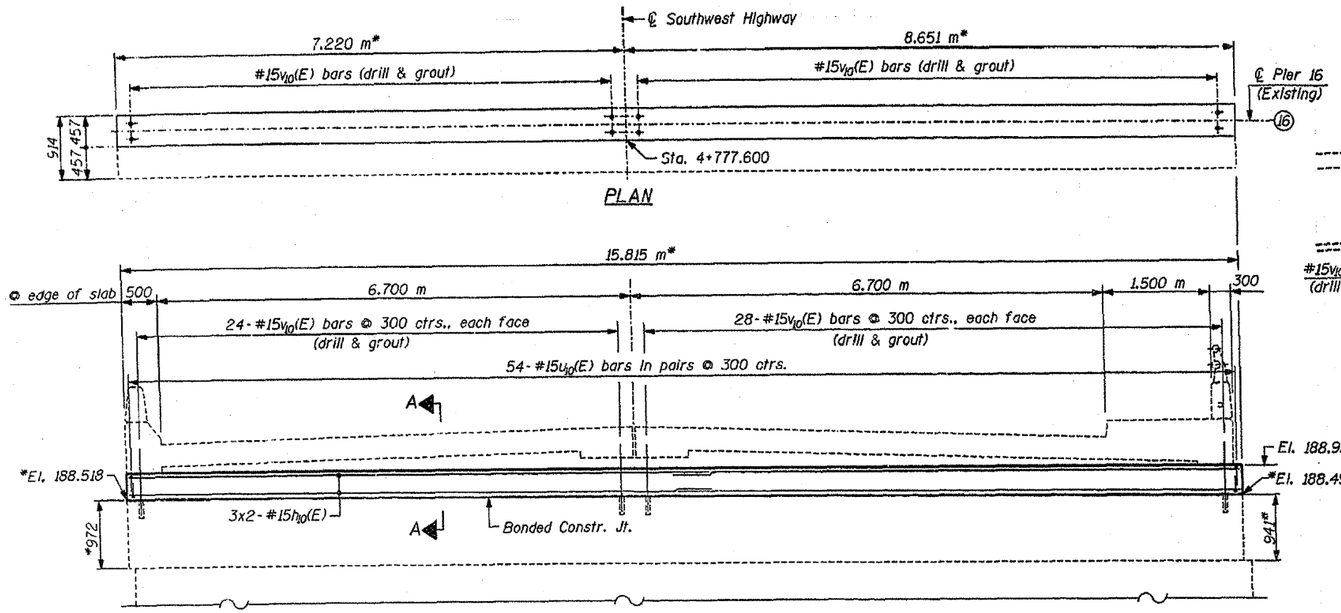
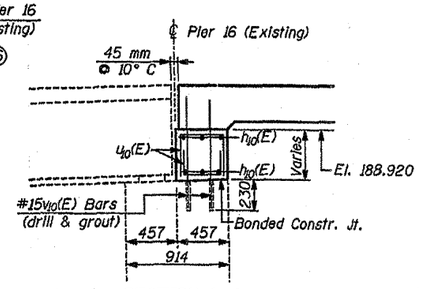
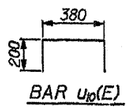
F.A... RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	15VB-1-R	COOK	243	201
STA. 4+665.229		TO STA. 4+777.600		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	



* Dimensions measured in field to be verified by the Contractor.





BILL OF MATERIAL PIER 16

Bar	No.	Size	Length (m)	Shape
h10(E)	12	#15	8.20	——
u10(E)	108	#15	0.78	⌊⌋
v10(E)	104	#15	.960	——
Concrete Structures		m³	3.0	
Reinforcement Bars, Epoxy Coated		kg	440	
Epoxy Crack Sealing		m	20	
High Performance Enhanced Shotcrete		m²	28	
Polymer Modified Portland Cement Mortar		m³	0.9	
Formed Concrete Repair (Depth ≤125)		m²	0.1	

Reinforcement Bars designated (E) shall be Epoxy Coated.

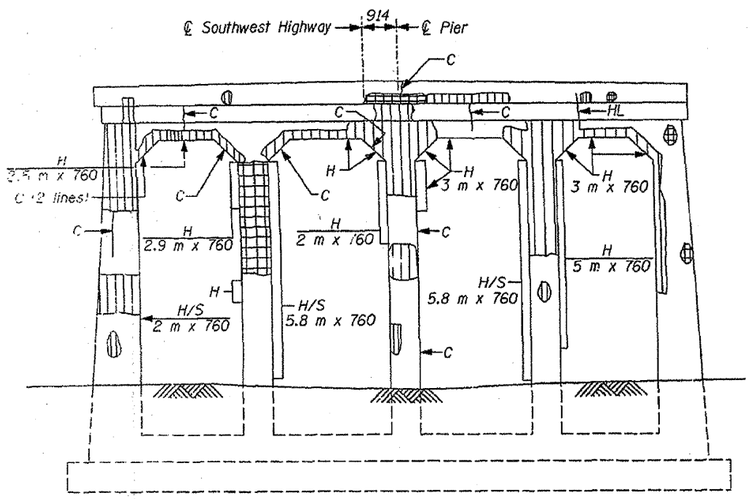
All dimensions are in millimeter (mm) except as noted.

NOTES:

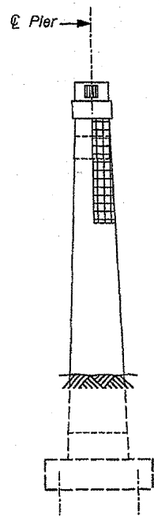
Bars indicated thus 3x2-#15 ect., indicate 3 lines of bars with 2 lengths per lines.

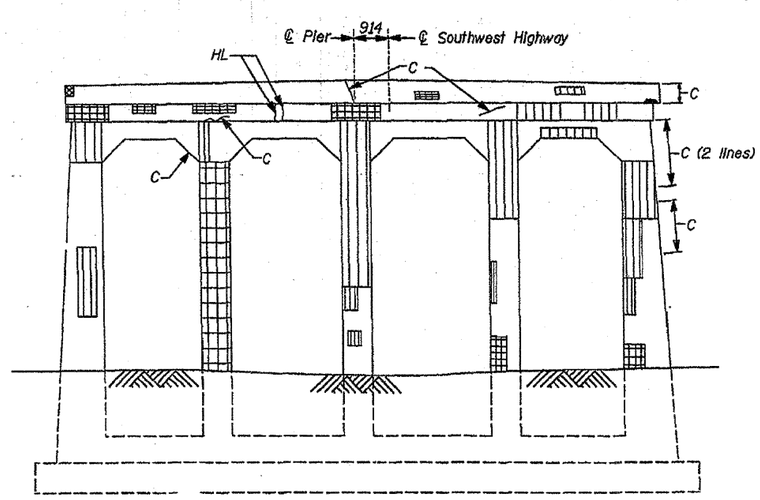
Drill and grout #15v10(E) bars in 22 mm ϕ x 230 mm min. deep drilled holes. The grout and method of application shall be approved by the Department.

MIN. LAP
#15 Bars=640



EXISTING ELEVATION-PIER 16
(LOOKING NORTHEAST)





EXISTING ELEVATION-PIER 16
(LOOKING SOUTHWEST)

LEGEND:

——	Indicates limits of Epoxy Crack Sealing.
	Limits of High Performance Enhanced Shotcrete.
H & H/S	Limits of High Performance Enhanced Shotcrete
	Limits of Polymer Modified Portland Cement Mortar.
	Formed Concrete Repair (Depth ≤125)
H	Hollow
C	Crack
HL	Hairline Crack

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PIER 16 (EXISTING) DETAILS
SOUTHWEST HIGHWAY OVER
B. & O.C.T. RAILROAD AND MELVINA DITCH
F.A.U. ROUTE 3578 SEC. 15VB-1-R
COOK COUNTY STATION 4+716.471
STRUCTURE NO. 016-0463

SCALE:
DATE: 6/17/09
DRAWN BY: F. MUNIR
CHECKED BY: B. SHAH

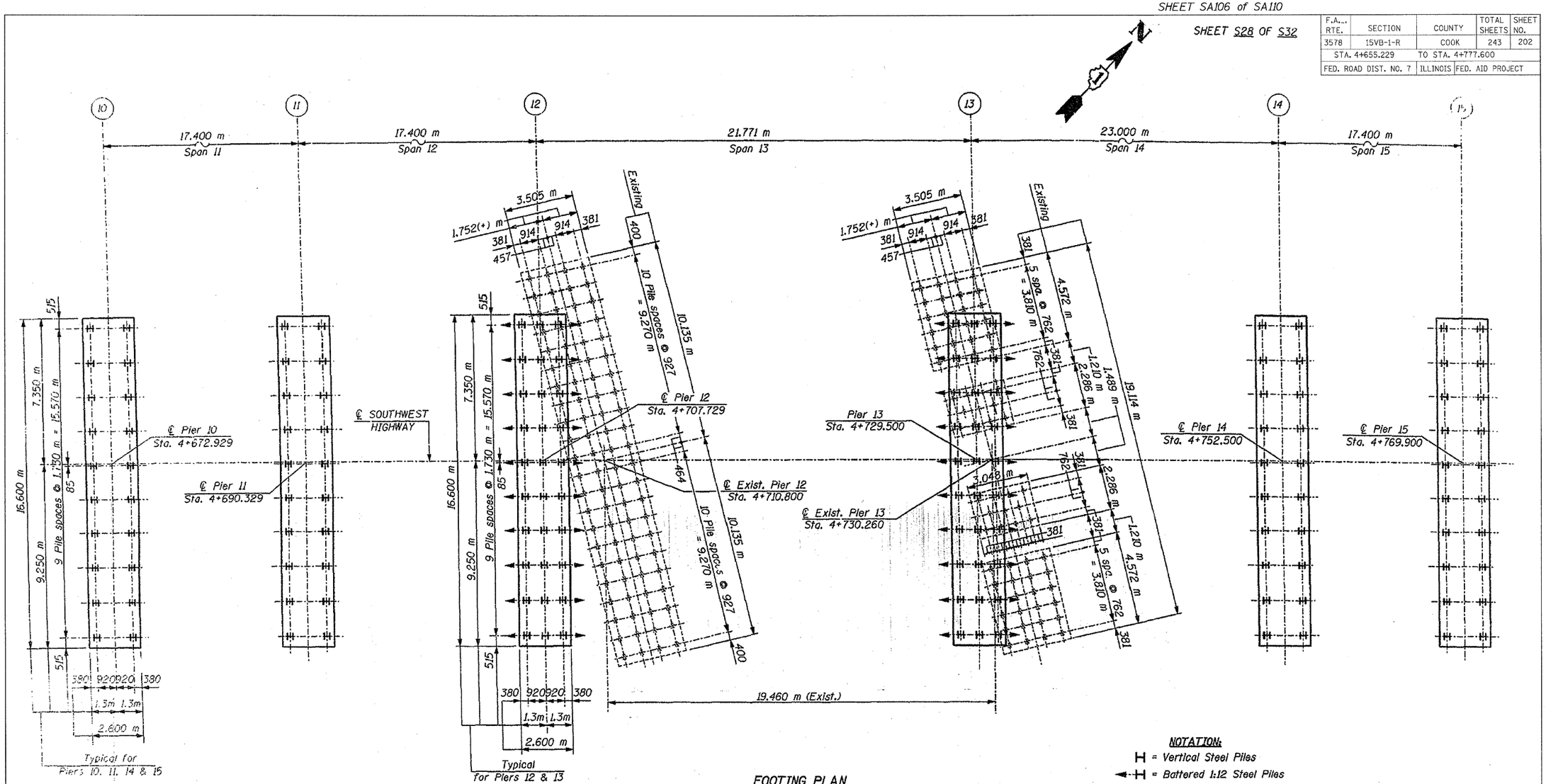
CHRISTIAN - ROGE & ASSOC.
CHICAGO ILLINOIS

FOR INFORMATION ONLY

SHEET SA106 of SA110

SHEET S28 OF S32

F.A... RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	15VB-1-R	COOK	243	202
STA. 4+655.229		TO STA. 4+777.600		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	



FOOTING PLAN

NOTATION:

- H = Vertical Steel Piles
- ◄H = Battered 1:12 Steel Piles
- ✲ = Existing Timber Piles

NOTES:

Footing and Timber Pile layout for existing Piers 12 & 13 shown are from existing plan dated 1934. It shall be the Contractor's responsibility to verify the existing Timber Pile layout in the field and make necessary approved adjustments prior to construction.

Adjustments to the proposed pile locations may be made to allow the piles to be driven alongside the interfering pile subject to the approval of the Engineer.

Any existing Timber Piles ✲ Piers 12 & 13 that interfere with the new construction of footing shall be cut off as the Engineer may direct. The cost for cutting off the existing piles will be included with the Contract Unit Price for Concrete Structures.

Exact location of the existing Timber Piles shall be determined in the field during the removal of the existing structure.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FOOTING PLAN

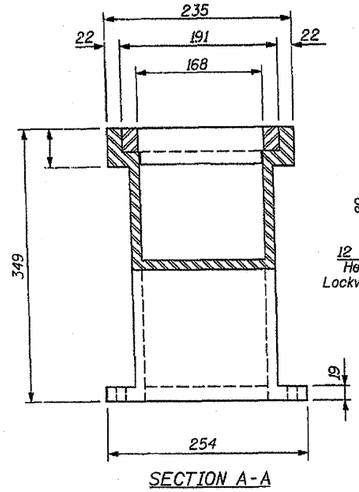
SOUTHWEST HIGHWAY OVER
B. & O.C.T. RAILROAD AND MELVINA DITCH
F.A.U. ROUTE 3578 SEC. 15VB-1-R
COOK COUNTY STATION 4+716.471
STRUCTURE NO. 016-0463

SCALE:
DATE: 6/17/09
DRAWN BY: F. MUNIR
CHECKED BY: B. SHAH

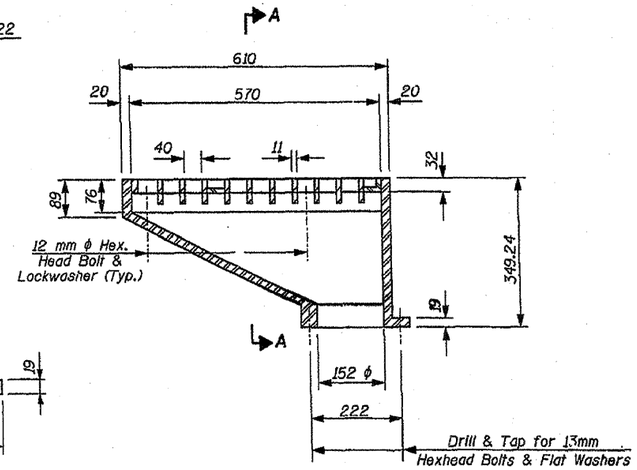
CHRISTIAN - ROGE & ASSOC.
CHICAGO ILLINOIS

FOR INFORMATION ONLY

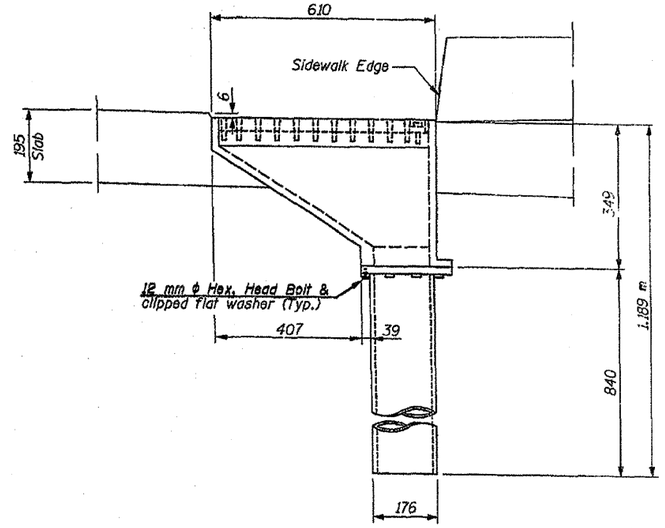
F.A.. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	15VB-1-R	COOK	243	203
STA. 4+655.229		TO STA. 4+777.600		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	



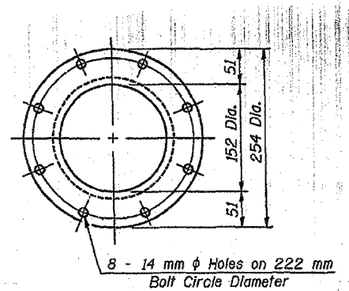
SECTION A-A



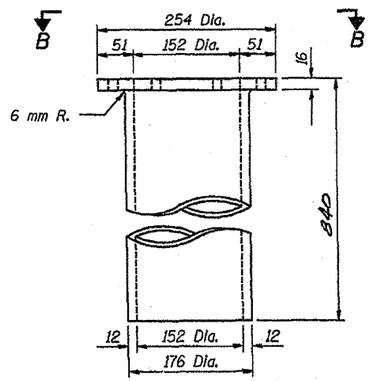
LONGITUDINAL SECTION



DRAINAGE SCUPPER



VIEW B-B



DOWNSPOUT

Steel Alternate

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 270M Grade 250.

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."

Cast Iron Alternate

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 30.

Bolts and washers shall conform to the requirements of ASTM A 307.

All bolts and washers shall be galvanized according to AASHTO M 232.

As an alternate bolts and washers may be stainless steel conforming to the requirements of ASTM A 193M, Type 304.

Cost of the Grate, Frame, Downspout, bolts and washers including complete installation of Scupper will be paid for at the unit bid price each for "DRAINAGE SCUPPERS."

The Contractor may use at his option steel drainage scuppers or cast iron drainage scuppers.

All dimensions are in millimeters (mm) except as noted.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scuppers	Each	8

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER DETAILS
SOUTHWEST HIGHWAY OVER
B. & O.C.T. RAILROAD AND MELVINA DITCH
F.A.U. ROUTE 3578 SEC. 15VB-1-R
COOK COUNTY STATION 4+716.471
STRUCTURE NO. 016-0463

SCALE:
DATE: 6/17/09
DRAWN BY: F. MUNIR
CHECKED BY: B. SHAH

CHRISTIAN - ROGE & ASSOC.
CHICAGO ILLINOIS

FOR INFORMATION ONLY

F.A.. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	15VB-1-R	COOK	243	204
STA. 4+655.229		TO STA. 4+777.600		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

MIRZA ENGINEERING, INC. — CHICAGO, ILLINOIS

BORING LOG

JOB NO: 9737 CLIENT: CHRISTIAN-ROGE & ASSOCIATES, INC.
PROJECT: FAU 3578 (Southwest Highway) over B & O CT RR and Stony Creek
LOCATION: Cook County, Illinois
BORING RIG & METHOD: Mobile B-57 w/Hollow Stem Augers

BORING NO: B-9
STATION: 4+667
OFFSET: 7.6m Lt
SURF ELEV: 180.07

SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/ 150mm	q_u kPa	STRAIN %	WATER CONTENT %
			0.00-0.30		Auger			18
FILL: Dark Br to Br Clay A-6; Organic matter noted			0.30-0.76	406	2 2-2	67	15	22
	178.39		1.07-1.52	356	1 1-1	48	15	22
		2	1.83-2.29	457	1 1-1	19	15	29
Very Soft Br & Gr to Gr Clay A-7-6			2.59-3.05	432	0 1-1	19	15	31
Shells noted at 3.7m			3.35-3.66	457	1/457	10	15	34
	175.92	4						
Very Soft Gr Organic Clay A-7-6; Marl seams & Shells noted			4.11-4.57	406	1/457	10	15	76
Peat seam noted at 5.2m			4.88-5.33	356	1 1-1	10	15	229
	173.92	6	5.64-6.10	457	2 1-1	10	15	233
Very Stiff Gr Silt A-4; Silt lenses noted			6.40-6.86	406	5 9-12	230	15	17
			7.16-7.62	457	7 12-11	259	15	16
	171.35	8	7.92-8.38	406	4 8-8	326	15	21
Medium Dense Gr Silt A-4			8.69-9.14	457	4 7-9			20
	170.62							
Dense Gr Sand A-1-a; Cobbles noted		10	9.45-9.91	381	8 11-21			5
Dense Gr Sand A-1-a; Cobbles noted			10.21-10.67	406	12 20-17			6
	169.40							
Very hard drilling below 10.7m								
Extremely Dense Gr Sand A-1-a; Cobbles noted			10.97-11.43	381	34 52-32			6
	168.24		11.73-11.93	76	100/76			9

Boring terminated at 11.8m

REMARKS — * Denotes Calibrated Penetrometer Estimate

WATER	9.4 m	ELEV. 170.62 DURING DRILLING ▽	CORE SIZE	mm	DATE: OCT 13 97
WATER	10.9 m	ELEV. 169.16 AT COMPLETION ▽	CASING LENGTH	m	DRILLER: Roesel
WATER	4.4 m	ELEV. 175.68 AFTER 24 HRS. ▽	CASING DIAMETER	mm	INSPECTOR: Mauter

MIRZA ENGINEERING, INC. — CHICAGO, ILLINOIS

BORING LOG

JOB NO: 9737 CLIENT: CHRISTIAN-ROGE & ASSOCIATES, INC.
PROJECT: FAU 3578 (Southwest Highway) over B & O CT RR and Stony Creek
LOCATION: Cook County, Illinois
BORING RIG & METHOD: Mobile B-57 w/Hollow Stem Augers

BORING NO: B-10
STATION: 4+680
OFFSET: 11.3m Rt
SURF ELEV: 179.69

SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/ 150mm	q_u kPa	STRAIN %	WATER CONTENT %
			0.00-0.30		Auger			11
FILL: Dark Br to Br Clay A-6; Organic matter noted			0.30-0.76	406	3 4-4	86	15	16
Bott./Ftg. Pier 10 Elev. 178.00	177.83		1.07-1.52	356	2 2-2	67	15	20
		2	1.83-2.29	406	1 1-1	19	15	39
Very Soft Gr Organic Clay A-7-6; Shells & Peat seams noted	176.49		2.59-3.05	203	1 1-1	10	15	173
Br Fibrous Peat; Shells noted ▽	175.54	4	3.35-3.81	279	1 1-1			344
Very Soft Gr Organic Silt A-7-5; Peat & Marl seams noted	174.72		4.11-4.57	381	1/457	10	15	249
Very Stiff Gr Silt A-4(8); Silt lenses noted ▽	173.44		4.88-5.33	406	3 7-9	211	15	18
		6	5.64-6.10	457	11 12-12	354	15	14
Very hard drilling below 6.2m			6.40-6.86	381	51 67-42			5
Extremely Dense Gr Sand A-1-a; Cobbles noted ▽	171.92		7.16-7.62		41 42-39			6
Refusal to drilling equipment at 7.8m								

REMARKS — * Denotes Calibrated Penetrometer Estimate

WATER	5.6 m	ELEV. 174.11 DURING DRILLING ▽	CORE SIZE	mm	DATE: OCT 14 97
WATER	7.0 m	ELEV. 172.68 AT COMPLETION ▽	CASING LENGTH	m	DRILLER: Roesel
WATER	3.7 m	ELEV. 175.97 AFTER 24 HRS. ▽	CASING DIAMETER	mm	INSPECTOR: Mauter

MIRZA ENGINEERING, INC. — CHICAGO, ILLINOIS

BORING LOG

JOB NO: 9737 CLIENT: CHRISTIAN-ROGE & ASSOCIATES, INC.
PROJECT: FAU 3578 (Southwest Highway) over B & O CT RR and Stony Creek
LOCATION: Cook County, Illinois
BORING RIG & METHOD: Mobile B-57 w/Hollow Stem Augers

BORING NO: B-11
STATION: 4+695
OFFSET: 9.0m Lt
SURF ELEV: 180.25

SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/ 150mm	q_u kPa	STRAIN %	WATER CONTENT %
			0.00-0.30		Auger			18
FILL: Br Clay A-6; Organic matter noted			0.30-0.76	406	2 2-2	48	15	18
	178.37		1.07-1.52	457	1 2-2	38	15	22
Bott./Ftg. Pier 11 Elev. 178.00		2	1.83-2.29	356	3 2-2	67	15	24
Medium Stiff Br & Gr to Gr Slt A-6; Roots & shells noted	177.03		2.59-3.05	330	1 1-1	48	15	30
Very Soft Gr Organic Clay A-7-6; Shells, Peat seams & Marl seams noted	176.99	4	3.35-3.81	457	1 1-1	19	15	42
			4.11-4.57	406	1/457			289
Br Fibrous Peat; Shells & Marl seams noted ▽	174.53		4.88-5.33	457	1 1-1			185
		6	5.64-6.10	457	4 10-13	230	15	19
Very Stiff to Hard Gr Clayey Silt A-4; Sand & Slt lenses noted			6.40-6.86	406	7 12-13	412	12	20
	172.46		7.16-7.62	457	6 7-9	440	15	17
Medium Dense Gr Slt A-4		8	7.92-8.38	457	7 9-11			19
Hard drilling below 8.6m ▽	171.70		8.69-9.14	406	12 15-18			7
Dense Gr Sand A-1-a; Cobbles noted					18			
	170.17	10	9.45-9.91	457	22-36			6
Extremely Dense Gr Sand A-1-a; Cobbles noted			10.21-10.45	229	55 100/76			6
	169.38		10.82-10.85	25	100/25			8

