

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	12-00036-00-RS	COOK	12	1
STA. 10+00 TO STA. 22+12				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
CONTRACT NO. 63790				

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAP RTE 366 (CENTRAL AVENUE)
65th STREET TO 67th STREET
ROADWAY RESURFACING
SECTION No. 12-00036-00-RS
PROJECT No. M 4003(075)
JOB No. C-91-556-12
VILLAGE OF BEDFORD PARK
COOK COUNTY

INDEX TO SHEETS:

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	GENERAL NOTES
3.	SUMMARY OF QUANTITIES
4.	TYPICAL EXISTING SECTIONS AND TYPICAL SECTIONS; STRUCTURAL DESIGN INFORMATION; HOT-MIX ASPHALT MIXTURE CHART
5.	PLAN AND PROFILE SHEET
6.	PLAN AND PROFILE SHEET AND STRUCTURE REPAIR SCHEDULE
7.	PAVEMENT MARKING PLAN AND LOOP DETECTOR REPLACEMENT PLAN
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9.	DISTRICT 1 DETAIL-TC 10-TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS
10.	DISTRICT 1 DETAIL-TS 07-DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING
11.	DISTRICT 1 DETAIL-BD 32-BUTT JOINT AND HMA TAPER

HIGHWAY STANDARDS:

STANDARD NO.	DESCRIPTION
000001-06:	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03:	CLASS D PATCHES
602001-02:	CATCH BASIN TYPE A
602011-02:	CATCH BASIN TYPE C
602301-03:	INLET, TYPE A
606001-05:	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701501-06:	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701901-02:	TRAFFIC CONTROL DEVICES
780001-03:	TYPICAL PAVEMENT MARKINGS

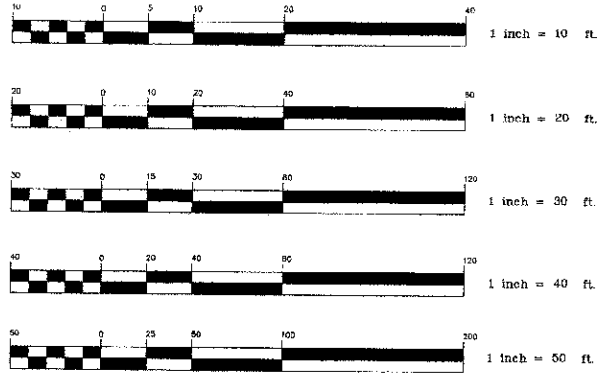
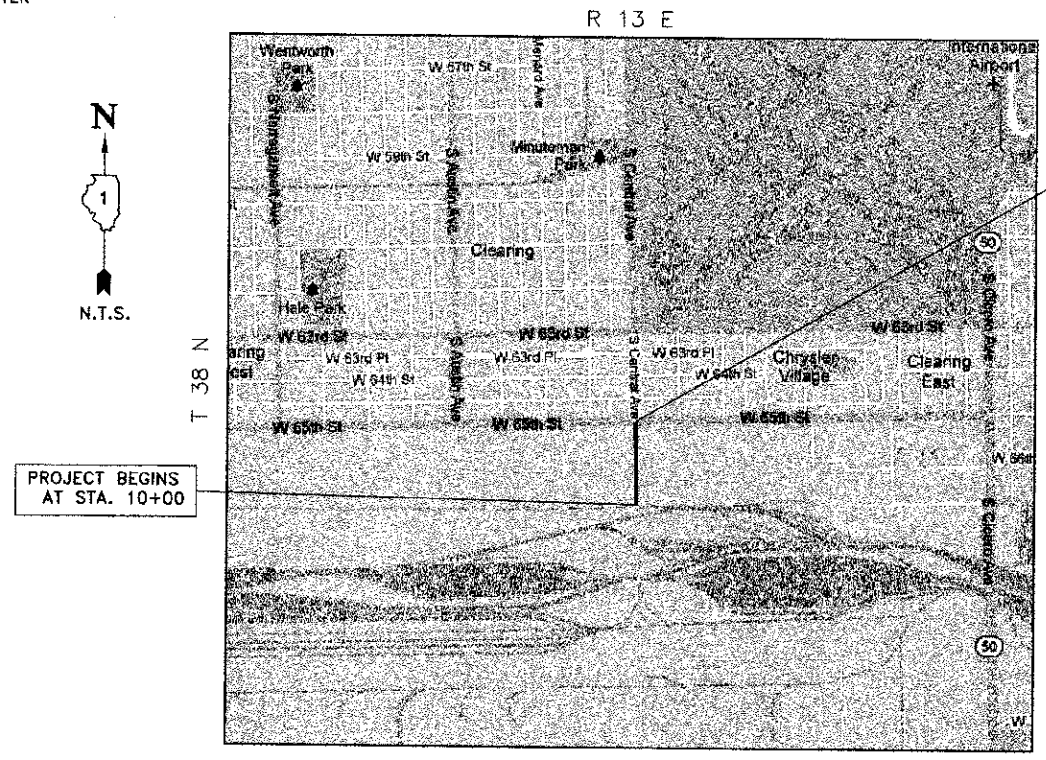
ADT = 400
SPEED LIMIT = 20 MPH
DESIGN SPEED = 25 MPH
DESIGN DESIGNATION - LOCAL

PROGRAM & OFFICE ENGINEER: CHARLES F. RIDGLE, P.E. 1-847-705-4406 SCHAMBURG, IL
CONSULTANT: HOEFFERLE BUTLER ENGINEERING, INC. 1-708-599-8980



THIS PROJECT IS LOCATED IN
THE VILLAGE OF BEDFORD PARK

PROJECT ENDS AT
STA. 22+12



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	<i>[Signature]</i> 31 . 20 13 VILLAGE OF BEDFORD PARK PRESIDENT
PASSED	March 1 . 20 13 <i>[Signature]</i> DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS
RELEASING FOR BID BASED ON LIMITED REVIEW	March 4 . 20 13 <i>[Signature]</i> DEPUTY DIRECTOR OF HIGHWAYS/REGION ENGINEER

J.U.L.I.E.
JOINT UTILITY LOCATION FOR EXCAVATION
1-800-892-0123 -OR- 811

CONTRACT NO. 63790

GROSS LENGTH OF PROJECT 1,212 FEET (0.23 MILES)
NET LENGTH OF PROJECT 1,212 FEET (0.23 MILES)

hbe Hoefflerle-Butler Engineering, Inc.
Consulting Civil Engineers - Land Surveyors
PROFESSIONAL DESIGN FIRM LICENSE NO. 194-000269
8714 S. ROBERTS ROAD HICKORY HILLS, ILLINOIS 60457
C780 599-8980 FAX C780 599-8790

EXPIRES 11-30-13

[Signature]
SIGNATURE
2/1/13
DATE

PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS

H&E JOB No. 11-511

GENERAL NOTES

CLEARING

ALL AREAS DESIGNATED IN PLANS AS TO BE CLEARED SHALL INVOLVE REMOVAL OF OBSTRUCTIONS AS DEFINED IN ARTICLE 201.01(a) OF THE STANDARD SPECIFICATIONS. ALL CLEARING SHALL NOT BE PAID FOR SEPARATELY, BUT INCLUDED IN THE COST OF THE CONTRACT.

UTILITIES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNER OF ALL EXISTING FACILITIES SO THAT THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS. THE CONTRACTORS SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS.

THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM AND SANITARY SEWERS, WATER SERVICE LINES AND OTHER UTILITY LINES ARE BASED ON RECORD INFORMATION PROVIDED, AND THE ENGINEER/VILLAGE DOES NOT GUARANTEE THEIR ACCURACY, THEIR EXACT HORIZONTAL AND VERTICAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT HIS OWN EXPENSE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER OR THE VILLAGE. THIS WORK SHALL BE AT THE CONTRACTORS EXPENSE.

COORDINATION OF ALL UTILITY WORK INVOLVED IN THE CONSTRUCTION AREA WILL BE DISCUSSED AT THE PRECONSTRUCTION CONFERENCE.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS AND CABLE TELEVISION FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED.)

CARE IS TO BE TAKEN AS NOT TO DAMAGE ANY OF THE EXISTING TRAFFIC SIGNAL CONDUITS AND EQUIPMENT. IF ANY OF THE TRAFFIC SIGNAL CONDUIT AND/OR EQUIPMENT IS DAMAGED, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE THE CONDUIT AND/OR EQUIPMENT AT NO COST TO THE STATE OR VILLAGE.

STORM SEWER

ANY EXISTING STORM SEWER DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS OR HER OWN EXPENSE.

RESTORATION

CONTRACTOR IS TO RESTORE ALL UNPAVED AREAS DAMAGED DURING CONSTRUCTION OPERATIONS TO THEIR ORIGINAL CONDITION INCLUDING THE FINE GRADING AND SODDING OR SEEDING OF AREAS WITHIN EASEMENTS AND RIGHTS-OF-WAY.

