134
	67100100	MOBILIZATION	L SUM	1
*	70103700	TRAFFIC CONTROL COMPLETE	L SUM	1
*	X0324118	GRANULAR CULVERT BACKFILL	CU YD	311
*	X4073106	BITUMINOUS CONCRETE PAVEMENT (FULL-DEPTH), SUPERPAVE, 11 1/4"	SQ YD	550
*	X4402100	PAVED DITCH REMOVAL	SQ YD	400
*	Z0003900	BICYCLE RAILING	FOOT	140
*	Z0013798	CONSTRUCTION LAYOUT	L SUM	1
*	Z0036600	PARAPET RAILING	FOOT	54
*	Z0054505	ROCK FILL (REPLACEMENT)	TON	472

CONSTRUCTION TYPE CODE: X028-2A

GENERAL NOTES:

- WHERE SECTION OR SUB-SECTION MARKERS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED AGENT OR LAND SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE J.U.L.I.E. NUMBER IS 1-800-892-0123.

THE LOCATION OF ALL UTILITIES ARE BASED ON INFORMATION PROVIDED BY OTHERS AND ARE INTENDED TO BE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS CONSTRUCTION ACTIVITIES WITH THE VARIOUS UTILITY OWNERS. ALL POTENTIAL CONFLICTS SHALL BE INVESTIGATED AND REMEDIAL ACTION TAKEN PRIOR TO INTERRUPTION OF THE CONTRACTOR'S PROGRESS.

ALL UTILITIES THAT REQUIRE RELOCATION SHALL BE COMPLETED BY THE UTILITY COMPANIES.

- WHERE PROPOSED CONSTRUCTION ABUTS EXISTING APPURTENANCES, A SAW CUT SHALL BE MADE TO ACHIEVE A NEAT CONSTRUCTION JOINT. SAW CUTTING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT PRICE FOR THE ITEM BEING CONSTRUCTED.

- ALL PRIVATE ENTRANCES AND SIDE ROADS ADJACENT TO THE PROJECT SHALL BE KEPT OPEN AT ALL TIMES.

- UTILITY POLES ARE TO BE MOVED, IF NECESSARY, BY THE UTILITY COMPANIES.

- THE FOLLOWING DENSITIES HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

A. GRANULAR MATERIALS 2.05 TONS / CU. YD.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES GENERAL NOTES

SCALE: NONE
DATE: 5/26/2006

DRAWN BY: BJD
CHECKED BY: GBR/SPH

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
05-00445-00-BR		SANGAMON	17	3
STA. 3+65.33		TO STA. 6+94.32		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

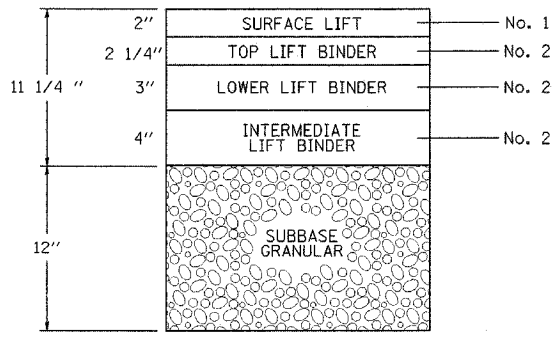
STRUCTURAL DESIGN INFORMATION (AMOS AVENUE)

DESIGN TRAFFIC (2016):
 P.V. = 3222 S.U. = 190 M.U. = 379
 T.F. = 1.678
 DESIGN STRAIN = 90 (MICROSTRAIN)
 E_{AC} = 535 ksi (AC-20)
 SSR : "POOR"

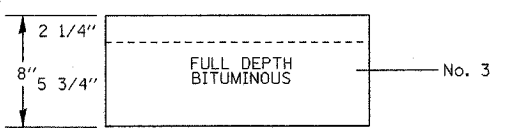
CONSTRUCT: BITUMINOUS CONCRETE PAVEMENT (FULL DEPTH), SUPERPAVE 11 1/4"

MIXTURE REQUIREMENTS

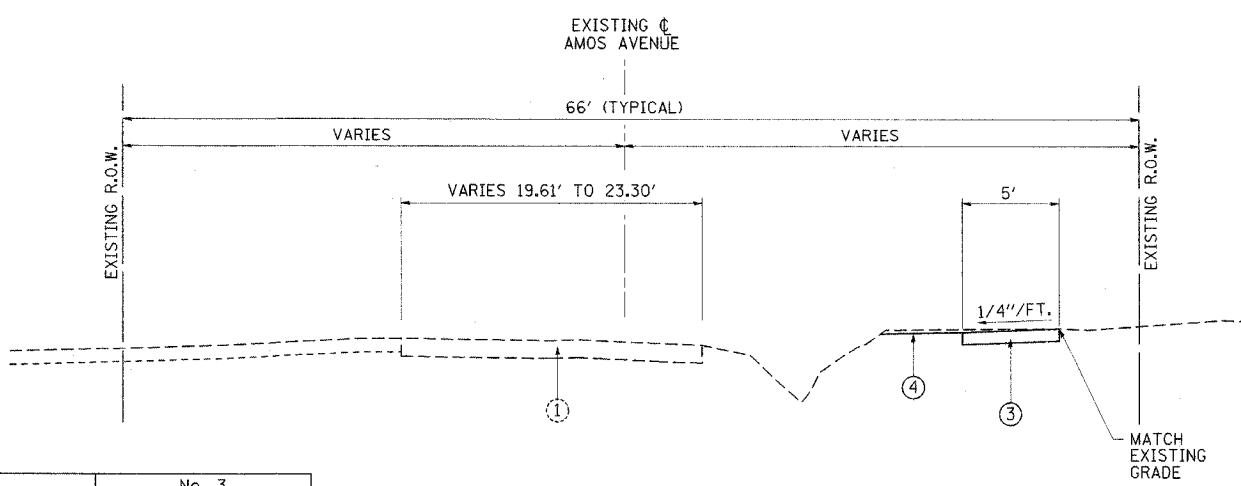
MIXTURE NUMBER:	No. 1	No. 2	No. 3
LOCATION(S):			
MIXTURE USE(S):	BITUMINOUS CONCRETE SURFACE LIFT	ALL BINDER LIFTS	BITUMINOUS SHOULDER
AC/PG:	PG 64-22	PG 64-22	PG 58-22
RAP % (MAX):	0%	15%	15%
DESIGN AIR VOIDS:	4.0% @ N _{design} = 50	4.0% @ N _{design} = 50	2.0% @ N _{design} = 30
MIXTURE COMPOSITION (GRADATION MIXTURE):	IL-9.5 OR IL-12.5	IL-19.0	BAM
FRICTION AGGREGATE:	MIX "C"	N/A	N/A



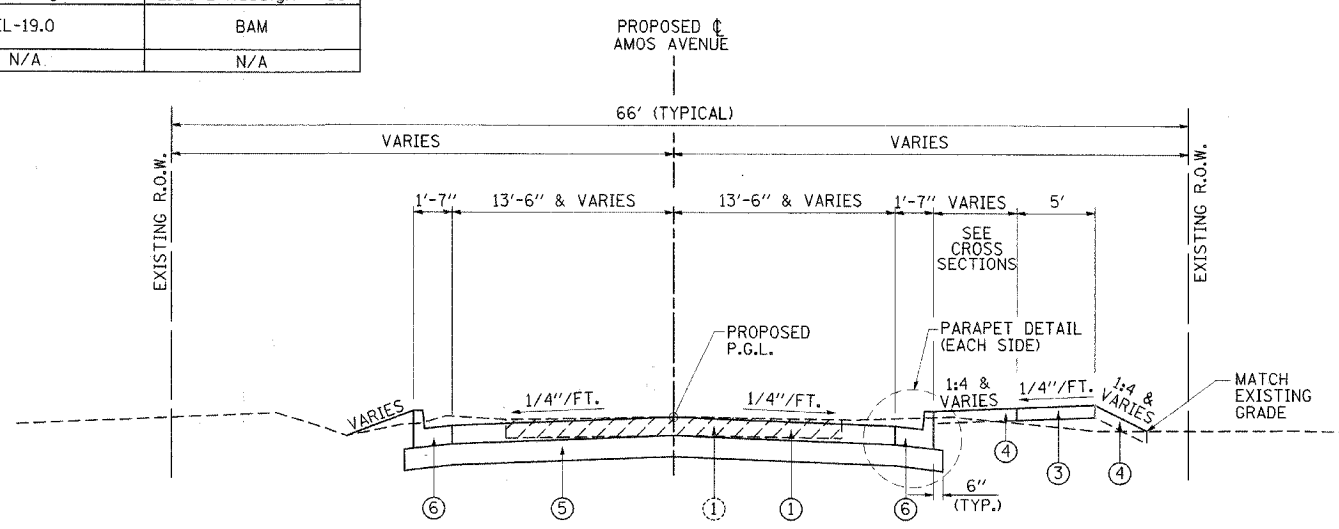
AMOS AVENUE BITUMINOUS LIFT DIAGRAM



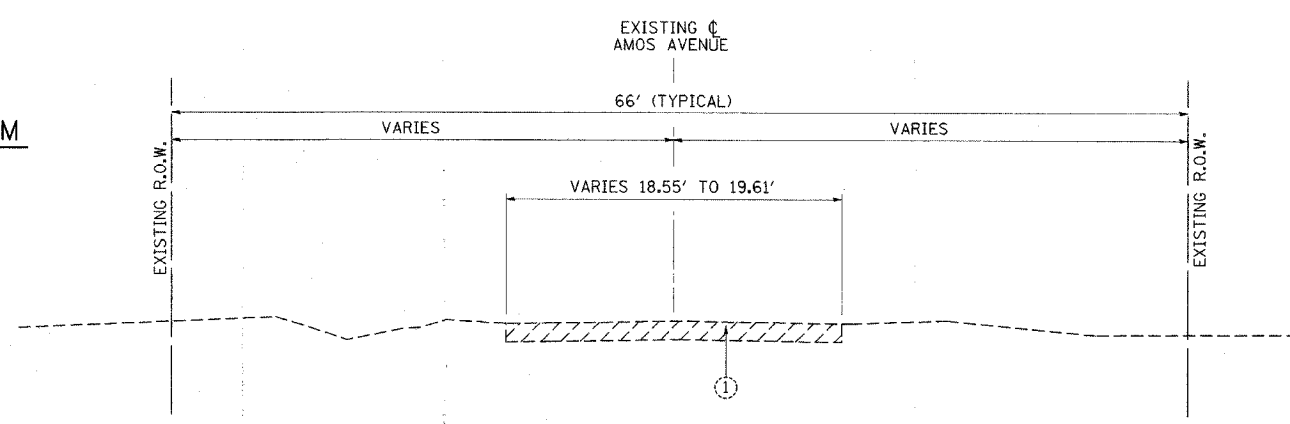
AMOS AVENUE SHOULDER LIFT DIAGRAM



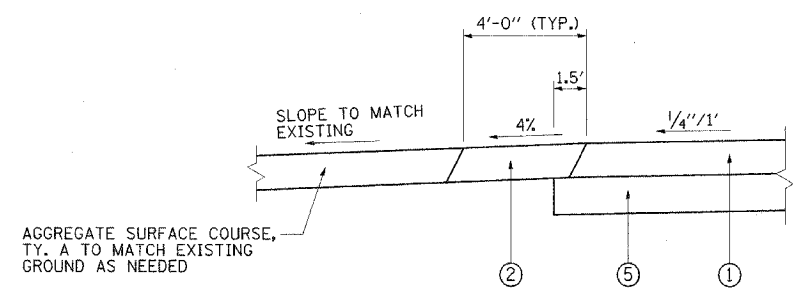
AMOS AVENUE - PROPOSED
 STA 5+65.18 TO STA 6+94.32



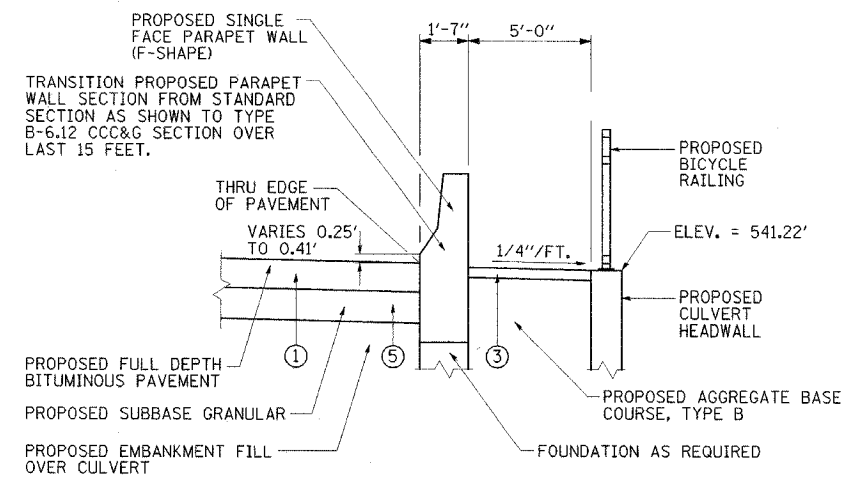
AMOS AVENUE - PROPOSED
 STA. 3+65.33 TO STA 5+65.18



AMOS AVENUE - EXISTING
 STA 3+65.33 TO STA 6+94.32
 (EXISTING BRIDGE OMISSION STA. 4+51.84 TO STA. 4+86.19)



SHOULDER DETAIL
 STA. 5+16.24, LT. TO STA 5+65.17, LT.



PARAPET DETAIL THRU CULVERT SECTION (SEE STRUCTURAL DETAILS)
 STA. 4+47.83 TO STA 4+90.17 RT. & LT.

- EXISTING LEGEND**
- ① EXISTING OIL & CHIP PAVEMENT WITH BITUMINOUS SURFACE TREATMENTS (TO BE REMOVED STA. 3+65.33 TO STA. 5+65.18 - COST INCLUDED IN EARTH EXCAVATION)

- PROPOSED LEGEND**
- ① PROP. BITUMINOUS CONCRETE PAVEMENT (FULL DEPTH), SUPERPAVE, 11-1/4"
 - ② PROP. BITUMINOUS SHOULDER, SUPERPAVE, 8"
 - ③ PROP. P.C.C. SIDEWALK, 4"
 - ④ PROP. SEEDING CLASS 2, WITH MULCH METHOD 2
 - ⑤ PROP. SUBBASE GRANULAR, TYPE B, 12"
 - ⑥ PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (GUTTER FLAG 1 1/4" THICK)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: NONE
 DATE: 5/26/06