Refusal to drilling equipment at 10.9m

REMARKS — * Denotes Calibrated Penetrometer Estimate

WATER	8.5 m	ELEV. 171.70 DURING DRILLING ▽	CORE SIZE	mm	DATE: OCT 14 97
WATER	9.8 m	ELEV. 170.60 AT COMPLETION ▽	CASING LENGTH	m	DRILLER: Roesel
WATER	5.2 m	ELEV. 174.99 AFTER 24 HRS. ▽	CASING DIAMETER	mm	INSPECTOR: Mauter

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING LOGS
SOUTHWEST HIGHWAY OVER
B. & O.C.T. RAILROAD AND MELVINA DITCH
F.A.U. ROUTE 3578 SEC. 15VB-1-R
COOK COUNTY STATION 4+716.471
STRUCTURE NO. 016-0463

SCALE:
DATE: 6/17/09
DRAWN BY: F. MUNIR
CHECKED BY: B. SHAH

CHRISTIAN - ROGE & ASSOC.
CHICAGO ILLINOIS

FOR INFORMATION ONLY

F.A.. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	15VB-1-R	COOK	243	205
STA. 4+655.229		TO STA. 4+777.600		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

MIRZA ENGINEERING, INC. — CHICAGO, ILLINOIS

BORING LOG

JOB NO: 9737 CLIENT: CHRISTIAN-ROGE & ASSOCIATES, INC.
PROJECT: FAU 3578 (Southwest Highway) over B & O CT RR and Stony Creek
LOCATION: Cook County, Illinois
BORING RIG & METHOD: Mobile B-57 w/Hollow Stem Augers

BORING NO: B-12
STATION: 4+709
OFFSET: 10.6m Rt
SURF ELEV: 180.76

SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/ 150mm	q_u kPa	STRAIN %	WATER CONTENT %
			0.00-0.30		Auger			20
Fill: Intermixed Gr Sand A-1-a and Br Clay A-6	178.84		0.30-0.76	254	3 11-8			10
FILL: Dark Br to Br Clay A-6; Organic matter noted Bott./Ftg. Pier 12 Elev. 178.36	178.31	2	1.07-1.52	127	4 2-2	98*		10
			1.83-2.29	76	2 2-3	192*		10
Medium Stiff Br & Gr Silt A-6; Silt lenses noted	177.55		2.59-3.05	406	1 1-1	48	15	27
Very Soft Gr Organic Clay A-7-6; Silt seams noted		4	3.35-3.81	406	1 1-1	19	15	34
	175.81		4.11-4.57	356	1/457	10	15	61
Br Fibrous Peat; Shells & Marl seams noted	174.99		4.88-5.33	381	1 2-2			267
Loose to Medium Dense Gr Sandy Loam A-4; Silt seams noted		6	5.64-6.10	406	2 4-3			17
	173.56		6.40-6.86	279	4 11-9			14
Dense to Medium Dense Gr Silt A-4		8	7.16-7.62	457	13 17-15			20
	172.37		7.92-8.38	457	8 13-15			21
Dense Gr Silt A-4	171.00		8.69-9.14	381	8 20-20			15
Hard drilling below 9.8m		10	9.45-9.91	432	12 15-50			19
Dense Gr Sand A-1-a; Cobbles noted	170.08		10.21-10.67	381	14 18-17			6
Extremely Dense Gr Sand A-1-a; Cobbles noted	169.44		10.97-11.06	51	100/76			14
Refusal to drilling equipment at 11.3m								

REMARKS — * Denotes Calibrated Penetrometer Estimate

WATER 5.9m ELEV. 174.81 DURING DRILLING ▽ CORE SIZE mm DATE: OCT 14 97
WATER m ELEV. AT COMPLETION ▽ CASING LENGTH m. DRILLER: Roesel
WATER 9.6m ELEV. 171.12 AFTER 24 HRS. ▽ CASING DIAMETER mm INSPECTOR: Mauter

MIRZA ENGINEERING, INC. — CHICAGO, ILLINOIS

BORING LOG

JOB NO: 9737 CLIENT: CHRISTIAN-ROGE & ASSOCIATES, INC.
PROJECT: FAU 3578 (Southwest Highway) over B & O CT RR and Stony Creek
LOCATION: Cook County, Illinois
BORING RIG & METHOD: Mobile B-57 w/Hollow Stem Augers

BORING NO: B-13
STATION: 4+726
OFFSET: 9.8m Lt
SURF ELEV: 181.66

SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/ 150mm	q_u kPa	STRAIN %	WATER CONTENT %
			0.00-0.30		Auger			15
FILL: Black Sand A-1-b	180.76		0.30-0.76	76	4 4-4			13
FILL: Dark Br to Br Clay A-6; Organic matter noted	179.74	2	1.07-1.52	356	4 3-4	57	15	15
Bott./Ftg. Pier 13 Elev. 178.36			1.83-2.29	406	1 1-1	19	15	18
			2.59-3.05	457	1/457	10	15	25
Very Soft Br & Gr to Gr Silt A-6		4	3.35-3.81	381	1/457	10	15	28
			4.11-4.57	457	1/457	19	15	30
	176.17		4.88-5.33	457	1 1-1	19	15	30
Br Fibrous Peat and Marl; Shells noted		6	5.64-6.10	457	1 2-2			199
Medium Dense Gr Silt A-4	175.14 174.85		6.40-6.86	457	1 5-8			22
Dense to Very Dense Gr Sand A-1-a; Cobbles noted		8	7.16-7.62	356	8 14-16			6
Very hard drilling below 8.5m			7.92-8.38	381	17 22-20			7
			8.69-9.14	356	39 36-38			6
	172.06		9.45-9.60	127	100/152			8

Boring terminated at 9.6m

REMARKS — * Denotes Calibrated Penetrometer Estimate

WATER 6.0m ELEV. 175.69 DURING DRILLING ▽ CORE SIZE mm DATE: OCT 15 97
WATER m ELEV AT COMPLETION ▽ CASING LENGTH m DRILLER: Roesel
WATER 7.5m ELEV. 174.19 AFTER 24 HRS. ▽ CASING DIAMETER mm INSPECTOR: Mauter

MIRZA ENGINEERING, INC. — CHICAGO, ILLINOIS

BORING LOG

JOB NO: 9737 CLIENT: CHRISTIAN-ROGE & ASSOCIATES, INC.
PROJECT: FAU 3578 (Southwest Highway) over B & O CT RR and Stony Creek
LOCATION: Cook County, Illinois
BORING RIG & METHOD: Mobile B-57 w/Hollow Stem Augers

BORING NO: B-14
STATION: 4+751
OFFSET: 10.8m Rt
SURF ELEV: 180.05

SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/ 150mm	q_u kPa	STRAIN %	WATER CONTENT %
			0.00-0.30		Auger			16
FILL: Br & Gr Clay A-6; brick fragments noted			0.30-0.76	457	10 13-13	431*		9
	178.37		1.07-1.52	406	4 6-5	239*		12
Bott./Ftg. Pier 14 Elev. 178.00		2	1.83-2.29	381	1 2-2	57	15	26
Medium Stiff Br & Gr to Gr Silt A-6; Roots noted	176.81		2.59-3.05	457	1 1-2	48	15	30
Very Soft Gr Organic Clay A-7-6; Peat seams noted		4	3.35-3.81	457	1 2-3	10	15	111
	175.69		4.11-4.57	457	1 2-3	10	15	204
Very Soft Gr Marl; Peat seams & Shells noted			4.88-5.33		2 3-6	10	15	111
Very hard drilling below 6.6m	174.58	6	5.64-6.10	356	20 22-28			6
Dense Gr Sand A-1-a; Cobbles noted			6.40-6.86	279	18 13-18			7
	172.43		7.16-7.62	406	18 18-18			6
Extremely Dense Gr Sand A-1-a; Cobbles noted	171.67	8	7.92-8.38	432	58 56-72			5

Boring terminated at 8.4m

REMARKS — * Denotes Calibrated Penetrometer Estimate

WATER 5.5m ELEV. 174.66 DURING DRILLING ▽ CORE SIZE mm DATE: OCT 15 97
WATER m ELEV. AT COMPLETION ▽ CASING LENGTH m. DRILLER: Roesel
WATER 4.3m ELEV. 175.78 AFTER 24 HRS. ▽ CASING DIAMETER mm INSPECTOR: Mauter

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING LOGS
SOUTHWEST HIGHWAY OVER
B. & O.C.T. RAILROAD AND MELVINA DITCH
F.A.U. ROUTE 3578 SEC. 15VB-1-R
COOK COUNTY STATION 4+716.471
STRUCTURE NO. 016-0463

SCALE:
DATE: 6/17/09
DRAWN BY: F. MUNIR
CHECKED BY: B. SHAH

CHRISTIAN - ROGE & ASSOC.
CHICAGO ILLINOIS

FOR INFORMATION ONLY

F.A.. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	15VB-1-R	COOK	243	206
STA. 4+655.229		TO STA. 4+777.600		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

MIRZA ENGINEERING, INC. — CHICAGO, ILLINOIS

BORING LOG

JOB NO: 9737 CLIENT: CHRISTIAN-ROGE & ASSOCIATES, INC. — BORING NO: B-15
PROJECT: FAU 3578 (Southwest Highway) over B & O CT RR and Stony Creek — STATION: 4+761
LOCATION: Cook County, Illinois — OFFSET: 8.5m Lt
BORING RIG & METHOD: Mobile B-57 w/Hollow Stem Augers — SURF ELEV: 179.80

SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/ 150mm	q_u kPa	STRAIN %	WATER CONTENT %
			0.00-0.30		Auger			10
FILL: Dark Br to Br Clay A-6; Organic matter & concrete rubble noted			0.30-0.76	356	3 1-1	29	15	16
	178.97							
			1.07-1.52	381	4 1-1	29	15	16
Bott./Ftg. Pier 15 Elev. 178.00		2						
Soft to Very Soft Br & Gr Silt A-6			1.83-2.29	406	2 1-2	29	15	25
			2.59-3.05	279	1 2-1	19	15	26
	176.39							
Br Fibrous Peat; Shells & Marl seams noted	175.84	4	3.35-3.81	457	1 3-2			255
Very Soft Gr Organic Clay A-7-6 and Marl; Shells noted	175.08		4.11-4.57	457	1 1-1	10	15	141
Medium Dense Gr Silt A-4			4.88-5.33	381	9 10-9			17
	174.07							
Hard Gr Silt A-4; Silt lenses noted		6	5.64-6.10	457	8 14-18	440	15	18
			6.40-6.86	406	8 16-21	469	11	17
	172.61							
Dense Gr Silt A-4	172.03		7.16-7.62	457	14 20-19			16
Medium Dense Gr Sand A-1-b	171.33	8	7.92-8.38	254	6 8-12			7
Very hard drilling from 8.5m to 9.3m Very Dense Gr Sand A-1-a; Cobbles noted			8.69-9.14	279	20 34-42			9
	170.47							
Extremely Dense Gr Silt A-4		10	9.45-9.91	381	61 38-46			16
	169.13		10.21-10.67		38 68-58			18

Boring terminated at 10.7m

REMARKS — * Denotes Calibrated Penetrometer Estimate

WATER 5.5 m ELEV. 174.31 DURING DRILLING ▽ CORE SIZE mm DATE: OCT 16 97
WATER m ELEV. AT COMPLETION ▼ CASING LENGTH m DRILLER: Roesel
WATER 9.8 m ELEV. 170.17 AFTER 1/4 HRS. ▽ CASING DIAMETER mm INSPECTOR: Mauter

MIRZA ENGINEERING, INC. — CHICAGO, ILLINOIS

BORING LOG

JOB NO: 9737 CLIENT: CHRISTIAN-ROGE & ASSOCIATES, INC. — BORING NO: B-16
PROJECT: FAU 3578 (Southwest Highway) over B & O CT RR and Stony Creek — STATION: 4+778
LOCATION: Cook County, Illinois — OFFSET: 13.2m Rt
BORING RIG & METHOD: Mobile B-57 w/Hollow Stem Augers — SURF ELEV: 180.66

SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/ 150mm	q_u kPa	STRAIN %	WATER CONTENT %
			0.00-0.30		Auger			7
FILL: Dark Br to Br Clay A-6; Organic matter noted			0.30-0.76	102	7 12-7	96*		11
	178.88							
			1.07-1.52	356	3 3-4	67	15	18
		2						
Medium Stiff Br & Gr Silt A-6(S); Silt lenses noted			1.83-2.29	457	2 1-2	67	15	23
			2.59-3.05	457	1 1-1	57	15	25
	177.26							
Very Soft Br Organic Clay A-7-6; Shells, Peat seams & Marl seams noted		4	3.35-3.81	457	1 1-1	19	15	60
	176.84		4.11-4.57	381	1/457	10	15	182
Medium Dense Gr Silty Loam A-4	▽176.17		4.88-5.33	457	5 10-10			22
		6	5.64-6.10	356	5 6-9			23
			6.40-6.86	457	5 9-11			21
Medium Dense Gr Silt A-4			7.16-7.62	381	7 8-9			22
		8	7.92-8.38	457	5 7-8			22
	171.46		8.69-9.14	254	6 8-8			17
Medium Dense Gr Sand A-1-a; Cobbles noted	170.89	10	9.45-9.91	356	11 9-9			6
Hard Gr Silt A-4(8)	169.63		10.21-10.67	457	14 14-29	393	15	16
Extremely Dense Gr Silt A-4	169.23		10.97-11.43	457	16 33-58			18
Very hard drilling below 11.4m								
Extremely Dense Gr Sand A-1-a; numerous Cobbles noted		12	11.73-12.01	254	76 100/127			7
	167.89		12.50-12.77	228	64 100/127			5

Boring terminated at 12.8m

REMARKS — * Denotes Calibrated Penetrometer Estimate

WATER 5.5 m ELEV. 175.17 DURING DRILLING ▽ CORE SIZE mm DATE: OCT 15 97
WATER m ELEV. AT COMPLETION ▼ CASING LENGTH m DRILLER: Roesel
WATER 6.9 m ELEV. 173.80 AFTER 24 HRS. ▽ CASING DIAMETER mm INSPECTOR: Mauter

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING LOGS
SOUTHWEST HIGHWAY OVER
B. & O.C.T. RAILROAD AND MELVINA DITCH
F.A.U. ROUTE 3578 SEC. 15VB-1-R
COOK COUNTY STATION 4+716.471
STRUCTURE NO. 016-0463

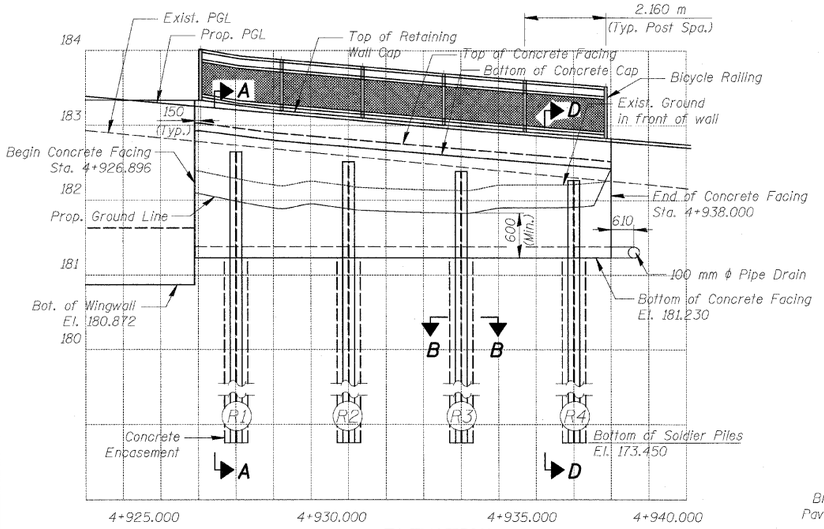
SCALE:
DATE: 6/17/09
DRAWN BY: F. MUNIR
CHECKED BY: B. SHAH

CHRISTIAN - ROGE & ASSOC.
CHICAGO ILLINOIS

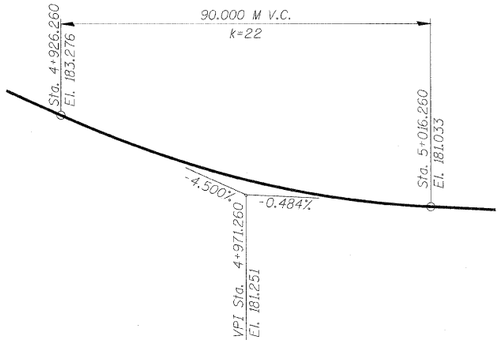
FOR INFORMATION ONLY

Bench Mark:

E. Flange Bolt of F.H. at S.W. corner Ridgeland & SW Highway - El. 181.825



ELEVATION



PROFILE GRADE SOUTHWEST HIGHWAY

PATRICK ENGINEERING, INC.
PAUL M. LOPEZ, S.E.

PAUL M. LOPEZ, P.E.,S.E.
NO. 081-005231
EXP. DATE: 11/30/10
DATE: 06/17/2009

SHEET SB1 of SB3

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	15V B-1-R-1	COOK	243	207
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62388

GENERAL NOTES:

DESIGN SPECIFICATION:

2002 AASHTO Standard Specifications for Highway Bridges.

LOADING:

Earth Dry Weight =	1,920 kg/m³
Equivalent Lateral Fluid Pressure =	2.4 kPa
Live Load Surcharge =	11.5 kPa

DESIGN STRESSES

EXISTING CONSTRUCTION

f'c = 24 MPa
fy = 400 MPa (Reinf.)
fy = 345 MPa (M270M Grade 345)

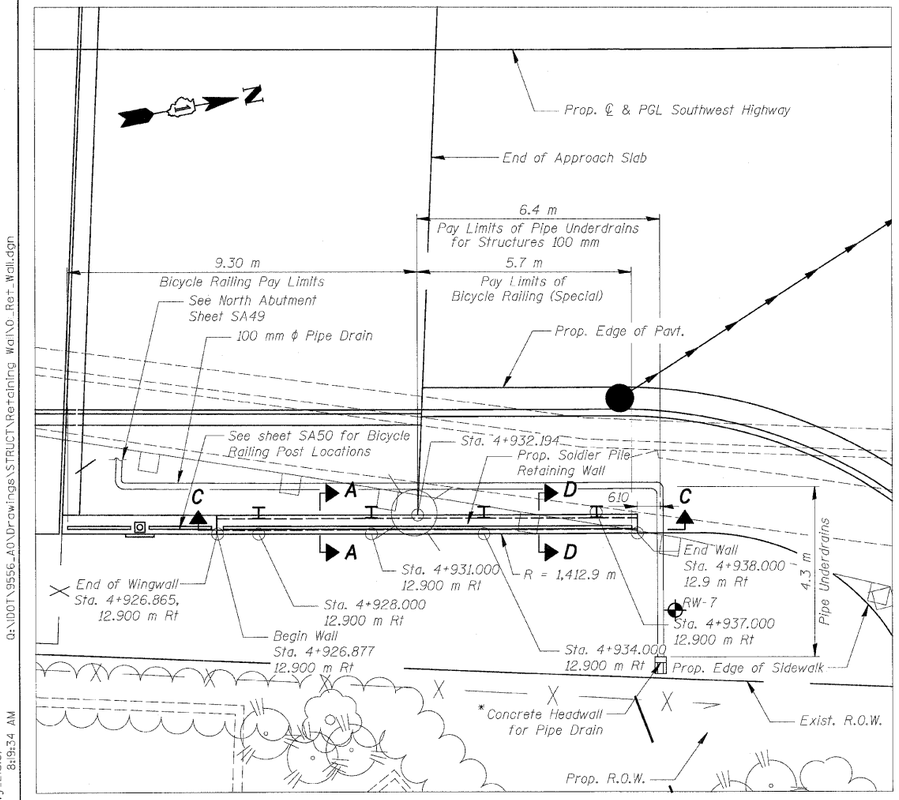
NEW CONSTRUCTION

f'c = 24 MPa
fy = 400 MPa (Reinf.)
fy = 345 MPa (M270M Grade 345)

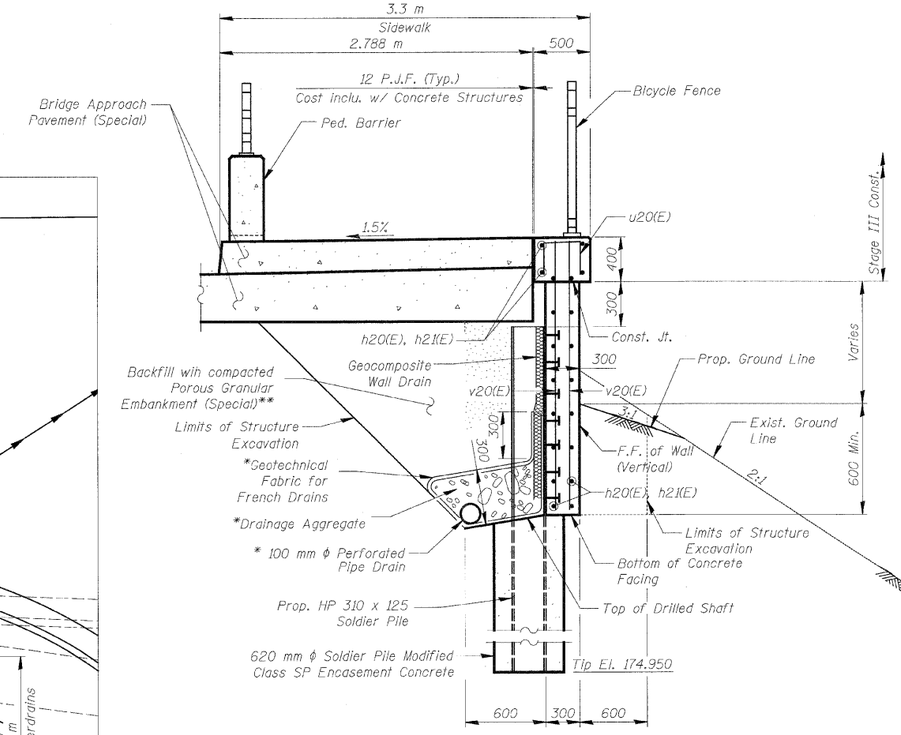
INDEX OF SHEETS

NOTES:

1. All dimensions are in millimeters (mm) except as noted.
2. Stations and offsets are measured at front face of wall.
3. Horizontal dimensions are measured along front face of wall.
4. See SA32 for Bicycle Railing Quantity and Details



PLAN

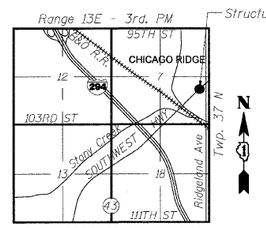


TYPICAL SECTION

* Included in the cost of Pipe Underdrains for Structures, 100 mm

**Backfill shall be compacted to the satisfaction of the Engineer.

All drainage system components shall extend to 600 mm from the end of wall, except an outlet pipe shall extend until intersecting with the side slopes. The pipe shall drain into concrete headwalls.



