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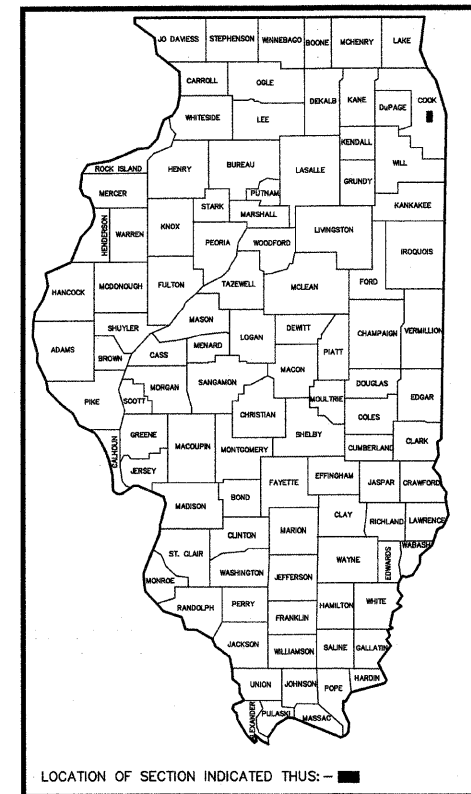
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY**

EAST AVENUE (FAU RTE. 2779)  
FROM CERMAK ROAD (FAU 1453) TO ROOSEVELT RD. (FAP 347)  
LAPP RESURFACING  
FEDERAL PROJECT ARA-9003(176)  
SECTION NO. 08-00165-00-RS  
CITY OF BERWYN  
COOK COUNTY  
JOB NO. C-91-208-09

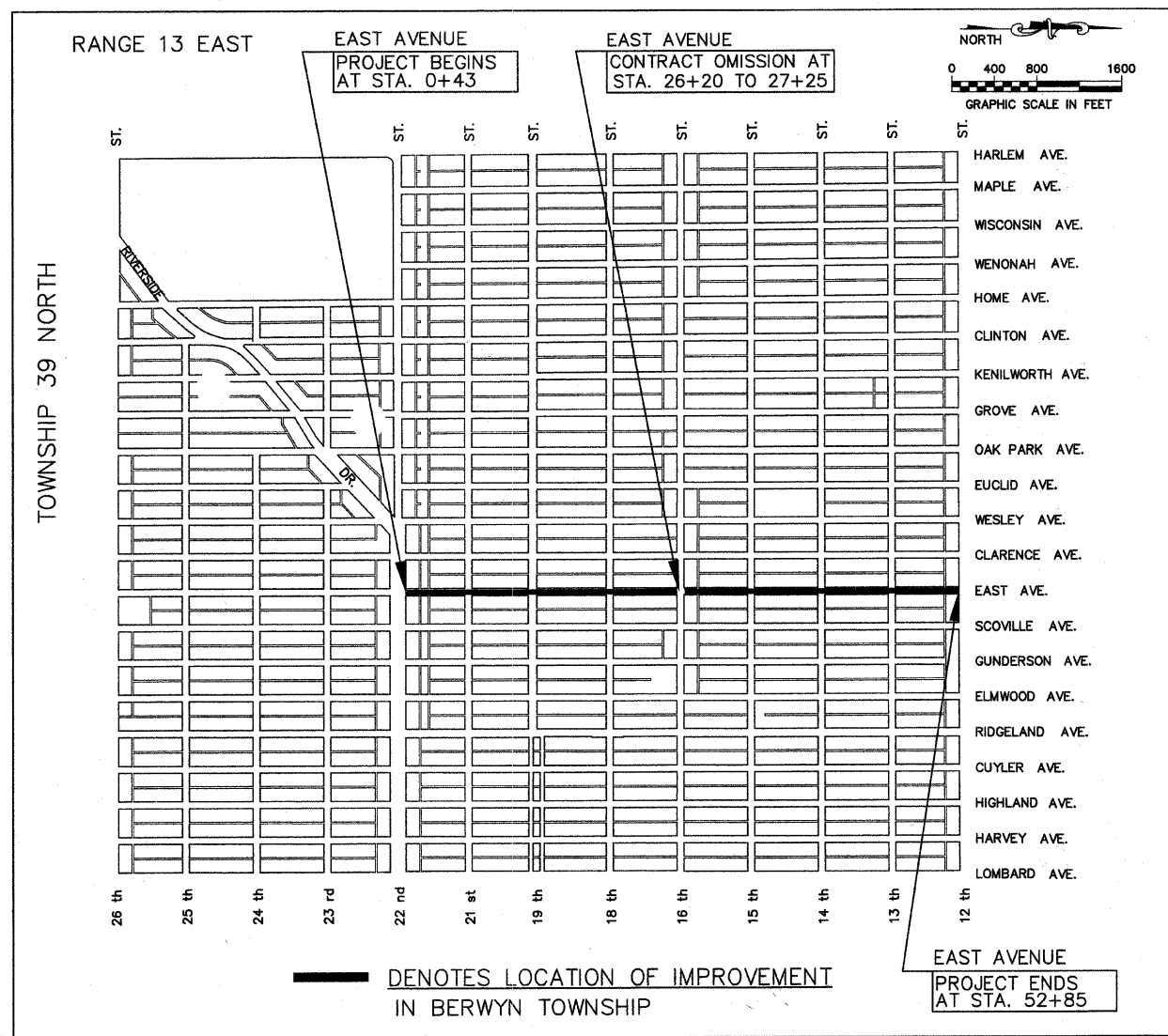
FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00165-00-RS	COOK	15	1
F.H.W.A. REG.	ILLINOIS	PROJECT	ARA-9003(176)	

CONTRACT NO. 63203



STATE STANDARDS

- 000001-05 STANDARDS SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 424001-05 CURB RAMPS FOR SIDEWALK
- 442201-03 CLASS C AND D PATCHES
- 602501-01 VALVE VAULT TYPE A
- 604001-03 FRAME & LIDS, TYPE 1
- 606001-04 CONCRETE CURB AND COMBINATION CONCRETE CURB & GUTTER
- 701301-03 LANE CLOSURE, 2 L, 2 W, SHORT TIME OPERATIONS
- 701501-05 URBAN LANE CLOSURE, 2 L, 2 W UNDIVIDED
- 701701-06 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701801-04 LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
- 701901-01 TRAFFIC CONTROL DEVICES
- 780001-02 TYPICAL PAVEMENT MARKINGS
- 886001-01 DETECTOR LOOP INSTALLATIONS
- 886006-01 TYPICAL LAYOUTS FOR DETECTION LOOPS
- 781001-03 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

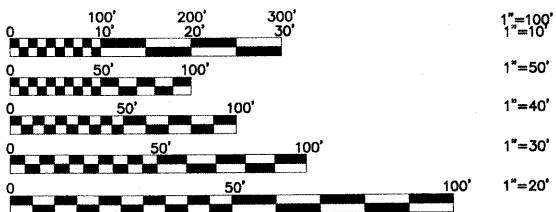


LOCATION MAP

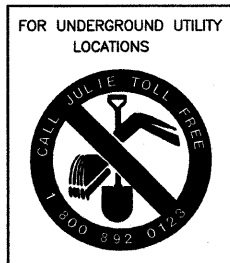
LENGTH OF PROJECT

GROSS LENGTH OF PROJECT 5,242 FEET (0.9928 MILES)  
NET LENGTH OF PROJECT 5,137 FEET (0.9729 MILES)

FIELD ENGINEER: MARILIN SOLOMON (847)705-4407  
CONSULTANT: FRANK NOVOTNY AND ASSOCIATES, INC. (630)887-8640



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



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

APPROVED June 26th 2009

CITY MAYOR Rlt J...

PASSED July 16, 2009

C. H. H. ...  
DISTRICT #1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID  
BASED ON LIMITED  
REVIEW July 16, 2009

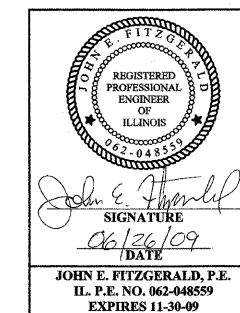
Diana M. O'Keefe  
DEPUTY DIRECTOR OF HIGHWAYS, REGION #1 ENGINEER

PROJECT LOCATED IN THE  
CITY OF BERWYN

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

SEE SHEET 3 FOR  
DESIGN DETAILS

TRAFFIC DATA:  
ADT (2015): 8,800  
POSTED SPEED LIMIT = 30 MPH  
DESIGN SPEED LIMIT = 30 MPH



CONTRACT NO. 63203

REVISIONS			
NO.	BY	DATE	DESCRIPTION
1	JEF	5-1-09	PER I.D.O.T. REVIEW
2	JEF	6-24-09	PER I.D.O.T. REVIEW
3	JEF	7-08-09	PER BERWYN
4	JEF	7-09-09	PER I.D.O.T. REVIEW
5	JEF	7-16-09	PER I.D.O.T. REVIEW



**Frank Novotny & Associates, Inc.**

825 Midway Drive • Willowbrook, IL • 60527 • Telephone: (630) 887-8640 • Fax: (630) 887-0132  
ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-008928

FNA JOB # 06077

# GENERAL CONSTRUCTION NOTES PAVING AND STORM SEWERS

## SPECIFICATIONS

THE LATEST EDITIONS OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", PREPARED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" SHALL GOVERN ALL WORK ASSOCIATED WITH THIS PROJECT. THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" MAY GOVERN OTHER WORK ON THIS PROJECT AS INDICATED BY REFERENCE.

## CARE IN EXCAVATION

CARE SHALL BE EXERCISED BY THE CONTRACTOR IN CARRYING OUT EARTH AND/OR TRENCHING OPERATIONS SO THAT LOCAL SERVICES, WATER VALVES, MANHOLES, CATCH BASINS, INLETS, BUFFALO BOXES, AND OTHER STRUCTURES ARE NOT DAMAGED OR REMOVED. ANY DAMAGE DONE BY THE CONTRACTOR, WHETHER THE STRUCTURE OR SERVICE IS VISIBLE AT THE GROUND SURFACE OR NOT, SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AS REQUIRED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

## NOTIFICATION OF PUBLIC UTILITIES

PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OFFICIALS OF THE PUBLIC WORKS DEPARTMENT OF THE LOCAL MUNICIPALITY, J.U.L.I.E. AT 1-800-892-0123, AND OTHER PUBLIC AND PRIVATE UTILITIES SO THAT ARRANGEMENTS CAN BE MADE TO LOCATE THEIR VARIOUS FACILITIES WITHIN THE LIMITS OF CONSTRUCTION UNDER THIS CONTRACT, AS WELL AS TO PROVIDE ADEQUATE PROTECTION AND INSPECTION THERETO. IT SHALL BE THIS CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES IN THE FIELD.

## TRAFFIC CONTROL DEVICES

BARRICADES AND WARNING SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH ARTICLE 107.14 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION". ADEQUATE LIGHTING SHALL BE MAINTAINED FROM DUSK TO DAWN AT ALL LOCATIONS WHERE CONSTRUCTION OPERATIONS WARRANT, OR AS DESIGNATED BY THE ENGINEER.

