STRICT ONE – DESIGN – PLAN PREPARATION ENGINEER: N ENG / ROBERT BORO (847) 705-4178 
 ROUTE
 SECTION
 COUNTY
 TOTAL SHEET

 FAP 343
 531-4HBK-I-2
 COOK
 10
 1

FOR INDEX OF SHEETS SEE SHEET 2

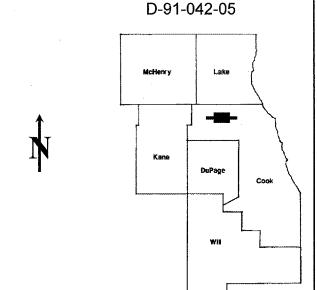
**IMPROVEMENT IS** 

LOCATED IN THE VILLAGE

OF PALATINE

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DISTRICT ONE PROPOSED HIGHWAY PLANS

FAP 343: ILLINOIS ROUTE 68
OVER ILLINOIS ROUTE 53
SECTION: 531-4HBK-I-2
BEAM REPLACEMENT
COOK COUNTY
C-91-042-05



**CONTRACT NO. 62865** 

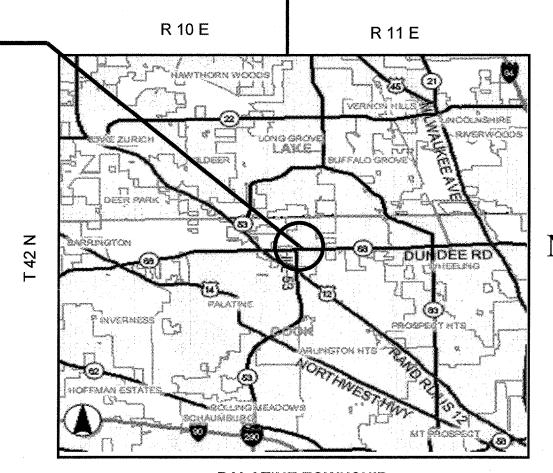
LOCATION OF IMPROVEMENT INDICATED THUS:

LOCATION OF IMPROVEMENT AT S.N.: 016-0961

#### **TRAFFIC DATA:**

IL RTE. 53: SPEED LIMIT = 55 MPH 2003 ADT = 93,400

<u>IL RTE. 68</u>: SPEED LIMIT = 45 MPH 2003 ADT = 38,800



PALATINE TOWNSHIP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED:

March 23, 20 05 Dine O'Keele Iff

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Mike Hine 10

NGINEER OF DESIGN AND ENVIRONMENT

DIRECTOR DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

J.U.L.I.E.: JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION (312) 744-7000

ア iii | グ ii | CONTRACT NO. 62865

	ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
L	FAP 343	531 <b>-</b> 4HBK-I-2	COOK	10	2

CONTRACT NO. 62865

### **INDEX OF SHEETS**

1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
3 - 4	SUMMARY OF QUANTITIES
5 - 7	BRIDGE REPAIR PLANS
8	TRAFFIC CONTROL PLANS
9	TRAFFIC CONTROL FOR SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES
10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS

# **STATE STANDARDS**

<u>STANDARDS</u>	DESCRIPTION
701101-01	OFF-ROAD OPERATIONS, MULTILANE, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701301- <i>0</i> 2	LANE CLOSURE, 2L, 2W SHORT TIME OPERATIONS
701400 <i>-0</i> 2	APPROACH TO LANE CLOSURE, FREEWAY / EXPRESSWAY
701401 <i>-03</i>	LANE CLOSURE, FREEWAY / EXPRESSWAY
701411- <i>03</i>	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPPEDS ≥ 45 MPH
701446	TWO LANE CLOSURE, FREEWAY / EXPRESSWAY
701601- <i>04</i>	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
702001-05	TRAFFIC CONTROL DEVICES
704001- <i>0</i> 2	TEMPORARY CONCRETE BARRIER

## **GENERAL NOTES**

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOURS NOTIFICATION IS REQUIRED).

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.

CONTRACTORS SHALL BE RESPONSIBLE FOR THE NOTIFICATION OF ALL EMERGENCY SERVICES, SCHOOL DISTRICTS, I.D.O.T.'S COMMUNICATIONS CENTER, SPRINGFIELD TRUCK PERMIT SECTION AND OTHER AGENCIES AFFECTED BY THE CLOSURE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR POSTING SIGNS THAT WILL INDICATE THE DATE THE CLOSURE WILL BE IN PLACE.

WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UPMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.

ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS STATE STANDARDS GENERAL NOTES

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 343	531-4HBK-l-2	соок	10	3

	SUMMARY OF QUANTITIES		URBAN						CONTR	ACT 62865
			TOTAL QUANTITIES			CONSTRUCTION T	TYPE CODE:	SFTY -	2A	
CODE NO	ITEM	UNIT	Q0/11111120		соок	COUNTY				
				SN 016-0961						
50102400	CONCRETE REMOVAL	CU YD	16.1	16.1						·
50300255	CONCRETE SUPERSTRUCTURE	CU YD	16.1	16.1						
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	8000	8000					ı	
50500505	STUD SHEAR CONNECTORS	EACH	129	129						
50501110	STRUCTURAL STEEL REMOVAL	POUND	8000	8000						
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3480	3480						
50900905	REMOVING AND RE-ERECTING EXISTING RAILING	FOOT	65	65						
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3						
67100100	MOBILIZATION	L SUM	. 1	1						
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1						·
X0322467	TEMPROARY INFORMATION SIGNING FOR LANE CLOSURE	SQ FT	48	48						
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1						·

ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES

			,		ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBE
			e de la companya de	<b>L</b>	FAP 343	531-4HBK-I-2	COOK	10	4
	SUMMARY OF QUANTITIES		URBAN					CONTR	ACT 62865
			TOTAL QUANTITIES		C	ONSTRUCTION TYP	PE CODE: SFTY	- 2A	
CODE NO	ITEM	UNIT			соок	COUNTY			
				SN 016-0961					
70400100	TEMPORARY CONCRETE BARRIER	FOOT	250	250					
Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 2	EACH	. 1	1					
Z0047300	PROTECTIVE SHIELD	SQ YD	90	90					
Z0073300	TEMPORARY SHORING AND CRIBBING	L SUM	. 1	1					

ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES

A SFTY-3N

#### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION N.B. Lanes \_ (F.A. 61) (F.A. 61) © Brg. W. Abut. © Brg. E. Abut. € Pier 3-Pier I ---- € Pier 2 Temporary shoring for Beam 14 may be required to ELEVATION facilitate alignment of existing splices. Use 12" x 12" Timber or HP's. Cost shall be included in the cost of N Temporary Shoring and Cribbing. The shoring shall be removed as soon as possible after the splice has been completed to minimize traffic control in the South Bound Lanes. 251"-2" 41'-8" Span 1 Span 4 9°-07'-10" € Brg. € Brg. W. Abut. Skew © Brg. Pier 2 Brg. © Brg. Pier 3 Splice 3 Splice 1 F. Abit. -(1) 2 spaces at = 39'-6" 3-4)-**(5)**-6)-€ Rdwy. (9)-= 39'-6" (10)-(11)-6 beam 6'-7" 12 13-(B)-- $\langle A \rangle$ 21'-0" DOOD TE OF MANON ±28'-4"

1'-558"

FRAMING PLAN

(A) Existing Beam to be replaced.
(B) Remove and replace bottom:

Remove and replace bottom clip angle

3'-1138"

081-004625

STRUCTURA!

SCOTOTOTO OF THE PARTY OF THE P

Expires 11-30-06

24'-0"

48'-5"

TOTAL SHEETS SHEET NO. SHEET NO. I531-4HB F.A. 61 COOK 5 3 SHEETS 10

Contract No. 62865

#### GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Pointing Contact Surface Areas of Existing Steel Structures".

The inorganic zinc rich primer/acrylic/acrylic paint system shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the acrylic finish coat shall be Interstate Green, Munsell No. 7.5G 4/8. See Special Provision "Cleaning and Painting New Metal Structures".

The cost of removal and/or re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included in the cost of Furnishing & Erecting Structural Steel.

Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included in the cost of "Concrete Removal".

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.