DRAWN BY: BJD
 CHECKED BY: SPH/JMM

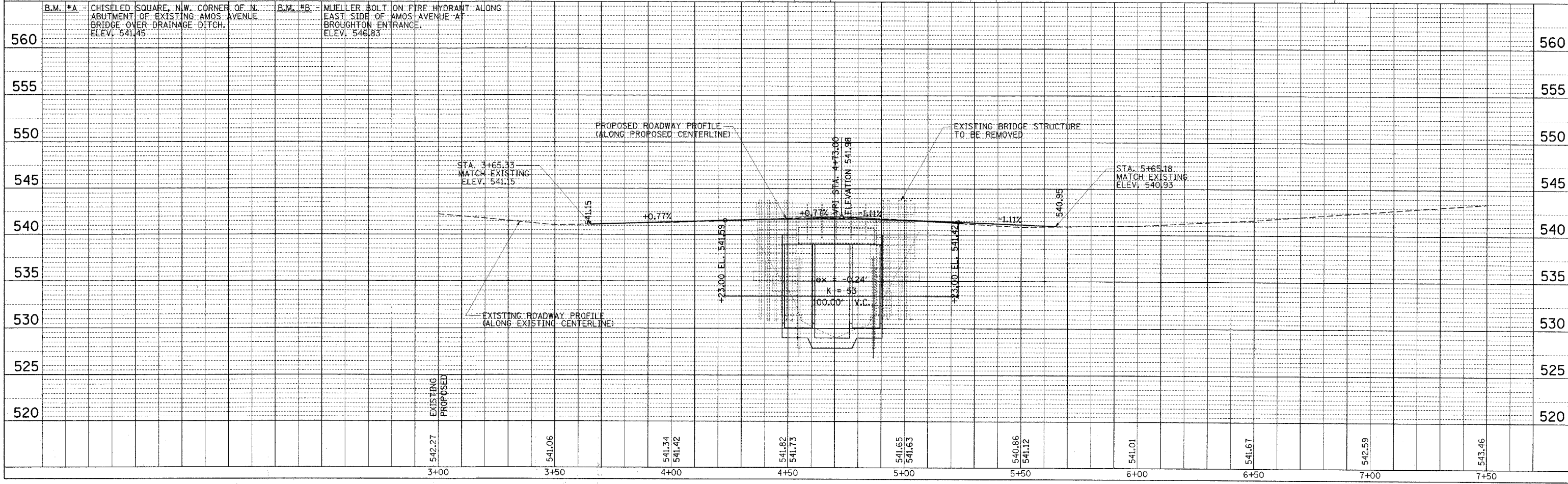
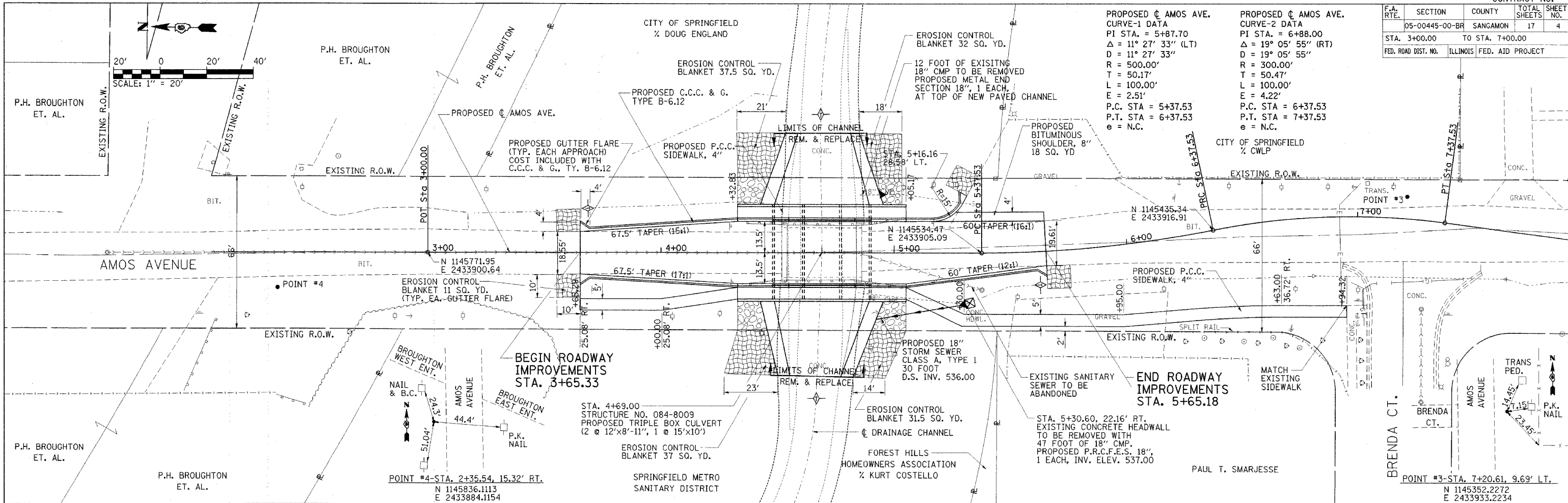
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 PLOT SCALE = 1/8"=1'-0"
 REFERENCE = #REF#

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
05-00445-00-BR		SANGAMON	17	4
STA. 3+00.00		TO STA. 7+00.00		
ILLINOIS FED. AID PROJECT				

PLAN	DATE
SURVEYED BY	
PLOTTED BY	
CHECKED BY	
DATE OF CHECK	
NO. OF SHEETS	
DATE OF PLOT	
NO. OF SHEETS	
DATE OF PLOT	
NO. OF SHEETS	

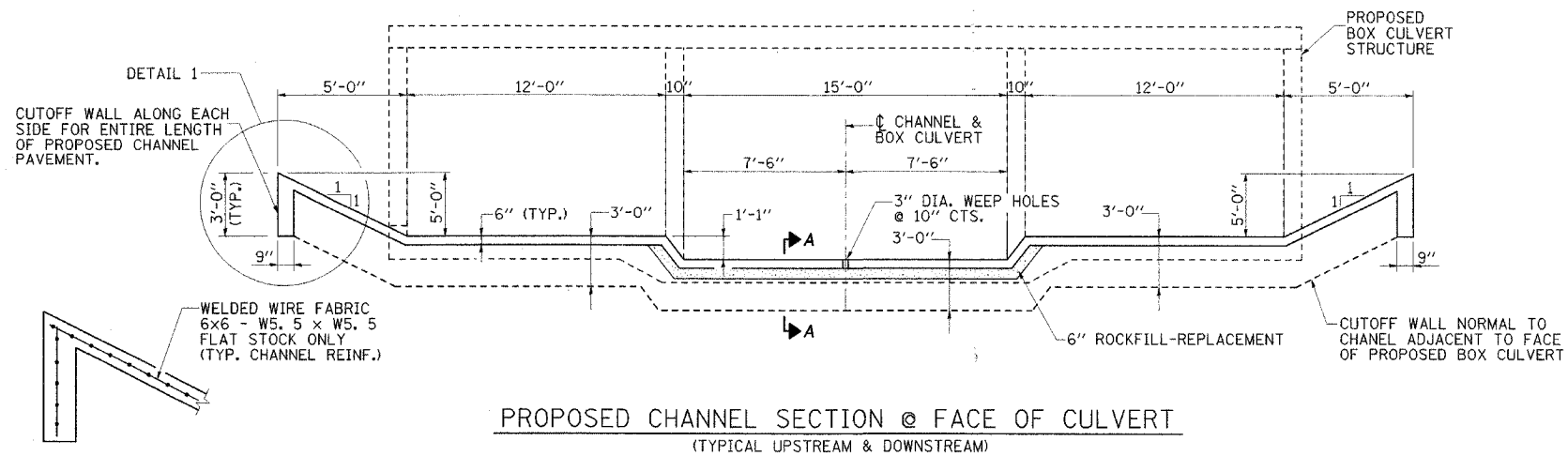
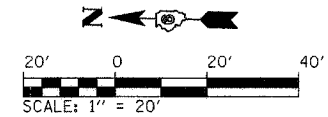
PROFILE	DATE
SURVEYED BY	
PLOTTED BY	
CHECKED BY	
DATE OF CHECK	
NO. OF SHEETS	
DATE OF PLOT	
NO. OF SHEETS	

PLOT DATE = 6/2/2006
 FILE NAME = #FILE#
 PLOT SCALE = #SCALE#
 REFERENCE = #REF#



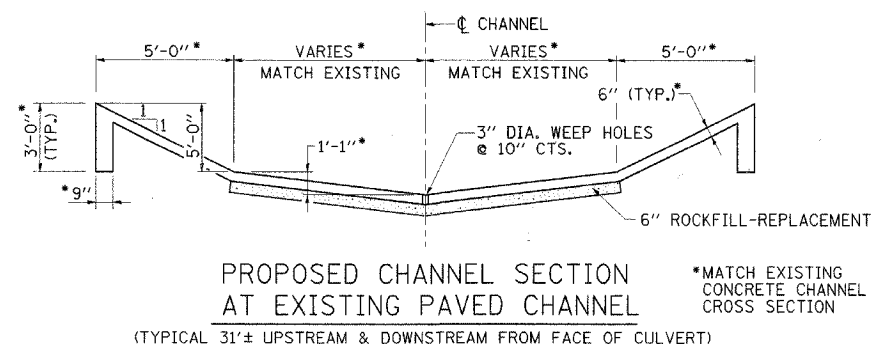
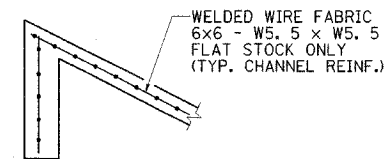
STATION	ELEVATION	STATION	ELEVATION
3+00	542.27	6+00	541.01
3+50	541.06	6+50	541.67
4+00	541.34 541.42	7+00	542.59
4+50	541.82 541.73	7+50	543.46
5+00	541.65 541.63		
5+50	540.86 541.12		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8009	05-00445-00-BR	SANGAMON	17	5
STA. N/A	TO STA. N/A			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

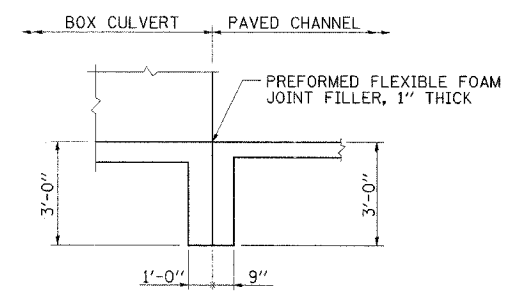


PROPOSED CHANNEL SECTION @ FACE OF CULVERT
(TYPICAL UPSTREAM & DOWNSTREAM)

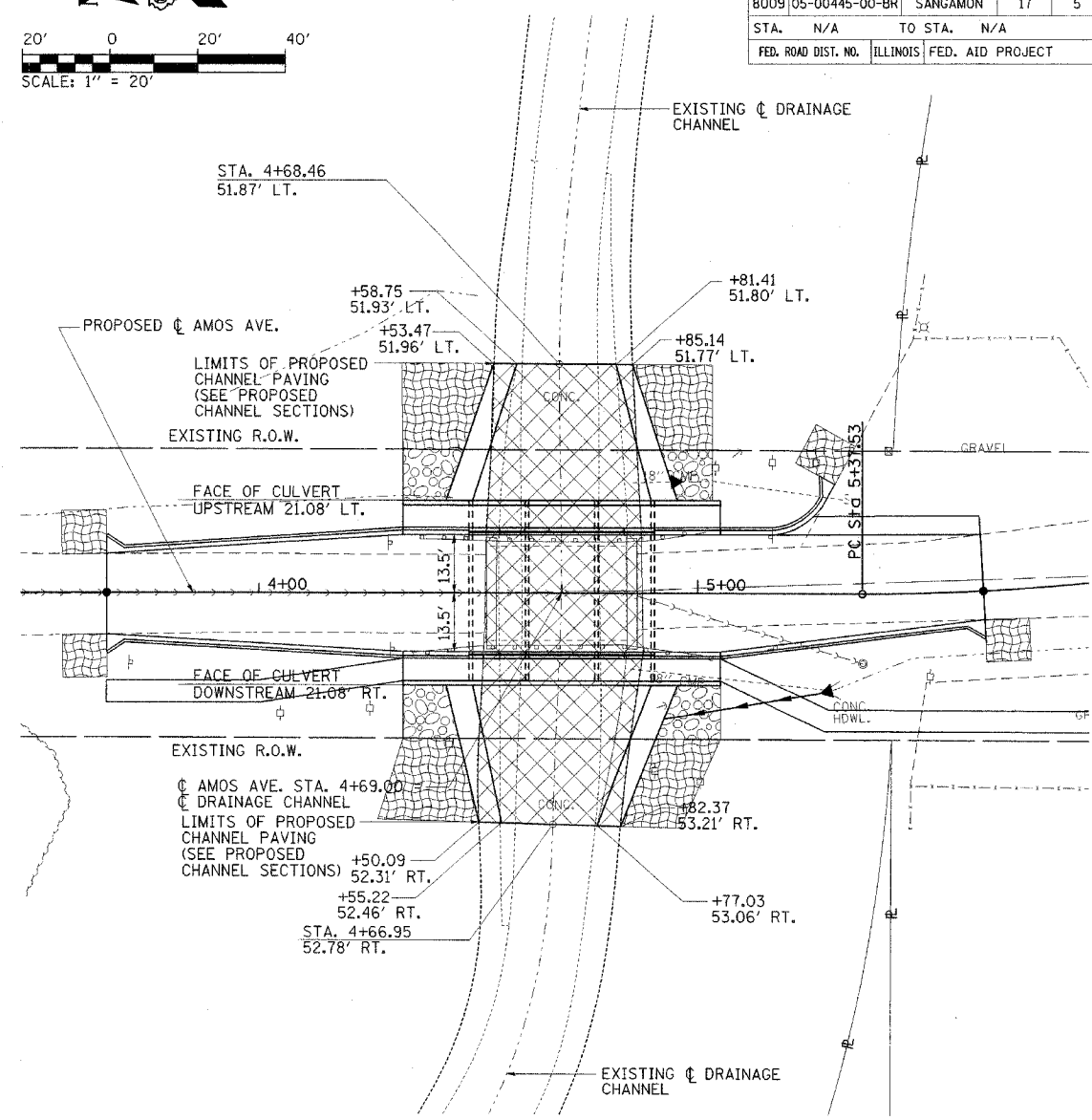
DETAIL 1



PROPOSED CHANNEL SECTION AT EXISTING PAVED CHANNEL
(TYPICAL 31'± UPSTREAM & DOWNSTREAM FROM FACE OF CULVERT)



SECTION A-A

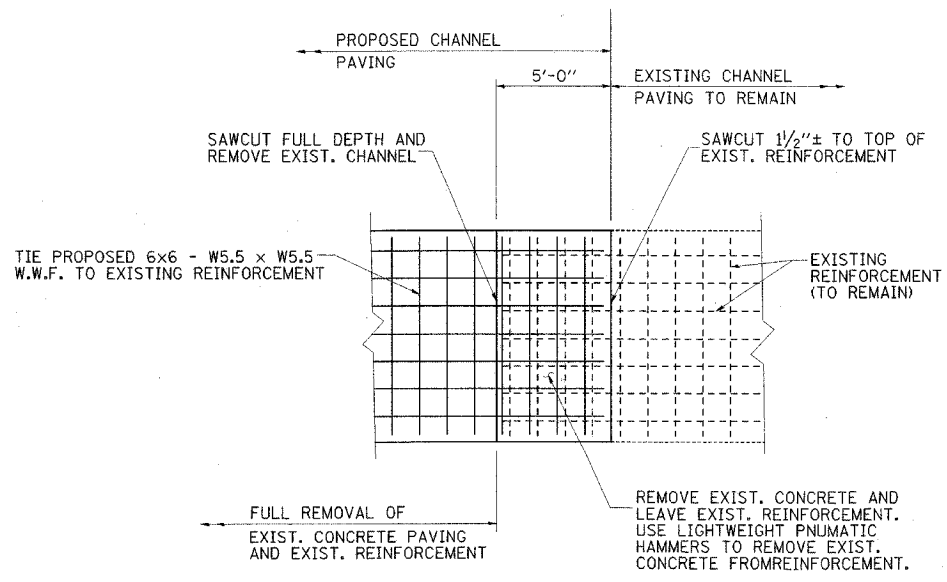


CHANNEL PAVING PLAN

LEGEND



PAVED DITCH REMOVAL	SQ. YD.	400
PAVED DITCH (SPECIAL)	FOOT	62



PLAN-CONNECT PROPOSED PAVING TO EXISTING PAVING
(TYPICAL UPSTREAM & DOWNSTREAM)

