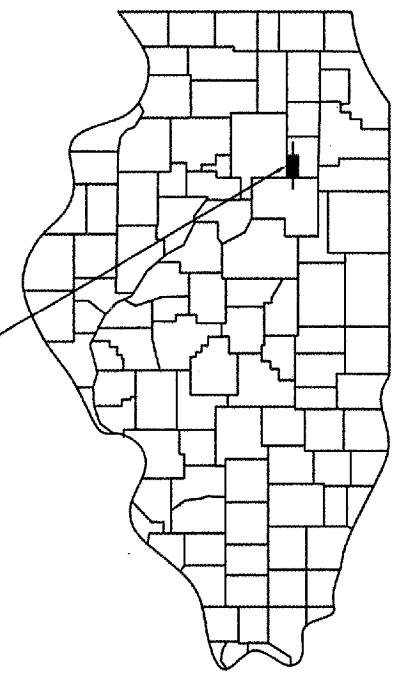


F.A. ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
273	03-00092-02-WR	GRUNDY	7	1

CONTRACT NO. 87304



PROJECT LOCATION

LOCATION OF SECTION INDICATED THUS: — ■ —

INDEX OF SHEETS

- 1 COVER SHEET, INDEX OF SHEETS, STANDARDS, LOCATION MAP
- 2 SUMMARY OF QUANTITIES, GENERAL NOTES, RESETTING SURVEY MONUMENTS TABLE, WIDENING TABLE, HOT-MIX ASPHALT SURFACE REMOVAL TABLE, EPOXY PAVEMENT STRIPING TABLE, CLASS D PATCH TABLE
- 3 TYPICAL CROSS SECTIONS, HOT-MIX ASPHALT DATA TABLE, RATES OF APPLICATION
- 4 TYPICAL ENTRANCE DETAIL, TYPICAL INTERSECTION DETAIL, TYPICAL MAILBOX TURNOUT DETAIL, TYPICAL TAPER AT BUTT JOINT
- 5 WB-55 INTERSECTION DETAIL
- 6 SUGGESTED LAYOUT FOR TRAFFIC CONTROL DEVICES
- 7 BRIDGE DECK & GUARD RAIL

STANDARDS

- 630301-04 TYPE 1 (SPECIAL) GUARDRAIL TERMINALS, 2 SHEETS
- 635006-02 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-01 REFLECTOR MARKER AND MOUNTING DETAILS, 3 SHEETS
- 667101 PERMANENT SURVEY MARKERS
- 701201-02 LANE CLOSURE, 2 LANE, 2 WAY, DAY ONLY
- 701306-01 LANE CLOSURE, 2 LANE, 2 WAY, SLOW MOVING OPERATIONS, DAY ONLY
- 701311-02 LANE CLOSURE, 2 LANE, 2 WAY, MOVING OPERATION, DAY ONLY
- 701326-02 LANE CLOSURE, 2 LANE, 2 WAY, PAVEMENT WIDENING
- 702001-06 TRAFFIC CONTROL DEVICES, 3 SHEETS
- 780001-01 TYPICAL PAVEMENT MARKINGS, 2 SHEETS
- BLR 21-6 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR
PROPOSED LOCAL AGENCY IMPROVEMENT
FEDERAL-AID SECONDARY PROJECT
STR FUNDS

F.A.S. ROUTE 273, C.H. T64, KINSMAN ROAD,
SECTION 03-00092-02-WR, GRUNDY COUNTY,
PROJECT SR-273(106)
JOB NUMBER C-93-043-05

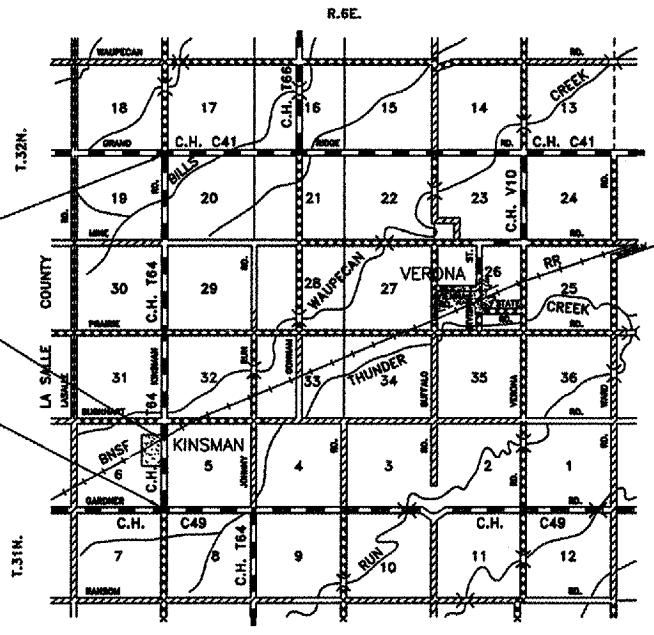
RURAL MAJOR COLLECTOR
DESIGN SPEED - 40 M.P.H.

EXISTING ROAD STA. 0+93 TO STA. 52+35	
7" AGG BASE CSE 7" x 0.08 =	0.56
3" HOT-MIX ASPHALT 3" x 0.30 =	0.90
	1.46
PROPOSED IMPROVEMENT STA. 0+93 TO STA. 52+35	
COLD MILL 1 1/2" HOT-MIX ASPHALT 1.5 x 0.30 =	-0.45
3" HOT-MIX ASPHALT 3" x 0.4 =	1.20
TOTAL AFTER PROPOSED IMPROVEMENT	2.21
EXISTING ROAD STA. 52+35 TO STA. 212+19	
7" AGG. BASE COURSE 7" x 0.08 =	0.56
3" HOT-MIX ASPHALT 3" x 0.23 =	0.69
1 1/2" HOT-MIX ASPHALT 1 1/2" x 0.30 =	0.45
	1.70
PROPOSED IMPROVEMENT STA. 52+35 TO STA. 212+19	
COLD MILL 1 1/2" HOT-MIX ASPHALT 1 1/2" x 0.30 =	-0.45
3" HOT-MIX ASPHALT 3" x 0.40 =	1.20
TOTAL AFTER PROPOSED IMPROVEMENT	2.45
PROPOSED HOT-MIX ASPHALT BASE COURSE WIDENING	
4" HOT-MIX ASPHALT BASE COURSE WIDENING 4" x 0.40 =	1.60
3" HOT-MIX ASPHALT 3" x 0.40 =	1.20
	2.80