MISCELLANEOUS

ACCESS: THE CONTRACTOR SHALL PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING CONSTRUCTION, EXCEPT DURING THE INSTALLATION OF SIDEWALK SPANNING DRIVEWAYS, WHICH INCLUDES THE LENGTH OF TIME NECESSARY FOR EXCAVATION, FRAMING, POURING, AND CURING.

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

ALL SAWCUTTING SHALL BE INCLUDED IN THE UNIT OF COST OF REMOVAL ITEMS AND SHALL BE PERFORMED PRIOR TO BEGINNING REMOVAL. ANY ITEMS OF WORK REMOVED PRIOR TO SAWCUTTING WILL NOT BE MEASURED FOR PAYMENT.

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.) TYPE III BARRICADES SHALL HAVE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.

ANY EXISTING PAVEMENT OUTSIDE THE AREAS DESIGNATED FOR REMOVAL IN THE PLANS DAMAGED BY THE CONTRACTOR DURING THE CONSTRUCTION SHALL BE REPLACED/REPAIRED BY THE CONTRACTOR AT HIS/HERS OWN EXPENSE TO THE SATISFACTION OF THE ENGINEER WITH NO ADDITIONAL COMPENSATION TO THE CONTRACTOR.

STAKING

THE CONTRACTOR SHALL TAKE CARE TO PROTECT AND PRESERVE ALL STAKING AND MARKING DURING CONSTRUCTION. CONTINUOUS DESTRUCTION OF STAKES AS A RESULT OF CARELESSNESS MAY RESULT IN THE CONTRACTOR BEING BILLED FOR THE COST OF REPLACEMENT.

THE ENGINEER SHALL BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK. THEY SHALL BE NOTIFIED AT LEAST 72 HOURS IN ADVANCE IF CONSTRUCTION STAKING IS REQUIRED.

CENTRAL AVENUE STA 10+00 TO STA 22+12	DRAWN BY: JMH	REVISED: _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	CHECKED BY: SAL	REVISED: _____			FAP RT 366	12-00036-00-RS	COOK	12	2	
	DATE: 12.04.12	REVISED: _____			CONTRACT No. 63790					
	REVISED: _____	REVISED: _____			SCALE: N.T.S.	SHEET No: 2 OF 12 SHEETS	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

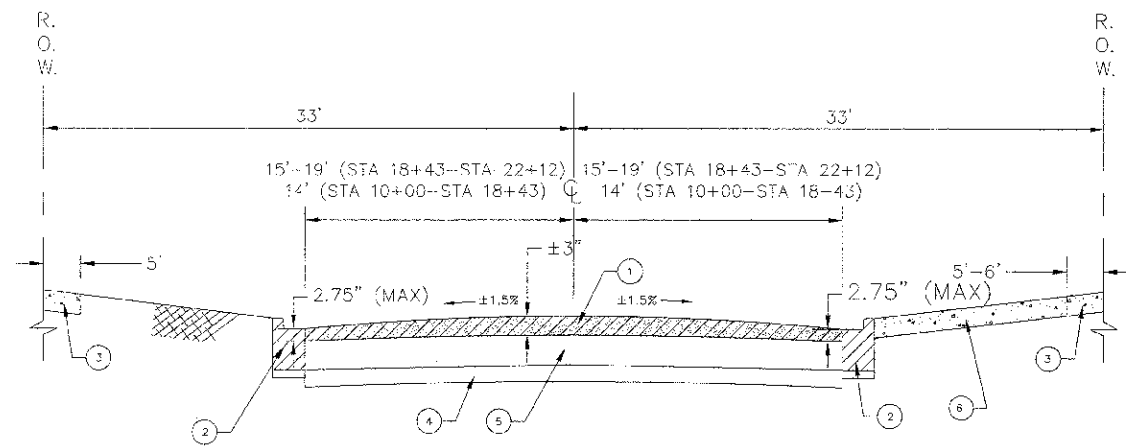
SUMMARY OF QUANTITIES

CODE NO.	PAY ITEM	UNITS	QTY.		CODE NO.	PAY ITEM	UNITS	QTY.
			CONSTRUCTION TYPE CODE 0005					CONSTRUCTION TYPE CODE 0005
~ X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	5		60206905	CATCH BASINS, TYPE C, TYPE 1 FRAME, OPEN LID	EACH	1
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	37		60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	1
35102000	AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	58		60250400	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	1
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	23		60266300	VALVE VAULTS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GAL	2919		60266600	VALVE BOXES TO BE ADJUSTED	EACH	2
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	1		60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	2
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	109		60500050	REMOVING CATCH BASINS	EACH	1
40600982	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	SQ YD	44		60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	2367
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	600		67100100	MOBILIZATION	L SUM	1
~ 42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	37		70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1
44000160	HOT-MIX ASPHALT SURFACE REMOVAL, 2-3/4"	SQ YD	3892		* 78000100	THERMOPLASTIC PAVEMENT MARKING-LETTERS AND SYMBOLS	SQ FT	61.20
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	629		* 78000200	THERMOPLASTIC PAVEMENT MARKING- LINE 4"	FOOT	2384
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	2367		* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	109
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	389		* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	48
44300100	AREA REFLECTIVE CRACK CONTROL TREATMENT	SQ YD	3892		~ * 88600600	DETECTOR LOOP REPLACEMENT	FOOT	224
60200105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME OPEN LID	EACH	4					

* DENOTES SPECIALTY ITEM

~ DENOTES SPECIAL PROVISION ITEM

CENTRAL AVENUE STA 10+00 TO STA 22+12	DRAWN BY: JMH	REVISED: _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	CHECKED BY: SAL	REVISED: _____		SCALE: N.T.S.	SHEET No. 3 OF 12 SHEETS	FAP RT 366	12-00036-00-RS	COOK	12	3
	DATE: 12.04.12	REVISED: _____								
	REVISED: _____	REVISED: _____				FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
					CONTRACT No. 63790					

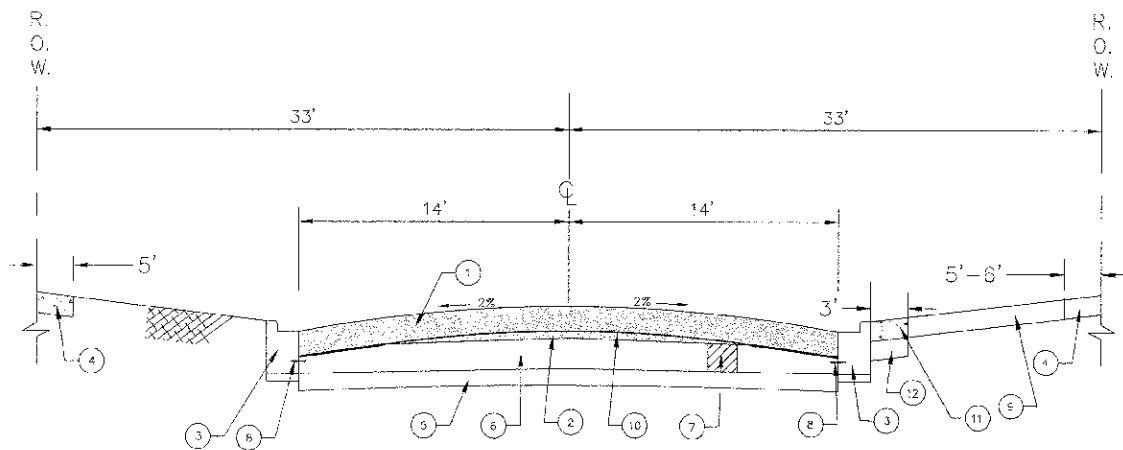


EXISTING TYPICAL SECTION
CENTRAL AVENUE; 65th - 67th STREET

- 1 PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2.75"
- 2 PROPOSED CURB & GUTTER REMOVAL, B6.12
- 3 EXISTING CONCRETE SIDEWALK
- 4 EXISTING GRANULAR SUB-BASE MATERIAL, 6"-13"
- 5 EXISTING CONCRETE BASE, 8"-10"
- 6 EXISTING CONCRETE DRIVEWAY

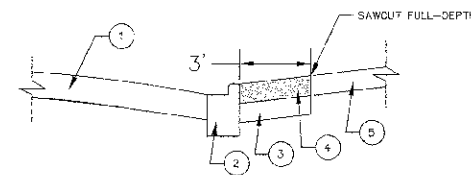
*DEPTH OF REMOVAL SHALL BE TO TOP OF CONCRETE BASE OR AT DISCRETION OF ENGINEER.