LOCATION SKETCH

Rev. 10-9-09

BILL OF MATERIAL

	Item	Unit	Quantity
	Stud Shear Connectors	Each	52
*	Porous Granular Embankment (Special)	m³	21
	Structure Excavation	m³	35
	Concrete Structures	m³	7.3
	Reinforcement Bars, Epoxy Coated	kg	630
*	Furnishing Soldier Piles (HP Section)	m	36.5
	Geocomposite Wall Drain	Sq. m	13
*	Pipe Underdrains for Structures 100 mm	m	10.7
*	Drilling and Setting Soldier Piles (in Soil)	m³	9.4
*	Bicycle Railing (Special)	m	5.7

* See Special Provisions

REVISIONS	
NAME	DATE

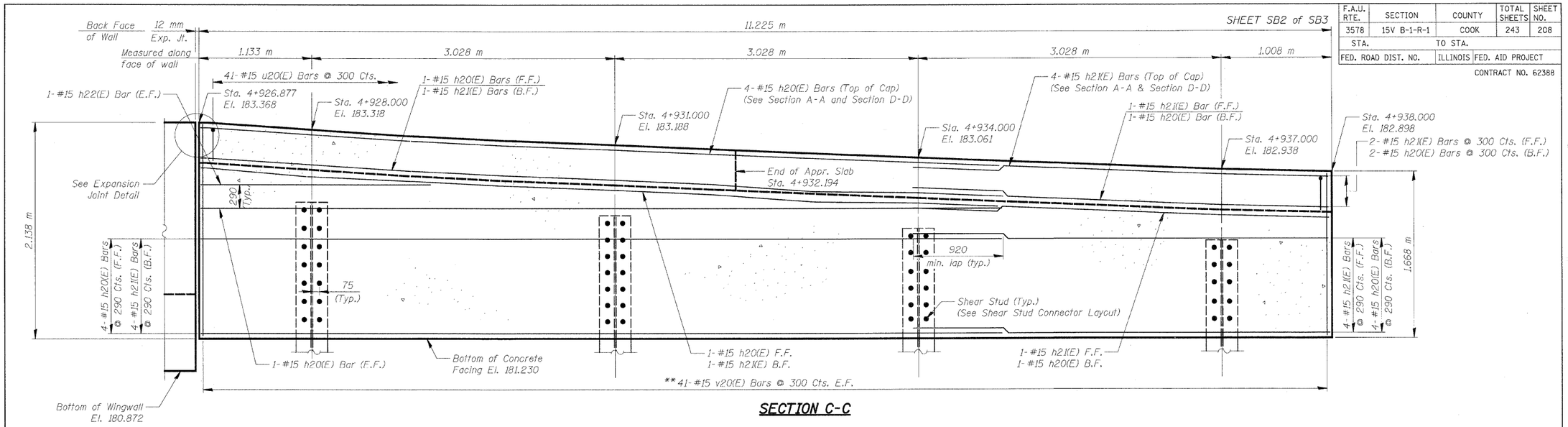
ILLINOIS DEPARTMENT OF TRANSPORTATION
RETAINING WALL GENERAL PLAN & ELEVATION
SOUTHWEST HIGHWAY OVER
B&O RAILROAD AND STONY CREEK
FAU 3578 SECTION 15V B-1-R-1
STRUCTURE NUMBER 016-2771
COOK COUNTY STATION 4+716.497

SCALE: NONE DRAWN BY: M. Tryon
DATE: 6/17/09 CHECKED BY: A. Yargiooglu

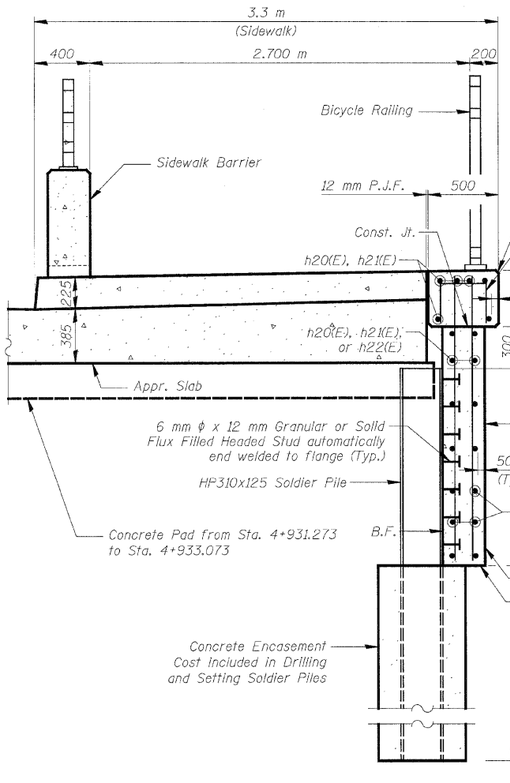
PATRICK ENGINEERING INC.
LISLE, ILLINOIS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	15V B-1-R-1	COOK	243	208
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

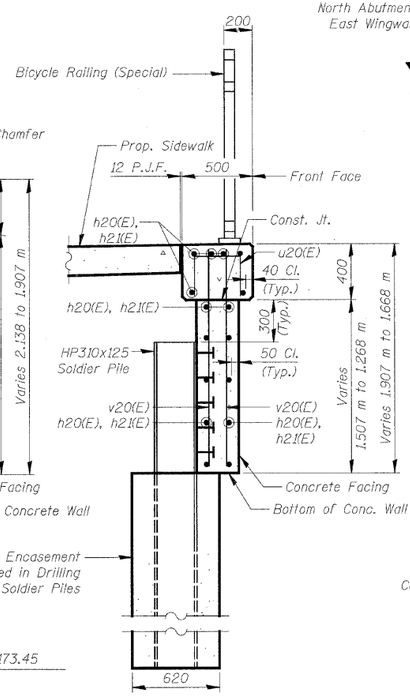
CONTRACT NO. 62388



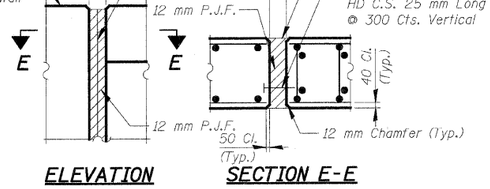
SECTION C-C



SECTION A-A



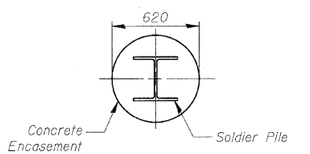
SECTION D-D



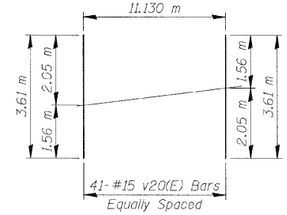
ELEVATION

SECTION E-E

EXPANSION JOINT DETAIL

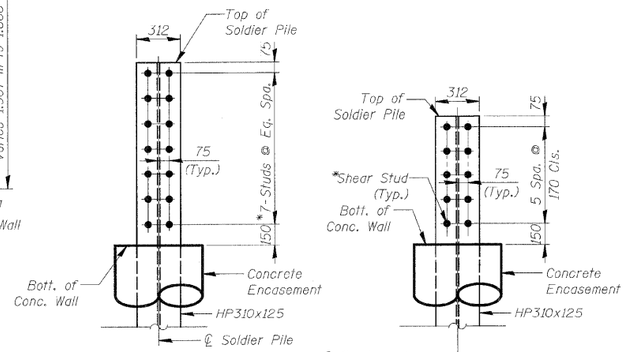


SECTION B-B



v20(E) FIELD CUTTING DIAGRAM

**Order v20(E) Bars full length. Cut to fit as shown and use remainder of bars in other face.

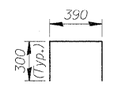


PILES R1, R2 & R3

PILE R4

SHEAR STUD CONNECTOR LAYOUT

*6 mm ϕ x 150 mm Granular or Solid Flux Filled Headed Studs automatically end welded to flange



u20(E) Bar

BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
h20(E)	18	#15	7.92	—
h21(E)	16	#15	4.15	—
h22(E)	2	#15	2.58	—
v20(E)	41	#15	3.61	—
u20(E)	41	#15	0.99	⊓
Stud Shear Connectors			Each	52
Reinforcement Bars, Epoxy Coated			kg	630

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
RETAINING WALL DETAILS
SOUTHWEST HIGHWAY OVER
B&O RAILROAD AND STONY CREEK
FAU 3578 SECTION 15V B-1-R-1
STRUCTURE NUMBER 016-2771
COOK COUNTY STATION 4+716.497

SCALE: NONE DRAWN BY: M. Tryon
DATE: 6/17/09 CHECKED BY: A. Yargiooglu

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

tkoppen(Rdwy_Lisle) 6/26/2009 8:19:45 AM
Q:\DOT\9556_A0\Drawings\STRUCT\Retaining Wall\02_Ret_Wall_details.dgn

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	15V B-1-R-1	COOK	243	209
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62388

Patrick Engineering, Inc.
STRUCTURE BORING LOG

Date 8/4/05

ROUTE FAU 3578 DESCRIPTION Southwest Highway Bridge over B&O Railroad

SECT. 15VB-1-R-1 STRUCT. NO. 016-2771 DRILLED BY Groff Testing Corp.

COUNTY Cook LOCATION Chicago Ridge, IL S. 7 , TWP. 37N , RNG. 13E

Boring No. RW-7
Station 4+939
Offset 15.24m R
Surface Elev. 182.12 m

Surface Water Elev. 177.55
Groundwater Elev.:
when drilling 175.5
at Completion 178.5
after ____ Hrs. NA

DEPTH	BLOWS	Qu kPa	W %
182.09			16
27.94 cm topsoil / Brown silty clay loam fill, trace coarse to fine sand, dry	15		9
	15	P	
Disturbed sample	8		
	3	216	15
Disturbed sample	7	P	
-1.5	4		
180.47			
Brown and gray silty clay, stiff, moist	2	111	22
	2	B	
	2		
	2	87	25
	2	B	
-3.0	2		
	1	63	33
	1	B	
	1		
Gardes to soft	0	32	31
	0	B	
-4.5	1		
	W	24	33
	O	B	
	H		
176.72			
Dark brown peat with shells, moist	2	167	147
	2	B	
-6.0	3		
175.58			
Gray sand and gravel with cobbles, very dense, saturated	23		9
	50	NP	
-7.5	20		

DEPTH	BLOWS	Qu kPa	W %
174.08			
Gray silt, medium dense, saturated			
	24		26
	9	NP	
-9.0	6		
172.58			
Gray gravelly sand with cobbles, medium dense, saturated			
	5		8
	9	NP	
-10.5	15		
171.08			
Gray sandy gravel with cobbles and boulders, very dense, saturated			
	95		6
	33	NP	
-12.0	38		
	95		8
168.77	50/3"	NP	
End of Boring at 13.56 m			
-13.5			
-15.0			

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

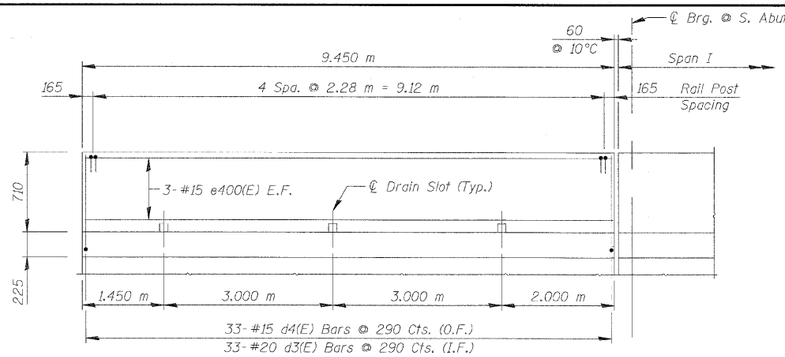
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SOIL BORING LOG
SOUTHWEST HIGHWAY OVER
B&O RAILROAD AND STONY CREEK
FAU 3578 SECTION 15V B-1-R-1
STRUCTURE NUMBER 016-2771
COOK COUNTY STATION 4+716.497
SCALE: NONE DRAWN BY: M. Tryon
DATE: 6/17/09 CHECKED BY: A. Yargiooglu

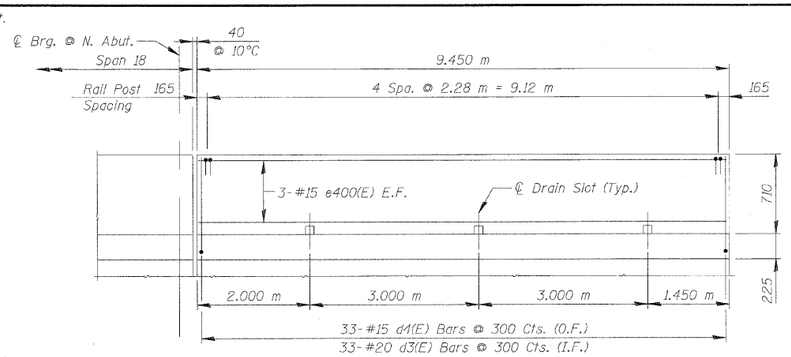
PATRICK ENGINEERING INC.
LISLE, ILLINOIS

tkoeppen(Rdwy_Lisle)
6/26/2009 8:19:54 AM
Q:\IDOT\9556_AO\Drawings\STRUCT\Retaining Wall\V03_SoilBoring.dgn

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	15V B-1-R-1	COOK	243	210
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
		CONTRACT NO. 62388		



ELEVATION OF SIDEWALK BARRIER
Looking North-West at South Approach Slab



ELEVATION OF SIDEWALK BARRIER
Looking North-West at North Approach Slab

NOTES

1. Reinforcement Bars designated (E) shall be epoxy coated.
2. For additional approach pavement details, see Roadway Plans.
3. Drain Slots shall omit the vertical reinforcement and shall be 50 mm min. from the edges of joints.
4. The cost of expansion anchors/inserts is included in the cost of Reinforcement Bars, Epoxy Coated.
5. For quantity of Bicycle Railing, see Bridge Plans.

BILL OF MATERIAL
(For 2 Approach Pavements)

	Item	Unit	Total
*	Bridge Approach Pavement (Special)	m²	367
	Protective Coat	m²	83

* See Special Provisions

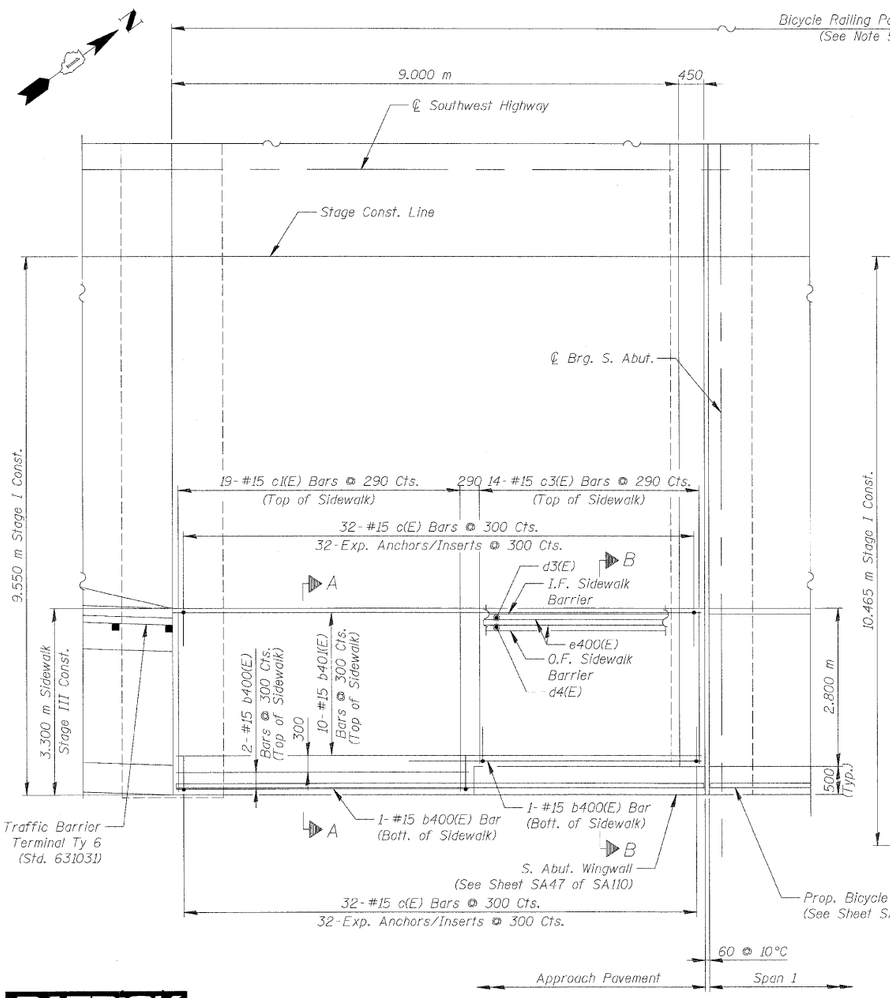
REINFORCEMENT BAR SCHEDULE AND QUANTITY OF CONCRETE SUPERSTRUCTURE
(For 2 Approach Sidewalks and Barriers)

Bar	No.	Size	Lenght (m)	Shape
b400(E)	4	#15	5.25 m	——
b401(E)	21	#15	9.35 m	——
c(E)	128	#15	5.30	L
c1(E)	19	#15	3.20 m	——
c3(E)	46	#15	2.70 m	——
d3(E)	66	#20	1.08 m	L
d4(E)	66	#15	1.08 m	L
d5(F)	20	#15	610	⊓
e400(E)	12	#15	9.35 m	——

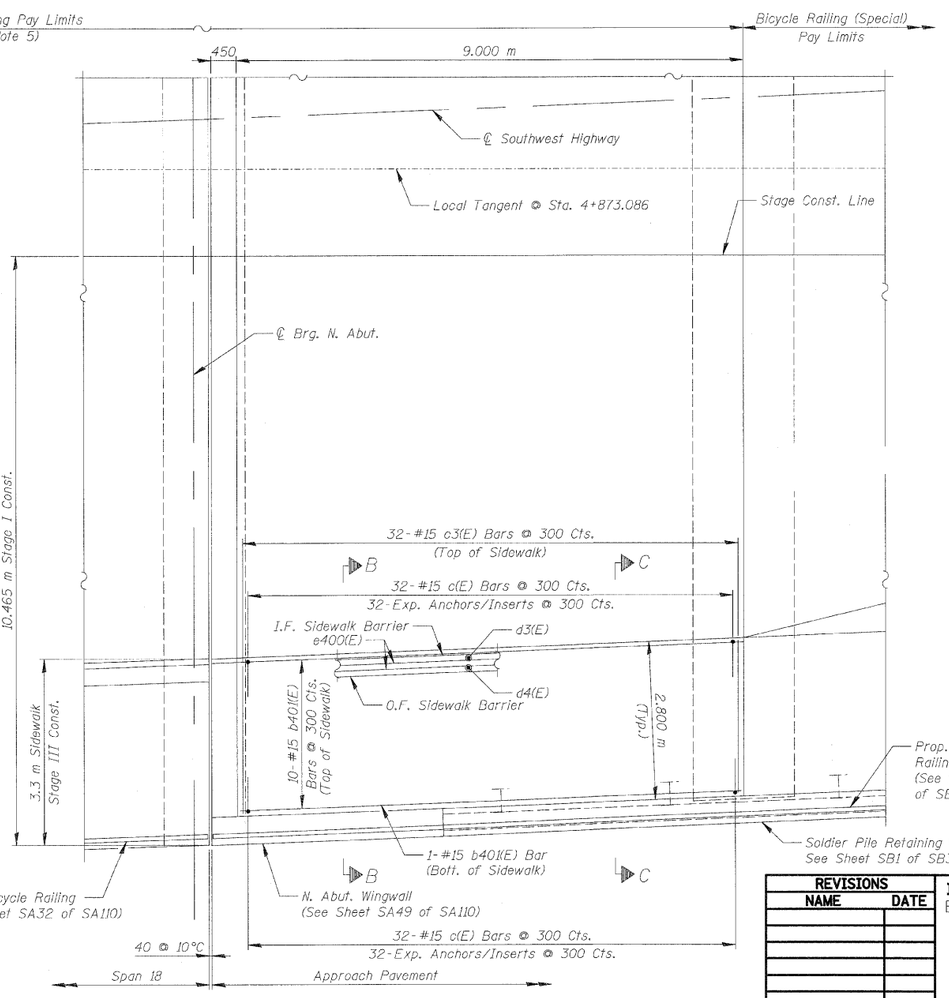
	Item	Unit	Total
**	Concrete Superstructure	m³	15.0
***	Reinforcement Bars, Epoxy Coated	kg	1,210

** The cost of Concrete Superstructure is included with the cost of Bridge Approach Pavement (Special)

*** The cost of Reinforcement Bars, Epoxy Coated is included with the cost of Bridge Approach Pavement (Special)



SOUTH APPROACH SLAB PLAN



NORTH APPROACH SLAB PLAN

REVISIONS	
NAME	DATE

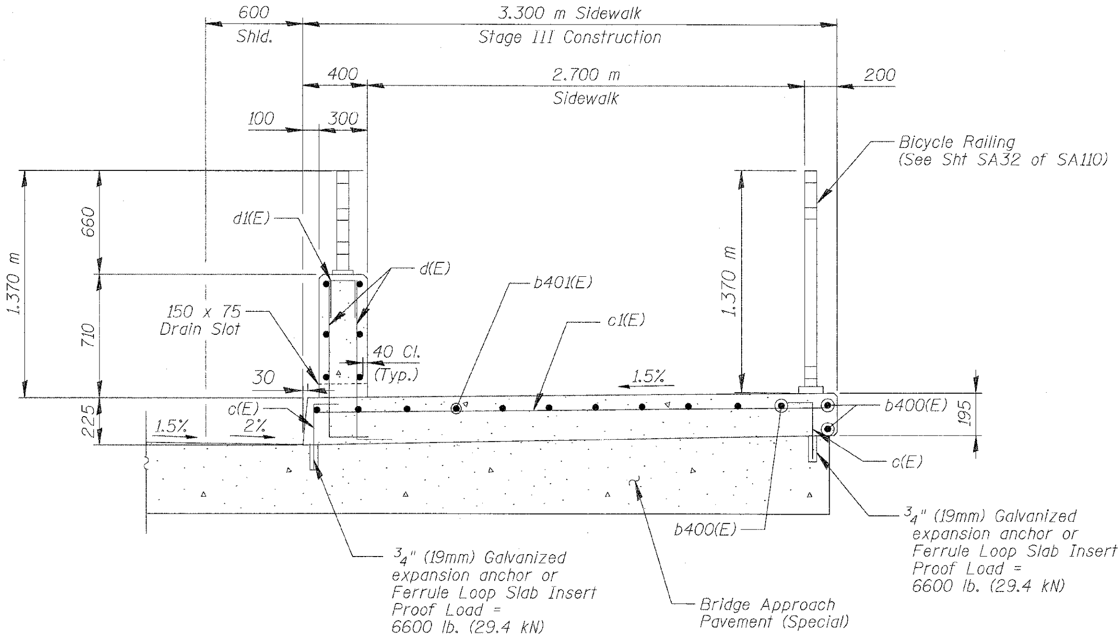
ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE APPROACH PAVEMENT (SPECIAL)
AT SOUTH AND NORTH ABUTMENTS
SOUTHWEST HIGHWAY OVER
B&O RAILROAD AND STONY CREEK
FAU 3578 SECTION 15V B-1-R-1
STRUCTURE NUMBER 016-2771
COOK COUNTY STATION 4+716.497
SCALE: NONE DRAWN BY: M. Tryon
DATE: 6/17/09 CHECKED BY: A. Yarglooglu

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

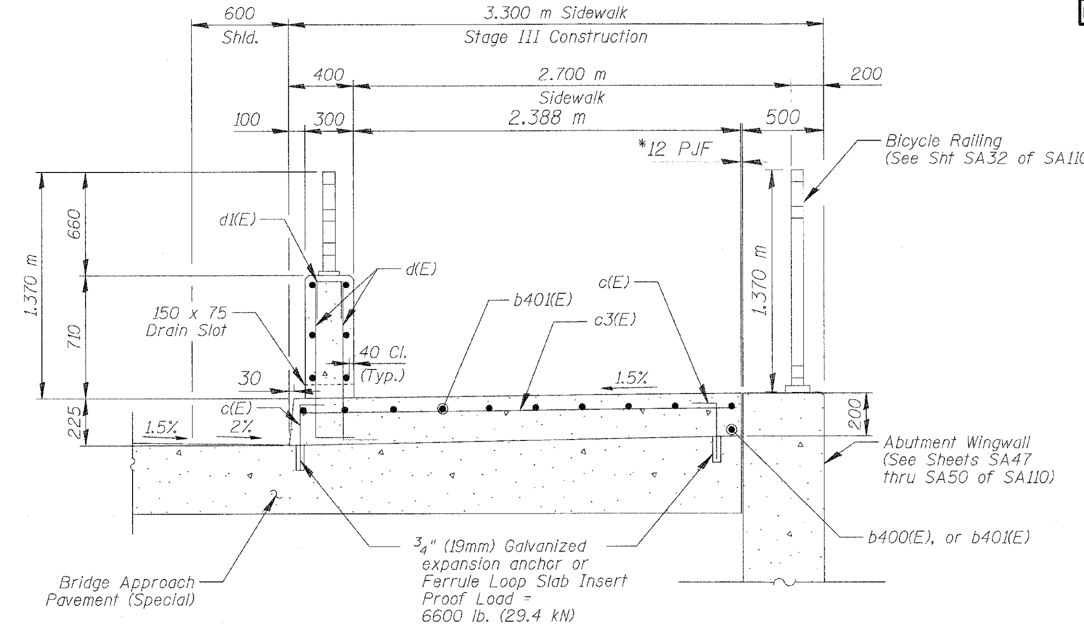
tkoeppen(Rdwy_Lisle)
6/26/2009 8:49:55 AM
G:\2001\9556.A00\Drawings\STRUCT\00 Approach slab details.dgn

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	15V B-1-R-1	COOK	243	211
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62388

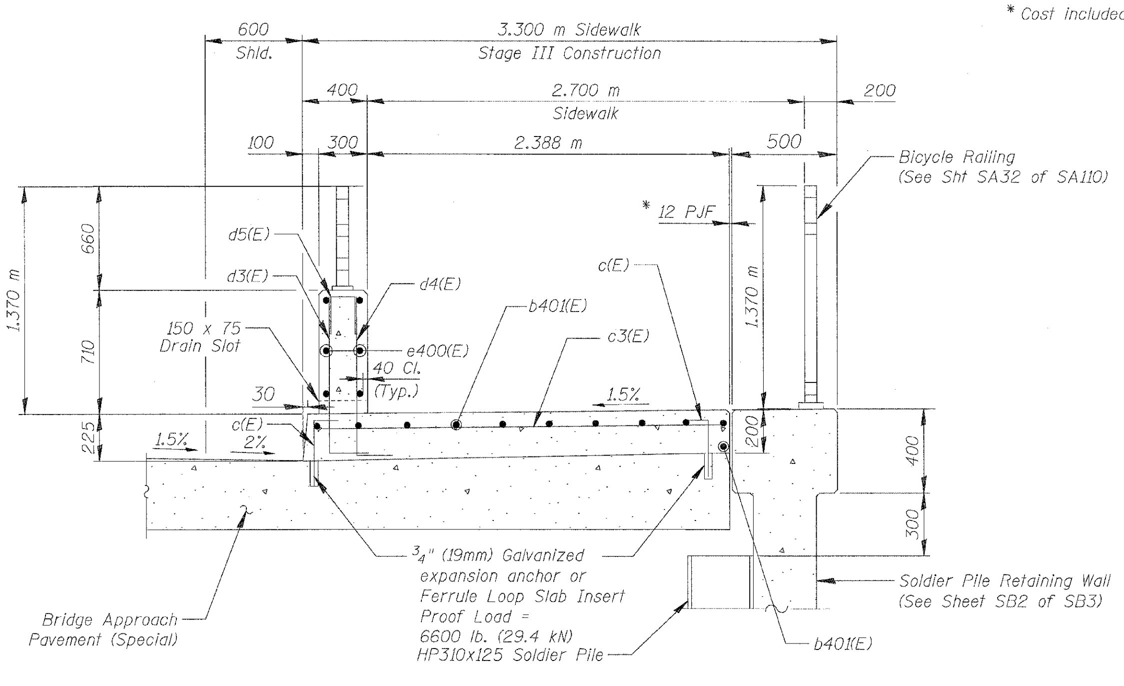


SECTION A-A

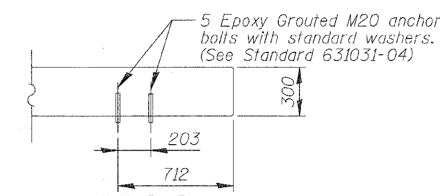


SECTION B-B

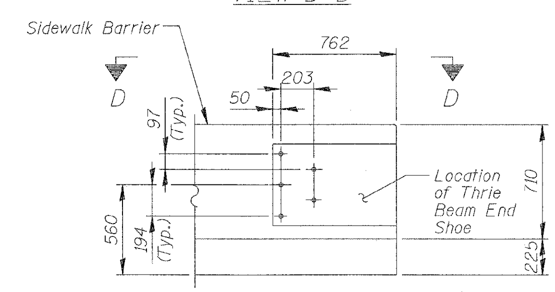
* Cost included in the Pay Item "Bridge Approach Pavement (Special)".