Prior to pouring the new concrete deck, all loose rust, loose mill scale and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard

The deck surface shall have its final finish tined according to Article 420.11(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

#### TOTAL BILL OF MATERIAL

TOTTLE DIEL OF MIT	1/4/14/	<u>\</u>
ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	16.1
Concrete Superstructure	Cu. Yd.	16.1
Reinforcement Bars (Epoxy Coated)	Pound	3480
Structural Steel Removal	Pound	8000
Furnishing & Erecting Structural Steel	Pound	8000
Stud Shear Connectors	Ea.	129
Temporary Shoring & Cribbing	L.S.	1
Removing & Re-Erecting Existing Railing	Foot	65
Protective Shield	Sq. Yd.	90

BRIDGE REPAIRS IL. RT. 68 (DUNDEE RD.) OVER F.A. RTE. 61 (IL. RT. 53) SEC. 531-4HB COOK COUNTY S.N. 016-0961

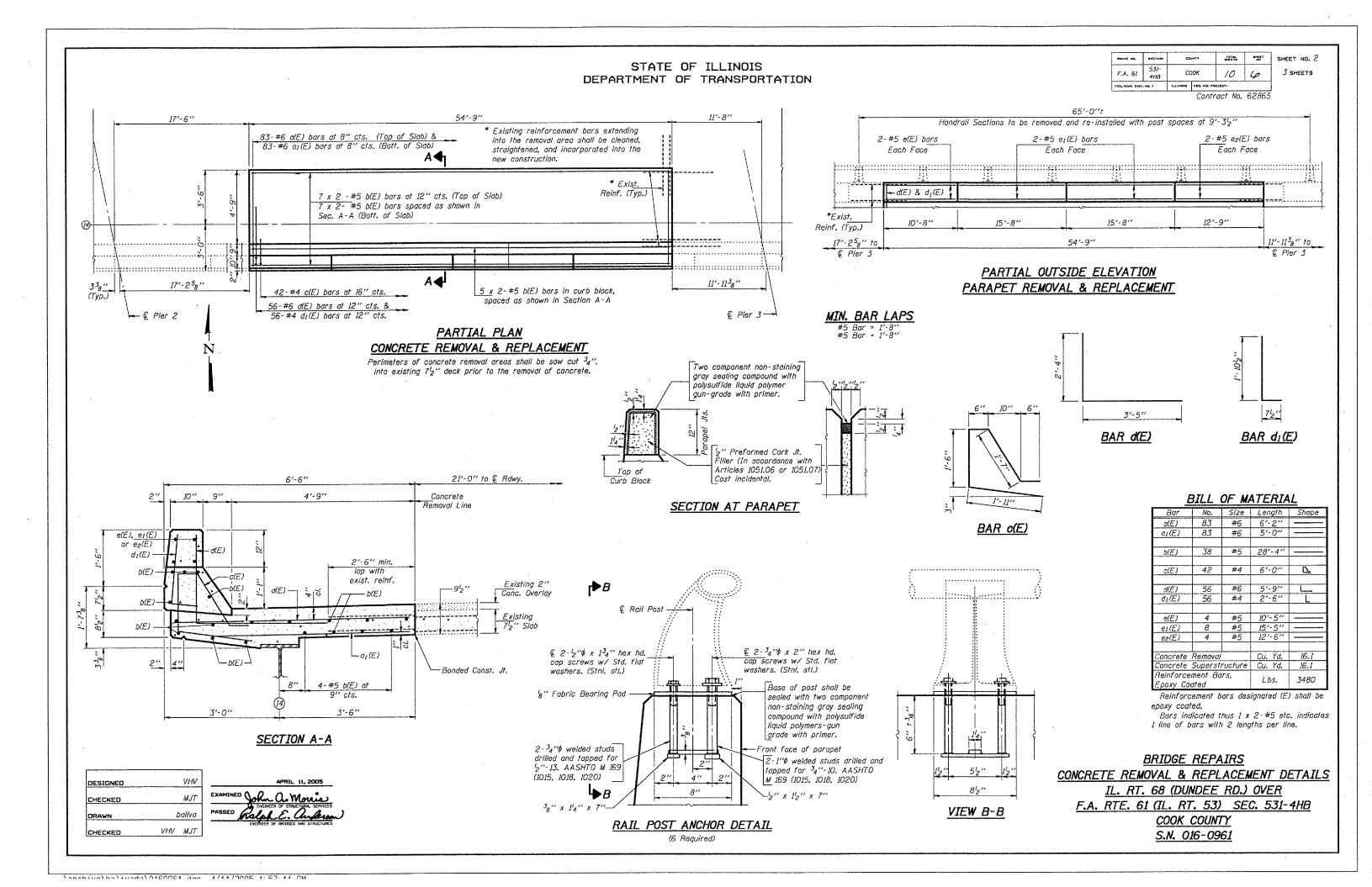
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-a. Mones