## PROTECTION OF SIGNS AND PROPERTY

ALL TRAFFIC SIGNS, STREET SIGNS, ETC., THAT INTERFERE WITH THE CONSTRUCTION OPERATIONS SHALL BE REMOVED AND PLACED AT NEW LOCATIONS AS DESIGNATED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. IN ADDITION, ALL MAIL BOXES THAT INTERFERE WITH CONSTRUCTION SHALL BE SIMILARLY RELOCATED AT NO ADDITIONAL COST IN ACCORDANCE WITH ARTICLES 107.20 AND 107.21 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

## SUPERINTENDENCE

SPECIAL ATTENTION IS DRAWN TO ARTICLE 105.06 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" WHICH REQUIRES THE CONTRACTOR TO HAVE A COMPETENT SUPERINTENDENT ON THE PROJECT SITE AT ALL TIMES, IRRESPECTIVE OF THE AMOUNT OF WORK SUBLET. THE SUPERINTENDENT SHALL BE CAPABLE OF READING AND UNDERSTANDING THE PLANS AND SPECIFICATIONS, SHALL HAVE FULL AUTHORITY TO EXECUTE ORDERS TO EXPEDITE THE PROJECT AND SHALL BE RESPONSIBLE FOR SCHEDULING AND HAVING CONTROL OF ALL THE WORK AS THE AGENT OF THE GENERAL CONTRACTOR. FAILURE TO COMPLY WITH THIS PROVISION WILL RESULT IN A SUSPENSION OF WORK AS PROVIDED IN ARTICLE 108.07.

## SAWING EXISTING IMPROVEMENTS

ALL PERMANENT TYPE PAVEMENTS OR OTHER PERMANENT IMPROVEMENTS WHICH ABUT THE PROPOSED IMPROVEMENT AND MUST BE REMOVED, SHALL BE SAWS AS DIRECTED PRIOR TO REMOVAL. ALL ITEMS SO REMOVED SHALL BE REPLACED WITH SIMILAR CONSTRUCTION MATERIALS TO THEIR ORIGINAL CONDITION OR BETTER. PAYMENT FOR SAWING SHALL BE INCLUDED IN THE COST FOR THE REMOVAL OF EACH ITEM, AND REPLACEMENT WILL BE PAID FOR UNDER THE RESPECTIVE ITEMS IN THE CONTRACT UNLESS OTHERWISE INDICATED. SAW CUTTING FOR PATCHES WILL BE INCIDENTAL TO THE PATCHING ITEM.

## CONSTRUCTION LAYOUT STAKES

THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH WOODEN STAKES OR OTHER LAYOUT MATERIALS FOR LAYOUT OF THE LINES AND GRADES OF THE PROJECT. FAILURE TO PROVIDE STAKES IN A TIMELY MANNER WILL RESULT IN A DELAY IN STAKEOUT WHICH WILL BE APPLICABLE AGAINST THE TIME LIMIT FOR COMPLETION SHOWN IN THE PROJECT SPECIFICATIONS. LINE AND GRADE WILL BE ESTABLISHED BY THE ENGINEER AT REGULAR INTERVALS ON PERMANENTLY PAVED SURFACES, SIDEWALKS OR STAKES AT THE ENGINEER'S OPTION, ALL WITHIN THE PUBLIC RIGHT-OF-WAY AND SHALL BE TRANSFERRED BY THE CONTRACTOR TO THE ACTUAL LINE OF CONSTRUCTION.

## PROJECT SAFETY

BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR TYPE II BARRICADE USED ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.

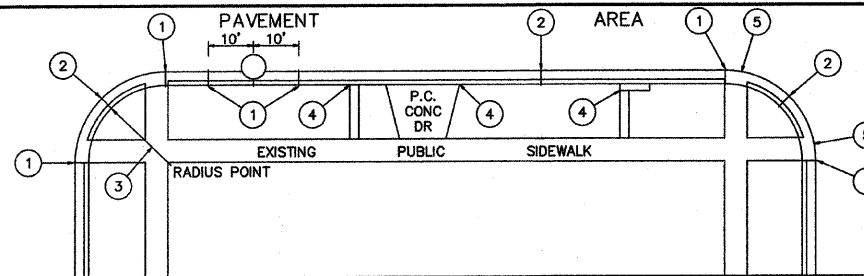
WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1-1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

THE CONTRACTOR SHALL COMPLY WITH AND OBSERVE THE RULES AND REGULATIONS OF O.S.H.A. AND APPROPRIATE AUTHORITIES REGARDING SAFETY PROVISIONS. THE CONTRACTOR, ENGINEER, AND OWNER SHALL EACH BE RESPONSIBLE FOR THEIR OWN RESPECTIVE AGENTS AND EMPLOYEES.

THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS, OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS WORK IN ACCORDANCE WITH THE DOCUMENTS AND SPECIFICATIONS.

ALL ITEMS ASSOCIATED WITH CURB AND GUTTER, DRIVEWAYS AND PATCHING WILL NOT EXCEED THE QUANTITIES LISTED IN THE SUMMARY OF QUANTITIES.



- EXPANSION JOINTS AT TANGENT POINTS AND 150 FOOT INTERVALS, CONSISTING OF ONE INCH PREMOLDED JOINT FILLER MATERIAL WITH #8 DOWEL BARS, 18" IN LENGTH, GREASED, PROVIDE EXPANSION CAP ON ONE END. ALSO CONSTRUCT THIS JOINT TEN FEET EACH SIDE OF PROPOSED UNDERGROUND STRUCTURE.
- CONTRACTION JOINTS AT TWENTY-FIVE FOOT INTERVALS AND AT THE CENTER OF RETURNS.
- ALL RADII SHALL BE 25 FEET TO THE BACK OF CURB UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- LONGITUDINAL EXPANSION JOINT CONSISTING OF ONE INCH PREMOLDED JOINT FILLER.
- DEPRESS CURB AT LOCATIONS WHERE PUBLIC WALKS INTERSECT CURB LINE AT STREET INTERSECTIONS, ALLEYS, AND OTHER LOCATIONS AS DIRECTED, FOR THE CONSTRUCTION OF RAMPED SIDEWALKS FOR ACCESS BY THE HANDICAPPED.

## JOINT DETAILS

## SUMMARY OF QUANTITIES

Item No	Description	Unit	Quantity
20700420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	150
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	463
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GAL	2,340
40600300	AGGREGATE (PRIME COAT)	TON	30
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	1,300
40600895	CONSTRUCTING TEST STRIP	EACH	1
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	245
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	2,620
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	5,241
42400800	DETECTABLE WARNINGS	SQ FT	10
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	22,404
44000600	SIDEWALK REMOVAL	SQ FT	5,241
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	120
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	906
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	1,359
44300300	AREA REFLECTIVE CRACK CONTROL TREATMENT, SYSTEM A	SQ YD	22,649
60248700	VALVE VAULT, TYPE A, 4' DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	3
60250200	CATCH BASINS TO BE ADJUSTED	EACH	3
60266800	VALVE BOXES TO BE ADJUSTED	EACH	3
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	80
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	10
67100100	MOBILIZATION	L SUM	1
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	2,200
70300210	TEMPORARY PAVEMENT MARKING-LETTERS AND SYMBOLS	SQ FT	40
70300220	TEMPORARY PAVEMENT MARKING - LINE, 4"	FOOT	9,400
70300240	TEMPORARY PAVEMENT MARKING - LINE, 6"	FOOT	800
70300260	TEMPORARY PAVEMENT MARKING - LINE, 12"	FOOT	400
70300280	TEMPORARY PAVEMENT MARKING - LINE, 24"	FOOT	500
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1,100
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	FOOT	40
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE, 4"	FOOT	9,400
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE, 6"	FOOT	800
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE, 12"	FOOT	400
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE, 24"	FOOT	500
* 81400115	HANDHOLES TO BE ADJUSTED	EACH	5
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	400
XX003435	PORTLAND CEMENT CONCRETE DRIVEWAY REMOVAL AND REPLACEMENT	SQ YD	15
* XX006257	RECESSED REFLECTIVE PAVEMENT MARKER	EACH	69

\* SPECIALTY ITEM

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00165-00-RS	COOK	15	2
F.H.W.A. REG.	ILLINOIS	PROJECT	ARA-9003(176)	
CONTRACT NO. 63203				

**Frank Novotny & Associates, Inc.**  
Civil Engineers/Municipal Consultants  
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Illinois Professional Design Firm No. 184-000928

PROJECT  
CITY OF BERWYN, ILLINOIS  
EAST AVENUE LAPP RESURFACING  
MFT SECTION NO. 08-00165-00-RS

REVISIONS				
NO.	BY	DATE	DESCRIPTION	
2	JEF	6-24-09	PER I.D.O.T. REVIEW	
3	JEF	7-09-09	PER BERWYN	
4	JEF	7-09-09	PER I.D.O.T. REVIEW	
5	JEF	7-16-09	PER I.D.O.T. REVIEW	

GENERAL NOTES  
JOINT DETAILS  
SUMMARY OF QUANTITIES

PROJECT NO. 06077	SCALE NONE	SHEET 2
DRAWN/DESIGNED JEP/AMS	DATE APRIL, 2009	OF 15
CHECKED/APPROVED JFP/JEF	FIELD BOOK NO. FILE	SHEETS

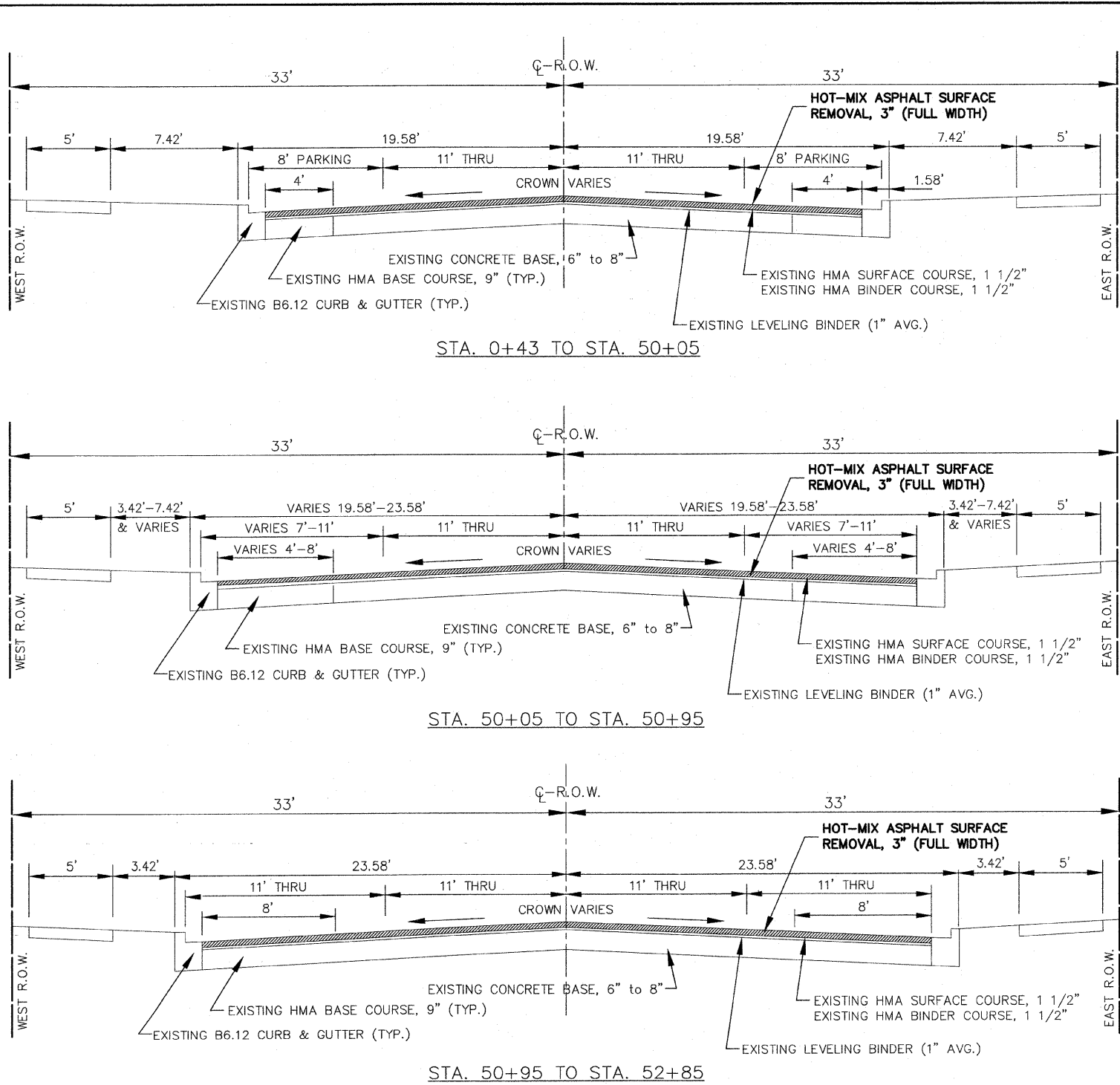
**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