SECTION C-C

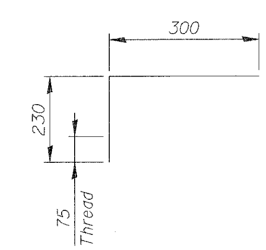


VIEW D-D

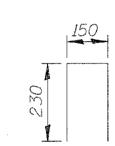


S. APPROACH SIDEWALK BARRIER DETAIL

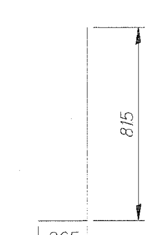
(Looking South at I.F. of Sidewalk Barrier)



BAR c(E)



BAR d5(E)



BAR d3(E) & d4(E)

NOTES

1. Reinforcement bars designated (E) shall be Epoxy Coated.
2. Bars indicated thus 20 x 3 - #15 etc. indicates 20 lines of bars with 3 lengths per line.
3. All dimensions are in millimeters (mm) except as noted.
4. For additional approach pavement details, see Roadway Plans.
5. In lieu of providing the d3(E) & d4(E) dowels bars as shown, the contractor, at his option and expense, can submit to the engineer for his review and approval an alternate detail to drill and grout the bars. No additional compensation will be allowed if the contractor elects to use the alternate detail.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH PAVEMENT (SPECIAL) DETAILS

SOUTHWEST HIGHWAY OVER B&O RAILROAD AND STONY CREEK

FAU 3578 SECTION 15V B-1-R-1

STRUCTURE NUMBER 016-2771

COOK COUNTY STATION 4+716.497

SCALE: NONE DRAWN BY: M. Tryon

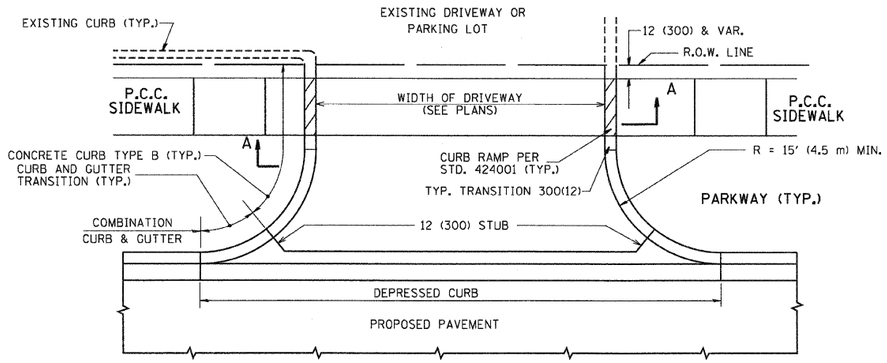
DATE: 6/17/09 CHECKED BY: A. Yargloogiu

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

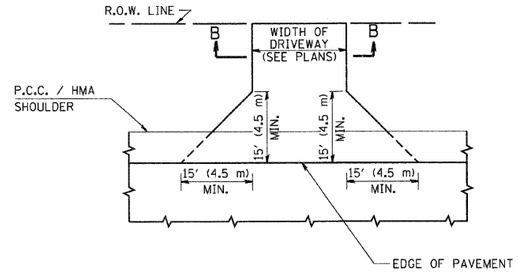
tkoeppen(Rdwy_Lisle) 6/26/2009 8:20:04 AM Q:\1001\9556.A0\Drawings\STRUCT\00_Approach slab details.dgn

CONTRACT NO.

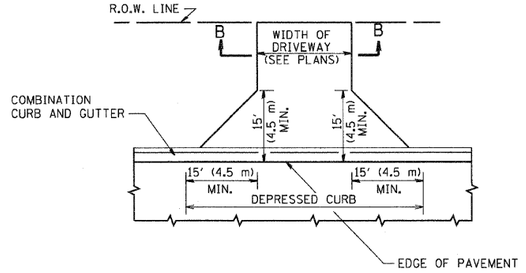
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	212
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



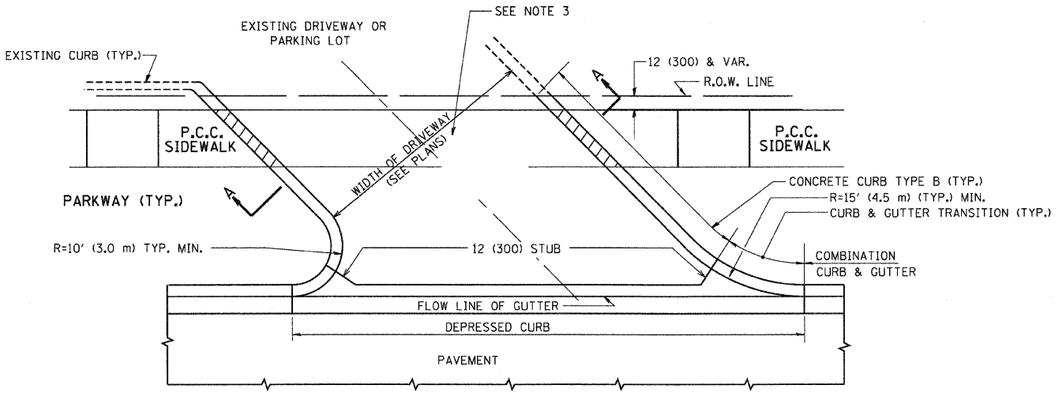
WITH CONCRETE CURB, TYPE B



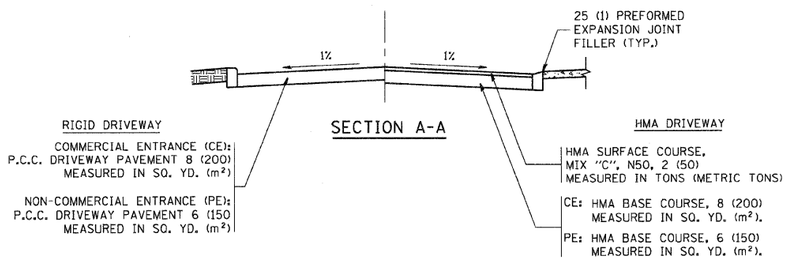
ADJACENT TO P.C.C. / HMA SHOULDER

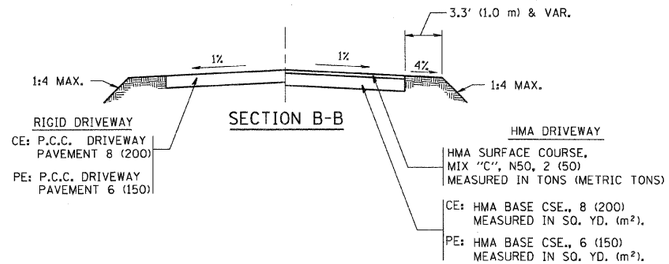


ADJACENT TO CURB AND GUTTER



WITH CONCRETE CURB, TYPE B





RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE, MIX "C", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m²).

GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

REVISIONS	
NAME	DATE
R. SHAH	11-04-95
J. POLLASTRINI	08-12-96
J. POLLASTRINI	12-14-96
A. ABBAS	03-21-97
T. HOLTZ	04-08-97
M. GOMEZ	04-06-01
P. LoFLEUR	04-15-03
R. BORO	01-01-07
R. BORO	06-11-08

ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)

SCALE: VERT. NONE HORIZ.

DRAWN BY

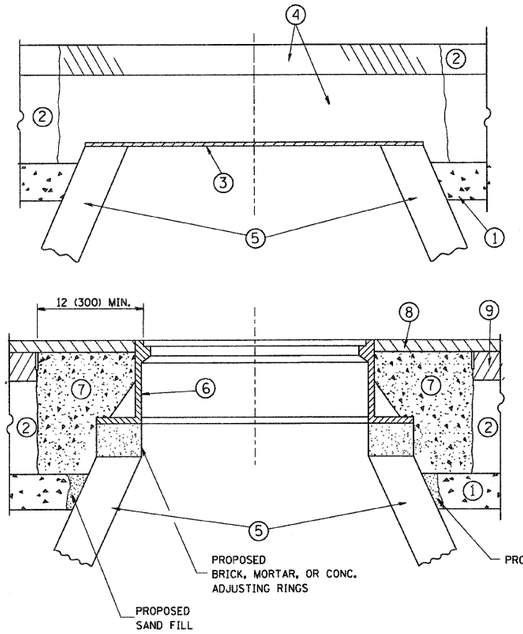
CHECKED BY

BD0156-07 (BD-01)

PLOT DATE = 6/12/2008
FILE NAME = c:\projects\dist1d24x36\bd01.dgn
PLOT SCALE = 49.9999 ' / IN.
USER NAME = bauerdl

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	213
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.

B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.

C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.

D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.

B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.

C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

LEGEND

1. SUB-BASE GRANULAR MATERIAL
2. EXISTING PAVEMENT
3. 36 (900) DIAMETER METAL PLATE
4. PROPOSED CRUSHED STONE AND HMA SURFACE MIX
5. EXISTING STRUCTURE
6. FRAME AND LID (SEE NOTES)
7. CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
8. PROPOSED HMA SURFACE COURSE
9. PROPOSED HMA BINDER COURSE

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/30/95
R. SHAH	03/10/95
A. ABBAS	03/21/97
R. WIEDEMAN	05/14/04
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: VERT. NONE HORIZ.

DRAWN BY

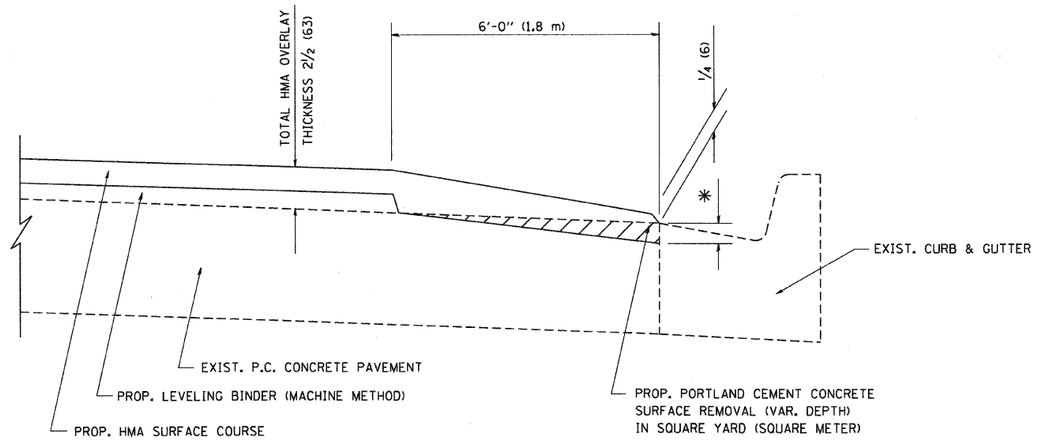
CHECKED BY

BD600-03 (BD-8)

PLOT DATE = 3/6/2007
FILE NAME = K:\dra\std\bd88.dgn
PLOT SCALE = 88.0000 ' / IN.
USER NAME = bauer-dl

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	214
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



HMA TAPER AT EDGE OF P.C.C PAVEMENT

HMA SURFACE		LEVELING BINDER	
MIX	THICKNESS	THICKNESS	* MILLING AT GUTTER FLAG
C OR D	1½ (38)	1 (25)	1¼ (33)
F	1¾ (44)	¾ (19)	1½ (38)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. SHAH	09/10/94
R. SHAH	10/25/94
A. ABBAS	05/05/99
E. GOMEZ	12/21/00
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

HMA TAPER AT EDGE OF P.C.C. PAVEMENT

SCALE: VERT. HORIZ. NONE

DRAWN BY Jls

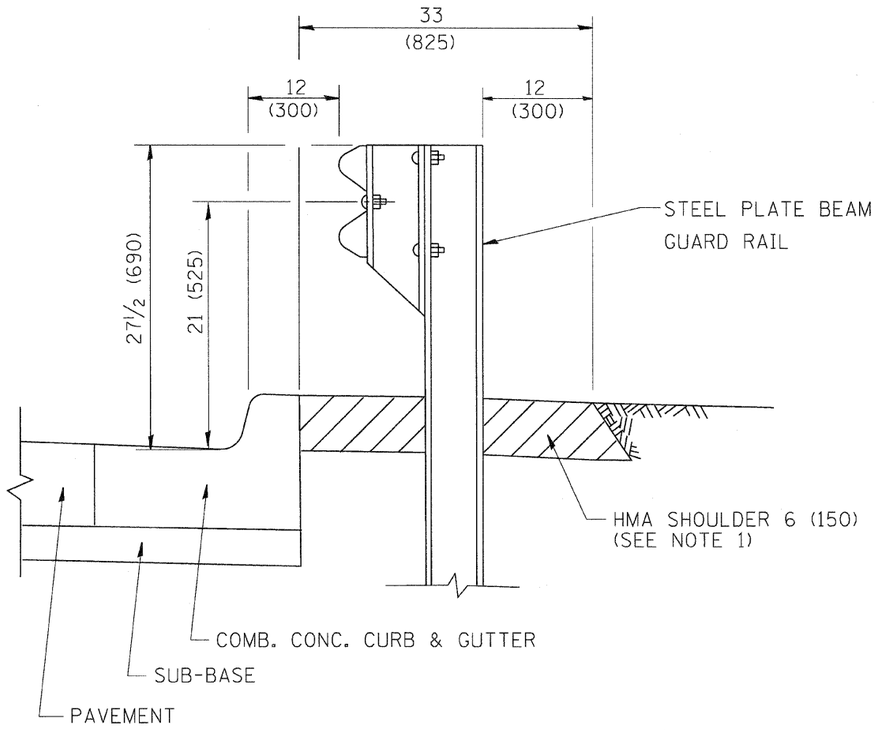
CHECKED BY A. ABBAS

BD400-06 (BD33)

PLOT DATE = 3/5/2007
FILE NAME = K:\cistate\bd33.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = bauerdl

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	215
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



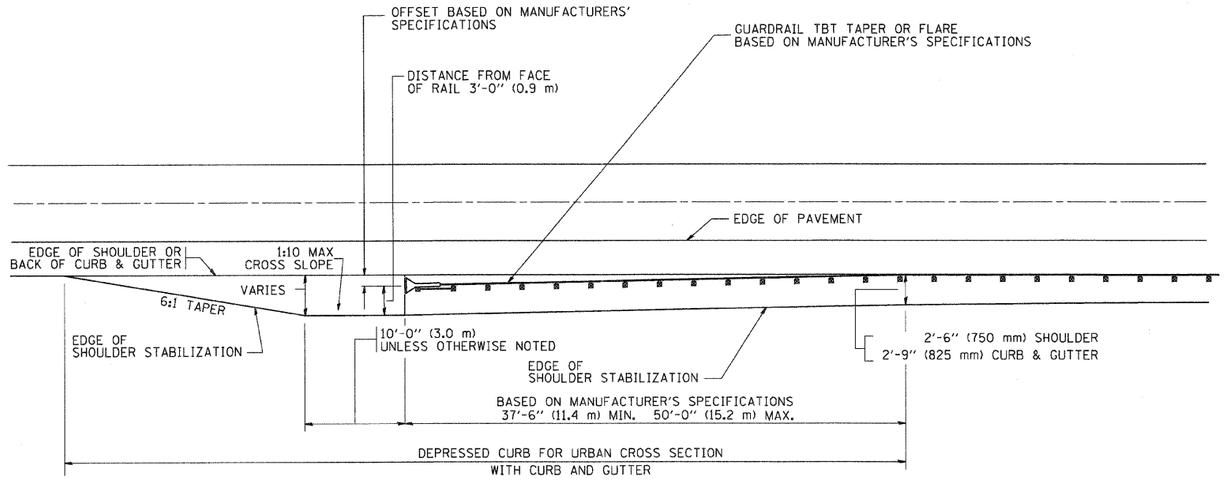
NOTES:
1. THE HMA SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

BASIS OF PAYMENT: HMA SHOULDER 6 (150) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDER 6" (150 mm)".

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER

[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



STABILIZATION AT TBT TY. 1 SPL.

TBT = TRAFFIC BARRIER TERMINAL

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
M. DE YONG	09-22-90
M. DE YONG	07-14-92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	02/23/95
A. ABBAS	03/21/97
E. GOMEZ	08/28/00
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

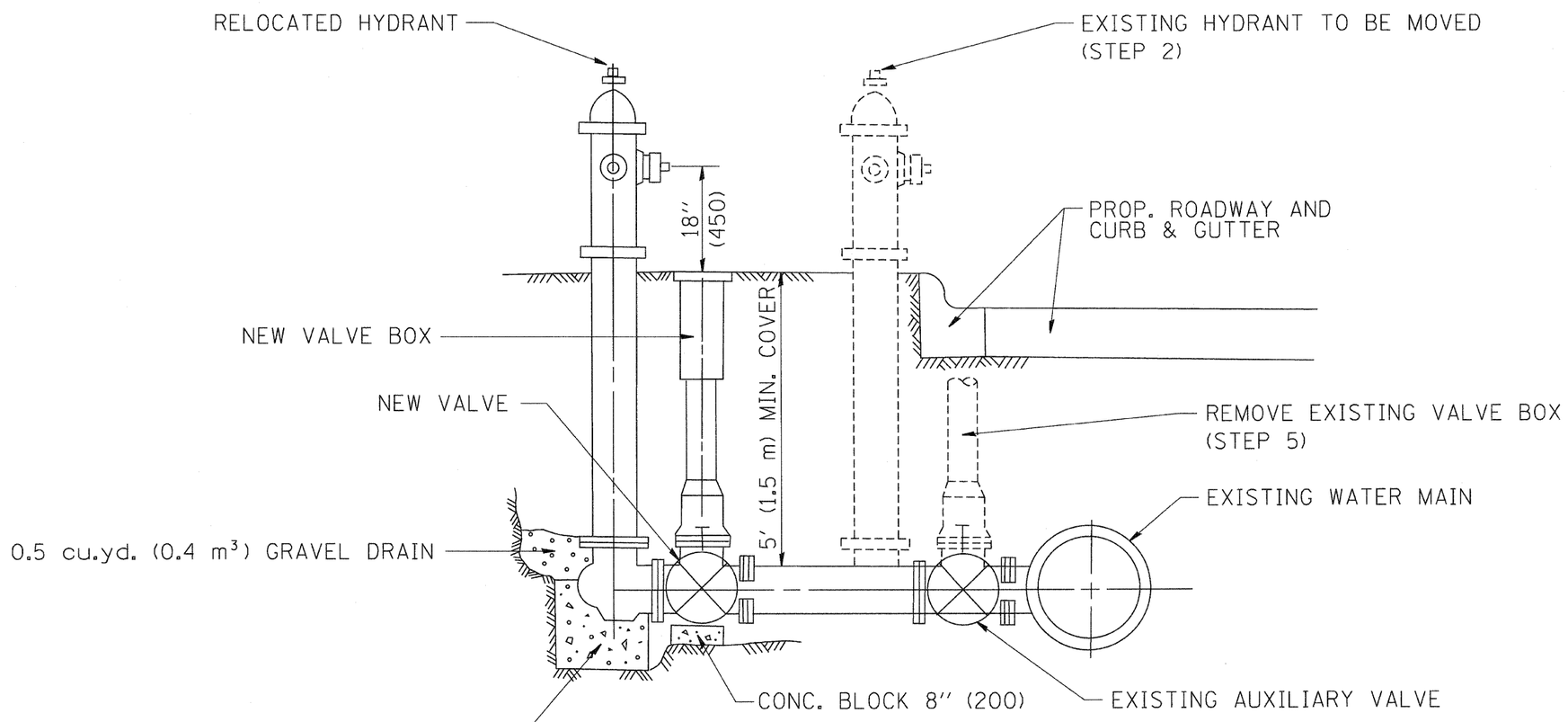
DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER STABILIZATION AT TBT TY 1 SPL.

SCALE: VERT. NONE HORIZ. DRAWN BY JIs CHECKED BY

BD600-10 (BD 34)

PLOT DATE = 12/17/2008
FILE NAME = C:\Projects\24x36\Original\bd34.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = gagliomobi

CONTRACT NO.				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	216
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SEQUENCE OF CONSTRUCTION:

1. CLOSE EXISTING VALVE.
2. REMOVE EXISTING HYDRANT.
3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
4. RELOCATE EXISTING HYDRANT.
5. OPEN EXISTING VALVE, REMOVE BOX.
6. BACKFILL.
7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

FIRE HYDRANT TO BE MOVED

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. SHAH	09/09/94
R. SHAH	10/25/94

ILLINOIS DEPARTMENT OF TRANSPORTATION

FIRE HYDRANT TO BE MOVED

SCALE: VERT. NONE HORIZ.