REVISIONS	
NAME	DATE

CITY OF SPRINGFIELD, ILLINOIS

CHANNEL PAVING DETAILS

CMT
CRAWFORD MURPHY & TILLY, INC.
CONSULTING ENGINEERS
SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

SCALE: NONE
DATE: 5/26/06

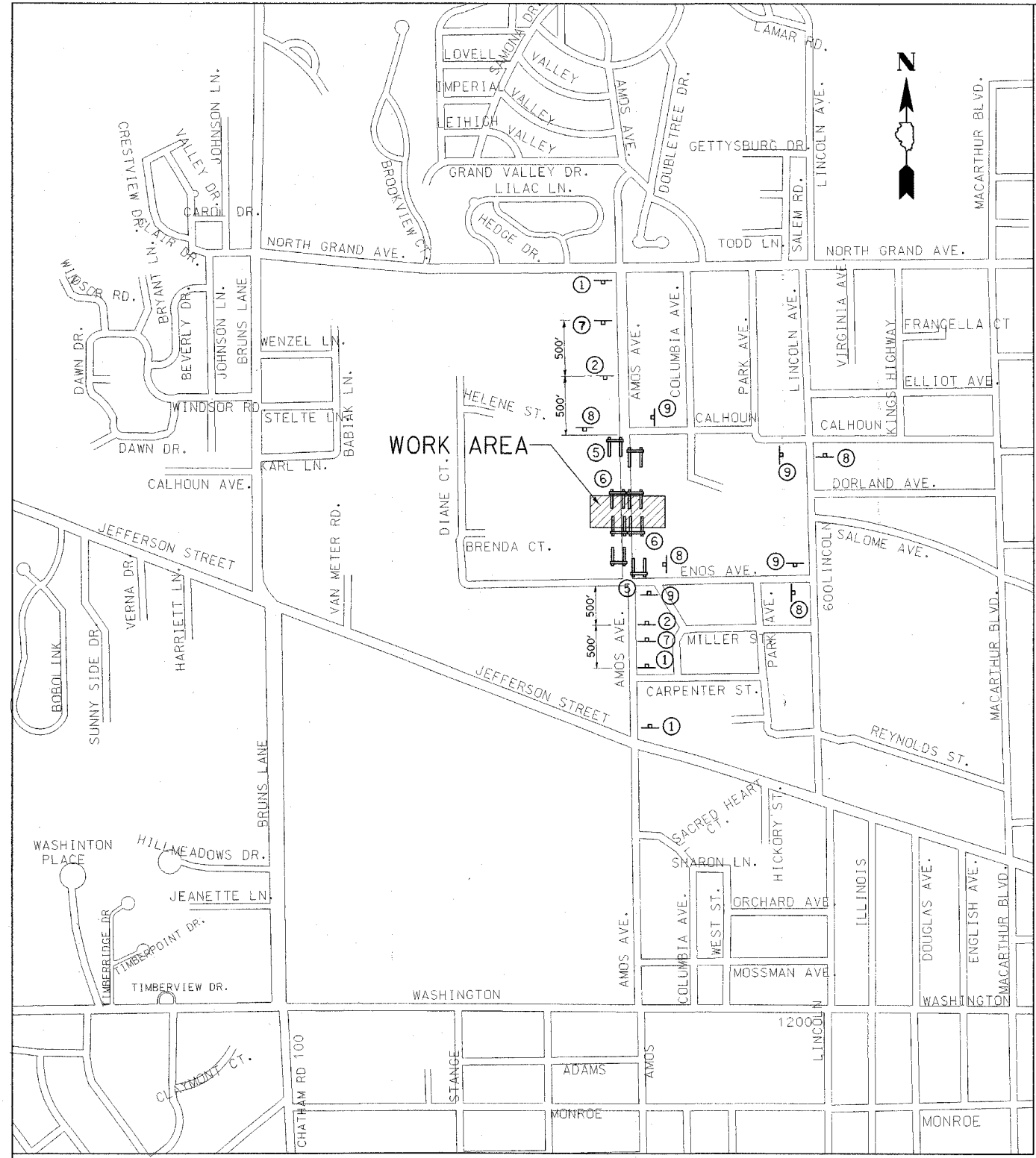
DRAWN BY: GLD
CHECKED BY: GBR/SPH

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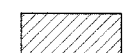


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8009 05-00445-00-BR		SANGAMON	17	6
STA. N/A	TO STA. N/A			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		


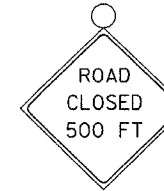
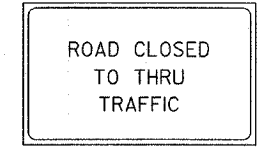
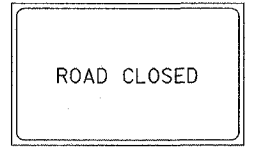

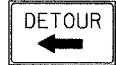

MAINTENANCE OF TRAFFIC GENERAL NOTES

- 1.) ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2002, THE DETAILS IN THESE PLANS AND THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- 2.) ALL MAINTENANCE OF TRAFFIC SIGNS SHALL BE PROVIDED, PLACED AND MAINTAINED BY THE CONTRACTOR.
- 3.) THE CONTRACTOR SHALL PROCEED WITH THE WORK IN AN EXPEDIENT MANNER TO MINIMIZE THE TIME THAT THE CLOSURE IS IN EFFECT.
- 4.) THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST TWO WEEKS PRIOR TO THE DAY THAT THE ROAD IS TO BE CLOSED. THE ENGINEER WILL COORDINATE WITH THE CITY AND ANY APPROPRIATE LOCAL AGENCIES.
- 5.) THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER THE NAMES AND PHONE NUMBERS OF HIS REPRESENTATIVES ON THE CONSTRUCTION SITE AND HIS REPRESENTATIVES RESPONSIBLE FOR THE DETOUR SIGNING AND MAINTENANCE OF TRAFFIC PRIOR TO THE START OF WORK.
- 6.) LOGITUDINAL DIMENSIONS SHOWN ON THESE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- 7.) THE ROAD SHALL NOT BE CLOSED UNTIL ALL SIGNING IS ERECTED IN ACCORDANCE WITH THE ROAD CLOSURE PLAN AND INSPECTED AND APPROVED BY THE ENGINEER.
- 8.) ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE ROAD CLOSURE IS IN EFFECT SHALL BE REMOVED OR COMPLETELY COVERED BY THE CONTRACTOR. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF TRAFFIC CONTROL COMPLETE.
- 9.) ALL ROAD CLOSURE SIGNS SHALL BE POST MOUNTED UNLESS OTHERWISE NOTED.
- 10.) ALL ROAD CLOSURE SIGNING, EXCEPT REGULATORY SIGNS, SHALL HAVE BLACK LEGNEDS ON FLUORESCENT ORANGE BACKGROUNDS AND STANDARD BLACK BORDERS. ALL ROAD CLOSURE SIGNS SHALL BE NEW OR LIKE NEW CONDITION.
- 11.) AS A MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED FOR THE CLOSURE SIGNAGE SHALL MEET THE REQUIREMENTS FOR TYPE A-LOW INTENSITY FLASHING LIGHTS PER ARTICLE 1084.01 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING HOURS OF DARKNESS. ONLY LIGHTS THAT HAVE BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND THE CITY OF SPRINGFIELD SHALL BE USED.
- 12.) THE TYPE III BARRICADES USED AT POINTS OF CLOSURE TO THRU TRAFFIC ONLY SHALL NOT EXCEED 8 FEET IN WIDTH FOR A SINGLE APPROACH LANE. ALL BARRICADES AT THESE LOCATIONS SHALL HAVE REFLECTORIZED STRIPING ON BOTH SIDES OF THE BARRICADE.
- 13.) THE "ROAD CLOSED" SIGN ON A TYPE III BARRICADE SHALL BE MOUNTED ACCORDING TO STANDARD 720001. ALL TYPE III BARRICADES SHALL HAVE TWO AMBER TYPE A-LOW INTENSITY FLASHING LIGHTS.
- 14.) CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IMMEDIATELY BEHIND THE TYPE III BARRICADES DURING NON-WORKING HOURS. IN ANY EVENT, ARTICLES 701 THRU 703 OF THE STANDARD SPECIFICATIONS SHALL APPLY.
- 15.) THE ENGINEER SHALL BE NOTIFIED AT LEAST TWO WEEKS BEFORE THE ROAD IS TO BE OPENED TO TRAFFIC. THE ENGINEER WILL COORDINATE WITH THE CITY AND THE APPROPRIATE LOCAL AGENCIES.
- 16.) THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAY AND POINTS OF ACCESS DURING ALL PERIODS OF CONSTRUCTION.
- 17.) FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF 8 SANDBAGS PER BARRICADE.



LEGEND

-  WORK AREA
-  SIGN PANEL ON PERMANENT SUPPORT
-  TYPE III BARRICADE

						
W20-3 (0) (4848) POST MOUNTED W/ LIGHT	W20-3 (4848) POST MOUNTED W/ LIGHT	R11-4 (6030) BARRICADE MOUNTED W/ LIGHTS	R11-2 (4830) BARRICADE MOUNTED W/ LIGHTS	W20-2 48" X 48"	M4-9L 30" X 24"	M4-9R 30" X 24"
SIGN PANEL No. 1	SIGN PANEL No. 2	SIGN PANEL No. 5	SIGN PANEL No. 6	SIGN PANEL No. 7	SIGN PANEL No. 8	SIGN PANEL No. 9

REVISIONS	
NAME	DATE

CITY OF SPRINGFIELD, ILLINOIS

MAINTENANCE OF TRAFFIC ROAD CLOSURE PLAN

SCALE: NONE
DATE: 5/26/06

DRAWN BY: GLD
CHECKED BY: JMM/SPH

L:\Springfield\050250\Draw\Sheets\MTO\Amos.dgn 5/27/2006

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8009	05-00445-00-BR	SANGAMON	17	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
SHEET 1 OF 9 SHEETS				

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A3	Sq. Yd.	60
Filter Fabric	Sq. Yd.	60
Removal of Existing Structures	L. Sum	1
Protective Coat	Sq. Yd.	36
Reinforcement Bars	Pound	56220
Reinforcement Bars, Epoxy Coated	Pound	2450
Concrete Box Culverts	Cu. Yd.	274.4
Bicycle Railing	Foot	140
Name Plates	Each	1
Granular Culvert Backfill	Cu. Yd.	311
Rockfill - Replacement	Ton	472
Parapet Railing	Foot	54

WATERWAY INFORMATION

Drainage Area = 3.31 Sq. Mi. Low Grade Elev. 540.90 @ Sta. 5+50

Flood Yr.	Freq. Q	C.F.S.	Opening	Sq. Ft. Nat.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	30	2616.4	193.3	255.2	536.21	0.00	0.00	536.21
Base	100	3294.4	218.6	288.7	537.07	1.12	1.12	538.19

Over-topping: Greater than 500 Year

Max Calc	500	3514.5	225.4	297.7	537.30	1.32	1.32	538.62
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Construction Permits: This project has been approved for construction under statewide Permit No. 12, as issued by the Department of Natural Resources/Office of Water Resources.

DESIGN SPECIFICATIONS

2002 AASHTO "Standard Specifications for Highway Bridges"

DESIGN STRESSES

FIELD UNITS
 f'c = 3,500 psi (Cast-in-place)
 fy = 60,000 psi (reinforcement)

LOADING HS20-44

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

GENERAL NOTES:

1. Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.
2. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
3. All construction joints shall be bonded.
4. Exposed edges shall have a 3/4" chamfer.
5. At least 8 ft. of barrel shall be poured monolithically with the wingwalls.
6. Precast culvert alternate is not allowed.
7. For details and quantity of sidewalks. See Roadway Plans.
8. Protective coat shall be applied to the top and inside face of the F shape parapet only.

I certify that to the best of my knowledge, information and belief, that this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges."

Gerald B. Rotherham
 Gerald B. Rotherham, P.E., S.E.
 Illinois Licensed Structural Engineer
 License Number: 081-005673
 Expiration Date: November 30, 2006



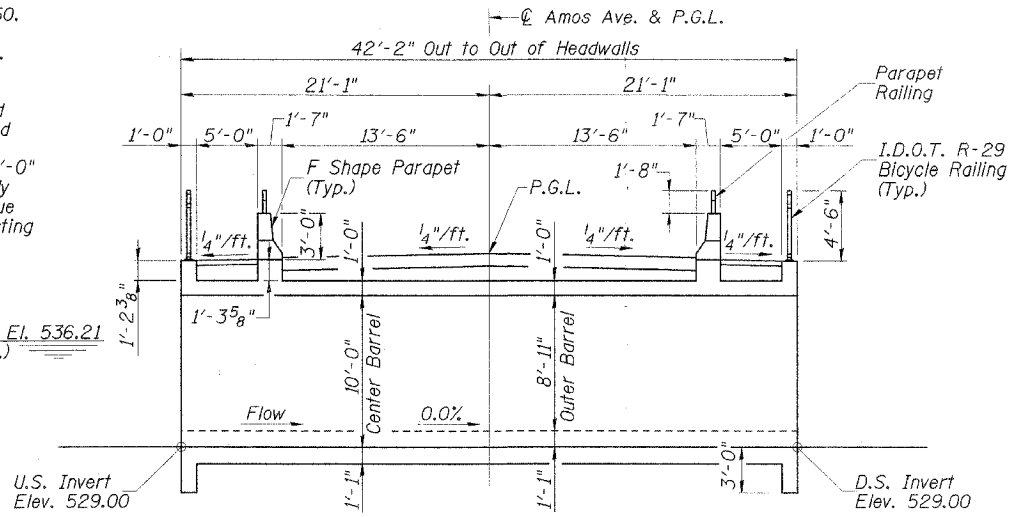
Bench Mark #1: Chiseled "□" on Northwest corner of North Abut. Amos Avenue bridge over drainage ditch. Elev. 541.45
 Bench Mark #2: Mueller bolt fire hydrant East side Amos Avenue @ Broughton entrance. Elev. 546.83

Existing Structure:

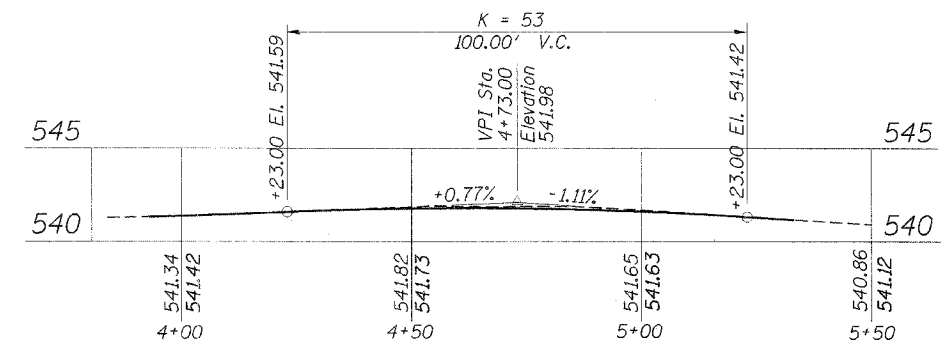
No. 084-3218 - Built as Project 14 in 1950. Superstructure consists of a R.C. deck supported on single span WF 21x68 beams. The superstructure is supported on closed abutments composed of timber piles and metal planking. The abutment walls are tied back to a dead man. The wingwalls are tied together by 1" dia. rods. The structure is 34'-6" back to back of abutments and 24'-0" out-to-out. The wingwalls are approximately 15'-6" in length. Traffic along Amos Avenue shall be detoured during construction. Existing structure to be removed.