PROPOSED IMPROVEMENT
ENDS STA. 212+19

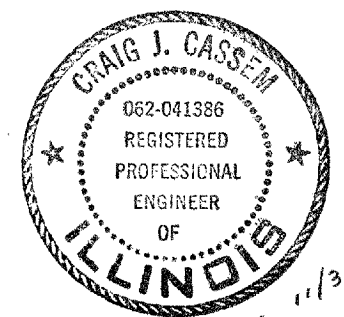
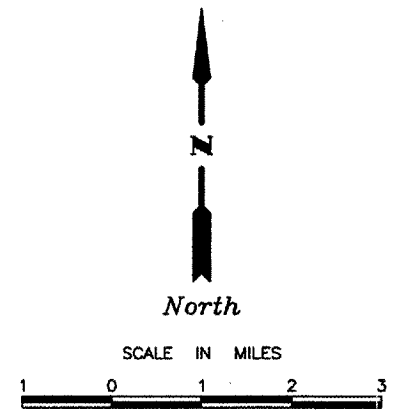
OMISSION: STA. 39+83
TO STA. 40+27 = 44'

PROPOSED IMPROVEMENT
BEGINS STA. 0+93



LOCATION MAP

GROSS LENGTH: 21,126.00 FEET = 4.001 MILES
OMISSIONS: 44.00 FEET = 0.008 MILES
NET LENGTH: 21,082.00 FEET = 3.993 MILES



Expires 11/30/07

UTILITIES

J.U.L.I.E. SYSTEM - THE TOLL FREE TELEPHONE NUMBER FOR JOINT UTILITY LOCATING INFORMATION FOR EXCAVATION IS 1-800-892-0123

THE ACCEPTANCE OF THIS PROJECT IS BASED ON THE MINIMUM DESIGN CRITERIA FOR 3-R BLR MANUAL.

THESE PLANS WERE PREPARED BY ME OR BY A FULL TIME MEMBER OF MY STAFF WORKING UNDER MY PERSONAL SUPERVISION.

APPROVED April 24 2007
Craig J. Cassem
CRAIG J. CASSEM
GRUNDY COUNTY ENGINEER

PASSED May 23 2007
Kenneth L. Long
DISTRICT THREE ENGINEER OF
LOCAL ROADS & STREETS

APPROVED May 23 2007
George F. Ryan
DEPUTY DIRECTOR OF HIGHWAYS
REGION TWO ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

2007 ADT = 338	
2015 ADT = 390	
TF ₁₅ = 0.01	M.U. = 3%
IBR = 3.0	S.U. = 9%
D _t = 2.0	P.V. = 88%

PREVIOUS CONSTRUCTION SECTIONS	
21-G	1947
(13, 21 RS)	1970
82-00076-00-RS	1982
86-00092-01-RS	1987

SUMMARY OF QUANTITIES

FUND CODE I000-2A

CO. HWY. T64 SECTION: 03-00092-02-WR

GRUNDY COUNTY, ILLINOIS

SHEET 2 OF 7

CONTRACT NO. 87304

GENERAL NOTES

THE THICKNESS OF HOT-MIX ASPHALT MIXTURES SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT-MIX ASPHALT MIXTURE IS PLACED.

THE HOT-MIX ASPHALT SURFACE OF ALL MAILBOX TURNOUTS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES, AND SIDE ROADS SHALL BE MADE NEATLY AND IN A WORKMANLIKE MANNER; AND SHALL ACCURATELY CONFORM TO THE SHAPES AND DIMENSIONS SHOWN IN THE PLAN DETAILS. IF REQUIRED BY THE ENGINEER, THE CONTRACTOR WILL BE REQUIRED TO SAW CUT THE HOT-MIX ASPHALT SURFACE TO CONFORM TO THE SHAPES AND DIMENSIONS SHOWN IN THE PLAN DETAILS. THIS WORK SHALL BE INCIDENTAL TO THE HOT-MIX ASPHALT QUANTITIES.

THE BASE COURSE WIDENING SHALL BE CARRIED THROUGH ALL ENTRANCES, SIDE ROADS, AND MAILBOX TURNOUTS. EXCEPTION SHALL BE DETERMINED BY THE ENGINEER.

THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HOT-MIX ASPHALT LIFTS.

FOR ALL SHORT-TERM PAVEMENT MARKINGS ON FINAL SURFACES (I.E., MAINLINE PAVEMENT), ONLY SHORT-TERM PAVEMENT MARKING TAPE SHALL BE USED.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUB-SECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

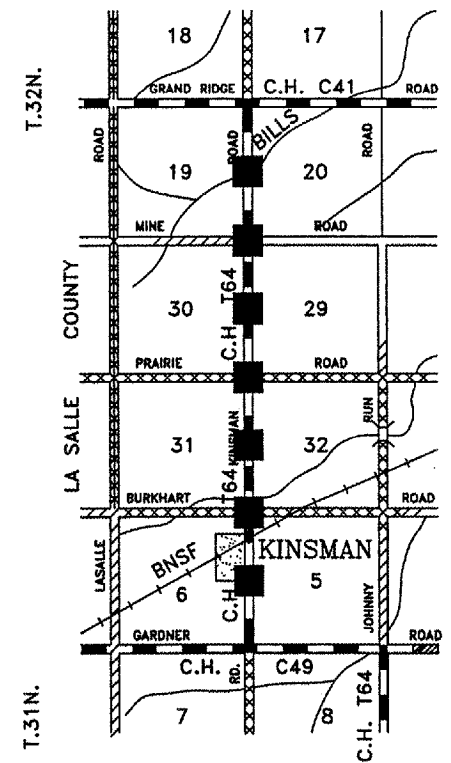
THE EXISTING ROAD SIGNS THAT INTERFERE WITH CONSTRUCTION WILL BE REMOVED OR RELOCATED AS DIRECTED BY THE ENGINEER. AFTER THE CONSTRUCTION IS COMPLETED, THE CONTRACTOR WILL REPLACE THE SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO COMPENSATION WILL BE ALLOWED.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB-NUMBER LISTED IN THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