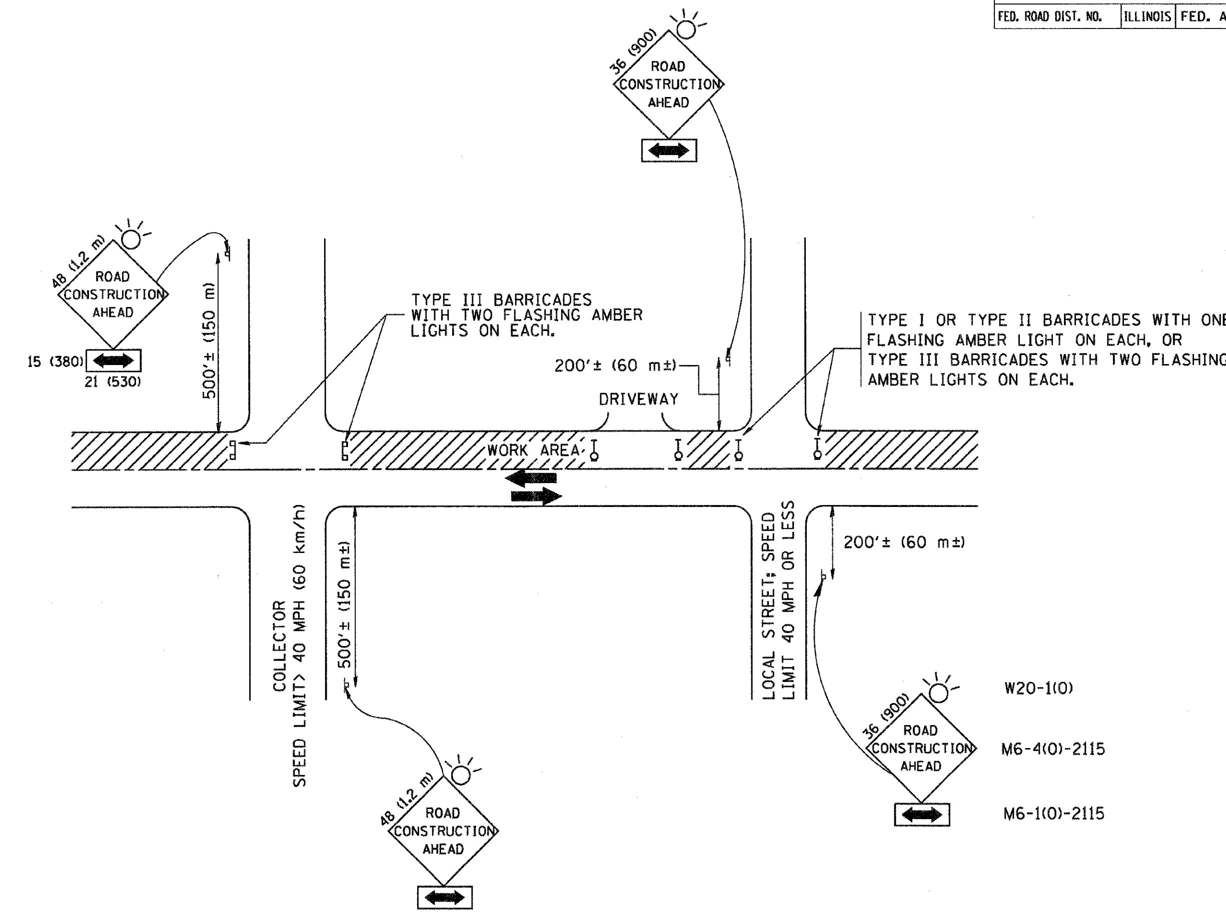
DRAWN BY

CHECKED BY

BD500-03 (BD-36)

PLOT DATE = 3/5/2007
FILE NAME = K:\district\bd36.dgn
PLOT SCALE = 50.0000 '/ IN.
USER NAME = bauer-dl

CONTRACT NO.				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	217
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE

DRAWN BY

CHECKED BY

TC-10

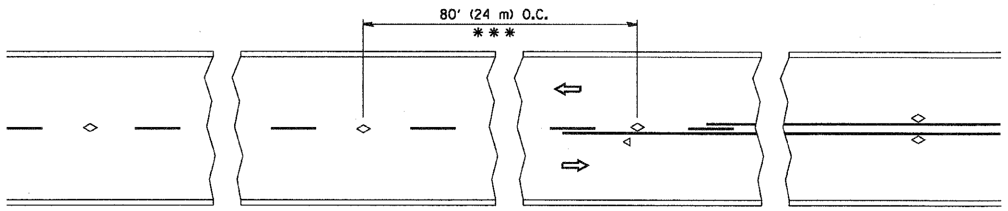
PLOT DATE = 3/6/2007
FILE NAME = K:\diststd\tc10.dgn
PLOT SCALE = 50.000 ' / IN.
USER NAME = bauerdl

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	218

CONTRACT NO.

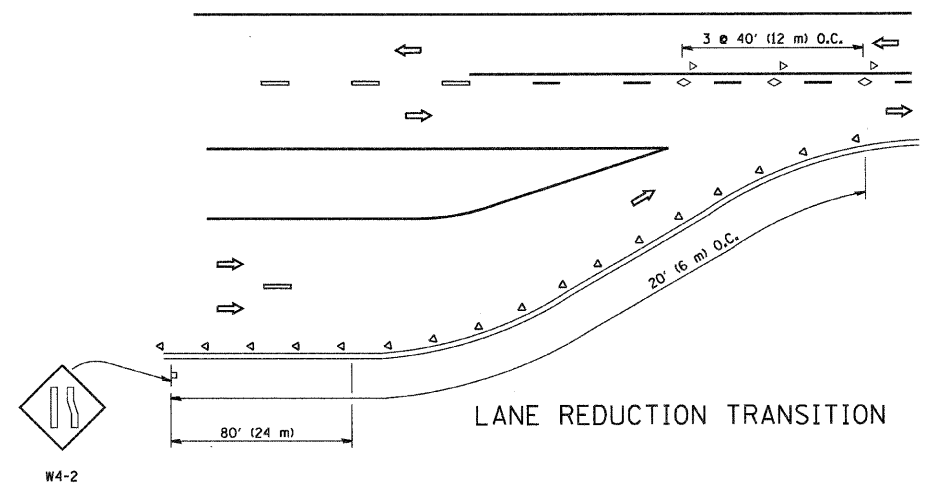
STA. TO STA.

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

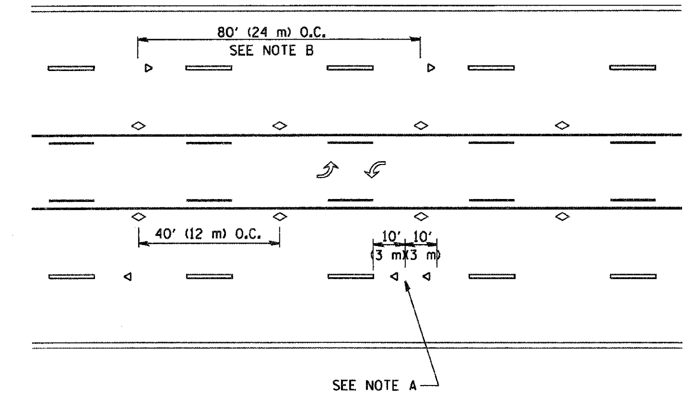


* * * REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

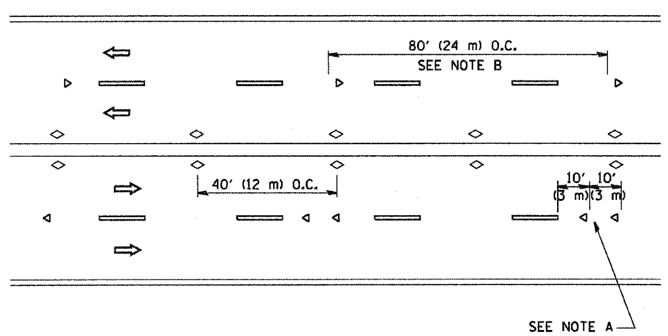
TWO-LANE/TWO-WAY



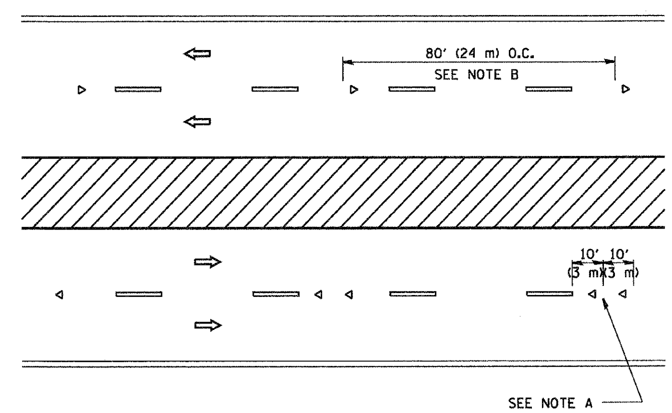
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

LANE MARKER NOTES

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

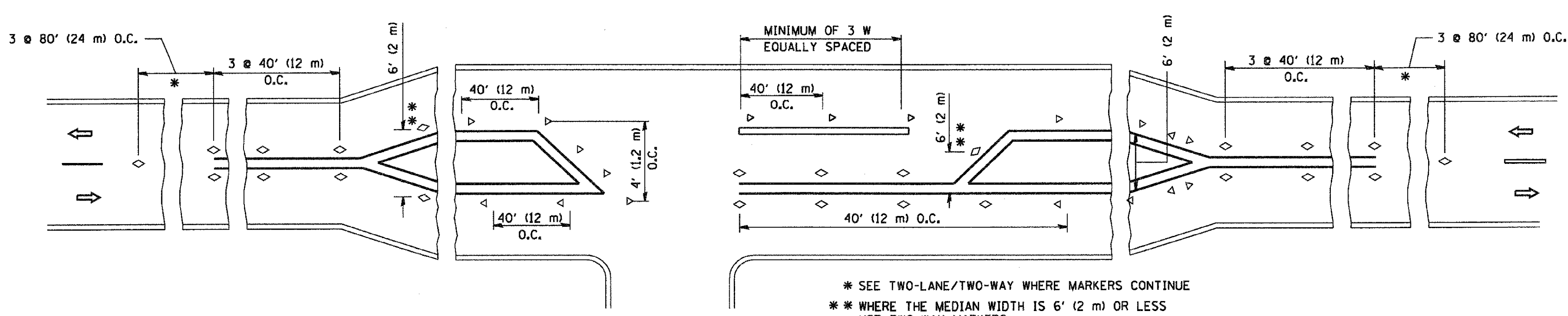
A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

SYMBOLS

- YELLOW STRIPE
- WHITE STRIPE
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (W/O)
- TWO-WAY AMBER MARKER

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

* * WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

All dimensions are in inches (millimeters) unless otherwise shown.

REVISIONS NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE

DRAWN BY CADD

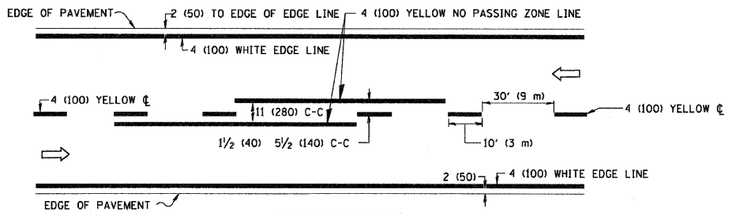
CHECKED BY

TC-11

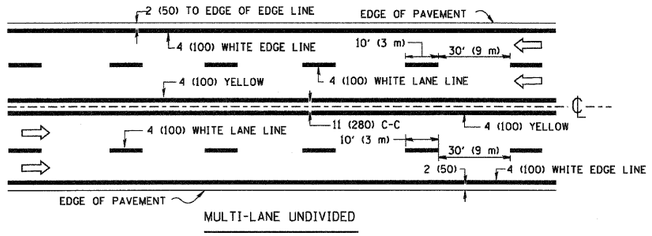
PLOT DATE = 3/6/2007
FILE NAME = K:\diststd\tc11.dgn
PLOT SCALE = 50.000 ' / IN.
USER NAME = bauerdl

CONTRACT NO.

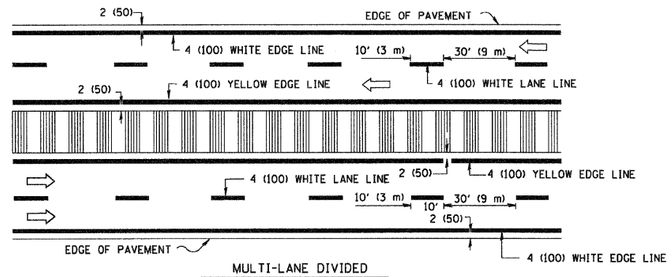
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	219
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



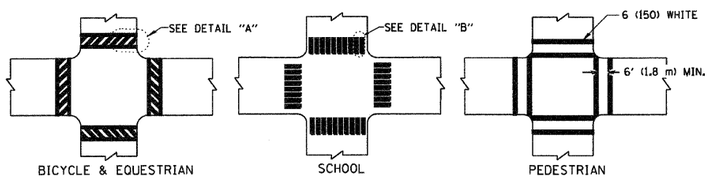
MULTI-LANE UNDIVIDED



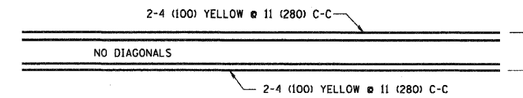
MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

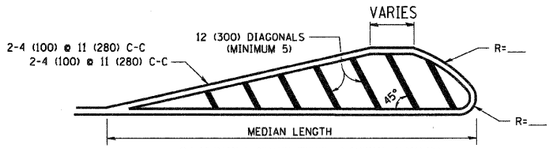
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



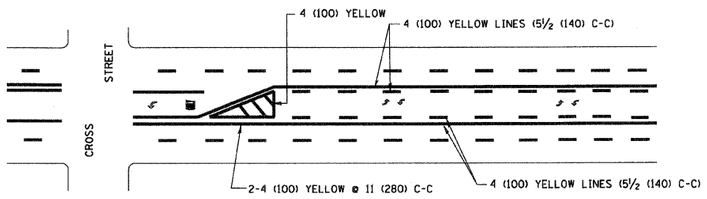
4' (1.2 m) WIDE MEDIANS ONLY



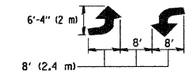
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

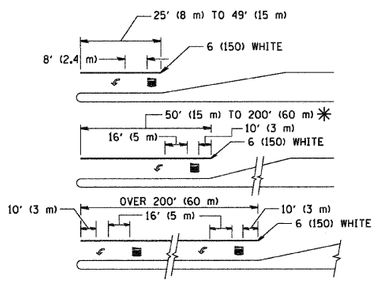


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

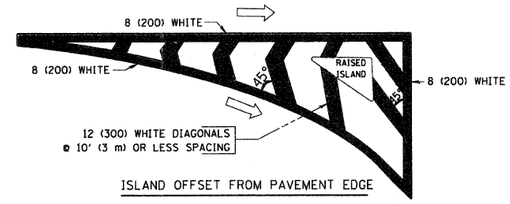


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) ONLY AREA = 20.8 SQ. FT. (1.9 m^2)

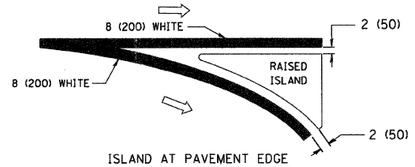
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 ⌀ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 ⌀ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 ⌀ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 ⌀ 6 (150) 12 (300) ⌀ 45° 12 (300) ⌀ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 ⌀ 4 (100) WITH 12 (300) DIAGONALS ⌀ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS ⌀ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)
SHOULDER DIAGONALS	12 (300) ⌀ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE

DRAWN BY CADD

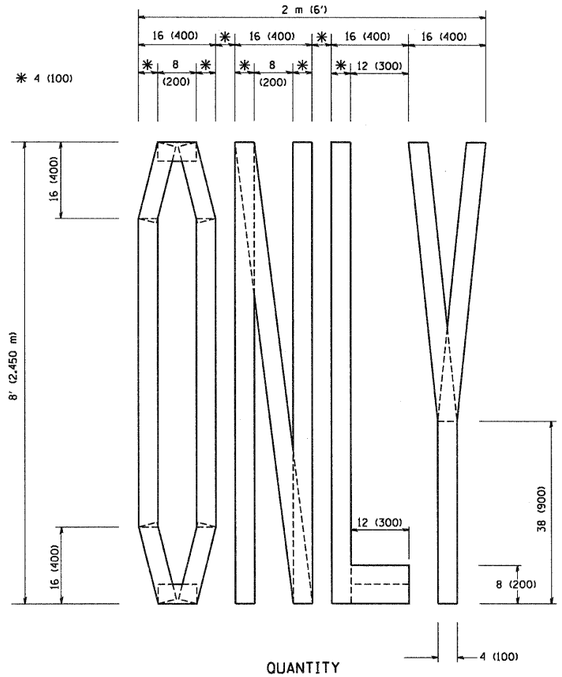
CHECKED BY

TC-13

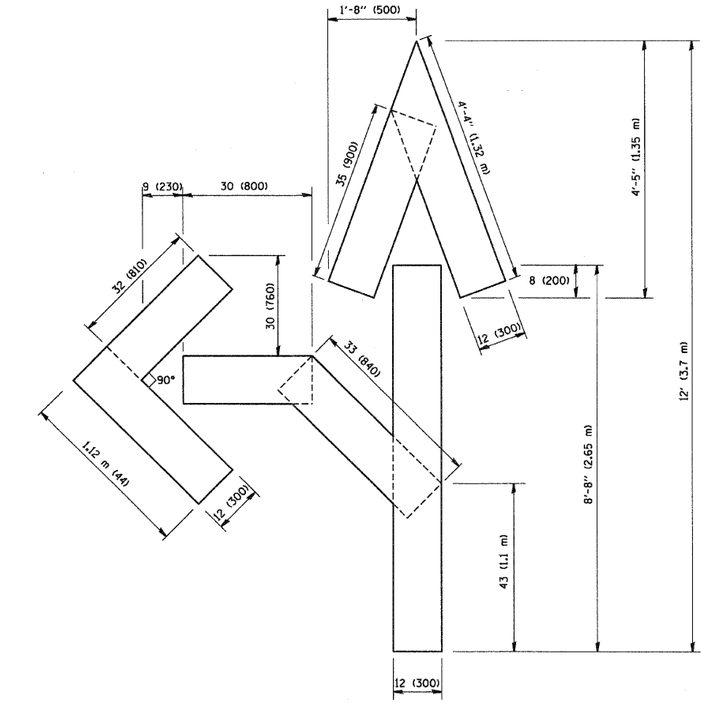
PLOT DATE = 3/6/2007
FILE NAME = K:\dist6std\tc13.dgn
PLOT SCALE = 50.0000 '/ IN.
USER NAME = bauerdl

CONTRACT NO.

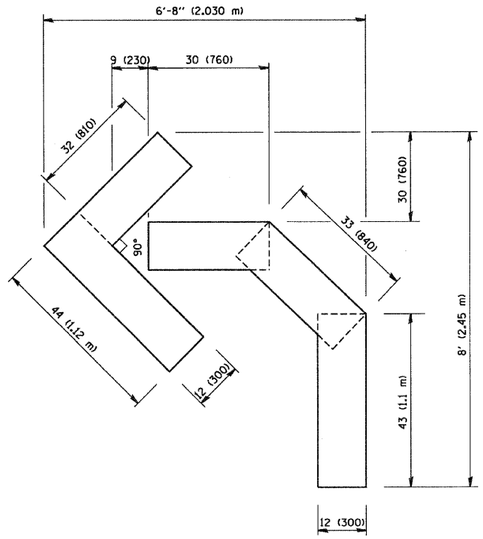
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	220
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



QUANTITY
4 (100) LINE = 64.1 ft. (19.7 m)
21.1 sq. ft. (1.97 sq. m)



QUANTITY
4 (100) LINE = 82.5 ft. (25.3 m)
27.5 sq. ft. (2.53 sq. m)



QUANTITY
4 (100) LINE = 45.5 ft. (13.9 m)
15.2 sq. ft. (1.39 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

SCALE: NONE

DRAWN BY CADD

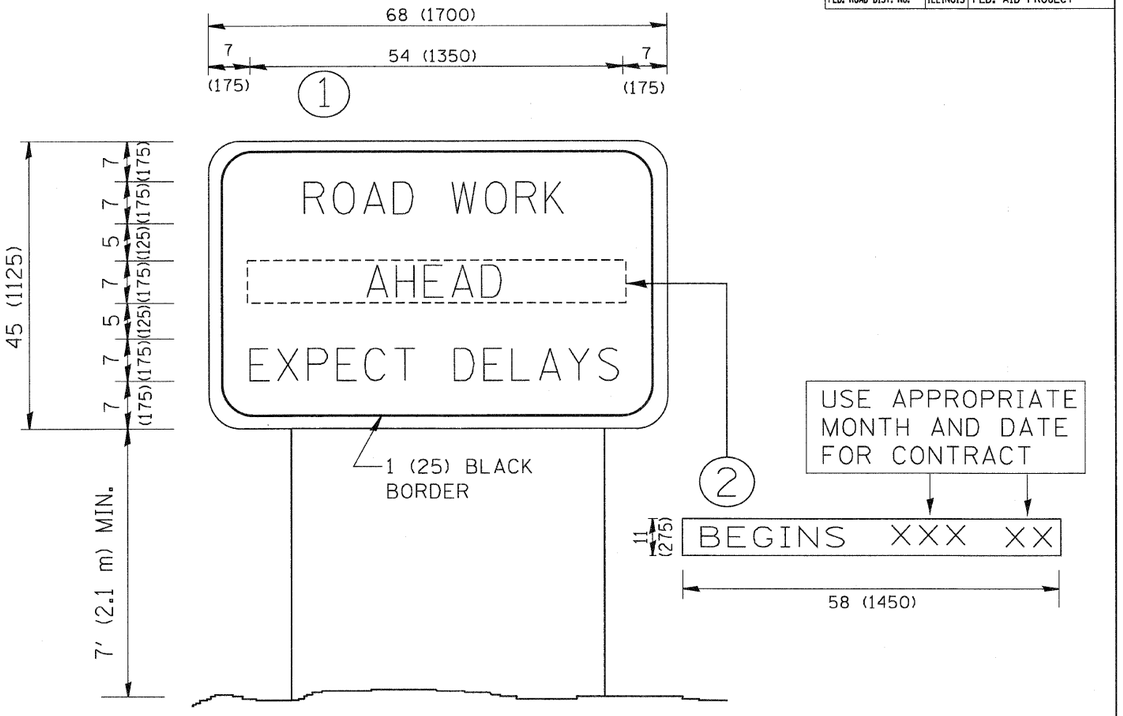
CHECKED BY

TC-16

PLOT DATE = 3/7/2007
FILE NAME = K:\dist\std\tc16.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = bauerd1

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	221
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE ''ROAD CONSTRUCTION AHEAD'' SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR ''TEMPORARY INFORMATION SIGNING'' FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99
C. JUCIUS	1-31-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

SCALE: NONE

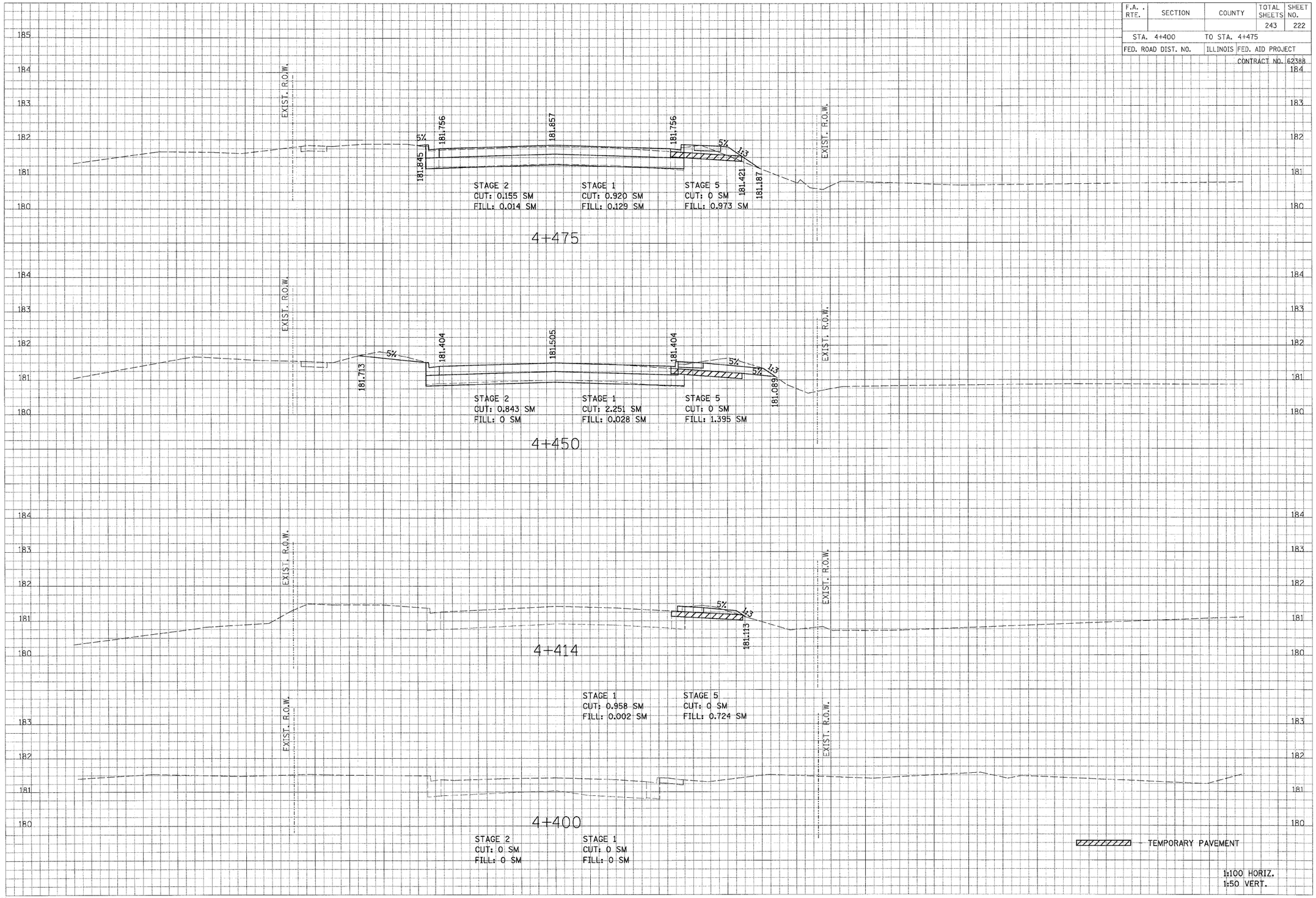
DRAWN BY DESIGN

CHECKED BY TC22

PLOT DATE = 3/8/2007
FILE NAME = K:\diasta\tc22.dgn
PLOT SCALE = 88.000 '/ IN.
USER NAME = baumrdl

℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	222
STA. 4+400		TO STA. 4+475		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	



FINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

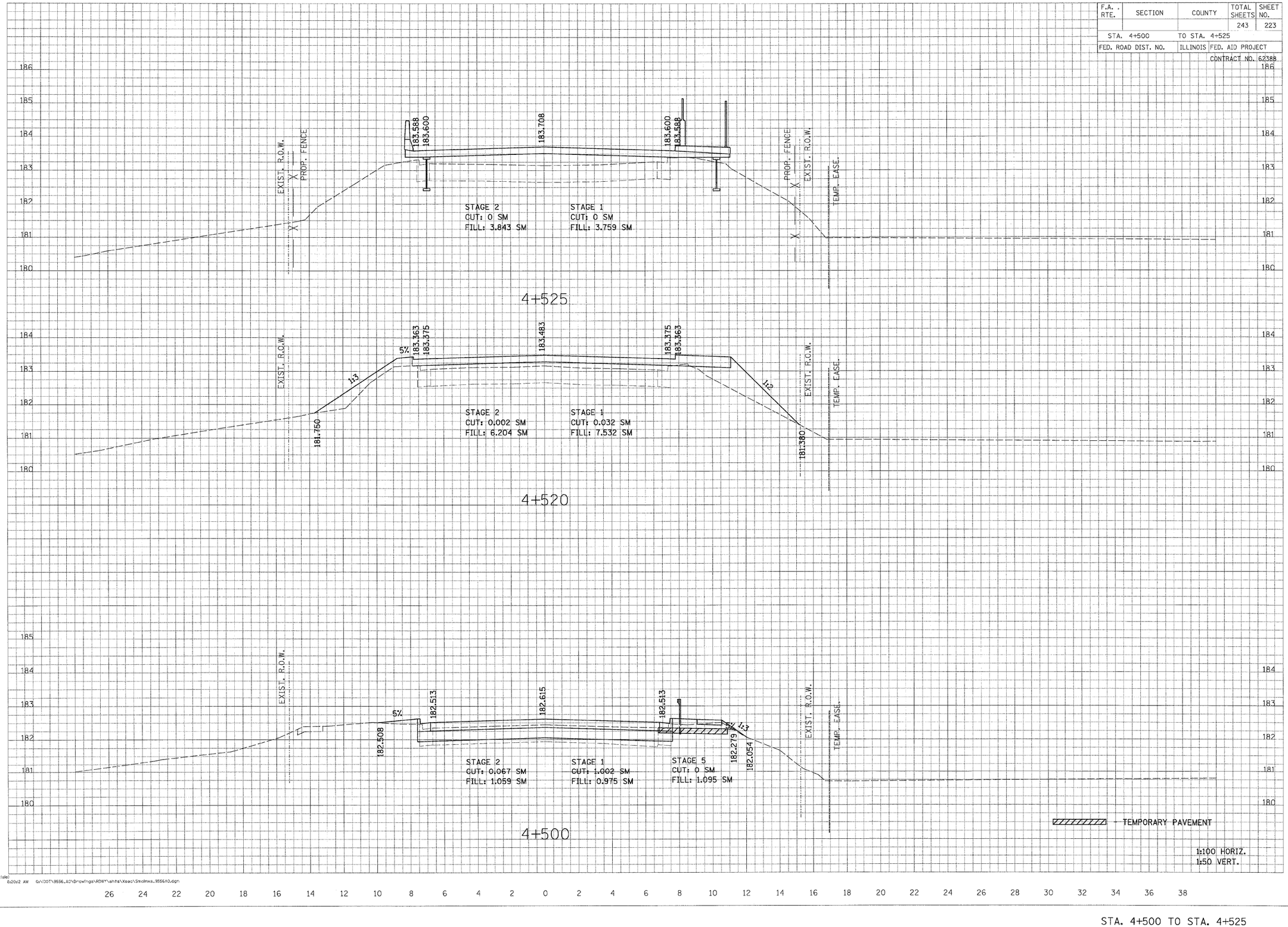
tkoeppen@dwy_Lisle
6/26/2009 9:20:8 AM G:\IDOT\9556_A01\Drawings\RDWY\shts\Xsec\Smallmxs_9556A0.dgn

STA. 4+400 TO STA. 4+475

℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	223
STA. 4+500		TO STA. 4+525		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62388



FINAL SURVEY — BY — DATE
SURVEYED
PLOTTED
TEMPLATE
NOTE BOOK
AREAS CHECKED
NO.

ORIGINAL SURVEY — BY — DATE
SURVEYED
PLOTTED
TEMPLATE
NOTE BOOK
AREAS CHECKED
NO.

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

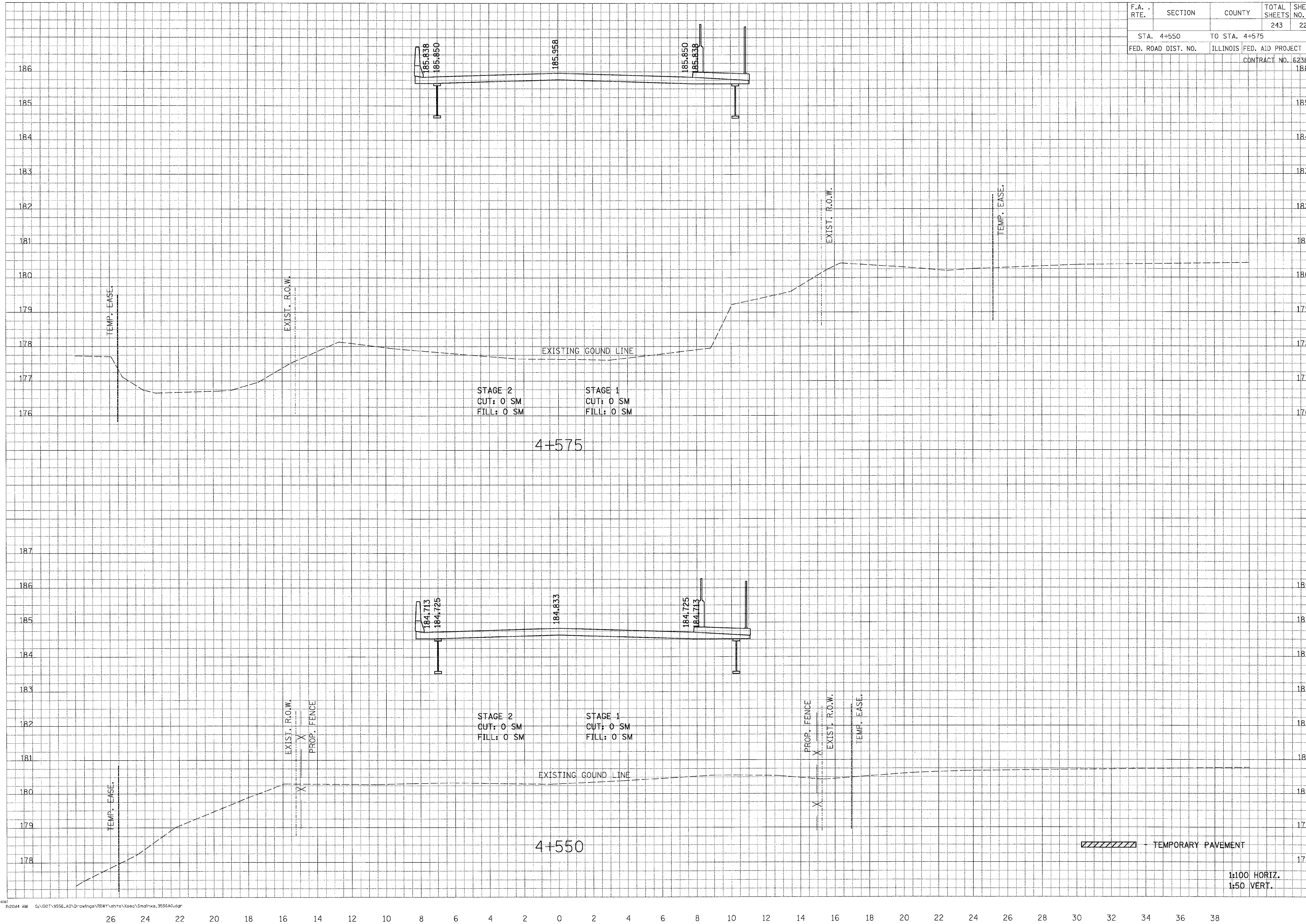
tkoeppen(Rdwy_Lisle)
6/26/2009 8:20:12 AM G:\DOT\9556_A0\Drawings\RDWY\shts\Xsec\Smallmxs_9556A0.dgn

STA. 4+500 TO STA. 4+525

℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	224
STA. 4+550		TO STA. 4+575		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62388



PATRICK ENGINEERING INC.
LISLE, ILLINOIS

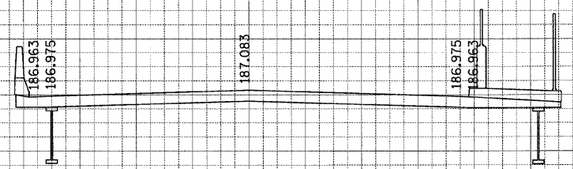
℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	225
STA. 4+600		TO STA. 4+600		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	

FINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — PLOT DATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — PLOT DATE — AREAS — AREAS CHECKED

PATRICK ENGINEERING INC.
LISLE, ILLINOIS



189 188 187 186 185 184 183 182 181 180 179 178 177 176

TEMP. EASE.
EXIST. R.O.W.
EXISTING GOUND LINE
EXIST. R.O.W.
TEMP. EASE.

STAGE 2
CUT: 0 SM
FILL: 0 SM

STAGE 1
CUT: 0 SM
FILL: 0 SM

4+600

▨ - TEMPORARY PAVEMENT

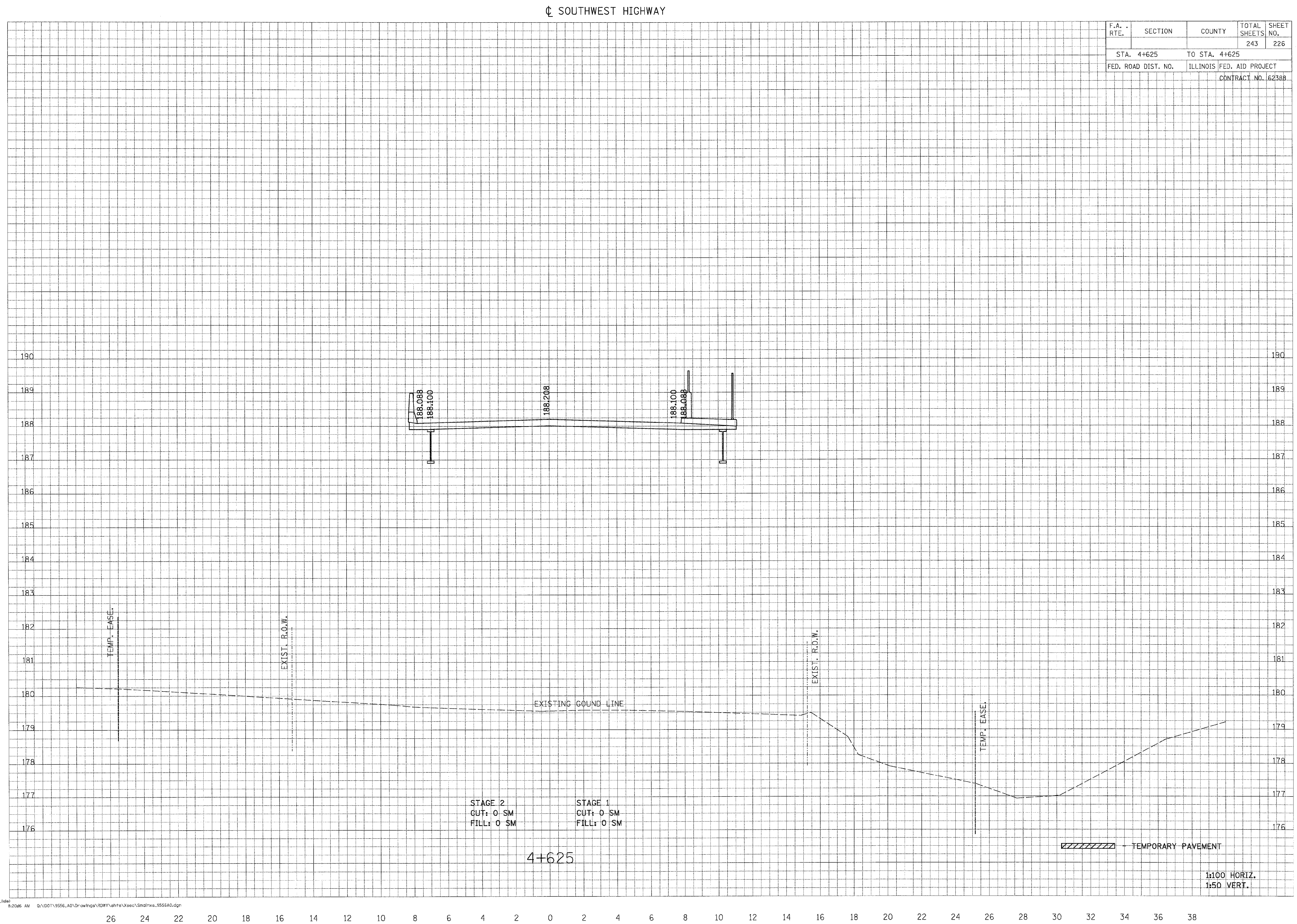
1:100 HORIZ.
1:50 VERT.

26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38

TkoappeniRdwy_Lisle
6/26/2009 8:20:25 AM Q:\IDOT\9556_A0\Drawings\RDWY\enta\Xsec\Smolnxs_9556A0.dgn

STA. 4+600 TO STA. 4+600

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	226
STA. 4+625		TO STA. 4+625		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	



FINAL SURVEY: SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK NO. — BY — DATE

ORIGINAL SURVEY: SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK NO. — BY — DATE

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

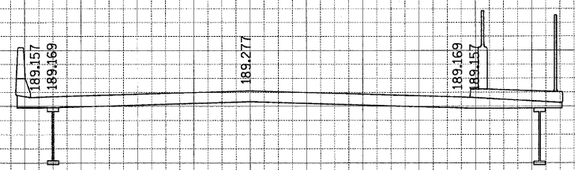
6/26/2009 8:20:46 AM

℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	227
STA. 4+650		TO STA. 4+650		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	

FINAL SURVEY | NOTE BOOK | NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

ORIGINAL SURVEY | NOTE BOOK | NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE



191 190 189 188 187 186 185 184 183 182 181 180 179 178 177

TEMP. EASE.
EXIST. R.O.W.
EXISTING GOUND LINE
EXIST. R.O.W.
TEMP. EASE.

STAGE 2
CUT: 0 SM
FILL: 0 SM

STAGE 1
CUT: 0 SM
FILL: 0 SM

4+650

TEMPORARY PAVEMENT

1:100 HORIZ.
1:50 VERT.

26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

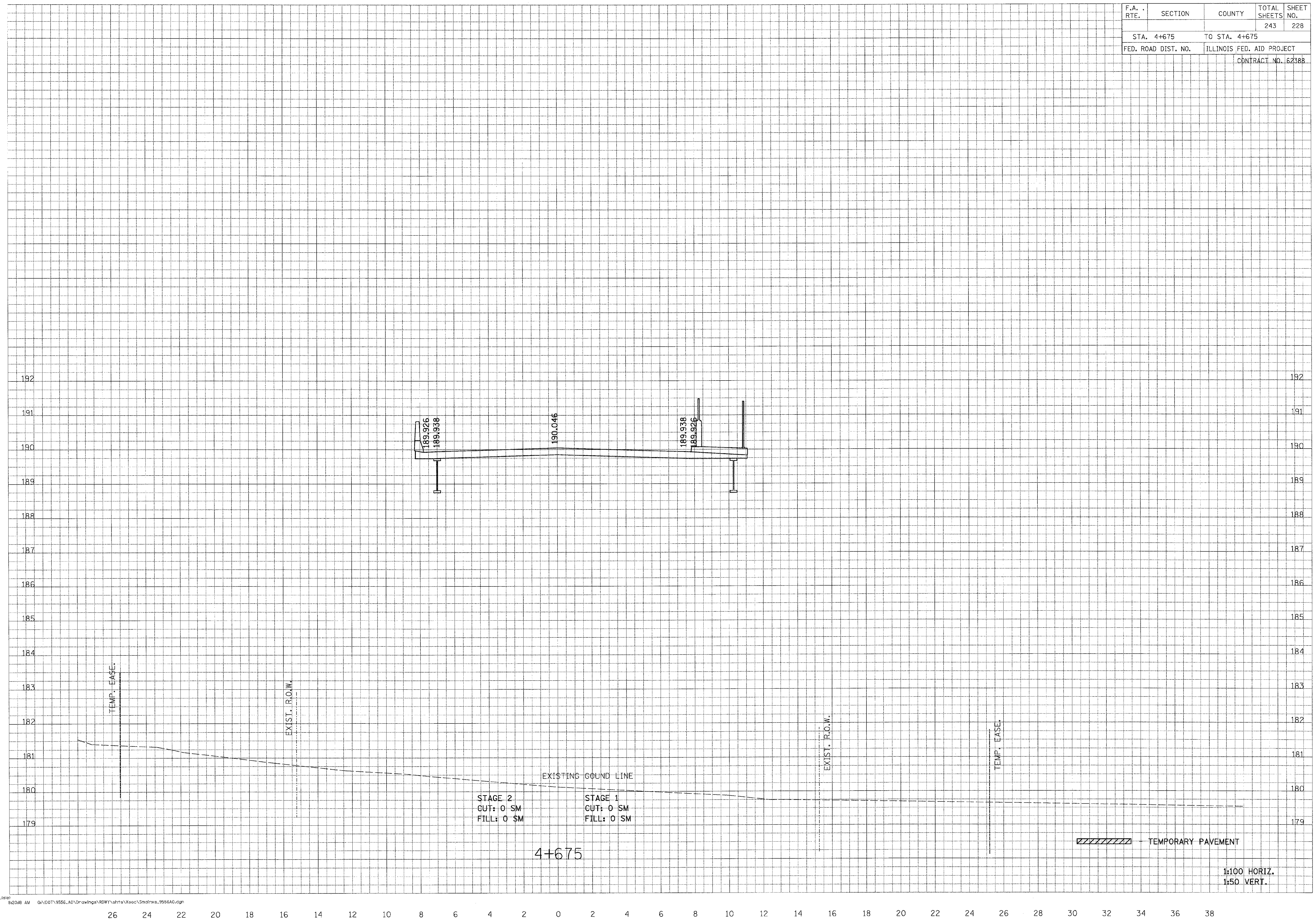
tkoeppel Rdwy_L1.dgn
6/26/2009 8:20:17 AM D:\IDOT\9556.A0\Drawings\RDWY\sht1a\Xsec\Smallmxs_9556A0.dgn

STA. 4+650 TO STA. 4+650

℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	228
STA. 4+675	TO STA. 4+675			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

CONTRACT NO. 62388



FINAL SURVEY | NOTE BOOK | NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

ORIGINAL SURVEY | NOTE BOOK | NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

STA. 4+675 TO STA. 4+675

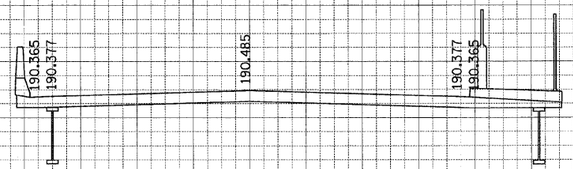
℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	229
STA. 4+700		TO STA. 4+700		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62388

FINAL SURVEY | NOTE BOOK | ORIGINAL SURVEY | NOTE BOOK

NO.	BY	DATE
	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	



192 191 190 189 188 187 186 185 184 183 182 181 180 179

EXISTING GOUND LINE

EXIST. R.O.W.

TEMP. EASE.

STAGE 2
CUT: 0 SM
FILL: 0 SM

STAGE 1
CUT: 0 SM
FILL: 0 SM

4+700

→ TEMPORARY PAVEMENT

1:100 HORIZ.
1:50 VERT.

26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38

PATRICK ENGINEERING INC. LISLE, ILLINOIS

tkoeppen(Rdwy_Lisle)
6/26/2009 8:20:9 AM D:\IDOT\9556_A0\Drawings\RDWY\shts\Xsec\Smallxs_9556A0.dgn

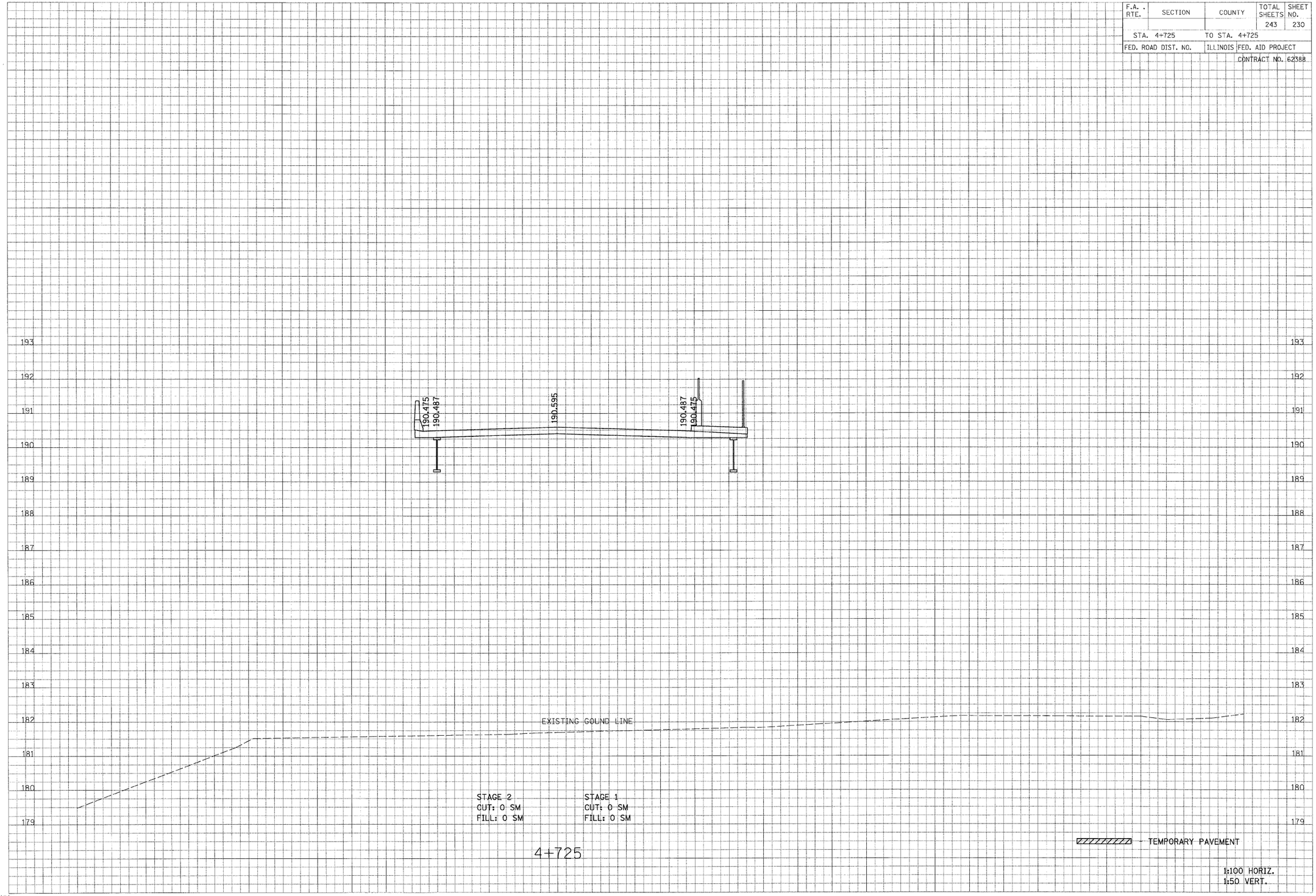
STA. 4+700 TO STA. 4+700

℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	230
STA. 4+725		TO STA. 4+725		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	

FINAL SURVEY? SURVEYED PLOTTED TEMPLATE AREAS CHECKED NOTE BOOK NO. BY DATE

ORIGINAL SURVEY? SURVEYED PLOTTED TEMPLATE AREAS CHECKED NOTE BOOK NO. BY DATE



PATRICK ENGINEERING INC. LISLE, ILLINOIS

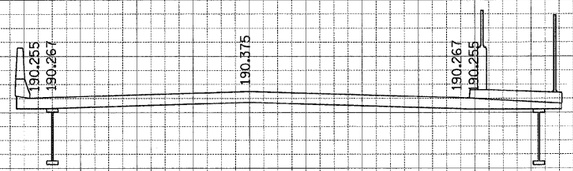
TKoeppen\Rdwy_Lisle\
6/26/2009 9:20:20 AM G:\DOT\9556_A0\Drawings\RDWY\sht's\Xsec\Smallxs_955640.dgn

STA. 4+725 TO STA. 4+725

℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	231
STA. 4+750		TO STA. 4+750		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	

FINAL SURVEY NOTE BOOK NO. | SURVEYED PLOTTED TEMPLATE AREAS | BY | DATE | AREAS CHECKED



192 191 190 189 188 187 186 185 184 183 182 181 180 179

TEMP. EASE.
EXIST. R.O.W.
EXIST. R.O.W.
EXISTING GOUND LINE
COM ED

STAGE 2
CUT: 0 SM
FILL: 0 SM

STAGE 1
CUT: 0 SM
FILL: 0 SM

4+750

▨ - TEMPORARY PAVEMENT

1:100 HORIZ.
1:50 VERT.