MIXTURE TYPE	AC TYPE	PERCENT AIR VOIDS
ROADWAY		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (IL-9.5mm)	PG 64-22	4% @ 50 GYR
LEVELING BINDER (MACHINE METHOD), N50, 1" (IL-9.5mm)	*PG 64-22	4% @ 50 GYR
PATCHING		
CLASS D PATCHES, TYPE III-IV, 9", (HMA BINDER IL-19.0mm)	*PG 64-22	4% @ 70 GYR

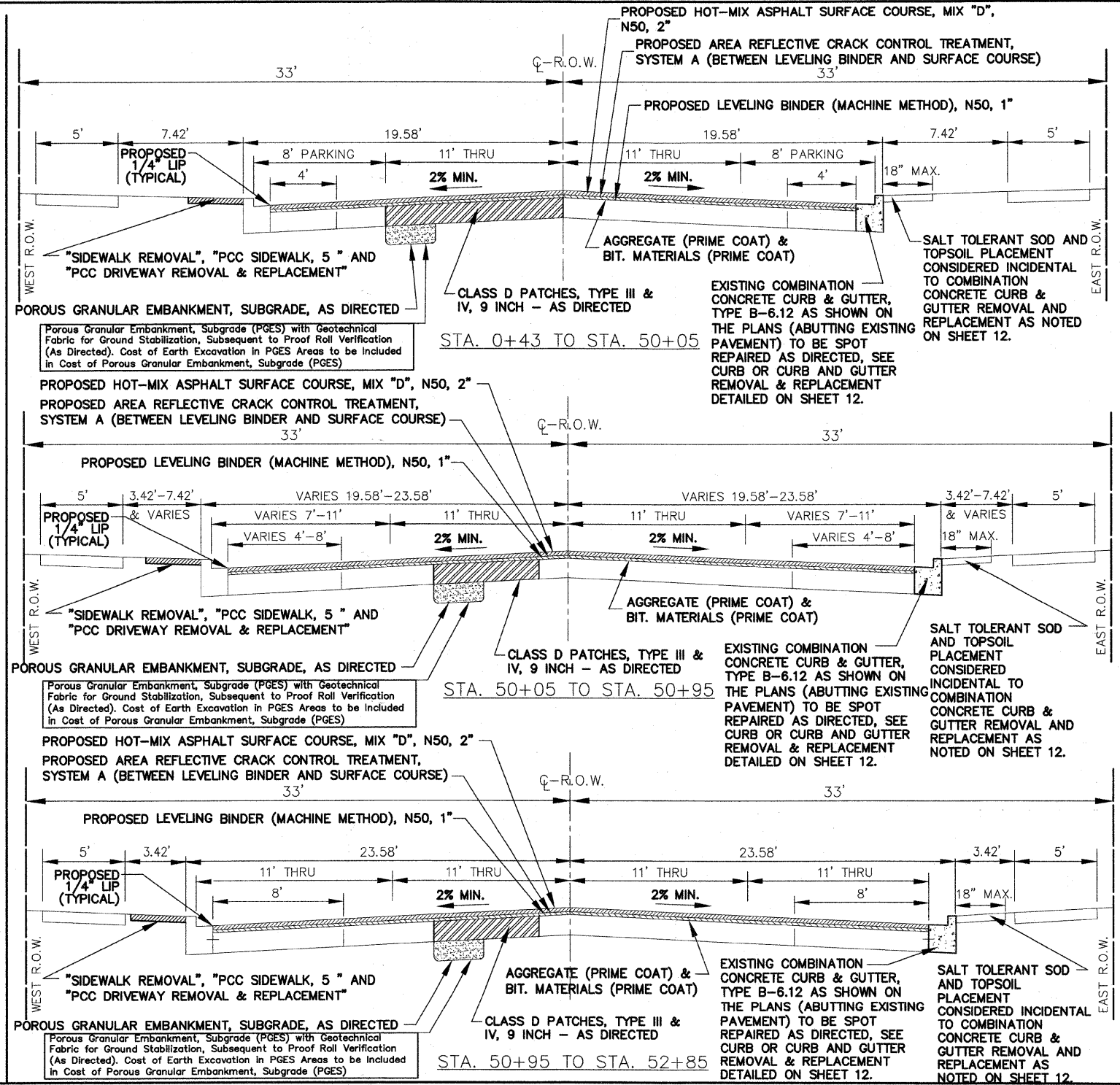
THE UNIT WEIGHT TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.  
\* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00165-00-RS	COOK	15	3
F.H.W.A. REG.	ILLINOIS	PROJECT	ARA-9003(176)	

CONTRACT NO. 63203



EXISTING



PROPOSED

TYPICAL CROSS SECTIONS

SCALE: 1"=4'

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Illinois Professional Design Firm No. 184-000928

PROJECT  
**CITY OF BERWYN, ILLINOIS**  
EAST AVENUE LAPP RESURFACING  
MFT SECTION NO. 08-00165-00-RS

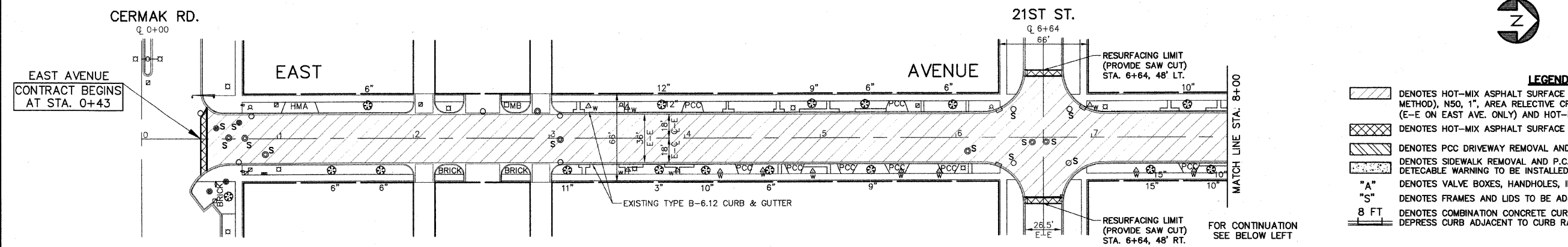
REVISIONS			
NO.	BY	DATE	DESCRIPTION
1	JEF	5-1-09	PER I.D.O.T. REVIEW
2	JEF	6-24-09	PER I.D.O.T. REVIEW

TYPICAL CROSS SECTIONS  
HOT-MIX ASPHALT  
MIXTURE REQUIREMENTS

PROJECT NO.	SCALE	SHEET
06077	NONE	3
DRAWN/DESIGNED JEP/AMS	DATE APRIL, 2009	OF 15
CHECKED/APPROVED JFP/JEF	FIELD BOOK NO. FILE	SHEETS

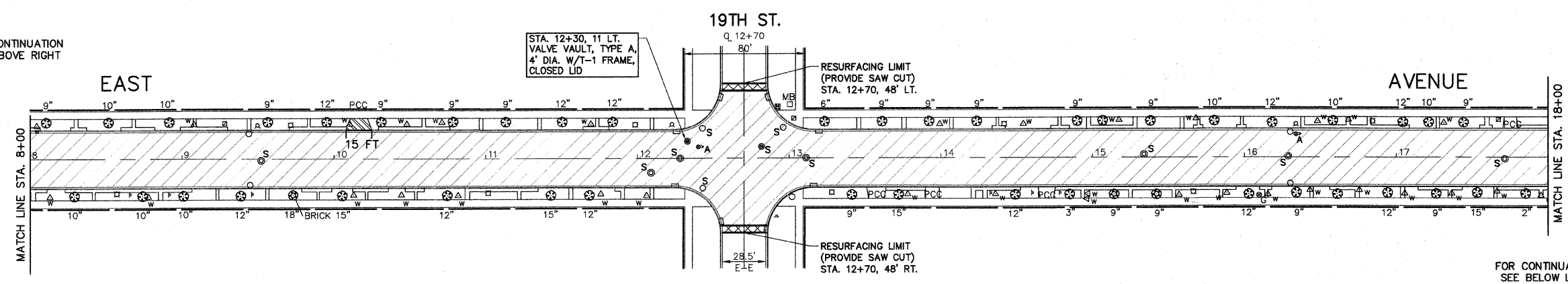
FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00165-00-RS	COOK	15	4
F.H.W.A. REG.	ILLINOIS PROJECT	ARA-9003(176)		

CONTRACT NO. 63203



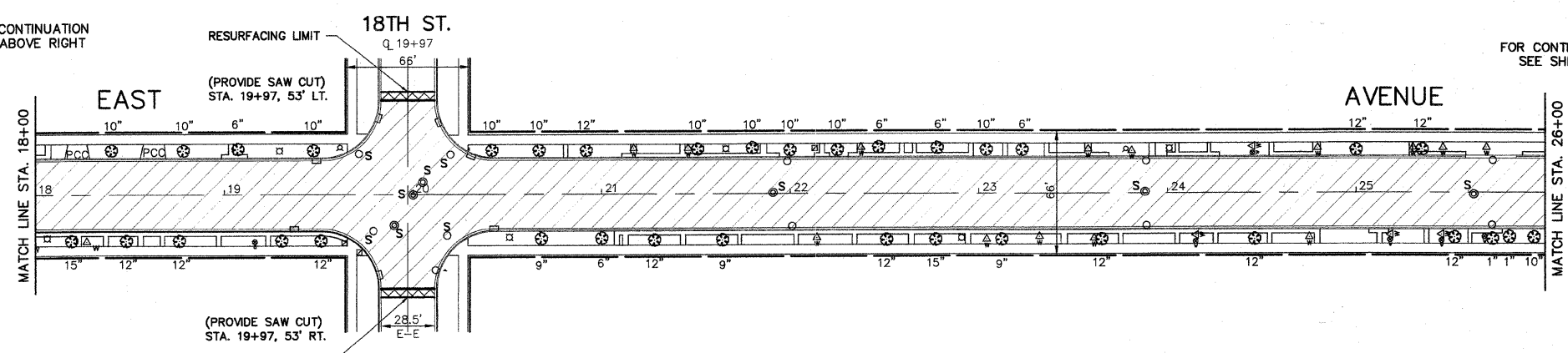
- LEGEND**
- DENOTES HOT-MIX ASPHALT SURFACE REMOVAL 3", LEVELING BINDER (MACHINE METHOD), N50, 1", AREA RELECTIVE CRACK CONTROL TREATMENT, SYSTEM A (E-E ON EAST AVE. ONLY) AND HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50, 2"
  - DENOTES HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT, (4.5' WIDTH)
  - DENOTES PCC DRIVEWAY REMOVAL AND REPLACEMENT
  - DENOTES SIDEWALK REMOVAL AND P.C. CONCRETE SIDEWALK, 5 INCH. DETECABLE WARNING TO BE INSTALLED AS REQUIRED.
  - "A" DENOTES VALVE BOXES, HANDHOLES, INLETS, AND CATCH BASINS TO BE ADJUSTED.
  - "S" DENOTES FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)
  - 8 FT DENOTES COMBINATION CONCRETE CURB & GUTTER REMOVAL AND REPLACEMENT. DEPRESS CURB ADJACENT TO CURB RAMP FOR SIDEWALKS AS REQUIRED.