CODE NO.	ITEM	UNIT	QUANTITY
20200500*	EARTH EXCAVATION (WIDENING)	CU YD	976
40600100*	BITUMINOUS MATERIAL (PRIME COAT)	GALLON	5,153
40600300	AGGREGATE (PRIME COAT)	TON	103
40600625*	LEVELING BINDER (MACHINE METHOD), N50	TON	5,039
40600982*	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	304
40600990	TEMPORARY RAMP	SQ YD	49
40603310*	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	4,430
40800050*	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	410
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	46,849
48101200	AGGREGATE SHOULDERS, TYPE B	TON	3,247
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	262
Δ63000000	STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	500
Δ63100167*	TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL (TANGENT)	EACH	6
63200310	GUARDRAIL REMOVAL	FOOT	150
67100100	MOBILIZATION	L SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1
70300100*	SHORT-TERM PAVEMENT MARKING	FOOT	4,216
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	5,270
Δ78005100*	EPOXY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	250
Δ78005110*	EPOXY PAVEMENT MARKING LINE - LINE 4"	FOOT	11,349
Δ78005180*	EPOXY PAVEMENT MARKING LINE - LINE 24"	FOOT	13
Δ78200455*	BIDIRECTIONAL GUARD RAIL REFLECTORS	EACH	18
Δ78201000*	TERMINAL MARKER-DIRECT APPLIED	EACH	6
Z0048665*	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1
Z0053700*	RESETTING SURVEY MONUMENTS	EACH	7
X4420132*	CLASS D PATCHES (SPECIAL)	SQ YD	727
35600650	HOT-MIX ASPHALT BASE COURSE WIDENING, 4"	SQ YD	6,097

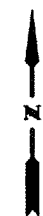
* DENOTES SPECIAL PROVISION
 Δ SPECIALTY ITEMS

RESETTING SURVEY MONUMENTS LOCATION MAP



LEGEND

■ DENOTES LOCATION FOR RESETTING SURVEY MONUMENTS



North

SCALE IN MILES



EPOXY PAVEMENT STRIPING TABLE

DESCRIPTION	FOOT
	EPOXY LINE 4"
SKIP DASH (YELLOW CENTERLINE)	4,960
SOLID (YELLOW NO PASS ZONES)	6,389
TOTAL	11,349

WIDENING TABLE

STATION TO STATION	SIDE	LENGTH	SQ.YD.	CU.YD.
0+93 TO 39+83	LT & RT	3,890	1,081	180
40+27 TO 212+19	LT & RT	17,192	4,775	796
TOTAL			5,856	976

CLASS D PATCH TABLE

STATION	SIDE	WIDTH	LENGTH	SQ.YD.
18+00 TO 21+12	NORTH BOUND	10	312	347
22+00 TO 23+00	NORTH BOUND	10	100	111
24+70	CROSS ROAD	5.4	20	12
93+57	CROSS ROAD	5.5	20	12
132+81	CROSS ROAD	4.9	20	11
140+60	CROSS ROAD	5.2	20	12
181+70 TO 183+70	SOUTH BOUND	10	200	222
TOTAL				727

HOT-MIX ASPHALT SURFACE REMOVAL 1 1/2"

DEPTH	STATION TO STATION	LENGTH	WIDTH	SQ.YD.
1 1/2"	0+93 TO 39+83	3,890'	20'	8,644
	40+27 TO 212+19	17,192'	20'	38,204
TOTAL				46,848

TABLE FOR REMOVAL OF EARTH EX. WIDENING FROM JOB SITE

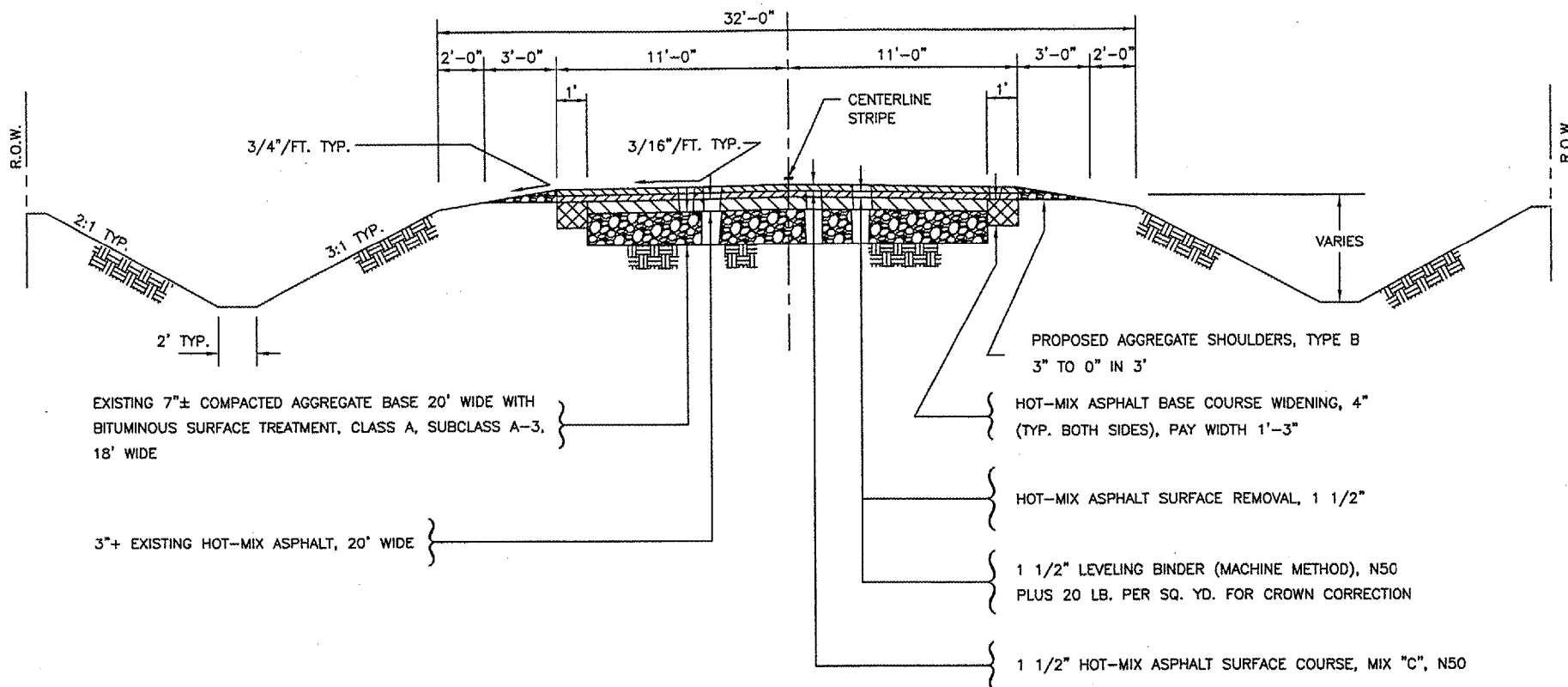
STATION TO STATION	SIDE
22+58 TO 39+83	RT
26+45 TO 39+83	LT