NOTES:
CROSS-HATCHED AREAS ARE TO BE REMOVED



PROPOSED TYPICAL SECTION
CENTRAL AVENUE; 65th - 67th STREET

- 1 PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX 'D', N50, 2"
- 2 PROPOSED HOT-MIX ASPHALT LEVELING BINDER (MACHINE METHOD), N50, VARIES
- 3 PROPOSED COMBINATION CONCRETE CURB & GUTTER, TYPE B6.12
- 4 EXISTING CONCRETE SIDEWALK
- 5 EXISTING GRANULAR SUB-BASE MATERIAL, 6"-13"
- 6 EXISTING CONCRETE BASE, 8"-10"
- 7 PROPOSED CLASS D PATCHES, TYPE II 10"
- 8 PROPOSED TIE BARS
- 9 EXISTING CONCRETE DRIVEWAY (WHERE SHOWN ON PLANS)
- 10 AREA REFLECTIVE CRACK CONTROL TREATMENT
- 11 PROPOSED P.C.C. DRIVEWAY PAVEMENT, 8"
- 12 PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 4"



PROPOSED TYPICAL SECTION
HOT-MIX ASPHALT DRIVEWAY

- 1 EXISTING PAVEMENT
- 2 PROPOSED COMBINATION CURB & GUTTER, TYPE B6.12
- 3 PROPOSED HOT MIX ASPHALT SURFACE COURSE, MIX 'D', N50, 3"
- 4 PROPOSED AGGREGATE BASE COURSE, TYPE B, 8"
- 5 EXISTING HOT-MIX ASPHALT DRIVEWAY PAVEMENT

STRUCTURAL DESIGN TRAFFIC: YEAR 2022
 PV = 364 SU = 16 MU = 20

ROAD/STREET CLASSIFICATION: CLASS II

PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
 P = 50 S = 50 M = 50

TRAFFIC FACTOR: ACTUAL T.F. = 0.133
 MINIMUM T.F. = N/A

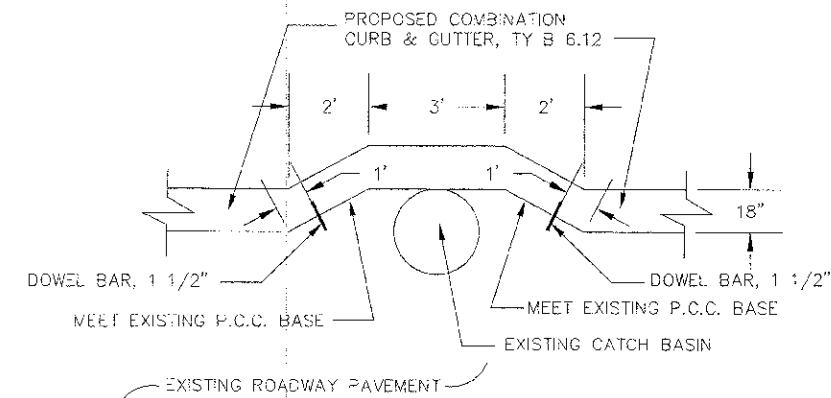
P6 GRADE: BINDER = N/A SURFACE = 64-22
 IBR = 2.5 SSR = FAIR

HOT-MIX ASPHALT MIXTURE REQUIREMENTS CHART	
MIXTURE TYPE	AIR VOIDS AT Ndes
PAVEMENT RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX 'D', N50, 2"	4% AT 50 GYR
HOT-MIX ASPHALT LEVELING BINDER (MACHINE METHOD), N50 (VARIES)	4% AT 50 GYR
DRIVEWAYS	
HOT-MIX ASPHALT SURFACE COURSE, MIX 'D', N50, 3"	4% AT 50 GYR
PATCHING	
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% AT 70 GYR

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN

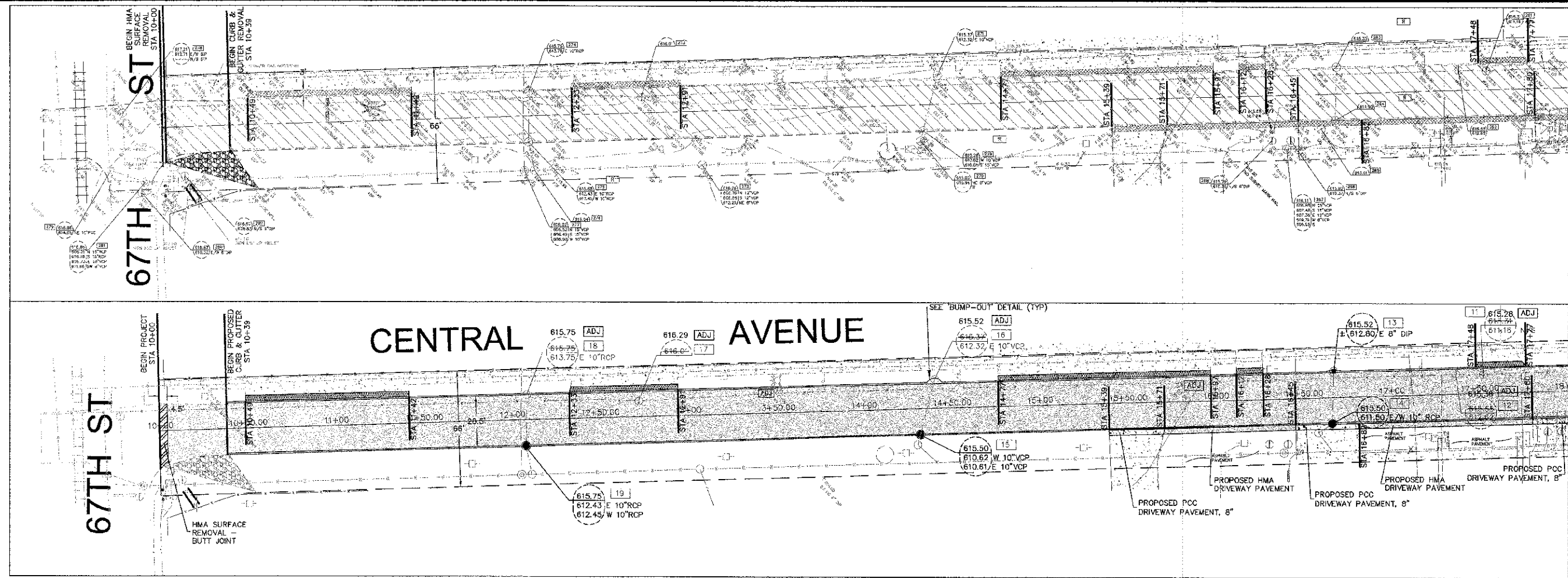
THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.



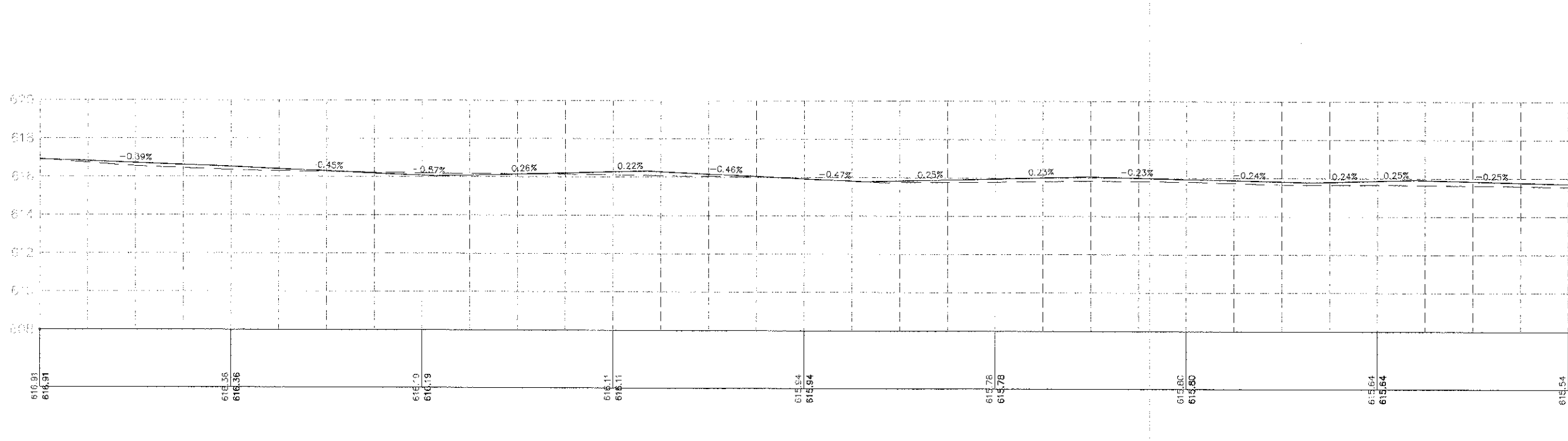
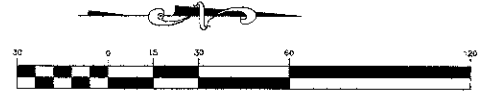
CURB 'BUMP-OUT' DETAIL