26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38

ORIGINAL SURVEY NOTE BOOK NO. | SURVEYED PLOTTED TEMPLATE AREAS | BY | DATE | AREAS CHECKED

PATRICK ENGINEERING INC. LISLE, ILLINOIS

Tkoeppen(Rdwy_Lisle)
6/26/2009 8:20:21 AM Q:\IDOT\9556_A01\Drawings\RDWY\shts\Xsec\Smolnks_9556A01.dgn

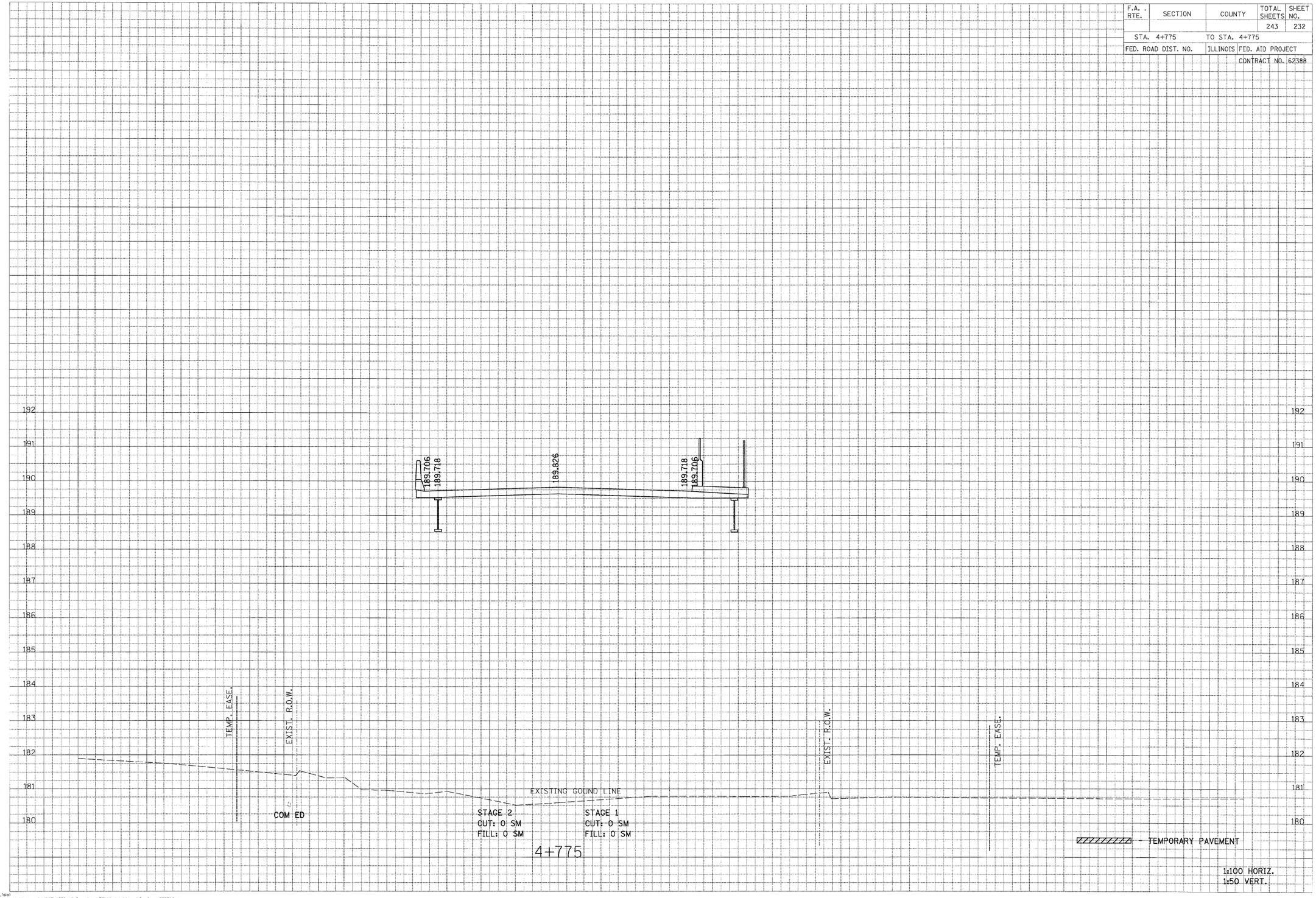
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	232
STA. 4+775		TO STA. 4+775		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	

FINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
AREAS
NO.
BY
DATE
AREAS CHECKED

ORIGINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
AREAS
NO.
BY
DATE
AREAS CHECKED

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

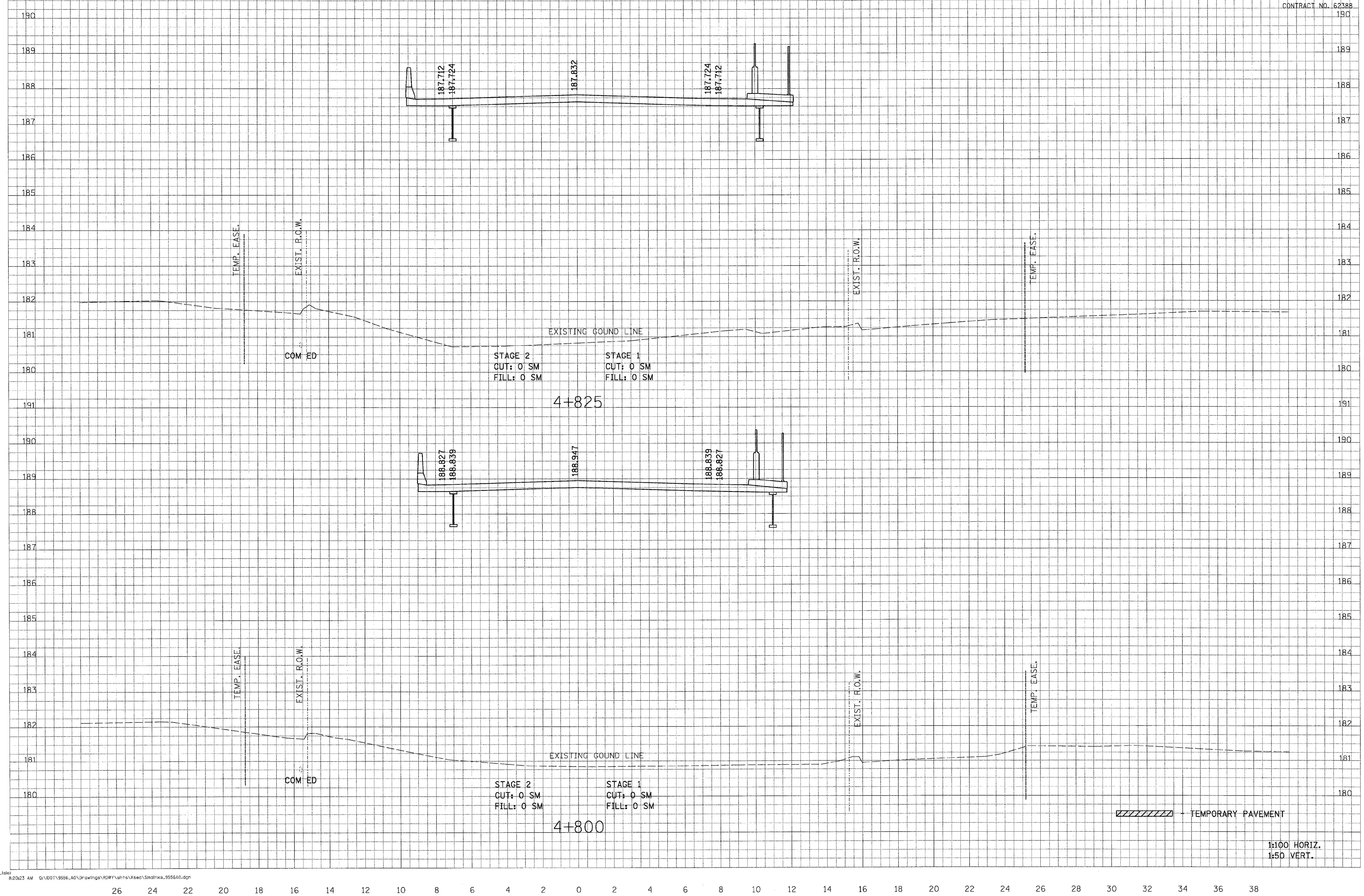
℄ SOUTHWEST HIGHWAY



tkoeppen\Rdwy_Lisle\
6/26/2009 8:20:22 AM D:\IDOT\9556_A0\Drawings\RDWY\shts\Xsec\Smallxs_9556A0.dgn

℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	233
STA. 4+800 TO STA. 4+825				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62388				



FINAL SURVEY	SURVEYED	PLOTTED	TEMPLATE	AREAS	AREAS CHECKED	NOTE BOOK	NO.	BY	DATE

ORIGINAL SURVEY	SURVEYED	PLOTTED	TEMPLATE	AREAS	AREAS CHECKED	NOTE BOOK	NO.	BY	DATE

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

tkoepper(Rowy_Lisle)
6/26/2009 8:20:23 AM Q:\IDOT\9586_A0\Drawings\RDWY\shts\Xsec\Smdnxs_955640.dgn

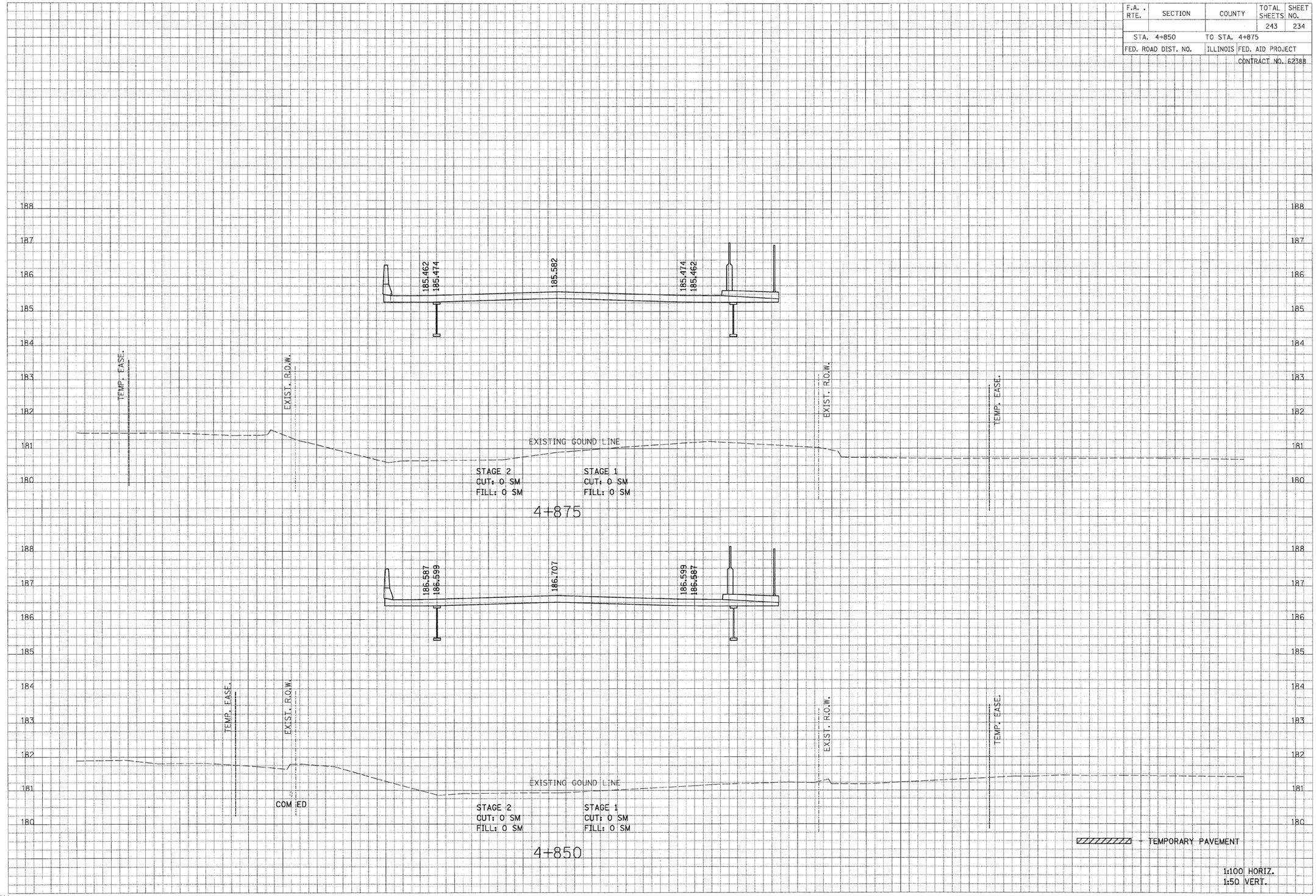
STA. 4+800 TO STA. 4+825

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	234
STA. 4+850		TO STA. 4+875		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	

NO.	NOTE BOOK	ORIGINAL SURVEY	FINAL SURVEY
		SURVEYED	
		PLOTTED	
		TEMPLATE	
		AREAS	
		AREAS CHECKED	

BY	DATE

℄ SOUTHWEST HIGHWAY



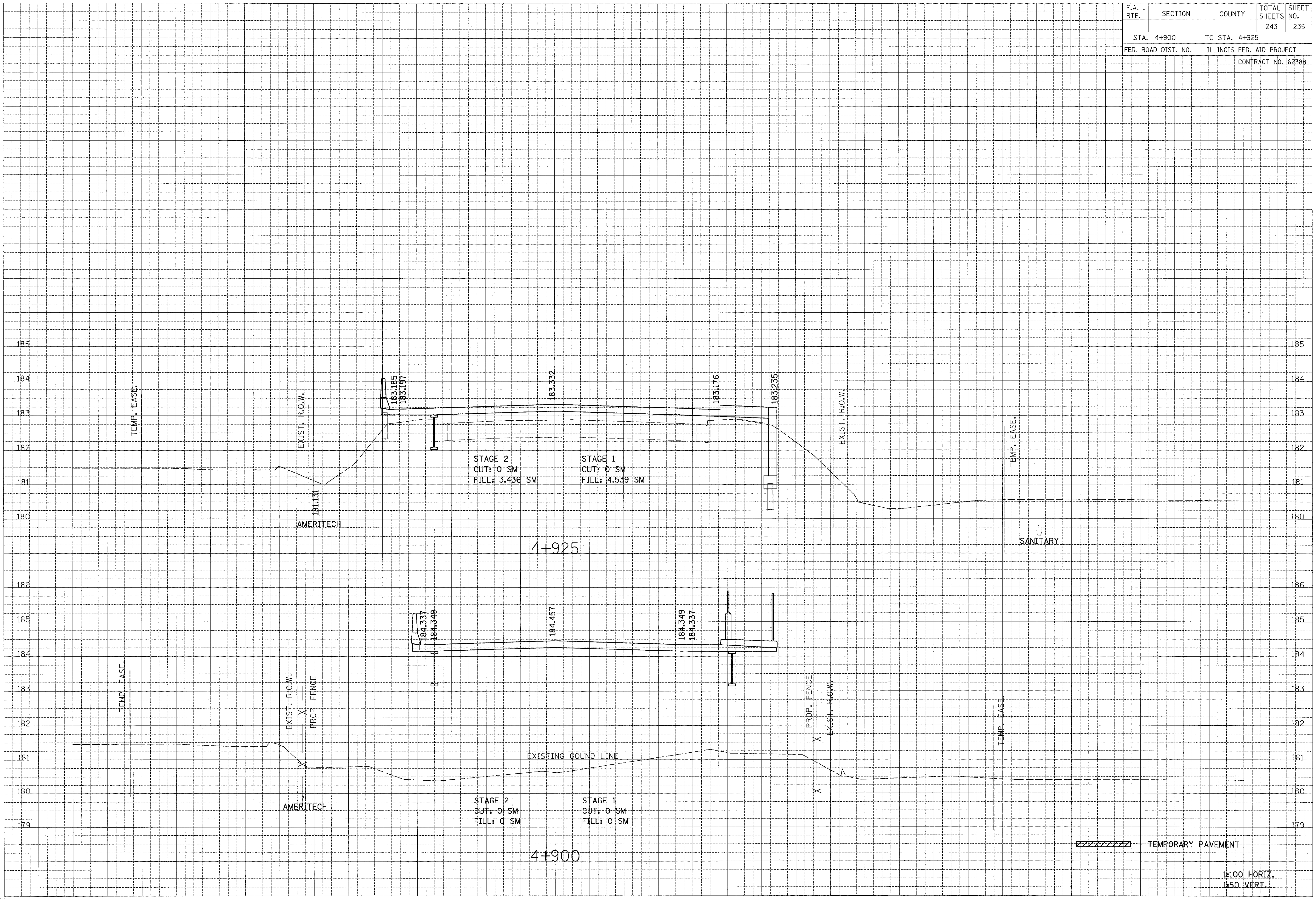
PATRICK ENGINEERING INC.
LISLE, ILLINOIS

tkoeppen(Rdwy_Lisle)
6/26/2009 8:20:24 AM Q:\IDOT\95596_A0\Drawings\RDWY\shts\Xsec\Smallxs_95596A0.dgn

℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	235
STA. 4+900		TO STA. 4+925		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62388



FINAL SURVEY / ORIGINAL SURVEY: SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED; NOTE BOOK NO.; BY; DATE

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

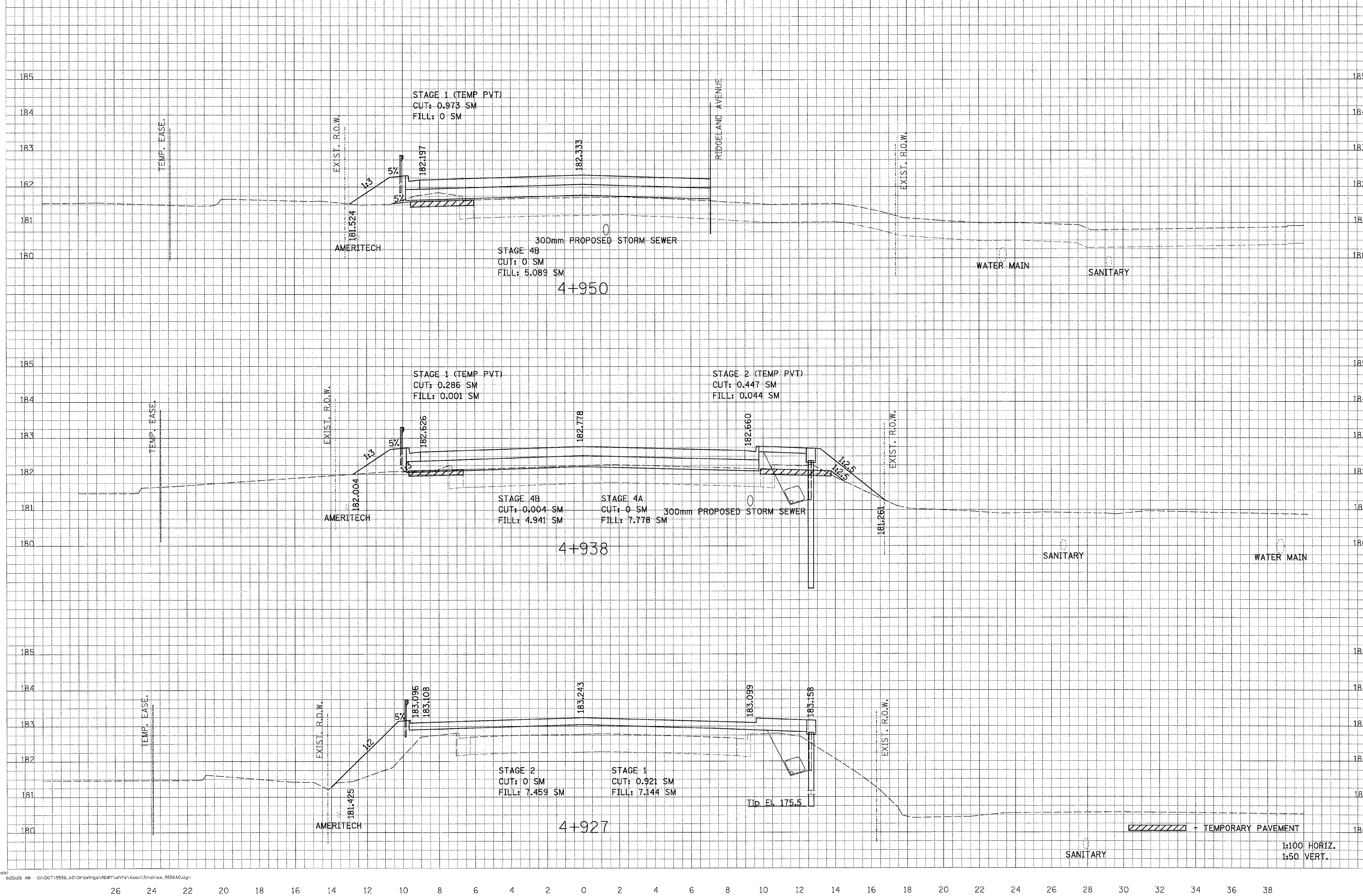
tkoopoen(Rdwy_Lisle)
6/26/2009 9:20:25 AM

STA. 4+900 TO STA. 4+925

℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	236
STA. 4+927		TO STA. 4+950		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 62388