STATE OF ILLINOIS
 COUNTY OF GRUNDY
 COUNTY ENGINEER

DRAWN: D.M.B. CHECKED: C.J.C. SCALE: NONE DATE: 12-04-06
 REVISED: 4-23-07

TYPICAL CROSS-SECTION DETAIL

STA. 0+93 TO STA. 52+35

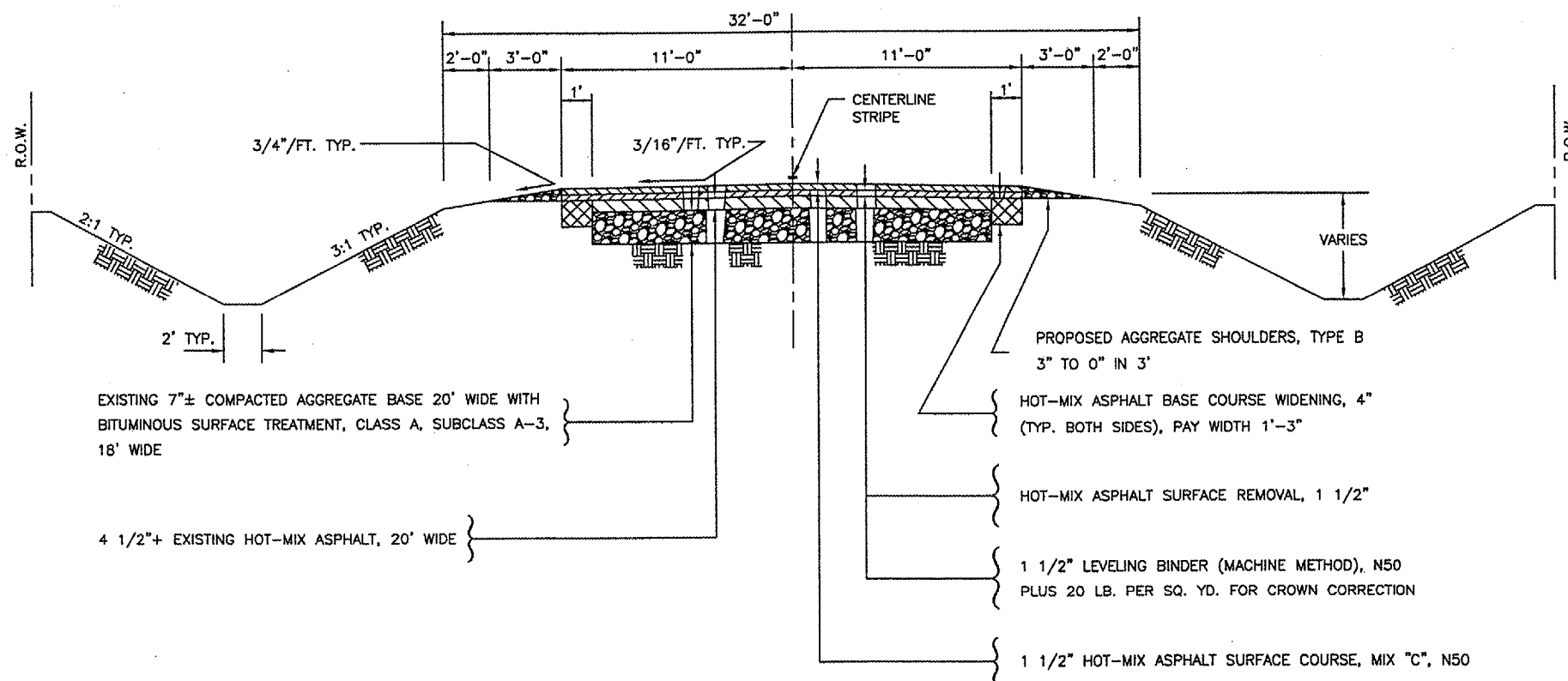


SUPERELEVATION RATES - KINSMAN ROAD

Station	Slope SB Lane	Slope NB Lane	Station	Slope SB Lane	Slope NB Lane
51+04	NC (1.5%)	NC (-1.5%)	57+14	1.5%	-1.5%
51+23	1.5%	-0.5%	57+33	0.5%	-1.5%
51+42	1.5%	0.5%	57+52	-0.5%	-1.5%
51+61	1.5%	1.5%	57+71	-1.5%	-1.5%
51+80	2.5%	2.5%	57+90	-2.5%	-2.5%
51+99	3.5%	3.5%	58+09	-3.5%	-3.5%
52+18	4.5%	4.5%	58+28	-4.5%	-4.5%
52+27	5.0%	5.0%	58+37	-5.0%	-5.0%
55+91	5.0%	5.0%	62+05	-5.0%	-5.0%
56+00	4.5%	4.5%	62+14	-4.5%	-4.5%
56+19	3.5%	3.5%	62+33	-3.5%	-3.5%
56+38	2.5%	2.5%	62+52	-2.5%	-2.5%
56+57	1.5%	1.5%	62+71	-1.5%	-1.5%
56+76	1.5%	0.5%	62+90	-0.5%	-1.5%
56+95	1.5%	-0.5%	63+09	0.5%	-1.5%
57+14	1.5%	-1.5%	63+28	1.5%	-1.5%

TYPICAL CROSS-SECTION DETAIL

STA. 52+35 TO STA. 212+19



HOT-MIX ASPHALT DATA TABLE

	BINDER, WIDENING, CLASS D PATCHES	SURFACE	LEVEL BINDER	INCIDENTAL SURFACING
PG GRADE	PG58-22	PG64-22	PG58-22	PG58-22
MAX % RAP ALLOWABLE**	25%	15%	15%	15%
DESIGN AIR	4.0% @	4.0% @	4.0% @	4.0% @
VOIDS	N50	N50	N50	N50
MIXTURE COMPOSITION	IL 19.0	IL 12.5 OR IL 9.5	IL 9.5	IL 12.5 OR IL 9.5
FRICTION AGGREGATE		MIXTURE C		MIXTURE C
DENSITY TEST METHOD	NUCLEAR/ CORES	CORRELATION	SATISFACTION OF ENGINEER	SATISFACTION OF ENGINEER

** IF RAP OPTION IS SELECTED, THE ASPHALT CEMENT GRADE MAY NEED TO BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