CENTRAL AVENUE STA 10+00 TO STA 22+12	DRAWN BY: JMH	REVISED: _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS		FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED BY: SAL	REVISED: _____				FAP RT 366	12-00036-00-RS	COOK	12	4
DATE: 12.04.12	REVISED: _____	CONTRACT No. 63790								
REVISED: _____	REVISED: _____	SCALE: H:1"=30' V:1"=3'		SHEET No. 4 OF 12 SHEETS	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			



LEGEND

- PROPOSED AGGREGATE SURFACE COURSE, TYPE B
- PROPOSED PCC DRIVEWAY
- PROPOSED HMA SURFACE
- HMA SURFACE REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- SURFACE REMOVAL - BUTT-JOINT



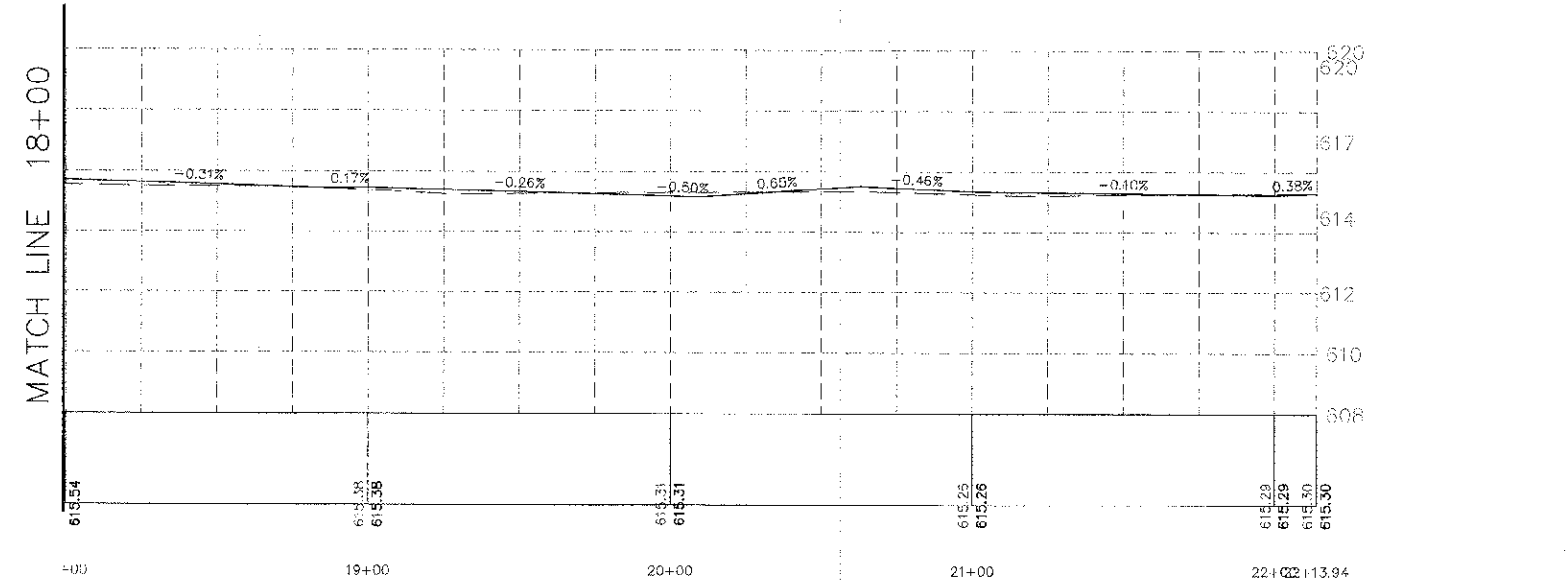
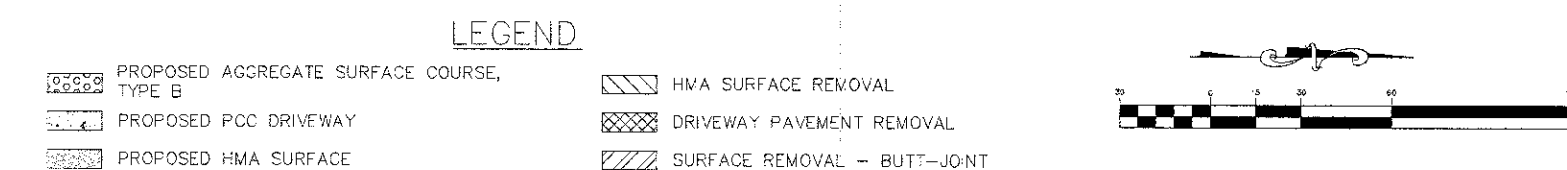
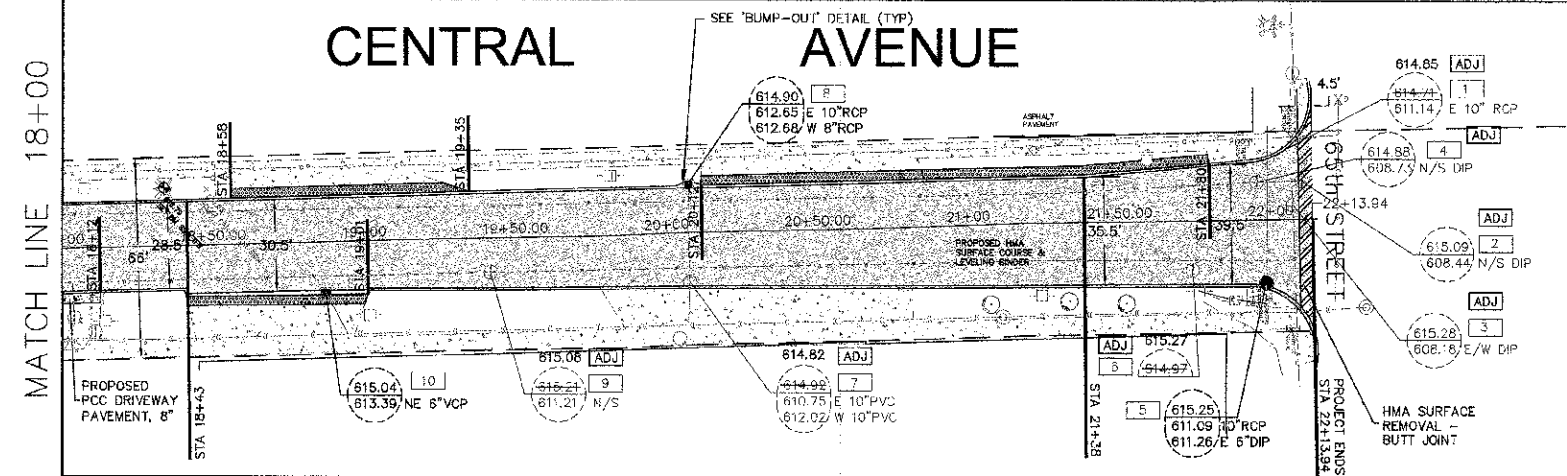
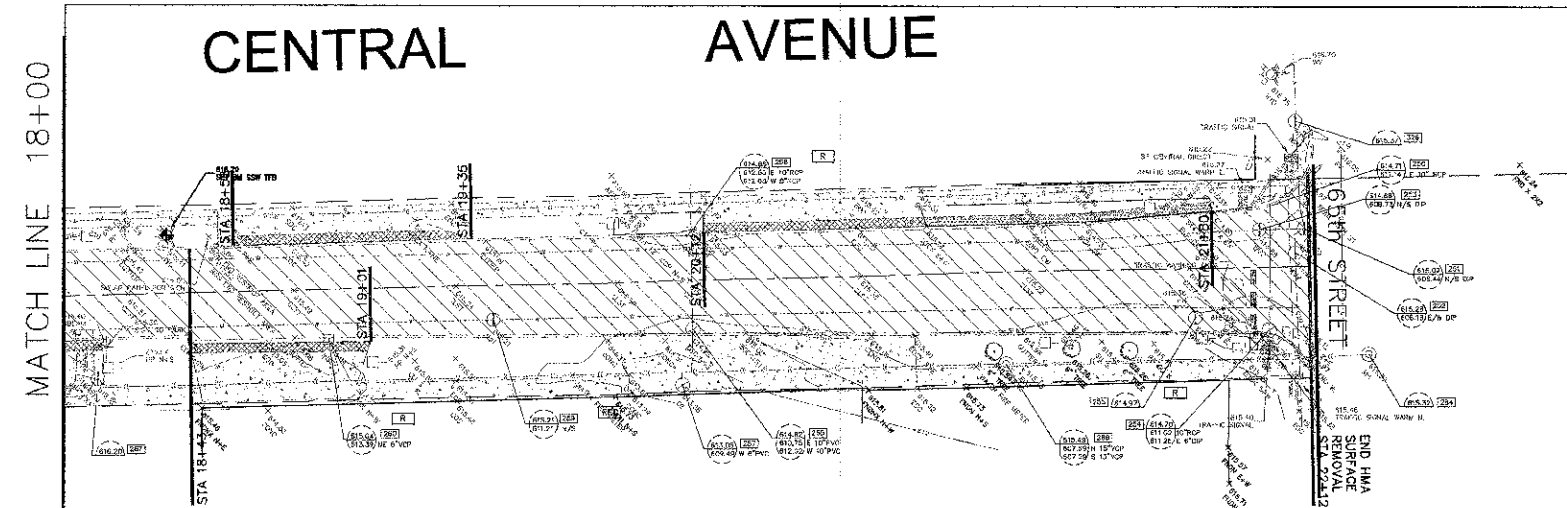
CENTRAL AVENUE STA 10+00 TO STA 22+12	DRAWN BY: JMH CHECKED BY: SAL DATE: 12.04.12 REVISED: _____	REVISED: _____ REVISED: _____ REVISED: _____ REVISED: _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CENTRAL AVENUE STA 10+00 TO STA 18+00 PLAN SHEET	FAU RTE 366	SECTION 12-00036-00-RS	COUNTY COOK	TOTAL SHEETS 12	SHEET NO. 5	CONTRACT No. 63790 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT
				SCALE: H: 1"=30' V: 1"=3'	SHEET No. 5 OF 12 SHEETS					