No Salvage

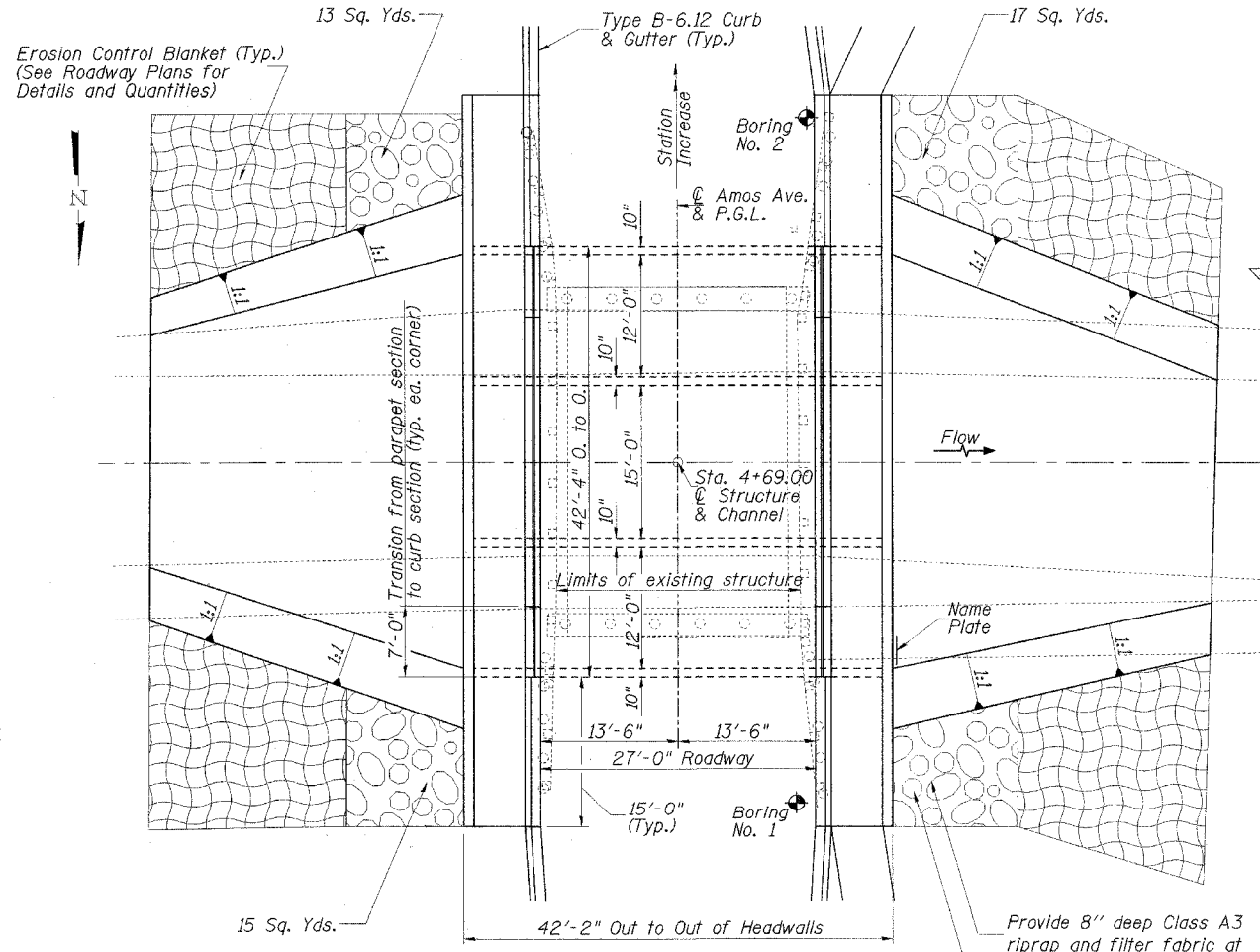
D.H.W. El. 537.07 (100 Yr.)
 D.H.W. El. 536.21 (30 Yr.)



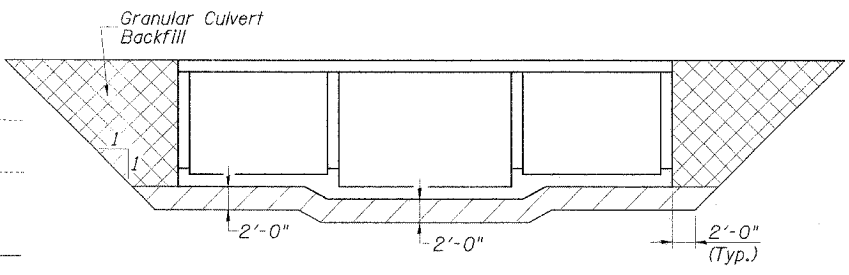
LONGITUDINAL SECTION
 (Looking South)



ROADWAY PROFILE
 (Along Centerline of Roadway)



PLAN



SECTION THRU BARREL

Note: Remove unsuitable soil 2'-0" below bottom of culvert and 2'-0" outside the footprint of box. Replace with Rockfill - Replacement.

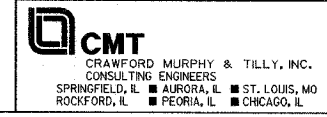
- Pay Limits of Rockfill - Replacement
- Pay Limits of Granular Culvert Backfill

BUILT 2006 BY
 CITY OF SPRINGFIELD
 SEC. 05-00445-00-BR
 F.A.U. RT. 8009 STA. 4+69.00
 LOADING HS20
 STR. NO. 084-8009

NAME PLATE
 See Std. 515001



LOCATION SKETCH

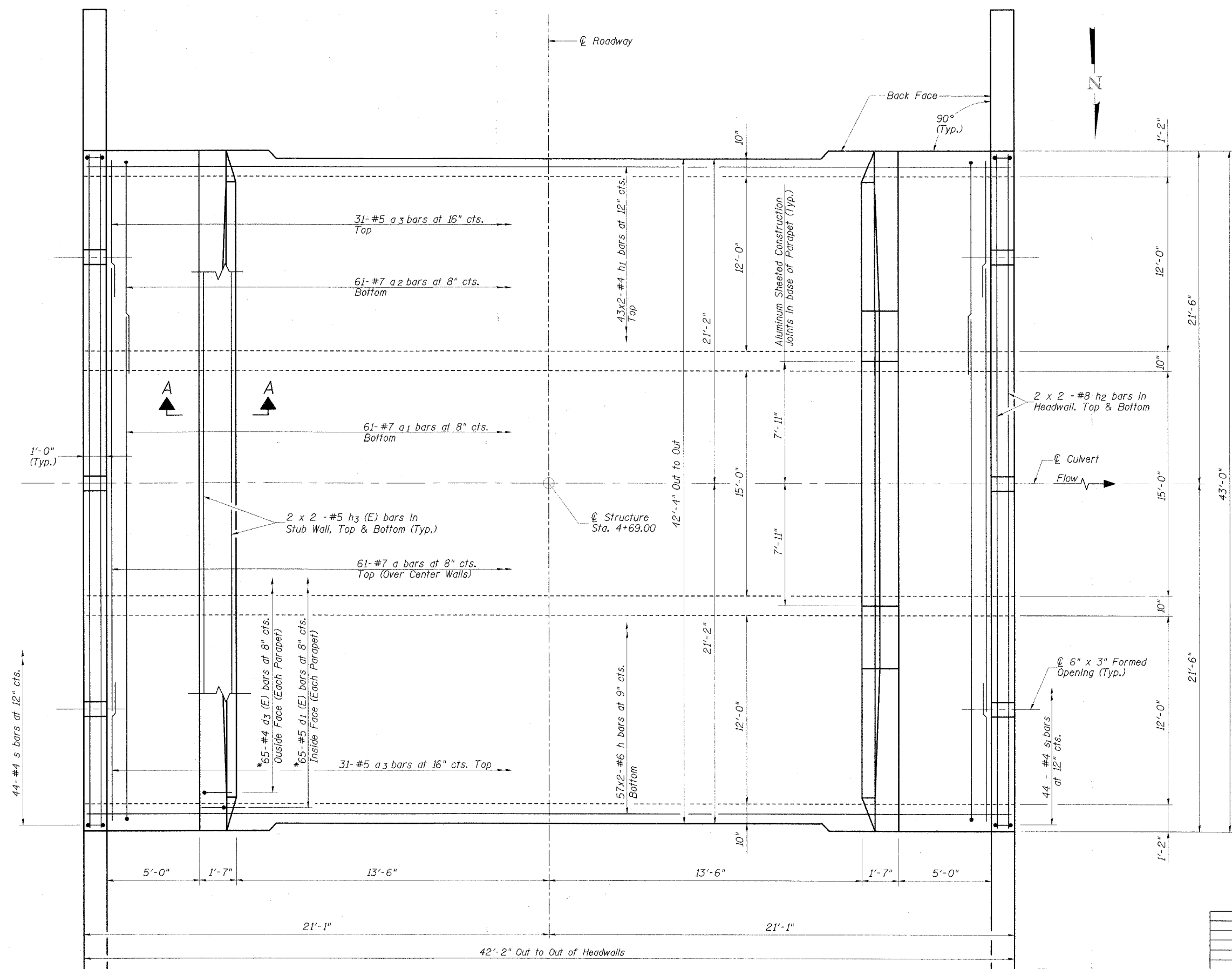


REVISIONS	
NAME	DATE

CITY OF SPRINGFIELD, ILLINOIS
GENERAL PLAN & ELEVATION
 FAU 8009-AMOS AVE. OVER DRAINAGE DITCH
 SECTION 05-00445-00-BR
 SANGAMON COUNTY
 STATION 4+69.00 S.N. 084-8009
 SCALE: NONE DRAWN BY: GLD
 DATE: 5/26/06 CHECKED BY: GBR

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8009	05-00445-00-BR	SANGAMON	17	8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SHEET 2 OF 9 SHEETS



MIN. BAR LAP

#4	= 1'-4"
#5	= 1'-8"
#6	= 2'-0"
#7	= 2'-9"
#8	= 4'-6"

- NOTES:**
- For Section A-A see Sheet 5 of 9
 - Bars indicated 2x2-#8 etc. indicates 2 lines of bars with 2 lengths per line.
 - Reinforcement bars designated (E) shall be epoxy coated.

*Bend bars to fit at end of parapets

**PLAN
TOP SLAB**

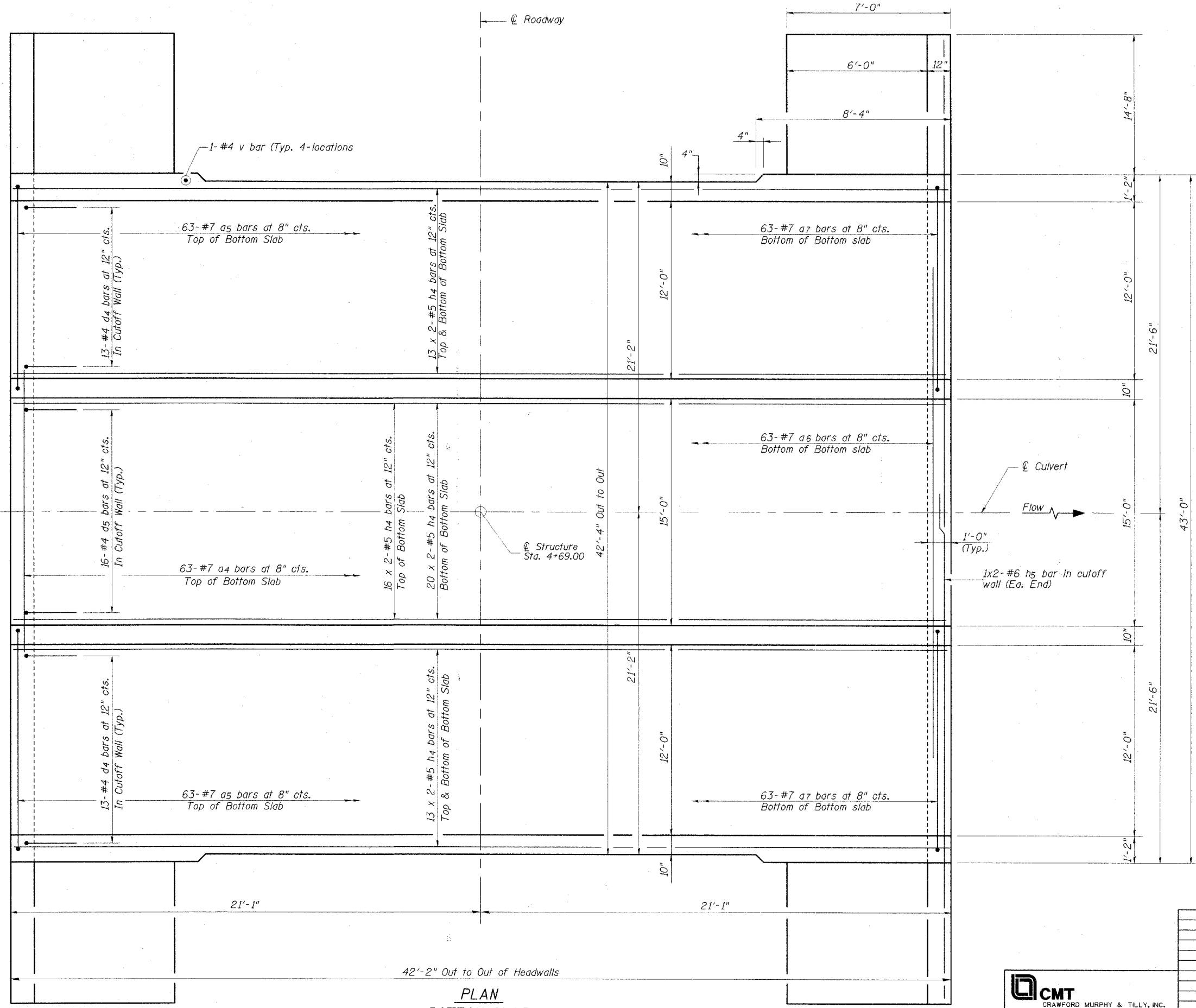
CMT
CRAWFORD MURPHY & TILLY, INC.
CONSULTING ENGINEERS
SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

REVISIONS	
NAME	DATE

CITY OF SPRINGFIELD, ILLINOIS
TOP SLAB REINFORCEMENT PLAN
FAU 8009-AMOS AVE. OVER DRAINAGE DITCH
SECTION 05-00445-00-BR
SANGAMON COUNTY
STATION 4+69.00 S.N. 084-8009
SCALE: NONE DRAWN BY: GLD
DATE: 5/26/06 CHECKED BY: GBR

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8009	05-00445-00-BR	SANGAMON	17	9
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
SHEET 3 OF 9 SHEETS				



MIN. BAR LAP
 #5 = 1'-8"
 #6 = 2'-0"

- NOTES:**
- See Sheet 6 of 9 for wingwall details.
 - Bars indicated 13x2-#5 etc. indicates 13 lines of bars with 2 lengths per line.

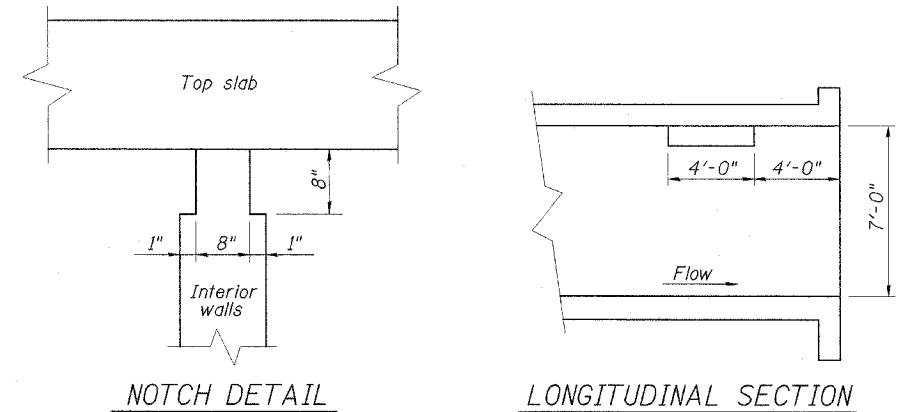
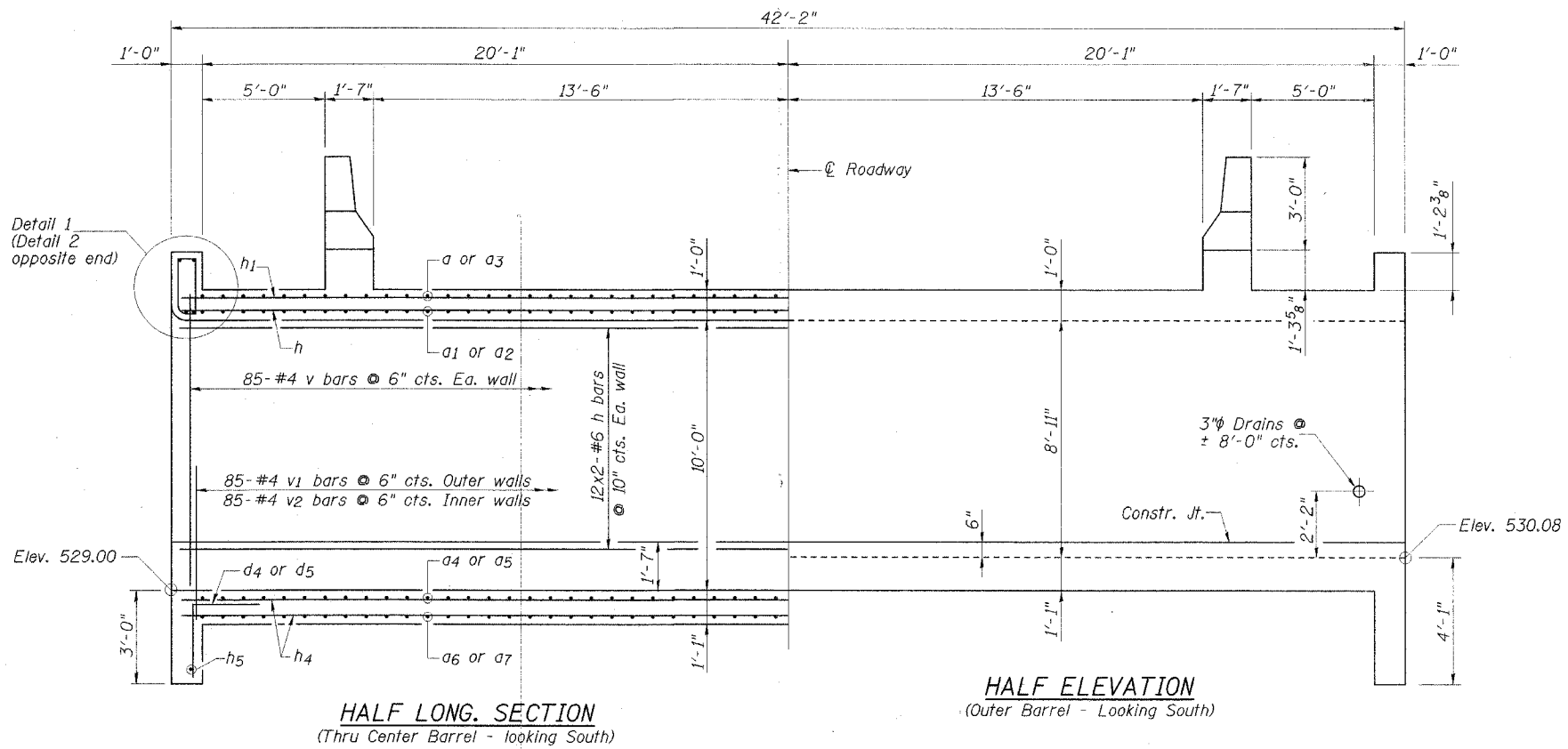
PLAN
BOTTOM SLAB