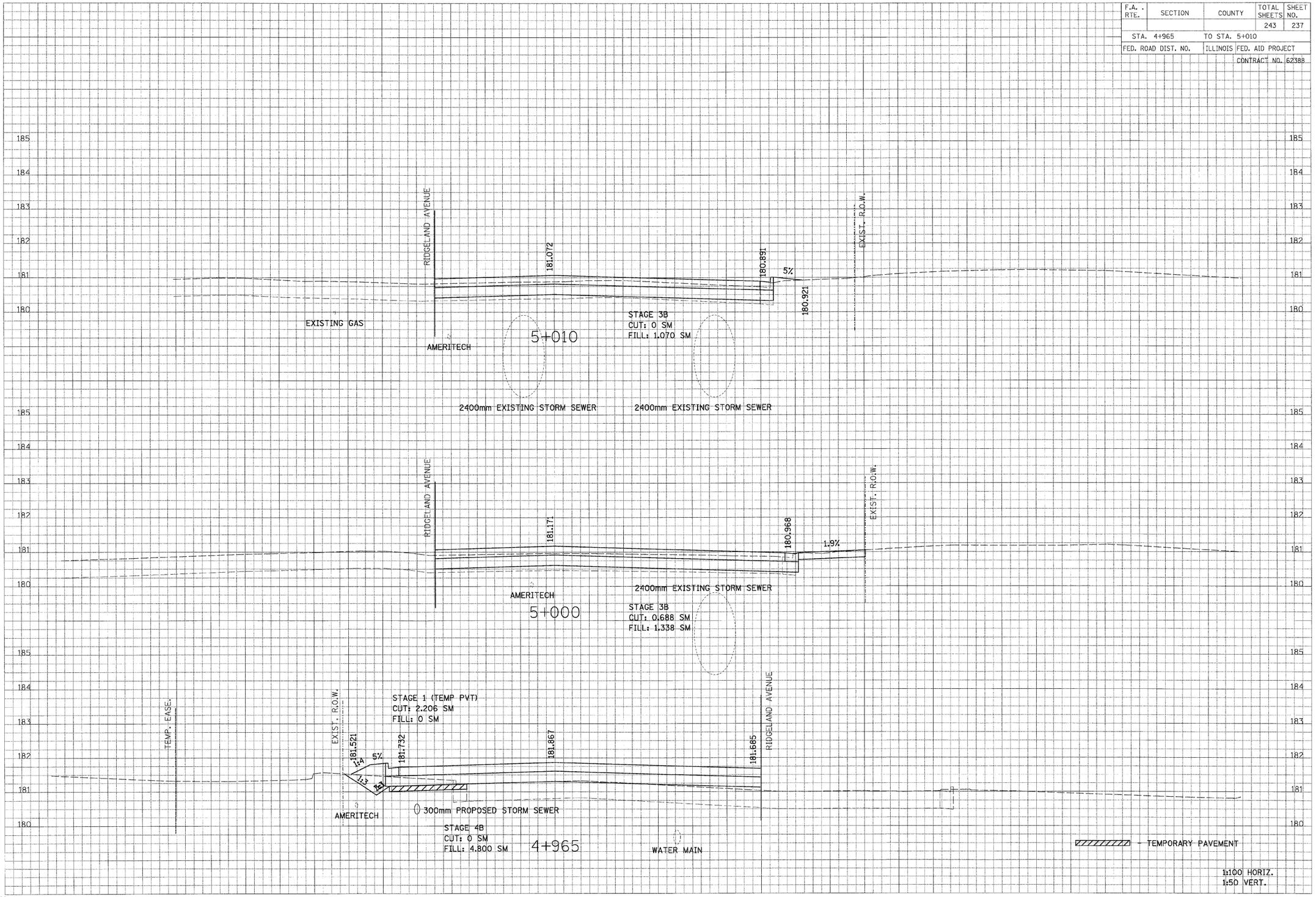
FINAL SURVEY / NOTE BOOK / NO. — SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED — BY — DATE

ORIGINAL SURVEY / NOTE BOOK / NO. — SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED — BY — DATE

PATRICK ENGINEERING INC. LISLE, ILLINOIS

℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	237
STA. 4+965		TO STA. 5+010		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	



	DATE	BY
FINAL SURVEY	SURVEYED	
	PLOTTED	
NOTE BOOK	TEMPLATE	
NO.	AREAS	
	AREAS CHECKED	

	DATE	BY
ORIGINAL SURVEY	SURVEYED	
	PLOTTED	
NOTE BOOK	TEMPLATE	
NO.	AREAS	
	AREAS CHECKED	

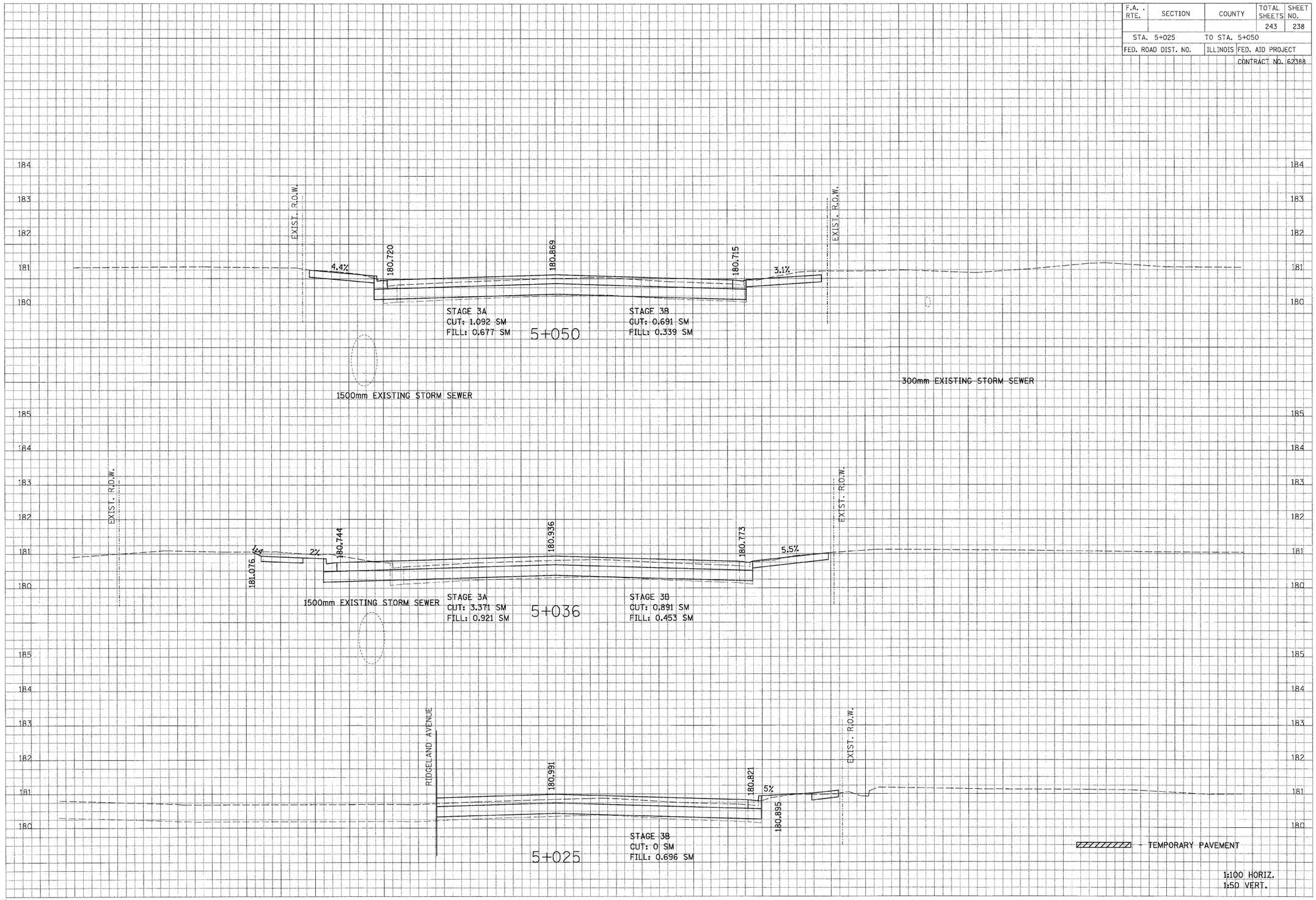
PATRICK ENGINEERING INC.
LISLE, ILLINOIS

tkoeppen(Ridwy_Lisle)
6/26/2009 8:20:28 AM G:\DOT\9556_A01\Drawings\RDWY\shts\Xsec\Smallxse_9556A10.dgn

STA. 4+965 TO STA. 5+010

℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	238
STA. 5+025		TO STA. 5+050		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	



FINAL SURVEY | NOTE BOOK | NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

ORIGINAL SURVEY | NOTE BOOK | NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

PATRICK ENGINEERING INC. LISLE, ILLINOIS

tkoeppen lisle
6/26/2009 8:20:30 AM G:\IDOT\9556_A0\Drawings\RDWY\shts\Xsec\Smalnxs_9556A0.dgn

STA. 5+025 TO STA. 5+050

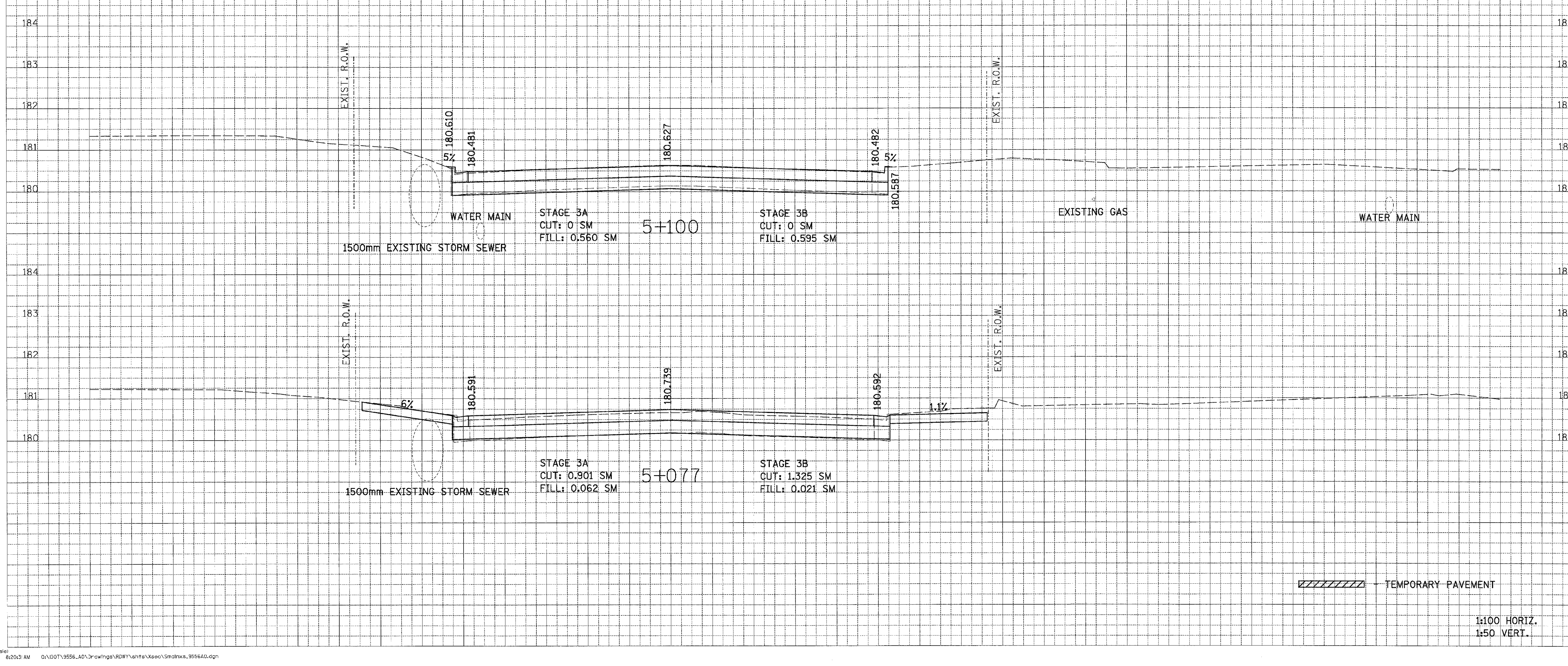
℄ SOUTHWEST HIGHWAY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	239
STA. 5+077		TO STA. 5+100		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62388

FINAL SURVEY	NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS AREAS CHECKED	BY	DATE

ORIGINAL SURVEY	NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS AREAS CHECKED	BY	DATE

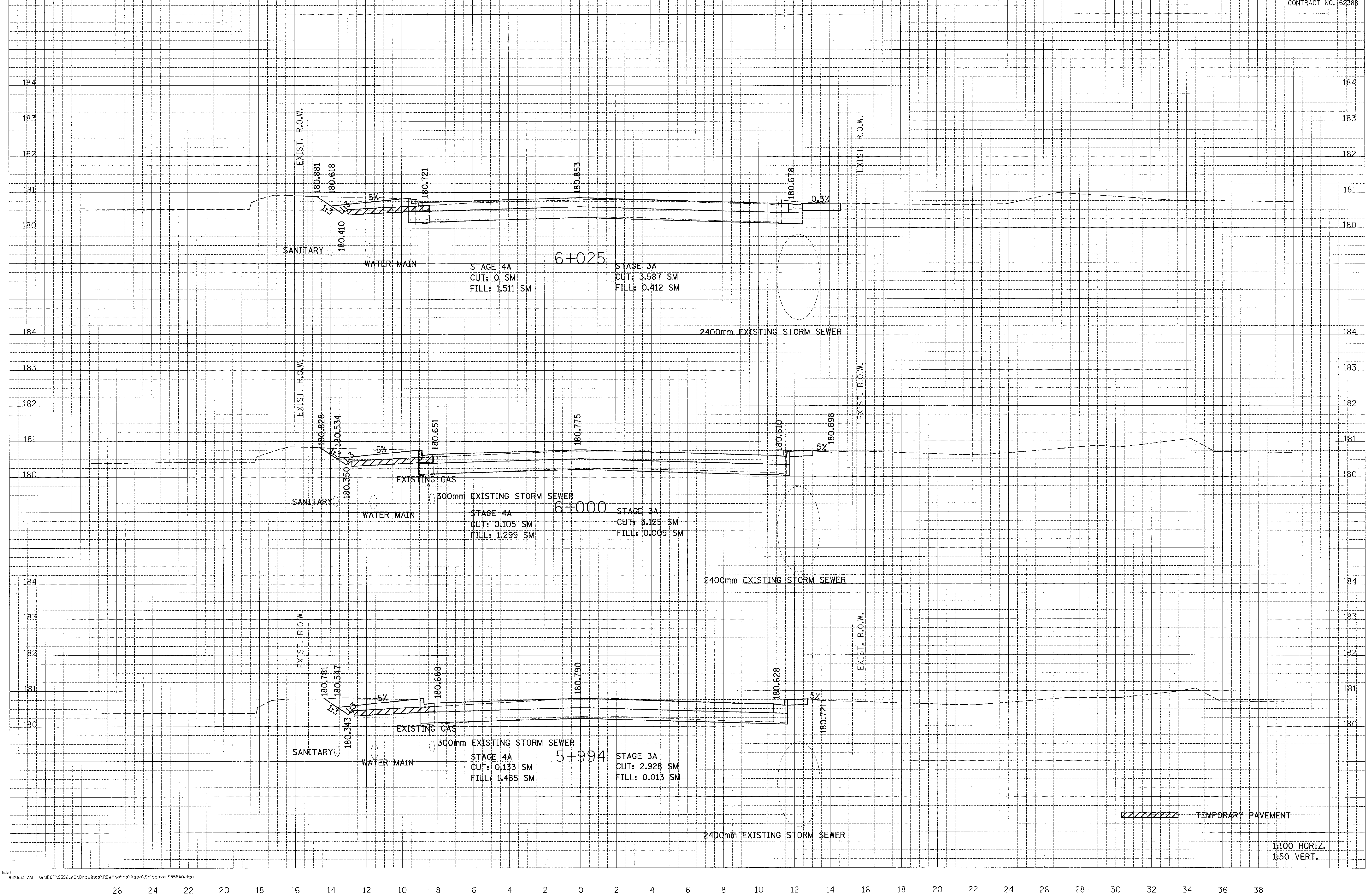


PATRICK ENGINEERING INC.
LISLE, ILLINOIS

fkoeppen(Rdwy_Lisle)
6/26/2009 8:20:31 AM O:\IDOT\9556_AO\Drawings\RDWY\shts\Xsec\Smallnxs_955640.dgn

℄ RIDGELAND AVENUE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	240
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	



FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

tkoepper(Rdwy_Lisle)
6/26/2009 8:20:33 AM Q:\DOT\9556_A0\Drawings\RDWY\shts\Xsec\Sridgexs_9556A0.dgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	241
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	

BY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	

FINAL SURVEY
NOTE BOOK
NO.

BY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	

ORIGINAL SURVEY
NOTE BOOK
NO.

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

℄ RIDGELAND AVENUE

PROP. R.O.W.
EXIST. R.O.W.
TEMP. EASE.

6+055
181.310
180.713
180.632
180.950
180.998
180.960
181.110
180.928
5%
2%
3.4%
1:3
WATER MAIN
STAGE 4A
CUT: 0 SM
FILL: 4.442 SM
STAGE 3A
CUT: 6.832 SM
FILL: 1.400 SM
WATER MAIN
2400mm EXISTING STORM SEWER

6+050
181.005
180.701
180.512
180.934
181.067
180.885
180.674
5%
SANITARY
WATER MAIN
STAGE 4A
CUT: 0 SM
FILL: 2.363 SM
STAGE 3A
CUT: 4.057 SM
FILL: 1.444 SM
2400mm EXISTING STORM SEWER

6+040
180.928
180.724
180.500
180.849
180.382
180.800
5%
7.0%
SANITARY
WATER MAIN
300mm PROPOSED STORM SEWER
STAGE 4A
CUT: 0 SM
FILL: 2.334 SM
STAGE 3A
CUT: 3.447 SM
FILL: 0.996 SM
2400mm EXISTING STORM SEWER

- TEMPORARY PAVEMENT

1:100 HORIZ.
1:50 VERT.

26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38

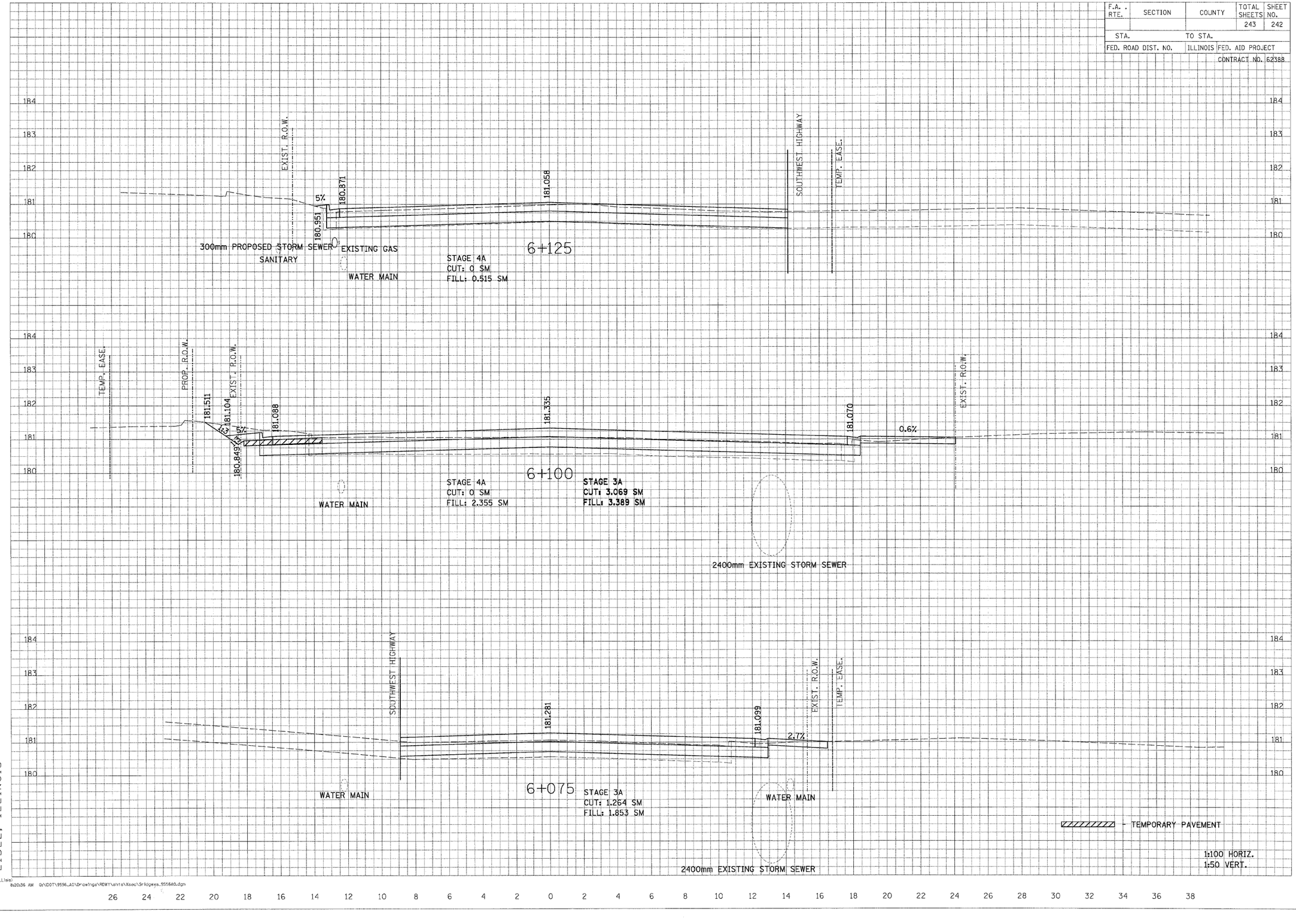
tkeeper(Rdwy_Lisle)
6/26/2009 8:20:35 AM G:\DOT\9556_A0\Drawings\RDWY\shts\Xsec\Sr1dgexs_9556A0.dgn

℄ RIDGELAND AVENUE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	242
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	

FINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED



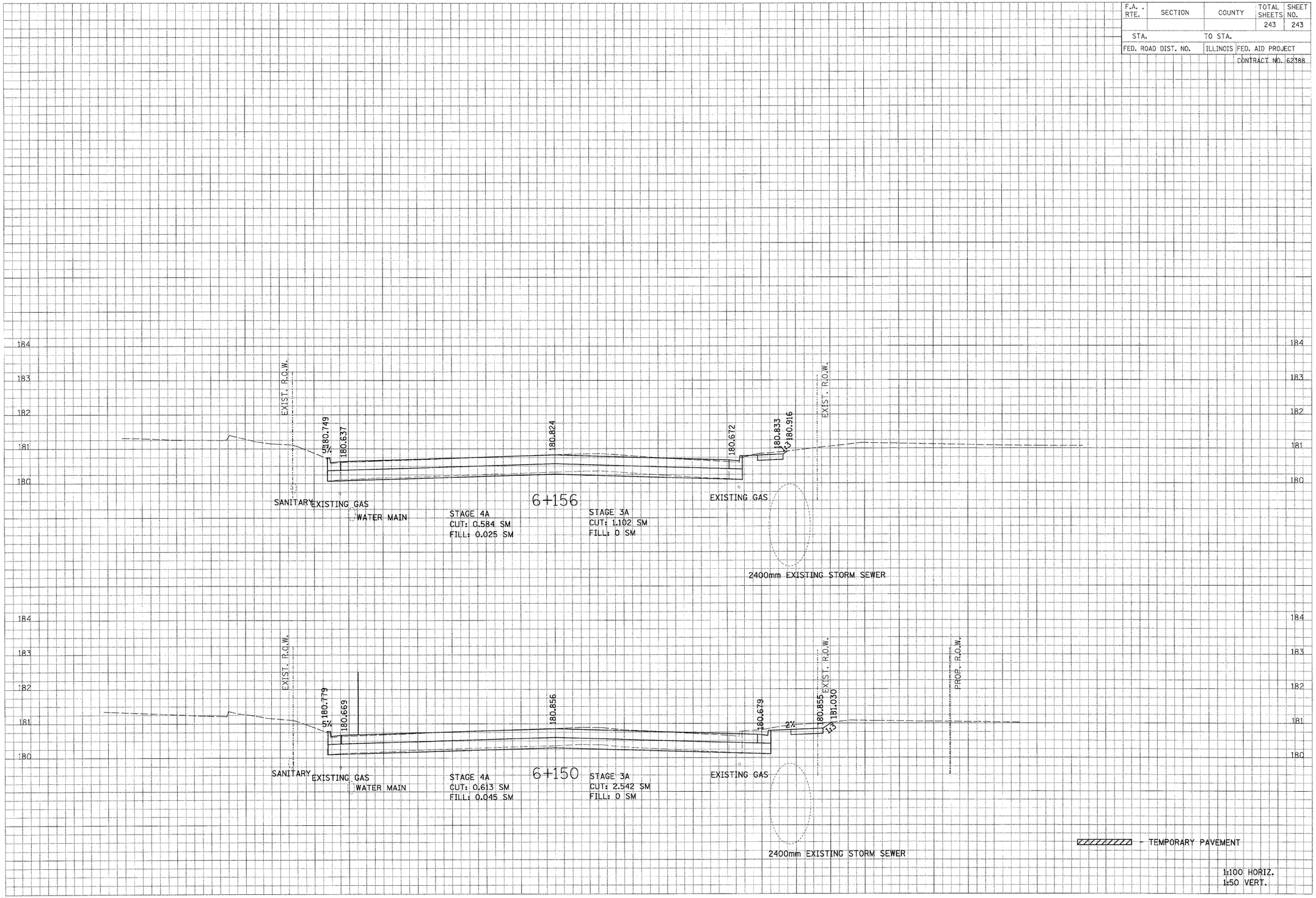
PATRICK ENGINEERING INC.
LISLE, ILLINOIS

tkoeppen(Rdwy_Lisle)
6/26/2009 8:20:36 AM G:\IDOT\9556_A0\Drawings\RDWY\shts\Xsec\Sridgexs_955640.dgn

℄ RIDGELAND AVENUE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			243	243
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 62388	

FINAL SURVEY
ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE



ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

tkoepsel\Rdwy_1(sle)
6/26/2003 6:20:38 AM D:\IDOT\95S6_A01\Drawings\RDWY\shts\Xsec\S-Ridge\gs_95S6A0.dgn