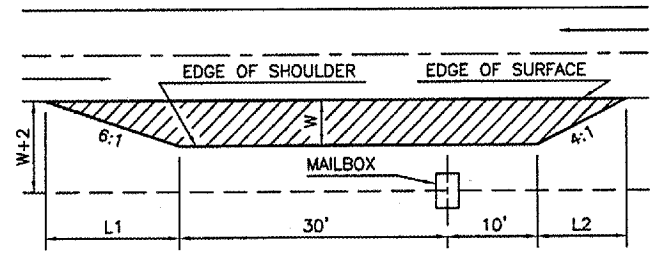
THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.10	TON/CU YD
BITUMINOUS MATERIALS PRIME COAT	0.10	GAL/SQ YD (RC 70) OR 0.40 GAL/SQ YD (MC 30)
AGGREGATE PRIME COAT	0.002	TONS/SQ YD
HOT-MIX ASPHALT - WIDENING, LEVEL BINDER, BINDER AND SURFACE COURSE	112	LBS/SQ YD/INCH
SHORT-TERM PAVEMENT MARKING	10	FT/100 FT OF APPLICATION

STATE OF ILLINOIS
COUNTY OF GRUNDY
COUNTY ENGINEER

DRAWN: D.M.B.	CHECKED: C.J.C.	SCALE: NONE	DATE: 12-13-06
REVISED:	4-10-07		

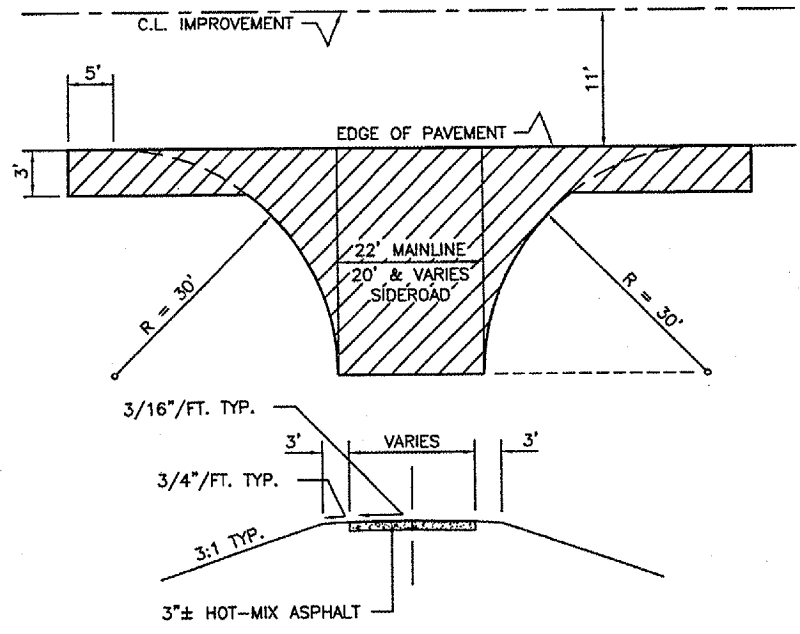
TYPICAL MAILBOX TURNOUT DETAIL



W	8'	6'	5'	4'	3'
L1	48'	36'	30'	24'	18'
L2	32'	24'	20'	16'	12'
SQ.YDS.	71	47	36	27	18

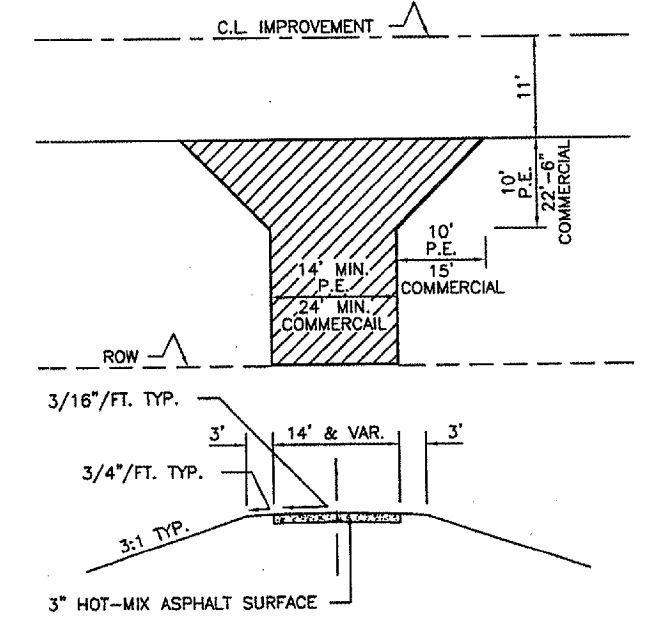
STATION	SIDE	SQ. YD.
42+52	RT	27
114+86	LT	27
125+36	RT	27
162+34	LT	27
165+44	RT	27
TOTAL		135

TYPICAL INTERSECTION DETAIL



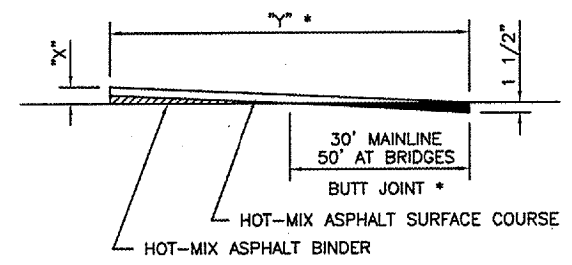
STATION	NAME	SIDE	SQ. YD.	TONS INCIDENTAL HOT-MIX ASPHALT
28+31	EMMETT STREET	LT	119	20
32+12	MAIN STREET	LT	119	20
35+82	GREEN STREET	LT	119	20
40+55	ELM STREET	LT	119	20
52+35	BURKHART ROAD	LT	119	20
52+35	BURKHART ROAD	RT	119	20
105+72	PRAIRIE ROAD	LT	119	20
105+72	PRAIRIE ROAD	RT	119	20
159+00	MINE ROAD	LT	119	20
159+00	MINE ROAD	RT	119	20
TOTALS			1,190	200

TYPICAL PRIVATE & COMMERCIAL ENTRANCE DETAIL



INCIDENTAL HOT-MIX ASPHALT SURFACING *					
STATION	SIDE	SURFACE	TYPE	SQ. YD.	TONS INCIDENTAL HOT-MIX ASPHALT
22+48	RT	ASPHALT	C.E.	120	20
23+41	RT	ASPHALT	C.E.	120	20
25+37	RT	ASPHALT	C.E.	120	20
27+22	LT	ASPHALT	P.E.	60	10
30+23	LT	ASPHALT	P.E.	60	10
33+77	LT	ASPHALT	P.E.	60	10
34+06	LT	ASPHALT	P.E.	60	10
37+78	LT	ASPHALT	C.E.	120	20
37+78	RT	ASPHALT	C.E.	120	20
43+50	LT	ASPHALT	P.E.	60	10
115+16	LT	ASPHALT	P.E.	60	10
125+10	RT	ASPHALT	P.E.	60	10
164+03	LT	ASPHALT	P.E.	60	10
166+91	RT	ASPHALT	P.E.	60	10
178+86	RT	ASPHALT	P.E.	60	10
207+09	RT	ASPHALT	P.E.	60	10
TOTALS				1,260	210

TYPICAL TAPER AT BUTT JOINT



* NOTE: BUTT JOINTS IN PRIVATE ENTRANCES SHALL BE 18".