REVISIONS	
NAME	DATE

CITY OF SPRINGFIELD, ILLINOIS
BOTTOM SLAB REINFORCEMENT PLAN
 FAU 8009-AMOS AVE. OVER DRAINAGE DITCH
 SECTION 05-00445-00-BR
 SANGAMON COUNTY
 STATION 4+69.00 S.N. 084-8009
 SCALE: NONE DRAWN BY: GLD
 DATE: 5/26/06 CHECKED BY: GBR

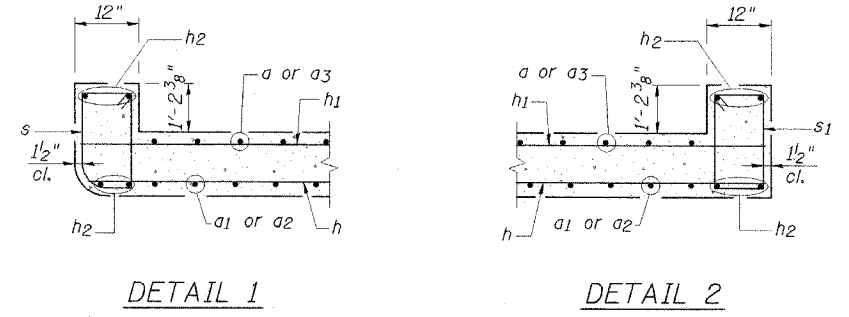
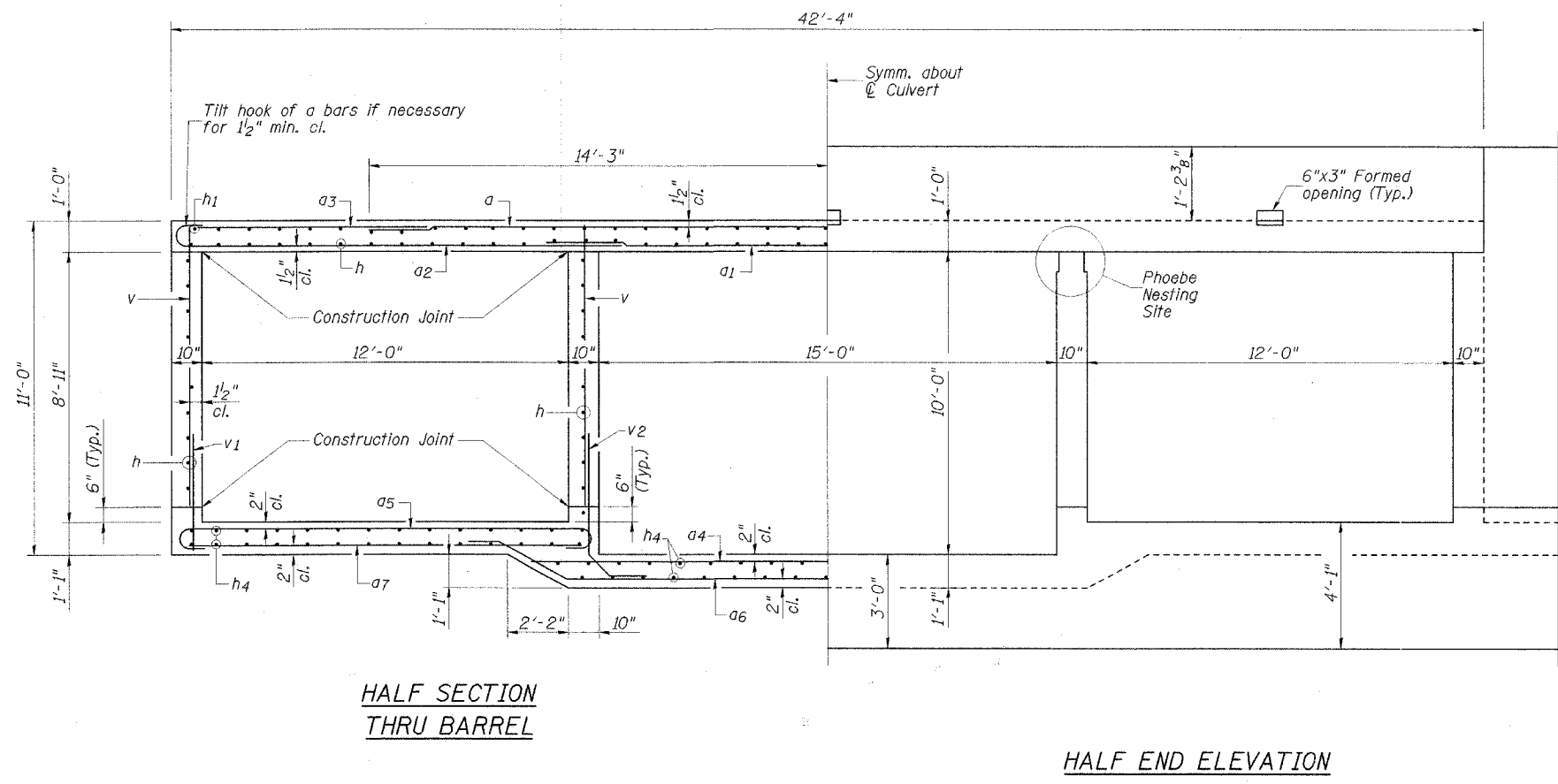
CMT
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 CONSULTING ENGINEERS
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 ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

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 5/24/2006



Note:
Notch formed by rough-finished board attached to and removed with formwork.

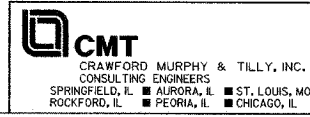
PHOEBE NESTING SITE DETAIL
(Near Downstream End)



REVISIONS	
NAME	DATE

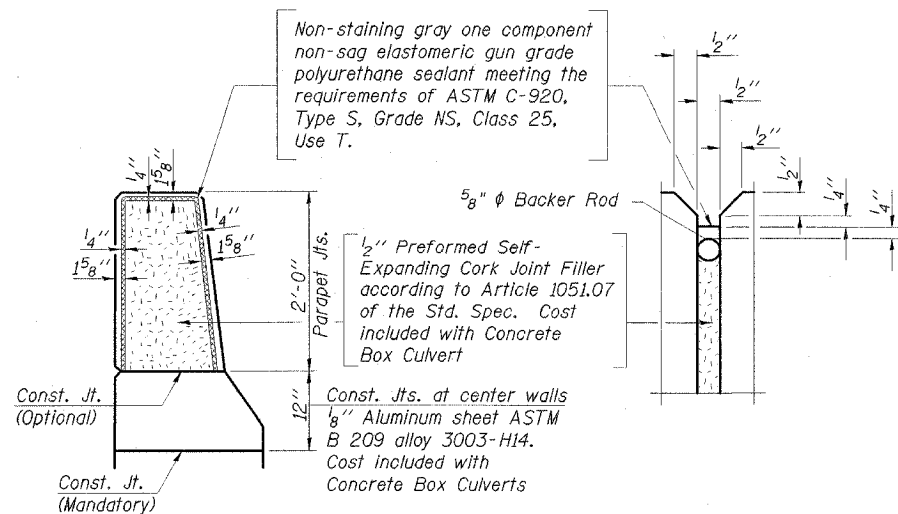
CITY OF SPRINGFIELD, ILLINOIS
CULVERT DETAILS I
FAU 8009-AMOS AVE. OVER DRAINAGE DITCH
SECTION 05-00445-00-BR
SANGAMON COUNTY
STATION 4+69.00 S.N. 084-8009

SCALE: NONE DRAWN BY: GLD
DATE: 5/26/06 CHECKED BY: GBR

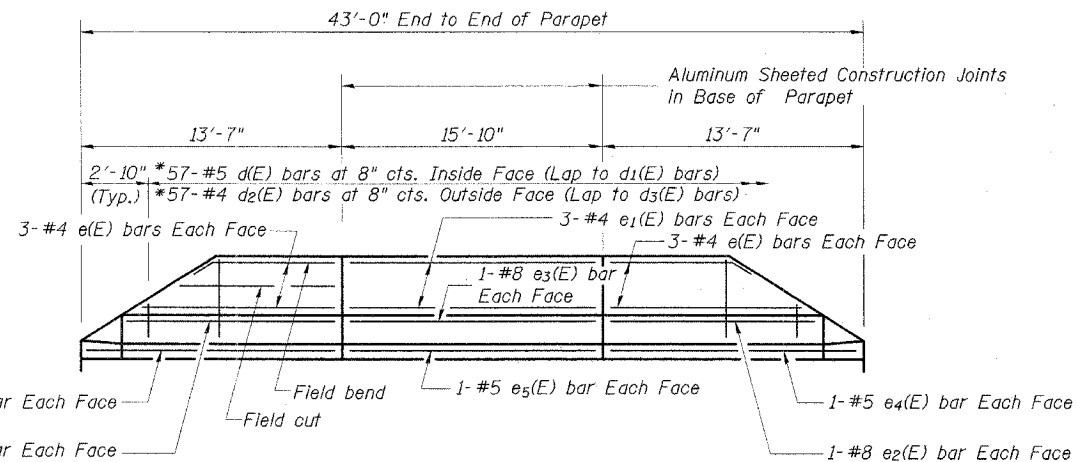


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8009	05-00445-00-BR	SANGAMON	17	11
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SHEET 5 OF 9 SHEETS

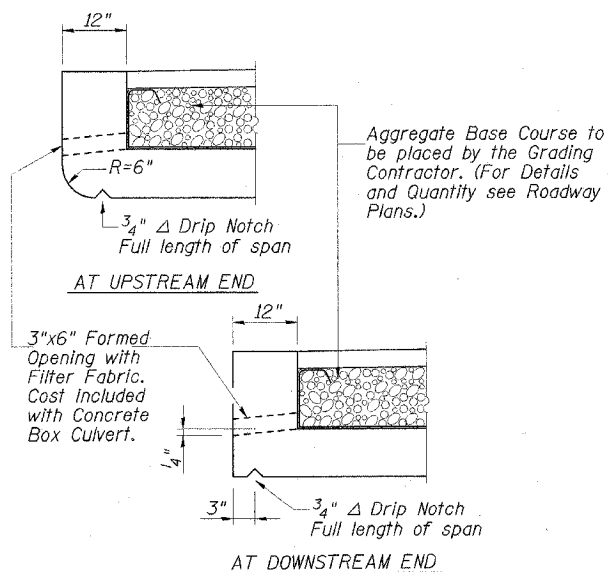


PARAPET JOINT DETAILS

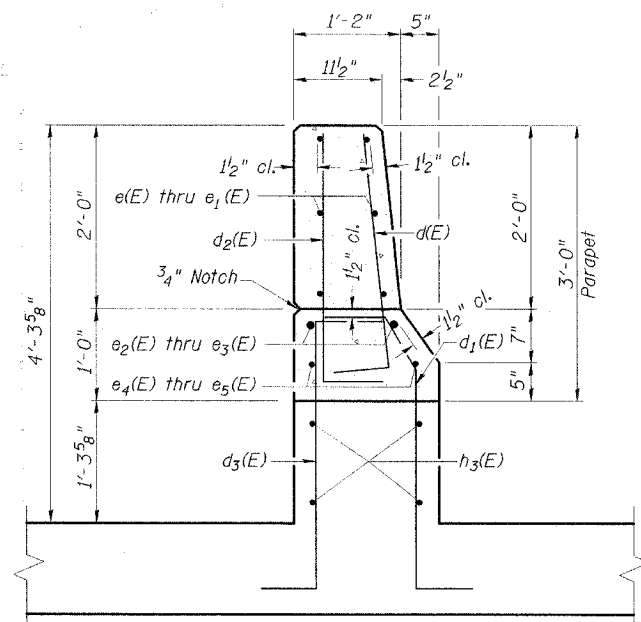


INSIDE ELEVATION OF PARAPET

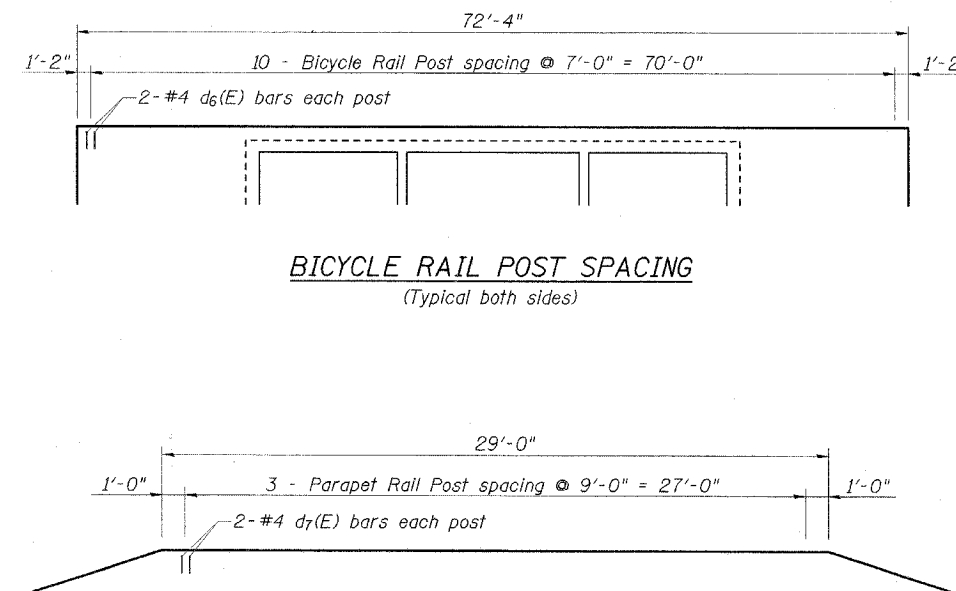
*Cut to fit @ end of parapet



DRAIN DETAIL

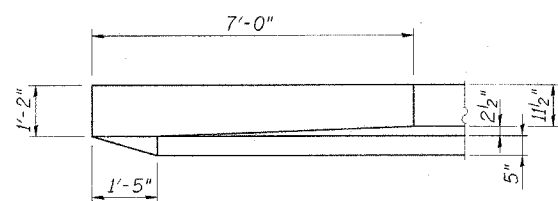


SECTION A-A

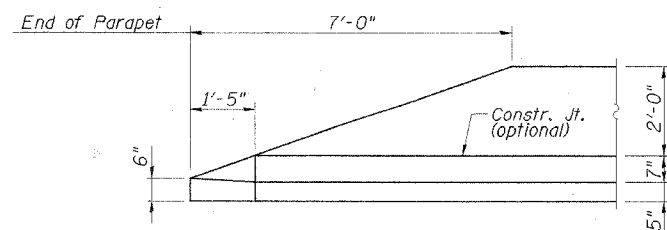


BICYCLE RAIL POST SPACING
(Typical both sides)

PARAPET RAIL POST SPACING
(Typical both Parapets)



PLAN



ELEVATION

END OF PARAPET DETAIL

NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.