FOR CONTINUATION SEE ABOVE RIGHT



FOR CONTINUATION SEE BELOW LEFT

FOR CONTINUATION SEE ABOVE RIGHT



FOR CONTINUATION SEE SHEET 5

FOR TYPICAL CROSS SECTION OF NEW PAVEMENT WORK SEE SHEET 3

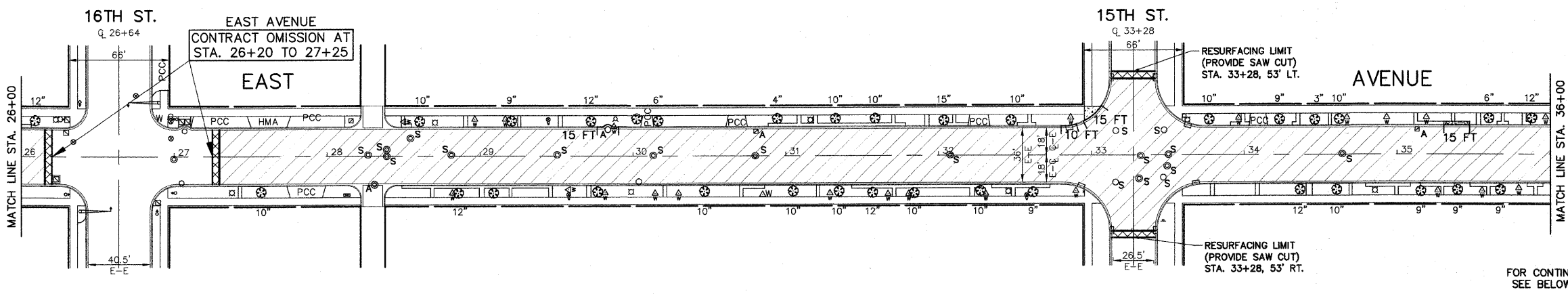
- NOTE:**
- 1 ALL EXISTING FRAMES AND LIDS THAT ARE TO BE REPLACED (AS DIRECTED BY THE ENGINEER) SHALL BE SALVAGED TO THE CONTRACTOR.
  - 2 ALL SAW CUTS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

**IMPORTANT!**  
 FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES INDICATED IN TITLE BLOCK.

REVISIONS			
NO.	BY	DATE	DESCRIPTION
2	JEF	6-24-09	PER I.D.O.T. REVIEW

PROJECT NO. 06077	SCALE V: 1"=5' H: 1"=40'
DRAWN/DESIGNED JEP/AMS	DATE APRIL, 2009
CHECKED/APPROVED JFP/JEF	FIELD BOOK NO. FILE

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00155-00-RS	COOK	15	5
F.H.W.A. REG.	ILLINOIS PROJECT	ARA-9003(176)	CONTRACT NO. 63203	

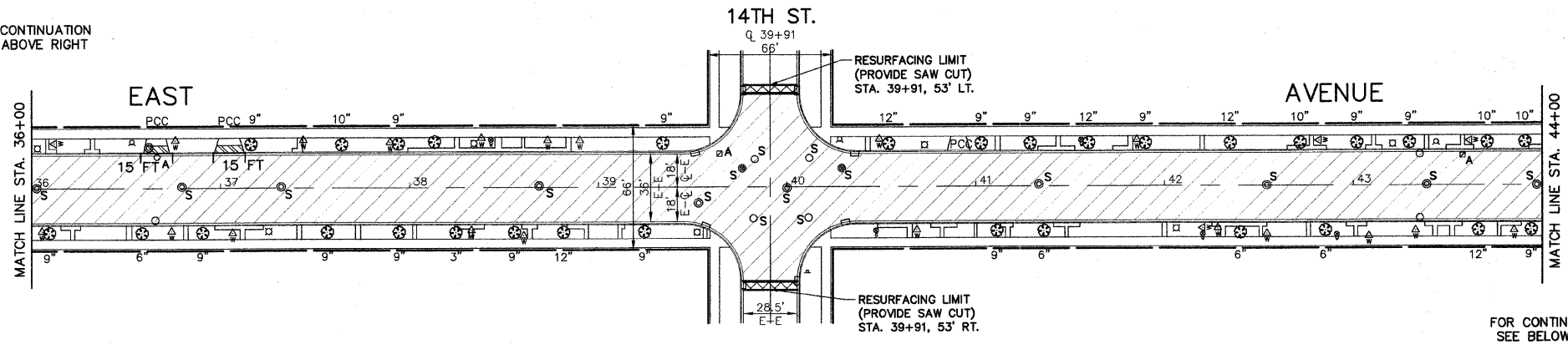


FOR CONTINUATION  
SEE SHEET 4

FOR CONTINUATION  
SEE BELOW LEFT

- LEGEND**
- DENOTES HOT-MIX ASPHALT SURFACE REMOVAL, 3", LEVELING BINDER (MACHINE METHOD), N50, 1", AREA RELECTIVE CRACK CONTROL TREATMENT, SYSTEM A (E-E ON EAST AVE. ONLY) AND HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50, 2"
  - DENOTES HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT, (4.5' WIDTH)
  - DENOTES PCC DRIVEWAY REMOVAL AND REPLACEMENT
  - DENOTES SIDEWALK REMOVAL AND P.C. CONCRETE SIDEWALK, 5 INCH. DETECABLE WARNING TO BE INSTALLED AS REQUIRED.
  - "A" DENOTES VALVE BOXES, HANDHOLES, INLETS, AND CATCH BASINS TO BE ADJUSTED.
  - "S" DENOTES FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)
  - 8 FT DENOTES COMBINATION CONCRETE CURB & GUTTER REMOVAL AND REPLACEMENT, DEPRESS CURB ADJACENT TO CURB RAMPS FOR SIDEWALKS AS REQUIRED.

FOR CONTINUATION  
SEE ABOVE RIGHT



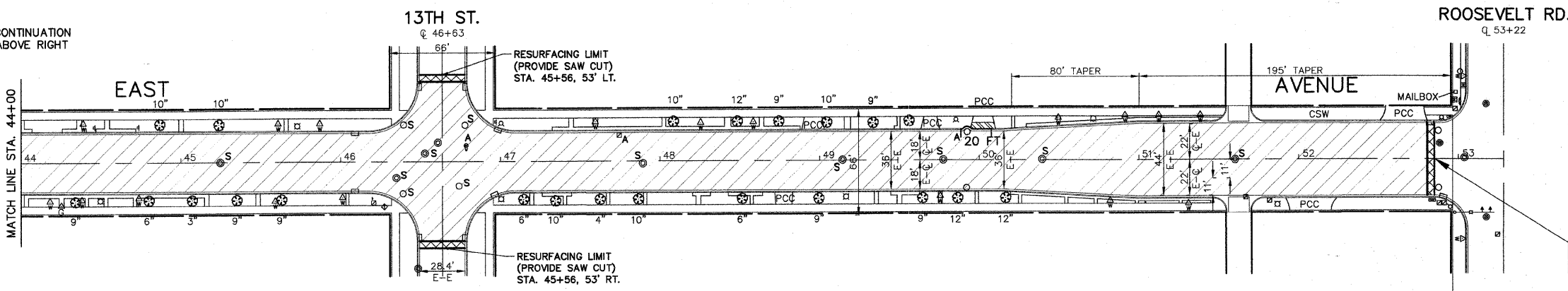
FOR CONTINUATION  
SEE BELOW LEFT

FOR TYPICAL CROSS SECTION OF NEW PAVEMENT WORK SEE SHEET 3

- NOTE:**
- 1 ALL EXISTING FRAMES AND LIDS THAT ARE TO BE REPLACED (AS DIRECTED BY THE ENGINEER) SHALL BE SALVAGED TO THE CONTRACTOR.
  - 2 ALL SAW CUTS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

**IMPORTANT!**  
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES INDICATED IN TITLE BLOCK.

FOR CONTINUATION  
SEE ABOVE RIGHT

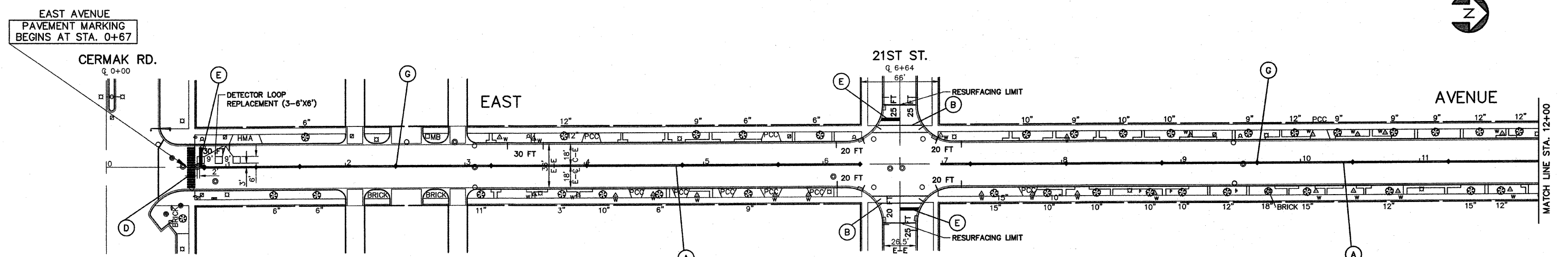


REVISIONS			
NO.	BY	DATE	DESCRIPTION
2	JEF	6-24-09	PER I.D.O.T. REVIEW

PROJECT NO. 06077	SCALE V: 1"=5' H: 1"=40'
DRAWN/DESIGNED JEP/AMS	DATE APRIL, 2009
CHECKED/APPROVED JFP/JEF	FIELD BOOK NO. FILE

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00155-00-RS	COOK	15	6
F.H.W.A. REG.	ILLINOIS	PROJECT	ARA-9003(176)	

CONTRACT NO. 63203



- THERMOPLASTIC STRIPING CODE**
- (A) PROPOSED DOUBLE SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING - CENTER LINE 4", 11" O/C
  - (B) PROPOSED SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 6" (CROSSWALK LINE)
  - (C) PROPOSED SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 6" (LANE LINE)
  - (D) PROPOSED SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 12" (PEDESTRIAN SCHOOL CROSSING)
  - (E) PROPOSED SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 24" (STOP BAR)
  - (F) PROPOSED SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS
  - (G) PROPOSED RECESSED REFLECTIVE PAVEMENT MARKERS - 80' O/C OR AS SHOWN
- ◆ TWO-WAY AMBER MARKER
  - ▶ ONE-WAY AMBER MARKER
  - ▷ ONE-WAY CRYSTAL MARKER

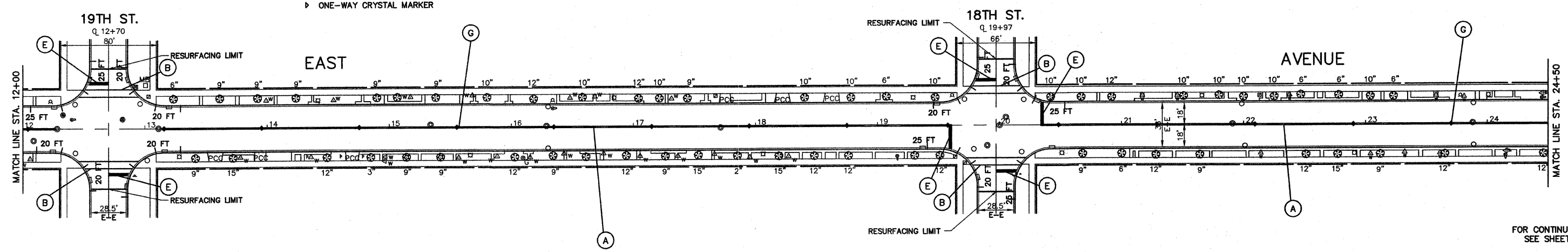
**NOTE:**  
AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS, THE CONTRACTOR SHALL CONTACT THE AREA TRAFFIC FIELD TECHNICIAN, PATRICE HARRIS, AT 1-708-597-9800.