"X" = PROPOSED PAVEMENT THICKNESS

"X"	"Y"
1"	20'
1 1/2"	30'
2"	40'
2 1/2"	50'
3"	60'
3 1/2"	70'
4"	80'

STATION	SIDE	SQ. YD.
0+93	C.L.	49
28+31	LT	23
32+12	LT	35
35+82	LT	19
39+83	C.L.	67
40+27	C.L.	67
212+19	C.L.	44
TOTAL		304

TYPICAL FIELD ENTRANCE DETAIL

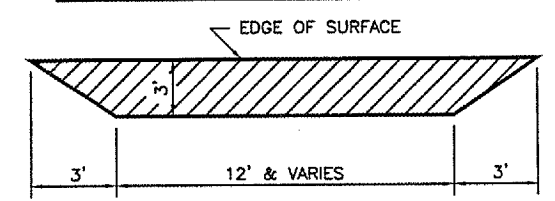


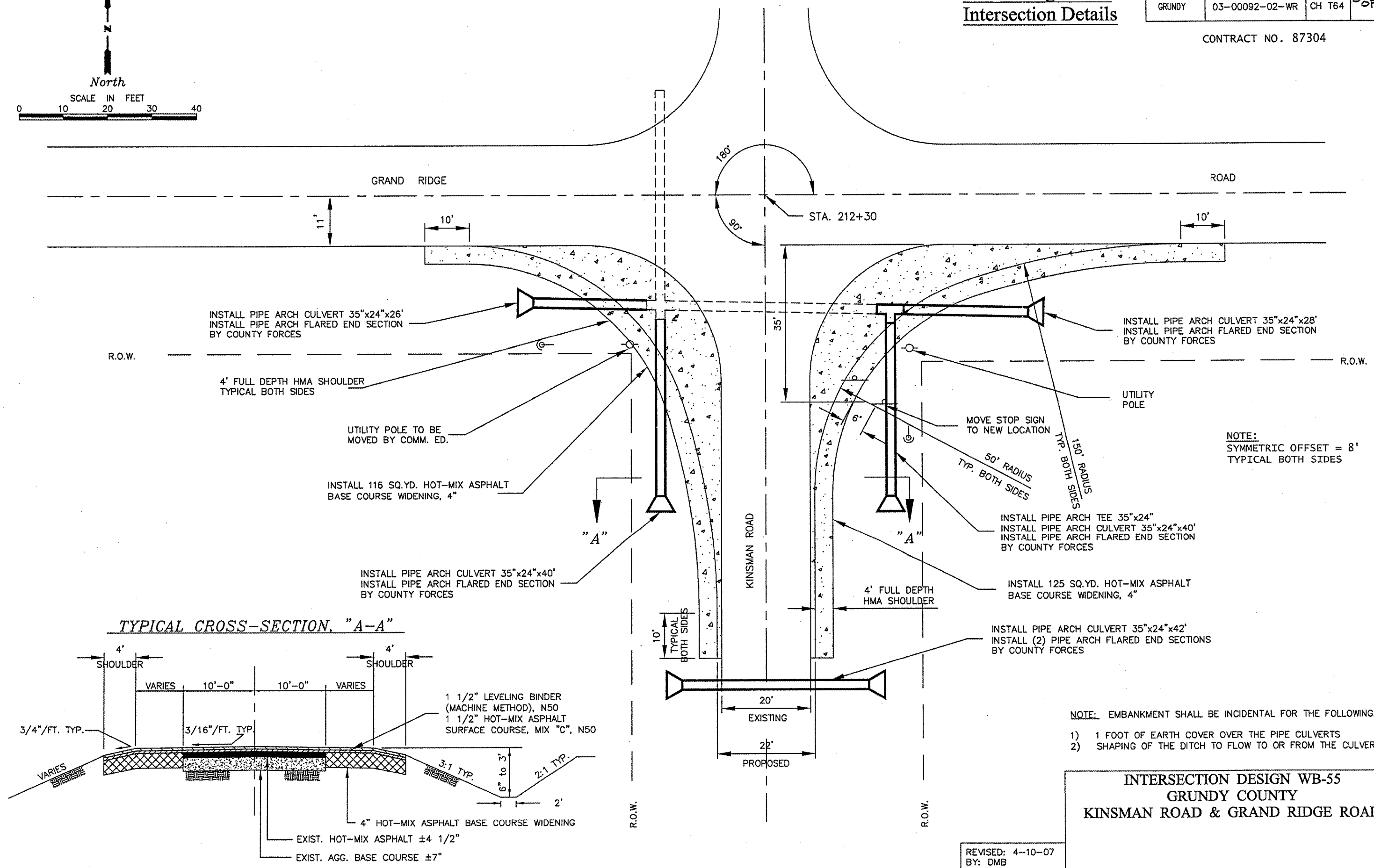
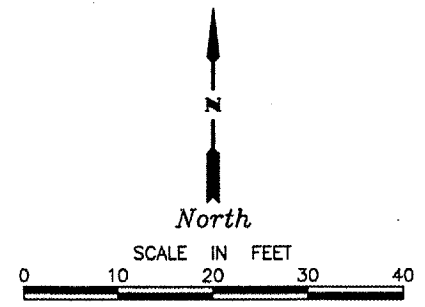
TABLE OF FIELD ENTRANCES

STATION	SIDE	SQ. YD.	STATION	SIDE	SQ. YD.
11+53	LT	6	99+12	RT	6
11+53	RT	6	105+33	LT	6
26+25	LT	6	105+33	RT	6
39+47	LT	6	145+55	RT	6
40+55	RT	6	145+55	LT	6
61+30	RT	6	168+08	RT	6
62+27	LT	6	172+27	LT	6
70+92	LT	6	176+35	RT	6
73+73	RT	6	178+06	LT	6
79+24	LT	6	187+44	RT	6
85+73	RT	6	193+96	LT	6
86+50	LT	6	204+66	LT	6
TOTAL		144	TOTAL		144