NOTES:
 1) ALL DRIVEWAYS NOT DESIGNATED TO BE REPLACED WITH PCC PAVEMENT OR HMA PAVEMENT SHALL BE REPLACED WITH AGGREGATE SURFACE COURSE, TYPE B

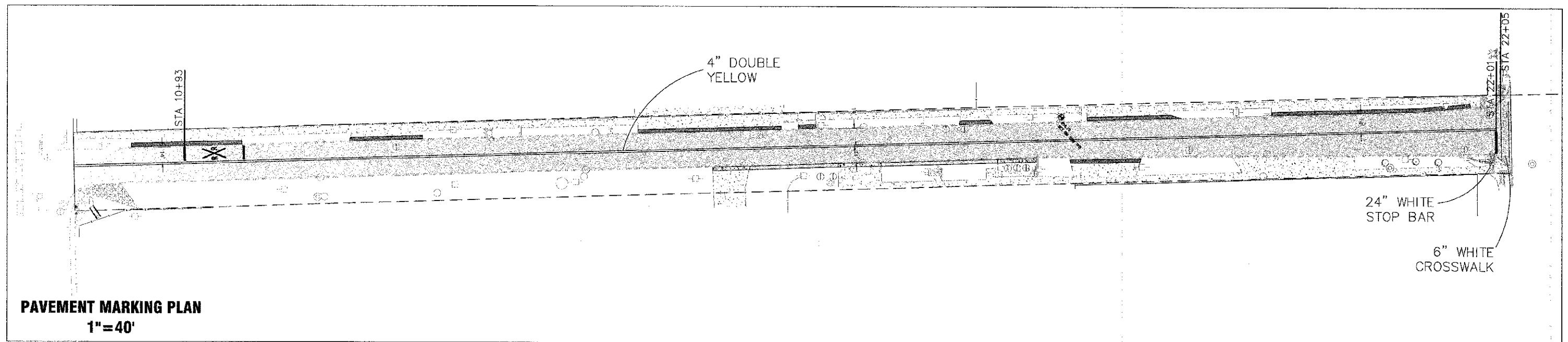
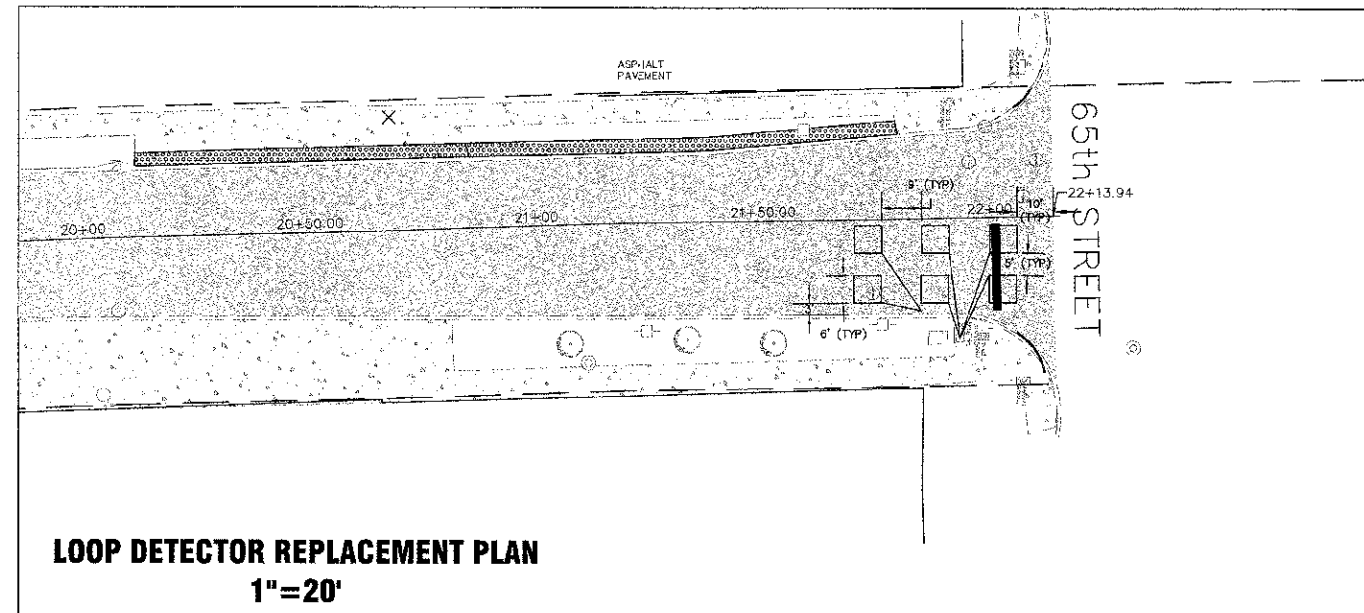
STRUCTURE REPAIR SCHEDULE

NUMBER	STRUCTURE TYPE	REMOVAL OF FRAME & RINGS	REMOVAL OF PIPE AT 15TH WALL	CLEAN OUT	REMOVE & REPLACE STRUCTURE	CONVENTIONAL USER	RELOCATE EXISTING STRUCTURE	ADJUST FRAME ELEVATION	REMOVE & REPLACE ALL RINGS	REMOVE & REPLACE FRAME AND COVER	REMARKS
1	4" P.C. CB								X		SEE NOTE 3.
2	4" P.C. WWV								X		SEE NOTE 3.
3	4" P.C. WWV								X		SEE NOTE 3.
4	6" P.C. WWV								X		DETERMINE IN FIELD NO. OF ADJ. RINGS & NOTIFY ENGINEER; SEE NOTE 3.
5	4" BLOCK CB				X					X	REPLACE WITH 4" P.C. CB WITH INSIDE TRAP; SEE NOTES 2 & 3.
6	WWV (COULD NOT OPEN)								X	X	DETERMINE IN FIELD NO. OF ADJ. RINGS & NOTIFY ENGINEER FOR FRAME TYPE; SEE NOTE 3.
7	4" P.C. CB								X		SEE NOTE 3.
8	36" BLOCK CB				X					X	REPLACE WITH 2" P.C. CB; SEE NOTES 2 & 3.
9	4" P.C. & 4" P.C. WWV						X			X	REMOVE TOP 24" OF BRICK; REPLACE WITH P.C. 36"x24" FLAT-BOTTOM OFFSET CONE; SEE NOTES 1 & 3.
10	8" VERTICAL PIPE W/FRAME				X					X	REPLACE WITH 2" P.C. CB WITH INSIDE TRAP; SEE NOTES 2 & 3.
11	6" P.C. WWV								X	X	SEE NOTES 1 & 3.
12	6" P.C. WWV								X		SEE NOTE 3.
13	36" BLOCK CB				X					X	REPLACE WITH 2" P.C. INL; SEE NOTES 2 & 3.
14	36" BLOCK CB				X					X	REPLACE WITH 4" P.C. CB WITH INSIDE TRAP; SEE NOTES 2 & 3.
15	4" BLOCK CB				X					X	REPLACE WITH 4" P.C. CB; SEE NOTES 2 & 3.
16	4" P.C. CB								X		SEE NOTE 3.
17	P.C. WWV								X	X	SEE NOTES 3 & 3.
18	4" P.C. CB		X						X	X	DETERMINE IN FIELD NO. OF ADJ. RINGS & NOTIFY ENGINEER FOR FRAME TYPE; SEE NOTE 3.
19	4" P.C. CB				X					X	REPLACE WITH 4" P.C. CB; SEE NOTES 2 & 3.