**NOTE:**  
ALL "ARROWS" AND "ONLYS" SHALL BE 8' IN HEIGHT.

**NOTE:**  
PROPOSED DOUBLE SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING - CENTER LINE 4", 11" O/C (NOTE: (A)) IS MEASURED PER LINE, TOTAL QUANTITY AND PAYMENT LENGTH IS FOR EACH LINEAR FOOT OF SINGLE 4" STRIPE INSTALLED.

**NOTE:**  
SHORT-TERM PAVEMENT MARKING IS PROPOSED ON THE NEW LEVELING BINDER AND ON THE NEW SURFACE. SEE ARTICLE 703.04 OF THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

FOR CONTINUATION  
SEE BELOW LEFT



FOR CONTINUATION  
SEE SHEET 8

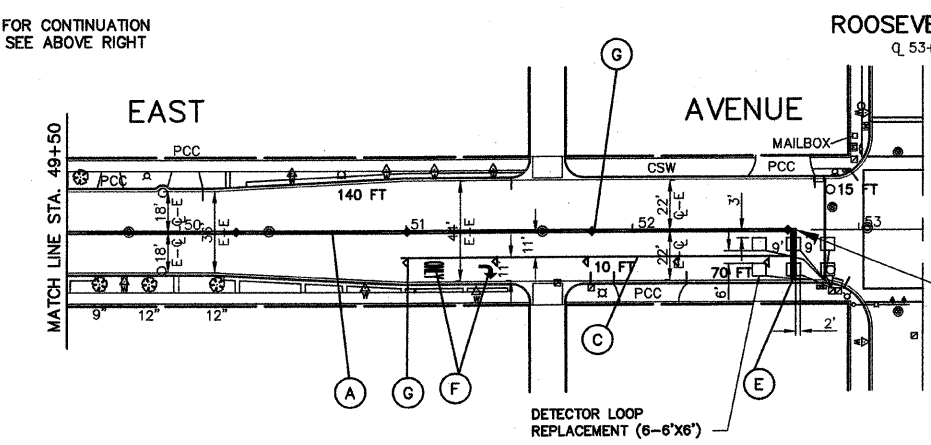
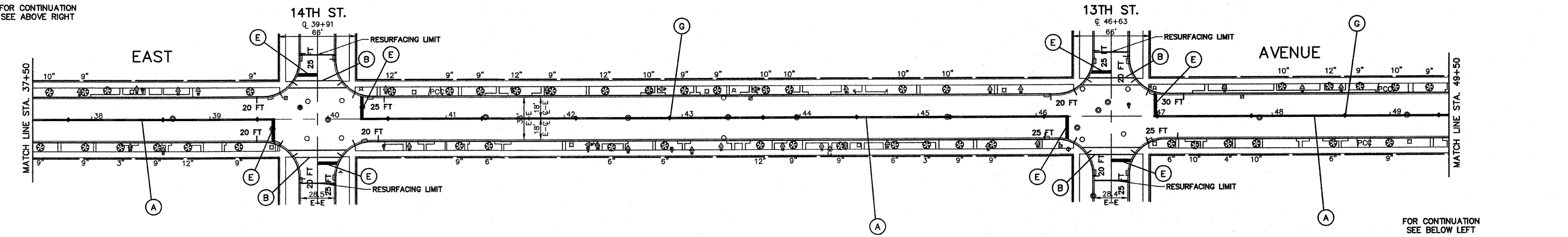
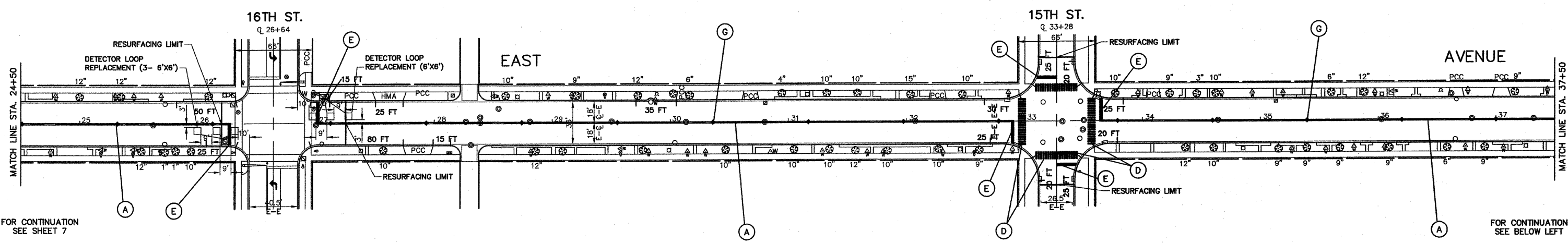
**IMPORTANT!**  
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES INDICATED IN TITLE BLOCK.

REVISIONS			
NO.	BY	DATE	DESCRIPTION
1	JEF	5-1-09	PER I.D.O.T. REVIEW
2	JEF	6-24-09	PER I.D.O.T. REVIEW
3	JEF	7-16-09	PER I.D.O.T. REVIEW

PROJECT NO. 06077	SCALE 1"=40'	SHEET 6 OF 15 SHEETS
DRAWN/DESIGNED JEP/AMS	DATE APRIL, 2009	
CHECKED/APPROVED JFP/JEF	FIELD BOOK NO. FILE	

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00165-00-RS	COOK	15	7
F.H.W.A. REG.	ILLINOIS PROJECT	ARA-9003(176)		

CONTRACT NO. 63203



- THERMOPLASTIC STRIPING CODE**
- (A) PROPOSED DOUBLE SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING - CENTER LINE 4", 11" O/C
  - (B) PROPOSED SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 6" (CROSSWALK LINE)
  - (C) PROPOSED SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 6" (LANE LINE)
  - (D) PROPOSED SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 12" (PEDESTRIAN SCHOOL CROSSING)
  - (E) PROPOSED SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 24" (STOP BAR)
  - (F) PROPOSED SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS
  - (G) PROPOSED RECESSED REFLECTIVE PAVEMENT MARKERS - 80' O/C OR AS SHOWN
- ◆ TWO-WAY AMBER MARKER
  - ▶ ONE-WAY CRYSTAL MARKER

**NOTE:**  
AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS, THE CONTRACTOR SHALL CONTACT THE AREA TRAFFIC FIELD TECHNICIAN, PATRICE HARRIS, AT 1-708-597-9800.

**NOTE:**  
ALL "ARROWS" AND "ONLYS" SHALL BE 8" IN HEIGHT.

**NOTE:**  
PROPOSED DOUBLE SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING - CENTER LINE 4", 11" O/C (NOTE: (A)) IS MEASURED PER LINE. TOTAL QUANTITY AND PAYMENT LENGTH IS FOR EACH LINEAR FOOT OF SINGLE 4" STRIPE INSTALLED.

**NOTE:**  
SHORT-TERM PAVEMENT MARKING IS PROPOSED ON THE NEW LEVELING BINDER AND ON THE NEW SURFACE. SEE ARTICLE 703.04 OF THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

EAST AVENUE  
PAVEMENT MARKING  
ENDS AT STA. 52+70

**IMPORTANT!**  
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES INDICATED IN TITLE BLOCK.

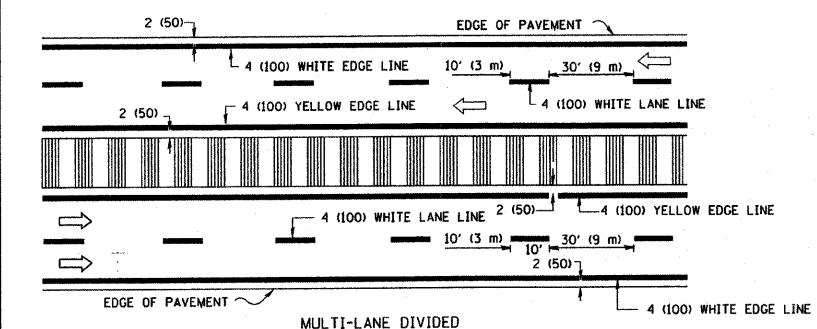
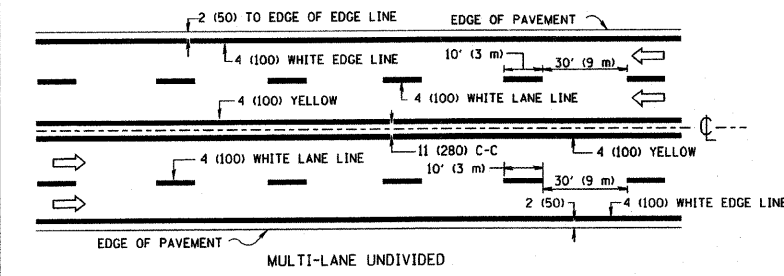
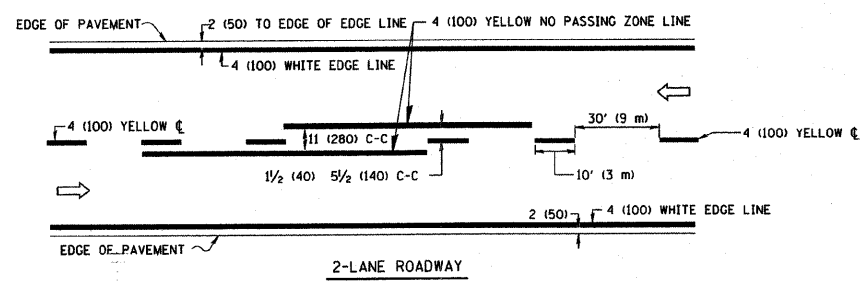
**Frank Novotny & Associates, Inc.**  
Civil Engineers/  
Municipal Consultants  
825 Midway Drive ♦ Willowbrook, IL ♦ 60527 ♦ Telephone: (630) 887-8640 ♦ Fax: (630) 887-0132  
Illinois Professional Design Firm No. 184-000928

PROJECT  
**CITY OF BERWYN, ILLINOIS**  
**EAST AVENUE LAPP RESURFACING**  
MFT SECTION NO. 08-00165-00-RS

REVISIONS			
NO.	BY	DATE	DESCRIPTION
1	JEF	5-1-09	PER I.D.O.T. REVIEW
2	JEF	6-24-09	PER I.D.O.T. REVIEW
3	JEF	7-16-09	PER I.D.O.T. REVIEW

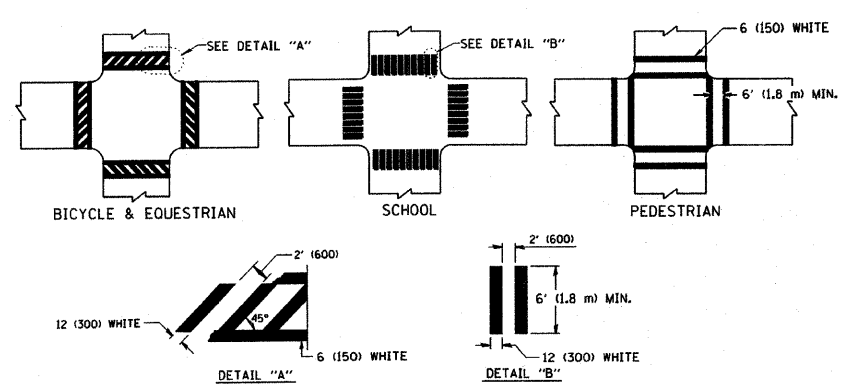
**PLAN SHEET: EAST AVENUE**  
**(PAVEMENT MARKING)**  
STA. 24+50 TO ROOSEVELT RD.