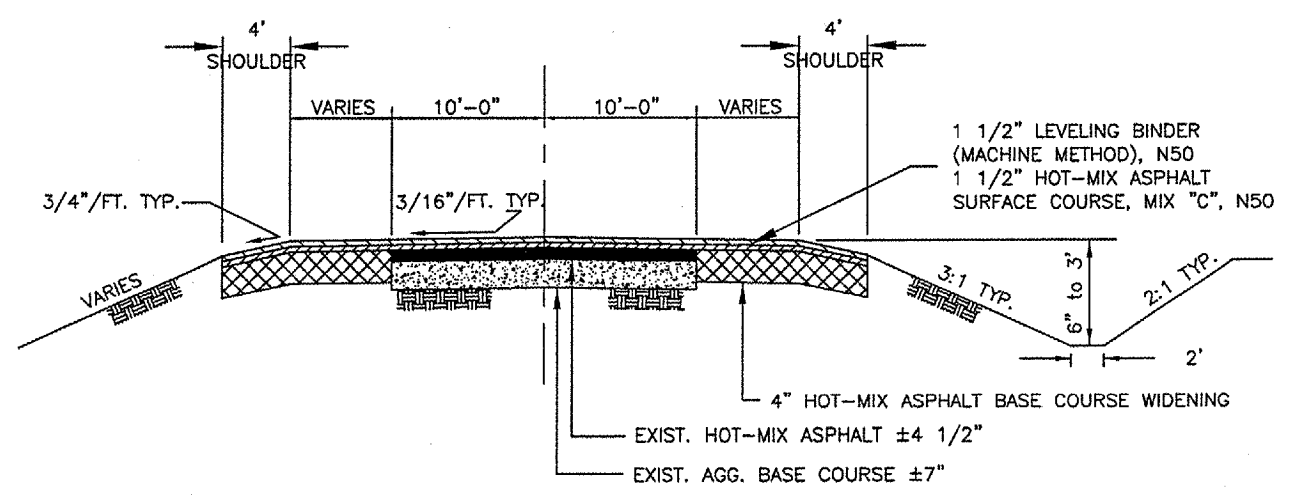
Grand Ridge Road Intersection Details

COUNTY	SECTION	HWY.NO.	SHEET NO.
GRUNDY	03-00092-02-WR	CH T64	5 OF 7

CONTRACT NO. 87304



TYPICAL CROSS-SECTION, "A-A"



NOTE:
SYMMETRIC OFFSET = 8'
TYPICAL BOTH SIDES

- NOTE: EMBANKMENT SHALL BE INCIDENTAL FOR THE FOLLOWING.
- 1) 1 FOOT OF EARTH COVER OVER THE PIPE CULVERTS
 - 2) SHAPING OF THE DITCH TO FLOW TO OR FROM THE CULVERTS.

INTERSECTION DESIGN WB-55
GRUNDY COUNTY
KINSMAN ROAD & GRAND RIDGE ROAD

REVISED: 4-10-07
BY: DMB

CONTRACT NO. 87304

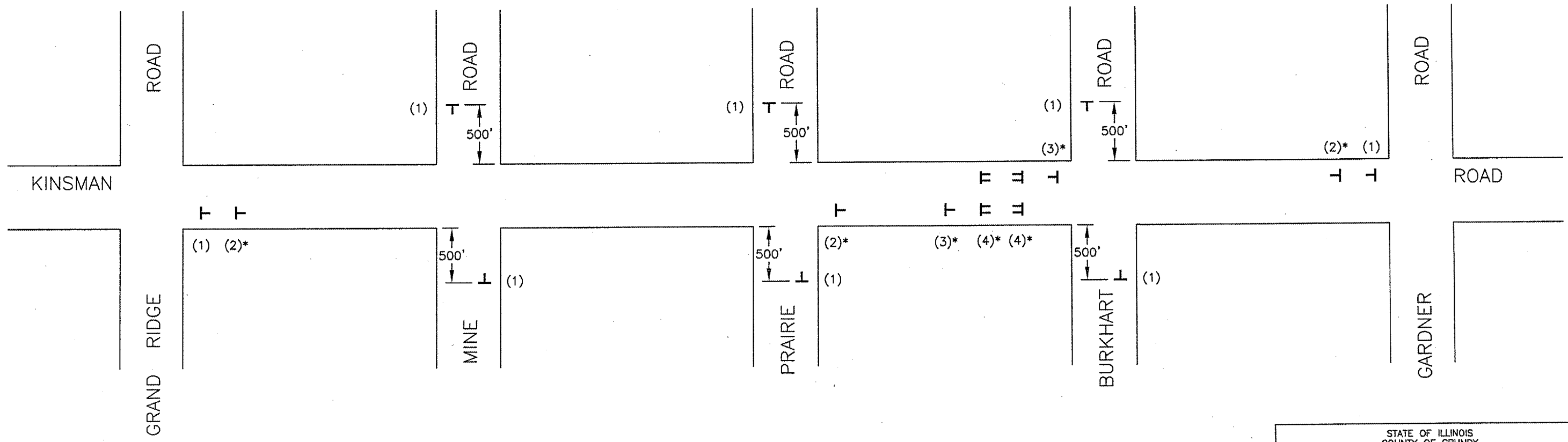
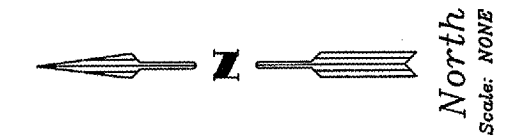
LEGEND

- "Road Construction Ahead" sign (W20-1).
- "Road Closed Ahead" sign (W20-3) with orange flag and low intensity light attached.
- "Road Closed 500 feet" sign (W20-3) with orange flag and low intensity flashing light attached.
- Two (2) Type III Barricades with low intensity flashing lights (2 per barricade) and "Road Closed" sign (R11-2) above barricade in approach lane.

SUGGESTED LAYOUT FOR TRAFFIC CONTROL DEVICES

NOTE: This suggested layout is included to detail the applicability of Highway Standard BLR 21-6 to this Project.

* Traffic Control Devices to be installed only during the construction phase of the Waterproofing Membrane System. (Maximum closure time is 3 days.)