- NOTES:
 1) REMOVE EXISTING FRAME AND FURNISH AND INSTALL A NEW TYPE 1 FRAME AND GASKETED CLOSED LID, OR AS DIRECTED BY ENGINEER
 2) REMOVE EXISTING FRAME AND FURNISH AND INSTALL A NEW TYPE 1 FRAME AND OPEN LID, OR AS DIRECTED BY ENGINEER
 3) STRUCTURES WITHIN PAVED AREAS WHERE NEW ADJUSTMENT RINGS, FRAME, OR FRAME ADJUSTMENTS (OR OTHER STRUCTURED NOTED IN THE ABOVE CHART) ARE NEEDED ARE TO BE MODIFIED TO INSTALL RUBBERIZED ADJUSTMENT RINGS. MAXIMUM ADJUSTMENT FOR RUBBER RINGS TO BE 3". ADDITIONAL ADJUSTMENTS IN HEIGHT SHALL BE MADE WITH PCC RINGS FOR A TOTAL HEIGHT ADJUSTMENT OF 6-INCHES.
 4) REMOVE EXISTING FRAME AND FURNISH AND INSTALL A NEW TYPE 1 FRAME AND GASKETED CLOSED LID, OR AS DIRECTED BY ENGINEER
 5) REMOVE EXISTING FRAME AND FURNISH AND INSTALL A NEW TYPE 1 FRAME AND GASKETED CLOSED LID, OR AS DIRECTED BY ENGINEER
 6) REMOVE EXISTING FRAME AND FURNISH AND INSTALL A NEW TYPE 1 FRAME AND GASKETED CLOSED LID, OR AS DIRECTED BY ENGINEER



CENTRAL AVENUE STA 10+00 TO STA 22+12	DRAWN BY: JMH	REVISED: _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CENTRAL AVENUE STA 18+00 TO STA 22+12 PLAN SHEET	FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED BY: SAL	REVISED: _____			FAP RT 366	12-00036-00-RS	COOK	12	6
	DATE: 12.03.12	REVISED: _____			CONTRACT No. 63790				
	REVISED: _____	REVISED: _____		SCALE: H:1"=30' V:1"=3'	SHEET No. 6 OF 12 SHEETS	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	



CENTRAL AVENUE
STA 10+00 TO STA 22+12

DRAWN BY: JMH

REVISED: _____

CHECKED BY: SAL

REVISED: _____

DATE: 12.03.12

REVISED: _____

REVISED: _____

REVISED: _____

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LOOP DETECTOR REPLACEMENT PLAN &
PAVEMENT MARKING PLAN**

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP RTE 366	12-00036-00-RS	COOK	12	7

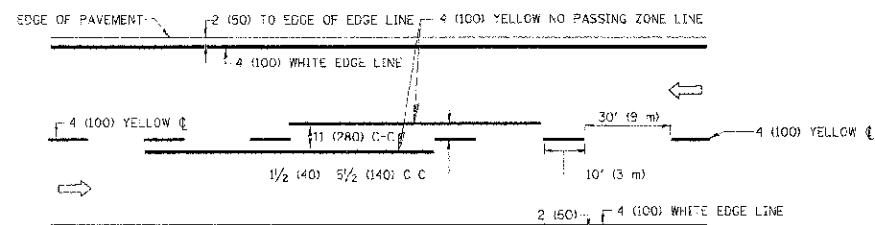
CONTRACT No. 63790

SCALE: SEE PLAN

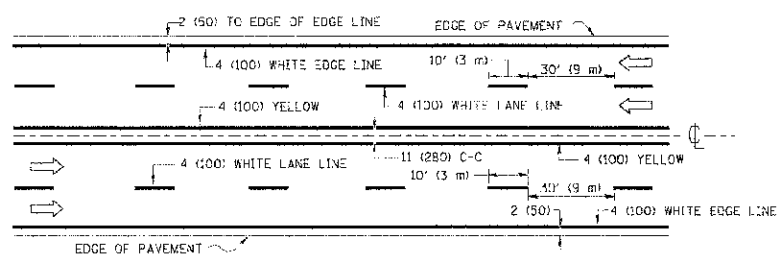
SHEET No. 7 OF 12 SHEETS

FED. ROAD DIST. NO.

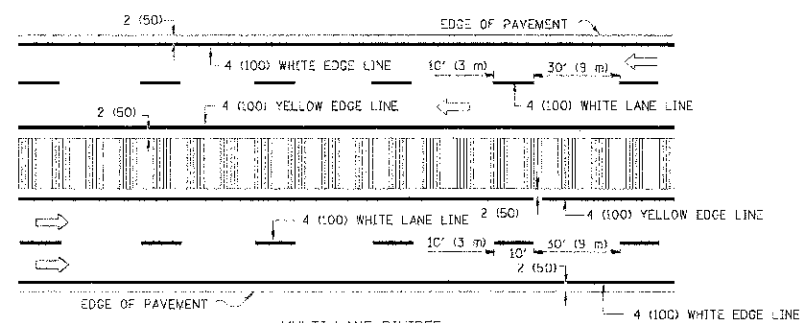
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2-LANE ROADWAY



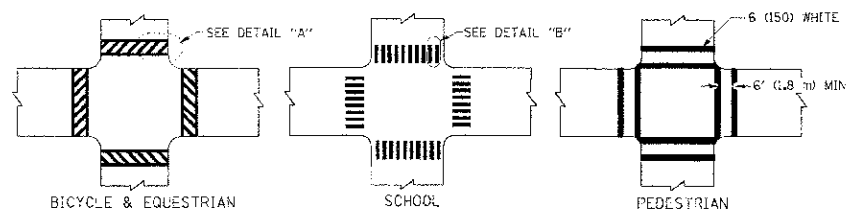
MULTI-LANE UNDIVIDED



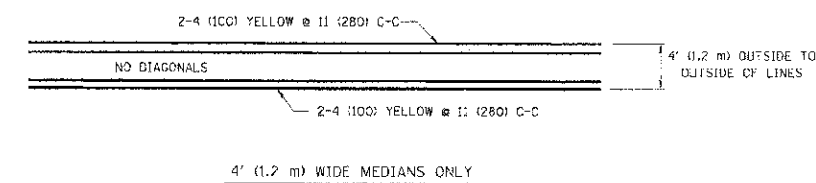
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

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

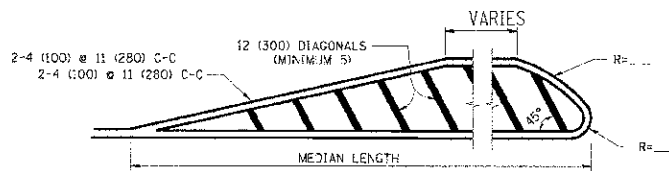
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

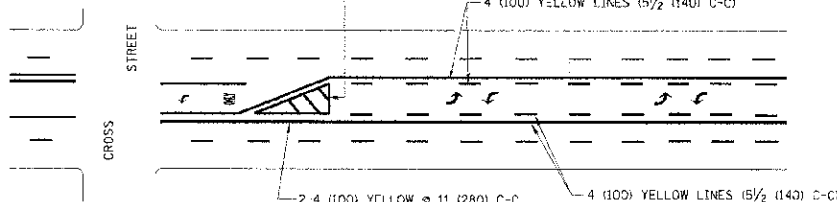


4' (1.2 m) WIDE MEDIANS ONLY



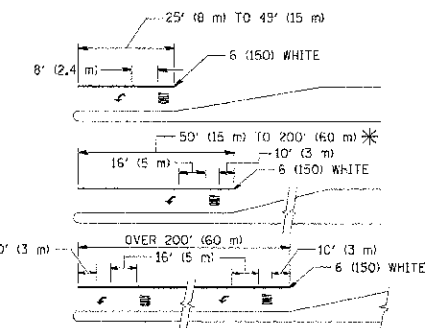
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE



MEDIAN WITH TWO-WAY LEFT TURN LANE

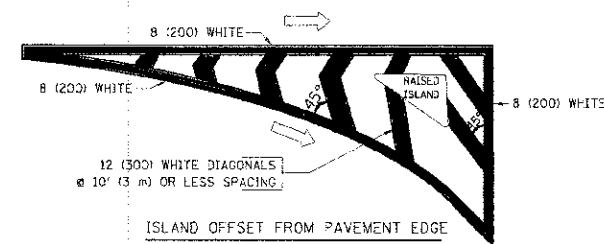
TYPICAL PAINTED MEDIAN MARKING



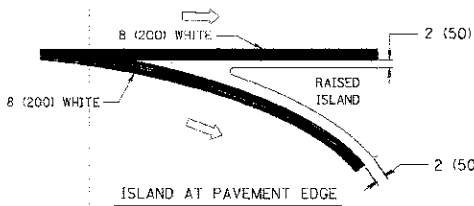
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.9 SQ. FT. (1.9 m²)
* TURN LANES IN EXCESS OF 40' (12.0 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