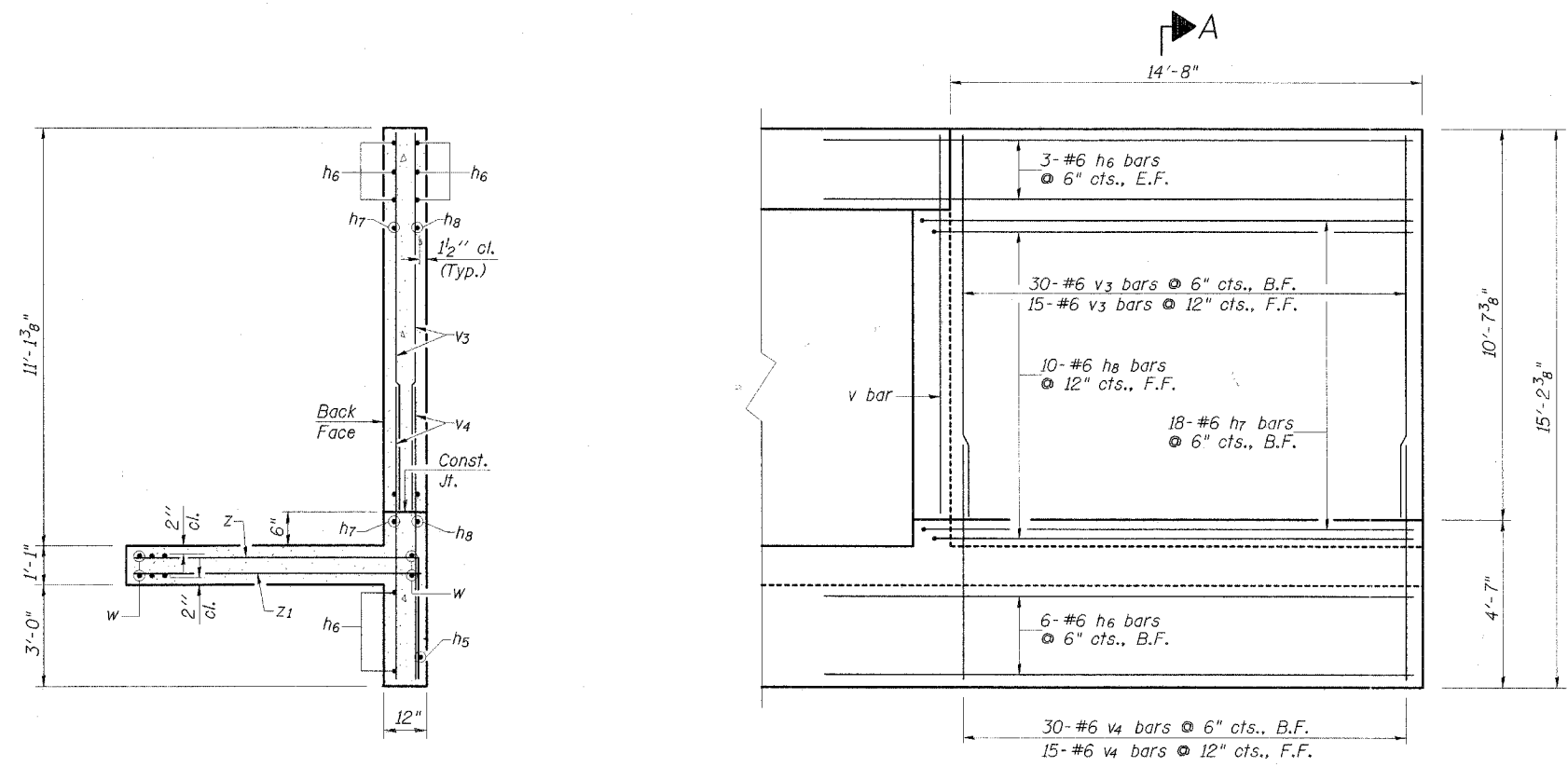
REVISIONS	
NAME	DATE

CITY OF SPRINGFIELD, ILLINOIS
PARAPET DETAILS
 FAU 8009-AMOS AVE. OVER DRAINAGE DITCH
 SECTION 05-00445-00-BR
 SANGAMON COUNTY
 STATION 4+69.00 S.N. 084-8009
 SCALE: NONE DRAWN BY: GLD
 DATE: 5/26/06 CHECKED BY: GBR

CMT
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 CONSULTING ENGINEERS
 SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
 ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

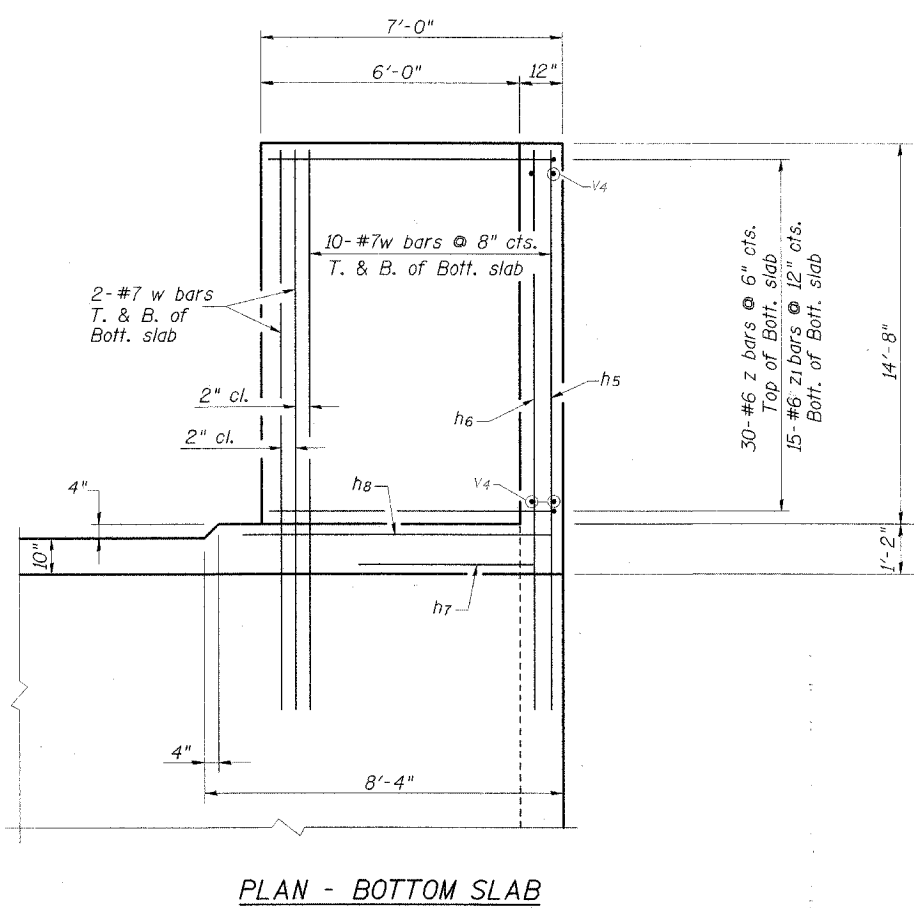
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8009	05-00445-00-BR	SANGAMON	17	12
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
SHEET 6 OF 9 SHEETS				

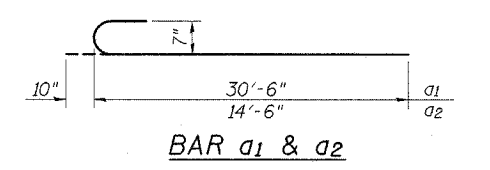


SECTION A-A

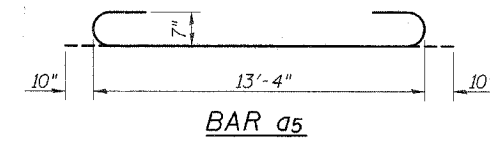
WINGWALL ELEVATION



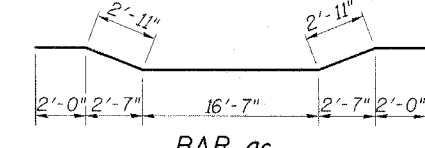
PLAN - BOTTOM SLAB



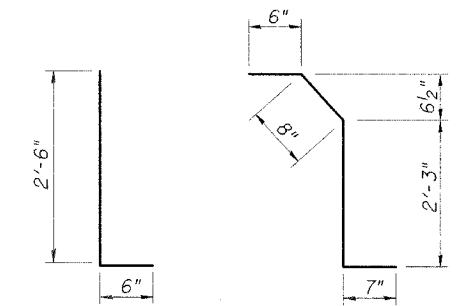
BAR a1 & a2



BAR a5

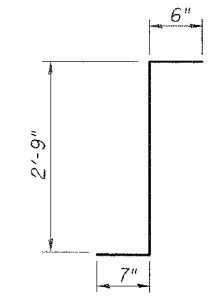


BAR a6

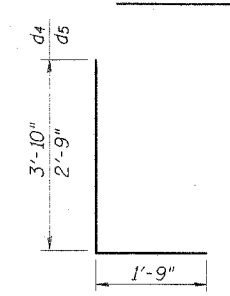


BARS d & d2

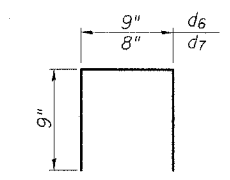
BAR d1



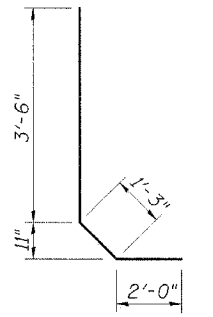
BARS d3



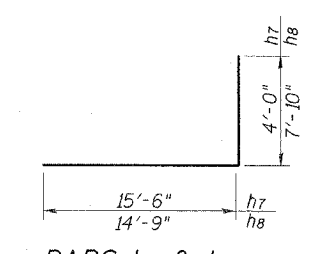
BARS d4 & d5



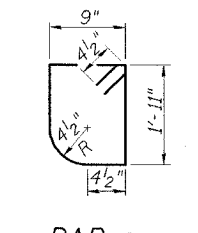
BARS d6 & d7



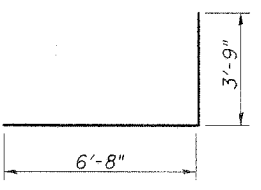
BAR v2



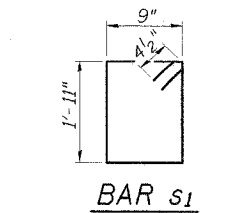
BARS h7 & h8



BAR s



BAR z



BAR s1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	61	#7	28'-6"	
a1	61	#7	31'-4"	
a2	61	#7	15'-4"	
a3	62	#5	8'-5"	
a4	63	#7	19'-7"	
a5	126	#7	15'-0"	
a6	63	#7	26'-5"	
a7	126	#7	13'-4"	
d(E)	114	#5	3'-0"	
d1(E)	130	#5	4'-0"	
d2(E)	114	#4	3'-0"	
d3(E)	130	#4	3'-10"	
d4	52	#4	5'-7"	
d5	32	#4	4'-6"	
d6(E)	44	#4	2'-3"	
d7(E)	16	#4	2'-2"	
e (E)	24	#4	11'-1"	
e1(E)	12	#4	15'-6"	
e2(E)	8	#8	12'-0"	
e3(E)	4	#8	15'-6"	
e4(E)	8	#5	13'-3"	
e5(E)	4	#5	15'-6"	
h	210	#6	22'-0"	
h1	86	#4	21'-7"	
h2	16	#8	23'-7"	
h3	16	#5	22'-2"	
h4	176	#5	21'-9"	
h5	4	#6	37'-0"	
h6	48	#6	18'-5"	
h7	72	#6	19'-6"	
h8	40	#6	22'-7"	
s	44	#4	5'-11"	
s1	44	#4	6'-1"	
v	344	#4	9'-2"	
v1	170	#4	3'-3"	
v2	170	#4	6'-9"	
v3	180	#6	10'-3"	
v4	180	#6	7'-3"	
w	96	#7	19'-3"	
z	120	#6	10'-5"	
z1	60	#6	6'-8"	
Concrete Box Culverts		Cu. Yd.	274.4	
Reinforcement Bars		Pound	56220	
Reinforcement Bars, Epoxy Coated		Pound	2450	

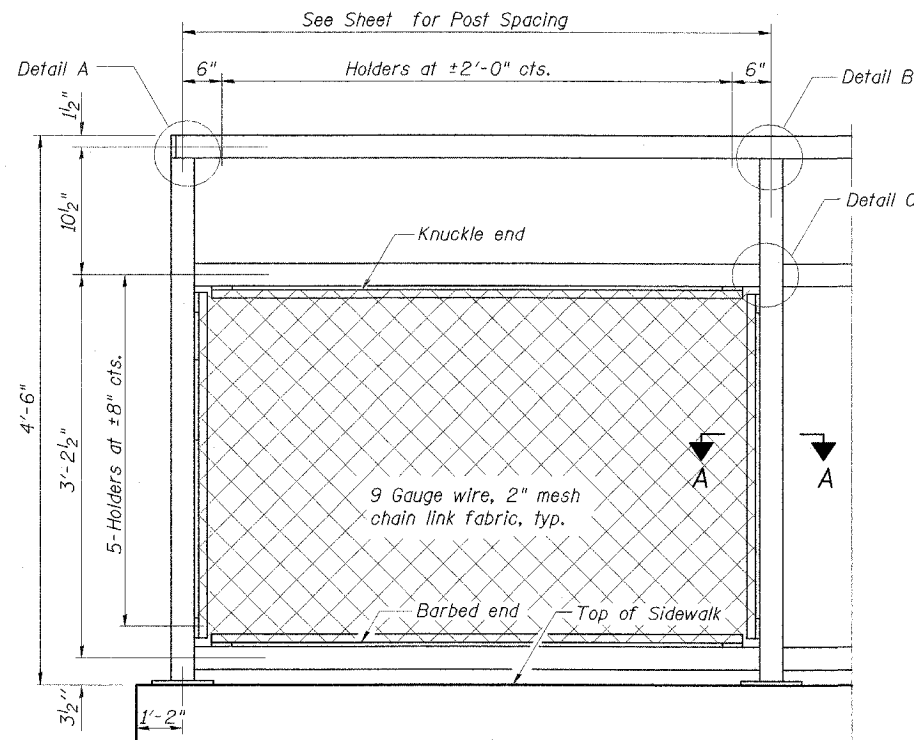
Reinforcement bars designated (E) shall be epoxy coated.