PROJECT NO. 06077	SCALE 1"=40'	SHEET 7
DRAWN/DESIGNED JEP/AMS	DATE APRIL, 2009	OF 15
CHECKED/APPROVED JFP/JEF	FIELD BOOK NO. FILE	SHEETS

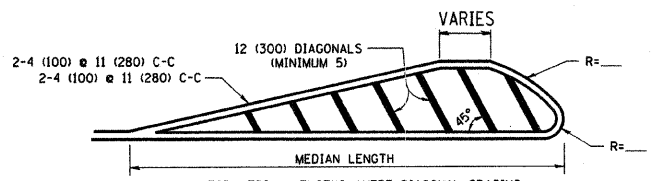
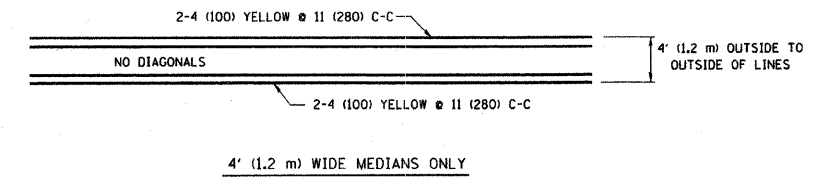


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

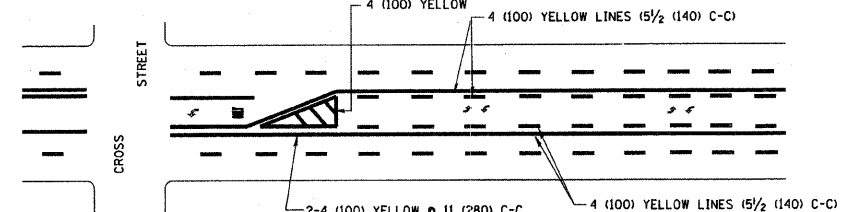


TYPICAL CROSSWALK MARKING

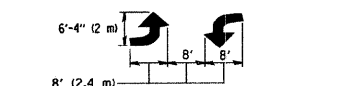


FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.  
 DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

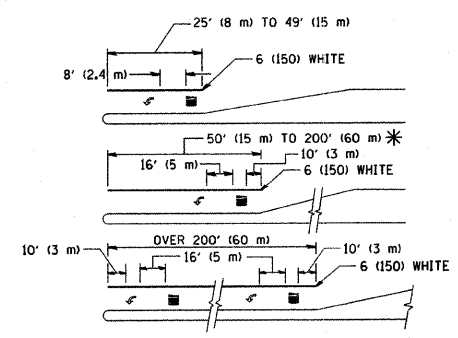


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

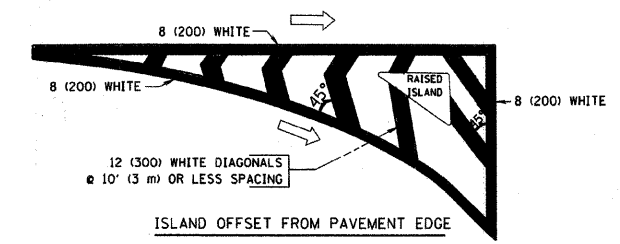
TYPICAL PAINTED MEDIAN MARKING



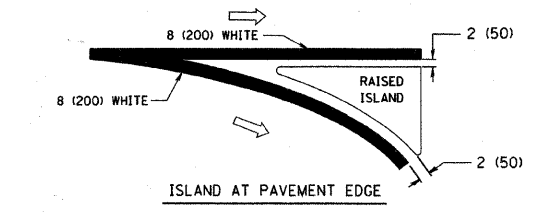
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
 \* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

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 UNDIVIDED 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	5/2 (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; 5/2 (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) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
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.

	LARGE SIZE	SMALL SIZE
THROUGH ARROW	1.07 (11.5)	0.60 (6.5)
LEFT OF RIGHT ARROW	1.47 (15.6)	0.60 (6.5)
COMBINATION LEFT (RIGHT) AND THROUGH ARROW	2.42 (26.0)	1.37 (14.7)

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

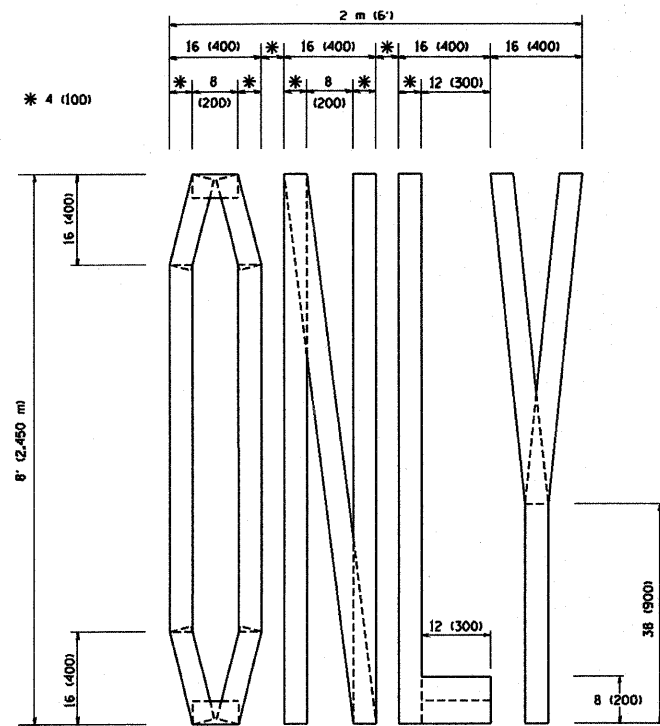
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 USER NAME = bwardt

REVISIONS			
NO.	BY	DATE	DESCRIPTION

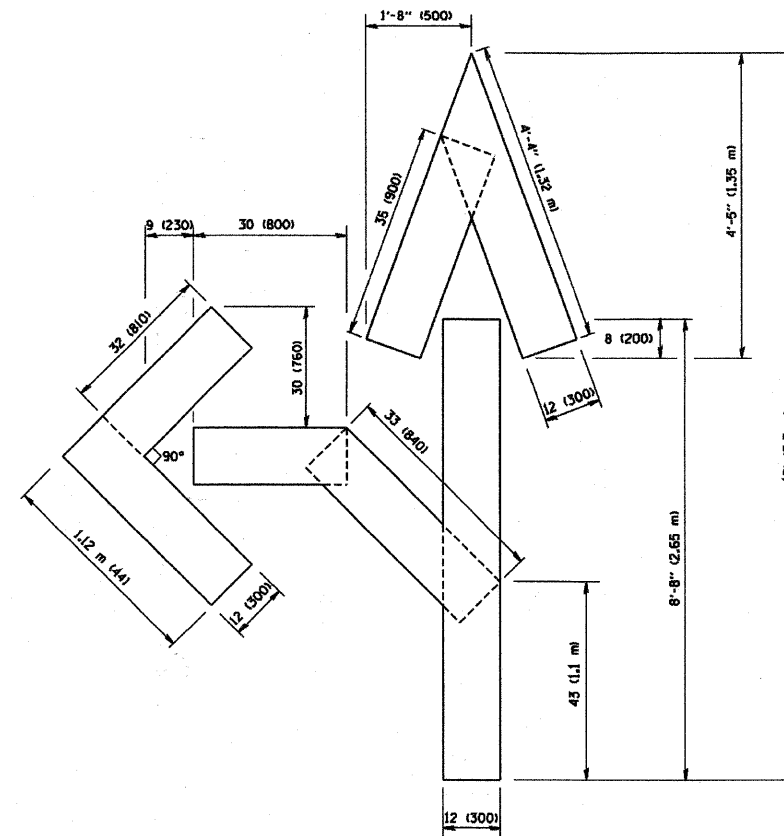


FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00165-00-RS	COOK	15	9
F.H.W.A. REG.	ILLINOIS	PROJECT	ARA-9003(176)	

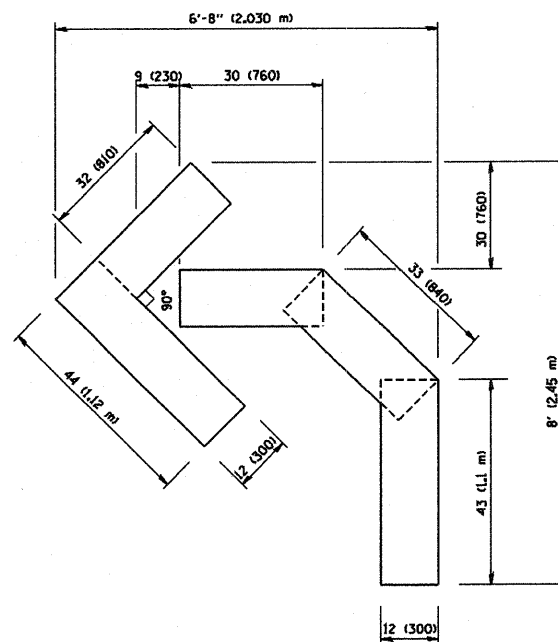
CONTRACT NO. 63203



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	
NO.	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