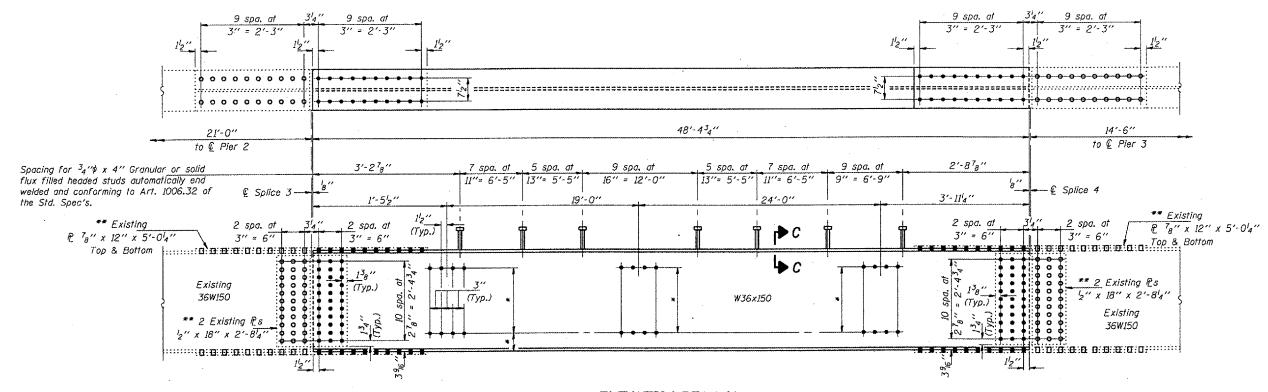
DESIGNED VICTOR # Velia

VHV



# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

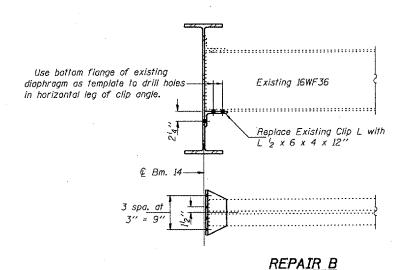
Contract No. 62865

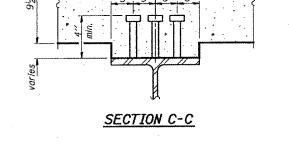


\*\* Exist. L's to be matched marked, removed and reused.

#### ELEVATION BEAM 14

\* Holes to be located and drilled in field.





€ Beam —

Notes: Natural camber of new beam shall be placed upward for fabrication.

Fasteners shall be high strength bolts. Flange splice holes shall be <sup>15</sup><sub>16</sub> '\phi for <sup>7</sup><sub>8</sub> '\phi bolts. Web splice holes shall be <sup>15</sup><sub>16</sub> '\phi for <sup>3</sup><sub>4</sub> '\phi bolts.

Diaphragm connection holes shall be <sup>15</sup><sub>16</sub> '\phi for <sup>3</sup><sub>4</sub> '\phi bolts. Two hardened washers shall be required at diaphragm connections.