REVISIONS	
NAME	DATE

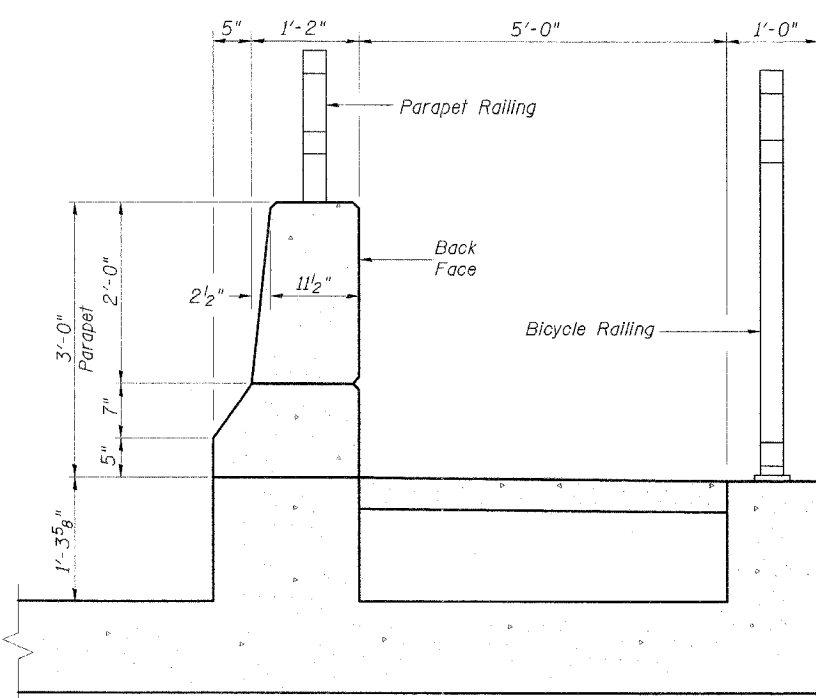
CITY OF SPRINGFIELD, ILLINOIS
CULVERT DETAILS II
 FAU 8009-AMOS AVE. OVER DRAINAGE DITCH
 SECTION 05-00445-00-BR
 SANGAMON COUNTY
 STATION 4+69.00 S.N. 084-8009
 SCALE: NONE DRAWN BY: GLD
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 CONSULTING ENGINEERS
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 ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

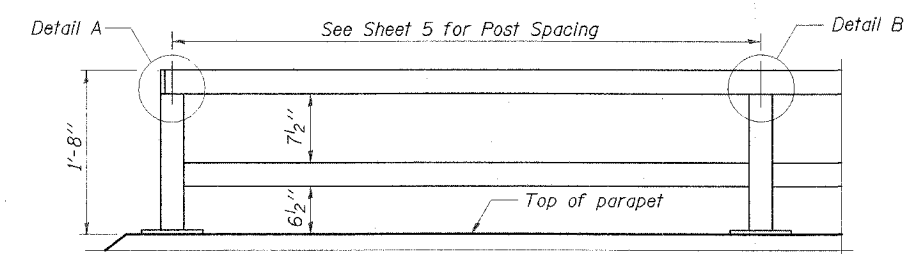
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8009	05-00445-00-BR	SANGAMON	17	13
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



BICYCLE RAILING

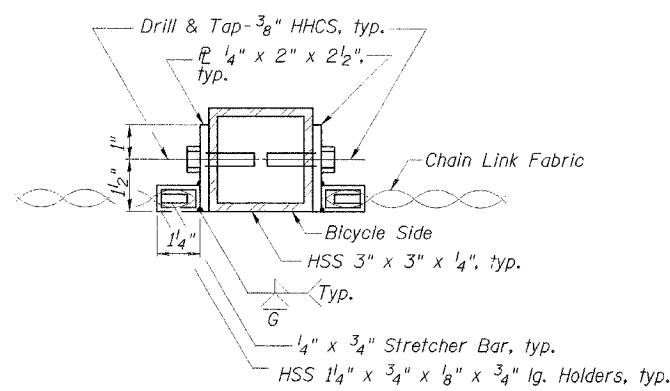


SECTION THRU CULVERT

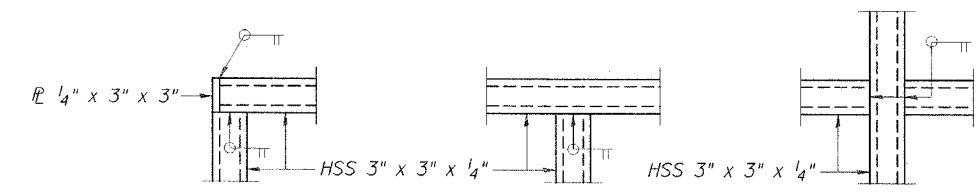


PARAPET RAILING ELEVATION

(Inside Face of Two Element Rail)



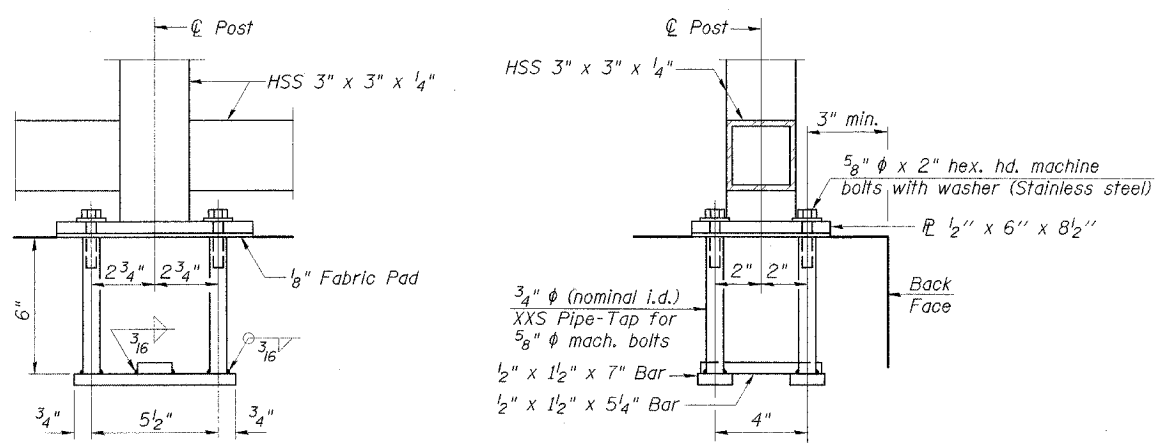
SECTION A-A



DETAIL A

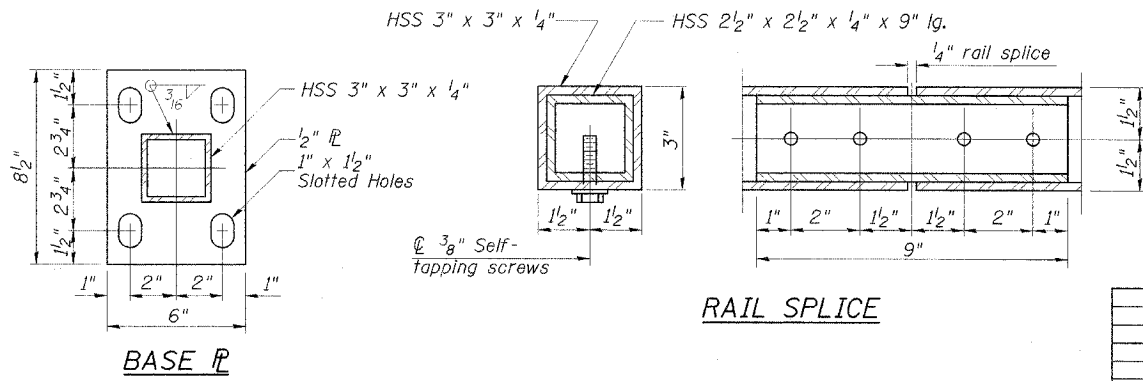
DETAIL B

DETAIL C



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" φ anchor rods. Embedment shall be according to the manufacturer's specifications.



BASE PLATE

RAIL SPLICE

BILL OF MATERIAL

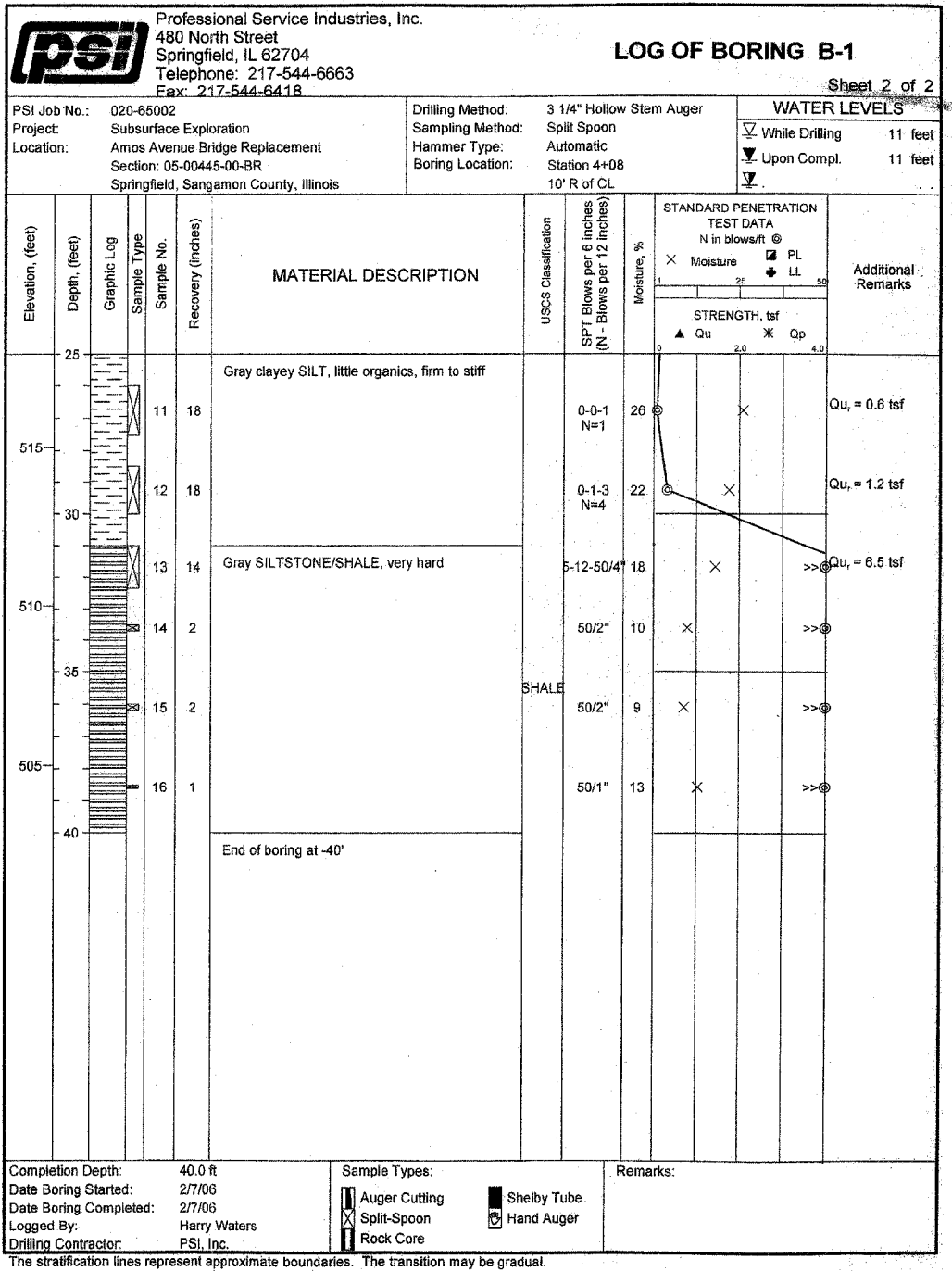
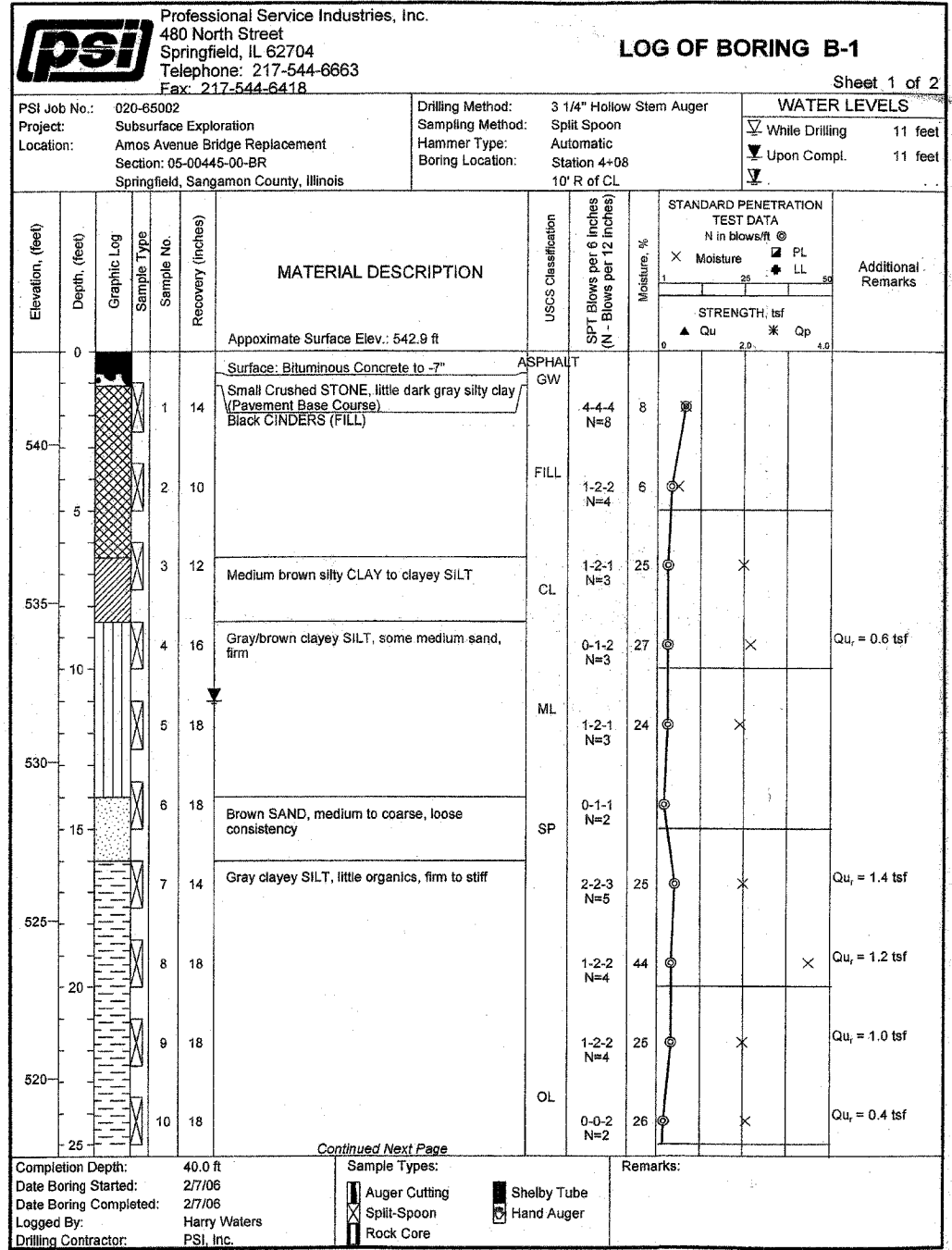
Item	Unit	Quantity
Bicycle Railing	Foot	140
Parapet Railing	Foot	54

REVISIONS	
NAME	DATE

CITY OF SPRINGFIELD, ILLINOIS
BICYCLE RAILING
 FAU 8009-AMOS AVE. OVER DRAINAGE DITCH
 SECTION 05-00445-00-BR
 SANGAMON COUNTY
 STATION 4+69.00 S.N. 084-8009
 SCALE: NONE DRAWN BY: GLD
 DATE: 5/26/06 CHECKED BY: GBR

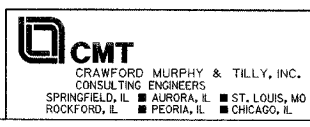
CMT
 CRAWFORD MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
 ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