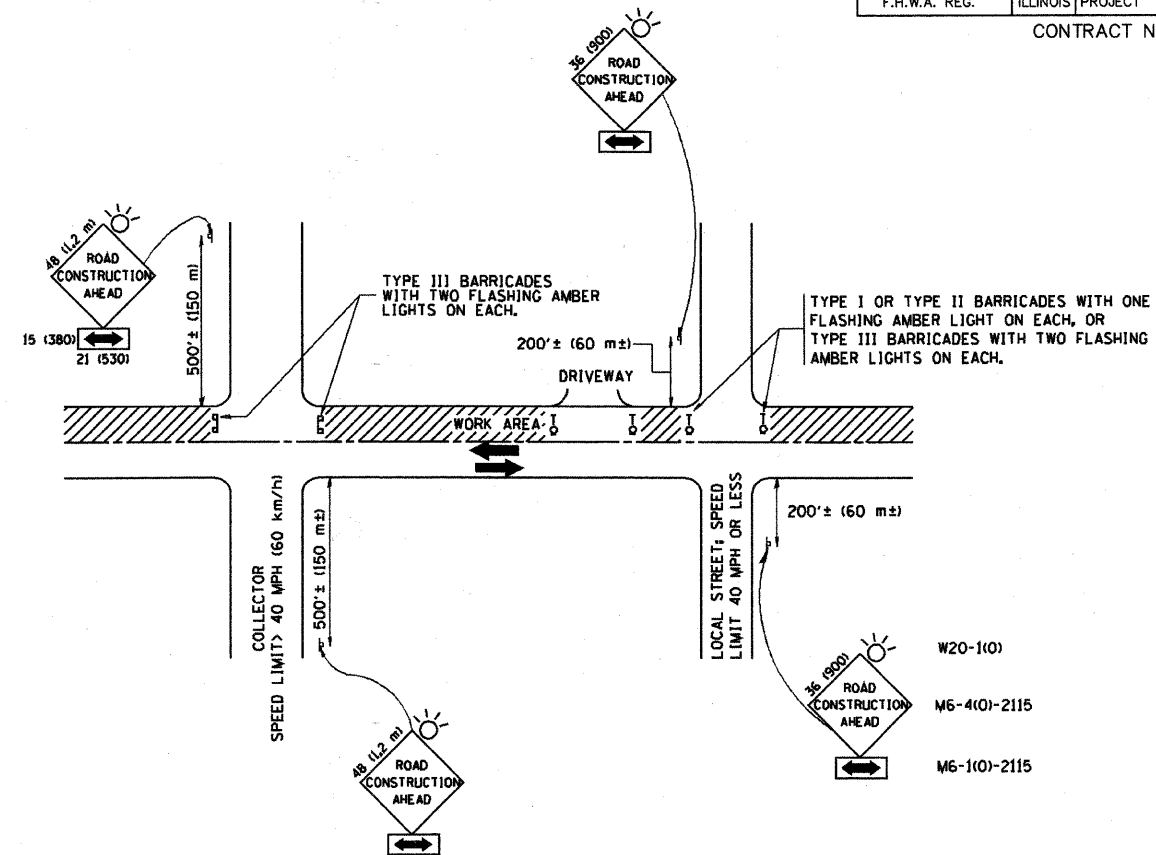
CHECKED BY  
TC-16

PLOT DATE: 3/7/2007  
FILE NAME: C:\Users\w\Documents\Projects\08-00165-00-RS\08-00165-00-RS.dwg  
PLOT SCALE: 1/8" = 1'-0"  
PLOT DEVICE: HP DesignJet 5000

REVISIONS			
NO.	BY	DATE	DESCRIPTION

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00165-00-RS	COOK	15	10
F.H.W.A. REG.	ILLINOIS	PROJECT	ARA-9003(176)	

CONTRACT NO. 63203



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	6/789
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  
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PLOT SCALE = 3/8"=1'-0"  
USER NAME = bshopp

REVISIONS			
NO.	BY	DATE	DESCRIPTION

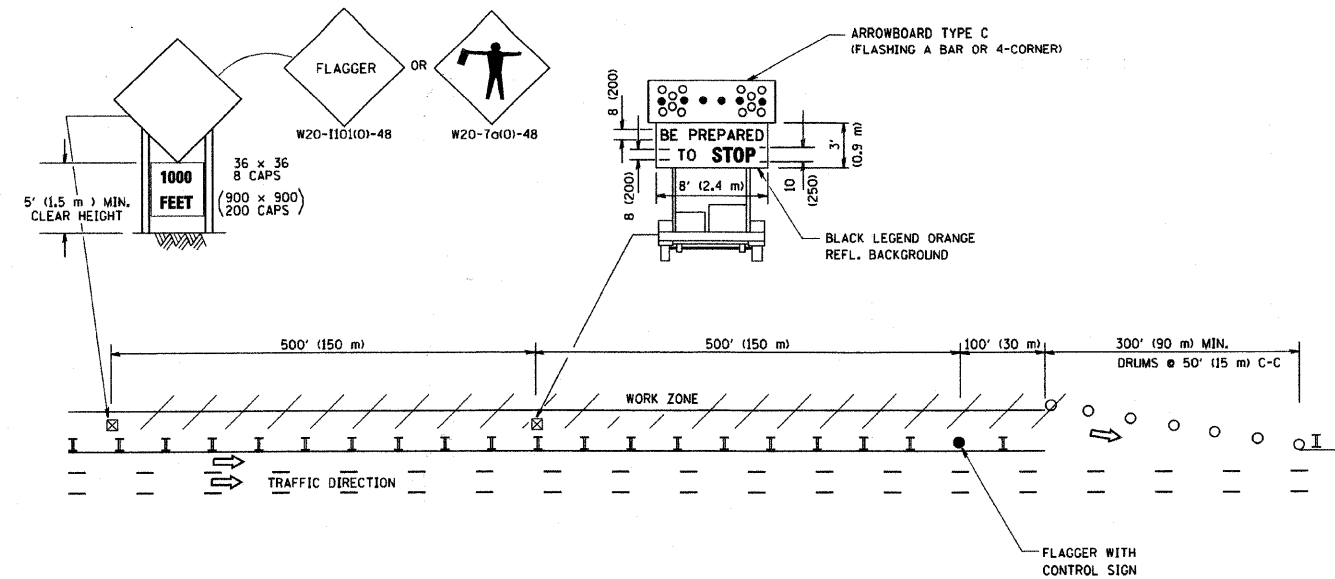
PROJECT NO. 06077	SCALE NONE
DRAWN/DESIGNED JEP/AMS	DATE APRIL, 2009
CHECKED/APPROVED JFP/JEF	FIELD BOOK NO. FILE

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00165-00-RS	COOK	15	11
F.H.W.A. REG.	ILLINOIS PROJECT	ARA-9003(176)		

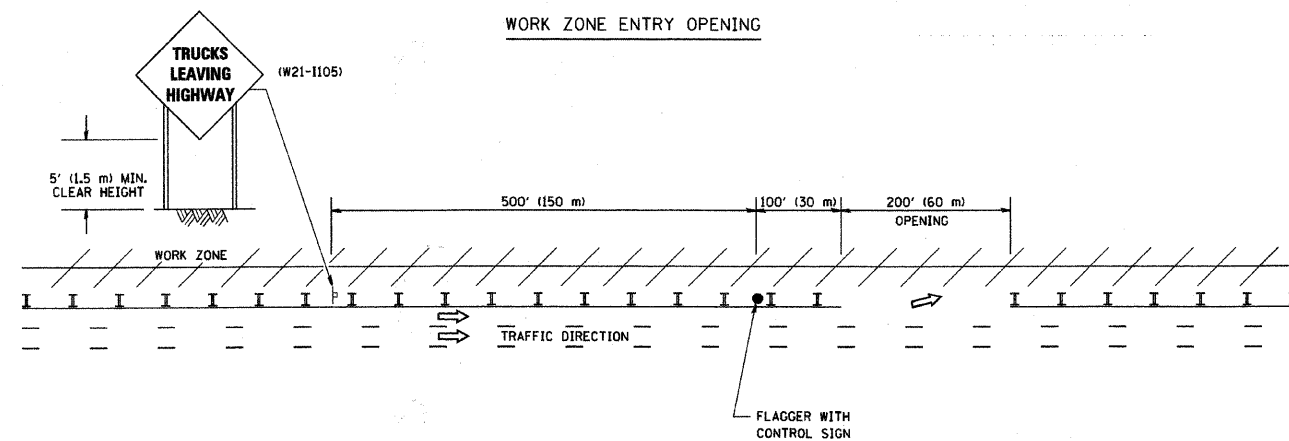
CONTRACT NO. 63203

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. The Arrowboard, the Flagger Ahead trailer mounted sign, and the Trucks Leaving Highway sign shall be removed or turned away from traffic and the exit and entry openings shall be closed when the flagging operation ceases.
2. Work Zone Exit Openings should be a minimum of one half mile apart.
3. Exiting the work zone at any place other than at a Work Zone Exit Opening will be prohibited.
4. All vehicles shall enter the work zone at entry openings, using their turn signals to warn motorists

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISIONS	
NO.	DATE
DWS	8/98
JAF	4/03
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

SCALE: NONE

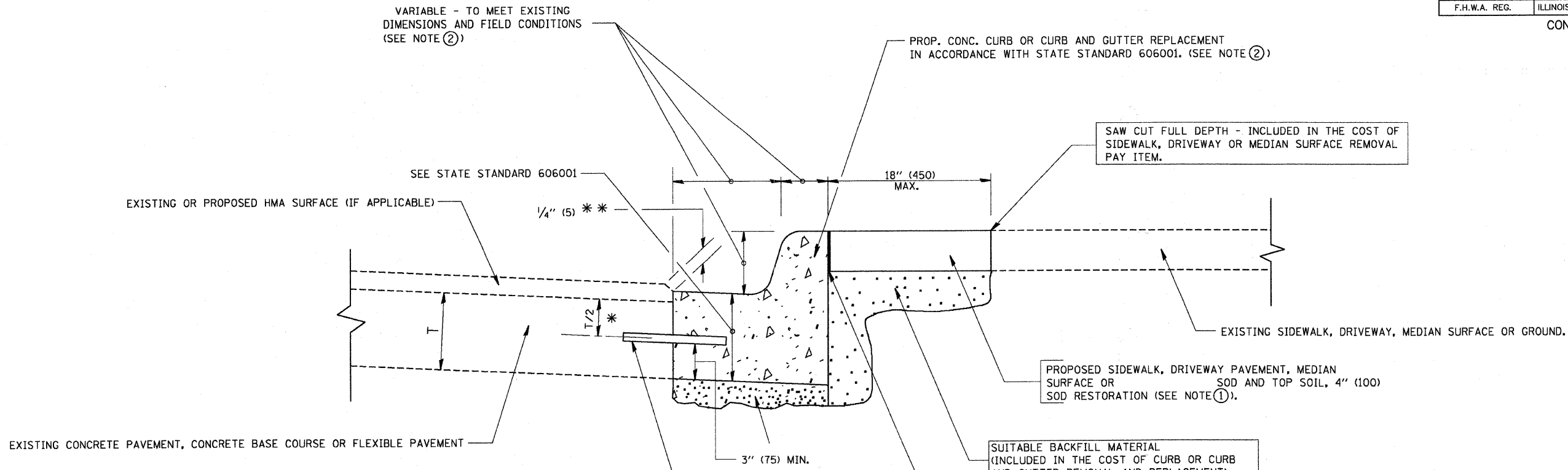
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CHECKED BY TC-18

PLOT DATE: 3/7/2007  
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USER: NAME: [redacted]

REVISIONS			
NO.	BY	DATE	DESCRIPTION

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00165-00-RS	COOK	15	12
F.H.W.A. REG.	ILLINOIS PROJECT	ARA-9003(176)		

CONTRACT NO. 63203



- \* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- \*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

- ② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
- ③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
- ④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑤ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
- ⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:  
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "CURB & GUTTER REMOVAL" AND "COMBINATION CONCRETE CURB & GUTTER" OF THE TYPE INDICATED.