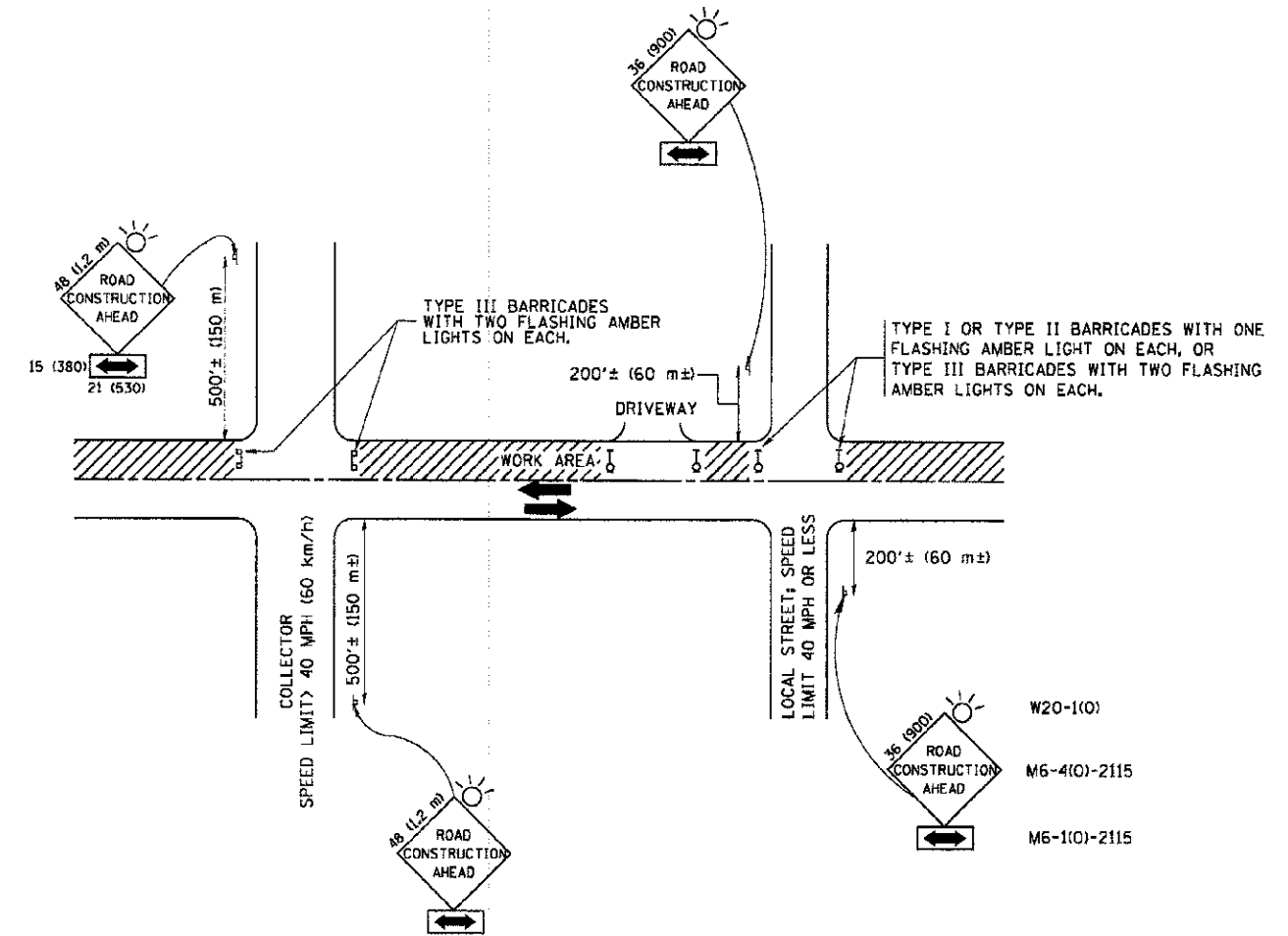
ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	30' (9 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 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 6 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	30' (9 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) LINES 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	30' (9 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5 1/2 (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.
GOLF MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 18' (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 78000; 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.



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.

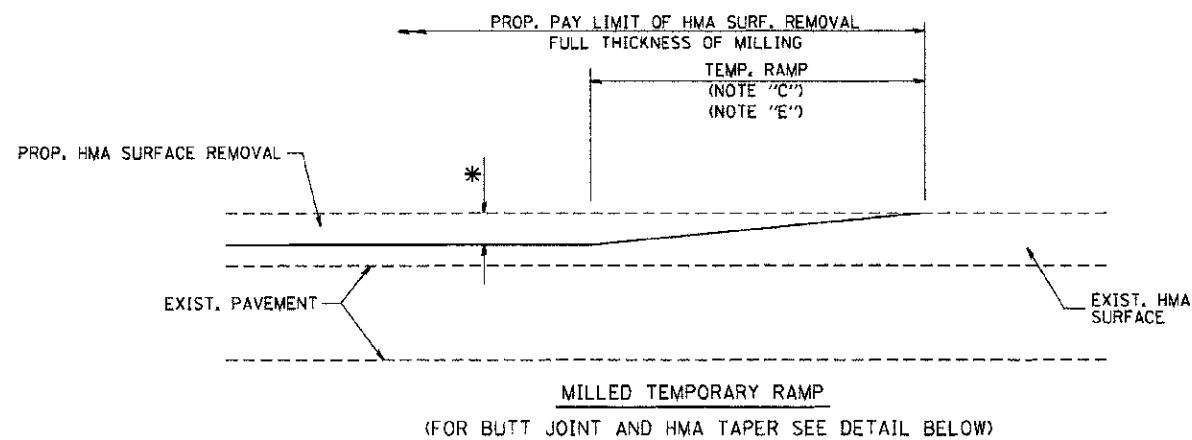
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		DRAWN -	REVISOR - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 / / IN.	CHECKED -	REVISOR - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISOR - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

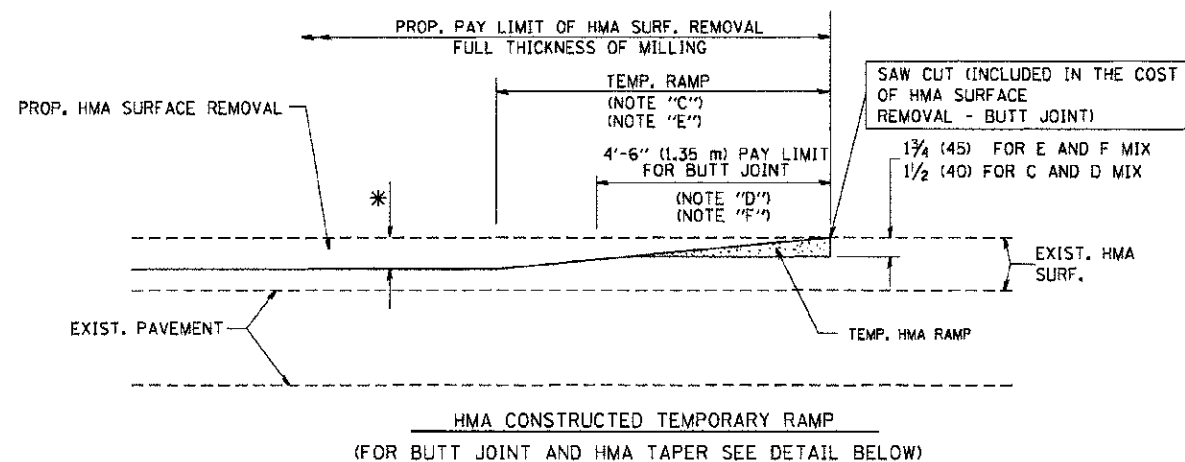
TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

F.A. - RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 358	12-00036-00-RS	COOK	12	9
TC-10			CONTRACT NO. 63790	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