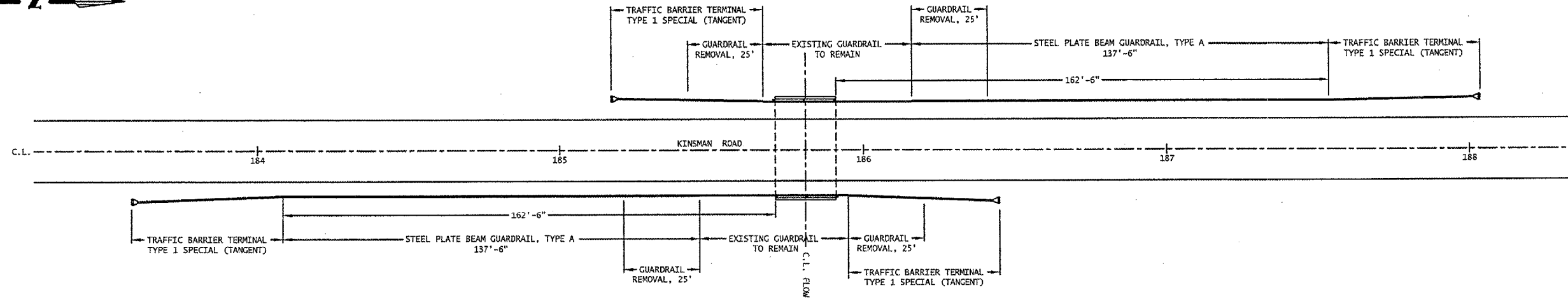


STATE OF ILLINOIS COUNTY OF GRUNDY COUNTY ENGINEER			
DRAWN: D.M.B.	CHECKED: C.J.C.	SCALE: NONE	DATE: 3-30-07
REVISED:	4-10-07		

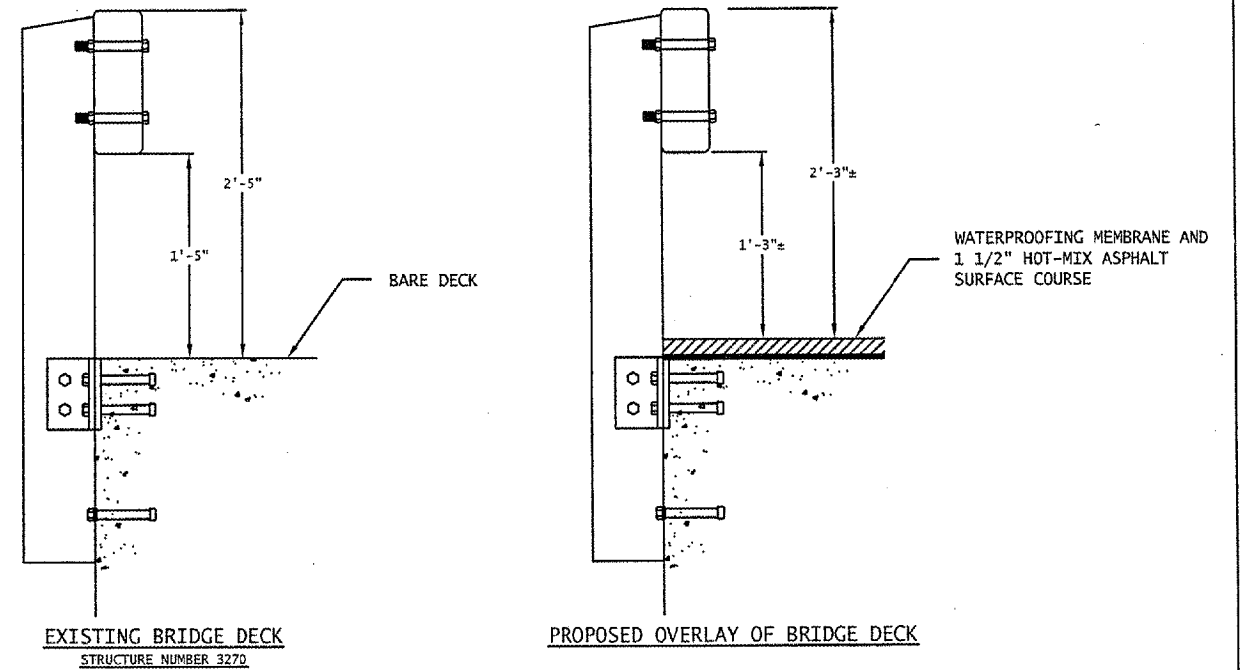


**BOX CULVERT
GUARDRAIL DETAILS**

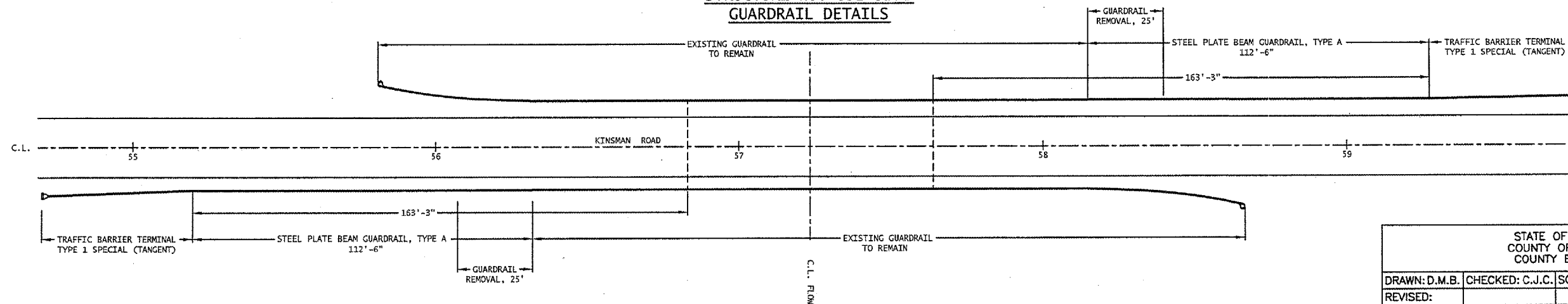
CO. HWY. T64 SECTION: 03-00092-02-WR
GRUNDY COUNTY, ILLINOIS
SHEET 7 OF 7



BRIDGE DECK WATERPROOFING MEMBRANE DETAILS



**STRUCTURE NO. 032-3270
GUARDRAIL DETAILS**



STATE OF ILLINOIS
COUNTY OF GRUNDY
COUNTY ENGINEER

DRAWN: D.M.B.	CHECKED: C.J.C.	SCALE: 1"=40'	DATE: 4-23-07
REVISED:			