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

## CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

REVISIONS	
NAME	DATE
A. HOUSEH	03/11/94
R. SHAH	02/24/95
R. SHAH	03/02/95
R. SHAH	08/19/96
R. SHAH	09/12/96
R. SHAH	09/19/96
R. SHAH	10/03/96
A. ABBAS	03/21/97
M. GOMEZ	01/22/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION  
  
CURB OR  
CURB AND GUTTER  
REMOVAL AND REPLACEMENT

SCALE: VERT. NONE  
HORIZ. NONE

DRAWN BY  
CHECKED BY  
BD600-06 (BD-24)

PLOT DATE = 3/6/2007  
 FILE NAME = K:\admin\10024.dgn  
 USER = BORO / IN.

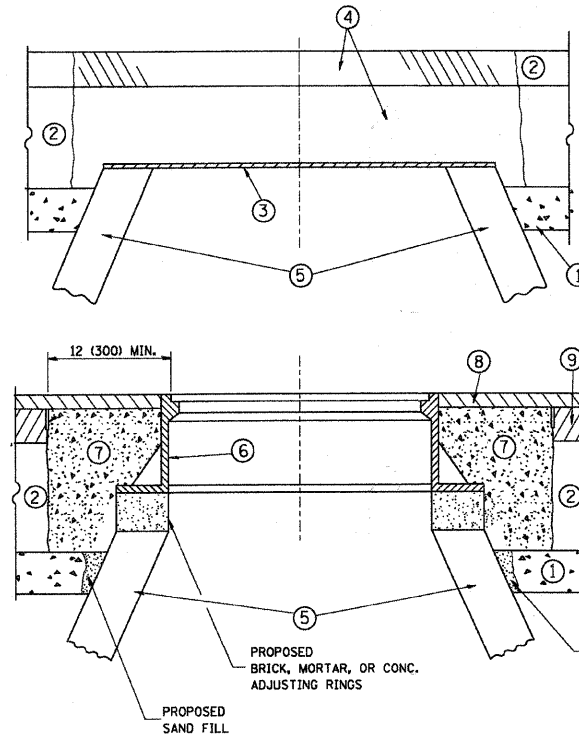
REVISIONS			
NO.	BY	DATE	DESCRIPTION

CURB OR  
CURB AND GUTTER  
REMOVAL AND REPLACEMENT

PROJECT NO. 06077	SCALE NONE	SHEET 12 OF 15 SHEETS
DRAWN/DESIGNED JEP/AMS	DATE APRIL, 2009	
CHECKED/APPROVED JFP/JEF	FIELD BOOK NO. FILE	

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00165-00-RS	COOK	15	13
F.H.W.A. REG.	ILLINOIS	PROJECT	ARA-9003(176)	

CONTRACT NO. 63203



**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 1 1/2 (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

**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

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

**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 105.04 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.

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISIONS	
NO.	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)

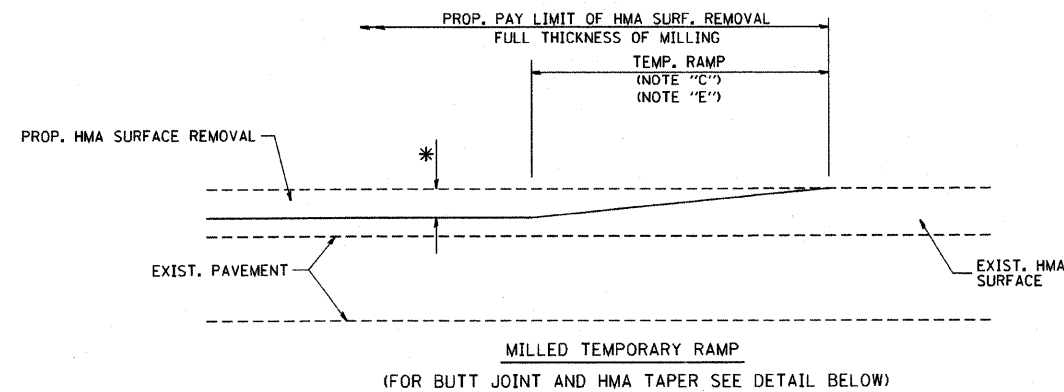
PLOT DATE: 3/6/2007  
 FILE NAME: R:\Projects\08-00165-00-RS.dwg  
 USER: NAME: bbarndt

REVISIONS			
NO.	BY	DATE	DESCRIPTION

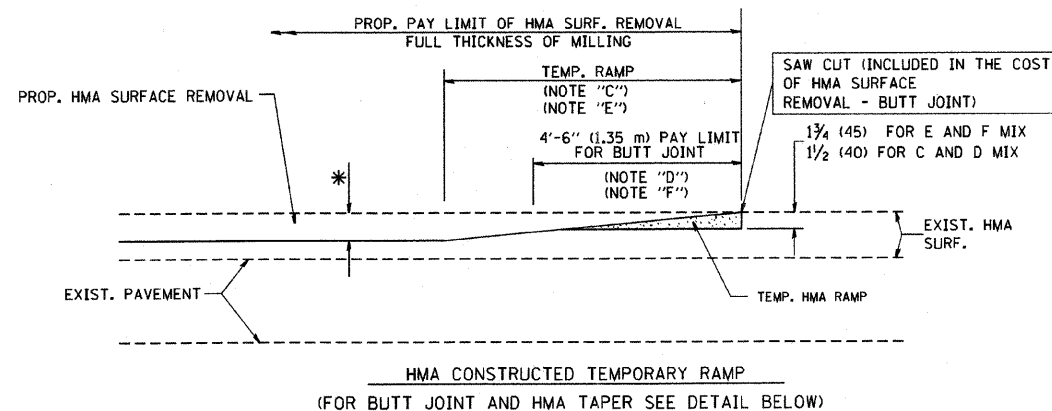
PROJECT NO. 06077	SCALE NONE
DRAWN/DESIGNED JEP/AMS	DATE APRIL, 2009
CHECKED/APPROVED JFP/JEF	FIELD BOOK NO. FILE

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00165-00-RS	COOK	15	14
F.H.W.A. REG.	ILLINOIS	PROJECT	ARA-9003(176)	

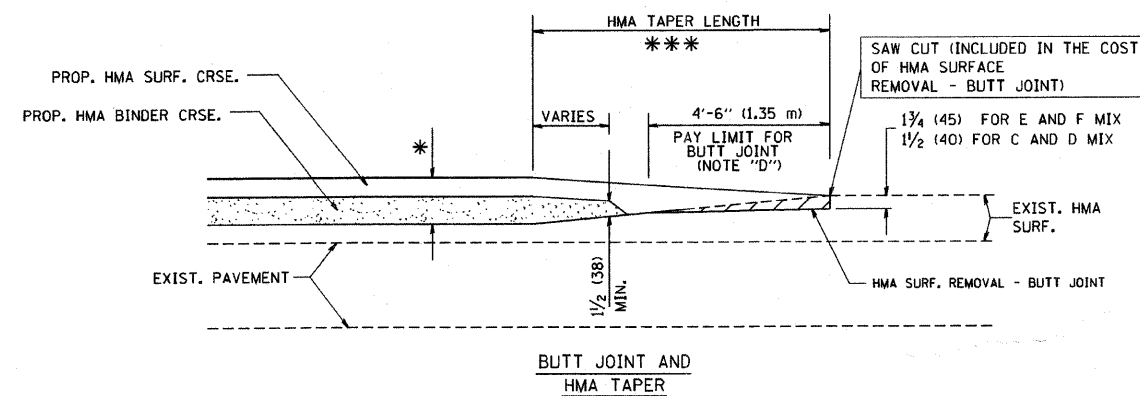
CONTRACT NO. 63203



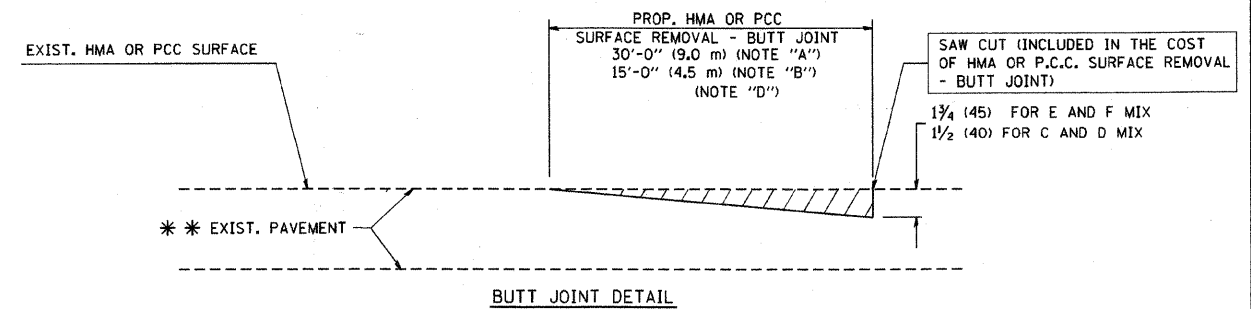
OPTION 1



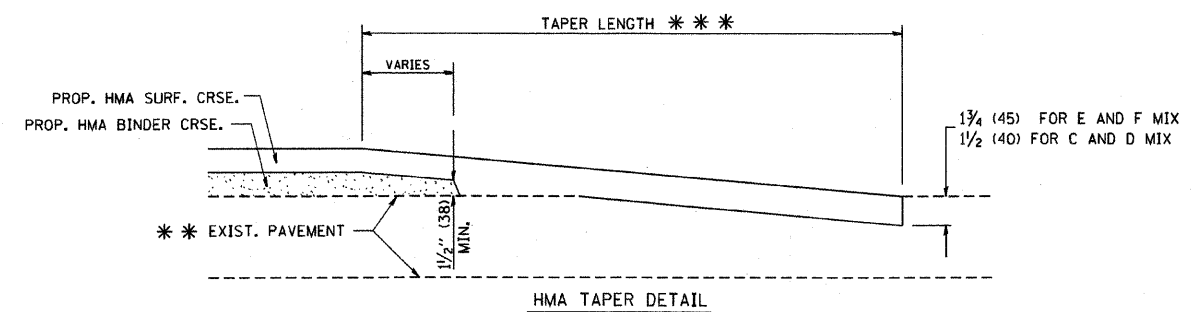
OPTION 2  
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER  
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



TYPICAL BUTT JOINT AND HMA TAPER  
FOR RESURFACING ONLY

\*\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
  - B: MINOR SIDE ROADS.
  - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
  - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
  - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
  - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
  - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

\*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

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

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQURE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND  
HMA TAPER  
DETAILS

SCALE: VERT. NONE  
HORIZ.

DRAWN BY  
CHECKED BY

BD400-05 (V1-BD32)

PLOT DATE = 3/5/2007  
FILE NAME = K:\mstn\0402.dwg  
USER NAME = bbarndt



Frank Novotny & Associates, Inc.

825 Midway Drive ♦ Willowbrook, IL ♦ 60527 ♦ Telephone: (630) 887-8640 ♦ Fax: (630) 887-0132  
Illinois Professional Design Firm No. 184-000928

PROJECT

CITY OF BERWYN, ILLINOIS  
EAST AVENUE LAPP RESURFACING  
MFT SECTION NO. 08-00165-00-RS

REVISIONS			
NO.	BY	DATE	DESCRIPTION

BUTT JOINT AND  
HMA TAPER  
DETAILS

PROJECT NO. 06077	SCALE NONE
DRAWN/DESIGNED JEP/AMS	DATE APRIL, 2009
CHECKED/APPROVED JFP/JEP	FIELD BOOK NO. FILE

SHEET  
14  
OF  
15  
SHEETS