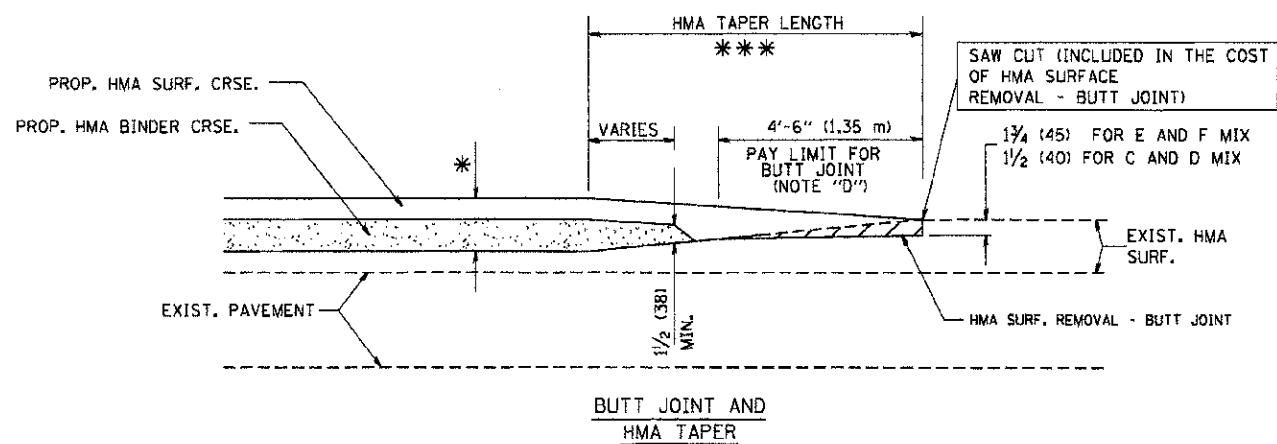
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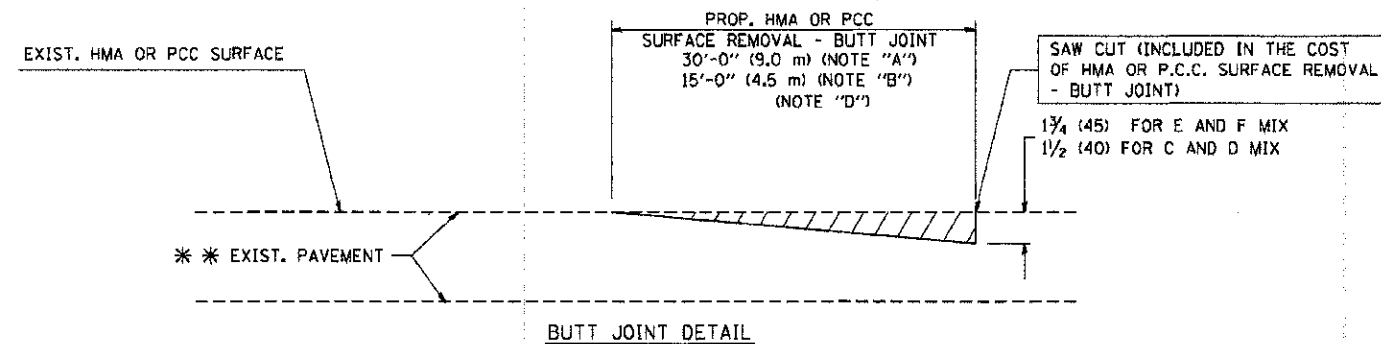
OPTION 1



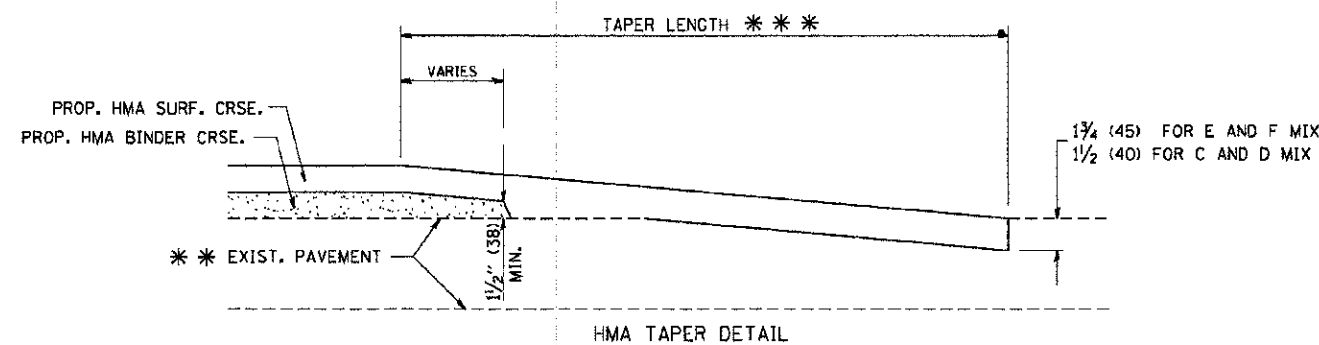
OPTION 2
TYPICAL TEMPORARY RAMP



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")

BASIS OF PAYMENT:

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

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

FILE NAME = W:\detroit\22x34\bd32.dgn	USER NAME = geglianob	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
		CHECKED -	REVISED - M. GOMEZ 04-06-01
		DATE - 06-13-90	REVISED - R. BORO 01-01-07

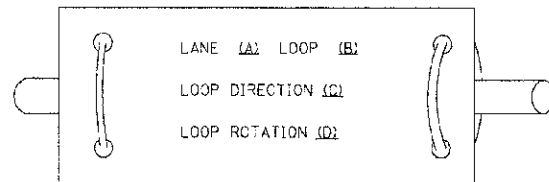
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS		F.A. RTE. 12-00036-00-RS	COUNTY COOK	TOTAL SHEETS 12	SHEET NO. 11
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	CONTRACT NO. 63790	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

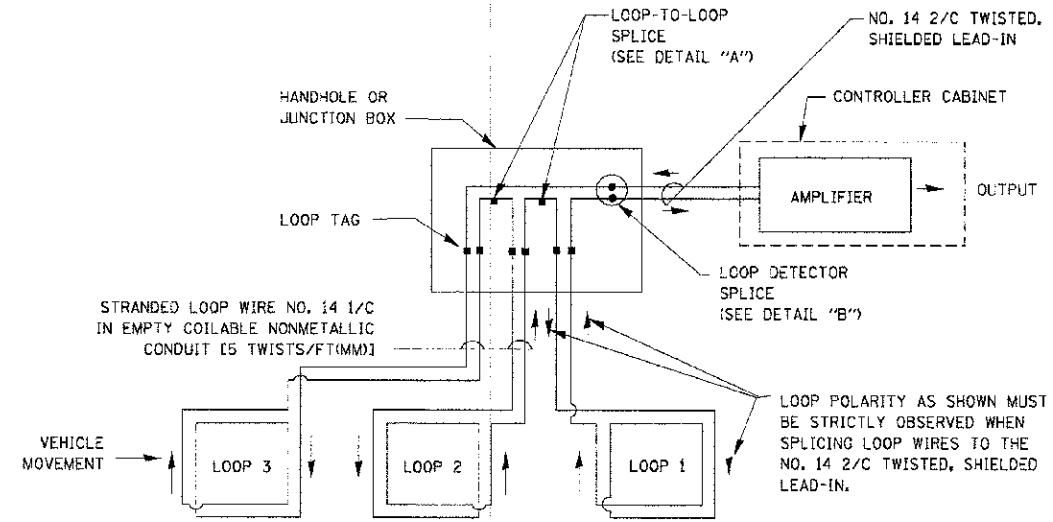
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

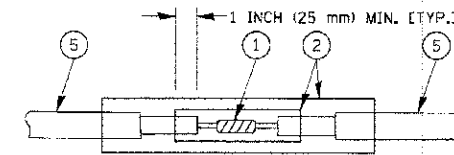


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

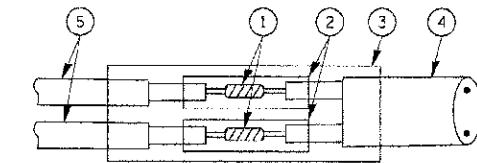


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

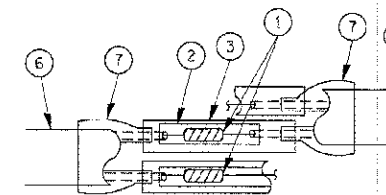


DETAIL "A" LOOP-TO-LOOP SPLICE

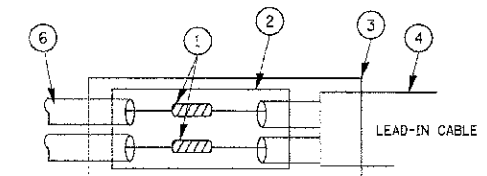


DETAIL "B" LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A" LOOP-TO-LOOP SPLICE



PRE-FORMED LOOP DETAIL "B" LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME =	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12-00036-00-RS	12-00036-00-RS	DRAWN - BCK	REVISED -		SCALE: NONE	SHEET NO. 1 OF 6	SHEETS	STA.	TO STA.	12	12
PLDI 12/14/2009	PLDI 12/14/2009	CHECKED - DAD	REVISED -				TS-05		CONTRACT NO. 63790		
PLDI 12/14/2009	PLDI 12/14/2009	DATE - 10-28-09	REVISED -				FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				