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 5/24/2006



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REVISIONS	
NAME	DATE



CITY OF SPRINGFIELD, ILLINOIS

BORING LOG I

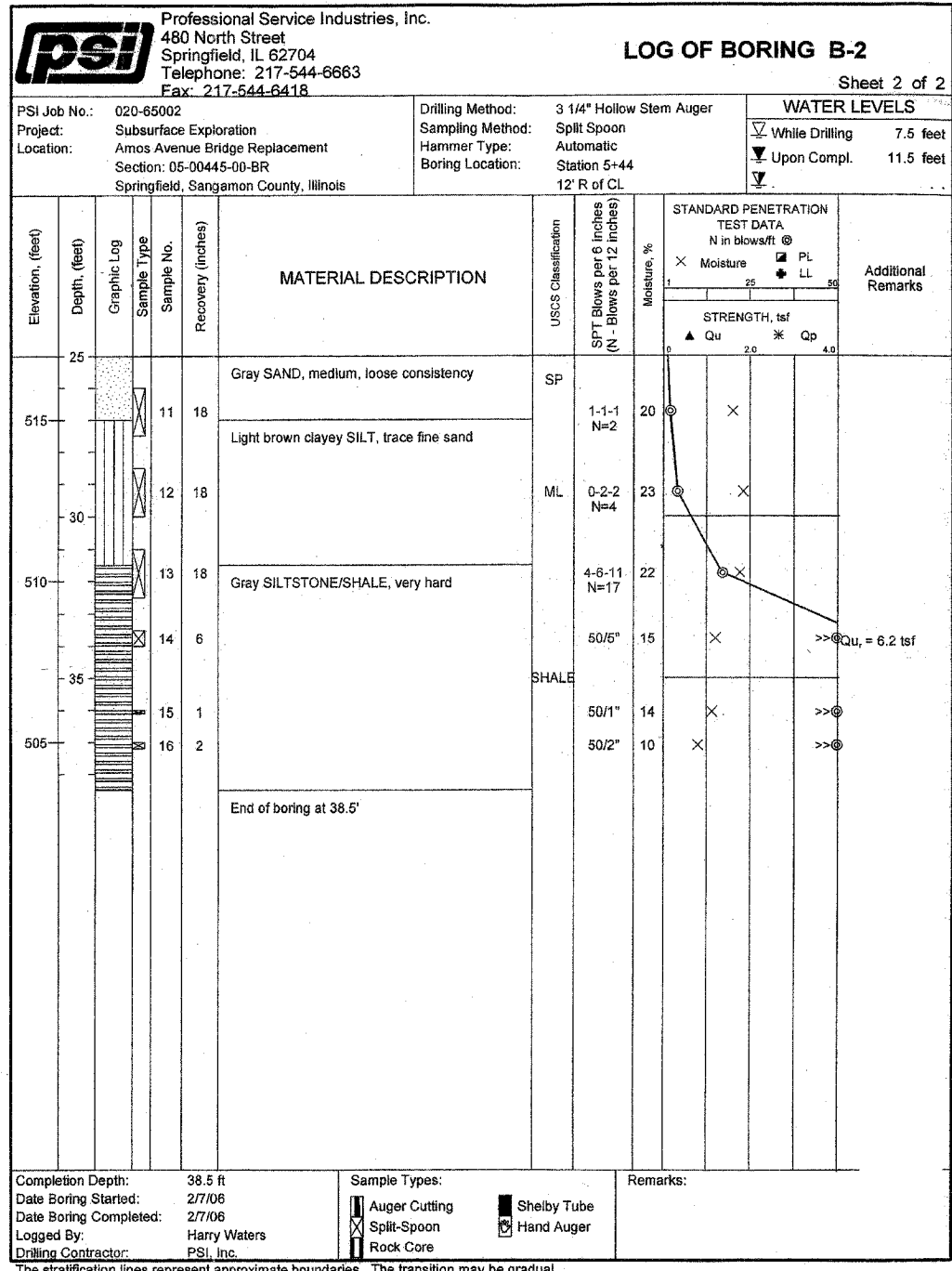
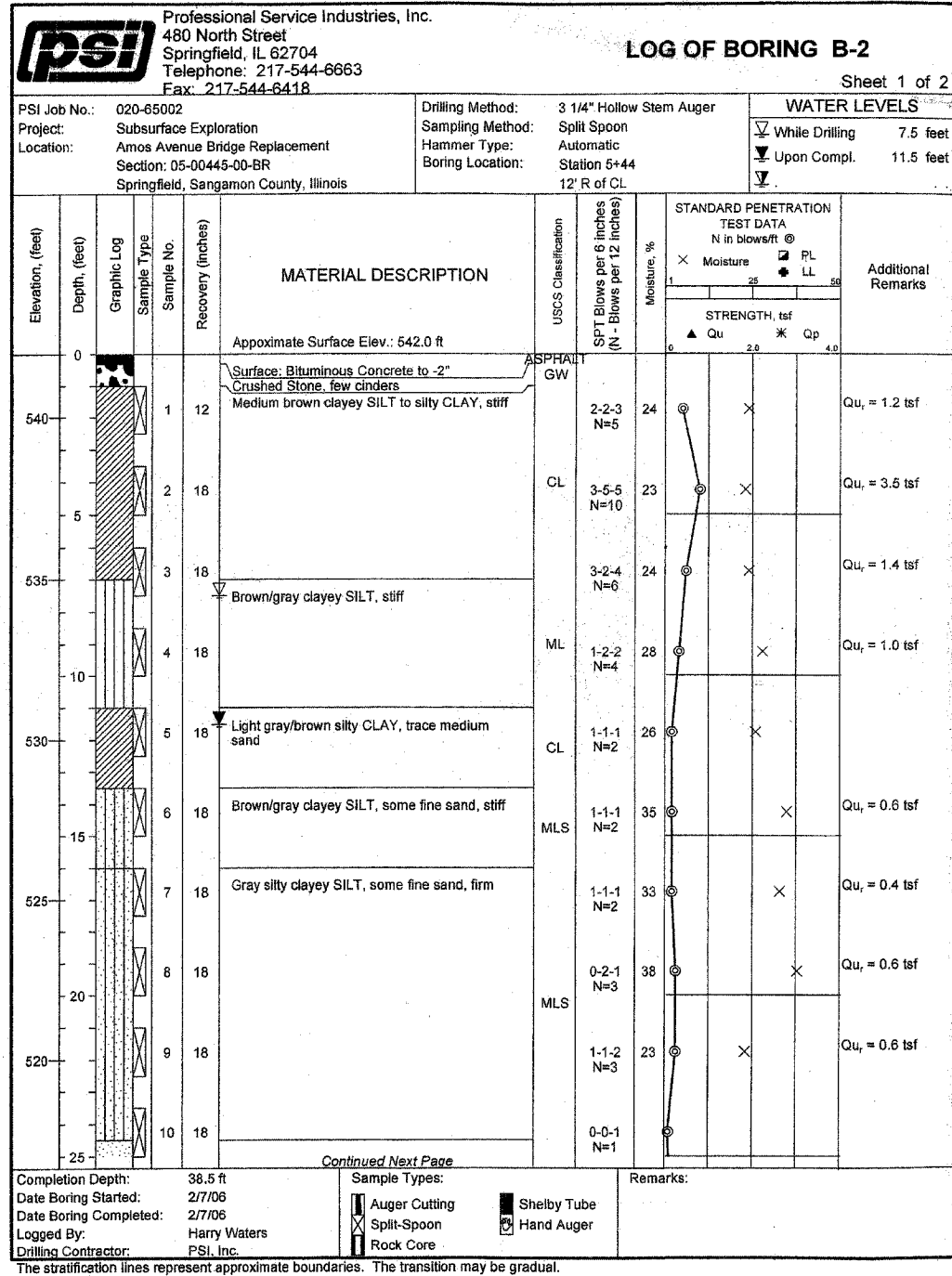
FAU 8009-AMOS AVE. OVER DRAINAGE DITCH
SECTION 05-00445-00-BR
SANGAMON COUNTY
STATION 4+69.00 S.N. 084-8009

SCALE: NONE
DATE: 5/26/06

DRAWN BY: GLD
CHECKED BY: GBR

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8009	05-00445-00-BR	SANGAMON	17	15
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SHEET 9 OF 9 SHEETS



L:\Springfield\0500445\Draw\Sheets\Borings\Borng

REVISIONS	
NAME	DATE

CRAWFORD MURPHY & TILLY, INC.
CONSULTING ENGINEERS
SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO
ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

CITY OF SPRINGFIELD, ILLINOIS
BORING LOG II
FAU 8009-AMOS AVE. OVER DRAINAGE DITCH
SECTION 05-00445-00-BR
SANGAMON COUNTY
STATION 4+69.00 S.N. 084-8009

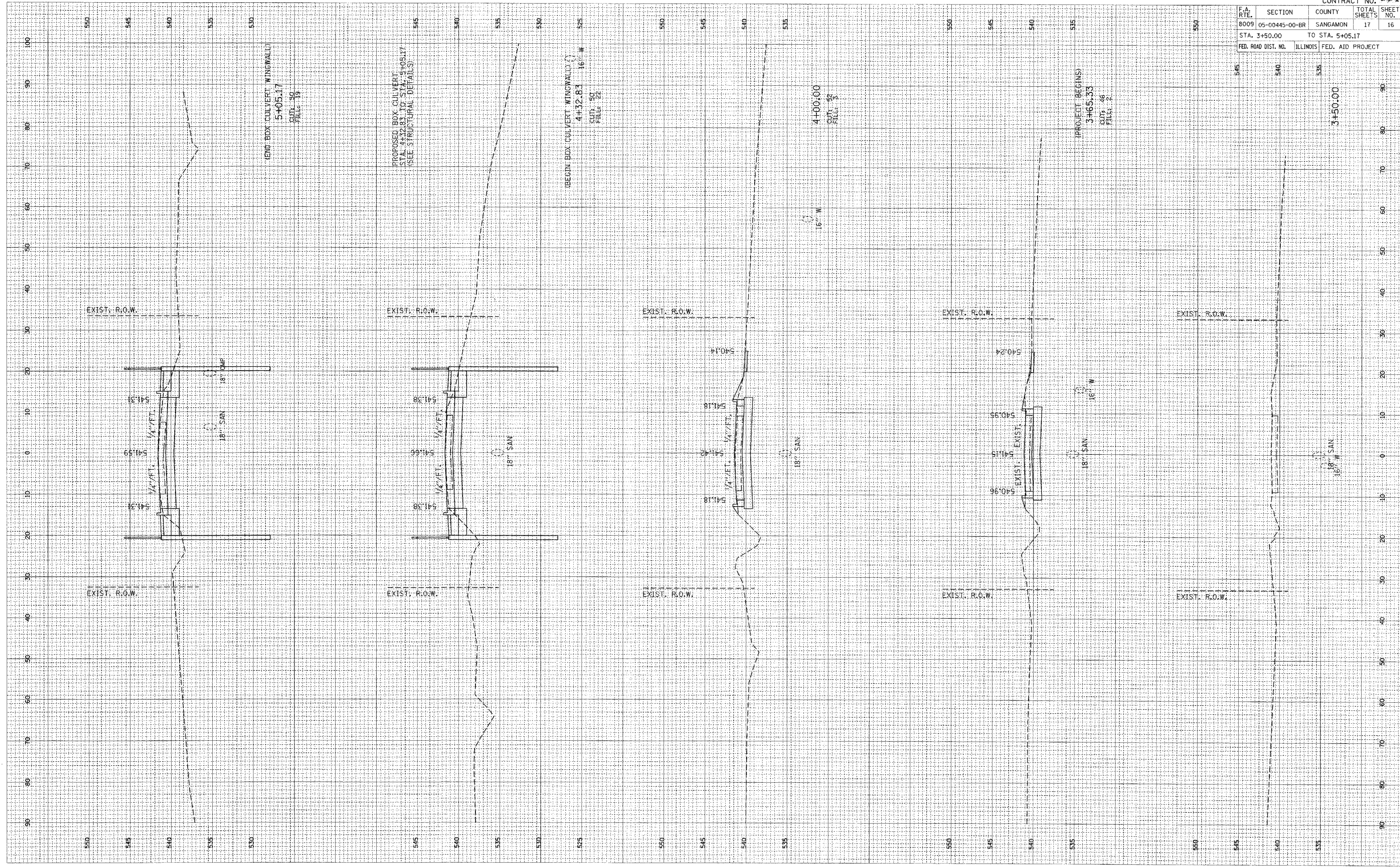
SCALE: NONE DRAWN BY: GLD
DATE: 5/26/06 CHECKED BY: GBR

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8009	05-00445-00-BR	SANGAMON	17	16
STA. 3+50.00		TO STA. 5+05.17		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	DATE
CHECKED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
CHECKED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	

PLOT DATE = 5/7/2006
 FILE NAME = #FILE#
 PLOT SCALE = #SCALE#
 USER NAME = bband

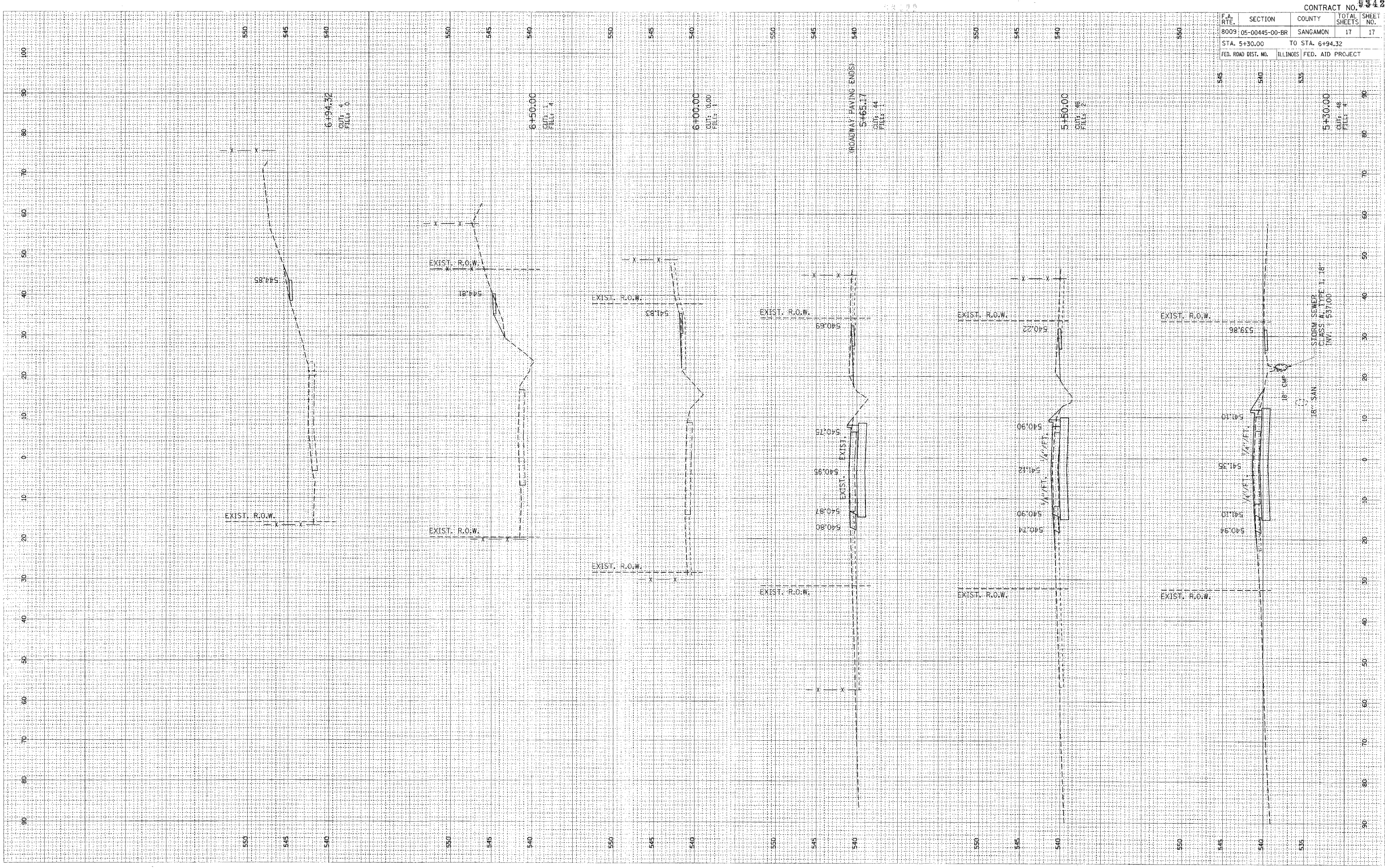


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8009	05-00445-00-BR	SANGAMON	17	17
STA. 5+30.00		TO STA. 6+94.32		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DATE	5/27/2005
DESIGNED BY	shannon
CHECKED BY	shannon
DATE	5/27/2005
DESIGNED BY	shannon
CHECKED BY	shannon

DATE	5/27/2005
DESIGNED BY	shannon
CHECKED BY	shannon
DATE	5/27/2005
DESIGNED BY	shannon
CHECKED BY	shannon

PLOT DATE = 5/27/2005
 PLOT SCALE = 1"=40'
 USER NAME = shannon



STATION	ELEVATION	DESCRIPTION
6+94.32	542.85	CUT: 4, FILL: 0
6+50.00	544.81	CUT: 4, FILL: 0
6+00.00	541.83	CUT: 0.00, FILL: 1.00
5+65.17	540.89	CUT: 44, FILL: 1
5+50.00	540.74	CUT: 46, FILL: 2
5+30.00	540.94	CUT: 46, FILL: 1