DESIGNED VHV

CMECKED MJT

DRAWN baliva

PASSED Kalak E. Charken

No. Reg'd.: Two (2) Clip L's

BRIDGE REPAIRS

IL. RT. 68 (DUNDEE RD.) OVER

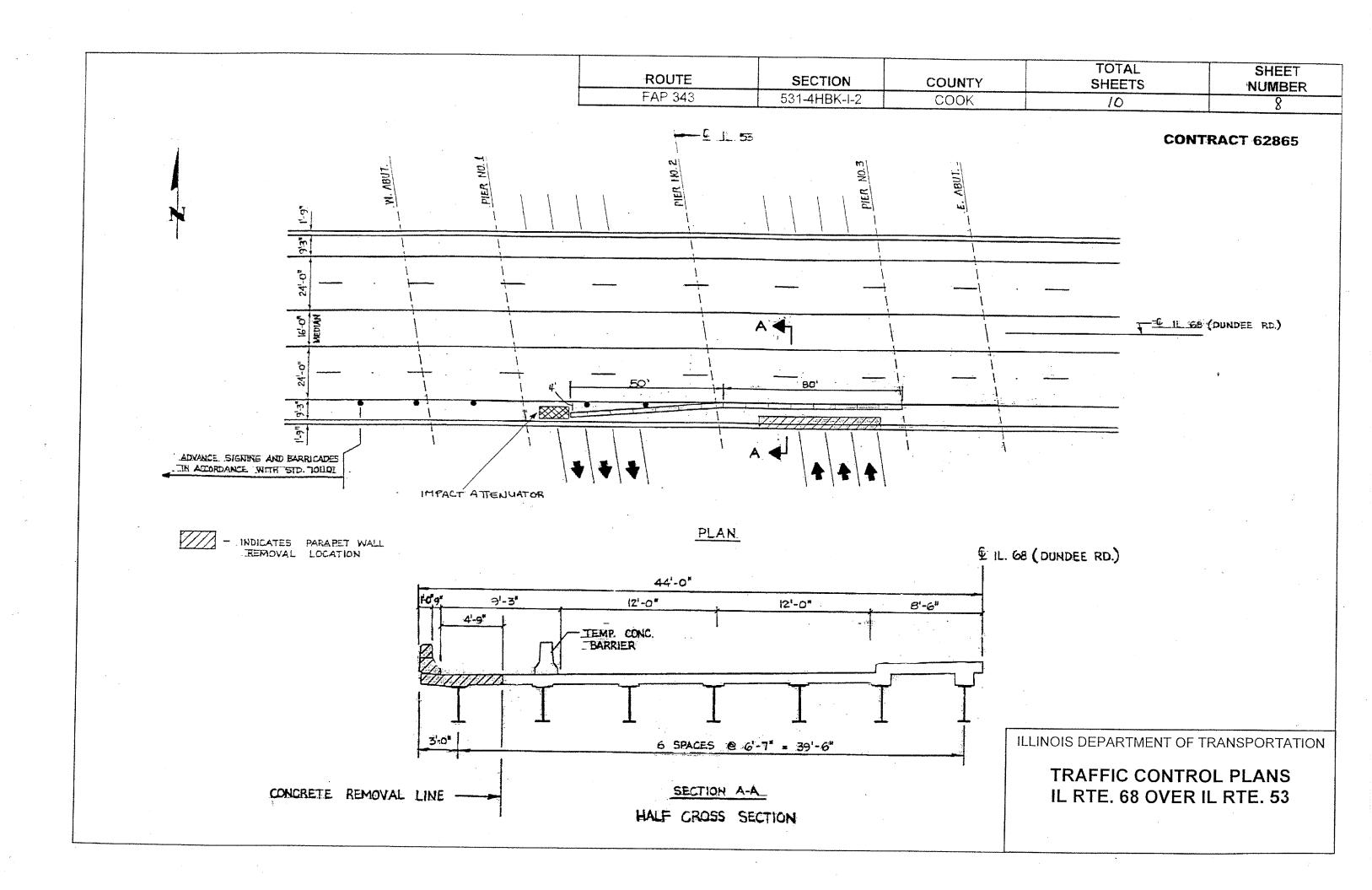
F.A. RTE. 61 (IL. RT. 53) SEC. 531-4HB

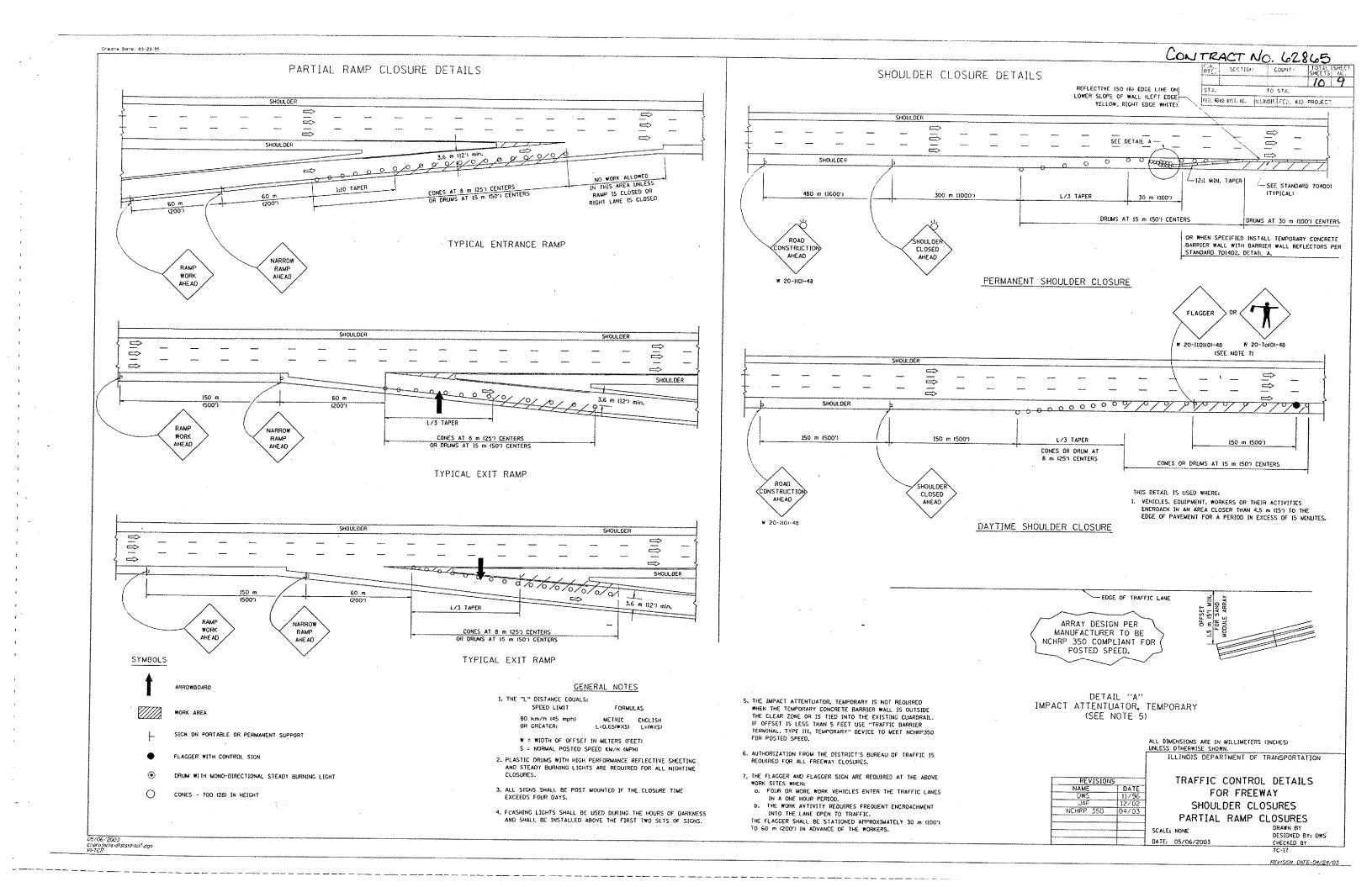
COOK COUNTY

S.N. 016-0961

VHV MJT

CHECKED

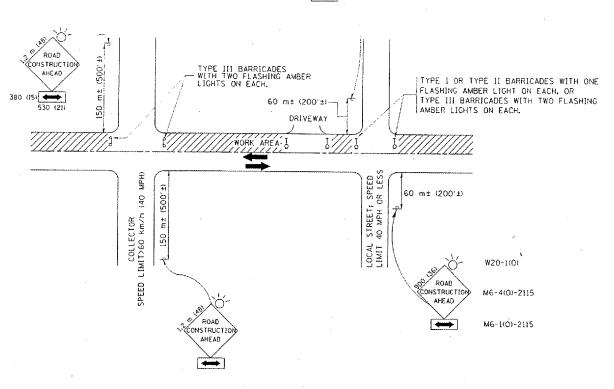




CONTRACT NO. 62865

TO STA.

FED. ROAD DIST. NO. FILLLINGIST 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 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- 0) ONE ROAD CONSTRUCTION AHEAD SIGN 900×900 (36×36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200") IN ADVANCE
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE 1, TYPE II OR TYPE 111 BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE ROAD CONSTRUCTION AHEAD SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE
- 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 (MG-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.

	12	REVISIO
	DATE	NAME
7	6/89	LHA
, ,	09/08/94	T. RAMMACHER
	10/18/95	J. OBERLE
	03/06/96	A. HOUSER
	10/15/96	A. HOUSEH
	01/06/00	T. RAMMACHER

ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL AND PROTECTION

SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: VERT. HORIZ. DATE 10/15/2002

DRAWN BY CHECKED BY

REVISION DATE: 01/06/00

Friday Dataser 15, 2002 & 10:20:25 AV at \prayecis \distact\\tal0.cgn \ L\=35.63 -USER-